

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

RESPONSES TO OEB STAFF INTERROGATORIES

INTERROGATORY 139:

Reference(s): Updated Exhibit 4B, Tab 1, Schedule 1, p. 2-4
Exhibit 4B, Tab 1, Schedule 1, Appendix A
Updated Exhibit 4B, Tab 1, Schedule 1, Appendix C

- a) For the asset categories that Toronto Hydro proposed Useful Life (ULs) outside the Kinectrics range, please provide supporting rationale (Updated Exhibit 4B / Tab 1 / Schedule 1 / Appendix C).
- b) Please explain how Toronto Hydro accurately forecasts, over a 5-year period, the particular month in which an asset will enter service (Exhibit 4B / Tab 1 / Schedule 1 / pp. 3-4).
- c) Please provide detailed working papers (showing the monthly data) supporting the depreciation expense schedule (Exhibit 4B / Tab 1 / Schedule 1 / Appendix A).

RESPONSE:

- a) As allowed by the OEB,¹ Toronto Hydro adopted useful lives (in some cases) that are outside the range of ‘Asset Depreciation Study for the Ontario Energy Board’ by Kinectrics (“OEB Study”). A list and additional information follows:

¹ EB-2008-0408, Report to the Board, Transition to International Financial Reporting Standards, Page 21.

	USoA Account Number	USoA Account Description	Current	Asset Details	
			Years	Category| Component | Type	
1	1830	Poles, Towers and Fixtures (Streetlighting)	40	Fully Dressed Concrete Poles	
2	1835	Overhead Conductors and Devices (Streetlighting)	40	OH Conductors	
3	1820	Distribution Station Equipment - Normally Primary Below 50 kV	25	Station Grounding Transformer - Station Grounding System	
4	1820	Distribution Station Equipment - Normally Primary Below 50 kV	30	Station Independent Breakers	
5	1845	Underground Conductors and Devices	20	Primary TR XLPE Cables Direct Buried	
6	1845	Underground Conductors and Devices	20	Secondary Cables Direct Buried	
7	1855	Services (Overhead & Underground)	20		
8	1840	Underground Conduit (Cable Chamber Roof)	20	Cable Chambers	
9	1910	Leasehold Improvements	5	Leasehold Improvements	
10	1908	Buildings and Fixtures	20	Administrative Buildings	
	1908	Buildings and Fixtures	30		
	1808	Buildings and Fixtures	20		
	1808	Buildings and Fixtures	30	Station Buildings	
	1808	Buildings and Fixtures	36		
11	1920	Computer Equipment - Hardware	6	Computer Equipment	Hardware
12	1611	Computer Software	10		Software

Figure 1: Useful Lives

- 1) For fully dressed street lighting concrete poles (account 1830), Toronto Hydro uses a useful life 40 years while the OEB Study has a useful life of from 50-80 years. Toronto Hydro based its assessment on the THESL sponsored Street Lighting and Expressway Lighting Assets Valuation Report by ValuQuest.²
- 2) For street lighting overhead conductors and devices (account 1835), Toronto Hydro uses a useful life of 40 years while the OEB Study has a useful life of 50-75 years. Toronto Hydro based its assessment on the THESL sponsored study 'Toronto Hydro Electric System Useful Life of Assets' by Kinectrics (THESL Study).³ The THESL Study was completed in August 2009 (before the OEB Study was issued in July 2010) since THESL was preparing to adopt the IFRS accounting standards.
- 3) Toronto Hydro uses a useful life of 25 years for Station Grounding System (account 1820) compared to a useful life of 30-40 years as per the OEB Study. Toronto

² EB-2009-0180/0181/0182/0183, Application for transfer of Streetlighting Assets, Appendix B, Filed 31st Jan, 2011

³ EB-2020-0142, Exhibit Q1, Tab 2, Schedule 7-2, Filed 9th Feb, 2011.

Hydro based its assessment on the THESL Study which has the range of 25-50 years.

- 4) The sub-assets under the category Station Independent Breakers (account 1820) are shown in the table below with the Toronto Hydro's useful lives based on the THESL Study. The OEB Study has a range of 35 to 65 years.

Table 1: Useful Lives based on the THESL Study

Section	Asset	Years
21	Oil Breaker (Outdoor)	30
22	SF6 Breaker (Outdoor)	30
23	Vacuum Breaker (Outdoor)	30
24	Oil Breaker (Indoor)	30
25	SF6 Breaker (Indoor)	30
26	Vacuum Breaker (Indoor)	30
27	Air Blast Breaker (Indoor)	30
28	Air Magnetic Breakers (Indoor)	25

- 5) Primary TR XLPE Cables Direct Buried (account 1845) contains the underground Primary Cable (XLPE Direct Buried) asset which has a useful life of 20 years compared to the useful life of 25 to 35 years as per the OEB Study. Toronto Hydro based its assessment on the THESL Study which has a range of 20-25 years.

- 6) The USoA account 1845 Underground Conductors and Devices includes the asset UG Secondary Cable (Direct Buried) which has a useful life of 20 years compared to 25 to 40 years as per the OEB Study. Toronto Hydro based its assessment on the THESL Study which has a range of 20-25 years.

1 7) The USoA account 1855 Services (Overhead & Underground) includes the asset
2 underground Secondary Cable (Direct Buried) which has a useful life of 20 years
3 compared to a useful life of 25 to 40 years as per the OEB Study. Toronto Hydro
4 based its assessment on the THESL Study which has a range of 20-25 years.

6 8) Cable chambers roofs included in account 1840 have a useful life of 20 years
7 compared to the OEB Study of 50 to 80 years. Toronto Hydro based its
8 assessment on the THESL Study which has a range of 20-30 years.

10 9) Toronto Hydro uses a useful life of 5 years for Leasehold Improvements. There is
11 no specific useful life in the OEB Study since, in such cases, useful life are lease
12 dependent.

14 10) Buildings and Fixtures (accounts 1808 and 1908) have a useful life of 20 to 36
15 years compare to OEB Study range of 50-75 years. The OEB category does not
16 included many substructure categories that are unique to Toronto Hydro, where
17 the useful life is aligned with a study by Pinchin Environmental Ltd.⁴

19 11) Toronto Hydro P-servers have a useful life of six years compared to the range of 3-
20 5 years as per the OEB Study. These are specialized servers that Toronto Hydro
21 assessed internally to have a longer useful life.

23 12) The Computer Software (account 1611 – 10 years) includes the utility's
24 CIS/Customer Care & Billing (CC&B) computer software. An internal assessment

⁴ EB-2010-0142, Exhibit R2, Tab 1, Schedule 4, Filed 2011 Feb 23, Interrogatory Q1-Staff-4

1 was performed which concluded that, for the CIS, a useful life of 10 years was
2 appropriate.

3

4 b) Please refer to Toronto Hydro's response to interrogatory 2A-SEC-31.

5

6 c) Please see Appendix A to this response for the monthly historical depreciation
7 expense for 2015-2017. Please see Appendix B to this response for the monthly
8 forecasted depreciation expense for 2018-2024.

9

10 Toronto Hydro notes that historical depreciation expense results from detailed
11 calculations within its ERP (financial) system which provides balances by USoA
12 account. For forecasted monthly depreciation expense, which is calculated outside
13 the ERP, balances by USoA account is not available.

2015 Summary of Depreciation Expense

OEB	Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Depreciation Expense
1611	Computer Software (Formally known as Account 1925)	\$ 1,683,178	\$ 1,683,178	\$ 1,683,178	\$ 1,673,574	\$ 1,607,609	\$ 1,577,137	\$ 1,535,102	\$ 1,467,255	\$ 1,465,641	\$ 1,708,824	\$ 1,545,377	\$ 1,660,906	\$ 19,290,957
1612	Land Rights	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1805	Land	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1808	Buildings	\$ 162,295	\$ 162,297	\$ 140,146	\$ 140,142	\$ 140,138	\$ 140,142	\$ 140,141	\$ 139,418	\$ 140,049	\$ 140,050	\$ 144,689	\$ 1,047,250	\$ 2,636,758
1815	Transformer Station Equipment >50 kV	\$ 33,675	\$ 33,675	\$ 33,675	\$ 33,675	\$ 33,675	\$ 33,675	\$ 33,675	\$ 33,675	\$ 33,675	\$ 33,675	\$ 33,675	\$ 33,675	\$ 404,102
1820	Distribution Station Equipment <50 kV	\$ 596,770	\$ 597,495	\$ 599,797	\$ 599,781	\$ 601,336	\$ 605,092	\$ 606,573	\$ 609,892	\$ 616,722	\$ 635,878	\$ 617,313	\$ 620,441	\$ 7,307,090
1830	Poles, Towers & Fixtures	\$ 638,968	\$ 724,659	\$ 681,915	\$ 662,905	\$ 788,310	\$ 710,604	\$ 813,660	\$ 1,315,465	\$ 942,053	\$ 1,818,883	\$ 1,427,870	\$ 5,053,745	\$ 15,579,036
1835	Overhead Conductors & Devices	\$ 606,258	\$ 721,834	\$ 631,911	\$ 661,280	\$ 682,673	\$ 695,503	\$ 684,596	\$ 862,542	\$ 934,051	\$ 947,734	\$ 818,754	\$ 2,283,438	\$ 10,530,573
1840	Underground Conduit	\$ 3,014,200	\$ 3,049,765	\$ 3,098,359	\$ 3,068,495	\$ 3,106,889	\$ 3,108,812	\$ 3,309,359	\$ 3,192,573	\$ 3,175,557	\$ 3,179,168	\$ 3,262,818	\$ 3,428,197	\$ 37,994,193
1845	Underground Conductors & Devices	\$ 1,434,577	\$ 1,485,555	\$ 1,072,850	\$ 1,516,805	\$ 1,609,100	\$ 1,570,225	\$ 1,964,176	\$ 2,279,749	\$ 2,125,755	\$ 2,069,568	\$ 2,224,395	\$ 3,823,045	\$ 23,175,800
1850	Line Transformers	\$ 1,597,585	\$ 1,848,166	\$ 2,000,825	\$ 1,748,489	\$ 2,017,610	\$ 1,904,479	\$ 1,872,232	\$ 2,403,455	\$ 2,795,240	\$ 2,925,604	\$ 2,890,561	\$ 4,045,433	\$ 28,049,679
1855	Services (Overhead & Underground)	\$ 153,786	\$ 156,926	\$ 170,636	\$ 160,987	\$ 166,718	\$ 165,604	\$ 166,993	\$ 187,994	\$ 232,057	\$ 239,658	\$ 193,399	\$ 310,161	\$ 2,304,920
1860	Meters	\$ 1,084,287	\$ 1,086,790	\$ 1,801,154	\$ 1,112,219	\$ 1,134,095	\$ 1,155,617	\$ 1,151,870	\$ 1,139,003	\$ 1,302,941	\$ 1,385,927	\$ 1,202,520	\$ 1,286,543	\$ 14,842,965
1905	Land	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1908	Buildings & Fixtures	\$ 466,345	\$ 466,345	\$ 466,351	\$ 466,384	\$ 466,356	\$ 545,153	\$ 546,189	\$ 546,189	\$ 688,746	\$ 567,058	\$ 599,047	\$ 857,421	\$ 6,681,582
1910	Leasehold Improvements	\$ 23,902	\$ 23,902	\$ 23,902	\$ 23,736	\$ 23,736	\$ 16,505	\$ 16,505	\$ 16,505	\$ 16,505	\$ 16,505	\$ 16,505	\$ 16,505	\$ 234,715
1915	Office Furniture & Equipment	\$ 160,653	\$ 160,652	\$ 160,653	\$ 160,653	\$ 160,653	\$ 160,759	\$ 132,081	\$ 132,081	\$ 132,077	\$ 132,611	\$ 131,210	\$ 138,218	\$ 1,762,299
1920	Computer Equipment - Hardware	\$ 468,169	\$ 449,104	\$ 445,880	\$ 466,647	\$ 466,647	\$ 464,324	\$ 439,808	\$ 453,655	\$ 453,200	\$ 501,779	\$ 478,413	\$ 524,454	\$ 5,612,079
1930	Transportation Equipment	\$ 510,972	\$ 500,849	\$ 493,958	\$ 492,967	\$ 489,166	\$ 484,808	\$ 478,820	\$ 478,820	\$ 475,886	\$ 484,046	\$ 487,447	\$ 475,041	\$ 5,852,780
1935	Stores Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1940	Tools, Shop & Garage Equipment	\$ 194,212	\$ 196,560	\$ 199,770	\$ 199,944	\$ 200,325	\$ 202,127	\$ 199,073	\$ 202,903	\$ 208,059	\$ 202,709	\$ 206,967	\$ 188,391	\$ 2,401,040
1945	Measurement & Testing Equipment	\$ 5,640	\$ 5,640	\$ 5,640	\$ 5,640	\$ 5,640	\$ 5,640	\$ 5,640	\$ 5,640	\$ 5,640	\$ 5,640	\$ 5,640	\$ 5,672	\$ 67,711
1950	Power Operated Equipment	\$ 12,291	\$ 12,291	\$ 9,794	\$ 9,794	\$ 9,794	\$ 9,794	\$ 9,794	\$ 9,794	\$ 9,794	\$ 9,794	\$ 9,794	\$ 9,794	\$ 122,523
1955	Communications Equipment	\$ 199,327	\$ 199,327	\$ 199,327	\$ 207,695	\$ 207,695	\$ 179,775	\$ 179,775	\$ 179,856	\$ 162,469	\$ 162,469	\$ 161,158	\$ 163,532	\$ 2,202,404
1960	Miscellaneous Equipment	\$ 3,077	\$ 3,077	\$ 3,077	\$ 3,077	\$ 3,077	\$ 3,077	\$ 3,077	\$ 3,077	\$ 3,077	\$ 3,077	\$ 3,077	\$ 3,077	\$ 36,919
1970	Load Management Controls Customer Premises	\$ 90,173	\$ 90,173	\$ 90,173	\$ 90,173	\$ 88,753	\$ 88,753	\$ 88,753	\$ 88,753	\$ 88,753	\$ 88,471	\$ 88,471	\$ 85,912	\$ 1,067,310
1975	Load Management Controls Utility Premises	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1980	System Supervisor Equipment	\$ 180,388	\$ 181,220	\$ 204,316	\$ 183,522	\$ 185,082	\$ 185,956	\$ 201,440	\$ 209,560	\$ 337,816	\$ 207,560	\$ 222,735	\$ 665,453	\$ 2,965,049
2440	Contributions & Grants	(\$ 122,616)	(\$ 126,053)	(\$ 181,955)	(\$ 137,950)	(\$ 148,610)	(\$ 170,285)	(\$ 240,168)	(\$ 180,654)	(\$ 215,433)	(\$ 266,271)	(\$ 239,422)	(\$ 556,355)	(\$ 2,585,773)
1609	Capital Contributions Paid	\$ 76,308	\$ 76,308	\$ 76,308	\$ 76,308	\$ 76,308	\$ 76,308	\$ 76,308	\$ 76,308	\$ 76,308	\$ 76,308	\$ 76,308	\$ 287,987	\$ 1,127,378
2005	Property Under Capital Leases	\$ 187,880	\$ 187,880	\$ 187,880	\$ 187,880	\$ 187,880	\$ 187,880	\$ 187,880	\$ 187,880	\$ 187,880	\$ 187,880	\$ 187,880	\$ 187,880	\$ 2,254,564
	Sub-Total	13,462,299	13,977,616	14,299,520	13,814,821	14,310,653	14,107,467	14,603,352	16,041,388	16,394,518	17,464,603	16,796,599	26,645,817	191,918,654
	Less Socialized Renewable Energy Generation Investments (input as negative)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Less Other Non Rate-Regulated Utility Assets (input as negative)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Total	13,462,299	13,977,616	14,299,520	13,814,821	14,310,653	14,107,467	14,603,352	16,041,388	16,394,518	17,464,603	16,796,599	26,645,817	191,918,654

Less: Fully Allocated Depreciation

Transportation	(\$ 159,736)	(\$ 159,639)	(\$ 64,665)	(\$ 140,620)	(\$ 169,026)	(\$ 165,379)	(\$ 163,472)	(\$ 126,362)	(\$ 149,074)	(\$ 173,983)	(\$ 166,362)	(\$ 161,498)	(\$ 1,799,817)
Net Depreciation	\$ 13,302,563	\$ 13,817,977	\$ 14,234,855	\$ 13,674,201	\$ 14,141,627	\$ 13,942,088	\$ 14,439,880	\$ 15,915,026	\$ 16,245,444	\$ 17,290,620	\$ 16,630,237	\$ 26,484,319	\$ 190,118,837

Appendix B: Monthly Depreciation from 2018-2024

<i>in \$millions</i>	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total
Depreciation	16.85	16.94	17.08	17.13	17.27	17.45	18.01	18.08	18.05	18.21	18.52	18.88	212.47
Derecognition	0.15	0.56	0.91	1.18	1.59	1.6	0.85	2	1.88	2.02	2.32	5.73	20.79
Transportation	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.22	-1.76
Total Depreciation	16.86	17.36	17.85	18.17	18.72	18.91	18.72	19.94	19.79	20.09	20.7	24.39	231.5

*rounding variances may exist

<i>in \$millions</i>	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
Depreciation	18.7	18.77	18.87	18.95	19.05	19.1	19.17	19.26	19.46	19.5	19.28	19.89	230
Derecognition	0.14	0.54	0.88	1.14	1.54	1.55	0.83	1.94	1.82	1.96	2.24	5.54	20.12
Transportation	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.22	-1.76
Total Depreciation	18.7	19.17	19.61	19.95	20.45	20.51	19.86	21.06	21.14	21.32	21.38	25.21	248.36

<i>in \$millions</i>	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Total
Depreciation	19.68	19.81	19.98	20.07	20.2	20.28	20.39	20.5	20.65	20.81	21.01	21.25	244.63
Derecognition	0.18	0.7	1.13	1.47	1.97	1.99	1.06	2.49	2.33	2.51	2.88	7.08	25.79
Transportation	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.22	-1.76
Total Depreciation	19.72	20.37	20.97	21.4	22.03	22.13	21.31	22.85	22.84	23.18	23.75	28.11	268.66

<i>in \$millions</i>	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Total
Depreciation	20.98	21.09	21.21	21.33	21.42	21.49	21.26	21.37	21.45	21.53	21.53	22.02	256.68
Derecognition	0.19	0.73	1.18	1.53	2.06	2.08	1.11	2.6	2.44	2.63	3.01	7.45	27.01
Transportation	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.22	-1.76
Total Depreciation	21.03	21.68	22.25	22.72	23.34	23.43	22.23	23.83	23.75	24.02	24.4	29.25	281.93

<i>in \$millions</i>	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Total
Depreciation	21.72	21.84	21.96	22	22.04	22.15	22.28	22.4	22.55	22.69	22.93	23.4	267.96
Derecognition	0.19	0.73	1.17	1.53	2.06	2.07	1.11	2.59	2.43	2.61	3	7.39	26.88
Transportation	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.22	-1.76
Total Depreciation	21.77	22.43	22.99	23.39	23.96	24.08	23.25	24.85	24.84	25.16	25.79	30.57	293.08

<i>in \$millions</i>	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Total
Depreciation	22.86	23.01	23.17	23.3	23.45	23.59	23.75	23.9	24.08	24.16	24.35	24.74	284.36
Derecognition	0.2	0.76	1.23	1.61	2.16	2.18	1.16	2.72	2.55	2.75	3.15	7.78	28.25
Transportation	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.22	-1.76
Total Depreciation	22.92	23.63	24.26	24.77	25.47	25.63	24.77	26.48	26.49	26.77	27.36	32.3	310.85

<i>in \$millions</i>	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Total
Depreciation	24.02	24.17	24.33	24.47	24.61	24.77	24.9	25.07	25.24	25.42	25.64	26.02	298.66
Derecognition	0.2	0.77	1.24	1.62	2.18	2.2	1.17	2.75	2.57	2.77	3.17	7.83	28.47
Transportation	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.22	-1.76
Total Depreciation	24.08	24.8	25.43	25.95	26.65	26.83	25.93	27.68	27.67	28.05	28.67	33.63	325.37

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

RESPONSES TO OEB STAFF INTERROGATORIES

INTERROGATORY 140:

Reference(s): Exhibit 4B, Tab 1, Schedule 1, p. 4-6
Exhibit 1C, Tab 3, Schedule 3, Appendix C

Preamble:

Toronto Hydro discusses its decommissioning provision, and in particular the accounting behind the recognition of the liability and the offsetting debit to the carrying amount of the related asset (Exhibit 4B / Tab 1 / Schedule 1 / pp. 4-5).

- a) Please advise whether the decommissioning liabilities that have been capitalized to assets are included in the asset values that form part of rate base.
- b) Please explain whether Table 3 (Exhibit 4B / Tab 1 / Schedule 1 / p. 5) represents the total decommissioning liabilities that have been capitalized to date within Toronto Hydro capital assets or are these the incremental decommissioning liabilities that were recognized in each of the years presented.
- c) If the response to part (b) is that the amount shown in Table 3 (Exhibit 4B / Tab 1 / Schedule 1 / p. 5) represent incremental (new) liabilities recognized in each year, then please quantify the total year-to-date NBV of decommissioning liabilities that are included in Toronto Hydro’s capital assets.
- d) Provide a continuity schedule of the decommissioning liability starting with the December 31, 2017 audited balance to 2020.

1 e) Please explain whether the annual accretion expense related to the
2 decommissioning liabilities, as presented in Table 4 (Exhibit 4B / Tab 1 / Schedule
3 1 / p. 5), forms part of the total depreciation and amortization expense that
4 Toronto Hydro is seeking to recover, as shown in Table 5 (Exhibit 4B / Tab 1 /
5 Schedule 1 / p. 6).

6
7 f) Please reconcile the actual depreciation expense for 2017 in Table 5 (Exhibit 4B /
8 Tab 1 / Schedule 1 / p. 6) to the depreciation expense shown in Note 6 of the 2017
9 audited financial statements (Exhibit 1C / Tab 3 / Schedule 3 / Appendix C).

10
11
12 **RESPONSE:**

13 a) Toronto Hydro confirms that decommissioning liabilities that have been capitalized to
14 assets are included in the asset values that form part of rate base.

15
16 b) Toronto Hydro confirms that Table 3 (Exhibit 4B, Tab 1, Schedule 1, page 5) represents
17 the decommissioning liability balances as at year-end for each of the years presented.

18
19 c) Table 3 (Exhibit 4B, Tab 1, Schedule 1, page 5) represents the NBV of the
20 decommissioning cost on the capital asset.

- 1 d) Please see below a continuity schedule of the decommissioning liability:

Decommissioning Liability - Continuity Schedule	(in \$ Millions)
Balance as at December 31, 2017	(1.5)
Difference between forecast and actual opening balance	0.1
Additions	-
Payments	0.1
Write-offs	-
Accretion	(0.0)
Effect of change in timing/amount of cash flows and change in discount rates	0.1
Ending balance as at December 31, 2018	(1.3)
Additions	-
Payments	0.1
Write-offs	-
Accretion	(0.0)
Effect of change in timing/amount of cash flows and change in discount rates	(0.0)
Ending balance as at December 31, 2019	(1.3)
Additions	-
Payments	0.1
Write-offs	-
Accretion	(0.0)
Effect of change in timing/amount of cash flows and change in discount rates	0.0
Ending balance as at December 31, 2020	(1.2)

2

3

- 4 e) The annual accretion expense related to decommissioning liabilities presented in
5 Exhibit 4B, Tab 1, Schedule 1, page 5, Table 4 is not included in the total depreciation
6 and amortization expense.

- 1 f) Please see the table below for the requested reconciliation.

Depreciation (\$ Millions)	2017
Depreciation – regulated and unregulated operations (Note 6)	176.4
Amortization Intangible Assets – regulated and unregulated operations (Note 7)	23.0
Fully Allocated Depreciation – Transportation (Exhibit 2A, Tab 1, Schedule 2, Appendix 2-BA)	(1.6)
Total Depreciation and Amortization (Statement of Income)	197.8
<u>Reconciling items</u>	
Less: Depreciation and Amortization related to Non-Regulated Assets (RRR 2.1.13)	(0.6)
Add: Capital Contributions (Exhibit 4B, Tab 1, Schedule 1, Appendix A)	(4.7)
Total Depreciation and Amortization (Exhibit 4B, Tab 1, Schedule 1, Page 6)	192.5

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

RESPONSES TO OEB STAFF INTERROGATORIES

INTERROGATORY 141:

Reference(s): Exhibit 4B, Tab 1, Schedule 2, p. 1-2

- a) Please provide a detailed breakdown of the assets disposed by category that generates the derecognition expense in each year 2015-2020 (Exhibit 4B / Tab 1 / Schedule 2 / p. 1).
- b) Please explain how the \$25.8 million forecasted derecognition expense for 2020 was calculated (Exhibit 4B / Tab 1 / Schedule 2 / p. 1). Please provide Toronto Hydro’s position on using an average of the actual / forecasted derecognition expense for 2015-2019.

RESPONSE:

- a) Please refer to Exhibit 4B, Tab 1, Schedule 1, Appendix A.
- b) The \$25.8 million forecast derecognition for 2020 was determined based on the historical relationship between derecognition expense and capital expenditures.

Toronto Hydro notes that in recent history the proportion of annual derecognition relative to annual capital investment is relatively consistent. As a result, Toronto Hydro believes that applying this historical relationship to forecast capital expenditures is a more appropriate basis to forecast derecognition expense than using a simple average of historical derecognition amounts. Toronto Hydro also notes that

1 related forecasting variances will be recorded in the proposed derecognition variance
2 account.

3

4 Please see Table 1 below for a comparison of derecognition and capital expenditures.

5

6 **Table 1 – Derecognition Expense as a Percent of Capital Expenditures (\$ Millions)**

	2015	2016	2017	
Derecognition	24.1	27.0	24.5	a
CapEx	490.6	508.4	496.6	b
% Derecognition vs. Capital	4.9%	5.3%	4.9%	a/b

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

RESPONSES TO OEB STAFF INTERROGATORIES

INTERROGATORY 142:

Reference(s): Exhibit 4B, Tab 2, Schedule 1, p. 1
Exhibit 4B, Tab 2, Schedule 3
Exhibit 1B, Tab 4, Schedule 1, p. 9
PILs Model

- a) Please provide a reference to where the investment tax credits of \$1.9 million are shown in the OM&A budget (Exhibit 4B / Tab 2 / Schedule 1 / p. 1).
- b) Please file the 2017 Corporate Tax Return.
- c) Toronto Hydro has not provided its PILs calculations for all years of the proposed Custom IR term. Currently only the 2020 calculations have been filed on the record of this proceeding. Please provide the PILs calculation for 2021-2024 in order to support the PILs amounts being sought in the C-factor for those years (Exhibit 1B / Tab 4 / Schedule 1 / p. 9).
- d) Please provide all supporting schedules for the 2021-2024 PILs calculations, including CCA continuities for each year.

RESPONSE:

- a) The Investment Tax Credits of \$1.9 million are shown as part of the Common Costs and Adjustments program in Exhibit 4A, Tab 2, Schedule 20.

- 1 b) Please refer to Appendix A for the 2017 Corporate Tax Return. Note that parts of the
2 document have been redacted for confidentiality purposes.
3
4 c) Please refer to Appendix B for the PILs calculations for 2021-2024.
5
6 d) Please refer to part (c) above and refer to Appendix C for CCA continuities for 2021-
7 2024.

Canada Revenue Agency
Agence du revenu
du Canada

T2 Corporation Income Tax Return

200

This form serves as a federal, provincial, and territorial corporation income tax return, unless the corporation is located in Quebec or Alberta. If the corporation is located in one of these provinces, you have to file a separate provincial corporation return.

All legislative references on this return are to the federal *Income Tax Act* and *Income Tax Regulations*. This return may contain changes that had not yet become law at the time of publication.

Send one completed copy of this return, including schedules and the *General Index of Financial Information* (GIFI), to your tax centre or tax services office. You have to file the return within six months after the end of the corporation's tax year.

For more information see cra.gc.ca or Guide T4012, *T2 Corporation - Income Tax Guide*.

055 Do not use this area

Toronto Hydro-Electric System Limited
EB-2018-0165
Interrogatory Responses
4B-Staff-142
Appendix A
FILED: January 21, 2019
(183 pages)

Identification

Business number (BN)

001

Corporation's name

002 TORONTO HYDRO-ELECTRIC SYSTEM LIMITED

Address of head office

Has this address changed since the last time we were notified?

010

1 Yes

2 No

X

If yes, complete lines 011 to 018.

011 14 CARLTON STREET

012

City Province, territory, or state

015 TORONTO

016 ON

Country (other than Canada) Postal or ZIP code

017 018 M5B 1K5

Mailing address (if different from head office address)

Has this address changed since the last time we were notified?

020

1 Yes

2 No

X

If yes, complete lines 021 to 028.

021 c/o

022 14 CARLTON STREET

023 5TH FLOOR-CORPORATE TAX DEPT

City Province, territory, or state

025 TORONTO

026 ON

Country (other than Canada) Postal or ZIP code

027 028 M5B 1K5

Location of books and records (if different from head office address)

Has this address changed since the last time we were notified?

030

1 Yes

2 No

X

If yes, complete lines 031 to 038.

031 14 CARLTON STREET

032

City Province, territory, or state

035 TORONTO

036 ON

Country (other than Canada) Postal or ZIP code

037 038 M5B 1K5

040 Type of corporation at the end of the tax year (tick one)

X

1 Canadian-controlled private corporation (CCPC)

2 Other private corporation

3 Public corporation

4 Corporation controlled by a public corporation

5 Other corporation

(specify)

If the type of corporation changed during the tax year, provide the effective date of the change

043

Year Month Day

To which tax year does this return apply?

Tax year start

Year Month Day

060 2017-01-01

Tax year-end

Year Month Day

061 2017-12-31

Has there been an acquisition of control resulting in the application of subsection 249(4) since the tax year start on line 060?

063

1 Yes

2 No

X

If yes, provide the date control was acquired

065

Year Month Day

Is the date on line 061 a deemed tax year-end according to subsection 249(3.1)?

066

1 Yes

2 No

X

Is the corporation a professional corporation that is a member of a partnership?

067

1 Yes

2 No

X

Is this the first year of filing after:

Incorporation?

070

1 Yes

2 No

X

Amalgamation?

071

1 Yes

2 No

X

If yes, complete lines 030 to 038 and attach Schedule 24.

Has there been a wind-up of a subsidiary under section 88 during the current tax year?

072

1 Yes

2 No

X

If yes, complete and attach Schedule 24.

Is this the final tax year before amalgamation?

076

1 Yes

2 No

X

Is this the final return up to dissolution?

078

1 Yes

2 No

X

If an election was made under section 261, state the functional currency used

079

Is the corporation a resident of Canada? 080 1 Yes X 2 No

If no, give the country of residence on line 081 and complete and attach Schedule 97.

081

Is the non-resident corporation claiming an exemption under an income tax treaty?

082

1 Yes

2 No

X

If yes, complete and attach Schedule 91.

If the corporation is exempt from tax under section 149, tick one of the following boxes:

085

1 Exempt under paragraph 149(1)(e) or (l)

2 Exempt under paragraph 149(1)(j)

3 Exempt under paragraph 149(1)(t)

4 Exempt under other paragraphs of section 149

Do not use this area

095

096

098

Attachments**Financial statement information:** Use GIFL schedules 100, 125, and 141.**Schedules** – Answer the following questions. For each **yes** response, **attach** the schedule to the T2 return, unless otherwise instructed.

	Yes	Schedule
Is the corporation related to any other corporations?	<input checked="" type="checkbox"/>	9
Is the corporation an associated CCPC?	<input checked="" type="checkbox"/>	23
Is the corporation an associated CCPC that is claiming the expenditure limit?	<input type="checkbox"/>	49
Does the corporation have any non-resident shareholders who own voting shares?	<input type="checkbox"/>	19
Has the corporation had any transactions, including section 85 transfers, with its shareholders, officers, or employees, other than transactions in the ordinary course of business? Exclude non-arm's length transactions with non-residents	<input type="checkbox"/>	11
If you answered yes to the above question, and the transaction was between corporations not dealing at arm's length, were all or substantially all of the assets of the transferor disposed of to the transferee?	<input type="checkbox"/>	44
Has the corporation paid any royalties, management fees, or other similar payments to residents of Canada?	<input type="checkbox"/>	14
Is the corporation claiming a deduction for payments to a type of employee benefit plan?	<input type="checkbox"/>	15
Is the corporation claiming a loss or deduction from a tax shelter?	<input type="checkbox"/>	T5004
Is the corporation a member of a partnership for which a partnership account number has been assigned?	<input type="checkbox"/>	T5013
Did the corporation, a foreign affiliate controlled by the corporation, or any other corporation or trust that did not deal at arm's length with the corporation have a beneficial interest in a non-resident discretionary trust (without reference to section 94)?	<input type="checkbox"/>	22
Did the corporation own any shares in one or more foreign affiliates in the tax year?	<input type="checkbox"/>	25
Has the corporation made any payments to non-residents of Canada under subsections 202(1) and/or 105(1) of the <i>Income Tax Regulations</i> ?	<input type="checkbox"/>	29
Did the corporation have a total amount over \$1 million of reportable transactions with non-arm's length non-residents?	<input type="checkbox"/>	T106
For private corporations: Does the corporation have any shareholders who own 10% or more of the corporation's common and/or preferred shares?	<input checked="" type="checkbox"/>	50
Has the corporation made payments to, or received amounts from, a retirement compensation plan arrangement during the year?	<input type="checkbox"/>	
Does the corporation earn income from one or more Internet webpages or websites?	<input type="checkbox"/>	88
Is the net income/loss shown on the financial statements different from the net income/loss for income tax purposes?	<input checked="" type="checkbox"/>	1
Has the corporation made any charitable donations; gifts of cultural or ecological property; or gifts of medicine?	<input checked="" type="checkbox"/>	2
Has the corporation received any dividends or paid any taxable dividends for purposes of the dividend refund?	<input checked="" type="checkbox"/>	3
Is the corporation claiming any type of losses?	<input type="checkbox"/>	4
Is the corporation claiming a provincial or territorial tax credit or does it have a permanent establishment in more than one jurisdiction?	<input checked="" type="checkbox"/>	5
Has the corporation realized any capital gains or incurred any capital losses during the tax year?	<input checked="" type="checkbox"/>	6
i) Is the corporation claiming the small business deduction and reporting a) income or loss from property (other than dividends deductible on line 320 of the T2 return), b) income from a partnership, c) income from a foreign business, d) income from a personal services business, e) income referred to in clause 125(1)(a)(i)(C) or 125(1)(a)(i)(B), or f) business limit assigned under subsection 125(3.2); or		
ii) does the corporation have aggregate investment income at line 440?	<input checked="" type="checkbox"/>	7
Does the corporation have any property that is eligible for capital cost allowance?	<input checked="" type="checkbox"/>	8
Does the corporation have any property that is eligible capital property?	<input type="checkbox"/>	10
Does the corporation have any resource-related deductions?	<input type="checkbox"/>	12
Is the corporation claiming deductible reserves (other than transitional reserves under section 34.2)?	<input type="checkbox"/>	13
Is the corporation claiming a patronage dividend deduction?	<input type="checkbox"/>	16
Is the corporation a credit union claiming a deduction for allocations in proportion to borrowing or an additional deduction?	<input type="checkbox"/>	17
Is the corporation an investment corporation or a mutual fund corporation?	<input type="checkbox"/>	18
Is the corporation carrying on business in Canada as a non-resident corporation?	<input type="checkbox"/>	20
Is the corporation claiming any federal, provincial, or territorial foreign tax credits, or any federal logging tax credits?	<input type="checkbox"/>	21
Does the corporation have any Canadian manufacturing and processing profits?	<input type="checkbox"/>	27
Is the corporation claiming an investment tax credit?	<input checked="" type="checkbox"/>	31
Is the corporation claiming any scientific research and experimental development (SR&ED) expenditures?	<input checked="" type="checkbox"/>	T661
Is the total taxable capital employed in Canada of the corporation and its related corporations over \$10,000,000?	<input checked="" type="checkbox"/>	33/34/35
Is the total taxable capital employed in Canada of the corporation and its associated corporations over \$10,000,000?	<input checked="" type="checkbox"/>	
Is the corporation subject to gross Part VI tax on capital of financial institutions?	<input type="checkbox"/>	38
Is the corporation claiming a Part I tax credit?	<input type="checkbox"/>	42
Is the corporation subject to Part IV.1 tax on dividends received on taxable preferred shares or Part VI.1 tax on dividends paid?	<input type="checkbox"/>	43
Is the corporation agreeing to a transfer of the liability for Part VI.1 tax?	<input type="checkbox"/>	45
Is the corporation subject to Part II - Tobacco Manufacturers' surtax?	<input type="checkbox"/>	46
For financial institutions: Is the corporation a member of a related group of financial institutions with one or more members subject to gross Part VI tax?	<input type="checkbox"/>	39
Is the corporation claiming a Canadian film or video production tax credit refund?	<input type="checkbox"/>	T1131
Is the corporation claiming a film or video production services tax credit refund?	<input type="checkbox"/>	T1177
Is the corporation subject to Part XIII.1 tax? (Show your calculations on a sheet that you identify as Schedule 92.)	<input type="checkbox"/>	92

Attachments (continued)

	Yes	Schedule
Did the corporation have any foreign affiliates in the tax year?	<input type="checkbox"/>	T1134
Did the corporation own or hold specified foreign property where the total cost amount of all such property, at any time in the year, was more than CAN\$100,000?	<input type="checkbox"/>	T1135
Did the corporation transfer or loan property to a non-resident trust?	<input type="checkbox"/>	T1141
Did the corporation receive a distribution from or was it indebted to a non-resident trust in the year?	<input type="checkbox"/>	T1142
Has the corporation entered into an agreement to allocate assistance for SR&ED carried out in Canada?	<input type="checkbox"/>	T1145
Has the corporation entered into an agreement to transfer qualified expenditures incurred in respect of SR&ED contracts?	<input type="checkbox"/>	T1146
Has the corporation entered into an agreement with other associated corporations for salary or wages of specified employees for SR&ED?	<input type="checkbox"/>	T1174
Did the corporation pay taxable dividends (other than capital gains dividends) in the tax year?	<input checked="" type="checkbox"/>	55
Has the corporation made an election under subsection 89(11) not to be a CCPC?	<input type="checkbox"/>	T2002
Has the corporation revoked any previous election made under subsection 89(11)?	<input type="checkbox"/>	T2002
Did the corporation (CCPC or deposit insurance corporation (DIC)) pay eligible dividends, or did its general rate income pool (GRIP) change in the tax year?	<input checked="" type="checkbox"/>	53
Did the corporation (other than a CCPC or DIC) pay eligible dividends, or did its low rate income pool (LRIP) change in the tax year?	<input type="checkbox"/>	54

Additional information

Did the corporation use the International Financial Reporting Standards (IFRS) when it prepared its financial statements?	270	1 Yes <input checked="" type="checkbox"/>	2 No <input type="checkbox"/>
Is the corporation inactive?	280	1 Yes <input type="checkbox"/>	2 No <input checked="" type="checkbox"/>
What is the corporation's main revenue-generating business activity?	221122	Electric Power Distribution	
Specify the principal products mined, manufactured, sold, constructed, or services provided, giving the approximate percentage of the total revenue that each product or service represents.	284	ELECTRICITY DISTRIBUTION	285 100.000 %
	286		287 %
	288		289 %
Did the corporation immigrate to Canada during the tax year?	291	1 Yes <input type="checkbox"/>	2 No <input checked="" type="checkbox"/>
Did the corporation emigrate from Canada during the tax year?	292	1 Yes <input type="checkbox"/>	2 No <input checked="" type="checkbox"/>
Do you want to be considered as a quarterly instalment remitter if you are eligible?	293	1 Yes <input type="checkbox"/>	2 No <input checked="" type="checkbox"/>
If the corporation was eligible to remit instalments on a quarterly basis for part of the tax year, provide the date the corporation ceased to be eligible	294	Year Month Day	
If the corporation's major business activity is construction, did you have any subcontractors during the tax year?	295	1 Yes <input type="checkbox"/>	2 No <input type="checkbox"/>

Taxable income

Net income or (loss) for income tax purposes from Schedule 1, financial statements, or GIFL.	300	119,735,879	A
Deduct:			
Charitable donations from Schedule 2	311	950,530	
Cultural gifts from Schedule 2	313		
Ecological gifts from Schedule 2	314		
Gifts of medicine from Schedule 2	315		
Taxable dividends deductible under section 112 or 113, or subsection 138(6) from Schedule 3	320		
Part VI.1 tax deduction*	325		
Non-capital losses of previous tax years from Schedule 4	331		
Net capital losses of previous tax years from Schedule 4	332		
Restricted farm losses of previous tax years from Schedule 4	333		
Farm losses of previous tax years from Schedule 4	334		
Limited partnership losses of previous tax years from Schedule 4	335		
Taxable capital gains or taxable dividends allocated from a central credit union	340		
Prospector's and grubstaker's shares	350		
Subtotal		950,530	950,530 B
Subtotal (amount A minus amount B) (if negative, enter "0")		118,785,349	C
Section 110.5 additions or subparagraph 115(1)(a)(vii) additions	355		D
Taxable income (amount C plus amount D)	360	118,785,349	
Income exempt under paragraph 149(1)(t)	370		
Taxable income for a corporation with exempt income under paragraph 149(1)(t) (line 360 minus line 370)		118,785,349	Z
Taxable income for the year from a personal services business**			Z.1

* This amount is equal to 3.5 times the Part VI.1 tax payable at line 724 on page 9.

** For a taxation year that ends after 2015.

Small business deduction

Canadian-controlled private corporations (CCPCs) throughout the tax year

Income from active business carried on in Canada from Schedule 7	400	114,863,763	A
Taxable income from line 360 on page 3, minus 100/28 3.57143 of the amount on line 632* on page 8, minus 4 times the amount on line 636** on page 8, and minus any amount that, because of federal law, is exempt from Part I tax	405	118,785,349	B
Business limit (see notes 1 and 2 below)	410	500,000	C

Notes:

- For CCPCs that are not associated, enter \$ 500,000 on line 410. However, if the corporation's tax year is less than 51 weeks, prorate this amount by the number of days in the tax year **divided** by 365, and enter the result on line 410.
- For associated CCPCs, use Schedule 23 to calculate the amount to be entered on line 410.

Business limit reduction:

Amount C	500,000	x	415 ***	9,608,995	D	=	11,250	427,066,444	E
Reduced business limit (amount C minus amount E) (if negative, enter "0")							425		F
Business limit the CCPC assigns under subsection 125(3.2) (from line 515 below)									G
Amount F minus amount G							427		H

Small business deduction

Amount A, B, C, or H, whichever is the least	x	Number of days in the tax year before January 1, 2016	x	17 % =	1
		Number of days in the tax year	365		
Amount A, B, C, or H, whichever is the least	x	Number of days in the tax year after December 31, 2015, and before January 1, 2018	365 x	17.5 % =	2
		Number of days in the tax year	365		
Amount A, B, C, or H, whichever is the least	x	Number of days in the tax year after December 31, 2017	x	18 % =	3
		Number of days in the tax year	365		
Total of amounts 1, 2 and 3 (enter amount I on line J on page 8)				430	I

* Calculate the amount of foreign non-business income tax credit deductible on line 632 without reference to the refundable tax on the CCPC's investment income (line 604) and without reference to the corporate tax reductions under section 123.4.

** Calculate the amount of foreign business income tax credit deductible on line 636 without reference to the corporation tax reductions under section 123.4.

*** Large corporations

- If the corporation is not associated with any corporations in both the current and previous tax years, the amount to be entered on line 415 is: (total taxable capital employed in Canada for the **prior** year **minus** \$10,000,000) x 0.225%.
- If the corporation is not associated with any corporations in the current tax year, but was associated in the previous tax year, the amount to be entered on line 415 is: (total taxable capital employed in Canada for the **current** year **minus** \$10,000,000) x 0.225%.
- For corporations associated in the current tax year, see Schedule 23 for the special rules that apply.

Small business deduction (continued)**Specified corporate income and assignment under subsection 125(3.2)****Applicable to tax years that begin after March 21, 2016**

Except that, if the tax year of your corporation started before **and** ends on or after March 22, 2016 and in the tax year of a CCPC, you can make an assignment of business limit to that other CCPC if its tax year started after March 21, 2016.

J1 Name of corporation receiving the income and assigned amount	J Business number of the corporation receiving the assigned amount	K Income paid under clause 125(1)(a)(i)(B) to the corporation identified in column J ³	L Business limit assigned to corporation identified in column J ⁴
	490	500	505
1.			
Total		510	Total 515

Notes:

3. This amount is [as defined in subsection 125(7) **specified corporate income** (a)(i)] the total of all amounts each of which is income from an active business of the corporation for the year from the provision of services or property to a private corporation (directly or indirectly, in any manner whatever) if
- (A) at any time in the year, the corporation (or one of its shareholders) or a person who does not deal at arm's length with the corporation (or one of its shareholders) holds a direct or indirect interest in the private corporation, and
- (B) it is not the case that all or substantially all of the corporation's income for the year from an active business is from the provision of services or property to
- (I) persons (other than the private corporation) with which the corporation deals at arm's length, or
- (II) partnerships with which the corporation deals at arm's length, other than a partnership in which a person that does not deal at arm's length with the corporation holds a direct or indirect interest.
4. The amount of the business limit you assign to a CCPC cannot be greater than the amount determined by the formula $A - B$, where A is the amount of income referred to in column K in respect of that CCPC and B is the portion of the amount described in A that is deductible by you in respect of the amount of income referred to in clauses 125(1)(a)(i)(A) or (B) for the year. The amount on line 515 cannot be greater than the amount on line 425.

General tax reduction for Canadian-controlled private corporations**Canadian-controlled private corporations throughout the tax year**

Taxable income from page 3 (line 360 or amount Z, whichever applies)	118,785,349	A
Lesser of amounts B9 and H9 from Part 9 of Schedule 27		B
Amount K13 from Part 13 of Schedule 27		C
Personal services business income	432	D
Amount used to calculate the credit union deduction (amount F from Schedule 17)		E
Amount from line 400, 405, 410, or 427 on page 4, whichever is the least		F
Aggregate investment income from line 440 on page 6*	4,872,116	G
Subtotal (add amounts B to G)	4,872,116	H
Amount A minus amount H (if negative, enter "0")	113,913,233	I
General tax reduction for Canadian-controlled private corporations – Amount I multiplied by 13 %	14,808,720	J

Enter amount J on line 638 on page 8.

* Except for a corporation that is, throughout the year, a cooperative corporation (within the meaning assigned by subsection 136(2)) or a credit union.

General tax reduction

Do not complete this area if you are a Canadian-controlled private corporation, an investment corporation, a mortgage investment corporation, a mutual fund corporation, or any corporation with taxable income that is not subject to the corporation tax rate of 38%.

Taxable income from page 3 (line 360 or amount Z, whichever applies)		K
Lesser of amounts B9 and H9 from Part 9 of Schedule 27		L
Amount K13 from Part 13 of Schedule 27		M
Personal services business income	434	N
Amount used to calculate the credit union deduction (amount F from Schedule 17)		O
Subtotal (add amounts L to O)		P
Amount K minus amount P (if negative, enter "0")		Q
General tax reduction – Amount Q multiplied by 13 %		R

Enter amount R on line 639 on page 8.

Refundable portion of Part I tax**Canadian-controlled private corporations throughout the tax year**Aggregate investment income from Schedule 7 **440** 4,872,116 A

Amount A 4,872,116 x $\frac{\text{Number of days in the tax year before January 1, 2016}}{365}$ x $\frac{26}{365}$ / 3 % = 1 1

Amount A 4,872,116 x $\frac{\text{Number of days in the tax year after December 31, 2015}}{365}$ x $\frac{30}{365}$ / 3 % = 1,494,116 2

Subtotal (amount 1 **plus** amount 2) 1,494,116 ► 1,494,116 BForeign investment income from Schedule 7 **445** C

Amount C _____ x $\frac{\text{Number of days in the tax year before January 1, 2016}}{365}$ x $\frac{9}{365}$ / 3 % = 3 3

Amount C _____ x $\frac{\text{Number of days in the tax year after December 31, 2015}}{365}$ x 8 % = 4 4

Subtotal (amount 3 **plus** amount 4) DForeign non-business income tax credit from line 632 on page 8 **minus** amount D (if negative, enter "0") EAmount B **minus** amount E (if negative, enter "0") 1,494,116 FForeign non-business income tax credit from line 632 on page 8 G

Number of days in the tax year before January 1, 2016 _____ x 35 = 5 5

Number of days in the tax year 365

Number of days in the tax year after December 31, 2015 365 x $\frac{38}{365}$ / 3 = 38.66667 6

Number of days in the tax year 365

Subtotal (amount 5 **plus** amount 6) 38.6667 H

Amount G _____ x $\frac{100}{38.6667}$ = I

Taxable income from line 360 on page 3 118,785,349 J**Deduct:**Amount from line 400, 405, 410, or 427 on page 4, whichever is the least KAmount I L

Foreign business income tax credit from line 636 on page 8 x 4 = M

Subtotal (total of amounts K to M) ► NSubtotal (amount J **minus** amount N) 118,785,349 O

Amount O 118,785,349 x $\frac{\text{Number of days in the tax year before January 1, 2016}}{365}$ x $\frac{26}{365}$ / 3 % = 7 7

Amount O 118,785,349 x $\frac{\text{Number of days in the tax year after December 31, 2015}}{365}$ x $\frac{30}{365}$ / 3 % = 36,427,507 8

Subtotal (amount 7 **plus** amount 8) 36,427,507 ► 36,427,507 PPart I tax payable **minus** investment tax credit refund (line 700 **minus** line 780 from page 9) 17,879,269 Q**Refundable portion of Part I tax** – Amount F, P, or Q, whichever is the least **450** 1,494,116 R

Refundable dividend tax on hand

Refundable dividend tax on hand at the end of the previous tax year	460	797,208	
Deduct:			
Dividend refund for the previous tax year	465	797,208	797,208 A
Add:			
Refundable portion of Part I tax from line 450 on page 6		1,494,116	B
Total Part IV tax payable from Schedule 3			C
Net refundable dividend tax on hand transferred from a predecessor corporation on amalgamation, or from a wound-up subsidiary corporation	480		
Subtotal (add amounts B, C, and line 480)		1,494,116	1,494,116 D
Refundable dividend tax on hand at the end of the tax year – Amount A plus amount D		485	2,291,324

Dividend refund

Private and subject corporations at the time taxable dividends were paid in the tax year			
Taxable dividends paid in the tax year from line 460 on page 3 of Schedule 3		2,100,000	E
Amount E	2,100,000	x	
	Number of days in the tax year before January 1, 2016	x	33 1 / 3 % = 1
	Number of days in the tax year	365	
Amount E	2,100,000	x	
	Number of days in the tax year after December 31, 2015	365	x 38 1 / 3 % = 805,000 2
	Number of days in the tax year	365	
Subtotal (amount 1 plus amount 2)		805,000	805,000 F
Refundable dividend tax on hand at the end of the tax year from line 485 above			2,291,324 G
Dividend refund – Amount F or G, whichever is less			805,000 H
Enter amount H on line 784 on page 9.			

Part I taxBase amount Part I tax – Taxable income from page 3 (line 360 or amount Z, whichever applies) multiplied by 38 % . . . **550** 45,138,433 A**Additional tax on personal services business income** (section 123.5)

Taxable income from a personal services business **555** x $\frac{\text{Number of days in the tax year after December 31, 2015}}{\text{Number of days in the tax year}}$ $\frac{365}{365}$ x 5 % = **560** B

Recapture of investment tax credit from Schedule 31 **602** C**Calculation for the refundable tax on the Canadian-controlled private corporation's (CCPC) investment income**
(if it was a CCPC throughout the tax year)

Aggregate investment income from line 440 on page 6 4,872,116 D

Taxable income from line 360 on page 3 118,785,349 E

Deduct:Amount from line 400, 405, 410, or 427 on page 4,
whichever is the least FNet amount (amount E minus amount F) 118,785,349 **118,785,349** G

Amount D or G, whichever is less 4,872,116 x $\frac{\text{Number of days in the tax year before January 1, 2016}}{\text{Number of days in the tax year}}$ $\frac{365}{365}$ x 6 2 / 3 % = 1

Amount D or G, whichever is less 4,872,116 x $\frac{\text{Number of days in the tax year after December 31, 2015}}{\text{Number of days in the tax year}}$ $\frac{365}{365}$ x 10 2 / 3 % = 519,692 2

Refundable tax on CCPC's investment income (amount 1 plus amount 2) **604** 519,692 **519,692** HSubtotal (add amounts A, B, C, and H) 45,658,125 I**Deduct:**

Small business deduction from line 430 on page 4 J

Federal tax abatement **608** 11,878,535Manufacturing and processing profits deduction from Schedule 27 **616**Investment corporation deduction **620**Taxed capital gains **624**Additional deduction – credit unions from Schedule 17 **628**Federal foreign non-business income tax credit from Schedule 21 **632**Federal foreign business income tax credit from Schedule 21 **636**General tax reduction for CCPCs from amount J on page 5 **638** 14,808,720General tax reduction from amount R on page 5 **639**Federal logging tax credit from Schedule 21 **640**Eligible Canadian bank deduction under section 125.21 **641**Federal qualifying environmental trust tax credit **648**Investment tax credit from Schedule 31 **652** 1,091,601Subtotal 27,778,856 **27,778,856** K**Part I tax payable** – Amount I minus amount K 17,879,269 L

Enter amount L on line 700 on page 9.

Privacy statement

Personal information is collected under the *Income Tax Act* to administer tax, benefits, and related programs. It may also be used for any purpose related to the administration or enforcement of the Act such as audit, compliance and the payment of debts owed to the Crown. It may be shared or verified with other federal, provincial/territorial government institutions to the extent authorized by law. Failure to provide this information may result in interest payable, penalties or other actions. Under the *Privacy Act*, individuals have the right to access their personal information and request correction if there are errors or omissions. Refer to Info Source cra.gc.ca/gncy/tp/nfsrc/nfsrc-eng.html, personal information bank CRA PPU 047.

Summary of tax and credits**Federal tax**

Part I tax payable from amount L on page 8	700	17,879,269
Part II surtax payable from Schedule 46	708	
Part III.1 tax payable from Schedule 55	710	
Part IV tax payable from Schedule 3	712	
Part IV.1 tax payable from Schedule 43	716	
Part VI tax payable from Schedule 38	720	
Part VI.1 tax payable from Schedule 43	724	
Part XIII.1 tax payable from Schedule 92	727	
Part XIV tax payable from Schedule 20	728	

Total federal tax 17,879,269

Add provincial or territorial tax:Provincial or territorial jurisdiction 750 ON
(if more than one jurisdiction, enter "multiple" and complete Schedule 5)

Net provincial or territorial tax payable (except Quebec and Alberta) 760 12,352,966

Total tax payable 770 30,232,235 A

Deduct other credits:

Investment tax credit refund from Schedule 31	780	
Dividend refund from amount H on page 7	784	805,000
Federal capital gains refund from Schedule 18	788	
Federal qualifying environmental trust tax credit refund	792	
Canadian film or video production tax credit refund (Form T1131)	796	
Film or video production services tax credit refund (Form T1177)	797	
Tax withheld at source	800	

Total payments on which tax has been withheld 801

Provincial and territorial capital gains refund from Schedule 18	808	
Provincial and territorial refundable tax credits from Schedule 5	812	
Tax instalments paid	840	30,666,223

Total credits 890 31,471,223

31,471,223 B

Refund code 894 2 Overpayment 1,238,988

Balance (amount A minus amount B) -1,238,988

Direct deposit request

To have the corporation's refund deposited directly into the corporation's bank account at a financial institution in Canada, or to change banking information you already gave us, complete the information below:

☐ Start ☐ Change information 910 Branch number

914 Institution number 918 Account number

If the result is positive, you have a **balance unpaid**.
If the result is negative, you have an **overpayment**.
Enter the amount on whichever line applies.
Generally, we do not charge or refund a difference of \$2 or less.

Balance unpaid

For information on how to make your payment, go to cra.gc.ca/payments.

If the corporation is a Canadian-controlled private corporation throughout the tax year, does it qualify for the one-month extension of the date the balance of tax is due?

896 1 Yes ☐ 2 No ☒

If this return was prepared by a tax preparer for a fee, provide their EFILE number

920

CertificationI, 950 Bovingdon 951 Sean 954 EVP & Chief Financial Officer
Last name First name Position, office, or rank

I am an authorized signing officer of the corporation. I certify that I have examined this return, including accompanying schedules and statements, and that the information given on this return is, to the best of my knowledge, correct and complete. I also certify that the method of calculating income for this tax year is consistent with that of the previous tax year except as specifically disclosed in a statement attached to this return.

955 2018-06-26

Date (yyyy/mm/dd)

Signature of the authorized signing officer of the corporation

956

Telephone number

Is the contact person the same as the authorized signing officer? If no, complete the information below

957 1 Yes ☐ 2 No ☒

958

Name of other authorized person

959

Telephone number

Language of correspondence – Langue de correspondance

Indicate your language of correspondence by entering 1 for English or 2 for French.

Indiquez votre langue de correspondance en inscrivant 1 pour anglais ou 2 pour français.

990

1



Net Income (Loss) for Income Tax Purposes

Schedule 1

Corporation's name	Business number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- The purpose of this schedule is to provide a reconciliation between the corporation's net income (loss) as reported on the financial statements and its net income (loss) for tax purposes. For more information, see the T2 *Corporation – Income Tax Guide*.
- All legislative references are to the *Income Tax Act*.

Net income (loss) after taxes and extraordinary items from line 9999 of Schedule 125 153,397,532 A

Add:

Provision for income taxes – current	101	30,967,711
Amortization of tangible assets	104	222,325,390
Charitable donations and gifts from Schedule 2	112	950,530
Taxable capital gains from Schedule 6	113	4,872,116
Scientific research expenditures deducted per financial statements	118	2,897,533
Non-deductible club dues and fees	120	227,915
Non-deductible meals and entertainment expenses	121	404,127
Reserves from financial statements – balance at the end of the year	126	313,050,047
Subtotal of additions		575,695,369 ►

575,695,369

Other additions:

Debt issue expense	208	1,217,506
--------------------	-----	-----------

Miscellaneous other additions:

1 Description	2 Amount		
605	295		
1 OITC/ORDTC/BCRDTC/ABRDTC from prior year under 12(1)(x) ITA	59,850		
2 See attached	110,959,384		
3 Ontario Co-op Credit	926,007		
4 Ontario apprenticeship credit	60,000		
Total of column 2	112,005,241	►	296 112,005,241
Subtotal of other additions		199	113,222,747 ►
Total additions		500	688,918,116 ►

113,222,747

688,918,116 B

Amount A plus amount B 842,315,648 C

Deduct:

Gain on disposal of assets per financial statements	401	515,158
Capital cost allowance from Schedule 8	403	285,990,997
SR&ED expenditures claimed in the year on line 460 from Form T661	411	5,132,484
Reserves from financial statements – balance at the beginning of the year	414	280,712,692
Subtotal of deductions		572,351,331 ►

572,351,331

Other deductions:**Miscellaneous other deductions:**

1 Description	2 Amount		
705	395		
1 Deduction under 20(1)(e) ITA	2,183,138		
2 See attached	148,045,300		
Total of column 2	150,228,438	►	396 150,228,438

	Subtotal of other deductions	499	150,228,438	▶	150,228,438	
	Total deductions	510	722,579,769	▶	722,579,769	D
Net income (loss) for income tax purposes	(amount C minus amount D)				119,735,879	E
Enter amount E on line 300 of the T2 return.						

