

1 **Q.** (Reference 3.1 - Transmission Line 100L Rebuild) It is stated (page 16) that
2 "A net present value ("NPV") calculation of customer revenue requirements
3 was completed for the assessed alternatives." Please provide a copy of the
4 **NPV analysis.**
5

6 **A.** Attachment A provides the NPV analysis for the three alternatives proposed in the
7 *Transmission Line 100L Rebuild* project.

ATTACHMENT A:

Newfoundland Power Inc. *Transmission Line 100L Rebuild* Project:
Present Worth Analyses of Alternatives.

Table 1 provides the Present Worth Analysis of Alternative 1 from 2026 to 2082.¹

Table 1 Present Worth Analysis of Alternative 1: Replace Deteriorated Structures and Defer Rebuild					
<i>Year</i>	<i>Transmission 51.9 yrs 8% CCA</i>	<i>Capital Revenue Requirement</i>	<i>Net Benefit</i>	<i>Present Worth Benefit</i>	<i>Cumulative Present Value Benefit</i>
2026	10,942,000	1,042,957	-1,042,957	-1,042,957	-1,042,957
2027	0	1,153,745	-1,153,745	-1,081,399	-2,124,356
2028	0	1,117,486	-1,117,486	-981,736	-3,106,092
2029	0	1,082,776	-1,082,776	-891,595	-3,997,687
2030	0	1,049,492	-1,049,492	-809,999	-4,807,686
2031	4,549,926	1,453,484	-1,453,484	-1,051,457	-5,859,143
2032	0	1,470,883	-1,470,883	-997,323	-6,856,466
2033	0	1,425,799	-1,425,799	-906,134	-7,762,599
2034	0	1,382,409	-1,382,409	-823,468	-8,586,067
2035	0	1,340,576	-1,340,576	-748,476	-9,334,543
2036	0	1,300,177	-1,300,177	-680,402	-10,014,945
2037	0	1,261,096	-1,261,096	-618,568	-10,633,513
2038	0	1,223,229	-1,223,229	-562,371	-11,195,884
2039	0	1,186,477	-1,186,477	-511,271	-11,707,155
2040	0	1,150,753	-1,150,753	-464,783	-12,171,938
2041	0	1,115,973	-1,115,973	-422,472	-12,594,410
2042	0	1,082,062	-1,082,062	-383,948	-12,978,358
2043	0	1,048,950	-1,048,950	-348,860	-13,327,218
2044	0	1,016,574	-1,016,574	-316,893	-13,644,111
2045	0	984,875	-984,875	-287,760	-13,931,871
2046	0	953,799	-953,799	-261,206	-14,193,077
2047	0	923,295	-923,295	-236,997	-14,430,074
2048	0	893,318	-893,318	-214,924	-14,644,997
2049	0	863,826	-863,826	-194,796	-14,839,794
2050	0	834,780	-834,780	-176,442	-15,016,236
2051	0	806,144	-806,144	-159,706	-15,175,942
2052	0	777,886	-777,886	-144,444	-15,320,386
2053	0	749,976	-749,976	-130,529	-15,450,915
2054	0	722,384	-722,384	-117,843	-15,568,758
2055	0	695,087	-695,087	-106,280	-15,675,038
2056	0	668,060	-668,060	-95,742	-15,770,780

¹ For the capital costs for each alternative, see Tables 3, 4 and 5 in Newfoundland Power's *2026 Capital Budget Application*, report *3.1 Transmission Line 100L Rebuild*. In the NPV analysis, the rebuild figures are detailed by year and reflect the forecast cost to complete capital work in that year, which would incorporate forecast inflationary costs increases from 2026 using the GDP deflator.

Table 1 Present Worth Analysis of Alternative 1: Replace Deteriorated Structures and Defer Rebuild					
<i>Year</i>	<i>Transmission 51.9 yrs 8% CCA</i>	<i>Capital Revenue Requirement</i>	<i>Net Benefit</i>	<i>Present Worth Benefit</i>	<i>Cumulative Present Value Benefit</i>
2057	0	641,282	-641,282	-86,142	-15,856,922
2058	0	614,733	-614,733	-77,398	-15,934,319
2059	0	588,394	-588,394	-69,436	-16,003,756
2060	0	562,249	-562,249	-62,190	-16,065,946
2061	0	536,283	-536,283	-55,599	-16,121,544
2062	0	510,480	-510,480	-49,605	-16,171,149
2063	0	484,828	-484,828	-44,158	-16,215,308
2064	0	459,315	-459,315	-39,211	-16,254,519
2065	0	433,930	-433,930	-34,721	-16,289,240
2066	0	408,662	-408,662	-30,649	-16,319,889
2067	0	383,503	-383,503	-26,959	-16,346,847
2068	0	358,442	-358,442	-23,617	-16,370,464
2069	0	333,474	-333,474	-20,594	-16,391,058
2070	0	308,589	-308,589	-17,862	-16,408,921
2071	0	283,782	-283,782	-15,396	-16,424,317
2072	0	259,046	-259,046	-13,173	-16,437,490
2073	0	234,375	-234,375	-11,171	-16,448,661
2074	0	209,765	-209,765	-9,371	-16,458,032
2075	0	185,210	-185,210	-7,755	-16,465,788
2076	0	160,707	-160,707	-6,307	-16,472,095
2077	0	1,047,795	-1,047,795	-38,545	-16,510,640
2078	0	58,242	-58,242	-2,008	-16,512,648
2079	0	51,037	-51,037	-1,649	-16,514,298
2080	0	43,846	-43,846	-1,328	-16,515,626
2081	0	36,668	-36,668	-1,041	-16,516,667
2082	0	408,966	-408,966	-10,883	-16,527,550

