Response of the Transmission Provider to the Régie de l'énergie's (the "Régie") request for information # 4

Translation commissioned by

NEWFOUNDLAND AND LABRADOR HYDRO (NLH)

RÉGIE DE L'ÉNERGIE'S (THE RÉGIE) REQUEST FOR INFORMATION NO. 4 FROM THE TRANSMISSION PROVIDER RESPECTING THE NETWORK UPGRADE POLICY

MAXIMUM ALLOWANCE

1. References: (i) Exhibit B-0004, p. 15

Preamble:

(i) "The Transmission Provider considers this to be a conservative proposal. The maximum allowance is established over a 20-year period, so the cost of upgrades made at a customer's request is recovered within a maximum of 20 years. This allowance is less than what it would be if it were based on the average useful life of transmission facilities, which is 40 years. The Transmission Provider is therefore guaranteed a contribution greater than what would be required if it were calculated over average useful life instead of a limited 20-year period, as is currently the case. In this regard, it should also be noted that native load, which grows gradually over the timeframe factored into the maximum allowance, in fact persists well beyond the 20-year period used to establish this allowance."

Requests:

1.1 Please demonstrate, using numerical examples drawn from real data, that the maximum allowance is conservative despite the fact that native load growth materializes gradually and the useful life of transmission assets is 40 years.

R1.1

Firstly, the Transmission Provider presents examples based on the data of the project to add a 315-34 kV transformer to the Normand substation (R-3847-2013).

The following tables illustrate the rate impact over 20 years and 40 years, as presented in R-3847-2013, in Exhibit HQT-1, Document 1, Schedule 6. It is possible to see that even though the native load grows gradually, use of the maximum allowance of \$571/kW over 20 years does not push the transmission rate up, but actually results in a slight decrease for all of these periods.

Table R1.1.1	
of the project over 20 years (maximum	allowana

Rate impact of the project over 20 years (maximum allowance of \$571/kW)

Cost of project (\$M) Estimated contribution of Distributor (\$M) Net commissioning (\$M)		33,752 7,486 26,266
	2015-10	27,000
	2016-10	-0,734
Straight-line depreciation ¹		
Average weighted prospective capital cost ²		5,698%
Maintenance and operation ³		1.3%
Public services tax (PST) ⁴		0.55%
Number of years		20

Years	Depreciation 2015-10	Depreciation 2016-10	Depreciation	Cumulative depreciation	Rate base: final balance	Rate base: average of 13 balances	Capital cost	Maintenance and operation	Public services tax	Total	Requisite revenue	Transmission needs	Annual rate
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)		(\$M)	(\$M)	(\$M)	(MW)	(\$/kW)
2012												2 984.378	71.49
2015	0,225	0,000	0,225	0,225	26,775	6,205	0,354	0,086	0,000	0,665	2 985,043	41 786	71.44
2016	1,350	-0,006	1,344	1,569	24,697	25,931	1,478	0,342	0,147	3,311	2 987,689	41 786	71.50
2017	1,350	-0,037	1,313	2,882	23,384	24,040	1,370	0,335	0,136	3,154	2 987.532	41 786	71.50
2018	1,350	-0,037	1,313	4,195	22.071	22,727	1,295	0,335	0,129	3,072	2 987,450	41 787	71.49
2019	1,350	-0,037	1,313	5,509	20,757	21,414	1,220	0,335	0,121	2,990	2 987,368	41 787	71.49
2020	1,350	-0,037	1,313	6,822	19,444	20,101	1,145	0,335	0,114	2,908	2 987,286	41 787	71.49
2021	1,350	-0,037	1,313	8,135	18,131	18,787	1,070	0,335	0,107	2,826	2 987,204	41 787	71.49
2022	1,350	-0,037	1,313	9.449	16,817	17,474	0,996	0,335	0,100	2,744	2 987,122	41 787	71.48
2023	1.350	-0,037	1,313	10,762	15,504	16,161	0,921	0,335	0.092	2,662	2 987,040	41 788	71.48
2024	1,350	-0,037	1,313	12,075	14,191	14,847	0,846	0,335	0,085	2,580	2 986,958	41 788	71.48
2025	1,350	-0,037	1,313	13,389	12,877	13,534	0,771	0,335	0,078	2,498	2 986.876	41 788	71.48
2026	1,350	-0,037	1,313	14,702	11,564	12,221	0,696	0,335	0,071	2,416	2 986,794	41 788	71.47
2027	1,350	-0,037	1,313	16,015	10,251	10,907	0,622	0,335	0,064	2,334	2 986,712	41 788	71.47
2028	1.350	-0.037	1,313	17.328	8,938	9,594	0,547	0.335	0.056	2,251	2 986.630	41 789	71.47
2029	1,350	-0,037	1,313	18,642	7,624	8,281	0,472	0,335	0,049	2,169	2 986,548	41 789	71.47
2030	1,350	-0,037	1,313	19,955	6,311	6,968	0,397	0,335	0,042	2,087	2 986,466	41 789	71.47
2031	1,350	-0,037	1,313	21,268	4,998	5,654	0,322	0,335	0,035	2,005	2 986,384	41 789	71.46
2032	1,350	-0,037	1,313	22,582	3,684	4,341	0,247	0,335	0,027	1,923	2 986,302	41 789	71.46
2033	1.350	-0,037	1,313	23.895	2,371	3,028	0,173	0,335	0,020	1.841	2 986,220	41 790	71.46
2034	1,350	-0,037	1,313	25,208	1,058	1,714	0,098	0,335	0,013	1,759	2 986,138	41 790	71.46
2035	1,125	-0,037	1,088	26,297	-0,031	0,427	0,024	0,249	0,006	1,367	2 985,746	41 790	71.45
2036	0.000	-0.031	-0,031	26.266	0,000	-0,013	-0,001	-0,001	0,000	-0.039	2 984.340	41 790	71.41
Entire 2015	-2036 period									2,251			71.47

Entire 2015-2036 period

1. Linear depreciation according to decision D-2010-020 for request R-3703-2009.

Average weighted prospective capital cost of 5.698%, according to decision D-2012-059 for request R-3777-2011.
 Operating and maintenance cost corresponding to 15% of the investment.
 Public services tax of 0.55% imposed pursuant to Part VI.4 of the *Taxation Act* (Québec).

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Rate impact of the project over 40 years (maximum allowance of \$571/kW)

Cost of project (\$M) Estimated contribution of Distributor (\$M) Net commissioning (\$M)		33,752 7,486 26,266
	2015-10	27,000
	2016-10	-0,734
Straight-line depreciation ¹		
Average weighted prospective capital cost ²		5,698%
Maintenance and operation ³		1.0%
Public services tax (PST) ⁴		0.55%
Number of years		40

Years	Depreciation to 2015-10	Depreciation to 2016-10	Depreciation	Cumulative depreciation	Rate base: final balance	Rate base: average of 13 balances	Capital cost	Maintenance and operation	Public services tax	Total	Requisite revenue	Transmission needs	Annual rate
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)		(\$M)	(\$M)	(\$M)	(MW)	(\$/kW)
2012											2 984.378	41 744	71.49
2015	0,113	0,000	0,113	0.113	26,888	6,218	0,354	0,065	0,000	0,532	2 984,910	41 786	71.43
2016	0,675	-0,003	0,672	0,784	25,482	26,381	1,503	0,257	0,148	2,580	2 986,959	41 786	71.48
2017	0,675	-0,018	0,657	1,441	24,825	25,153	1,433	0,252	0,140	2,482	2 986,860	41 786	71.48
2018	0,675	-0,018	0,657	2.098	24,168	24,497	1,396	0,252	0,137	2,441	2 986,819	41 787	71.48
2019	0,675	-0,018	0,657	2,754	23,512	23,840	1,358	0,252	0,133	2,400	2 986,778	41 787	71.48
2020	0.675	-0,018	0,657	3,411	22,855	23,183	1.321	0,252	0,129	2,359	2 986,737	41 787	71.48
2021	0,675	-0,018	0,657	4,068	22,198	22,527	1,284	0,252	0,126	2,318	2 986,696	41 787	71.47
2022	0,675	-0,018	0,657	4.724	21,542	21.870	1,246	0,252	0,122	2,277	2 986,655	41 787	71.47
2023	0.675	-0,018	0,657	5,381	20.885	21,213	1,209	0,252	0,118	2,236	2 986,614	41 788	71.47
2024	0,675	-0,018	0,657	6,038	20,228	20,557	1,171	0,252	0,115	2,195	2 986,573	41 788	71.47
2025	0,675	-0,018	0,657	6,694	19,572	19,900	1,134	0,252	0,111	2,154	2 986,532	41 788	71.47
2026	0,675	-0,018	0,657	7,351	18,915	19,243	1,096	0,252	0,108	2,113	2 986,491	41 788	71.47
2027	0,675	-0,018	0,657	8,008	18.258	18,587	1,059	0,252	0,104	2,072	2 986,450	41 788	71.47
2028	0,675	-0,018	0,657	8,664	17,602	17,930	1,022	0,252	0,100	2,031	2 986,409	41 789	71.46
2029	0,675	-0.018	0,657	9.321	16,945	17,273	0,984	0,252	0,097	1.990	2 986,368	41 789	71.46
2030	0,675	-0,018	0,657	9,978	16.288	16,617	0,947	0,252	0,093	1,949	2 986,327	41 789	71.46
2031	0,675	-0,018	0,657	10,634	15,632	15,960	0,909	0,252	0,090	1,908	2 986,286	41 789	71.46
2032	0,675	-0.018	0,657	11,291	14,975	15,303	0,872	0,252	0,086	1.867	2 986,245	41 789	71.46
2033	0,675	-0,018	0,657	11,947	14,319	14,647	0,835	0,252	0,082	1,826	2 986,204	41 790	71.46
2034	0,675	-0,018	0,657	12,604	13.662	13,990	0,797	0.252	0,079	1,785	2 986,163	41 790	71.46
2035	0,675	-0,018	0,657	13,261	13,005	13,334	0,760	0,252	0,075	1,743	2 986,122	41 790	71.46
2036	0,675	-0,018	0,657	13,917	12,349	12,677	0,722	0,252	0,072	1,702	2 986,081	41 790	71.45
2037	0,675	-0,018	0,657	14,574	11,692	12,020	0,685	0,252	0,068	1,661	2 986,040	41 790	71.45
2038	0,675	-0,018	0,657	15,231	11,035	11,364	0,647	0,252	0,064	1,620	2 985,999	41 790	71.45
2039	0,675	-0.018	0,657	15,887	10,379	10,707	0,610	0,252	0,061	1,579	2 985,958	41 790	71.45
2040	0,675	-0,018	0,657	16,544	9,722	10,050	0,573	0,252	0,057	1,538	2 985,917	41 790	71.45
2041	0,675	-0,018	0,657	17,201	9,065	9,394	0,535	0.252	0,053	1,497	2 985,876	41 790	71.45
2042	0,675	-0.018	0,657	17,857	8,409	8,737	0,498	0,252	0.050	1,456	2 985,835	41 790	71.45
2043	0,675	-0,018	0,657	18,514	7,752	8,080	0,460	0,252	0,046	1,415	2 985,794	41 790	71.45
2044	0,675	-0,018	0,657	19,171	7,095	7.424	0,423	0,252	0,043	1,374	2 985.753	41 790	71.45
2045	0,675	-0,018	0,657	19,827	6,439	6,767	0,386	0,252	0,039	1,333	2 985,712	41 790	71.45
2046	0,675	-0,018	0,657	20,484	5,782	6,110	0,348	0,252	0,035	1,292	2 985,671	41 790	71.44
2047	0,675	-0,018	0,657	21,141	5,125	5,454	0,311	0,252	0,032	1,251	2 985,630	41 790	71.44
2048	0,675	-0,018	0,657	21.797	4,469	4,797	0,273	0,252	0,028	1,210	2 985,589	41 790	71.44
2049	0,675	-0,018	0,657	22,454	3,812	4,140	0,236	0,252	0,025	1,109	2 985,547	41 790	71.44
2050	0,675	-0,018	0,657	23,111	3,155	3,404	0,199	0,252	0,021	1,120	2 965,506	41 790	71.44
2031	0.675	-0,010	0,657	23.101	2,499	2,021	0,101	0,252	0,017	1,007	2 900.400	41 790	71.44
2052	0,075	-0,010	0,007	24,424	1.042	2,170	0,124	0,252	0,014	1,040	2 300,424	41 790	71.44
2053	0,075	-0,018	0,007	20,080	1,180	1,514	0,086	0,252	0,010	0.064	2 905,383	41 790	71.44
2054	0,675	-0,010	0,607	20,101	0,529	0,007	0,049	0,202	0,007	0,904	2 900,042	41 790	71.44
2000	0,505	-0,010	0,544	20,201	-0,015	0,214	0,012	0,107	0,003	0,740	2 900,125	41790	71.43
2056	0,000	-0,015	-0,015	26,266	0.000	-0,006	0,000	-0,005	0,000	-0,021	2 984,357	41 790	71.41