Attached Schedule with Total

Line 295 – Amount

Title Line 295 – Amount

Description	Operator (Note)	Amount	
ARO accretion expense not deductible for tax		27,508	00
Deferred revenue - 12(1)(a) addback	+	10,112,437	00
Para 12(1)(x) -Fixed asset capital contributions	+	28,704,350	00
Smart meters revenue, per 2014 rate rider	+	2,581,946	00
Reversal of IS impact re. tax savings materialized on gain on sale of OCCP	+	6,632,167	00
Reversal of IS impact re. CC on deferred gain on sale of OCCP	+	52,279	00
Stranded meters revenue	+	3,985,516	00
HONI contrib'n - taxable per drawdown as a result of FRO for 2015 rate app	+	484,914	00
2008 Named ppts - taxable per drawdown as a result of FRO for 2015 rate app	+	1,472,313	00
LRAM - taxable per drawdown as a result of FRO for 2015 rate application	+	4,806,960	00
1575-2014 Derec'n taxable per drawdown as a result of FRO for 2015 rate app	+	7,789,255	00
De-recognition variance (not yet approved)	+	2,888,878	00
De-recognition variance CC (not yet approved)	+	192,636	00
Deferred monthly billing (not yet approved) reverse IS impact re. 2016 OPEX	+	12,820	00
Deferred monthly billing costs and savings (not yet approved) reverse IS	+	1,763,385	00
Capital-related revenue requirement variance principal (not yet approved)	+	15,977,190	00
Capital-related revenue requirement variance -CC (not yet approved)	+	180,245	00
Foregone revenue per drawdown as a result of FRO for 2015 rate app	+	20,346,672	00
Externally driven capital variance - Principal (not yet approved)	+	1,145,428	00
Externally driven capital variance - CC (not yet approved)	+	3,252	00
Excess expansion deposit (not yet approved) - CC only	+	204,580	00
Wireless attachment - (not yet approved) - Reverse carrying charges	+	4,396	00
Wireless attachment - deferred revenue taxable in the year	+	100,000	00
POEB transferred from THESI , IS impact is in THESI	+	1,093,000	00
Interest income included in acctg gain on sale, taxable in the year	+	6,463	00
Reverse CWIP write off for accounting (re: innovation project) net of AFUDC	+	360,075	00
Non-deductible interest expense on 2012 NOR	+	30,719	00
	+		
	Total	110,959,384	00

Note: The calculations are performed one at a time, from the first to the last line, and not according to the priority rules of the operations. For example, the formula 1+2*3 will not result in the same thing as the formula 1+3*2.

Attached Schedule with Total

Line 395 – Amount

Title Line 395 – Amount

Explanatory note

Other deductions to Schedule 1

Description	Operator (Note)	Amount
Amortization of contributed capital received recorded in other revenue		4,710,955 00
Deductible land lease recorded in depreciation for accounting	+	89,423 00
13(7.4) election re: Contributed capital received	+	28,704,350 00
Capitalized POEB for accounting, not for tax	+	8,088,302 00
ARO payments - deductible for tax	+	59,573 00
Deferred revenue - 20(1)(m) deduction	+	10,112,437 00
777 Bay Street lease inducement - reverse accounting amortization	+	54,792 00
Gain on sale of OCCP deduction - per drawdown as a result of FRO	+	25,026,302 00
Capitalized POEB regulatory liab deduction -per drawdown as a result of FRO	+	8,120,308 00
HST variance deduction - per drawdown as a result of FRO for 2015 rate app	+	98,341 00
1592 deduction - per drawdown as a result of FRO for 2015 rate app	+	207,927 00
Deferred monthly billing - actual OPEX incurred – deductible for tax	+	4,558,785 00
Deferred monthly billing - CC not yet approved	+	37,274 00
LRAM reversal of CC before OEB approval	+	156,366 00
LRAM reversal of distribution revenue before OEB approval	+	10,891,098 00
Reversal of IS impact re: Gain on sale variance acct -CC (not yet approved)	+	212,645 00
PSC lease payment capitalized for acctg, deducted for tax	+	2,961,979 00
2017 CIR costs incurred in the year	+	1,048,941 00
Cogeco payment for lease cancellation, s 20(1)(z) deduction	+	1,220,759 00
OPEB cash vs accrual variance (not yet approved)	+	1,300,000 00
RDA net movement re. tax on capital gain on sale of 50 & 60 Eglinton	+	1,235,572 00
Deductible electricty charges (re: 715 Miller) capitalized for accounting	+	73,031 00
ARO liability write down to P&L, non taxable	+	7,826 00
Deductible property tax (re: 715 Miller) capitalized for accounting	+	232,312 00
2017 OPEX capitalized for acctg re. innovation project	+	1,007 00
AFUDC income that is not taxable	+	9,802,955 00
Reversal of 2016 Ont R&D credit recorded for acctg in 2017; taxed in 2016/7	+	346,522 00
Reversal of 2016 Fed R&D credit recorded for acctg in 2017; taxed thru T661	+	1,160,151 00
2016 Ont apprentice & coop credits; taxed in 2016; recorded for acctg in 2017	+	1,112,367 00
POEB transferred from THC, income statement impact is in THC	+	387,000 00
Change in AOCI with no I/S impact	+	26,026,000 00
	+	
	Total	148,045,300 00

Note: The calculations are performed one at a time, from the first to the last line, and not according to the priority rules of the operations. For example, the formula 1+2*3 will not result in the same thing as the formula 1+3*2.

Toronto Hydro Electric System Limited

Taxation year ended:

December 31, 2017

C.R.A. Bus#:

MOF A/C# (Hydro PILs #):



Election under subsection 13(7.4)

The company hereby elects under subsection 13(7.4) of the Income Tax Act to reduce the capital cost of depreciable property acquired in the taxation year by a total amount of \$28,704,350 received in the taxation year in respect of that property that would otherwise be included in income under paragraph 12(1)(x).

Authorized Signing Officer

A handwritten signature in black ink, appearing to be 'S. B. A.', written over a horizontal line.

Canada Revenue
AgencyAgence du revenu
du Canada

Schedule 2

Charitable Donations and Gifts

Corporation's name	Business number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- For use by corporations to claim any of the following:
 - the eligible amount of charitable donations to qualified donees;
 - the Ontario, Nova Scotia, and British Columbia food donation tax credits for farmers;
 - the eligible amount of gifts of certified cultural property;
 - the eligible amount of gifts of certified ecologically sensitive land; or
 - the additional deduction for gifts of medicine.
- All legislative references are to the federal *Income Tax Act*, unless otherwise specified.
- The eligible amount of a gift is the amount by which the fair market value of the gifted property exceeds the amount of an advantage, if any, for the gift.
- The donations and gifts are eligible for a 5-year carryforward except for gifts of certified ecologically sensitive land made after February 10, 2014, which are eligible for a 10-year carryforward. Provincial food donation tax credits must be applied in the current tax year.
- Use this schedule to show a transfer of unused amounts from previous years following an amalgamation or the wind-up of a subsidiary as described under subsections 87(1) and 88(1).
- Subsection 110.1(1.2) provides as follows:
 - Where a particular corporation has undergone an acquisition of control, for tax years that end on or after the acquisition of control, no corporation can claim a deduction for a gift made by the particular corporation to a qualified donee before the acquisition of control.
 - If a particular corporation makes a gift to a qualified donee pursuant to an arrangement under which both the gift and the acquisition of control is expected, no corporation can claim a deduction for the gift unless the person acquiring control of the particular corporation is the qualified donee.
- An eligible medical gift made before March 22, 2017 to a qualifying organization for activities outside of Canada may be eligible for an additional deduction. Calculate the additional deduction in Part 5.
- File a completed copy of this schedule with your *T2 Corporation Income Tax Return*.
- For more information, see the *T2 Corporation – Income Tax Guide*.

Part 1 – Charitable donations

Charity/Recipient	Amount (\$100 or more only)
My Tribute Gift, Online Memorial donation	100
Sunnybrook Foundation	800,000
Ontario Science Centre	8,400
Georgian College	140,000
	Subtotal 948,500
	Add: Total donations of less than \$100 each 2,030
	Total donations in current tax year 950,530

Part 1 – Charitable donations

	Federal	Québec	Alberta
Charitable donations at the end of the previous tax year	1A		
Charitable donations expired after five tax years* 239			
Charitable donations at the beginning of the current tax year (amount 1A minus line 239) 240			
Charitable donations transferred on an amalgamation or the wind-up of a subsidiary 250			
Total charitable donations made in the current year (include on line 112 of Schedule 1) 210	950,530	950,530	950,530
Subtotal (line 250 plus line 210)	950,530 1B	950,530	950,530
Subtotal (line 240 plus amount 1B)	950,530 1C	950,530	950,530
Adjustment for an acquisition of control 255			
Total charitable donations available (amount 1C minus line 255)	950,530 1D	950,530	950,530
Amount applied in the current year against taxable income (cannot be more than amount 2H in Part 2) (enter on line 311 of the T2 return) 260	950,530	950,530	950,530
Charitable donations closing balance (amount 1D minus line 260) 280			
The amount of qualifying donations for the Ontario community food program donation tax credit for farmers included in line 260 (for donations made after December 31, 2013) 262			
Ontario community food program donation tax credit for farmers (line 262 multiplied by 25 %) 1E			
Enter amount 1E on line 420 of Schedule 5, <i>Tax Calculation Supplementary – Corporations</i> . The maximum amount you can claim in the current year is whichever is less: the Ontario income tax otherwise payable or amount 1E. For more information, see section 103.1.2 of the <i>Taxation Act, 2007</i> (Ontario).			
The amount of qualifying donations for the Nova Scotia food bank tax credit for farmers included in line 260 (for donations made after December 31, 2015) 263			
Nova Scotia food bank tax credit for farmers (line 263 multiplied by 25 %) 1F			
Enter amount 1F on line 570 of Schedule 5, <i>Tax Calculation Supplementary – Corporations</i> . The maximum amount you can claim in the current year is whichever is less: the Nova Scotia income tax otherwise payable or amount 1F. For more information, see section 50A of the Nova Scotia <i>Income Tax Act</i> .			
The amount of qualifying gifts for the British Columbia farmers' food donation tax credit included in line 260 (for donations made after February 16, 2016 and before January 1, 2019) 265			
British Columbia farmers' food donation tax credit (line 265 multiplied by 25 %) 1G			
Enter amount 1G on line 683 of Schedule 5, <i>Tax Calculation Supplementary – Corporations</i> . The maximum amount you can claim in the current year is whichever is less: the British Columbia income tax otherwise payable or amount 1G. For more information, see section 20.1 of the British Columbia <i>Income Tax Act</i> .			

* For the federal and Alberta, the gifts expire after five tax years. For Québec, gifts made in a tax year that ended before March 24, 2006, expire after five tax years and gifts made in a tax year that ended after March 23, 2006, expire after twenty tax years.

Amounts carried forward – Charitable donations

Year of origin:		Federal	Québec	Alberta
1 st prior year	2016-12-31			
2 nd prior year	2015-12-31			
3 rd prior year	2014-12-31			
4 th prior year	2013-12-31			
5 th prior year	2012-12-31			
6 th prior year*	2011-12-31			
7 th prior year	2010-12-31			
8 th prior year	2009-12-31			
9 th prior year	2008-12-31			
10 th prior year	2007-12-31			
11 th prior year	2006-12-31			
12 th prior year	2005-12-31			
13 th prior year	2004-12-31			
14 th prior year	2003-12-31			
15 th prior year	2002-12-31			
16 th prior year	2001-12-31			
17 th prior year	2001-09-30			
18 th prior year	2000-09-30			
19 th prior year				
20 th prior year				
21 st prior year*				
Total (to line A)				

* For the federal and Alberta, the 6th prior year gifts expire in the current year. For Québec, the 6th prior year gifts made in a tax year that ended before March 24, 2006, expire in the current year and the 21st prior year gifts made in a tax year that ended after March 23, 2006, expire in the current year.

Part 2 – Maximum allowable deduction for charitable donations

Net income for tax purposes* multiplied by 75 %	89,801,909	2A
Taxable capital gains arising in respect of gifts of capital property included in Part 1 **	225	
Taxable capital gain in respect of a disposition of a non-qualifying security under subsection 40(1.01)	227	
The amount of the recapture of capital cost allowance in respect of charitable donations	230	
Proceeds of disposition, less outlays and expenses**	2B	
Capital cost**	2C	
Amount 2B or 2C, whichever is less	235	
Line 230 or 235, whichever is less	2D	
Subtotal (add lines 225, 227 and amount 2D)	2E	
Amount 2E multiplied by 25 %	2F	
Subtotal (amount 2A plus amount 2F)	89,801,909	2G
Maximum allowable deduction for charitable donations (amount 1D from Part 1, amount 2G, or net income for tax purposes, whichever is less)	950,530	2H

* For credit unions, subsection 137(2) states that this amount is before the deduction of payments pursuant to allocations in proportion to borrowing and bonus interest.

** This amount must be prorated by the following calculation: eligible amount of the gift **divided by** the proceeds of disposition of the gift.

Part 3 – Gifts of certified cultural property

	Federal	Québec	Alberta
Gifts of certified cultural property at the end of the previous tax year	3A		
Gifts of certified cultural property expired after five tax years*	439		
Gifts of certified cultural property at the beginning of the current tax year (amount 3A minus line 439)	440		
Gifts of certified cultural property transferred on an amalgamation or the wind-up of a subsidiary	450		
Total gifts of certified cultural property in the current year	410		
(include on line 112 of Schedule 1)			
Subtotal (line 450 plus line 410)	3B		
Subtotal (line 440 plus amount 3B)	3C		
Adjustment for an acquisition of control	455		
Amount applied in the current year against taxable income (enter on line 313 of the T2 return)	460		
Subtotal (line 455 plus line 460)	3D		
Gifts of certified cultural property closing balance (amount 3C minus amount 3D)	480		

* For the federal and Alberta, the gifts expire after five tax years. For Québec, gifts made in a tax year that ended before March 24, 2006, expire after five tax years and gifts made in a tax year that ended after March 23, 2006, expire after twenty tax years.

Amount carried forward – Gifts of certified cultural property

Year of origin:	Federal	Québec	Alberta
1 st prior year 2016-12-31			
2 nd prior year 2015-12-31			
3 rd prior year 2014-12-31			
4 th prior year 2013-12-31			
5 th prior year 2012-12-31			
6 th prior year* 2011-12-31			
7 th prior year 2010-12-31			
8 th prior year 2009-12-31			
9 th prior year 2008-12-31			
10 th prior year 2007-12-31			
11 th prior year 2006-12-31			
12 th prior year 2005-12-31			
13 th prior year 2004-12-31			
14 th prior year 2003-12-31			
15 th prior year 2002-12-31			
16 th prior year 2001-12-31			
17 th prior year 2001-09-30			
18 th prior year 2000-09-30			
19 th prior year			
20 th prior year			
21 st prior year*			
Total			

* For the federal and Alberta, the 6th prior year gifts expire in the current year. For Québec, the 6th prior year gifts made in a tax year that ended before March 24, 2006, expire in the current year and the 21st prior year gifts made in a tax year that ended after March 23, 2006, expire in the current year.

Part 4 – Gifts of certified ecologically sensitive land

	Federal	Québec	Alberta
Gifts of certified ecologically sensitive land at the end of the previous tax year	4A		
Gifts of certified ecologically sensitive land expired after 5 tax years, or after 10 tax years for gifts made after February 10, 2014*	539		
Gifts of certified ecologically sensitive land at the beginning of the current tax year (amount 4A minus line 539)	540		
Gifts of certified ecologically sensitive land transferred on an amalgamation or the wind-up of a subsidiary	550		
Total current-year gifts of certified ecologically sensitive land made before February 11, 2014 (include on line 112 of Schedule 1)	510		
Total current-year gifts of certified ecologically sensitive land made after February 10, 2014 (include on line 112 of Schedule 1)	520		
Subtotal (add lines 550, 510, and 520)	4B		
Subtotal (line 540 plus amount 4B)	4C		
Adjustment for an acquisition of control	555		
Amount applied in the current year against taxable income (enter on line 314 of the T2 return)	560		
Subtotal (line 555 plus line 560)	4D		
Gifts of certified ecologically sensitive land closing balance (amount 4C minus amount 4D)	580		

* For the federal and Alberta, gifts made before February 11, 2014, expire after five tax years and gifts made after February 10, 2014, expire after ten tax years.
For Québec, gifts made during a tax year that ended before March 24, 2006, expire after five tax years and gifts made during a tax year that ended after March 23, 2006 expire after twenty tax years.

Amounts carried forward – Gifts of certified ecologically sensitive land

Amount of carried forward gifts made on or after February 11, 2014, in the tax year including this date	Federal	Québec	Alberta
Year of origin:			
1 st prior year 2016-12-31			
2 nd prior year 2015-12-31			
3 rd prior year 2014-12-31			
4 th prior year 2013-12-31			
5 th prior year 2012-12-31			
6 th prior year* 2011-12-31			
7 th prior year 2010-12-31			
8 th prior year 2009-12-31			
9 th prior year 2008-12-31			
10 th prior year 2007-12-31			
11 th prior year* 2006-12-31			
12 th prior year 2005-12-31			
13 th prior year 2004-12-31			
14 th prior year 2003-12-31			
15 th prior year 2002-12-31			
16 th prior year 2001-12-31			
17 th prior year 2001-09-30			
18 th prior year 2000-09-30			
19 th prior year			
20 th prior year			
21 st prior year*			
Total			

* For the federal and Alberta, gifts made before February 11, 2014, expire after five tax years and gifts made after February 10, 2014, expire after ten tax years.
The field "Amount of carried forward gifts made on or after February 11, 2014, in the tax year including this date" is used to determine the portion of the gifts made in the tax year straddling February 11, 2014, that expires after ten tax years.
For Québec, gifts made during a tax year that ended before March 24, 2006, expire after five tax years and gifts made in a tax year that ended after March 23, 2006, expire after twenty tax years.

Part 5 – Additional deduction for gifts of medicine

	Federal	Québec	Alberta
Additional deduction for gifts of medicine at the end of the previous tax year	5A		
Additional deduction for gifts of medicine expired after five tax years*	639		
Additional deduction for gifts of medicine at the beginning of the current tax year (amount 5A minus line 639)	640		
Additional deduction for gifts of medicine transferred on an amalgamation or the wind-up of a subsidiary	650		
Additional deduction for gifts of medicine made before March 22, 2017:			
Proceeds of disposition	602		
Cost of gifts of medicine made before March 22, 2017	601		
Subtotal (line 602 minus line 601)	5B		
Amount 5B multiplied by 50 %	5C		
Eligible amount of gifts	600		
Federal	Additional deduction for gifts of medicine made before March 22, 2017		
a _____ x $\left(\frac{b}{c} \right)$ =	610		
Québec	Additional deduction for gifts of medicine made before March 22, 2017		
a _____ x $\left(\frac{b}{c} \right)$ =			
Alberta	Additional deduction for gifts of medicine made before March 22, 2017		
a _____ x $\left(\frac{b}{c} \right)$ =			
where:			
a is the lesser of line 601 and amount 5C			
b is the eligible amount of gifts (line 600)			
c is the proceeds of disposition (line 602)			
Subtotal (line 650 plus line 610)	5D		
Subtotal (line 640 plus amount 5D)	5E		
Adjustment for an acquisition of control	655		
Amount applied in the current year against taxable income (enter on line 315 of the T2 return)	660		
Subtotal (line 655 plus line 660)	5F		
Additional deduction for gifts of medicine closing balance (amount 5E minus amount 5F)	680		

* For the federal and Alberta, the gifts expire after five tax years. For Québec, gifts made before March 19, 2007, expire after five tax years and gifts made after March 18, 2007, expire after twenty tax years.

Amounts carried forward – Additional deduction for gifts of medicine

Year of origin:		Federal	Québec	Alberta
1 st prior year	2016-12-31			
2 nd prior year	2015-12-31			
3 rd prior year	2014-12-31			
4 th prior year	2013-12-31			
5 th prior year	2012-12-31			
6 th prior year*	2011-12-31			
7 th prior year	2010-12-31			
8 th prior year	2009-12-31			
9 th prior year	2008-12-31			
10 th prior year	2007-12-31			
11 th prior year	2006-12-31			
12 th prior year	2005-12-31			
13 th prior year	2004-12-31			
14 th prior year	2003-12-31			
15 th prior year	2002-12-31			
16 th prior year	2001-12-31			
17 th prior year	2001-09-30			
18 th prior year	2000-09-30			
19 th prior year				
20 th prior year				
21 st prior year*				
Total				

* For the federal and Alberta, the 6th prior year gifts expire in the current year. For Québec, gifts made before March 19, 2007, expire after five tax years and gifts made after March 18, 2007, expire after twenty tax years.

Québec – Gifts of musical instruments

Gifts of musical instruments at the end of the previous tax year		A
Deduct: Gifts of musical instruments expired after twenty tax years		B
Gifts of musical instruments at the beginning of the tax year		C
Add:		
Gifts of musical instruments transferred on an amalgamation or the wind-up of a subsidiary		D
Total current-year gifts of musical instruments		E
	Subtotal (line D plus line E)	F
Deduct: Adjustment for an acquisition of control		G
Total gifts of musical instruments available		H
Deduct: Amount applied against taxable income		I
Gifts of musical instruments closing balance		J

Amounts carried forward – Gifts of musical instruments

Year of origin:			Québec
1 st prior year	.....	2016-12-31	
2 nd prior year	.....	2015-12-31	
3 rd prior year	.....	2014-12-31	
4 th prior year	.....	2013-12-31	
5 th prior year	.....	2012-12-31	
6 th prior year*	.....	2011-12-31	
7 th prior year	.....	2010-12-31	
8 th prior year	.....	2009-12-31	
9 th prior year	.....	2008-12-31	
10 th prior year	.....	2007-12-31	
11 th prior year	.....	2006-12-31	
12 th prior year	.....	2005-12-31	
13 th prior year	.....	2004-12-31	
14 th prior year	.....	2003-12-31	
15 th prior year	.....	2002-12-31	
16 th prior year	.....	2001-12-31	
17 th prior year	.....	2001-09-30	
18 th prior year	.....	2000-09-30	
19 th prior year	.....	
20 th prior year	.....	
21 st prior year*	.....	
Total	.....	

* These gifts expired in the current year.

**Dividends Received, Taxable Dividends Paid, and
Part IV Tax Calculations**

Corporation's name	Business number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- Corporations must use this schedule to report:
 - non-taxable dividends under section 83;
 - deductible dividends under subsection 138(6);
 - taxable dividends deductible from income under section 112, subsection 113(2) and paragraphs 113(1)(a), (a.1), (b) or (d); or
 - taxable dividends paid in the tax year that qualify for a dividend refund.
- All legislative references are to the federal *Income Tax Act*.
- The calculations in this schedule apply only to private or subject corporations.
- A recipient corporation is **connected** with a payer corporation at any time in a tax year, if at that time the recipient corporation:
 - controls the payer corporation, other than because of a right referred to in paragraph 251(5)(b); or
 - owns more than 10% of the issued share capital (with full voting rights), and shares that have a fair market value of more than 10% of the fair market value of all shares of the payer corporation.
- If you need more space, continue on a separate schedule.
- File one completed copy of this schedule with your *T2 Corporation Income Tax Return*.
- Column A1 – Enter "X" if dividends received from a foreign source.
- Column F1 – Enter the amount of dividends received reported in column 240 that are eligible.
- Column F2 – Enter the code that applies to the deductible taxable dividend.

Part 1 – Dividends received in the tax year

- Do **not** include dividends received from foreign non-affiliates.
- Complete columns B, C, D, H and I **only** if the payer corporation is **connected**.

Important instructions to follow if the payer corporation is connected

- If your corporation's tax year-end is different than that of the **connected** payer corporation, dividends could have been received from more than one tax year of the payer corporation. If so, **use a separate line** to provide the information according to each tax year of the payer corporation.
- When completing column J and K use the **special calculations provided in the notes**.

1	A Name of payer corporation (from which the corporation received the dividend)	A1	B Enter 1 if payer corporation is connected	C Business Number of connected corporation	D Tax year-end of the payer corporation in which the sections 112/113 and subsection 138(6) dividends in column F were paid YYYY/MM/DD	E Non-taxable dividends under section 83
	200		205	210	220	230
			2			
Total of column E (enter amount on line 402 of Schedule 1)						

F	F1	F2	G	H	I	J	K
Taxable dividends deductible from taxable income under section 112, subsections 113(2) and 138(6), and paragraphs 113(1)(a), (a.1), (b), or (d) ^{note 1}	Eligible dividends (included in column F)		Dividends included in column F that was received before 2016	Total taxable dividends paid by connected payer corporation (for tax year in column D)	Dividend refund of the connected payer corporation (for tax year in column D) ^{note 2}	Part IV tax before deductions. Dividends (from column G) received before 2016 multiplied by 33 1/3% ^{note 3}	Part IV tax before deductions. Dividends received after 2015 (column F minus column G) multiplied by 38 1/3% ^{note 4}
240			241	250	260	270	275
1							
Total of column F (include this amount on line 320 of the T2 Return)						Total of column J (enter amount on line a in Part 2)	Total of column K (enter amount on line b in Part 2)

1 If taxable dividends are received, enter the amount in column 240, but if the corporation is not subject to Part IV tax (such as a public corporation other than a subject corporation as defined in subsection 186(3)), enter "0" in column 270 or column 275 as applicable according to the date received. Life insurers are not subject to Part IV tax on subsection 138(6) dividends.

2 If the connected payer corporation's tax year ends after the corporation's balance-due day for the tax year (two or three months, as applicable), you have to estimate the payer's dividend refund when you calculate the corporation's Part IV tax payable.

3 For dividends received **before 2016** from **connected** corporations, Part IV tax on dividends is equal to: column G **multiplied** by column I **divided** by column H.

4 For dividends received **after 2015** from **connected** corporations, Part IV tax on dividends is equal to: column I **divided** by column H **multiplied** by the result of column F **minus** column G.

Part 2 – Calculation of Part IV tax payable

Part IV tax on dividends received **before 2016**, before deductions (total of column J in part 1) a

Part IV tax on dividends received **after 2015**, before deductions (total of column K in part 1) b

Part IV tax before deductions (amount a **plus** amount b) **L**

Deduct:

Part IV tax payable on dividends subject to Part IV tax (from line 360 of Schedule 43) **320**

Subtotal (amount L **minus** line 320) **M**

Deduct:

Current-year non-capital loss claimed to reduce Part IV tax **330** c

Non-capital losses from previous years claimed to reduce Part IV tax **335** d

Current-year farm loss claimed to reduce Part IV tax **340** e

Farm losses from previous years claimed to reduce Part IV tax **345** f

Total losses applied against Part IV tax (total of amounts c to f) g

If your tax year begins after December 31, 2015:

Amount g **multiplied** by 38 1 / 3 % h

If your tax year begins before January 1, 2016:

Amount b or M whichever is less 1

Amount 1 or g, whichever is less 2

Amount g **minus** amount 2 3

Amount 2 x 38 1 / 3 % = i

Amount 3 x 33 1 / 3 % = j

Subtotal (amount i **plus** amount j) k

Amount h or amount k, whichever applies depending on your tax year start date **N**

Part IV tax payable (amount M **minus** amount N, if negative enter "0") **360**

(enter amount on line 712 of the T2 return)

Part 3 – Taxable dividends paid in the tax year that qualify for a dividend refund

If your corporation's tax year-end is different than that of the connected recipient corporation, your corporation could have paid dividends in more than one tax year of the recipient corporation. If so, use a separate line to provide the information according to each tax year of the recipient corporation.

	O Name of connected recipient corporation	P Business Number	Q Tax year-end of connected recipient corporation in which the dividends in column R were received YYYY/MM/DD	R Taxable dividends paid to connected corporations	R1 Eligible dividends (included in column R)
	400	410	420	430	
1	Toronto Hydro Corporation		2017-12-31	2,100,000	2,100,000

Total of column R 2,100,000

Total taxable dividends paid in the tax year to other than connected corporations **450**

Eligible dividends (included in line 450) 450a

Total taxable dividends paid in the tax year that qualify for a dividend refund
(total of column R plus line 450) **460** 2,100,000

Part 4 – Total dividends paid in the tax year

Complete this part if the total taxable dividends paid in the tax year that qualify for a dividend refund (line 460) is different from the total dividends paid in the tax year.

Total taxable dividends paid in the tax year for the purposes of a dividend refund (from above) 2,100,000
Other dividends paid in the tax year (total of 510 to 540)
Total dividends paid in the tax year **500** 2,100,000

Deduct:

Dividends paid out of capital dividend account **510**
Capital gains dividends **520**
Dividends paid on shares described in subsection 129(1.2) **530**
Taxable dividends paid to a controlling corporation that was bankrupt at any time in the year **540**

Subtotal (total of lines 510 to 540) S

Total taxable dividends paid in the tax year that qualify for a dividend refund (Line 500 minus amount S) 2,100,000 T

Canada Revenue
AgencyAgence du revenu
du Canada

Tax Calculation Supplementary – Corporations

Schedule 5

Corporation's name	Business Number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- Use this schedule if, during the tax year, the corporation:
 - had a permanent establishment in more than one jurisdiction (corporations that have no taxable income should only complete columns A, B and D in Part 1);
 - is claiming provincial or territorial tax credits or rebates (see Part 2); or
 - has to pay taxes, other than income tax, for Newfoundland and Labrador, or Ontario (see Part 2).
- All legislative references mentioned in this schedule are from the *Income Tax Regulations*.
- For more information, see the *T2 Corporation – Income Tax Guide*.
- Enter the regulation number in field 100 of Part 1.

Part 1 – Allocation of taxable income

100

Enter the Regulation that applies (402 to 413).

A Jurisdiction Tick yes if the corporation had a permanent establishment in the jurisdiction during the tax year.*	B Total salaries and wages paid in jurisdiction	C (B x taxable income) / G	D Gross revenue	E (D x taxable income) / H	F Allocation of taxable income (C + E) x 1/2** (where either G or H is nil, do not multiply by 1/2)
Newfoundland and Labrador	003 1 Yes <input type="checkbox"/>	103	143		
Newfoundland and Labrador Offshore	004 1 Yes <input type="checkbox"/>	104	144		
Prince Edward Island	005 1 Yes <input type="checkbox"/>	105	145		
Nova Scotia	007 1 Yes <input type="checkbox"/>	107	147		
Nova Scotia Offshore	008 1 Yes <input type="checkbox"/>	108	148		
New Brunswick	009 1 Yes <input type="checkbox"/>	109	149		
Quebec	011 1 Yes <input type="checkbox"/>	111	151		
Ontario	013 1 Yes <input type="checkbox"/>	113	153		
Manitoba	015 1 Yes <input type="checkbox"/>	115	155		
Saskatchewan	017 1 Yes <input type="checkbox"/>	117	157		
Alberta	019 1 Yes <input type="checkbox"/>	119	159		
British Columbia	021 1 Yes <input type="checkbox"/>	121	161		
Yukon	023 1 Yes <input type="checkbox"/>	123	163		
Northwest Territories	025 1 Yes <input type="checkbox"/>	125	165		
Nunavut	026 1 Yes <input type="checkbox"/>	126	166		
Outside Canada	027 1 Yes <input type="checkbox"/>	127	167		
Total	129 G		169 H		

* "Permanent establishment" is defined in subsection 400(2).

** For corporations other than those described under section 402, use the appropriate calculation described in the Regulations to allocate taxable income.

Notes:

- After determining the allocation of taxable income, you have to calculate the corporation's provincial or territorial tax payable. For more information on how to calculate the tax for each province or territory, see the instructions for Schedule 5 in the *T2 Corporation – Income Tax Guide*.
- If the corporation has provincial or territorial tax payable, complete Part 2.
- If the corporation is a member of a partnership and the partnership had a permanent establishment in a jurisdiction, select the jurisdiction in Column A and include your proportionate share of the partnership's salaries and wages and gross revenue in columns B and D, respectively.

Part 2 – Ontario tax payable, tax credits, and rebates

Total taxable income	Income eligible for small business deduction	Provincial or territorial allocation of taxable income	Provincial or territorial tax payable before credits
118,785,349		118,785,349	13,660,315

Ontario basic income tax (from Schedule 500)	270	13,660,315	
Ontario small business deduction (from Schedule 500)	402		
Subtotal (line 270 minus line 402)		13,660,315	13,660,315 5A
Ontario additional tax re Crown royalties (from Schedule 504)	274		
Ontario transitional tax debits (from Schedule 506)	276		
Recapture of Ontario research and development tax credit (from Schedule 508)	277		
Subtotal (total of lines 274 to 277)			5B
Gross Ontario tax (amount 5A plus amount 5B)		13,660,315	5C
Ontario resource tax credit (from Schedule 504)	404		
Ontario tax credit for manufacturing and processing (from Schedule 502)	406		
Ontario foreign tax credit (from Schedule 21)	408		
Ontario credit union tax reduction (from Schedule 500)	410		
Ontario political contributions tax credit (from Schedule 525)	415		
Ontario non-refundable tax credits (total of lines 404 to 415)			5D
Subtotal (amount 5C minus amount 5D) (if negative, enter "0")		13,660,315	5E
Ontario research and development tax credit (from Schedule 508)	416	258,142	
Ontario corporate income tax payable before Ontario corporate minimum tax credit and Ontario community food program donation tax credit for farmers (amount 5E minus amount 416) (if negative, enter "0")		13,402,173	5F
Ontario corporate minimum tax credit (from Schedule 510)	418		
Ontario community food program donation tax credit for farmers (from Schedule 2)	420		
Ontario corporate income tax payable (amount 5F minus the total of lines 418 and 420) (if negative enter "0")		13,402,173	5G
Ontario corporate minimum tax (from Schedule 510)	278		
Ontario special additional tax on life insurance corporations (from Schedule 512)	280		
Subtotal (line 278 plus amount 280)			5H
Total Ontario tax payable before refundable credits (amount 5G plus amount 5H)		13,402,173	5I
Ontario qualifying environmental trust tax credit	450		
Ontario co-operative education tax credit (from Schedule 550)	452	926,007	
Ontario apprenticeship training tax credit (from Schedule 552)	454	60,000	
Ontario computer animation and special effects tax credit (from Schedule 554)	456		
Ontario film and television tax credit (from Schedule 556)	458		
Ontario production services tax credit (from Schedule 558)	460		
Ontario interactive digital media tax credit (from Schedule 560)	462		
Ontario sound recording tax credit (from Schedule 562)	464		
Ontario book publishing tax credit (from Schedule 564)	466		
Ontario innovation tax credit (from Schedule 566)	468		
Ontario business-research institute tax credit (from Schedule 568)	470	63,200	
Ontario refundable tax credits (total of lines 450 to 470)		1,049,207	1,049,207 5J
Net Ontario tax payable or refundable credit (amount 5I minus amount 5J) (if a credit, enter a negative amount) Include this amount on line 255.	290	12,352,966	

Summary

Enter the total net tax payable or refundable credits for all provinces and territories on line 255.

Net provincial and territorial tax payable or refundable credits 255 12,352,966

If the amount on line 255 is positive, enter the net provincial and territorial tax payable on line 760 of the T2 return.

If the amount on line 255 is negative, enter the net provincial and territorial refundable tax credits on line 812 of the T2 return.



Summary of Dispositions of Capital Property

Corporation's name TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	Business number 	Tax year-end Year Month Day 2017-12-31
---	-------------------------	--

- Use this schedule if your corporation disposed of (actual or deemed) capital property or claimed an allowable business investment loss (ABIL), or both, in the tax year.
- Also use this schedule to make a designation under paragraph 111(4)(e) of the *Income Tax Act* if control of the corporation has been acquired by a person or a group of persons.
- For more information, see the section called "Schedule 6, Summary of Dispositions of Capital Property" in Guide T4012, *T2 Corporation – Income Tax Guide*.

Designation under paragraph 111(4)(e) of the Income Tax Act

Are any dispositions shown on this schedule related to deemed dispositions designated under paragraph 111(4)(e)? **050** 1 Yes ☐ 2 No ☒If **yes**, attach a statement specifying which properties such a designation applies to.

Part 1 – Shares

1 Number of shares 100	2 Name of corporation in which the shares are held 105	3 Class of shares 106	4 Date of Acquisition YYYY/MM/DD 110	5 Proceeds of disposition 120	6 Adjusted cost base 130	7 Outlays and expenses from disposition 140	8 Gain (or loss) (column 5 minus columns 6 and 7) 150	Foreign source
Totals								
Total adjustment under subsection 112(3) of the Act to all losses identified in Part 1							160	
Actual gain or loss from the disposition of shares (total of column 8 plus line 160)								A

Part 2 – Real estate (Do not include losses on depreciable property)

	1 Municipal address of real estate 1 = Address 1 2 = Address 2 3 = City 4 = Province, Country, Postal Code and Zip Code or Foreign Postal Code 200	2 Date of Acquisition YYYY/MM/DD 210	3 Proceeds of disposition 220	4 Adjusted cost base 230	5 Outlays and expenses from disposition 240	6 Gain (or loss) (column 3 minus columns 4 and 5) 250	Foreign source
1	29 Heathrow Drive		448,986		29,825	419,161	
2	50 Eglinton Ave West		6,432,800	708,376	112,364	5,612,060	
3	60 Eglinton Ave West		8,187,200	4,331,181	143,009	3,713,010	
Totals			15,068,986	5,039,557	285,198	9,744,231	B

Part 3 – Bonds

1 Face value of bonds 300	2 Maturity date YYYY/MM/DD 305	3 Name of bond issuer 307	4 Date of Acquisition YYYY/MM/DD 310	5 Proceeds of disposition 320	6 Adjusted cost base 330	7 Outlays and expenses from disposition 340	8 Gain (or loss) (column 5 minus columns 6 and 7) 350	Foreign source
Totals								C

Part 4 – Other properties (Do not include losses on depreciable property)

1 Description of other property	2 Date of Acquisition YYYY/MM/DD	3 Proceeds of disposition	4 Adjusted cost base	5 Outlays and expenses from disposition	6 Gain (or loss) (column 3 minus columns 4 and 5)	Foreign source
400	410	420	430	440	450	
Totals						D

Note

Other property includes capital debts established as bad debts, as well as amounts that arise from foreign currency transactions.

Part 5 – Personal-use property (Do not include listed personal property)

1 Description of personal-use property	2 Date of Acquisition YYYY/MM/DD	3 Proceeds of disposition	4 Adjusted cost base	5 Outlays and expenses from disposition	6 Gain only (column 3 minus columns 4 and 5; if negative, enter "0")	Foreign source
500	510	520	530	540	550	
Totals						E

Note

You cannot deduct losses on dispositions of personal-use property (other than listed personal property) from your income.

Part 6 – Listed personal property

1 Description of listed personal property	2 Date of Acquisition YYYY/MM/DD	3 Proceeds of disposition	4 Adjusted cost base	5 Outlays and expenses from disposition	6 Gain (or loss) (column 3 minus columns 4 and 5)	Foreign source
600	610	620	630	640	650	
Totals						

Deduct: Unapplied listed personal property losses from other years (amount from line 530 of Schedule 4, *Corporation Loss Continuity and Application*)Net gains (or losses) from the disposition of listed personal property (total of column 6 **minus** line 655)**F****Note**

Net listed personal property losses can only be applied against listed personal property gains.

Part 7 – Property qualifying for and resulting in an allowable business investment loss

1 Name of small business corporation	2 Shares, enter 1; debt, enter 2	3 Date of Acquisition YYYY/MM/DD	4 Proceeds of disposition	5 Adjusted cost base	6 Outlays and expenses from disposition	7 Loss only (column 4 minus columns 5 and 6)	Foreign source
900	905	910	920	930	940	950	
Totals							

Allowable business investment losses (ABILs) Total of Column 7 x 50.0000 % = **G**Enter amount G on line 406 of Schedule 1, *Net Income (Loss) for Income Tax Purposes*.**Note**

Properties listed in Part 7 should not be included in any other parts of this schedule.

Part 8 – Capital gains or losses

Total of amounts A to F (do not include amount F if it is a loss)	9,744,231	H
Add:		
Capital gains dividend received in the year	875	I <input type="checkbox"/>
Capital gains reserve opening balance (from Part 1 of Schedule 13, <i>Continuity of Reserves</i> , enter the amount from line 8, <i>Balance at the beginning of the year plus</i> the amount from line 9, <i>Transfer on an amalgamation or the wind-up of a subsidiary</i>)	880	J
Subtotal (total of amounts H to J)	9,744,231	K
Deduct: Capital gains reserve closing balance (from Schedule 13)	885	L
Capital gains or losses, excluding ABILs (amount K minus amount L)	890	M

Part 9 – Taxable capital gains and total capital losses

Capital gains or losses, excluding ABILs (amount from line 890 in Part 8)	9,744,231	N
Deduct the following amounts included in amount N, that are subject to the zero inclusion rate:		
Note When a taxpayer is entitled to an advantage in respect of a donation, the zero inclusion rate is restricted to only part of the taxpayer's capital gain on disposition of the property. See section 38.2 of the Act for more information.		
Gain on the donation to a qualified donee of a share, debt obligation, or right listed on a designated stock exchange and other securities under subparagraphs 38(a.1)(i) and (iii) of the Act	895	a <input type="checkbox"/>
Gain on the donation to a qualified donee of ecologically sensitive land under paragraph 38(a.2) of the Act*	896	b <input type="checkbox"/>
Exempt portion of the gain on the donation of securities arising from the exchange of a partnership interest under paragraph 38(a.3)	b-2	<input type="checkbox"/>
Subtotal (amount a plus amount b plus b-2)		O
Subtotal (amount N minus amount O)	9,744,231	P
Add:		
Deemed capital gain from the donation of property included in a flow-through share class of property to a qualified donee under subsection 40(12) of the Act:		
Exemption threshold at time of disposition	897	c
The total of all capital gains from the disposition of the actual property	898	d
Amount c or amount d, whichever is less		Q <input type="checkbox"/>
Taxable capital gains under section 34.2 of the Act (line 275 of Schedule 73, <i>Income Inclusion Summary for Corporations that are Members of Partnerships</i>)	x	2 = 899 R
Subtotal (total of amounts P to R)	9,744,231	S
Deduct:		
Allowable capital losses under section 34.2 of the Act (line 285 of Schedule 73, <i>Income Inclusion Summary for Corporations that are Members of Partnerships</i>)	x	2 = 901 T
Total capital gains or losses (amount S minus amount T)	9,744,231	U
Taxable capital gains or total capital losses		
Total capital losses (amount U, if amount U is negative; if amount U is positive, enter "0")		V
Enter amount V on line 210 of Schedule 4.		
Taxable capital gains (if amount U is positive, enter amount U	9,744,231	multiplied by 50.0000 %;
if amount U is negative, enter "0")		4,872,116 W
Enter amount W on line 113 of Schedule 1.		

* Do not include gains on donations of ecologically sensitive land to a private foundation.



Aggregate Investment Income and Active Business Income

Corporation's name	Business number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- Use this schedule if you are a Canadian-controlled private corporation (CCPC) to calculate:
 - your aggregate investment income and foreign investment income, as defined in subsection 129(4), to determine the refundable portion of Part I tax;
 - your **specified partnership income**, if you are a member or **designated member** of one or more partnerships as defined under subsection 125(7); and
 - your income from an active business carried on in Canada eligible for the small business deduction including any **specified corporate income** as defined in subsection 125(7).
- Use this schedule if another CCPC is making an assignment of business limit under subsection 125(3.2) to you.
- Use this schedule if you are a member of a partnership to assign **specified partnership business limit** to a **designated member** under subsection 125(8).
Note: If you are a corporation that is not a CCPC, **only** complete Table 1 (columns A1, B1, C1, G1, H1 and J1) and Table 3 to make this assignment.
- All legislative references are to the *Income Tax Act*.
- For more information, see **Small Business Deduction** and **Refundable Portion of Part I Tax** in Guide T4012, *T2 Corporation – Income Tax Guide*.
- All notes with regards to this form can be found at the bottom of the form.

Part 1 – Aggregate investment income

Aggregate investment income is all **world** source income.

Eligible portion of taxable capital gains for the year	002	4,872,116
Eligible portion of allowable capital losses for the year (including allowable business investment losses)	012	
Net capital losses of previous years claimed on line 332 on the T2 return	022	
Subtotal (line 012 plus line 022)		A
Line 002 minus amount A (if negative, enter "0")		B 4,872,116
Total income from property (include income from a specified investment business carried on in Canada other than income from a source outside Canada)	032	
Exempt income	042	
Amounts received from AgriInvest Fund No. 2 that were included in computing the corporation's income for the year	052	
Taxable dividends deductible (total of column F on Schedule 3 minus related expenses)	062	
Business income from an interest in a trust that is considered property income under paragraph 108(5)(a)	072	
Subtotal (add lines 042, 052, 062 and 072)		C
Subtotal (line 032 minus amount C)		D
Amount B plus amount D		E 4,872,116
Total losses from property (include losses from a specified investment business carried on in Canada other than a loss from a source outside Canada)	082	
Amount E minus line 082 (if negative, enter "0") (enter on line 440 of the T2 return)	092	4,872,116

Part 2A – Canadian investment income calculation

Eligible portion of taxable capital gains for the year before taking into account the capital gains reserve (federal) of Schedule 13	4,872,116	1.1	
Reserve's eligible portion (addition/deduction)		1.2	
Taxable capital gains under section 34.2 (line 275 on Schedule 73)		1.3	
Eligible portion of taxable capital gains for the year after taking into account the capital gains reserve from Schedule 13 and the taxable capital gains under section 34.2 (add amounts 1.1, 1.2, and 1.3)	4,872,116		1a
Eligible portion of allowable capital losses for the year (including allowable business investment losses)		2.1	
Net capital losses of previous years claimed on line 332 on the T2 return		2.2	
Allowable capital losses under section 34.2 (line 285 of Schedule 73)		2.3	
Add amounts 2.1, 2.2 and 2.3			2a
Amount 1a minus amount 2a (if negative, enter "0")	4,872,116		3a
Taxable dividends		4.1	
Rental property income (under regulation 1100(11))		4.2	
Other property income		4.3	
Property income under section 34.2 (line 280 of Schedule 73)		4.4	
Total property income from Canadian sources (add amounts 4.1, 4.2, 4.3 and 4.4)			4a
Exempt income		5.1	
Amounts received from AgriInvest Fund No. 2 that were included in computing the corporation's income for the year		5.2	
Taxable dividends deductible (total of column F on Schedule 3 minus related expenses)		5.3	
Business income from an interest in a trust that is considered property income under paragraph 108(5)(a)		5.4	
Add amounts 5.1, 5.2, 5.3 and 5.4			5a
Amount 4a minus amount 5a			6a
Amount 3a plus amount 6a	4,872,116		7a
Rental property losses (under regulation 1100(11))		8.1	
Dividend losses		8.2	
Other property losses		8.3	
Property losses under section 34.2 (line 280 of Schedule 73)		8.4	
Total property losses from Canadian sources (add amounts 8.1, 8.2, 8.3 and 8.4)			8a
Amount 7a minus amount 8a (if negative, enter "0")	4,872,116		9a

Part 2 – Foreign investment incomeForeign investment income is all income from sources **outside Canada**.

Eligible portion of taxable capital gains for the year before taking into account the capital gains reserve (federal) of Schedule 13

a1

Reserve's eligible portion (addition/deduction)

a2

Taxable capital gains under section 34.2 (line 275 of Schedule 73)*

a3

Eligible portion of taxable capital gains for the year after taking into account the capital gains reserve (federal) of Schedule 13 and taxable capital gains under section 34.2 (**add** amounts a1, a2, and a3)

001

Allowable capital losses for the year

b1

Allowable capital losses under section 34.2 (line 285 of Schedule 73)*

b2

Eligible portion of allowable capital losses for the year (including allowable business investment losses) (**Add** amounts b1 and b2)

009

Subtotal (line 001 **minus** line 009) (if negative, enter "0")

F

Taxable dividends

c1

Rental property income (under regulation 1100(11))

c2

Other property income

c3

Property income under section 34.2 (line 280 of Schedule 73)*

c4

Total income from property from a source **outside Canada** (net of related expenses) (**add** amounts c1, c2, c3 and c4)

019

Exempt income

029

Taxable dividends deductible (total of column F on Schedule 3 **minus** related expenses)

049

Business income from an interest in a trust that is considered property income under paragraph 108(5)(a)

059

Subtotal (**add** lines 029, 049, and 059)

G

Subtotal (line 019 **minus** amount G)

H

Amount F **plus** amount H

I

Rental property losses (under regulation 1100(11))

d1

Dividend losses

d2

Other property losses

d3

Property losses under section 34.2 (line 280 of Schedule 73)*

d4

Total losses from property from a source **outside Canada** (**add** amounts d1, d2, d3 and d4)

069

Amount I **minus** line 069 (if negative, enter "0") (enter on line 445 of the T2 return)

079

* When an amount is entered on these lines, the amounts calculated for the taxable capital gains or allowable capital losses on lines 1.3 and 2.3 as well as property income or losses on lines 4.4 and 8.4 in Part 2A, "Canadian investment income calculation" are automatically updated. For more details, press F1 to consult the Help.

Net taxable dividends	Canadian	Foreign	Total
Taxable dividends deducted per schedule 3			
Less: Expenses related to such dividends			
Total expenses			
Net taxable dividends			

Part 3 – Specified partnership income

Table 1 – Specified partnership income

A				A1				1A			
Is the corporation a designated member of the partnership?				Partnership name				Partnership's account number			
				200							
Yes		No									

B1	C1	D1	1D	2D	E1	F1
Total income (loss) of partnership from an active business	Corporation's share of amount in column B1	Income of the corporation from providing (directly or indirectly) services or property to the partnership <small>note 1</small>	Adjustments under section 34.2 <small>note 2</small>	Expenses the corporation incurred to earn partnership income	Adjustments (column 1D minus column 2D)	Corporation's income (loss) in respect of the partnership <small>note 3</small> (add columns C1, D1 and E1)
300	310	311			315	320

Total **350**

G1	H1	I1	J1	K1	L1	M1
Number of days in the partnership's fiscal period	Prorated business limit <small>notes 3 and 4</small> (column C1 ÷ column B1) × [\$ 500 000 × (column G1 ÷ 365)] (if column C1 is negative, enter "0")	Specified partnership business limit assigned to you (from H2 in Table 2) <small>notes 1, 6 and 7</small>	Specified partnership business limit assigned by you (from F3 in Table 3) <small>notes 1, 6 and 8</small>	Specified partnership business limit amount (column H1 plus column I1 minus column J1)	Column F1 minus column K1 (if negative, enter "0")	Lesser of columns F1 and K1 (if column F1 is negative, enter "0") <small>notes 5</small>
325	330	335	336			340

Total **385** **360**

Corporation's losses for the year from an active business carried on in Canada (other than as a member of a partnership) – enter as a positive amount **370**

Specified partnership loss of the corporation for the year – enter as a positive amount (total of all negative amounts in column F1) **380**

Subtotal (line 370 **plus** line 380) **J**

Amount at line 385 or amount J, whichever is less **390**

Specified partnership income (line 360 **plus** line 390) **400**
(enter at amount N in Part 4)

Part 3 – Specified partnership income (continued)

Tables 2 and 3 are used to make an assignment of **specified partnership business limit** under subsection 125(8). A person that is a member of a partnership can make an assignment of **specified partnership business limit** under subsection 125(8) to a **designated member** for any tax year that **starts after** March 21, 2016. Also, that person can make an assignment for its tax year that **starts before** March 22, 2016 and **ends after** March 21, 2016 if the tax year of the **designated member starts after** March 21, 2016.

If you are a designated member and **receiving** specified partnership business limit from a person that is a member of the partnership, complete Table 2.

If you are a member of the partnership and **assigning** specified partnership business limit to a designated member, complete Table 3.

Table 2 – A member is assigning to you specified partnership business limit under subsection 125(8)

A2		2A	B2		
Partnership name		Partnership's account number	Name of the member		
405			406		

C2	D2	E2	F2	G2	H2
Business number of the member (if applicable)	Social insurance number of the member (if applicable)	Trust account number of the member (if applicable)	Tax year start of the member (yyyymmdd)	Tax year-end of the member (yyyymmdd)	Specified partnership business limit assigned to you by the member note 9
410	411	412	415	416	420

Table 3 – You are assigning to a designated member (CCPC) specified partnership business limit under subsection 125(8)

A3		3A	B3	
Partnership name		Partnership's account number	Name of the designated member	
425			426	

C3	D3	E3	F3
Business number of the designated member	Tax year start of the designated member	Tax year-end of the designated member (yyyymmdd)	Specified partnership business limit assigned by you to the designated member note 10
430	435	436	440

Part 4 – Partnership income not eligible for the small business deduction

Corporation's income from active businesses carried on in Canada as a member or designated member of a partnership (after deducting related expenses) – from line 350 in Part 3 (if the net amount is negative, enter "0" on line 450) K

Specified partnership loss (from line 380 in Part 3) L

Subtotal (amount K **plus** amount L) M

Specified partnership income (from line 400 in Part 3) N

Partnership income not eligible for the small business deduction (amount M **minus** amount N) **450**
(enter at amount V in Part 5)

Part 5 – Income from active business carried on in Canada

Net income for income tax purposes from line 300 of the T2 return	119,735,879	O	
Allowable business investment loss from line 406 of Schedule 1		P	
Subtotal (amount O plus amount P)	119,735,879		119,735,879 Q
Foreign business income after deducting related expenses ^{note 11}	500		
Taxable capital gains from line 113 of Schedule 1	4,872,116	R	
Net property income (line 032 ^{note 12} minus the total of lines 042, 052 and 082 in Part 1) ^{note 11}		S	
Personal services business income and other income after deducting related expenses ^{note 11}	520		
Subtotal (add line 500, amount R, amount S and line 520)	4,872,116		4,872,116 T
Net amount (amount Q minus amount T)			114,863,763 U
Partnership income not eligible for the small business deduction (line 450 in Part 4)		V	
Partnership income allocated to your corporation under subsection 96(1.1)	530		
Income referred to in clause 125(1)(a)(i)(C)	540		
Income referred to in clause 125(1)(a)(i)(B) (from line 615 in Part 6)		W	
Subtotal (add amount V, line 530, line 540 and amount W)			X
Specified corporate income (from line 625 in Part 6)			Y
Income from active business carried on in Canada (amount U minus amount X plus amount Y) (enter amount Z on line 400 of the T2 return - if negative, enter "0")			114,863,763 Z

Part 6 – Specified corporate income and assignment under subsection 125(3.2)**Applies to tax years that begin after March 21, 2016.**A CCPC can also make an assignment of business limit to you for its tax year that **starts before** March 22, 2016, and **ends after** March 21, 2016, if your tax **year starts** after March 21, 2016.

1AA Name of the corporation	AA Business number of the corporation	BB Income described under clause 125(1)(a)(i)(B) received from the corporation identified in column AA ^{note 13}	CC Business limit assigned from the corporation identified in column AA ^{note 14}
	600	610	620
1			
		Total 615	Total 625

Notes

Note 1 Applies to tax years that **begin after** March 21, 2016. For tax years beginning before March 22, 2016 leave blank.

Note 2 Do **not** include expenses that were deducted in computing the income of the corporation in column D1.

In general, amounts included under subsections 34.2(2) and 34.2(3) or claimed under subsection 34.2(4) are deemed to have the **same character** and be in the **same proportions** as the partnership income they relate to. Amounts claimed under subsection 34.2(11) and included under subsection 34.2(12) are deemed to have the **same character** and be in the **same proportions** as the qualifying transitional income. For example, if a corporation receives \$100,000 of partnership income for the partnership's fiscal period ending in its tax year, and that income is made up of \$40,000 of active business income, \$30,000 of income from property, and \$30,000 as a taxable capital gain, the corporation's adjusted stub period accrual (ASPA) in respect of the partnership would be 40% active business income, 30% property income, and 30% taxable capital gains. Add or deduct only the portion of the following amounts that are characterized as **active business income** in accordance with subsection 34.2(5):

Add:

- the ASPA under subsection 34.2(2) (column 4 of Schedule 73)
- the income inclusion for a new corporate member of a partnership under subsection 34.2(3) (column 6 of Schedule 73)
- the previous-year transitional reserve under subsection 34.2(12) (column 12 of Schedule 73)

Deduct:

- the previous-year ASPA under subsection 34.2(4) (column 5 of Schedule 73)
- the previous-year income inclusion for a new corporate member of a partnership under subsection 34.2(4) (column 7 of Schedule 73)
- the current-year transitional reserve under subsection 34.2(11) (column 11 of Schedule 73)

Note 3 When a partnership carries on more than one business, one of which generates income and another of which realizes a loss, the loss is **not** netted against the partnership's income when calculating the prorated business limit (column H1). Enter on line 380 the total of all losses from column F1.

Note 4 For tax years that begin after March 21, 2016, **if you are a designated member** of the partnership, enter "0".

Note 5 For tax years that begin after March 21, 2016, you must enter "0" **if** the partnership provides services or property to either:

(A) a private corporation (directly or indirectly in any manner whatever) in the year, if:

- you (or one of your shareholders) or a person that does **not** deal at arm's length with you (or one of your shareholders) holds a direct or indirect interest in the private corporation, and
- it is not the case that all or substantially all of the partnership's income for the year from an active business is from providing services or property to
 - persons (other than the private corporation) that deal at arm's length with the partnership and each person that holds a direct or indirect interest in the partnership, or
 - partnerships with which the partnership deals at arm's length, other than a partnership in which a person that does **not** deal at arm's length with you holds a direct or indirect interest, or

(B) a particular partnership (directly or indirectly in any manner whatever) in the year, if:

- you (or one of your shareholders) do **not** deal at arm's length with the particular partnership or a person that holds a direct or indirect interest in the particular partnership, and
- it is not the case that all or substantially all of the partnership's income for the year from an active business is from providing services or property to
 - persons that deal at arm's length with the partnership and each person that holds a direct or indirect interest in the partnership, or
 - partnerships (other than the particular partnership) with which the partnership deals at arm's length, other than a partnership in which a person that does **not** deal at arm's length with you holds a direct or indirect interest.

Note 6 A person that is a member of a partnership can make an assignment of **specified partnership business limit** under subsection 125(8) to a **designated member** for any tax year that **starts after** March 21, 2016. Also, that person can make an assignment for its tax year that **starts before** March 22, 2016 and **ends after** March 21, 2016 if the tax year of the **designated member starts after** March 21, 2016.

Note 7 If you are a **designated member** receiving an assignment of **specified partnership business limit**, complete Table 2 to determine the amounts to enter in Table 1 column I1.

Note 8 If you are a corporation that is a **member** of the partnership and you are assigning **specified partnership business limit**, complete Table 3 to determine the amounts to enter in Table 1 column J1.

Note 9 Add the amounts in column H2 that are for the same partnership and enter it in Table 1 column I1, in the row of the applicable partnership.

Note 10 Add the amounts in column F3 that are for the same partnership and enter it in Table 1 column J1, in the row of the applicable partnership. This amount **cannot** be higher than the amount of prorated business limit you would otherwise be entitled to in Table 1 column H1 for that partnership.

Note 11 If negative, enter amount in brackets, and **add** instead of subtracting.

Note 12 Net of related expenses.

Note 13 This amount is [as defined in subsection 125(7) **specified corporate income** (a)(i)] the total of all amounts, each of which is your income from an active business for the year from providing services or property to a private corporation (directly or indirectly, in any manner whatever) if

(A) at any time in the year, you (or one of your shareholders) or a person that does **not** deal at arm's length with you (or one of your shareholders) holds a direct or indirect interest in the private corporation, and

(B) it is not the case that all or substantially all of your income for the year from an active business is from providing services or property to

(I) persons (other than the private corporation) with which you deal at arm's length, or

(II) partnerships with which you deal at arm's length, other than a partnership in which a person that does **not** deal at arm's length with you holds a direct or indirect interest.

Do **not** include income from an associated corporation if the conditions described in subsection 125(10) are met.

Note 14 The amount of business limit that a CCPC can assign to you cannot be greater than the amount in column BB that is from providing services or property **directly** to that CCPC. If there is an amount included in column BB that is deductible by that CCPC in respect of the amount of its income referred to in clause 125(1)(a)(i)(A) or (B) for its tax year, you need to deduct it from column BB for the purpose of determining the amount that can be assigned to you.



Capital Cost Allowance (CCA)

Corporation's name TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	Business number 	Tax year-end Year Month Day 2017-12-31
---	-------------------------	--

For more information, see the section called "Capital Cost Allowance" in the *T2 Corporation Income Tax Guide*.

