# PID 226: APPENDIX- C
## Plots for Stability Simulations


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## C.1 FLT_1_3PH

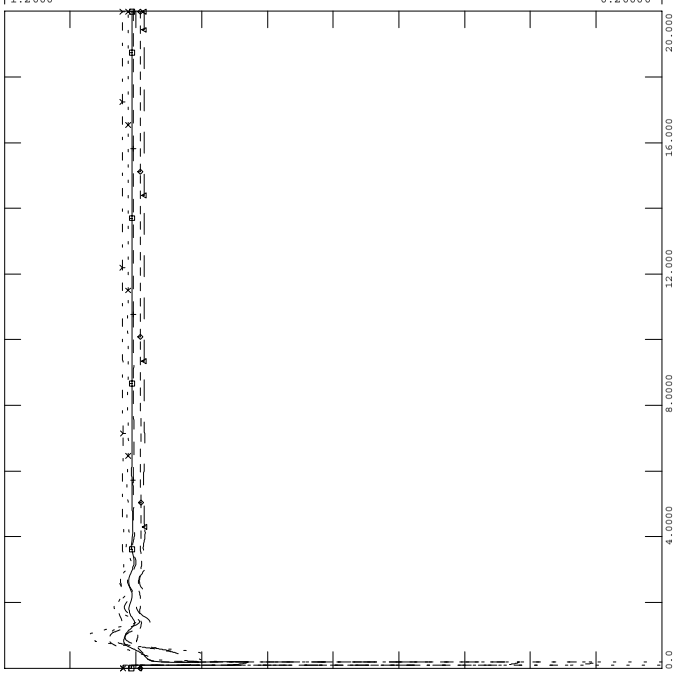
Three phase fault on the 8G.GULF (#336820) to 8B.WLSN (#336830) 500 kV line, near the 8G.GULF.

a) Apply 3 Phase Fault AT 8G.GULF 500KV BUS 336820
b) Clear fault after 5 cycles by tripping line from 8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830

POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1_3PH.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

