

1 Q. Re: 2013 Capital Projects 500,000 and Over: Explanations, page C-29 Upgrade
2 Distribution Systems:
3 Please provide the standardized inspection and testing procedures results indicating
4 that the line components have remaining life spans of only one to five years.

5

6

7 A. The inspection and testing procedures which indicate line components have
8 remaining life spans of only one to five years, apply to poles, cribs, and crossarms.

9

10 The requirements to replace line hardware such as insulators, conductor, and
11 cutouts, are based on visual assessments performed by Hydro's local line crews.
12 Hydro's standard method of assessment is the Line Structure Inspection Report, but
13 in some cases, a more detailed assessment may be completed.

14

15 Relevant examples of Line Structure Inspection Reports for Hydro's Central Region,
16 and the detailed assessment for Hydro's Northern and Labrador Regions, as
17 completed in 2005, are included as attachments CA-NLH-25 Attachment 1 and CA-
18 NLH-25 Attachment 2.

CA-NLH-25
ATTACHMENTS

Distribution Line Inspection Report Examples
Central Region

Grey River Line 1



DISTRIBUTION SYSTEM G. River.
LINE # 1

ASSET INFORMATION

POLE # 17 # OF ANCHORS 1
UNIQUE # 10978950 ALIANT ATTACHED ☒ STRAND ☐ DROP ☒
POLE HEIGHT 30' CATV ATTACHED ☐ STRAND ☐ DROP ☐
TREATMENT _____
WOOD SPECIES _____ GEOGRAPHIC LOCATION _____
CLASS _____ (I.E. STREET LOCATION/
COMMUNITY/HIGHWAY) _____
VINTAGE _____
STRUCTURE TYPE SDE

DMM INSTRUCTION #40

☐ CLIMBING INSPECTION

LINE STRUCTURE INSPECTION

☒ VISUAL INSPECTION

STRUCTURE CONDITION (CHECK BOX IF CONDITION IS OK, N/A - NOT APPLICABLE,
OR CIRCLE BOX IF CONDITION IS ABNORMAL AND COMMENT)

W/O # 837896

CODE	ITEM	CODE	ITEM
01	☒ BRUSH	16	☒ SERVICE DROP
02	☒ PRIMARY CONDUCTOR	19	☒ GUY WIRE
03	☐ INSULATOR	20	☒ GUY WIRE BONDED
04	☐ INSULATOR TIES	21	☒ GUY GUARD
05	☐ INSULATOR HARDWARE	22	☒ ANCHORS
06	☐ CROSSARM A ☐ B ☐ C	23	☒ CRIB A ☐ B ☐ C
07	☐ CROSSARM HARDWARE	24	☒ POLE A ☐ B ☒ C
08	☐ HOT LINE CLAMP	26	☐ SECONDARY WIRE
09	☐ PRIMARY LEAD	27	☒ GROUND WIRE
10	☐ CUTOUTS	28	☒ GROUND WIRE MOULDING
11	☐ NEUT. BRACKET	32	☒ SWITCH NUMBER
13	☒ SECONDARY HARDWARE	38	☒ STREET LIGHT
14	☒ SECONDARY TIES	80	☒ STRUCTURE/UNIQUE NUMBER TAG
15	☒ SECONDARY CONNECTIONS		

CODE COMMENTS

24 Pole 'B'

INSPECTOR T. Kendall DATE Oct 27/10
SUPERVISOR _____ DATE _____
W/O ASSIGNED FOR CORRECTIVE ACTION. W/O # _____ DATE _____

South Brook Line 3

WO. 482 445 ——— ☐ CLIMBING INSPECTION
☒ VISUAL INSPECTION

PREVENTATIVE MAINTENANCE PROGRAM
 TRANSFORMER STRUCTURE INSPECTION
 DMM INSTRUCTION # 20

SYSTEM 101 LINE NO. 3 STR NO. 06
 COMMUNITY/LOCATION Roberts Item
 TRANSFORMER NO. 217 KVA RATING 75 VOLTAGE 2400/12000
 BUSHING TYPE ☒ TOP ☐ SIDE BUSHING CREEPAGE ☐ LONG ☒ SHORT
 SECONDARY SIZE WIRE 120 LEADS 4 SECONDARY TYPE ☒ AL ☐ CU
 SECONDARY VOLTAGE 0-N 120 0-0 240
 SECONDARY AMPS: A0 B0 C0 N
 STRUCTURE CONDITION (CHECK BOX IF CONDITION IS OK, N/A - NOT APPLICABLE,
 OR CIRCLE BOX IF CONDITION IS ABNORMAL AND COMMENT)

