Sprain Brook-Dunwoodie South Stability Limit Analysis For The Addition of 3.26% Series Reactor on M51, M52, 71 and 72 Lines

Revised – 11 February 2005

Operations Engineering
New York Independent System Operator, Inc.
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1 INTRODUCTION

As part of the ConEdison Fault Current Mitigation Plan, 3.26% Series Reactors are being installed in the Sprain Brook – W. 49th Street (M51 & M52) and the Dunwoodie – Rainey (71 & 72) lines, instead of the 2% series reactors originally prescribed by the Plan. The 3.26% series reactors are expected to be available for use during the Summer 2005 capability period. Details of the operating procedure are being determined by Con-Edison and will be distributed independently of this report.

This study examines the impact of the addition of the 3.26% series reactor on the stability performance of UPNY-ConEd (Open) Interface and Sprain Brook/Dunwoodie – South (Open) Interface. The Leeds SVC is modeled out of service to avoid the need for a second set of limits for the SVC out of service condition for these interfaces.

This report summarizes the result of the stability analysis as presented in Table 1, and includes selected results, a comparison plot of stability tests for the base case (without series reactors) and the case with 3.26% series reactors in service.

2 CONCLUSIONS and RECOMMENDATIONS

The UPNY-ConEd and Sprain Brook-Dunwoodie South contingency tests demonstrate acceptable performance of the NYISO bulk power system. The results of the analysis, demonstrate that the addition of the 3.26% series reactors on each of the M51, M52, 71, and 72 lines does not have an adverse impact on UPNY-ConEd and Sprain Brook/Dunwoodie – South stability performance. The following conclusions and recommendations are pertinent:

- All test simulations are stable at the indicated test transfer level and represent the highest solved power flow case.

- The pre contingency power flow analysis showed that on initial insertion of the 3.26% series reactors, voltages on the Con-Edison 345 kV network (Sprain Brook and Dunwoodie bus voltage) dropped from 1.02 p.u to about 0.96 p.u. (representing about a 6% drop). Through adjustment of available generation dispatch, voltage schedules, and switching of shunt reactors, system voltages were restored to acceptable levels (above 1.0 p.u.).

- The UPNY-Con-Ed interface stability transfer limit of **4850 MW** should be used when the 3.26% series reactors are *not* bypassed on each of the M51, M52, 71 and 72 lines, based on the highest pre-contingency solved case.

- Dunwoodie South interface stability transfer limit of **4350 MW** should be used when the 3.26% series reactors are *not* bypassed on each of the M51, M52, 71 and 72 lines, based on the highest pre-contingency solved case.

The summary of test levels and recommended stability transfer limits are presented in Table 1.

2.1 ***Stability Limits***

The table 1 below summarizes the test transfer levels and recommended Sprain Brook/Dunwoodie – South and UPNY-ConEd interface stability transfer limits based on the detailed stability analyses conducted for the addition of 3.26% series reactor on each of the Sprain Brook – West 49th Street (M51 & M52) and Dunwoodie – Rainey (71 & 72) lines.

Table 1

		Sprain Brook - Dunwoodie South Stability Analysis for the Addition of 3.26% Reactor **Athens Generation In Service** **Leeds SVC Out of Service**			
	Case Description	***Tested Transfer Level*** (Highest Stable Test Level)		***Recommended Limit*** (Includes NYISO 10% Safety Margin)	
		UPNY-ConEd	***Sprain Brook-Dunwoodie***	***UPNY-ConEd***	***Sprain Brook-Dunwoodie***
1	***UC5939DS53974m6Athens.sav***	***5939***	***5397***	***5300***	***4850***
3	***UC5426DS48634m6Aths3.26%X.sav***	***5426***	***4863***	***4850***	***4350***

Note Case 1 = 3.26% Series Reactors bypassed
Case 3 = 3.26% Series Reactors in-service (*not* bypassed)

3. STUDY ASSUMPTIONS AND METHODOLOGY

3.1 Interface Definitions

Sprain Brook/Dunwoodie – South (Open) Interface		
Dunwoodie – Rainey	71	345 kV
Dunwoodie – Rainey	72	345 kV
Sprain Brook – Tremont	X28	345 kV
Sprain Brook - West 49th Street	M51	345 kV
Sprain Brook - West 49th Street	M52	345 kV
Lake Success – Jamaica	903	138 kV
Valley Stream – Jamaica	901L/M	138 kV
Dunwoodie – Sherman Creek	99031	138 kV
Dunwoodie – Sherman Creek	99032	138 kV
Dunwoodie – East 179th Street	99153	138 kV

UPNY-ConEd (Open) Interface		
Ladentown - Buchanan South*	Y88	345 kV
*Pleasant Valley - Wood St.	F30	345 kV
*Pleasant Valley - E. Fishkill	F36	345 kV
*Pleasant Valley - E. Fishkill	F37	345 kV
*Pleasant Valley – Millwood	F31	345 kV
*Ramapo - Buchanan North	Y94	345 kV
Roseton - E. Fishkill*	RFK305	345 kV
Fishkill Plains – Sylvan Lake	A/990	115 kV
East Fishkill 115/345	F33	115/345 kV

3.2 Base Case Development

The study used the NERC System Dynamic Data Working Group /NPCC/NYISO dynamics representation as was used for "Central East, Total East and UPNY-ConEd Stability Analysis for the Addition Athens Generation" study.

The 3.26% series reactors are represented in the case by adding 0.0326 p.u. reactance to the impedance of each of the M51, M52, 71 and 72 circuits.

3.3 Transfer Case Development

Two transfer cases were developed: **Case 1** represents flow at the current UPNY-ConEd and Sprain Brook-Dunwoodie South stability transfer limit levels (plus margin), and **Case 3** is the corresponding test case with 3.26% series reactors in service.

To assess the impact of the 3.26% series reactors on the existing UPNY-ConEd and Sprain Brook-Dunwoodie interface stability limits, all Athens generators were placed in service and generation in western NY and Ontario was increased, and generation in New England and southeastern New York was decreased to obtain the desired interface flow on UPNY-ConEd and Sprain Brook-Dunwoodie interfaces.

The standard set of UPNY-ConEd contingencies and additional critical contingencies on the 345 kV network south of Sprain Brook and Dunwoodie were tested in each case. In each case, the contingencies tested demonstrate acceptable stable and well-damped performance of the NYISO bulk power system. (Appendix A presents a listing of the contingencies.)

The Leeds SVC is modeled out of service in all tests. This is a conservative approach as the Leeds SVC could be critical to UPNY-ConEd interface stability performance and ensures that the interface stability transfer limits are not dependent on the availability of the Leeds SVC.

3.4 Contingency Analysis

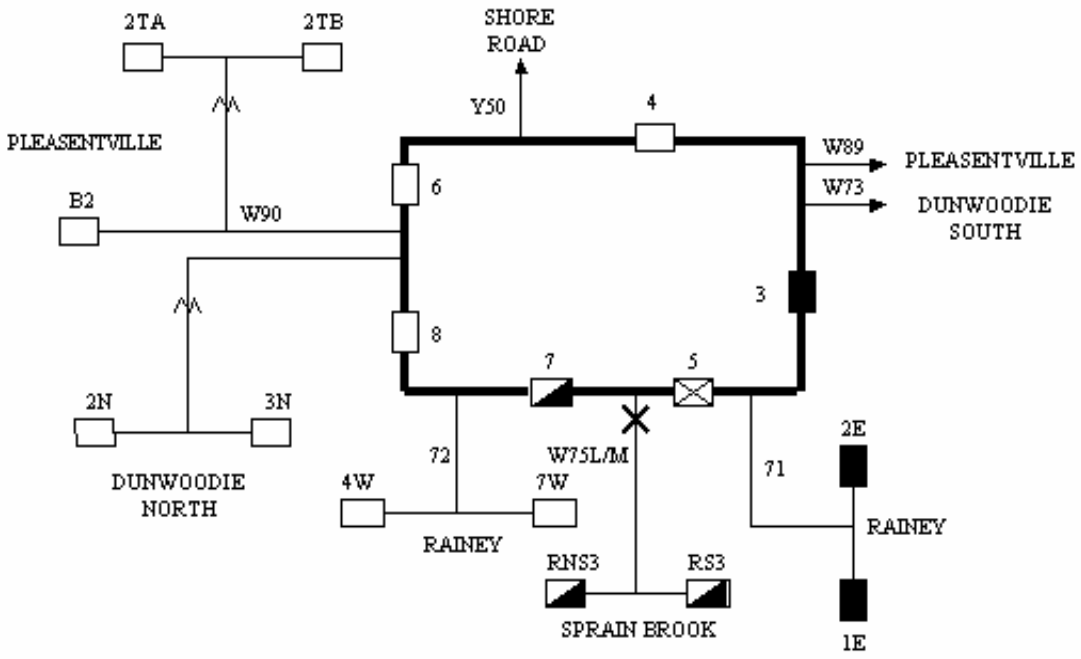
Appendix A lists the UPNY-ConEd contingencies tested in this analysis. Additional critical contingencies on the 345 kV network south of Sprain Brook and Dunwoodie were developed using the following breaker diagrams and switching sequence shown below. These breaker diagrams with switching sequence were obtained from Con-Ed.

Appendix B includes load flow summary view, transcription diagram and selected simulation results for each case. Appendix C includes comparison of some machine angles and bus voltages for all cases with and without the 3.26% series reactor.

The testing was performed in accordance with the "Standards for Planning and Operating the New York ISO Bulk Power System" and the NYISO Transmission Planning Guideline #3.

> *The determination of interface transfer limits requires the consideration of thermal, voltage, and stability limitations. When determining a stability limit, a margin also shall be applied to the power transfer level to allow for uncertainties associated with system modeling. This margin shall be the larger of ten percent of the highest stable transfer level simulated or 200MW. The margin also shall be applied in establishing a stability limit for faults remote from the interface for which the power transfer limit is being determined.*

DUNWOODIE 345-kV STATION



DESCRIPTION: SINGLE-LINE-TO-GROUND FAULT WITH DELAY CLEARING AT DUNWOODIE 345-kV STATION ON FEEDER W75L/M

TIME (CYCLES)	SWITCHING SEQUENCE
0.0	FAULT AT DUNWOODIE 345-kV ON FEEDER W75L/M
4.0	DUNWOODIE BREAKER 7 AND SPRAIN BROOK BREAKERS RS3 AND RNS3 OPEN BUT BREAKER 5 FAILS TO INTERRUPT
11.7	DUNWOODIE BREAKER 3 OPENS
13.7	RAINEY BREAKERS 1E AND 2E OPEN CLEARING THE FAULT

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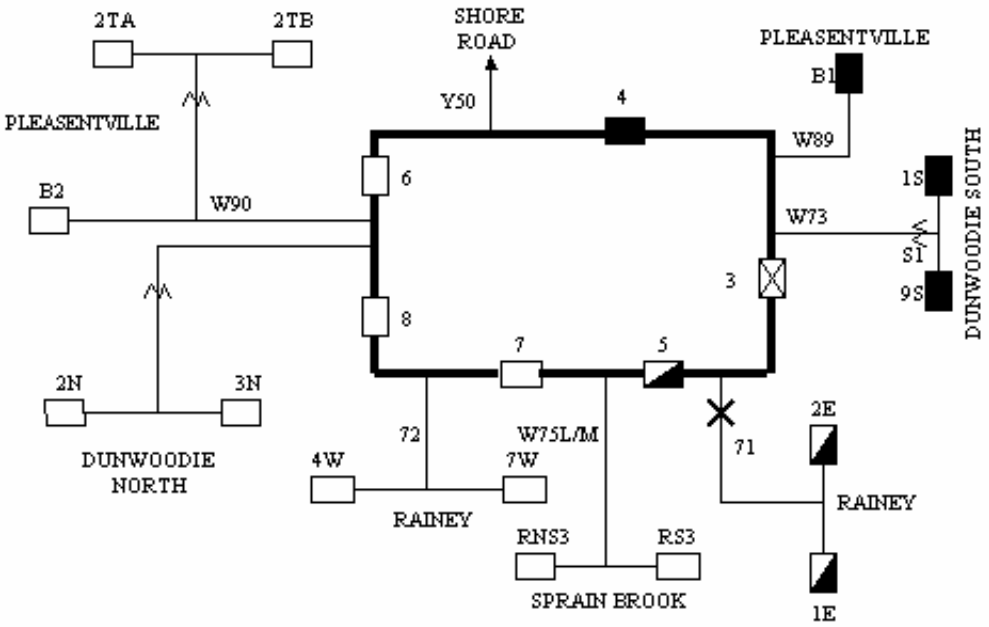
DUNWOODIE 345-kV STATION



DESCRIPTION: SINGLE-LINE-TO-GROUND FAULT WITH DELAY CLEARING AT DUNWOODIE 345-kV STATION ON FEEDER W71

TIME (CYCLES)	SWITCHING SEQUENCE
0.0	FAULT AT DUNWOODIE 345-kV ON FEEDER W71
4.0	DUNWOODIE BREAKER 5 AND RAINEY BREAKERS 1E & 2E OPEN BUT BREAKER 3 FAILS TO INTERRUPT
11.1	DUNWOODIE BREAKER 4 OPENS
11.6	PLEASANTVILLE BREAKER B1 OPENS
16.6 – 18.6	DUNWOODIE 138-kV BREAKERS 1S AND 9S OPEN CLEARING THE FAULT

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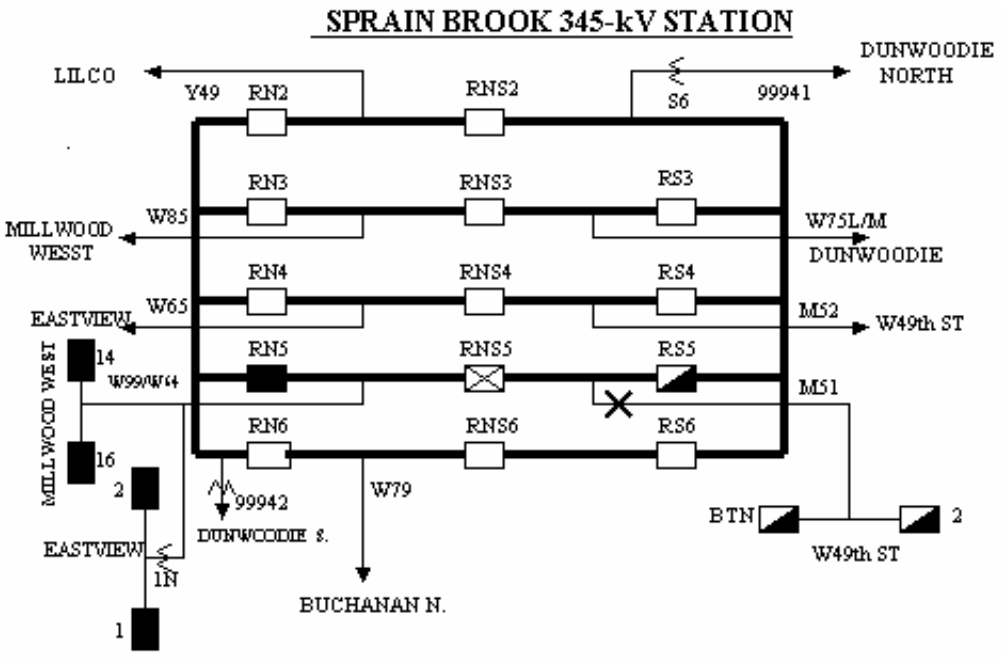
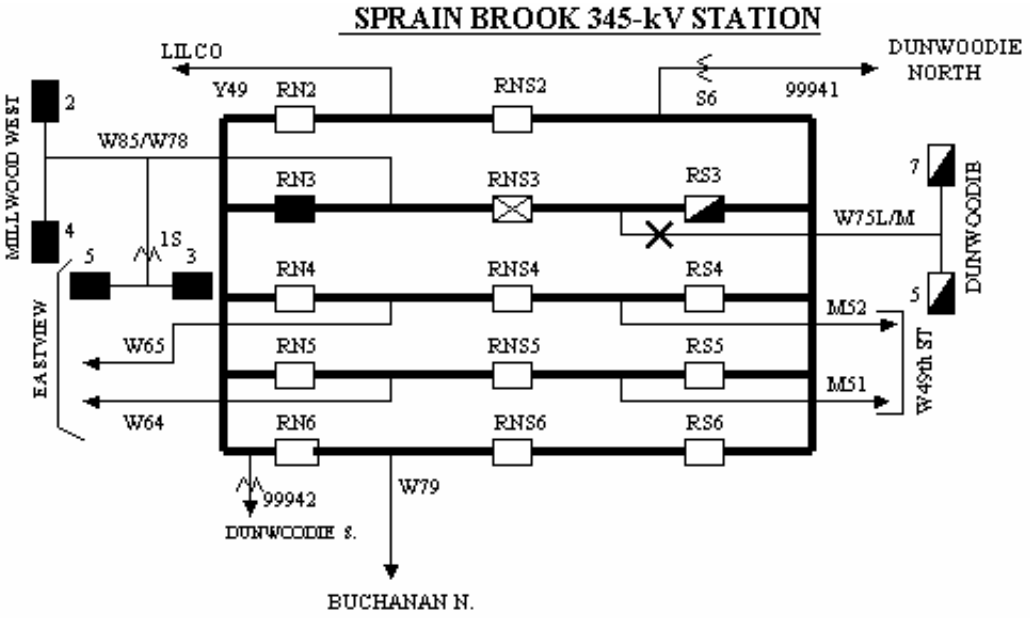


DESCRIPTION: SINGLE-LINE-TO-GROUND FAULT WITH DELAYED CLEARING AT SPRAIN BROOK 345-kV STATION ON FEEDER M51

TIME (CYCLES)	**SWITCHING SEQUENCE**
0.0	FAULT AT SPRAIN BROOK 345-kV ON FEEDER M51
4.0	W49 ST. BKRS BTN & 2 AND SPRAIN BROOK BREAKER RS5 OPENS BUT BREAKER RNS5 FAILS TO INTERRUPT
11.7	SPRAIN BROOK BREAKER RN5 OPENS
14.2	MILLWOOD WEST BREAKERS 14 & 16 OPEN
15.2	EASTVIEW BREAKERS 1 & 2 OPEN CLEARING THE FAULT

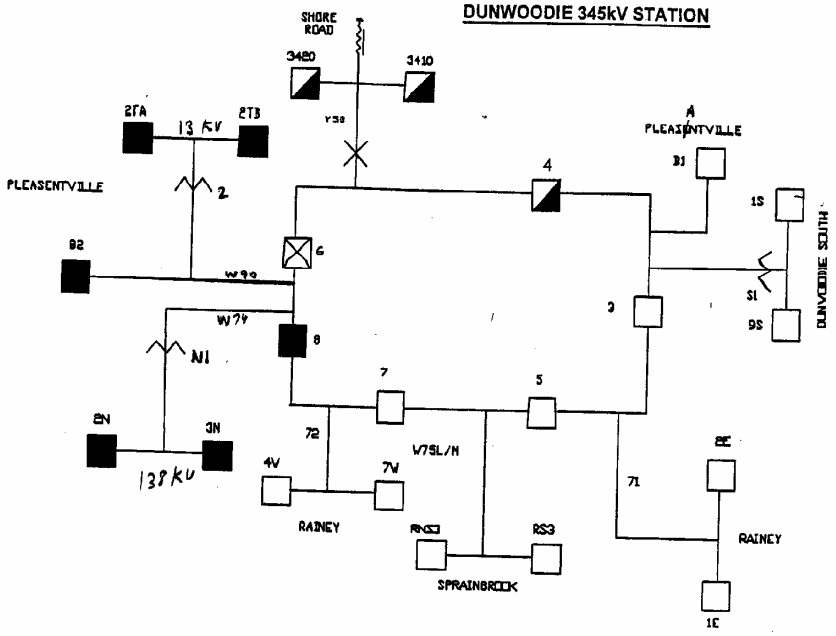


DESCRIPTION: SINGLE-LINE-TO-GROUND FAULT WITH DELAYED CLEARING AT SPRAIN BROOK 345-kV STATION ON FEEDER W75L/M

TIME (CYCLES)	SWITCHING SEQUENCE
0.0	FAULT AT SPRAIN BROOK 345-kV ON FEEDER W75L/M
4.0	DUNWOODIE BREAKER 5 & 7 AND SPRAIN BROOK BREAKER RS3 OPEN BUT BREAKER RNS3 FAILS TO INTERRUPT
11.7	SPRAIN BROOK BREAKER RN3 OPENS
14.2	MILLWOOD WEST BREAKERS 2 & 4 OPEN
15.2	EASTVIEW BREAKERS 3 & 5 OPEN CLEARING THE FAULT

[illegible]

(2)



DESCRIPTION: SINGLE-LINE-TO-GROUND FAULT WITH DELAY CLEARING AT DUNWOODIE 345 KV STATION ON FEEDER Y50

TIME (CYCLES)	SWITCHINGSEQUENCE
0.0	FAULT AT DUNWOODIE 345 KV ON FEEDER Y50
4.0	SHORE ROAD BREAKERS 3410 & 3420 OPEN
4.0	DUNWOODIE BREAKER 4 OPENS BUT BREAKER 6 FAILS TO INTERRUPT
11.7	DUNWOODIE BREAKER 8 OPENS
14.2	PLEASANTVILLE BREAKER B2 OPENS
12.7	DUNWOODIE 138-KV BREAKERS 2N & 3N OPEN
17.7	PLEASANTVILLE BREAKERS 2TA & 2TB OPEN

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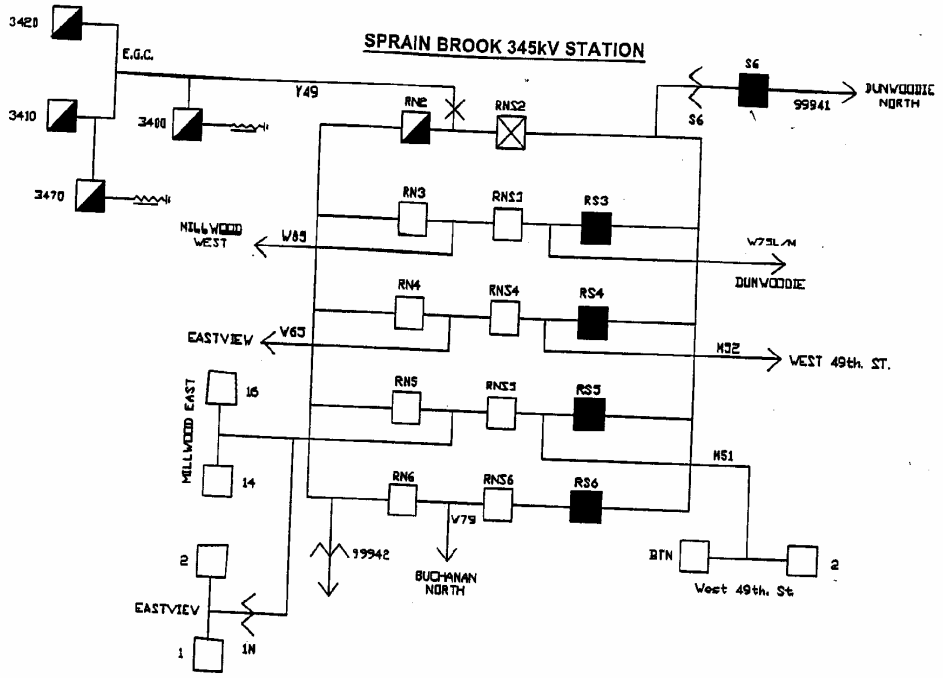
(3)



DESCRIPTION: SINGLE-LINE-TO-GROUND FAULT WITH DELAY CLEARING AT SPRAIN BROOK 345 KV STATION ON FEEDER Y49

TIME (CYCLES)	SWITCHINGSEQUENCE
0.0	FAULT AT SPRAIN BROOK 345 KV ON FEEDER Y49
3.5	EAST GARDEN CITY BREAKERS 3400, 3410, 3420 & 3470 OPEN
3.5	SPRAIN BROOK BREAKER RN2 OPEN BUT BREAKER RNS2 FAILS TO INTERRUPT
9.8	SPRAIN BROOK BREAKERS RS3, RS4, RS5 & RS6 OPEN
10.8	DUNWOODIE 138-KV BREAKER S6 OPENS

1/19/05
J.S.

