J14.1 a (with contingency growth)

Category							ī		1		T	
Category			50% Cos	t Growth	100% Cos	st Growth	150% Co	st Growth	200% Co	st Growth	250% Co	st Growth
Category	Category / Contract Type	Base Case	Gross	Costs	Gross	Costs	Gross	Costs	Gross	Costs	Gross	Costs
	Category / Contract Type	\$2013	costs	passed to	costs	passed to	costs	passed to	costs	passed to	costs	passed to
				OPG		OPG		OPG		OPG		OPG
10	OPG Project Management	690	1,035	1,035	1,380	1,380	1,725	1,725	2,070	2,070	2,415	2,415
—	Contractor Cost	030	1,000	1,000	1,500	1,500	1,723	1,723	2,070	2,070	2) 123	2) 113
F	Tooling (Fixed Price)											
F	, , , , , , , , , , , , , , , , , , ,											
-	Mockup (Fixed Price)											
	Owner Specified Materials											
RFR -	(Cost Plus)											
10.10	Definition Phase (Target											
	Price/ Fixed Fee)											
	Execution Phase (Target											
	Price/ Fixed Fee)											
<u> </u>	Contingency											
	Total											
			425	125	166	466	200	200	240	240	201	204
_	OPG Project Management	83	125	125	166	166	208	208	249	249	291	291
<u>[</u>	Contractor Cost	-										
	Defueling - Eng Services											
Fuel	(Fixed/Firm Price)											
	Defueling - Eng Services (Misc											
Handling	Reimbursables)											
r	Fuel Handling (Fixed Price)											
Ι 7	Contingency											
	Total											
	OPG Project Management	63	95	95	126	126	158	158	189	189	221	221
-		03		33	120	120	128	130	199	199		
Ľ	Contractor Cost											
Steam	Fixed Price											
Generators	Target Price/ Fixed Fee	:										
Generators	EPC Other											
(Contingency											
	Total											
	OPG Project Management	195	293	293	390	390	488	488	585	585	683	683
_	Contractor Cost				000		.00	.00	300	300	000	000
F		-										
	Eng Serv & Equip Supply											
-	(Fixed Price)	-										
	Eng Serv & Equip Supply											
Turbine	(Target Price)	_										
	Installation - Defn Phase											
Generators	(Target Price/ Fixed Fee)											
<u> </u>	Installation - Exec. Phase	-										
	(Target Price/ Fixed Fee)											
-	EPC	-										
<u> </u>		-										
	Contingency											
	Total	_										
[(OPG Project Management	216	324	324	432	432	540	540	648	648	756	756
Balance of	Contractor Cost											
Plant	EPC & T&M											
rialit	Contingency											
_	Total											
I N												
	ISIANGING											
<u> </u>	Islanding System Shutdown											
1	System Shutdown	963	4 205	4 305	4 720	4 730	2.450	3.450	3 500	3 500	2.024	2.024
 	System Shutdown Operations & Maintence Support	863	1,295	1,295	1,726	1,726	2,158	2,158	2,589	2,589	3,021	3,021
 	System Shutdown Operations & Maintence Support Facilities & Infrastructure	820	1,230	1,230	1,640	1,640	2,050	2,050	2,460	2,460	2,870	2,870
 <u> </u> <u> </u>	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management	820 10	1,230 15	1,230 15	1,640 20	1,640 20	2,050 25	2,050 25	2,460 30	2,460 30	2,870 35	2,870 35
