Q. Re: Data: For each change in average service life, dispersion curve or net salvage value between the prior depreciation study and the current depreciation study, provide a detailed narrative explaining what changed between the two studies that resulted in modification to either the average service life, dispersion curve or net salvage. Finally, provide all workpapers, assumptions, considerations, and material reviewed and relied upon in sufficient detail to permit verification of the information provided.

A. Since the completion of the last depreciation study, Hydro has undertaken reviews of account structure and naming conventions. Prior to the submission of depreciation study data to Gannett Fleming, Hydro reviewed the asset types that were included in each depreciable group. The review was largely based on the anticipated implementation of the International Financial Reporting Standards (IFRS), and as such, there was a focus on ensuring that assets that would be exposed to similar forces of retirement and estimated average service lives were grouped together. As a result of this review, there was a restructuring and grouping of assets within each account which resulted in limited comparability from the average service life estimates between the current and prior depreciation studies.

In addition, in April 2011, Hydro undertook a renaming of accounts. CA-NLH-1 Attachment 2 is a table that maps the account numbers from the originally analyzed accounts to the revised naming convention that is presented in the current application.

CA-NLH-5, Attachment 1, provides a summary of the previously studied average service life estimate(Gannett's Modified Service Life column), the life estimate resulting from the retirement rate analysis in this proceeding (Gannett's Preliminary Service Life column) and the recommended average service life estimate in this current study (Gannet's Revised Service Life column). Gannett Fleming notes that the changes in average service life estimates are largely caused by the restructured grouping of assets within the revised account groupings.

UOP	Description	Gannett's Modified Service Life	Gannett's Preliminary Service Life	Gannett's Revised Service Life	Iowa Curve
001	AIRCRAFT LANDING STRIP	25	22	22	S6
013	AUXILIARY POWER SYSTEMS	25	40	30	R4
017	BATTERY & POWER SYSTEMS	15	30	15	S3
023	BOILER SYSTEM	#N/A	35	35	R3
033	BRIDGES	50	60	60	R4
035	BUILDINGS - OTHER	40	50	50	R0.5
053	BUILDINGS - METAL	45	55	55	R3
065	BUS DUCT GENERATOR	45	35	35	R3
067	BUSWORK & HARDWARE	45	40	40	R3
069	CABLES - TELECONTROL	35	40	40	R2.5
073	CABLE - SUBMARINE	40	45	45	R4
075	CABLES - UNDER GROUND	50	60	60	S4
079	CABLES - ABOVE GROUND	40	50	50	R3
093	CAPICTORS	35	35	35	R4
095	CHEMICAL FEED SYSTEMS	35	60	35	R3
097	CHLORINATION SYSTEMS	#N/A	40	40	R4
099	CIRCUIT BREAKERS	42	55	55	R3
109	COMPRESSED AIR SYSTEMS	31	40	40	R3
119	COMPUTERS	5	5	5	SQ
123	CONDENSERS	50	35	40	R3
129	CONDUCTOR	50	60	60	R3
145	DISTRIBUTION CONDUCTOR	50	55	55	R3
151	CONTROL, METER / RELAYING	35	45	30	R1
169	COOLING SYSTEMS	30	40	40	R1.5
171	COUNTERPOISE	40	50	50	R3
173	CRANES	75	70	70	R3
179	DAMS, DYKES, CANALS & TUNNELS	100	100	100	R4
181	DIESEL SYSTEMS & ENGINES	20	25	25	S0.5
189	DISCONNECT SWITCHES	42	50	45	S2.5
193	DYKES AND LINERS - FUEL STORAGE	100	42	42	L1
195	ELEVATORS	#N/A	40	40	S5
209	EMS EQUIPMENT	15	30	25	R2.5
	REMAINING ASSETS SHOULD BE RETIRED				
217	ENVIRONMENTAL EQUIPMENT	#N/A	30	30	S4
218	FALL ARREST EQUIPMENT	#N/A	10	10	L2
219	FEEDWATER SYSTEMS	#N/A	45	45	L2
223	FENCING	37	47	47	R3
225	FIRE FIGHTING EQUIPMENT	35	45	45	R4
235	FOOTINGS & FOUNDATIONS	40	50	50	R4
241	FREQ CONVERSION	32	40	40	S4
249	FUEL SYSTEMS	#N/A	50	50	R1.5
263	GAS TURBINE SYSTEMS	42	50	35	R4
283	GATES	75	80	80	R4