Appendix A
Fault Tests Index

UPNY-ConEd CONTINGENCIES	
UC01ATH	SLG/STK#RNS4 @ PL.VLLY./PL.VLLY.-MILLWOOD
UC02	3PH@FISHKILL-L/O TOWER(2-1938)FISHKILL-PLEASANTVILLE
UC03	3PH@SPRAIN BK-L/O TOWER(2-1956)MILLWOOD-SPRAIN BROOK
UC04	SLG/STK @ BUCHANAN NORTH / IP#2 STK BKR 9
UC05	3PH/STK @ BUCHANAN SOUTH / W97*MILLWOOD STK BKR 6
UC06	SLG/STK @ DUNWOODIE - PVLE W90 / STK#8 CLR RAINEY#72
UC07	SLG/STK @ FISHKILL-PL.VAL F36 / STK#11 CLR BANK#1
UC08	SLG/STK @ LADENTOWN-RAMAPO W72 / STK#1-56-2 / CLR W67
UC09	SLG/STK@MILLWOOD-EASTVIEW/SPRAIN BROOK/STK#16 CLR W98
UC10	SLG/STK@RAMAPO-ROCK TAVERN/STK T-77-94-2/CLR Y94 *
UC11	SLG/STK@SPRAINBROOK-TREMONT/STK RNS6/CLEAR W93/W79
UC12	SLG/STK@RAMAPO-BRANCHBURG/STK T-1500-W72-2/CLR W72
UC13	SLG/STK@LEEDS-N.SCOTLAND/STK R94301/CLR#303*HURLEY
UC14ATH	SLG/STK@LEEDS-GILBOA / STK R391 / CLR#91 PL.VALLEY
UC15	SLG/STK@LEEDS-PLEASANT VALLEY/STK R9293/CLR#93 NS
UC16	SLG/STK @ ROSETON/ROSETON-ROCK TAVERN#311/STK 31151
UC18	3PH@LADENTOWN-L/O TOWER Y88/Y94 BUCHANAN RIVER CROSSING
UC19	3PH@MILLWOOD-L/O TOWER (2-1961) MILLWOOD-SPRAINBROOK
UC20	3PH@DUNWOODIE-L/O TOWER(2-1938)PLEASANTVILLE*DUNWD
UC21	3PH@PL.VALLEY-L/O TOWER(2-1961)PV-MILLWOOD DBL CKT
UC22	SLG/STK@LADENTOWN-BUCHANAN Y88/STK#3-56-2/CLR W67&BP#1
UC23	SLG/STK@RAMAPO-BUCHANAN/STK T-77-94-2/CLR#377 ROCK TAV
UC24	SLG/STK@ROCK TAVERN-ROSETON/CLR COOPERS-ROCK TAV
UC25	3PH @ RAVENSWOOD#3 - TRIP GEN.@ 4.5~
UC26	LLG L/O TOWER LADENTOWN-W.HAVERSTRAW /REJ BOWLINE
UC27	SLG/STK@ROCK TAVERN-COOPERS/CLR ROCK TAVN-RAMAPO
UC29	SLG/STK@LADENTOWN-BUCHANAN Y88/STK#6-56-2/CLR W68&BP#2
UC30	LLG@ROCK TAVN/COOPERS CORNERS-ROCK TAVERN D/C
UC30AR	LLG@ROCK TAVN/COOPERS CORNERS-ROCK TAVERN D/C
UC32	SLG/STK@COOPERS/ CCRT-42 / BACKUP CLR UCC-2/41@MARCY

Appendix A

SIMULATED FAULTS

DUNWOODIE SOUTH CONTINGENCIES

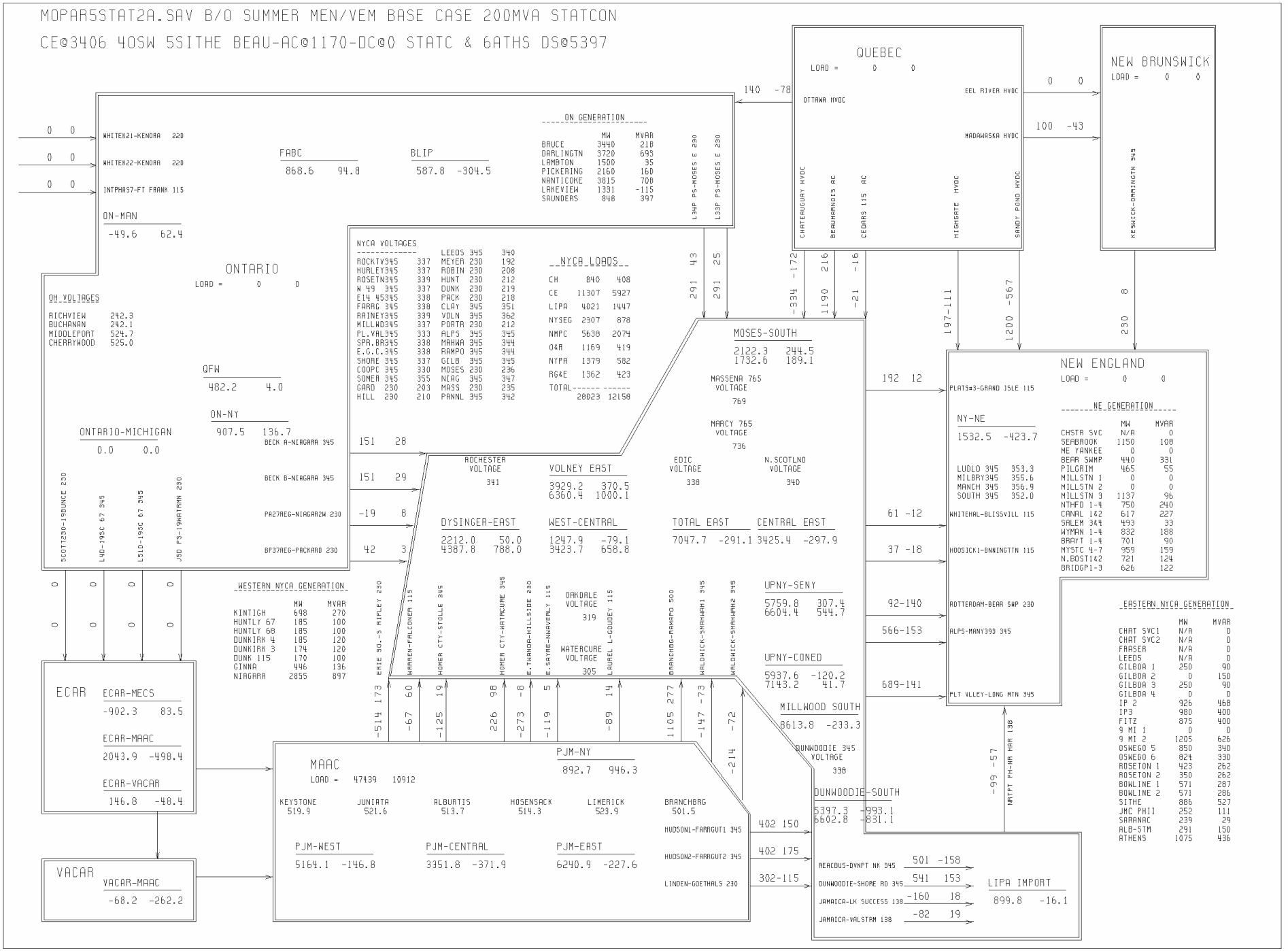
DS01	SLG/SKT@SPRAINBROOK-WEST 49th STREET/STK RNS5/CLEAR W99/W64
DS02	SLG/SKT@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
DS03	SLG/SKT@ DUNWOODIE -SPRAINBROOK /STK # 5/CLEAR RAINEY # 71
DS04	SLG/SKT@ DUNWOODIE -RAINEY /STK # 3/CLEAR W89 & W73
DS05	3PH@FARRAGUT-L/O FARRAGUT - HUDSON (B) LINES
DS06	SLG/SKT@SPRAINBROOK-EGC 345 kV (FEEDER Y49) WITH DELAYED CLEARING
DS07	SLG/SKT@SPRAINBROOK-SHORE RD 345 kV (FEEDER Y50) WITH DELAYED CLEARING

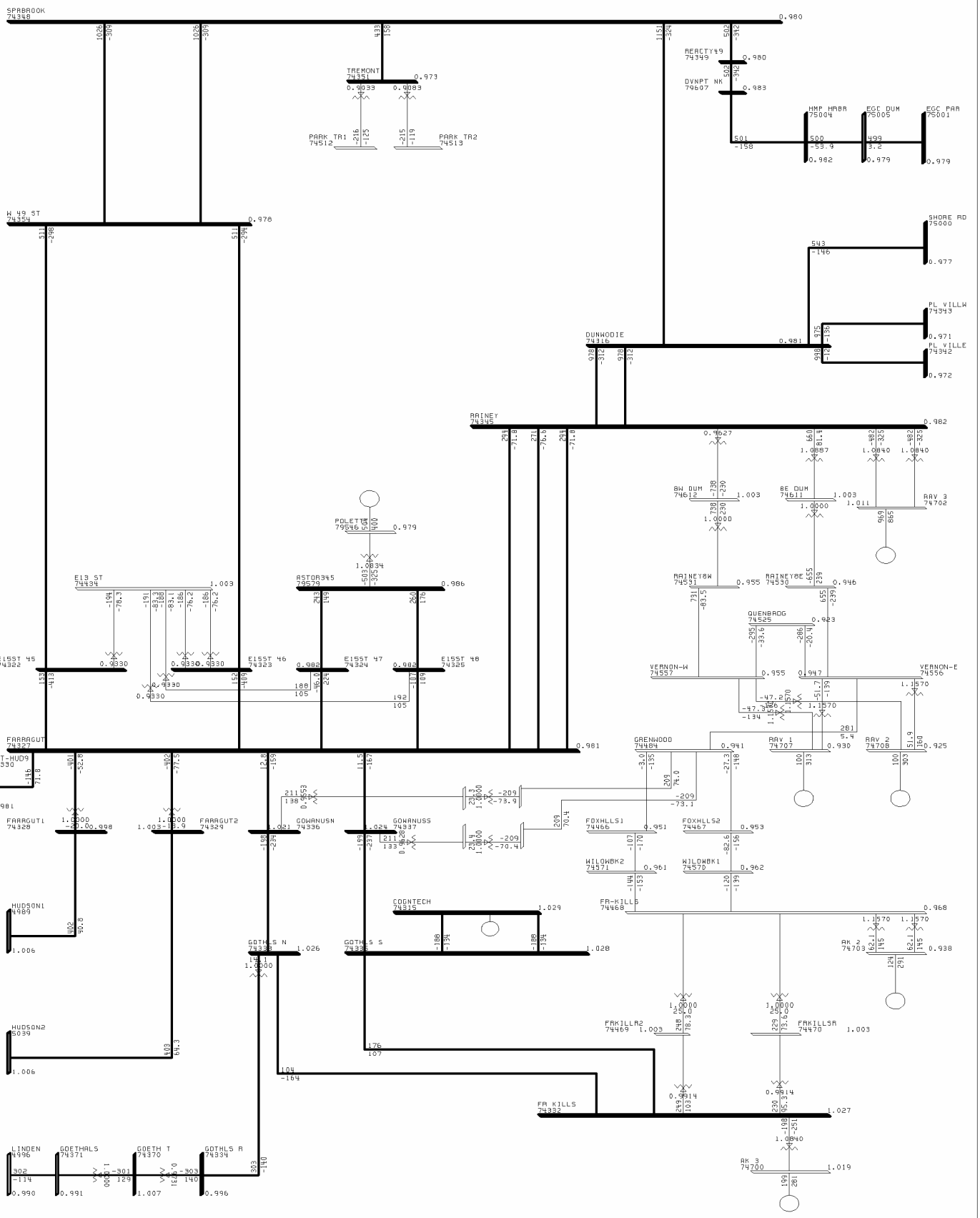
Appendix B
(Simulation plots)

(UPNY- ConEd and Sprainbrook - Dunwoodie South)

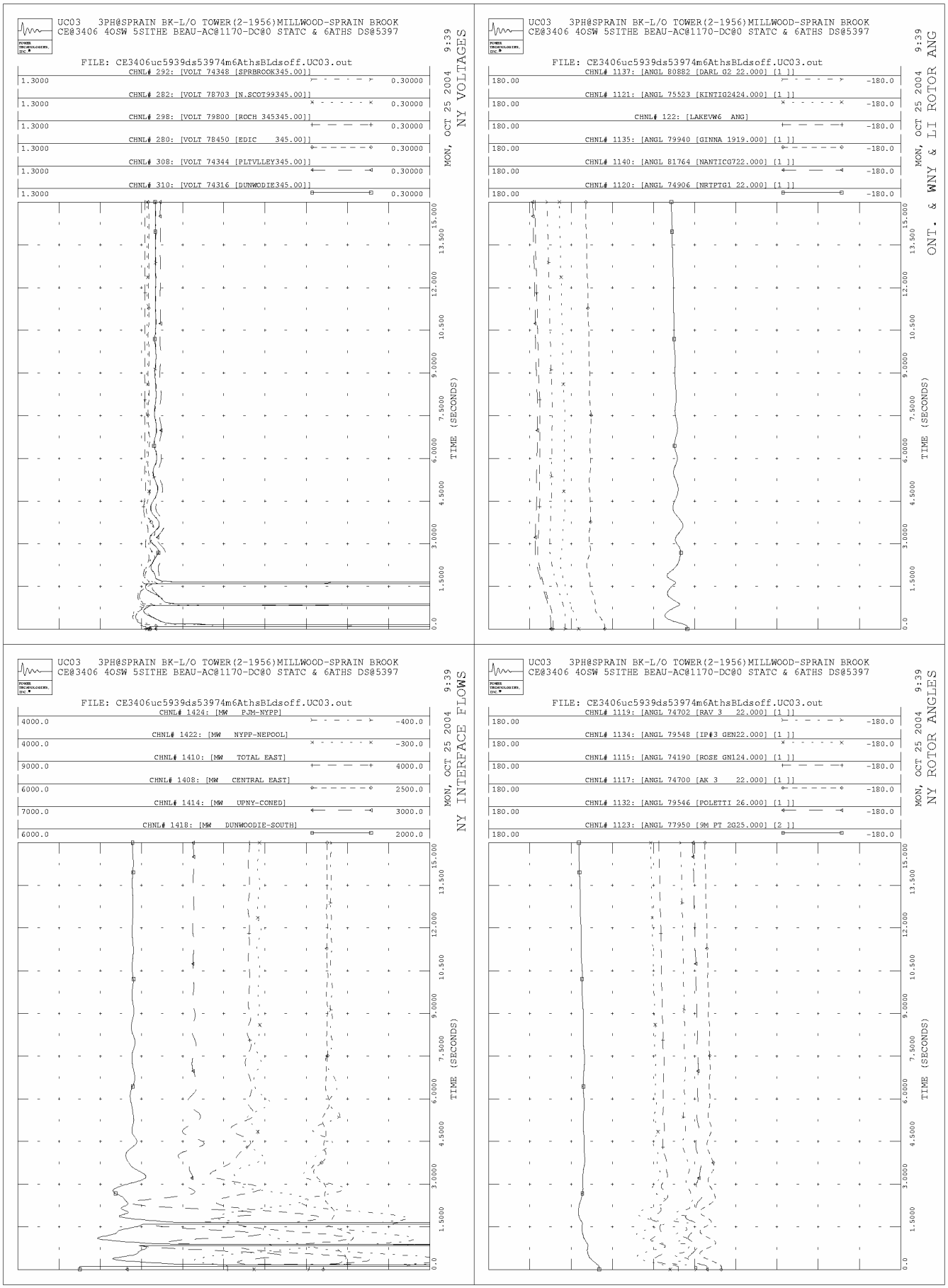
CASE 1: Peak Transfer Case (UPNY-Cond@5939MW and SpBk-Dun. South@5397MW)

(Without the 3% Series Reactor)


MOPAR5STAT2A.SAV B/O SUMMER MEN/VEM BASE CASE 200MVA STATCON
CE@3406 40SW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
QUEBEC
LOAD = 0 0
OTTAWA HVDC
EEL RIVER HVDC
MADAWASKA HVDC
CHATEAUGUAY HVDC
BERAHARNOIS AC
CEDARS 115 AC
HIGHGATE HVDC
SANDY POND HVDC
NEW BRUNSWICK
LOAD = 0 0
KEWAICK-DARINGTN 345
140 -78
0 0
100 -43
WHITEK21-KENORA 220
WHITEK22-KENORA 220
INTPHAS7-FT FRANK 115
ON-MAN
-49.6 62.4
FABC
868.6 94.8
BLIP
587.8 -304.5
ON GENERATION
MW MVAR
BRUCE 3440 218
DARLINGTN 3720 693
LAMBTON 1500 35
PICKERING 2160 160
NANTICOKE 3815 708
LAKEVIEW 1331 -115
SAUNDERS 848 397
L34P PS-MOSES E 230
L33P PS-MOSES E 230
NYCA VOLTAGES
ROCKTV345 337
HURLEY345 337
ROSETN345 339
W 49 345 337
E14 W53345 338
FARRG 345 338
RAINEY345 339
MILLWD345 337
PL.VAL345 333
SPR.BR345 338
E.G.C.345 338
SHORE 345 337
COOPC 345 330
SOMER 345 355
GARD 230 203
HILL 230 210
LEEDS 345 340
MEYER 230 192
ROBIN 230 208
HUNT 230 212
DUNK 230 219
PACK 230 218
CLAY 345 351
VOLN 345 362
PORTR 230 212
ALPS 345 345
MAHWA 345 344
RAMPO 345 344
GILB 345 345
MOSES 230 236
NIAG 345 347
MASS 230 235
PANNL 345 342
NYCA LOADS
MW MVAR
CH 840 408
CE 11307 5927
LIPA 4021 1447
NYSEG 2307 878
NMPC 5638 2074
O&R 1169 419
NYPA 1379 582
RG&E 1362 423
TOTAL 28023 12158
291 43
291 25
-334 -172
1190 216
-21 -16
197 -111
1200 -567
8 230
ONTARIO
LOAD = 0 0
OH VOLTAGES
RICHVIEW 242.3
BUCHANAN 242.1
MIDDLEPORT 524.7
CHERRYWOOD 525.0
QFW
482.2 4.0
ON-NY
907.5 136.7
ONTARIO-MICHIGAN
0.0 0.0
BECK A-NIAGARA 345
BECK B-NIAGARA 345
PA27AEG-NIAGAR2W 230
BP37AEG-PACKARD 230
151 28
151 29
-19 8
42 3
SCOTT230-19BUNCE 230
L4D-19SC 67 345
L51D-19SC 67 345
J5D PS-19WARTMAN 230
MOSES-SOUTH
2122.3 244.5
1732.6 189.1
MASSENA 765 VOLTAGE
769
MARCY 765 VOLTAGE
736
ROCHESTER VOLTAGE
341
EDIC VOLTAGE
338
N.SCOTLND VOLTAGE
340
VOLNEY EAST
3929.2 370.5
6360.4 1000.1
DYSINGER-EAST
2212.0 50.0
4387.8 788.0
WEST-CENTRAL
1247.9 -79.1
3423.7 658.8
TOTAL EAST
7047.7 -291.1
CENTRAL EAST
3425.4 -297.9
NEW ENGLAND
LOAD = 0 0
PLATS#3-GRAND 15LE 115
NY-NE
1532.5 -423.7
LUDLO 345 353.3
MILBRY345 355.6
MANCH 345 356.9
SOUTH 345 352.0
WHITEHAL-BLISSVILL 115
HOOSICK1-BNNINGTTN 115
ROTTERDAM-BEAR SWP 230
ALPS-MANY393 345
PLT VLLEY-LONG MTN 345
NE GENERATION
MW MVAR
CHSTR SVC N/A 0
SEABROOK 1150 108
ME YANKEE 0 0
BEAR SWMP 440 331
PILGRIM 465 55
MILLSTN 1 0 0
MILLSTN 2 0 0
MILLSTN 3 1137 96
NTHFD 1-4 750 240
CANAL 1&2 617 227
SALEM 3&4 493 33
WYMAN 1-4 832 188
BRAYT 1-4 701 90
MYSTC 4-7 959 159
N.BOST1&2 721 124
BRIDGP1-3 626 122
192 12
61 -12
37 -18
92-140
566-153
689-141
WESTERN NYCA GENERATION
MW MVAR
KINTIGH 698 270
HUNTLY 67 185 100
HUNTLY 68 185 100
DUNKIRK 4 185 120
DUNKIRK 3 174 120
DUNK 115 170 100
GINNA 446 136
NIAGARA 2855 897
ERIE 90.-5 RIPLEY 230
WARREN-FALCONER 115
HOMER CTY-STOLLE 345
HOMER CTY-WATRCURE 345
E.TWANDA-HILLSIDE 230
E.SAYRE-NARVERLY 115
OAKDALE VOLTAGE
319
WATERCURE VOLTAGE
305
LAUREL L-GOUDEY 115
BRANCHBG-RAMAPO 500
WALDWICK-SMAHAWK1 345
WALDWICK-SMAHAWK2 345
-514 173
-67 60
-125 19
226 98
-273 -8
-119 5
-89 14
1105 277
-147 -73
-214 -72
UPNY-SENY
5759.8 307.4
6604.4 544.7
UPNY-CONED
5937.6 -120.2
7143.2 41.7
MILLWOOD SOUTH
8613.8 -233.3
DUNWOODIE 345 VOLTAGE
338
DUNWOODIE-SOUTH
5397.3 -993.1
6602.8 -831.1
-99 -57
NATPT PH-NR HAR 138
EASTERN NYCA GENERATION
MW MVAR
CHAT SVC1 N/A 0
CHAT SVC2 N/A 0
FRASER N/A 0
LEED5 N/A 0
GILBDA 1 250 90
GILBDA 2 0 150
GILBDA 3 250 90
GILBDA 4 0 0
IP 2 926 468
IP3 980 400
FITZ 875 400
9 MI 1 0 0
9 MI 2 1205 626
OSWEGO 5 850 340
OSWEGO 6 824 330
ROSETON 1 423 262
ROSETON 2 350 262
BOWLINE 1 571 287
BOWLINE 2 571 286
5ITHE 886 527
JMC PH1I 252 111
SARANAC 239 29
ALB-5TM 291 150
ATHENS 1075 436
ECAR
ECAR-MECS
-902.3 83.5
ECAR-MAAC
2043.9 -498.4
ECAR-VACAR
146.8 -48.4
VACAR
VACAR-MAAC
-68.2 -262.2
MAAC
LOAD = 47439 10912
KEYSTONE 519.9
JUNIATA 521.6
ALBURTIS 513.7
HOSENSACK 514.3
LIMERICK 523.9
BRANCHBRG 501.5
PJM-NY
892.7 946.3
PJM-WEST
5164.1 -146.8
PJM-CENTRAL
3351.8 -371.9
PJM-EAST
6240.9 -227.6
HUDSON1-FARRGUT1 345
HUDSON2-FARRGUT2 345
LINDEN-GOETHALS 230
402 150
402 175
302-115
REACBUS-DVNPT NK 345
DUNWOODIE-SHORE A0 345
JAMAICA-LK SUCCESS 138
JAMAICA-VALSTRM 138
501 -158
541 153
-160 18
-82 19
LIPA IMPORT
899.8 -16.1