CODE	ITEM	CODE	ITEM
01	☐ BRUSH	26	☐ SECONDARY WIRE
02	☐ PRIMARY CONDUCTOR	27	☐ GROUND WIRE
03	☐ INSULATOR	28	☐ TRF GROUNDED INDIVIDUALLY
04	☐ INSULATOR TIES	31	☐ SEC. NEUT. TIED TO SYSTEM NEUT.
05	☐ INSULATOR HARDWARE	35	☐ CONDITION OF PAINT
06	☐ CROSSARM	36	☐ CONDITION OF BAND
07	☐ CROSSARM HARDWARE	38	☐ STREET LIGHT
08	☐ HOT LINE CLAMP	39	☐ PLATFORM
09	☐ PRIMARY LEAD	40	☐ BUSHINGS
10	☐ CUTOUT	44	☐ CONNECTIONS
11	☐ NEUTRAL SPOOL BRACKET BONDED	49	☐ STRUCTURE TO STANDARD
12	☐ SPOOL BRACKET GROUNDED	54	☐ OIL LEAKS
13	☐ SECONDARY HARDWARE	56	☐ LIGHTNING ARRESTOR
14	☐ SECONDARY TIES	58	☐ REPLACE FUSE - SIZE <u> </u> AMP.
15	☐ SECONDARY CONNECTIONS	80	☐ STRUCTURE NUMBER TAG
16	☐ SERVICE DROP/ATTACHMENTS	81	☐ MOUNTING BOLTS
18	☐ GRD. WIRE CONN. TO GRD. ROD	95	☐ GROUNDING TO STANDARD
19	☐ GUY WIRE	96	☐ GROUND WIRE TIED TO CASE GROUND
20	☐ GUY WIRE BONDED	97	☐ GROUND WIRE TIED TO SYSTEM NEUT
21	☐ GUY GUARD	98	☐ NEUTRAL TIED TO H2
22	☐ ANCHORS	99	☐ H2 TIED TO X2 (DUAL BUSHINGS)
23	☐ CRIB A ☐ B ☐ C	100	☐ X2 BONDED TO TANK
24	☐ POLE A ☐ B ☐ C	101	☐ X2 BONDED TO NEUTRAL
25	☐ SECONDARY LEADS		
26	☐ SECONDARY WIRE		

CODE COMMENTS

☐ 40' Pole BlackJack
☐ Voltage - unknown.
☐
☐

INSPECTOR Codrill DATE 06.01.05
 DISTRIBUTION SUPERVISOR [Signature]

REV. 97-02-25

St. Brendan's Line 1



DISTRIBUTION SYSTEM

LINE #

ASSET INFORMATION

POLE # 24 # OF ANCHORS 1
 UNIQUE # 10112834 ALIANT ATTACHED ☒ STRAND ☒ DROP ☐
 POLE HEIGHT 35 CATV ATTACHED ☐ STRAND ☐ DROP ☐
 TREATMENT Creos
 WOOD SPECIES Pine GEOGRAPHIC LOCATION _____
 CLASS 4 (I.E. STREET LOCATION/
 VINTAGE 1965 COMMUNITY/HIGHWAY) _____
 STRUCTURE TYPE 3A

 DMM INSTRUCTION #40
 LINE STRUCTURE INSPECTION

 STRUCTURE CONDITION (CHECK BOX IF CONDITION IS OK, N/A, NOT APPLICABLE,
 OR CIRCLE BOX IF CONDITION IS ABNORMAL AND COMMENT)
☐ CLIMBING INSPECTION☒ VISUAL INSPECTION

