



SYSTEM PROTECTION & CONTROL PROJECTS 20413

CABLE SCHEDULE

NORMANDY BREAKER & CCVT REPLACEMENT

CABLE NOTES:

1. TYPE B, BS, F, AND FO CABLE SHALL BE FURNISHED BY THE OWNER, UNLESS OTHERWISE SPECIFIED.
2. THE CONTRACTOR SHALL FURNISH ALL OTHER CABLE, AS SPECIFIED.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL CABLE LENGTHS. CABLE LENGTHS LISTED ARE APPROXIMATE.
4. THE CONTRACTOR SHALL VERIFY THE EXISTING CABLE CONNECTIONS AND DUPLICATE CABLES TO NEW DC PANELS EXISTING PANEL NUMBERS CAN BE DIFFERENT.

CABLE LEGEND:

- A - THHN INSULATED COPPER CONDUCTOR, RATED 600V
- B - CONTROL CABLE
- BS - SHIELDED CONTROL CABLE
- C - RHW, THHW, OR THWN INSULATED COPPER CONDUCTOR, RATED 600V
- F - INSTRUMENT CABLE
- FO - FIBER OPTIC CABLE
- S - SINGLE CONDUCTOR
- M - MULTIPLE CONDUCTOR

IFB NO.

FILE: APPENDIX II - NM BREAKER & CCVT REPLACEMENT CABLE SCHEDULE REV1 20200811

DATE: 8/11/2020

PAGE: 1 OF 4

CABLE SCHEDULE NORMANDY BREAKER & CCVT REPLACEMENT

PAGE: 2 OF 5

CABLE #	FROM	TO	VOLT	SIZE	#C	S/M	TYPE	LNGTH ckt ft	CONDUIT #	REMARKS
BKR 921N										
921N/C1	BKR 921N	NEW 230KV PNL 6	600	10	21	M	BS			BKR 921N CONTROL
921N/C2	BKR 921N	NEW 230KV PNL 6	600	10	21	M	BS			BKR 921N CONTROL
921N/NBJB-1	BKR 921N	230KV NORTH BUS JUNCTION BOX 1	600	10	4	M	BS			EXISTING NB PRI PROT.
921N/NBJB-2	BKR 921N	230KV NORTH BUS JUNCTION BOX 2	600	10	4	M	BS			EXISTING NB SEC PROT.
921N/NBD1-1	BKR 921N	NEW 230KV PNL 14	600	10	4	M	BS			230KV NORTH BUS PRI PROT.
921N/NBD1-2	BKR 921N	NEW 230KV PNL 14	600	10	4	M	BS			230KV NORTH BUS PRI PROT.
921N/NBD2-1	BKR 921N	NEW 230KV PNL 14	600	10	4	M	BS			230KV NB SEC PROT.
921N/NBD2-2	BKR 921N	NEW 230KV PNL 14	600	10	4	M	BS			230KV NB SEC PROT.
921N/921PR-1	BKR 921N	NEW 230KV PNL 6	600	10	4	M	BS			921 PRI PROT.
921N/921PR-2	BKR 921N	NEW 230KV PNL 6	600	10	4	M	BS			921 PRI PROT.
921N/921SC-1	BKR 921N	NEW 230KV PNL 6	600	10	4	M	BS			921 SEC. PROT.
921N/921SC-2	BKR 921N	NEW 230KV PNL 6	600	10	4	M	BS			921 SEC. PROT.
BKR 92144										
92144/C1	BKR 92144	NEW 230KV PNL 6	600	10	21	M	BS			BKR 92144CONTROL
92144/C2	BKR 92144	NEW 230KV PNL 6	600	10	21	M	BS			BKR 92144 CONTROL
92144/921PR-1	BKR 92144	NEW 230KV PNL 6	600	10	4	M	BS			921 PRI PROT.
92144/921PR-2	BKR 92144	NEW 230KV PNL 6	600	10	4	M	BS			921 PRI PROT.
92144/921SC-1	BKR 92144	NEW 230KV PNL 6	600	10	4	M	BS			921 SEC PROT.
92144/921SC-2	BKR 92144	NEW 230KV PNL 6	600	10	4	M	BS			921 SEC PROT.
92144/944PR-1	BKR 92144	NEW 230KV PNL 3	600	10	4	M	BS			944 PRI PROT.
92144/944PR-2	BKR 92144	NEW 230KV PNL 3	600	10	4	M	BS			944 PRI PROT.
92144/944SC-1	BKR 92144	NEW 230KV PNL 3	600	10	4	M	BS			944 SEC PROT.