Entire 2015-2056 period

Linear depreciation according to decision D-2010-020 for request R-3703-2009.
 Average weighted prospective capital cost of 5.698%, according to decision D-2012-059 for request R-3777-2011.
 Operating and maintenance cost corresponding to 15% of the investment.
 Public services tax of 0.55% imposed pursuant to Part VI.4 of the *Taxation Act* (Québec).

71.49

1,650

2015-10

2016-10

The following table indicates that the use of a maximum allowance of \$736/kW, calculated based on a 40-year period, does not generate higher transmission rates for the 20-year and 40-year periods. However, the lower rates generated for the entire 40-year period is less significant than in the previous case, and there is no rate decrease for the 20-year period.

Table R1.1.3 Rate impact of the project over 20 years (maximum allowance of \$736/kW)

Cost of project (\$M) Estimated contribution of Distributor (\$M) Net commissioning (\$M)

Straight-line depreciation¹ Average weighted prospective capital cost² Maintenance and operation³ Public services tax (PST)4 Number of years

Years	Depreciation to 2015-10	Depreciation to 2016-10	Depreciation	Cumulative depreciation	Rate base: final balance	Rate base: average of 13 balances	Capital cost	Maintenance and operation	Public services tax	Total	Requisite revenue	Transmission needs	Annual rate
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)		(\$M)	(\$M)	(\$M)	(MW)	(\$/kW)
2012											2 984,378	41 744	71.49
2015	0,225	0,000	0,225	0,225	26,775	6,205	0,354	0,086	0,000	0,665	2 985,043	41 786	71.44
2016	1.350	0.057	1.407	1,632	32,224	27.676	1,577	0,366	0,147	3.498	2 987,876	41 786	71.50
2017	1,350	0,343	1,693	3,325	30,531	31,377	1.788	0.432	0,177	4,090	2 988.468	41 786	71.52
2018	1.350	0.343	1.693	5,018	28.838	29.685	1,691	0,432	0,168	3.984	2 988,363	41 787	71.52
2019	1,350	0,343	1,693	6,711	27,145	27,992	1,595	0,432	0,159	3,878	2 988,257	41 787	71.51
2020	1,350	0,343	1,693	8,403	25.453	26,299	1,499	0,432	0,149	3,773	2 988,151	41 787	71.51
2021	1.350	0,343	1,693	10,096	23.760	24.606	1,402	0,432	0.140	3.667	2 988,045	41 787	71.51
2022	1,350	0,343	1,693	11,789	22,067	22,913	1.306	0,432	0,131	3,561	2 987,939	41 787	71.50
2023	1,350	0,343	1,693	13,482	20,374	21,221	1,209	0,432	0,121	3,455	2 987,834	41 788	71.50
2024	1,350	0,343	1,693	15,175	18,681	19,528	1,113	0,432	0,112	3,350	2 987,728	41 788	71.50
2025	1,350	0,343	1,693	16,867	16,989	17,835	1,016	0,432	0,103	3,244	2 987,622	41 788	71.49
2026	1.350	0.343	1.693	18.560	15,296	16.142	0,920	0,432	0.093	3,138	2 987,516	41 788	71.49
2027	1,350	0,343	1,693	20,253	13,603	14,449	0,823	0,432	0,084	3,032	2 987,411	41 788	71.49
2028	1,350	0,343	1,693	21,946	11,910	12,757	0,727	0,432	0,075	2,926	2 987,305	41 789	71.49
2029	1,350	0,343	1,693	23,639	10,217	11,064	0,630	0,432	0,066	2,821	2 987,199	41 789	71.48
2030	1,350	0,343	1,693	25,331	8,525	9,371	0,534	0,432	0,056	2,715	2 987,093	41 789	71.48
2031	1.350	0,343	1,693	27,024	6,832	7,678	0,438	0,432	0,047	2,609	2 986.988	41 789	71.48
2032	1,350	0,343	1,693	28,717	5,139	5,985	0,341	0,432	0,038	2,503	2 986,882	41 789	71.47
2033	1,350	0,343	1,693	30,410	3,446	4,293	0,245	0,432	0,028	2,398	2 986,776	41 790	71.47
2034	1,350	0,343	1,693	32,103	1,753	2,600	0,148	0,432	0,019	2,292	2 986,670	41 790	71.47
2035	1,125	0,343	1,468	33,570	0,286	0,933	0,053	0,346	0,010	1,876	2 986,255	41 790	71.46
2036	0.000	0,286	0,286	33,856	0,000	0,121	0,007	0,066	0,002	0,360	2 984,738	41 790	71.42

Entire 2015-2036 period

2,902

71.49

33,752

-0,104 33,856

27,000

5,698%

1.3%

20

0.55%

6,856

1. Linear depreciation according to decision D-2010-020 for request R-3703-2009.

Average weighted prospective capital cost of 5.698%, according to decision D-2012-059 for request R-3777-2011.
 Operating and maintenance cost corresponding to 15% of the investment.

4. Public services tax of 0.55% imposed pursuant to Part VI.4 of the Taxation Act (Québec).

Table R1.1.4
Rate impact of the project over 40 years (maximum allowance of \$736/kW)

Cost of project (\$M) Estimated contribution of Distributor (\$M) Net commissioning (\$M)		33,752 -0,104 33,856
	2015-10	27,000
	2016-10	6,856
Straight-line depreciation ¹		
Average weighted prospective capital cost ²		5,698%
Maintenance and operation ³		1.0%
Public services tax (PST) ⁴		0.55%
Number of years		40