CODE ITEM

- 01 ☒ BRUSH
 02 ☒ PRIMARY CONDUCTOR
 03 ☒ INSULATOR
 04 ☒ INSULATOR TIES
 05 ☒ INSULATOR HARDWARE
 06 ☒ CROSSARM A ☐ B ☒ C
 07 ☒ CROSSARM HARDWARE
 08 ☒ HOT LINE CLAMP
 09 ☒ PRIMARY LEAD
 10 ☒ CUTOUTS
 11 ☒ NEUT. BRACKET
 13 ☒ SECONDARY HARDWARE
 14 ☒ SECONDARY TIES
 15 ☒ SECONDARY CONNECTIONS

CODE ITEM

- 16 ☒ SERVICE DROP
 19 ☒ GUY WIRE
 20 ☒ GUY WIRE BONDED
 21 ☒ GUY GUARD
 22 ☒ ANCHORS
 23 ☒ POLE A ☐ B ☒ C
 24 ☒ POLE A ☐ B ☒ C
 26 ☒ SECONDARY WIRE
 27 ☒ GROUND WIRE
 28 ☒ GROUND WIRE MOULDING
 32 ☒ SWITCH NUMBER
 38 ☒ STREET LIGHT
 80 ☒ STRUCTURE/UNIQUE NUMBER TAG

CODE COMMENTS

03 Glass
 14 Bottom Hot - Untied
 21 No Guard & Condition B

INSPECTOR C. Davis DATE 07/10/10
 SUPERVISOR _____ DATE _____
 W/O ASSIGNED FOR CORRECTIVE ACTION, W/O # _____ DATE _____

CA-NLH-25
ATTACHMENTS

Distribution Line Material Replacement Assessment 2005
Northern Region

CHARLOTTETOWN LINE 1

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
CHARLOTTETOWN LINE 1												
STR #	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
17					1/0 - 2	1/0 - 1						
12						1/0 - 4	1					
14					1/0 - 4							
8					1/0 - 6	1/0 - 2						
21	2											
23	1											
24	1						1					
25	2				1/0 - 1							
26					1/0 - 1							
166					1/0 - 1							
27	2						1					
31	1											
33												
147					1/0 - 2		1					
34	1						1					
35	1											
36							1					
169					1/0 - 3		1					
6							1					
5					1/0 - 4	1/0 - 6						
38					1/0 - 2	1/0 - 6						
41							1					
42	1											
48					1/0 - 1	1/0 - 1	1					
56					1/0 - 1	1/0 - 4	1					
65					1/0 - 6	1/0 - 2	3					
125	1				1/0 - 10		3					
74							1					

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
CHARLOTTETOWN LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
81					1/0 - 5	1/0 - 2	1					
82	1											
83					1/0 - 2		1					
84	1											
86	1											
87			2									"C" Structure / Tap
88			1		1/0 - 1							
89					1/0 - 2		1					
92	1											
93							1					
94							1					
96					1/0 - 1	1/0 - 1	1					
70							1					
71					1/0 - 4	1/0 - 1						
137					1/0 - 6		3					
158					1/0 - 2	1/0 - 1	1					
159							1					
73					1/0 - 2							
120							1					
61					1/0 - 4	1/0 - 1	1					
60	1											
59	1						1					
58	1										Poor	Sub-standard, tri-guyed
122					1/0 - 2		1					
155					1/0 - 4		3					
4	3											
1					1/0 - 8							
152							1					

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
CHARLOTTETOWN LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
9					1/0 - 6							
153					1/0 - 4							
101						1/0 - 2						
104	1										40' - Bad	Too small
103	1											
105	1										40' - Bad	Too small
106	2										40' - Bad	Too small
107			2				1				40' - Bad	Too small
108	2											Reframe as "D" Structure, angle to big for "B"
109	1											
110	2											
111	1											
112						1/0 - 4	1					
113	2											
114	1		2				1					
115	1		2									
116	1											
118							1					
178					1/0 - 1	1/0 - 1	1					
150					1/0 - 1							

CHARLOTTETOWN LINE 2

[illegible]

[illegible]