POWER TECHNOLOGIES, INC.	MOPAR5STAT2A.SAV B/O SUMMER MEN/VEM BASE CASE 200MVA STATCON 4OSW 5SITH BEAU-AC@1170-DC@0 6ATHS UC@5939 DS@5397 (PK CASE) 1) SOUTH-EAST NYISO THU, NOV 04 2004 10:07	KV: ≤138 . ≤230 . ≤345	BUS - VOLTAGE(PU) BRANCH - MW/MVAR EQUIPMENT - MW/MVAR


UC03 3PH@SPRAIN BK-L/O TOWER(2-1956)MILLWOOD-SPRAIN BROOK
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
FILE: CE3406uc5939ds53974m6AthsBLdsoff.UC03.out
CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
CHNL# 282: [VOLT 78703 [N.SCOT99345.00]]
CHNL# 298: [VOLT 79800 [ROCH 345345.00]]
CHNL# 280: [VOLT 78450 [EDIC 345.00]]
CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
1.3000
0.30000
MON, OCT 25 2004 9:39
NY VOLTAGES
TIME (SECONDS)
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000
UC03 3PH@SPRAIN BK-L/O TOWER(2-1956)MILLWOOD-SPRAIN BROOK
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
FILE: CE3406uc5939ds53974m6AthsBLdsoff.UC03.out
CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
CHNL# 122: [LAKEVW6 ANG]
CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00
-180.0
MON, OCT 25 2004 9:39
ONT. & WNY & LI ROTOR ANG
TIME (SECONDS)
0.0
1.5000
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6.0000
7.5000
9.0000
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12.000
13.500
15.000
UC03 3PH@SPRAIN BK-L/O TOWER(2-1956)MILLWOOD-SPRAIN BROOK
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
FILE: CE3406uc5939ds53974m6AthsBLdsoff.UC03.out
CHNL# 1424: [MW PJM-NYPP]
CHNL# 1422: [MW NYPP-NEPOOL]
CHNL# 1410: [MW TOTAL EAST]
CHNL# 1408: [MW CENTRAL EAST]
CHNL# 1414: [MW UPNY-CONED]
CHNL# 1418: [MW DUNWOODIE-SOUTH]
4000.0
-400.0
-300.0
9000.0
4000.0
6000.0
2500.0
7000.0
3000.0
6000.0
2000.0
MON, OCT 25 2004 9:39
NY INTERFACE FLOWS
TIME (SECONDS)
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000
UC03 3PH@SPRAIN BK-L/O TOWER(2-1956)MILLWOOD-SPRAIN BROOK
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
FILE: CE3406uc5939ds53974m6AthsBLdsoff.UC03.out
CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00
-180.0
MON, OCT 25 2004 9:39
NY ROTOR ANGLES
TIME (SECONDS)
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000

UC05 3PH/STK @ BUCHANAN SOUTH / W97*MILLWOOD STK BKR 6
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

FILE: CE3406uc5939ds53974m6AthsBLdsoff.UC05.out

MON, OCT 25 2004 9:39

NY VOLTAGES

CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
1.3000 0.30000

CHNL# 282: [VOLT 78703 [N.SCOT99345.00]]
1.3000 0.30000

CHNL# 298: [VOLT 79800 [ROCH 345345.00]]
1.3000 0.30000

CHNL# 280: [VOLT 78450 [EDIC 345.00]]
1.3000 0.30000

CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
1.3000 0.30000

CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
1.3000 0.30000

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

UC05 3PH/STK @ BUCHANAN SOUTH / W97*MILLWOOD STK BKR 6
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

FILE: CE3406uc5939ds53974m6AthsBLdsoff.UC05.out

MON, OCT 25 2004 9:39

ONT. & WNY & LI ROTOR ANG

CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
180.00 -180.0

CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
180.00 -180.0

CHNL# 122: [LAKEVW6 ANG]
180.00 -180.0

CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
180.00 -180.0

CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
180.00 -180.0

CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

UC05 3PH/STK @ BUCHANAN SOUTH / W97*MILLWOOD STK BKR 6
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

FILE: CE3406uc5939ds53974m6AthsBLdsoff.UC05.out

MON, OCT 25 2004 9:39

NY INTERFACE FLOWS

CHNL# 1424: [MW PJM-NYPP]
4000.0 -400.0

CHNL# 1422: [MW NYPP-NEPOOL]
4000.0 -300.0

CHNL# 1410: [MW TOTAL EAST]
9000.0 4000.0

CHNL# 1408: [MW CENTRAL EAST]
6000.0 2500.0

CHNL# 1414: [MW UPNY-CONED]
7000.0 3000.0

CHNL# 1418: [MW DUNWOODIE-SOUTH]
6000.0 2000.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

UC05 3PH/STK @ BUCHANAN SOUTH / W97*MILLWOOD STK BKR 6
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

FILE: CE3406uc5939ds53974m6AthsBLdsoff.UC05.out

MON, OCT 25 2004 9:39

NY ROTOR ANGLES

CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
180.00 -180.0

CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
180.00 -180.0

CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
180.00 -180.0

CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
180.00 -180.0

CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
180.00 -180.0

CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

DS01 SLG/STK@SPRAINBROOK-W.49TH/STK RNS5/CLEAR W99/W64
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

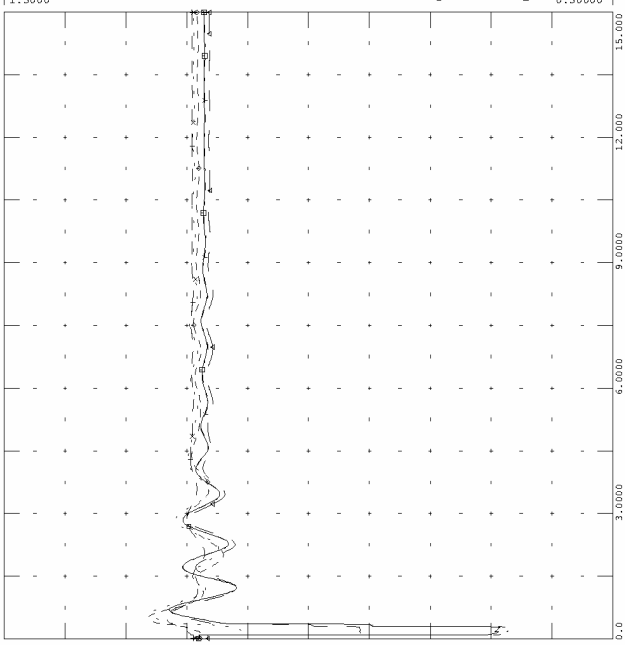
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS01.out

MON, OCT 25 2004 9:39

NY VOLTAGES

CHNL# 292: [VOLT 74348 [SPRBROOK345.00]] 1.3000 0.30000
CHNL# 282: [VOLT 78703 [N.SCOT99345.00]] 1.3000 0.30000
CHNL# 298: [VOLT 79800 [ROCH 345345.00]] 1.3000 0.30000
CHNL# 280: [VOLT 78450 [EDIC 345.00]] 1.3000 0.30000
CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]] 1.3000 0.30000
CHNL# 310: [VOLT 74316 [DUNWODIE345.00]] 1.3000 0.30000

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)



DS01 SLG/STK@SPRAINBROOK-W.49TH/STK RNS5/CLEAR W99/W64
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

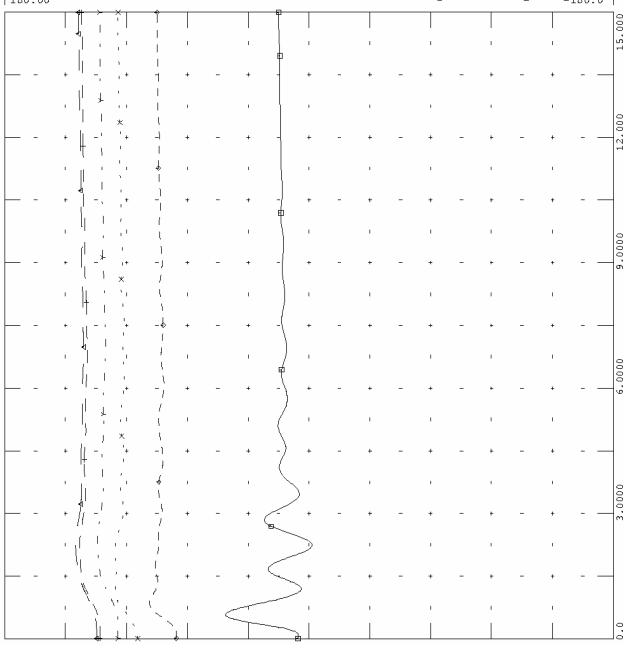
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS01.out

MON, OCT 25 2004 9:39

ONT. & WNY & LI ROTOR ANG

CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]] 180.00 -180.0
CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]] 180.00 -180.0
CHNL# 122: [LAKEVW6 ANG] 180.00 -180.0
CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]] 180.00 -180.0
CHNL# 1140: [ANGL B1764 [NANTICG722.000] [1]] 180.00 -180.0
CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]] 180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)



DS01 SLG/STK@SPRAINBROOK-W.49TH/STK RNS5/CLEAR W99/W64
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

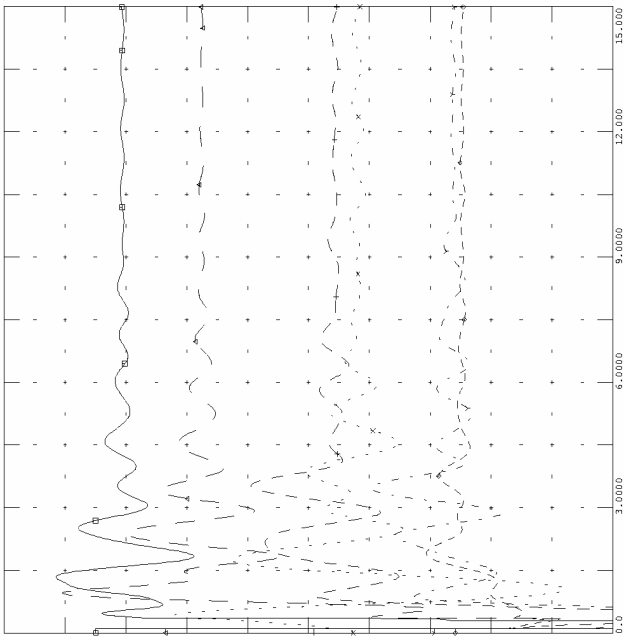
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS01.out

MON, OCT 25 2004 9:39

NY INTERFACE FLOWS

CHNL# 1424: [MW PJM-NYPP] 4000.0 -400.0
CHNL# 1422: [MW NYPP-NEPOOL] 4000.0 -300.0
CHNL# 1410: [MW TOTAL EAST] 9000.0 4000.0
CHNL# 1408: [MW CENTRAL EAST] 6000.0 2500.0
CHNL# 1414: [MW UPNY-CONED] 7000.0 3000.0
CHNL# 1418: [MW DUNWOODIE-SOUTH] 6000.0 2000.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)



DS01 SLG/STK@SPRAINBROOK-W.49TH/STK RNS5/CLEAR W99/W64
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

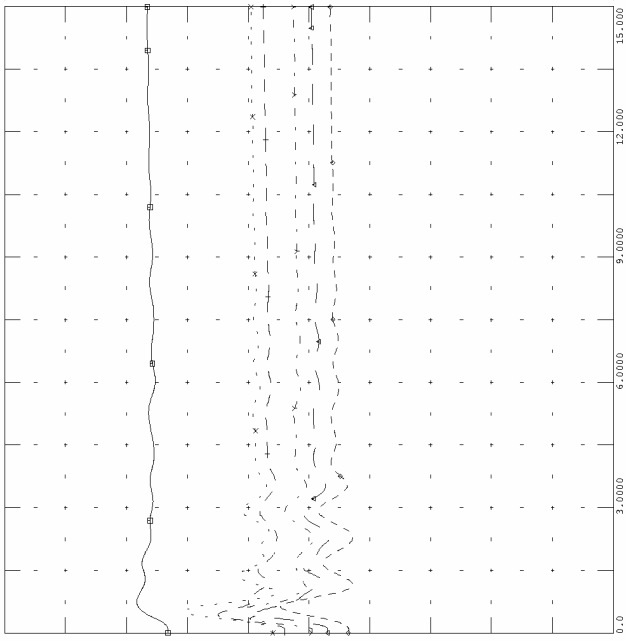
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS01.out

MON, OCT 25 2004 9:39

NY ROTOR ANGLES

CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]] 180.00 -180.0
CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]] 180.00 -180.0
CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]] 180.00 -180.0
CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]] 180.00 -180.0
CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]] 180.00 -180.0
CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]] 180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)



DS02 SLG/STK@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS02.out

MON, OCT 25 2004 9:39

NY VOLTAGES

CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
1.3000 0.30000

CHNL# 282: [VOLT 78703 [N.SCOT99345.00]]
1.3000 0.30000

CHNL# 298: [VOLT 79800 [ROCH 345345.00]]
1.3000 0.30000

CHNL# 280: [VOLT 78450 [EDIC 345.00]]
1.3000 0.30000

CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
1.3000 0.30000

CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
1.3000 0.30000

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

DS02 SLG/STK@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS02.out

MON, OCT 25 2004 9:39

ONT. & WNY & LI ROTOR ANG

CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
180.00 -180.0

CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
180.00 -180.0

CHNL# 122: [LAKEVW6 ANG]
180.00 -180.0

CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
180.00 -180.0

CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
180.00 -180.0

CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

DS02 SLG/STK@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS02.out

MON, OCT 25 2004 9:39

NY INTERFACE FLOWS

CHNL# 1424: [MW PJM-NYPP]
4000.0 -400.0

CHNL# 1422: [MW NYPP-NEPOOL]
4000.0 -300.0

CHNL# 1410: [MW TOTAL EAST]
9000.0 4000.0

CHNL# 1408: [MW CENTRAL EAST]
6000.0 2500.0

CHNL# 1414: [MW UPNY-CONED]
7000.0 3000.0

CHNL# 1418: [MW DUNWOODIE-SOUTH]
6000.0 2000.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

DS02 SLG/STK@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS02.out

MON, OCT 25 2004 9:39

NY ROTOR ANGLES

CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
180.00 -180.0

CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
180.00 -180.0

CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
180.00 -180.0

CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
180.00 -180.0

CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
180.00 -180.0

CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00 -180.0

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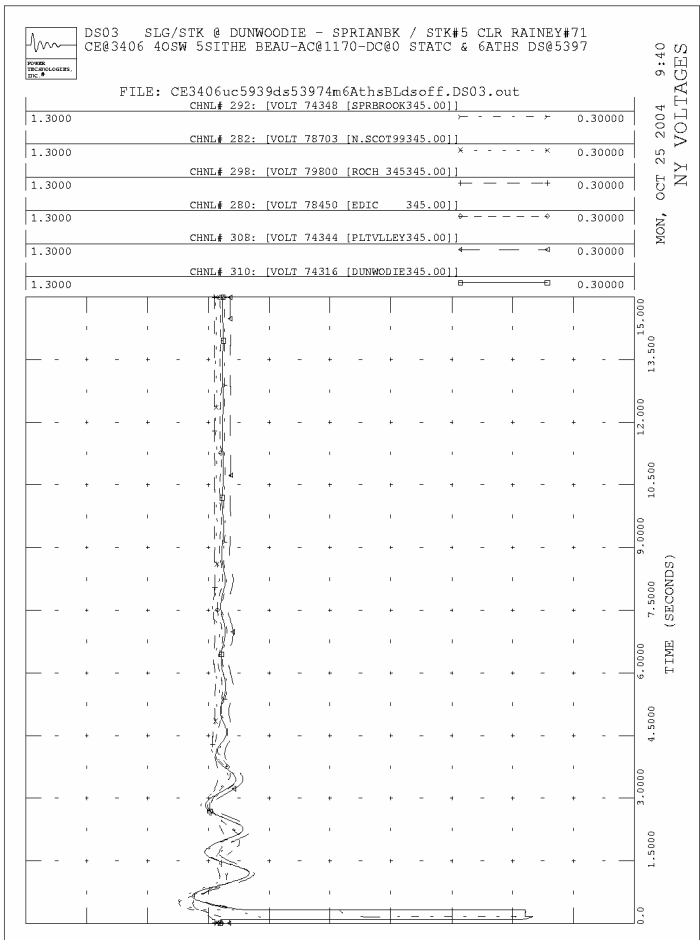
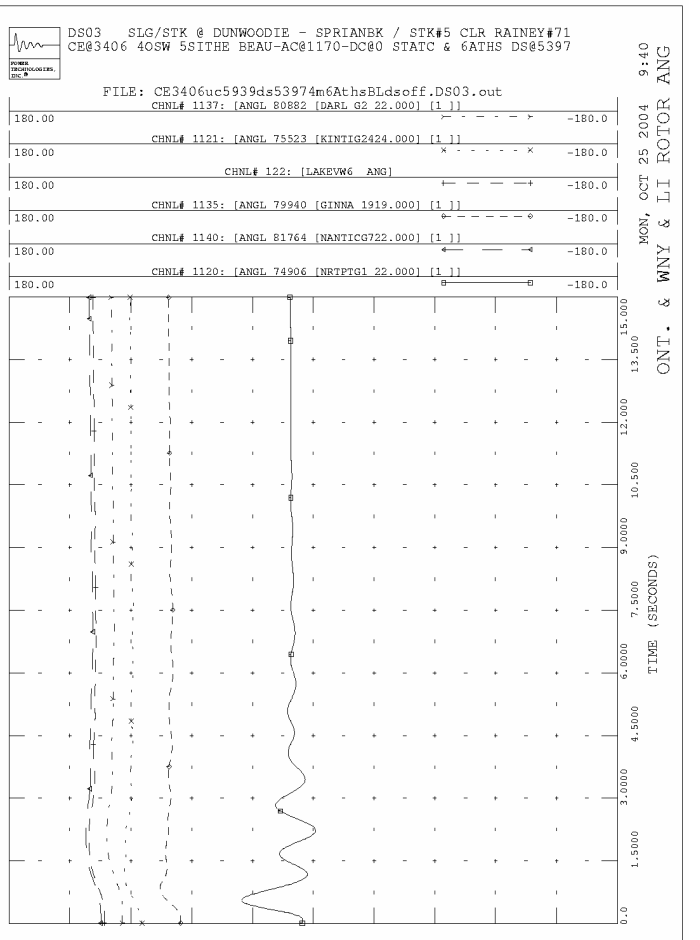
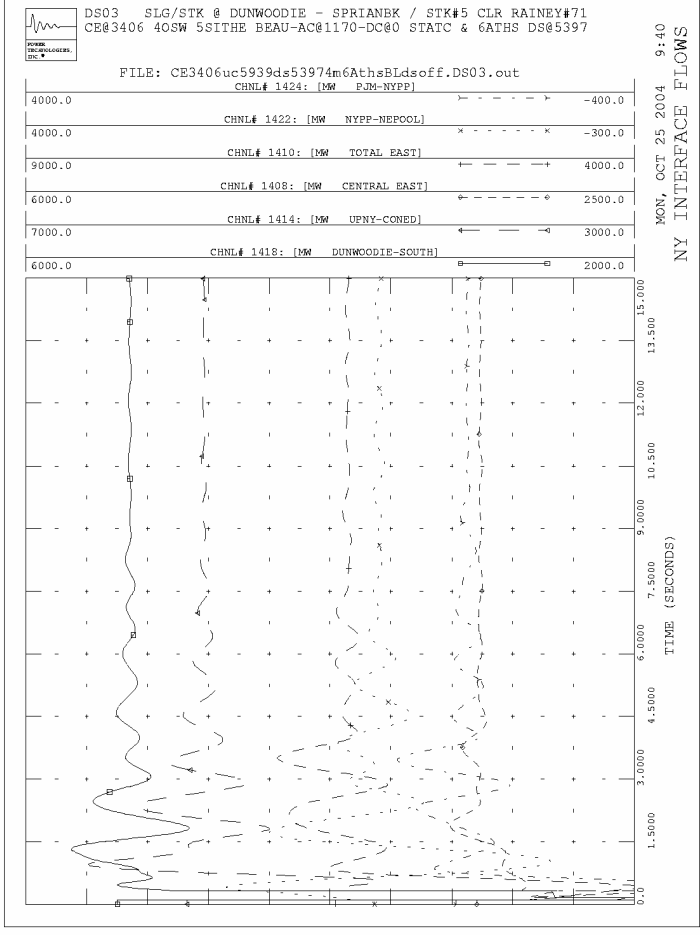
TIME (SECONDS)


DS03 SLG/STK @ DUNWOODIE - SPRIANBK / STK#5 CLR RAINEY#71
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS03.out
CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
CHNL# 282: [VOLT 78703 [N.SCOT99345.00]]
CHNL# 298: [VOLT 79800 [ROCH 345345.00]]
CHNL# 280: [VOLT 78450 [EDIC 345.00]]
CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
1.3000
0.30000
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000
TIME (SECONDS)
MON, OCT 25 2004 9:40
NY VOLTAGES


