Q. (Reference CA-NP-073 Attachment A) In the NPV analysis for the Transmission Line 100L Rebuild, would a discount rate of 9 per cent change the ranking of the alternatives? Please provide the calculations.

A. The ranking of the alternatives would remain the same using a 9% discount rate. Attachment A provides the revised NPV analysis for the three alternatives proposed in the *Transmission Line 100L Rebuild* project.

ATTACHMENT A:

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

Table 1 provides the revised Present Worth Analysis of Alternative 1 from 2026 to 2082 using a 9% discount rate.[1]

Table 1 Present Worth Analysis of Alternative 1: Replace Deteriorated Structures and Defer Rebuild					
Year	Transmission 51.9 yrs 8% CCA	Capital Revenue Requirement	Net Benefit	Present Worth Benefit	Cumulative Present Value Benefit
2026	10,942,000	1,291,566	-1,291,566	-1,291,566	-1,291,566
2027	0	1,393,023	-1,393,023	-1,278,003	-2,569,570
2028	0	1,346,732	-1,346,732	-1,133,517	-3,703,087
2029	0	1,302,418	-1,302,418	-1,005,706	-4,708,792
2030	0	1,259,924	-1,259,924	-892,562	-5,601,354
2031	4,549,926	1,759,076	-1,759,076	-1,143,279	-6,744,633
2032	0	1,764,662	-1,764,662	-1,052,210	-7,796,843
2033	0	1,707,103	-1,707,103	-933,844	-8,730,687
2034	0	1,651,706	-1,651,706	-828,936	-9,559,623
2035	0	1,598,299	-1,598,299	-735,901	-10,295,524
2036	0	1,546,721	-1,546,721	-653,351	-10,948,875
2037	0	1,496,826	-1,496,826	-580,069	-11,528,945
2038	0	1,448,480	-1,448,480	-514,985	-12,043,930
2039	0	1,401,559	-1,401,559	-457,159	-12,501,088
2040	0	1,355,949	-1,355,949	-405,763	-12,906,851
2041	0	1,311,545	-1,311,545	-360,069	-13,266,921
2042	0	1,268,251	-1,268,251	-319,434	-13,586,355
2043	0	1,225,977	-1,225,977	-283,290	-13,869,645
2044	0	1,184,643	-1,184,643	-251,137	-14,120,782
2045	0	1,144,172	-1,144,172	-222,530	-14,343,311
2046	0	1,104,496	-1,104,496	-197,076	-14,540,388
2047	0	1,065,552	-1,065,552	-174,429	-14,714,816
2048	0	1,027,280	-1,027,280	-154,279	-14,869,095
2049	0	989,627	-989,627	-136,352	-15,005,447
2050	0	952,544	-952,544	-120,406	-15,125,854
2051	0	915,985	-915,985	-106,225	-15,232,078
2052	0	879,907	-879,907	-93,616	-15,325,694
2053	0	844,273	-844,273	-82,408	-15,408,102
2054	0	809,047	-809,047	-72,449	-15,480,551
2055	0	774,196	-774,196	-63,604	-15,544,154

[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					
Year	Transmission 51.9 yrs 8% CCA	Capital Revenue Requirement	Net Benefit	Present Worth Benefit	Cumulative Present Value Benefit
2056	0	739,691	-739,691	-55,751	-15,599,906
2057	0	705,503	-705,503	-48,784	-15,648,690
2058	0	671,608	-671,608	-42,606	-15,691,295
2059	0	637,981	-637,981	-37,131	-15,728,426
2060	0	604,601	-604,601	-32,283	-15,760,709
2061	0	571,450	-571,450	-27,993	-15,788,702
2062	0	538,507	-538,507	-24,201	-15,812,903
2063	0	505,757	-505,757	-20,853	-15,833,756
2064	0	473,185	-473,185	-17,899	-15,851,654
2065	0	440,775	-440,775	-15,296	-15,866,951
2066	0	408,516	-408,516	-13,006	-15,879,957
2067	0	376,394	-376,394	-10,994	-15,890,951
2068	0	344,399	-344,399	-9,229	-15,900,180
2069	0	312,521	-312,521	-7,683	-15,907,863
2070	0	280,751	-280,751	-6,332	-15,914,195
2071	0	249,079	-249,079	-5,154	-15,919,349
2072	0	217,499	-217,499	-4,129	-15,923,478
2073	0	186,002	-186,002	-3,239	-15,926,717
2074	0	154,582	-154,582	-2,470	-15,929,187
2075	0	123,233	-123,233	-1,806	-15,930,994
2076	0	91,949	-91,949	-1,237	-15,932,230
2077	0	1,082,950	-1,082,950	-13,362	-15,945,592
2078	0	41,104	-41,104	-465	-15,946,057
2079	0	31,905	-31,905	-331	-15,946,389
2080	0	22,724	-22,724	-216	-15,946,605
2081	0	13,560	-13,560	-119	-15,946,724
2082	0	429,943	-429,943	-3,448	-15,950,171

Table 2 provides the revised Present Worth Analysis of Alternative 2 from 2026 to 2082 using a 9% discount rate.