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
CHARLOTTETOWN LINE 2												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
278	1											
279	2											"B" structure
280	2											"B" structure
281 - 300	1 each (20)											total of 20 insulators
301	2											"B" structure
302 - 306	1 each (5)											total of 5 insulators
307	2											"B" structure
308	1											
309	2											"B" structure
310 - 319	1 each (10)											total of 10 insulators
322	2						resag					replace rock anchor, resag guy
323 - 325	1 each (3)											total of 3 insulators
326	2											"B" structure
327	1											
328	1											
329	2											"B" structure
330							1					
331	2											"B" structure
332	2											"B" structure
333	1						1					
335	1						1					
339	2											"B" structure
341	1											
342	1						1					
347	2											"B" Structure
348	1						1					
349							1					Fish Plant
350	1											
351							1					

RODDICKTON LINE 1

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
RODDICKTON LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
1		2										Grey Tie Top
3	1	2										Grey Tie Top
4	1	2										Grey Tie Top
5	1	2										Grey Tie Top
6	1	2										Grey Tie Top
7	1	2										Grey Tie Top
8	1	2					1					Grey Tie Top, 3DF
9	1	2										Grey Tie Top / 1 loose tie
339							1					
13											Blackjack	Long Span, Both Sides
14											Blackjack	
15							1					Long Span
17							1					
19							1					
21							1					
342							1					
22							1				Blackjack	
345			3				1				Rotten	SDE
343												
27							1					
349							1					
30							1					
24		2					1					
31						5 - 4/0						
33							1					
35											BlackJack	
36	1	2					1				BlackJack	Brown Tie Top Glass
37	1	2									BlackJack	Brown Tie Top Glass

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
RODDICKTON LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
38	1	2					1				BlackJack	Brown Tie Top Glass
39	1	2										Brown Tie Top Glass
41							2					
42						8 - 1/0						
44	1	2					1					Grey Tie Top Glass
45							3					3DF
46	1	1										Grey Tie Top Glass
47		3	18								BlackJack	3D
48	1	2					1				BlackJack	Brown Tie Top Glass
49	1	2				2 - 2/0						Grey Tie Top Glass / Secondary Splices
51	1	2									BlackJack	Brown Tie Top Glass
52	1	2					1					Brown Tie Top Glass
54							3					
55	1	2										Grey Tie Top Glass
57										1	Blackjack	
355							1					
361						4 - 1/0						Secondary Splices
369							1					
409											Straighten Pole	SA
414											Damaged, Needs Replaced	Damaged by plow / SDE
411							1					
375							1					
379							1					
417											Needs Replacement	Long drop span / SDE
395							1	1	1			needs secondary anchor & guy
396										1		
403							1					
389							1					

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
RODDICKTON LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
384							1					
419								1	1			needs secondary anchor & guy
382							1					
381							1					
426												
428												
436												
437												
440												
441												
444												
446												
447												
449												
450												
451												
452												
453												
426											Blackjack	
428							1					
436												Re-sag primary
437							2					
440	1	2										Brown Tie Top Glass
441							1					
444							1					
446					2							
447						6 - 1/0						
449	1	2		1								Brown Tie Top Glass / re-tighten x-arm

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
RODDICKTON LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
450	1	2										Brown Tie Top Glass
451	1	2										Brown Tie Top Glass
452	1	2										Brown Tie Top Glass
453	1	2										Brown Tie Top Glass
454	1	2										Brown Tie Top Glass
455			9				3					
59							3					
62	1	2										Grey Tie Top Glass
63							1					
65			9									3C
460							1					
67						2 - 1/0						
68	1	2										Grey Tie Top Glass
69							3					
464							3					
795							1					
70							1					
71			6					1	1			#2 ACSR
72	1	2										#2 ACSR, Grey Tie Top Glass
73												#2 ACSR
465						3 - 2/0						Secondary Splices
74	1	2					1					Grey Tie Top Glass
75	1							1	1			Grey Tie Top Glass, needs secondary guy & anchor
80							1					
476												Re-sag secondary
85												
87	1	2										Brown Tie Top Glass
89	1	2										Brown Tie Top Glass / long span

[illegible]