 <u> </u> <u> </u>	System Shutdown Operations & Maintence Support Facilities & Infrastructure	820	1,230	1,230	1,640	1,640	2,050	2,050	2,460	2,460	2,870	2,870
S C F N	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management	820 10	1,230 15	1,230 15	1,640 20	1,640 20	2,050 25	2,050 25	2,460 30	2,460 30	2,870 35	2,870 35
I G F Nother Costs	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management New Fuel Insurance	820 10 132	1,230 15 198	1,230 15 198	1,640 20 264	1,640 20 264	2,050 25 330	2,050 25 330	2,460 30 396	2,460 30 396	2,870 35 462	2,870 35 462
I S C I Other Costs	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management New Fuel Insurance Regulatory, i.e. ISR, EA, IIP	820 10 132 114 80	1,230 15 198 171 120	1,230 15 198 171 120	1,640 20 264 228 160	1,640 20 264 228 160	2,050 25 330 285 200	2,050 25 330 285 200	2,460 30 396 342 240	2,460 30 396 342 240	2,870 35 462 399 280	2,870 35 462 399 280
Other Costs	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management New Fuel Insurance Regulatory, i.e. ISR, EA, IIP Licensing (CNSC Fees)	820 10 132 114	1,230 15 198 171	1,230 15 198 171	1,640 20 264 228	1,640 20 264 228	2,050 25 330 285	2,050 25 330 285	2,460 30 396 342	2,460 30 396 342	2,870 35 462 399	2,870 35 462 399
Other Costs F	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management New Fuel Insurance Regulatory, i.e. ISR, EA, IIP Licensing (CNSC Fees) Contingency	820 10 132 114 80	1,230 15 198 171 120	1,230 15 198 171 120	1,640 20 264 228 160	1,640 20 264 228 160	2,050 25 330 285 200	2,050 25 330 285 200	2,460 30 396 342 240	2,460 30 396 342 240	2,870 35 462 399 280	2,870 35 462 399 280
Other Costs F	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management New Fuel Insurance Regulatory, i.e. ISR, EA, IIP Licensing (CNSC Fees) Contingency Retube Waste Containers	820 10 132 114 80 73	1,230 15 198 171 120 110	1,230 15 198 171 120 110	1,640 20 264 228 160 146	1,640 20 264 228 160 146	2,050 25 330 285 200 183	2,050 25 330 285 200 183	2,460 30 396 342 240 219	2,460 30 396 342 240 219	2,870 35 462 399 280 256	2,870 35 462 399 280 256
Other Costs F	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management New Fuel Insurance Regulatory, i.e. ISR, EA, IIP Licensing (CNSC Fees) Contingency Retube Waste Containers (Provision)	820 10 132 114 80 73	1,230 15 198 171 120 110	1,230 15 198 171 120 110	1,640 20 264 228 160 146	1,640 20 264 228 160 146	2,050 25 330 285 200 183	2,050 25 330 285 200 183	2,460 30 396 342 240 219	2,460 30 396 342 240 219	2,870 35 462 399 280 256	2,870 35 462 399 280 256
Other Costs F	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management New Fuel Insurance Regulatory, i.e. ISR, EA, IIP Licensing (CNSC Fees) Contingency Retube Waste Containers (Provision) Management Reserve	820 10 132 114 80 73	1,230 15 198 171 120 110	1,230 15 198 171 120 110	1,640 20 264 228 160 146	1,640 20 264 228 160 146	2,050 25 330 285 200 183	2,050 25 330 285 200 183	2,460 30 396 342 240 219	2,460 30 396 342 240 219	2,870 35 462 399 280 256	2,870 35 462 399 280 256