Years	Depreciation to 2015-10	Depreciation to 2016-10	Depreciation	Cumulative depreciation	Rate base: final balance	Rate base: average of 13 balances	Capital cost	Maintenance and operation	Public services tax	Total	Requisite revenue	Transmission needs	Annual rate
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)		(\$M)	(\$M)	(\$M)	(MW)	(\$/kW)
2012											2 984,378	41744	71.49
2015	0,113	0,000	0.113	0,113	26.888	6,218	0,354	0,065	0,000	0,532	2 984,910	41 786	71.43
2016	0,675	0,029	0,704	0,816	33,040	28,129	1,603	0,275	0,148	2,730	2 987,108	41 786	71.49
2017	0,675	0,171	0,846	1,662	32,194	32,617	1,859	0,325	0,182	3,211	2 987,590	41 786	71.50
2018	0,675	0,171	0.846	2.509	31,347	31.770	1,810	0,325	0.177	3,158	2 987,537	41 787	71.50
2019	0,675	0,171	0,846	3,355	30,501	30,924	1,762	0,325	0,172	3,106	2 987,484	41 787	71.49
2020	0,675	0,171	0,846	4,202	29,654	30,078	1.714	0,325	0,168	3,053	2 987,431	41 787	71.49
2021	0,675	0,171	0,846	5,048	28,808	29,231	1,666	0,325	0,163	3,000	2 987,378	41 787	71.49
2022	0,675	0,171	0,846	5,894	27,962	28,385	1,617	0,325	0,158	2,947	2 987,325	41 787	71.49
2023	0,675	0,171	0,846	5,741	27.115	27,538	1,569	0,325	0,154	2,894	2 987,272	41 788	71.49
2024	0,675	0,171	0,046	7,567	20,209	20,092	1.521	0,325	0,149	2,041	2 907,220	41 700	71.49
2025	0,075	0,171	0,846	9.434	23,422	23,840	1,473	0,325	0,144	2,700	2 907,107	41 788	71.40
2020	0,675	0,171	0,846	10 126	23,730	24,333	1,424	0,325	0,140	2,733	2987.061	41 788	71.40
2028	0.675	0,171	0.846	10.120	22 883	23,306	1,328	0.325	0 131	2,000	2 987 008	41 789	71.48
2029	0.675	0.171	0.846	11.819	22.037	22,460	1,280	0.325	0.126	2,577	2 986,955	41 789	71.48
2030	0.675	0.171	0.846	12.666	21,190	21.614	1.232	0.325	0.121	2.524	2 986,902	41 789	71.48
2031	0,675	0,171	0,846	13,512	20,344	20,767	1,183	0,325	0,117	2,471	2 986,849	41 789	71.47
2032	0,675	0,171	0,846	14,358	19,498	19,921	1,135	0,325	0,112	2,418	2 986,797	41 789	71.47
2033	0,675	0,171	0,846	15,205	18,651	19,074	1,087	0,325	0,107	2,365	2 986,744	41 790	71.47
2034	0,675	0,171	0,846	16,051	17,805	18,228	1.039	0,325	0,103	2,312	2 986,691	41 790	71.47
2035	0,675	0,171	0,846	16,898	16,958	17,382	0,990	0,325	0,098	2,259	2 986,638	41 790	71.47
2036	0,675	0,171	0,846	17,744	16,112	16,535	0,942	0,325	0,093	2,207	2 986,585	41 790	71.47
2037	0,675	0,171	0,846	18,590	15.266	15,689	0,894	0.325	0,089	2,154	2 986,532	41 790	71.47
2038	0,675	0,171	0,846	19,437	14,419	14,842	0,846	0,325	0,084	2,101	2 986,479	41 790	71.46
2039	0,675	0,171	0,846	20,283	13,573	13,996	0,797	0,325	0,079	2,048	2 986,426	41 790	71.46
2040	0,675	0,171	0,846	21,130	12,726	13,150	0,749	0,325	0,075	1,995	2 986,373	41 790	71.46
2041	0,675	0,171	0.846	21,976	11.880	12,303	0,701	0,325	0,070	1,942	2 986,321	41 790	71.46
2042	0,675	0.171	0,846	22,822	11.034	11.457	0,653	0,325	0,065	1,889	2 986,268	41 790	71.46
2043	0,675	0,171	0,846	23,669	10,187	10,610	0,605	0,325	0,061	1,836	2 986,215	41 790	71.46
2044	0,675	0,171	0,846	24.515	9,341	9,764	0,556	0,325	0,056	1,784	2 986,162	41 790	71.46
2045	0,675	0,171	0,846	25,362	8,494	8,918	0,508	0,325	0,051	1,731	2 986,109	41 790	71.40
2040	0,675	0,171	0.046	20,200	7,040	0,071	0,460	0,325	0,047	1,070	2 966,056	41 790	71.45
2047	0,075	0,171	0,846	27,034	5 955	6 378	0,412	0,325	0,042	1,025	2 985 950	41 790	71.45
2040	0,675	0,171	0,846	28 747	5,355	5,570	0,305	0,325	0,037	1,572	2 985 898	41 790	71.45
2050	0.675	0,171	0,846	29 594	4 262	4 686	0.267	0.325	0.028	1,010	2 985 845	41 790	71.45
2051	0.675	0.171	0.846	30,440	3.416	3.839	0.219	0.325	0.023	1,413	2 985,792	41 790	71.45
2052	0,675	0,171	0,846	31,286	2,570	2,993	0,171	0,325	0,019	1,360	2 985,739	41 790	71.45
2053	0,675	0.171	0,846	32,133	1,723	2,146	0,122	0,325	0,014	1,308	2 985,686	41 790	71.45
2054	0,675	0,171	0,846	32,979	0,877	1,300	0,074	0,325	0,009	1,255	2 985,633	41 790	71.44
2055	0,563	0,171	0,734	33,713	0.143	0,467	0,027	0,260	0,005	1,025	2 985,404	41 790	71.44
2056	0,000	0,143	0,143	33,856	0.000	0,060	0,003	0,049	0,001	0,196	2 984,575	41 790	71.42

Entire 2015-2056 period

Linear depreciation according to decision D-2010-020 for request R-3703-2009.
 Average weighted prospective capital cost of 5.698%, according to decision D-2012-059 for request R-3777-2011.
 Operating and maintenance cost corresponding to 15% of the investment.
 Public services tax of 0.55% imposed pursuant to Part VI.4 of the *Taxation Act* (Québec).

71.47

2,127

Secondly, the Transmission Provider gives examples based on data of the project to build the new 120-25 kV St-Jérôme substation and the supply thereof (R-3913-2014¹).

The follow tables show the rate impact over 20 years and 40 years, as presented in R-3913-2014, revised December 18, 2014, in Exhibit HQTD-2, Document 1, Schedule 5. It is possible to see that even though native load grows gradually, use of the maximum allowance of \$598/kW over 20 years does not have the impact of pushing the transmission rate up for all of these periods.

Table R1.1.5

Rate impact of the project over 20 years (maximum allowance of \$598/kW)

Cost of project (\$M) 77,312 Estimated contribution of Distributor (\$M) 10,515 66,797 Net commissioning (\$M) Commissioning year and month 2016-11 Straight-line depreciation¹ Average weighted prospective capital cost² 5,666% Maintenance and operation³ 1.3% Public services tax (PST)⁴ 0.55% 20 Number of years

Years	Depreciation	Cumulative depreciation	Rate base: final balance	Rate base: average of 13 balances	Capital cost	Maintenance and operation	Public services tax	Total	Requisite revenue	Transmission needs	Annual rate
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)		(\$M)	(\$M)	(\$M)	(MW)	(\$/kW)
2014									3 114,418	41 718	74.65
2016	0,278	0,278	66,518	10,255	0,581	0,142	0,000	1,001	3 115,419	41 718	74.68
2017	3,340	3.618	63,178	64,848	3,674	0,850	0,366	8,230	3 122,648	41 758	74.78
2018	3,340	6,958	59,839	61,509	3,485	0,850	0,347	8,022	3122,440	41 766	74.76
2019	3,340	10,298	56,499	58,169	3,296	0,850	0,329	7,815	3 122,233	41 771	74.75
2020	3,340	13,638	53,159	54,829	3,107	0,850	0,311	7,607	3 122,025	41 776	74.73
2021	3,340	16,977	49,819	51,489	2,917	0,850	0,292	7,400	3121.817	41 781	74.72
2022	3,340	20,317	46,479	48,149	2,728	0,850	0,274	7,192	3121.610	41 786	74.70
2023	3,340	23,657	43,139	44,809	2,539	0,850	0,256	6,984	3121,402	41 791	74.69
2024	3.340	26,997	39,800	41,470	2,350	0,850	0,237	6,777	3121,195	41 796	74.68
2025	3,340	30,337	36,460	38,130	2,160	0,850	0,219	6,569	3120,987	41 800	74.67
2026	3,340	33,677	33,120	34,790	1,971	0,850	0,201	6,362	3120,779	41 804	74.65
2027	3,340	37,016	29,780	31,450	1,782	0,850	0,182	6,154	3 120,572	41 808	74.64
2028	3,340	40,356	26,440	28,110	1,593	0,850	0,164	5,946	3120,364	41 813	74.63
2029	3,340	43,696	23,100	24,770	1,403	0,850	0,145	5,739	3120,157	41 817	74.61
2030	3,340	47,036	19,761	21,431	1,214	0,850	0,127	5,531	3 119,949	41 819	74.61
2031	3,340	50,376	16,421	18,091	1,025	0,850	0,109	5,324	3119,741	41 820	74.60
2032	3,340	53,716	13,081	14,751	0,836	0,850	0,090	5,116	3119,534	41 822	74.59
2033	3,340	57,055	9,741	11,411	0,647	0,850	0,072	4,908	3119,326	41 824	74.58
2034	3,340	60,395	6,401	8,071	0,457	0,850	0,054	4,701	3119,119	41 826	74.57
2035	3,340	63,735	3,062	4,731	0,268	0,850	0,035	4,493	3 118,911	41 828	74.57
2036	3,062	66,797	0,000	1,413	0,080	0,708	0,017	3,867	3 118,285	41 830	74.55

Entire 2014-2036 period

5.987

1. Linear depreciation according to decision D-2010-020 for request R-3703-2009.

Average weighted prospective capital cost of 5.666%, according to decision D-2014-049 for request R-3823-2012.
 Operating and maintenance cost corresponding to 15% of the investment.

4. Public services tax of 0.55% imposed pursuant to Part VI.4 of the Taxation Act (Québec).

¹ HQTD-2, Document 1, Schedule 5, revised December 18, 2014.