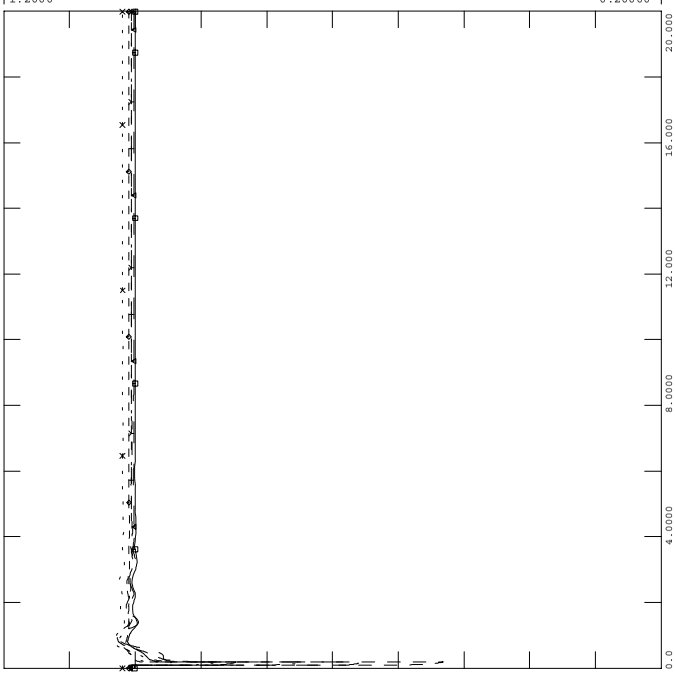



TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1_3PH.OUT

CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

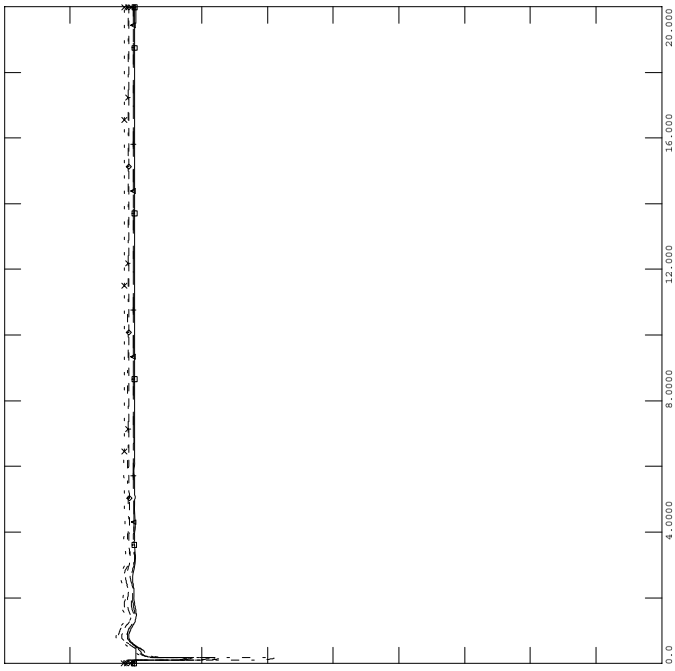



TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1_3PH.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

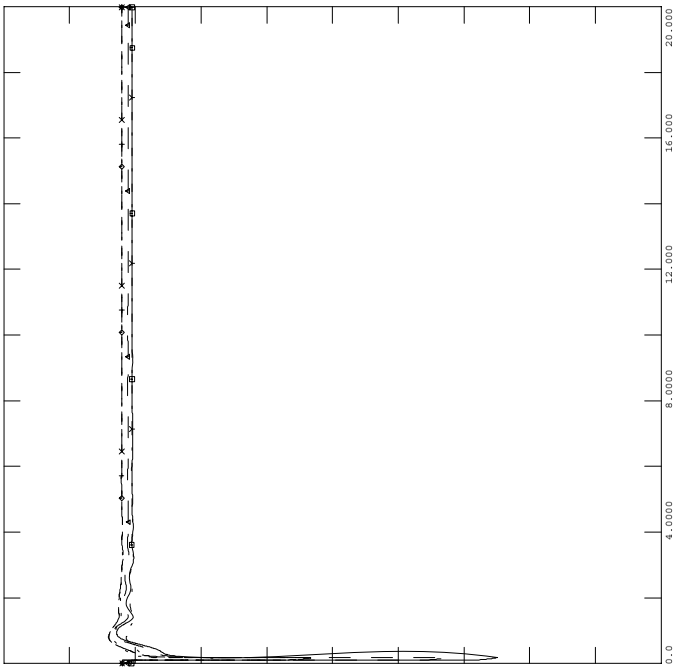



TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1_3PH.OUT

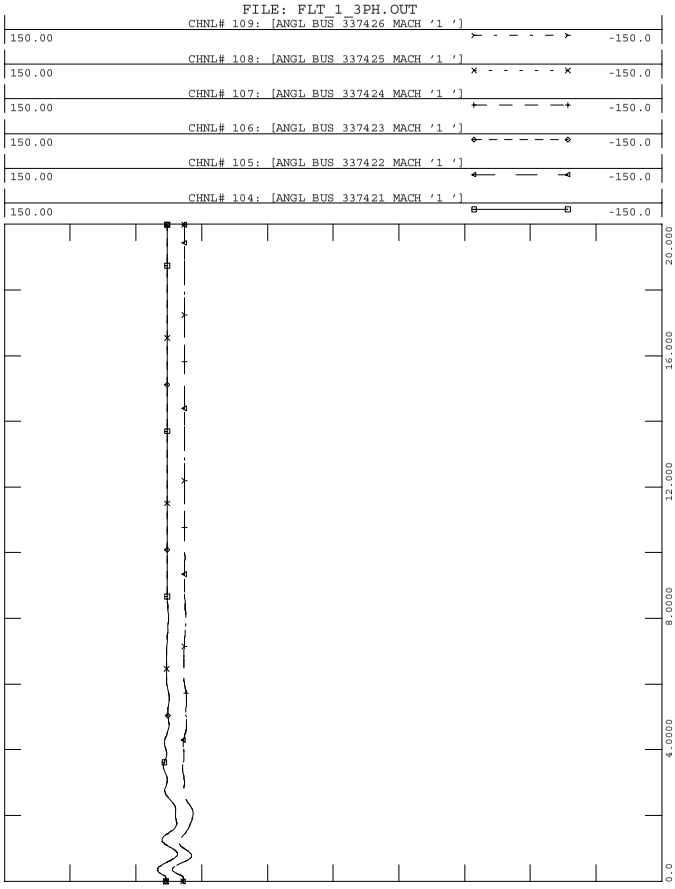
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000




TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

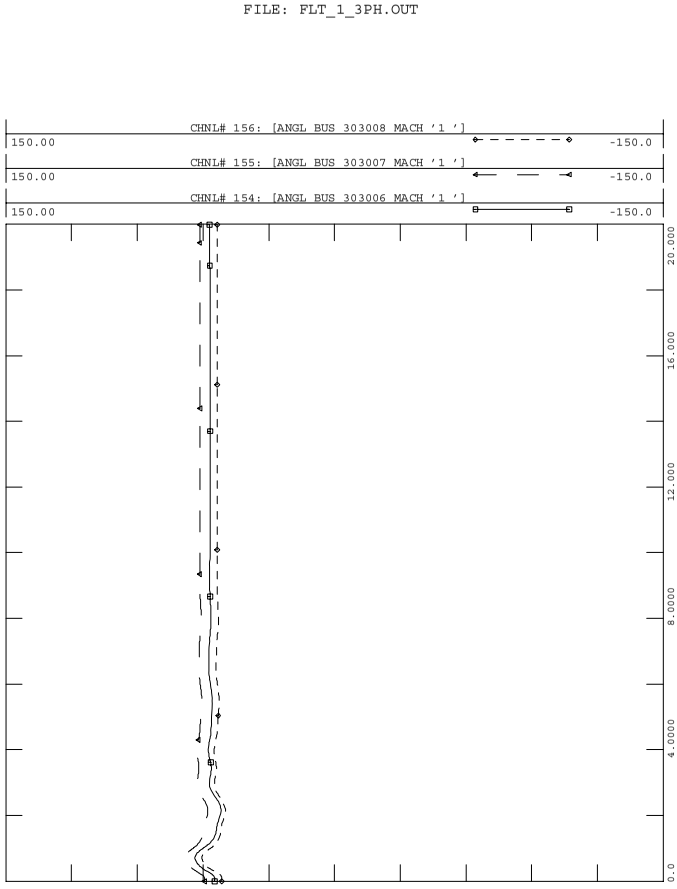
POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1_3PH.OUT