Other Costs F	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management New Fuel Insurance Regulatory, i.e. ISR, EA, IIP Licensing (CNSC Fees) Contingency Retube Waste Containers (Provision)	820 10 132 114 80 73	1,230 15 198 171 120 110	1,230 15 198 171 120 110	1,640 20 264 228 160 146	1,640 20 264 228 160 146	2,050 25 330 285 200 183	2,050 25 330 285 200 183	2,460 30 396 342 240 219	2,460 30 396 342 240 219	2,870 35 462 399 280 256	2,870 35 462 399 280 256
Other Costs F	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management New Fuel Insurance Regulatory, i.e. ISR, EA, IIP Licensing (CNSC Fees) Contingency Retube Waste Containers (Provision) Management Reserve	820 10 132 114 80 73	1,230 15 198 171 120 110	1,230 15 198 171 120 110	1,640 20 264 228 160 146	1,640 20 264 228 160 146	2,050 25 330 285 200 183	2,050 25 330 285 200 183	2,460 30 396 342 240 219	2,460 30 396 342 240 219	2,870 35 462 399 280 256	2,870 35 462 399 280 256
Other Costs F	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management New Fuel Insurance Regulatory, i.e. ISR, EA, IIP Licensing (CNSC Fees) Contingency Retube Waste Containers (Provision) Management Reserve	820 10 132 114 80 73	1,230 15 198 171 120 110	1,230 15 198 171 120 110	1,640 20 264 228 160 146	1,640 20 264 228 160 146	2,050 25 330 285 200 183	2,050 25 330 285 200 183	2,460 30 396 342 240 219	2,460 30 396 342 240 219	2,870 35 462 399 280 256	2,870 35 462 399 280 256
Other Costs I Other Costs I Other Costs I Other Costs	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management New Fuel Insurance Regulatory, i.e. ISR, EA, IIP Licensing (CNSC Fees) Contingency Retube Waste Containers (Provision) Management Reserve Total	820 10 132 114 80 73 220 568	1,230 15 198 171 120 110 330 852	1,230 15 198 171 120 110 330 852	1,640 20 264 228 160 146 440 1,136	1,640 20 264 228 160 146 440 1,136	2,050 25 330 285 200 183 550 1,420	2,050 25 330 285 200 183 550 1,420	2,460 30 396 342 240 219 660 1,704	2,460 30 396 342 240 219 660 1,704	2,870 35 462 399 280 256 770 1,988	2,870 35 462 399 280 256 770 1,988
Other Costs F	System Shutdown Operations & Maintence Support Facilities & Infrastructure Waste Management New Fuel Insurance Regulatory, i.e. ISR, EA, IIP Licensing (CNSC Fees) Contingency Retube Waste Containers (Provision) Management Reserve Total	820 10 132 114 80 73 220 568	1,230 15 198 171 120 110 330 852	1,230 15 198 171 120 110 330 852	1,640 20 264 228 160 146 440 1,136	1,640 20 264 228 160 146 440 1,136	2,050 25 330 285 200 183 550 1,420	2,050 25 330 285 200 183 550 1,420	2,460 30 396 342 240 219 660 1,704	2,460 30 396 342 240 219 660 1,704	2,870 35 462 399 280 256 770 1,988	2,870 35 462 399 280 256 770 1,988