Table R1.1.6
Rate impact of the project over 40 years (maximum allowance of \$598/kW)

Cost of project (\$M)	77,312
Estimated contribution of Distributor (\$M)	10,515
Net commissioning (\$M)	66,797
Commissioning year and month	2016-11
Straight-line depreciation ¹	
Average weighted prospective capital cost ²	5,666%
Maintenance and operation ³	1.0%
Public services tax (PST) ⁴	0.55%
Number of years	40

Years	Depreciation	Cumulative depreciation	Rate base: final balance	Rate base: average of 13 balances	Capital cost	Maintenance and operation	Public services tax	Total	Requisite revenue	Transmission needs	Annual rate
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)		(\$M)	(\$M)	(\$M)	(MW)	(\$/kW)
2014									3 114,418	41 718	74.65
2016	0,139	0,139	66,657	10,266	0,582	0,106	0,000	0,827	3 115,245	41 718	74.67
2017	1,670	1,809	64,988	65,822	3,730	0,638	0,367	6,404	3 120,822	41 758	74.74
2018	1,670	3,479	63,318	64,153	3,635	0,638	0,357	6,300	3 120,718	41 766	74.72
2019	1,670	5,149	61,648	62,483	3,540	0,638	0,348	6,197	3 120,614	41 771	74.71
2020	1,670	6,819	59,978	60,813	3,446	0,638	0,339	6,093	3 120,511	41 776	74.70
2021	1,670	8,489	58,308	59,143	3,351	0,638	0,330	5,989	3 120,407	41 781	74.68
2022	1,670	10,159	56,638	57,473	3,256	0,638	0,321	5,885	3120,303	41 786	74.67
2023	1,670	11,829	54,968	55,803	3,162	0,638	0,312	5,781	3120,199	41 791	74.66
2024	1,670	13,498	53,298	54,133	3,067	0,638	0,302	5,678	3 120,095	41 796	74.65
2025	1,670	15,168	51,628	52,463	2,973	0,638	0,293	5,574	3 119,992	41 800	74.64
2026	1,670	16,838	49,958	50,793	2,878	0,638	0,284	5,470	3 119,888	41 804	74.63
2027	1,670	18,508	48,288	49,123	2,783	0,638	0,275	5,366	3 119,784	41 808	74.62
2028	1,670	20,178	46,618	47,453	2,689	0,638	0,266	5,262	3119,680	41 813	74.61
2029	1,670	21,848	44,949	45,784	2,594	0,638	0,256	5,159	3119,576	41 817	74.60
2030	1,670	23,518	43,279	44,114	2,499	0,638	0,247	5,055	3 119,473	41 819	74.60
2031	1,670	25,188	41,609	42,444	2,405	0,638	0,238	4,951	3 119,369	41 820	74.59
2032	1,670	26,858	39,939	40,774	2,310	0,638	0,229	4,847	3 119,265	41 822	74.58
2033	1,670	28,528	38,269	39,104	2,216	0,638	0,220	4,743	3 119,161	41 824	74.58
2034	1,670	30,198	36,599	37,434	2,121	0,638	0,210	4,640	3119,057	41 826	74.57
2035	1,670	31,868	34,929	35,764	2,026	0,638	0,201	4,536	3 118,954	41 828	74.57
2036	1,670	33,537	33,259	34,094	1,932	0,638	0,192	4,432	3 118,850	41 830	74.56
2037	1,670	35,207	31,589	32,424	1,837	0,638	0,183	4,328	3 118,746	41 830	74.56
2038	1,670	36,877	29,919	30,754	1,743	0,638	0,174	4,224	3 118,642	41 830	74.56
2039	1,670	38,547	28,249	29,084	1,648	0,638	0,165	4,120	3 118,538	41 830	74.55
2040	1,670	40,217	26,579	27,414	1,553	0,638	0,155	4,017	3 118,435	41 830	74.55
2041	1,670	41,887	24,910	25,745	1,459	0,638	0,146	3,913	3 118,331	41 830	74.55
2042	1,670	43,557	23,240	24,075	1,364	0,638	0,137	3,809	3 118,227	41 830	74.55
2043	1,670	45,227	21,570	22,405	1,269	0,638	0,128	3,705	3118,123	41 830	74.54
2044	1,670	46,897	19,900	20,735	1,175	0,638	0,119	3,601	3 118,019	41 830	74.54
2045	1,670	48,567	18,230	19,065	1,080	0,638	0,109	3,498	3 117,915	41 830	74.54
2046	1,670	50,237	16,560	17,395	0,986	0,638	0,100	3,394	3 117,812	41 830	74.54
2047	1,670	51,907	14,890	15,725	0,891	0,638	0,091	3,290	3 117,708	41 830	74.53
2048	1,670	53,576	13,220	14,055	0,796	0,638	0,082	3,186	3 117,604	41 830	74.53
2049	1,670	55,246	11,550	12,385	0,702	0,638	0,073	3,082	3117,500	41 830	74.53
2050	1,670	56,916	9,880	10,715	0,607	0,638	0,064	2,979	3 117,396	41 830	74.53
2051	1,670	58,586	8,210	9,045	0,513	0,638	0,054	2,875	3 117,293	41 830	74.52
2052	1,670	60,256	6,541	7,375	0,418	0,638	0,045	2,771	3 117,189	41 830	74.52
2053	1,670	61,926	4,871	5,706	0,323	0,638	0,036	2,667	3 117,085	41 830	74.52
2054	1,670	63,596	3,201	4,036	0,229	0,638	0,027	2,563	3 116,981	41 830	74.52
2055	1,670	65,266	1,531	2,366	0,134	0,638	0,018	2,460	3 116,877	41 830	74.51
2056	1,531	66,797	0,000	0,707	0,040	0,532	0,008	2,111	3116,529	41 830	74.51

Entire 2014-2056 period

4,287

Linear depreciation according to decision D-2010-020 for request R-3703-2009.
 Average weighted prospective capital cost of 5.666%, according to decision D-2014-049 for request R-3823-2012.
 Operating and maintenance cost corresponding to 15% of the investment.
 Public services tax of 0.55% imposed pursuant to Part VI.4 of the *Taxation Act* (Québec).

The following tables indicate that use of a maximum allowance of \$772/kW, calculated based on a 40-year period, does have the impact of generating higher transmission rates for the 20-year period, but not for the 40-year period.

Table R1.1.7 Rate impact of the project over 20 years (maximum allowance of \$772/kW)

Cost of project (\$M)	77,312
Estimated contribution of Distributor (\$M)	0,000
Net commissioning (\$M)	77,312
Commissioning year and month	2016-11
Straight-line depreciation ¹	
Average weighted prospective capital cost ²	5,666%
Maintenance and operation ³	1.3%
Public services tax (PST) ⁴	0.55%
Number of years	20

Years	Depreciation	Cumulative depreciation	Rate base: final balance	Rate base: average of 13 balances	Capital cost	Maintenance and operation	Public services tax	Total	Requisite revenue	Transmission needs	Annual rate
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)		(\$M)	(\$M)	(\$M)	(MW)	(\$/kW)
2014									3 114,418	41 718	74.65
2016	0,322	0,322	76,990	11,869	0,673	0,164	0,000	1,159	3 115,576	41 718	74.68
2017	3,866	4,188	73,124	75,057	4,253	0,984	0,423	9,526	3 123,943	41 758	74.81
2018	3,866	8,053	69,259	71,191	4,034	0,984	0,402	9,285	3123,703	41 766	74.79
2019	3,866	11,919	65,393	67,326	3,815	0,984	0,381	9,045	3 123,463	41 771	74.78
2020	3,866	15,785	61,527	63,460	3,596	0,984	0,360	8,805	3 123,223	41 776	74.76
2021	3,866	19,650	57,662	59,595	3,377	0,984	0,338	8,564	3122,982	41 781	74.75
2022	3,866	23,516	53,796	55,729	3,158	0,984	0,317	8,324	3122,742	41 786	74.73
2023	3,866	27,381	49,931	51,863	2,939	0,984	0,296	8,084	3 122,502	41 791	74.72
2024	3,866	31,247	46,065	47,998	2,720	0,984	0,275	7,844	3 122,261	41 796	74.70
2025	3,866	35,113	42,199	44,132	2,501	0,984	0,253	7,603	3 122,021	41 800	74.69
2026	3,866	38,978	38,334	40,267	2,282	0,984	0,232	7,363	3 121,781	41 804	74.68
2027	3,866	42,844	34,468	36,401	2,062	0,984	0,211	7,123	3121,541	41 808	74.66
2028	3,866	46,709	30,603	32,535	1,843	0,984	0,190	6,882	3121,300	41 813	74.65
2029	3,866	50,575	26,737	28,670	1,624	0,984	0,168	6,642	3 121,060	41 817	74.64
2030	3,866	54,441	22,871	24,804	1,405	0,984	0,147	6,402	3 120,820	41 819	74.63
2031	3,866	58,306	19,006	20,939	1,186	0,984	0,126	6,162	3 120,579	41 820	74.62
2032	3,866	62,172	15,140	17,073	0,967	0,984	0,105	5,921	3 120,339	41 822	74.61
2033	3,866	66,037	11,275	13,207	0,748	0,984	0,083	5,681	3 120,099	41 824	74.60
2034	3,866	69,903	7,409	9,342	0,529	0,984	0,062	5,441	3 119,859	41 826	74.59
2035	3,866	73,769	3,543	5,476	0,310	0,984	0,041	5,200	3 119,618	41 828	74.58
2036	3,543	77,312	0,000	1,635	0,093	0,820	0,019	4,475	3 118,893	41 830	74.56

6.930

Entire 2014-2036 period

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Linear depreciation according to decision D-2010-020 for request R-3703-2009.
 Average weighted prospective capital cost of 5.666%, according to decision D-2014-049 for request R-3823-2012.
 Operating and maintenance cost corresponding to 15% of the investment.