TUE, AUG 25 2009 17:14

LOCAL AREA MACHINE ANGLES

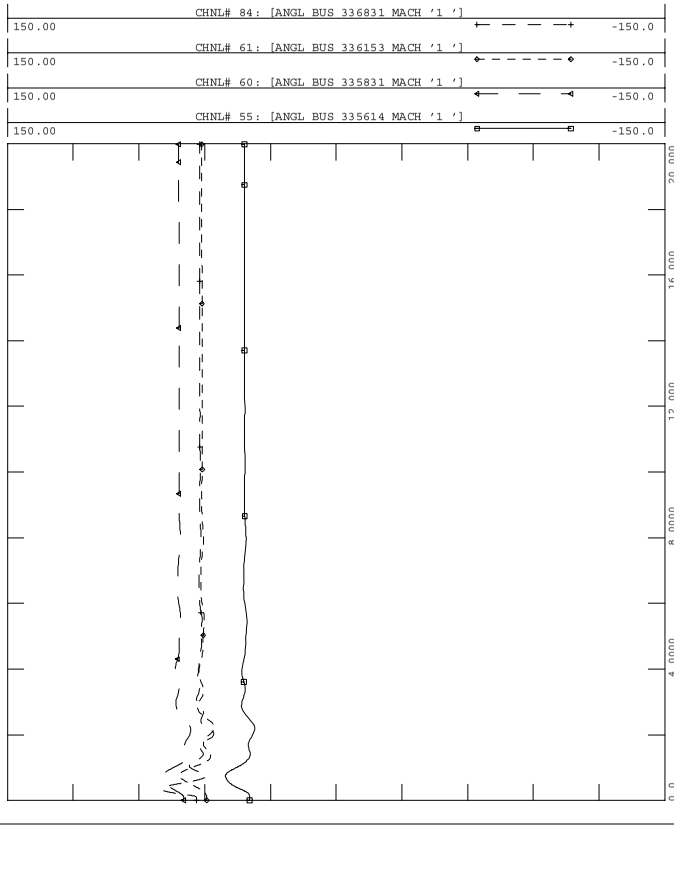
POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1_3PH.OUT




TUE, AUG 25 2009 17:14

LOCAL AREA MACHINE ANGLES

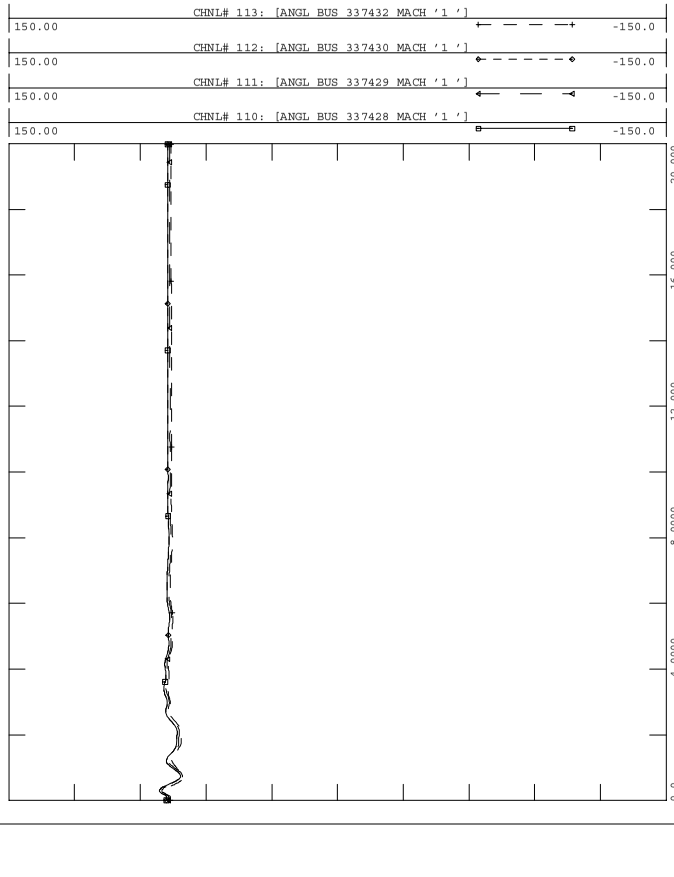
POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1_3PH.OUT