Table 2 Present Worth Analysis of Alternative 2: Rebuild in a Parallel Right-of-Way					
Year	Transmission 51.9 yrs 8% CCA	Capital Revenue Requirement	Net Benefit	Present Worth Benefit	Cumulative Present Value Benefit
2026	450,000	53,117	-53,117	-53,117	-53,117
2027	14,271,000	1,741,803	-1,741,803	-1,597,984	-1,651,101
2028	0	1,872,223	-1,872,223	-1,575,813	-3,226,914
2029	0	1,810,025	-1,810,025	-1,397,672	-4,624,586
2030	0	1,750,482	-1,750,482	-1,240,085	-5,864,671
2031	0	1,693,381	-1,693,381	-1,100,581	-6,965,252
2032	0	1,638,526	-1,638,526	-977,000	-7,942,252
2033	0	1,585,739	-1,585,739	-867,454	-8,809,705
2034	0	1,534,854	-1,534,854	-770,291	-9,579,997
2035	0	1,485,718	-1,485,718	-684,066	-10,264,062
2036	0	1,438,192	-1,438,192	-607,508	-10,871,570
2037	0	1,392,146	-1,392,146	-539,502	-11,411,072
2038	0	1,347,463	-1,347,463	-479,070	-11,890,142
2039	0	1,304,034	-1,304,034	-425,348	-12,315,490
2040	0	1,261,757	-1,261,757	-377,576	-12,693,067
2041	0	1,220,542	-1,220,542	-335,085	-13,028,152
2042	0	1,180,303	-1,180,303	-297,283	-13,325,435
2043	0	1,140,961	-1,140,961	-263,645	-13,589,080
2044	0	1,102,446	-1,102,446	-233,712	-13,822,792
2045	0	1,064,690	-1,064,690	-207,071	-14,029,863
2046	0	1,027,634	-1,027,634	-183,362	-14,213,225
2047	0	991,221	-991,221	-162,261	-14,375,486
2048	0	955,400	-955,400	-143,484	-14,518,969
2049	0	920,123	-920,123	-126,776	-14,645,745
2050	0	885,348	-885,348	-111,912	-14,757,657
2051	0	851,033	-851,033	-98,692	-14,856,350
2052	0	817,142	-817,142	-86,938	-14,943,288
2053	0	783,641	-783,641	-76,489	-15,019,777
2054	0	750,499	-750,499	-67,206	-15,086,983
2055	0	717,687	-717,687	-58,961	-15,145,944
2056	0	685,179	-685,179	-51,643	-15,197,587
2057	0	652,950	-652,950	-45,150	-15,242,737
2058	0	620,978	-620,978	-39,394	-15,282,131
2059	0	589,243	-589,243	-34,294	-15,316,425

Table 2 Present Worth Analysis of Alternative 2: Rebuild in a Parallel Right-of-Way					
Year	Transmission 51.9 yrs 8% CCA	Capital Revenue Requirement	Net Benefit	Present Worth Benefit	Cumulative Present Value Benefit
2060	0	557,726	-557,726	-29,780	-15,346,205
2061	0	526,408	-526,408	-25,787	-15,371,991
2062	0	495,275	-495,275	-22,258	-15,394,250
2063	0	464,311	-464,311	-19,144	-15,413,394
2064	0	433,504	-433,504	-16,398	-15,429,791
2065	0	402,839	-402,839	-13,980	-15,443,771
2066	0	372,306	-372,306	-11,853	-15,455,624
2067	0	341,895	-341,895	-9,986	-15,465,611
2068	0	311,596	-311,596	-8,350	-15,473,961
2069	0	281,399	-281,399	-6,918	-15,480,879
2070	0	251,297	-251,297	-5,668	-15,486,547
2071	0	221,282	-221,282	-4,579	-15,491,125
2072	0	191,346	-191,346	-3,632	-15,494,758
2073	0	161,485	-161,485	-2,812	-15,497,570
2074	0	131,691	-131,691	-2,104	-15,499,674
2075	0	101,959	-101,959	-1,495	-15,501,169
2076	0	72,285	-72,285	-972	-15,502,141
2077	0	84,703	-84,703	-1,045	-15,503,186
2078	0	1,346,793	-1,346,793	-15,245	-15,518,431
2079	0	0	0	0	-15,518,431
2080	0	0	0	0	-15,518,431
2081	0	0	0	0	-15,518,431
2082	0	0	0	0	-15,518,431

Table 3 provides the revised Present Worth Analysis of Alternative 3 from 2026 to 2082 using a 9% discount rate.