Table 2 provides the Present Worth Analysis of Alternative 2 from 2026 to 2082.

Table 2 Present Worth Analysis of Alternative 2: Rebuild in a Parallel Right-of-Way					
<i>Year</i>	<i>Transmission 51.9 yrs 8% CCA</i>	<i>Capital Revenue Requirement</i>	<i>Net Benefit</i>	<i>Present Worth Benefit</i>	<i>Cumulative Present Value Benefit</i>
2026	450,000	42,893	-42,893	-42,893	-42,893
2027	14,271,000	1,407,716	-1,407,716	-1,319,445	-1,362,337
2028	0	1,550,718	-1,550,718	-1,362,340	-2,724,677
2029	0	1,502,001	-1,502,001	-1,236,798	-3,961,476
2030	0	1,455,362	-1,455,362	-1,123,250	-5,084,725
2031	0	1,410,637	-1,410,637	-1,020,462	-6,105,187
2032	0	1,367,672	-1,367,672	-927,341	-7,032,528
2033	0	1,326,325	-1,326,325	-842,916	-7,875,444
2034	0	1,286,469	-1,286,469	-766,319	-8,641,762
2035	0	1,247,982	-1,247,982	-696,779	-9,338,541
2036	0	1,210,757	-1,210,757	-633,607	-9,972,148
2037	0	1,174,691	-1,174,691	-576,186	-10,548,334
2038	0	1,139,693	-1,139,693	-523,966	-11,072,300
2039	0	1,105,676	-1,105,676	-476,452	-11,548,753
2040	0	1,072,562	-1,072,562	-433,202	-11,981,955
2041	0	1,040,280	-1,040,280	-393,817	-12,375,772
2042	0	1,008,762	-1,008,762	-357,939	-12,733,711
2043	0	977,947	-977,947	-325,246	-13,058,957
2044	0	947,779	-947,779	-295,447	-13,354,404
2045	0	918,207	-918,207	-268,281	-13,622,685
2046	0	889,182	-889,182	-243,510	-13,866,195
2047	0	860,661	-860,661	-220,920	-14,087,115
2048	0	832,604	-832,604	-200,316	-14,287,431
2049	0	804,973	-804,973	-181,525	-14,468,956
2050	0	777,734	-777,734	-164,385	-14,633,341
2051	0	750,857	-750,857	-148,752	-14,782,093
2052	0	724,311	-724,311	-134,496	-14,916,589
2053	0	698,071	-698,071	-121,495	-15,038,084
2054	0	672,112	-672,112	-109,642	-15,147,726
2055	0	646,412	-646,412	-98,837	-15,246,564
2056	0	620,949	-620,949	-88,991	-15,335,554
2057	0	595,706	-595,706	-80,020	-15,415,574
2058	0	570,663	-570,663	-71,849	-15,487,423
2059	0	545,806	-545,806	-64,410	-15,551,834
2060	0	521,120	-521,120	-57,641	-15,609,475

Table 2
Present Worth Analysis of Alternative 2: Rebuild in a Parallel Right-of-Way

<i>Year</i>	<i>Transmission 51.9 yrs 8% CCA</i>	<i>Capital Revenue Requirement</i>	<i>Net Benefit</i>	<i>Present Worth Benefit</i>	<i>Cumulative Present Value Benefit</i>
2061	0	496,590	-496,590	-51,483	-15,660,958
2062	0	472,205	-472,205	-45,886	-15,706,844
2063	0	447,952	-447,952	-40,799	-15,747,643
2064	0	423,821	-423,821	-36,181	-15,783,824
2065	0	399,803	-399,803	-31,990	-15,815,815
2066	0	375,888	-375,888	-28,191	-15,844,006
2067	0	352,068	-352,068	-24,749	-15,868,754
2068	0	328,335	-328,335	-21,633	-15,890,388
2069	0	304,683	-304,683	-18,816	-15,909,204
2070	0	281,105	-281,105	-16,271	-15,925,475
2071	0	257,595	-257,595	-13,976	-15,939,451
2072	0	234,148	-234,148	-11,907	-15,951,358
2073	0	210,759	-210,759	-10,045	-15,961,403
2074	0	187,422	-187,422	-8,373	-15,969,776
2075	0	164,134	-164,134	-6,873	-15,976,649
2076	0	140,892	-140,892	-5,530	-15,982,179
2077	0	155,178	-155,178	-5,708	-15,987,887
2078	0	1,281,196	-1,281,196	-44,176	-16,032,063
2079	0	0	0	0	-16,032,063
2080	0	0	0	0	-16,032,063
2081	0	0	0	0	-16,032,063
2082	0	0	0	0	-16,032,063

Table 3 provides the Present Worth Analysis of Alternative 3 from 2026 to 2082.