DS03 SLG/STK @ DUNWOODIE - SPRIANBK / STK#5 CLR RAINEY#71
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS03.out
CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
CHNL# 122: [LAKEVW6 ANG]
CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00
-180.0
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000
TIME (SECONDS)
MON, OCT 25 2004 9:40
ONT. & WNY & LI ROTOR ANG


DS03 SLG/STK @ DUNWOODIE - SPRIANBK / STK#5 CLR RAINEY#71
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS03.out
CHNL# 1424: [MW PJM-NYPP]
CHNL# 1422: [MW NYPP-NEPOOL]
CHNL# 1410: [MW TOTAL EAST]
CHNL# 1408: [MW CENTRAL EAST]
CHNL# 1414: [MW UPNY-CONED]
CHNL# 1418: [MW DUNWOODIE-SOUTH]
4000.0
-400.0
-300.0
9000.0
4000.0
6000.0
2500.0
7000.0
3000.0
2000.0
0.0
1.5000
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4.5000
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7.5000
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10.500
12.000
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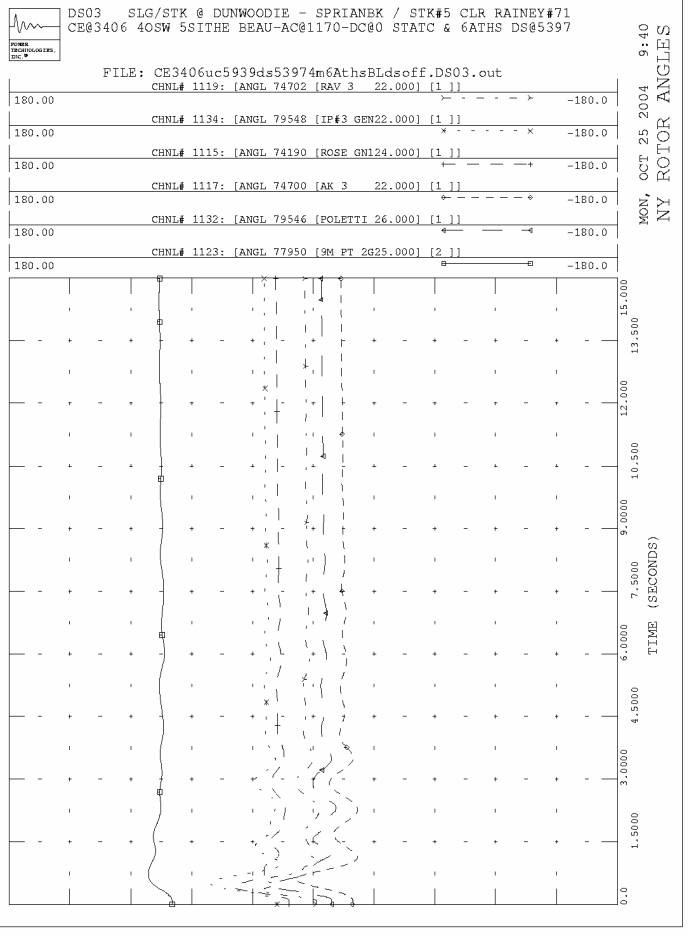
15.000
TIME (SECONDS)
MON, OCT 25 2004 9:40
NY INTERFACE FLOWS


DS03 SLG/STK @ DUNWOODIE - SPRIANBK / STK#5 CLR RAINEY#71
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS03.out
CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00
-180.0
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000
TIME (SECONDS)
MON, OCT 25 2004 9:40
NY ROTOR ANGLES

DS04 SLG/STK @ DUNWOODIE - RAINEY/ STK#3 CLR W89&W73
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS04.out

MON, OCT 25 2004 9:40

NY VOLTAGES

CHNL# 292: [VOLT 74348 [SPRBROOK345.00]] 1.3000 0.30000
CHNL# 282: [VOLT 78703 [N.SCOT99345.00]] 1.3000 0.30000
CHNL# 298: [VOLT 79800 [ROCH 345345.00]] 1.3000 0.30000
CHNL# 280: [VOLT 78450 [EDIC 345.00]] 1.3000 0.30000
CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]] 1.3000 0.30000
CHNL# 310: [VOLT 74316 [DUNWODIE345.00]] 1.3000 0.30000

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

DS04 SLG/STK @ DUNWOODIE - RAINEY/ STK#3 CLR W89&W73
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS04.out

MON, OCT 25 2004 9:40

ONT. & WNY & LI ROTOR ANG

CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]] 180.00 -180.0
CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]] 180.00 -180.0
CHNL# 122: [LAKEVW6 ANG] 180.00 -180.0
CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]] 180.00 -180.0
CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]] 180.00 -180.0
CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]] 180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

DS04 SLG/STK @ DUNWOODIE - RAINEY/ STK#3 CLR W89&W73
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS04.out

MON, OCT 25 2004 9:40

NY INTERFACE FLOWS

CHNL# 1424: [MW PJM-NYPP] 4000.0 -400.0
CHNL# 1422: [MW NYPP-NEPOOL] 4000.0 -300.0
CHNL# 1410: [MW TOTAL EAST] 9000.0 4000.0
CHNL# 1408: [MW CENTRAL EAST] 6000.0 2500.0
CHNL# 1414: [MW UPNY-CONED] 7000.0 3000.0
CHNL# 1418: [MW DUNWOODIE-SOUTH] 6000.0 2000.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

DS04 SLG/STK @ DUNWOODIE - RAINEY/ STK#3 CLR W89&W73
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

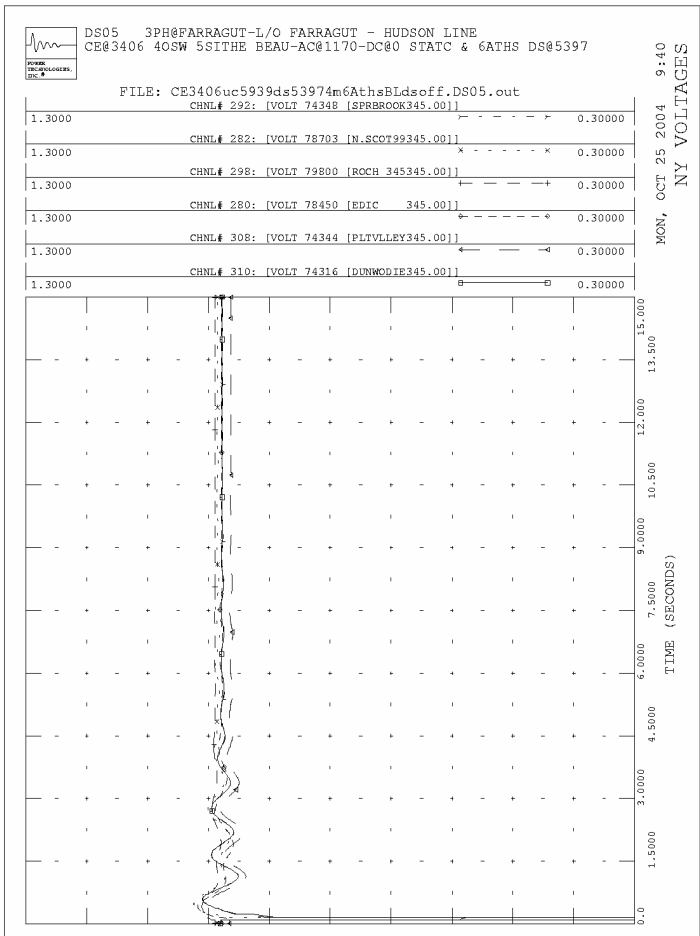
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS04.out

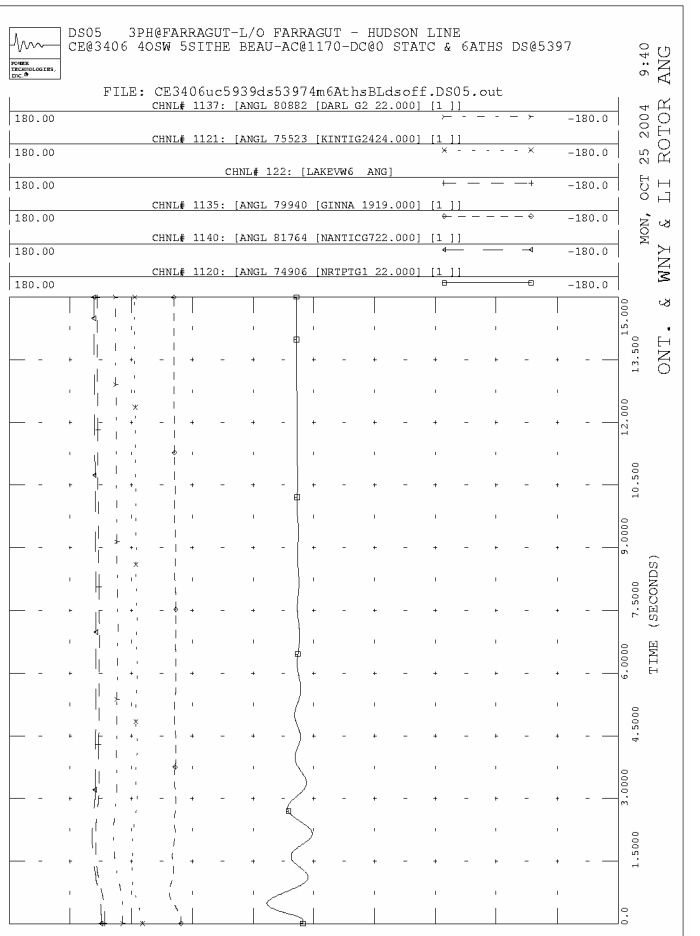
MON, OCT 25 2004 9:40

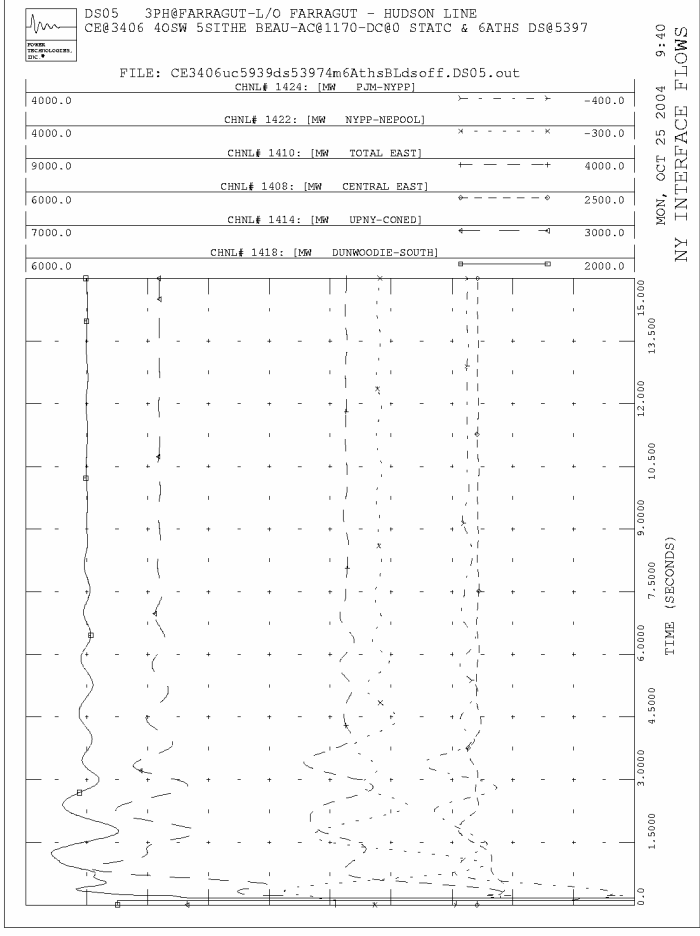
NY ROTOR ANGLES

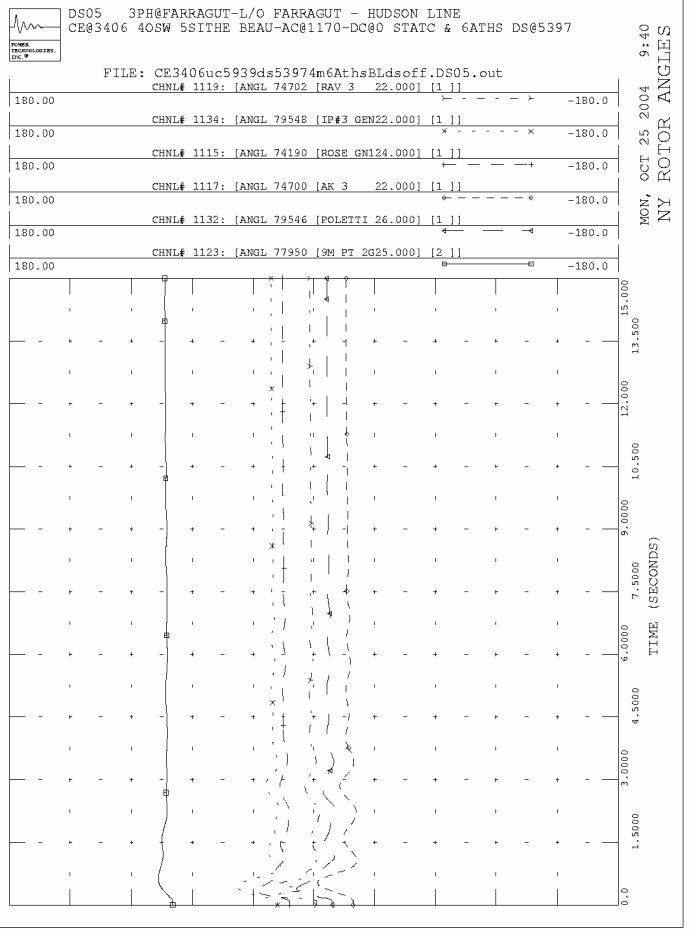
CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]] 180.00 -180.0
CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]] 180.00 -180.0
CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]] 180.00 -180.0
CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]] 180.00 -180.0
CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]] 180.00 -180.0
CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]] 180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

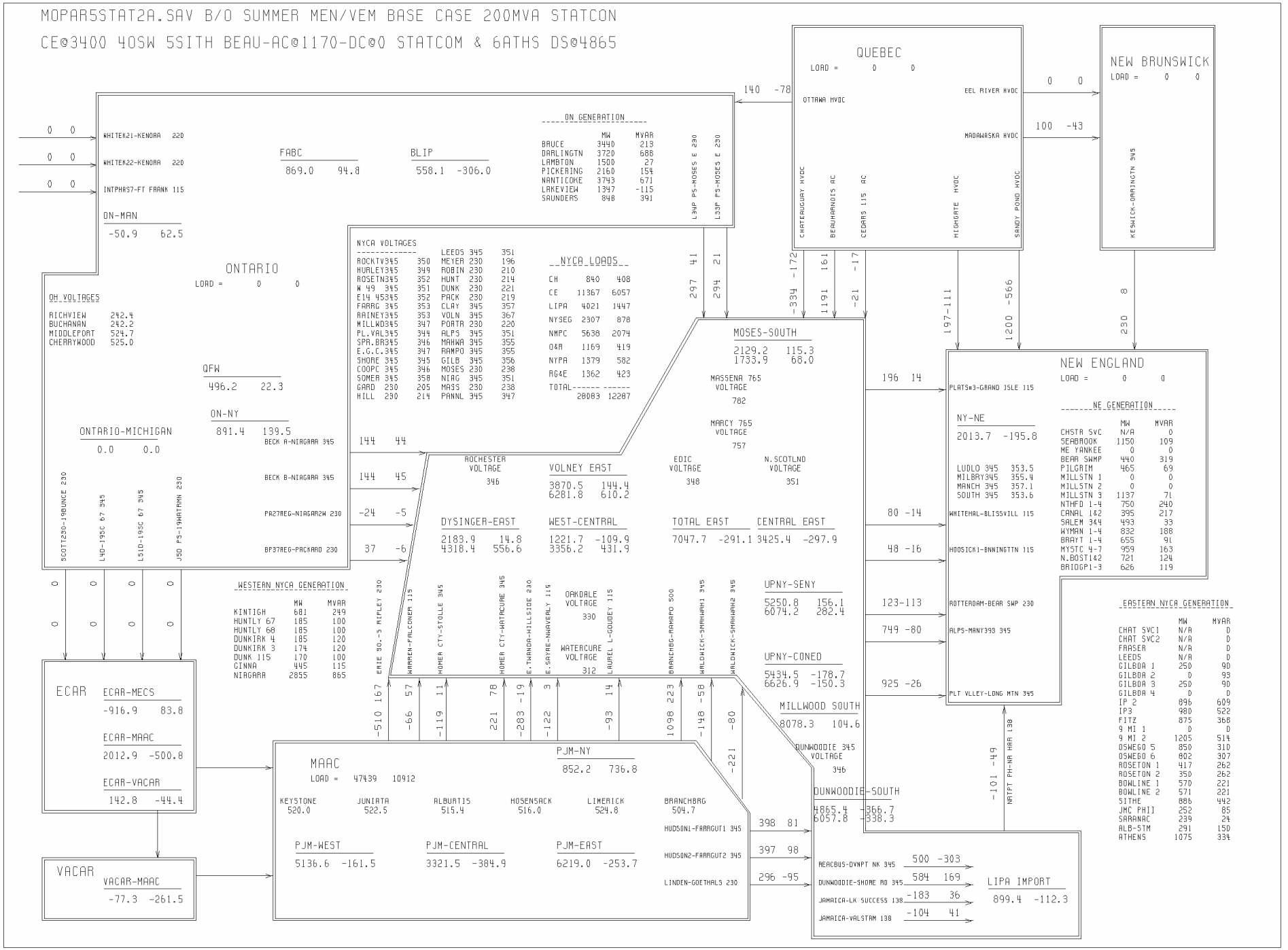

DS05 3PH@FARRAGUT-L/O FARRAGUT - HUDSON LINE
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS05.out
CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
CHNL# 282: [VOLT 78703 [N.SCOT99345.00]]
CHNL# 298: [VOLT 79800 [ROCH 345345.00]]
CHNL# 280: [VOLT 78450 [EDIC 345.00]]
CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
1.3000
0.30000
MON, OCT 25 2004 9:40
NY VOLTAGES
TIME (SECONDS)
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000

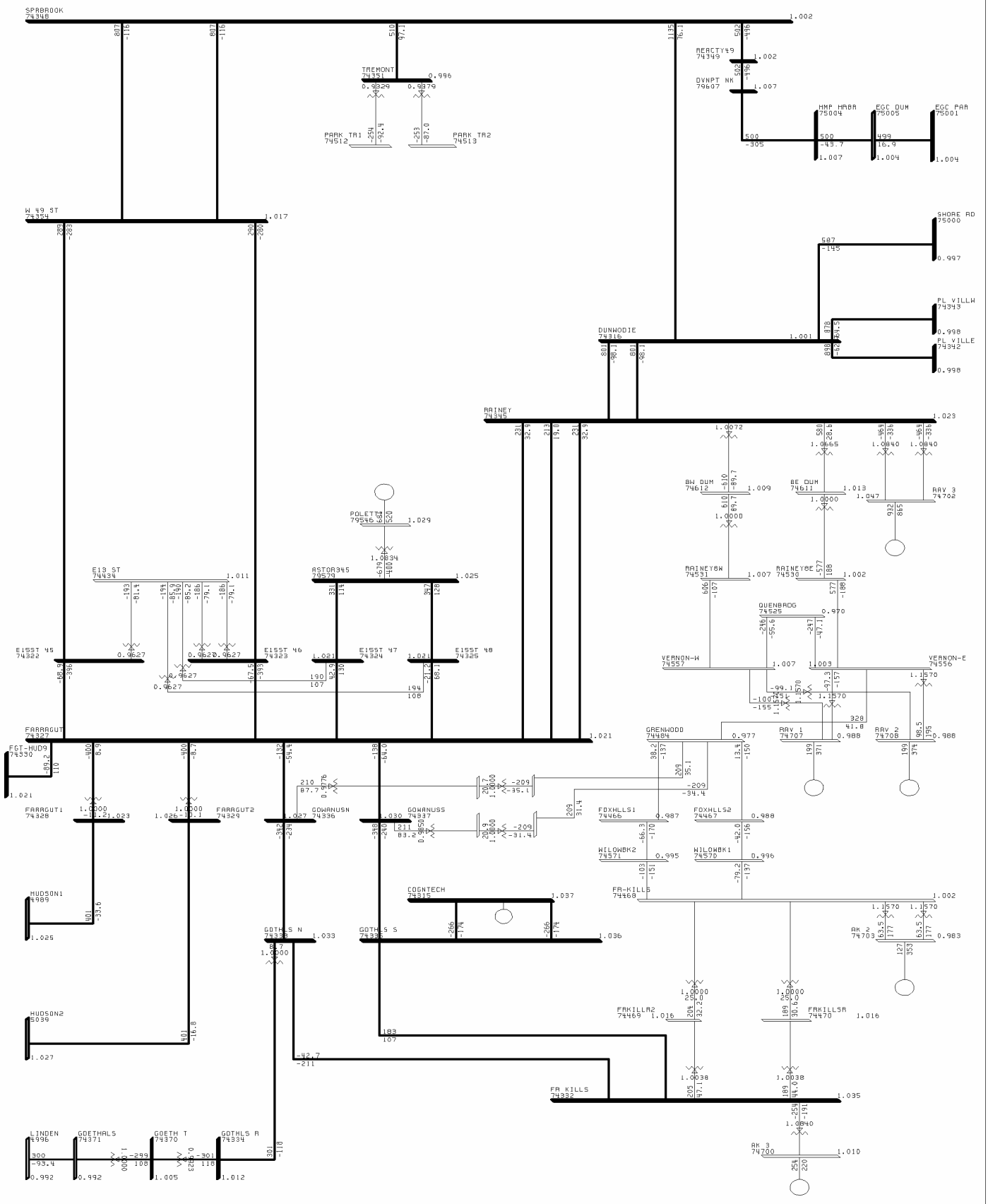

DS05 3PH@FARRAGUT-L/O FARRAGUT - HUDSON LINE
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS05.out
CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
CHNL# 122: [LAKEVW6 ANG]
CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00
-180.0
MON, OCT 25 2004 9:40
ONT. & WNY & LI ROTOR ANG
TIME (SECONDS)
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000


DS05 3PH@FARRAGUT-L/O FARRAGUT - HUDSON LINE
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS05.out
CHNL# 1424: [MW PJM-NYPP]
CHNL# 1422: [MW NYPP-NEPOOL]
CHNL# 1410: [MW TOTAL EAST]
CHNL# 1408: [MW CENTRAL EAST]
CHNL# 1414: [MW UPNY-CONED]
CHNL# 1418: [MW DUNWOODIE-SOUTH]
4000.0
-400.0
-300.0
9000.0
4000.0
6000.0
2500.0
7000.0
3000.0
2000.0
MON, OCT 25 2004 9:40
NY INTERFACE FLOWS
TIME (SECONDS)
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000