Assumptions:

Cost growth is applied to all costs except contingency.

Contingency amounts are decreased by the cost overruns and are accounted for in the total costs for each scenario.

Current cost estimate is OPG's current "high confidence" estimate.

Project components costs (RFR, Fuel Handling etc.) include all costs, including OPG management costs, contractor costs, and other costs.

Total includes all project component costs and intestest and escalation.

LUEC includes all costs, including interest, escalation, and fixed corporate overheads for pensions and other post employment benefits.

Percent cost growth is applied to all costs and is spread evenly across all costs.

OPG Assumptions:

Interest & escalation prorated

An increase of Project cost of \$1B will result in a LUEC increase of approximately 0.003 (0.3 cents).

J14.1 b (contingency removed to offset cost growth)

Cartigrapy Conference Con	J14.1 b (cont	ingency removed to offset cost gr	owth)									I	
Content						İ		1	T	1	1		
Content Cont	-	Category / Contract Type		Gross	Costs	Gross	Costs	Gross	Costs	Gross	Costs	Gross	Costs
OPC Project Management 680 1,005 5,005 1,380 1,380 1,725 1,725 2,070 2,415		Category , contract type	\$2013	costs	passed to	costs	passed to	costs	passed to	costs	passed to	costs	passed to
Contractor Cost Thomas T					OPG		OPG		OPG		OPG		OPG
Training Triest Price		OPG Project Management	690	1,035	1,035	1,380	1,380	1,725	1,725	2,070	2,070	2,415	2,415
Training Triest Price		Contractor Cost	†										
Multi-Aug Flore Process			+										
Over Specified Materials Definition Phase Harget Phicip Fixed Pixel Phicip Pixel Pixel Phicip Pixel Pixel Phicip Pixel Pixel Phicip Pixel Pixel Pixel Pixel Phicip Pixel Pixe			†										
Contraction Prince Frage Price Price		' `	+										
Definition Phase (Target P		-											
Price/ Fixed Fee Price P	RFR		+										
Execution Phase (Target Price) Freed Free Concingency Total													
Price/Fixed Fee Price Pr		-											
Controlled Salar													
Total		Price/ Fixed Fee)											
OPG Project Management S3 125 125 186 186 208 208 249		Contingency											
Contractor Cost Circled Particular Price Circled Particular Circled Particu		Total											
Contractor Cost Circled Particular Price Circled Particular Circled Particu		OPG Project Management	83	125	125	166	166	208	208	249	249	291	291
Fuel													
Fuel Handling			+										
Defauling Emp Services (Misc Reimbursables) Fuel Handling (Fixed Price)													
Reimbursobles Fixed Price Contingency Total	Fuel		+										
Fuel Handling (fixed Price) Contingency Total Contractor Cost Contractor C	Handling												
Contingency Fotal		•											
Total		Fuel Handling (Fixed Price)											
Contractor Cost Fixed Price Target Price Fixed Fee P.C. Other Contingency Total		Contingency											
Contractor Cost Fixed Price Target Price/ Fixed Fee LPC Other		Total											
Fixed Price Target Price/Fixed Fee FPC Other		OPG Project Management	63	95	95	126	126	158	158	189	189	221	221
Fixed Price Target Price/Fixed Fee FPC Other		Contractor Cost											
Target Price Fixed Fee F			7										
SEPC Other Contingency Total	Steam		+										
Contingency Total	Generators		+										
Total			+										
OPG Project Management 195 293 293 390 390 488 488 585 585 683													
Contractor Cost Eng Serv & Equip Supply (fixed Price)										1			
Eng Serv & Equip Supply (Fixed Price) Eng Serv & Equip Supply (Target Price) Installation - Defn Phase (Target Price) Installation - Defn Phase (Target Price) Installation - Exec. Phase (Target Price) Fixed Fee) EPC			195	293	293	390	390	488	488	585	585	683	683
Fixed Price Eng Serv & Equip Supply (Target Price)		Contractor Cost											
Eng Serv & Equip Supply (Target Price) Turbine Generators Installation - Defn Phase (Target Price) Fixed Fee)		Eng Serv & Equip Supply											