Is the corporation electing under *Regulation 1101(5q)*? **101** Yes ☐ No ☒

	1 Class number *	Description	2 Undepreciated capital cost at the beginning of the year (amount from column 12 of last year's schedule 8)	3 Cost of acquisitions during the year (new property must be available for use) (see note 1 below)	4 Adjustments and transfers (see note 2 below)	5 Proceeds of dispositions during the year (amount not to exceed the capital cost)	6 50% rule (1/2 of the amount, if any, by which the net cost of acquisitions exceeds column 5) (see note 3 below)	7 Reduced undepreciated capital cost (column 2 plus column 3 plus or minus column 4 minus column 5 minus column 6)	8 CCA rate % (see note 4 below)	9 Recapture of capital cost allowance (line 107 of Schedule 1) (see note 5 below)	10 Terminal loss (line 404 of Schedule 1)	11 Capital cost allowance (for declining balance method, column 7 multiplied by column 8, or a lower amount) (line 403 of Schedule 1) (see note 6 below)	12 Undepreciated capital cost at the end of the year (column 6 plus column 7 minus column 11)
	200		201	203	205	207	211		212	213	215	217	220
1.	1	Buildings	1,050,551,478	50,260,398	-98,722	4,148,922	23,055,738	1,073,508,494	4	0	0	42,940,340	1,053,623,892
2.	8	Furnitures, Fixtures and Equipme	25,760,341	7,372,442		0	3,686,221	29,446,562	20	0	0	5,889,312	27,243,471
3.	10	Vehicles & Fleets	10,059,005	4,232,144		225,966	2,003,089	12,062,094	30	0	0	3,618,628	10,446,555
4.	12	Computer Software	5,044,188	18,493,279		0	9,246,640	14,290,827	100	0	0	14,290,827	9,246,640
5.	17	Paving, Parking Lot and Yards	22,071,898	10,520,239		103,915	5,208,162	27,280,060	8	0	0	2,182,405	30,305,817
6.	2	Pre - 1988 Electrical distributing	257,244,858			0		257,244,858	6	0	0	15,434,691	241,810,167
7.	95	CWIP	496,089,815		-20,513,643	0		475,576,172	0	0	0		475,576,172
8.	45	computer hardware	13,586			0		13,586	45	0	0	6,114	7,472
9.	47	ELECTRICITY DISTRIBUTION EC	1,993,602,199	381,548,847		0	190,774,424	2,184,376,622	8	0	0	174,750,130	2,200,400,916
10.	42	Fibre	4,634,062	6,451,274		0	3,225,637	7,859,699	12	0	0	943,164	10,142,172
11.	50	Computers acquired after March	19,972,283	15,074,677		0	7,537,339	27,509,621	55	0	0	15,130,292	19,916,668
12.	43.2	Solar	2,322,472	262,648		0	131,324	2,453,796	50	0	0	1,226,898	1,358,222
13.	13	2012 additions	58,748			0		58,748	NA	0	0	58,748	
14.	46	Date Network Infrastructure Equ	18,359,530	1,122,350		0	561,175	18,920,705	30	0	0	5,676,212	13,805,668
15.	13	2014 addition	26,203			0		26,203	NA	0	0	10,481	15,722
16.	6	Fences & Gates	1,883,105	449,665		0	224,833	2,107,937	10	0	0	210,794	2,121,976
17.	14.1	Pre-2017 CEC	51,742,306			0		51,742,306	5	0	0	3,621,961	48,120,345
Totals			3,959,436,077	495,787,963	-20,612,365	4,478,803	245,654,582	4,184,478,290				285,990,997	4,144,141,875

* Class numbers followed by a letter indicate the basic rate of the class taking into account the additional deduction allowed.

Class 1a: $4\% + 6\% = 10\%$ (class 1 to 10%), class 1b: $4\% + 2\% = 6\%$ (class 1 to 6%).

Note 1. Include any property acquired in previous years that has now become available for use. This property would have been previously excluded from column 3. List separately any acquisitions that are not subject to the 50% rule, see *Regulation 1100(2)* and (2.2).

Note 2. Enter in column 4, "Adjustments and transfers", amounts that increase or reduce the undepreciated capital cost.

Items that **increase** the undepreciated capital cost include amounts transferred under section 85, or transferred on amalgamation or winding-up of a subsidiary. Items that **reduce** the undepreciated capital cost include government assistance received or entitled to be received in the year, or a reduction of capital cost after the application of section 80. See the *T2 Corporation Income Tax Guide* for other examples of adjustments and transfers to include in column 4.

Note 3. The net cost of acquisitions is the cost of acquisitions (column 3) **plus** or **minus** certain adjustments and transfers from column 4. For information on the exceptions to the 50% rule, as well as how to calculate the amounts to enter in column 6 in those cases, see Interpretation Bulletin IT-285, *Capital Cost Allowance - General Comments*.

Note 4. Enter a rate only if you are using the declining balance method. For any other method (for example the straight-line method, where calculations are always based on the cost of acquisitions), enter N/A. Then enter the amount you are claiming in column 11.

Note 5. For every entry in column 9, "Recapture of capital cost allowance", there must be a corresponding entry in column 5, "Proceeds of dispositions during the year". The recapture and terminal loss rules do not apply to passenger vehicles in Class 10.1.

Note 6. If the tax year is shorter than 365 days, prorate the CCA claim. Some classes of property do not have to be prorated. See the *T2 Corporation Income Tax Guide* for more information.

T2 SCH 8 (17)

Canada

RELATED AND ASSOCIATED CORPORATIONS

Name of corporation	Business Number	Tax year end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	[REDACTED]	2017-12-31

- Complete this schedule if the corporation is related to or associated with at least one other corporation.
- For more information, see the *T2 Corporation Income Tax Guide*.

	Name 100	Country of residence (other than Canada) 200	Business number (see note 1) 300	Relationship code (see note 2) 400	Number of common shares you own 500	% of common shares you own 550	Number of preferred shares you own 600	% of preferred shares you own 650	Book value of capital stock 700
1.	TORONTO HYDRO CORPORATION		[REDACTED]	1					
2.	TORONTO HYDRO ENERGY SERVIC		[REDACTED]	3					

Note 1: Enter "NR" if the corporation is not registered or does not have a business number.
Note 2: Enter the code number of the relationship that applies from the following order: 1 - Parent 2 - Subsidiary 3 - Associated 4 - Related but not associated

Continuity of financial statement reserves (not deductible)

Financial statement reserves (not deductible)						
	Description	Balance at the beginning of the year	Transfer on an amalgamation or the wind-up of a subsidiary	Add	Deduct	Balance at the end of the year
1	POEB	280,485,000		32,485,000		312,970,000
2	Termination Accrual	227,692			147,645	80,047
	Reserves from Part 2 of Schedule 13					
	Totals	280,712,692		32,485,000	147,645	313,050,047

The total opening balance plus the total transfers should be entered on line 414 of Schedule 1 as a deduction.

The total closing balance should be entered on line 126 of Schedule 1 as an addition.



Agreement Among Associated Canadian-Controlled Private Corporations to Allocate the Business Limit

- For use by a Canadian-controlled private corporation (CCPC) to identify all associated corporations and to assign a percentage for each associated corporation. This percentage will be used to allocate the business limit for purposes of the small business deduction. Information from this schedule will also be used to determine the date the balance of tax is due and to calculate the reduction to the business limit.
- An associated CCPC that has more than one tax year ending in a calendar year, is required to file an agreement for each tax year ending in that calendar year.

Column 1: Enter the legal name of each of the corporations in the associated group. Include non-CCPCs and CCPCs that have filed an election under subsection 256(2) of the *Income Tax Act* not to be associated for purposes of the small business deduction.

Column 2: Provide the business number for each corporation (if a corporation is not registered, enter "NR").

Column 3: Enter the association code from the list below that applies to each corporation:

- 1 – Associated for purposes of allocating the business limit (unless code 5 applies)
- 2 – CCPC that is a "third corporation" that has elected under subsection 256(2) not to be associated for purposes of the small business deduction
- 3 – Non-CCPC that is a "third corporation" as defined in subsection 256(2)
- 4 – Associated non-CCPC
- 5 – Associated CCPC to which code 1 does not apply because of a subsection 256(2) election made by a "third corporation"

Column 4: Enter the business limit for the year of each corporation in the associated group.

Column 5: Assign a percentage to allocate the business limit to each corporation that has an association code 1 in column 3. The total of all percentages in column 5 cannot exceed 100%.

Column 6: Enter the business limit allocated to each corporation by multiplying the amount in column 4 by the percentage in column 5. Add all business limits allocated in column 6 and enter the total at line A. Ensure that the total at line A does not exceed \$500,000.

Allocating the business limit

Date filed (do not use this area)	025	Year Month Day			
Enter the calendar year to which the agreement applies	050	Year 2017			
Is this an amended agreement for the above calendar year that is intended to replace an agreement previously filed by any of the associated corporations listed below?	075	1 Yes <input type="checkbox"/> 2 No <input checked="" type="checkbox"/>			
1 Names of associated corporations	2 Business number of associated corporations	3 Association code	4 Business limit for the year before the allocation \$	5 Percentage of the business limit %	6 Business limit allocated* \$
100	200	300		350	400
1 TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		1	500,000	100.0000	500,000
2 TORONTO HYDRO CORPORATION		1	500,000		
3 TORONTO HYDRO ENERGY SERVICES INC.		1	500,000		
Total				100.0000	500,000 A

Business limit reduction under subsection 125(5.1) of the Act

The business limit reduction is calculated in the small business deduction area of the T2 return. One of the factors used in this calculation is the "large corporation amount" at line 415 of the T2 return. The amount at line 415 is determined using the formula $0.225\% \times (D - \$10,000,000)$. Details of this formula and variable D are in subsection 125(5.1) of the Act.

* Each corporation will enter on line 410 of the T2 return, the amount allocated to it in column 6. However, if the corporation's tax year is less than 51 weeks, prorate the amount in column 6 by the number of days in the tax year divided by 365, and enter the result on line 410 of the T2 return.

Special rules for business limit

Special rules apply under subsection 125(5) if a CCPC has more than one tax year ending in the same calendar year and it is associated in more than one of those tax years with another CCPC that has a tax year ending in that calendar year. The business limit for the second or later tax year will be equal to the business limit determined for the first tax year ending in the calendar year or the business limit determined for the second or later tax year ending in the same calendar year, whichever is less.



Investment Tax Credit – Corporations

General information

- Use this schedule:
 - to calculate an investment tax credit (ITC) earned during the tax year;
 - to claim a deduction against Part I tax payable;
 - to claim a refund of credit earned during the current tax year;
 - to claim a carryforward of credit from previous tax years;
 - to transfer a credit following an amalgamation or wind-up of a subsidiary, as described under subsections 87(1) and 88(1);
 - to request a credit carryback to one or more previous years;
 - if you are subject to a recapture of ITC; or
 - if you are claiming:
 - The **Ontario Research and Development Tax Credit**;
 - The **Ontario Innovation Tax Credit**.
- Unless otherwise noted, all legislative references are to the *Income Tax Act* and the *Income Tax Regulations*.
- The ITC is eligible for a three-year carryback (if not deductible in the year earned). It is also eligible for a twenty-year carryforward.
- Investments or expenditures, described in subsection 127(9) and Regulation Part XLVI, that earn an ITC are:
 - qualified property and qualified resource property (Parts 4 to 7 of this schedule);
 - qualified scientific research and experimental development (SR&ED) expenditures (Parts 8 to 17). File Form T661, *Scientific Research and Experimental Development (SR&ED) Expenditures Claim*;
 - pre-production mining expenditures (Parts 18 to 20);
 - apprenticeship job creation expenditures (Parts 21 to 23); and
 - child care spaces expenditures (Parts 24 to 28).
 - Expenditures related to child care spaces that occurred after March 21, 2017 no longer qualify for the investment tax credit. Under a transitional rule, the investment tax credit will be available for eligible expenditures incurred before 2020 under a written agreement entered before March 22, 2017.
- Include a completed copy of this schedule with the *T2 Corporation Income Tax Return*. If you need more space, attach additional schedules.
- For more information on ITCs, see "Investment Tax Credit" in Guide T4012, *T2 Corporation – Income Tax Guide*, Information Circular IC78-4, *Investment Tax Credit Rates*, and its related Special Release.
- For more information on SR&ED, see T4088, *Guide to Form T661 – Scientific Research and Experimental Development (SR&ED) Expenditures Claim*.

Detailed information

- For the purpose of this schedule, **investment** means the capital cost of the property (excluding amounts added by an election under section 21), determined without reference to subsections 13(7.1) and 13(7.4), minus the amount of any government or non-government assistance that the corporation has received, is entitled to receive, or can reasonably be expected to receive for that property when it files the income tax return for the year in which the property was acquired.
- An ITC deducted or refunded in a tax year for a depreciable property, other than a depreciable property deductible under paragraph 37(1)(b), reduces both the capital cost of that property and the undepreciated capital cost of that class in the next tax year. An ITC for SR&ED deducted or refunded in a tax year will reduce the balance in the pool of deductible SR&ED expenditures and the adjusted cost base (ACB) of an interest in a partnership in the next tax year. An ITC from pre-production mining expenditures deducted in a tax year reduces the balance in the pool of deductible cumulative Canadian exploration expenses in the next tax year.
- Property acquired has to be **available for use** before a claim for an ITC can be made. See subsections 127(11.2) and 248(19) for more information.
- Expenditures for SR&ED and capital costs for a property qualifying for an ITC must be identified by the claimant on Form T661 and Schedule 31 no later than 12 months after the claimant's income tax return is due for the tax year in which it incurred the expenditures or capital costs.
- Expenditures for pre-production mining, apprenticeship, or child care space for an ITC must be identified by the claimant on Schedule 31 no later than 12 months after the claimant's income tax return is due for the tax year in which it incurred the expenditures or capital costs.
- Partnership allocations – Subsection 127(8) provides for the allocation of the amount that may reasonably be considered to be a partner's share of the ITCs of the partnership at the end of the fiscal period of the partnership. An allocation of ITCs is generally considered to be the partner's reasonable share of the ITCs if it is made in the same proportion in which the partners have agreed to share any income or loss and if section 103 is not applicable for the agreement to share any income or loss. Special rules apply to specified members of a partnership and limited partners. For more information, see Guide T4068, *Guide for the Partnership Information Return*.
- For tax purposes, Canada includes the **exclusive economic zone of Canada** as defined in the *Oceans Act* (which generally consists of an area of the sea that is within 200 nautical miles from the Canadian coastline), including the airspace, seabed and subsoil of that zone.
- For the purpose of this schedule, the expression **Atlantic Canada** includes the Gaspé Peninsula and the provinces of Newfoundland and Labrador, Prince Edward Island, Nova Scotia, and New Brunswick, as well as their respective offshore regions (prescribed in Regulation 4609).
- For the purpose of this schedule, **qualified property** means property in Atlantic Canada that is used primarily for manufacturing and processing, farming or fishing, logging, storing grain, or harvesting peat. Property in Atlantic Canada that is used primarily for oil and gas, and mining activities is considered qualified property only if acquired by the taxpayer **before** March 29, 2012. Qualified property includes new buildings and new machinery and equipment (prescribed in Regulation 4600), and if acquired by the taxpayer **after** March 28, 2012, new energy generation and conservation property (prescribed in Regulation 4600). Qualified property can also be used primarily to produce or process electrical energy or steam in a prescribed area (as described in Regulation 4610). See the definition of **qualified property** in subsection 127(9) for more information.

Detailed information (continued)

- For the purpose of this schedule, **qualified resource property** means property in Atlantic Canada that is used primarily for oil and gas, and mining activities, if acquired by the taxpayer **after** March 28, 2012, and **before** January 1, 2016. Qualified resource property includes new buildings and new machinery and equipment (prescribed in Regulation 4600). See the definition of **qualified resource property** in subsection 127(9) for more information.
- For the purpose of this schedule, **pre-production mining exploration expenditures** are pre-production mining expenditures incurred **after** March 28, 2012, by the taxpayer to determine the existence, location, extent, or quality of certain mineral resources in Canada, excluding expenses incurred in the exploration of an oil or gas well. See subparagraph (a)(i) of the definition of **pre-production mining expenditure** in subsection 127(9) for more information.
- For the purpose of this schedule, **pre-production mining development expenditures** are pre-production mining expenditures incurred **after** March 28, 2012, by the taxpayer to bring a new mineral resource mine in Canada into production, excluding expenses in the development of a bituminous sands deposit or an oil shale deposit. See subparagraph (a)(ii) of the definition of **pre-production mining expenditure** in subsection 127(9) for more information.

Part 1 – Investments, expenditures, and percentages

	Specified percentage
Investments	
Qualified property acquired primarily for use in Atlantic Canada	10 %
Qualified resource property acquired primarily for use in Atlantic Canada and acquired:	
– after March 28, 2012, and before 2014	10 %
– after 2013 and before 2016	5 %
– after 2015*	0 %
Expenditures	
If you are a Canadian-controlled private corporation (CCPC), this percentage may apply to the portion that you claim of the SR&ED qualified expenditure pool that does not exceed your expenditure limit (see Part 10)	35 %
Note: If your current year's qualified expenditures are more than your expenditure limit (see Part 10), the excess is eligible for an ITC calculated at the 15 % rate**.	
If you are a corporation that is not a CCPC and have incurred qualified expenditures for SR&ED in any area in Canada:	
– before 2014**	20 %
– after 2013**	15 %
If you are a taxable Canadian corporation that incurred pre-production mining expenditures before March 29, 2012	10 %
If you are a taxable Canadian corporation that incurred pre-production mining exploration expenditures:	
– after March 28, 2012, and before 2013	10 %
– in 2013	5 %
– after 2013	0 %
If you are a taxable Canadian corporation that incurred pre-production mining development expenditures***:	
– after March 28, 2012, and before 2014	10 %
– in 2014	7 %
– in 2015	4 %
– after 2015	0 %
If you paid salary and wages to apprentices in the first 24 months of their apprenticeship contract for employment	10 %
If you incurred expenditures after March 18, 2007 and before March 22, 2017 (or before 2020 if you entered into a written agreement before March 22, 2017) for the creation of licensed child care spaces for the children of your employees and, potentially, for other children	25 %
* A transitional relief rate of 10% may apply to property acquired after 2013 and before 2017, if the property is acquired under a written agreement entered into before March 29, 2012, or the property is acquired as part of a phase of a project where the construction or the engineering and design work for the construction started before March 29, 2012. See paragraph (a.1) of the definition of specified percentage in subsection 127(9) for more information.	
** The reduction of the rate from 20% to 15% applies to 2014 and later tax years, except that, for 2014 tax years that start before 2014, the reduction is pro-rated based on the number of days in the tax year that are after 2013.	
*** A transitional relief rate may apply to expenditures incurred after 2013 and before 2016, if the expenditure is incurred under a written agreement entered into before March 29, 2012, or the expenditure is incurred as part of the development of a new mine where the construction or the engineering and design work for the construction of the new mine started before March 29, 2012. See subparagraphs (k)(ii) and (iii) of the definition of specified percentage in subsection 127(9) for more information.	

Corporation's name TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	Business number 	Tax year-end Year Month Day 2017-12-31
---	-------------------------	--

Part 2 – Determination of a qualifying corporationIs the corporation a qualifying corporation? **101** 1 Yes ☐ 2 No ☒

For the purpose of a refundable ITC, a **qualifying corporation** is defined under subsection 127.1(2). The corporation has to be a CCPC and its taxable income (before any loss carrybacks) for its previous tax year cannot be more than its **qualifying income limit** for the particular tax year. If the corporation is associated with any other corporations during the tax year, the total of the taxable incomes of the corporation and the associated corporations (before any loss carrybacks), for their last tax year ending in the previous calendar year, cannot be more than their qualifying income limit for the particular tax year.

Note: A CCPC considered associated with another corporation under subsection 256(1) will be considered **not** associated for the calculation of a refundable ITC if:

- one corporation is associated with another corporation solely because one or more persons own shares of the capital stock of both corporations; and
- one of the corporations has at least one shareholder who is not common to both corporations.

If you are a **qualifying** corporation, you will earn a **100%** refund on your share of any ITCs earned at the 35% rate on qualified **current** expenditures for SR&ED, up to the allocated expenditure limit. The 100% refund does not apply to qualified **capital** expenditures eligible for the 35% credit rate. They are only eligible for the **40%** refund*.

Some CCPCs that are **not qualifying** corporations may also earn a **100%** refund on their share of any ITCs earned at the 35% rate on qualified **current** expenditures for SR&ED, up to the allocated expenditure limit. The expenditure limit can be determined in Part 10. The 100% refund does not apply to qualified **capital** expenditures eligible for the 35% credit rate. They are only eligible for the **40%** refund*.

The 100% refund will not be available to a corporation that is an **excluded corporation** as defined under subsection 127.1(2). A corporation is an excluded corporation if, at any time during the year, it is a corporation that is either controlled by (directly or indirectly, in any manner whatever) or is related to:

- a) one or more persons exempt from Part I tax under section 149;
- b) Her Majesty in right of a province, a Canadian municipality, or any other public authority; or
- c) any combination of persons referred to in a) or b) above.

* Capital expenditures incurred after December 31, 2013, including lease payments for property that would have been a capital expenditure if purchased directly, are **not** qualified SR&ED expenditures and are **not** eligible for an ITC on SR&ED expenditures.

Part 3 – Corporations in the farming industry

Complete this area if the corporation is making SR&ED contributions.

Is the corporation claiming a contribution in the current year to an agricultural organization whose goal is to finance SR&ED work (for example, check-off dues)? **102** 1 Yes ☐ 2 No ☒

If **yes**, complete Schedule 125, *Income Statement Information*, to identify the type of farming industry the corporation is involved in.

Contributions to agricultural organizations for SR&ED* **103** _____
(Enter this amount on line 350 of Part 8)

* Enter only contributions not already included on Form T661.

Include 80% of the contributions made **after** 2012. For contributions made **before** 2013, include all of the contributions.

Qualified Property and Qualified Resource Property**Part 4 – Eligible investments for qualified property and qualified resource property from the current tax year**

Capital cost allowance class number 105	Description of investment 110	Date available for use 115	Location used in Atlantic Canada (province) 120	Amount of investment 125
Total of investments for qualified property and qualified resource property				

A1

* Include investments acquired after 2013 and before 2017 that are eligible for transitional relief.

SR&ED

Part 8 – Qualified SR&ED expenditures

Current expenditures (from line 557 on Form T661)	7,117,339	
Contributions to agricultural organizations for SR&ED		
Deduct:		
Government assistance, non-government assistance, or contract payment		
Contributions to agricultural organizations for SR&ED for the federal ITC (this amount is updated to line 103 of Part 3. For more details, consult the Help.)*		
		350
Current expenditures (line 557 on Form T661 plus line 103 in Part 3)*	7,117,339	350 7,117,339
Capital expenditures incurred before 2014 (from line 558 on Form T661)**		360
Repayments made in the year (from line 560 on Form T661)		370
Qualified SR&ED expenditures (total of lines 350 to 370)		380 7,117,339

* If you are claiming only contributions made to agricultural organizations for SR&ED, line 350 should equal line 103 in Part 3. Do not file Form T661.

** Capital expenditures incurred after December 31, 2013, are not qualified SR&ED expenditures. Capital cost allowance can be claimed for depreciable property acquired for use in SR&ED after 2013.

Part 9 – Components of the SR&ED expenditure limit calculation

Part 9 only applies if you are a CCPC.

Note: A CCPC considered associated with another corporation under subsection 256(1) will be considered not associated for the calculation of an SR&ED expenditure limit if:

- one corporation is associated with another corporation solely because one or more persons own shares of the capital stock of the corporation; and
- one of the corporations has at least one shareholder who is not common to both corporations.

Is the corporation associated with another CCPC for the purpose of calculating the SR&ED expenditure limit? **385** 1 Yes ☒ 2 No ☐If you answered **no** to the question on line 385 above or if you are not associated with any other corporations, complete lines 390 and 398.If you answered **yes**, the amounts for associated corporations will be determined on Schedule 49.Enter your taxable income for the previous tax year* (prior to any loss carrybacks applied) **390**

Enter your taxable capital employed in Canada for the previous tax year minus \$10 million. If this amount is nil or negative, enter "0".

If this amount is over \$40 million, enter \$40 million **398*** If the tax year referred to on line 390 is less than 51 weeks, **multiply** the taxable income by the following result: 365 **divided** by the number of days in that tax year.

Part 10 – SR&ED expenditure limit for a CCPC

For a stand-alone (not associated) corporation:	\$ 8,000,000	
Taxable income for the previous tax year (line 390 in Part 9) or \$500,000, whichever is more	x 10 =	A2
Excess (\$8,000,000 minus amount A2; if negative, enter "0")		B2
\$ 40,000,000 minus line 398 in Part 9	b	
Amount b divided by \$ 40,000,000		C2
Expenditure limit for the stand-alone corporation (amount B2 multiplied by amount C2)*		D2
For an associated corporation:		
If associated, the allocation of the SR&ED expenditure limit, as provided on Schedule 49*	400	E2
If your tax year is less than 51 weeks, calculate the amount of the expenditure limit as follows:		
Amount D2 or E2 x Number of days in the tax year 365 =		F2
Your SR&ED expenditure limit for the year (enter the amount from amount D2, E2, or F2, whichever applies)	410	

* Amount D2 or E2 cannot be more than \$3,000,000.

Part 11 – Investment tax credits on SR&ED expenditures

Current expenditures (from line 350 in Part 8) or the expenditure limit (from line 410 in Part 10), whichever is less* **420** x 35 % = G2

Line 350 **minus** line 410 (if negative, enter "0") **430** 7,117,339

Amount from line 430 x Number of days in the tax year before 2014 x 20% = c

Amount from line 430** 7,117,339 x Number of days in the tax year after 2013 365 x 15 % = 1,067,601 d

Subtotal (amount c **plus** amount d) 1,067,601 ► 1,067,601 H2

Line 410 **minus** line 350 (if negative, enter "0") e

Capital expenditures (line 360 in Part 8) or amount e, whichever is less* **440** x 35 % = I2

Line 360 **minus** amount e (if negative, enter "0") **450**

Amount from line 450 x Number of days in the tax year before 2014 x 20% = f

Amount from line 450** x Number of days in the tax year after 2013 365 x 15 % = g

Subtotal (amount f **plus** amount g) ► J2

If a corporation makes a repayment of any government or non-government assistance, or contract payments that reduced the amount of qualified expenditures for ITC purposes, the amount of the repayment is eligible for a credit.

Repayments (amount from line 370 in Part 8)

The ITC on the repayment (the credit) is calculated using the ITC rate that you used to determine your ITC when your qualified expenditures for ITC purposes were reduced because of the government or non-government assistance, or contract payments. Enter the amount of the repayment on the line that corresponds to the appropriate rate. ***

460 x 35 % = h

480 x 20 % = i

490 x 15 % = j

Subtotal (**add** amounts h to j) ► K2

Current-year SR&ED ITC (total of amounts G2 to K2; enter on line 540 in Part 12) 1,067,601 L2

* For corporations that are not CCPCs, enter "0" for amounts G2 and I2.

** For tax years that end after 2013, the general SR&ED ITC rate is reduced from 20% to 15%, except that, for 2014 tax years that start before 2014, the reduction is pro-rated based on the number of days in the tax year that are after 2013. For tax years that have a start date **after** 2013, multiply the amount by 15%.

*** If you are reporting a repayment for a tax year which included two calendar years with different rates (such as a 2014 tax year that started in 2013), the amount of repayment is allocated between the two ITC rates as follows:

- For the first part of the tax year, enter on the line next to the applicable ITC rate, the result of the following calculation: The full repayment amount **multiplied** by the number of days in the tax year which were in the first calendar year, **divided** by the total number of days in the tax year.
- For the last part of the tax year which is in the second calendar year, enter on the line next to the applicable ITC rate, the difference between the first part calculated above and the full repayment amount.

Part 12 – Current-year credit and account balances – ITC from SR&ED expenditures

ITC at the end of the previous tax year					M2
Credit deemed as a remittance of co-op corporations	510				
Credit expired	515				
	Subtotal (line 510 plus line 515)				
ITC at the beginning of the tax year (amount M2 minus amount N2)	520				N2
Credit transferred on amalgamation or wind-up of subsidiary	530				
Total current-year credit (from amount L2 in Part 11)	540	1,067,601			
Credit allocated from a partnership	550				
	Subtotal (total of lines 530 to 550)	1,067,601		1,067,601	O2
Total credit available (line 520 plus amount O2)				1,067,601	P2
Credit deducted from Part I tax	560	1,067,601			
Credit carried back to previous years (amount S2 in Part 13)					k
Credit transferred to offset Part VII tax liability	580				
	Subtotal (total of line 560, amount k, and line 580)	1,067,601		1,067,601	Q2
Credit balance before refund (amount P2 minus amount Q2)					R2
Refund of credit claimed on SR&ED expenditures (from Part 14 or 15, whichever applies)	610				
ITC closing balance on SR&ED (amount R2 minus line 610)	620				

Part 13 – Request for carryback of credit from SR&ED expenditures

	Year	Month	Day				
1st previous tax year					Credit to be applied	911	
2nd previous tax year					Credit to be applied	912	
3rd previous tax year					Credit to be applied	913	
					Total of lines 911 to 913		S2
					(enter at amount k in Part 12)		

Part 14 – Refund of ITC for qualifying corporations – SR&ED

Complete this part only if you are a qualifying corporation as determined on line 101 in Part 2.

Is the corporation an excluded corporation as defined under subsection 127.1(2)? **650** 1 Yes ☐ 2 No ☒

Current-year ITC (lines 540 **plus** 550 in Part 12 **minus** amount K2 in Part 11) I

Refundable credits (amount I or amount R2 in Part 12, whichever is less)* T2

Amount T2 or amount G2 in Part 11, whichever is less U2

Net amount (amount T2 **minus** amount U2; if negative, enter "0") V2

Amount V2 **multiplied by** 40 % W2

Amount U2 X2

Refund of ITC (amount W2 **plus** amount X2 – enter this, or a lesser amount, on line 610 in Part 12) Y2

Enter the total of line 310 in Part 5 and line 610 in Part 12 on line 780 of the T2 return.

* If you are also an excluded corporation, as defined in subsection 127.1(2), this amount must be multiplied by 40%. Claim this, or a lesser amount, as your refund of ITC for amount Y2.

Part 15 – Refund of ITC for CCPCs that are not qualifying or excluded corporations – SR&ED

Complete this box only if you are a CCPC that is not a qualifying or excluded corporation as determined on line 101 in Part 2.

Credit balance before refund (from amount R2 in Part 12) Z2

Amount Z2 or amount G2 in Part 11, whichever is less AA2

Net amount (amount Z2 **minus** amount AA2; if negative, enter "0") BB2

Amount BB2 or amount I2 in Part 11, whichever is less CC2

Amount CC2 **multiplied by** 40 % DD2

Amount AA2 EE2

Refund of ITC (amount DD2 **plus** amount EE2) FF2

Enter FF2, or a lesser amount, on line 610 in Part 12 and also on line 780 of the T2 return.

Recapture – SR&ED

Part 16 – Recapture of ITC for corporations and partnerships – SR&ED

You will have a recapture of ITC in a year when **all** of the following conditions are met:

- you acquired a particular property in the current year or in any of the 20 previous tax years, and the credit was earned in a tax year ending after 1997 and did not expire before 2008;
- you claimed the cost of the property as a qualified expenditure for SR&ED on Form T661;
- the cost of the property was included in calculating your ITC or was the subject of an agreement made under subsection 127(13) to transfer qualified expenditures; and
- you disposed of the property or converted it to commercial use after February 23, 1998. This condition is also met if you disposed of or converted to commercial use a property that incorporates the particular property previously referred to.

Note:

The recapture **does not apply** if you disposed of the property to a non-arm's-length purchaser who intended to use it all or substantially all for SR&ED. When the non-arm's-length purchaser later sells or converts the property to commercial use, the recapture rules will apply to the purchaser based on the historical ITC rate of the original user.

You will report a recapture on the T2 return for the year in which you disposed of the property or converted it to commercial use. In the following tax year, add the amount of the ITC recapture to the SR&ED expenditure pool.

If you have more than one disposition for calculations 1 and 2, complete the columns for each disposition for which a recapture applies, using the calculation formats below.

Calculation 1 – If you meet all of the above conditions

Amount of ITC you originally calculated for the property you acquired, or the original user's ITC where you acquired the property from a non-arm's length party, as described in the note above	Amount calculated using ITC rate at the date of acquisition (or the original user's date of acquisition) on either the proceeds of disposition (if sold in an arm's length transaction) or the fair market value of the property (in any other case)	Amount from column 700 or 710, whichever is less
700	710	
Subtotal (enter amount A3 on line C3 in Part 17)		A3

Calculation 2 – Only if you transferred all or a part of the qualified expenditure to another person under an agreement described in subsection 127(13); otherwise, enter nil on line B3.

A	B	C	D	E	F
Rate that the transferee used in determining its ITC for qualified expenditures under a subsection 127(13) agreement	Proceeds of disposition of the property if you dispose of it to an arm's length person; or, in any other case, enter the fair market value of the property at conversion or disposition	Amount, if any, already provided for in Calculation 1 (This allows for the situation where only part of the cost of a property is transferred under a subsection 127(13) agreement.)	Amount determined by the formula $(A \times B) - C$	ITC earned by the transferee for the qualified expenditures that were transferred	Amount from column D or E, whichever is less
720	730	740		750	
Subtotal (total of column F) (enter amount B3 on line D3 in Part 17)					B3

Part 16 – Recapture of ITC for corporations and partnerships – SR&ED (continued)

Calculation 3

As a member of the partnership, you will report your share of the SR&ED ITC of the partnership after the SR&ED ITC has been reduced by the amount of the recapture. If this amount is a positive amount, you will report it on line 550 in Part 12. However, if the partnership does not have enough ITC otherwise available to offset the recapture, then the amount by which reductions to ITC exceed additions (the excess) will be determined and reported on line 760.

Corporate partner's share of the excess of SR&ED ITC (amount to be reported on line E3 in Part 17) **760**

Part 17 – Total recapture of SR&ED investment tax credit

Recaptured ITC from calculation 1, amount A3 in Part 16	.....	C3
Recaptured ITC from calculation 2, amount B3 in Part 16	.....	D3
Recaptured ITC from calculation 3, line 760 in Part 16	.....	E3
Total recapture of SR&ED investment tax credit (total of amounts C3 to E3)	.....	F3
Enter amount F3 in amount A8 in Part 29.		

Pre-Production Mining

Part 18 – Pre-production mining expenditures

Exploration information

A mineral resource that qualifies for the credit means a mineral deposit from which the principal mineral to be extracted is diamond, a base or precious metal deposit, or a mineral deposit from which the principal mineral to be extracted is an industrial mineral that, when refined, results in a base or precious metal.

In column 800, list all minerals for which pre-production mining expenditures have taken place in the tax year.

For each of the minerals reported in column 800, identify each project (in column 805), mineral title (in column 806), and mining division (in column 807) where title is registered. If there is no mineral title, identify only the project and mining division.

List of minerals 800	Project name 805
Mineral title 806	Mining division 807

Pre-production mining expenditures*

Exploration:

Pre-production mining expenditures that you incurred in the tax year (**before** January 1, 2014) for the purpose of determining the existence, location, extent, or quality of a mineral resource in Canada:

Prospecting	810
Geological, geophysical, or geochemical surveys	811
Drilling by rotary, diamond, percussion, or other methods	812
Trenching, digging test pits, and preliminary sampling	813

Development:

Pre-production mining expenditures incurred in the tax year for bringing a new mine in a mineral resource in Canada into production in reasonable commercial quantities and incurred before the new mine comes into production in such quantities:

Clearing, removing overburden, and stripping	820
Sinking a mine shaft, constructing an adit, or other underground entry	821

Other pre-production mining expenditures incurred in the tax year:

Description 825	Amount 826
Total of column 826	

▶ A4

Total pre-production mining expenditures (total of lines 810 to 821 and amount A4) 830

Total of all assistance (grants, subsidies, rebates, and forgivable loans) or reimbursements that the corporation has received or is entitled to receive in respect of the amounts referred to on line 830 above 832

Excess (line 830 **minus** line 832) (if negative, enter "0") B4

Repayments of government and non-government assistance 835

Pre-production mining expenditures (amount B4 **plus** line 835) C4

* A pre-production mining expenditure is defined under subsection 127(9).

Part 19 – Current-year credit and account balances – ITC from pre-production mining expenditures

ITC at the end of the previous tax year	.....	D4
Credit deemed as a remittance of co-op corporations	..... 841	
Credit expired	..... 845	
Subtotal (line 841 plus line 845)	..... 850	E4
ITC at the beginning of the tax year (amount D4 minus amount E4)	..... 850	
Credit transferred on amalgamation or wind-up of subsidiary	..... 860	
Pre-production mining expenditures* incurred before January 1, 2013 (applicable part from amount C4 in Part 18)	..... 870 x 10 % = m	
Pre-production mining exploration expenditures** incurred in 2013 (applicable part from amount C4 in Part 18)	..... 872 x 5 % = n	
Pre-production mining development expenditures incurred in 2014 (applicable part from amount C4 in Part 18)	..... 874 x 7 % = o	
Pre-production mining development expenditures incurred in 2015 (applicable part from amount C4 in Part 18)	..... 876 x 4 % = p	
Current year credit (total of amounts m to p)	..... 880	F4
Total credit available (total of lines 850, 860, and amount F4)	.....	G4
Credit deducted from Part I tax	..... 885	
Credit carried back to previous years (amount I4 in Part 20)	..... q	
Subtotal (line 885 plus amount q)	.....	H4
ITC closing balance from pre-production mining expenditures (amount G4 minus amount H4)	..... 890	

* Also include pre-production mining development expenditures incurred before 2014 and pre-production mining development expenditures incurred after 2013 and before 2016 that are eligible for transitional relief.

** Also include pre-production mining development expenditures incurred in 2015 if the expense is described in subparagraph (a)(ii) of the definition **pre-production mining expenditure** in subsection 127(9) of the Act because of paragraph (g.4) of the definition **Canadian exploration expense** in subsection 66.1(6) of the Act.

Part 20 – Request for carryback of credit from pre-production mining expenditures

	Year	Month	Day		
1st previous tax year				..... Credit to be applied	921
2nd previous tax year				..... Credit to be applied	922
3rd previous tax year				..... Credit to be applied	923
Total of lines 921 to 923					I4
(enter at amount q in Part 19)					

Apprenticeship Job Creation**Part 21 – Total current-year credit – ITC from apprenticeship job creation expenditures**

If you are a related person as defined under subsection 251(2), has it been agreed in writing that you are the only employer who will be claiming the apprenticeship job creation tax credit for this tax year for each apprentice whose contract number (or social insurance number (SIN) or name) appears below? (If not, you cannot claim the tax credit.)

..... **611** 1 Yes ☐ 2 No ☐

For each apprentice in their first 24 months of the apprenticeship, enter the apprenticeship contract number registered with Canada, or a province or territory, under an apprenticeship program designed to certify or license individuals in the trade. For the province, the trade must be a Red Seal trade. If there is no contract number, enter the SIN or the name of the eligible apprentice.

	A Contract number (SIN or name of apprentice)	B Name of eligible trade	C Eligible salary and wages*	D Column C x 10 %	E Lesser of column D or \$ 2,000
	601	602	603	604	605
1.	Lineworker	88,566	8,857	2,000
2.	Lineworker	81,378	8,138	2,000

A Contract number (SIN or name of apprentice)	B Name of eligible trade	C Eligible salary and wages*	D Column C x 10 %	E Lesser of column D or \$ 2,000	
601	602	603	604	605	
3. [REDACTED]	Lineworker	80,260	8,026	2,000	
4. [REDACTED]	Lineworker	81,014	8,101	2,000	
5. [REDACTED]	Lineworker	88,593	8,859	2,000	
6. [REDACTED]	Lineworker	98,285	9,829	2,000	
7. [REDACTED]	Lineworker	89,033	8,903	2,000	
8. [REDACTED]	Lineworker	88,503	8,850	2,000	
9. [REDACTED]	Lineworker	79,505	7,951	2,000	
10. [REDACTED]	Lineworker	90,815	9,082	2,000	
11. [REDACTED]	Lineworker	87,244	8,724	2,000	
12. [REDACTED]	Lineworker	84,017	8,402	2,000	
Total current-year credit (total of column E) (enter amount A5 on line 640 in Part 22)				24,000	A5

* Other than qualified expenditure incurred, and net of any other government or non-government assistance received or to be received. **Eligible salary and wages**, and **qualified expenditures** are defined under subsection 127(9).

Part 22 – Current-year credit and account balances – ITC from apprenticeship job creation expenditures

ITC at the end of the previous tax year			B5
Credit deemed as a remittance of co-op corporations	612		
Credit expired after 20 tax years	615		
Subtotal (line 612 plus line 615)			C5
ITC at the beginning of the tax year (amount B5 minus amount C5)		625	
Credit transferred on amalgamation or wind-up of subsidiary	630		
ITC from repayment of assistance	635		
Total current-year credit (amount A5 in Part 21)	640	24,000	
Credit allocated from a partnership	655		
Subtotal (total of lines 630 to 655)		24,000	D5
Total credit available (line 625 plus amount D5)			E5
		24,000	
Credit deducted from Part I tax	660	24,000	
Credit carried back to previous years (amount G5 in Part 23)		r	
Subtotal (line 660 plus amount r)		24,000	F5
ITC closing balance from apprenticeship job creation expenditures (amount E5 minus amount F5)		690	

Part 23 – Request for carryback of credit from apprenticeship job creation expenditures

	Year	Month	Day		
1st previous tax year				Credit to be applied	931
2nd previous tax year				Credit to be applied	932
3rd previous tax year				Credit to be applied	933
Total of lines 931 to 933 (enter at amount r in Part 22)					G5

Child Care Spaces

Part 24 – Eligible child care spaces expenditures

Enter the eligible expenditures that you incurred after March 18, 2017 and before March 22, 2017 (or before 2020 if you entered into a written agreement before March 22, 2017) to create licensed child care spaces for the children of the employees and, potentially, for other children. You cannot be carrying on a child care services business. The eligible expenditures include:

- the cost of depreciable property (other than specified property); and
- the specified child care start-up expenditures.

Properties should be acquired and expenditures should be incurred only to create new child care spaces at a licensed child care facility.

Cost of depreciable property from the current tax year

Capital cost allowance class number	Description of investment	Date available for use	Amount of investment
665	675	685	695
1.			
Total cost of depreciable property from the current tax year (total of column 695)			715

Specified child care start-up expenditures from the current tax year	705	
Total gross eligible expenditures for child care spaces (line 715 plus line 705)		A6
Total of all assistance (including grants, subsidies, rebates, and forgivable loans) or reimbursements that the corporation has received or is entitled to receive in respect of the amounts referred to in amount A6	725	
Excess (amount A6 minus line 725) (if negative, enter "0")		B6
Repayments by the corporation of government and non-government assistance	735	
Total eligible expenditures for child care spaces (amount B6 plus line 735)	745	

Part 25 – Current-year credit – ITC from child care spaces expenditures

The credit is equal to 25% of eligible child care spaces expenditures incurred to a maximum of \$10,000 per child care space created in a licensed child care facility.

Eligible expenditures (from line 745 in Part 24)	x	25 %	=		C6
Number of child care spaces	755	x \$	10,000	=	D6
ITC from child care spaces expenditures (amount C6 or D6, whichever is less)					E6

Part 26 – Current-year credit and account balances – ITC from child care spaces expenditures

ITC at the end of the previous tax year		F6
Credit deemed as a remittance of co-op corporations	765	
Credit expired after 20 tax years	770	
Subtotal (line 765 plus line 770)		G6
ITC at the beginning of the tax year (amount F6 minus amount G6)	775	
Credit transferred on amalgamation or wind-up of subsidiary	777	
Total current-year credit (amount E6 in Part 25)	780	
Credit allocated from a partnership	782	
Subtotal (total of lines 777 to 782)		H6
Total credit available (line 775 plus amount H6)		I6
Credit deducted from Part I tax	785	
Credit carried back to previous years (amount K6 in Part 27)		s
Subtotal (line 785 plus amount s)		J6
ITC closing balance from child care spaces expenditures (amount I6 minus amount J6)	790	

Part 27 – Request for carryback of credit from child care space expenditures

	<table><tr><td>Year</td><td>Month</td><td>Day</td></tr><tr><td>2016</td><td>12</td><td>31</td></tr><tr><td>2015</td><td>12</td><td>31</td></tr><tr><td>2014</td><td>12</td><td>31</td></tr></table>	Year	Month	Day	2016	12	31	2015	12	31	2014	12	31	
Year	Month	Day												
2016	12	31												
2015	12	31												
2014	12	31												
1st previous tax year	Credit to be applied	941												
2nd previous tax year	Credit to be applied	942												
3rd previous tax year	Credit to be applied	943												
Total of lines 941 to 943 (enter at amount s in Part 26)		K6												

Recapture – Child Care Spaces**Part 28 – Recapture of ITC for corporations and partnerships – Child care spaces**

The ITC will be recovered against the taxpayer's tax otherwise payable under Part I of the Act if, at any time within 60 months of the day on which the taxpayer acquired the property:

- the new child care space is no longer available; or
- property that was an eligible expenditure for the child care space is:
 - disposed of or leased to a lessee; or
 - converted to another use.

If the property disposed of is a child care space, the amount that can reasonably be considered to have been included in the original ITC (paragraph 127(27.12)(a))

792

In the case of eligible expenditures (paragraph 127(27.12)(b)), the lesser of:

The amount that can reasonably be considered to have been included in the original ITC

795

25% of either the proceeds of disposition (if sold in an arm's length transaction)

or the fair market value (in any other case) of the property

797

Amount from line 795 or line 797, whichever is less

A7

Partnerships

As a member of the partnership, you will report your share of the child care spaces ITC of the partnership after the child care spaces ITC has been reduced by the amount of the recapture. If this amount is a positive amount, you will report it on line 782 in Part 26. However, if the partnership does not have enough ITC otherwise available to offset the recapture, then the amount by which reductions to ITC exceed additions (the excess) will be determined and reported on line 799 below.

Corporate partner's share of the excess of ITC

799

Total recapture of child care spaces investment tax credit (total of line 792, amount A7, and line 799)

B7

Enter amount B7 at amount B8 in Part 29.

Summary of Investment Tax Credits**Part 29 – Total recapture of investment tax credit**

Recaptured SR&ED ITC (amount F3 in Part 17)

A8

Recaptured child care spaces ITC (amount B7 in Part 28)

B8

Total recapture of investment tax credit (amount A8 plus amount B8)

C8

Enter amount C8 on line 602 of the T2 return.

Part 30 – Total ITC deducted from Part I tax

ITC from investments in qualified property deducted from Part I tax (line 260 in Part 5)

D8

ITC from SR&ED expenditures deducted from Part I tax (line 560 in Part 12)

1,067,601

E8

ITC from pre-production mining expenditures deducted from Part I tax (line 885 in Part 19)

F8

ITC from apprenticeship job creation expenditures deducted from Part I tax (line 660 in Part 22)

24,000

G8

ITC from child care space expenditures deducted from Part I tax (line 785 in Part 26)

H8

Total ITC deducted from Part I tax (total of amounts D8 to H8)

1,091,601

I8

Enter amount I8 on line 652 of the T2 return.

Continuity of investment tax credit carryovers

CCA class number	97	Apprenticeship job creation ITC			
Current year					
	Addition current year (A)	Applied current year (B)	Claimed as a refund (C)	Carried back (D)	ITC end of year (A-B-C-D)
	24,000	24,000			
Prior years					
Taxation year		ITC beginning of year (E)	Adjustments (F)	Applied current year (G)	ITC end of year (E-F-G)
2016-12-31					
2015-12-31					
2014-12-31					
2013-12-31					
2012-12-31					
2011-12-31					
2010-12-31					
2009-12-31					
2008-12-31					
2007-12-31					*
2006-12-31					
2005-12-31					
2004-12-31					
2003-12-31					
2002-12-31					
2001-12-31					
2001-09-30					
2000-09-30					
					*
Total					
B+C+D+G				Total ITC utilized	24,000

* The **ITC end of year** includes the amount of ITC expired from the 10th preceding year if it is before January 1, 1998, or the amount of ITC expired from the 20th preceding year if it is after December 31, 1997. Note that this credit expires at the end of the tax year and any expired credit will be posted to line 215, 515, 615, 770 or 845, as applicable, in Schedule 31 the following year.

Continuity of investment tax credit carryovers

CORPORATE TAXPREP / TAXPREP DES SOCIÉTÉS - EP28 VERSION 2017 V2.0

**Taxable Capital Employed in Canada – Large Corporations**

Corporation's name	Business number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- Use this schedule in determining if the total taxable capital employed in Canada of the corporation (other than a financial institution or an insurance corporation) and its related corporations is greater than \$10,000,000.
- If the total taxable capital employed in Canada of the corporation and its related corporations is greater than \$10,000,000, file a completed Schedule 33 with your T2 *Corporation Income Tax Return* no later than six months from the end of the tax year.
- Unless otherwise noted, all legislative references are to the *Income Tax Act* and the *Income Tax Regulations*.
- Subsection 181(1) defines the terms **financial institution**, **long-term debt**, and **reserves**.
- Subsection 181(3) provides the basis to determine the carrying value of a corporation's assets or any other amount under Part I.3 for its capital, investment allowance, taxable capital, or taxable capital employed in Canada, or for a partnership in which it has an interest.
- If the corporation was a non-resident of Canada throughout the year and carried on a business through a permanent establishment in Canada, go to Part 4, **Taxable capital employed in Canada**.

Part 1 – Capital

Add the following year-end amounts:

Reserves that have not been deducted in calculating income for the year under Part I	101	371,869,822
Capital stock (or members' contributions if incorporated without share capital)	103	556,300,000
Retained earnings	104	1,147,200,000
Contributed surplus	105	12,800,000
Any other surpluses	106	
Deferred unrealized foreign exchange gains	107	
All loans and advances to the corporation	108	
All indebtedness of the corporation represented by bonds, debentures, notes, mortgages, hypothecary claims, bankers' acceptances, or similar obligations	109	2,471,000,000
Any dividends declared but not paid by the corporation before the end of the year	110	
All other indebtedness of the corporation (other than any indebtedness for a lease) that has been outstanding for more than 365 days before the end of the year	111	
The total of all amounts, each of which is the amount, if any, in respect of a partnership in which the corporation held a membership interest at the end of the year, either directly or indirectly through another partnership (see note below)	112	
Subtotal (add lines 101 to 112)		4,559,169,822 ▶ 4,559,169,822 A

Note:Line 112 is determined by the formula $(A - B) \times C/D$ (as per paragraph 181.2(3)(g)) where:

- A is the total of all amounts that would be determined for lines 101, 107, 108, 109, and 111 in respect of the partnership for its last fiscal period that ends at or before the end of the year if
- those lines applied to partnerships in the same manner that they apply to corporations, and
 - those amounts were computed without reference to amounts owing by the partnership
 - to any corporation that held a membership interest in the partnership either directly or indirectly through another partnership, or
 - to any partnership in which a corporation described in subparagraph (i) held a membership interest either directly or indirectly through another partnership.
- B is the partnership's deferred unrealized foreign exchange losses at the end of the period,
- C is the share of the partnership's income or loss for the period to which the corporation is entitled either directly or indirectly through another partnership, and
- D is the partnership's income or loss for the period.

Part 1 – Capital (continued)Subtotal A (from page 1) 4,559,169,822 A**Deduct** the following amounts:Deferred tax debit balance at the end of the year **121** 57,000,000Any deficit deducted in calculating its shareholders' equity (including, for this purpose, the amount of any provision for the redemption of preferred shares) at the end of the year **122** _____To the extent that the amount may reasonably be regarded as being included in any of lines 101 to 112 above for the year, any amount deducted under subsection 135(1) in calculating income under Part I for the year. **123** _____Deferred unrealized foreign exchange losses at the end of the year **124** _____Subtotal (add lines 121 to 124) 57,000,000 ▶ 57,000,000 B**Capital for the year** (amount A minus amount B) (if negative, enter "0") **190** 4,502,169,822**Part 2 – Investment allowance****Add** the carrying value at the end of the year of the following assets of the corporation:A share of another corporation **401** _____A loan or advance to another corporation (other than a financial institution) **402** _____A bond, debenture, note, mortgage, hypothecary claim, or similar obligation of another corporation (other than a financial institution) **403** _____Long-term debt of a financial institution **404** _____A dividend payable on a share of the capital stock of another corporation **405** _____A loan or advance to, or a bond, debenture, note, mortgage, hypothecary claim or similar obligation of, a partnership each member of which was, throughout the year, another corporation (other than a financial institution) that was not exempt from tax under this Part (otherwise than because of paragraph 181.1(3)(d)), or another partnership described in paragraph 181.2(4)(d.1) **406** _____An interest in a partnership (see note 2 below) **407** _____**Investment allowance for the year** (add lines 401 to 407) **490** _____**Notes:**

1. Lines 401 to 405 should not include the carrying value of a share of the capital stock of, a dividend payable by, or indebtedness of a corporation that is exempt from tax under Part I.3 (other than a non-resident corporation that at no time in the year carried on business in Canada through a permanent establishment).
2. Where the corporation has an interest in a partnership held either directly or indirectly through another partnership, refer to subsection 181.2(5) for additional rules regarding the carrying value of an interest in a partnership.
3. Where a trust is used as a conduit for loaning money from a corporation to another related corporation (other than a financial institution), the loan will be considered to have been made directly from the lending corporation to the borrowing corporation. Refer to subsection 181.2(6) for special rules that may apply.

Part 3 – Taxable capitalCapital for the year (line 190) 4,502,169,822 C**Deduct:** Investment allowance for the year (line 490) _____ D**Taxable capital for the year** (amount C minus amount D) (if negative, enter "0") **500** 4,502,169,822

Part 4 – Taxable capital employed in Canada**To be completed by a corporation that was resident in Canada at any time in the year**

Taxable capital for the year (line 500)	4,502,169,822	x	Taxable income earned in Canada	610	118,785,349	=	Taxable capital employed in Canada	690	4,502,169,822
			Taxable income		118,785,349				

- Notes:**
1. Regulation 8601 gives details on calculating the amount of taxable income earned in Canada.
 2. Where a corporation's taxable income for a tax year is "0," it shall, for the purposes of the above calculation, be deemed to have a taxable income for that year of \$1,000.
 3. In the case of an airline corporation, Regulation 8601 should be considered when completing the above calculation.

To be completed by a corporation that was a non-resident of Canada throughout the year and carried on a business through a permanent establishment in Canada

Total of all amounts each of which is the carrying value at the end of the year of an asset of the corporation used in the year or held in the year, in the course of carrying on any business during the year through a permanent establishment in Canada **701**

Deduct the following amounts:

Corporation's indebtedness at the end of the year [other than indebtedness described in any of paragraphs 181.2(3)(c) to (f)] that may reasonably be regarded as relating to a business it carried on during the year through a permanent establishment in Canada **711**

Total of all amounts each of which is the carrying value at the end of year of an asset described in subsection 181.2(4) of the corporation that it used in the year, or held in the year, in the course of carrying on any business during the year through a permanent establishment in Canada **712**

Total of all amounts each of which is the carrying value at the end of year of an asset of the corporation that is a ship or aircraft the corporation operated in international traffic, or personal or movable property used or held by the corporation in carrying on any business during the year through a permanent establishment in Canada (see note below) **713**

Total deductions (add lines 711, 712, and 713) **▶** **E**

Taxable capital employed in Canada (line 701 minus amount E) (if negative, enter "0") **790**

Note: Complete line 713 only if the country in which the corporation is resident did not impose a capital tax for the year on similar assets, or a tax for the year on the income from the operation of a ship or aircraft in international traffic, of any corporation resident in Canada during the year.

Part 5 – Calculation for purposes of the small business deduction

This part is applicable to corporations that are not associated in the current year, but were associated in the prior year.

Taxable capital employed in Canada (amount from line 690) **F**

Deduct: 10,000,000 **G**

Excess (amount F minus amount G) (if negative, enter "0") **H**

Calculation for purposes of the small business deduction (amount H x 0.225%) **I**

Enter this amount at line 415 of the T2 return.

Attached Schedule with Total

Part 1 – All indebtedness of the corporation represented by bonds, debentures, notes, mortgages, hypothecary claims, bankers' acceptances, or similar obligations

Title Part 1 – All indebtedness of the corporation represented by bonds, debent

Description	Operator (Note)	Amount	
Notes payable		2,089,900,000	00
Customer deposits	+	58,100,000	00
Deferred revenue	+	188,700,000	00
Bank indebtedness	+	125,000,000	00
Deferred conservation credit	+	9,300,000	00
	Total	2,471,000,000	00

Note: The calculations are performed one at a time, from the first to the last line, and not according to the priority rules of the operations. For example, the formula 1+2*3 will not result in the same thing as the formula 1+3*2.

Attached Schedule with Total

Part 1 – Reserves that have not been deducted in calculating income for the year under Part I

Title Part 1 – Reserves that have not been deducted in computing income for th

Description	Operator (Note)	Amount	
Termination accrual		99,822	00
POEB liability	+	312,970,000	00
Deferred tax in regulatory credit balance	+	58,800,000	00
	Total	371,869,822	00

Note: The calculations are performed one at a time, from the first to the last line, and not according to the priority rules of the operations. For example, the formula 1+2*3 will not result in the same thing as the formula 1+3*2.

SHAREHOLDER INFORMATION

Name of corporation	Business Number	Tax year end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	[REDACTED]	2017-12-31

All private corporations must complete this schedule for any shareholder who holds 10% or more of the corporation's common and/or preferred shares.

		Provide only one number per shareholder				
Name of shareholder (after name, indicate in brackets if the shareholder is a corporation, partnership, individual, or trust)		Business Number (If a corporation is not registered, enter "NR")	Social insurance number	Trust number	Percentage common shares	Percentage preferred shares
100		200	300	350	400	500
1	TORONTO HYDRO CORPORATION				100.000	
2						
3						
4						
5						
6						
7						
8						
9						
10						



General Rate Income Pool (GRIP) Calculation

Corporation's name TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	Business number [REDACTED]	Tax year-end Year Month Day 2017-12-31
---	-----------------------------------	--

On: 2017-12-31

- If you are a Canadian-controlled private corporation (CCPC) or a deposit insurance corporation (DIC), use this schedule to determine the general rate income pool (GRIP).
- All legislative references are to the *Income Tax Act* and the *Income Tax Regulations*.
- When an eligible dividend was paid in the tax year, file a completed copy of this schedule with your *T2 Corporation Income Tax Return*. Do not send your worksheets with your return, but keep them in your records in case we ask to see them later.
- Subsection 89(1) defines the terms **eligible dividend**, **excessive eligible dividend designation**, **general rate income pool**, and **low rate income pool**.

Eligibility for the various additions

Answer the following questions to determine the corporation's eligibility for the various additions:

2006 addition

- Is this the corporation's first taxation year that includes January 1, 2006? ☐ Yes ☒ No
 - If not, what is the date of the taxation year end of the corporation's first year that includes January 1, 2006?
Enter the date and go directly to question 4
 - During that first year, was the corporation a CCPC or would it have been a CCPC if not for the election of subsection 89(11) ITA? ☒ Yes ☐ No
- If the answer to question 3 is yes, complete Part "GRIP addition for 2006".

Change in the type of corporation

- Was the corporation a CCPC during its preceding taxation year? ☒ Yes ☐ No
 - Corporations that become a CCPC or a DIC ☐ Yes ☒ No
- If the answer to question 5 is yes, complete Part 4.

Amalgamation (first year of filing after amalgamation)

- Corporations that were formed as a result of an amalgamation ☐ Yes ☒ No
If the answer to question 6 is yes, answer questions 7 and 8. If the answer is no, go to question 9.
- Was one or more of the predecessor corporations neither a CCPC nor a DIC? ☐ Yes ☐ No
If the answer to question 7 is yes, complete Part 4.
- Was one or more of the predecessor corporation a CCPC or a DIC during the taxation year that ended immediately before amalgamation? ☐ Yes ☐ No
If the answer to question 8 is yes, complete Part 3.

Winding-up

- Has the corporation wound-up a subsidiary in the preceding taxation year? ☐ Yes ☒ No
If the answer to question 9 is yes, answer questions 10 and 11. If the answer is no, go to Part 1.
- Was the subsidiary neither a CCPC nor a DIC during its last taxation year? ☐ Yes ☐ No
If the answer to question 10 is yes, complete Part 4.
- Was the subsidiary a CCPC or a DIC during its last taxation year? ☐ Yes ☐ No
If the answer to question 11 is yes, complete Part 3.

Part 1 – General rate income pool (GRIP)

GRIP at the end of the previous tax year	100	368,305,095	A
Taxable income for the year (DICs enter "0") *	110	118,785,349	B
Income for the credit union deduction * (amount E in Part 3 of Schedule 17)	120		
Amount on line 400, 405, 410, or 427 of the T2 return, whichever is less *	130		
For a CCPC, the lesser of aggregate investment income (line 440 of the T2 return) and taxable income *	140	4,872,116	
Subtotal (add lines 120, 130, and 140)		4,872,116	C
Income taxable at the general corporate rate (amount B minus amount C) (if negative enter "0")	150	113,913,233	
After-tax income (line 150 multiplied by 0.72 (the general rate factor for the tax year))	190	82,017,528	D
Eligible dividends received in the tax year	200		
Dividends deductible under section 113 received in the tax year	210		
Subtotal (line 200 plus line 210)			E
Becoming a CCPC (amount W5 in Part 4)	220		
Post-amalgamation (total of amounts E4 in Part 3 and amounts W5 in Part 4)	230		
Post-wind-up (total of amounts E4 in Part 3 and amounts W5 in Part 4)	240		
Subtotal (add lines 220, 230, and 240)	290		F
Subtotal (add amounts A, D, E, and F)		450,322,623	G
Eligible dividends paid in the previous tax year	300	2,100,000	
Excessive eligible dividend designations made in the previous tax year (If becoming a CCPC (subsection 89(4) applies), enter "0" on lines 300 and 310.)	310		
Subtotal (line 300 minus line 310)		2,100,000	H
GRIP before adjustment for specified future tax consequences (amount G minus amount H) (amount can be negative)	490	448,222,623	
Total GRIP adjustment for specified future tax consequences to previous tax years (amount N3 in Part 2)	560		
GRIP at the end of the tax year (line 490 minus line 560)	590	448,222,623	

Enter this amount on line 160 of Schedule 55.