DS05 3PH@FARRAGUT-L/O FARRAGUT - HUDSON LINE
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397
FILE: CE3406uc5939ds53974m6AthsBLdsoff.DS05.out
CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00
-180.0
MON, OCT 25 2004 9:40
NY ROTOR ANGLES
TIME (SECONDS)
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000

CASE 3: 3% Series Reactor In Service (UPNY-ConEd@5426MW and SpBk-Dun. South@4863MW)


MOPAR5STAT2A.SAV B/O SUMMER MEN/VEM BASE CASE 200MVA STATCON
CE@3400 40SW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4865
QUEBEC
LOAD = 0 0
OTTAWA HVDC
EEL RIVER HVDC
MADAWASKA HVDC
CHATEAUGUAY HVDC
BEAUHARNOIS AC
CEDARS 115 AC
HIGHGATE HVDC
SANDY POND HVDC
NEW BRUNSWICK
LOAD = 0 0
KEWAITIN 345
140 -78
0 0
100 -43
WHITEH21-KENORA 220
WHITEH22-KENORA 220
INTPHAS7-FT FRANK 115
ON-MAN
-50.9 62.5
ONTARIO
LOAD = 0 0
OH VOLTAGES
RICHVIEW 242.4
BUCHANAN 242.2
MIDDLEPORT 524.7
CHERRYWOOD 525.0
FABC
869.0 94.8
BLIP
558.1 -306.0
ON GENERATION
BRUCE 3440 213
DARLINGTN 3720 688
LAMBTON 1500 27
PICKERING 2160 154
NANTICOKE 3743 671
LAKEVIEW 1347 -115
SAUNDERS 848 391
L34P PS-MOSES E 230
L33P PS-MOSES E 230
NYCA VOLTAGES
ROCKTV345 350
HURLEY345 349
ROSETN345 352
W 49 345 351
E14 45345 352
FARRG 345 353
RAINEY345 353
MILLWD345 347
PL.VAL345 344
SPR.BR345 346
E.G.C.345 347
SHORE 345 345
COOPC 345 346
SOMER 345 358
GARD 230 205
HILL 230 214
LEEDS 345 351
MEYER 230 196
ROBIN 230 210
HUNT 230 214
DUNK 230 221
PACK 230 219
CLAY 345 357
VOLN 345 367
PORTR 230 220
ALPS 345 351
MAHWA 345 355
RAMPO 345 355
GILB 345 356
MOSES 230 238
NIAG 345 351
MASS 230 238
PANNL 345 347
NYCA LOADS
CH 840 408
CE 11367 6057
LIPA 4021 1447
NYSEG 2307 878
NMPC 5638 2074
O&R 1169 419
NYPA 1379 582
RG&E 1362 423
TOTAL 28083 12287
297 41
294 21
-334 -172
1191 161
-21 -17
197 -111
1200 -566
8 230
MOSES-SOUTH
2129.2 115.3
1733.9 68.0
MASSENA 765 VOLTAGE
782
MARCY 765 VOLTAGE
757
EDIC VOLTAGE
348
N.SCOTLND VOLTAGE
351
ROCHESTER VOLTAGE
346
VOLNEY EAST
3870.5 144.4
6281.8 610.2
DYSINGER-EAST
2183.9 14.8
4318.4 556.6
WEST-CENTRAL
1221.7 -109.9
3356.2 431.9
TOTAL EAST
7047.7 -291.1
CENTRAL EAST
3425.4 -297.9
OAKDALE VOLTAGE
330
WATERCURE VOLTAGE
312
UPNY-SENY
5250.8 156.1
6074.2 282.4
UPNY-CONED
5434.5 -178.7
6626.9 -150.3
MILLWOOD SOUTH
8078.3 104.6
DUNWOODIE 345 VOLTAGE
346
DUNWOODIE-SOUTH
4865.4 -366.7
6057.8 -338.3
-101 -49
NATPT PH-NR HAR 138
NEW ENGLAND
LOAD = 0 0
NY-NE
2013.7 -195.8
LUDLO 345 353.5
MILBRY345 355.4
MANCH 345 357.1
SOUTH 345 353.6
NE GENERATION
CHSTR SVC N/A 0
SEABROOK 1150 109
ME YANKEE 0 0
BEAR SWMP 440 319
PILGRIM 465 69
MILLSTN 1 0 0
MILLSTN 2 0 0
MILLSTN 3 1137 71
NTHFD 1-4 750 240
CANAL 1&2 395 217
SALEM 3&4 493 33
WYMAN 1-4 832 188
BRAYT 1-4 655 91
MYSTC 4-7 959 163
N.BOST1&2 721 124
BRIDGP1-3 626 119
196 14
80 -14
48 -16
123 -113
749 -80
925 -26
PLATSB3-GRAND ISLE 115
WHITEHAL-BLISSVILL 115
HOOSICK1-BNNINGTTN 115
ROTTERDAM-BEAR SWP 230
ALPS-MANY393 345
PLT VLLEY-LONG MTN 345
EASTERN NYCA GENERATION
CHAT SVC1 N/A 0
CHAT SVC2 N/A 0
FRASER N/A 0
LEEDS N/A 0
GILBOA 1 250 90
GILBOA 2 0 93
GILBOA 3 250 90
GILBOA 4 0 0
IP 2 896 609
IP3 980 522
FITZ 875 368
9 MI 1 0 0
9 MI 2 1205 514
OSWEGO 5 850 310
OSWEGO 6 802 307
ROSETON 1 417 262
ROSETON 2 350 262
BOWLINE 1 570 221
BOWLINE 2 571 221
SITHE 886 442
JMC PHII 252 85
SARANAC 239 24
ALB-STM 291 150
ATHENS 1075 334
ONTARIO-MICHIGAN
0.0 0.0
QFW
496.2 22.3
ON-NY
891.4 139.5
SCOTT230-19BUNCE 230
L4D-195C 67 345
L51D-195C 67 345
J5D PS-19WATRWN 230
BECK A-NIAGARA 345
BECK B-NIAGARA 345
PA27AEG-NIAGAR2W 230
BP37AEG-PACKARD 230
144 44
144 45
-24 -5
37 -6
WESTERN NYCA GENERATION
KINTIGH 681 249
HUNTLY 67 185 100
HUNTLY 68 185 100
DUNKIRK 4 185 120
DUNKIRK 3 174 120
DUNK 115 170 100
GINNA 445 115
NIAGARA 2855 865
ERIE 90.-3 RIPLEY 230
WARREN-FALCONER 115
HOMER CTY-STOLLE 345
HOMER CTY-WATRCURE 345
E.TWANDA-HILLSIDE 230
E.SAYRE-NARVERLY 115
LAUREL L-GOUDEY 115
BRANCHBG-RAMAPO 500
WALDWICK-RAMAPAH1 345
WALDWICK-RAMAPAH2 345
-510 167
-66 57
-119 11
221 78
-283 -19
-122 3
-93 14
1098 223
-148 -58
-80
-221
ECAR
ECAR-MECS
-916.9 83.8
ECAR-MAAC
2012.9 -500.8
ECAR-VACAR
142.8 -44.4
VACAR
VACAR-MAAC
-77.3 -261.5
MAAC
LOAD = 47439 10912
KEYSTONE 520.0
JUNIATA 522.5
ALBURTIS 515.4
HOSENSACK 516.0
LIMERICK 524.8
BRANCHBRG 504.7
PJM-NY
852.2 736.8
PJM-WEST
5136.6 -161.5
PJM-CENTRAL
3321.5 -384.9
PJM-EAST
6219.0 -253.7
HUDSON1-FARRGUT1 345
HUDSON2-FARRGUT2 345
LINDEN-GOETHALS 230
398 81
397 98
296 -95
REACBUS-DYNPT NK 345
DUNWOODIE-SHORE AD 345
JAMAICA-LK SUCCESS 138
JAMAICA-VALSTRM 138
500 -303
584 169
-183 36
-104 41
LIPA IMPORT
899.4 -112.3



POWER TECHNOLOGIES, INC.	MOPAR5STAT2A.SAV B/O SUMMER MEN/VEM BASE CASE 200MVA STATCON CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848 1) SOUTH-EAST NYISO THU, FEB 03 2005 15:44	KV: ≤138 . ≤230 . ≤345	BUS - VOLTAGE(PU) BRANCH - MW/MVAR EQUIPMENT - MW/MVAR

UC03 3PH@SPRAIN BK-L/O TOWER(2-1956)MILLWOOD-SPRAIN BROOK
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.UC03.out

THU, FEB 03 2005 15:48

NY VOLTAGES

CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
1.3000 0.30000

CHNL# 318: [VOLT 75044 [HOLBRK 138.000]]
1.3000 0.30000

CHNL# 312: [VOLT 75001 [E.G.C 345.000]]
1.3000 0.30000

CHNL# 280: [VOLT 78450 [EDIC 345.00]]
1.3000 0.30000

CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
1.3000 0.30000

CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
1.3000 0.30000

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000

TIME (SECONDS)

UC03 3PH@SPRAIN BK-L/O TOWER(2-1956)MILLWOOD-SPRAIN BROOK
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.UC03.out

THU, FEB 03 2005 15:48

ONT. & WNY & LI ROTOR ANG

CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
180.00 -180.0

CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
180.00 -180.0

CHNL# 1460: [ANGL 74900 [BARET 20.00]]
180.00 -180.0

CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
180.00 -180.0

CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
180.00 -180.0

CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000

TIME (SECONDS)

UC03 3PH@SPRAIN BK-L/O TOWER(2-1956)MILLWOOD-SPRAIN BROOK
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.UC03.out

THU, FEB 03 2005 15:48

NY INTERFACE FLOWS

CHNL# 1424: [MW PJM-NYPP]
4000.0 -400.0

CHNL# 1422: [MW NYPP-NEPOOL]
4000.0 -300.0

CHNL# 1410: [MW TOTAL EAST]
9000.0 4000.0

CHNL# 1408: [MW CENTRAL EAST]
6000.0 2500.0

CHNL# 1414: [MW UPNY-CONED]
7000.0 3000.0

CHNL# 1418: [MW DUNWOODIE-SOUTH]
6000.0 2000.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000

TIME (SECONDS)

UC03 3PH@SPRAIN BK-L/O TOWER(2-1956)MILLWOOD-SPRAIN BROOK
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.UC03.out

THU, FEB 03 2005 15:48

NY ROTOR ANGLES

CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
180.00 -180.0

CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
180.00 -180.0

CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
180.00 -180.0

CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
180.00 -180.0

CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
180.00 -180.0

CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000

TIME (SECONDS)

UC05 3PH/STK @ BUCHANAN SOUTH / W97*MILLWOOD STK BKR 6
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.UC05.out

THU, FEB 03 2005 15:49

NY VOLTAGES

CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
1.3000 0.30000

CHNL# 318: [VOLT 75044 [HOLBRK 138.000]]
1.3000 0.30000

CHNL# 312: [VOLT 75001 [E.G.C 345.000]]
1.3000 0.30000

CHNL# 280: [VOLT 78450 [EDIC 345.00]]
1.3000 0.30000

CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
1.3000 0.30000

CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
1.3000 0.30000

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

UC05 3PH/STK @ BUCHANAN SOUTH / W97*MILLWOOD STK BKR 6
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.UC05.out

THU, FEB 03 2005 15:49

ONT. & WNY & LI ROTOR ANG

CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
180.00 -180.0

CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
180.00 -180.0

CHNL# 1460: [ANGL 74900 [BARET 20.00]]
180.00 -180.0

CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
180.00 -180.0

CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
180.00 -180.0

CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

UC05 3PH/STK @ BUCHANAN SOUTH / W97*MILLWOOD STK BKR 6
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.UC05.out

THU, FEB 03 2005 15:49

NY INTERFACE FLOWS

CHNL# 1424: [MW PJM-NYPP]
4000.0 -400.0

CHNL# 1422: [MW NYPP-NEPOOL]
4000.0 -300.0

CHNL# 1410: [MW TOTAL EAST]
9000.0 4000.0

CHNL# 1408: [MW CENTRAL EAST]
6000.0 2500.0

CHNL# 1414: [MW UPNY-CONED]
7000.0 3000.0

CHNL# 1418: [MW DUNWOODIE-SOUTH]
6000.0 2000.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)

UC05 3PH/STK @ BUCHANAN SOUTH / W97*MILLWOOD STK BKR 6
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.UC05.out

THU, FEB 03 2005 15:49

NY ROTOR ANGLES

CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
180.00 -180.0

CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
180.00 -180.0

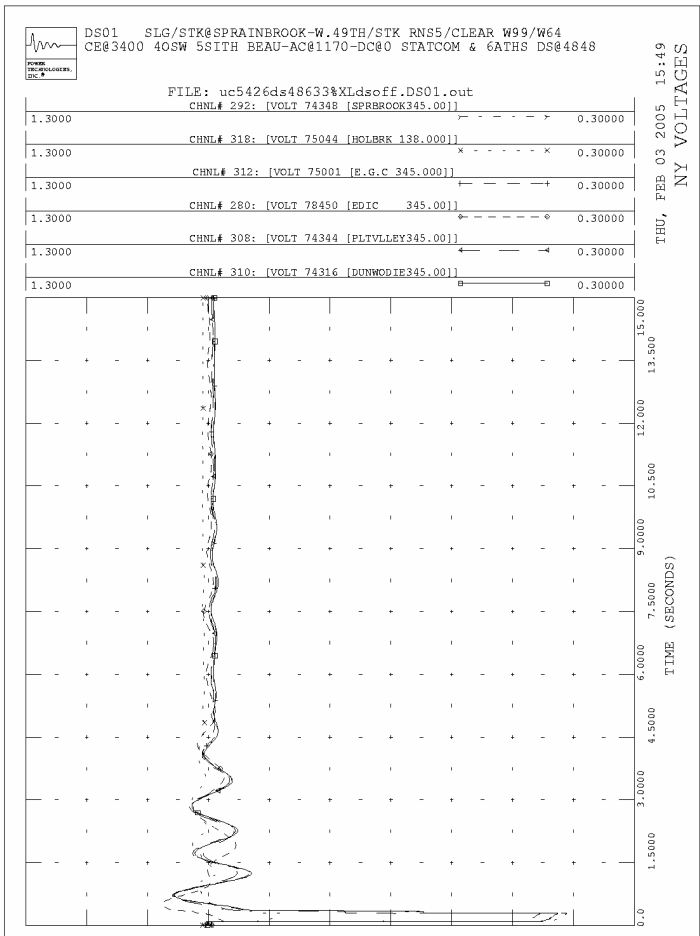
CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
180.00 -180.0

CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
180.00 -180.0

CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
180.00 -180.0

CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000
TIME (SECONDS)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CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS01.out
CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
CHNL# 318: [VOLT 75044 [HOLBRK 138.000]]
CHNL# 312: [VOLT 75001 [E.G.C 345.000]]
CHNL# 280: [VOLT 78450 [EDIC 345.00]]
CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
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0.0
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3.0000
4.5000
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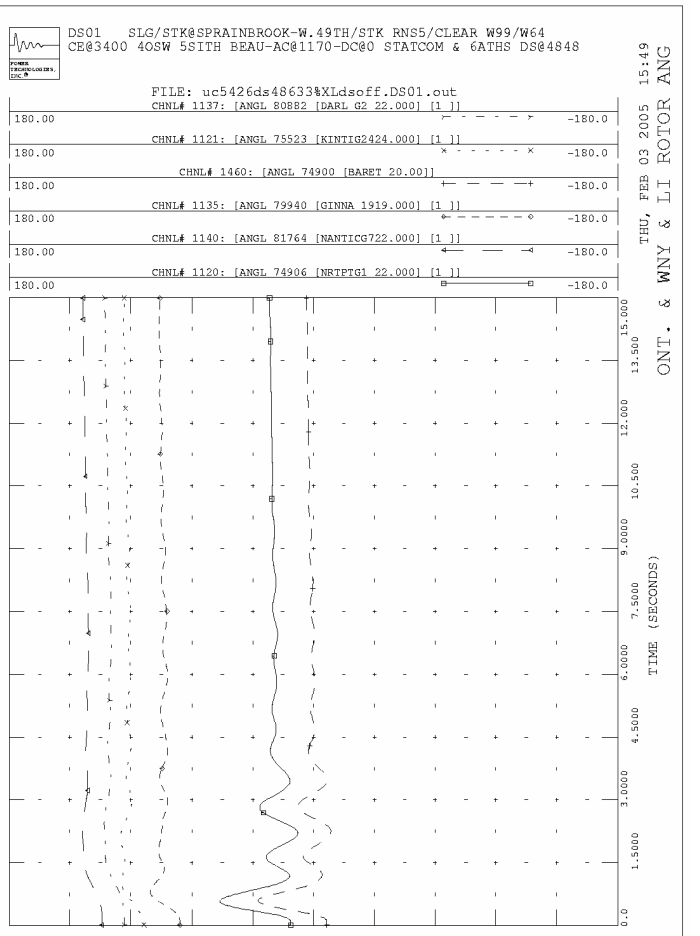
TIME (SECONDS)
THU, FEB 03 2005 15:49
NY VOLTAGES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CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS01.out
CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
CHNL# 1460: [ANGL 74900 [BARET 20.00]]
CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00
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4.5000
6.0000
7.5000
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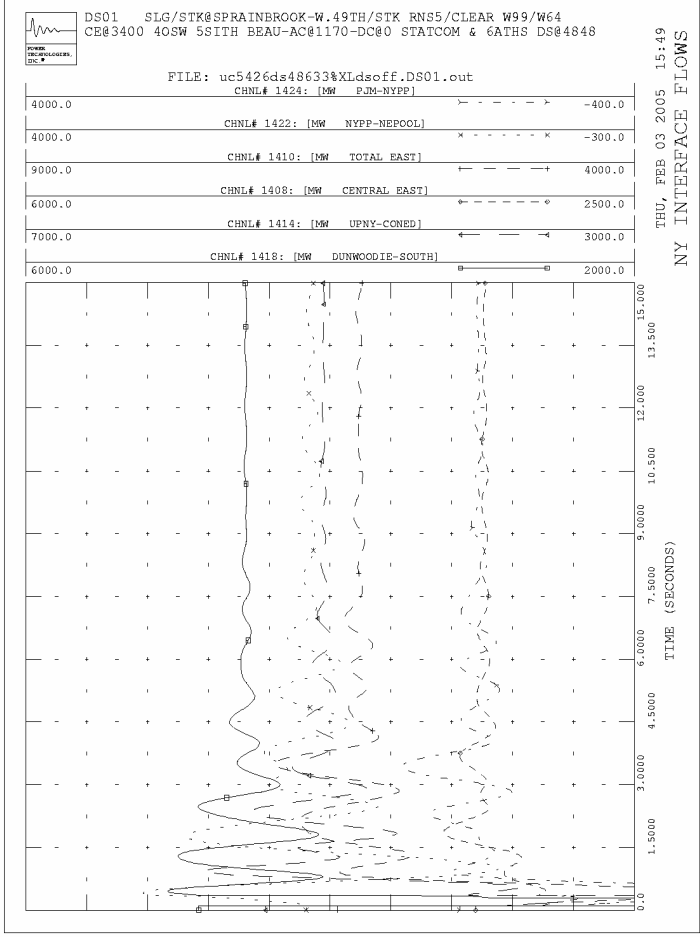
15.000
TIME (SECONDS)
THU, FEB 03 2005 15:49
ONT. & WNY & LI ROTOR ANG


