ORPC Project Cost Summary

Project: [redacted]

Developer: [redacted]

File P20001

Project Description:

[redacted]

Cost Summary

			(with Payroll Burden)
Material		$	25,937
Stores Overhead		$	2,594
Labour		$	10,962
Trucking		$	3,660
Outside Contract		$	-
Contingency	10%	$	4,315
Cost of ORPC Work		$	47,468
Contributed Plant		$	-
Project Cost		$	47,468
ORPC Contribution (NPV)		$	1,368
Customer Cash Cap Contribution		$	46,100
Customer Cash Cont With HST		$	52,093

Prepared B[redacted]

[redacted]

[redacted]

Distribution Plant Breakdown

Project [redacted]

Plant Acct		Material	Stores Burden	Labour	Trucking	O/S Contracts	Sub Total	Cont Plant	Total	
1830	Poles	1878.00	187.80	7806.92	3020.00	0.00	12892.72	0.00	$ 12,892.72	29.9%
1835	OH Conductor	4098.30	409.83	0.00	0.00	0.00	4508.13	0.00	$ 4,508.13	10.4%
1840	Civil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$ -	n/a
1845	UG Conductor	4562.96	456.30	3155.45	640.00	0.00	8814.70	0.00	$ 8,814.70	20.4%
1850	Transformers	15356.00	1535.60	0.00	0.00	0.00	16891.60	0.00	$ 16,891.60	39.1%
1855	Services	41.76	4.18	0.00	0.00	0.00	45.94	0.00	$ 45.94	0.1%
1860	Meters	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$ -	0.0%
Totals		25937.02	2593.70	10962.37	3660.00	0.00	43153.09	0.00	$ 43,153.09	100%

Contingency	$ 4,315.31
	$ 47,468.40

Printed 18-Dec-21

Underground Estimate

[redacted]

Material

Part #	Qty. (Pieces or Meters)		Unit Cost	Total Incl Stores [redacted]		Price Update	Contestable Quantity	Non Contest $	Updated
		1840 Ducts and Civil (Not Contributed Plant by Others)							
		Yds. Cement	$90.00	$0.00				0.00	
U06828		PVC DUCT 3" 3.28	$1.01	$0.00		Aug.06		0.00	May 2011
P175007		Plugs 3"	$3.89	$0.00				0.00	May 2011
P185003		Long Sweep Elbows	$28.56	$0.00		Aug.06		0.00	May 2011
		Fish Line		$0.00					
		Misc. Fittings		$0.00					
		Concrete Pad	$1,000.00	$0.00				0.00	
		Kearney Air Seal	$10.00	$0.00					
		Fiberglass Pad	$750.92	$0.00				0.00	
		Fiberglass Covers	$170.45	$0.00				0.00	
P13004		U/G Warning Tape	$0.13	$0.00				0.00	May 2011
U05805		Ground Plate	$119.85	$0.00	$0.00			0.00	
		1845 Underground Conductor & Devices							
U00484	1	Ground Rods	$15.00	$16.50		Aug.06		16.50	May 2011
U05857	1	Ground Rod Clamps	$4.37	$4.81		Aug.06		4.81	May 2011
U07240		Pipe Straps 3"	$1.59	$0.00		Aug.06		0.00	May 2011
		Guard Straps	$2.37	$0.00				0.00	
U07156	3	Guards	$63.01	$207.93				207.93	May 2011
U07241		Lags 1/4 x 2	$0.27	$0.00		Aug.06		0.00	May 2011
U06979		Ground Wire	$3.46	$0.00				0.00	May 2011
		Prim. Cable 3/0	$5.50	$0.00				0.00	
	180	Prim Cable 1/0 (m)	$16.79	$3,324.42		Mar 07		3324.42	May 2011
		Connector	$2.52	$0.00		Aug.06		0.00	
		Moulding	$0.24	$0.00		Aug.06		0.00	
		Moulding Staples	$0.20	$0.00		Aug.06		0.00	
P65005	3	Disconnects	$114.00	$376.20		Aug.06		376.20	May 2011
	3	Fuses	$4.28	$14.12		Aug.06		14.12	
U00100	3	Disconnect Branded	$15.00	$49.50				49.50	May 2011
U00056	3	Stirrups Clamp	$18.00	$59.40		Aug.06		59.40	May 2011
U00045		Hot Line Clamps	$10.80	$0.00		Aug.06		0.00	May 2011
U00091		9 KV Arrestors	$47.00	$0.00		Aug.06		0.00	May 2011
U00080	3	3 KV Arrestors	$40.88	$134.90		Aug.06		134.90	
		Connectors No. 6 /Copper	$3.57	$0.00				0.00	
		Switch Module 3/3	$1,800.00	$0.00				0.00	May 2011
U21006	3	Termi Kits	$118.80	$392.04		Aug.06		392.04	May 2011
	3	Stem Connectors	$24.64	$81.31				81.31	
	3	Cable Supports	$23.76	$78.41				78.41	
U05443	3	Load Break Elbows	$50.28	$165.92		Aug.06		165.92	May 2011
U06515		Bushing Well Inserts	$43.74	$0.00		Aug.06		0.00	May 2011
	3	Insulated Caps	$34.48	$113.78				113.78	
		Parking. Stands	$101.40	$0.00				0.00	
		Multiplex Junction		$0.00					
				$0.00	$5,019.26				
		1850 Transformers							
		1 ph 50 kVA	$4,173.00	$0.00		July 1, 2006		0.00	
		1 ph 100 kVA	$3,120.00	$0.00				0.00	
	1	3 ph 300 kVA	$15,356.00	$16,891.60				16891.60	
		3 ph 500 kVA	$19,650.00	$0.00				0.00	
		3 ph 750 kVA	$24,000.00	$0.00				0.00	
		3 ph 1000 kVA	$31,080.00	$0.00				0.00	
		Propane Gas		$0.00					
		Pavement Repair	$750.00	$0.00				0.00	
		Ground Rods	$12.96	$0.00		Aug.06		0.00	
		Ground Rod Clamps	$5.19	$0.00		Aug.06		0.00	
				$0.00	16891.60				
		1855 Services							
U06214		Secondary 3/0 triplex	$5.85	$0.00		July 25, 2017		0.00	May 2011
U06741		TA 250 Connectors	$3.55	$0.00				0.00	May 2011
U07103	4	TA 500 Connectors	$10.44	$45.94				45.94	May 2011
U06391		Secondary 250 triplex	$11.62	$0.00		Aug.06		0.00	May 2011
				$0.00	45.94				
		Total Material		$21,956.79	#########			$21,956.79	

