

1 Q. With reference to IC-NLH-97, for each specifically assigned macro asset, identify all
2 projects undertaken on that specifically assigned macro asset, by year, since the last
3 GRA, including the capital cost of each project.

4

5

6 A. Please refer to IC-NLH-099, Attachment 1 (Revision 2).

Projects Undertaken on Newfoundland Power Specific Assigned Macro Assets 2007 - 2014				
Year	Date	Location	Description	Cost
2007	12/11/2007	TL219	TL219, WPLM 2007 INSPECTION	141,554.65
	12/11/2007	TL219	TL219, WPLM 2007 REFURBISHMENT	5,848.48
2008	12/2/2008	TL215	TL215, WPLM 2008 INSPECTION	33,859.55
	12/2/2008	TL215	TL215, WPLM 2008 REFURBISHMENT	343,813.35
	12/2/2008	TL219	TL219, WPLM 2008 INSPECTION	206,858.70
	12/16/2008	TL219	TL219, WPLM 2008 REFURBISHMENT	6,051.96
	12/16/2008	Doyles	ROOF, DLS TS	21,068.21
	12/29/2008	Doyles	124 VDC BATTERIES, DLS TS	27,349.62
	12/31/2008	Doyles	RIG-D Beam Ice Monitoring	6,158.27
	12/31/2008	Holyrood	FALL ARREST PROTECTION SYSTEM	1,766.18
	12/31/2008	Holyrood	FALL ARREST PROTECTION SYSTEM	1,766.18
2009	5/13/2009	Western Avalon	PT, B4, BPH, WAV TS	7,984.97
	12/14/2009	Western Avalon	UPGRADE T4, WAV TS (2009)	5,403.30
	12/14/2009	Grand Bay	GROUNDING UPGRADE GBA TS, 2009	2,886.63
	12/14/2009	Doyles	FALL ARREST PLATES T1, DLS TS	1,987.98
	12/15/2009	Doyles	GROUNDING UPGRADE, DLS TS 2009	1,707.83
	12/9/2009	TL215	TL215, WPLM 2009 INSPECTION	37,117.26
	12/9/2009	TL215	TL215, WPLM 2009 REFURBISHMENT	227,281.44
	12/9/2009	TL219	TL219, WPLM 2009 INSPECTION	169,703.99
2010	9/30/2010	Western Avalon	BUSHING X2,T1 WAV TS	9,114.39
	9/30/2010	Western Avalon	BUSHING X3,T1 WAV TS	9,114.39
	9/30/2010	Western Avalon	BUSHING X1,T1 WAV TS	9,114.39
	12/6/2010	Western Avalon	PT, B4, APH, WAV TS	13,592.91
	12/6/2010	Western Avalon	PT, B4, CPH, WAV TS	13,592.91
	12/6/2010	Stephenville	PT, 405L, BPH (MAT), SVL TS	9,061.94
	12/7/2010	Stephenville	PT, 405L, APH (MAT) SVL TS	9,061.94
	12/7/2010	Stephenville	PT, 405L, CPH (MAT) SVL TS	9,061.94
	12/10/2010	Doyles	TRF UPGRDE T1, DLS TS (2010)	91,241.37
	12/13/2010	Doyles	GROUNDING UPGRADE,DLS TS 2010	28,622.25
	11/5/2010	TL215	TL215, WPLM REFURBISHMENT	111,522.22
	11/23/2010	TL215	TL-215 REPLACE GUY WIRE ,2010.	326,256.17
	11/12/2010	TL219	TL219, WPLM 2010 INSPECTION	214,426.48
2011	12/5/2011	Doyles	INSULATORS, DLS TS, (2011)	5,637.23
	12/5/2011	Doyles	INSULATORS, DLS TS, (2011)	4,099.80
	12/4/2011	Stephenville	405L PT, A PH, SVL TS (LABOUR)	4,318.74
	12/4/2011	Stephenville	405L PT, B PH, SVL TS (LABOUR)	4,318.74
	12/4/2011	Stephenville	405L PT, CPH, SVL TS, (LABOUR)	3,954.77
	12/4/2011	Stephenville	405L PT, CPH, SVL TS, (LABOUR)	0
	12/4/2011	Stephenville	L405 CT, A PH, SVL TS	19,173.74
	12/4/2011	Stephenville	L405 CT, B PH, SVL TS	24,905.81
	12/4/2011	Stephenville	L405 CT, B PH, SVL TS	0
	10/6/2011	Holyrood	TRF UPGRADE T8, HRD TS (2011)	35,521.34
	12/4/2011	Bottom Brook	T2 CT, A PH, BBK TS (MAT)	15,078.68
	12/4/2011	Bottom Brook	T2 CT, B PH, BBK TS, (MAT)	15,078.68
	9/19/2011	TL219	TL219 WPLM 2011 INSPECTION	226,653.00
2012	12/31/2012	Doyles	BREAKER B1L15, DLS TS	296,205.52
	9/10/2012	Doyles	125 VDC CHARGER, DLS TS	26,487.69
	2/8/2012	Bottom Brook	Bushing H1,T2,BBK TS (Mat)	3,591.35
	2/8/2012	Bottom Brook	Bushing H2,T2,BBK TS (Mat)	3,591.35
	2/8/2012	Bottom Brook	Bushing H3,T2,BBK TS (Mat)	3,591.35
	7/30/2012	Bottom Brook	Bushing X1,T2,BBK TS (Mat)	3,591.35
	7/30/2012	Bottom Brook	Bushing X2,T2,BBK TS (Mat)	3,591.35
	7/30/2012	Bottom Brook	Bushing X3,T2,BBK TS (Mat)	3,591.35
	12/10/2012	Bottom Brook	CT, T2, CPH, BBK TS	15,931.19
	7/5/2012	Western Avalon	TRF Upgrade T5, WAV TS (2012)	29,927.84
	7/9/2012	Western Avalon	INSULATORS, WAV TS, (2012)	9,381.35