TUE, AUG 25 2009 17:14

LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1_3PH.OUT

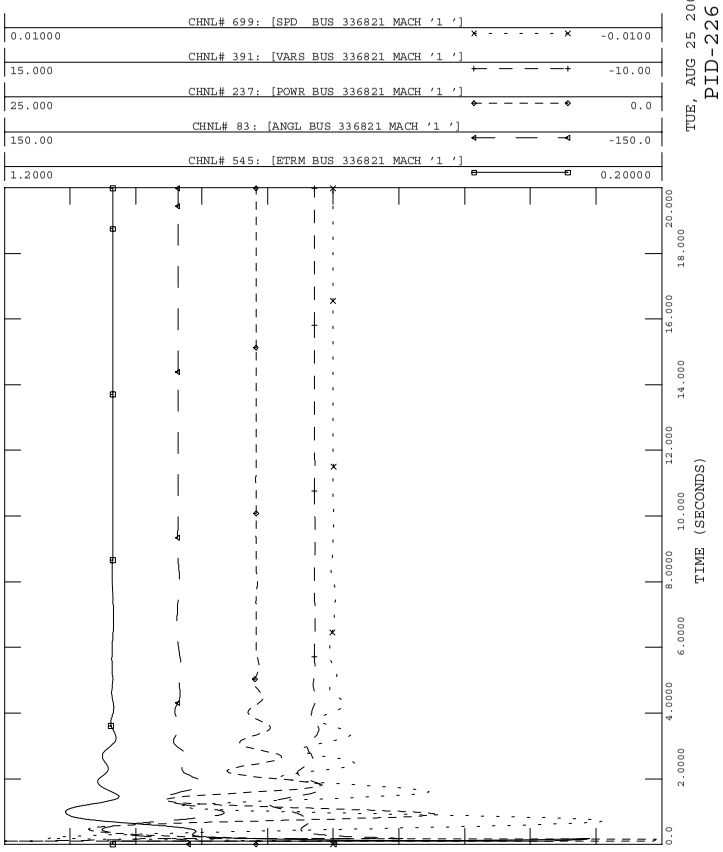



TUE, AUG 25 2009 17:14

LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.2 FLT_2_3PH

Three phase fault on the 8G.GULF (#336820) to 8FRKLIN (#336562) 500 kV line, near the 8G.GULF.

a) Apply 3 Phase Fault at 8G.GULF 500KV BUS 336820
b) Clear fault after 5 cycles by tripping line from 8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562

POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2_3PH.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2_3PH.OUT

CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2_3PH.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2_3PH.OUT

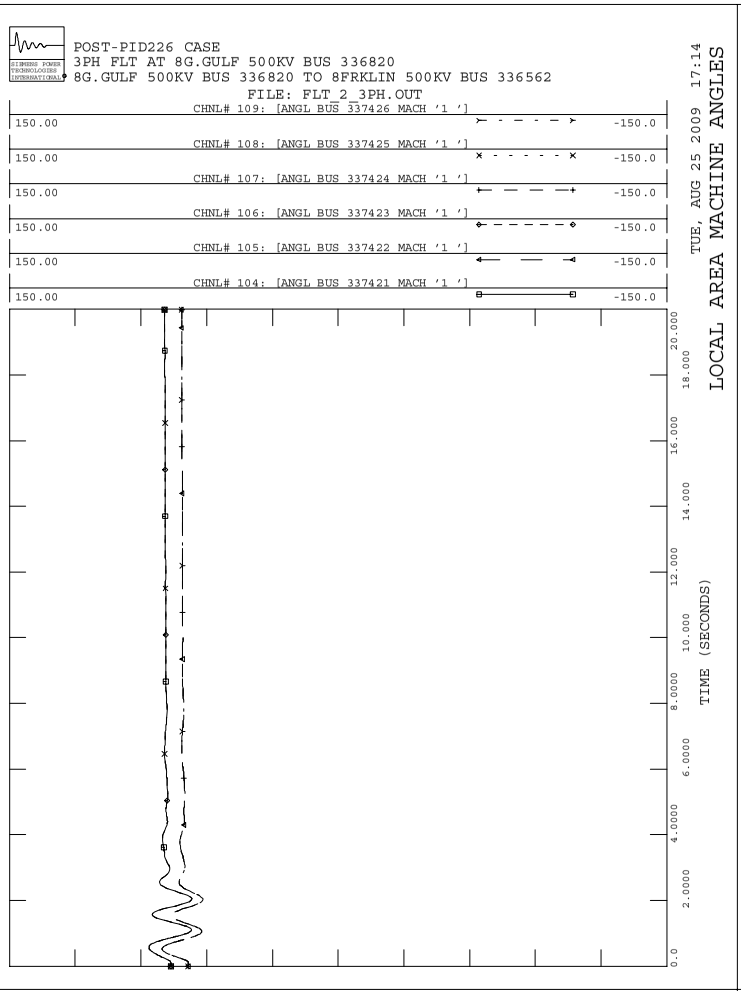
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