* For lines 110, 120, 130, and 140, the income amount is the amount before considering specified future tax consequences. This phrase is defined in subsection 248(1). It includes the deduction of a loss carryback from subsequent tax years, a reduction of Canadian exploration expenses and Canadian development expenses that were renounced in subsequent tax years (e.g., flow-through share renunciations), reversals of income inclusions where an option is exercised in subsequent tax years, and the effect of certain foreign tax credit adjustments.

Part 2 – GRIP adjustment for specified future tax consequences to previous tax years

Complete this part if the corporation's taxable income of any of the previous three tax years took into account the specified future tax consequences defined in subsection 248(1) from the current tax year. Otherwise, enter "0" on line 560.

First previous tax year 2016-12-31

Taxable income before specified future tax consequences from the current tax year	90,234,366	A1
Enter the following amounts before specified future tax consequences from the current tax year:		
Income for the credit union deduction (amount E in Part 3 of Schedule 17)		B1
Amount on line 400, 405, 410, or 427 of the T2 return, whichever is less		C1
Aggregate investment income (line 440 of the T2 return)	815,211	D1
Subtotal (add amounts B1, C1, and D1)	815,211	E1
Subtotal (amount A1 minus amount E1) (if negative, enter "0")	89,419,155	F1

Part 2 – GRIP adjustment for specified future tax consequences to previous tax years (continued)

Future tax consequences that occur for the current year					
Amount carried back from the current year to a prior year					
Non-capital loss carry-back (paragraph 111 (1)(a) ITA)	Capital loss carry-back	Restricted farm loss carry-back	Farm loss carry-back	Other	Total carrybacks

Taxable income after specified future tax consequences G1

Enter the following amounts after specified future tax consequences:

Income for the credit union deduction

(amount E in Part 3 of Schedule 17) . . . H1

Amount on line 400, 405, 410, or 427

of the T2 return, whichever is less . . . I1

Aggregate investment income

(line 440 of the T2 return) J1

Subtotal (add amounts H1, I1, and J1) ► K1

Subtotal (amount G1 minus amount K1) (if negative, enter "0") ► L1

Subtotal (amount F1 minus amount L1) (if negative, enter "0") ► M1

GRIP adjustment for specified future tax consequences to the first previous tax year(amount M1 multiplied by 0.72) **500****Second previous tax year 2015-12-31**

Taxable income before specified future tax consequences from

the current tax year 10,918,774 A2

Enter the following amounts before specified future tax consequences from the current tax year:

Income for the credit union deduction

(amount E in Part 3 of Schedule 17) . . . B2

Amount on line 400, 405, 410, or 427

of the T2 return, whichever is less . . . C2

Aggregate investment income

(line 440 of the T2 return) 1,564,378 D2

Subtotal (add amounts B2, C2, and D2) ► 1,564,378 E2

Subtotal (amount A2 minus amount E2) (if negative, enter "0") ► 9,354,396 F2

Future tax consequences that occur for the current year					
Amount carried back from the current year to a prior year					
Non-capital loss carry-back (paragraph 111 (1)(a) ITA)	Capital loss carry-back	Restricted farm loss carry-back	Farm loss carry-back	Other	Total carrybacks

Taxable income after specified future tax consequences G2

Enter the following amounts after specified future tax consequences:

Income for the credit union deduction

(amount E in Part 3 of Schedule 17) . . . H2

Amount on line 400, 405, 410, or 427

of the T2 return, whichever is less . . . I2

Aggregate investment income

(line 440 of the T2 return) J2

Subtotal (add amounts H2, I2, and J2) ► K2

Subtotal (amount G2 minus amount K2) (if negative, enter "0") ► L2

Subtotal (amount F2 minus amount L2) (if negative, enter "0") ► M2

GRIP adjustment for specified future tax consequences to the second previous tax year(amount M2 multiplied by 0.72) **520**

Part 2 – GRIP adjustment for specified future tax consequences to previous tax years (continued)Third previous tax year 2014-12-31Taxable income before specified future tax consequences from
the current tax year 50,381,643 A3**Enter the following amounts before specified future tax
consequences from the current tax year:**Income for the credit union deduction
(amount E in Part 3 of Schedule 17) . . . B3Amount on line 400, 405, 410, or 427
of the T2 return, whichever is less C3Aggregate investment income
(line 440 of the T2 return) 487,660 D3Subtotal (add amounts B3, C3, and D3) 487,660 ▶ 487,660 E3Subtotal (amount A3 minus amount E3) (if negative, enter "0") 49,893,983 ▶ 49,893,983 F3**Future tax consequences that occur for the current year**

Amount carried back from the current year to a prior year

Non-capital loss carry-back (paragraph 111 (1)(a) ITA)	Capital loss carry-back	Restricted farm loss carry-back	Farm loss carry-back	Other	Total carrybacks

Taxable income after specified future tax consequences G3

Enter the following amounts after specified future tax consequences:

Income for the credit union deduction
(amount E in Part 3 of Schedule 17) . . . H3Amount on line 400, 405, 410, or 427
of the T2 return, whichever is less I3Aggregate investment income
(line 440 of the T2 return) J3Subtotal (add amounts H3, I3, and J3) ▶ K3Subtotal (amount G3 minus amount K3) (if negative, enter "0") ▶ L3Subtotal (amount F3 minus amount L3) (if negative, enter "0") M3**GRIP adjustment for specified future tax consequences to the third previous tax year**(amount M3 multiplied by 0.72) 540**Total GRIP adjustment for specified future tax consequences to previous tax years:**(add lines 500, 520, and 540) (if negative, enter "0") N3

Enter amount N3 on line 560 in part 1.

**Part 3 – Worksheet to calculate the GRIP addition post-amalgamation or post-wind-up
(predecessor or subsidiary was a CCPC or a DIC in its last tax year)**nb. 1 Post-amalgamation ☐ Post-wind-up ☐

Complete this part when there has been an amalgamation (within the meaning assigned by subsection 87(1)) or a wind-up (to which subsection 88(1) applies) and the predecessor or subsidiary corporation was a CCPC or a DIC in its last tax year. In the calculation below, **corporation** means a predecessor or a subsidiary. The last tax year for a predecessor corporation was its tax year that ended immediately before the amalgamation and for a subsidiary corporation was its tax year during which its assets were distributed to the parent on the wind-up.

For a post-wind-up, include the GRIP addition in calculating the parent's GRIP at the end of its tax year that immediately follows the tax year during which it receives the assets of the subsidiary.

Complete a separate worksheet for **each** predecessor and **each** subsidiary that was a CCPC or a DIC in its last tax year. Keep a copy of this calculation for your records, in case we ask to see it later.

Corporation's GRIP at the end of its last tax year A4Eligible dividends paid by the corporation in its last tax year B4Excessive eligible dividend designations made by the corporation in its last tax year C4Subtotal (amount B4 minus amount C4) ▶ D4**GRIP addition post-amalgamation or post-wind-up (predecessor or subsidiary was a CCPC or a DIC in its last tax year)**(amount A4 minus amount D4) E4

After you complete this calculation for each predecessor and each subsidiary, calculate the total of all the E4 amounts. Enter this total amount on:

- line 230 for post-amalgamation; or
- line 240 for post-wind-up.

Part 4 – Worksheet to calculate the GRIP addition post-amalgamation, post-wind-up (predecessor or subsidiary was not a CCPC or a DIC in its last tax year), or the corporation is becoming a CCPC**nb. 1** Corporation becoming a CCPC ☐ Post amalgamation ☐ Post wind-up ☐

Complete this part when there has been an amalgamation (within the meaning assigned by subsection 87(1)) or a wind-up (to which subsection 88(1) applies) and the predecessor or subsidiary was not a CCPC or a DIC in its last tax year. Also, use this part for a corporation becoming a CCPC. In the calculation below, **corporation** means a corporation becoming a CCPC, a predecessor, or a subsidiary.

For a post-wind-up, include the GRIP addition in calculating the parent's GRIP at the end of its tax year that immediately follows the tax year during which it receives the assets of the subsidiary.

Complete a separate worksheet for **each** predecessor and **each** subsidiary that was not a CCPC or a DIC in its last tax year. Keep a copy of this calculation for your records, in case we ask to see it later.

Cost amount to the corporation of all property immediately before the end of its previous/last tax year A5

The corporation's money on hand immediately before the end of its previous/last tax year B5

Total of subsection 111(1) losses that would have been deductible in calculating the corporation's taxable income for the previous/last tax year if the corporation had had unlimited income from each business carried on and each property held and had realized an unlimited amount of capital gains for the previous/last tax year:

Non-capital losses	.....	C5
Net capital losses	.....	D5
Farm losses	.....	E5
Restricted farm losses	.....	F5
Limited partnership losses	.....	G5
Subtotal (add amounts C5 to G5)	.....	H5

Total of all amounts deducted under subsection 111(1) in calculating the corporation's taxable income for the previous/last tax year:

Non-capital losses	.....	I5
Net capital losses	.....	J5
Farm losses	.....	K5
Restricted farm losses	.....	L5
Limited partnership losses	.....	M5
Subtotal (add amounts I5 to M5)	.....	N5

Unused and unexpired losses at the end of the corporation's previous/last tax year (amount H5 minus amount N5) O5

Subtotal (add amounts A5, B5, and O5) P5

All the corporation's debts and other obligations to pay that were outstanding immediately before the end of its previous/last tax year Q5

Paid-up capital of all the corporation's issued and outstanding shares of capital stock immediately before the end of its previous/last tax year R5

All the corporation's reserves deducted in its previous/last tax year S5

The corporation's capital dividend account immediately before the end of its previous/last tax year T5

The corporation's low rate income pool immediately before the end of its previous/last tax year U5

Subtotal (add amounts Q5 to U5) V5

GRIP addition post-amalgamation or post-wind-up (predecessor or subsidiary was not a CCPC or a DIC in its last tax year), or the corporation is becoming a CCPC (amount P5 minus amount V5) (if negative, enter "0") W5

After you complete this worksheet for each predecessor and each subsidiary, calculate the total of all the W5 amounts. Enter this total amount on:

- line 220 for a corporation becoming a CCPC;
- line 230 for post-amalgamation; or
- line 240 for post-wind-up.



Part III.1 Tax on Excessive Eligible Dividend Designations

Corporation's name	Business number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- Every corporation resident in Canada that pays a taxable dividend (other than a capital gains dividend within the meaning assigned by subsection 130.1(4) or 131(1)) in the tax year must file this schedule.
- Canadian-controlled private corporations (CCPC) and deposit insurance corporations (DIC) must complete Part 1 of this schedule. All other corporations must complete Part 2.
- Every corporation that has paid an eligible dividend must also file Schedule 53, *General Rate Income Pool (GRIP) Calculation*, or Schedule 54, *Low Rate Income Pool (LRIP) Calculation*, whichever is applicable.
- File the completed schedules with your *T2 Corporation Income Tax Return* no later than six months from the end of the tax year.
- All legislative references are to the *Income Tax Act* and the *Income Tax Regulations*.
- Subsection 89(1) defines the terms eligible dividend, excessive eligible dividend designation, general rate income pool (GRIP), and low rate income pool (LRIP).
- The calculations in Part 1 and Part 2 do not apply if the excessive eligible dividend designation arises from the application of paragraph (c) of the definition of excessive eligible dividend designation in subsection 89(1). This paragraph applies when an eligible dividend is paid to artificially maintain or increase the GRIP or to artificially maintain or decrease the LRIP.

Do not use this area

Part 1 – Canadian-controlled private corporations and deposit insurance corporations

Taxable dividends paid in the tax year not included in Schedule 3	.....
Taxable dividends paid in the tax year included in Schedule 3	.....	2,100,000
Total taxable dividends paid in the tax year	.....	100 2,100,000
Total eligible dividends paid in the tax year	.....	150 2,100,000 A
GRIP at the end of the tax year (line 590 on Schedule 53) (if negative, enter "0")	.....	160 448,222,623 B
Excessive eligible dividend designation (line 150 minus line 160)	.....	C
Deduct:		
Excessive eligible dividend designations elected under subsection 185.1(2) to be treated as ordinary dividends *	.....	180 D
Subtotal (amount C minus amount D)		E
Part III.1 tax on excessive eligible dividend designations – CCPC or DIC (amount E multiplied by 20 %)	.....	190 F
Enter the amount from line 190 on line 710 of the T2 return.		

Part 2 – Other corporations

Taxable dividends paid in the tax year not included in Schedule 3	.....
Taxable dividends paid in the tax year included in Schedule 3	.....
Total taxable dividends paid in the tax year	.....	200
Total excessive eligible dividend designations in the tax year (amount from line A of Schedule 54)	.....	G
Deduct:		
Excessive eligible dividend designations elected under subsection 185.1(2) to be treated as ordinary dividends *	.....	280 H
Subtotal (amount G minus amount H)		I
Part III.1 tax on excessive eligible dividend designations – Other corporations (amount I multiplied by 20 %)	.....	290 J
Enter the amount from line 290 on line 710 of the T2 return.		

* You can elect to treat all or part of your excessive eligible dividend designation as a separate taxable dividend in order to eliminate or reduce the Part III.1 tax otherwise payable. You must file the election on or before the day that is 90 days **after** the day the notice of assessment for Part III.1 tax was sent. We will accept an election before the assessment of the tax. For more information on how to make this election, go to www.cra.gc.ca/eligibledividends.



Ontario Corporation Tax Calculation

Corporation's name	Business number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- Use this schedule if the corporation had a permanent establishment, under section 400 of the federal *Income Tax Regulations*, in Ontario at any time in the tax year and had Ontario taxable income in the year.
- Legislative references are to the federal *Income Tax Act* and *Income Tax Regulations*.
- This schedule is a worksheet only and is not required to be filed with your *T2 Corporation Income Tax Return*.

Part 1 – Ontario basic rate of tax for the year

Ontario basic rate of tax for the year 11.5 % A

Part 2 – Ontario basic income tax

Ontario taxable income * 118,785,349 B

Ontario basic income tax: Amount B multiplied by Ontario basic rate of tax for the year (amount A from Part 1) 13,660,315 C

If the corporation has a permanent establishment in more than one jurisdiction, or is claiming an Ontario tax credit in addition to Ontario basic income tax, or has Ontario corporate minimum tax or Ontario special additional tax on life insurance corporations payable, enter amount C on line 270 of Schedule 5, *Tax Calculation Supplementary – Corporations*. Otherwise, enter it on line 760 of the T2 return.

* If the corporation has a permanent establishment only in Ontario, enter the amount from line 360 or line Z, whichever applies, of the T2 return. Otherwise, enter the taxable income allocated to Ontario from column F in Part 1 of Schedule 5.

Part 3 – Ontario small business deduction (OSBD)

Complete this part if the corporation claimed the federal small business deduction under subsection 125(1).

Amount from line 400 of the T2 return 114,863,763 1

Amount from line 405 of the T2 return 118,785,349 2

Amount from line 427 of the T2 return. 3

Enter the least of amounts 1, 2 or 3 D

Ontario domestic factor (ODF):
Ontario taxable income * 118,785,349.00 = 1.00000 E
Taxable income earned in all provinces and territories ** 118,785,349

Amount D x amount E a

Ontario taxable income
(amount B from Part 2) 118,785,349 b

Ontario small business income (lesser of amount a or b) F

Number of days in the tax year before January 1, 2018 365 x 7 % = 7.00000 % G1
Number of days in the tax year 365

Number of days in the tax year after December 31, 2017 x 8 % = % G2
Number of days in the tax year 365

OSBD rate for the year (rate G1 plus G2) 7.00000 % G3

Ontario small business deduction (Amount F multiplied by amount G3) H

Enter amount H on line 402 of Schedule 5.

* Enter amount B from Part 2.

** Includes the offshore areas for Nova Scotia and Newfoundland and Labrador.

- Part 4 – Ontario adjusted small business income

Complete this part if the corporation was a Canadian-controlled private corporation throughout the tax year and is claiming the Ontario tax credit for manufacturing and processing or the Ontario credit union tax reduction.

Ontario adjusted small business income (lesser of amount D and amount b) |

Enter amount I at amount K in Part 5 of this schedule or at amount B in Part 2 of Schedule 502, *Ontario Tax Credit for Manufacturing and Processing*, whichever applies.

- Part 5 – Credit union tax reduction

Complete this part and Schedule 17, *Credit Union Deductions*, if the corporation was a credit union throughout the tax year.

Amount D from Part 3 of Schedule 17 J

Ontario adjusted small business income (amount I) K

Subtotal (amount J **minus** amount K) (if negative, enter "0") _____ L

Amount L **multiplied** by amount G3 M

Ontario domestic factor (amount E)	1.00000	N
------------------------------------	---------	---

Ontario credit union tax reduction (amount M multiplied by amount N) 0

Enter amount O on line 410 of Schedule 5.



Ontario Research and Development Tax Credit

Corporation's name	Business number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- Use this schedule to:
 - calculate an Ontario research and development tax credit (ORDTC);
 - claim an ORDTC earned in the tax year or carried forward from any of the 20 previous tax years that are a tax year ending after December 31, 2008, to reduce Ontario corporate income tax payable in the current tax year;
 - carry back an ORDTC earned in the tax year to reduce Ontario corporate income tax payable in any of the three previous tax years;
 - add an ORDTC that was allocated to the corporation by a partnership of which it was a member;
 - add an ORDTC transferred after an amalgamation or windup; or
 - calculate a recapture of the ORDTC.
- The ORDTC is a non-refundable tax credit on eligible expenditures incurred by a corporation in a tax year. The ORDTC rate is:
 - 4.5% for tax years that end before June 1, 2016;
 - 3.5% for tax years that start after May 31, 2016; and
 - prorated for a tax year that ends on or after June 1, 2016, and includes May 31, 2016.
- An eligible expenditure is an expenditure for a permanent establishment in Ontario of a corporation, that is a qualified expenditure for the purposes of section 127 of the federal *Income Tax Act* for scientific research and experimental development (SR&ED) carried on in Ontario.
- Only corporations that are not exempt from Ontario corporate income tax and none of whose income is exempt income can claim the ORDTC.
- Complete and attach this schedule to the *T2 Corporation Income Tax Return* for the tax year.
- To claim this credit, you must also send in completed copies of the Form T661, *Scientific Research and Experimental Development (SR&ED) Expenditures Claim*, and the Schedule 31, *Investment Tax Credit - Corporations*, within 18 months of the tax year end.

Part 1 – Ontario SR&ED expenditure pool

Total eligible expenditures incurred by the corporation in Ontario in the tax year	100	7,438,681	A
Government assistance, non-government assistance, or a contract payment for eligible expenditures	105	63,200	B
Net eligible expenditures for the tax year (amount A minus amount B) (if negative, enter "0")		7,375,481	C
Eligible expenditures transferred to the corporation by another corporation	110		D
Subtotal (amount C plus amount D)		7,375,481	E
Eligible expenditures the corporation transferred to another corporation	115		F
Ontario SR&ED expenditure pool (amount E minus amount F) (if negative, enter "0")	120	7,375,481	G

Part 2 – Eligible repayments

The repayment of the ORDTC is calculated using the ORDTC rate that you used to determine your tax credit at the time your eligible expenditures were reduced because of the government or non-government assistance, or contract payments. Enter the amount of the repayment on the line that corresponds to the appropriate rate.

Repayments for tax years that end before June 1, 2016 210 x 4.5 % = 215 H

Repayment for a tax year that ends on or after June 1, 2016 and includes May 31, 2016. Complete the proration calculation below.

Number of days in the tax year before June 1, 2016	240	152	x	4.5 %	=	1.8689 %	1
Number of days in the tax year	241	366					
Number of days in the tax year after May 31, 2016	242	214	x	3.5 %	=	2.0464 %	2
Number of days in the tax year	243	366					

Subtotal (percentage 1 plus percentage 2) 3.9153 % 3

Repayments for a tax year that ends on or after June 1, 2016 and includes May 31, 2016 211 x percentage 3 3.9153 % = 216 I

Part 2 – Eligible repayments (continued)

Repayments for tax years that start after May 31, 2016	.....	212	x	3.5 %	=	217	J
Repayments made in the tax year of government or non-government assistance or contract payments that reduced eligible expenditures for first term or second term shared-use equipment acquired before 2014	.....	220	x	1 / 4	=	225	K
Eligible repayments (total of amounts H to K)	.....	229					L

Part 3 – Calculation of the current part of the ORDTC**For tax years that end before June 1, 2016**

Ontario SR&ED expenditure pool (amount G in Part 1)	.....	x	4.5 %	=	200	M
ORDTC allocated to the corporation by a partnership of which it is a member (other than a specified member) for a fiscal period that ends in the corporation's tax year *	.....	205				N
Eligible repayments (amount L in Part 2)	.....					O
Current part of the ORDTC for tax years that end before June 1, 2016 (total of amounts M to O)	.....	230				P

For a tax year that ends on or after June 1, 2016, and includes May 31, 2016

Number of days in the tax year before June 1, 2016	_____	x	4.5 %	=	_____ %	4
Number of days in the tax year						
Number of days in the tax year after May 31, 2016	_____	x	3.5 %	=	_____ %	5
Number of days in the tax year						
Subtotal (percentage 4 plus percentage 5)	=====				%	6
Ontario SR&ED expenditure pool (amount G in Part 1)	_____	x	percentage 6	_____ %	=	201 _____ Q
ORDTC allocated to the corporation by a partnership of which it is a member (other than a specified member) for a fiscal period that ends in the corporation's tax year *	_____					206 _____ R
Eligible repayments (amount L in Part 2)	_____					_____ S
Part of the ORDTC for a tax year that ends on or after June 1, 2016, and includes May 31, 2016 (total of amounts Q to S)	_____					231 _____ T

For tax years that start after May 31, 2016

Ontario SR&ED expenditure pool (amount G in Part 1)	.....	7,375,481	x	3.5 %	=	202	258,142	U
ORDTC allocated to the corporation by a partnership of which it is a member (other than a specified member) for a fiscal period that ends in the corporation's tax year *	.....	207						V
Eligible repayments (amount L in Part 2)	.....							W
The ORDTC for tax years that start after May 31, 2016 (total of amounts U to W)	.....	232					258,142	X

* If there is a disposal or change of use of eligible property, see Part 7 on page 4.

Part 4 – Calculation of ORDTC available for deduction and ORDTC balance

ORDTC balance at the end of the previous tax year Y

ORDTC expired after 20 tax years **300** ZORDTC at the beginning of the tax year (amount Y **minus** amount Z) **305** AAORDTC transferred to the corporation on amalgamation or windup **310** BB**Current part of ORDTC** 258,142 CC

(amount P, T or X in Part 3 whichever applies)

Are you waiving all or part of the
current part of the ORDTC? **315** Yes 1 ☐ No 2 ☒If you answered **yes** at line 315, enter the amount of
the tax credit waived on line 320.If you answered **no** at line 315, enter "0" on line 320.Waiver of the current part of the ORDTC **320** DDSubtotal (amount CC **minus** amount DD) 258,142 ▶ 258,142 EE**ORDTC available for deduction** (total of amounts AA, BB and EE) 258,142 ▶ 258,142 FF

ORDTC claimed ** 258,142 GG

(Enter amount GG on line 416 on page 5 of Schedule 5, *Tax Calculation Supplementary – Corporations*)

ORDTC carried back to previous tax years (from Part 5) HH

Subtotal (amount GG **plus** amount HH) 258,142 ▶ 258,142 II**ORDTC balance at the end of the tax year** (amount FF **minus** amount II) **325** JJ

** This amount cannot be more than the lesser of the following amounts:

- ORDTC available for deduction (amount FF); or
- Ontario corporate income tax payable before the ORDTC and the Ontario corporate minimum tax credit (amount from line E6 on page 5 of Schedule 5).

Part 5 – Request for carryback of tax credit

	Year	Month	Day			
1 st previous tax year	2016-12-31			..... Credit to be applied	901	.....
2 nd previous tax year	2015-12-31			..... Credit to be applied	902	.....
3 rd previous tax year	2014-12-31			..... Credit to be applied	903	.....
Total (total of amount 901 to 903)(enter at amount HH in Part 4)						.....

Part 7 – Calculation of a recapture of ORDTC (continued)

Calculation 2 – If the corporation is deemed by subsection 42(1) of the *Taxation Act, 2007* (Ontario) to have transferred all or part of the eligible expenditure to another corporation as a consequence of an agreement described in subsection 127(13) of the federal Act complete Calculation 2. Otherwise, enter nil on line SS.

	OO Rate percentage that the transferee used to determine its federal ITC for qualified expenditure that was transferred under an agreement under subsection 127(13) of the federal Act 720	PP Proceeds of disposition of the property if you dispose of it to a person at arm's length; or, in any other case, the fair market value of the property at conversion or disposition 730	QQ Amount, if any, already provided for in Calculation 1 (this allows for the situation where only part of the cost of a property is transferred for an agreement under subsection 127(13) of the federal Act) 740
1.			

	RR Amount determined by the formula (OO x PP) - QQ (using the columns above)	SS Federal ITC earned by the transferee for the qualified expenditure that was transferred 750	TT Amount from column RR or SS, whichever is less
1.			

Total of column TT (enter at amount XX in Part 8) _____ **UU**

Calculation 3

As a member of a partnership, you will report your share of the ORDTC of the partnership after the ORDTC has been reduced by the amount of the recapture. If this is a positive amount, you will report it on line 205, 206, or 207 in Part 3, whichever applies. However, if the partnership does not have enough ORDTC otherwise available to offset the recapture, then the amount by which reductions to the ORDTC exceeds additions (the excess) will be determined and reported on line VV.

Corporate partner's share of the excess of ORDTC (enter at amount ZZ in Part 8) **760** _____ **VV**

Part 8 – Total recapture of ORDTC

Recaptured federal ITC for Calculation 1 (amount NN from Part 7) **WW**

Recaptured federal ITC for Calculation 2 (amount UU from Part 7) **XX**

Amount WW **plus** amount XX x 23.56 % = _____ **YY**

Corporate partner's share of the excess of ORDTC for Calculation 3 (amount VV from Part 7) **ZZ**

Recapture of ORDTC (amount YY **plus** amount ZZ) (enter amount AAA on line 277 on page 5 of Schedule 5) **AAA**

Schedule A - Worksheet for eligible expenditures incurred by the corporation in Ontario for the current taxation year

This worksheet allows you to report the amount of eligible expenditures entered on Form T661, *Scientific Research and Experimental Development (SR&ED) Expenditures Claim* which represents eligible expenditures as defined in section 127 of the *Income Tax Act* (ITA) with regard to scientific research and experimental development (SR&ED) **carried on in Ontario and attributable to a permanent establishment in Ontario of a corporation.**

Data on the worksheet is calculated based on the amounts on Form T661, but will have to be adjusted according to the rules of Ontario, if applicable, in particular when the corporation has had a permanent establishment in more than one jurisdiction. This data will be used when calculating Schedule 508 and Schedule 566.

Enter the breakdown between current and capital expenditures

	Current Expenditures	Capital Expenditures
Total expenditures for SR&ED	6,560,281	
Add		
• payment of prior years' unpaid expenses (other than salary or wages)	+	
• prescribed proxy amount (Enter "0" if you use the traditional method)	+	
• expenditures on shared-use equipment		+
• other additions	+	+
Subtotal =	8,094,461	=
Less		
• current expenditures (other than salary or wages) not paid within 180 days of the tax year end	-	
• amounts paid in respect of an SR&ED contract to a person or partnership that is not taxable supplier	-	
• 20% of contract expenditures for SR&ED performed on your behalf	-	
• prescribed expenditures not allowed by regulations	-	-
• other deductions	-	-
• non-arm's length transactions		
- expenditures for non-arm's length SR&ED contracts	-	
- purchases (limited to costs) of goods and services from non-arm's length suppliers	-	-
Subtotal =	7,438,681 I	= II
Total eligible expenditures incurred by the corporation in Ontario in the tax year (add amount I and II)		= 7,438,681 III

Enter amount III on line 100 of Schedule 508.



Ontario Corporate Minimum Tax

Corporation's name	Business number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- File this schedule if the corporation is subject to Ontario corporate minimum tax (CMT). CMT is levied under section 55 of the *Taxation Act, 2007* (Ontario), referred to as the "Ontario Act".
- Complete Part 1 to determine if the corporation is subject to CMT for the tax year.
- A corporation not subject to CMT in the tax year is still required to file this schedule if it is deducting a CMT credit, has a CMT credit carryforward, or has a CMT loss carryforward or a current year CMT loss.
- A corporation that has Ontario special additional tax on life insurance corporations (SAT) payable in the tax year must complete Part 4 of this schedule even if it is not subject to CMT for the tax year.
- A corporation is exempt from CMT if, throughout the tax year, it was one of the following:
 - 1) a corporation exempt from income tax under section 149 of the federal *Income Tax Act*;
 - 2) a mortgage investment corporation under subsection 130.1(6) of the federal Act;
 - 3) a deposit insurance corporation under subsection 137.1(5) of the federal Act;
 - 4) a congregation or business agency to which section 143 of the federal Act applies;
 - 5) an investment corporation as referred to in subsection 130(3) of the federal Act; or
 - 6) a mutual fund corporation under subsection 131(8) of the federal Act.
- File this schedule with the *T2 Corporation Income Tax Return*.

Part 1 – Determination of CMT applicability

Total assets of the corporation at the end of the tax year *	112	5,187,800,000
Share of total assets from partnership(s) and joint venture(s) *	114	
Total assets of associated corporations (amount from line 450 on Schedule 511)	116	4,002,819,000
Total assets (total of lines 112 to 116)		9,190,619,000
Total revenue of the corporation for the tax year **	142	3,838,700,000
Share of total revenue from partnership(s) and joint venture(s) **	144	
Total revenue of associated corporations (amount from line 550 on Schedule 511)	146	264,817,000
Total revenue (total of lines 142 to 146)		4,103,517,000

The corporation is subject to CMT if:

- for tax years ending before July 1, 2010, the total assets at the end of the year of the corporation or the associated group of corporations are more than \$5,000,000, or the total revenue for the year of the corporation or the associated group of corporations is more than \$10,000,000.
- for tax years ending after June 30, 2010, the total assets at the end of the year of the corporation or the associated group of corporations are equal to or more than \$50,000,000, and the total revenue for the year of the corporation or the associated group of corporations is equal to or more than \$100,000,000.

If the corporation is not subject to CMT, do not complete the remaining parts unless the corporation is deducting a CMT credit, or has a CMT credit carryforward, a CMT loss carryforward, a current year CMT loss, or SAT payable in the year.

* Rules for total assets

- Report total assets according to generally accepted accounting principles, adjusted so that consolidation and equity methods are not used.
- Do not include unrealized gains and losses on assets and foreign currency gains and losses on assets that are included in net income for accounting purposes but not in income for corporate income tax purposes.
- The amount on line 114 is determined at the end of the last fiscal period of the partnership or joint venture that ends in the tax year of the corporation. Add the proportionate share of the assets of the partnership(s) and joint venture(s), and deduct the recorded asset(s) for the investment in partnerships and joint ventures.
- A corporation's share in a partnership or joint venture is determined under paragraph 54(5)(b) of the Ontario Act and, if the partnership or joint venture had no income or loss, is calculated as if the partnership's or joint venture's income were \$1 million. For a corporation with an indirect interest in a partnership or joint venture, determine the corporation's share according to paragraph 54(5)(c) of the Ontario Act.

** Rules for total revenue

- Report total revenue in accordance with generally accepted accounting principles, adjusted so that consolidation and equity methods are not used.
- If the tax year is less than 51 weeks, **multiply** the total revenue of the corporation or the partnership, whichever applies, by 365 and **divide** by the number of days in the tax year.
- The amount on line 144 is determined for the partnership or joint venture fiscal period that ends in the tax year of the corporation. If the partnership or joint venture has 2 or more fiscal periods ending in the filing corporation's tax year, **multiply** the sum of the total revenue for each of the fiscal periods by 365 and **divide** by the total number of days in all the fiscal periods.
- A corporation's share in a partnership or joint venture is determined under paragraph 54(5)(b) of the Ontario Act and, if the partnership or joint venture had no income or loss, is calculated as if the partnership's or joint venture's income were \$1 million. For a corporation with an indirect interest in a partnership or joint venture, determine the corporation's share according to paragraph 54(5)(c) of the Ontario Act.

Part 2 – Adjusted net income/loss for CMT purposes

Net income/loss per financial statements *	210	153,397,532
Add (to the extent reflected in income/loss):		
Provision for current income taxes/cost of current income taxes	220	30,967,711
Provision for deferred income taxes (debits)/cost of future income taxes	222	
Equity losses from corporations	224	
Financial statement loss from partnerships and joint ventures	226	
Dividends deducted on financial statements (subsection 57(2) of the Ontario Act), excluding dividends paid by credit unions under subsection 137(4.1) of the federal Act	230	
Other additions (see note below):		
Share of adjusted net income of partnerships and joint ventures **	228	
Total patronage dividends received, not already included in net income/loss	232	
281	282	
283	284	
Subtotal		30,967,711 ▶
		30,967,711 A
Deduct (to the extent reflected in income/loss):		
Provision for recovery of current income taxes/benefit of current income taxes	320	
Provision for deferred income taxes (credits)/benefit of future income taxes	322	
Equity income from corporations	324	
Financial statement income from partnerships and joint ventures	326	
Dividends deductible under section 112, section 113, or subsection 138(6) of the federal Act	330	
Dividends not taxable under section 83 of the federal Act (from Schedule 3)	332	
Gain on donation of listed security or ecological gift	340	
Accounting gain on transfer of property to a corporation under section 85 or 85.1 of the federal Act ***	342	
Accounting gain on transfer of property to/from a partnership under section 85 or 97 of the federal Act ****	344	
Accounting gain on disposition of property under subsection 13(4), subsection 14(6), or section 44 of the federal Act *****	346	
Accounting gain on a windup under subsection 88(1) of the federal Act or an amalgamation under section 87 of the federal Act	348	
Other deductions (see note below):		
Share of adjusted net loss of partnerships and joint ventures **	328	
Tax payable on dividends under subsection 191.1(1) of the federal Act multiplied by 3	334	
Interest deducted/deductible under paragraph 20(1)(c) or (d) of the federal Act, not already included in net income/loss	336	
Patronage dividends paid (from Schedule 16) not already included in net income/loss	338	
381	382	
383	384	
385	386	
387	388	
389	390	
Subtotal		▶
Adjusted net income/loss for CMT purposes (line 210 plus amount A minus amount B)		490 184,365,243

If the amount on line 490 is positive and the corporation is subject to CMT as determined in Part 1, enter the amount on line 515 in Part 3.

If the amount on line 490 is negative, enter the amount on line 760 in Part 7 (enter as a positive amount).

Note

In accordance with *Ontario Regulation 37/09*, when calculating net income for CMT purposes, accounting income should be adjusted to:

- exclude unrealized gains and losses due to mark-to-market changes or foreign currency changes on specified mark-to-market property (assets only);
- include realized gains and losses on the disposition of specified mark-to-market property not already included in the accounting income, if the property is not a capital property or is a capital property disposed in the year or in a previous tax year ended after March 22, 2007.

"Specified mark-to-market property" is defined in subsection 54(1) of the Ontario Act.

These rules also apply to partnerships. A corporate partner's share of a partnership's adjusted income flows through on a proportionate basis to the corporate partner.

*** Rules for net income/loss**

- Banks must report net income/loss as per the report accepted by the Superintendent of Financial Institutions under the federal *Bank Act*, adjusted so consolidation and equity methods are not used.

Part 2 – Calculation of adjusted net income/loss for CMT purposes (continued)

- Life insurance corporations must report net income/loss as per the report accepted by the federal Superintendent of Financial Institutions or equivalent provincial insurance regulator, before SAT and adjusted so consolidation and equity methods are not used. If the life insurance corporation is resident in Canada and carries on business in and outside of Canada, **multiply** the net income/loss by the ratio of the Canadian reserve liabilities **divided** by the total reserve liability. The reserve liabilities are calculated in accordance with Regulation 2405(3) of the federal Act.
- Other corporations must report net income/loss in accordance with generally accepted accounting principles, except that consolidation and equity methods must not be used. When the equity method has been used for accounting purposes, equity losses and equity income are removed from book income/loss on lines 224 and 324 respectively.
- Corporations, other than insurance corporations, should report net income from line 9999 of the GIF1 (Schedule 125) on line 210.

****** The share of the adjusted net income of a partnership or joint venture is calculated as if the partnership or joint venture were a corporation and the tax year of the partnership or joint venture were its fiscal period. For a corporation with an indirect interest in a partnership through one or more partnerships, determine the corporation's share according to clause 54(5)(c) of the Ontario Act.

******* A joint election will be considered made under subsection 60(1) of the Ontario Act if there is an entry on line 342, and an election has been made for transfer of property to a corporation under subsection 85(1) of the federal Act.

******** A joint election will be considered made under subsection 60(2) of the Ontario Act if there is an entry on line 344, and an election has been made under subsection 85(2) or 97(2) of the federal Act.

********* A joint election will be considered made under subsection 61(1) of the Ontario Act if there is an entry on line 346, and an election has been made under subsection 13(4) or 14(6) and/or section 44 of the federal Act.

For more information on how to complete this part, see the *T2 Corporation – Income Tax Guide*.

Part 3 – CMT payable

Adjusted net income for CMT purposes (line 490 in Part 2, if positive) **515** 184,365,243

Deduct:

CMT loss available (amount R from Part 7)

Minus: Adjustment for an acquisition of control * **518**

Adjusted CMT loss available **C**

Net income subject to CMT calculation (if negative, enter "0") **520** 184,365,243

Amount from line 520 184,365,243 x $\frac{\text{Number of days in the tax year before July 1, 2010}}{\text{Number of days in the tax year}}$ 365 x 4 % = 1

Amount from line 520 184,365,243 x $\frac{\text{Number of days in the tax year after June 30, 2010}}{\text{Number of days in the tax year}}$ 365 x 2.7 % = 4,977,862 2

Subtotal (amount 1 **plus** amount 2) 4,977,862 3

Gross CMT: amount on line 3 above x OAF ** **540** 4,977,862

Deduct:

Foreign tax credit for CMT purposes *** **550**

CMT after foreign tax credit deduction (line 540 **minus** line 550) (if negative, enter "0") 4,977,862 D

Deduct:

Ontario corporate income tax payable before CMT credit (amount F6 from Schedule 5) 13,402,173

Net CMT payable (if negative, enter "0") **E**

Enter amount E on line 278 of Schedule 5, *Tax Calculation Supplementary – Corporations*, and complete Part 4.

* Enter the portion of CMT loss available that exceeds the adjusted net income for the tax year from carrying on a business before the acquisition of control. See subsection 58(3) of the Ontario Act.

*** Enter "0" on line 550 for life insurance corporations as they are not eligible for this deduction. For all other corporations, enter the cumulative total of amount J for the province of Ontario from Part 9 of Schedule 21 on line 550.

**** Calculation of the Ontario allocation factor (OAF):**

If the provincial or territorial jurisdiction entered on line 750 of the T2 return is "Ontario," enter "1" on line F.

If the provincial or territorial jurisdiction entered on line 750 of the T2 return is "multiple," complete the following calculation, and enter the result on line F:

Ontario taxable income **** = Taxable income *****

Ontario allocation factor 1.00000 F

**** Enter the amount allocated to Ontario from column F in Part 1 of Schedule 5. If the taxable income is nil, calculate the amount in column F as if the taxable income were \$1,000.

***** Enter the taxable income amount from line 360 or amount Z of the T2 return, whichever applies. If the taxable income is nil, enter "1,000".

Part 4 – Calculation of CMT credit carryforward

CMT credit carryforward at the end of the previous tax year *	.....	G
Deduct:		
CMT credit expired *	..... 600	
CMT credit carryforward at the beginning of the current tax year * (see note below)	.....	620
Add:		
CMT credit carryforward balances transferred on an amalgamation or the windup of a subsidiary (see note below)	.....	650
CMT credit available for the tax year (amount on line 620 plus amount on line 650)	.....	H
Deduct:		
CMT credit deducted in the current tax year (amount P from Part 5)	.....	I
	Subtotal (amount H minus amount I)	J
Add:		
Net CMT payable (amount E from Part 3)	.....
SAT payable (amount O from Part 6 of Schedule 512)	.....
	Subtotal	K
CMT credit carryforward at the end of the tax year (amount J plus amount K)	.....	670 L

- * For the first harmonized T2 return filed with a tax year that includes days in 2009:
- do not enter an amount on line G or line 600;
 - for line 620, enter the amount from line 2336 of Ontario CT23 Schedule 101, *Corporate Minimum Tax (CMT)*, for the last tax year that ended in 2008.

For other tax years, enter on line G the amount from line 670 of Schedule 510 from the previous tax year.

Note: If you entered an amount on line 620 or line 650, complete Part 6.

Part 5 – Calculation of CMT credit deducted from Ontario corporate income tax payable

CMT credit available for the tax year (amount H from Part 4)	.....	M
Ontario corporate income tax payable before CMT credit (amount F6 from Schedule 5)	..... 13,402,173	1
For a corporation that is not a life insurance corporation:		
CMT after foreign tax credit deduction (amount D from Part 3)	..... 4,977,862	2
For a life insurance corporation:		
Gross CMT (line 540 from Part 3)	.....	3
Gross SAT (line 460 from Part 6 of Schedule 512)	.....	4
The greater of amounts 3 and 4	.....	5
	Deduct: line 2 or line 5, whichever applies:	6
	Subtotal (if negative, enter "0")	8,424,311 N
Ontario corporate income tax payable before CMT credit (amount F6 from Schedule 5)	..... 13,402,173	
Deduct:		
Total refundable tax credits excluding Ontario qualifying environmental trust tax credit (amount J6 minus line 450 from Schedule 5)	..... 1,049,207	
	Subtotal (if negative, enter "0")	12,352,966 O
CMT credit deducted in the current tax year (least of amounts M, N, and O)	.....	P

Enter amount P on line 418 of Schedule 5 and on line I in Part 4 of this schedule.

Is the corporation claiming a CMT credit earned before an acquisition of control? **675** 1 Yes ☐ 2 No ☒

If you answered **yes** to the question at line 675, the CMT credit deducted in the current tax year may be restricted. For information on how the deduction may be restricted, see subsections 53(6) and (7) of the Ontario Act.

Part 6 – Analysis of CMT credit available for carryforward by year of origin

Complete this part if:

- the tax year includes January 1, 2009; or
- the previous tax year-end is deemed to be December 31, 2008, under subsection 249(3) of the federal Act.

Year of origin	CMT credit balance *
10th previous tax year	680
9th previous tax year	681
8th previous tax year	682
7th previous tax year	683
6th previous tax year	684
5th previous tax year	685
4th previous tax year	686
3rd previous tax year	687
2nd previous tax year	688
1st previous tax year	689
Total **	

* CMT credit that was earned (by the corporation, predecessors of the corporation, and subsidiaries wound up into the corporation) in each of the previous 10 tax years and has not been deducted.

** Must equal the total of the amounts entered on lines 620 and 650 in Part 4.

Part 7 – Calculation of CMT loss carryforward

CMT loss carryforward at the end of the previous tax year * Q

Deduct:

CMT loss expired * 700

CMT loss carryforward at the beginning of the tax year * (see note below) 720

Add:

CMT loss transferred on an amalgamation under section 87 of the federal Act ** (see note below) 750

CMT loss available (line 720 plus line 750) R

Deduct:

CMT loss deducted against adjusted net income for the tax year (lesser of line 490 (if positive) and line C in Part 3) S

Subtotal (if negative, enter "0") S

Add:Adjusted net loss for CMT purposes (amount from line 490 in Part 2, if **negative**) (enter as a positive amount) 760

CMT loss carryforward balance at the end of the tax year (amount S plus line 760) 770 T

* For the first harmonized T2 return filed with a tax year that includes days in 2009:

- do not enter an amount on line Q or line 700;
- for line 720, enter the amount from line 2214 of Ontario CT23 Schedule 101, *Corporate Minimum Tax (CMT)*, for the last tax year that ended in 2008.

For other tax years, enter on line Q the amount from line 770 of Schedule 510 from the previous tax year.

** Do not include an amount from a predecessor corporation if it was controlled at any time before the amalgamation by any of the other predecessor corporations.

Note: If you entered an amount on line 720 or line 750, complete Part 8.

Part 8 – Analysis of CMT loss available for carryforward by year of origin

Complete this part if:

- the tax year includes January 1, 2009; or
- the previous tax year-end is deemed to be December 31, 2008, under subsection 249(3) of the federal Act.

Year of origin	Balance earned in a tax year ending before March 23, 2007 *	Balance earned in a tax year ending after March 22, 2007 **
10th previous tax year	810	820
9th previous tax year	811	821
8th previous tax year	812	822
7th previous tax year	813	823
6th previous tax year	814	824
5th previous tax year	815	825
4th previous tax year	816	826
3rd previous tax year	817	827
2nd previous tax year	818	828
1st previous tax year		829
Total ***		

* Adjusted net loss for CMT purposes that was earned (by the corporation, by subsidiaries wound up into or amalgamated with the corporation before March 22, 2007, and by other predecessors of the corporation) in each of the previous 10 tax years that ended before March 23, 2007, and has not been deducted.

** Adjusted net loss for CMT purposes that was earned (by the corporation and its predecessors, but not by a subsidiary predecessor) in each of the previous 20 tax years that ended after March 22, 2007, and has not been deducted.

*** The total of these two columns must equal the total of the amounts entered on lines 720 and 750.

**ONTARIO CORPORATE MINIMUM TAX – TOTAL ASSETS
AND REVENUE FOR ASSOCIATED CORPORATIONS**

Name of corporation	Business Number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	89671 8327 RC0002	2017-12-31

- For use by corporations to report the total assets and total revenue of all the Canadian or foreign corporations with which the filing corporation was associated at any time during the tax year. These amounts are required to determine if the filing corporation is subject to corporate minimum tax.
- Total assets and total revenue include the associated corporation's share of any partnership(s)/joint venture(s) total assets and total revenue.
- Attach additional schedules if more space is required.
- File this schedule with the *T2 Corporation Income Tax Return*.

	Names of associated corporations	Business number (Canadian corporation only) (see Note 1)	Total assets* (see Note 2)	Total revenue** (see Note 2)
	200	300	400	500
1	TORONTO HYDRO CORPORATION		3,962,500,000	243,400,000
2	TORONTO HYDRO ENERGY SERVICES INC.		40,319,000	21,417,000
			450	550
		Total	4,002,819,000	264,817,000

Enter the total assets from line 450 on line 116 in Part 1 of Schedule 510, *Ontario Corporate Minimum Tax*.

Enter the total revenue from line 550 on line 146 in Part 1 of Schedule 510.

Note 1: Enter "NR" if a corporation is not registered.

Note 2: If the associated corporation does not have a tax year that ends in the filing corporation's current tax year but was associated with the filing corporation in the previous tax year of the filing corporation, enter the total revenue and total assets from the tax year of the associated corporation that ends in the previous tax year of the filing corporation.

*** Rules for total assets**

- Report total assets in accordance with generally accepted accounting principles, adjusted so that consolidation and equity methods are not used.
- Include the associated corporation's share of the total assets of partnership(s) and joint venture(s) but exclude the recorded asset(s) for the investment in partnerships and joint ventures.
- Exclude unrealized gains and losses on assets that are included in net income for accounting purposes but not in income for corporate income tax purposes.

**** Rules for total revenue**

- Report total revenue in accordance with generally accepted accounting principles, adjusted so that consolidation and equity methods are not used.
- If the associated corporation has 2 or more tax years ending in the filing corporation's tax year, **multiply** the sum of the total revenue for each of those tax years by 365 and **divide** by the total number of days in all of those tax years.
- If the associated corporation's tax year is less than 51 weeks and is the only tax year of the associated corporation that ends in the filing corporation's tax year, **multiply** the associated corporation's total revenue by 365 and **divide** by the number of days in the associated corporation's tax year.
- Include the associated corporation's share of the total revenue of partnerships and joint ventures.
- If the partnership or joint venture has 2 or more fiscal periods ending in the associated corporation's tax year, **multiply** the sum of the total revenue for each of the fiscal periods by 365 and **divide** by the total number of days in all the fiscal periods.



ONTARIO CO-OPERATIVE EDUCATION TAX CREDIT

Name of corporation	Business Number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- Use this schedule to claim an Ontario co-operative education tax credit (CETC) under section 88 of the *Taxation Act, 2007* (Ontario).
- The CETC is a refundable tax credit that is equal to an eligible percentage (10% to 30%) of the eligible expenditures incurred by a corporation for a qualifying work placement. The maximum credit amount is \$1,000 for each qualifying work placement ending before March 27, 2009, and \$3,000 for each qualifying work placement beginning after March 26, 2009. For a qualifying work placement that straddles March 26, 2009, the maximum credit amount is prorated.
- Eligible expenditures are salaries and wages (including taxable benefits) paid or payable to a student in a qualifying work placement, or fees paid or payable to an employment agency for services performed by the student in a qualifying work placement. These expenditures must be paid on account of employment or services, as applicable, at a permanent establishment of the corporation in Ontario. Expenditures for a work placement (WP) are not eligible expenditures if they are greater than the amounts that would be paid to an arm's length employee.
- A WP must meet all of the following conditions to be a qualifying work placement:
 - the student performs employment duties for a corporation under a qualifying co-operative education program (QCEP);
 - the WP has been developed or approved by an eligible educational institution as a suitable learning situation;
 - the terms of the WP require the student to engage in productive work;
 - the WP is for a period of at least 10 consecutive weeks or, in the case of an internship program, not less than 8 consecutive months and not more than 16 consecutive months;
 - the student is paid for the work performed in the WP;
 - the corporation is required to supervise and evaluate the job performance of the student in the WP;
 - the institution monitors the student's performance in the WP; and
 - the institution has certified the WP as a qualifying work placement.
- Make sure you keep a copy of the letter of certification from the Ontario eligible educational institution containing the name of the student, the employer, the institution, the term of the WP, and the name/discipline of the QCEP to support the claim. Do not submit the letter of certification with the *T2 Corporation Income Tax Return*.
- File this schedule with the *T2 Corporation Income Tax Return*.

Part 1 – Corporate information

110 Name of person to contact for more information	120 Telephone number including area code
Is the claim filed for a CETC earned through a partnership?	150 1 Yes <input type="checkbox"/> 2 No <input checked="" type="checkbox"/>
If you answered yes to the question at line 150, what is the name of the partnership?	160
Enter the percentage of the partnership's CETC allocated to the corporation	170 %
* When a corporate member of a partnership is claiming an amount for eligible expenditures incurred by a partnership, complete a Schedule 550 for the partnership as if the partnership were a corporation. Each corporate partner, other than a limited partner, should file a separate Schedule 550 to claim the partner's share of the partnership's CETC. The allocated amounts can not exceed the amount of the partnership's CETC.	

Part 2 – Eligibility

1. Did the corporation have a permanent establishment in Ontario in the tax year?	200 1 Yes <input checked="" type="checkbox"/> 2 No <input type="checkbox"/>
2. Was the corporation exempt from tax under Part III of the <i>Taxation Act, 2007</i> (Ontario)?	210 1 Yes <input type="checkbox"/> 2 No <input checked="" type="checkbox"/>
If you answered no to question 1 or yes to question 2, then the corporation is not eligible for the CETC.	

Part 3 – Eligible percentage for determining the eligible amountCorporation's salaries and wages paid in the previous tax year * **300** 218,900,000

For eligible expenditures incurred before March 27, 2009:

- If line 300 is \$400,000 or less, enter 15% on line 310.
- If line 300 is \$600,000 or more, enter 10% on line 310.
- If line 300 is more than \$400,000 and less than \$600,000, enter the percentage on line 310 using the following formula:

$$\text{Eligible percentage} = 15\% - \left[5\% \times \left(\frac{\text{amount on line 300} - \$400,000}{\$200,000} \right) \right]$$

Eligible percentage for determining the eligible amount **310** 10.000 %

For eligible expenditures incurred after March 26, 2009:

- If line 300 is \$400,000 or less, enter 30% on line 312.
- If line 300 is \$600,000 or more, enter 25% on line 312.
- If line 300 is more than \$400,000 and less than \$600,000, enter the percentage on line 312 using the following formula:

$$\text{Eligible percentage} = 30\% - \left[5\% \times \left(\frac{\text{amount on line 300} - \$400,000}{\$200,000} \right) \right]$$

Eligible percentage for determining the eligible amount **312** 25.000 %

* If this is the first tax year of an amalgamated corporation and subsection 88(9) of the *Taxation Act, 2007* (Ontario) applies, enter the salaries and wages paid in the previous tax year by the predecessor corporations.

Part 4 – Calculation of the Ontario co-operative education tax credit

Complete a separate entry for each student for each qualifying work placement that ended in the corporation's tax year. If a qualifying work placement would otherwise exceed four consecutive months, divide the WP into periods of four consecutive months and enter each full period of four consecutive months as a separate WP. If the WP does not divide equally into four-month periods and if the period that is less than 4 months is 10 or more consecutive weeks, then enter that period as a separate WP. If that period is less than 10 consecutive weeks, then include it with the WP for the last period of 4 consecutive months. Consecutive WPs with two or more associated corporations are deemed to be with only one corporation, as designated by the corporations.