Labour (Man-hours) & Trucking (Hours)

	Lineman	Lead Hand	MM Foreman	Mechanic	Supervisor	Line Truck	Bucket Truck	Sm Vech	Tensioner	*Lineman*	*Lead Hand*	*MM Foreman*	*Mechanic*	*Supervisor*	*Line Truck*	*Bucket Truck*	*Sm Vech*	*Tensioner*
										1.00								
1840 Ducts and Civil Work																		
Install 3 Elbows, 3 Terms										*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Install 12 m of 4/0 cu wire										[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Other										*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
														0.00				*0.00*
1845 Underground Conductor & Devices																		
Pull Primary Cable	12.00		4.00			4.00		4.00		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Install Switchgear										[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Frame and connect riser	8.00	8.00					8			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Install Elbows	8.00	8.00				8.00								[redacted]				[redacted]
Other																		
1850 Transformers																		
Install Transformer 1 ph										*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Install Transformer 3 ph										[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Transformer Grounding										*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Other														*0.00*				*0.00*
1855 Services																		
Pull and connect										*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Other										[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
										0.00	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
														0.00				0.00
Totals (including burden)	[redacted]	[redacted]	[redacted]		[redacted]	540.00	0	100.00	0.00									
				Labour>>>>	-			**Equip>>>>>**	**640**									
				Labour Hours>>	48.00													

Contestable Work

	Lineman	Lead Hand	MM Foreman	Mechanic	Supervisor	Line Truck	Bucket Truck	Sm Vech	Tensioner	*Lineman*	*Lead Hand*	*MM Foreman*	*Mechanic*	*Supervisor*	*Line Truck*	*Bucket Truck*	*Sm Vech*	*Tensioner*
										1.00								
1840 Ducts and Civil Work																		
Install Ducts										*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Trenching by ORPC										[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Other										*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
														0.00				*0.00*
1845 Underground Conductor & Devices																		
Pull Primary Cable										*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Install Switchgear										[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Frame and connect riser										*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Install Elbows														*0.00*				*0.00*
Other																		
1850 Transformers																		
Install Transformer 1 ph										*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Install Transformer 3 ph										[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Transformer Grounding										*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Other														*0.00*				*0.00*
1855 Services																		
Pull and connect										*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Other										[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
										0.00	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
														0.00				0.00
Totals (including burden)	0.00	0.00	0.00		0.00	0.00	0	0.00	0.00									
				Labour>>>>	**$ -**			**Equip>>>>> $**	-									
				Total Non-Contestable		3,155.4		**Total Non-contestable**		640.00								
				total M-Hr>>>>>>>>>>	-													

Outside Contracts (dollars)

