Q. The cost benefit analysis that was provided in relation to the Rattling Brook Refurbishment is an evaluation of two alternatives - proceeding with the proposed capital expenditures vs. not operating the plant. Provide a cost benefit analysis assuming the continued operation of the plant without the work and with this work, setting out details of the savings associated with the increased capacity and the costs associated with the carrying charges.

A. Attachment C to *Appendix H: Feasibility Analysis* found in Volume II of Newfoundland Power's 2007 Capital Budget Application indicates the levelized cost resulting from continued operation of the Rattling Brook hydroelectric plant assuming the planned improvements are undertaken.

Attachment A to this Response indicates the levelized cost resulting from continued operation of the Rattling Brook hydroelectric plant assuming none of the planned improvements are undertaken. It is presented on the same basis as Attachment C to *Appendix H: Feasibility Analysis*.

Comparison of Attachment A to Attachment C to *Appendix H*: *Feasibility Analysis* shows the details requested in the question.

The assumption that the Rattling Brook hydroelectric plant can continue to operate without the planned improvements is not a realistic or viable assumption for the purposes of engineering planning.

Levelized Cost Resulting from Continued Operation of the Rattling Brook hydro-electric plant

Present Worth Analysis

Weighted Average Incremental Cost of Capital **7.15%**

PW Year **2007**

YEAR	Generation Hydro 49.26 yrs 8% CCA	Generation Hydro 49.26 yrs 30% CCA	Capital Revenue Requirement	Operating Costs	Operating Benefits	Net Benefit	Present Worth Benefit	Cumulative Present Worth Benefit	Rev Rqmt (¢/kWhr)	Levelized Rev Rqmt (¢/kWhr)
2007	0	0	0	281,851	0	-281,851	-263,043	-263,043	0.404	0.497
2008	0	0	0	286,079	0	-286,079	-249,173	-512,217	0.410	0.497
2009	0	0	0	290,942	0	-290,942	-236,499	-748,716	0.417	0.497
2010	0	0	0	295,888	0	-295,888	-224,470	-973,186	0.424	0.497
2011	0	0	0	300,918	0	-300,918	-213,053	-1,186,239	0.431	0.497
2012	0	0	0	305,432	0	-305,432	-201,819	-1,388,058	0.438	0.497
2013	0	0	0	310,013	0	-310,013	-191,177	-1,579,235	0.444	0.497
2014	0	0	0	314,664	0	-314,664	-181,096	-1,760,331	0.451	0.497
2015	0	0	0	319,384	0	-319,384	-171,547	-1,931,878	0.458	0.497
2016	0	0	0	324,174	0	-324,174	-162,501	-2,094,379	0.464	0.497
2017	0	0	0	329,037	0	-329,037	-153,933	-2,248,312	0.471	0.497
2018	0	0	0	333,973	0	-333,973	-145,816	-2,394,128	0.478	0.497
2019	0	0	0	338,982	0	-338,982	-138,127	-2,532,255	0.486	0.497
2020	0	0	0	344,067	0	-344,067	-130,844	-2,663,098	0.493	0.497
2021	0	0	0	349,228	0	-349,228	-123,944	-2,787,043	0.500	0.497
2022	0	0	0	354,466	0	-354,466	-117,409	-2,904,451	0.508	0.497
2023	0	0	0	359,783	0	-359,783	-111,218	-3,015,669	0.515	0.497
2024	0	0	0	365,180	0	-365,180	-105,353	-3,121,022	0.523	0.497
2025	0	0	0	370,658	0	-370,658	-99,798	-3,220,820	0.531	0.497
2026	0	0	0	376,218	0	-376,218	-94,536	-3,315,356	0.539	0.497
2027	0	0	0	381,861	0	-381,861	-89,551	-3,404,907	0.547	0.497
2028	0	0	0	387,589	0	-387,589	-84,829	-3,489,735	0.555	0.497
2029	0	0	0	393,403	0	-393,403	-80,356	-3,570,091	0.564	0.497
2030	0	0	0	399,304	0	-399,304	-76,119	-3,646,210	0.572	0.497
2031	0	0	0	405,293	0	-405,293	-72,105	-3,718,315	0.581	0.497
2032	0	0	0	411,373	0	-411,373	-68,303	-3,786,618	0.589	0.497
2033	0	0	0	417,543	0	-417,543	-64,701	-3,851,319	0.598	0.497
2034	0	0	0	423,806	0	-423,806	-61,290	-3,912,608	0.607	0.497
2035	0	0	0	430,163	0	-430,163	-58,058	-3,970,666	0.616	0.497
2036	0	0	0	436,616	0	-436,616	-54,996	-4,025,663	0.626	0.497
2037	0	0	0	443,165	0	-443,165	-52,096	-4,077,759	0.635	0.497
2038	0	0	0	449,813	0	-449,813	-49,349	-4,127,108	0.644	0.497
2039	0	0	0	456,560	0	-456,560	-46,747	-4,173,856	0.654	0.497
2040	0	0	0	463,408	0	-463,408	-44,282	-4,218,138	0.664	0.497
2041	0	0	0	470,359	0	-470,359	-41,947	-4,260,085	0.674	0.497
2042	0	0	0	477,415	0	-477,415	-39,735	-4,299,821	0.684	0.497
2043	0	0	0	484,576	0	-484,576	-37,640	-4,337,461	0.694	0.497
2044	0	0	0	491,845	0	-491,845	-35,655	-4,373,116	0.705	0.497
2045	0	0	0	499,222	0	-499,222	-33,775	-4,406,891	0.715	0.497
2046	0	0	0	506,711	0	-506,711	-31,994	-4,438,886	0.726	0.497
2047	0	0	0	514,311	0	-514,311	-30,307	-4,469,193	0.737	0.497
2048	0	0	0	522,026	0	-522,026	-28,709	-4,497,902	0.748	0.497
2049	0	0	0	529,856	0	-529,856	-27,195	-4,525,098	0.759	0.497
2050	0	0	0	537,804	0	-537,804	-25,761	-4,550,859	0.770	0.497
2051	0	0	0	545,871	0	-545,871	-24,403	-4,575,262	0.782	0.497
2052	0	0	0	554,059	0	-554,059	-23,116	-4,598,378	0.794	0.497
2053	0	0	0	562,370	0	-562,370	-21,897	-4,620,275	0.806	0.497
2054	0	0	0	570,806	0	-570,806	-20,743	-4,641,018	0.818	0.497
2055	0	0	0	579,368	0	-579,368	-19,649	-4,660,667	0.830	0.497
2056	0	0	0	588,058	0	-588,058	-18,613	-4,679,280	0.842	0.497
2057	0	0	0	596,879	0	-596,879	-17,631	-4,696,911	0.855	0.497
2058	0	0	0	605,832	0	-605,832	-16,702	-4,713,613	0.868	0.497
2059	0	0	0	614,920	0	-614,920	-15,821	-4,729,434	0.881	0.497
2060	0	0	0	624,144	0	-624,144	-14,987	-4,744,420	0.894	0.497
2061	0	0	0	633,506	0	-633,506	-14,196	-4,758,617	0.908	0.497