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
RODDICKTON LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
138	1	2									Blackjack	Brown Tie Top Glass
139	1	2										Brown Tie Top Glass
141	1	2										Brown Tie Top Glass
143	1	2										Brown Tie Top Glass
145	1	2										Brown Tie Top Glass
148	1	2										Brown Tie Top Glass
149	1	2										Brown Tie Top Glass
150	1	2										Brown Tie Top Glass
151	1	2										Brown Tie Top Glass
153	1	2										Brown Tie Top Glass
155	2	4									Blackjack	Brown Tie Top Glass
156		2									Blackjack	Brown Tie Top Glass
157		3	18									
161	1	2										Brown Tie Top Glass
480	1	2					1					Wire Type - #2, Grey Tie Top Glass
481	1	2										Wire Type - #2, Brown Tie Top Glass
482	1	2										Wire Type - #2, Grey Tie Top Glass / long span
483	1	2										Wire Type - #2, Brown Tie Top Glass
484	1											Wire Type - #2, Grey Tie Top Glass
485	1	1	3				1					Grey Tie Top Glass, Brown Tie Top Glass
486			3				1					
488							1	1				Wire Type - #2, needs secondary guy & anchor
489		3	12									Wire Type - #2, Grey Tie Top Glass
490	2	4										Wire Type - #2, Grey Tie Top Glass
492												Wire Type - #2
493	1	2										Grey Tie Top Glass, Brown Tie Top Glass
495	1	2										Wire Type - #2, Grey Tie Top Glass
498	1	2					1			1		Wire Type - #2, Brown Tie Top Glass

[illegible]

[illegible]

[illegible]

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
RODDICKTON LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPlicing/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
250	1	2										Brown Tie Top Glass
251												Brown Tie Top Glass
252	1	2										Brown Tie Top Glass
253	2	4										Brown Tie Top Glass
254	2	4										Brown Tie Top Glass
255	1	2										Brown Tie Top Glass
256						4 - 1/0						
257					8 - 1/0							
799					8 - 1/0							
258	1	2										Brown Tie Top Glass
259	2	4										Brown Tie Top Glass
260	1	2										Brown Tie Top Glass
261	2	4										Brown Tie Top Glass
262	1	2					1					
263	1	2										Brown Tie Top Glass
264	1	2										Brown Tie Top Glass
265		4										Brown Tie Top Glass
265												
266							1					
265							1					
267			18									
269	1	2					1					Brown Tie Top Glass
567							1					
270	1	2										Brown Tie Top Glass
271	1	2										Brown Tie Top Glass
272							1					
275							1					
273	1	2					1					Grey Tie Top Glass

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
RODDICKTON LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
274	1	2										Brown Tie Top Glass
275	1	1										Grey Tie Top Glass
277	1	2					1					Brown Tie Top Glass
279							1					
283	1	2										Brown Tie Top Glass
288	1	2				3 - 1/0	1					Grey Tie Top Glass
287						3 - 1/0						
579											Blackjack	Secondary Pole
289	1	2										Grey Tie Top Glass
290	1	2										Grey Tie Top Glass
291	1	2					1					Grey Tie Top Glass
292					4 - 1/0							
285							1					
587							3					
293						2 - 1/0	1	1	1			Needs secondary guy and anchor
294						4 - 2/0	1					Secondary Splices
295	1	2										Grey Tie Top Glass
296	2	4										Brown Tie Top Glass
298		3	21									Grey Tie Top Glass
608		2					1					Brown Tie Top Glass
609							1					
299							1					
616											Blackjack	SSP
301						3 - 1/0	1					Secondary Splices
302								1	1			Secondary Guy & Anchor
304			18				1					
305		3	18								Blackjack	Grey Tie Top Glass
306		3	18								Blackjack	Grey Tie Top Glass

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
RODDICKTON LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
620											Blackjack	SSP / STL
592											Blackjack	SSP / STL
597	1											Grey Tie Top Glass
598	1											Grey Tie Top Glass
601					2 - 1/0	2 - 1/0 / 3 - 4/0	1					
307	1	1					1				Blackjack	Wire Type - CU, Grey Tie Top Glass
308	1	2									Blackjack	Wire Type - CU, Grey Tie Top Glass
309		3	18									Wire Type - CU, Grey Tie Top Glass
310		4	12									Wire Type - CU, Grey Tie Top Glass
311	2	4					1					Wire Type - CU, Grey Tie Top Glass
628	1											Needs Secondary OHG
629		2					1					Grey Tie Top Glass
630			3									Secondary Pole
631							1					
312							1					Wire Type - CU
313												Wire Type - CU
634												Secondary Pole
712							2	1	1			Needs Secondary Guy & Anchor
713												SSP
714												Wire Type - CU
716							1					Wire Type - CU
718												Secondary Pole
719												Wire Type - CU
720							1					Wire Type - CU
721												Wire Type - CU
724												Wire Type - CU
725												Wire Type - CU
727							1					Wire Type - CU