	1840	1845	1850	1855
Trenching				
Totals	0.00	0.00	0.00	0.00 -

0.00

Date Printed: 18-Dec-21

Overhead Estimate

Project

Material	Qty. (Pieces or Meters)		Book Value / Unit Cost	Total Incl Stores [redacted]			Contestable	Non Contestable $	Updated
	1830 Poles and Anchors								
Part #									
U01930		Anchor Helix Large 10"	$48.00	$0.00		August-18		0.00	
		Anchor Rods 8'	$19.95	$0.00		Aug.06		0.00	
U05812		Anchor Rods 10'	$18.50	$0.00		August-18		0.00	
U01922		Anchor Eyes for Plsa Anchor	$8.25	$0.00		August-18		0.00	
U01890	150.00	Guy Wire	$0.54	$89.10		August-18		89.10	
U00472		40' Pole	$512.00	$0.00		August-18		0.00	
U00473	3.00	45'Pole	$599.00	$1,976.70		August-18		1976.70	
U00474		50' Pole	$576.00	$0.00		August-18		0.00	
U00475		55' Pole	$725.41	$0.00		August-18		0.00	
U01941		Guards	$8.10	$0.00		August-18		0.00	
				$0.00	$2,065.80			0.00	
	1835 - Overhead Conductor & Framing								
		5/8 " Bolts	$1.50	$0.00		Aug.06		0.00	
	20.00	3/4" Bolts	$2.60	$57.20		Aug.06		57.20	
		Angle Bolts	$4.25	$0.00		Aug.06		0.00	
		Straight Eye Bolts	$4.72	$0.00		Aug.06		0.00	
		Carriage Bolts	$0.14	$0.00		Aug.06		0.00	
		Lag Bolts	$0.21	$0.00		Aug.06		0.00	
		Brace Irons	$1.23	$0.00				0.00	
		Hot taps	$8.48	$0.00				0.00	
		CLAMPS	$15.00	$0.00		Aug.06		0.00	
		Shells	$1.14	$0.00		Aug.06		0.00	
		Amp Covers	$2.52	$0.00		Aug.06		0.00	
		Amp Connectors	$15.00	$0.00		Aug.06		0.00	
		Eye Nuts	$2.97	$0.00		Aug.06		0.00	
		Kearney Grips	$3.78	$0.00		Aug.06		0.00	
		1/4 x 2 Lags	$0.27	$0.00		Aug.06		0.00	
		Stirrups	$23.00	$0.00		Aug.06		0.00	
		Pins	$12.00	$0.00		Aug.06		0.00	
	2.00	Neutral Bracket	$4.77	$10.49				10.49	
		Three Wire BRAcket	$32.35	$0.00				0.00	
		Rack Spools	$1.76	$0.00				0.00	
		Sleeves	$21.96	$0.00		Aug.06		0.00	
		Sleeves	$9.67	$0.00		Aug.06		0.00	
		Large Staples	$0.23	$0.00		Aug.06		0.00	
		Small Staples	$0.02	$0.00		Aug.06		0.00	
		Friction Tape	$2.44	$0.00				0.00	
		Scotch Tape	$3.24	$0.00		Aug.06		0.00	
		Crossarms wood	$35.90	$0.00				0.00	
U00259	4.00	Crossarms Steel - 9'6"	$296.87	$1,306.23		August-18		1306.23	
U06169		Tie Wire	$0.72	$0.00		August-18		0.00	
U06132	600.00	No 1/0 ACSR	$2.75	$1,815.00		August-18		1815.00	
U06357		No 3/0 ACSR	$1.54	$0.00		August-18		0.00	
U07033		No 3/0 AACSR	$2.17	$0.00		August-18		0.00	
U06197		556 Al	$1.07	$0.00		August-18		0.00	
U06195		336 Aluminium Bare Tulip	$3.08	$0.00		August-18		0.00	
		350 MCM	$2.59	$0.00				0.00	
U06892		No 1/0 Poly	$1.66	$0.00		August-18		0.00	
U07237		No 4/0 Poly	$2.37	$0.00		August-18		0.00	
U07238		266 Poly WP 266	$3.95	$0.00		August-18		0.00	
		Lock Washers	$0.19	$0.00		Aug.06		0.00	
		4 x 4 Washers	$1.14	$0.00		Aug.06		0.00	
		2 x 2 Washers	$0.32	$0.00		Aug.06		0.00	
		2 x 2 x 3/4" washers	$0.43	$0.00		Aug.06		0.00	
		Large Strain Insulators	$4.21	$0.00		Aug.06		0.00	
U0004		46 KV Insulators	$68.00	$0.00		August-18		0.00	
		2762 Insulators- Porcellain Pin 15 kV	$14.60	$0.00				0.00	
				$0.00					
	18.00	Dead End Buty, Rubber	$37.80	$748.44		Aug.06		748.44	
				$0.00					
	8.00	Universal Poly Insulators	$62.05	$546.04		Aug.06		546.04	
		Top Post Bracket	$17.01	$0.00		Aug.06		0.00	
		Side Post Bracket	$14.91	$0.00		Aug.06		0.00	
	8.00	3/4 Studs	$2.81	$24.73		Aug.06		24.73	
		Conductor Clamp	$8.10	$0.00		Aug.06		0.00	
		44 Kv DE Insulators	$86.00	$0.00				0.00	
				$0.00	$4,508.13				
	1850 Transformers								
		Polemount Transformers	$2,400.00	$0.00				0.00	
U00101		Disc Brackets	$16.85	$0.00		August-18		0.00	
U00105		100 Amp Disconnects	$110.00	$0.00		August-18		0.00	
U00305		Fuse Links - 100 Amp	$15.75	$0.00		August-18		0.00	
U06218		5 kv Drop Wire	$4.75	$0.00		August-18		0.00	
U00091		9 kv Arrestors	$46.00	$0.00		August-18		0.00	
U00080		3 kv Arrestors	$46.00	$0.00		August-18		0.00	
U05813		Ground Rods	$8.81	$0.00		August-18		0.00	
U05857		Ground Rod Clamps	$4.00	$0.00		August-18		0.00	
		Ground Plates	$3.70	$0.00				0.00	
U00378		Moulding	$0.23	$0.00		August-18		0.00	
				$0.00					
				$0.00	$0.00				
	1855 Services								
U06210		No 2 Triplex	$1.28	$0.00		August-18		0.00	
U00035		Preserves - Figure Eights	$4.85	$0.00		August-18		0.00	
				$0.00	$0.00				
		Total Material		$6,573.93	$6,573.93			$6,573.93	

Labour (Man-hours) & Trucking (Hours)

	Lineman	Lead Hand	MM Foreman	Mechanic	Supervisor	Line Truck	Bucket Truck	Sm Vech	Tensioner
1830 Poles and Anchors									
Install 3-45/3 Wood Poles	32.00		16.00		4.00	16.00	16.00	8.00	
Install New Conductor	32.00		16.00		4.00		16.00	8.00	
Relocate tranformers	4.00	4.00	4.00			4.00	4.00	4.00	
1835 - Overhead Conductor & Framing									
Run, Sag and Tie In									
Neutral and Bus									
Install A/B									
1850 Transformers									
Install Transformer 1 ph									
Install Transformer 3 ph									
Transformer Grounding									
Other									
1855 Services									
Run, Sag and Connect									
Transfer									
Totals (including burden)						900.00	1620	500.00	0.00
				Labour>>>>>>>				**Equip>>>>>**	**3020.00**
				Labour Hours>>>>>>>	116.00				

	Lineman	Lead Hand	MM Foreman	Mechanic	Supervisor	Line Truck	Bucket Truck	Sm Vech	Tensioner
1830 Poles and Anchors									
Install 3-45/3 Wood Poles	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Install New Conductor	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Relocate tranformers	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
1835 - Overhead Conductor & Framing									
Run, Sag and Tie In	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Neutral and Bus	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Install A/B					*0.00*				*0.00*
1850 Transformers									
Install Transformer 1 ph	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Install Transformer 3 ph	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Transformer Grounding	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Other					*0.00*				*0.00*
1855 Services									
Run, Sag and Connect	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Transfer	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Totals (including burden)					*0.00*				*0.00*