4. Public services tax of 0.55% imposed pursuant to Part VI.4 of the Taxation Act (Québec).

Table R1.1.8
Rate impact of the project over 40 years (maximum allowance of \$772/kW)

Cost of project (\$M)	77,312
Estimated contribution of Distributor (\$M)	0,000
Net commissioning (\$M)	77,312
Commissioning year and month	2016-11
Straight-line depreciation ¹	
Average weighted prospective capital cost ²	5,666%
Maintenance and operation ³	1.0%
Public services tax (PST) ⁴	0.55%
Number of years	40

Years	Depreciation	Cumulative depreciation	Rate base: final balance	Rate base: average of 13 balances	Capital cost	Maintenance and operation	Public services tax	Total	Requisite revenue	Transmission needs	Annual rate
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)		(\$M)	(\$M)	(\$M)	(MW)	(\$/kW)
2014									3114,418	41 718	74.65
2016	0,161	0,161	77,151	11,882	0,673	0,123	0,000	0,957	3115,375	41 718	74.68
2017	1,933	2,094	75,218	76,185	4,317	0,739	0,424	7,412	3121,830	41 758	74.76
2018	1,933	4,027	73,285	74,252	4,207	0,739	0,414	7,292	3 121,710	41 766	74.74
2019	1,933	5,959	71,353	72,319	4,098	0,739	0,403	7,172	3 121,590	41 771	74.73
2020	1,933	7,892	69,420	70,386	3,988	0,739	0,392	7,052	3 121,470	41 776	74.72
2021	1,933	9,825	67,487	68,453	3,879	0,739	0,382	6,932	3121,350	41 781	74.71
2022	1,933	11,758	65,554	66,521	3,769	0,739	0,371	6,812	3121,229	41 786	74.70
2023	1,933	13,691	63,621	64,588	3,660	0,739	0,361	6,691	3121,109	41 791	74.68
2024	1,933	15,623	61,689	62,655	3,550	0,739	0,350	6,571	3 120,989	41 796	74.67
2025	1,933	17,556	59,756	60,722	3,441	0,739	0,339	6,451	3 120,869	41 800	74.66
2026	1,933	19,489	57,823	58,789	3,331	0,739	0,329	6,331	3120,749	41 804	74.65
2027	1,933	21,422	55,890	56,857	3,221	0,739	0,318	6,211	3 120,629	41 808	74.64
2028	1,933	23,355	53,957	54,924	3,112	0,739	0,307	6,091	3 120,509	41 813	74.63
2029	1,933	25,287	52,025	52,991	3,002	0,739	0,297	5,971	3 120,388	41 817	74.62
2030	1,933	27,220	50,092	51,058	2,893	0,739	0,286	5,850	3 120,268	41 819	74.61
2031	1,933	29,153	48,159	49,125	2,783	0,739	0,276	5,730	3 120,148	41 820	74.61
2032	1,933	31,086	46,226	47,193	2,674	0,739	0,265	5,610	3 120,028	41 822	74.60
2033	1,933	33,019	44,293	45,260	2,564	0,739	0,254	5,490	3 119,908	41 824	74.60
2034	1,933	34,951	42,361	43,327	2,455	0,739	0,244	5,370	3 119,788	41 826	74.59
2035	1,933	36,884	40,428	41,394	2,345	0,739	0,233	5,250	3119,668	41 828	74.58
2036	1,933	38,817	38,495	39,461	2,236	0,739	0,222	5,130	3119,547	41 830	74.58
2037	1,933	40,750	36,562	37,529	2,126	0,739	0,212	5,009	3119,427	41 830	74.57
2038	1,933	42,683	34,629	35,596	2,017	0,739	0,201	4,889	3 119,307	41 830	74.57
2039	1,933	44,615	32,697	33,663	1,907	0,739	0,190	4,769	3 119,187	41 830	74.57
2040	1,933	46,548	30,764	31,730	1,798	0,739	0,180	4,649	3 119,067	41 830	74.57
2041	1,933	48,481	28,831	29,797	1,688	0,739	0,169	4,529	3 118,947	41 830	74.56
2042	1,933	50,414	26,898	27,865	1,579	0,739	0,159	4,409	3 118,827	41 830	74.56
2043	1,933	52,347	24,965	25,932	1,469	0,739	0,148	4,289	3118,706	41 830	74.56
2044	1,933	54,279	23,033	23,999	1,360	0,739	0,137	4,168	3118,586	41 830	74.55
2045	1,933	56,212	21,100	22,066	1,250	0,739	0,127	4,048	3118,466	41 830	74.55
2046	1,933	58,145	19,167	20,133	1,141	0,739	0,116	3,928	3118,346	41 830	74.55
2047	1,933	60,078	17,234	18,201	1,031	0,739	0,105	3,808	3 118,226	41 830	74.55
2048	1,933	62,011	15,301	16,268	0,922	0,739	0,095	3,688	3118,106	41 830	74.54
2049	1,933	63,943	13,369	14,335	0,812	0,739	0,084	3,568	3 117,986	41 830	74.54
2050	1,933	65,876	11,436	12,402	0,703	0,739	0,074	3,448	3117,865	41 830	74.54
2051	1,933	67,809	9,503	10,469	0,593	0,739	0,063	3,327	3 117,745	41 830	74.53
2052	1,933	69,742	7,570	8,537	0,484	0,739	0,052	3,207	3117,625	41 830	74.53
2053	1,933	/1,6/5	5,637	6,604	0,374	0,739	0,042	3,087	3117,505	41 830	74.53
2054	1,933	73,007	3,705	4,071	0,200	0,739	0,031	2,907	3117,385	41 830	74.53
2055	1,933	75,540	1,772	2,738	0,155	0,739	0,020	2,847	3 117,205	41 830	74.52
2000	1,//2	11,312	0,000	0,010	0,040	0,015	0,010	∠,443	3 1 10,001	41 030	74.01

Entire 2014-2056 period

4,962

Linear depreciation according to decision D-2010-020 for request R-3703-2009.
 Average weighted prospective capital cost of 5.666%, according to decision D-2014-049 for request R-3823-2012.
 Operating and maintenance cost corresponding to 15% of the investment.
 Public services tax of 0.55% imposed pursuant to Part VI.4 of the *Taxation Act* (Québec).

Since the 40-year period is comparable to the average useful life of the project's capital assets, using a maximum allowance calculated over a 20-year period when calculating contributions for native load projects will attenuate the annual rate increases that result from the gradual growth of the native load over time, and the impact will either be that no rate increases will result or that rates will decrease for the entire 20-year and 40-year periods.

As illustrated by the results obtained in the previous examples, the Transmission Provider's proposal to continue establishing the maximum allowance over 20 years is conservative and appropriate in light of the objective sought.

1.2 Please specify whether the Transmission Provider has considered an alternative methodology for calculating the maximum allowance that would reflect the fact that native load growth materializes gradually and the useful life of transmission assets is greater than 20 years.

R1.2

As can be seen from Exhibit HQT-1, Document 1, the Transmission Provider proposes continuing to use the method for establishing the maximum allowance, as it is presented in Section E, Attachment J to the OATT in force.

In Decision D-2014-117, the Régie requires additional evidence from the Transmission Provider that, among other things, details the calculation of the maximum allowance and defines the parameters and variables used in that calculation. In response to this decision, the Transmission Provider filed Exhibit HQT-3, Document 1, which presents the existing method used in respect of the maximum allowance. It is based, among other things, on a 20-year period.

The Transmission Provider supports its use of this 20-year period on those reasons given in response to requests 2.1 and 2.2 of the Régie's request for information no. 1 in Exhibit HQT-4, Document 1.

The Transmission Provider uses a 20-year period because, among other reasons, it is in line with the transmission system's planning. The commissioning projects in one year seek to supply all load growth that will materialize over 20 years. Consequently, in its application, the maximum allowance reflects this gradual native load growth by recognizing the rate neutrality achieved over the period in question.

Moreover, the maximum allowance results from the application of a single rate to all transmission system customers.

Maintaining the same depreciation period, in this case 20 years, implies that the same maximum allowance is applicable to all customers. This 20-year period is the appropriate horizon for covering costs.

As for a maximum allowance calculation method that would reflect the fact that native load grows gradually over time, the Transmission Provider makes the following comments. The maximum allowance is granted by the Transmission Provider pursuant to the OATT. The maximum capacity to be transmitted is requested by the customer, and growth changes in the customer's load can take various forms and will vary depending on the projects. The Transmission Provider does not believe it is appropriate for the maximum allowance calculation to be affected by a gradual load increase. It would like to be able to apply a single maximum allowance to the customer's capacity to be transmitted. This maximum allowance would be calculated using known parameters, as is currently done. These parameters would also remain fixed until such time as they are amended during the approval of the maximum allowance in the context of rate applications.

CALCULATION OF MAXIMUM AMOUNT APPLICABLE TO THE MATAPÉDIA PROJECT

2. References:

- (i) Exhibit B-0011, p. 15;
- (ii) R-3631-2007, Decision D-2007-141, pp. 24 and 25;
- (iii) Exhibit B-0015, p. 14;
- (iv) Exhibit B-0016, Schedule 1;
- (v) Exhibit B-0016, p. 16.

Preamble:

(i) "When the Régie examined the Transmission Provider's applications for authorization to integrate wind energy plants into the transmission system, it reserved its decisions on the estimated contribution from the Distributor for integrating these projects until the issues were addressed in this proceeding. Until the Régie has ruled on this issue, possibly at the conclusion of this proceeding, the Transmission Provider has no choice but to apply the existing regulatory framework.

Table 3 Calculation of maximum amount applicable to the Matapédia project (1st call for tenders) and the other wind energy connection projects approved to date by the Régie

	1 st call for tenders	2 nd call for tenders	3 rd call for tenders
Maximum capacity to be transmitted	817.5 MW	2004.5 MW	289.9 MW
Maximum allowance	<u>\$560/kW</u>	<u>\$596/kW</u>	\$571/kW
Maximum amount for transmission network upgrades	\$457.8 M	\$1194.7 M	\$165.5 M

(ii) "For the calculation of additional revenues to be taken into consideration in the calculation of the rate impact of the Project, the parameter used must be the estimated fluctuation of the Distributor's needs at peak capacity, i.e. the criterion usually used to establish the rate, and not the maximum capacity to be connected to and transmitted on the network. This maximum capacity of 990 MW is applied as the network design criterion, but not as the criterion for determining the rate.

According to the Régie, the methodology for calculating the rate impact presented in the investment project cases must be coherent with the methodology for calculating the long-term rate impact of the Transmission Provider's investments presented in the rate cases. [...] The capacity need forecasts used in these other cases refer to the forecasted needs of the Distributor during the network's coinciding peak capacity.