Turbing Generators (Target Price) Installation - Defin Phase (Target Price) Fixed Fee) Installation - Exec. Phase (Target Price) Fixed Fee) Installation - Exec. Phase (Target Price) Fixed Fee) EPC Contingency Total OPG Project Management 216 324 324 432 432 540 540 648 648 756 Contract Cost EPC & T&M Contractor Cost EPC & T&M Contingency Total Islanding System Shutdown Operations & Maintence Support 863 1,295 1,295 1,726 1,726 2,158 2,158 2,589 2,589 3,021 Facilities & Infrastructure 820 1,230 1,230 1,540 1,640 2,050 2,050 2,460 2,460 2,870 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 298 298 298 298 298 298 298 298 298 2		(Fixed Price)											
Turbing Generators (Target Price) Installation - Defin Phase (Target Price) Fixed Fee) Installation - Exec. Phase (Target Price) Fixed Fee) Installation - Exec. Phase (Target Price) Fixed Fee) EPC Contingency Total OPG Project Management 216 324 324 432 432 540 540 648 648 756 Contract Cost EPC & T&M Contractor Cost EPC & T&M Contingency Total Islanding System Shutdown Operations & Maintence Support 863 1,295 1,295 1,726 1,726 2,158 2,158 2,589 2,589 3,021 Facilities & Infrastructure 820 1,230 1,230 1,540 1,640 2,050 2,050 2,460 2,460 2,870 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 198 264 264 330 396 396 462 New Fuel 132 198 298 298 298 298 298 298 298 298 298 2		Eng Serv & Equip Supply	1										
Installation - Defn Phase (Target Price/ Fixed Fee) Installation - Defn Phase (Target Price/ Fixed Fee) Installation - Exec. Phase (Target Price/ Fixed Fee) EPC													
Clarget Price Fixed Fee Installation - Exec. Phase Installation -	Turbine	· · · · · · · · · · · · · · · · · · ·											
Installation - Exec. Phase (Target Price/ Fixed Fee) EPC	Generators												
Carget Price / Fixed Fee EPC Contingency Total			-										
EPC Contingency Total													
Contingency Total			_										
Total		EPC											
Description		Contingency											
Contractor Cost EPC & T&M Contingency Total		Total											
Contractor Cost EPC & T&M Contingency Total Islanding System Shutdown Operations & Maintence Support 863 1,295 1,726 1,726 2,158 2,158 2,589 2,589 3,021 Facilities & Infrastructure 820 1,230 1,230 1,640 1,640 2,050 2,050 2,460 2,460 2,870 Waste Management 10 15 15 20 20 25 25 30 30 35 New Fuel 132 198 198 264 264 330 330 336 396 396 462 Insurance 114 171 171 228 228 228 285 285 342 342 399 Regulatory, i.e. ISR, EA, IIP 80 120 120 160 160 200 200 240 240 240 280 Licensing (CNSC Fees) 73 110 110 146 146 183 183 219 219 256 Contingency Retube Waste Containers (Provision) 220 330 330 340 440 440 550 550 660 660 770 Management Reserve 568 Total Subtotal Insurance 10,000 10,104 13,100 16,096 19,092 Interest & Escalation 2,900 2,930 3,799 4,668 5,537 Total 12,900 13,034 16,899 20,764 24,629 Total		OPG Project Management	216	324	324	432	432	540	540	648	648	756	756
Salance of Plant EPC & T&M Contingency Total Islanding System Shutdown Operations & Maintence Support 863 1,295 1,295 1,726 1,726 2,158 2,158 2,589 2,589 3,021 Facilities & Infrastructure 820 1,230 1,230 1,640 1,640 2,050 2,050 2,460 2,460 2,870 Waste Management 10 15 15 20 20 25 25 30 30 35 New Fuel 132 198 198 264 264 330 330 336 336 462 New Fuel 132 198 198 264 264 330 330 330 336 336 462 New Fuel 132 198 198 198 228 228 285 285 342 342 399 New Fuel 14 171 171 228 228 228 285 285 342 342 399 New Fuel 14 171 171 171 228 228 285 285 342 342 399 New Fuel 14 171					0.2.1							, , ,	
Plant Contingency Total Islanding System Shutdown Operations & Maintence Support 863 1,295 1,295 1,726 1,726 2,158 2,158 2,589 2,589 3,021 Facilities & Infrastructure 820 1,230 1,230 1,640 1,640 2,050 2,050 2,460 2,460 2,870 Waste Management 10 15 15 20 20 25 25 30 30 35 New Fuel 132 198 198 264 264 330 330 396 396 462 Insurance 114 171 171 228 228 228 285 342 342 399 Regulatory, i.e. ISR, EA, IIP 80 120 120 160 160 200 200 240 240 280	Balance of		-										
Total Islanding System Shutdown Operations & Maintence Support 863 1,295 1,295 1,726 1,726 2,158 2,158 2,589 2,589 3,021 Facilities & Infrastructure 820 1,230 1,230 1,640 1,640 2,050 2,050 2,460 2,460 2,870 Waste Management 10 15 15 20 20 25 25 30 30 35 New Fuel 132 198 198 264 264 330 330 396 396 462 1,800	Plant		-										