NORMANDY SUBSTATION

CABLE SCHEDULE NORMANDY BREAKER & CCVT REPLACEMENT

PAGE: 3 OF 5

CABLE #	FROM	TO	VOLT	SIZE	#C	S/M	TYPE	LNGTH ckt ft	CONDUIT #	REMARKS
92144/944SC-2	BKR 92144	NEW 230KV PNL 3	600	10	4	M	BS			944 SEC PROT.
BKR 944S										
944S/C1	BKR 944S	NEW 230KV PNL 3	600	10	21	M	BS			BKR 944S CONTROL
944S/C2	BKR 944S	NEW 230KV PNL 3	600	10	21	M	BS			BKR 944S CONTROL
944S/SBJB-1	BKR 944S	230KV SOUTH BUS JUNCTION BOX 1	600	10	4	M	BS			EXISTING SB PRI PROT.
944S/SBJB-2	BKR 944S	230KV SOUTH BUS JUNCTION BOX 2	600	10	4	M	BS			EXISTING SB SEC PROT.
944S/SBD1-1	BKR 944S	NEW 230KV PNL 13	600	10	4	M	BS			230KV SB PRI PROT.
944S/SBD1-2	BKR 944S	NEW 230KV PNL 13	600	10	4	M	BS			230KV SB PRI PROT.
944S/SBD2-1	BKR 944S	NEW 230KV PNL 13	600	10	4	M	BS			230KV SB SEC PROT.
944S/SBD2-2	BKR 944S	NEW 230KV PNL 13	600	10	4	M	BS			230KV SB SEC PROT.
944S/944PR-1	BKR 944S	NEW 230KV PNL 3	600	10	4	M	BS			944 PRIMARY PROTECTION
944S/944PR-2	BKR 944S	NEW 230KV PNL 3	600	10	4	M	BS			944 PRI PROT.
944S/944SC-1	BKR 944S	NEW 230KV PNL 3	600	10	4	M	BS			944 SEC PROT.
944S/944SC-2	BKR 944S	NEW 230KV PNL 3	600	10	4	M	BS			944 SEC PROT.
921PTJB										
921/PHA	230KV LINE 921 PHASE "A" PT	230KV LINE 921 PT FUSE JUNCTION BOX 921PTJB	600	10	8	M	BS			LINE 921 PT – PHASE "A"
921/PHB	230KV LINE 921 PHASE "B" PT	230KV LINE 921 PT FUSE JUNCTION BOX 921PTJB	600	10	8	M	BS			LINE 921 PT – PHASE "B"
921/PHC	230KV LINE 921 PHASE "C" PT	230KV LINE 921 PT FUSE JUNCTION BOX 921PTJB	600	10	8	M	BS			LINE 921 PT – PHASE "C"
921PT/JB	230KV LINE 921 PT FUSE JUNCTION BOX 921PTJB	NEW 230KV PNL 6	600	10	8	M	BS			LINE 921 PT'S TO PNL 6
BKR 928S										
928S/C1	BKR 928S	NEW 230KV PNL 8	600	10	21	M	BS			BKR 928S CONTROL
928S/C2	BKR 928S	NEW 230KV PNL 8	600	10	21	M	BS			BKR 928S CONTROL
928S/SBJB-1	BKR 928S	230KV SOUTH BUS JUNCTION BOX 1	600	10	4	M	BS			EXISTING SB PRI PROT.

NORMANDY SUBSTATION

CABLE SCHEDULE NORMANDY BREAKER & CCVT REPLACEMENT

PAGE: 4 OF 5

CABLE #	FROM	TO	VOLT	SIZE	#C	S/M	TYPE	LNGTH ckt ft	CONDUIT #	REMARKS
928S/SBJB-2	BKR 928S	230KV SOUTH BUS JUNCTION BOX 2	600	10	4	M	BS			EXISTING SB SEC PROT.
928S/SBD1-1	BKR 928S	NEW 230KV PNL 13	600	10	4	M	BS			230KV SB PRI PROT.
928S/SBD1-2	BKR 928S	NEW 230KV PNL 13	600	10	4	M	BS			230KV SB PRI PROT.
928S/SBD2-1	BKR 928S	NEW 230KV PNL 13	600	10	4	M	BS			230KV SB SEC PROT.
928S/SBD2-2	BKR 928S	NEW 230KV PNL 13	600	10	4	M	BS			230KV SB SEC PROT.
928S/928PR-1	BKR 928S	NEW 230KV PNL 8	600	10	4	M	BS			928 PRI PROT.
928S/928PR-2	BKR 928S	NEW 230KV PNL 8	600	10	4	M	BS			928 PRI PROT.
928S/928SC-1	BKR 928S	NEW 230KV PNL 8	600	10	4	M	BS			928 SEC PROT.
928S/928SC-2	BKR 928S	NEW 230KV PNL 8	600	10	4	M	BS			928 SEC PROT.
BKR 9T6N										
9T6N/C1	BKR 9T6N	NEW 230KV PNL 17	600	10	21	M	BS			BKR 9T6N CONTROL
9T6N/C2	BKR 9T6N	NEW 230KV PNL 17	600	10	21	M	BS			BKR 9T6N CONTROL
9T6N/NBJB-1	BKR 9T6N	230KV NORTH BUS JUNCTION BOX 1	600	10	4	M	BS			EXISTING NB PRI PROT.
9T6N/NBJB-2	BKR 9T6N	230KV NORTH BUS JUNCTION BOX 2	600	10	4	M	BS			EXISTING NB SEC PROT.
9T6N/NBD1-1	BKR 9T6N	NEW 230KV PNL 14	600	10	4	M	BS			230KV NORTH BUS PRI PROT.
9T6N/NBD1-2	BKR 9T6N	NEW 230KV PNL 14	600	10	4	M	BS			230KV NORTH BUS PRI PROT.
9T6N/NBD2-1	BKR 9T6N	NEW 230KV PNL 14	600	10	4	M	BS			230KV NB SEC PROT.
9T6N/NBD2-2	BKR 9T6N	NEW 230KV PNL 14	600	10	4	M	BS			230KV NB SEC PROT.
9T6N/T6PR-1	BKR 9T6N	NEW 230KV PNL 17	600	10	4	M	BS			T6 PRI PROT.
9T6N/T6PR-2	BKR 9T6N	NEW 230KV PNL 17	600	10	4	M	BS			T6 PRI PROT.
9T6N/T6SC-1	BKR 9T6N	NEW 230KV PNL 17	600	10	4	M	BS			T6 SEC. PROT.
9T6N/T6SC-2	BKR 9T6N	NEW 230KV PNL 17	600	10	4	M	BS			T6 SEC. PROT.
BKR 9T6T7										
9T6T7/C1	BKR 9T6T7	NEW 230KV PNL 12	600	10	21	M	BS			BKR 9T6T7CONTROL