Contestable Work

	Lineman	Lead Hand	MM Foreman	Mechanic	Supervisor	Line Truck	Bucket Truck	Sm Vech	Tensioner
1830 Poles and Anchors									
Set, transfer and remove old pole									
Flying Corner rearrangment									
Relocate tranformers									
1835 - Overhead Conductor & Framing									
Frame Poles									
Run, Sag and Tie In									
Neutral and Bus									
Other									
1850 Transformers									
Install Transformer 1 ph									
Install Transformer 3 ph									
Transformer Grounding									
Other									
1855 Services									
Run, Sag and Connect									
Other									
Totals (including burden)	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00
				Labour>>>>>>>	**0.00**			**Equip>>>>>**	**0.00**
				Total Non-Contestable				**Total Non-Con**	**3020.00**
				Contestible Labour Hrs	0.00				

	Lineman	Lead Hand	MM Foreman	Mechanic	Supervisor	Line Truck	Bucket Truck	Sm Vech	Tensioner
1830 Poles and Anchors									
Set, transfer and remove old pole	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Flying Corner rearrangment	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Relocate tranformers	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
1835 - Overhead Conductor & Framing									
Frame Poles	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Run, Sag and Tie In	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Neutral and Bus	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Other					*0.00*				*0.00*
1850 Transformers									
Install Transformer 1 ph	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Install Transformer 3 ph	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Transformer Grounding	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Other					*0.00*				*0.00*
1855 Services									
Run, Sag and Connect	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Other	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Totals (including burden)					*0.00*				*0.00*

Outside Contracts (dollars)

	1840	1830	1835	1850	1855
Pole Digging					
Trenching					
Rock Anchor					
Totals	0.00	0.00	0.00	0.00	0.00

Date Printed: 18-Dec-21

Street Lighting Estimate (Not Included in Project Estimate)

Project:**#REF!** Number of Lights

To[redacted]

Qty. (Pieces or Feet)		Unit Cost			Contestable	
	8 Ft Mastarms	$97.74	$0.00	Aug.08		0.00
	Luminaire 70 HPS FG	$125.00	$0.00	Oct 09		0.00
	Luminaire 100 HPS FG	$125.00	$0.00	Oct 09		0.00
	Luminaire 150 HPS	$139.34	$0.00	Jun 08		0.00
	Luminaire 200 HPS	$189.00	$0.00	Aug.06		0.00
	Luminaire 250 HPS	$152.28	$0.00	Aug.08		0.00
	Photo Cell	$11.52	$0.00	Oct 09		0.00
	Photo Cell Base	$10.75	$0.00	Aug.06		
	Concrete Poles 35'	$1,232.00	$0.00	Oct 09		
	Steel Standards	$1,196.78	$0.00	Jun 08		0.00
	70 HPS Bulb	$11.60	$0.00			0.00
	250 HPS Bulbs	$14.00	$0.00			0.00
	150 HPS Bulbs	$12.14	$0.00	Jun 08		0.00
	8//2 Farmex	$0.71	$0.00	Aug.06		0.00
	10/2 Farmex	$1.40	$0.00	Jun 08		0.00
	14/2 Farmex	$0.19	$0.00	Aug.06		0.00
	Relays		$0.00			0.00
	Washers	$0.25	$0.00			0.00
	Sauna Tube		$0.00			0.00
	Anchor Bolts		$0.00			0.00
	5/8 x 12"Thru-Bolts	$1.46	$0.00	Aug.06		0.00
	St. Lt Fuse holder	$9.67	$0.00	Aug.06		0.00
	30 Amp Fuses	$4.93	$0.00	Aug.06		0.00
	TA 250 CONN	$2.79	$0.00			0.00
	No. 6 copper connectors	$3.57	$0.00			0.00
	Amp Shells	$1.14	$0.00	Aug.06		0.00
	Amp Covers	$2.52	$0.00	Aug.06		0.00
	Service	$500.00	$0.00			0.00
			$0.00			0.00
Total Material			**$0.00**	**Total Non-Contestable**		

Labour (Man-hours) & Trucking (Hours)

	Lineman	Lead Hand	MM Foreman	Mechanic	Supervisor	Line Truck	Bucket Truck	Sm Vech	Tensioner
Install Poles									
Install bracket and lumin									
cable pulling									
Totals (including burden)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Labour>>>>	**0.00**			**Equip>>>>>**	**0.00**

Contestable Work

	Lineman	Lead Hand	MM Foreman	Mechanic	Supervisor	Line Truck	Bucket Truck	Sm Vech	Tensioner
Install Poles									
Install bracket and lumin									
cable pulling									
Totals (including burden)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Labour>>>>	**0.00**			**Equip>>>>>**	**0.00**
				Total Non-Contestab	**0.00**			**Total Non-Contestab**	**0.00**

Outside Contracts (dollars)

Trenching
pole hole in rock

Totals 0.00

Total Cost

Date Printed: 18-Dec-21

Cost Summary	ORPC Burdened	External Cost**
Material	-	-
Stores Overhead	-	-
Labour	-	-
Trucking	-	-
O/S Contracts	-	-
Engineering	n/a	n/a
Contingency	-	-
Total	**-**	**-**
Cost per Light	**#DIV/0!**	**#DIV/0!**

**** Indicate on Project Summary Page Costing Type**

Contributed Capital (Cash and Plant)

Project #REF!