For the purposes of calculating the Project's rate impact, the growth of the Distributor's needs should therefore, based on this logic, be linked to the data of the Distributor's electricity supply plan and with the guarantee provided under the balancing agreement entered into between the Distributor and the Generator. That portion of the needs satisfied by integrating wind-power production resulting from the first call for tenders should thus be set at 346 MW, namely 35% of the 990 MW of integrated maximum capacity."

(iii) "The Transmission Provider therefore grants no MWs to the Distributor's resource projects when it adds them to the annual aggregation. The estimate of the amounts available to cover the costs of the Distributor's upgrade is exclusively based on the forecasted growth of the satellite substations and the forecasted growth of customers directly connected to the transmission system.

In the Transmission Provider's proposal, the power to be transmitted, expressed in MWs, is used only to determine the costs that might be added to the aggregation, to be covered by the growth of the satellite substations and, where applicable, the growth of the Distributor's customers directly connected to the transmission network."

(iv) The Transmission Provider presents the annual aggregation, from 2006 to 2014, of load growth projects as well as native load resource projects. This aggregation illustrates how the resource projects proposed by the Transmission Provider are handled in this matter.

(v) "Some flexibility in application of the Transmission Provider's proposal is desirable, given the specific nature of native load transmission service. The Régie has also indicated that it "understands that, over a very long period, growth-related transmission needs may necessitate very costly capital expenditures that will have significant impacts on the size of the Distributor's contribution. Accordingly, some flexibility in the application of the methodology for determining the Distributor's contributions could be contemplated. The Transmission Provider may submit a proposal to this effect." [footnote omitted] The Transmission Provider therefore proposes that the positive balances produced when the maximum allowance exceeds costs be carried forward and used to cover contributions in subsequent years. The Transmission Provider proposes,

however, that the contributions be payable in all years in which the cumulative balance is negative."

Requests:

2.1 Please present the maximum amount for the network upgrades that the Transmission Provider would have allocated and for the contribution of the Distributor if 35% of the maximum capacity integrated had been used in the calculations for each of the three calls for tenders presented in Table 3 of reference (i).

R2.1

In the following table, the Transmission Provider presents the estimated contribution of the Distributor if the connected maximum capacity is limited to 35%. The amounts retained to fill out this table were taken from investment application R-3742-2010 for the 2nd call for tenders and investment application R-3836-2013 for the 3rd call for tenders. In the case of the 1st call for tenders, the Transmission Provider used the actual amounts and actual connected maximum capacity in order to complete the requested exercise, seeing as all of the work associated with this project was completed in 2013, in other words the data available at the time this matter was filed.

Table R2.1

Calculation of maximum amount applicable to the Matapédia project (1st call for tenders) and the other wind energy connection projects approved to date by the Régie based on a connected maximum capacity limited to 35%

	1 st call for tenders	2 nd call for tenders	3 rd call for tenders
Maximum capacity to be transmitted	286.1 MW	701.6 MW	101.5 MW
Maximum allowance	<u>\$560/kW</u>	<u>\$596/kW</u>	<u>\$571/kW</u>
Maximum amount for transmission network upgrades	\$457.8 M	\$418.1 M	\$57.9 M
Total costs of projects	<u>\$484.2 M</u>	<u>\$1,375.4 M</u>	<u>\$262.8 M</u>
Contribution demanded of the Distributor	\$-324.0 M	\$-957.3 M	\$-204.9 M

2.2 Please produce the aggregation cited in reference (iv) by retaining the approach described in reference (ii), in other words apply 35% of the maximum integrated capacity for the purposes of calculating the maximum allowance. Where applicable, please specify the amount of the additional contribution that would result therefrom.

R2.2

In the tables provided in Schedule 1, the Transmission Provider presents the updated aggregation of loads and resources if the connected maximum capacity is limited to 35% for the purposes of calculating the maximum amount.

2.3 Please comment on how the result obtained from the response to the previous request compares to the contribution resulting from the Transmission Provider's proposal in this case relating to the resource projects.

R2.3

As presented in Schedule 1, the application of a connected maximum capacity limited to 35% would have the effect of increasing the Distributor's initial contribution and reducing, by an equal amount, the contribution resulting from the aggregation of resource and load growth projects.

The Transmission Provider emphasizes, however, that this type of approach would be unfair to the Distributor. By applying this method, the latter would be deprived of the opportunity to cover costs using potential revenues generated by the connection of new satellite substations or the connection of industrial customers.

The Transmission Provider reiterates that the Régie's questioning regarding the use of a 35% load factor for calculating the allowance that may be granted to wind farms flows from concerns over the "likelihood"² of transmission revenues being generated by the native load that can be associated with such intermittent power sources. Consequently, the Transmission Provided emphasizes that this question is completely settled by the use of satellite substation growth, which data is coherent with the forecasted native load growth, as an indicator of the transmission revenues to be obtained from the Distributor.

2.4 Please specify whether, in the absence of the proposed handling of the resource project aggregation, the Transmission Provider would maintain its proposal to carry over positive balances.

R2.4

The Transmission Provider's proposal to carry over positive balances is based on the specific nature of the transmission service to supply the native load. Moreover, as was mentioned in the evidence in the revised version of Exhibit HQT-1, Document 1, page 16, the Régie had indicated that a certain flexibility might be considered for the payment terms of the Distributor's contributions.

As a result, the Transmission Provider is of the opinion that if the resource projects are not aggregated as proposed and given that the Régie has invited the Transmission Provider to be flexible about the payment terms for the Distributor's contributions, its proposal to carry over the positive balances remains well founded.

² D-2009-071 (R-3669-2008), p. 23-24.

METHODOLOGY FOR ESTABLISHMENT AND PAYMENT OF THE DISTRIBUTOR'S CONTRIBUTION FOR PROJECTS WITH PHASED COMMISSIONINGS

3. References: (i) Exhibit B-0011, pp. 16 and 17

Preamble:

"In the case of a project with phased commissioning, the Transmission Provider's proposal [footnote omitted] specifies that the contributions would be reflected in the rate base when the value of the commissioned assets exceeds the maximum amount of the allowance, and subsequently at each commissioning up to the final commissioning. It is equitable since payment of the contributions will begin as the maximum amount of the allowance is reached. Moreover, it is simple and precise, since it is based on the actual cost of the assets commissioned year after year.

The Transmission Provider has filed what it considers an optimal proposal, based on its analysis, and it has not found any alternative that would better respond to the Régie's concerns about the matching of costs with contributions in the Transmission Provider's rate base. In the event that alternatives are proposed in the course of the proceeding, the Transmission Provider reserves the right to make representations with respect to such proposals."

Request:

3.1 The Régie would like to know the Transmission Provider's position on the following methodology:

- Calculate, for each partial commissioning, the maximum amount for network upgrades, determined individually and based on the quantity of MWs associated with this commissioning;
- Compare this amount to the value of the corresponding commissioning:
 - Should the maximum amount for the network upgrades not cover the value of the commissioning, payment of a contribution will be required equal to the difference between the value of the commissioning and the individual maximum amount;
 - Should the maximum amount for the network upgrades be greater than the value of the commissioning, the remaining balance will be carried over to the maximum amount for the network upgrades associated with the following commissioning.

- Once the customer's total project-linked contribution is reached, no further contribution will be required.

R3.1

Neither the method presented in the request, nor the MW or commissioning pro rata method, is fair to the customers of the Transmission Provider because they deprive them of the granting, by the Transmission Provider, of a maximum amount for network upgrades reflecting the maximum capacity to be transmitted in the context of the project. It will therefore be inappropriate to demand a contribution from a customer that has not achieved the maximum amount to which it is entitled.

Moreover, the Transmission Provider insists that such a method introduces elements of uncertainty and inaccuracy that could translate into contributions that are not representative of the costs that may be assumed by the Transmission Provider. This mismatch between costs and contributions could result in rate base inaccuracies. The Transmission Provider therefore repeats that when it makes connections to generating stations, section 12A.2(i) of the OATT requires that the customer sign at least one transmission service agreement in order to generate sufficient revenues to cover the costs incurred by the Transmission Provider for the network upgrades.

Based on these elements, the Transmission Provider believes that the method it is proposing allows for a better matching, over time, between the project costs assumed by the Transmission Provider and payment of the contribution by its customer. The method proposed by the Transmission Provider is more precise because it is based on the actual costs of the commissioned assets. It is easy to apply and fair to all of the Transmission Provider's customers.

Moreover, the Transmission Provider points out that any contribution allocation method used over time cannot have the effect of changing the global amount of the contribution calculated for that project. The notion of a single project, in other words works that have a common objective and are only useful if they are all carried out, must not be placed in doubt by the choice of a method.

See also the response to request 8.4 of the Régie's request for information number 1 in Exhibit HQT-4, Document 1.

APPROACH TO NETWORK UPGRADE COST-SHARING AMONG TRANSMISSION SERVICE CUSTOMERS

4. References:

- (i) Exhibit B-0016, p. 25;
- (ii) Exhibit B-0015, p. 36;
- (iv) Exhibit B-0020, p. 15;
- (v) *Hydro-Québec's OATT* currently in force, pp. 95 and 104.

Preamble:

(i) The Transmission Provider may determine that work related to different network upgrade projects could advantageously be replaced by a common technical solution that is more optimal in terms of cost and network development than piecemeal solutions. The Transmission Provider's proposed approach would, if applicable, assign to each of the projects involved a portion of the cost of the common solution, based on the amount by which it reduces the cost of the project.

(ii) *"The Transmission Provider will evaluate the investments needed for each of the individual solutions <u>based on their chronological order</u>. Each request will give rise to a determination of a solution and will be dealt with taking into account the amendments made to the network to respond to all the demands that preceded it." [emphasis added]*

(iii) "Network upgrade costs are shared among transmission service customers when network upgrades are triggered by <u>concomitant</u> applications from different customers, and the Transmission Provider chooses to combine their respective needs, identifying a common technical solution that advantageously, simultaneously and completely meets the previously identified needs.