	7/19/2012	Western Avalon	TRF Upgrade T5, WAV TS (2012)	14,963.92
	10/31/2012	Western Avalon	Bushing H1,T1,WAV TS (Mat)	44,891.77
	10/31/2012	Western Avalon	Bushing H1,T1,WAV TS (Mat)	44,891.77
	10/31/2012	Western Avalon	Bushing H3,T1,WAV TS (Mat)	44,891.77
	11/7/2012	Western Avalon	PT, 64L, BPH, WAV TS	19,117.42
	11/12/2012	Western Avalon	PT, B4, CPH, WAVTS	19,117.42
	9/15/2012	Holyrood	TRF Upg HRD T8 (2012)	14,963.92
	11/14/2012	Holyrood	TRF Upgd HRDT6 2012, Rplc Rads	59,855.69
	12/21/2012	Holyrood	HV ARRESTORS, T6, HRDTS	17,345.92
	12/21/2012	Holyrood	LV ARRESTORS, T6, HRDTS	13,876.74
	12/13/2012	TL215	TL-215 Replace Guy Wire	256,039.00
	12/31/2012	TL215	TL215 Replace Guy Wire	447,607.47
	12/31/2012	TL219	TL-219 , WPLM 2012 Inspections	165,767.88
2013	12/2/2013	Dolyes	B1L15 UPGRADE, DLS TS	33,893.72
	12/10/2013	Dolyes	PT TL 215 B PH,DLS TS	57,682.32
	12/2/2013	Bottom Brook	BREAKER,L400T2,BBK TS	79,892.33
	12/31/2013	Grand Bay	Grounding Upgrade,GBA TS(2013)	4,564.39
	11/22/2013	Western Avalon	Bushing H1,T1,WAV TS (Install)	19,339.88
	11/22/2013	Western Avalon	Bushing H2,T1,WAV TS (Install)	19,339.88
	11/22/2013	Western Avalon	Bushing H3,T1,WAV TS (Install)	19,339.88
	11/22/2013	Holyrood	TRF Upgrade T7, HRDTS (2013)	19,339.88
	8/26/2013	TL214	TL-214 WPLM Inspections 2013	12,750.74
	7/26/2013	TL215	TL-215 Replace Guy Wires	286,721.18
	8/26/2013	TL219	TL-219, WPLM Inspections 2013	76,504.44
2014	12/1/2014	TL215	TL-215 Replace Guy Wires	496,600.00
	12/1/2014	Western Avalon	Replace T5 Tap Changer - WAV	1,452,500.00

Projects Undertaken on NARL Specific Assigned Macro Assets 2007 - 2014				
Year	Date	Location	Description	Cost
2007	12/18/2007	CBCTS	IRIG-B DIST. SYSTEM, CBC TS	3,696.98
2008	12/15/2008	CBCTS	HV ARRESTORS T1, CBC TS	9,071.27
2009	4/8/2009	CBCTS	HV ARRESTORS T1,CBC (INSTALL)	1,587.45
	4/20/2009	CBCTS	HV ARRESTERS T2, CBC TS	21,430.52
	12/14/2009	CBCTS	FALL ARREST PLATES T1, CBC TS	1,987.98
	12/14/2009	CBCTS	FALL ARREST PLATES T2, CBC TS	1,987.98
2013	12/16/2013	CBCTS	Grounding Upgrade,CBC TS(2013)	31,443.56