UOP	Description	Gannett's Modified Service Life	Gannett's Preliminary Service Life	Gannett's Revised Service Life	Iowa Curve
293	GENERATORS	50	60	60	S4
298	GENERATOR - WINDINGS	#N/A	40	40	S3
299	GLYCOL SYSTEMS	30	40	40	S3
301	GOVENORS	50	55	45	S4
305	GROUND WIRE SYSTEM	50	55	55	R4
310	BOOMS - TIMBER	N/A	40	40	R1
319	HRDWIRED SUPRVSRY EQUIP	20	17	17	L3
327	INFORMATION DELIVERY SYS - ECC	20	20	20	S4
329	INSTRUMENTATION	#N/A	28	26	L0.5
343	INSULATORS	28	30	30	L3
351	INTAKE STRUCTURES	100	100	100	R4
353	INVERTERS	50	16	25	S3
365	L.V. SWITCHING SYSTEMS	50	60	60	R5
383	LAND IMPROVMENTS	40	50	50	R3
385	LIGHTING SYSTEMS	40	45	45	R4
389	LIGHTNING ARRESTORS	50	58	58	R3
391	LINE COUPLING EQUIPMENT	25	23	23	R5
393	MAIN BREAKERS	25	42	42	R0.5
395	MARINE TERMINAL	25	50	50	R4
403	METALCLAD SWITCHGEAR CUB/EQU 4kv/6(	25	30	30	R4
405	METER TEST SWITCHES	25	35	35	R5
407	METERING TANKS	40	37	37	R3
409	METERS - DIGITAL	25	20	20	L3
411	METERS - ANALOGUE	25	25	25	L3
413	METERS - OTHER	25	22	22	L3
415	MICROWAVE DISH	20	17	30	L4
	ACCOUNT IS FULLY RETIRED - REMOVE FROM STUDY				
417	MISC UNITS OF PROP	35	20	20	R1
418	STUDIES	#N/A	20	5	R0.5
419	MOBILE - A.T.V.'S & SNOWMOBILES	4	7	7	SQ
421	MOBILE - AIR COMPRESSOR,ATTACHMENT	10	20	20	R2
423	MOBILE - ARGO'S	5	7	7	SQ
431	MOBILE - FLEX/FORK/LOAD/GRADE/MUSK/	12	20	20	R2
443	MULTIPLEX EQUIPMENT	20	18	18	R2.5
444	OFFICE EQUIPMENT	5	20	20	SQ
445	OFFICE FURNITURE	20	20	20	SQ
447	P.C.B. STORAGE CONTAINER	25	30	30	R4
449	PABX - PRIV AUTO BRANCH EXCH	10	20	20	R4
451	PENSTOCK	65	70	70	R4
455	POLE CRIBS & POLE HARDWARE	46	42	50	L2
459	POLE STRUCTURES - WOOD	46	53	53	R4
509	POLES - CONCRETE	35	25	25	R4
515	POLES - WOOD	35	37	37	R3
533	POWER LINE CARRIER	20	22	20	R4
541	POWER SYSTEMS	#N/A	18	18	R3

UOP	Description	Gannett's Modified Service Life	Gannett's Preliminary Service Life	Gannett's Revised Service Life	Iowa Curve
547	POWERHOUSE	#N/A	75	75	R3
552	PRINTERS	5	5	5	SQ
553	PROTECTIVE CONTROL & RELAY PANELS	35	30	30	R3
555	RADIO TOWERS (WOOD OR STEEL)	35	35	35	R3
557	RADIOS - FIXED MICROWAVE EQUIPMENT	10	22	22	R4
559	RADIOS - FIXED UHF EQUIPMENT	10	15	15	L1.5
561	RADIOS - FIXED VHF EQUIPMENT	10	19	19	R3
565	RADIOS - MOBILE VHF BASE STATION	10	15	15	R3
573	REACTORS & RESISTORS	40	40	40	S4
575	RECLOSERS	40	40	40	R4
581	REGULATORS	40	35	35	R3
583	RESERVOIR POWER	30	30	30	R3
587	REVENUE METERING	30	35	35	R3
597	RIGHT - OF - WAYS	45	55	55	R4
599	ROADS	50	50	50	R4
600	ROUTERS & LAN	7	5	5	SQ
601	RUNNER	40	33	33	R5
603	SCADA EQUIPMENT	20	20	20	R3
621	SECTIONALIZERS	30	25	25	R3
622	SERVERS	5	5	5	SQ
623	SEWAGE DISPOSAL SYSTEM	40	45	45	R2.5
625	SOFTWARE - PRE 2011	7	7	7	SQ
	SOFTWARE - POST 2010 - PERSONAL PRODUCTIVITY			5	SQ
	SOFTWARE - POST 2010 - ENTERPRISE			7	SQ
627	SPILLWAY STRUCTURES	100	100	100	R4
629	STACKS	#N/A	40	40	R4
637	STATIC EXCITATION SYSTEM	32	32	32	R4
643	STATIC EXCITATION - XFORMERS	32	32	32	R4
645	STATION SERVICE	40	40	40	R4
653	STOP LOGS	65	65	65	R4
655	STORAGE PALLETS & RACKINGS	25	30	30	R3
657	STORM & YARD DRAINAGE	45	45	45	R4
661	STREET LIGHTS	35	20	20	R2
669	STRUCTURAL SUPPORTS (WOOD OR STEEL)	45	45	45	R4
671	SUMP SYSTEMS	60	35	35	R4
673	SURGE SYSTEMS	60	45	45	R3
677	STATION SWITCHING	29	45	45	L1.5
685	TELECONTROL SYSTEM	10	27	27	L1
691	TEST EQUIPMENT	25	40	20	SQ
695	TOOLS & EQUIPMENT	15	35	20	SQ
697	TOWERS	60	65	65	R3
703	TRANSFORMERS	47	55	55	R3
709	TRANSFORMERS - PAD MOUNT	40	40	40	R3
733	TRANSFORMERS - POLE MOUNTED	35	30	30	R2
769	TURBINES	50	50	50	R3
773	VACUUM CLEANING SYSTEM	#N/A	60	60	R4

UOP	Description	Gannett's Modified Service Life	Gannett's Preliminary Service Life	Gannett's Revised Service Life	Iowa Curve
775	VALVES - PENSTOCK	65	65	65	R3
779	VEHICLES - 1 TON	#N/A	8	8	L4
781	VEHICLES - 3/4 TON AND UNDER	5	7	7	L3
787	VEHICLES - BOOMS/BODIES/CRANES/CAB &	6	15	15	L1.5
793	VEHICLES - CARS, STATION WAGONS & VAN	5	6	6	L3
795	VEHICLES - DUMP TRUCKS	8	20	20	L3
805	WATER REGULATING STRUCTURES	45	55	55	S4
807	WATER SYSTEMS	45	30	30	L4
815	WATER TREATMENT	#N/A	34	34	L4
827	YARD STORAGE RAMPS	25	25	25	R3