Contributed Cash		%		Total Cash	Total	
1830	Poles	29.9%		46100.00	13773.16	
1835	OH Conductor	10.4%		46100.00	4815.99	
1845	UG Conductor	20.4%		46100.00	9416.66	
1850	Transformers	39.1%		46100.00	18045.12	
1855	Services	0.1%		46100.00	49.07	
1860	Meters	0.0%		46100.00	0.00	
	Total	100%			46100.00	
Contributed Plant						
1840	Ducts/Civil					
	Single Ph Transformer Pads	500.00	0.00			
	Three Ph Pads	1000.00	0.00			
	Main trench (meters)	3.00	0.00			
	Secondary Trench (meters)	1.50	0.00			
	Concrete Encase Duct (meters)	35.00	0.00			4 duct bank with concrete
	Concrete Encase Duct (meters)	70.00	0.00			4 ducts with concrete & road reinstatement
	Supply and Install Duct					
	Total Contribute Plant				0.00	
Total Contributed Capital					**46100.00**	

1860 - Metering

Project: **#REF!**

Material

Qty	Item	Book Value	Total Incl Stores Overhead 10%
	200 A Single Ph Socket Base	90.00	$0.00
	Test Block	101.00	$0.00
	Meter Wire (ft)	0.15	$0.00
	Current Transfomer	160.00	$0.00
	Potential trf 120/360	125.00	$0.00
	Meter Node 3 element	600.00	$0.00
			$0.00
			$0.00
			$0.00
			$0.00
			$0.00
			$0.00
			$0.00
			$0.00
Total Material			**$0.00**

Labour (Man-hours) & Trucking (Hours)

	Lineman	Lead Hand	MM Foreman	Mechanic	Tech	Line Truck	Bucket Truck	Sm Vech	Tensioner
Install and test meter									
Totals (including burden)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Labour>>>	**0.00**			**Equip>>>>**	**0.00**

Outside Contracts (dollars)

Totals	0.00

Printed 18-Dec-21

Burdens

Labour Burden	[redacted]	
Stores Burden	[redacted]	
Internal ORPC Work	[redacted]	(Applied to all jobs to cover cost of admin/facilities/etc.)
Contingency	[redacted]	

Labour/Equipment Rates

	Rate	Burden	Burdened Hourly ORPC Cost	
		[redacted]%		
Mississippi Foreman	[redacted]		[redacted]	Updated to July 2018 Estimated Rates
Hrs. Lead Hand	[redacted]		[redacted]	
Lineperson	[redacted]		[redacted]	
Meter/Stn Tech	[redacted]		[redacted]	
Hrs. Mechanic	[redacted]		[redacted]	
Supervisors	[redacted]		[redacted]	
Service Truck			$ 25.00	
Large Line Truck			$ 45.00	
# 11 DOUBLE BUCKET			$ 45.00	
Tension Machine			$ 45.00	
Backhoe, Trencher			$ 45.00	
Engineering			[redacted]	

Contributed Capital - Determinants (DSC 3.2.9)

Project: **#REF!**
Date: **21-Jan-20**
Developer [redacted]

Cost Estimate Summary

	Contestible	Non-Contestible	
Material	$28,531	$0	
Labour	$12,059	$0	
Equipment	$4,026	$0	
Outside Contract	$0	$0	
Overhead	$2,853	$0	
	$47,468	$0	
Total Cost of Work			**$47,468**
Add'l Cost for Contestible Option(Estimate) (Inspection, Material Approval, Etc)		$0	

Description of Contestible Work
Labour and material to install 7 transformers, primary and secondary cable

NPV Calculation Factors

Calculation of the contributed capital requirement is a per Appendix B of the Distribution Code. The factors used in the NPV calculation:

Term:	25.00	Years
No of Services:	0.00	
Load - Energy	2600.00	Avg. kW-hr/month
Load - Demand	0.00	Avg kW/month

Fixed and Incremental Distribution Rates are approved OEB Rates

Borrowing rate	4.54%
Interest rate	9.19%
Marginal tax rate	19.15%

Incremental O&M rate $ 192.06 per customer

In the case of commerical development the NPV calculation is applied to reduce the transformer part of the work required for the service.

In the case of residential developments the NPV calculation is used to all offset all cost related to the expansion of the system to the customers meter base.

Guide to MEA Model on Economic Evaluation of Expansion Projects

1. Introduction

This spreadsheet provides a model for economic evaluation of proposed expansion projects in a service area of a electricity distributor. The Distribution System Code issued by the Ontario Energy Board (OEB) requires that a distributor perform such an evaluation to determine if the future revenue from the customer(s) will pay for the capital cost and on-going maintenance costs of the expansion project. If a shortfall between the present value of the projected costs and revenues is calculated, the distributor may propose to collect all or a portion of that amount from the customer(s). The evaluation is basically a discounted cash flow calculation that brings all costs and revenues to their net present values. This model, in general, follows the methodology, the set of common elements and related assumptions provided in Appendix B of the Distribution System Code.

Some cells include explanatory comments and are indicated by way of a red triangle in the upper right-hand corner of those cells.

2. Licence Agreement and Disclaimer

See tab **Agreement** in this model.

3. System Requirements

Microsoft Excel 2000 (or similar spreadsheet program capable of translating an Excel workbook).

The model includes a circular calculation in cell D83 of the NPV Calculation Worksheet. To ensure an appropriate result the calculation settings must be changed. In Microsoft Excel select the menu item Tools, Options and select "Iterations" in the dialogue box under the tab "Calculation".

4. Methodology

This model follows the requirements of chapter 3 and the suggested formula from Appendix "B" of the OEB's Distribution System Code. The calculation depends on two worksheets called "Data Inputs" and "NPV Calculation". The worksheet "Data Inputs" is used for all variables required by the model. This sheet allows data to be entered for each of the first five years and for a fixed annual amount for the years six through twenty-five. The worksheet "NPV Calculation" performs all of the calculations required to determine the amount of contributed capital that may be required for a particular project.