Projects Undertaken on Vale Specific Assigned Macro Assets 2007 - 2014					
Year	Date	Location	Description	Cost	Comments
2008	12/18/2008	Western Avalon	BKR B1L08 UPGRD (MAT), WAV TS	27,224.53	
2010	12/6/2010	Western Avalon	B1L08, UPGRADE (L&M) WAV TS	66,298.68	
2012	10/8/2012	Western Avalon	DISCONNECT B1L08-1, WAV TS	55,464.60	
	10/1/2012	Western Avalon	DISCONNECT B1L08-2, WAV TS	55,464.60	
	9/3/2012	Western Avalon	GND SW L08G, WAV TS	55,464.60	
	6/12/2012	Western Avalon	CT, B1L08, APH, WAV TS	60,538.52	
	6/24/2012	Western Avalon	CT, B1L08, CPH, WAV TS	63,724.76	
	10/30/2012	Western Avalon	RECLOSER, B1L08, WAV TS	9,936.06	Fully Contributed by Vale
	10/30/2012	Western Avalon	TL208 PROTECTION, WAV TS	160,442.87	Fully Contributed by Vale
	10/30/2012	Vale	BUS WORK, VBN TS	159,731.98	Fully Contributed by Vale
	10/30/2012	Vale	SUPPORT STR, FOOTINGS, VBN TS	28,884.72	Fully Contributed by Vale
	10/30/2012	Vale	POWER & CONTROL CABLES, VBN TS	439,120.24	Fully Contributed by Vale
	10/30/2012	Vale	GROUNDING, VBN TS	37,771.44	Fully Contributed by Vale
	10/30/2012	Vale	CABLE RACEWAY, VBN TS	52,094.04	Fully Contributed by Vale
	10/30/2012	Vale	125 VDC BATTERIES, VBN TS	79,408.98	Fully Contributed by Vale
	10/30/2012	Vale	125 VDC CHARGER, VBN TS	55,806.87	Fully Contributed by Vale
	10/30/2012	Vale	125 VDC DIST PANEL, VBN TS	27,330.13	Fully Contributed by Vale
	10/30/2012	Vale	DISCONNECT, B1L08, VBN TS	56,450.75	Fully Contributed by Vale
	10/30/2012	Vale	DISCONNECT, B1T1-1, VBN TS	112,651.12	Fully Contributed by Vale
	10/30/2012	Vale	DISCONNECT, B1T2-1, VBN TS	112,651.12	Fully Contributed by Vale
	10/30/2012	Vale	TRANSFORMER T1, VBN TS	401,879.65	Fully Contributed by Vale
	10/30/2012	Vale	TRANSFORMER T2, VBN TS	401,879.65	Fully Contributed by Vale
	10/30/2012	Vale	BREAKER, B1T1, VBN TS	369,138.01	Fully Contributed by Vale
	10/30/2012	Vale	BREAKER, B1T2, VBN TS	369,138.01	Fully Contributed by Vale
	10/30/2012	Vale	REVENUE METERING, VBN TS	27,330.13	Fully Contributed by Vale
	10/30/2012	Vale	LAND, VBN TS	9,790.00	Fully Contributed by Vale
	10/30/2012	Vale	POST INSULATORS(230KV), VBN TS	78,500.84	Fully Contributed by Vale
	10/30/2012	Vale	AC DISTRIBUTION PANEL, VBN TS	11,601.19	Fully Contributed by Vale
	10/30/2012	Vale	HEAT,LIGHT,VENT,SECUR,VBN TS	26,166.29	Fully Contributed by Vale
	10/30/2012	Vale	YARD LIGHTING, VBN TS	26,166.29	Fully Contributed by Vale
	10/30/2012	Vale	FIRE PROT / DET, VBN TS	1,244.99	Fully Contributed by Vale
	10/30/2012	Vale	BREAKER FAIL PROT, VBN TS	63,841.41	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING H1, T1, VBN TS	9,622.17	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING H2, T1, VBN TS	9,622.17	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING H3, T1, VBN TS	9,622.17	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING X1, T1, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING X2, T1, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING X3, T1, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING X0, T1, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING Y1, T1, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING Y2, T1, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING Y3, T1, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING Y0, T1, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	HV ARRESTERS, T1, VBN TS	4,936.78	Fully Contributed by Vale
	10/30/2012	Vale	LV (X) ARRESTERS, T1, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	LV (Y) ARRESTERS, T1, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	NEUT GND RESISTOR(X)T1, VBN TS	4,936.78	Fully Contributed by Vale
	10/30/2012	Vale	NEUT GND RESISTOR(Y)T1, VBN TS	4,936.78	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING H1, T2, VBN TS	9,622.17	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING H2, T2, VBN TS	9,622.17	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING H3, T2, VBN TS	9,622.17	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING X1, T2, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING X2, T2, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING X3, T2, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING X0, T2, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING Y1, T2, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING Y2, T2, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING Y3, T2, VBN TS	2,594.08	Fully Contributed by Vale
	10/30/2012	Vale	BUSHING Y0, T2, VBN TS	2,594.08	Fully Contributed by Vale