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
RODDICKTON LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
731							1					
736						3 - 2/0						
761											Blackjack	
760											Blackjack	
759			3				1					
754		2					1					re-sag primary
753			6									
748							1					
747		2									Blackjack	
745		2					1				Blackjack	Secondary Pole
740		3	12									
741											Blackjack	SDE
742		3	12									
744		2									Blackjack	
762		2					1				Blackjack	re-sag primary
765			6									
766		1										
768		1					1					
769								1	1		Blackjack	Secondary Pole / needs guys & anchor
771		1										
772											Blackjack	Secondary Pole
774					3 - 1/0	4 - 1/0	1					
314												Wire Type - C
315					5 - 1/0							
636							1					
637						4 - 1/0						
638							3					
639	1	2					3					Grey Tie Top Glass

[illegible]

RODDICKTON LINE 3

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
RODDICKTON LINE 3												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
3											Blackjack	
7	1	2									Blackjack	Brown Tie Top Glass
8	1	2										Grey Tie Top Glass
10	1	2										Grey Tie Top Glass
11	1	2										Grey Tie Top Glass
12	1	2										Grey Tie Top Glass
13	2	4										Grey Tie Top Glass
14	1	2					1					Grey Tie Top Glass
15	2	4										Grey Tie Top Glass
16	2	4										Grey Tie Top Glass
17	1	2										Grey Tie Top Glass
18	2	4										Grey Tie Top Glass
19	1	2										Grey Tie Top Glass
20	1	2										Grey Tie Top Glass
21	2	4										Grey Tie Top Glass
48							1					Grey Tie Top Glass
22	1	2										Grey Tie Top Glass
23	1	2										Grey Tie Top Glass
49			2				1					
24	1	2										Grey Tie Top Glass
25	2	4										Grey Tie Top Glass
26												
27	1	2										Grey Tie Top Glass
28	1	2										Grey Tie Top Glass
29	1	2										Grey Tie Top Glass
30	2	4										Grey Tie Top Glass
31	2	4										Grey Tie Top Glass
71					1/0		1					

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
RODDICKTON LINE 3												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
32	2	4										
57					1/0		1					
34	1	2										Grey Tie Top Glass
35	1	2										Grey Tie Top Glass
36	1	2					1					Grey Tie Top Glass
65			2									
37	1	2										Grey Tie Top Glass
38	1	2										Grey Tie Top Glass
39	1	2										Grey Tie Top Glass
41	1	2										Grey Tie Top Glass
42	1	2					1					Grey Tie Top Glass
44						3 - 4/0						
76					4 - 1/0 / 3 - 4/0							
79							1					Wire Type - Cu - Copper Neutral
81					3 - 1/0							Wire Type - Cu - Copper Neutral
82												Wire Type - Cu - Copper Primary & Neutral
83												Wire Type - Cu - Copper Primary & Neutral
84												Wire Type - Cu - Copper Primary & Neutral
85							1					Wire Type - Cu - Copper Primary & Neutral
87												Wire Type - Cu - Copper Primary & Neutral
90												Wire Type - Cu - Copper Primary & Neutral
93	1	2										Wire Type - Cu - Copper Primary & Neutral / Tie Top Glass
94												Wire Type - Cu - Copper Primary & Neutral
96							1					Wire Type - Cu - Copper Primary & Neutral
103												Wire Type - Cu - Copper Primary & Neutral
104												Wire Type - Cu - Copper Primary & Neutral
105							1					Wire Type - Cu - Copper Primary & Neutral
106												Wire Type - Cu - Copper Primary & Neutral