DS01 SLG/STK@SPRAINBROOK-W.49TH/STK RNS5/CLEAR W99/W64
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS01.out
CHNL# 1424: [MW PJM-NYPP]
CHNL# 1422: [MW NYPP-NEPOOL]
CHNL# 1410: [MW TOTAL EAST]
CHNL# 1408: [MW CENTRAL EAST]
CHNL# 1414: [MW UPNY-CONED]
CHNL# 1418: [MW DUNWOODIE-SOUTH]
4000.0
-400.0
-300.0
9000.0
4000.0
6000.0
2500.0
7000.0
3000.0
2000.0
0.0
1.5000
3.0000
4.5000
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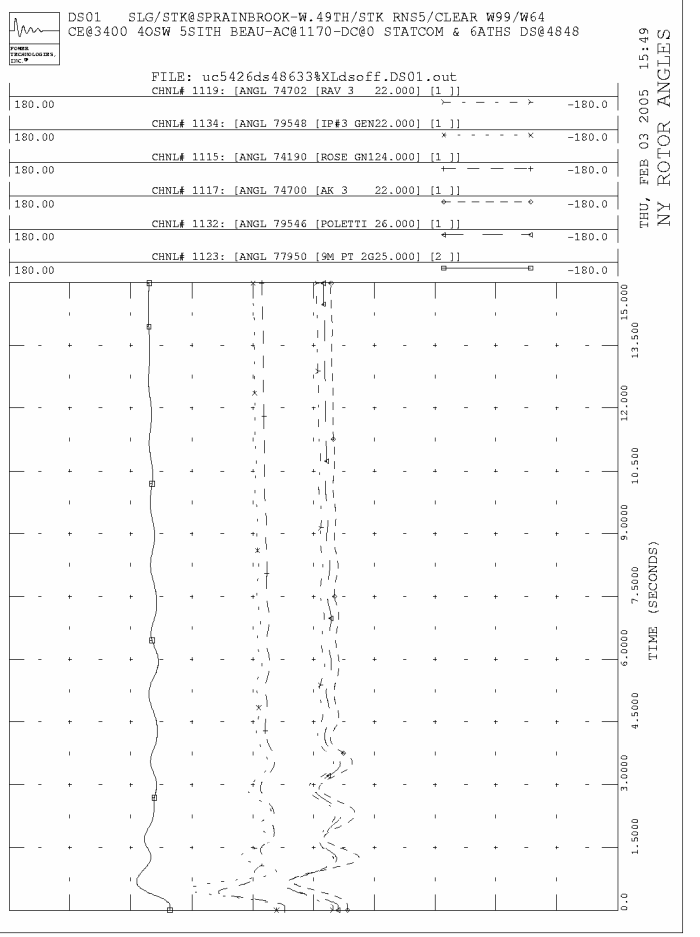
15.000
TIME (SECONDS)
THU, FEB 03 2005 15:49
NY INTERFACE FLOWS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CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS01.out
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CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00
-180.0
0.0
1.5000
3.0000
4.5000
6.0000
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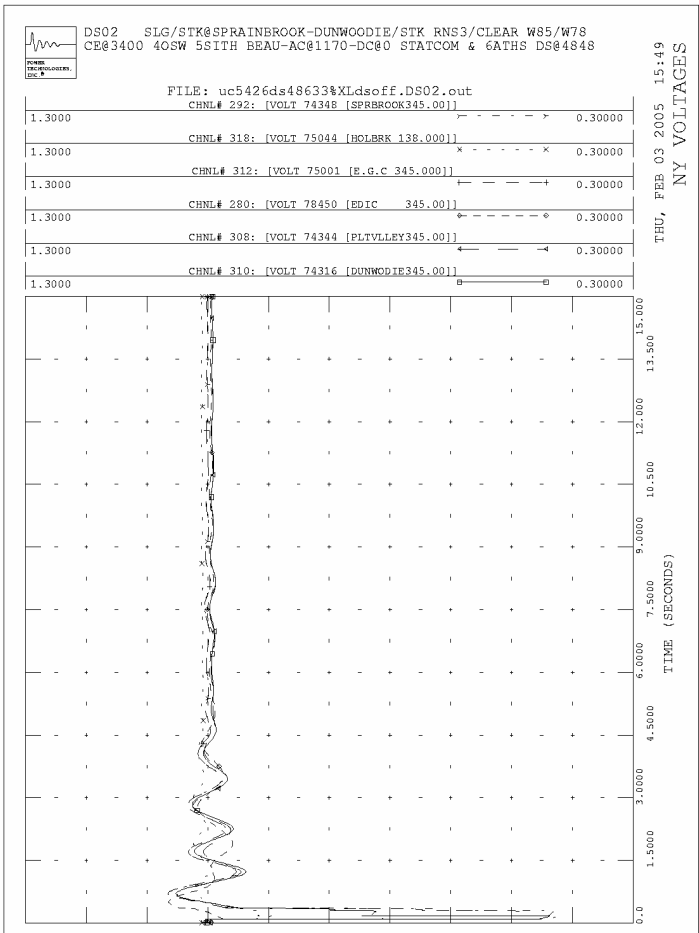
TIME (SECONDS)
THU, FEB 03 2005 15:49
NY ROTOR ANGLES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CE@3400 40SW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS02.out
CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
CHNL# 318: [VOLT 75044 [HOLBRK 138.000]]
CHNL# 312: [VOLT 75001 [E.G.C 345.000]]
CHNL# 280: [VOLT 78450 [EDIC 345.00]]
CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
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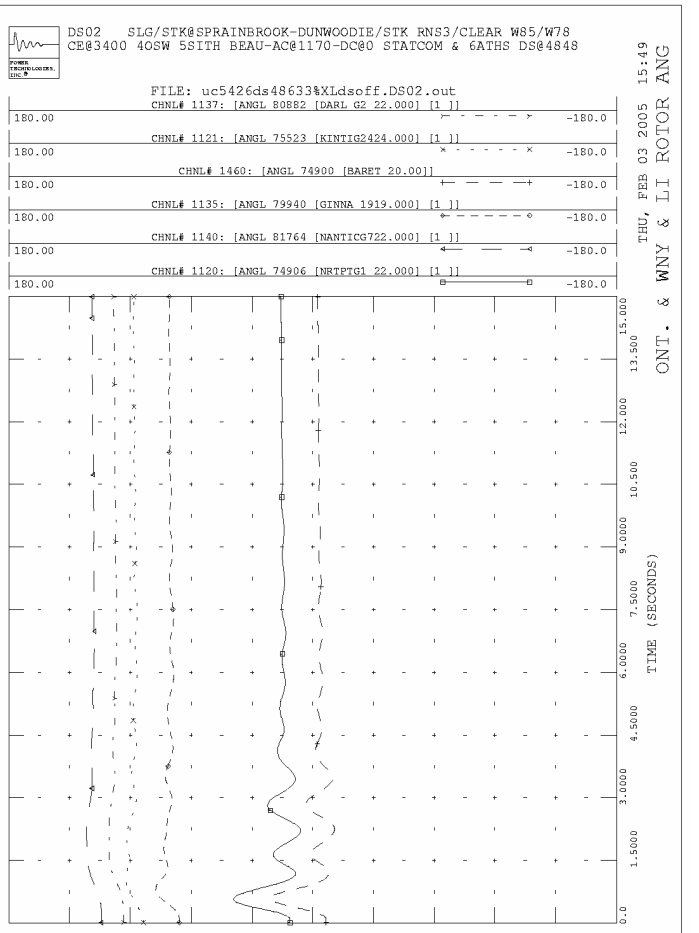
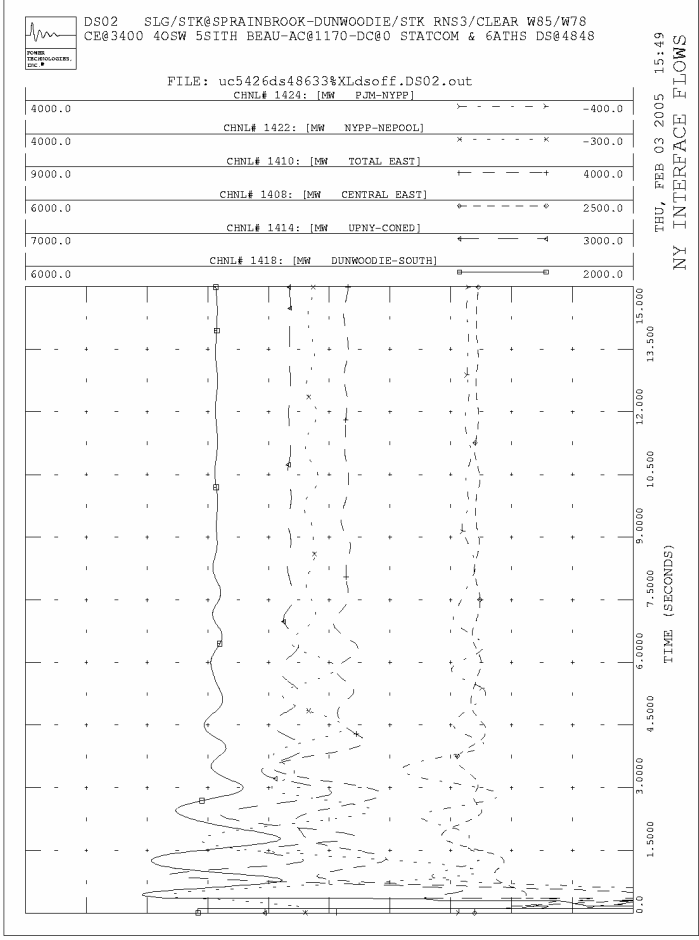
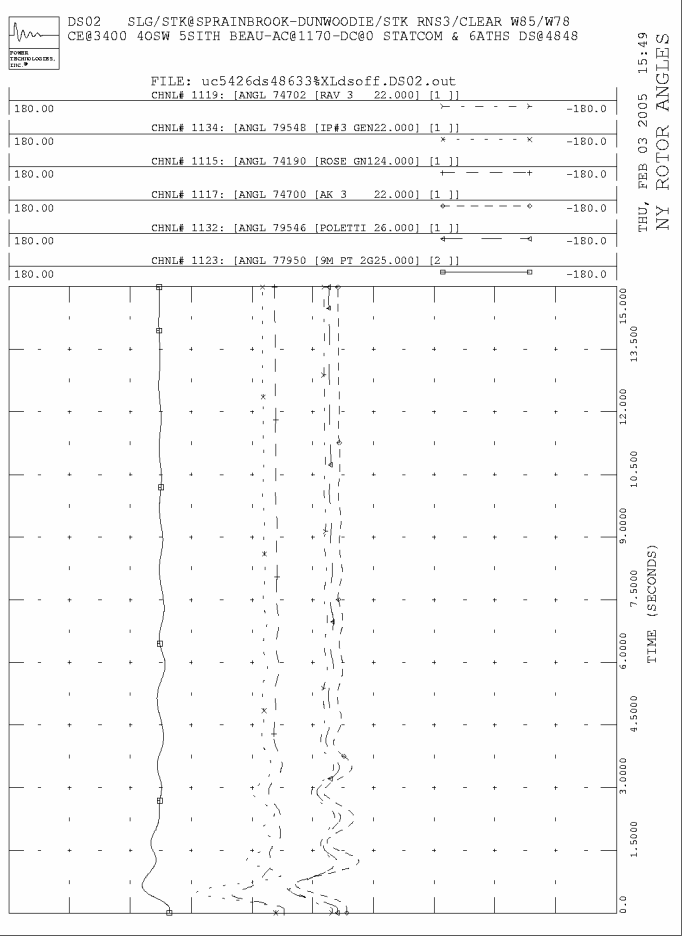
TIME (SECONDS)
THU, FEB 03 2005 15:49
NY VOLTAGES


DS02 SLG/STK@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
CE@3400 40SW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS02.out
CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
CHNL# 1460: [ANGL 74900 [BARET 20.00]]
CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00
-180.0
TIME (SECONDS)
THU, FEB 03 2005 15:49
ONT. & WNY & LI ROTOR ANG


DS02 SLG/STK@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
CE@3400 40SW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS02.out
CHNL# 1424: [MW PJM-NYPP]
CHNL# 1422: [MW NYPP-NEPOOL]
CHNL# 1410: [MW TOTAL EAST]
CHNL# 1408: [MW CENTRAL EAST]
CHNL# 1414: [MW UPNY-CONED]
CHNL# 1418: [MW DUNWOODIE-SOUTH]
4000.0
9000.0
6000.0
7000.0
-400.0
-300.0
4000.0
2500.0
3000.0
2000.0
TIME (SECONDS)
THU, FEB 03 2005 15:49
NY INTERFACE FLOWS


DS02 SLG/STK@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
CE@3400 40SW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS02.out
CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00
-180.0
TIME (SECONDS)
THU, FEB 03 2005 15:49
NY ROTOR ANGLES

DS03 SLG/STK @ DUNWOODIE - SPRIANBK / STK#5 CLR RAINEY#71
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.DS03.out

THU, FEB 03 2005 15:49

NY VOLTAGES

CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
1.3000 0.30000

CHNL# 318: [VOLT 75044 [HOLBRK 138.000]]
1.3000 0.30000

CHNL# 312: [VOLT 75001 [E.G.C 345.000]]
1.3000 0.30000

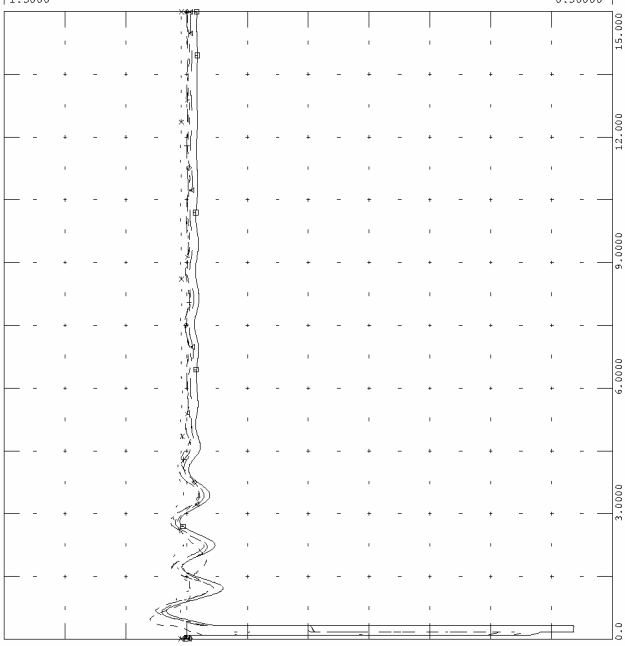
CHNL# 280: [VOLT 78450 [EDIC 345.00]]
1.3000 0.30000

CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
1.3000 0.30000

CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
1.3000 0.30000

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000

TIME (SECONDS)



DS03 SLG/STK @ DUNWOODIE - SPRIANBK / STK#5 CLR RAINEY#71
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.DS03.out

THU, FEB 03 2005 15:49

ONT. & WNY & LI ROTOR ANG

CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
180.00 -180.0

CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
180.00 -180.0

CHNL# 1460: [ANGL 74900 [BARET 20.00]]
180.00 -180.0

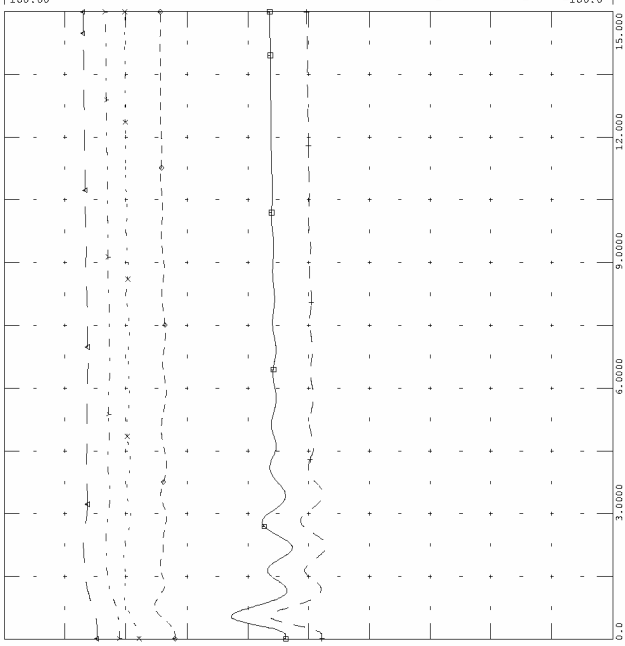
CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
180.00 -180.0

CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
180.00 -180.0

CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000

TIME (SECONDS)



DS03 SLG/STK @ DUNWOODIE - SPRIANBK / STK#5 CLR RAINEY#71
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.DS03.out

THU, FEB 03 2005 15:49

NY INTERFACE FLOWS

CHNL# 1424: [MW PJM-NYPP]
4000.0 -400.0

CHNL# 1422: [MW NYPP-NEPOOL]
4000.0 -300.0

CHNL# 1410: [MW TOTAL EAST]
9000.0 4000.0

CHNL# 1408: [MW CENTRAL EAST]
6000.0 2500.0

CHNL# 1414: [MW UPNY-CONED]
7000.0 3000.0

CHNL# 1418: [MW DUNWOODIE-SOUTH]
6000.0 2000.0

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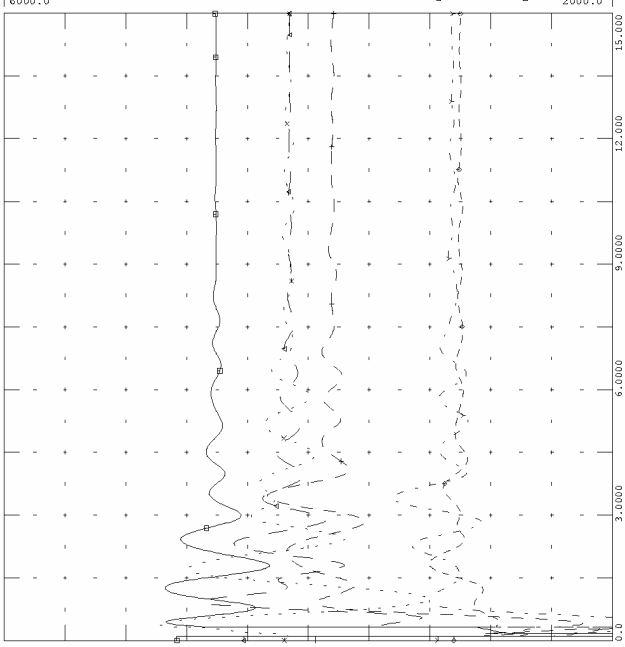
TIME (SECONDS)



DS03 SLG/STK @ DUNWOODIE - SPRIANBK / STK#5 CLR RAINEY#71
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.DS03.out

THU, FEB 03 2005 15:49

NY ROTOR ANGLES

CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
180.00 -180.0

CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
180.00 -180.0

CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
180.00 -180.0

CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
180.00 -180.0

CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
180.00 -180.0

CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00 -180.0

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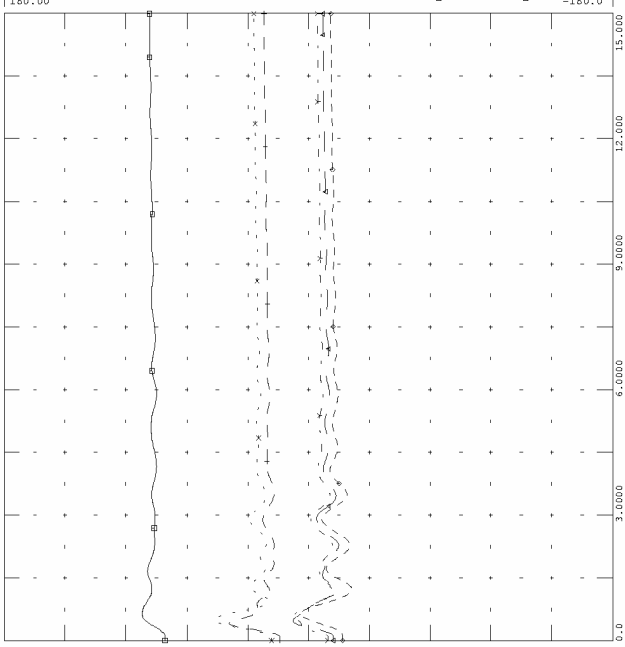
TIME (SECONDS)



DS04 SLG/STK @ DUNWOODIE - RAINEY/ STK#3 CLR W89&W73
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.DS04.out

THU, FEB 03 2005 15:49

NY VOLTAGES

CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
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CHNL# 318: [VOLT 75044 [HOLBRK 138.000]]
1.3000 0.30000

CHNL# 312: [VOLT 75001 [E.G.C 345.000]]
1.3000 0.30000

CHNL# 280: [VOLT 78450 [EDIC 345.00]]
1.3000 0.30000

CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
1.3000 0.30000

CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
1.3000 0.30000

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000

TIME (SECONDS)

DS04 SLG/STK @ DUNWOODIE - RAINEY/ STK#3 CLR W89&W73
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.DS04.out

THU, FEB 03 2005 15:49

ONT. & WNY & LI ROTOR ANG

CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
180.00 -180.0

CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
180.00 -180.0

CHNL# 1460: [ANGL 74900 [BARET 20.00]]
180.00 -180.0

CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
180.00 -180.0

CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
180.00 -180.0

CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00 -180.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000

TIME (SECONDS)

DS04 SLG/STK @ DUNWOODIE - RAINEY/ STK#3 CLR W89&W73
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.DS04.out

THU, FEB 03 2005 15:49

NY INTERFACE FLOWS

CHNL# 1424: [MW PJM-NYPP]
4000.0 -400.0

CHNL# 1422: [MW NYPP-NEPOOL]
4000.0 -300.0

CHNL# 1410: [MW TOTAL EAST]
9000.0 4000.0

CHNL# 1408: [MW CENTRAL EAST]
6000.0 2500.0

CHNL# 1414: [MW UPNY-CONED]
7000.0 3000.0

CHNL# 1418: [MW DUNWOODIE-SOUTH]
6000.0 2000.0

0.0 1.5000 3.0000 4.5000 6.0000 7.5000 9.0000 10.500 12.000 13.500 15.000

TIME (SECONDS)

DS04 SLG/STK @ DUNWOODIE - RAINEY/ STK#3 CLR W89&W73
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848

FILE: uc5426ds48633%XLdsoff.DS04.out

THU, FEB 03 2005 15:49

NY ROTOR ANGLES

CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
180.00 -180.0

CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
180.00 -180.0

CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
180.00 -180.0

CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
180.00 -180.0

CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
180.00 -180.0

CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00 -180.0

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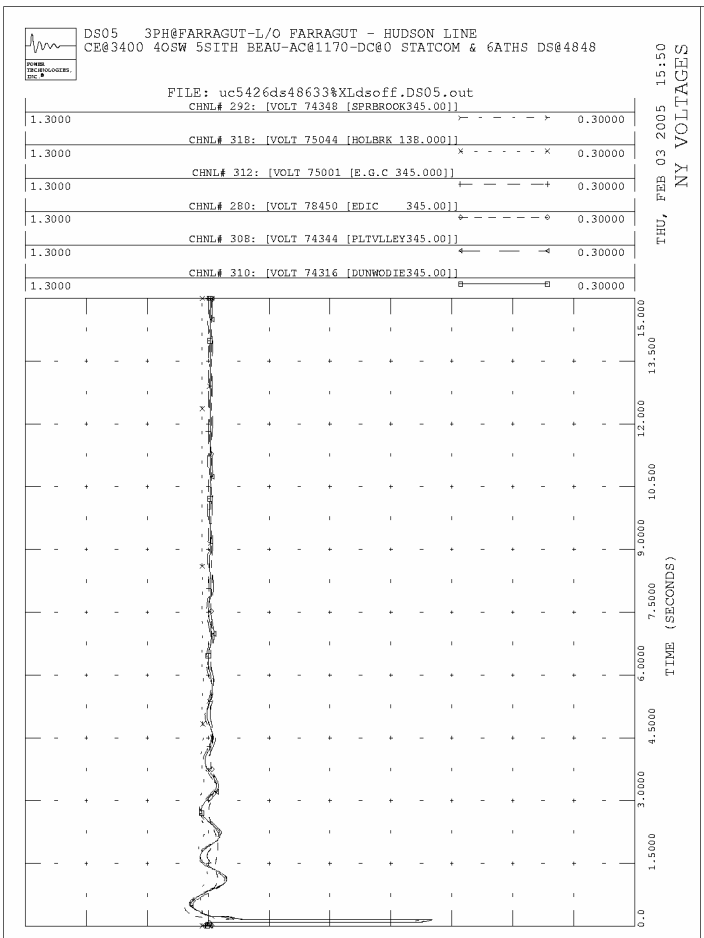
TIME (SECONDS)


DS05 3PH@FARRAGUT-L/O FARRAGUT - HUDSON LINE
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS05.out
CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
CHNL# 318: [VOLT 75044 [HOLBRK 138.000]]
CHNL# 312: [VOLT 75001 [E.G.C 345.000]]
CHNL# 280: [VOLT 78450 [EDIC 345.00]]
CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
1.3000
0.30000
0.0
1.5000
3.0000
4.5000
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7.5000
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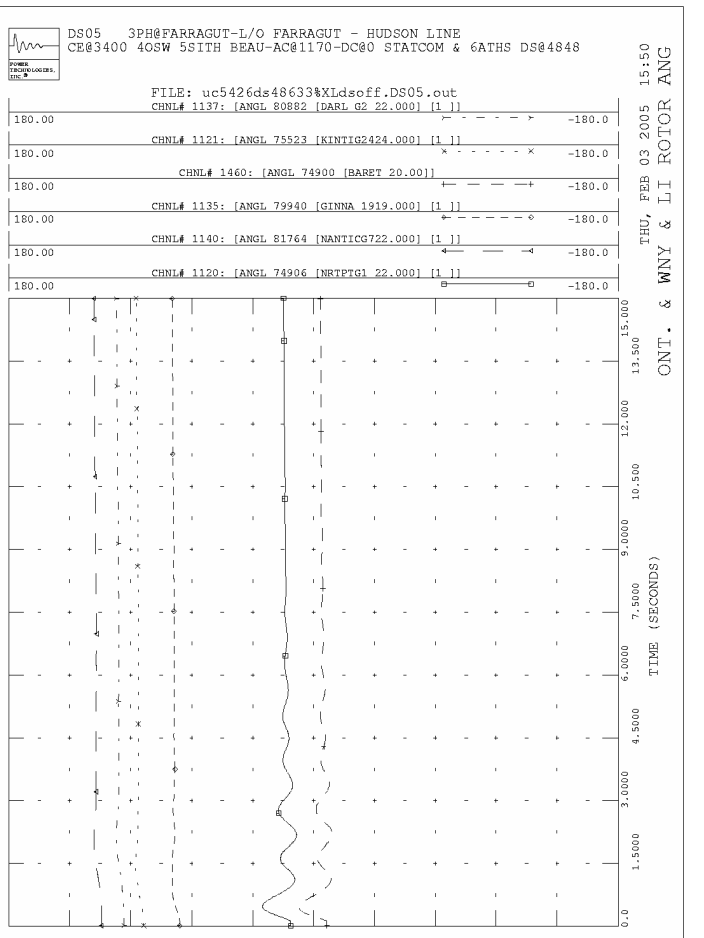
10.500
12.000
13.500
15.000
TIME (SECONDS)
THU, FEB 03 2005 15:50
NY VOLTAGES