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

Year	Transmission 51.9 yrs 8% CCA	Capital Revenue Requirement	Net Benefit	Present Worth Benefit	Cumulative Present Value Benefit
2026	450,000	53,117	-53,117	-53,117	-53,117
2027	13,323,000	1,629,903	-1,629,903	-1,495,324	-1,548,441
2028	0	1,751,534	-1,751,534	-1,474,231	-3,022,672
2029	0	1,693,346	-1,693,346	-1,307,574	-4,330,246
2030	0	1,637,642	-1,637,642	-1,160,147	-5,490,393
2031	0	1,584,222	-1,584,222	-1,029,636	-6,520,029
2032	0	1,532,905	-1,532,905	-914,021	-7,434,050
2033	0	1,483,521	-1,483,521	-811,537	-8,245,586
2034	0	1,435,916	-1,435,916	-720,638	-8,966,224
2035	0	1,389,947	-1,389,947	-639,970	-9,606,194
2036	0	1,345,484	-1,345,484	-568,347	-10,174,541
2037	0	1,302,407	-1,302,407	-504,726	-10,679,267
2038	0	1,260,604	-1,260,604	-448,189	-11,127,455
2039	0	1,219,974	-1,219,974	-397,929	-11,525,385
2040	0	1,180,422	-1,180,422	-353,237	-11,878,622
2041	0	1,141,863	-1,141,863	-313,485	-12,192,106
2042	0	1,104,216	-1,104,216	-278,119	-12,470,225
2043	0	1,067,410	-1,067,410	-246,650	-12,716,875
2044	0	1,031,376	-1,031,376	-218,645	-12,935,520
2045	0	996,054	-996,054	-193,722	-13,129,242
2046	0	961,385	-961,385	-171,541	-13,300,783
2047	0	927,318	-927,318	-151,800	-13,452,583
2048	0	893,805	-893,805	-134,233	-13,586,816
2049	0	860,801	-860,801	-118,602	-13,705,419
2050	0	828,266	-828,266	-104,697	-13,810,116
2051	0	796,161	-796,161	-92,329	-13,902,445
2052	0	764,454	-764,454	-81,332	-13,983,777
2053	0	733,111	-733,111	-71,557	-14,055,334
2054	0	702,104	-702,104	-62,872	-14,118,206
2055	0	671,405	-671,405	-55,159	-14,173,365
2056	0	640,991	-640,991	-48,312	-14,221,678
2057	0	610,839	-610,839	-42,238	-14,263,916
2058	0	580,926	-580,926	-36,853	-14,300,769
2059	0	551,235	-551,235	-32,082	-14,332,851

Table 3 Present Worth Analysis of Alternative 3: Rebuild in a Partially Re-Routed Right-of-Way					
Year	Transmission 51.9 yrs 8% CCA	Capital Revenue Requirement	Net Benefit	Present Worth Benefit	Cumulative Present Value Benefit
2060	0	521,748	-521,748	-27,859	-14,360,710
2061	0	492,448	-492,448	-24,123	-14,384,833
2062	0	463,320	-463,320	-20,822	-14,405,655
2063	0	434,350	-434,350	-17,909	-14,423,563
2064	0	405,526	-405,526	-15,340	-14,438,903
2065	0	376,837	-376,837	-13,077	-14,451,980
2066	0	348,271	-348,271	-11,088	-14,463,068
2067	0	319,818	-319,818	-9,342	-14,472,410
2068	0	291,470	-291,470	-7,811	-14,480,220
2069	0	263,218	-263,218	-6,471	-14,486,692
2070	0	235,055	-235,055	-5,302	-14,491,993
2071	0	206,973	-206,973	-4,283	-14,496,276
2072	0	178,965	-178,965	-3,397	-14,499,673
2073	0	151,027	-151,027	-2,630	-14,502,304
2074	0	123,152	-123,152	-1,968	-14,504,271
2075	0	95,335	-95,335	-1,398	-14,505,669
2076	0	67,571	-67,571	-909	-14,506,578
2077	0	81,897	-81,897	-1,010	-14,507,588
2078	0	1,257,328	-1,257,328	-14,232	-14,521,820
2079	0	0	0	0	-14,521,820
2080	0	0	0	0	-14,521,820
2081	0	0	0	0	-14,521,820
2082	0	0	0	0	-14,521,820