5. Reference

The MEA examined issues relating to the economic evaluation of expansion projects and produced a List of Issues on Economic Evaluation of Expansions and Responses. The document provides different examples and options to address the issues. Column E (on the right-hand side) of this sheet provides cross-references between the input data/calculations and the issues addressed in the document. It is strongly recommended that users of this model refer to that document when carrying out the economic evaluation.

6. Input Data Worksheet

The model includes sample data which should be overwritten with your utility specific data.

General information about the expansion project is entered into the first four lines of column E:
- The first line is where the Project Name is input;
- The Developer Name is entered into the second line;
- The number of years in the Customer Connection Horizon is entered into the third line; and

- The Customer Revenue Horizon is entered into the fourth line.

There are twelve colour coded data input tables.
- Yellow tables are used to enter constants which do not normally change in the year.
- Blue tables are used for project specific data.

All costs and revenues should be in today's dollars, no inflation needs to apply to any of them.

Table 1: Forecasted customer additions (non-cumulative)
Enter customer additions by class that will be added in the year. The model assumes that customer additions are made evenly throughout the year. The model creates cumulative data to automatically calculate revenues.

Table 2: Estimate of average energy per added customer (monthly kWh)
Enter average customer monthly energy consumption per additional customer by class. These figures can vary for year 1 to 5 and are to be a fixed number for each class for year 6 to 25.

Table 3: Estimate of average demand per added customer (kW)
Enter average customer demand (per customer) for classes that a demand charge applies. These figures can vary for year 1 to 5 and are to be a fixed number for each class for year 6 through 25.

Table 4: Approved wires only rates per rate schedule - fixed monthly charge
The approved rates for the relevant rate classes should be input in this table. No discount rates should be applied to rates for future years. The sample rates in this table are constant. For rates to be used in the First Generation PBR period, refer to Issues # 2a and 2b in the MEA Issues List and Responses. The OEB has indicated that rates for the first three years can be ramped to include approved rate increases.

Table 5: Approved wires only rates per rate schedule - variable charge (per kWh)
See comment under table 4.

Table 6: Approved wires only rates per rate schedule - demand charge (per kW)
See comment under table 4.

Table 7: New facilities and/or reinforcement investments
Enter costs for new facilities in this table. For a facility that is to be put in the future, its cost is to be entered in the year when, according to the LDC's forecast, it will be substantially complete. The treatment of upstream costs is addressed in the MEA List of Issues and Responses; users should consider the options/examples on the list.

Table 8: Customer specific capital
In general, most customer specific capital (e.g. for power quality purposes) should be paid for by the customer and should not be included in the evaluation. If a user can justify including certain customer specific capital in the evaluation, Table 8 is to be used to enter the data.

Table 9: Incremental overheads at project level applicable to distribution expansion
A LDC may classify certain capital costs as overheads and use this table to enter the figures; another utility may classify all capital costs as direct and put them in Table 7 leaving Table 9 blank. It is important that, in using this model, users should make sure their classification of capital costs are consistent with their utilities' accounting practices.

Table 10: Attributable incremental annual operating, maintenance and administration (OM&A) expenditures (per customer addition)
It should be noted that incremental administration cost should also be included in entries in this table. After considering all the different options determining incremental OM&A costs, perhaps the simplest way is to average costs as a suitable surrogate.

Table 11: Discount rate data
- Borrowing Rate: Enter utility's prospective (forward outlook) borrowing rate
- Rate of rate on Common Equity: Enter the rate of return allowed by the OEB. Currently, the rate is 9.88%.
- Total debt and Common Equity: actual debt and equity ratio should be used (not deemed ratio).
- Marginal Tax rates: The current marginal tax rate is 43.5%

Table 12: Tax rate data
The Taxable Capital Employed in Canada (TCEC) is specific to each corporation and is allocable among affiliates. The Federal capital tax (LCT) does not apply where TCEC is less than $10.0 million.

7. NPV Calculation Worksheet
All figures for the years in the revenue horizon are shown in these tables.

The Following tables are included in this sheet:

- Customer Revenue Table
Customer additions are assumed to be added evenly throughout the year, therefore, current year additions are divided by two.

- Capital Costs Table
Capital costs are calculated and summarized.

- Incremental Operating, Maintenance & Administration Table

- Tax Calculation Table
Payments in lieu of income taxes are not applicable until Section 93 of the *Electricity Act, 1998* comes in to force (i.e. Market Opening).

- Net Present Value Summary Table
If the net present value of the project is negative, the utility may collect up to that amount of contributed capital from the customer/developer.

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Table No.		
	Project name	+'Proj Summary'!B3:E3
	Developer name	Blank Worksheet
	Customer connection horizon (max 5)	5.00
	Customer revenue horizon (max 25)	25.00

YELLOW CELLS ONLY ARE FOR DATA INPUT OF ANNUAL CONSTANTS.

BLUE CELLS ARE USED FOR PROJECT SPECIFIC DATA

1.00 Forecasted customer additions (non-cumulative)

Customer Class	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Residential					
General Service < 50kW					
General Service > 50kW (non-TOU)					
General Service > 50kW (TOU)					
Large User					
Other class - non-demand					
Other class - non-demand					
Other class - demand					
Other class - demand					

Add in year of connection

2.00 Estimate of average energy per added customer (monthly kWh)

Customer Class	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Residential	690.00	690.00	690.00	690.00	690.00
General Service < 50kW	1910.00	1910.00	1910.00	1910.00	1910.00
Other class - non-demand					
Other class - non-demand					