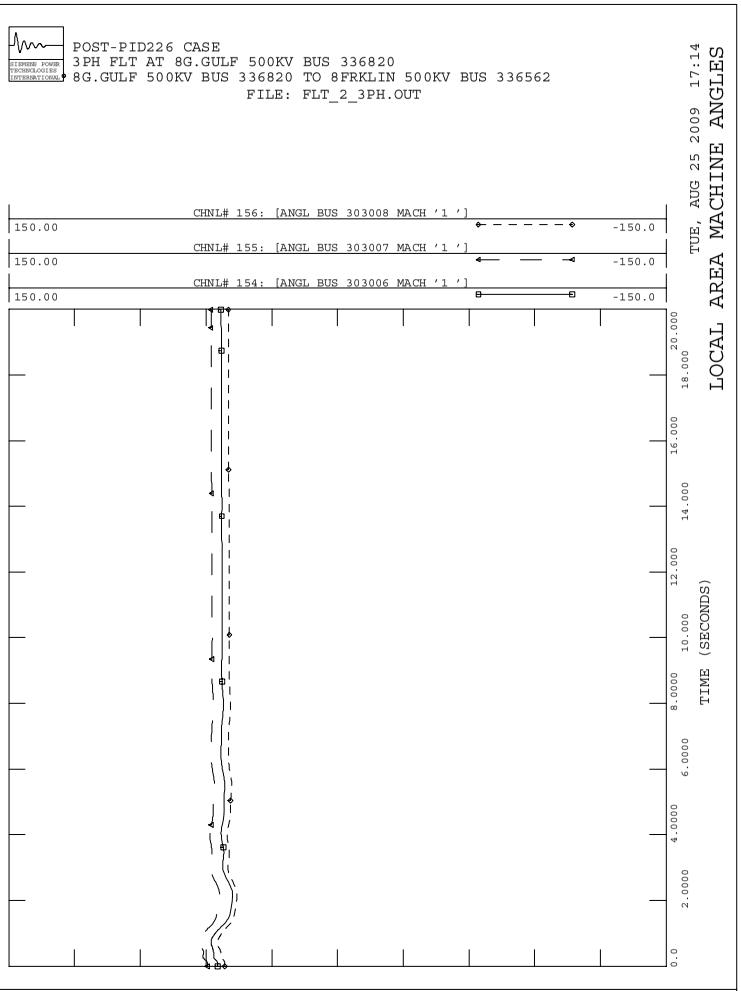
1.2000 0.20000

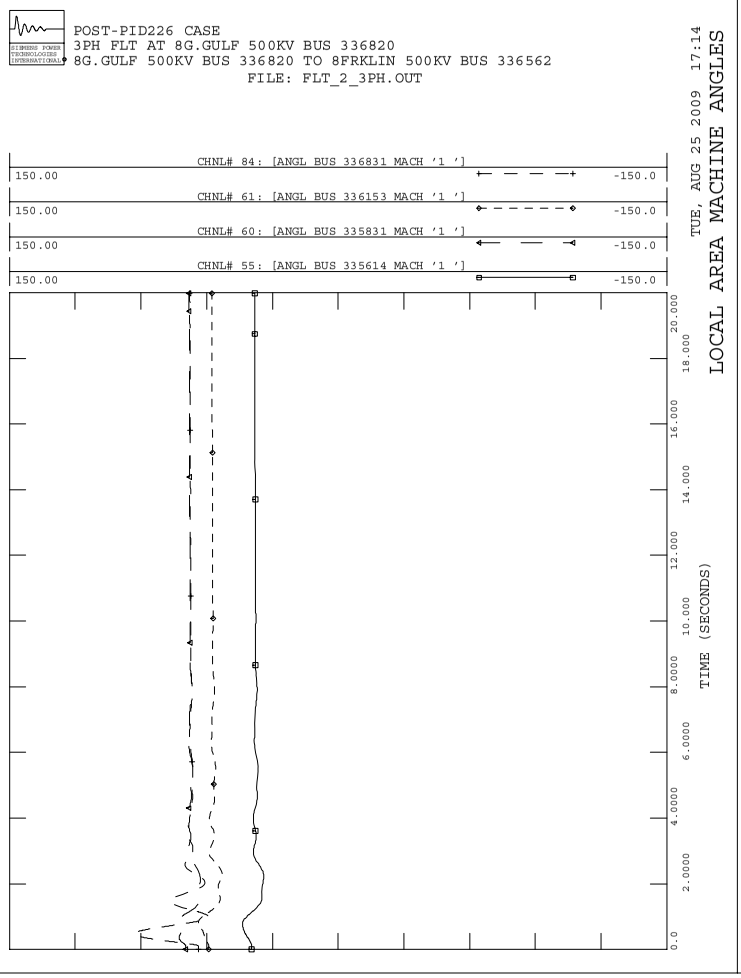
0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