	A Name of university, college, or other eligible educational institution 400	B Name of qualifying co-operative education program 405
1.	Georgian College	Electical Engineering
2.	University of Waterloo	Environmental Sciences
3.	Georgian College	Electical Engineering
4.	Georgian College	Electical Engineering
5.	Georgian College	Electical Engineering
6.	Ryerson University	Electrical and Computer Engineering
7.	Ryerson University	Electrical and Computer Engineering
8.	Queen's University	Bachelor of Applied Science
9.	Queen's University	Bachelor of Applied Science
10.	Ryerson University	Electrical and Computer Engineering
11.	University of Toronto	Applied Science and Engineering
12.	McMaster University	Electrical Engineering
13.	McMaster University	Electrical Engineering
14.	University of Toronto	Applied Science and Engineering
15.	University of Toronto	Applied Science and Engineering
16.	Georgian College	Electical Engineering
17.	University of Western Ontario	Electrical Engineering
18.	University of Western Ontario	Electrical Engineering
19.	Georgian College	Electical Engineering
20.	Georgian College	Electical Engineering
21.	University of Western Ontario	Electrical Engineering
22.	University of Western Ontario	Electrical Engineering
23.	University of Toronto	Applied Science and Engineering

	A Name of university, college, or other eligible educational institution 400	B Name of qualifying co-operative education program 405
24.	University of Toronto	Applied Science and Engineering
25.	University of Toronto	Applied Science and Engineering
26.	Ryerson University	Electrical and Computer Engineering
27.	Ryerson University	Electrical and Computer Engineering
28.	Ryerson University	Electrical and Computer Engineering
29.	Ryerson University	Electrical and Computer Engineering
30.	McMaster University	Computer Engineering
31.	McMaster University	Computer Engineering
32.	University of Toronto	Applied Science and Engineering
33.	University of Toronto	Applied Science and Engineering
34.	Ryerson University	Electrical and Computer Engineering
35.	University of Toronto	Applied Science and Engineering
36.	University of Toronto	Applied Science and Engineering
37.	University of Toronto	Applied Science and Engineering
38.	University of Toronto	Applied Science and Engineering
39.	Mohawk College	Electrical Engineering
40.	Mohawk College	Electrical Engineering
41.	Georgian College	Electrical Engineering
42.	University of Western Ontario	Electrical Engineering
43.	University of Western Ontario	Electrical Engineering
44.	University of Toronto	Applied Science and Engineering
45.	Georgian College	Electrical Engineering
46.	University of Toronto	Applied Science and Engineering
47.	University of Toronto	Applied Science and Engineering
48.	UTSC	Management
49.	Georgian College	Electrical Engineering
50.	Georgian College	Electrical Engineering
51.	Ryerson University	Electrical and Computer Engineering
52.	Ryerson University	Electrical and Computer Engineering
53.	Ryerson University	Electrical and Computer Engineering
54.	University of Toronto	Applied Science and Engineering
55.	University of Toronto	Applied Science and Engineering
56.	Ryerson University	Electrical and Computer Engineering
57.	Ryerson University	Electrical and Computer Engineering
58.	Queen's University	Bachelor of Applied Science
59.	Queen's University	Bachelor of Applied Science
60.	UTSC	Management
61.	Ryerson University	Electrical and Computer Engineering
62.	Ryerson University	Electrical and Computer Engineering
63.	UTSC	Management
64.	UTSC	Management
65.	UTSC	Management
66.	Georgian College	Electrical Engineering
67.	Georgian College	Electrical Engineering
68.	Georgian College	Electrical Engineering
69.	Georgian College	Electrical Engineering
70.	Georgian College	Electrical Engineering
71.	Queen's University	Bachelor of Applied Science
72.	Queen's University	Bachelor of Applied Science
73.	McMaster University	Chemical Engineering
74.	McMaster University	Chemical Engineering
75.	UTSC	Management
76.	Georgian College	Electrical Engineering
77.	University of Toronto	Applied Science and Engineering
78.	University of Toronto	Applied Science and Engineering

400	405
A Name of university, college, or other eligible educational institution	B Name of qualifying co-operative education program
79. University of Western Ontario	Management and Organizational Studies
80. University of Western Ontario	Management and Organizational Studies
81. McMaster University	Chemical Engineering
82. McMaster University	Chemical Engineering
83. University of Toronto	Applied Science and Engineering
84. University of Toronto	Applied Science and Engineering
85. Brock University	Business Administration
86. University of Toronto	Applied Science and Engineering
87. University of Toronto	Applied Science and Engineering
88. McMaster University	BTech - Energy Engineering Technology
89. McMaster University	BTech - Energy Engineering Technology
90. McMaster University	Engineering Physics and Management
91. McMaster University	Engineering Physics and Management
92. York University	Electrical Engineering
93. University of Toronto	Applied Science and Engineering
94. University of Western Ontario	Mechanical Engineering
95. University of Western Ontario	Mechanical Engineering
96. University of Toronto	Applied Science and Engineering
97. University of Toronto	Applied Science and Engineering
98. UTSC	Management
99. McMaster University	Electrical Engineering
100. UTSC	Management
101. Ryerson University	Electrical and Computer Engineering
102. Ryerson University	Electrical and Computer Engineering
103. UOIT	Electrical Engineering
104. UOIT	Electrical Engineering
105. McMaster University	Mechatronics
106. McMaster University	Mechatronics
107. UTSC	Management
108. Ryerson University	Chemical Engineering
109. Ryerson University	Chemical Engineering
110. Ryerson University	Chemical Engineering
111. Centennial College	Computer System Technology
112. McMaster University	Electrical Engineering
113. University of Toronto	Applied Science and Engineering
114. University of Toronto	Applied Science and Engineering
115. Centennial College	Computer System Technology
116. Brock University	Business Administration
117. University of Toronto	Applied Science and Engineering
118. McMaster University	DeGroote School of Business
119. McMaster University	DeGroote School of Business
120. University of Toronto	Applied Science and Engineering
121. Queen's University	Bachelor of Applied Science
122. Queen's University	Bachelor of Applied Science
123. University of Waterloo	Nanotechnology Engineering
124. York University	Economics
125. York University	Economics
126. Ryerson University	Chemical Engineering
127. Ryerson University	Chemical Engineering
128. Georgian College	Electrical Engineering
129. Ryerson University	Public Health and Safety
130. Ryerson University	Public Health and Safety
131. McMaster University	Electrical Engineering
132. University of Waterloo	Environment and Business
133. University of Toronto	Applied Science and Engineering

A Name of university, college, or other eligible educational institution 400	B Name of qualifying co-operative education program 405
134. University of Toronto	Applied Science and Engineering
135. University of Waterloo	Mathematics/Business Administration
136. University of Toronto	Applied Science and Engineering
137. University of Toronto	Applied Science and Engineering
138. Sheridan College	HR Management
139. George Brown College	HR Management
140. McMaster University	BTech - Process Automation
141. McMaster University	Btech - Automation Engineering Technology
142. Mohawk College	Electrical Engineering
143. Mohawk College	Electrical Engineering
144. Seneca College	HR Management
145. Seneca College	Government Relations
146. York University	Human Resource Management
147. York University	Human Resource Management
148. UTSC	Management
149. UTSC	Management
150. UTSC	Management
151. UTSC	Management
152. Mohawk College	Electrical Engineering
153. Mohawk College	Electrical Engineering
154. Mohawk College	Electrical Engineering
155. University of Waterloo	Electrical Engineering
156. University of Waterloo	Electrical Engineering
157. Centennial College	Electrical Engineering
158. Centennial College	Electrical Engineering
159. Centennial College	Electrical Engineering
160. UTSC	Management
161. UTSC	Management
162. Georgian College	Electrical Engineering
163. Georgian College	Electical Engineering
164. Georgian College	Electical Engineering
165. Georgian College	Electical Engineering
166. Centennial College	Computer Systems Technology
167. Centennial College	Computer Systems Technology
168. Georgian College	Electrical Engineering
169. Georgian College	Electical Engineering
170. Seneca College	International Business Management
171. University of Waterloo	Mechanical Engineering
172. Georgian College	Electrical Engineering
173. Georgian College	Electical Engineering
174. University of Waterloo	Actuarial Science
175. Georgian College	Electical Engineering
176. Georgian College	Electical Engineering
177. Georgian College	Business Accounting
178. UTSC	Management
179. Mohawk College	Energy Systems Engineering Technology
180. Mohawk College	Energy Systems Engineering Technology
181. Mohawk College	Energy Systems Engineering Technology
182. McMaster University	Btech - Automotive and Vehicle
183. McMaster University	Btech - Automotive and Vehicle
184. University of Toronto	Applied Science and Engineering
185. University of Toronto	Applied Science and Engineering
186. University of Toronto	Applied Science and Engineering
187. University of Toronto	Applied Science and Engineering
188. Ryerson University	Electrical and Computer Engineering

	A Name of university, college, or other eligible educational institution 400	B Name of qualifying co-operative education program 405
189.	Ryerson University	Electrical and Computer Engineering
190.	University of Toronto	Applied Science and Engineering
191.	University of Toronto	Applied Science and Engineering
192.	University of Toronto	Applied Science and Engineering
193.	University of Toronto	Applied Science and Engineering
194.	University of Toronto	Applied Science and Engineering
195.	University of Toronto	Applied Science and Engineering
196.	Ryerson University	Electrical and Computer Engineering
197.	Ryerson University	Electrical and Computer Engineering
198.	Queen's University	Bachelor of Applied Science
199.	Queen's University	Bachelor of Applied Science
200.	University of Toronto	Applied Science and Engineering
201.	University of Toronto	Applied Science and Engineering
202.	Queen's University	Bachelor of Applied Science
203.	Queen's University	Bachelor of Applied Science
204.	Queen's University	Bachelor of Applied Science
205.	Queen's University	Bachelor of Applied Science
206.	Ryerson University	Electrical and Computer Engineering
207.	Ryerson University	Electrical and Computer Engineering
208.	York University	Civil Engineering
209.	York University	Civil Engineering
210.	Georgian College	Electrical Engineering
211.	Georgian College	Electrical Engineering
212.	McMaster University	Electrical Engineering
213.	McMaster University	Electrical Engineering
214.	York University	Electrical Engineering
215.	York University	Electrical Engineering
216.	Centennial College	Business Administration
217.	Centennial College	Business Administration
218.	McMaster University	Civil Engineering
219.	McMaster University	Civil Engineering
220.	Ryerson University	Accounting and Finance
221.	Ryerson University	Accounting and Finance
222.	Georgian College	Civil Engineering
223.	Centennial College	Business Administration
224.	Centennial College	Business Administration
225.	Georgian College	Electrical Engineering
226.	York University	Finance
227.	York University	Finance
228.	Georgian College	Electrical Engineering
229.	University of Toronto	Applied Science and Engineering
230.	University of Toronto	Applied Science and Engineering
231.	McMaster University	Mechanical Engineering
232.	McMaster University	Mechanical Engineering
233.	University of Toronto	Applied Science and Engineering
234.	University of Toronto	Applied Science and Engineering
235.	University of Toronto	Applied Science and Engineering
236.	University of Toronto	Applied Science and Engineering
237.	McMaster University	Software Engineering
238.	McMaster University	Software Engineering
239.	Centennial College	Computer Systems Technology
240.	Centennial College	Computer Systems Technology
241.	Mohawk College	Electrical Engineering
242.	Mohawk College	Electrical Engineering
243.	University of Waterloo	Civil Engineering

	A Name of university, college, or other eligible educational institution 400	B Name of qualifying co-operative education program 405
244.	University of Toronto	Applied Science and Engineering
245.	University of Toronto	Applied Science and Engineering
246.	George Brown College	HR Management
247.	Ryerson University	Business Technology Management
248.	Ryerson University	Business Technology Management
249.	McMaster University	DeGroote School of Business
250.	McMaster University	DeGroote School of Business
251.	University of Toronto	Applied Science and Engineering
252.	Georgian College	Electrical Engineering
253.	University of Western Ontario	Chemical Engineering
254.	University of Western Ontario	Chemical Engineering
255.	University of Toronto	Applied Science and Engineering
256.	University of Toronto	Applied Science and Engineering
257.	University of Toronto	Applied Science and Engineering
258.	Queen's University	Bachelor of Applied Science
259.	McMaster University	Civil Engineering
260.	University of Western Ontario	Management and Organizational Studies
261.	University of Toronto	Applied Science and Engineering
262.	McMaster University	Electrical Engineering
263.	Ryerson University	Electrical and Computer Engineering
264.	Ryerson University	Electrical and Computer Engineering
265.	University of Toronto	Applied Science and Engineering
266.	Ryerson University	Mechanical and Industrial Engineering
267.	Georgian College	Electrical Engineering
268.	Georgian College	Electrical Engineering
269.	Carleton University	Bachelor of Engineering, Electrical
270.	Georgian College	Electrical Engineering
271.	University of Toronto	Applied Science and Engineering
272.	University of Toronto	Applied Science and Engineering
273.	Georgian College	Electrical Engineering
274.	McMaster University	DeGroote School of Business
275.	McMaster University	Electrical Engineering
276.	University of Toronto	Applied Science and Engineering
277.	Georgian College	Electrical Engineering
278.	Ryerson University	Chemical Engineering
279.	Georgian College	Electrical Engineering
280.	University of Toronto	Applied Science and Engineering
281.	UTSC	Management
282.	Brock University	Business Administration
283.	UTSC	Management
284.	York University	Information Technology
285.	UTSC	Management
286.	McMaster University	Business Informatics
287.	Ryerson University	Electrical and Computer Engineering
288.	Georgian College	Electrical Engineering
289.	George Brown College	HR Management
290.	McMaster University	Electrical Engineering and Management
291.	Georgian College	HR Management
292.	McMaster University	Computer Engineering
293.	University of Toronto	Applied Science and Engineering
294.	University of Toronto	Applied Science and Engineering
295.	McMaster University	DeGroote School of Business
296.	University of Waterloo	Electrical Engineering
297.	York University	Accounting
298.	Ryerson University	Electrical and Computer Engineering

A Name of university, college, or other eligible educational institution 400		B Name of qualifying co-operative education program 405	
299.	Ryerson University	Occupational Health and Safety	
300.	Georgian College	Computer Studies	
301.	York University	Accounting	
302.	University of Waterloo	Accounting and Financial Management	
303.	Brock University	Business Administration	
304.	University of Toronto	Applied Science and Engineering	
305.	George Brown College	Information Systems Business Analysis	
306.	Centennial College	Software Engineering	
307.	McMaster University	Computer Engineering	
308.	University of Toronto	Applied Science and Engineering	
309.	University of Toronto	Applied Science and Engineering	
310.	University of Western Ontario	Mechatronics Systems Engineering	
311.	Georgian College	Electrical Engineering	
312.	York University	Space Engineering	
313.	University of Western Ontario	Electrical Engineering	
314.	Georgian College	Electrical Engineering	
315.	Mohawk College	Energy Systems Engineering Technology	
316.	University of Toronto	Applied Science and Engineering	
317.	Mohawk College	Electrical Engineering	
318.	Georgian College	Electrical Engineering	
319.	Georgian College	Electrical Engineering	
320.	Humber College	Business Administration	
321.	Mohawk College	Energy Systems Engineering Technology	
322.	Georgian College	Electrical Engineering	
323.	McMaster University	Software Engineering	
C Name of student 410		D Start date of WP (see note 1 below) 430	E End date of WP (see note 2 below) 435
1.		2017-01-09	2017-04-28
2.		2017-05-01	2017-09-01
3.		2017-01-09	2017-04-28
4.		2017-05-01	2017-09-01
5.		2017-01-09	2017-04-28
6.		2017-01-09	2017-04-28
7.		2017-05-01	2017-09-01
8.		2017-01-09	2017-04-28
9.		2017-05-01	2017-08-28
10.		2017-01-09	2017-04-28
11.		2017-01-09	2017-04-28
12.		2017-01-09	2017-04-28
13.		2017-05-01	2017-09-01
14.		2017-01-09	2017-04-28
15.		2017-05-01	2017-09-01
16.		2017-01-09	2017-04-28
17.		2017-05-01	2017-08-11
18.		2017-01-09	2017-04-28
19.		2017-09-05	2017-12-22
20.		2017-01-09	2017-04-28
21.		2017-05-01	2017-08-15
22.		2017-01-09	2017-04-28
23.		2017-01-09	2017-04-28

	C Name of student	D Start date of WP (see note 1 below)	E End date of WP (see note 2 below)
	410	430	435
24.		2017-01-09	2017-04-28
25.		2017-05-01	2017-09-01
26.		2017-01-09	2017-04-28
27.		2017-05-01	2017-08-30
28.		2017-01-09	2017-04-28
29.		2017-05-01	2017-09-01
30.		2017-01-09	2017-04-28
31.		2017-05-01	2017-09-01
32.		2017-01-09	2017-04-28
33.		2017-05-01	2017-09-01
34.		2017-01-09	2017-04-28
35.		2017-01-09	2017-04-28
36.		2017-05-01	2017-08-18
37.		2017-01-09	2017-04-28
38.		2017-05-01	2017-09-01
39.		2017-01-09	2017-04-28
40.		2017-05-01	2017-09-01
41.		2017-01-09	2017-04-28
42.		2017-01-09	2017-04-28
43.		2017-05-01	2017-08-29
44.		2017-01-09	2017-04-28
45.		2017-01-09	2017-04-28
46.		2017-01-09	2017-04-28
47.		2017-05-01	2017-09-01
48.		2017-01-09	2017-04-28
49.		2017-09-05	2017-12-22
50.		2017-01-09	2017-04-28
51.		2017-01-09	2017-04-28
52.		2017-01-09	2017-04-28
53.		2017-05-01	2017-09-01
54.		2017-01-09	2017-04-28
55.		2017-05-01	2017-08-25
56.		2017-01-09	2017-04-28
57.		2017-05-01	2017-09-01
58.		2017-01-09	2017-04-28
59.		2017-05-01	2017-08-25
60.		2017-01-09	2017-04-28
61.		2017-01-09	2017-04-28
62.		2017-05-01	2017-09-01
63.		2017-01-09	2017-04-28
64.		2017-01-09	2017-04-28
65.		2017-01-09	2017-04-28
66.		2017-01-09	2017-04-28
67.		2017-05-01	2017-09-01
68.		2017-01-09	2017-04-28
69.		2017-05-01	2017-09-01
70.		2017-05-01	2017-09-01
71.		2017-01-09	2017-04-28
72.		2017-05-01	2017-09-01
73.		2017-01-09	2017-04-28
74.		2017-05-01	2017-08-25
75.		2017-01-09	2017-04-28
76.		2017-09-05	2017-12-22
77.		2017-01-09	2017-04-28

	C Name of student	D Start date of WP (see note 1 below)	E End date of WP (see note 2 below)
	410	430	435
78.		2017-05-01	2017-09-01
79.		2017-01-09	2017-04-28
80.		2017-05-01	2017-09-01
81.		2017-01-09	2017-04-28
82.		2017-05-01	2017-09-01
83.		2017-01-09	2017-04-28
84.		2017-05-01	2017-09-01
85.		2017-01-09	2017-04-28
86.		2017-01-09	2017-04-28
87.		2017-05-01	2017-09-01
88.		2017-01-09	2017-04-28
89.		2017-05-01	2017-09-01
90.		2017-01-09	2017-04-28
91.		2017-05-01	2017-09-01
92.		2017-01-09	2017-04-28
93.		2017-01-09	2017-04-28
94.		2017-05-01	2017-08-11
95.		2017-01-09	2017-04-28
96.		2017-01-09	2017-04-28
97.		2017-05-01	2017-09-01
98.		2017-01-09	2017-04-28
99.		2017-01-09	2017-04-28
100.		2017-01-09	2017-04-28
101.		2017-01-09	2017-04-28
102.		2017-05-01	2017-09-01
103.		2017-01-09	2017-04-28
104.		2017-05-01	2017-09-01
105.		2017-01-09	2017-04-28
106.		2017-05-01	2017-09-01
107.		2017-01-09	2017-04-28
108.		2017-09-05	2017-12-22
109.		2017-01-09	2017-04-28
110.		2017-05-01	2017-09-01
111.		2017-01-09	2017-04-28
112.		2017-01-09	2017-04-28
113.		2017-01-09	2017-04-28
114.		2017-05-01	2017-09-01
115.		2017-01-09	2017-04-28
116.		2017-05-01	2017-09-01
117.		2017-01-09	2017-04-28
118.		2017-01-09	2017-04-28
119.		2017-05-01	2017-09-01
120.		2017-01-09	2017-04-28
121.		2017-01-09	2017-04-28
122.		2017-05-01	2017-09-01
123.		2017-01-09	2017-04-28
124.		2017-01-09	2017-04-28
125.		2017-05-01	2017-09-01
126.		2017-01-09	2017-04-28
127.		2017-05-01	2017-09-01
128.		2017-01-09	2017-04-28
129.		2017-01-09	2017-04-28
130.		2017-05-01	2017-09-01
131.		2017-01-09	2017-04-28

	C Name of student	D Start date of WP (see note 1 below)	E End date of WP (see note 2 below)
	410	430	435
132.		2017-01-09	2017-04-28
133.		2017-01-09	2017-04-28
134.		2017-05-01	2017-09-01
135.		2017-01-09	2017-04-28
136.		2017-01-09	2017-04-28
137.		2017-05-01	2017-09-01
138.		2017-01-09	2017-04-28
139.		2017-01-09	2017-04-28
140.		2017-01-09	2017-04-28
141.		2017-05-01	2017-09-01
142.		2017-01-09	2017-04-28
143.		2017-05-01	2017-09-01
144.		2017-01-09	2017-04-28
145.		2017-01-09	2017-04-28
146.		2017-01-09	2017-04-28
147.		2017-05-01	2017-09-01
148.		2017-01-09	2017-04-28
149.		2017-05-01	2017-09-01
150.		2017-01-09	2017-04-28
151.		2017-05-01	2017-08-25
152.		2017-09-05	2017-12-22
153.		2017-01-09	2017-04-28
154.		2017-05-01	2017-09-01
155.		2017-01-09	2017-04-28
156.		2017-01-09	2017-04-28
157.		2017-09-05	2017-12-22
158.		2017-01-09	2017-04-28
159.		2017-05-01	2017-09-01
160.		2017-01-09	2017-04-28
161.		2017-05-01	2017-09-01
162.		2017-09-05	2017-12-22
163.		2017-01-09	2017-04-28
164.		2017-05-01	2017-09-01
165.		2017-01-09	2017-04-28
166.		2017-01-09	2017-04-28
167.		2017-05-01	2017-09-01
168.		2017-09-05	2017-12-22
169.		2017-01-09	2017-04-28
170.		2017-01-09	2017-04-28
171.		2017-01-09	2017-04-25
172.		2017-01-09	2017-04-28
173.		2017-01-09	2017-04-28
174.		2017-01-09	2017-04-28
175.		2017-01-09	2017-04-28
176.		2017-01-09	2017-04-28
177.		2017-01-09	2017-04-28
178.		2017-01-09	2017-04-28
179.		2017-09-05	2017-12-14
180.		2017-01-09	2017-04-28
181.		2017-05-01	2017-09-01
182.		2017-01-09	2017-04-28
183.		2017-05-01	2017-09-01
184.		2017-09-05	2017-12-22
185.		2017-05-01	2017-09-01

	C Name of student	D Start date of WP (see note 1 below)	E End date of WP (see note 2 below)
	410	430	435
186.		2017-09-05	2017-12-22
187.		2017-05-01	2017-09-01
188.		2017-09-05	2017-12-22
189.		2017-05-01	2017-09-01
190.		2017-09-05	2017-12-22
191.		2017-05-01	2017-09-01
192.		2017-09-05	2017-12-22
193.		2017-05-01	2017-09-01
194.		2017-09-05	2017-12-22
195.		2017-05-01	2017-09-01
196.		2017-09-05	2017-12-22
197.		2017-05-01	2017-09-01
198.		2017-09-05	2017-12-22
199.		2017-05-01	2017-09-01
200.		2017-09-05	2017-12-22
201.		2017-05-01	2017-09-01
202.		2017-09-05	2017-12-22
203.		2017-05-01	2017-09-01
204.		2017-09-05	2017-12-22
205.		2017-05-01	2017-09-01
206.		2017-09-05	2017-12-22
207.		2017-05-01	2017-09-01
208.		2017-09-05	2017-12-22
209.		2017-05-01	2017-09-01
210.		2017-09-05	2017-12-22
211.		2017-05-01	2017-09-01
212.		2017-09-05	2017-12-22
213.		2017-05-01	2017-09-01
214.		2017-09-05	2017-12-22
215.		2017-05-01	2017-09-01
216.		2017-09-05	2017-12-22
217.		2017-05-01	2017-09-01
218.		2017-09-05	2017-12-22
219.		2017-05-01	2017-09-01
220.		2017-09-05	2017-12-22
221.		2017-05-01	2017-09-01
222.		2017-05-01	2017-09-01
223.		2017-09-05	2017-12-22
224.		2017-05-01	2017-09-01
225.		2017-05-01	2017-09-01
226.		2017-09-05	2017-12-22
227.		2017-05-01	2017-09-01
228.		2017-05-01	2017-09-01
229.		2017-09-05	2017-12-22
230.		2017-05-01	2017-09-01
231.		2017-09-05	2017-12-22
232.		2017-05-01	2017-09-01
233.		2017-09-05	2017-12-22
234.		2017-05-01	2017-09-01
235.		2017-09-05	2017-12-22
236.		2017-05-01	2017-09-01
237.		2017-09-05	2017-12-22
238.		2017-05-01	2017-09-01
239.		2017-09-05	2017-12-22

	C Name of student	D Start date of WP (see note 1 below)	E End date of WP (see note 2 below)
	410	430	435
240.		2017-05-01	2017-09-01
241.		2017-09-05	2017-12-22
242.		2017-05-01	2017-09-01
243.		2017-05-01	2017-09-01
244.		2017-09-05	2017-12-22
245.		2017-05-01	2017-09-01
246.		2017-05-01	2017-09-01
247.		2017-09-05	2017-12-22
248.		2017-05-01	2017-09-01
249.		2017-09-05	2017-12-22
250.		2017-05-01	2017-09-01
251.		2017-05-16	2017-09-01
252.		2017-05-17	2017-09-01
253.		2017-06-06	2017-09-01
254.		2017-09-05	2017-12-22
255.		2017-09-05	2017-12-22
256.		2017-09-05	2017-12-22
257.		2017-09-05	2017-12-22
258.		2017-09-05	2017-12-22
259.		2017-09-05	2017-12-22
260.		2017-09-05	2017-12-22
261.		2017-09-05	2017-12-22
262.		2017-09-05	2017-12-22
263.		2017-09-05	2017-12-22
264.		2017-09-05	2017-12-22
265.		2017-09-05	2017-12-22
266.		2017-09-05	2017-12-22
267.		2017-09-05	2017-12-22
268.		2017-09-05	2017-12-22
269.		2017-09-05	2017-12-22
270.		2017-09-05	2017-12-22
271.		2017-09-05	2017-12-22
272.		2017-09-05	2017-12-22
273.		2017-09-05	2017-12-22
274.		2017-09-05	2017-12-22
275.		2017-09-05	2017-12-22
276.		2017-09-05	2017-12-22
277.		2017-09-05	2017-12-22
278.		2017-09-05	2017-12-22
279.		2017-09-05	2017-12-22
280.		2017-09-05	2017-12-22
281.		2017-09-05	2017-12-22
282.		2017-09-05	2017-12-22
283.		2017-09-05	2017-12-22
284.		2017-09-05	2017-12-22
285.		2017-09-05	2017-12-22
286.		2017-09-05	2017-12-22
287.		2017-09-05	2017-12-22
288.		2017-09-05	2017-12-22
289.		2017-09-05	2017-12-22
290.		2017-09-05	2017-12-22
291.		2017-09-05	2017-12-22
292.		2017-09-05	2017-12-22
293.		2017-09-05	2017-12-22

	C Name of student	D Start date of WP (see note 1 below)	E End date of WP (see note 2 below)
	410	430	435
294.		2017-09-05	2017-12-22
295.		2017-09-05	2017-12-22
296.		2017-09-05	2017-12-22
297.		2017-09-05	2017-12-22
298.		2017-09-05	2017-12-22
299.		2017-09-05	2017-12-22
300.		2017-09-05	2017-12-22
301.		2017-09-05	2017-12-22
302.		2017-09-05	2017-12-22
303.		2017-09-05	2017-12-22
304.		2017-09-05	2017-12-22
305.		2017-09-05	2017-12-22
306.		2017-09-05	2017-12-22
307.		2017-09-05	2017-12-22
308.		2017-09-05	2017-12-22
309.		2017-09-05	2017-12-22
310.		2017-09-05	2017-12-22
311.		2017-09-05	2017-12-22
312.		2017-09-05	2017-12-22
313.		2017-09-05	2017-12-22
314.		2017-09-05	2017-12-22
315.		2017-09-05	2017-12-22
316.		2017-09-05	2017-12-22
317.		2017-09-05	2017-12-22
318.		2017-09-05	2017-12-22
319.		2017-09-05	2017-12-22
320.		2017-09-05	2017-12-22
321.		2017-09-05	2017-12-22
322.		2017-09-05	2017-12-22
323.		2017-09-11	2017-12-22
<p>Note 1: When the WP has been divided into separate periods because it exceeds four consecutive months, enter the start date for the separate WP.</p> <p>Note 2: When the WP has been divided into separate periods because it exceeds four consecutive months, enter the end date for the separate WP.</p>			

Part 4 – Calculation of the Ontario co-operative education tax credit (continued)

	F1 Eligible expenditures before March 27, 2009 (see note 1 below)		F2 Eligible expenditures after March 26, 2009 (see note 1 below)		X Number of consecutive weeks of the WP completed by the student before March 27, 2009 (see note 3 below)	Y Total number of consecutive weeks of the student's WP (see note 3 below)
	450		452			
1.		10.000 %	12,443	25.000 %		16
2.		10.000 %	13,074	25.000 %		18
3.		10.000 %	13,346	25.000 %		16
4.		10.000 %	15,014	25.000 %		18
5.		10.000 %	14,348	25.000 %		16
6.		10.000 %	11,590	25.000 %		16
7.		10.000 %	13,039	25.000 %		18
8.		10.000 %	15,233	25.000 %		16
9.		10.000 %	16,186	25.000 %		17
10.		10.000 %	10,402	25.000 %		16
11.		10.000 %	10,319	25.000 %		16
12.		10.000 %	10,632	25.000 %		16
13.		10.000 %	11,961	25.000 %		18
14.		10.000 %	11,086	25.000 %		16
15.		10.000 %	12,472	25.000 %		18
16.		10.000 %	12,601	25.000 %		16
17.		10.000 %	13,781	25.000 %		15
18.		10.000 %	14,700	25.000 %		16
19.		10.000 %	12,774	25.000 %		15
20.		10.000 %	13,626	25.000 %		16
21.		10.000 %	14,282	25.000 %		15
22.		10.000 %	15,234	25.000 %		16
23.		10.000 %	11,796	25.000 %		16
24.		10.000 %	15,121	25.000 %		16
25.		10.000 %	17,011	25.000 %		18
26.		10.000 %	15,407	25.000 %		16
27.		10.000 %	16,369	25.000 %		17
28.		10.000 %	15,434	25.000 %		16
29.		10.000 %	17,363	25.000 %		18
30.		10.000 %	10,705	25.000 %		16
31.		10.000 %	12,043	25.000 %		18
32.		10.000 %	11,466	25.000 %		16
33.		10.000 %	12,899	25.000 %		18
34.		10.000 %	15,308	25.000 %		16
35.		10.000 %	14,635	25.000 %		16
36.		10.000 %	14,635	25.000 %		16
37.		10.000 %	15,121	25.000 %		16
38.		10.000 %	17,011	25.000 %		18
39.		10.000 %	13,514	25.000 %		16
40.		10.000 %	15,204	25.000 %		18
41.		10.000 %	14,251	25.000 %		16
42.		10.000 %	10,833	25.000 %		16
43.		10.000 %	11,510	25.000 %		17
44.		10.000 %	14,847	25.000 %		16
45.		10.000 %	14,520	25.000 %		16
46.		10.000 %	11,468	25.000 %		16
47.		10.000 %	12,901	25.000 %		18
48.		10.000 %	9,831	25.000 %		16
49.		10.000 %	12,774	25.000 %		15
50.		10.000 %	13,626	25.000 %		16
51.		10.000 %	16,100	25.000 %		16

	F1 Eligible expenditures before March 27, 2009 (see note 1 below) 450	Eligible percentage before March 27, 2009 (from line 310 in Part 3)	F2 Eligible expenditures after March 26, 2009 (see note 1 below) 452	Eligible percentage after March 26, 2009 (from line 310a in Part 3)	X Number of consecutive weeks of the WP completed by the student before March 27, 2009 (see note 3 below)	Y Total number of consecutive weeks of the student's WP (see note 3 below)
52.		10.000 %	15,121	25.000 %		16
53.		10.000 %	17,011	25.000 %		18
54.		10.000 %	13,496	25.000 %		16
55.		10.000 %	14,340	25.000 %		17
56.		10.000 %	14,702	25.000 %		16
57.		10.000 %	16,540	25.000 %		18
58.		10.000 %	14,605	25.000 %		16
59.		10.000 %	15,518	25.000 %		17
60.		10.000 %	12,210	25.000 %		16
61.		10.000 %	15,164	25.000 %		16
62.		10.000 %	17,060	25.000 %		18
63.		10.000 %	12,210	25.000 %		16
64.		10.000 %	11,940	25.000 %		16
65.		10.000 %	12,210	25.000 %		16
66.		10.000 %	13,938	25.000 %		16
67.		10.000 %	15,680	25.000 %		18
68.		10.000 %	13,437	25.000 %		16
69.		10.000 %	15,117	25.000 %		18
70.		10.000 %	14,167	25.000 %		18
71.		10.000 %	11,468	25.000 %		16
72.		10.000 %	12,901	25.000 %		18
73.		10.000 %	11,488	25.000 %		16
74.		10.000 %	12,206	25.000 %		17
75.		10.000 %	10,705	25.000 %		16
76.		10.000 %	13,476	25.000 %		15
77.		10.000 %	11,045	25.000 %		16
78.		10.000 %	12,426	25.000 %		18
79.		10.000 %	11,248	25.000 %		16
80.		10.000 %	12,654	25.000 %		18
81.		10.000 %	11,341	25.000 %		16
82.		10.000 %	12,758	25.000 %		18
83.		10.000 %	10,005	25.000 %		16
84.		10.000 %	11,256	25.000 %		18
85.		10.000 %	10,069	25.000 %		16
86.		10.000 %	11,341	25.000 %		16
87.		10.000 %	12,758	25.000 %		18
88.		10.000 %	14,447	25.000 %		16
89.		10.000 %	16,253	25.000 %		18
90.		10.000 %	11,468	25.000 %		16
91.		10.000 %	12,901	25.000 %		18
92.		10.000 %	15,922	25.000 %		16
93.		10.000 %	10,319	25.000 %		16
94.		10.000 %	14,255	25.000 %		15
95.		10.000 %	15,205	25.000 %		16
96.		10.000 %	14,618	25.000 %		16
97.		10.000 %	16,445	25.000 %		18
98.		10.000 %	11,872	25.000 %		16
99.		10.000 %	15,097	25.000 %		16
100.		10.000 %	10,562	25.000 %		16
101.		10.000 %	14,870	25.000 %		16
102.		10.000 %	16,728	25.000 %		18
103.		10.000 %	15,037	25.000 %		16
104.		10.000 %	16,917	25.000 %		18

	F1 Eligible expenditures before March 27, 2009 (see note 1 below) 450	Eligible percentage before March 27, 2009 (from line 310 in Part 3)	F2 Eligible expenditures after March 26, 2009 (see note 1 below) 452	Eligible percentage after March 26, 2009 (from line 310a in Part 3)	X Number of consecutive weeks of the WP completed by the student before March 27, 2009 (see note 3 below)	Y Total number of consecutive weeks of the student's WP (see note 3 below)
105.		10.000 %	14,031	25.000 %		16
106.		10.000 %	15,785	25.000 %		18
107.		10.000 %	12,210	25.000 %		16
108.		10.000 %	10,690	25.000 %		15
109.		10.000 %	11,403	25.000 %		16
110.		10.000 %	12,828	25.000 %		18
111.		10.000 %	10,922	25.000 %		16
112.		10.000 %	16,321	25.000 %		16
113.		10.000 %	14,115	25.000 %		16
114.		10.000 %	15,880	25.000 %		18
115.		10.000 %	11,665	25.000 %		16
116.		10.000 %	16,920	25.000 %		18
117.		10.000 %	12,346	25.000 %		16
118.		10.000 %	11,341	25.000 %		16
119.		10.000 %	12,758	25.000 %		18
120.		10.000 %	15,092	25.000 %		16
121.		10.000 %	11,468	25.000 %		16
122.		10.000 %	12,901	25.000 %		18
123.		10.000 %	15,744	25.000 %		16
124.		10.000 %	10,038	25.000 %		16
125.		10.000 %	11,293	25.000 %		18
126.		10.000 %	11,023	25.000 %		16
127.		10.000 %	12,401	25.000 %		18
128.		10.000 %	15,613	25.000 %		16
129.		10.000 %	10,603	25.000 %		16
130.		10.000 %	11,928	25.000 %		18
131.		10.000 %	15,837	25.000 %		16
132.		10.000 %	10,160	25.000 %		16
133.		10.000 %	11,150	25.000 %		16
134.		10.000 %	12,544	25.000 %		18
135.		10.000 %	10,895	25.000 %		16
136.		10.000 %	10,832	25.000 %		16
137.		10.000 %	12,186	25.000 %		18
138.		10.000 %	31,478	25.000 %		16
139.		10.000 %	10,402	25.000 %		16
140.		10.000 %	9,854	25.000 %		16
141.		10.000 %	11,086	25.000 %		18
142.		10.000 %	13,545	25.000 %		16
143.		10.000 %	15,238	25.000 %		18
144.		10.000 %	10,190	25.000 %		16
145.		10.000 %	10,744	25.000 %		16
146.		10.000 %	10,617	25.000 %		16
147.		10.000 %	11,944	25.000 %		18
148.		10.000 %	9,239	25.000 %		16
149.		10.000 %	10,394	25.000 %		18
150.		10.000 %	10,485	25.000 %		16
151.		10.000 %	11,140	25.000 %		17
152.		10.000 %	13,318	25.000 %		15
153.		10.000 %	14,206	25.000 %		16
154.		10.000 %	15,982	25.000 %		18
155.		10.000 %	14,251	25.000 %		16
156.		10.000 %	14,072	25.000 %		16
157.		10.000 %	12,647	25.000 %		15

	F1 Eligible expenditures before March 27, 2009 (see note 1 below) 450	Eligible percentage before March 27, 2009 (from line 310 in Part 3)	F2 Eligible expenditures after March 26, 2009 (see note 1 below) 452	Eligible percentage after March 26, 2009 (from line 310a in Part 3)	X Number of consecutive weeks of the WP completed by the student before March 27, 2009 (see note 3 below)	Y Total number of consecutive weeks of the student's WP (see note 3 below)
158.		10.000 %	13,490	25.000 %		16
159.		10.000 %	15,176	25.000 %		18
160.		10.000 %	10,540	25.000 %		16
161.		10.000 %	11,857	25.000 %		18
162.		10.000 %	13,009	25.000 %		15
163.		10.000 %	13,876	25.000 %		16
164.		10.000 %	15,611	25.000 %		18
165.		10.000 %	12,604	25.000 %		16
166.		10.000 %	9,239	25.000 %		16
167.		10.000 %	10,394	25.000 %		18
168.		10.000 %	11,598	25.000 %		15
169.		10.000 %	12,371	25.000 %		16
170.		10.000 %	11,773	25.000 %		16
171.		10.000 %	11,865	25.000 %		15
172.		10.000 %	11,742	25.000 %		16
173.		10.000 %	9,349	25.000 %		16
174.		10.000 %	9,349	25.000 %		16
175.		10.000 %	14,072	25.000 %		16
176.		10.000 %	11,438	25.000 %		16
177.		10.000 %	9,463	25.000 %		16
178.		10.000 %	10,808	25.000 %		16
179.		10.000 %	11,742	25.000 %		13
180.		10.000 %	13,420	25.000 %		16
181.		10.000 %	15,098	25.000 %		18
182.		10.000 %	10,617	25.000 %		16
183.		10.000 %	11,944	25.000 %		18
184.		10.000 %	14,004	25.000 %		15
185.		10.000 %	16,805	25.000 %		18
186.		10.000 %	12,628	25.000 %		15
187.		10.000 %	15,154	25.000 %		18
188.		10.000 %	13,734	25.000 %		15
189.		10.000 %	16,480	25.000 %		18
190.		10.000 %	13,734	25.000 %		15
191.		10.000 %	16,480	25.000 %		18
192.		10.000 %	13,734	25.000 %		15
193.		10.000 %	16,480	25.000 %		18
194.		10.000 %	13,734	25.000 %		15
195.		10.000 %	16,480	25.000 %		18
196.		10.000 %	13,572	25.000 %		15
197.		10.000 %	16,286	25.000 %		18
198.		10.000 %	13,329	25.000 %		15
199.		10.000 %	15,994	25.000 %		18
200.		10.000 %	13,734	25.000 %		15
201.		10.000 %	16,480	25.000 %		18
202.		10.000 %	13,491	25.000 %		15
203.		10.000 %	16,189	25.000 %		18
204.		10.000 %	13,734	25.000 %		15
205.		10.000 %	16,480	25.000 %		18
206.		10.000 %	13,248	25.000 %		15
207.		10.000 %	15,897	25.000 %		18
208.		10.000 %	14,014	25.000 %		15
209.		10.000 %	16,817	25.000 %		18
210.		10.000 %	11,793	25.000 %		15

	F1 Eligible expenditures before March 27, 2009 (see note 1 below) 450	Eligible percentage before March 27, 2009 (from line 310 in Part 3)	F2 Eligible expenditures after March 26, 2009 (see note 1 below) 452	Eligible percentage after March 26, 2009 (from line 310a in Part 3)	X Number of consecutive weeks of the WP completed by the student before March 27, 2009 (see note 3 below)	Y Total number of consecutive weeks of the student's WP (see note 3 below)
211.		10.000 %	14,151	25.000 %		18
212.		10.000 %	13,653	25.000 %		15
213.		10.000 %	16,383	25.000 %		18
214.		10.000 %	13,842	25.000 %		15
215.		10.000 %	16,610	25.000 %		18
216.		10.000 %	10,433	25.000 %		15
217.		10.000 %	12,519	25.000 %		18
218.		10.000 %	13,572	25.000 %		15
219.		10.000 %	16,286	25.000 %		18
220.		10.000 %	8,793	25.000 %		15
221.		10.000 %	10,552	25.000 %		18
222.		10.000 %	14,167	25.000 %		18
223.		10.000 %	10,378	25.000 %		15
224.		10.000 %	12,453	25.000 %		18
225.		10.000 %	10,400	25.000 %		18
226.		10.000 %	10,000	25.000 %		15
227.		10.000 %	12,001	25.000 %		18
228.		10.000 %	13,734	25.000 %		18
229.		10.000 %	10,293	25.000 %		15
230.		10.000 %	12,351	25.000 %		18
231.		10.000 %	13,572	25.000 %		15
232.		10.000 %	16,286	25.000 %		18
233.		10.000 %	10,108	25.000 %		15
234.		10.000 %	12,130	25.000 %		18
235.		10.000 %	10,415	25.000 %		15
236.		10.000 %	12,499	25.000 %		18
237.		10.000 %	9,994	25.000 %		15
238.		10.000 %	11,993	25.000 %		18
239.		10.000 %	9,534	25.000 %		15
240.		10.000 %	11,441	25.000 %		18
241.		10.000 %	12,781	25.000 %		15
242.		10.000 %	15,338	25.000 %		18
243.		10.000 %	16,032	25.000 %		18
244.		10.000 %	13,734	25.000 %		15
245.		10.000 %	16,480	25.000 %		18
246.		10.000 %	11,618	25.000 %		18
247.		10.000 %	10,052	25.000 %		15
248.		10.000 %	12,062	25.000 %		18
249.		10.000 %	10,108	25.000 %		15
250.		10.000 %	12,130	25.000 %		18
251.		10.000 %	8,531	25.000 %		15
252.		10.000 %	11,984	25.000 %		15
253.		10.000 %	8,491	25.000 %		12
254.		10.000 %	10,613	25.000 %		15
255.		10.000 %	10,798	25.000 %		15
256.		10.000 %	10,620	25.000 %		15
257.		10.000 %	13,648	25.000 %		15
258.		10.000 %	10,620	25.000 %		15
259.		10.000 %	10,908	25.000 %		15
260.		10.000 %	10,485	25.000 %		15
261.		10.000 %	10,767	25.000 %		15
262.		10.000 %	14,004	25.000 %		15
263.		10.000 %	10,905	25.000 %		15

	F1 Eligible expenditures before March 27, 2009 (see note 1 below) 450	Eligible percentage before March 27, 2009 (from line 310 in Part 3)	F2 Eligible expenditures after March 26, 2009 (see note 1 below) 452	Eligible percentage after March 26, 2009 (from line 310a in Part 3)	X Number of consecutive weeks of the WP completed by the student before March 27, 2009 (see note 3 below)	Y Total number of consecutive weeks of the student's WP (see note 3 below)
264.		10.000 %	14,004	25.000 %		15
265.		10.000 %	14,004	25.000 %		15
266.		10.000 %	10,485	25.000 %		15
267.		10.000 %	10,300	25.000 %		15
268.		10.000 %	14,182	25.000 %		15
269.		10.000 %	13,469	25.000 %		15
270.		10.000 %	13,833	25.000 %		15
271.		10.000 %	13,654	25.000 %		15
272.		10.000 %	13,404	25.000 %		15
273.		10.000 %	12,114	25.000 %		15
274.		10.000 %	9,957	25.000 %		15
275.		10.000 %	14,004	25.000 %		15
276.		10.000 %	14,004	25.000 %		15
277.		10.000 %	14,288	25.000 %		15
278.		10.000 %	9,075	25.000 %		15
279.		10.000 %	12,173	25.000 %		15
280.		10.000 %	10,497	25.000 %		15
281.		10.000 %	10,620	25.000 %		15
282.		10.000 %	9,187	25.000 %		15
283.		10.000 %	10,215	25.000 %		15
284.		10.000 %	10,312	25.000 %		15
285.		10.000 %	10,620	25.000 %		15
286.		10.000 %	10,100	25.000 %		15
287.		10.000 %	10,905	25.000 %		15
288.		10.000 %	12,461	25.000 %		15
289.		10.000 %	10,620	25.000 %		15
290.		10.000 %	14,031	25.000 %		15
291.		10.000 %	10,485	25.000 %		15
292.		10.000 %	10,620	25.000 %		15
293.		10.000 %	14,004	25.000 %		15
294.		10.000 %	10,620	25.000 %		15
295.		10.000 %	10,908	25.000 %		15
296.		10.000 %	12,173	25.000 %		15
297.		10.000 %	10,350	25.000 %		15
298.		10.000 %	14,004	25.000 %		15
299.		10.000 %	9,358	25.000 %		15
300.		10.000 %	10,485	25.000 %		15
301.		10.000 %	10,620	25.000 %		15
302.		10.000 %	8,877	25.000 %		15
303.		10.000 %	9,187	25.000 %		15
304.		10.000 %	13,826	25.000 %		15
305.		10.000 %	10,905	25.000 %		15
306.		10.000 %	10,620	25.000 %		15
307.		10.000 %	14,063	25.000 %		15
308.		10.000 %	14,004	25.000 %		15
309.		10.000 %	10,620	25.000 %		15
310.		10.000 %	14,288	25.000 %		15
311.		10.000 %	8,764	25.000 %		15
312.		10.000 %	14,155	25.000 %		15
313.		10.000 %	14,004	25.000 %		15
314.		10.000 %	11,130	25.000 %		15
315.		10.000 %	14,357	25.000 %		15
316.		10.000 %	10,905	25.000 %		15

	F1 Eligible expenditures before March 27, 2009 (see note 1 below) 450	Eligible percentage before March 27, 2009 (from line 310 in Part 3)	F2 Eligible expenditures after March 26, 2009 (see note 1 below) 452	Eligible percentage after March 26, 2009 (from line 310a in Part 3)	X Number of consecutive weeks of the WP completed by the student before March 27, 2009 (see note 3 below)	Y Total number of consecutive weeks of the student's WP (see note 3 below)
317.		10.000 %	14,357	25.000 %		15
318.		10.000 %	12,402	25.000 %		15
319.		10.000 %	11,605	25.000 %		15
320.		10.000 %	11,840	25.000 %		15
321.		10.000 %	14,323	25.000 %		15
322.		10.000 %	12,114	25.000 %		15
323.		10.000 %	9,625	25.000 %		15

	G Eligible amount (eligible expenditures multiplied by eligible percentage) (see note 2 below) 460	H Maximum CETC per WP (see note 3 below) 462	I CETC on eligible expenditures (column G or H, whichever is less) 470	J CETC on repayment of government assistance (see note 4 below) 480	K CETC for each WP (column I or column J) 490
1.	3,111	3,000	3,000		3,000
2.	3,269	3,000	3,000		3,000
3.	3,337	3,000	3,000		3,000
4.	3,754	3,000	3,000		3,000
5.	3,587	3,000	3,000		3,000
6.	2,898	3,000	2,898		2,898
7.	3,260	3,000	3,000		3,000
8.	3,808	3,000	3,000		3,000
9.	4,047	3,000	3,000		3,000
10.	2,601	3,000	2,601		2,601
11.	2,580	3,000	2,580		2,580
12.	2,658	3,000	2,658		2,658
13.	2,990	3,000	2,990		2,990
14.	2,772	3,000	2,772		2,772
15.	3,118	3,000	3,000		3,000
16.	3,150	3,000	3,000		3,000
17.	3,445	3,000	3,000		3,000
18.	3,675	3,000	3,000		3,000
19.	3,194	3,000	3,000		3,000
20.	3,407	3,000	3,000		3,000
21.	3,571	3,000	3,000		3,000
22.	3,809	3,000	3,000		3,000
23.	2,949	3,000	2,949		2,949
24.	3,780	3,000	3,000		3,000
25.	4,253	3,000	3,000		3,000
26.	3,852	3,000	3,000		3,000
27.	4,092	3,000	3,000		3,000
28.	3,859	3,000	3,000		3,000
29.	4,341	3,000	3,000		3,000
30.	2,676	3,000	2,676		2,676
31.	3,011	3,000	3,000		3,000
32.	2,867	3,000	2,867		2,867
33.	3,225	3,000	3,000		3,000
34.	3,827	3,000	3,000		3,000
35.	3,659	3,000	3,000		3,000
36.	3,659	3,000	3,000		3,000
37.	3,780	3,000	3,000		3,000
38.	4,253	3,000	3,000		3,000
39.	3,379	3,000	3,000		3,000

	G Eligible amount (eligible expenditures multiplied by eligible percentage) (see note 2 below) 460	H Maximum CETC per WP (see note 3 below) 462	I CETC on eligible expenditures (column G or H, whichever is less) 470	J CETC on repayment of government assistance (see note 4 below) 480	K CETC for each WP (column I or column J) 490
40.	3,801	3,000	3,000		3,000
41.	3,563	3,000	3,000		3,000
42.	2,708	3,000	2,708		2,708
43.	2,878	3,000	2,878		2,878
44.	3,712	3,000	3,000		3,000
45.	3,630	3,000	3,000		3,000
46.	2,867	3,000	2,867		2,867
47.	3,225	3,000	3,000		3,000
48.	2,458	3,000	2,458		2,458
49.	3,194	3,000	3,000		3,000
50.	3,407	3,000	3,000		3,000
51.	4,025	3,000	3,000		3,000
52.	3,780	3,000	3,000		3,000
53.	4,253	3,000	3,000		3,000
54.	3,374	3,000	3,000		3,000
55.	3,585	3,000	3,000		3,000
56.	3,676	3,000	3,000		3,000
57.	4,135	3,000	3,000		3,000
58.	3,651	3,000	3,000		3,000
59.	3,880	3,000	3,000		3,000
60.	3,053	3,000	3,000		3,000
61.	3,791	3,000	3,000		3,000
62.	4,265	3,000	3,000		3,000
63.	3,053	3,000	3,000		3,000
64.	2,985	3,000	2,985		2,985
65.	3,053	3,000	3,000		3,000
66.	3,485	3,000	3,000		3,000
67.	3,920	3,000	3,000		3,000
68.	3,359	3,000	3,000		3,000
69.	3,779	3,000	3,000		3,000
70.	3,542	3,000	3,000		3,000
71.	2,867	3,000	2,867		2,867
72.	3,225	3,000	3,000		3,000
73.	2,872	3,000	2,872		2,872
74.	3,052	3,000	3,000		3,000
75.	2,676	3,000	2,676		2,676
76.	3,369	3,000	3,000		3,000
77.	2,761	3,000	2,761		2,761
78.	3,107	3,000	3,000		3,000
79.	2,812	3,000	2,812		2,812
80.	3,164	3,000	3,000		3,000
81.	2,835	3,000	2,835		2,835
82.	3,190	3,000	3,000		3,000
83.	2,501	3,000	2,501		2,501
84.	2,814	3,000	2,814		2,814
85.	2,517	3,000	2,517		2,517
86.	2,835	3,000	2,835		2,835
87.	3,190	3,000	3,000		3,000
88.	3,612	3,000	3,000		3,000
89.	4,063	3,000	3,000		3,000
90.	2,867	3,000	2,867		2,867
91.	3,225	3,000	3,000		3,000
92.	3,981	3,000	3,000		3,000

	G Eligible amount (eligible expenditures multiplied by eligible percentage) (see note 2 below) 460	H Maximum CETC per WP (see note 3 below) 462	I CETC on eligible expenditures (column G or H, whichever is less) 470	J CETC on repayment of government assistance (see note 4 below) 480	K CETC for each WP (column I or column J) 490
93.	2,580	3,000	2,580		2,580
94.	3,564	3,000	3,000		3,000
95.	3,801	3,000	3,000		3,000
96.	3,655	3,000	3,000		3,000
97.	4,111	3,000	3,000		3,000
98.	2,968	3,000	2,968		2,968
99.	3,774	3,000	3,000		3,000
100.	2,641	3,000	2,641		2,641
101.	3,718	3,000	3,000		3,000
102.	4,182	3,000	3,000		3,000
103.	3,759	3,000	3,000		3,000
104.	4,229	3,000	3,000		3,000
105.	3,508	3,000	3,000		3,000
106.	3,946	3,000	3,000		3,000
107.	3,053	3,000	3,000		3,000
108.	2,673	3,000	2,673		2,673
109.	2,851	3,000	2,851		2,851
110.	3,207	3,000	3,000		3,000
111.	2,731	3,000	2,731		2,731
112.	4,080	3,000	3,000		3,000
113.	3,529	3,000	3,000		3,000
114.	3,970	3,000	3,000		3,000
115.	2,916	3,000	2,916		2,916
116.	4,230	3,000	3,000		3,000
117.	3,087	3,000	3,000		3,000
118.	2,835	3,000	2,835		2,835
119.	3,190	3,000	3,000		3,000
120.	3,773	3,000	3,000		3,000
121.	2,867	3,000	2,867		2,867
122.	3,225	3,000	3,000		3,000
123.	3,936	3,000	3,000		3,000
124.	2,510	3,000	2,510		2,510
125.	2,823	3,000	2,823		2,823
126.	2,756	3,000	2,756		2,756
127.	3,100	3,000	3,000		3,000
128.	3,903	3,000	3,000		3,000
129.	2,651	3,000	2,651		2,651
130.	2,982	3,000	2,982		2,982
131.	3,959	3,000	3,000		3,000
132.	2,540	3,000	2,540		2,540
133.	2,788	3,000	2,788		2,788
134.	3,136	3,000	3,000		3,000
135.	2,724	3,000	2,724		2,724
136.	2,708	3,000	2,708		2,708
137.	3,047	3,000	3,000		3,000
138.	7,870	3,000	3,000		3,000
139.	2,601	3,000	2,601		2,601
140.	2,464	3,000	2,464		2,464
141.	2,772	3,000	2,772		2,772
142.	3,386	3,000	3,000		3,000
143.	3,810	3,000	3,000		3,000
144.	2,548	3,000	2,548		2,548
145.	2,686	3,000	2,686		2,686

	G Eligible amount (eligible expenditures multiplied by eligible percentage) (see note 2 below) 460	H Maximum CETC per WP (see note 3 below) 462	I CETC on eligible expenditures (column G or H, whichever is less) 470	J CETC on repayment of government assistance (see note 4 below) 480	K CETC for each WP (column I or column J) 490
146.	2,654	3,000	2,654		2,654
147.	2,986	3,000	2,986		2,986
148.	2,310	3,000	2,310		2,310
149.	2,599	3,000	2,599		2,599
150.	2,621	3,000	2,621		2,621
151.	2,785	3,000	2,785		2,785
152.	3,330	3,000	3,000		3,000
153.	3,552	3,000	3,000		3,000
154.	3,996	3,000	3,000		3,000
155.	3,563	3,000	3,000		3,000
156.	3,518	3,000	3,000		3,000
157.	3,162	3,000	3,000		3,000
158.	3,373	3,000	3,000		3,000
159.	3,794	3,000	3,000		3,000
160.	2,635	3,000	2,635		2,635
161.	2,964	3,000	2,964		2,964
162.	3,252	3,000	3,000		3,000
163.	3,469	3,000	3,000		3,000
164.	3,903	3,000	3,000		3,000
165.	3,151	3,000	3,000		3,000
166.	2,310	3,000	2,310		2,310
167.	2,599	3,000	2,599		2,599
168.	2,900	3,000	2,900		2,900
169.	3,093	3,000	3,000		3,000
170.	2,943	3,000	2,943		2,943
171.	2,966	3,000	2,966		2,966
172.	2,936	3,000	2,936		2,936
173.	2,337	3,000	2,337		2,337
174.	2,337	3,000	2,337		2,337
175.	3,518	3,000	3,000		3,000
176.	2,860	3,000	2,860		2,860
177.	2,366	3,000	2,366		2,366
178.	2,702	3,000	2,702		2,702
179.	2,936	3,000	2,936		2,936
180.	3,355	3,000	3,000		3,000
181.	3,775	3,000	3,000		3,000
182.	2,654	3,000	2,654		2,654
183.	2,986	3,000	2,986		2,986
184.	3,501	3,000	3,000		3,000
185.	4,201	3,000	3,000		3,000
186.	3,157	3,000	3,000		3,000
187.	3,789	3,000	3,000		3,000
188.	3,434	3,000	3,000		3,000
189.	4,120	3,000	3,000		3,000
190.	3,434	3,000	3,000		3,000
191.	4,120	3,000	3,000		3,000
192.	3,434	3,000	3,000		3,000
193.	4,120	3,000	3,000		3,000
194.	3,434	3,000	3,000		3,000
195.	4,120	3,000	3,000		3,000
196.	3,393	3,000	3,000		3,000
197.	4,072	3,000	3,000		3,000
198.	3,332	3,000	3,000		3,000

	G Eligible amount (eligible expenditures multiplied by eligible percentage) (see note 2 below) 460	H Maximum CETC per WP (see note 3 below) 462	I CETC on eligible expenditures (column G or H, whichever is less) 470	J CETC on repayment of government assistance (see note 4 below) 480	K CETC for each WP (column I or column J) 490
199.	3,999	3,000	3,000		3,000
200.	3,434	3,000	3,000		3,000
201.	4,120	3,000	3,000		3,000
202.	3,373	3,000	3,000		3,000
203.	4,047	3,000	3,000		3,000
204.	3,434	3,000	3,000		3,000
205.	4,120	3,000	3,000		3,000
206.	3,312	3,000	3,000		3,000
207.	3,974	3,000	3,000		3,000
208.	3,504	3,000	3,000		3,000
209.	4,204	3,000	3,000		3,000
210.	2,948	3,000	2,948		2,948
211.	3,538	3,000	3,000		3,000
212.	3,413	3,000	3,000		3,000
213.	4,096	3,000	3,000		3,000
214.	3,461	3,000	3,000		3,000
215.	4,153	3,000	3,000		3,000
216.	2,608	3,000	2,608		2,608
217.	3,130	3,000	3,000		3,000
218.	3,393	3,000	3,000		3,000
219.	4,072	3,000	3,000		3,000
220.	2,198	3,000	2,198		2,198
221.	2,638	3,000	2,638		2,638
222.	3,542	3,000	3,000		3,000
223.	2,595	3,000	2,595		2,595
224.	3,113	3,000	3,000		3,000
225.	2,600	3,000	2,600		2,600
226.	2,500	3,000	2,500		2,500
227.	3,000	3,000	3,000		3,000
228.	3,434	3,000	3,000		3,000
229.	2,573	3,000	2,573		2,573
230.	3,088	3,000	3,000		3,000
231.	3,393	3,000	3,000		3,000
232.	4,072	3,000	3,000		3,000
233.	2,527	3,000	2,527		2,527
234.	3,033	3,000	3,000		3,000
235.	2,604	3,000	2,604		2,604
236.	3,125	3,000	3,000		3,000
237.	2,499	3,000	2,499		2,499
238.	2,998	3,000	2,998		2,998
239.	2,384	3,000	2,384		2,384
240.	2,860	3,000	2,860		2,860
241.	3,195	3,000	3,000		3,000
242.	3,835	3,000	3,000		3,000
243.	4,008	3,000	3,000		3,000
244.	3,434	3,000	3,000		3,000
245.	4,120	3,000	3,000		3,000
246.	2,905	3,000	2,905		2,905
247.	2,513	3,000	2,513		2,513
248.	3,016	3,000	3,000		3,000
249.	2,527	3,000	2,527		2,527
250.	3,033	3,000	3,000		3,000
251.	2,133	3,000	2,133		2,133

	G Eligible amount (eligible expenditures multiplied by eligible percentage) (see note 2 below) 460	H Maximum CETC per WP (see note 3 below) 462	I CETC on eligible expenditures (column G or H, whichever is less) 470	J CETC on repayment of government assistance (see note 4 below) 480	K CETC for each WP (column I or column J) 490
252.	2,996	3,000	2,996		2,996
253.	2,123	3,000	2,123		2,123
254.	2,653	3,000	2,653		2,653
255.	2,700	3,000	2,700		2,700
256.	2,655	3,000	2,655		2,655
257.	3,412	3,000	3,000		3,000
258.	2,655	3,000	2,655		2,655
259.	2,727	3,000	2,727		2,727
260.	2,621	3,000	2,621		2,621
261.	2,692	3,000	2,692		2,692
262.	3,501	3,000	3,000		3,000
263.	2,726	3,000	2,726		2,726
264.	3,501	3,000	3,000		3,000
265.	3,501	3,000	3,000		3,000
266.	2,621	3,000	2,621		2,621
267.	2,575	3,000	2,575		2,575
268.	3,546	3,000	3,000		3,000
269.	3,367	3,000	3,000		3,000
270.	3,458	3,000	3,000		3,000
271.	3,414	3,000	3,000		3,000
272.	3,351	3,000	3,000		3,000
273.	3,029	3,000	3,000		3,000
274.	2,489	3,000	2,489		2,489
275.	3,501	3,000	3,000		3,000
276.	3,501	3,000	3,000		3,000
277.	3,572	3,000	3,000		3,000
278.	2,269	3,000	2,269		2,269
279.	3,043	3,000	3,000		3,000
280.	2,624	3,000	2,624		2,624
281.	2,655	3,000	2,655		2,655
282.	2,297	3,000	2,297		2,297
283.	2,554	3,000	2,554		2,554
284.	2,578	3,000	2,578		2,578
285.	2,655	3,000	2,655		2,655
286.	2,525	3,000	2,525		2,525
287.	2,726	3,000	2,726		2,726
288.	3,115	3,000	3,000		3,000
289.	2,655	3,000	2,655		2,655
290.	3,508	3,000	3,000		3,000
291.	2,621	3,000	2,621		2,621
292.	2,655	3,000	2,655		2,655
293.	3,501	3,000	3,000		3,000
294.	2,655	3,000	2,655		2,655
295.	2,727	3,000	2,727		2,727
296.	3,043	3,000	3,000		3,000
297.	2,588	3,000	2,588		2,588
298.	3,501	3,000	3,000		3,000
299.	2,340	3,000	2,340		2,340
300.	2,621	3,000	2,621		2,621
301.	2,655	3,000	2,655		2,655
302.	2,219	3,000	2,219		2,219
303.	2,297	3,000	2,297		2,297
304.	3,457	3,000	3,000		3,000

	G Eligible amount (eligible expenditures multiplied by eligible percentage) (see note 2 below) 460	H Maximum CETC per WP (see note 3 below) 462	I CETC on eligible expenditures (column G or H, whichever is less) 470	J CETC on repayment of government assistance (see note 4 below) 480	K CETC for each WP (column I or column J) 490
305.	2,726	3,000	2,726		2,726
306.	2,655	3,000	2,655		2,655
307.	3,516	3,000	3,000		3,000
308.	3,501	3,000	3,000		3,000
309.	2,655	3,000	2,655		2,655
310.	3,572	3,000	3,000		3,000
311.	2,191	3,000	2,191		2,191
312.	3,539	3,000	3,000		3,000
313.	3,501	3,000	3,000		3,000
314.	2,783	3,000	2,783		2,783
315.	3,589	3,000	3,000		3,000
316.	2,726	3,000	2,726		2,726
317.	3,589	3,000	3,000		3,000
318.	3,101	3,000	3,000		3,000
319.	2,901	3,000	2,901		2,901
320.	2,960	3,000	2,960		2,960
321.	3,581	3,000	3,000		3,000
322.	3,029	3,000	3,000		3,000
323.	2,406	3,000	2,406		2,406
Ontario co-operative education tax credit (total of amounts in column K) 500					926,007 L

or, if the corporation answered **yes** at line 150 in Part 1, determine the partner's share of amount L:

Amount L _____ x percentage on line 170 in Part 1 _____ % = _____ **M**

Enter amount L or M, whichever applies, on line 452 of Schedule 5, *Tax Calculation Supplementary – Corporations*. If you are filing more than one Schedule 550, add the amounts from line L or M, whichever applies, on all the schedules and enter the total amount on line 452 of Schedule 5.

Note 1: Reduce eligible expenditures by all government assistance, as defined under subsection 88(21) of the *Taxation Act, 2007* (Ontario), that the corporation has received, is entitled to receive, or may reasonably expect to receive, for the eligible expenditures, on or before the filing due date of the *T2 Corporation Income Tax Return* for the tax year.

Note 2: Calculate the eligible amount (Column G) using the following formula:

Column G = (column F1 x percentage on line 310) + (column F2 x percentage on line 312)

Note 3: If the WP ends before March 27, 2009, the maximum credit amount for the WP is \$1,000.

If the WP begins after March 26, 2009, the maximum credit amount for the WP is \$3,000.

If the WP begins before March 27, 2009, and ends after March 26, 2009, calculate the maximum credit amount using the following formula:

$(\$1,000 \times X/Y) + [\$3,000 \times (Y - X)/Y]$

where "X" is the number of consecutive weeks of the WP completed by the student before March 27, 2009,
and "Y" is the total number of consecutive weeks of the student's WP.

Note 4: When claiming a CETC for repayment of government assistance, complete a **separate entry** for each repayment and complete columns A to E and J and K with the details for the previous year WP in which the government assistance was received. Include the amount of government assistance repaid in the tax year multiplied by the eligible percentage for the tax year in which the government assistance was received, to the extent that the government assistance reduced the CETC in that tax year.