10/30/2012	Vale	HV ARRESTERS, T2, VBN TS	4,936.78	Fully Contributed by Vale
10/30/2012	Vale	LV(X) ARRESTERS, T2, VBN TS	2,594.08	Fully Contributed by Vale
10/30/2012	Vale	LV (Y) ARRESTERS, T2, VBN TS	2,594.08	Fully Contributed by Vale
10/30/2012	Vale	NEUT GND RESISTOR(X) T2 VBN TS	4,936.78	Fully Contributed by Vale
10/30/2012	Vale	NEUT GND RESISTOR(Y) T2 VBN TS	4,936.78	Fully Contributed by Vale
10/30/2012	Vale	TL208 PROTECTION, VBN TS	79,249.26	Fully Contributed by Vale
10/30/2012	Vale	T1 PROTECTION A, VBN TS	114,529.23	Fully Contributed by Vale
10/30/2012	Vale	T1 PROTECTION B, VBN TS	114,529.23	Fully Contributed by Vale
10/30/2012	Vale	T2 PROTECTION A, VBN TS	114,529.23	Fully Contributed by Vale
10/30/2012	Vale	T2 PTOTECTION B, VBN TS	114,529.23	Fully Contributed by Vale
10/30/2012	Vale	STATION CONTROL, HMI, VBN TS	89,185.32	Fully Contributed by Vale
10/30/2012	Vale	PT, B1, A PH, VBN TS	52,333.56	Fully Contributed by Vale
10/30/2012	Vale	PT, B1, B PH, VBN TS	52,333.56	Fully Contributed by Vale
10/30/2012	Vale	PT B1 C PH, VBN TS	52,333.56	Fully Contributed by Vale
10/30/2012	Vale	GND SW, L08G, VBN TS	56,450.75	Fully Contributed by Vale
10/30/2012	Vale	TAP CHANGER, T1, VBN TS	9,622.17	Fully Contributed by Vale
10/30/2012	Vale	TAP CHANGER, T2, VBN TS	9,622.17	Fully Contributed by Vale
10/31/2012	Vale	FENCE, VBN TS	3,430.93	Fully Contributed by Vale
10/17/2012	TL208	AA236 Type , Steel Towers	1,259,888.38	Fully Contributed by Vale
10/17/2012	TL208	NDD Type Steel Tower SS	398,306.67	Fully Contributed by Vale
10/17/2012	TL208	A-Type (CAC) Steel Tower	122,481.54	Fully Contributed by Vale
10/17/2012	TL208	DD236 Type Steel Towers	452,757.94	Fully Contributed by Vale
10/17/2012	TL208	Tower Foundations Self S	3,125,972.94	Fully Contributed by Vale
10/17/2012	TL208	Anchors For V-towers	168,324.17	Fully Contributed by Vale
10/18/2012	TL208	804 kmcil Conductor	299,025.72	Fully Contributed by Vale
10/18/2012	TL208	Suspension Insulators	103,429.94	Fully Contributed by Vale
10/18/2012	TL208	# 1 Steel Counterpoise	43,379.13	Fully Contributed by Vale
10/18/2012	TL208	Overhead Ground Wire	83,485.38	Fully Contributed by Vale
10/18/2012	TL208	Suspension Insulators	75,780.36	Fully Contributed by Vale
10/18/2012	TL208	Insulators Suspension	401,727.36	Fully Contributed by Vale
10/18/2012	TL208	Suspension Insulators	19,473.31	Fully Contributed by Vale