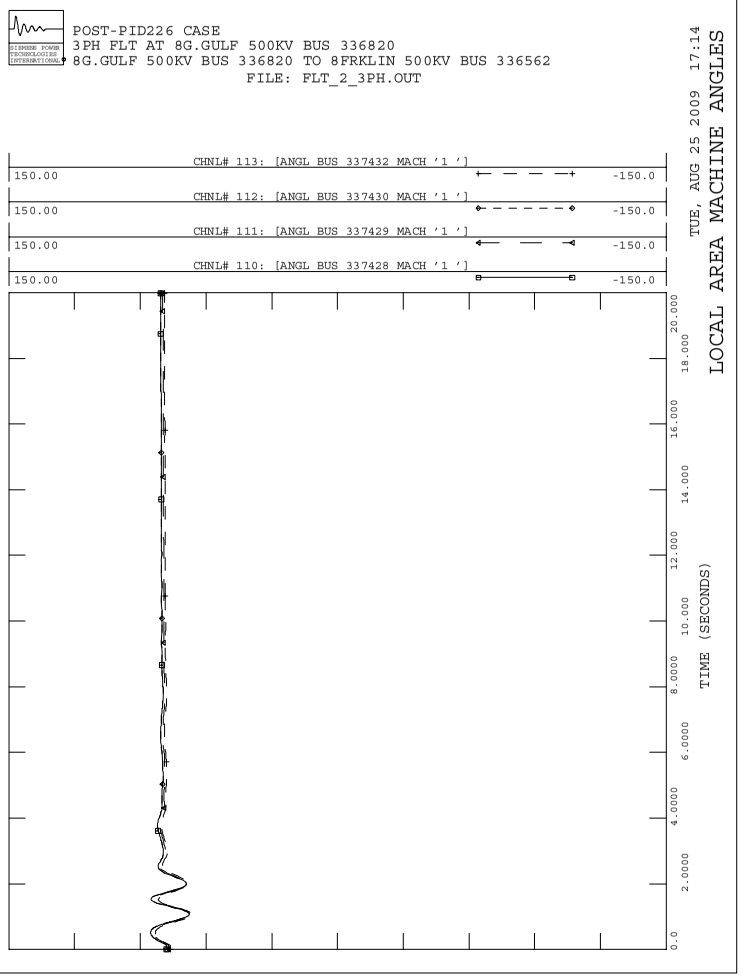
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2_3PH.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