Ontario Apprenticeship Training Tax Credit

Corporation's name	Business number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- Use this schedule to claim an Ontario apprenticeship training tax credit (ATTC) under section 89 of the *Taxation Act, 2007* (Ontario).
- The ATTC is a refundable tax credit that is equal to a specified percentage (25% to 45%) of the eligible expenditures incurred by a corporation for a qualifying apprenticeship. For eligible expenditures incurred after March 26, 2009 for an apprenticeship program that began before April 24, 2015, the maximum credit for each qualifying apprenticeship is \$10,000 per year to a maximum credit of \$40,000 over the first 48-month period of the qualifying apprenticeship. For an apprenticeship program that began after April 23, 2015, the maximum credit for each qualifying apprenticeship is \$5,000 per year to a maximum credit of \$15,000 over the first 36-month period of the qualifying apprenticeship.
- Eligible expenditures are salaries and wages (including taxable benefits) paid to an apprentice in a qualifying apprenticeship or fees paid to an employment agency for the provision of services performed by the apprentice in a qualifying apprenticeship. These expenditures must be:
 - paid on account of employment or services, as applicable, at a permanent establishment of the corporation in Ontario;
 - for services provided by the apprentice during the first 48 months of the apprenticeship program, if an apprenticeship program began before April 24, 2015; and
 - for services provided by the apprentice during the first 36 months of the apprenticeship program, if an apprenticeship program began after April 23, 2015.
- An expenditure is not eligible for an ATTC if:
 - the same expenditure was used, or will be used, to claim a co-operative education tax credit; or
 - it is more than an amount that would be paid to an arm's length apprentice.
- An apprenticeship must meet the following conditions to be a qualifying apprenticeship:
 - the apprenticeship is in a qualifying skilled trade approved by the Ministry of Training, Colleges and Universities (Ontario) or a person designated by him or her; and
 - the corporation and the apprentice must be participating in an apprenticeship program in which the training agreement has been registered under the *Ontario College of Trades and Apprenticeship Act, 2009*, or the *Apprenticeship and Certification Act, 1998*, or in which the contract of apprenticeship has been registered under the *Trades Qualification and Apprenticeship Act*.
- Do not submit the training agreement or contract of apprenticeship with your *T2 Corporation Income Tax Return*. Keep a copy of the training agreement or contract of apprenticeship to support your claim.
- File this schedule with your *T2 Corporation Income Tax Return*.

Part 1 – Corporate information

110 Name of person to contact for more information	120 Telephone number
Is the claim filed for an ATTC earned through a partnership? *	150 1 Yes <input type="checkbox"/> 2 No <input checked="" type="checkbox"/>
If you answered yes to the question at line 150, what is the name of the partnership?	160
Enter the percentage of the partnership's ATTC allocated to the corporation	170 %
* When a corporate member of a partnership is claiming an amount for eligible expenditures incurred by a partnership, complete a Schedule 552 for the partnership as if the partnership were a corporation. Each corporate partner, other than a limited partner, should file a separate Schedule 552 to claim the partner's share of the partnership's ATTC. The total of the partners' allocated amounts can never exceed the amount of the partnership's ATTC.	

Part 2 – Eligibility

1. Did the corporation have a permanent establishment in Ontario in the tax year?	200 1 Yes <input checked="" type="checkbox"/> 2 No <input type="checkbox"/>
2. Was the corporation exempt from tax under Part III of the <i>Taxation Act, 2007</i> (Ontario)?	210 1 Yes <input type="checkbox"/> 2 No <input checked="" type="checkbox"/>
If you answered no to question 1 or yes to question 2, then you are not eligible for the ATTC.	

Part 3 – Specified percentageCorporation's salaries and wages paid in the previous tax year * **300** 218,900,000**For eligible expenditures incurred after March 26, 2009 for an apprenticeship program that began before April 24, 2015:**

- If line 300 is \$400,000 or less, enter 45% on line 312.
- If line 300 is \$600,000 or more, enter 35% on line 312.
- If line 300 is more than \$400,000 and less than \$600,000, enter the percentage on line 312 using the following formula:

$$\text{Specified percentage} = 45 \% - \left[10 \% \times \left(\frac{\text{amount on line 300} - 400,000}{200,000} \right) \right]$$

Specified percentage **312** 35.000 %**For eligible expenditures incurred for an apprenticeship program that began after April 23, 2015:**

- If line 300 is \$400,000 or less, enter 30% on line 314.
- If line 300 is \$600,000 or more, enter 25% on line 314.
- If line 300 is more than \$400,000 and less than \$600,000, enter the percentage on line 314 using the following formula:

$$\text{Specified percentage} = 30 \% - \left[5 \% \times \left(\frac{\text{amount on line 300} - 400,000}{200,000} \right) \right]$$

Specified percentage **314** 25.000 %


* If this is the first tax year of an amalgamated corporation and subsection 89(6) of the *Taxation Act, 2007* (Ontario) applies, enter salaries and wages paid in the previous tax year by the predecessor corporations.

Part 4 – Ontario apprenticeship training tax credit

Complete a **separate entry** for each apprentice for each qualifying apprenticeship with the corporation. When claiming an ATTC for repayment of government assistance, complete a **separate entry** for each repayment, and complete columns A to G and M and N with the details for the employment period in the previous tax year in which the government assistance was received.

A Trade code		B Apprenticeship program/trade name		C Name of apprentice	
400		405		410	
1.	434a	Powerline Technician			
2.	434a	Powerline Technician			
3.	434a	Powerline Technician			
4.	434a	Powerline Technician			
5.	434a	Powerline Technician			
6.	434a	Powerline Technician			
7.	434a	Powerline Technician			
8.	434a	Powerline Technician			
9.	434a	Powerline Technician			
10.	434a	Powerline Technician			
11.	434a	Powerline Technician			
12.	434a	Powerline Technician			

D Original contract or training agreement number		E Original registration date of apprenticeship contract or training agreement (YYYYMMDD) (see note 1)	F Start date of employment as an apprentice in the tax year (YYYYMMDD) (see note 2)	G End date of employment as an apprentice in the tax year (YYYYMMDD) (see note 3)
420		425	430	435
1.		2016-02-29	2017-01-01	2017-12-31
2.		2016-02-29	2017-01-01	2017-12-31
3.		2016-02-29	2017-01-01	2017-12-31
4.		2016-02-29	2017-01-01	2017-12-31
5.		2016-02-29	2017-01-01	2017-12-31
6.		2016-02-29	2017-01-01	2017-12-31
7.		2016-02-29	2017-01-01	2017-12-31
8.		2016-02-29	2017-01-01	2017-12-31
9.		2016-02-29	2017-01-01	2017-12-31

	D Original contract or training agreement number	E Original registration date of apprenticeship contract or training agreement (YYYYMMDD) (see note 1)	F Start date of employment as an apprentice in the tax year (YYYYMMDD) (see note 2)	G End date of employment as an apprentice in the tax year (YYYYMMDD) (see note 3)
10.	 420	425	430	435
11.		2016-02-29	2017-01-01	2017-12-31
12.		2016-02-29	2017-01-01	2017-12-31

Note 1: Enter the original registration date of the apprenticeship contract or training agreement in all cases, even when multiple employers employed the apprentice.

Note 2: When there are multiple employment periods as an apprentice in the tax year with the corporation, enter the date that is the first day of employment as an apprentice in the tax year with the corporation. When claiming an ATTC for repayment of government assistance, enter the start date of employment as an apprentice for the tax year in which the government assistance was received.

Note 3: When there are multiple employment periods as an apprentice in the tax year with the corporation, enter the date that is the last day of employment as an apprentice in the tax year with the corporation. When claiming an ATTC for repayment of government assistance, enter the end date of employment as an apprentice for the tax year in which the government assistance was received.

Part 4 – Ontario apprenticeship training tax credit (continued)

	H1 Number of days in the tax year employed as an apprentice in a qualifying apprenticeship program that began before April 24, 2015 (see note 1) 442	H2 Number of days in the tax year employed as an apprentice in a qualifying apprenticeship program that began after April 23, 2015 (see note 1) 443	I Maximum credit amount for the tax year (see note 2) 445
1.		365	5,000
2.		365	5,000
3.		365	5,000
4.		365	5,000
5.		365	5,000
6.		365	5,000
7.		365	5,000
8.		365	5,000
9.		365	5,000
10.		365	5,000
11.		365	5,000
12.		365	5,000

Note 1: When there are multiple employment periods as an apprentice in the tax year with the corporation, do not include days in which the individual was not employed as an apprentice.

For H1: The days employed as an apprentice must be within 48 months of the registration date provided in column E.

For H2: The days employed as an apprentice must be within 36 months of the registration date provided in column E.

Note 2: Maximum credit = $(\$10,000 \times H1/365^*)$ or $(\$5,000 \times H2/365^*)$, whichever applies.

* 366 days, if the tax year includes February 29

	J1 Eligible expenditures incurred after March 26, 2009 for a qualifying apprenticeship program that began before April 24, 2015 (see note 3) 452	J2 Eligible expenditures incurred for a qualifying apprenticeship program that began after April 23, 2015 (see note 3) 453	K Eligible expenditures multiplied by specified percentage (see note 4) 460
1.		88,566	22,142
2.		81,378	20,345
3.		80,261	20,065
4.		81,015	20,254
5.		88,593	22,148
6.		98,286	24,572
7.		89,034	22,259
8.		88,503	22,126
9.		79,505	19,876
10.		90,815	22,704
11.		87,244	21,811
12.		84,018	21,005

Note 3: Reduce eligible expenditures by all government assistance, as defined under subsection 89(19) of the *Taxation Act, 2007* (Ontario), that the corporation has received, is entitled to receive, or may reasonably expect to receive, in respect of the eligible expenditures, on or before the filing due date of the *T2 Corporation Income Tax Return* for the tax year.

For J1: Eligible expenditures must be for services provided by the apprentice to the taxpayer during the first 48 months of the apprenticeship program, and not relating to services performed before the apprenticeship program began or after it ended.

For J2: Eligible expenditures must be for services provided by the apprentice to the taxpayer during the first 36 months of the apprenticeship program, and not relating to services performed before the apprenticeship began or after it ended.

Note 4: Calculate the amount in column K as follows:

Column K = $(J1 \times \text{line 312})$ or $(J2 \times \text{line 314})$, whichever applies.

	L ATTC on eligible expenditures (lesser of columns I and K) 470	M ATTC on repayment of government assistance (see note 5) 480	N ATTC for each apprentice (column L or M, whichever applies) 490
1.	5,000		5,000
2.	5,000		5,000

	L ATTC on elig ble expenditures (lesser of columns I and K) 470	M ATTC on repayment of government assistance (see note 5) 480	N ATTC for each apprentice (column L or M, whichever applies) 490
3.	5,000		5,000
4.	5,000		5,000
5.	5,000		5,000
6.	5,000		5,000
7.	5,000		5,000
8.	5,000		5,000
9.	5,000		5,000
10.	5,000		5,000
11.	5,000		5,000
12.	5,000		5,000

Ontario apprenticeship training tax credit (total of amounts in column N)

50060,000O

Or, if the corporation answered **yes** at line 150 in Part 1, determine the partner's share of amount O:

Amount O

x

percentage on line 170 in Part 1

%

=

.....

P

Enter amount O or P, whichever applies, on line 454 of Schedule 5, *Tax Calculation Supplementary – Corporations*. If you are filing more than one Schedule 552, **add** the amounts from line O or P, whichever applies, on all the schedules, and enter the total amount on line 454 of Schedule 5.

Note 5: Include the amount of government assistance repaid in the tax year multiplied by the specified percentage for the tax year in which the government assistance was received, to the extent that the government assistance reduced the ATTC in that tax year. Complete a **separate entry** for each repayment of government assistance.

See the privacy notice on your return.



ONTARIO BUSINESS-RESEARCH INSTITUTE TAX CREDIT

Name of corporation	Business Number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- Use this schedule to claim the Ontario business-research institute tax credit (OBRITC) under section 97 of the *Taxation Act, 2007* (Ontario).
- The OBRITC is a 20% refundable tax credit based on qualified expenditures incurred in Ontario under an eligible contract with an eligible research institute (ERI).
- A list of eligible research institutes and the applicable ERI codes for eligible contracts can be found on our website. Go to www.cra.gc.ca/ctao and select "business-research institute tax credit".
- The criteria for a corporation to be eligible for the OBRITC include the eligibility requirements in Part 1 of this schedule.
- The annual qualified expenditure limit is \$20 million. If a corporation is associated with other corporations at any time in the calendar year, the \$20 million limit must be allocated among the associated corporations.
- Qualifying corporations are defined in subsection 97(3) of the *Taxation Act, 2007* (Ontario).
- For each eligible contract, you must complete a separate Schedule 569, *Ontario Business-Research Institute Tax Credit Contract Information*.
- Keep the eligible contract to support your claim. Do not submit the contract with the *T2 Corporation Income Tax Return*.
- To claim the OBRITC, include the following with the *T2 Corporation Income Tax Return*:
 - a completed copy of this schedule; and
 - a completed copy of Schedule 569 for each eligible contract.

Part 1 – Eligibility

1. Did the corporation, for the tax year, carry on business in Ontario through a permanent establishment in Ontario? **100** 1 Yes ☒ 2 No ☐
2. Was the corporation exempt from tax for the tax year under Part III of the *Taxation Act, 2007* (Ontario)? **105** 1 Yes ☐ 2 No ☒

If you answered **no** to question 1 or **yes** to question 2, the corporation is **not eligible** for the OBRITC.

Part 2 – Qualified expenditure limit for the tax year

- Was the corporation associated at any time in the tax year with another corporation? **200** 1 Yes ☒ 2 No ☐

If the corporation answered **no** at line 200, enter \$20,000,000 on line 205. If the corporation answered **yes** at line 200, complete Part 3 and enter on line 205 the expenditure limit allocated to the corporation in column 310 in Part 3.

Qualified expenditure limit **205** 20,000,000 A

If the tax year is 51 weeks or more, enter amount A on line 210.

If the tax year of the filing corporation is less than 51 weeks, complete the following proration calculation:

Amount A 20,000,000 × $\frac{\text{days in the tax year}}{365}$ = 365 B

Qualified expenditure limit for the tax year (amount A or amount B, whichever applies) **210** 20,000,000 C

Part 3 – Allocation of the \$20 million expenditure limit between associated corporations

Use this part to allocate the \$20 million expenditure limit to the filing corporation and all its associated corporations for each of their tax years ending in the calendar year. See subsection 38(4) of Ontario Regulation 37/09 for expenditure limit allocation rules for associated corporations. Attach additional schedules if you need more space.

	Name of all associated corporations, including the filing corporation (include the associated corporations that have a tax year that ends in the calendar year)	Business Number (enter "NR" if corporation is not registered)	Expenditure limit allocated
	300	305	310
1.	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		20,000,000
2.	TORONTO HYDRO CORPORATION		
3.	TORONTO HYDRO ENERGY SERVICES INC.		
Total expenditure limit (cannot exceed \$20 million)			315 20,000,000

D

Enter the expenditure limit allocated to the corporation on line 205 in Part 2.

Part 4 – Calculation of the Ontario business-research institute tax credit

Total number of eligible contracts used to determine the OBRITC for this tax year	400	2
Total qualified expenditures for all eligible contracts identified on line 400 for this tax year (total of amounts on line 310 in Part 3 of each Schedule 569)	405	316,000 E
Qualified expenditure limit for the tax year (amount C in Part 2)		20,000,000 F
Qualified expenditures for the OBRITC for the tax year (amount E or F, whichever is less)	410	316,000
Ontario business-research Institute tax credit (line 410 x 20 %)		63,200 G

Enter amount G on line 470 of Schedule 5, *Tax Calculation Supplementary – Corporations*.



ONTARIO BUSINESS-RESEARCH INSTITUTE TAX CREDIT CONTRACT INFORMATION

Name of corporation	Business Number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- Use this schedule to support your claim for the Ontario business-research institute tax credit (OBRITC), which is made on Schedule 568, *Ontario Business-Research Institute Tax Credit*. Complete a separate Schedule 569 for each eligible contract.
- The OBRITC is a 20% refundable tax credit based on qualified expenditures incurred in Ontario under an eligible contract with an eligible research institute (ERI). An ERI, for purposes of the OBRITC, is defined in subsection 97(27) of the *Taxation Act, 2007* (Ontario).
- A list of eligible research institutes and the applicable ERI codes for eligible contracts can be found on our web site. Go to www.cra.gc.ca/ctao and select "business-research institute tax credit".
- The eligibility requirements in Part 2 of this schedule must be met for the qualifying corporation to claim an OBRITC for this contract.
- Eligible contracts entered into before August 10, 2007 were subject to advanced ruling legislation. OBRITC claims relating to one of these contracts must have the corresponding Ontario Ministry of Revenue ruling reference number entered at line 130 in Part 1 of this schedule.
- Corporations can only claim the OBRITC for the number of days in the tax year that the corporation **was not** connected to the ERI. Connected corporations, for the purposes of the OBRITC, are defined in subsection 97(4) of the *Taxation Act, 2007* (Ontario).
- Eligible contracts and qualified expenditures are defined in subsections 97(6) and 97(8), respectively, of the *Taxation Act, 2007* (Ontario).
- According to subsections 97(16) and (19) of the *Taxation Act, 2007* (Ontario), qualified expenditures must be reduced by contributions the corporation received, is entitled to receive or may reasonably expect to receive. Qualified expenditures include repayment of government assistance made by the corporation during the year. Contribution and government assistance are defined in subsection 97(27) of the *Taxation Act, 2007* (Ontario).

Part 1 – Contract details

100 Name of person to contact for more information	105 Telephone number including area code
110 Name of the ERI on the contract	
Ryerson University	
115 ERI code	120 Date of contract
111	Year Month Day 2016-01-01
If the date on line 120 is before August 10, 2007, was the contract subject to an advanced ruling?	125 1 Yes <input type="checkbox"/> 2 No <input checked="" type="checkbox"/>
For all contracts entered into before August 10, 2007, enter the Ontario Ministry of Revenue ruling reference number	130 <input type="text"/> - <input type="text"/>
Is the claim filed for an OBRITC earned through a partnership?	135 1 Yes <input type="checkbox"/> 2 No <input checked="" type="checkbox"/>
If the answer on line 135 is yes , are you a specified member?	140 1 Yes <input type="checkbox"/> 2 No <input checked="" type="checkbox"/>
If the answer on line 135 is yes , what is the name of the partnership?	145 <input type="text"/>
Enter the corporation's percentage share of the income or loss of the partnership's fiscal period ending in the corporation's tax year	150 <input type="text"/> %

* When a corporate member of a partnership is claiming an amount for qualified expenditures incurred during the tax year under the eligible contract by the partnership, complete Schedule 569 as if the partnership were a corporation. Each corporate member, other than a specified member, should file a Schedule 569 as if it, instead of the partnership, had entered into the contract with the ERI and can claim the corporation's share of the partnership's qualified expenditures. Specified members of a partnership cannot claim an OBRITC. A definition of "specified member" can be found in subsection 248(1) of the federal *Income Tax Act*.

Part 2 – Eligibility

Contract:

1. Did the corporation enter into a contract with an ERI? **200** 1 Yes ☒ 2 No ☐
2. Do the terms of the contract state that the ERI agrees to perform, in Ontario, scientific research and experimental development (SR&ED) related to the business carried on in Canada by the corporation? **205** 1 Yes ☒ 2 No ☐
3. Was the corporation entitled to exploit the results of the SR&ED carried out under the contract? **210** 1 Yes ☒ 2 No ☐

If you answered **no** to question 1, 2, or 3, the contract is **not an eligible** contract for the purposes of an OBRITC.

Expenditures:

4. Were the expenditures made by a payment of money by the corporation to the ERI or by a prescribed payment? **215** 1 Yes ☒ 2 No ☐
5. Were the expenditures incurred in respect of SR&ED carried on in Ontario by the ERI? **220** 1 Yes ☒ 2 No ☐
6. Are the expenditures identified in subparagraph 37(1)(a)(i), (i.1) or (ii) of the federal *Income Tax Act* and would they also qualify as qualified expenditures, as defined in subsection 127(9) of the federal Act, other than prescribed types of expenditures and certain salaries or wages? **225** 1 Yes ☒ 2 No ☐
7. Were the expenditures incurred by the corporation for purposes of SR&ED related to the business carried on in Canada by the corporation? **230** 1 Yes ☒ 2 No ☐

If you answered **no** to question 4, 5, 6, or 7, the expenditures are **not eligible** expenditures for the purposes of an OBRITC.

Part 3 – Qualified expenditures for this contract for the tax year

Qualified expenditures incurred in the tax year **300** 308,000

If the corporation answered **yes** at line 135 in Part 1, and **no** at line 140 in Part 1, determine the partnerships' share of qualified expenditures available to claim in the tax year:

Line 300 308,000 × percentage on line 150 in Part 1 _____ % = _____ A

Number of days in this tax year that the corporation was **not** connected to the ERI identified on line 110 in Part 1 **305** 365

Qualified expenditures for this contract for the tax year:

(Line 300 or amount A, whichever applies) × line 305 112,420,000 = **310** 308,000 B
number of days in the tax year 365

Enter amount B on line 405 of **Schedule 568**, *Ontario Business-Research Institute Tax Credit*.



ONTARIO BUSINESS-RESEARCH INSTITUTE TAX CREDIT CONTRACT INFORMATION

Name of corporation	Business Number	Tax year-end Year Month Day
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED		2017-12-31

- Use this schedule to support your claim for the Ontario business-research institute tax credit (OBRITC), which is made on Schedule 568, *Ontario Business-Research Institute Tax Credit*. Complete a separate Schedule 569 for each eligible contract.
- The OBRITC is a 20% refundable tax credit based on qualified expenditures incurred in Ontario under an eligible contract with an eligible research institute (ERI). An ERI, for purposes of the OBRITC, is defined in subsection 97(27) of the *Taxation Act, 2007* (Ontario).
- A list of eligible research institutes and the applicable ERI codes for eligible contracts can be found on our web site. Go to www.cra.gc.ca/ctao and select "business-research institute tax credit".
- The eligibility requirements in Part 2 of this schedule must be met for the qualifying corporation to claim an OBRITC for this contract.
- Eligible contracts entered into before August 10, 2007 were subject to advanced ruling legislation. OBRITC claims relating to one of these contracts must have the corresponding Ontario Ministry of Revenue ruling reference number entered at line 130 in Part 1 of this schedule.
- Corporations can only claim the OBRITC for the number of days in the tax year that the corporation **was not** connected to the ERI. Connected corporations, for the purposes of the OBRITC, are defined in subsection 97(4) of the *Taxation Act, 2007* (Ontario).
- Eligible contracts and qualified expenditures are defined in subsections 97(6) and 97(8), respectively, of the *Taxation Act, 2007* (Ontario).
- According to subsections 97(16) and (19) of the *Taxation Act, 2007* (Ontario), qualified expenditures must be reduced by contributions the corporation received, is entitled to receive or may reasonably expect to receive. Qualified expenditures include repayment of government assistance made by the corporation during the year. Contribution and government assistance are defined in subsection 97(27) of the *Taxation Act, 2007* (Ontario).

Part 1 – Contract details

100 Name of person to contact for more information	105 Telephone number including area code
110 Name of the ERI on the contract	
Georgian College	
115 ERI code	120 Date of contract
212	Year Month Day 2016-01-01
If the date on line 120 is before August 10, 2007, was the contract subject to an advanced ruling?	125 1 Yes <input type="checkbox"/> 2 No <input checked="" type="checkbox"/>
For all contracts entered into before August 10, 2007, enter the Ontario Ministry of Revenue ruling reference number	130 <input type="text"/> - <input type="text"/>
Is the claim filed for an OBRITC earned through a partnership?*	135 1 Yes <input type="checkbox"/> 2 No <input checked="" type="checkbox"/>
If the answer on line 135 is yes , are you a specified member?	140 1 Yes <input type="checkbox"/> 2 No <input checked="" type="checkbox"/>
If the answer on line 135 is yes , what is the name of the partnership?	145 <input type="text"/>
Enter the corporation's percentage share of the income or loss of the partnership's fiscal period ending in the corporation's tax year	150 <input type="text"/> %

* When a corporate member of a partnership is claiming an amount for qualified expenditures incurred during the tax year under the eligible contract by the partnership, complete Schedule 569 as if the partnership were a corporation. Each corporate member, other than a specified member, should file a Schedule 569 as if it, instead of the partnership, had entered into the contract with the ERI and can claim the corporation's share of the partnership's qualified expenditures. Specified members of a partnership cannot claim an OBRITC. A definition of "specified member" can be found in subsection 248(1) of the federal *Income Tax Act*.

Part 2 – Eligibility**Contract:**

1. Did the corporation enter into a contract with an ERI? **200** 1 Yes ☒ 2 No ☐
2. Do the terms of the contract state that the ERI agrees to perform, in Ontario, scientific research and experimental development (SR&ED) related to the business carried on in Canada by the corporation? **205** 1 Yes ☒ 2 No ☐
3. Was the corporation entitled to exploit the results of the SR&ED carried out under the contract? **210** 1 Yes ☒ 2 No ☐

If you answered **no** to question 1, 2, or 3, the contract is **not an eligible** contract for the purposes of an OBRITC.

Expenditures:

4. Were the expenditures made by a payment of money by the corporation to the ERI or by a prescribed payment? **215** 1 Yes ☒ 2 No ☐
5. Were the expenditures incurred in respect of SR&ED carried on in Ontario by the ERI? **220** 1 Yes ☒ 2 No ☐
6. Are the expenditures identified in subparagraph 37(1)(a)(i), (i.1) or (ii) of the federal *Income Tax Act* and would they also qualify as qualified expenditures, as defined in subsection 127(9) of the federal Act, other than prescribed types of expenditures and certain salaries or wages? **225** 1 Yes ☒ 2 No ☐
7. Were the expenditures incurred by the corporation for purposes of SR&ED related to the business carried on in Canada by the corporation? **230** 1 Yes ☒ 2 No ☐

If you answered **no** to question 4, 5, 6, or 7, the expenditures are **not eligible** expenditures for the purposes of an OBRITC.

Part 3 – Qualified expenditures for this contract for the tax year

Qualified expenditures incurred in the tax year **300** 8,000

If the corporation answered **yes** at line 135 in Part 1, and **no** at line 140 in Part 1, determine the partnerships' share of qualified expenditures available to claim in the tax year:

Line 300 8,000 × percentage on line 150 in Part 1 _____ % = _____ A

Number of days in this tax year that the corporation was **not** connected to the ERI identified on line 110 in Part 1 **305** 365

Qualified expenditures for this contract for the tax year:

$$\frac{(\text{Line 300 or amount A, whichever applies}) \times \text{line 305}}{\text{number of days in the tax year}} = \frac{2,920,000}{365} = \text{. } \mathbf{310} \underline{\underline{8,000}} \text{ B}$$

Enter amount B on line 405 of **Schedule 568**, *Ontario Business-Research Institute Tax Credit*.



Scientific Research and Experimental Development (SR&ED) Expenditures Claim

Use this form:

- to provide technical information on your SR&ED projects;
- to calculate your SR&ED expenditures; and
- to calculate your qualified SR&ED expenditures for investment tax credits (ITC).

To claim an ITC, use either:

- Schedule T2SCH31, *Investment Tax Credit – Corporations*, or
- Form T2038(IND), *Investment Tax Credit (Individuals)*.

The information requested in this form and documents supporting your expenditures and project information (Part 2) are prescribed information.

Your SR&ED claim must be filed within 12 months of the filing due date of your income tax return.

To help you fill out this form, use the T4088, *Guide to Form T661*, which is available on our Web site: www.cra.gc.ca/sred.

Part 1 – General information

010 Name of claimant TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	Enter one of the following: <div>Business number (BN)</div> <div>Social insurance number (SIN)</div>	
Tax year From: 2017-01-01 Year Month Day To: 2017-12-31 Year Month Day		
050 Total number of projects you are claiming this tax year: 10		
100 Contact person for the financial information [Redacted]	105 Telephone number/extension [Redacted]	110 Fax number [Redacted]
115 Contact person for the technical information [Redacted]	120 Telephone number/extension [Redacted]	125 Fax number [Redacted]

151 If this claim is filed for a partnership, was Form T5013 filed? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No		
If you answered no to line 151, complete lines 153, 156 and 157.		
153 Names of the partners	156 %	157 BN or SIN
1		
2		
3		
4		
5		

Part 2 - Project informationCRA internal form identifier 060
Code 1501**Complete a separate Part 2 for each project claimed this year.**

Section A - Project identification
200 Project title (and identification code if applicable) See schedule

Part 3 – Calculation of SR&ED expenditures**What did you spend on your SR&ED projects?****Section A – Select the method to calculate the SR&ED expenditures**

I elect (choose) to use the following method to calculate my SR&ED expenditures and related investment tax credits (ITC) for this tax year.
I understand that my election is irrevocable (cannot be changed) for this tax year.

160 1 ☒ I elect to use the proxy method
(Enter "0" on line 360 and complete Part 5.)

162 1 ☐ I choose to use the traditional method
(Enter "0" on lines 355 and 502. Complete line 360.)

Section B – Calculation of allowable SR&ED expenditures (to the nearest dollar)

• SR&ED portion of salary or wages of employees directly engaged in the SR&ED:

a) Employees other than specified employees for work performed in Canada	300	+	3,281,382
b) Specified employees for work performed in Canada	305	+	
Subtotal (add lines 300 and 305)	306	=	3,281,382
c) Employees other than specified employees for work performed outside Canada (subject to limitations – see guide)	307	+	
d) Specified employees for work performed outside Canada (subject to limitations – see guide)	309	+	

• Salary or wages identified on line 315 in prior years that were paid in this tax year	310	+	
• Salary or wages incurred in the year but not paid within 180 days of the tax year end	315		
• Cost of materials consumed in performing SR&ED	320	+	
• Cost of materials transformed in performing SR&ED	325	+	
• Contract expenditures for SR&ED performed on your behalf:			
a) Arm's length contracts (see note 1)	340	+	2,883,899
b) Non-arm's length contracts (see note 1)	345	+	
• Lease costs of equipment used before 2014 :			
a) All or substantially all (90% of the time or more) for SR&ED	350	+	
b) Primarily (more than 50% of the time but less than 90%) for SR&ED. (Enter 50% of lease costs if you use the proxy method or enter "0" if you use the traditional method)	355	+	
• Overhead and other expenditures (enter "0" if you use the proxy method)	360	+	
• Third-party payments (see note 2) (complete Form T1263*)	370	+	395,000

Total current SR&ED expenditures (add lines 306 to 370; do not add line 315)
(Corporations may need to adjust line 118 of schedule T2SCH1)

• Capital expenditures for depreciable property available for use **before 2014**
(Do not include these capital expenditures on schedule T2SCH8)

Total allowable SR&ED expenditures (add lines 380 and 390)

Section C – Calculation of pool of deductible SR&ED expenditures (to the nearest dollar)

Amount from line 400

Deduct

• provincial government assistance for expenditures included on line 400	429	–	267,646
• other government assistance for expenditures included on line 400	431	–	
• non-government assistance for expenditures included on line 400	432	–	
• SR&ED ITCs applied and/or refunded in the prior year (see guide)	435	–	1,160,151
• sale of SR&ED capital assets and other deductions	440	–	
Subtotal (line 420 minus lines 429 to 440)	442	=	5,132,484

Add

• repayments of government and non-government assistance that previously reduced the SR&ED expenditure pool	445	+	
• prior year's pool balance of deductible SR&ED expenditures (from line 470 of prior year T661)	450	+	
• SR&ED expenditure pool transfer from amalgamation or wind-up	452	+	
• amount of SR&ED ITC recaptured in the prior year	453	+	
Amount available for deduction (add lines 442 to 453) (enter positive amount only, include negative amount in income)	455	=	5,132,484

• Deduction claimed in the year
(Corporations should enter this amount on line 411 of schedule T2SCH1)

Pool balance of deductible SR&ED expenditures to be carried forward to future years (line 455 minus 460)

* Form T1263, *Third-Party Payments for Scientific Research and Experimental Development (SR&ED)*

Note 1 – For contract expenditures made after 2013, no amounts for purchasing or leasing capital property can be included.

Note 2 – For third-party payments made after 2013, no amounts for purchasing or leasing capital property can be included.

Part 4 – Calculation of qualified SR&ED expenditures for investment tax credit (ITC) purposes

The resulting amount is used to calculate your refundable and/or non refundable ITC.

Enter the breakdown between current and capital expenditures (to the nearest dollar)		Current Expenditures	Capital Expenditures
Total expenditures for SR&ED (from lines 380 and 390)	492	6,560,281	496
Add			
• payment of prior years' unpaid amounts (other than salary or wages) (see note 5)	500 +		
• prescribed proxy amount (complete Part 5) (Enter "0" if you use the traditional method)	502 +	1,534,180	
• expenditures on shared-use equipment for property acquired before 2014			504 +
• qualified expenditures transferred to you (see note 3) (complete Form T1146**)	508 +		510 +
Subtotal (add lines 492 to 508, and add lines 496 to 510)	511 =	8,094,461	512 =
Deduct (see note 4)			
• provincial government assistance	513 -	321,342	514 -
• other government assistance	515 -		516 -
• non-government assistance and contract payments	517 -		518 -
• current expenditures (other than salary or wages) not paid within 180 days of the tax year end (see note 5)	520 -		
• amounts paid in respect of an SR&ED contract to a person or partnership that is not a taxable supplier	528 -		
• 20% of expenditures included on lines 340 and 370	529 -	655,780	
• prescribed expenditures not allowed by regulations (see guide)	530 -		532 -
• other deductions (see guide)	533 -		535 -
• non-arm's length transactions			
– assistance allocated to you (complete Form T1145*)	538 -		540 -
– expenditures for non-arm's length SR&ED contracts (from line 345)	541 -		
– adjustments to purchases (limited to costs) of goods and services from non-arm's length suppliers (see guide)	542 -		543 -
– qualified expenditures you transferred (complete Form T1146**)	544 -		546 -
Subtotal (line 511 minus lines 513 to 544 and line 512 minus lines 514 to 546)	557 =	7,117,339	558 =
Qualified SR&ED expenditures (add lines 557 and 558)			559 = 7,117,339
Add			
• repayments of assistance and contract payments made in the year			560 +
Total qualified SR&ED expenditures for ITC purposes (add lines 559 and 560)			570 = 7,117,339

* Form T1145, *Agreement to Allocate Assistance for SR&ED Between Persons Not Dealing at Arm's Length*

** Form T1146, *Agreement to Transfer Qualified Expenditures Incurred in Respect of SR&ED Contracts Between Persons Not Dealing at Arm's Length*

Note 3 – On line 510 (capital) – Only include expenditures made before 2014 by the transferor (performer). Complete the latest version of Form T1146.

Note 4 – On lines 514, 516, 518, 532, 535, 540, 543 and 546 – Only include amounts related to expenditures of a capital nature made before 2014.

Note 5 – For arm's length contracts, only include 80% of the contract amount.

Part 5 – Calculation of prescribed proxy amount (PPA)**A notional amount representing your overhead and other expenditures.**

This part calculates the PPA to enter on line 502 in Part 4. Do not complete this part if you have chosen to use the traditional method in Part 3 (line 162). You can only claim a PPA if you elected to use the proxy method for the year in Part 3 (line 160).

Special rules apply for specified employees. Calculate your salary base in Section A and the PPA in Section B.

Section A – Salary base

Salary or wages of employees other than specified employees (from lines 300 and 307) **810** + 3,281,382

Deduct

Bonuses, remuneration based on profits, and taxable benefits that were included on line 810 **812** – 491,963

Subtotal (line 810 minus 812) **814** = 2,789,419

Salary or wages of specified employees

850	852	854	856	858	860
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Name of specified employee	Total salary or wages for the year (SR&ED and non-SR&ED) excluding bonuses, remuneration based on profits, and taxable benefits (to the nearest dollar)	% of time spent on SR&ED (maximum 75%)	Amount in column 2 multiplied by percentage in column 3	2,5 x A x B/365 A = Year's maximum pensionable earnings B = Number of days employed in tax year	Amount in column 4 or 5, whichever amount is less
(Enter total of column 6 on line 816)					816 +
Salary base (total of lines 814 and 816)					818 = 2,789,419

Section B – Prescribed proxy amount (PPA)

Enter 65% of the salary base (line 818) less 5% of the salary base for the number of 2013 calendar days in the tax year, and less 10% of the salary base for number of days after 2013 in the tax year (use the formula in the guide-line 820) **820** = 1,534,180

Enter the amount from line 820 on line 502 in Part 4 unless the overall cap on PPA applies to you.

(See the guide for explanation and example of the overall cap on PPA)

Part 6 – Project costs

Information requested in this part must be provided for **all** SR&ED projects claimed in the year. Expenditures should be recorded and allocated on a project basis.

750	752	754	756
Project title or identification code	Salary or wages in the tax year	Cost of materials in the tax year	Contract expenditures for SR&ED performed on your behalf in the tax year
	(Total of lines 306 to 309)	(Total of lines 320 and 325)	(Total of lines 340 and 345)
1. P01: Electric Vehicle Program	67,023		
2. P02: Electric Power System reliability improvement	272,215		353,368
3. P03: Electric Power System capacity planning & improvemer	99,082		199,012
4. P03A: Underground Gas Transformer Station Design	674,499		1,590,816
5. P04: Improved Grid Solutions	192,962		9,960
6. P05: Downtown network reliability improvements	176,949		98,500
7. P06: Distribution system design standards development	415,525		15,086
8. P07: Developing & applying smart metering systems, technic	643,812		265,644

750	752	754	756
Project title or identification code	Salary or wages in the tax year	Cost of materials in the tax year	Contract expenditures for SR&ED performed on your behalf in the tax year
	(Total of lines 306 to 309)	(Total of lines 320 and 325)	(Total of lines 340 and 345)
9. P08: Distributed generation (DG) and Protection facilitation	466,111		339,263
10. P10: Sustainable power generation systems development	273,204		12,250
Total	3,281,382		2,883,899

Part 7 – Additional information

Expenditures for SR&ED performed by you in Canada (line 400 minus lines 307, 309, 340, 345, and 370) **605** 3,281,382

From the total you entered on line 605, estimate the percentage of distribution of the sources of funds for SR&ED performed within your organization.

		Canadian (%)	Foreign (%)
Internal	600	100.000	
Parent companies, subsidiaries, and affiliated companies	602		604
Federal grants (do not include funds or tax credits from SR&ED tax incentives)	606		
Federal contracts	608		
Provincial funding	610		
SR&ED contract work performed for other companies on their behalf	612		614
Other funding (e.g., universities, foreign governments)	616		618

For statistical purposes indicate whether the work you performed falls within the realm of Basic or Applied research (to advance scientific knowledge) or Experimental development (to achieve a technological advancement):

620 1 ☐ Basic or Applied research **622** 1 ☒ Experimental development

Enter the number of SR&ED personnel in full-time equivalents (FTE):

Scientists and engineers	632	21
Technologists and technicians	634	
Managers and administrators	636	
Other technical supporting staff	638	

Part 8 – Claim checklist

To ensure your claim is complete, make sure you have:

1. used the current version of this form ☒
2. entered the method you have chosen for reporting your SR&ED expenditures in Section A of Part 3 ☒
3. completed Part 2 for each project ☒
4. filed a completed Schedule T2SCH31 or Form T2038(IND) to claim ITCs on your qualified SR&ED expenditures ☒
5. filed a completed Form T1145*, T1146**, T1174*** and/or T1263**** including any required attachments, if applicable ☒

To expedite the processing of your claim, make sure you have:

1. completed Form T2, *Corporation Income Tax Return* or Form T1, *Income Tax and Benefit Return* ☒
2. filed the appropriate provincial and/or territorial tax credit forms, if applicable ☒
3. retained documents to support the SR&ED work performed and SR&ED expenditures you claimed ☒
4. checked boxes 231 and 232 on page 2 of your T2 return to indicate attachment of Form T661 and Schedule T2SCH31 ☒

* Form T1145, *Agreement to Allocate Assistance for SR&ED Between Persons Not Dealing at Arm's Length*

** Form T1146, *Agreement to Transfer Qualified Expenditures Incurred in Respect of SR&ED Contracts Between Persons Not Dealing at Arm's Length*

*** Form T1174, *Agreement Between Associated Corporations to Allocate Salary or Wages of Specified Employees for Scientific Research and Experimental Development (SR&ED)*

**** Form T1263, *Third-Party Payments for Scientific Research and Experimental Development (SR&ED)*

Part 9 – Claim preparer information

Information requested in this part must be provided for each claim preparer that has accepted consideration to prepare or assist in the preparation of this SR&ED claim. Certification is required on lines 935, 970, and 975.

A \$1000 penalty may be assessed if the information requested below about the claim preparer(s) and billing arrangement(s), is missing, incomplete, or inaccurate. Where a claim preparer has prepared or assisted in the preparation of this SR&ED form, the claimant and the claim preparer will be jointly and severally, or solidarily, liable for the penalty.

935 Was a claim preparer engaged in any aspect of the preparation of this SR&ED claim?

- 1 ☒ Yes (complete the claim preparer information table and lines 970 and 975 below)
2 ☐ No (complete lines 970 and 975)

Claim preparer information table

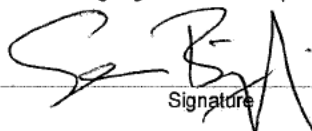
940	945	950	955	960	965
Name of claim preparer (company or individual)	Business number	Billing arrangement code (see codes*)	Billing rate (percentage, hourly/daily rate or flat fee)	Other billing arrangement(s) (Maximum 10 words)	Total fee paid, payable, or expected to pay
1. Under separate cover by Deloitte LLP		5		Under separate cover by	1
Total					1

*** Billing arrangement codes**

Code	Type of billing arrangement
1	Contingency fee arrangement – where the fee is based on a percentage of the investment tax credit earned
2	Hourly rate
3	Daily rate
4	Flat fee arrangement (lump sum)
5	Other arrangements – describe the arrangement in box 960 in 10 words or less

970 I, Sean Bovingdon, certify that the information provided in this part is complete

Name of authorized signing officer of the corporation, or individual (print)
and accurate.

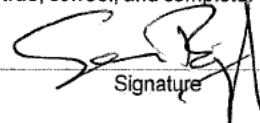

Signature

975 2018-06-26
Year Month Day

Part 10 – Certification

I certify that I have examined the information provided on this form and on the attachments and it is true, correct, and complete.

165 Sean Bovingdon
Name of authorized signing officer of the corporation, or individual


Signature

170 2018-06-26
Date

175 Deloitte LLP
Name of person/firm who completed this form

Privacy Notice

Personal information is collected pursuant to subsections 37(1), 37(11), and 162(5.1) of the *Income Tax Act* (the Act) and is used for verification of compliance, administration and enforcement of the Scientific Research and Experimental Development (SR&ED) program requirements.

Information may also be used for the administration and enforcement of other provisions of the Act, including assessment, audit, enforcement, collections, and appeals, and may be disclosed under information-sharing agreements in accordance with the Act. Incomplete or inaccurate information may result in assessment of monetary penalties and delays in processing SR&ED claims.

The social insurance number is collected pursuant to section 237 of the Act and is used for identification purposes.

Information is described in personal information bank CRA PPU 441 "Scientific Research and Experimental Development" in the Canada Revenue Agency (CRA) chapter of *Info Source*. Personal information is protected under the *Privacy Act*, and individuals have a right of access to, correction, and protection of their personal information. Further details regarding requests for personal information at the CRA and our *Info Source* chapter can be found at www.cra.gc.ca/atip.

**THIRD-PARTY PAYMENTS FOR
SCIENTIFIC RESEARCH AND EXPERIMENTAL DEVELOPMENT (SR&ED)**

Complete this form for each third-party payment and attach it to Form T661.

For more information on third-party payments:

- See line 370 of Guide to Form T661, *Scientific Research and Experimental Development (SR&ED) Expenditures Claim*;
- Third-Party Payments Policy;
- Consult our Web site: **www.cra.gc.ca/sred**.

Required Information**1. Identification**

701	Name of the third party	Georgian College	
702	Address (Street number and name)	1 Georgian College	
	City	Province/Territory	Postal Code
	Barrie	ON	L4M 3X9
704	Total amount paid in the year		
	\$ 10,000		

Identify the research project(s) performed by the third-party entity for the payment

706	Project title (and identification code if applicable)
	1 P08 - Distributed Generation (DG) and
	2 Protection Facilitation

Check the appropriate box to indicate the type of entity:

711	Approved association	1 Yes	<input type="checkbox"/>
712	Non-profit SR&ED corporation resident in Canada	1 Yes	<input type="checkbox"/>
714	An approved university, college, research institute, or other similar institution	1 Yes	<input checked="" type="checkbox"/>
716	Granting council	1 Yes	<input type="checkbox"/>
718	Other corporation resident in Canada	1 Yes	<input type="checkbox"/>
721	Are you dealing at arm's length with the recipient?	1 Yes	<input checked="" type="checkbox"/>
		2 No	<input type="checkbox"/>

2. Nature of payment

Check the appropriate box to indicate the type of entity:

The payment is for:			
731	Experimental development	1 Yes	<input checked="" type="checkbox"/>
732	Applied research	1 Yes	<input type="checkbox"/>
734	Basic research	1 Yes	<input type="checkbox"/>
736	Briefly explain what the payment is for:		
	Centre for Sustainable technologies campaign		

738 Briefly explain how the SR&ED is related to a business that you carry on:

The research related directly to the business of the
company which distributes electricity and is responsible for
leading the way in conservation and demand management

740 Briefly explain how you are entitled to exploit the results of the SR&ED:

Toronto Hydro has the right to exploit any of the
intellectual property arising out of the research
funded by Toronto Hydro

Personal information is collected pursuant to subsections 37(1), 37(11), and 162(5.1) of the *Income Tax Act* (the Act) and is used for verification of compliance, administration and enforcement of the Scientific Research and Experimental Development (SR&ED) program requirements.

Information may also be used for the administration and enforcement of other provisions of the Act, including audit, enforcement action, collections, and appeals, and may be disclosed under information-sharing agreements in accordance with the Act. Incomplete or inaccurate information may result in assessment of monetary penalties and/or delays in processing SR&ED claims.

The social insurance number is collected pursuant to section 237 of the Act and is used for identification purposes.

Information is described in personal information bank CRA PPU 441 "Scientific Research and Experimental Development", in the Canada Revenue Agency (CRA) chapter of *Info Source*. Personal information is protected under the *Privacy Act* and individuals have a right of access to, correction, and protection of their personal information. Further details regarding requests for personal information at the CRA and our Info Source chapter can be found at <http://www.cra.gc.ca/atip/>.

**THIRD-PARTY PAYMENTS FOR
SCIENTIFIC RESEARCH AND EXPERIMENTAL DEVELOPMENT (SR&ED)**

Complete this form for each third-party payment and attach it to Form T661.

For more information on third-party payments:

- See line 370 of Guide to Form T661, *Scientific Research and Experimental Development (SR&ED) Expenditures Claim*;
- Third-Party Payments Policy;
- Consult our Web site: **www.cra.gc.ca/sred**.

Required Information**1. Identification**

701	Name of the third party Ryerson University		
702	Address (Street number and name) 350 Victoria Street		
	City Toronto	Province/Territory ON CA	Postal Code M4B 2K3
704	Total amount paid in the year \$ 100,000		

Identify the research project(s) performed by the third-party entity for the payment

706	Project title (and identification code if applicable)
	1 P08 - Distributed Generation (DG) and
	2 Protection Facilitation

Check the appropriate box to indicate the type of entity:

711	Approved association	1 Yes	<input type="checkbox"/>
712	Non-profit SR&ED corporation resident in Canada	1 Yes	<input type="checkbox"/>
714	An approved university, college, research institute, or other similar institution	1 Yes	<input checked="" type="checkbox"/>
716	Granting council	1 Yes	<input type="checkbox"/>
718	Other corporation resident in Canada	1 Yes	<input type="checkbox"/>
721	Are you dealing at arm's length with the recipient?	1 Yes	<input checked="" type="checkbox"/> 2 No <input type="checkbox"/>

2. Nature of payment

Check the appropriate box to indicate the type of entity:

The payment is for:			
731	Experimental development	1 Yes	<input checked="" type="checkbox"/>
732	Applied research	1 Yes	<input type="checkbox"/>
734	Basic research	1 Yes	<input type="checkbox"/>
736	Briefly explain what the payment is for: Using smart loads to improve frequency response on the distribution grid and engaged renewable energy integration.		

738 Briefly explain how the SR&ED is related to a business that you carry on:

The research related directly to the business of the company
which distributes electricity and is responsible for leading
the way in conservation and demand management.

740 Briefly explain how you are entitled to exploit the results of the SR&ED:

Toronto Hydro has the right to exploit any of the
intellectual property arising out of the research
funded by Toronto Hydro

Personal information is collected pursuant to subsections 37(1), 37(11), and 162(5.1) of the *Income Tax Act* (the Act) and is used for verification of compliance, administration and enforcement of the Scientific Research and Experimental Development (SR&ED) program requirements.

Information may also be used for the administration and enforcement of other provisions of the Act, including audit, enforcement action, collections, and appeals, and may be disclosed under information-sharing agreements in accordance with the Act. Incomplete or inaccurate information may result in assessment of monetary penalties and/or delays in processing SR&ED claims.

The social insurance number is collected pursuant to section 237 of the Act and is used for identification purposes.

Information is described in personal information bank CRA PPU 441 "Scientific Research and Experimental Development", in the Canada Revenue Agency (CRA) chapter of *Info Source*. Personal information is protected under the *Privacy Act* and individuals have a right of access to, correction, and protection of their personal information. Further details regarding requests for personal information at the CRA and our Info Source chapter can be found at <http://www.cra.gc.ca/atip/>.

**THIRD-PARTY PAYMENTS FOR
SCIENTIFIC RESEARCH AND EXPERIMENTAL DEVELOPMENT (SR&ED)**

Complete this form for each third-party payment and attach it to Form T661.

For more information on third-party payments:

- See line 370 of Guide to Form T661, *Scientific Research and Experimental Development (SR&ED) Expenditures Claim*;
- Third-Party Payments Policy;
- Consult our Web site: **www.cra.gc.ca/sred**.

Required Information**1. Identification**

701	Name of the third party	Ryerson University		
702	Address (Street number and name)	350 Victoria Street		
	City	Province/Territory	Postal Code	
	Toronto	ON CA	M4B 2K3	
704	Total amount paid in the year			
	\$ 67,500			

Identify the research project(s) performed by the third-party entity for the payment

706	Project title (and identification code if applicable)
1	P02 - Electric Power System Reliability Improvement

Check the appropriate box to indicate the type of entity:

711	Approved association	1 Yes	<input type="checkbox"/>
712	Non-profit SR&ED corporation resident in Canada	1 Yes	<input type="checkbox"/>
714	An approved university, college, research institute, or other similar institution	1 Yes	<input checked="" type="checkbox"/>
716	Granting council	1 Yes	<input type="checkbox"/>
718	Other corporation resident in Canada	1 Yes	<input type="checkbox"/>
721	Are you dealing at arm's length with the recipient?	1 Yes	<input checked="" type="checkbox"/> 2 No <input type="checkbox"/>

2. Nature of payment

Check the appropriate box to indicate the type of entity:

The payment is for:			
731	Experimental development	1 Yes	<input checked="" type="checkbox"/>
732	Applied research	1 Yes	<input type="checkbox"/>
734	Basic research	1 Yes	<input type="checkbox"/>
736	Briefly explain what the payment is for:		
	Utilization of Reclosers on Toronto Hydro Grid		

738 Briefly explain how the SR&ED is related to a business that you carry on:

The research related directly to the business of the company
which distributes electricity and is responsible for leading
the way in conservation and demand management.

740 Briefly explain how you are entitled to exploit the results of the SR&ED:

Toronto Hydro has the right to exploit any of the
intellectual property arising out of the research
funded by Toronto Hydro

Personal information is collected pursuant to subsections 37(1), 37(11), and 162(5.1) of the *Income Tax Act* (the Act) and is used for verification of compliance, administration and enforcement of the Scientific Research and Experimental Development (SR&ED) program requirements.

Information may also be used for the administration and enforcement of other provisions of the Act, including audit, enforcement action, collections, and appeals, and may be disclosed under information-sharing agreements in accordance with the Act. Incomplete or inaccurate information may result in assessment of monetary penalties and/or delays in processing SR&ED claims.

The social insurance number is collected pursuant to section 237 of the Act and is used for identification purposes.

Information is described in personal information bank CRA PPU 441 "Scientific Research and Experimental Development", in the Canada Revenue Agency (CRA) chapter of *Info Source*. Personal information is protected under the *Privacy Act* and individuals have a right of access to, correction, and protection of their personal information. Further details regarding requests for personal information at the CRA and our Info Source chapter can be found at <http://www.cra.gc.ca/atip/>.

**THIRD-PARTY PAYMENTS FOR
SCIENTIFIC RESEARCH AND EXPERIMENTAL DEVELOPMENT (SR&ED)**

Complete this form for each third-party payment and attach it to Form T661.

For more information on third-party payments:

- See line 370 of Guide to Form T661, *Scientific Research and Experimental Development (SR&ED) Expenditures Claim*;
- Third-Party Payments Policy;
- Consult our Web site: **www.cra.gc.ca/sred**.

Required Information**1. Identification**

701	Name of the third party	Ryerson University		
702	Address (Street number and name)	350 Victoria Street		
	City	Province/Territory	Postal Code	
	Toronto	ON CA	M4B 2K3	
704	Total amount paid in the year			
	\$ 75,000			

Identify the research project(s) performed by the third-party entity for the payment

706	Project title (and identification code if applicable)
1	P10 - Sustainable Power Generation Systems Development

Check the appropriate box to indicate the type of entity:

711	Approved association	1 Yes	<input type="checkbox"/>
712	Non-profit SR&ED corporation resident in Canada	1 Yes	<input type="checkbox"/>
714	An approved university, college, research institute, or other similar institution	1 Yes	<input checked="" type="checkbox"/>
716	Granting council	1 Yes	<input type="checkbox"/>
718	Other corporation resident in Canada	1 Yes	<input type="checkbox"/>
721	Are you dealing at arm's length with the recipient?	1 Yes	<input checked="" type="checkbox"/> 2 No <input type="checkbox"/>

2. Nature of payment

Check the appropriate box to indicate the type of entity:

The payment is for:			
731	Experimental development	1 Yes	<input checked="" type="checkbox"/>
732	Applied research	1 Yes	<input type="checkbox"/>
734	Basic research	1 Yes	<input type="checkbox"/>
736	Briefly explain what the payment is for:		
	Energy Storage Implementation study for Sunnybrook Hospital		

738 Briefly explain how the SR&ED is related to a business that you carry on:

The research related directly to the business of the company
which distributes electricity and is responsible for leading
the way in conservation and demand management.

740 Briefly explain how you are entitled to exploit the results of the SR&ED:

Toronto Hydro has the right to exploit any of the
intellectual property arising out of the research
funded by Toronto Hydro

Personal information is collected pursuant to subsections 37(1), 37(11), and 162(5.1) of the *Income Tax Act* (the Act) and is used for verification of compliance, administration and enforcement of the Scientific Research and Experimental Development (SR&ED) program requirements.

Information may also be used for the administration and enforcement of other provisions of the Act, including audit, enforcement action, collections, and appeals, and may be disclosed under information-sharing agreements in accordance with the Act. Incomplete or inaccurate information may result in assessment of monetary penalties and/or delays in processing SR&ED claims.

The social insurance number is collected pursuant to section 237 of the Act and is used for identification purposes.

Information is described in personal information bank CRA PPU 441 "Scientific Research and Experimental Development", in the Canada Revenue Agency (CRA) chapter of *Info Source*. Personal information is protected under the *Privacy Act* and individuals have a right of access to, correction, and protection of their personal information. Further details regarding requests for personal information at the CRA and our Info Source chapter can be found at <http://www.cra.gc.ca/atip/>.

**THIRD-PARTY PAYMENTS FOR
SCIENTIFIC RESEARCH AND EXPERIMENTAL DEVELOPMENT (SR&ED)**

Complete this form for each third-party payment and attach it to Form T661.

For more information on third-party payments:

- See line 370 of Guide to Form T661, *Scientific Research and Experimental Development (SR&ED) Expenditures Claim*;
- Third-Party Payments Policy;
- Consult our Web site: **www.cra.gc.ca/sred**.

Required Information**1. Identification**

701	Name of the third party	Ryerson University		
702	Address (Street number and name)	350 Victoria Street		
	City	Province/Territory	Postal Code	
	Toronto	ON CA	M4B 2K3	
704	Total amount paid in the year			
	\$ 67,500			

Identify the research project(s) performed by the third-party entity for the payment

706	Project title (and identification code if applicable)
1	P02 - Electric Power System Reliability Improvement

Check the appropriate box to indicate the type of entity:

711	Approved association	1 Yes	<input type="checkbox"/>
712	Non-profit SR&ED corporation resident in Canada	1 Yes	<input type="checkbox"/>
714	An approved university, college, research institute, or other similar institution	1 Yes	<input checked="" type="checkbox"/>
716	Granting council	1 Yes	<input type="checkbox"/>
718	Other corporation resident in Canada	1 Yes	<input type="checkbox"/>
721	Are you dealing at arm's length with the recipient?	1 Yes	<input checked="" type="checkbox"/> 2 No <input type="checkbox"/>

2. Nature of payment

Check the appropriate box to indicate the type of entity:

The payment is for:			
731	Experimental development	1 Yes	<input checked="" type="checkbox"/>
732	Applied research	1 Yes	<input type="checkbox"/>
734	Basic research	1 Yes	<input type="checkbox"/>
736	Briefly explain what the payment is for:		
	Utilization of Reclosers on Toronto Hydro Grid		

738 Briefly explain how the SR&ED is related to a business that you carry on:

The research related directly to the business of the company
which distributes electricity and is responsible for leading
the way in conservation and demand management.

740 Briefly explain how you are entitled to exploit the results of the SR&ED:

Toronto Hydro has the right to exploit any of the
intellectual property arising out of the research
funded by Toronto Hydro.

Personal information is collected pursuant to subsections 37(1), 37(11), and 162(5.1) of the *Income Tax Act* (the Act) and is used for verification of compliance, administration and enforcement of the Scientific Research and Experimental Development (SR&ED) program requirements.

Information may also be used for the administration and enforcement of other provisions of the Act, including audit, enforcement action, collections, and appeals, and may be disclosed under information-sharing agreements in accordance with the Act. Incomplete or inaccurate information may result in assessment of monetary penalties and/or delays in processing SR&ED claims.

The social insurance number is collected pursuant to section 237 of the Act and is used for identification purposes.

Information is described in personal information bank CRA PPU 441 "Scientific Research and Experimental Development", in the Canada Revenue Agency (CRA) chapter of *Info Source*. Personal information is protected under the *Privacy Act* and individuals have a right of access to, correction, and protection of their personal information. Further details regarding requests for personal information at the CRA and our Info Source chapter can be found at <http://www.cra.gc.ca/atip/>.

**THIRD-PARTY PAYMENTS FOR
SCIENTIFIC RESEARCH AND EXPERIMENTAL DEVELOPMENT (SR&ED)**

Complete this form for each third-party payment and attach it to Form T661.

For more information on third-party payments:

- See line 370 of Guide to Form T661, *Scientific Research and Experimental Development (SR&ED) Expenditures Claim*;
- Third-Party Payments Policy;
- Consult our Web site: **www.cra.gc.ca/sred**.

Required Information**1. Identification**

701	Name of the third party	Ryerson University		
702	Address (Street number and name)	350 Victoria Street		
	City	Province/Territory	Postal Code	
	Toronto	ON CA	M4B 2K3	
704	Total amount paid in the year			
	\$ 75,000			

Identify the research project(s) performed by the third-party entity for the payment

706	Project title (and identification code if applicable)
1	P10 - Sustainable Power Generation Systems Development

Check the appropriate box to indicate the type of entity:

711	Approved association	1 Yes	<input type="checkbox"/>
712	Non-profit SR&ED corporation resident in Canada	1 Yes	<input type="checkbox"/>
714	An approved university, college, research institute, or other similar institution	1 Yes	<input checked="" type="checkbox"/>
716	Granting council	1 Yes	<input type="checkbox"/>
718	Other corporation resident in Canada	1 Yes	<input type="checkbox"/>
721	Are you dealing at arm's length with the recipient?	1 Yes	<input checked="" type="checkbox"/> 2 No <input type="checkbox"/>

2. Nature of payment

Check the appropriate box to indicate the type of entity:

The payment is for:			
731	Experimental development	1 Yes	<input checked="" type="checkbox"/>
732	Applied research	1 Yes	<input type="checkbox"/>
734	Basic research	1 Yes	<input type="checkbox"/>
736	Briefly explain what the payment is for:		
	Energy Storage Implementation study for Irving		

738 Briefly explain how the SR&ED is related to a business that you carry on:

The research related directly to the business of the company
which distributes electricity and is responsible for leading
the way in conservation and demand management.