Present Worth Analysis

Weighted Average Incremental Cost of Capital **7.15%**

PW Year **2007**

YEAR	Generation Hydro 49.26 yrs 8% CCA	Generation Hydro 49.26 yrs 30% CCA	Capital Revenue Requirement	Operating Costs	Operating Benefits	Net Benefit	Present Worth Benefit	Cumulative Present Worth Benefit	Rev Rqmt (¢/kWhr)	Levelized Rev Rqmt (¢/kWhr)
2062	0	0	0	643,008	0	-643,008	-13,448	-4,772,065	0.921	0.497
2063	0	0	0	652,654	0	-652,654	-12,739	-4,784,804	0.935	0.497
2064	0	0	0	662,443	0	-662,443	-12,067	-4,796,871	0.949	0.497
2065	0	0	0	672,380	0	-672,380	-11,431	-4,808,301	0.963	0.497
2066	0	0	0	682,466	0	-682,466	-10,828	-4,819,129	0.978	0.497
2067	0	0	0	692,703	0	-692,703	-10,257	-4,829,387	0.992	0.497
2068	0	0	0	703,093	0	-703,093	-9,716	-4,839,103	1.007	0.497
2069	0	0	0	713,640	0	-713,640	-9,204	-4,848,307	1.022	0.497
2070	0	0	0	724,344	0	-724,344	-8,719	-4,857,025	1.038	0.497
2071	0	0	0	735,209	0	-735,209	-8,259	-4,865,284	1.053	0.497
2072	0	0	0	746,237	0	-746,237	-7,823	-4,873,107	1.069	0.497
2073	0	0	0	757,431	0	-757,431	-7,411	-4,880,518	1.085	0.497
2074	0	0	0	768,793	0	-768,793	-7,020	-4,887,538	1.101	0.497
2075	0	0	0	780,324	0	-780,324	-6,650	-4,894,188	1.118	0.497
2076	0	0	0	792,029	0	-792,029	-6,299	-4,900,488	1.135	0.497
2077	0	0	0	803,910	0	-803,910	-5,967	-4,906,455	1.152	0.497
2078	0	0	0	815,968	0	-815,968	-5,652	-4,912,107	1.169	0.497
2079	0	0	0	828,208	0	-828,208	-5,354	-4,917,461	1.187	0.497
2080	0	0	0	840,631	0	-840,631	-5,072	-4,922,534	1.204	0.497
2081	0	0	0	853,240	0	-853,240	-4,805	-4,927,338	1.222	0.497
2082	0	0	0	866,039	0	-866,039	-4,551	-4,931,889	1.241	0.497
2083	0	0	0	879,030	0	-879,030	-4,311	-4,936,201	1.259	0.497
2084	0	0	0	892,215	0	-892,215	-4,084	-4,940,285	1.278	0.497
2085	0	0	0	905,598	0	-905,598	-3,869	-4,944,153	1.297	0.497
2086	0	0	0	919,182	0	-919,182	-3,665	-4,947,818	1.317	0.497
2087	0	0	0	932,970	0	-932,970	-3,471	-4,951,289		