DS05 3PH@FARRAGUT-L/O FARRAGUT - HUDSON LINE
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS05.out
CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
CHNL# 1460: [ANGL 74900 [BARET 20.00]]
CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00
-180.0
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
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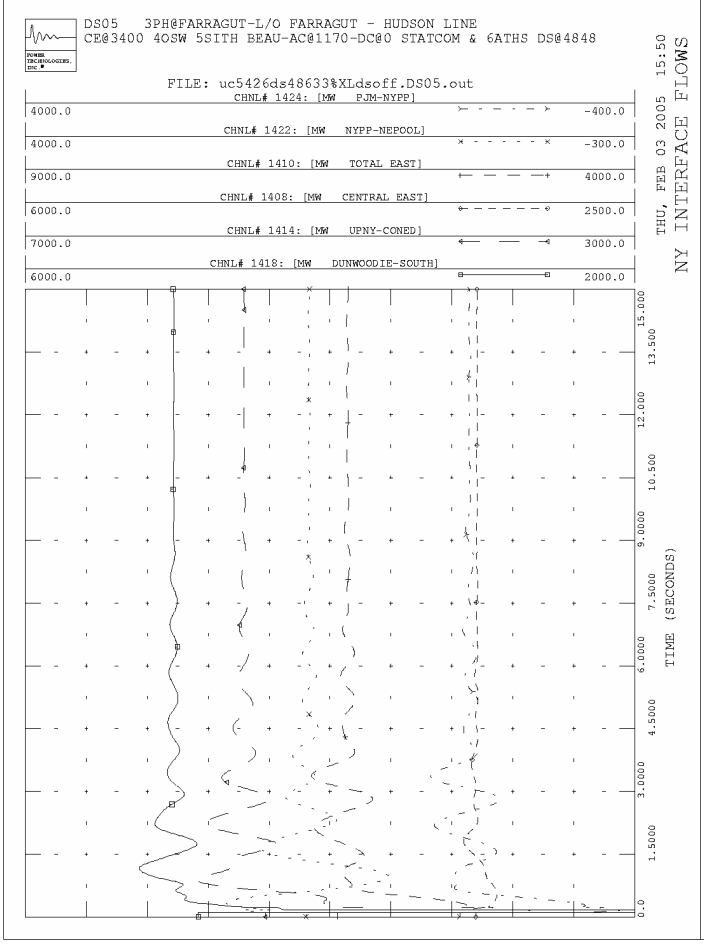
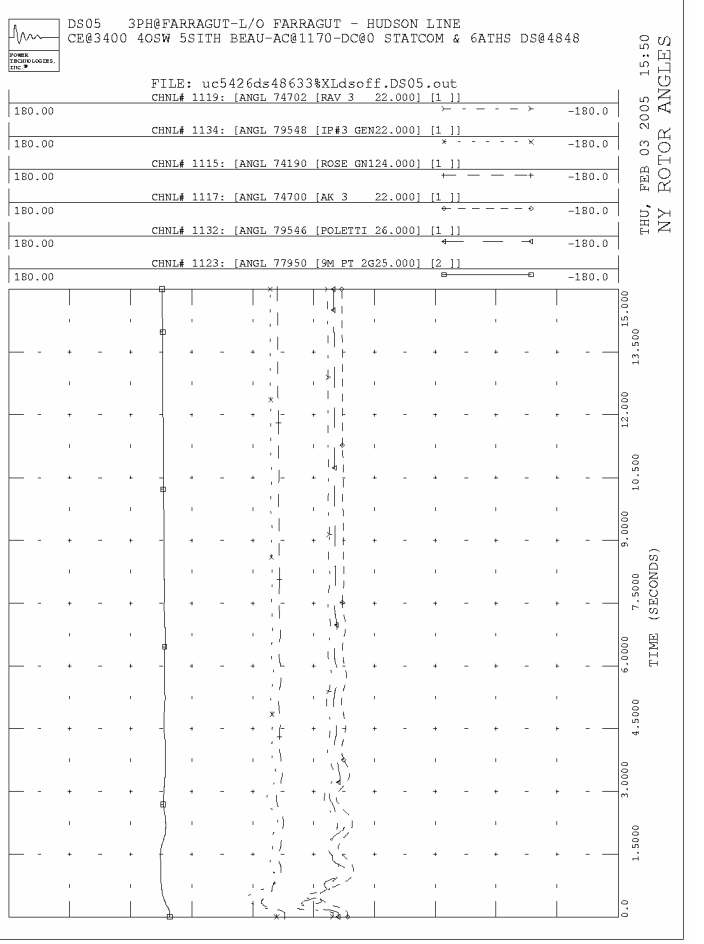
12.000
13.500
15.000
TIME (SECONDS)
THU, FEB 03 2005 15:50
ONT. & WNY & LI ROTOR ANG


DS05 3PH@FARRAGUT-L/O FARRAGUT - HUDSON LINE
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS05.out
CHNL# 1424: [MW PJM-NYPP]
CHNL# 1422: [MW NYPP-NEPOOL]
CHNL# 1410: [MW TOTAL EAST]
CHNL# 1408: [MW CENTRAL EAST]
CHNL# 1414: [MW UPNY-CONED]
CHNL# 1418: [MW DUNWOODIE-SOUTH]
4000.0
-400.0
-300.0
9000.0
4000.0
6000.0
2500.0
7000.0
3000.0
2000.0
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000
TIME (SECONDS)
THU, FEB 03 2005 15:50
NY INTERFACE FLOWS


DS05 3PH@FARRAGUT-L/O FARRAGUT - HUDSON LINE
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS05.out
CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00
-180.0
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
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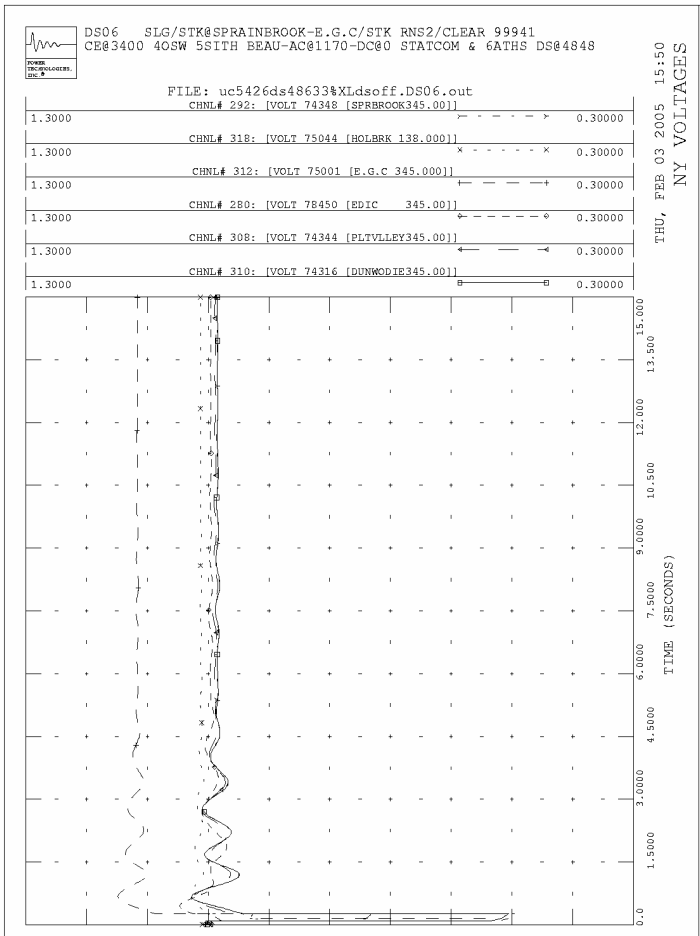
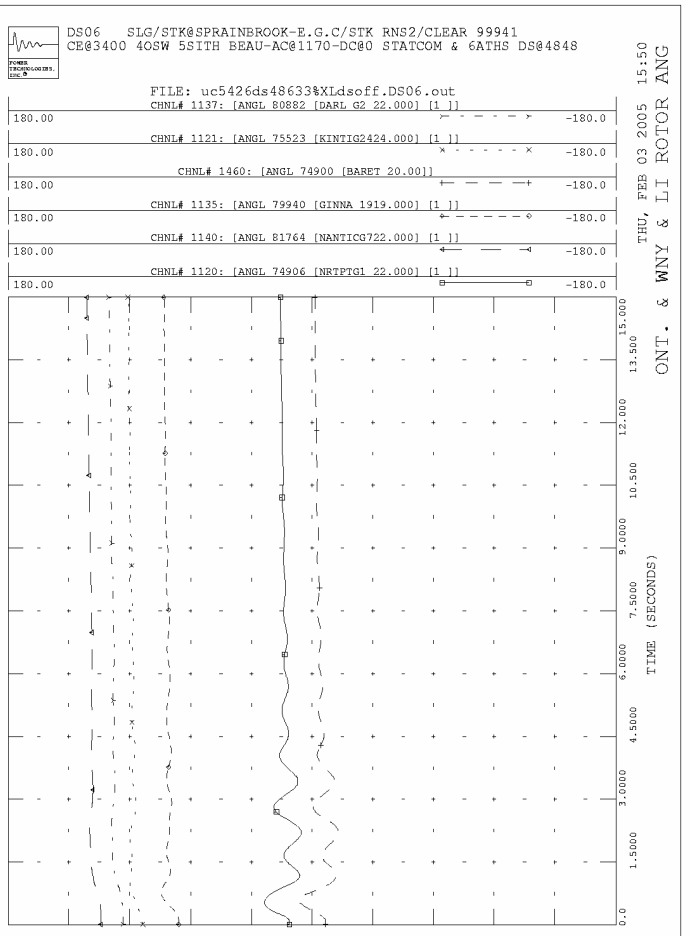
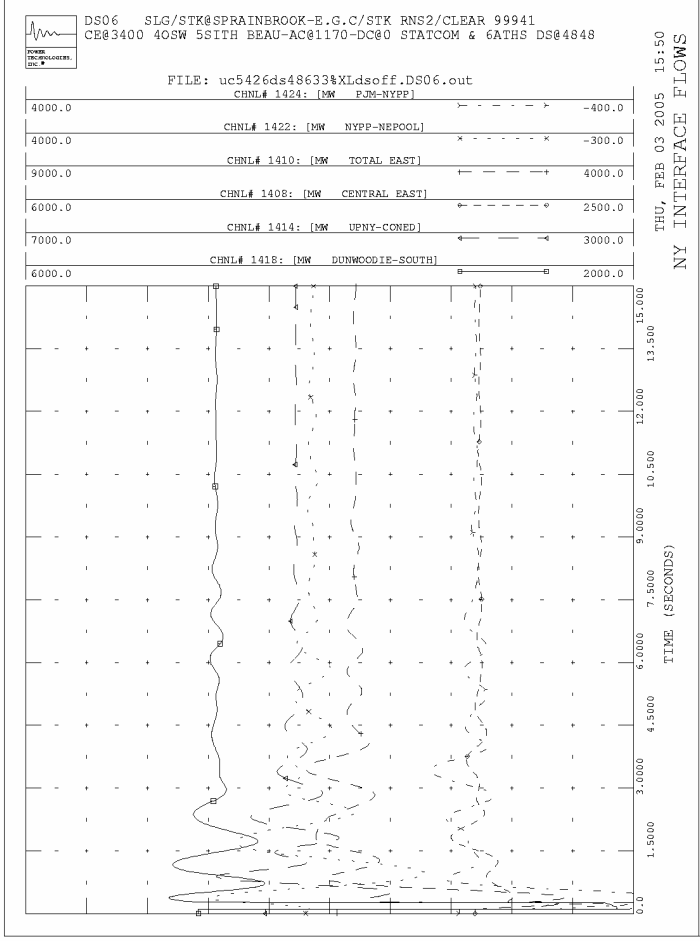
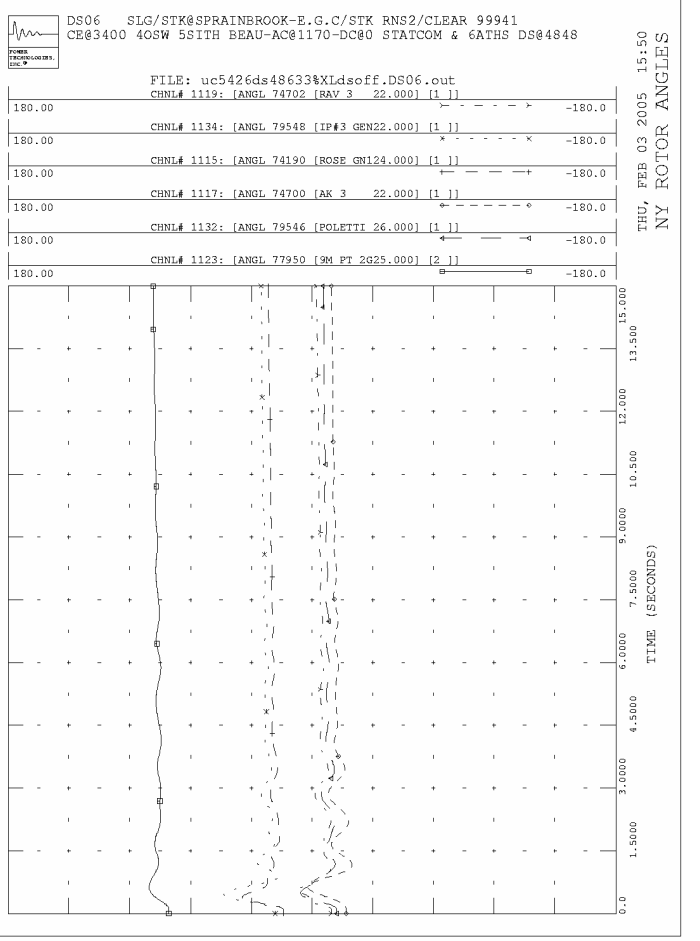
13.500
15.000
TIME (SECONDS)
THU, FEB 03 2005 15:50
NY ROTOR ANGLES


DS06 SLG/STK@SPRAINBROOK-E.G.C/STK RNS2/CLEAR 99941
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS06.out
CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
1.3000
0.30000
CHNL# 318: [VOLT 75044 [HOLBRK 138.000]]
1.3000
0.30000
CHNL# 312: [VOLT 75001 [E.G.C 345.000]]
1.3000
0.30000
CHNL# 280: [VOLT 78450 [EDIC 345.00]]
1.3000
0.30000
CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
1.3000
0.30000
CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
1.3000
0.30000
15.000
13.500
12.000
10.500
9.0000
7.5000
6.0000
4.5000
3.0000
1.5000
0.0
TIME (SECONDS)
THU, FEB 03 2005 15:50
NY VOLTAGES


DS06 SLG/STK@SPRAINBROOK-E.G.C/STK RNS2/CLEAR 99941
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS06.out
CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
180.00
-180.0
CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
180.00
-180.0
CHNL# 1460: [ANGL 74900 [BARET 20.00]]
180.00
-180.0
CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
180.00
-180.0
CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
180.00
-180.0
CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00
-180.0
15.000
13.500
12.000
10.500
9.0000
7.5000
6.0000
4.5000
3.0000
1.5000
0.0
TIME (SECONDS)
THU, FEB 03 2005 15:50
ONT. & WNY & LI ROTOR ANG


DS06 SLG/STK@SPRAINBROOK-E.G.C/STK RNS2/CLEAR 99941
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS06.out
CHNL# 1424: [MW PJM-NYPP]
4000.0
-400.0
CHNL# 1422: [MW NYPP-NEPOOL]
4000.0
-300.0
CHNL# 1410: [MW TOTAL EAST]
9000.0
4000.0
CHNL# 1408: [MW CENTRAL EAST]
6000.0
2500.0
CHNL# 1414: [MW UPNY-CONED]
7000.0
3000.0
CHNL# 1418: [MW DUNWOODIE-SOUTH]
6000.0
2000.0
15.000
13.500
12.000
10.500
9.0000
7.5000
6.0000
4.5000
3.0000
1.5000
0.0
TIME (SECONDS)
THU, FEB 03 2005 15:50
NY INTERFACE FLOWS


DS06 SLG/STK@SPRAINBROOK-E.G.C/STK RNS2/CLEAR 99941
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS06.out
CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
180.00
-180.0
CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
180.00
-180.0
CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
180.00
-180.0
CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
180.00
-180.0
CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
180.00
-180.0
CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00
-180.0
15.000
13.500
12.000
10.500
9.0000
7.5000
6.0000
4.5000
3.0000
1.5000
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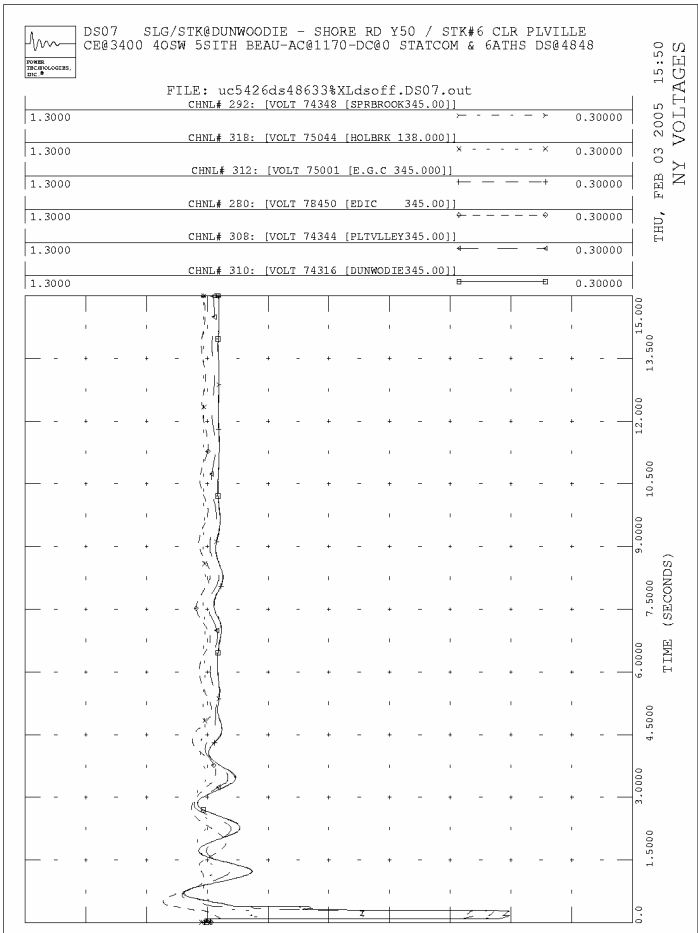
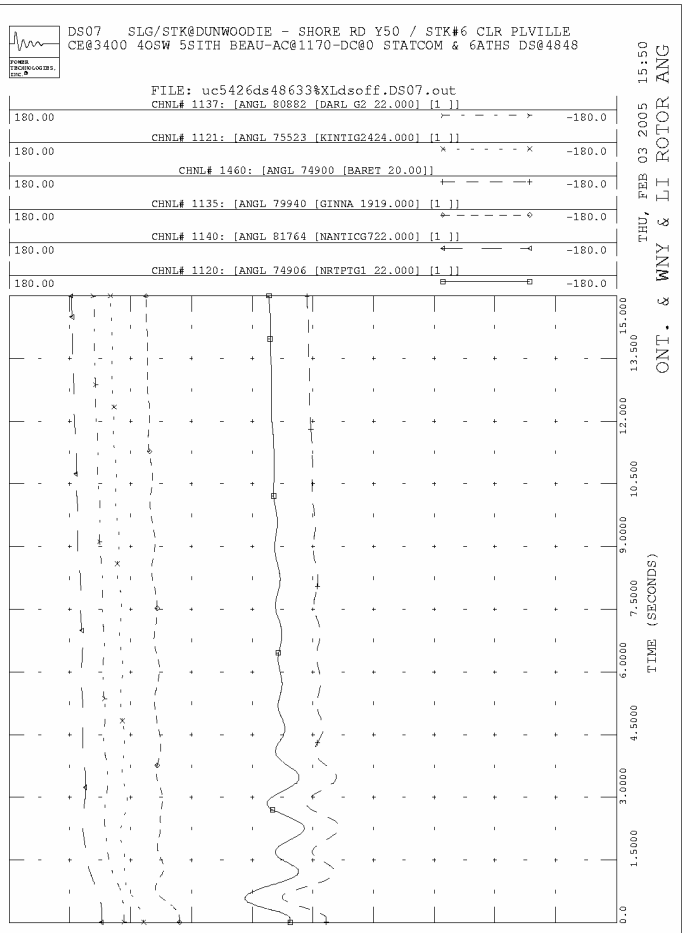
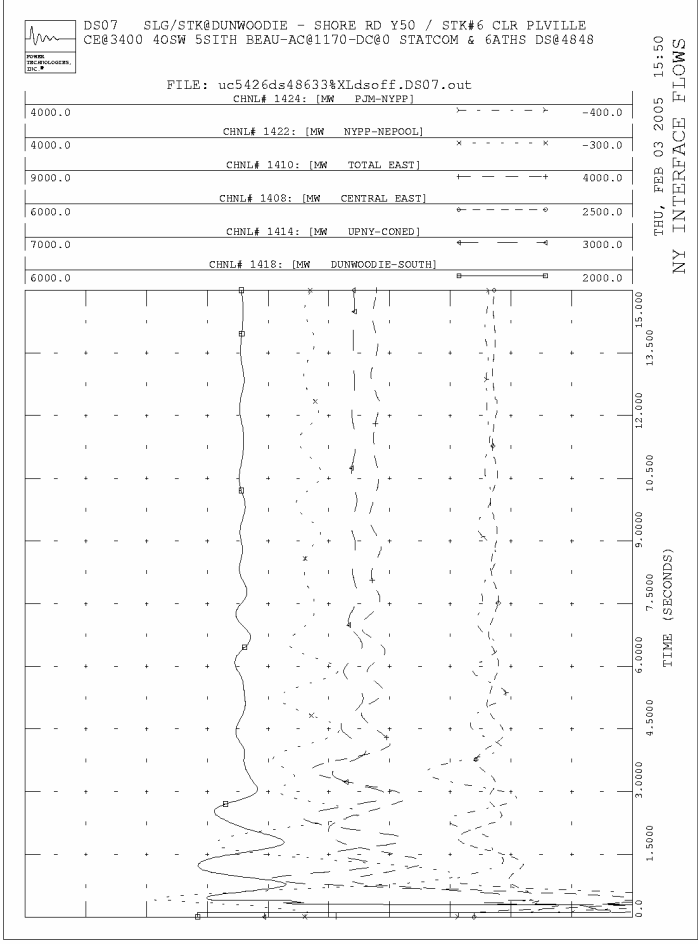
TIME (SECONDS)
THU, FEB 03 2005 15:50
NY ROTOR ANGLES