Islanding System Shutdown System Shutdown System Shutdown Operations & Maintence Support 863 1,295 1,295 1,726 1,726 2,158 2,158 2,589 2,589 3,021													
System Shutdown Operations & Maintence Support 863 1,295 1,295 1,726 1,726 2,158 2,158 2,589 2,589 3,021 Facilities & Infrastructure 820 1,230 1,230 1,640 1,640 2,050 2,050 2,460 2,460 2,870 Waste Management 10 15 15 20 20 25 25 30 30 35 New Fuel 132 198 198 264 264 330 330 396 396 462 Insurance 114 171 171 228 228 285 285 342 342 399 Licensing (CNSC Fees) 73 110 110 146 146 183 183 219 219 256 Contingency Retube Waste Containers (Provision) 220 330 330 330 440 440 550 550 660 660 770 Management Reserve 568 Total 568 5,537 Total 12,900 13,034 16,899 20,764 24,629													
Operations & Maintence Support 863 1,295 1,726 1,726 2,158 2,158 2,589 2,589 3,021 Facilities & Infrastructure 820 1,230 1,230 1,640 1,640 2,050 2,050 2,460 2,460 2,870 Waste Management 10 15 15 20 20 25 25 30 30 35 New Fuel 132 198 198 264 264 330 330 396 396 462 Insurance 114 171 171 228 228 285 285 342 342 399 Regulatory, i.e. ISR, EA, IIP 80 120 120 160 160 200 200 240 240 280 Licensing (CNSC Fees) 73 110 110 146 146 183 183 219 219 256 Contingency Retube Waste Containers (Provision) 220 330 330 330 440 440 550 550 660 660 770 Management Reserve 568 Total 10,000 10,104 13,100 16,096 19,092 Interest & Escalation 2,900 2,930 3,799 4,668 5,537 Total 12,900 13,034 16,899 20,764 24,629			-										
Facilities & Infrastructure				<u> </u>	i	i		i		i	i	i	
Other Costs Waste Management 10 15 15 20 20 25 25 30 30 35 New Fuel 132 198 198 264 264 330 330 396 396 462 Insurance 114 171 171 228 228 285 285 342 342 399 Regulatory, i.e. ISR, EA, IIP 80 120 120 160 160 200 200 240 240 280 Licensing (CNSC Fees) 73 110 110 146 146 183 183 219 219 256 Contingency Retube Waste Containers (Provision) 220 330 330 440 440 550 550 660 660 770 Management Reserve 568 10 13,100 16,096 19,092 19,092 Interest & Escalation 2,900 2,930 3,799 4,668 5,537<				· ·	-	·							3,021
New Fuel 132 198 198 264 264 330 330 396 396 462		Facilities & Infrastructure	820	1,230	1,230	1,640	1,640	2,050	2,050	2,460	2,460	2,870	2,870
New Fuel 132 198 198 264 264 330 330 396 396 462 180		Waste Management	10	15	15	20	20	25	25	30	30	35	35
Other Costs Insurance		New Fuel	132	198	198	264	264	330	330	396	396	462	462
Other Costs Regulatory, i.e. ISR, EA, IIP		Insurance					228		285			399	399
Licensing (CNSC Fees) 73 110 110 146 146 183 183 219 219 256 Contingency Retube Waste Containers (Provision) 220 330 330 440 440 550 550 660 660 770 Management Reserve 568	Other Costs												280
Contingency Retube Waste Containers (Provision) 220 330 330 440 440 550 550 660 660 770 Management Reserve 568						 		ł		ł			256
Retube Waste Containers		· · · · · · · · · · · · · · · · · · ·	/3	1 110	I 110	I 140	140	103	103		213		230
Provision 220 330 330 440 440 550 550 660 660 770 Management Reserve 568													
Management Reserve 568													
Total Total Subtotal 10,000 10,104 13,100 16,096 19,092 Interest & Escalation 2,900 2,930 3,799 4,668 5,537 Total 12,900 13,034 16,899 20,764 24,629		,		330	330	440	440	550	550	660	660	770	770
Subtotal 10,000 10,104 13,100 16,096 19,092 Interest & Escalation 2,900 2,930 3,799 4,668 5,537 Total 12,900 13,034 16,899 20,764 24,629			568			<u> </u>							
Interest & Escalation 2,900 2,930 3,799 4,668 5,537 Total 12,900 13,034 16,899 20,764 24,629		Total											
Interest & Escalation 2,900 2,930 3,799 4,668 5,537 Total 12,900 13,034 16,899 20,764 24,629										-			
Interest & Escalation 2,900 2,930 3,799 4,668 5,537 Total 12,900 13,034 16,899 20,764 24,629	Subtotal		10,000		10,104		13,100		16,096		19,092		22,089
Total 12,900 13,034 16,899 20,764 24,629	Interest & Es	calation											6,405
													28,494
2020 FOI Eddit Cost Scending (cents) 0.5 0.5		h Cost Scenario (cents)							_				13.0
	LOLC I OF Eac	ii cost sectiano (cents)	0.3	l .	0.3		3.3		10.7		11.3		13.0