NORMANDY SUBSTATION

CABLE SCHEDULE NORMANDY BREAKER & CCVT REPLACEMENT

PAGE: 5 OF 5

CABLE #	FROM	TO	VOLT	SIZE	#C	S/M	TYPE	LNGTH ckt ft	CONDUIT #	REMARKS
9T6T7/C2	BKR 9T6T7	NEW 230KV PNL 12	600	10	21	M	BS			BKR 9T6T7 CONTROL
9T6T7/T6PR-1	BKR 9T6T7	NEW 230KV PNL 17	600	10	4	M	BS			T6 PRI PROT.
9T6T7/T6PR-2	BKR 9T6T7	NEW 230KV PNL 17	600	10	4	M	BS			T6 PRI PROT.
9T6T7/T6SC-1	BKR 9T6T7	NEW 230KV PNL 12	600	10	4	M	BS			T6 SEC PROT.
9T6T7/T6SC-2	BKR 9T6T7	NEW 230KV PNL 12	600	10	4	M	BS			T6 SEC PROT.
9T6T7/T7PR-1	BKR 9T6T7	NEW 230KV PNL 21	600	10	4	M	BS			T7 PRI PROT.
9T6T7/T7PR-2	BKR 9T6T7	NEW 230KV PNL 21	600	10	4	M	BS			T7 PRI PROT.
9T6T7/T7SC-1	BKR 9T6T7	NEW 230KV PNL 12	600	10	4	M	BS			T7 SEC PROT.
9T6T7/T7SC-2	BKR 9T6T7	NEW 230KV PNL 12	600	10	4	M	BS			T7 PRI PROT.
BKR 9T7S										
9T7S/C1	BKR 9T7S	NEW 230KV PNL 21	600	10	21	M	BS			BKR 9T7S CONTROL
9T7S/C2	BKR 9T7S	NEW 230KV PNL 21	600	10	21	M	BS			BKR 9T7S CONTROL
9T7S/SBJB-1	BKR 9T7S	230KV SOUTH BUS JUNCTION BOX 1	600	10	4	M	BS			EXISTING SB PRI PROT.
9T7S/SBJB-2	BKR 9T7S	230KV SOUTH BUS JUNCTION BOX 2	600	10	4	M	BS			EXISTING SB SEC PROT.
9T7S/SBD1-1	BKR 9T7S	NEW 230KV PNL 13	600	10	4	M	BS			230KV SB PRI PROT.
9T7S/SBD1-2	BKR 9T7S	NEW 230KV PNL 13	600	10	4	M	BS			230KV SB PRI PROT.
9T7S/SBD2-1	BKR 9T7S	NEW 230KV PNL 13	600	10	4	M	BS			230KV SB SEC PROT.
9T7S/SBD2-2	BKR 9T7S	NEW 230KV PNL 13	600	10	4	M	BS			230KV SB SEC PROT.
9T7S/T7PR-1	BKR 9T7S	NEW 230KV PNL 21	600	10	4	M	BS			T7 PRIMARY PROTECTION
9T7S/T7PR-2	BKR 9T7S	NEW 230KV PNL 21	600	10	4	M	BS			T7 PRIMARY PROTECTION
9T7S/9T7SC-1	BKR 9T7S	NEW230KV PNL 21	600	10	4	M	BS			T7 SECONDARY PROTECTION
9T7S/9T7SC-2	BKR 9T7S	NEW230KV PNL 21	600	10	4	M	BS			T7 SECONDARY PROTECTION

NORMANDY SUBSTATION