DS07 SLG/STK@DUNWOODIE - SHORE RD Y50 / STK#6 CLR PLVILLE
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS07.out
CHNL# 292: [VOLT 74348 [SPRBROOK345.00]]
CHNL# 318: [VOLT 75044 [HOLBRK 138.000]]
CHNL# 312: [VOLT 75001 [E.G.C 345.000]]
CHNL# 280: [VOLT 78450 [EDIC 345.00]]
CHNL# 308: [VOLT 74344 [PLTVLLEY345.00]]
CHNL# 310: [VOLT 74316 [DUNWODIE345.00]]
1.3000
0.30000
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000
TIME (SECONDS)
THU, FEB 03 2005 15:50
NY VOLTAGES


DS07 SLG/STK@DUNWOODIE - SHORE RD Y50 / STK#6 CLR PLVILLE
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS07.out
CHNL# 1137: [ANGL 80882 [DARL G2 22.000] [1]]
CHNL# 1121: [ANGL 75523 [KINTIG2424.000] [1]]
CHNL# 1460: [ANGL 74900 [BARET 20.00]]
CHNL# 1135: [ANGL 79940 [GINNA 1919.000] [1]]
CHNL# 1140: [ANGL 81764 [NANTICG722.000] [1]]
CHNL# 1120: [ANGL 74906 [NRTPTG1 22.000] [1]]
180.00
-180.0
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000
TIME (SECONDS)
THU, FEB 03 2005 15:50
ONT. & WNY & LI ROTOR ANG


DS07 SLG/STK@DUNWOODIE - SHORE RD Y50 / STK#6 CLR PLVILLE
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS07.out
CHNL# 1424: [MW PJM-NYPP]
CHNL# 1422: [MW NYPP-NEPOOL]
CHNL# 1410: [MW TOTAL EAST]
CHNL# 1408: [MW CENTRAL EAST]
CHNL# 1414: [MW UPNY-CONED]
CHNL# 1418: [MW DUNWOODIE-SOUTH]
4000.0
-400.0
-300.0
9000.0
4000.0
6000.0
2500.0
7000.0
3000.0
2000.0
0.0
1.5000
3.0000
4.5000
6.0000
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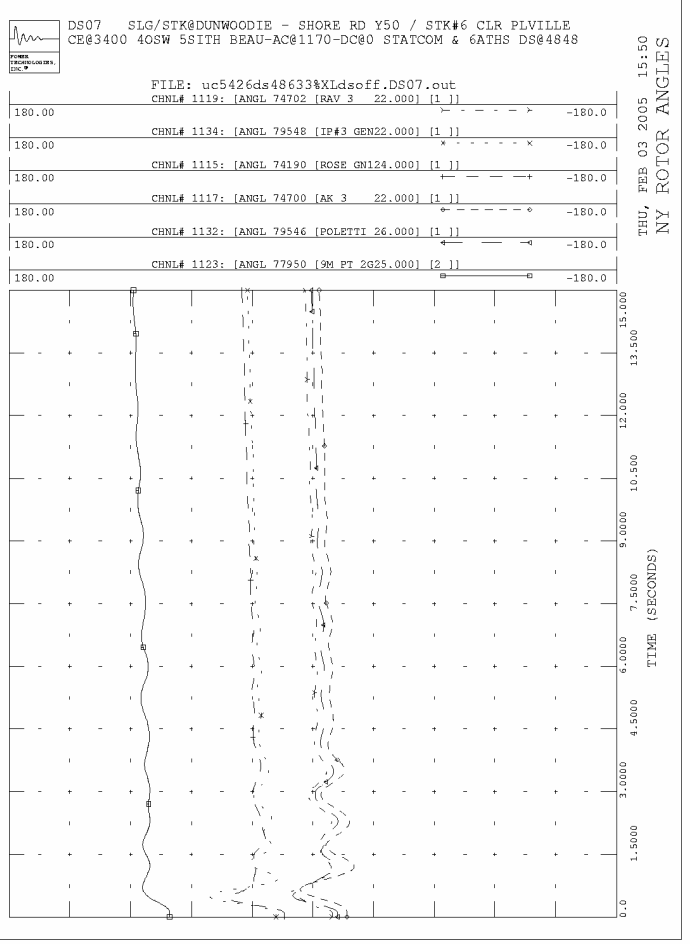
9.0000
10.500
12.000
13.500
15.000
TIME (SECONDS)
THU, FEB 03 2005 15:50
NY INTERFACE FLOWS


DS07 SLG/STK@DUNWOODIE - SHORE RD Y50 / STK#6 CLR PLVILLE
CE@3400 4OSW 5SITH BEAU-AC@1170-DC@0 STATCOM & 6ATHS DS@4848
FILE: uc5426ds48633%XLdsoff.DS07.out
CHNL# 1119: [ANGL 74702 [RAV 3 22.000] [1]]
CHNL# 1134: [ANGL 79548 [IP#3 GEN22.000] [1]]
CHNL# 1115: [ANGL 74190 [ROSE GN124.000] [1]]
CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
CHNL# 1123: [ANGL 77950 [9M PT 2G25.000] [2]]
180.00
-180.0
0.0
1.5000
3.0000
4.5000
6.0000
7.5000
9.0000
10.500
12.000
13.500
15.000
TIME (SECONDS)
THU, FEB 03 2005 15:50
NY ROTOR ANGLES

Appendix C

Comparison of Machine Angles and Bus Voltages for Cases 1 & 3
(Cases With and Without the 3% Reactor)

POWER TECHNOLOGIES, INC.®

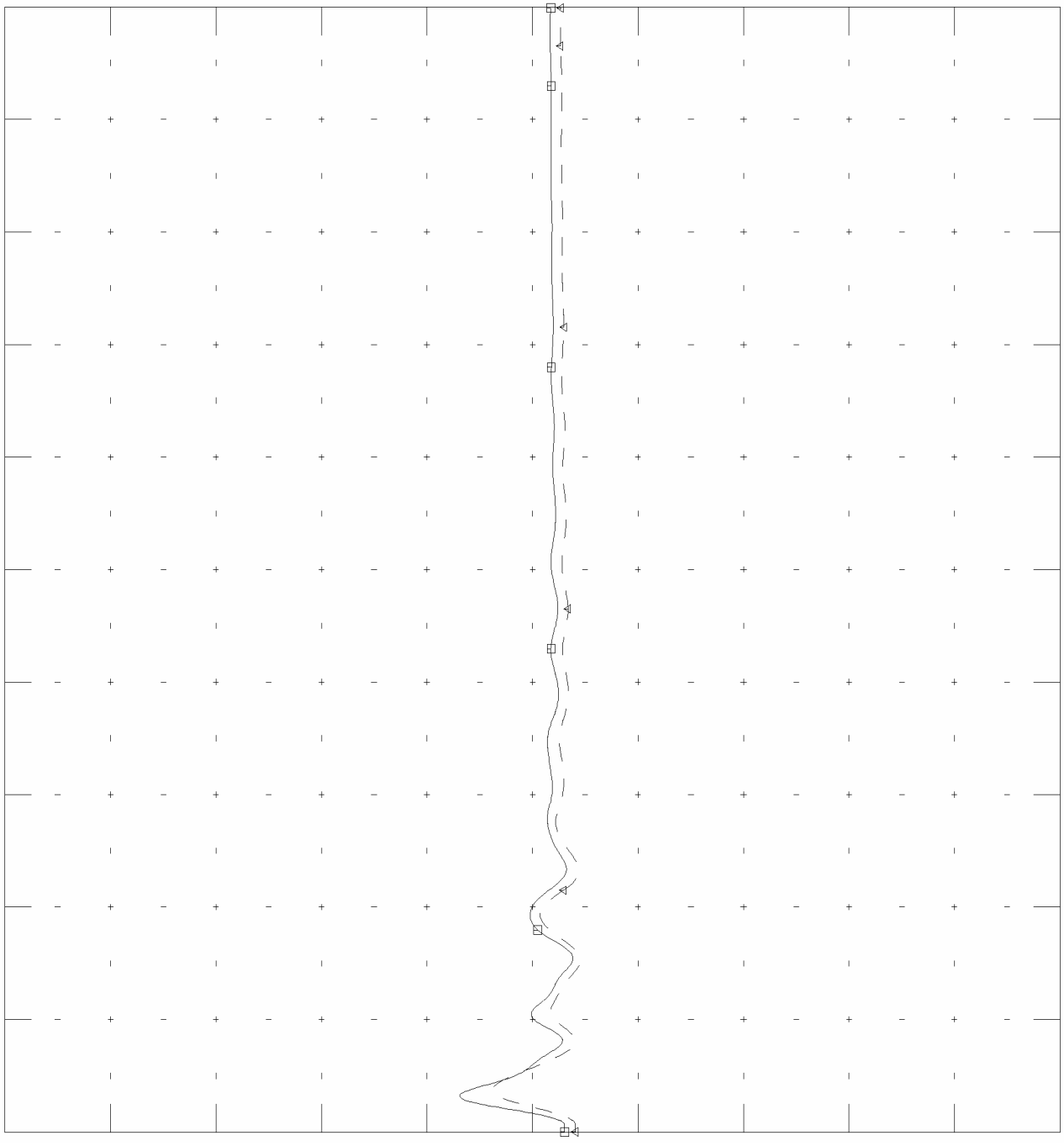
DS02 SLG/STK@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

THU, FEB 03 2005 16:08

POLETTI ROTOR ANGLE

CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
180.00 FILE:uc5426ds48633%XLdsoff.DS02.out -180.0

CHNL# 1132: [ANGL 79546 [POLETTI 26.000] [1]]
180.00 FILE:CE3406uc5939ds53974m6AthsBLdsoff.DS02.out -180.0

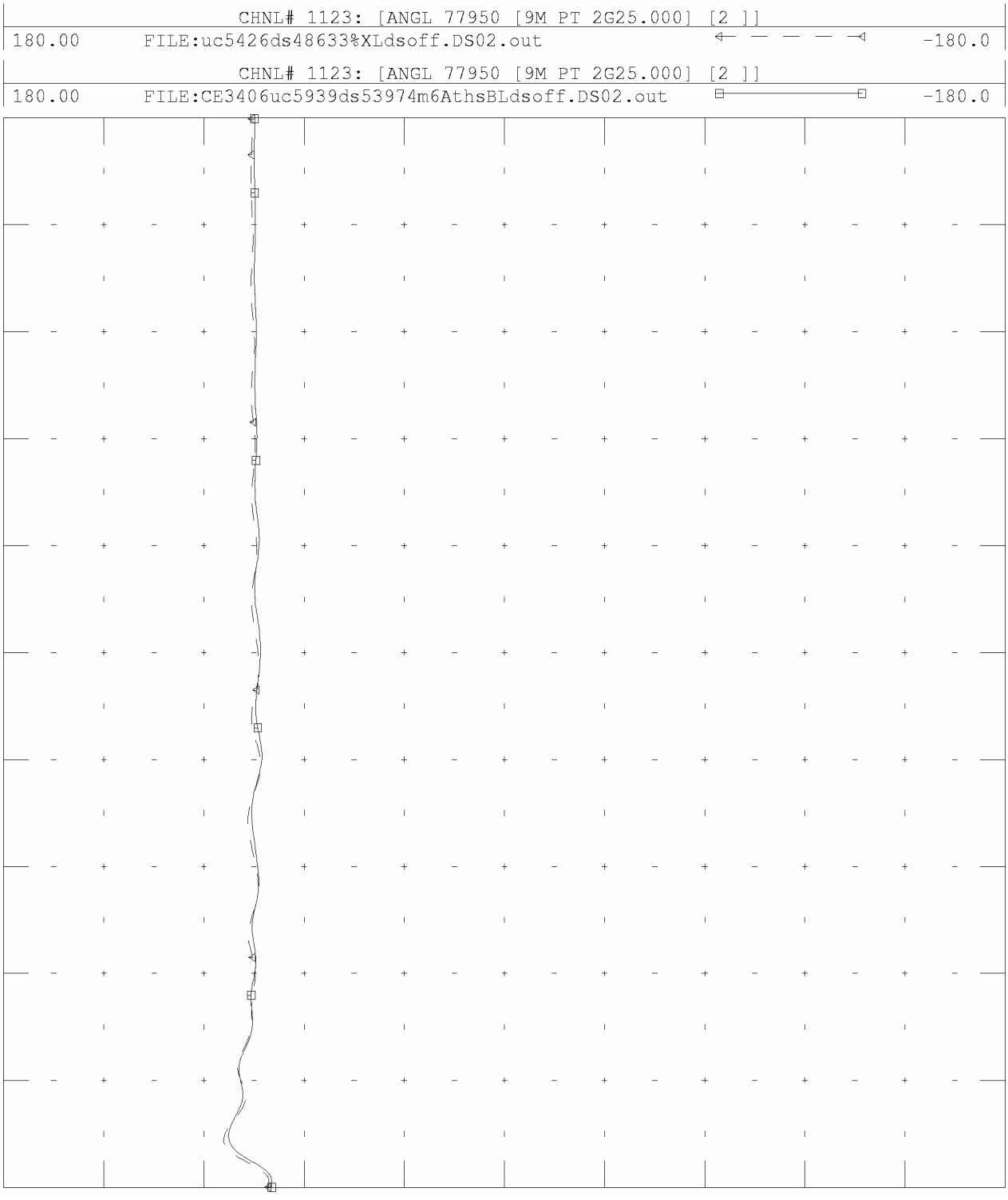


POWER TECHNOLOGIES, INC.®

DS02 SLG/STK@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

THU, FEB 03 2005 16:08

9M #2 ROTOR ANGLE



POWER TECHNOLOGIES, INC.®

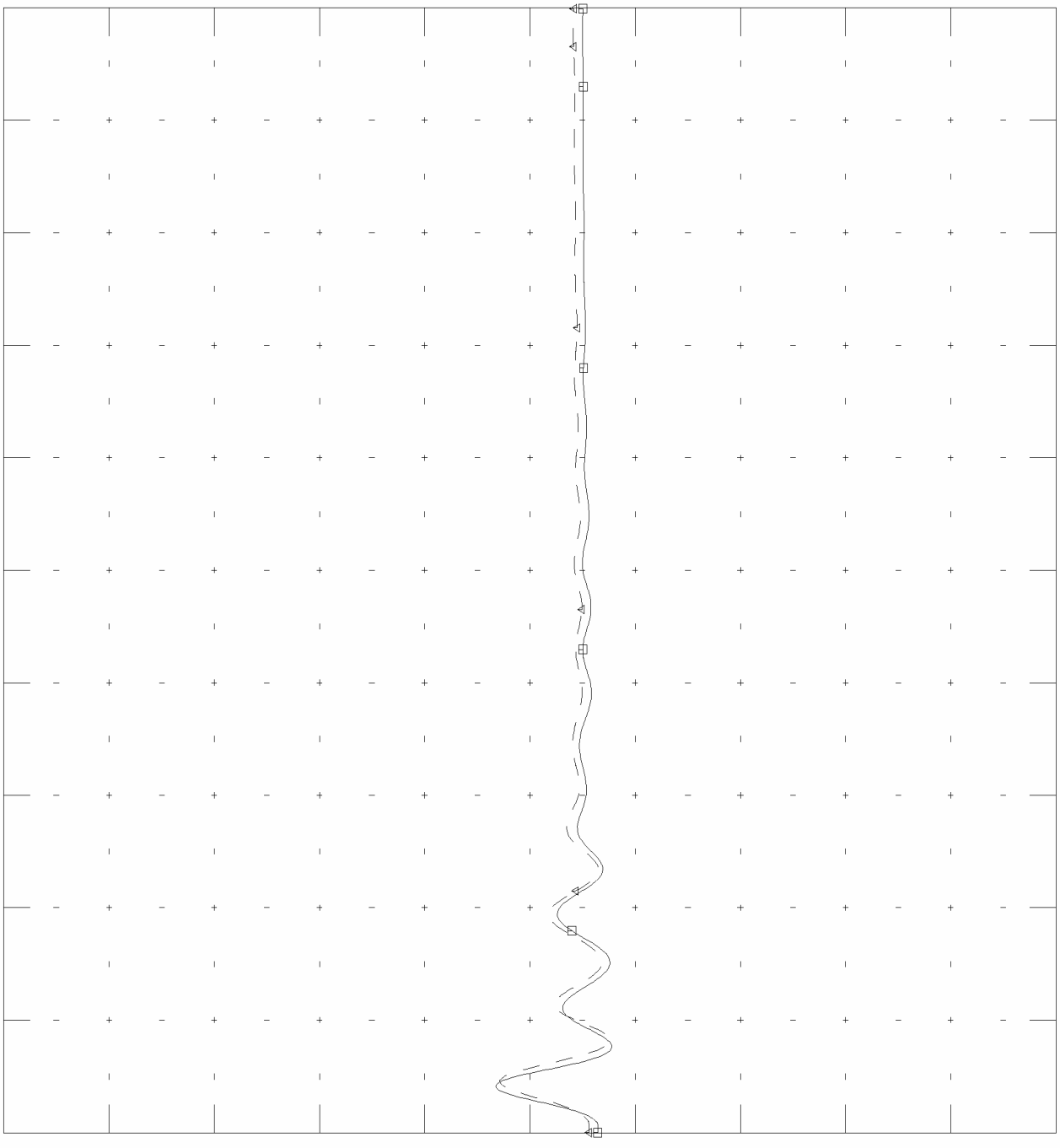
DS02 SLG/STK@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

THU, FEB 03 2005 16:09

AK3 ROTOR ANGLE

CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
180.00 FILE:uc5426ds48633%XLdsoff.DS02.out -180.0

CHNL# 1117: [ANGL 74700 [AK 3 22.000] [1]]
180.00 FILE:CE3406uc5939ds53974m6AthsBLdsoff.DS02.out -180.0

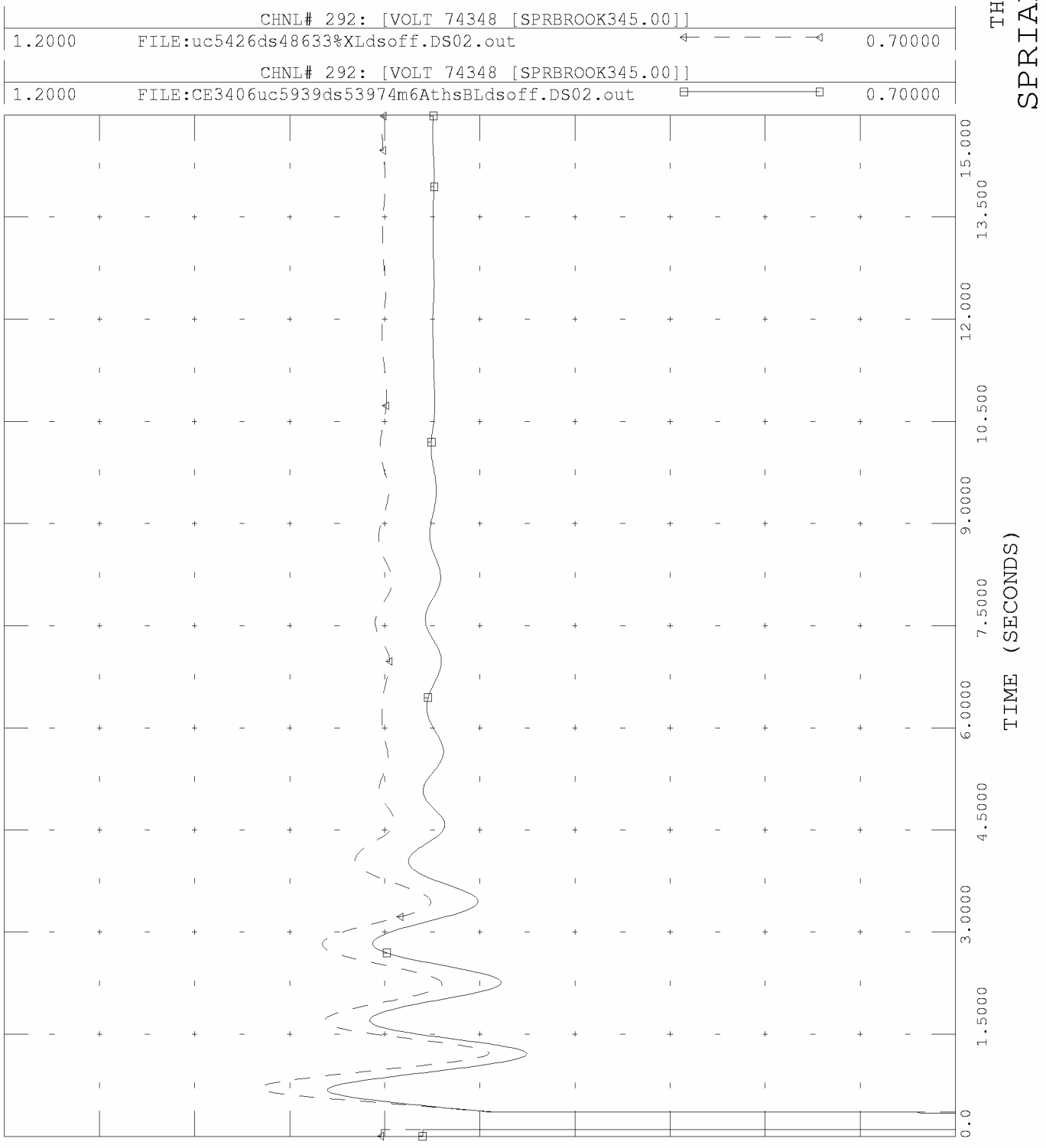


POWER TECHNOLOGIES, INC.®

DS02 SLG/STK@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

THU, FEB 03 2005 16:10

SPRIANBROOK VOLTAGE



POWER TECHNOLOGIES, INC.®

DS02 SLG/STK@SPRAINBROOK-DUNWOODIE/STK RNS3/CLEAR W85/W78
CE@3406 4OSW 5SITHE BEAU-AC@1170-DC@0 STATC & 6ATHS DS@5397

THU, FEB 03 2005 16:10

DUNWOODIE VOLTAGE