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
RODDICKTON LINE 3												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
110							1					Wire Type - Cu - Copper Primary & Neutral
115												Wire Type - Cu - Copper Primary & Neutral
120												Wire Type - Cu - Copper Primary & Neutral
121							1					Wire Type - Cu - Copper Primary & Neutral
122												Wire Type - Cu - Copper Primary & Neutral
127					3 - 1/0		3					Wire Type - Cu - Copper Primary & Neutral
128							1					
129					8 - 1/0							
132					4 - 1/0		2					
133	1	1									Rotten	Wire Type - Cu - Copper Primary & Neutral
134							1					Wire Type - Cu - Copper Primary & Neutral
140												Wire Type - Cu - Copper Primary & Neutral
141	1	2										Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
146	2	4										Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
147							1					Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
149							3					Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
150							2					Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
151	1	2										Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
152		1										Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
153	1	2					3					Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
158												Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
159							1					Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
163							1					Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
168							1					Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
170												Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
175					1 - 1/0							Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
177												Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass
178												Wire Type - Cu - Copper Primary & Neutral / Grey Tie Top Glass

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT

RODDICKTON LINE 3

	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
233	1											Brown Tie Top Glass
234	2											Brown Tie Top Glass
235			3				1					

COW HEAD LINE 1

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
COW HEAD LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
380	1											1A
379			4				1					1DS
378	1											1D
377			2									1C
374	2											1B
373	2											1B
372	2											1B
371	1		6				1					1D
449			2				1					1D, 1TS
370	1											1DE, transformer
369	1											1A
368	1											1A
367	1										Blackjack	1A
366	1											1A, Neutral Tie Broke
365	1											1A
364	1											1A
363	1											1A
362	1		2				1					1A, 1TS
444	1										Blackjack	1A
445	1										Blackjack	1A
446	1	2									Blackjack	1D
447	2											1B
267							1					1DE, transformer
361	1											1A
360	1											1A
359	2											1B, guy guard
358	1											1A, 2 guy guards
357		4								1		1D, replace crib, guy guard

[illegible]

[illegible]

[illegible]

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
COW HEAD LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
75	1											1A
76	1						1					1A, transformer
77	1											1A
78	1											1A, transformer
80			6									1D
81	2											1B
82			3									1DE, transformer
288	1	2										3A, plumb pole
289		5	15									3DF
290							3					Transformer, Bank, 3DE
630					1 - 1/0		1					1DE, transformer
453											Blackjack	SA
384					2 - 1/0							1A, 1TS
634							1					1C, transformer
132							1					1DE, transformer
32							1					3A, transformer
35			2				1					3A, 1TS
139							1					1DE, transformer
138											Blackjack	SDE
146											Blackjack	SDE
37						2 - 4/0	1					3A, transformer
38						2 - 2/0	1					3A, transformer
39							1					3A, transformer
40							2					3A, 3TS
N/A							3					3DE, 1TS, Shallow Bay Motel
155			2				1					1D, transformer
156							1					1DE, transformer
159						1 - 1/0, 2 - 2/0						SDE

[illegible]

[illegible]

[illegible]

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
COW HEAD LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPlicing/Size	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
421							1					1DE, transformer
411							1					1A, 1TS
410			3									1E
409							1					1E, transformer
408	2											1B
405	1					1 - 1/0	1					1A, transformer
404			6				1					1DS
403							1					1B, transformer
514			2									1DE
402	1		3									1A, 1T
401	1											1A, 2 Taps
602							1					1DE
504	2											1B
506							1					1DE, transformer
400			6		1 - 1/0	1 - 1/0						1ES
498											Blackjack	SA, needs to be plumbed
399	2						1					1B, transformer
398	2											1B
397	1											1A, needs to be plumbed
396	1											1A
484											Blackjack	SDE
486											Blackjack	SDE
1	1											3DF, 1T
2							3					3DS
3	1	2										3A
4	1	2										3A
6	1	2										3A
7	1	2					1					3A, transformer

