

ELECTRIC GENERAL RATE APPLICATION 2015

Manitoba Hydro Undertaking #20

Manitoba Hydro to provide a chart similar to slide 42 of Exhibit MH-36 with the power train assets for the Nelson River plants and Grand Rapids, giving the age of each asset, type, and the anticipated retirement.

Response:

Please see the following charts. Please note, the age of each asset within a fleet of each asset types ranges from original station in service to less than 5 years old.

Grand Rapids Generating Station	In Service 1968 Age = 47 years	# of Assets recommended for replacement or refurbishment	Expected Remaining Service Life
Asset Type	Breakers	25	6 - 33
	Exciters	2	14 - 20
	Generators	4	5 - 15
	Governors	4	5 - 15
	Transformers	0	
	Turbines	4	5 - 15

Kettle Generating Station	In Service 1974 Age = 41 years	# of Assets recommended for replacement or refurbishment	Expected Remaining Service Life
Asset Type	Breakers	14	14 - 20
	Exciters	1	17
	Generators	8	5 - 18
	Governors	11	5 - 18
	Transformers	8	22 - 25
	Turbines	12	31 - 47

Kelsey Generating Station	In Service 1961 Age = 51 years	# of Assets recommended for replacement or refurbishment	Expected Remaining Service Life
Asset Type	Breakers	17	9 - 43
	Exciters	7	17 - 18
	Generators	7	5 - 18
	Governors	0	
	Transformers	7	22 - 25

Limestone Generating Station	In Service 1990 Age = 25 years	# of Assets recommended for replacement or refurbishment	Expected Remaining Service Life
Asset Type	Breakers	31	14 - 38
	Exciters	10	9 - 14
	Transformers	10	9 - 14
	Turbines	10	14 - 45

Long Spruce Generating Station	In Service 1979 Age = 36 years	# of Assets recommended for replacement or refurbishment	Expected Remaining Service Life
Asset Type	Breakers	46	18 - 31
	Exciters	10	5 - 12
	Generators	10	5 - 12
	Governors	10	20 - 25
	Transformers	10	5 - 12
	Turbines	10	38 - 49