Projects Undertaken on CBP&P Specific Assigned Macro Assets 2007 - 2014				
Year	Date	Location	Description	Cost
2007	7/16/2007	Corner Brook Frequency Converter	FALL ARREST PROTECTION SYSTEM	9,039.79
	12/18/2007	Corner Brook Frequency Converter	OIL WATER SEPARATOR, CBF CS	2,661.71
	12/19/2007	Corner Brook Frequency Converter	50 Hz Assessment 2006	27,601.04
	12/20/2007	Corner Brook Frequency Converter	VENTALATION UPGRADE 2006	32,653.02
	12/20/2007	Corner Brook Frequency Converter	60 Hz Assessment, 2006	27,601.34
	12/31/2007	Corner Brook Frequency Converter	TRANSFORMER T1, CBFTS	907,362.63
2008	12/31/2007	Corner Brook Frequency Converter	FALL ARREST PROTECTION SYSTEM	9,154.25
	12/19/2008	Corner Brook Frequency Converter	WALL BUSHING 229TB APH, CBF TS	6,856.97
	12/19/2008	Corner Brook Frequency Converter	WALL BUSHING 229TB BPH, CBF TS	6,856.96
	12/19/2008	Corner Brook Frequency Converter	WALL BUSHING 229TB CPH, CBF TS	6,856.95
	12/19/2008	Corner Brook Frequency Converter	WALL BUSHING 129TA APH, CBF TS	6,856.95
	12/19/2008	Corner Brook Frequency Converter	WALL BUSHING 129TA BPH, CBF TS	6,856.95
	12/19/2008	Corner Brook Frequency Converter	WALL BUSHING 129TA CPH, CBF TS	6,856.95
	12/29/2008	Corner Brook Frequency Converter	WALL BUSHING T1 A PH, CBF TS	22,541.78
	12/29/2008	Corner Brook Frequency Converter	WALL BUSHING T1 B PH, CBF TS	22,541.78
	12/29/2008	Corner Brook Frequency Converter	WALL BUSHING T1 C PH, CBF TS	22,541.78
	12/29/2008	Corner Brook Frequency Converter	WALL BUSHING T2 A PH, CBF TS	22,541.77
	12/29/2008	Corner Brook Frequency Converter	WALL BUSHING T2 B PH, CBF TS	22,541.76
	12/29/2008	Corner Brook Frequency Converter	WALL BUSHING T2 C PH, CBF TS	22,541.76
	12/29/2008	Corner Brook Frequency Converter	VENTILATION UPGRADE 2008 CBF CS	610,752.64
	12/29/2008	Corner Brook Frequency Converter	60 CY ROTOR REWIND, CBFCs	758,978.19
	12/29/2008	Corner Brook Frequency Converter	50 CY ROTOR REWIND, CBFCs	695,204.34
	12/29/2008	Corner Brook Frequency Converter	BEARING # 4, CBFCs	84,446.39
2009	12/14/2009	Corner Brook Frequency Converter	SYNCHRONIZER, CBF CS	86,719.83
	12/14/2009	Corner Brook Frequency Converter	LIQUID RHEOSTAT, CBF CS	668,286.96
	12/14/2009	Corner Brook Frequency Converter	AVR 60 CY, CBF CS	69,757.04
	12/14/2009	Corner Brook Frequency Converter	AVR 50CY, CBF CS	69,746.11
2011	10/31/2011	Corner Brook Frequency Converter	125 VDC BATTERIES, CBF CS	36,386.60
	10/31/2011	Corner Brook Frequency Converter	SWITCH UPGRADE, 129, CBF CS	52,769.09
2013	12/16/2013	Corner Brook Frequency Converter	Upgrade, Compressor 1 CBF CS	17,155.82
	12/16/2013	Corner Brook Frequency Converter	Compressor Control Panel	22,874.43
	12/16/2013	Corner Brook Frequency Converter	COMPRESSOR 2, CBF CS	30,499.24
	12/16/2013	Corner Brook Frequency Converter	AIR DRYER 1, CBF CS	57,186.08
	12/16/2013	Corner Brook Frequency Converter	AIR DRYER 2, CBF CS	57,186.08
	12/16/2013	Corner Brook Frequency Converter	AIR RECEIVER, CBF CS	22,874.43
	12/16/2013	Corner Brook Frequency Converter	DEW POINT MONITOR, CBF CS	13,343.41
	12/16/2013	Corner Brook Frequency Converter	COMP AIR SYSTEM UPGRADE (2013)	160,121.04
2014	12/12/2014	Corner Brook Frequency Converter	Install Online Vibration Monitoring System - CBF	382,800.00