Assumptions:

Cost growth is applied to all costs except contingency.

Contingency amounts are decreased by the cost overruns and are accounted for in the total costs for each scenario.

Current cost estimate is OPG's current "high confidence" estimate.

Project components costs (RFR, Fuel Handling etc.) include all costs, including OPG management costs, contractor costs, and other costs.

Total includes all project component costs and intestest and escalation.

LUEC includes all costs, including interest, escalation, and fixed corporate overheads for pensions and other post employment benefits.

Percent cost growth is applied to all costs and is spread evenly across all costs.

OPG Assumptions:

Interest & escalation prorated

An increase of Project cost of \$1B will result in a LUEC increase of approximately \$0.003 (0.3 cents).

J14.2 a (with	contingency growth)	T	T				Т					
N.4 - *				t Growth		st Growth		st Growth		st Growth		st Growth
Major	Category / Contract Type	Base Case	Gross	Costs	Gross	Costs	Gross	Costs	Gross	Costs	Gross	Costs
Category		\$2013	costs	passed to OPG	costs	passed to OPG	costs	passed to OPG	costs	passed to OPG	costs	passed to OPG
	OPG Project Management	690	1,035	1	1,380	+	1,725	+	2,070		2,415	
	Contractor Cost	030	1,055	1,033	1,300	1,300	1,723	1,723	2,070	2,010	2,413	2,413
	Tooling (Fixed Price)	-										
	Mockup (Fixed Price)											
	Owner Specified Materials											
DED	(Cost Plus)											
RFR	Definition Phase (Target Price/											
	Fixed Fee)											
	Execution Phase (Target Price/											
	Fixed Fee)	-										
	Contingency											
	Total	0.2	1 125	125	1.00	1.00	1 200	1 200	240	1 240	204	1 201
	OPG Project Management	83	125	125	166	166	208	208	249	249	291	291
	Contractor Cost Defueling - Eng Services	-										
	(Fixed/Firm Price)											
Fuel	Defueling - Eng Services (Misc	-										
Handling	Reimbursables)											
	Fuel Handling (Fixed Price)											
	Contingency											
	Total											
	OPG Project Management	63	95	95	126	126	158	158	189	189	221	221
	Contractor Cost											
Steam	Fixed Price											
Generators	Target Price/ Fixed Fee											
	EPC Other											
	Contingency											
	Total	405	202	202	200	200	400	400	505	505	600	602
	OPG Project Management Contractor Cost	195	293	293	390	390	488	488	585	585	683	683
	Eng Serv & Equip Supply	-										
	(Fixed Price)											
	Eng Serv & Equip Supply	-										
	(Target Price)											
Turbine	Installation - Defn Phase											
Generators	(Target Price/ Fixed Fee)											
	Installation - Exec. Phase											
	(Target Price/ Fixed Fee)											
	EPC											
	Contingency											
	Total			•		,	,					•
	OPG Project Management	216	324	324	432	432	540	540	648	648	756	756
Balance of	Contractor Cost											
Plant	EPC & T&M	-										
	Contingency Total											
	Islanding											
	System Shutdown											
	Operations & Maintence Support	863	1,295	1,295	1,726	1,726	2,158	2,158	2,589	2,589	3,021	3,021
	Facilities & Infrastructure	820	1,230	1,230		1,640	2,050		2,460		2,870	2,870
	Waste Management	10	15	15	20	20	25		30		35	35
	New Fuel	132	198	198	264	264	330		396		462	462
Other Costs	Insurance	114	171	171	228	228	285	285	342	342	399	399
Other Costs	Regulatory, i.e. ISR, EA, IIP	80	120	120	160	160	200		240		280	280
	Licensing (CNSC Fees)	73	110	110	146	146	183	183	219	219	256	256
	Contingency											
	Retube Waste Containers		_				_	_	_	_	_	_
	(Provision)	220	330	330		440	550		660		770	770
	Management Reserve	568	852	852	1,136	1,136	1,420	1,420	1,704	1,704	1,988	1,988
	Total											
Subtotal		10.000	15 000	14.010	20,000	10 200	2E 000	22.606	20,000	26.004	25 000	21 202
Subtotal Interest & Es	calation	10,000 2,900	15,000 4,350	14,010 4,063	5,800	18,308 5,309	25,000 7,250	-	30,000 8,700		35,000 10,150	31,203 9,048
Total	Culdion	12,900	19,349	18,073	25,800	23,617	32,250		38,700		45,150	
	ch Cost Scenario (cents)	8.3		9.9		11.6		13.2		14.9	+3,130	16.6
	coot occitatio (cents)	0.5		5.5		11.0		13.2		17.3		10.0

Assumptions:

Cost growth is applied to all costs $\ensuremath{\mathsf{except}}$ contingency.

Contingency amounts are decreased by the cost overruns and are accounted for in the total costs for each scenario.

Current cost estimate is OPG's current "high confidence" estimate.