Add in all 5 years

3.00 Estimate of average demand per added customer kW

Customer Class	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
General Service > 50kW (non-TOU)					
General Service > 50kW (TOU)	0.00	0.00	0.00	0.00	0.00
Large User	0.00	0.00	0.00	0.00	0.00
Other class - demand	0.00	0.00	0.00	0.00	0.00
Other class - demand	0.00	0.00	0.00	0.00	0.00

4.00 Approved wires only rates per rate schedule - monthly fixed charge

Customer Class	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Residential	16.47	16.47	16.47	16.47	16.47
General Service < 50kW	22.37	22.37	22.37	22.37	22.37
General Service > 50kW (non-TOU)	84.18	84.18	84.18	84.18	84.18
General Service > 50kW (TOU)					
Large User					
Other class - non-demand					
Other class - non-demand					
Other class - demand					
Other class - demand					

5.00 Approved wires only rates per rate schedule - variable charge (per kWh)

Customer Class	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Residential	0.0099	0.0099	0.0099	0.0099	0.0099
General Service < 50kW	0.0127	0.0127	0.0127	0.0127	0.0127
Other class - non-demand					
Other class - non-demand					

6.00 Approved wires only rates per rate schedule - demand charge (per kW)

Customer Class	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
General Service > 50kW (non-TOU)	3.4865	3.4865	3.4865	3.4865	3.4865
General Service > 50kW (TOU)					
Large User					
Other class - demand					
Other class - demand					

7.00 New facilities and/or reinforcement investments

Capital elements	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Distribution stations					
Distribution lines	47,468				
Distribution transformers					
Secondary busses					
Services	-				
Other					
Total	47,468	-	-	-	-
Assessed value of land					

8.00 Customer specific capital

Customer Class	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Residential	0.00	0.00	0.00	0.00	0.00
General Service < 50kW	0.00	0.00	0.00	0.00	0.00
General Service > 50kW (non-TOU)	0.00	0.00	0.00	0.00	0.00
General Service > 50kW (TOU)	0.00	0.00	0.00	0.00	0.00
Large User	0.00	0.00	0.00	0.00	0.00
Other class - non-demand	0.00	0.00	0.00	0.00	0.00
Other class - non-demand	0.00	0.00	0.00	0.00	0.00
Other class - demand	0.00	0.00	0.00	0.00	0.00
Other class - demand	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00

9.00 Incremental overheads (capital) at project level applicable to distribution system expansion

Customer Class	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*	*Years 6-25*
Residential	0.00	0.00	0.00	0.00	0.00	0.00
General Service < 50kW	0.00	0.00	0.00	0.00	0.00	0.00
General Service > 50kW (non-TOU)	0.00	0.00	0.00	0.00	0.00	0.00
General Service > 50kW (TOU)	0.00	0.00	0.00	0.00	0.00	0.00
Large User	0.00	0.00	0.00	0.00	0.00	0.00
Other class - non-demand	0.00	0.00	0.00	0.00	0.00	0.00
Other class - non-demand	0.00	0.00	0.00	0.00	0.00	0.00
Other class - demand	0.00	0.00	0.00	0.00	0.00	0.00
Other class - demand	0.00	0.00	0.00	0.00	0.00	0.00

Attributable incremental annual operating, maintenance and administration expenditures (per customer addition)

Customer Class	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*	*Years 6-25*
Residential	192.06	192.06	192.06	192.06	192.06	192.06
General Service < 50kW	192.06	192.06	192.06	192.06	192.06	192.06
General Service > 50kW (non-TOU)	192.06	192.06	192.06	192.06	192.06	192.06
General Service > 50kW (TOU)	192.06	192.06	192.06	192.06	192.06	192.06
Large User						
Other class - non-demand						
Other class - non-demand						
Other class - demand						
Other class - demand						

2010	2009
3568726	

Discount rate data

Incremental after-tax cost of capital	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*	*Years 6-25*
Borrowing rate	4.54%	4.54%	4.54%	4.54%	4.54%	4.54%
Rate of return on common equity	9.19%	9.19%	9.19%	9.19%	9.19%	9.19%
Total debt outstanding (%)	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
Total common equity (%)	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%
Marginal income tax rate	19.15%	19.15%	19.15%	19.15%	19.15%	19.15%
Incremental after-tax weighted average cost of capital	5.8784%	5.8784%	5.8784%	5.8784%	5.8784%	5.8784%

Tax rate data

Type of tax	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*	*Years 6-25*
Municipal tax rate						
Marginal income tax rate	19.15%	19.15%	19.15%	19.15%	19.15%	19.15%
Federal capital tax rate	0.225%	0.225%	0.225%	0.225%	0.225%	0.225%
Provincial capital tax rate	0.300%	0.300%	0.300%	0.300%	0.300%	0.300%
Capital cost allowance rate	4.000%	4.000%	4.000%	4.000%	4.000%	4.000%
Taxable capital employed in Canada	18,902,000	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000
Capital Deduction (Federal purposes)	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000
Base for Federal capital tax	(31,098,000)	(30,000,000)	(30,000,000)	(30,000,000)	(30,000,000)	(30,000,000)

Financial Factors Updated November 2010

Net Present Value Summary

	With taxes	**Without Federal and Provincial taxes**
1. PV of Operating Cash Flow		
a) PV of Net Operating Cash Flow	**$0**	**$0**
b) PV of Taxes	**($32)**	**$0**
PV of Operating Cash Flow	**($32)**	**$0**
2. PV of Capital	**($46,132)**	**($46,132)**
3. PV of CCA Tax Shield	**$99**	**$0**
NET PRESENT VALUE	**($46,064)**	**($46,132)**