The Transmission Provider first develops and compares various scenarios to identify the optimal solutions that will individually satisfy the needs of each customer, <u>in</u> the same order as these needs were presented in applications. Consequently, the Transmission Provider will examine each of these needs taking the previous applications into consideration, resulting in a technical solution that will be specific to each customer. If the Transmission Provider identifies and chooses to retain one common technical solution, it will attribute a common objective to the customers whose needs are satisfied by that solution.

The Transmission Provider attributes to these customers a portion of the cost of the common technical solution that was retained based on <u>the chronological order of their needs</u>, up to the maximum amount of the specific technical solution that was initially developed for them, and this until the full value of the common objective attributed to them is reached. [emphasis added]

(iv) Sections 37.1 and 40.1 of Hydro-Québec's OATT, among others:

"37.1 *Information Required Annually from the Distributor*: The Distributor shall provide, or have provided, on an annual basis all of the information stipulated in Régie decisions, orders and regulations including but not limited to the following:

(i) A description of load at each Point of Delivery. This description shall separately identify and provide the Distributor's best estimate of the total loads to be served at each transmission voltage level, and the loads to be served from each Transmission Provider substation at the same

transmission voltage level. The description shall include a ten-(10-) year forecast of the load and resources needed at the coincident and non-coincident peak in summer and winter;"

"40.1 Notice of Need for a System Impact Study:[...]

Except for Distributor requirements arising from growth in the Native Load, for which the Distributor annually submits its forecasts to the Transmission Provider pursuant to Subsection 37.1 i) herein, the Distributor shall submit a request for a System Impact Study for all other requirements, notably for supplying new specific industrial loads, supplying new loads not physically connected to the Transmission Provider's system, connecting new Distributor Resources and having the Transmission Provider conduct strategic and orientation studies required by the Distributor."

Requests:

4.1 Please clarify what the Transmission Provider means by "concomitant" applications in reference (i). More specifically, please specify whether it is referring to the applications formulated in the course of a specific period and, if so, specify which one.

R4.1

The notion of concomitance is associated with the possibility, over time and based on the scheduled commissioning dates, of developing the upgrades required by these applications in the context of an optimal common solution. It is not associated with a specific period of time within which two applications are received. If the common technical solution identified by the Transmission Provider satisfies, in a timely manner, the individual transmissions needs of customers having made such an application, they shall be identified as concomitant.

4.2 Please specify how the Transmission Provider will determine the application submission order if the common technical solution seeks both to meet native load growth needs and an application for point-to-point transmission service. Please justify the approach retained.

R4.2

In response to request 8.1 of the Régie's request for information number 2 in Exhibit HQT-4, Document 1.1, the Transmission Provider states the following:

"In addition to the Distributor's needs for native load growth that occur and are processed on a continuous basis, the order of priority resulting from the first-come, first-served principle applies to applications presented by point-to-point customers and by the Distributor for connection to generating stations."

This means that in a case where the common technical solution contemplates both native load growth needs and an application for point-to-point transmission services, the Transmission Provider would consider the native load need to have come first.

One instance of native load growth, however, stands as an exception to the above: the direct connection of a new Distributor customer to the transmission system or a growth in the load of an existing customer of the Distributor connected directly to the transmission system. Indeed, the Transmission Provider receives applications from the Distributor, on an individual basis and in an ad hoc manner, for new loads generated by large customers to be connected or already directly connected to the transmission system. These new loads are not included in the forecasts transmitted annually by the Distributor, such that an entry date may be attributed thereto.

4.3 If the Régie were to determine that project applications that are contemplated by a common solution must be considered as having being submitted at the same time, and at least one of these projects seeks to meet a native load growth, please indicate how the costs would be shared among the customers.

R4.3

Considering the response to request 4.2 above, the Transmission Provider would presume that the native load need occurred first. Consequently, the Transmission Provider would allocate the cost of the common solution among the two customers in the manner described in the response to request 14.6 of the Régie's request for information number 1 (example 1), in Exhibit HQT-4, Document 1, by considering that customer 1 corresponds to the native load growth.

However, for the exception mentioned in the response to request 4.2, if the native load growth results from an application from the Distributor for a customer to be connected or already directly connected to the transmission system, the Transmission Provider would presume that both applications occurred at the same time and would distribute the cost of the common solution among the two customers proportionally to the costs of the solutions that would have responded to the needs of each client taken individually.

4.4 Please specify if the Transmission Provider will, once each customer's costs have been established, associate each of the various major components of the project to one and the same customer for follow-up purposes. If this is not the case, please describe the contemplated approach.

R4.4

The costs of a global solution are distributed among several customers, taking their entry order into account, as described in the response to request 14.6 of the Régie's request for information number 1 (example 1). In the example cited above, the portion of the costs attributed to customer #1 is established based on the estimated cost of the solution that would have satisfied only the needs of that customer. For follow-up purposes, the Transmission Provider would determine the portion of the costs thus established for the 1st client in such a manner that only the protect.

HANDLING OF COMMITMENTS

5. References:

(i) Exhibit B-0040, p. 13;

(ii) Decision D-2011-083 Reasons, R-3757-2011;

(iii) Hydro-Québec's OATT, p. 26.

Preamble:

(i) In response to request 1.2 of the Régie's request for information no. 3, the Transmission Provider produced the connection agreement respecting the interconnection of the generating stations of the de la Romaine complex to Hydro-Québec's transmission system. Section 2.1 of this agreement specifies, in section (e):

"(e) Recovery of integration fees assumed by the Transmission Provider

In order that the Transmission Provider may recover all of the integration fees assumed by the **Transmission Provider**, as stipulated in section 6.1(*a*), the **Generator** avails itself of the commitment contracted under paragraph (*i*) of section 12A.2 of the OATT."

(ii) Decision D-2011-083 respecting the project to connect the generating stations of the de la Romaine complex mentions the following, among other things:

"[43] Pursuant to the provisions of the OATT in force on the execution date of the connection agreement to integrate the generating stations to Hydro-Québec's transmission system between Hydro-Québec TransÉnergie and Hydro-Québec Production (the Connection Agreement), the maximum amount of the integration fees that may be assumed by the Transmission Provider is \$923.8 million. The surplus amount to be assumed by the Generator represents a significant portion of the Project's cost, namely \$918.3 million."

[44] According to Attachment J of the OATT, these amounts must be increased in order to reflect the operating and maintenance costs as well as the applicable taxes.

As a result, the maximum amounts assumed by the Transmission Provider rise to \$1,097.9 million, and the estimated contribution of the Generator is established at \$1,091.4 million. The following table presents the estimated costs of connecting the generating stations of the de la Romaine complex.

	Cost of network	Operating and	Total
Original: 2015-01-30			HQT-4, Document 1.3 Page 21 of 29

	upgrades	maintenance costs,	
		taxes	
Total estimated costs of the project	\$1,892.1 M	\$347.2 M	\$2,189.3
Amounts assumed by the Transmission Provider (integration fees and Generator's commitment under 12A.2(i))	\$923.8 M	\$174.1 M	\$1,097.9 M
Additional amount (Generator's contribution)	\$918.3 M	\$173.1 M	\$1,091.4 M

[59] According to the Transmission Provider, the Generator's contractual commitment contemplated by the Connection Agreement executed December 14, 2010, namely to cover all integration fees assumed by the Transmission Provider, is ensured by the use of the three following service agreements:

- The HQT-ON long-term transmission service agreement that was executed October 16, 2006 and deposited before the Régie November 16, 2006;

- The HQT-MASS and HQT-NS long-term transmission service agreements that were executed March 31, 2009 and deposited before the Régie April 21, 2009. (the Service Agreements)"

[...]

"Moreover, the costs of the Generator's commitments provided for under section 12A.2(i) are \$195.8 million [footnote omitted] for Eastmain-1-A and de la Sarcelle, and \$1,097.9 million [footnote omitted] for the de la Romaine complex, whereas the costs of the network upgrades provided for the long-term point-to-point service are \$735.0 million [footnote omitted] for the interconnection with Ontario, and \$143.6 million [footnote omitted] for the upgrades and modifications to the transmission equipment required to use the HQT-MASS and HQT-NS interconnections, for a total of \$2,172.3 million.

Consequently, there are sufficient revenues to cover the costs of the Generator's commitments. A balance is also available for other commitments."

(iii) Section 12A.2 of the OATT reads as follows:

"12A.2 Purchase of Point-to-Point Service or Repayment: When the Connection Agreement is executed, the provisions herein for connecting the generating station to the power system, particularly those set out in Attachment J, shall apply. Furthermore, the generating station owner or a third party named for that purpose by the owner shall, to the satisfaction of the Transmission Provider, make at least one of the commitments below.

i) Long-Term Transmission Service Agreement

At least one Service Agreement must be executed for Long-Term Firm Transmission Service. The present value of payments to be made to the Transmission Provider over the term of the applicable Service Agreements at least equals costs incurred by the Transmission Provider to ensure connection of the generating station, less any amount repaid to the Transmission Provider.

ii) Transmission Service Purchase Commitment

A take-or-pay commitment to purchase Firm or Non-Firm Point-to -Point Transmission Services must be executed for an amount that at least equals the present value of costs incurred by the Transmission Provider, less any amount repaid to the Transmission Provider, to ensure connection of the generating station.

Subject to the following paragraph, at the end of each twelve- (12-) month period following December 31 of the year the generating station was commissioned, the annual amount of the purchase commitment (value A) is subtracted from the product of the annual output to the power system and the rate for Point-to-Point Transmission Service contracted by the customer or, lacking any, the rate for non firm hourly service (value B). Any negative difference between these two (2) annual values (B - A) is paid to the Transmission Provider at the end of the year in which it occurs. The amount payable by the customer is reduced by any cumulative positive difference (B-A) from prior years. If such prior-year cumulative difference (B-A) is larger than the amount payable, the net amount payable is zero and the balance of the cumulative difference (B-A) is positive and the cumulative difference between these two (2) annual values (B-A) is positive and the cumulative difference (B-A) from prior years is negative, the Transmission Provider pays the customer a refund equal to the lesser of the positive difference (B-A) for the year in question and the absolute value of the cumulative difference (B-A) from prior years.