740 Briefly explain how you are entitled to exploit the results of the SR&ED:

Toronto Hydro has the right to exploit any of the
intellectual property arising out of the research
funded by Toronto Hydro.

Personal information is collected pursuant to subsections 37(1), 37(11), and 162(5.1) of the *Income Tax Act* (the Act) and is used for verification of compliance, administration and enforcement of the Scientific Research and Experimental Development (SR&ED) program requirements.

Information may also be used for the administration and enforcement of other provisions of the Act, including audit, enforcement action, collections, and appeals, and may be disclosed under information-sharing agreements in accordance with the Act. Incomplete or inaccurate information may result in assessment of monetary penalties and/or delays in processing SR&ED claims.

The social insurance number is collected pursuant to section 237 of the Act and is used for identification purposes.

Information is described in personal information bank CRA PPU 441 "Scientific Research and Experimental Development", in the Canada Revenue Agency (CRA) chapter of *Info Source*. Personal information is protected under the *Privacy Act* and individuals have a right of access to, correction, and protection of their personal information. Further details regarding requests for personal information at the CRA and our Info Source chapter can be found at <http://www.cra.gc.ca/atip/>.

Part 2 – Project information (continued)

Project number 1

CRA internal form identifier 060

Code 1501

Complete a separate Part 2 for each project claimed this year.

Section A – Project identification**200** Project title (and identification code if applicable)

P01: Electric Vehicle Program

202 Project start date

2010-02

Year Month

204 Completion or expected completion date

2019-12

Year Month

206 Field of science or technology code
(See guide for list of codes)

2.02.01

Electrical and electronic engineering

Project claim history

208 1 ☒ Continuation of a previously claimed project**210** 1 ☐ First claim for the project**218** Was any of the work done jointly or in collaboration with other businesses? 1 ☐ Yes 2 ☒ NoIf you answered **yes** to line 218, complete lines 220 and 221.**220** Names of the businesses**221** BN

1

Section B – Project descriptions**242** What scientific or technological uncertainties did you attempt to overcome?
(Maximum 50 lines)

1. The obstacles that TH had to overcome at the start of the claim project were:
2. (1) Understanding what steps did TH have to take now and in future to be ready
3. to accommodate the Provincial Government's target of 1 in 20 new vehicles in
4. Ontario by 2020 being electric ones; how would we need to develop and prepare
5. the assets and infrastructure;
6. (2) Determining the electric vehicle makes, and technologies used, that would
7. be selected for use in internal field trials;
8. (3) Understanding and developing the design, operation, monitoring and
9. reporting parameters that would need to be specified to ensure the data
10. captured and analyzed from internal pilots, and from external participants
11. through the EV Connections Program (CP), would lead to meaningful insights
12. about all aspects of electric vehicle charging on its grid operations.
13. TH had made initial efforts in prior years to establish from modeling what the
14. aggregate impacts on its grid might be. The EV pilot field trial continued.
15. The hope was that the trial results would be scalable and applicable to
16. different degrees of EV penetration across its service area, and inform how EV
17. charging could be integrated within its grid operations and control. Whether
18. results from its internal trials and from the EV CP participants would be
19. scalable and facilitate the integration of EV charging with grid operations
20. remained to be explored.
- 21.
- 22.

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

- 1.
- 2.
3. Data collected from the EV connections program was used to develop a model to
4. understand what number and type of EVs could be connected to a distribution
5. transformer before causing local infrastructure impacts. This model provided
6. realistic representation of factors such as state of charge before charging,
7. charging time and flow during various points in the charging time in addition
8. to actual demand related to vehicle type. Few vehicles are needed to trigger
9. a local infrastructure constraint. Together with the data on the location of
10. actual EVs, local areas can be targeted for intervention. Modelling was
11. completed and data is presently being generated for a 5 year term. Alternative
12. EV data collection techniques are also being explored.

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

13.
14.
15.
16. The project for curb-side charging with the City of Toronto was re-initiated
17. after being stalled for regulatory/legal issues. The focus is to understand
18. the pattern of usage and the impact on downtown infrastructure. Focus will be
19. to find solutions that permit increased deployment while minimizing
20. infrastructure impact and therefore cost. Concepts, locations, parking,
21. standards for installation, selected vendors, modelling for rates, and
22. prepared forecasts were explored.
23.
24. A project was initiated to provide charging capability into neighbourhoods
25. that have no private means of charging a vehicle. Customers were found to use
26. extension cords over sidewalks which presents a safety issue. To prevent a
27. safety concern, we began working to find/develop pole mounted solutions with
28. manufacturers (such models do not currently exist in North America).
29.
30. We worked with Cross Chasm Technologies in the deployment of on-board and off-
31. board vehicle charging controls to control over-night charging in a way that
32. is beneficial to the grid and not user experience impactive to the driver.
33. ("SmartCharging"). We worked with Cross Chasm to design the demand impact
34. control, the data collection aspects to enable further technical insight as
35. well as on the rewards program to encourage participation. Project was
36. successful and objectives were achieved. Toronto Hydro will be participating
37. in a larger Canada wide project using the similar technology extending into
38. 2018.
39.
40. We also used the results of our work with Cross Chasm and retained other sub-
41. contractors to develop models for use in Regulatory proceedings that would
42. determine the cost benefit of SmartCharging program with rewards deployment
43. given a variety of vehicle charging characteristics (captured through EV
44. Connections program). 'Power Lens' online tool acquired and would be tested as
45. a tool to determine usage rates. Modeling was performed to attempt to
46. determine usage methods to encourage users to charge at opportune times. A
47. concept evolved to address the home as a whole rather than in isolation (i.e.
48. a desire to leverage home tech).
49.
50. In late 2016 we initiated work on a workplace charging project at 500
51. Commissioners St. The aim of the project is to integrate electric vehicle
52. charging with existing solar generation, battery storage and building demand
53. management system to manage overall building electrical demand. This work had
54. extended into FY2017 and will be commissioned and monitored in FY2018.
55.
56. The impact of the Ontario Climate Change Action Plan, particularly related to
57. the electrification of transportation was assessed on a system wide basis to
58. determine the infrastructure impact on a wide area basis. We also did work to
59. modify our Conditions of Service technical requirements for metering in Multi-
60. Unit Residential Buildings to achieve lower costs, less resource demand and
61. increased deployment of electric vehicles. A new TransformTO plan specific to
62. Toronto was initiated which is intended to include elements of personal and
63. public transit and adoption rates of EVs.
64.
65. Work would continue into FY2017 with: outreach programs (EV discovery center),
66. forecasting and projects (curbside EV charging stations (pre-studies to
67. compare with baseline - perceptions and behaviors), utilization of streetlight
68. poles (residential on-street) for charging capability, design of workplace
69. charging systems, increasing the utilization of EV fleet, and condominium
70. solutions to reduce cost of EV adoption).

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

- 71.
72. Other new activities in FY2017 included:
73. TTC Studies on feasibility utilizing the fleet for energy storage. We also
74. investigating a means to repurpose used batteries. Ongoing investigations will
75. be, in part, conducted by Toronto Hydro's new Business development innovation
76. group (led by General Manager, Jack Simpson) - areas of responsibility will
77. include: Electrification of transportation, Distributed Generation
78. District energy and microgrids as well as Blockchain technologies.
- 79.

246 What scientific or technological advancements did you achieve or attempt to achieve as a result of the work described in line 244? (Maximum 50 lines)

1. Scientific and technological advancements include:
2. Better models of the impact of the electric vehicle charging behaviour on a
3. local area basis using data from the EV Connections program
4. Understanding of the capabilities and implementability of "Smart Charging"
5. (utility control of electric vehicle charging) to minimize local grid impacts
6. as well as customer inconvenience.
7. Understanding of the impacts of Ontario's Climate Change Action Plan,
8. specifically the electrification of transportation, on Toronto Hydro's peak
9. demand at a system wide basis. (expanding into TransformTO initiatives)
10. Understanding of the technical barriers that further need to be worked on to
11. proceed with curb-side and workplace charging in 2017 in the context of
12. minimizing infrastructure impacts.
13. Understanding of integrated Electrification of transportation, Distributed
14. Generation, District energy and microgrids as well as Blockchain technologies
15. via Toronto Hydro's new Business development innovation group.

Section C – Additional project information

Who prepared the responses for Section B?

253 1 ☒ Employee directly involved in the project

254 Name

255 1 ☐ Other employee of the company

256 Name

257 1 ☒ External consultant

258 Name

Deloitte LLP

259 Firm

Deloitte LLP

List the key individuals directly involved in the project and indicate their qualifications/experience.

260 Names

261 Qualifications/experience and position title

- 1 [REDACTED]
- 2 [REDACTED]
- 3 [REDACTED]

265 Are you claiming any salary or wages for SR&ED performed outside Canada? 1 ☐ Yes 2 ☒ No

266 Are you claiming expenditures for SR&ED carried out on behalf of another party? 1 ☐ Yes 2 ☒ No

267 Are you claiming expenditures for SR&ED performed by people other than your employees? 1 ☐ Yes 2 ☒ No

If you answered **yes** to line 267, complete lines 268 and 269.

268 Names of individuals or companies

269 BN

1

What evidence do you have to support your claim? (Check any that apply)

You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

- | | | | | | | | |
|------------|---|-------------------------------------|--|------------|---|-------------------------------------|--|
| 270 | 1 | <input checked="" type="checkbox"/> | Project planning documents | 276 | 1 | <input checked="" type="checkbox"/> | Progress reports, minutes of project meetings |
| 271 | 1 | <input checked="" type="checkbox"/> | Records of resources allocated to the project, time sheets | 277 | 1 | <input type="checkbox"/> | Test protocols, test data, analysis of test results, conclusions |
| 272 | 1 | <input type="checkbox"/> | Design of experiments | 278 | 1 | <input checked="" type="checkbox"/> | Photographs and videos |
| 273 | 1 | <input checked="" type="checkbox"/> | Project records, laboratory notebooks | 279 | 1 | <input type="checkbox"/> | Samples, prototypes, scrap or other artefacts |
| 274 | 1 | <input type="checkbox"/> | Design, system architecture and source code | 280 | 1 | <input type="checkbox"/> | Contracts |
| 275 | 1 | <input type="checkbox"/> | Records of trial runs | 281 | 1 | <input checked="" type="checkbox"/> | Others, specify |
| | | | | 282 | | | Invoices & emails. |

Part 2 – Project information (continued)

Project number 2

CRA internal form identifier 060

Code 1501

Complete a separate Part 2 for each project claimed this year.

Section A – Project identification**200** Project title (and identification code if applicable)

P02: Electric Power System reliability improvement

202 Project start date

2007-01

Year Month

204 Completion or expected completion date

2018-12

Year Month

206 Field of science or technology code
(See guide for list of codes)

2.02.01

Electrical and electronic engineering

Project claim history

208 1 ☒ Continuation of a previously claimed project**210** 1 ☐ First claim for the project**218** Was any of the work done jointly or in collaboration with other businesses? 1 ☐ Yes 2 ☒ NoIf you answered **yes** to line 218, complete lines 220 and 221.**220** Names of the businesses**221** BN

1

Section B – Project descriptions**242** What scientific or technological uncertainties did you attempt to overcome?
(Maximum 50 lines)

1. THESL is trying to achieve sustained, measureable improvements in the
2. performance of its distribution system. In electricity distribution, standard
3. metrics are used for service performance and reliability tracking, SAIDI and
4. SAIFI. These metrics reflect factors within THESL's control, e.g. the extent
5. and targeting of its annual spend on capital and O&M, and factors and events
6. beyond THESL's control such as numbers of storm days experienced annually.
7. Historical data shows that the number of storm days on average has increased,
8. but physical damage to the grid from such weather was not as extensive as in
9. prior years. Past efforts to storm harden the grid and to use covered cables
10. where warranted seem to have had a beneficial impact on reliability
11. performance.
12. To sustain existing levels and strive to make further improvements in the
13. values of those standard metrics, THESL needed to work to improve the
14. distribution system.
- 15.
16. The obstacles faced and whose resolution the THESL project worked on with
17. some subcontractor assistance were as follows:
- 18.
19. 1. (Event Management/AMI Data Analytics) - Understanding how to improve the
20. quality of historical asset reliability data; for use in improved OMS/ITIS
21. reporting. Challenges included geospatial cross-referencing of existing
22. OMS/ITIS data, and developing an enhanced outage reporting process. ITIS
23. itself requires the development of new data tables that must be realigned to
24. support new Event management requirements. This work transitioned into a
25. broader AMI data analytics approach.
26. 2. (Risk Analyzer) - Development of a model/tool that can quantify the
27. "installed risk" value of the distribution system based on data (historical
28. and current).
29. 3. (Feeder Automation Radio Study) - As we expanded our capabilities in Feeder
30. Automation, the network becomes larger and more complicated - which can lead
31. to radio saturation. For this project, we investigated new potential designs
32. that could overcome issues with noise, location, communication interferences,
33. terrain, and prevent oversaturation while providing communication between
34. switches.
35. 4. (Power Quality Monitoring) - Understanding how availability technologies
36. could be developed for use in the TH infrastructure. Installation of a Power
37. Quality Monitoring network for real time event analysis and alerts.

242 What scientific or technological uncertainties did you attempt to overcome?
(Maximum 50 lines)

38. 5. (Underground Cable Testing) - Involved test method development in an effort
39. to be able to prioritize replacement of underground cable assets. Challenges
40. included understanding what methods work best for the many different types and
41. conditions of cables and environment.
42. 6. Analytics [operating] - Analytics Road map for visual and deductive
43. reasoning analysis, as well as use cases development to assess the various
44. inputs which drive the decisions and execution times within the control room.
45. 7. Analytics [planning] - Understanding how new analytical tools could be
46. integrated within to THESL's planning processes to maximize productivity
47. benefits.

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

1. Experimental development in this fiscal period included the following:
2.
3. 1. (AMI Data Analytics) - Utilization of Smart Metering data to enhance and
4. evolve existing planning practices. Ongoing work included analytics of
5. individual residential meters to develop system wide outage metrics such as
6. CEMI and CELID; integration of data into NMS environment for real time system
7. outage reporting; outage and customer focused interruption validation;
8. integration with traditional outage data sources such as SCADA and customer
9. calls; and loading data for asset utilization and contingency analysis.
10. Includes beginning road mapping exercise of metering data needs and
11. applications to drive the direction of the overall metering program to support
12. analytical needs.
13.
14. 2. (Risk Analyzer) - In 2017, a broader initiative to establish a metric that
15. measures the risk of the system from an interruption cost perspective was
16. initiated. As a result, the Risk Analyzer will be integrated into that
17. initiative. The initiative would be expanded to include a interruption survey
18. and subsequent study with development to follow.
19.
20.
21. 3. (Feeder Automation Radio Study) - Investigate integration of a FLISR system
22. into existing NMS product. Ongoing testing and benefit realization to applied
23. in the following year to enhance SAIFI and SAIDI. Sandbox environment to be
24. utilized as Engineering Planning tool to optimize SCADA integration across the
25. system. Firmware on 90 radios in the east (Cavanaugh TS) were upgraded and TH
26. is scheduled to perform setting adjustment for the same 90 radios in the
27. Spring 2018. Pending the results of the testing, over 225 radios in the west
28. may need to be upgraded.
29.
30. 4. (Power Quality Monitoring) - Fault Localization Project for PQM - A
31. software tool development initiative was pursued to attempt to improve the
32. fidelity of fault localization from two switching points down (which may range
33. from 50 - 1000m) to an accuracy of +/- 30m. The tool currently utilizes a
34. reactance to fault engine that looks at fault waveform characteristics
35. recorded at the station compared to system models to determine fault location.
36. In 2017, the development and integration of PQView continued with PQView fault
37. analysis tool now correlates times of outage events against other outage
38. information systems at Toronto Hydro ('ITIS') - TH had several examples of the
39. fault analysis tool being used to assist field crews in determining location
40. of intermittent faults on feeders. PQView also offered several steady-state
41. analysis tools that are used for: Voltage variation (use of histogram and
42. time-profiling tools to quickly determine voltage variation at customer supply
43. points); and Correlation against PQ events (plot PQ events like voltage sags
44. against steady state voltage/load profiles to assist in investigating customer
45. inquiries)

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

46.
47. 5. (Underground Cable Testing) - Continued development, investigated various
48. test methods to be able to quantify the condition of existing underground
49. assets. Experimented/analyzed/developed different methods work for the many
50. different types and conditions of cables and environments, and performed
51. actual physical testing.
52.
53. 6. (Analytics - operating) - Ongoing development of a roadmap with
54. Quatric Solutions Inc. to outline the various departments which interact with
55. the Control Room and the number of tools involved in tracking the various
56. metrics which are used to track and improve performance across the
57. organization. In development with Quatric Solutions Inc., 25 use cases were
58. developed to support framework of a Power System analysis tool for the
59. control room.
60. 7. (Analytics - planning) - Continued the development of an
61. engineering data warehouse to streamline the access to data as well as perform
62. 'big data' calculations required by THESL's planning department. In parallel
63. to this activity, continued the deployment of new data blending & analytics
64. software to THESL's planning department and integrated software into business
65. processes to improve productivity & drive new insights into THESL data based
66. on new capabilities.
67. Long term strategies in EPS reliability are being devised to define capital
68. requirements over the coming decades. These strategies will continue to
69. challenge known techniques and methodologies and will result in continued
70. development-oriented activities in future fiscal periods.
71.
72. SR&ED activities were sub-contracted during the course of this fiscal period.
73. Sub-contractors performed investigations and analysis required to continue
74. development in EPS initiatives.

246 What scientific or technological advancements did you achieve or attempt to achieve as a result of the work described in line 244? (Maximum 50 lines)

1. Through experimental development, the following advancements were sought or
2. achieved:
3. 1. (Event Management) - Improved quality of historical asset reliability data;
4. and developed correlations to specific impacted asset location(s).
5. 2. (Risk Analyzer) - Developed a model/tool that can quantify the "installed
6. risk" value of the distribution system based on data (historical and current)
7. which is to drive a customer interruption cost driven risk outcome.
8. 3. (Feeder Automation Radio Study) - Study progressed; improved knowledge of
9. influencing factors - work continued in next fiscal period.
10. 4. (Power Quality Monitoring) - Improvement knowledge of how various new
11. technologies could be developed for use in the TH infrastructure;
12. analysis/research would continue in next fiscal period.
13. 5. (Underground Cable Testing) - Test method development improved our
14. knowledge of the condition different types and conditions of cables; including
15. that age was not the only primary factor for asset condition.
16. 6. (Analytics - Operations) - Model development was approved for
17. progressing to next steps for hiring the necessary staff and ensuring that the
18. right IT infrastructure is in place.
19. 7. (Analytics - Planning) - Improved productivity of select business
20. processes and enhanced the quality of existing data analysis capability. The
21. implementation enabled increased analytical and data visualization
22. capabilities in planning. It further increased efficient access to data for
23. engineers within the Engineering Planning area.

Section C – Additional project information

Who prepared the responses for Section B?

253	1 <input checked="" type="checkbox"/> Employee directly involved in the project	254	Name	
255	1 <input type="checkbox"/> Other employee of the company	256	Name	
257	1 <input checked="" type="checkbox"/> External consultant	258	Name	
			Deloitte LLP	259 Firm
				Deloitte LLP

List the key individuals directly involved in the project and indicate their qualifications/experience.

260	Names	261	Qualifications/experience and position title
1			
2			
3			

265 Are you claiming any salary or wages for SR&ED performed outside Canada? 1 ☐ Yes 2 ☒ No**266** Are you claiming expenditures for SR&ED carried out on behalf of another party? 1 ☐ Yes 2 ☒ No**267** Are you claiming expenditures for SR&ED performed by people other than your employees? 1 ☒ Yes 2 ☐ NoIf you answered **yes** to line 267, complete lines 268 and 269.

268	Names of individuals or companies	269	BN
1	CEATI International Inc.		
2	Compass Point Systems Inc.		
3	Metsco Energy Solutions		
4	SNC-LAVALIN INC.		

What evidence do you have to support your claim? (Check any that apply)

You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

270	1 <input checked="" type="checkbox"/> Project planning documents	276	1 <input checked="" type="checkbox"/> Progress reports, minutes of project meetings
271	1 <input checked="" type="checkbox"/> Records of resources allocated to the project, time sheets	277	1 <input checked="" type="checkbox"/> Test protocols, test data, analysis of test results, conclusions
272	1 <input type="checkbox"/> Design of experiments	278	1 <input type="checkbox"/> Photographs and videos
273	1 <input checked="" type="checkbox"/> Project records, laboratory notebooks	279	1 <input type="checkbox"/> Samples, prototypes, scrap or other artefacts
274	1 <input type="checkbox"/> Design, system architecture and source code	280	1 <input checked="" type="checkbox"/> Contracts
275	1 <input checked="" type="checkbox"/> Records of trial runs	281	1 <input checked="" type="checkbox"/> Others, specify 282 Invoices & emails.

Part 2 – Project information (continued)Project number **3**

CRA internal form identifier 060

Code 1501

Complete a separate Part 2 for each project claimed this year.**Section A – Project identification****200** Project title (and identification code if applicable)

P03: Electric Power System capacity planning & improvement

202 Project start date

2007-03

Year Month

204 Completion or expected completion date

2019-12

Year Month

206 Field of science or technology code
(See guide for list of codes)

2.02.01

Electrical and electronic engineering

Project claim history

208 1 ☒ Continuation of a previously claimed project**210** 1 ☐ First claim for the project**218** Was any of the work done jointly or in collaboration with other businesses? 1 ☐ Yes 2 ☒ NoIf you answered **yes** to line 218, complete lines 220 and 221.**220** Names of the businesses**221** BN

1

Section B – Project descriptions**242** What scientific or technological uncertainties did you attempt to overcome?
(Maximum 50 lines)

- 1.
2. The technological objective of the project is to develop more accurate and
3. flexible tools for peak demand forecasting and option development. The
4. primary tool for input into subsequent tools is the load forecasting tool.
5. Challenges with current methods are: (1) they poorly deal with abrupt changes
6. in underlying drivers of peak demand; (2) they are not flexible to include
7. new factors (without previous history) that will increase electricity demand
8. such as the electrification of transportation as proposed in the Ontario
9. Climate Change Action Plan; and (3) they do not provide understanding in the
10. seasonality of peaks (as compared with a yearly peak) and further they are
11. not designed to provide an hourly profile for peak conditions (which would be
12. necessary in order to understand the feasibility of non-wires solution to deal
13. with peak constraints.)
- 14.

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

- 1.
2. Investigation into two key studies continued from the previous tax year.
- 3.
4. New methods/techniques, beyond current practices, were developed. A long-
5. term/25 year spatial peak demand forecast was completed, including sensitivity
6. analysis and a peak demand forecast process design, based on City forecasts of
7. population & employment and IESO weather correction and extremes calculation,
8. with the flexibility to handle multiple CDM and DG scenarios. Different CDM
9. and DG scenarios were analyzed using the newly developed method. The Spatial
10. Peak Demand Forecast from this study was contributed to the Central Toronto
11. IRRP. THESL also continued to work with the OPA on developing contingencies
12. for reliability and security analysis to identify mid- to long-term needs of
13. the transmission system supplying downtown Toronto. Needs were examined on a
14. probabilistic in addition to a deterministic approach traditionally used. A
15. broader Metro Toronto Regional Infrastructure Report Plan (MTRI) extrapolating
16. from the central IRRP was made and incorporated GO Line electrification and
17. other potential future system additions.
- 18.
19. The second study took a broader approach to identify the root problems of
20. supply unreliability covering the areas of asset condition, system

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

21. design/operation/ maintenance, and contingency planning of supplies with a
22. focus on bulk supply points to THESL and the distribution of power from these
23. points of supply in an integrated manner. In addition, the study examined the
24. reliability of supply and the investment planning process in other major
25. cities and make improvement recommendations for both THESL and HONI. The
26. study was completed, however, a final report covered 3 additional components,
27. i.e. reliability of supply, the investment planning process, and key
28. implementation considerations. Business plan and engineering feasibility would
29. be subsequently pursued and the SR&ED activity would end.
30.
31. After the release of the Ontario Climate Change Action Plan, an in-house study
32. was performed of the impact of such a plan on Toronto's overall peak demand.
33. The study included the adoption of electric vehicles, further electrification
34. of mass transit, increased solar generation, conversion of natural gas heating
35. to electric heat pumps, and conversion of natural gas water heaters to
36. electricity. Further internal study was undertaken to assess the impacts of
37. the above factors on a seasonal basis rather than on a yearly basis as well as
38. the impacts on an hourly load profile basis.
39.
40. In FY2017 the approach developed in the internal study was incorporated into
41. an RFP for a study to update and enhance the Spatial Peak Demand Forecast.
42. New City forecasts of population and employment, and hourly demand profiles
43. were used to complete a gross peak demand forecast. A gross forecast was
44. completed in December 2017. The gross demand forecast will be coupled in
45. FY2018 with assumptions for four different outlooks for new factors that will
46. impact electricity demand such as electric vehicle adoption, the
47. electrification of mass transit, energy storage, and electrification for space
48. heating and hot water, taking into consideration the TransformTO goals and
49. strategies approved by the City of Toronto in July 2017 to reduce greenhouse
50. gas. The outlooks will be used to examine seasonality of peaks, and to
51. facilitate an understanding of the feasibility of non-wires solutions to deal
52. with peak constraints. Results capturing the uncertainties around uptake of
53. these initiatives will be available in March 2018 for input to a new
54. Integrated Regional Resource Plan study.
55. A portion of the SR&ED effort claimed was performed by contractors (as
56. identified in Section D, line 268) working as part of the project team.
57.

246 What scientific or technological advancements did you achieve or attempt to achieve as a result of the work described in line 244? (Maximum 50 lines)

1. THESL sought in general terms, to gain more knowledge about how to plan for
2. increasing its distribution system capacity and sources of power supplies in a
3. cost effective manner in the face of severe physical constraints and changing
4. circumstances. Electricity system planning in Ontario is conducted at 3
5. levels: bulk transmission system planning, regional system planning and
6. distribution system planning. The OPA is responsible for the first level, and
7. leads the effort in the second with the active participation of transmitters
8. and distributors. The third level is led by distributors. More specifically
9. the advances were to increase the knowledge and know-how behind the main
10. options and key variables in the quest to increase bulk electricity supply to
11. downtown Toronto, in a more reliable cost effective manner, and which examines
12. the use of non-traditional contributions from distributed generation and
13. demand management options and to improve long term planning techniques for
14. supplies of different kinds and determining infrastructure needs. Furthermore,
15. the impact of the Ontario Climate Change Action Plan are now known to increase
16. winter peak demand in a way that would closely resemble summer peak demand and
17. that on a system wide basis, it is now understood that peak demand will be
18. shifted in time on a peak day to the interaction of decreased solar generation

19. at the time of increased electric vehicle charging. These learnings on a
20. system wide basis are guiding the development of a study for a small area
21. forecast to be performed in 2017 closely aligned to the physical power system,
22. the impact of the factors seen on a system wide basis due to the Ontario
23. Climate Change Action Plan.
24.
25.

Section C – Additional project information

Who prepared the responses for Section B?

253	1 <input checked="" type="checkbox"/> Employee directly involved in the project	254	Name
255	1 <input type="checkbox"/> Other employee of the company	256	Name
257	1 <input checked="" type="checkbox"/> External consultant	258	Name
			Deloitte LLP
		259	Firm
			Deloitte LLP

List the key individuals directly involved in the project and indicate their qualifications/experience.

260	Names	261	Qualifications/experience and position title
1			
2			
3			

265 Are you claiming any salary or wages for SR&ED performed outside Canada? 1 ☐ Yes 2 ☒ No**266** Are you claiming expenditures for SR&ED carried out on behalf of another party? 1 ☐ Yes 2 ☒ No**267** Are you claiming expenditures for SR&ED performed by people other than your employees? 1 ☒ Yes 2 ☐ NoIf you answered **yes** to line 267, complete lines 268 and 269.

268	Names of individuals or companies	269	BN
1	Navigant Consulting Ltd		
2			
3			
4			

What evidence do you have to support your claim? (Check any that apply)

You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

270	1 <input checked="" type="checkbox"/> Project planning documents	276	1 <input checked="" type="checkbox"/> Progress reports, minutes of project meetings
271	1 <input checked="" type="checkbox"/> Records of resources allocated to the project, time sheets	277	1 <input type="checkbox"/> Test protocols, test data, analysis of test results, conclusions
272	1 <input type="checkbox"/> Design of experiments	278	1 <input type="checkbox"/> Photographs and videos
273	1 <input checked="" type="checkbox"/> Project records, laboratory notebooks	279	1 <input type="checkbox"/> Samples, prototypes, scrap or other artefacts
274	1 <input type="checkbox"/> Design, system architecture and source code	280	1 <input checked="" type="checkbox"/> Contracts
275	1 <input type="checkbox"/> Records of trial runs	281	1 <input checked="" type="checkbox"/> Others, specify 282 Invoices, emails, reports

Part 2 – Project information (continued)

Project number 4

CRA internal form identifier 060

Code 1501

Complete a separate Part 2 for each project claimed this year.

Section A – Project identification			
200 Project title (and identification code if applicable)			
P03A: Underground Gas Transformer Station Design			
202 Project start date	204 Completion or expected completion date	206 Field of science or technology code (See guide for list of codes)	
2010-02 Year Month	2018-11 Year Month	2.01.01	Civil engineering
Project claim history			
208 1 <input checked="" type="checkbox"/> Continuation of a previously claimed project		210 1 <input type="checkbox"/> First claim for the project	
218 Was any of the work done jointly or in collaboration with other businesses? 1 <input type="checkbox"/> Yes 2 <input checked="" type="checkbox"/> No			
If you answered yes to line 218, complete lines 220 and 221.			
220 Names of the businesses			221 BN
1			

Section B – Project descriptions	
242 What scientific or technological uncertainties did you attempt to overcome? (Maximum 50 lines)	
1. The obstacles THESL had to address during the project duration, and attempt to	
2. resolve during the year included:	
3. The underground station configuration to include all the equipment necessary	
4. and accommodate Hydro One owned HV switch gear (S/G) on the same restricted	
5. site	
6. Determining with HONI the preferred supply arrangements for the new TS and	
7. what cross-sectional detailed design could be used to carry 4 circuits in a	
8. supply tunnel	
9. Whether or not the cables supplying the new TS would have to be cooled and	
10. how this capability could be provided within a tunnel of a nominal 3m in	
11. internal diameter, 600m long, 30m below street level	
12. How to develop a design and construction approach for a fixed shoring wall	
13. with no tie-backs that would support both the 600m tunnel as well as the	
14. transformer station.	
15. How to design and build 100 ft mine shafts under the station floor to connect	
16. the tunnel to the station while achieving mining construction requirements.	
17. The original design incorporated pre-cast shaft-liners, however during	
18. construction we recognized that this approach couldn't be used because of	
19. safety reasons (mining regulations). We needed to work with our consultants	
20. to determine how to achieve this, as it has never been done before.	
21. How to improve the constructability of the station floor using a modified pour	
22. -strip design in an effort to reduce the time required to pour.	
23. How to develop a venting approach or method to deal with the challenges if the	
24. transformer gas (SF6) leaks (in an underground station).	
25. We encountered a large obstacle in the side of the shoring wall part-way	
26. through construction. Needed to develop a design approach to overcome this	
27. challenge.	
28. How the historical machine shop on the site - which was going to be dismantled	
29. and re-built during construction - could be upgraded by design to serve as a	
30. post disaster building and retain all existing heritage features of the	
31. existing building. Further, the provisions for excess capacity left inherent	
32. volume in the building which presented a fire abatement hazard.	
33. Systematic uncertainties were encountered in the course of development as	
34. methods to resolve individual obstacles would form competing demands with	
35. other obstacles.	

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

1.
2.
3. The project team continued to meet on a daily basis to review progress,
4. discuss emerging issues, examine failure modes and technical direction.
5. Systematic development required regular review meetings for teams including:
6. technical coordination, cable installation, protection teams, asset management
7. planning, telecommunications and other co-development technical teams..
8. Technical equipment coordination meetings' continued with final reviews of the
9. major electrical equipment such as Toshiba Gas-Insulated Transformers, ABB MV
10. Air-Insulated Switchgear, Siemens MV Gas-Insulated Switchgear, Siemens HV Gas-
11. Insulated Switchgear, Virelec P&C (installed in FY2017 and to be completed in
12. FY2018), HONI Energization (to be completed in FY2018), and Protection and
13. Control end to end testing was initiated.
14.
15. Supply tunnel cooling - Thermo-resistivity testing, concrete, and accelerated
16. aging testing continued. The HONI room (for HV GIS) was completed and the
17. switchgear is expected to be tested in FY2018 including P&C equipment and all
18. HV and MV cable. In FY2017 Kinetrics was also selected to perform HV cable
19. testing. A revised Kinetrics testing methodology was required due to concerns
20. of the coronal effect on the equipment - 3 iterations of methodologies
21. explored (HV partial discharge test) - with the final test methodology to be
22. utilized in FY2018.
23.
24. In FY2016, due to their immense weight, the delivery of the Toshiba GIT
25. transformers required comprehensive technical analysis to ensure they could be
26. transported safely over a TTC tunnel beneath an existing road in downtown
27. Toronto. Deflection monitors were deployed to monitor the tunnel during the
28. delivery of the transformers. The final delivery to site required a tandem
29. (dual) crane lift and the concrete floors required significant reshoring.
30. Later when the transformers were being assembled, prior to filling the tanks
31. with SF6 gas, detection and monitoring system for insulating gas was deployed,
32. along with leak control, spill and mitigation plans. In FY2017, an additional
33. study was initiated to assess the SF6 risk management which included a
34. comprehensive fluid dynamics of the entire situations. Preliminary
35. recommendations in FY2017 with the final report due in FY2018.
36.
37. Phase II development may follow in FY2018 (pending regulatory approval) -
38. scope: three new gas insulated transformers and their associated switch gear
39. and HV and MV and some P&C equipment. Technical specifications and RFP and
40. through an RFI process determined the maturity of the gas insulated
41. transformer technologies. Lessons learned from Phase I to be applied.
42.
43. Other FY2017 activities included HV cable in which an alternative approach was
44. developed and an integrated testing strategies for fire abatement concerns.
45. (The building for Phase I is designed with provisions for Phase II, but at
46. Phase I it leaves large volume unused and poor conditions for fire protection
47. and control).
48.
49. Overall, construction is expected to be completed by end of FY2018, with
50. energization expected shortly thereafter.
51.
52. A portion of the SR&ED effort claimed was performed by contractors (as
53. identified in Section D, line 268) working as part of the project team.
54.
55.

246 What scientific or technological advancements did you achieve or attempt to achieve as a result of the work described in line 244? (Maximum 50 lines)

1. THESL needed to increase its knowledge and know-how of TS detailed design - to
2. the most stringent applicable standards - and of construction practices that
3. would be required to build and commission a one-of-a-kind, below grade indoor
4. TS (with gas-insulated transformers) on a unique constrained site to
5. facilitate additional bulk electricity supply and transformer capacity for
6. downtown Toronto. This project involved the development of the first
7. underground TS that used gas-insulated transformers, and the industry will now
8. be able to use our advancements as a starting point for future designs.
9. Some of the key technological advancements achieved were as follows:
10. 1. Development of all the design approaches to overcome the obstacles listed
11. above and achieve the project objectives to include all the equipment
12. necessary and accommodate Hydro One owned HV switch gear (S/G) on the same
13. restricted site in an underground TS.
14. 2. Development of a unique design and construction approach for a fixed
15. shoring wall with no tie-backs that could support both the 600m tunnel as well
16. as the transformer station 100 ft underground, and divide the two projects
17. into separate construction projects for regulatory (Safety) purposes.
18. 3. New methods to improve the constructability of the station floor using a
19. modified pour-strip design in an effort to reduce the time required to pour.
20. 4. Development of a unique venting approach to deal with the challenges if
21. the transformer gas (SF6) leaks (in an underground station)
22. 5. Understanding how to modify the shoring wall design to overcome a large
23. obstacle (cement) in the side of the shoring wall part-way through
24. construction.
25. 6. Supply tunnel cooling methodologies and Thermo-resistivity testing
26. techniques developed
27. 7. Fire abatement strategies for provisional volumes in the transformer
28. station bay.
29. Other engineering concept and method advancements would be devised as a result
30. of systematic obstacles encountered in the course of the development process.
- 31.
- 32.

Section C – Additional project information

Who prepared the responses for Section B?

253 1 ☒ Employee directly involved in the project**254** Name**255** 1 ☐ Other employee of the company**256** Name**257** 1 ☒ External consultant**258** Name

Deloitte LLP

259 Firm

Deloitte LLP

List the key individuals directly involved in the project and indicate their qualifications/experience.

260	Names	261	Qualifications/experience and position title
1			
2			
3			

265 Are you claiming any salary or wages for SR&ED performed outside Canada? 1 ☐ Yes 2 ☒ No**266** Are you claiming expenditures for SR&ED carried out on behalf of another party? 1 ☐ Yes 2 ☒ No**267** Are you claiming expenditures for SR&ED performed by people other than your employees? 1 ☒ Yes 2 ☐ NoIf you answered **yes** to line 267, complete lines 268 and 269.

268	Names of individuals or companies	269	BN
1	IBI GROUP		

268	Names of individuals or companies	269	BN
2	KINECTRICS NORTH AMERICA INC.		
3	K-TEK ELECTRO SERVICES LIMITED		
4	METSCO ENERGY SOLUTIONS INC.		
5	MMM GROUP LIMITED		
6	SNC-LAVALIN INC.		

What evidence do you have to support your claim? (Check any that apply)

You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

270	1	<input checked="" type="checkbox"/>	Project planning documents	276	1	<input checked="" type="checkbox"/>	Progress reports, minutes of project meetings		
271	1	<input checked="" type="checkbox"/>	Records of resources allocated to the project, time sheets	277	1	<input checked="" type="checkbox"/>	Test protocols, test data, analysis of test results, conclusions		
272	1	<input type="checkbox"/>	Design of experiments	278	1	<input checked="" type="checkbox"/>	Photographs and videos		
273	1	<input checked="" type="checkbox"/>	Project records, laboratory notebooks	279	1	<input type="checkbox"/>	Samples, prototypes, scrap or other artefacts		
274	1	<input checked="" type="checkbox"/>	Design, system architecture and source code	280	1	<input checked="" type="checkbox"/>	Contracts		
275	1	<input type="checkbox"/>	Records of trial runs	281	1	<input checked="" type="checkbox"/>	Others, specify	282	Invoices & emails

Part 2 – Project information (continued)

Project number 5

Complete a separate Part 2 for each project claimed this year.

CRA internal form identifier 060
Code 1501

Section A – Project identification			
200 Project title (and identification code if applicable)			
P04: Improved Grid Solutions			
202 Project start date		204 Completion or expected completion date	
2010-03		2019-12	
Year Month		Year Month	
		206 Field of science or technology code (See guide for list of codes)	
		2.02.01 Electrical and electronic engineering	
Project claim history			
208 1 <input checked="" type="checkbox"/> Continuation of a previously claimed project 210 1 <input type="checkbox"/> First claim for the project			
218 Was any of the work done jointly or in collaboration with other businesses? 1 <input type="checkbox"/> Yes 2 <input checked="" type="checkbox"/> No			
If you answered yes to line 218, complete lines 220 and 221.			
220 Names of the businesses		221 BN	
1			

Section B – Project descriptions

242 What scientific or technological uncertainties did you attempt to overcome?
(Maximum 50 lines)

1. The capability to deploy/implement a range of Smart Grid (SG)
2. concepts/technologies across THESL's grid to transition it to one that has a
3. fully intelligent infrastructure with: Compatible, durable and reliable
4. equipment with built-in sensing and intelligent electronic devices for
5. monitoring, fault diagnosis, and self-restoration; Fail-safe, robust, fast,
6. high band-width, 2-way advanced communications from customers to the grid
7. control centre; Centralized monitoring & control utilizing integrated
8. databases for customer information, for asset records including their
9. geographic locations, for the management of outages, for grid operations and
10. for making physical changes to the grid infrastructure; Informed & intelligent
11. operators & customers regarding electricity use and the assets for local
12. generation, distribution & storage and initiatives to facilitate wise
13. consumption for system-wide benefits; and unrestricted capability to
14. accommodate, plug-in hybrid (PH) electric vehicles (EV), battery only EVs,
15. distributed generation (DG), and energy storage devices. Ongoing obstacles
16. faced in 2017 were:
17. -Meter-ready transformers failed tests leading to design changes. (In
18. previous fiscal periods, outages from failures of pole top mounted units with
19. ongoing TM were reviewed. However, in only one case had the unit been
20. overloaded for a relatively long time prior to failure. TM data analytics work
21. continued in FY16 to gain greater insight into transformer failures.
22. - Uncertainty of data analytics tools to extract and analyze information
23. -The extent to which the benefits expected from the pilot field trial of PLMs
24. were being realized. THESL wanted pilot implementation to lead to: (A) Better
25. management of O/H assets and improved reliability, (B) Significant customer-
26. minutes-out improvements by reporting outages to the control room (C)
27. Reduction of momentary outages
28. -Intelligent node implementation at Exhibition Place generation sites did not
29. have telecommunications to meet utility grade cyber-security requirements or
30. permit access and integration into utility SCADA system. In addition,
31. significant technical challenges were encountered in implementing an
32. intelligent node in the Strachan TS station. Using new secure routers and
33. adapting THESL cellular private network for the purpose, secure communications
34. were achieved. In addition, creative use of approved THESL intelligent
35. electronic devices provided a means of installing the intelligent node at
36. Strachan TS without having to modify the 13.8 kV buswork. Other uncertainties
37. emerged in the course of development as a result of systematic challenges.

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

1. In this fiscal period, progress continued to be made with design of a unit
2. with integral plug-in connection. Failures were encountered and a design
3. change process continued. 1st-phase prototypes built in the previous period
4. were tested. The new design passed all the tests as documented in the test
5. plan and the activity ended.
- 6.
7. Monitoring of pole top mounted 1-phase transformers continued. When the
8. existing tool stopped working, Toronto Hydro investigated options and decided
9. to develop in-house scripts to replace the tool leading to faster data
10. extraction and analysis. Customized Project Reports summarizing the options,
11. implementation strategy and results were prepared and the activity ended.
- 12.
13. 200 PLM purchases and greater insight into the causes of outages were
14. observed. Detailed real-time profiles could be generated - an ability to
15. observe 'profile signatures' was possible. A signature profile study was
16. conducted. TH explored harmonization of legacy communication systems, however,
17. the technology is now obsolete - CDMA has been phased out. In FY2017 upgrades
18. were explored and the activity then placed on-hold.

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

19.

20. Intelligent Nodes were installed at Exhibition Place Wind Turbine Building,

21. Horse Palace, and Agricultural Center. The central intelligent node has been

22. moved to the Point of Presence room at 500 Commissioners. All data was

23. processed at an alternate server at Prolucid's office. TH approved routers

24. were installed and data sent via TH Rogers APN to the central intelligent node

25. - network configurations and security clearances are complete for data

26. transfer over TH network. Development continued with TH approved routers and

27. locks to ensure robust pathways to central communications - concepts involved

28. re-purposing Closed-Circuit systems to attempt to achieve cyber-compliant

29. connections. Communication faults were encountered since simultaneous

30. replacement of the routers was not possible - a bridging solution was devised.

31. Hard drive modifications were also required to improve functionality. TH and

32. Prolucid developed algorithms to gather generation output data to attempt to

33. refine energy distribution and output. Detailed reports were subsequently

34. generated. We had learned that local control and autonomous actions are

35. difficult to implement in a legacy system with mixed technologies (i.e. More

36. conducive to a microgrid).

37.

38. In previous fiscal periods solutions for monitoring padmount and submersible

39. transformers from various vendors were evaluated and a selection was made to

40. proceed with a pilot. Instead of moving to a field trial directly, it was

41. decided that end-to-end integration be performed in the Solutions Development

42. Centre to identify technical challenges. A test kit was designed to

43. demonstrate the technology and the activity ended.

44.

45. Power Line monitoring through older generation Wi-Fi CDMA data collectors are

46. becoming obsolete. TH is now investigating migrating data and assessing in new

47. generation Wi-Fi. TH may internalize the process to attempt to bring

48. intelligence to a more comprehensive integrated system. All CDMA were re-

49. located -Transformers were on a broader smart grid, while the Powerline

50. monitors were targeted for lines with reliability or repeatable concerns to

51. attempt to ensure rapid restoration. Development will continued with power

52. line monitoring tool renewal program and expansion to 4.16. Unmonitored

53. substations were abandoned in 2017 in favor of leveraging our advanced

54. metering system to serve also as a power disturbance capture device.

55. A portion of the SR&ED effort claimed was performed by contractors (as

56. identified in Section D, line 268) working as part of the project team.

246 What scientific or technological advancements did you achieve or attempt to achieve as a result of the work described in line 244? (Maximum 50 lines)

1. In previous fiscal periods and during FY 17, transformer monitoring (TM)

2. continued for 1-phase pole top mounted units on an extended basis. TM data

3. extraction and analytics were improved by creation of in-house developed

4. scripts.

5. The Power Line Monitors (PLM) pilot was expanded and additional PLMs were

6. chosen to be installed and field at 34 locations. Data from the Power Line

7. Monitors was analyzed to attempt to identify new signatures and develop use

8. cases for Planning, Control Room and Power Quality teams.

9. The Intelligent Node project with Prolucid Technologies tapered. Security

10. issues that had previously disallowed coordination and control by locally

11. positioned intelligent devices without a centralized controller was overcome

12. by CC technologies and pathway strategies. 6 Intelligent Nodes (four at

13. Exhibition Place, one at 500 Commissioners, and one at Strachan TS) were

14. installed. Data from the Intelligent Nodes was validated and improvements were

15. made to the data viewer. Cyber-compliance and further algorithm refinements

16. were devised.

17. Additional advancements were sought in the course of development as obstacles

18. were encountered in power line and transformer communication methodologies.

Section C – Additional project information

Who prepared the responses for Section B?

253 1 ☒ Employee directly involved in the project**254** Name**255** 1 ☐ Other employee of the company**256** Name**257** 1 ☒ External consultant**258** Name

Deloitte LLP

259 Firm

Deloitte LLP

List the key individuals directly involved in the project and indicate their qualifications/experience.

260 Names**261** Qualifications/experience and position title

1 [REDACTED]

[REDACTED]

2 [REDACTED]

[REDACTED]

3

265 Are you claiming any salary or wages for SR&ED performed outside Canada? 1 ☐ Yes 2 ☒ No**266** Are you claiming expenditures for SR&ED carried out on behalf of another party? 1 ☐ Yes 2 ☒ No**267** Are you claiming expenditures for SR&ED performed by people other than your employees? 1 ☒ Yes 2 ☐ NoIf you answered **yes** to line 267, complete lines 268 and 269.**268** Names of individuals or companies**269** BN

1 KINECTRICS NORTH AMERICA INC.

What evidence do you have to support your claim? (Check any that apply)

You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

270 1 ☒ Project planning documents**276** 1 ☒ Progress reports, minutes of project meetings**271** 1 ☒ Records of resources allocated to the project, time sheets**277** 1 ☒ Test protocols, test data, analysis of test results, conclusions**272** 1 ☐ Design of experiments**278** 1 ☒ Photographs and videos**273** 1 ☒ Project records, laboratory notebooks**279** 1 ☐ Samples, prototypes, scrap or other artefacts**274** 1 ☒ Design, system architecture and source code**280** 1 ☒ Contracts**275** 1 ☐ Records of trial runs**281** 1 ☒ Others, specify **282** Emails & Invoices

Part 2 – Project information (continued)Project number **6**

CRA internal form identifier 060

Code 1501

Complete a separate Part 2 for each project claimed this year.

Section A – Project identification			
200 Project title (and identification code if applicable)			
P05: Downtown network reliability improvements			
202 Project start date	204 Completion or expected completion date	206 Field of science or technology code (See guide for list of codes)	
2010-01 Year Month	2019-12 Year Month	2.02.01	Electrical and electronic engineering
Project claim history			
208 1 <input checked="" type="checkbox"/> Continuation of a previously claimed project 210 1 <input type="checkbox"/> First claim for the project			
218 Was any of the work done jointly or in collaboration with other businesses? 1 <input type="checkbox"/> Yes 2 <input checked="" type="checkbox"/> No			
If you answered yes to line 218, complete lines 220 and 221.			
220 Names of the businesses			221 BN
1			

Section B – Project descriptions	
242 What scientific or technological uncertainties did you attempt to overcome? (Maximum 50 lines)	
1. THESL's network distribution system, used in the downtown core, is the most	
2. reliable distribution system in use in the city of Toronto. Most feeder and	
3. equipment failures do not result in any interruption to customers. In certain	
4. circumstances, some failure modes may result in widespread, long duration	
5. service interruptions. The most important of these failure modes involves	
6. catastrophic equipment failures that result not only in the destruction of the	
7. equipment in the vault, but often damage the civil structure of the vault as	
8. well. THESL continues to strive to improve its downtown network reliability	
9. and continues to face ongoing uncertainties as new technologies and techniques	
10. are explored.	
11. The obstacles THESL faced and overcame during this fiscal year would be	
12. derived from the following:	
13. Investigate alternative silver-sand current limiting fuses and alloy type	
14. fuses. Fuses had to be compatible with submersible case designs and coordinate	
15. with the variety of transformers that could be paired with the protectors;	
16. The position of the network protector operating handle must be compatible with	
17. sizes, manufacturers and vintages of network transformers. THESL has	
18. historically had interference problems with some combinations of network	
19. protectors and transformers;	
20. Continued development and improvement of the SCADA remote monitoring and	
21. operating system for the network protector was required. In particular the	
22. junction box connecting the remote sensors to the network protector is very	
23. difficult to service.	
24. Compact load break primary switch development in which limitations in	
25. operating mechanisms and interlocks would create difficulties with integration	
26. with the network transformers.	
27. 347Y/600V network equipment development for larger and taller downtown	
28. buildings - difficulties with respect to self-isolation methodologies and high	
29. current failures.	
30. Dual Radial Automation (DRA) for medium to large power applications -	
31. challenges in devising systems and methodologies for automated transfer	
32. capabilities and new standards for long term reliability and repeatability.	
33. Other systematic uncertainties would be encountered through the development	
34. process and techniques and concepts to overcome potential failure modes would	
35. be explored.	

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

- 1.
2. Development in attempts to overcome the obstacles THESL faced in FY2017
3. included:
- 4.
5. Alternative silver-sand current limiting fuses and alloy type fuse
6. development: Ground leakage current tests failed with the original design and
7. a concept with a barrier was conceived and tested with mixed, yet
8. satisfactory, results. Development extended to include meeting 600V flashover
9. requirements with fuse and cable limiter concepts.
- 10.
11. The position of the network protector: Experimented with a small chassis size
12. that would hypothetically fit in all protectors. An engineered adapter bus was
13. designed to attempt to work with all vintages identified. A universal
14. mechanism to attempt to enable incremental re-installation was also devised.
15. Retro-fit concepts were devised as the universal mechanism was not entirely
16. effective for all applications. Furthermore, development took place in FY2017
17. to adapt the chassis to fit into an additional model of protector.
- 18.
19. In FY2017 SCADA remote monitoring was further developed to allow quick-connect
20. of control wiring to allow rapid equipment replacement. A new fire detection
21. system was added and linked to remote monitoring. Remote monitoring and
22. control capabilities were also developed for the new loadbreak primary switch
23. which will see its first application on 600V network equipment (see below).
- 24.
25. Development of an emerging technology compact load-break primary switch for
26. network transformers took place in FY2017 and continued into FY2018. This new
27. Eaton VisoVac switch greatly surpasses the capabilities of the mag-break
28. switch, and as a result, work on the mag-break switch was halted. Man-machine
29. interface development and enhancement took place. Deficiencies in operating
30. mechanisms, safety interlocking and mating with the network transformer were
31. identified and rectified. A new capability to locally operate the switch from
32. safely outside of the vault using a remote pendant was added. This new load-
33. break switch design will be trialed on 600V network units in FY2018.
- 34.
35. Development of 347Y/600V network equipment will allow this high reliability
36. technology to be applied to larger/taller downtown buildings. Trial
37. installation of this equipment was deferred from FY2017 to FY2018 to allow a
38. new technology load-break primary switch to be developed (see above). This new
39. switch allowed a new transformer fault detection and interruption system to be
40. developed which will enable failing network units to self-isolate from the
41. network grid. 600V network protector development continued in FY2017 to enable
42. the protector switch to interrupt fault currents. Successful design
43. enhancements were undertaken after the unit failed initial testing in a high
44. current testing facility. New standards and operating practices required by
45. the new equipment were developed.
- 46.
47. Development of new Dual Radial Automation (DRA) equipment continued in FY2017
48. and will be trialed in FY2018. This new equipment provides remote monitoring
49. and control capabilities, as well as new operating modes including local
50. automatic transfer capabilities. DRA is intended to reduce interruptions
51. experienced by medium to large dual-radial supplied customers. The concept
52. incorporates enhancements to an existing proven switch design, combined with
53. newly developed control and SCADA equipment. New standards for DRA were
54. developed in FY2017. Operating and maintenance procedure development will
55. continue into FY2018.
- 56.
57. Other inter-related development activities included: Development of a portable
58. transformer phase testing device for use with 600V circuits ; Fully electronic

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

59. relays have been found to hesitate when de-energized as a result of emulated
60. performance of mechanical devices - preliminary exploration of electronic
61. relays with improved performance in extreme operations has begun in FY2017 and
62. will continue in FY2018; Communication systems revisions to box and radial
63. line loop design - applicable to 600V and existing network enhancements; FOC
64. and simulation tools; Swivel nut bus cable fastening methods; Electric
65. Interlocks on manual grounding switches; and Development of special network
66. relays and operating practices for DG systems.
67. A portion of the SR&ED effort claimed was performed by contractors (as
68. identified in Section D, line 268) working as part of the project team.

246 What scientific or technological advancements did you achieve or attempt to achieve as a result of the work described in line 244? (Maximum 50 lines)

1. THESL undertook to develop equipment to address the continuing challenges
2. associated with downtown network reliability. Advancements in new concepts and
3. methodologies would be derived in the course of development. In FY2017,
4. Toronto Hydro would gain insight and new understanding of:
5. Alternative silver-sand current limiting fuses and alloy type fuse concepts as
6. well as 600V flashover protection techniques from fuse and cable limiter
7. concepts.
8. Small chassis design concepts for protector applications - new adapter bus,
9. retro-fit and universal mechanism concepts developed.
10. Miniaturized SCADA device designs with quick-connect control wiring and new
11. fire detection capabilities.
12. Compact load-break primary switch (Eaton VisoVac) development and associated
13. knowledge from overcoming deficiencies in operating mechanisms, interlocking
14. and system mating challenges.
15. 347Y/600V network system concepts (fault detection techniques, self-isolation
16. strategies and other design enhancements) for power delivery applications in
17. larger and taller structures.
18. Understanding of dual radial automation equipment and development of remote
19. monitoring and control methodologies and SCADA integration strategies.
20.

Section C – Additional project information

Who prepared the responses for Section B?

253 1 ☒ Employee directly involved in the project

254 Name

255 1 ☐ Other employee of the company

256 Name

257 1 ☒ External consultant

258 Name

Deloitte LLP

259 Firm

Deloitte LLP

List the key individuals directly involved in the project and indicate their qualifications/experience.

260	Names	261	Qualifications/experience and position title
1			
2			
3			

265 Are you claiming any salary or wages for SR&ED performed outside Canada? 1 ☐ Yes 2 ☒ No

266 Are you claiming expenditures for SR&ED carried out on behalf of another party? 1 ☐ Yes 2 ☒ No

267 Are you claiming expenditures for SR&ED performed by people other than your employees? 1 ☒ Yes 2 ☐ No

If you answered **yes** to line 267, complete lines 268 and 269.

268	Names of individuals or companies	269	BN
1	KINECTRICS NORTH AMERICA INC.		

What evidence do you have to support your claim? (Check any that apply)

You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

- | | | | | | | | |
|------------|---|-------------------------------------|--|------------|---|-------------------------------------|--|
| 270 | 1 | <input checked="" type="checkbox"/> | Project planning documents | 276 | 1 | <input checked="" type="checkbox"/> | Progress reports, minutes of project meetings |
| 271 | 1 | <input checked="" type="checkbox"/> | Records of resources allocated to the project, time sheets | 277 | 1 | <input checked="" type="checkbox"/> | Test protocols, test data, analysis of test results, conclusions |
| 272 | 1 | <input type="checkbox"/> | Design of experiments | 278 | 1 | <input type="checkbox"/> | Photographs and videos |
| 273 | 1 | <input checked="" type="checkbox"/> | Project records, laboratory notebooks | 279 | 1 | <input type="checkbox"/> | Samples, prototypes, scrap or other artefacts |
| 274 | 1 | <input type="checkbox"/> | Design, system architecture and source code | 280 | 1 | <input checked="" type="checkbox"/> | Contracts |
| 275 | 1 | <input type="checkbox"/> | Records of trial runs | 281 | 1 | <input checked="" type="checkbox"/> | Others, specify 282 Invoices and Emails |

Part 2 – Project information (continued)

Project number 7

CRA internal form identifier 060

Code 1501

Complete a separate Part 2 for each project claimed this year.**Section A – Project identification****200** Project title (and identification code if applicable)

P06: Distribution system design standards development

202 Project start date

2011-01

Year Month

204 Completion or expected completion date

2019-12

Year Month

206 Field of science or technology code
(See guide for list of codes)

2.02.01

Electrical and electronic engineering

Project claim history

208 1 ☒ Continuation of a previously claimed project**210** 1 ☐ First claim for the project**218** Was any of the work done jointly or in collaboration with other businesses? 1 ☐ Yes 2 ☒ NoIf you answered **yes** to line 218, complete lines 220 and 221.**220** Names of the businesses**221** BN

1

Section B – Project descriptions**242** What scientific or technological uncertainties did you attempt to overcome?
(Maximum 50 lines)

1. THESL has sets of existing technical specifications and standards for the
2. equipment, materials and construction methods for both the underground and the
3. overhead portions of its overall power distribution network/grid. For the
4. past few years THESL has been subjected to increasing regulatory scrutiny by
5. the OEB and interveners participating in OEB proceedings. Such scrutiny
6. extends to design standards, equipment & materials specifications, and
7. construction practices. THESL therefore needed to know the degree to which
8. THESL's distribution standards differed from those of similar LDCs and where
9. differences existed whether or not they were justified given the unique
10. characteristics of Toronto and THESL. Experimental development involved a
11. number of studies performed with specific uncertainties listed below. The
12. uncertainties THESL faced were as follows:
13. How could it show the regulatory authorities that its technical design
14. standards, equipment & materials specifications, and construction practices
15. were comparable to those of other peer LDCs serving a mix of suburban & high
16. density urban load, and where differences existed, why they were justifiable
17. An evaluation of currently available new equipment that can potentially be
18. incorporated within underground residential distribution (URD) system within
19. the downtown core
20. The identification of asset classes predominantly involved with forced
21. outages, and whether or not these assets in the field are in full compliance
22. with current existing construction standards, standard practices & equipment
23. specifications, and
24. The upgrades and improvements needed for 2 existing key standard practices for
25. (a) Major Equipment Re-use, and (b) Equipment Failure Analysis Program.
26. Understanding how the grid was prepared for future expansion and development.
27. Pole loading is generally non-linear, and no software/modelling tools existing
28. that incorporate all potential scenarios. We sought to develop such a tool.
29. The impact of wrapping 1 & 3 phase transformers had an unknown impact on heat
30. dissipation and transformer life. A study was required to determine the
31. effects.
32. Failures take place in the field, that have unknown causes. We would fully
33. investigate and understand the potential causes of these failures.
34. Other uncertainties and challenges would emerge from potential failure modes
35. (reliability and repeatability) of evolving complex systematic distribution
36. system concepts and methodologies.
- 37.

242 What scientific or technological uncertainties did you attempt to overcome?
(Maximum 50 lines)

38.