Project components costs (RFR, Fuel Handling etc.) include all costs, including OPG management costs, contractor costs, and other costs.

Total includes all project component costs and intestest and escalation.

LUEC includes all costs, including interest, escalation, and fixed corporate overheads for pensions and other post employment benefits. Percent cost growth is applied to all costs and is spread evenly across all costs.

OPG Assumptions:

Interest & escalation prorated

An increase of Project cost of \$1B will result in a LUEC increase of approximately \$0.003 (0.3 cents).

J14.2 b (cont	ingency removed to offset cost gro	owth)			1						•	
				t Growth		st Growth		st Growth	+	st Growth	+	st Growth
Major	Category / Contract Type	Base Case	Gross	Costs								
Category	Category / Contract Type	\$2013	costs	passed to								
				OPG								
	OPG Project Management	690	1,035	1,035	1,380	1,380	1,725	1,725	2,070	2,070	2,415	2,415
	Contractor Cost											
	Tooling (Fixed Price)											
	Mockup (Fixed Price)											
	Owner Specified Materials											
RFR	(Cost Plus)											
KEK	Definition Phase (Target Price/											
	Fixed Fee)											
	Execution Phase (Target Price/											
	Fixed Fee)											
	Contingency											
	Total											
	OPG Project Management	83	125	125	166	166	208	208	249	249	291	291
	Contractor Cost											
	Defueling - Eng Services											
	(Fixed/Firm Price)											
Fuel	Defueling - Eng Services (Misc											
Handling	Reimbursables)											
	Fuel Handling (Fixed Price)											
	Contingency											
	Total	ī										
	OPG Project Management	63	95	95	126	126	158	158	189	189	221	221
	Contractor Cost	03	33	33	120	120	150	130	103	103	221	221
	Fixed Price	1										
Steam	Target Price/ Fixed Fee	-										
Generators	EPC Other	-										
	Contingency	1										
	Total											
	OPG Project Management	195	293	293	390	390	488	488	585	585	683	683
	Contractor Cost	193	293	293	390	390	400	400	363	363	063	063
	Eng Serv & Equip Supply	-										
	(Fixed Price)	+										
	Eng Serv & Equip Supply											
Turbine	(Target Price)	-										
Generators	Installation - Defn Phase											
	(Target Price/ Fixed Fee)	-										
	Installation - Exec. Phase											
	(Target Price/ Fixed Fee)	-										
	EPC	-										
	Contingency											
	Total		+					+			†	1
	OPG Project Management	216	324	324	432	432	540	540	648	648	756	756
Balance of	Contractor Cost											
Plant	EPC & T&M											
	Contingency											
	Total											
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	System Shutdown											
	Operations & Maintence Support	863	1,295	1,295	1,726	1,726			2,589		3,021	3,021
	Facilities & Infrastructure	820	1,230	1,230	1,640	1,640	2,050		2,460		2,870	2,870
	Waste Management	10	15	15	20	20	25	+	30		35	35
	New Fuel	132	198	198	264	264	330		396		462	462
Other Costs	Insurance	114	171	171	228	228	285	285	342	342	399	399
- Circi C0313	Regulatory, i.e. ISR, EA, IIP	80	120	120	160	160	200		240		280	280
	Licensing (CNSC Fees)	73	110	110	146	146	183	183	219	219	256	256
	Contingency											
	Retube Waste Containers											
	(Provision)	220	330	330	440	440	550	550	660	660	770	770
	Management Reserve	568										
	Total											
Subtotal		10,000		10,104		13,100		16,096		19,092		22,089
Interest & Es	calation	2,900	_	2,930		3,799	_	4,668		5,537		6,405
Total		12,900		13,034		16,899		20,764		24,629		28,494
LUEC For Eac	ch Cost Scenario (cents)	8.3		8.3		9.5		10.7		11.9		13.0

Assumptions:

$\label{lem:cost} \textbf{Cost growth is applied to all costs except contingency.}$

Contingency amounts are decreased by the cost overruns and are accounted for in the total costs for each scenario.

Current cost estimate is OPG's current "high confidence" estimate.

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OPG Assumptions:

Interest & escalation prorated

An increase of Project cost of \$1B will result in a LUEC increase of approximately \$0.003 (0.3 cents).