During the year that the generating station is commissioned, the annual purchase commitment is pro-rated to the number of days between the commissioning date and December 31 of that year.

The annual purchase commitment, i.e., value A above, is a annuity calculated on the basis of the following factors: a) costs incurred by the Transmission Provider to ensure connection of the

generating station augmented by 15% to cover operating and maintenance costs over a twenty-(20-) year period, when incurred by the Transmission Provider, and augmented by applicable taxes, less any amount repaid by the customer; b) the Transmission Provider's prospective capital costs approved by the Régie; and c) the term of the purchase commitment.

iii) Repayment

The Transmission Provider must be repaid an amount that equals the present value of costs it incurred to ensure connection of the generating station.

The generating station owner shall not be required to provide any of the above commitments for any generation obtained by the Distributor through a call for tenders or when such a call for tenders is waived and which the Distributor has designated pursuant to Section 38 herein. When only a portion of a generating station is for the Distributor, the commitment of the generating station owner, or of the third party named for that purpose by the owner, shall cover an amount equal to the costs incurred by the Transmission Provider to ensure connection of the generating station, multiplied by the following factor: the number one (1), less the ratio of the capacity in kilowatts (kW) allocated to the Distributor to the total rated capacity in kW of the station's generating units. In the event of abandonment before the generating station is commissioned, the requestor shall repay the total of costs incurred by the Transmission Provider."

Requests:

5.1 Considering the costs mentioned in R-3757-2011, all other things being equal, please determine what amounts would have been associated with the Generator's commitment if the latter had availed itself of:

- option (ii) of the OATT in force;
- option (iii) of the OATT.

R5.1

Options (i), (ii) and (iii) in section 12A.2 of the *OATT* are offered to point-to-point transmission service customers in order to allow them to cover the costs that the Transmission Provider incurred for the network upgrades.

Regardless of the option selected by the customer, the amount associated with the costs to be covered by the Generator, in the context of a project to connect generating stations of the de la Romaine complex, remains the same because it flows from the project costs.

Moreover, the Transmission Provider emphasizes that the cases invoked by the Régie in the request are hypothetical, as in actual fact the Generator availed itself of option (i) of section 12A.2 in order to cover the \$1,097.9 million in costs assumed by the Transmission Provider to connect the generating stations of the de la Romaine complex to the transmission system. Option (i) stipulates that the owner of the generating station must

have signed at least one service agreement for the long-term, firm point-to-point transmission services to cover its costs. In this context, the Transmission Provider presented, in R-3757-2011, three service agreements already executed for delivery to ON, MASS and NS.

5.2 Please confirm whether, all other things being equal, the amounts determined in the previous request for each of the two options considered would be added to the amounts of \$2,172.3 million associated with the HQT-ON, HQT-MASS and HQT-NS long-term point-to-point transmission service agreements mentioned in reference (ii) above.

R5.2

The total amount of commitments, \$2,172.3 million, indicated in the preamble to reference (ii), already includes that \$1,097.9 million commitment to connect the generating stations of the de la Romaine complex. The amount of \$1,097.9 million corresponds to the maximum amount assumed by the Transmission Provider.

See also the response to request 5.1 regarding the hypothetical nature of the request. Indeed, nothing leads to the presumption that the agreements for delivery to ON, MASS and NS would be those known today if, at the time of their execution, the customer had intended to opt for another type of commitment in order to cover the costs of the upgrades.

5.3 Please use a table to present a comparison of the impact, on the Transmission Provider's requisite revenues, of the commitments associated with each of the 3 options in section 12A.2 as applied to the case in R-3757-2011.

R5.3

In the following table, the Transmission Provider presents the impact on the requisite revenues based on each of the three options in Section 12A.2.

The impact on the requisite revenues is estimated based on the format of the rate impact of investments projected for the 2023 horizon, as presented in R-3823-2012 in Exhibit HQT-9, Document 1, page 29, namely the data available at the time this matter was filed. It should be noted that the commissionings in R-3757-2011 are a forecast while, for section 12A.2(ii), the annual production injected into the system measured at the connection point is not available. It is therefore supposed, for the purposes of simulation, that this production is sufficient to cover the annual amount of the purchase commitment.

The Transmission Provider insists, however, on giving several warnings. Since the project is contemplated by a final decision of the Régie and it has been shown that the revenues generated by the customer cover the costs, these simulations are not in keeping with the commercial realities of the project, seeing as the Generator availed itself of option (i) of section 12A.2. The simulations resulting from the request contemplate only the requisite revenues and do not take into account the capacity, in MWs, and associated revenues.

Vooro	Section 12 A.2	Section 12 A.2	Section 12 A.2		
rears	(i)		(iii)		
	(\$M)	(\$M)	(\$M)		
2012	2,984	2,984	2,984		
2014	3,071	3,071	3,055		
2015	3,158	3,158	3,085		
2016	3,168	3,168	3,093		
2017	3,241	3,241	3,142		
2018	3,354	3,354	3,226		
2019	3,523	3,523	3,396		
2020	3,560	3,560	3,440		
2021	3,527	3,527	3,451		
2022	3,557	3,557	3,483		
2023	3,529	3,529	3,457		

Table 5.3Impact on requisite revenues of the three options in section 12A.2

Schedule 1

Schedule 1 Aggregation of resources and load growth projects and evaluation of the contribution required from the Distributor

The following table presents the annual aggregation (loans and resources) of the load growth projects as well as native load resource projects, based a load factor of 35% of the connected capacity.

Transmission Provider's Proposal

Year		2006	2007	2008	2009	2010	2011	2012	2013	2014
Total growth over 20 years, in MWs - Loads	(A)	865	106	369	460	429	229	230	551	190
Maximum allocation of HQT, in \$M - Loads	(B)	484	60	195	286	253	130	131	287	114
Total investments of HQT, in \$M - Loads	(C)	143	58	140	173	170	126	105	296	389
Total investments of HQT, in \$M - Resources (Note 1)	(D)	26	18	62	122	22	214	210	231	169
Annual spread (Note 2)	(E) = (B) - (C + D)	315	(17)	(6)	(9)	61	(210)	(184)	(239)	(444)
Multi-year spread	Sum of (E)	315	298	292	283	344	134	(50)	(289)	(733)

Note 1: The investments of the Transmission Provider do not include the deduction of surplus amounts expected to be paid by the Distributor.

Note 2: Without the 15% increase for maintenance and operating costs.

Approach described by the Régie (maximum connected capacity limited to 35%)

Year		2006	2007	2008	2009	2010	2011	2012	2013	2014
Total growth over 20 years, in MWs - Loads	(A)	865	106	369	460	429	229	230	551	190
Maximum allocation of HQT, in \$M - Loads	(B)	484	60	195	286	253	130	131	287	114
Total investments of HQT, in \$M - Loads	(C)	143	58	140	173	170	126	105	296	389
Total investments of HQT, in \$M - Resources (Note 1)	(D)	26	18	62	32	0	5	207	223	41
Annual spread (Note 2)	(E) = (B) - (C + D)	315	(17)	(6)	81	83	(1)	(181)	(231)	(316)
Multi-year spread	Sum of (E)	315	298	292	373	456	455	274	43	(273)

Note 1: The investments of the Transmission Provider do not include the deduction of surplus amounts expected to be paid by the Distributor.

Note 2: Without the 15% increase for maintenance and operating costs.

Summary of initial contributions to be paid by the Distributor for the three calls for tender

Year		2006	2007	2008	2009	2010	2011	2012	2013	2014
Annual spead (Note 2)	<e)=(b)-(c +="" d)<="" th=""><th>-</th><th></th><th>-</th><th>(90)</th><th>(22)</th><th>(208)</th><th>(4)</th><th>(8)</th><th>(128)</th></e)=(b)-(c>	-		-	(90)	(22)	(208)	(4)	(8)	(128)
Multi-year spread	Sum of (E)	-			(90)	(112)	(320)	(324)	(332)	(460)

The following tables give the annual details on the aggregation of the load growth projects as well as native load resource projects based on a load factor of 35% of the connected capacity for the years 2006 to 2014.

YEAR 2006

Project	Growth over 20 years	Maximum allowance of	Costs of	Spread between	
110,600	MW	in \$M	in \$M	in \$M	
LOADS					
Cowansville satellite substation	38.0	21.3	8.0	13.3	
25 kV Donnacona satellite substation	13.7	7.7	16.3	-8.7	
Groulx satellite substation	66.0	37.0	6.0	31.0	
Iberville satellite substation	11.5	6.4	9.3	-2.9	
Mascouche satellite substation	55.0	30.8	6.2	24.6	
Mirabel satellite substation	46.5	26.0	9.6	16.4	
Renaud satellite substation	96.0	53.8	3.8	50.0	
St-Félicien satellite substation	10.0	5.6	7.3	-1.7	
St-Rémi 25 satellite substation	12.5	7.0	8.9	-1.9	
Dorion-Langlois Line	0.0	0.0	5.9	-5.9	
Notre-Dame-du-Laus satellite substation	2.0	1.1	1.0	0.1	
Arnaud substation (Alouette customer - Phase II)	500.0	280.0	37.5	242.5	
Niobec Mine (Carnbior)	3.0	1.7	1.2	0.5	
Goldex in Val d'Or (Agnico-Eagle Mines)	10.5	5.9	3.3	2.6	
Telecom	0.0	0.0	18.6	-18.6	
Total Loads	864.7	484.2	142.9	341.3	
RESOURCES					
1 st CT wind farm					
Baie-des-Sables (109.5 MW)			9.9		
Common works			0.3		
Upgrade			13.2		
Telecom			3.0		
Subtotal			26.4		
Total Resources			26.4		
TOTAL OF LOADS + RESOURCES			169.3		