

Appendix 1

Table 1.1 - Comparison of the Likely Environmental Effects of Hydro One's Bruce x Milton "Reference Route" to: Original Bradley x Georgetown Route (incl. Pt. 95 to Milton TS, 1974) and Ontario Hydro Preferred Middle Route from Bradley Jct. To Essa TS. (Plan 7, 1984)

Key Environmental & Socio- economic Evaluation Criteria	HOne-Bruce x Milton Reference Route(RR)	1st Bradley x Georgetown	Bruce x Essa TS Preferred Route	Comments
Route Length (km)	180 km	179.2 km	158.5 km	
Power System Security	2 x 2cct. 500 kV lines on same r/w All BNPD circuits and Nanticoke lines through Milton TS	Separate from Bradley x Kitchener	System Plan 7 Preferred Route All 3 BNPD lines have geographic separation	Bruce x Essa connects to Claireville TS. 200 ft available on Essa x Claireville r/w
Existing property rights	24km-Bradley Jct.	24km-Bradley Jct.	24km-Bradley Jct.	BxM is fourth line on r/w from BNPD to Bradley Jct.
Total right-of-way area	1152 ha	1260 ha	1205 ha	BxM & BxG utilize adjacent r/w
Human Settlement				B x E affects 20% fewer properties
Number of properties affected	480	469	393	
Residential / farm buildings within proposed r/w (i.e. likely removal)	33	6	5	RR - 6x more displacement of residents. More than all the previous 500kv lines combined
Residential/farms buildings within 100m of r/w (i.e. close proximity)	41	Not available	30	Socio-economic issues – view, property values, EMF
Diagonal severance of properties	81 km	Not available	31.3 km	Diagonal severances create greatest property impacts
No. properties diagonally severed	206	209	80 (approx)	RR - reprises 1960's routing
No. properties with potential for three transmission lines	186	0	0	Severe impact - Ontario Hydro Policy - 3 t-lines on a property qualifies for a buyout offer

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Key Environmental & Socio- economic Evaluation Criteria	HOne-Bruce x Milton Reference Route(RR)	1st Bradley x Georgetown	Bruce x Essa TS Preferred Route	Comments
Agricultural Resources Area of Class 1-3 in r/w	732 ha	816 ha (Class 1-2)	678 ha	CLI Capability was upgraded in the 1980's for SW projects.
Length through CLI Class 1-3	126 km	135 km	114 km	Towers located in cultivated lands are primary agric impact
Forest Resources Woodlots – bush removed	305 ha	314 ha	284.3 ha	RR removes more forest resources per km than B x G or B x E (76m r/w)
Biological Resources Sensitive areas / Provincially significant ESA's	2 - Camp Creek	Route sited to avoid Camp Creek	Glamis Bog & Osprey Wetlands	RR impacts Camp Creek avoided by the B x G route
Major river system crossings	4 – Saugeen, Teeswater, Grand	4 – Saugeen Teeswater , Grand	4- Saugeen, Noisy and Mad Rivers, Negro Creek	
No of stream /watercourse crossings	40 plus (not classified)	35	38 (cold and warm water streams)	Stream crossings are not an issue for transmission
Recreation public / private parks	1 (Orton Park)	0	1 (Motocross and trail park)	Orton Park used by families
Trail Crossings	Not avail	Not assessed	4 (Bruce Trail)	TransCanada Trail crossings with B x M
Mineral Resources Active pits and Quarries	1 pit - Bentick 1 quarry - HHs	(not avail)	5.1 ha affected	
Visual / Cultural Landscapes Highly scenic/ forested landscapes	Not available	0.4 km	12.0 km	Classification systems not comparable

Appendix 1

Source:

Bradley x Georgetown

R/W = 66 – 230kV – 66 – 63 500kV 125 **1st 500 r/w 190'**

190 x 5280 = 23 acres / mile

Total Class 1 & 2 - Bradley x 95 = 1927 acre / 23 = 84 miles (135 km)

58 x 1000 = 5.8 ha / km

Pt 95 x Milton TS – one line only

11.7 miles = 18.8 km x 76 m wide = 90 ha of Class 1 – 2 Agricultural lands

Total r/w and forest and Agric resources - Ref Route

RR – 180,000 m x 64m /10000 = **1152 ha Total r/w area**

Forest resources **305 ha**

Roads/ pasture / waste land 10% = 1152 – 115 = 1037 ha

1037 – 305 = 732 Class 1-3 lands Length through = 732 / 5.8 ha/km = **126 km**