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
COW HEAD LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
8	1	2					1					3D, 1TS
10							1					3A
11							1					3A, 1TS
95			3									1E
97			2				1					1DE, transformer
98							1					1DE, transformer
12	2	2										3B
13	2	2										3B
87			2				1					1DE, transformer
85			2					1				1C, 1T, replace rusty guy
86	2											1B
15	2	4										3B
16							1					3A, transformer
17							1					3A, 1TS
21	2	4					1					3B, 1TS
22	2	4					1					3B, transformer
110			5									1E
111	1											1A
112	1						1					1A, transformer
24							1					3A, transformer
25							3					3B, 3TS
114			6				3					3DE, transformer bank
113			2					1				1DE, replace rusty guy
26		1					3					3DS, 1T
116							1					1DS
117	2											1B
118	2											1B
119	1						1					1A, transformer

[illegible]

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT

COW HEAD LINE 1

STR #	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
222			2				1					1DE, transformer
591											Blackjack	SSP, can be removed, nothing on it
253							1					1DE, transformer
242	1	2										3A
243	1	2					1					3A, transformer
245							3					3DE, transformer bank

ST. LEWIS LINE 1

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
ST. LEWIS LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
49							1			1		
46	1											
42						1/0 - 2					tar - 40'	
41											tar - 40'	
40							1					
38											tar - 40'	
36			1									"C" Structure
35	1										tar	
34							1					
33	2										tar	"B" Structure
31	1		2				1				tar	tub harbour X
21							3					
18							3					School - Transformer Bank
15												
14							1					Bruce Slade
13			3	4								Bog Pole
12	1	2		1								
11	1	2		1								
10	1	2		1								
9	1	2		1							tar	
23											tar - 40'	
28	1					1/0 - 1	1					
30					1/0 - 2		1					
25					1/0 - 1	2/0 - 2						
7							1					
8					1/0 - 2							
6					1/0 - 2		1					
							3					Substation

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
ST. LEWIS LINE 1												
STR #	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPLICING/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
51		2		1		1/0 - 2	1					
52						1/0 - 1	3				tar	SL1 - D5
53	1	2										
55							1					
66							1					
63							1					Transformer, MOT
79				1							tar - 40'	
80	2	4		1							tar - 40'	
85											tar - 35'	
83	1	2		1							tar - 40'	
96					1/0 - 2		1					
87							1				tar - 45'	Transformer, Dan Taylor
76			1				1					
75			1									
74	2											
73	1						1					
69						1/0 - 1						
70					1/0 - 1							
89	2										tar - 40'	
97						2/0 - 2	1					
99	1			1								
100					1/0 - 5							
101	2											
102	2						1					
103				1							tar - 40'	
165			1		2/0 - 3, 1/0 - 1		1					
162											tap - 40'	
160					1/0 - 2							

DISTRIBUTION LINE MATERIAL REPLACEMENT ASSESSMENT												
ST. LEWIS LINE 1												
	PIN TYPE REQUIRED		SUSP. TYPE REQUIRED	CROSSARM	AUTO SLEEVES		CUTOUTS	GUYS	ANCHORS	CRIBS	POLES	REMARKS
STR #	CENTER PHASE	SIDE PHASE	ALL PHASES	QUANTITY	DEAD-ENDS/SIZE	SPlicing/SIZE	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TYPE/LENGTH/CONDITION	ANY OBSERVATION NOT IDENTIFIED ON ITEMS LISTED
159	2										tar - 40'	
157	1										tar - 40'	
155			2									
154	1										tar - 40'	
153					1/0 - 4							Ros Margrove, by road
					1/0 - 2		1					Ros Margrove, by road
152					1/0 - 4		1					
150							1					
149	1										tar - 40'	
148	2										tar - 40'	
141	3		5				1				tar - 45'	
142												
144	2		4				3					Bank, 50 kVA's
145							3					
146					1/0 - 3		1					1DE
116							1					
113							1					
107							1					SL1 - D8
117			3								tar - 30'	Replace with 40' "C" Structure
118	1	2									tar - 40'	
139	1	2									tar - 40'	
140		4									tar 40'	"B" Structure
138						1/0 - 2	1					Fox Harbour Hill
137												Fox Harbour Hill
133							1					Fox Harbour Hill
132	1				1/0 - 2	1/0 - 2						Fox Harbour Hill
131						1/0 - 1						Fox Harbour Hill

[illegible]