Table 3 Present Worth Analysis of Alternative 3: Rebuild in a Partially Re-Routed Right-of-Way					
<i>Year</i>	<i>Transmission 51.9 yrs 8% CCA</i>	<i>Capital Revenue Requirement</i>	<i>Net Benefit</i>	<i>Present Worth Benefit</i>	<i>Cumulative Present Value Benefit</i>
2026	450,000	42,893	-42,893	-42,893	-42,893
2027	13,323,000	1,317,355	-1,317,355	-1,234,750	-1,277,643
2028	0	1,450,759	-1,450,759	-1,274,524	-2,552,167
2029	0	1,405,183	-1,405,183	-1,157,076	-3,709,242
2030	0	1,361,552	-1,361,552	-1,050,847	-4,760,089
2031	0	1,319,710	-1,319,710	-954,685	-5,714,774
2032	0	1,279,515	-1,279,515	-867,567	-6,582,341
2033	0	1,240,834	-1,240,834	-788,584	-7,370,925
2034	0	1,203,547	-1,203,547	-716,924	-8,087,849
2035	0	1,167,542	-1,167,542	-651,867	-8,739,716
2036	0	1,132,716	-1,132,716	-592,767	-9,332,483
2037	0	1,098,975	-1,098,975	-539,047	-9,871,530
2038	0	1,066,232	-1,066,232	-490,193	-10,361,723
2039	0	1,034,408	-1,034,408	-445,742	-10,807,465
2040	0	1,003,428	-1,003,428	-405,279	-11,212,744
2041	0	973,226	-973,226	-368,433	-11,581,177
2042	0	943,739	-943,739	-334,867	-11,916,044
2043	0	914,910	-914,910	-304,281	-12,220,325
2044	0	886,686	-886,686	-276,403	-12,496,728
2045	0	859,019	-859,019	-250,988	-12,747,716
2046	0	831,864	-831,864	-227,813	-12,975,529
2047	0	805,181	-805,181	-206,679	-13,182,207
2048	0	778,931	-778,931	-187,403	-13,369,611
2049	0	753,081	-753,081	-169,823	-13,539,433
2050	0	727,597	-727,597	-153,788	-13,693,221
2051	0	702,451	-702,451	-139,163	-13,832,384
2052	0	677,615	-677,615	-125,825	-13,958,209
2053	0	653,066	-653,066	-113,662	-14,071,871
2054	0	628,779	-628,779	-102,573	-14,174,444
2055	0	604,734	-604,734	-92,465	-14,266,909
2056	0	580,912	-580,912	-83,253	-14,350,162
2057	0	557,294	-557,294	-74,860	-14,425,022
2058	0	533,865	-533,865	-67,216	-14,492,238
2059	0	510,609	-510,609	-60,257	-14,552,495
2060	0	487,513	-487,513	-53,924	-14,606,418

Table 3
Present Worth Analysis of Alternative 3: Rebuild in a Partially Re-Routed Right-of-Way

<i>Year</i>	<i>Transmission 51.9 yrs 8% CCA</i>	<i>Capital Revenue Requirement</i>	<i>Net Benefit</i>	<i>Present Worth Benefit</i>	<i>Cumulative Present Value Benefit</i>
2061	0	464,563	-464,563	-48,163	-14,654,581
2062	0	441,748	-441,748	-42,926	-14,697,507
2063	0	419,057	-419,057	-38,168	-14,735,675
2064	0	396,481	-396,481	-33,847	-14,769,522
2065	0	374,009	-374,009	-29,927	-14,799,449
2066	0	351,634	-351,634	-26,372	-14,825,821
2067	0	329,349	-329,349	-23,152	-14,848,973
2068	0	307,145	-307,145	-20,237	-14,869,210
2069	0	285,016	-285,016	-17,601	-14,886,811
2070	0	262,956	-262,956	-15,221	-14,902,032
2071	0	240,961	-240,961	-13,073	-14,915,105
2072	0	219,024	-219,024	-11,138	-14,926,243
2073	0	197,140	-197,140	-9,396	-14,935,639
2074	0	175,307	-175,307	-7,832	-14,943,471
2075	0	153,519	-153,519	-6,428	-14,949,899
2076	0	131,773	-131,773	-5,172	-14,955,071
2077	0	147,554	-147,554	-5,428	-14,960,499
2078	0	1,196,088	-1,196,088	-41,241	-15,001,740
2079	0	0	0	0	-15,001,740
2080	0	0	0	0	-15,001,740
2081	0	0	0	0	-15,001,740
2082	0	0	0	0	-15,001,740