	Total	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15	YEAR 16	YEAR 17	YEAR 18	YEAR 19	YEAR 20	YEAR 21	YEAR 22	YEAR 23	YEAR 24	YEAR 25
Discount rate		0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878	0.05878
Present value factor - end of year		0.94448	0.89204	0.84252	0.79574	0.75156	0.70983	0.67042	0.63320	0.59805	0.56484	0.53348	0.50386	0.47589	0.44947	0.42451	0.40095	0.37868	0.35766	0.33780	0.31905	0.30133	0.28460	0.26880	0.25388	0.23978
Present value factor - mid-year		0.97184	0.91789	0.86693	0.81879	0.77334	0.73040	0.68985	0.65155	0.61537	0.58121	0.54894	0.51846	0.48968	0.46249	0.43681	0.41256	0.38966	0.36802	0.34759	0.32829	0.31007	0.29285	0.27659	0.26123	0.24673
OPERATIONS																										
Customer revenue - fixed charge rate																										
Residential	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Service < 50kW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Service > 50kW (non-TOU)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Service > 50kW (TOU)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large User	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other class - non-demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other class - non-demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other class - demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other class - demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total fixed charge revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Customer revenue - variable charge rate																										
Residential	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Service < 50kW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Service > 50kW (non-TOU)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Service > 50kW (TOU)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large User	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other class - non-demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other class - non-demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other class - demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other class - demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total variable charge revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Customer revenue - total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Revenue received for each of the years 6 - 25 are the same as year 5

	Total	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15	YEAR 16	YEAR 17	YEAR 18	YEAR 19	YEAR 20	YEAR 21	YEAR 22	YEAR 23	YEAR 24	YEAR 25
Incremental OM&A																										
Residential	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Service < 50kW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Service > 50kW (non-TOU)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
General Service > 50kW (TOU)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large User	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other class - non-demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other class - non-demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other class - demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other class - demand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Incremental OM&A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Current year customer additions are divided by two in order to recognize level activities throughout the year.

	Total	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
CAPITAL COSTS						
New facilities and/or reinforcement investments	47,468	47,468	0	0	0	0
Customer specific capital						
Residential	0	0	0	0	0	0
General Service < 50kW	0	0	0	0	0	0
General Service > 50kW (non-TOU)	0	0	0	0	0	0
General Service > 50kW (TOU)	0	0	0	0	0	0
Large User	0	0	0	0	0	0
Other class - non-demand	0	0	0	0	0	0
Other class - non-demand	0	0	0	0	0	0
Other class - demand	0	0	0	0	0	0
Other class - demand	0	0	0	0	0	0
Total customer specific capital (exclude land)	0	0	0	0	0	0
Incremental Overheads at project level						
Residential	0	0	0	0	0	0
General Service < 50kW	0	0	0	0	0	0
General Service > 50kW (non-TOU)	0	0	0	0	0	0
General Service > 50kW (TOU)	0	0	0	0	0	0
Large User	0	0	0	0	0	0
Other class - non-demand	0	0	0	0	0	0
Other class - non-demand	0	0	0	0	0	0
Other class - demand	0	0	0	0	0	0
Other class - demand	0	0	0	0	0	0
Total incremental overheads	0	0	0	0	0	0
Land and land rights	0	0	0	0	0	0
Annual Total Capital Costs	47,468	47,468	0	0	0	0
Annual Capital Costs excluding land	47,468	47,468	0	0	0	0

There is assumption made here that there are no up front capital costs in the first year, that Costs in the first year are incurred evenly during the year.

	Total	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15	YEAR 16	YEAR 17	YEAR 18	YEAR 19	YEAR 20	YEAR 21	YEAR 22	YEAR 23	YEAR 24	YEAR 25
Present Value of Annual Capital Costs	46,132	46,132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Total	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15	YEAR 16	YEAR 17	YEAR 18	YEAR 19	YEAR 20	YEAR 21	YEAR 22	YEAR 23	YEAR 24	YEAR 25
Present Value Of CCA Tax Shield																										
Opening undepreciated capital cost		47,468	1,376	1,321	1,268	1,217	1,169	1,122	1,077	1,034	993	953	915	878	843	809	777	746	716	687	660	633	608	584	560	538
Less: Contributed Capital		(46,064)																								
Less: Capital cost allowance	887	28	55	53	51	49	47	45	43	41	40	38	37	35	34	32	31	30	29	27	26	25	24	23	22	22
Closing undepreciated capital cost		1,376	1,321	1,268	1,217	1,169	1,122	1,077	1,034	993	953	915	878	843	809	777	746	716	687	660	633	608	584	560	538	517
CCA Annual Income Tax Savings		5	11	10	10	9	9	9	8	8	8	7	7	7	6	6	6	6	5	5	5	5	5	4	4	4
Present Value of CCA Tax Shield	99	5	10	9	8	7	7	6	5	5	4	4	4	3	3	3	2	2	2	2	2	2	1	1	1	1

	Total	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15	YEAR 16	YEAR 17	YEAR 18	YEAR 19	YEAR 20	YEAR 21	YEAR 22	YEAR 23	YEAR 24	YEAR 25
Present Value of Operating Cash Flow																										
Present Value of Net Operating Cash																										
Customer revenue - total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less Total Incremental OM&A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net (Wires) Operating Cash before Income Tax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Present value of Net Operating Cash	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Present Value of Taxes																										
Income Taxes	(13)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Provincial Capital Taxes	66	4	4	4	4	4	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2
Federal Capital Taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual Municipal Taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Taxes	53	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1
PV of Taxes	32	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
PV of Municipal TaxesTaxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Net Present Value Summary

	With taxes	Without Federal and Provincial taxes
1. PV of Operating Cash Flow		
a) PV of Net Operating Cash Flow	0	0
b) PV of Taxes	(32)	0
PV of Operating Cash Flow	(32)	0
2. PV of Capital	(46,132)	(46,132)
3. PV of CCA Tax Shield	99	
NET PRESENT VALUE	#######	#######

Capital Contribution required from