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

- 1.
- 2.
3. In the previous FY trials were performed on a 600A switch which was intended
4. to fit within the confines of the legacy structure - the application was
5. energized and will be tested for reliability and repeatability. The activity
6. extended for adjacent 200A cascading systems. New infrastructure was
7. considered and evaluated to replace obsolete 80E fusing suitable for the
8. confined environment. Ongoing corrosion issues are being mitigated through
9. selection of marine grade steels and recommendations in maintenance practices
10. to minimize system impact.
- 11.
12. Reclosers - several scenarios of how reclosers could be best utilized on the
13. Toronto Hydro grid to increase system reliability continued to be explored.
14. The utilization of reclosers was further analysed through a research project
15. at the Centre for Urban Energy (CUE) at Ryerson in 2017. The CUE's project
16. outlined the requirements for reducing the number of momentary system
17. interruptions with modifications to station breaker relay settings and fibre
18. optic communication. Implementation of the two schemes is scheduled for 2018.
- 19.
20. LED technology was tested and new lighting standards developed. A remote
21. control and monitoring system for street lighting was tested and installed as
22. part of a pilot project. Based on 2016 American Medical Association's
23. opinion/guidance report for Correlated Colour Temperature (CCT) to be limited
24. to 3000K, recommendation by Toronto Public Health for 3000K followed, and led
25. to revision of technical specifications. In late 2017, conversion of street
26. lighting to LED was placed on hold, pending approval from the City.
- 27.
28. Dynamic cable management (DCM) is a statistical approach to assessing cable
29. segments by combining various trends and system information with the intent of
30. reducing in-service failures and improving reliability metrics. This is
31. accomplished by generating a prioritized list of high risk cable segments most
32. likely to fail in the following year. When this information is used in
33. conjunction with the newly developed advanced cable testing methodology, it
34. will help validate whether a complete area needs to be completely or partially
35. replaced, or simply deferred.
- 36.
37. Due to the complexities involved, the reliability model study has been broken
38. down into two distinct phases. Phase one looks into survival and regression
39. analysis, attempting to determine which statistical model best represents
40. Toronto Hydro's data. Phase two looks into the dynamic nature of the
41. distribution system and the resulting data generated. Machine learning
42. algorithms are incorporated into the tool to allow for algorithm flexibility
43. and ensure the model learns and adapts to changes in the distribution system
44. over time. This phase also involved collaboration with the University of
45. Waterloo to validate the underlying statistical approach and methodologies
46. used. As well, the results are being used to improve fidelity of the model.
47. Additionally, field testing will be incorporated into the model in 2018.
48. Grounding studies were carried out to resolve issues with several
49. installations of pad-mount equipment that could not meet construction
50. grounding standards. Primarily, this included installations above parking
51. foundations or in boulevards where clearance to other utilities could not be
52. maintained. Standards group initiated a study to develop alternative
53. grounding standards. Grounding studies were completed in late 2017. Based on
54. study results, alternative grounding designs with reduced separation to ground

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

55. loop and asphalt provision have been approved on case by case basis.
56.
57. A technical study on drainage and oil containment systems for transformers was
58. performed. The report was finalized in 2017. It outlined the most state-of-the
59. -art drainage systems that are used across the North American market. The
60. primary focus of this report was to identify well documented and reliable oil
61. containment solutions that could be implemented in our underground structures
62. that house oil containing equipment (Network Vaults and Submersible Vaults).
63. Some of the provided solutions were implemented by Toronto Hydro in trial
64. programs.
65.
66. Equipment wrapping - investigation to wrap the equipment in foliage / canvas
67. to improve asset masking - report [METSCO - 'Investigation of aesthetic
68. Appearance of Pad Mounted Transformers' (16-167-001-RV)]. This report was
69. completed in 2017 and it identified various solutions to conceal pad mounted
70. equipment. Many concealment techniques were developed, including hand
71. painting/ texture matching with surrounding landscapes, vegetation, artificial
72. panels and fencing. However the most widely used and durable solution was
73. found to be adhesive wraps. Toronto Hydro will overhaul the existing program
74. to make it more accessible to the public.
75.
76. Underground infrastructure - Reinforce aging vaults - Civil Structure
77. Additives. Trial test performed and a one year freeze thaw cycle to be
78. performed. Products specializing in freeze thaw resilience and reduced
79. permeability have been trialed in 2 vault locations. These products are
80. designed for remote applications with minimal additional materials and can
81. easily be applied on confined and lowlight jobsites. If performance is
82. acceptable, these products will be used moving forward for future concrete
83. structure repair projects. Corrosion studies were conducted and 5 standards
84. completed and will be piloted in 2018 for underground infrastructure.
85.
86.
87. City Place - investigation of equipment failures. In depth evaluation was
88. performed to complete a needs analysis for an engineering lab. The activity is
89. now considered complete.
90.
91. Work continued on the development of a modelling tool (City planning project)
92. to understand how feeders and transformer stations could be affected by future
93. city expansion. Development extended and testing of the tool in GIS software
94. was conducted with many filtering layers.
95.
96. Development of battery storage solutions, duct structures and dielectric
97. switchgear also continued. Contractors were used to assist with various
98. studies. Details are listed below in box 268.

246 What scientific or technological advancements did you achieve or attempt to achieve as a result of the work described in line 244? (Maximum 50 lines)

1. Advancements included:
2. - understanding the degree to which THESL's distribution standards differed
3. from those of similar LDCs and where differences existed whether or not they
4. were justified given the unique characteristics of Toronto and THESL.
5. - Determine what new equipment could potentially be incorporated into the
6. design standards for this application after appropriate field trials had been
7. held with satisfactory results.
8. - increased understanding of (1) the asset classes that were the predominant
9. contributors to forced outages, (2) compliance of these assets with current
10. standards/specifications, and (3) how 2 key standard practices could be
11. improved.

12. - Through development of a modelling tool, we obtained knowledge of how the
13. existing grid might respond to a wide range of future potential development
14. scenarios.
15. - Developed a web-based tool that can analyze all pole loading analysis
16. components, and developed modified design and construction standards to
17. incorporate the new tool.
18. - Developed a web-based tool that can voltage drop for both overhead and
19. underground systems and developed modified design and construction standards
20. to incorporate the new tool.
21. - Developed a temperature profile for pad-mounted transformers wrapped with a
22. graffiti-proof layer under a range of operating conditions.
23. - Through engineering studies on failed components, we gained knowledge of
24. potential failure causes for a wide range of equipment (splices, switches &
25. switchgear).
26. - Various investigation led to new methodologies and strategies in improving
27. reliability and repeatability of distribution system assets.
28.
29.
30.

Section C – Additional project information

Who prepared the responses for Section B?

253	1 <input checked="" type="checkbox"/> Employee directly involved in the project	254	Name	
255	1 <input type="checkbox"/> Other employee of the company	256	Name	
257	1 <input checked="" type="checkbox"/> External consultant	258	Name	259 Firm
			Deloitte LLP	Deloitte LLP

List the key individuals directly involved in the project and indicate their qualifications/experience.

260	Names	261	Qualifications/experience and position title
1			
2			
3			

- 265** Are you claiming any salary or wages for SR&ED performed outside Canada? 1 ☐ Yes 2 ☒ No
266 Are you claiming expenditures for SR&ED carried out on behalf of another party? 1 ☐ Yes 2 ☒ No
267 Are you claiming expenditures for SR&ED performed by people other than your employees? 1 ☒ Yes 2 ☐ No

If you answered **yes** to line 267, complete lines 268 and 269.

268	Names of individuals or companies	269	BN
1	METSCO ENERGY SOLUTIONS INC.		

What evidence do you have to support your claim? (Check any that apply)

You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

- | | |
|---|---|
| 270 1 <input checked="" type="checkbox"/> Project planning documents | 276 1 <input checked="" type="checkbox"/> Progress reports, minutes of project meetings |
| 271 1 <input checked="" type="checkbox"/> Records of resources allocated to the project, time sheets | 277 1 <input checked="" type="checkbox"/> Test protocols, test data, analysis of test results, conclusions |
| 272 1 <input type="checkbox"/> Design of experiments | 278 1 <input checked="" type="checkbox"/> Photographs and videos |
| 273 1 <input checked="" type="checkbox"/> Project records, laboratory notebooks | 279 1 <input type="checkbox"/> Samples, prototypes, scrap or other artefacts |
| 274 1 <input type="checkbox"/> Design, system architecture and source code | 280 1 <input checked="" type="checkbox"/> Contracts |
| 275 1 <input type="checkbox"/> Records of trial runs | 281 1 <input checked="" type="checkbox"/> Others, specify 282 Emails, invoices |

Part 2 – Project information (continued)Project number **8**

CRA internal form identifier 060

Code 1501

Complete a separate Part 2 for each project claimed this year.**Section A – Project identification****200** Project title (and identification code if applicable)

P07: Developing & applying smart metering systems, technique

202 Project start date

2009-07

Year Month

204 Completion or expected completion date

2018-12

Year Month

206 Field of science or technology code
(See guide for list of codes)

2.02.01

Electrical and electronic engineering

Project claim history

208 1 ☒ Continuation of a previously claimed project**210** 1 ☐ First claim for the project**218** Was any of the work done jointly or in collaboration with other businesses? 1 ☐ Yes 2 ☒ NoIf you answered **yes** to line 218, complete lines 220 and 221.**220** Names of the businesses**221** BN

1

Section B – Project descriptions**242** What scientific or technological uncertainties did you attempt to overcome?
(Maximum 50 lines)

1. The overall project objective/advancement sought was the knowledge and
2. capability to be able to deploy smart meters (SM) and Advanced Metering
3. Infrastructure (AMI), Ontario Energy Board (OEB) and Ministry of Energy and
4. Infrastructure specifications compliant, across the THESL distribution network
5. serving about 700,000 customers for automated meter reading of all
6. residential, commercial & industrial customers, with seamless & reliable end-
7. to-end data communications for settlement and billing purposes through a set
8. of IT application tools that performs consistently, and in a stable manner.
9. Key uncertainties were as follows:
10. - The performance of the application configuration and preferred arrangements
11. to implement smart metering for medium and large C & I customers to bring the
12. SM read data handling in-house instead of relying on external subcontractors,
13. - The performance of the approach to implement the Measurement Canada
14. requirement for cumulative readings on all TOU bills,
15. - Integration of other emerging requirements, e. g. for Smart Grid
16. applications, for EV metering, and accommodating the implementation of DG FIT
17. and micro-FIT systems with bi-directional metering, and
18. - Whether or not other improvements would be needed for the existing set of
19. S/W tools as an integral part of the technology development, implementation
20. and completion of smart metering for all types of C & I customers.
21. - Stability of suite meter AMI and meter read data for billing
22. - Smart Meter AMI system EA MS will form a legacy system
23. - Uncertainties derived from the development of ION meters, MDMR (meter data
24. management / repository), MWM - Mobile Workforce Management for metering
25. replacement/installation activities, and Smart Meter mesh systems (Synergy net
26. conversions)
- 27.

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

- 1.
2. The new add-on function, Power Status Check (PSC) was developed, tested and
3. added to EA MS. Upgrading to attempt to improve the communication methodology
4. was undertaken - a multichannel EA MS 9 Upgraded with GIS tool (AxisDetect),
5. and Batch Request Tools (Power Status Check, On Request Read, Remote
6. Connect/Disconnect) was pursued. Testing of the fault detection and resolution
7. with geographical data was conducted. Work would extend to include remote

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

8. connect/disconnect and batch reader capabilities.
9.
10. SmartSync meters reached their serviceable life due to of the retirement of
11. Roger's 2G network. These meters will be replaced with Itron Centron LTE
12. meters through to 2018. In this fiscal period Toronto Hydro completed the
13. requirement specification phase of the MV-STAR (upgrading - live September
14. 2017), MV-90 and MV-WEB (upgrading - live September 2017) upgrade to Itron's
15. new Itron Enterprise Edition (IEE).
16.
17. Testing continued throughout with the re-configured ODS, ESB and CC&B to allow
18. the billing of small C & I customers to be made from the SM reads with KWh and
19. KVARh register reads and peak demands - with fully converted meters from
20. manual reads to automated reads. By the end of the fiscal period we had
21. implemented small C&I billing with the data collected through smart meters for
22. small C&I customers and converted 30,000 of the 70,000 in FY2017 with the
23. remainder in FY2018. Ongoing investigation of the use of the practice can
24. mitigate power demand.
25.
26. THESL upgraded Primeread to attempt to support wireless transponders with
27. conversions to 4G ongoing in FY2017. THESL performed tests of the
28. enhancements to communicate with multiple transponders connected in a daisy-
29. chain, to perform ad-hoc export data to ODS, to export register data with mid-
30. night timestamps. Signal noise failures and data collection success rates
31. below expectations were observed and building retrofits from PLC to DLC were
32. tested.
33.
34. In FY2017 Toronto Hydro continued to implement new private apn for metering
35. systems - EA MS, Primeread and MV90 are all able to communicate to meters with
36. wireless communication capabilities. THESL replaced smart meter phoneline
37. gatekeepers with pole mount wireless gatekeepers with battery backup. The
38. wireless gatekeepers enables Rex 2 meters to report outages and restorations
39. in real time to the Outage Management System. We are coordinating the
40. installation of an additional 8,000 meters with last gasp capability (5,000
41. installations completed in 2017) to ensure that every transformer has a "last
42. gasp" capable meter connected to it. These meters will be identified as
43. redundant and may be used for transformer outage fault detection.
44.
45. Other notable work performed - High fidelity Schneider Electric ION meters
46. with wireless communication to MV-90 were examined and tested for integration
47. into the TH systems - ION implemented on 1MW+ customers with additional power
48. quality tools and grid management. MDMR (meter data management / repository) -
49. integration SME smart meter entity via IESO went live September 2017 -
50. subsequent Phase II for billing data. MWM - Mobile Workforce Management for
51. metering replacement/installation activity developed and initiated. In the
52. future an upgrade of Smart Meter mesh system will be undertaken (Synergy net
53. conversion) a 2020 completion timeframe was proposed. Gatekeepers may be
54. replaced with Routers and meters replaced with REXU pending investigations.
55. Rapid system synchronization capability is anticipated. In FY2018 we intend to
56. further integrate IESO Smart Meter Entity MDM/R for customers with TOU rates.
57. MV System upgrades are also planned as are revisions to the MWFM (C&I meter
58. processing).
59.
60. Contractors would assist on development efforts and are outlined in box 268.
61.
62.

246 What scientific or technological advancements did you achieve or attempt to achieve as a result of the work described in line 244? (Maximum 50 lines)

1. Virtually all residential customers are now on time-of-use (TOU) rates. The
2. related SM systems and practices have stabilized and their development can be
3. considered substantially complete. Residential customer AMI included a suite
4. of IT tools: (1) EnergyAxis Management System (EA MS), version 9.0, for
5. aggregating/managing readings, fed from gatekeepers (with uploaded meter data)
6. using dedicated wireless communication network, (2) Operations Data Store
7. (ODS), version 6.4, that takes/holds EA MS and Primeread data in an Oracle
8. database which interfaces with (a) a Customer Care & Billing System, and (b) a
9. customer accessible TOU Website, with IVR through and Enterprise Service Bus
10. (ESB) on a JBoss platform, (3) MoveIT, interfacing with the IESO's MDM/R
11. system, work in combination with IBM ESB to interface with EA MS, Primeread,
12. and CC&B, (4) MapInfo, a GIS using EA MS data to track all field SM hardware,
13. and (5) an interface with the Kubra i-docs software tool for ensuring
14. cumulative readings of customers' bills. Full implementation of PrimeStone's
15. AMI for Quadlogic suite meters - using power line carrier communications
16. within the buildings was somewhat completed, as was the improvement of
17. PrimeStone's AMI functionality, suite metering practices and procedures for
18. medium/large C & I customers. Some work in this area would continue, as would
19. upgrading EA MS versions and preparing to upgrade large C&I AMI MV systems to
20. IEE. Knowledge would be gained from Primeread enhancements, EA MS version
21. upgrades, MV systems upgrades, and a Mobile Meter workforce management (MWM)
22. system to automate the process of large volume of meter changes.
23.

Section C – Additional project information

Who prepared the responses for Section B?

253 1 ☒ Employee directly involved in the project**254** Name**255** 1 ☐ Other employee of the company**256** Name**257** 1 ☒ External consultant**258** Name

Deloitte LLP

259 Firm

Deloitte LLP

List the key individuals directly involved in the project and indicate their qualifications/experience.

260 Names**261** Qualifications/experience and position title

1 [REDACTED]

[REDACTED]

2 [REDACTED]

[REDACTED]

3 [REDACTED]

[REDACTED]

265 Are you claiming any salary or wages for SR&ED performed outside Canada? 1 ☐ Yes 2 ☒ No**266** Are you claiming expenditures for SR&ED carried out on behalf of another party? 1 ☐ Yes 2 ☒ No**267** Are you claiming expenditures for SR&ED performed by people other than your employees? 1 ☒ Yes 2 ☐ NoIf you answered **yes** to line 267, complete lines 268 and 269.**268** Names of individuals or companies**269** BN

1 The Bagg Group

[REDACTED]

What evidence do you have to support your claim? (Check any that apply)

You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

- | | | | | | | | |
|------------|---|-------------------------------------|--|------------|---|-------------------------------------|--|
| 270 | 1 | <input checked="" type="checkbox"/> | Project planning documents | 276 | 1 | <input checked="" type="checkbox"/> | Progress reports, minutes of project meetings |
| 271 | 1 | <input checked="" type="checkbox"/> | Records of resources allocated to the project, time sheets | 277 | 1 | <input checked="" type="checkbox"/> | Test protocols, test data, analysis of test results, conclusions |
| 272 | 1 | <input type="checkbox"/> | Design of experiments | 278 | 1 | <input type="checkbox"/> | Photographs and videos |
| 273 | 1 | <input checked="" type="checkbox"/> | Project records, laboratory notebooks | 279 | 1 | <input type="checkbox"/> | Samples, prototypes, scrap or other artefacts |
| 274 | 1 | <input checked="" type="checkbox"/> | Design, system architecture and source code | 280 | 1 | <input checked="" type="checkbox"/> | Contracts |
| 275 | 1 | <input checked="" type="checkbox"/> | Records of trial runs | 281 | 1 | <input checked="" type="checkbox"/> | Others, specify |
| | | | | 282 | | | Invoices & emails. |

Part 2 – Project information (continued)Project number **9**

CRA internal form identifier 060

Code 1501

Complete a separate Part 2 for each project claimed this year.

Section A – Project identification			
200 Project title (and identification code if applicable)			
P08: Distributed generation (DG) and Protection facilitation			
202 Project start date	204 Completion or expected completion date	206 Field of science or technology code (See guide for list of codes)	
2007-01 Year Month	2019-12 Year Month	2.02.01	Electrical and electronic engineering
Project claim history			
208 1 <input checked="" type="checkbox"/> Continuation of a previously claimed project 210 1 <input type="checkbox"/> First claim for the project			
218 Was any of the work done jointly or in collaboration with other businesses? 1 <input type="checkbox"/> Yes 2 <input checked="" type="checkbox"/> No			
If you answered yes to line 218, complete lines 220 and 221.			
220 Names of the businesses			221 BN
1			

Section B – Project descriptions	
242 What scientific or technological uncertainties did you attempt to overcome? (Maximum 50 lines)	
1. For 2017, the uncertainties would be derived from distributed generation (DG)	
2. development were as follows:	
3. - Developing and finalizing the standard for communication equipment that	
4. would maintain distribution system integrity and reliability and allow THESL	
5. to monitor/take appropriate corrective action during system contingencies,	
6. - Continuing connection impact assessments (CIA) for all proposed DG projects	
7. to determine the suitability of connecting to the distribution system,	
8. - Developing a forecast of near, medium and long term DG sites that will be	
9. connected to the THESL distribution system based on system technology, size	
10. and area of connection (station bus and feeder level),	
11. - Identifying jurisdictions that operate a distribution system similar to	
12. THESL, which have implemented a centralized monitoring and control system for	
13. DG sites, and understanding how the similarities and differences could relate	
14. to the THESL distribution system.	
15. - Identifying solutions that will allow for the integration of additional DG	
16. sites to the THESL distribution system (e.g. upgrading station protection	
17. systems and installing bus-transfer system at transformer substations,	
18. installing remote communication equipment at DG sites for monitoring and	
19. control), and	
20. - Developing and specifying a system tool that will enable power system	
21. simulation and which interfaces with Toronto Hydro's mapping system and	
22. enterprise systems to extract and build network models for analyzing key	
23. parameters needed to assess system conditions.	
24. Additional uncertainties that evolved over the course of development would	
25. stem from:	
26. -Integrating a growing number and capacity of renewable energy and energy	
27. storage projects with the distribution grid	
28. -Interconnecting large customer substations with rotating type generators and	
29. designs to improve interface and reliability with distributed generation	
30. - Interconnecting energy storage with inverter type connection and lithium ion	
31. batteries to provide ancillary services, load displacement and emergency	
32. backup power	
33. -Investigating and analyzing system disturbances impacting utility station	
34. protection systems and take corrective action to improve system reliability.	
35.	
36.	

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

1.
2.
3. To uphold the reliability/integrity of its distribution supply grid,
4. analysis/simulation studies continued. The Gateway assessment tool continued
5. with automated extraction of the network modelling (Including Primary networks
6. that detailed up to the distribution transformer and spot load and Primary &
7. Secondary networks with individual service points and secondary grid
8. networks). TH also facilitated studies for arc flash hazard analysis,
9. protective device coordination, contingency assessment, multi-case scenario
10. connections with distributed energy resources, and grid network modelling and
11. analysis. CYME Gateway now interfaces with Toronto Hydro's mapping system and
12. enterprise systems in order to extract and build the network model to better
13. analyze loading, fault levels and assess Distributed Energy Resources
14. connectivity within the distribution system. The system was deployed and will
15. be monitored for potential failure modes with intended completion in Q1 of
16. FY2018. Furthermore an Energy Center concept to provide a situational
17. awareness capability was initiated (with control room information flow and
18. field data access).
19.
20. Protection and Control of Distribution Grid ongoing development included
21. analysis tools and criteria for modernizing station protection at TS and MS's:
22. Developed Protection Philosophy to assist in the determination of feeder
23. protection relay settings for Transformer and Municipal Stations; Protection
24. relay enhancements and supply station transformer replacements with feeder
25. protection implications; Protection Philosophy analysis prepared with key
26. parameters including station sequence data, generator interconnections and
27. max/min protection scenarios; and Protection review process to improve feeder
28. settings given distribution system modifications, enhancements and generator
29. interconnection.
30.
31. Energy storage - Energy storage projects were developed to provide Toronto
32. Hydro with strategic ancillary capabilities to address system efficiency,
33. reliability and power quality, as well as Distributed Generation (DG) and
34. Electric Vehicle (EV) enablement in targeted areas of the Toronto Hydro
35. distribution system. Toronto Hydro also began working with Green Power Labs
36. Inc. on the deployment of Supervisory Predictive Control technology - The
37. supervisory grid controller may provide real time analysis and control
38. enabling the Battery Storage and Solar PV. Toronto Hydro also installed the
39. world's first grid-scale integrated pole mounted energy storage system (PMESS)
40. with lithium-ion batteries that charge during off-peak hours and discharge
41. during peak hours. TH continued to develop a prototype monitoring and control
42. interface for power quality that leverages energy storage and solar PV at the
43. Roding community center. Toronto Hydro also initiated energy storage initiative
44. with Metrolinx on the Eglinton Crosstown Transit for a 20MW/80MWh supply to
45. power the traction power system. Technical specifications were developed to
46. integrate the storage system with the Toronto Hydro feeder supplies from
47. Runnymede TS and Bermondsey TS. In FY2017 a phase 1 10 MW, 12MVA capacity of
48. energy storage concept was initiated. Preliminary design and technical
49. specifications were conceived to interconnect 4 utility points of common
50. coupling and 2 normal open points. In addition, synchronization of 8 points
51. along the transit system integrated into the design for evaluation of site
52. operation flexibility and reliability.
53.
54.
55. A portion of the SR&ED effort claimed was performed by contractors (as
56. identified in Section D, line 268) working as an integral part of the project
57. team.
58.

246 What scientific or technological advancements did you achieve or attempt to achieve as a result of the work described in line 244? (Maximum 50 lines)

1. Technological advancements involved integrating electricity production and
2. energy storage across THESL's distribution network. To connect distributed
3. generation (DG) units on the distribution grid, THESL needed to develop wired
4. and wireless solutions to enable remote monitoring and control. Different
5. options were necessary to enable the interconnection of both renewable and non
6. -renewable generation sources. The solutions would allow for the remote
7. monitoring and control of the majority of DG sites connected to the THESL
8. distribution system. Additional advancements realized over the course of
9. development included:
10. Developing energy storage connection methodology:
11. - Developing technical requirement for the interconnection of Energy Storage
12. Unit to help resolve localized system issues.
13. - Utilizing CYME to create system study models for the connection impact on
14. THESL's distribution system.
15. Developing Arc Flash hazard criteria and deployment approach:
16. - Existing arc flash hazard programs are suitable for Arc Flash Hazard (AFH)
17. calculation in local or small distribution system.
18. - TH worked with CYME closely in developing the existing CYME AFH module to
19. handle AFH calculation in large distribution system such as TH entire
20. distribution system.
21. Developing System Protection methodology, analysis tools and criteria for
22. modernizing station protection at TS and MS:
23. - Developed Protection Philosophy document to assist in the determination of
24. feeder protection relay settings for Transformer and Municipal Stations within
25. the distribution grid.
26. - Numerous protection relay enhancements and supply station transformer
27. replacements under way with feeder protection implications and settings
28. required to be addressed
29. - Protection Philosophy document prepared also serves as a technical guide
30. relating to the grid with key parameters including station sequence data,
31. generator interconnections and max/min protection scenarios.
32. - Protection review process in progress to improve feeder settings given
33. distribution system modifications, enhancements and generator and storage
34. interconnections.

Section C – Additional project information

Who prepared the responses for Section B?

253 1 ☒ Employee directly involved in the project**254** Name**255** 1 ☐ Other employee of the company**256** Name**257** 1 ☒ External consultant**258** Name

Deloitte LLP

259 Firm

Deloitte LLP

List the key individuals directly involved in the project and indicate their qualifications/experience.

260	Names	261	Qualifications/experience and position title
1			
2			
3			

265 Are you claiming any salary or wages for SR&ED performed outside Canada? 1 ☐ Yes 2 ☒ No**266** Are you claiming expenditures for SR&ED carried out on behalf of another party? 1 ☐ Yes 2 ☒ No**267** Are you claiming expenditures for SR&ED performed by people other than your employees? 1 ☒ Yes 2 ☐ No

If you answered yes to line 267, complete lines 268 and 269.		
268	Names of individuals or companies	269 BN
1	LES SOLUTIONS QUATRIC INC.	
2	METSCO ENERGY SOLUTIONS INC.	
3	SNC-LAVALIN INC.	

What evidence do you have to support your claim? (Check any that apply)

You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

- | | | | | | | | | | |
|------------|---|-------------------------------------|--|------------|---|-------------------------------------|--|------------|--------------------|
| 270 | 1 | <input checked="" type="checkbox"/> | Project planning documents | 276 | 1 | <input checked="" type="checkbox"/> | Progress reports, minutes of project meetings | | |
| 271 | 1 | <input checked="" type="checkbox"/> | Records of resources allocated to the project, time sheets | 277 | 1 | <input checked="" type="checkbox"/> | Test protocols, test data, analysis of test results, conclusions | | |
| 272 | 1 | <input type="checkbox"/> | Design of experiments | 278 | 1 | <input checked="" type="checkbox"/> | Photographs and videos | | |
| 273 | 1 | <input checked="" type="checkbox"/> | Project records, laboratory notebooks | 279 | 1 | <input type="checkbox"/> | Samples, prototypes, scrap or other artefacts | | |
| 274 | 1 | <input type="checkbox"/> | Design, system architecture and source code | 280 | 1 | <input checked="" type="checkbox"/> | Contracts | | |
| 275 | 1 | <input type="checkbox"/> | Records of trial runs | 281 | 1 | <input checked="" type="checkbox"/> | Others, specify | 282 | Invoices & emails. |

Part 2 – Project information (continued)Project number **10**

CRA internal form identifier 060

Code 1501

Complete a separate Part 2 for each project claimed this year.

Section A – Project identification**200** Project title (and identification code if applicable)

P10: Sustainable power generation systems development

202 Project start date

2007-04

Year Month

204 Completion or expected completion date

2018-12

Year Month

206 Field of science or technology code
(See guide for list of codes)

2.02.01

Electrical and electronic engineering

Project claim history

208 1 ☒ Continuation of a previously claimed project**210** 1 ☐ First claim for the project**218** Was any of the work done jointly or in collaboration with other businesses? 1 ☐ Yes 2 ☒ NoIf you answered **yes** to line 218, complete lines 220 and 221.**220** Names of the businesses**221** BN

1

Section B – Project descriptions**242** What scientific or technological uncertainties did you attempt to overcome?
(Maximum 50 lines)

1. THESL wanted to further develop its capability to design & develop
2. commercially viable sustainable systems to generate electricity, and which
3. capture all of a specific site's potential; given the actual resources
4. available.
5. The obstacles and uncertainties related to wind resources:
6. (1) Keeping the off-shore wind research platform in Lake Ontario in service
7. and operate continuously over the year even under extreme weather conditions,
8. such as high winds (>100 km/h), high waves (>5m waves) and cold temperatures
9. (<-15C) causing icing and additional loading of equipment. Project study is
10. completed.
11. (2) Removal of the platform from Lake Ontario after 2 years of data
12. collection, if no other use for it can be found. Project is completed and
13. decommissioned.
14. (3) Monitoring of the performance of the control/converter system of the
15. demonstration WTG in operation at Exhibition Place to determine if a
16. replacement more reliable control/converter system was warranted. Generator
17. stator failure occurred in 2017 which required novel, in-situ up-tower
18. repair/replacement. Project returned in-service in 2018.
19. For PV systems, uncertainties related to:
20. (1) establishing the potential capacity of a proposed rooftop host site given
21. an assessment of its current condition/possible rehabilitation/upgrading;
22. Project completed and now commercially available satellite-based software used
23. to evaluate rooftops.
24. (2) preparing FIT and micro-FIT applications for acceptance with sufficient
25. system concept definition to assure a high probability of acceptance; CYME
26. Gateway software integration developed in 2017 for interconnection review of
27. projects.
28. (3) determining detailed system design including circuit design, metering, and
29. grid protection, to support IESO programs and pass ESA inspection and utility
30. requirements.
31. (4) meeting system design performance targets in-service; Energy Centre in
32. development in 2017 for real-time monitoring/forecast of PV systems will
33. continue through 2018.
34. For Biogas systems, uncertainties related to:
35. (1) establishing the potential capacity of a depleting fuel resource; project
36. on-hold in 2018 due to site construction
37. (2) determining the scaling factors involved of various power generation

242 What scientific or technological uncertainties did you attempt to overcome?
(Maximum 50 lines)

38. methods
39. (3) understanding the technological obstacles of utilizing a 'dirty' fuel
40. resource which must be de-watered and filtered to remove corrosive impurities
41. prior to combustion in a power generating unit
42. (4) Monitoring performance and meeting system design performance targets in-
43. service.
44. For energy storage activities uncertainties related to a "HydroStor" 660kW,
45. 330kWh underwater-compressed air energy storage system would also need to be
46. resolved.
47. Furthermore, new energy storage options with regard to large-scale industrial
48. batteries and co-generation integration would expose TH to new levels of
49. uncertainties in future fiscal periods.

244 What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242?
(Summarize the systematic investigation or search) (Maximum 100 lines)

1.
2. PV Solar:
3. PV Solar activities continued in FY2017 with monitoring and analysis of
4. systems and data in attempts to improving the understanding of the effects on
5. the distribution network and maintenance cycles. Specialized modified
6. structures (elevated truss systems or ETS) were conceptualized, designed and
7. tested in applications where the site roof structures could not support the
8. load of convention TH installations. Group C projects with ETSS (about 10
9. projects in FY2017) had challenges with site-specific issues which were
10. eventually resolved with the advent of new methodologies. PV solar
11. applications will continue to be evaluated for operational impact and
12. reliability.
13.
14. Off-shore wind development activities was on-hold through FY2017 given the
15. continued off-shore development moratorium in Ontario.
16.
17. Bio-Gas Development: Generally, activities on Bio-gas system development
18. remained on hold with development to be resumed on three main initiatives:
19. - Ashbridges Treatment Plant (ABTP), Green Lane, and Keele Valley - in each
20. case TH would attempt to resolve technical constraints from low EROEI (Energy
21. Return on Energy Invested) resources.
22. - ABTP 10MW biogas resource. The design concept was completed although
23. challenges with other infrastructure assets were encountered. A possible
24. mitigation strategy developed a tunneling concept involving horizontal
25. drilling through bedrock to avoid any possible interferences - this approach
26. is unique for a biogas application. Site challenges remain concerning
27. construction interface with other infrastructure projects.
28. - The Green Lane 8MW landfill gas resource - the present challenge for all
29. alternative generation and distribution systems stem from the taper of FIT
30. (feed in tariff) funding and the present extremely low cost of conventional
31. fossil fuel generation systems. The Green Lane application is a landfill
32. source of mixed CO2 and 'dirty' natural gas which must be separated for use in
33. power generation - the extra step and increased maintenance requirement adds
34. costs to the system despite the green-house gas reduction potential.
35.
36. Hydrostor:
37. In this fiscal period, THESL continued working with Hydrostor to observe
38. system operation. This project is considered to be a temporary, scientific
39. research project with the goal of testing and validating this underwater
40. compressed air energy storage technology for future use. This system will
41. also be used to analyze, understand and document the potential benefits that
42. bulk energy storage can provide for THESL and the grid. Preliminary trials
43. have been conducted and observations made. The system is capable of producing

244	What work did you perform in the tax year to overcome the scientific or technological uncertainties described in line 242? (Summarize the systematic investigation or search) (Maximum 100 lines)
44.	650kW and provides 330kWh of storage. The operating trip efficiency was noted
45.	to be under 60%. The pilot demonstrated that the system is feasible, however,
46.	scaling efficiencies would be necessary. It was also observed that with a 5
47.	minute start up and shut down process lag the storage technique was less
48.	flexible than battery storage. Overcoming and mitigating these observations
49.	would be the focus of ongoing development. In FY2016 - a small capacity
50.	expansion and phase-changing material for the heat recovery system were
51.	tested. In FY2017 high water levels on the Island prevented capacity expansion
52.	plans and the system is now planned for decommissioning in 2018.
53.	
54.	Energy Storage:
55.	In this fiscal period, a medium size project, CES2, has been implemented with
56.	a 500kW/500kWh lithium-ion battery storage unit installed at 500
57.	Commissioner's. A 30kW/30kWh pole mount energy storage system has been
58.	explored (with Ryerson). Operating characteristics and integration and
59.	resilience with the distributed generation systems are being studied. Larger
60.	energy storage solutions were developed for FY2017, including the Eglinton
61.	Crosstown LRT project with capacity of 10MW/30MWh which is in detailed design
62.	in 2018. Projects are underway to re-purpose a surplus municipal station
63.	(Bulwer MS) and utilize a 2MW/8MWh energy storage system to defer station
64.	capacity expansions at Cecil TS. Limitations in the legacy structure pose
65.	technical challenges and are being addressed. Future projects include mobile
66.	energy storage solutions utilizing a mobile truck/trailer in 2018.
67.	
68.	FY2017 - Studies continued for Irving Cogen/Storage concerning a 30MW cogen
69.	and 30MW/7.5MWh storage application (to address energy costs and power
70.	quality/resiliency) and Sunnybrook 15MW/4MWh storage application (for
71.	reliability and power quality). Sunnybrook storage is entering detailed design
72.	in 2018. Work was contracted with Ryerson CUE to perform technical review and
73.	simulation to evaluate whether tuned reactors and capacitors would improve
74.	battery storage systems. The target for power quality improvement was set at
75.	95% using storage solutions at the customer load. Power Advisory group
76.	subcontracted to perform market/technology review. Several customer hosted
77.	energy storage feasibility studies were developed in 2017 to reduce global
78.	adjustment (GA) costs, improve resiliency and provide emergency power. Further
79.	investigation is required to provide more economic solutions.
80.	
81.	Electrification:
82.	In this fiscal period, several electric vehicle charging applications were
83.	developed to address curb-side parking challenges, multi-residential parking
84.	challenges and integrate load controls with charging systems to manage grid
85.	demand impacts. Work has also been focused on developing infrastructure for
86.	electric bus vehicles with integrated energy storage and load controls. Work
87.	will continue on these initiatives in 2018 with curb-side pilots, parking lot
88.	pilots and bus pilots.
89.	A portion of the SR&ED effort claimed was performed by contractors (as
90.	identified in Section D, line 268) working as part of the project team.

246	What scientific or technological advancements did you achieve or attempt to achieve as a result of the work described in line 244? (Maximum 50 lines)
1.	The performance of THESL's first wind turbine generator at Exhibition Place
2.	was a concern - in FY2017 the generator winding of the unit was repaired in-
3.	situ. The turbine has been returned in-service in 2018 using a novel up-tower
4.	method.
5.	For PV Solar, experimental development continued with monitoring and analysis
6.	activity. Work pertaining to unique structures and applications have been
7.	conducted and new knowledge gained. Elevated Truss Structure (ETS) for low
8.	capacity roofs has been incorporated into 10 solar projects in FY2017.

9. For bio-gas fueled systems, THESL developed innovative directional drilling of utility services across deep infrastructure.
11. For the underwater, compressed air pilot, it has demonstrated potential bulk storage benefits but also confirmed the storage medium has not been robust enough for the underwater environment. Phase change materials have been implemented and tested in this system and found to provide greater heat storage and fewer low temperature operating concerns.
16. Also in FY2017, work on dispatch algorithms to improve performance of solar projects provided higher production. Initial simulation concepts and modeling work for energy storage designs for mid and large project applications were devised and will be further explored in FY2018 with research on storage applications for transit projects including light rail and bus vehicles.

Section C – Additional project information

Who prepared the responses for Section B?

253	1 <input checked="" type="checkbox"/> Employee directly involved in the project	254	Name	
255	1 <input type="checkbox"/> Other employee of the company	256	Name	
257	1 <input checked="" type="checkbox"/> External consultant	258	Name	259 Firm
			Deloitte LLP	Deloitte LLP

List the key individuals directly involved in the project and indicate their qualifications/experience.

260	Names	261	Qualifications/experience and position title
1			
2			
3			

- 265** Are you claiming any salary or wages for SR&ED performed outside Canada? 1 ☐ Yes 2 ☒ No
- 266** Are you claiming expenditures for SR&ED carried out on behalf of another party? 1 ☐ Yes 2 ☒ No
- 267** Are you claiming expenditures for SR&ED performed by people other than your employees? 1 ☒ Yes 2 ☐ No

If you answered **yes** to line 267, complete lines 268 and 269.

268	Names of individuals or companies	269	BN
1	CEATI INTERNATIONAL INC.		

What evidence do you have to support your claim? (Check any that apply)

You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

- | | |
|---|--|
| 270 1 <input checked="" type="checkbox"/> Project planning documents | 276 1 <input checked="" type="checkbox"/> Progress reports, minutes of project meetings |
| 271 1 <input checked="" type="checkbox"/> Records of resources allocated to the project, time sheets | 277 1 <input checked="" type="checkbox"/> Test protocols, test data, analysis of test results, conclusions |
| 272 1 <input type="checkbox"/> Design of experiments | 278 1 <input checked="" type="checkbox"/> Photographs and videos |
| 273 1 <input checked="" type="checkbox"/> Project records, laboratory notebooks | 279 1 <input type="checkbox"/> Samples, prototypes, scrap or other artefacts |
| 274 1 <input type="checkbox"/> Design, system architecture and source code | 280 1 <input checked="" type="checkbox"/> Contracts |
| 275 1 <input checked="" type="checkbox"/> Records of trial runs | 281 1 <input checked="" type="checkbox"/> Others, specify 282 Presentations, e-mails and W.O. detail |

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

RESPONSES TO OEB STAFF INTERROGATORIES

INTERROGATORY 142:

Reference(s): Exhibit 4B, Tab 2, Schedule 1, p. 1
Exhibit 4B, Tab 2, Schedule 3
Exhibit 1B, Tab 4, Schedule 1, p. 9
PILs Model

- a) Please provide a reference to where the investment tax credits of \$1.9 million are shown in the OM&A budget (Exhibit 4B / Tab 2 / Schedule 1 / p. 1).
- b) Please file the 2017 Corporate Tax Return.
- c) Toronto Hydro has not provided its PILs calculations for all years of the proposed Custom IR term. Currently only the 2020 calculations have been filed on the record of this proceeding. Please provide the PILs calculation for 2021-2024 in order to support the PILs amounts being sought in the C-factor for those years (Exhibit 1B / Tab 4 / Schedule 1 / p. 9).
- d) Please provide all supporting schedules for the 2021-2024 PILs calculations, including CCA continuities for each year.

RESPONSE:

- a) The Investment Tax Credits of \$1.9 million are shown as part of the Common Costs and Adjustments program in Exhibit 4A, Tab 2, Schedule 20.

- 1 b) Please refer to Appendix A for the 2017 Corporate Tax Return. Note that parts of the
2 document have been redacted for confidentiality purposes.
3
4 c) Please refer to Appendix B for the PILs calculations for 2021-2024.
5
6 d) Please refer to part (c) above and refer to Appendix C for CCA continuities for 2021-
7 2024.

RESPONSES TO ND HANN INTERROGATORIES

1

2

3 **INTERROGATORY 108:**

4 **Reference(s):** **Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,**

5 **UPDATED, p. 17 of the PDF file, lines 6-9, section 242**

6

7 What is the Definition of Extreme Weather used by THESL?

8

9

10 **RESPONSE:**

11 Please refer to Toronto Hydro's response to interrogatory 1B-Hann-1.

RESPONSES TO ND HANN INTERROGATORIES

1

2

3 **INTERROGATORY 109:**

4 **Reference(s):** **Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,**

5 **UPDATED, p. 17 of the PDF file, lines 6-9, section 242**

6

7 Is the definition of Extreme Weather consistent throughout the evidence?

8

9

10 **RESPONSE:**

11 Please refer to Toronto Hydro's response to interrogatory 1B-Hann-1.

RESPONSES TO ND HANN INTERROGATORIES

1

2

3 **INTERROGATORY 110:**

4 **Reference(s):** **Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,**

5 **UPDATED, p. 17 of the PDF file, lines 6-9, section 242**

6

7 Why is >100 km/h considered high winds in this project?

8

9

10 **RESPONSE:**

11 The project in respect of which this question is being asked is a non-rate regulated

12 business activity and is not within the scope of this application.

RESPONSES TO ND HANN INTERROGATORIES

INTERROGATORY 111:

Reference(s): Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,
UPDATED, p. 17 of the PDF file, lines 6-9, section 242

Are greater than 5m waves considered outside the operating parameters for Great Lake
Shipping?

RESPONSE:

The project in respect of which this question is being asked is a non-rate regulated
business activity and is not within the scope of this application.

RESPONSES TO ND HANN INTERROGATORIES

1

2

3 **INTERROGATORY 112:**

4 **Reference(s):** Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,

5 **UPDATED, p. 17 of the PDF file, lines 6-9, section 242**

6

7 Why was -15C chosen?

8

9

10 **RESPONSE:**

11 The project in respect of which this question is being asked is a non-rate regulated

12 business activity and is not within the scope of this application.

RESPONSES TO ND HANN INTERROGATORIES

1

2

3 **INTERROGATORY 113:**

4 **Reference(s):** **Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,**

5 **UPDATED, p. 17 of the PDF file, lines 6-9, section 242**

6

7 What are the design parameters for the wind platform?

8

9

10 **RESPONSE:**

11 The project in respect of which this question is being asked is a non-rate regulated

12 business activity and is not within the scope of this application.

RESPONSES TO ND HANN INTERROGATORIES

1

2

3 **INTERROGATORY 114:**

4 **Reference(s):** **Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,**

5 **UPDATED, p. 17 of the PDF file, lines 6-9, section 242**

6

7 What codes and/or data were the design parameters based on?

8

9

10 **RESPONSE:**

11 The project in respect of which this question is being asked is a non-rate regulated

12 business activity and is not within the scope of this application.

RESPONSES TO ND HANN INTERROGATORIES

1

2

3 **INTERROGATORY 115:**

4 **Reference(s):** **Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,**

5 **UPDATED, p. 22 of the PDF file, lines 1-11, section 242**

6

7 **Why does THESL believe it cannot design its distribution system for storm days?**

8

9

10 **RESPONSE:**

11 Please refer to Toronto Hydro's response to interrogatory 1B-Hann-8.

RESPONSES TO ND HANN INTERROGATORIES

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

INTERROGATORY 116:

**Reference(s): Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,
 UPDATED, p. 22 of the PDF file, lines 1-11, section 242**

What is THESL's the definition of a storm day?

RESPONSE:

"Storm days" is used to broadly refer to adverse weather events including those described in Exhibit 2B, Section A4, page 13. These may include, but are not limited to, any storm events with high winds, heavy rain, freezing rain, etc.

Please also refer to Toronto Hydro's response to interrogatory 1B-Hann-1.

RESPONSES TO ND HANN INTERROGATORIES

1

2

3 **INTERROGATORY 117:**

4 **Reference(s):** **Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,**

5 **UPDATED, p. 22 of the PDF file, lines 1-11, section 242**

6

7 Did the storm hardening using covered cables prevent vegetation interruptions?

8

9

10 **RESPONSE:**

11 Using tree proof conductors can reduce vegetation interruptions such as tree/brush

12 contacts. However, they will not prevent customer interruptions as a result of downed

13 lines caused by trees. Please see Exhibit 2B, Section D2.1.2 for further details on climate,

14 weather, and storm hardening.

RESPONSES TO ND HANN INTERROGATORIES

INTERROGATORY 118:

**Reference(s): Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,
UPDATED, p. 26 of the PDF file, lines 5-15, section 242**

Was the methodology developed by a subcontractor tested against the 25 years 1993 to 2017, using data from 1968 to 1992 or any period of time (eg 10 year periods) that would be reasonable to test the methodology? If yes, how did the predicted data correlate with the actual results?

RESPONSE:

Yes, the methodology was tested. For the details of the methodology, data assumptions, and correlation with actual results, please follow the link provided in Exhibit 2B, Section B2.1 for the Central Toronto IRRP – Appendices, see Appendix B: Toronto Hydro Spatial Load Forecast Methodology, October 2012, pages 9 to 12.

RESPONSES TO ND HANN INTERROGATORIES

INTERROGATORY 119:

Reference(s): Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,
UPDATED, p. 47 of the PDF file, lines 41-55, section 244

How many pole mounted wireless gatekeeper have been physically or electronically
damage during storm events?

RESPONSE:

Toronto Hydro does not have records of any gatekeepers damaged due to storm events.

RESPONSES TO ND HANN INTERROGATORIES

INTERROGATORY 120:

**Reference(s): Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,
UPDATED, p. 47 of the PDF file, lines 41-55, section 244**

What was the time to restore the gatekeeper?

RESPONSE:

Please refer to Toronto Hydro's response to interrogatory 4B-Hann-119.

RESPONSES TO ND HANN INTERROGATORIES

1

2

3 **INTERROGATORY 121:**

4 **Reference(s):** **Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,**

5 **UPDATED, p. 47 of the PDF file, lines 41-55, section 244**

6

7 What was the cost to restore the gatekeeper?

8

9

10 **RESPONSE:**

11 Please refer to Toronto Hydro's response to interrogatory 4B-Hann-119.

RESPONSES TO ND HANN INTERROGATORIES

INTERROGATORY 122:

**Reference(s): Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,
UPDATED, p. 47 of the PDF file, lines 41-55, section 244**

a) This work was done in 2015, tested in 2016, additional meters were installed in 2017 and 2018. The evidence states that “The outage / 47. restoration event data can be fed to Outage Management System.” Is it fed or is it not fed to the Outage Management System. [sic]

b) If not, why not and when will it operational?

RESPONSE:

a) Toronto Hydro completed phase 1 of the Network Management System (NMS) upgrade in 2018 and looks to integrate “last gasp” data in the new NMS system during NMS Phase 2 (2019-2020).

b) Please refer to response (a).

RESPONSES TO ND HANN INTERROGATORIES

INTERROGATORY 123:

**Reference(s): Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,
UPDATED, p. 38 of the PDF file, lines 1-10, section 242**

The evidence states “THESL's network distribution system, used in the downtown core, is the most 2. reliable distribution system in use in the city of Toronto. Most feeder and 3. equipment failures do not result in any interruption to customers.” [sic]

a) Is this because the downtown core is an underground system?

b) Is the system not exposed to tree damage to the infrastructure or

c) Are there other reasons?

RESPONSE:

a) The network distribution system experiences certain reliability benefits from being situated underground. However, the main contributor to the network distribution system's superior reliability is its unique ability to tolerate the loss of one or more primary feeders, network units, or secondary distribution cables without any interruption to customers. The network system has also been designed with the ability to self-isolate most faults without requiring human intervention. The attributes and benefits of Toronto Hydro's network distribution system are described in Exhibit 2B, Sections D2.2.3 and E6.4.

- 1 b) The network distribution system is largely isolated from damage caused by trees.
- 2
- 3 c) See response to part (a).

RESPONSES TO ND HANN INTERROGATORIES

INTERROGATORY 124:

Reference(s): Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,
UPDATED, p. 38 of the PDF file, lines 1-10, section 242

Does the “submerible protector” work? If yes, what is the plan for implementing in flood prone areas? [sic]

RESPONSE:

Submersible network protector cases are indeed effective at keeping flood waters away from sensitive protector mechanisms. Toronto Hydro plans to replace *all* non-submersible network protectors (i.e. fibertop, ventilated and semi-dust-tight types) located in underground vaults with submersible types, prioritizing flood prone areas. The percentage of submersible protectors is expected to increase to 75% by the end of 2024.

RESPONSES TO ND HANN INTERROGATORIES

INTERROGATORY 125:

**Reference(s): Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,
UPDATED, p. 44 of the PDF file, lines 1-11, section 246**

a) What are the differences between “THESL's distribution standards and 3. those of similar LDCs and where differences existed whether or not they 4. were justified given the unique characteristics of Toronto and THESL?” [sic]

b) What is the definition of the cause of failure for the predominant asset classes?

RESPONSE:

a) The reference refers to an independent third-party review of Toronto Hydro’s distribution standards that was carried out in 2014. This review, which was included in Toronto Hydro’s 2015-2019 CIR application (EB-2014-0116, Exhibit 2B, Section D, Appendix B) states: “...THESL’s Standards were found by PSE and LHB to be thorough, well documented, and consistent with what is seen in the industry throughout North America.”

b) Between 2013 and 2017, forced (i.e. unplanned) outages were predominantly caused by defective equipment. Defective equipment contributed to 36 percent and 44 percent of SAIFI and SAIDI respectively.

RESPONSES TO ND HANN INTERROGATORIES

1

2

3 **INTERROGATORY 126:**

4 **Reference(s):** **Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,**

5 **UPDATED, p. 44 of the PDF file, lines 1-11, section 246**

6

7 Did the loads exceed the design standard with overload factor?

8

9

10 **RESPONSE:**

11 Please refer to Toronto Hydro's response to interrogatory 1B-Hann-8.

RESPONSES TO ND HANN INTERROGATORIES

1

2

3 **INTERROGATORY 127:**

4 **Reference(s):** **Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,**

5 **UPDATED, p. 44 of the PDF file, lines 1-11, section 246**

6

7 What are the standards listed in (2) line 9 and 10?

8

9

10 **RESPONSE:**

11 The standards listed are distribution construction standards that have been reviewed by

12 Power System Engineering, Inc. ("PSE"), an independent third party. Please refer to

13 Exhibit 2B, Section D, Appendix B for a copy of PSE's Standards Review – 2018 Update for

14 further details.

RESPONSES TO ND HANN INTERROGATORIES

INTERROGATORY 128:

Reference(s): Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,
UPDATED, p. 45 of the PDF file, lines 23-27, section 246

What are the failure causes for the studied equipment, by equipment type?

RESPONSE:

Please see Tables 1 and 2 below.

Table 1: Failure Causes by Equipment Type

Equipment Type	Root Causes
Transformer, CSP	Unknown, End of Life, Known Issue, Process, External
Transformer, Network	Unknown, Secondary Failure, End of Life, Process, Supplier Quality, External
Transformer, Padmount	Process, End of Life, External, Unknown, Lightning Strike, Supplier Quality, Secondary Failure, Overload, Overvoltage
Transformer, Polemount	End of Life, External, Process, Unknown, Supplier Quality, Secondary Failure, Lightning Strike, Overload, Overvoltage, Known Issue, Shipping & Handling, Compliance
Transformer, Station	End of Life
Transformer, Submersible	Supplier Quality, Process, End of Life, Overload, External, Secondary Failure, Unknown, Lightning Strike, Known Issue, Shipping & Handling, Overvoltage
Transformer, Vault	End of Life, Supplier Quality, External, Unknown, Overload, Secondary Failure, Known Issue, Process, Overvoltage, Shipping & Handling
Transformer, Other	External, Supplier Quality, Process, Overload, End of Life, Unknown, Lightning Strike
Circuit Breaker	End of Life, Process, Unknown, External

Equipment Type	Root Causes
Switchgear	Supplier Quality, Process, External, Unknown, End of Life, Secondary Failure, Known Issue
Switch, Manual	Unknown, External, Process, Supplier Quality, End of Life, Lightning Strike
Switch, SCADA	Unknown, Supplier Quality, Process, Known Issue, External, End of Life, Shipping & Handling
Switch, Other	Unknown, Supplier Quality, End of Life, Process, External, Known Issue
Network Protector	Process, Supplier Quality, External, Unknown
Pole, Guy Wire, Anchor	Process, End of Life, External, Unknown, Supplier Quality, Secondary Failure, Lightning Strike, Overload, Overvoltage, Known Issue, Shipping & Handling, Compliance
O/H Conductor Hardware	Supplier Quality, Process
Surge/Lightning Arrester	Unknown, External, Supplier Quality, Known Issue, End of Life
Insulator	Unknown, External, End of Life, Supplier Quality, Known Issue, Process
Cable	Unknown, End of Life, Process, External, Supplier Quality, Secondary Failure, Known Issue, Overload, Compliance
Splice/Termination	Process, Unknown, Supplier Quality, Secondary Failure, End of Life, External, Overload, Compliance
Fuse	Supplier Quality, Process, Known Issue, Unknown, External,
Crew Equipment/Tools	Supplier Quality, Process, End of Life, Unknown, Known Issue, External
Metering	Supplier Quality, Process, End of Life, Unknown, External
Misc. Vault Equipment	External, Supplier Quality, End of Life, Known Issue, Process
Communication	Supplier Quality, End of Life, Process, Secondary Failure, Known Issue, External, Unknown
Other	External, Unknown, Process, Supplier Quality, End of Life

1 **Table 2: Failure Cause Definitions**

Root Cause	Definition
Process	Caused by an internal process; may be further subcategorized as an issue with the design, installation, maintenance, operation, or standards/specifications.
Supplier Quality	Caused by the supplier/manufacturer; includes manufacturing issues, insufficient or lack of manufacturing procedures, product design, inadequate packaging, or damage from supplier, final inspection failure, failed/incorrect test reports.
End of Life	Unit has met or exceeded its useful life.
Unknown	Not enough information to root cause the failure.
External	Caused by events/conditions outside of the failed asset; includes animal contact, corrosion, contamination, extreme weather (for major event days), hit by vehicle, triggered by another failure, tampering (stealing, vandalism), and tree contact.
Overload	The unit was overloaded.
Secondary Failure	Failure on the secondary triggered a failure of the asset.
Known Issue	This is a known issue that has been investigated before and programs are already in place to correct this issue from future occurrence.
Lightning Strike	Lightning strike caused damage to the asset through means of overvoltage.
Overvoltage	Lightning/Switching/Other – failed due to transients or surges.
Shipping & Handling	Damage caused by shipping and handling within our own facilities or from our suppliers.
Compliance	Failed due to lack of adherence to standards.

RESPONSES TO ND HANN INTERROGATORIES

INTERROGATORY 129:

Reference(s): Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,
UPDATED, p. 45 of the PDF file, lines 23-27, section 246

What are the “new methodologies and strategies in improving 27. reliability and repeatability of distribution system assets”? [sic]

RESPONSE:

To drive improvements to standards and equipment, and thus improve the reliability of distribution system assets, Toronto Hydro develops strategies by investigating distribution equipment failures and identifying and analyzing the root cause (using the Root Cause Analysis (RCO) methodology). Depending on the nature of the root cause identified, various preventative actions can be used to mitigate reoccurrences of the same failure mode.

For example, if the root cause stems from a manufacturing defect, Toronto Hydro coordinates with the manufacturer to implement preventative measures at the facility and to perform manufacturing audits to verify the effectiveness of the measure(s).

Where the root cause is attributed to an internal process issue, Toronto Hydro may release a bulletin, engage the relevant personnel in a safety meeting, or consider updating its Construction Standards and/or purchasing specifications.

For more details on Toronto Hydro’s standards and practice review process, please refer to Exhibit 2B, Section D1.2.5.

RESPONSES TO ND HANN INTERROGATORIES

INTERROGATORY 130:

**Reference(s): Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,
UPDATED, p. 34 of the PDF file, lines 22-27, section 242**

Does this statement “(B) Significant customer- 26. minutes-out improvements by reporting outages to the control room” mean that THESL has improved its control room management of interruptions? [sic]

RESPONSE:

No. The statement at the reference provided is made in the context of a 2016 tax filing and describes an anticipated benefit of installing Power Line Monitors (PLM).

RESPONSES TO ND HANN INTERROGATORIES

1

2

3 **INTERROGATORY 131:**

4 **Reference(s):** **Exhibit 4B, Tab 2, Schedule 3 – 2016 Tax Return REDACTED,**

5 **UPDATED, p. 34 of the PDF file, lines 22-27, section 242**

6

7 What does “Reduction of momentary outages.” refer to?

8

9

10 **RESPONSE:**

11 Reduction of momentary outages refers to decreasing the frequency of interruptions that

12 last less than one minute.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION
INTERROGATORIES

INTERROGATORY 48:

Reference(s): **Exhibit 4B, Schedule 1, Appendix C**

a) Please explain for each of the USoA accounts for which THESL is proposing to use a TUL below the Kinectrics recommended value, the reason for the difference and what studies were undertaken in support of the departure from the Board's standard depreciation values.

RESPONSE:

Please refer to Toronto Hydro's response to interrogatory 4B-Staff-139 (a).

**RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION
INTERROGATORIES**

INTERROGATORY 49:

Reference(s): Exhibit 4B, Tab 1, Schedule 1, Appendix A

- a) Please explain the reasons for the increase in total depreciation expense for Account 1609 "Capital Contributions paid, which has risen from \$1.127 million in 2015 to \$8.781 million in 2020 (forecast).
- b) Please provide an explanation for the similarly large increase in depreciation expense for account 2440 "Contributions and Grants"
- c) Please also explain the difference between these two accounts.

RESPONSE:

- a) The increase in total depreciation for Account 1609 is driven by Hydro One Networks Inc. ("HONI") Capital Contributions paid, which are discussed in the Stations Expansion program (Exhibit 2B, Section E7.4). It also includes contributions related to Copeland being in-service.
- b) The depreciation increase in Account 2440 is driven by programs such as Customer Connections (Exhibit 2B, Section E5.2), Externally Initiated Plant Relocations and Expansions (Exhibit 2B, Section E5.2), and the Metrolinx energy storage project discussed in Exhibit 2B, Section E7.2.

1 c) Account 1609 “Capital Contributions paid” captures the payments that Toronto Hydro
2 makes to HONI for capacity-related upgrades as part of the Stations Expansion
3 program (Exhibit 2B, Section E7.4).

4

5 Account 2440 “Contributions and Grants” captures the payments received from
6 customers when Toronto Hydro provides specific services like a new connection to the
7 distribution system, or the relocation of distributions assets to meet customer needs.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION
INTERROGATORIES

INTERROGATORY 50:

Reference(s): Exhibit 4B, Tab 1, Schedule 2

Table 2: Derecognition Variance 2015 to 2019 (\$ Millions)

	2015 Actual	2016 Actual	2017 Actual	2018 Bridge	2019 Bridge
OEB-Approved	33.9	26.6	28.0	29.4	32.6
Actual/Forecast ¹	24.1	27.0	24.5	20.8	20.1
Variance	(9.8)	0.4	(3.5)	(8.6)	(12.5)

a) Please explain how the derecognition amounts are forecast for the 2020-2024 period?

RESPONSE:

a) Forecasted derecognition amounts for 2020-2024 were calculated based on the historical relationship between derecognition expense and capital expenditures.

Please see interrogatory 4B-Staff-141 (b) for additional information.