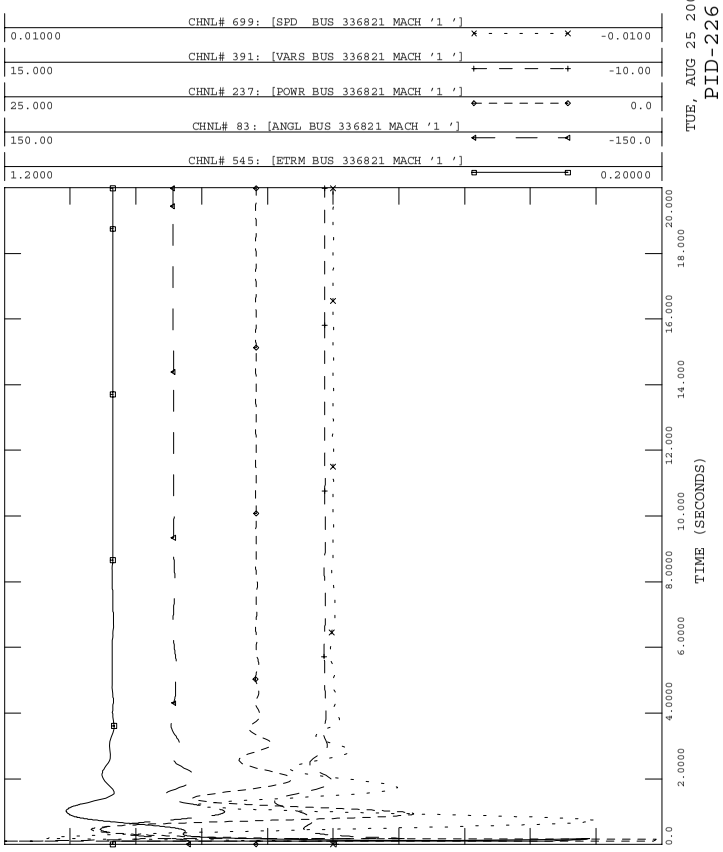

POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2_3PH.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2_3PH.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2_3PH.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.3 FLT_3_3PH

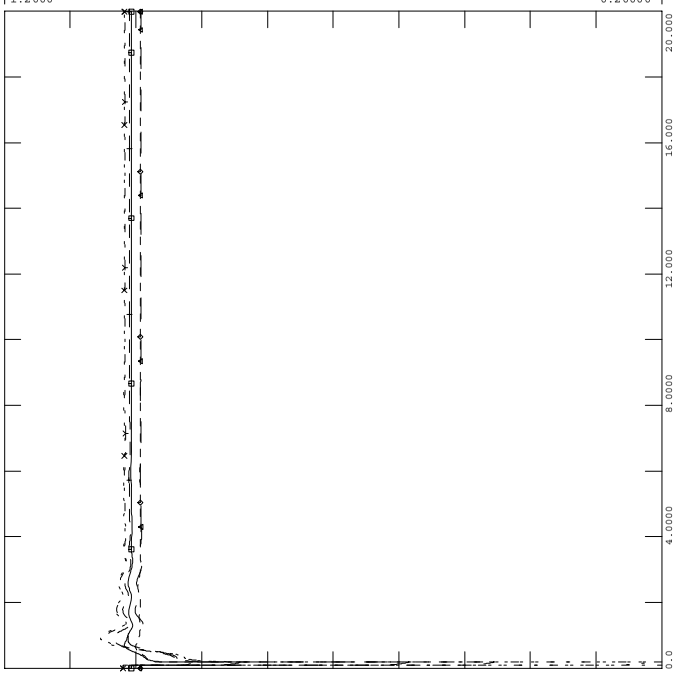
Three phase fault on the 8B.WLSN (#336830) to 8PERYVILL (#337427) 500 kV line, near the 8B.WLSN.

a) Apply 3 Phase Fault at 8B.WLSN 500KV BUS 336830
b) Clear fault after 5 cycles by tripping line from 8B.WLSN 500KV BUS 336830 TO 8PERYVILL 500KV BUS 337427

POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8PERYVILL 500KV BUS 337427
FILE: FLT_3_3PH.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

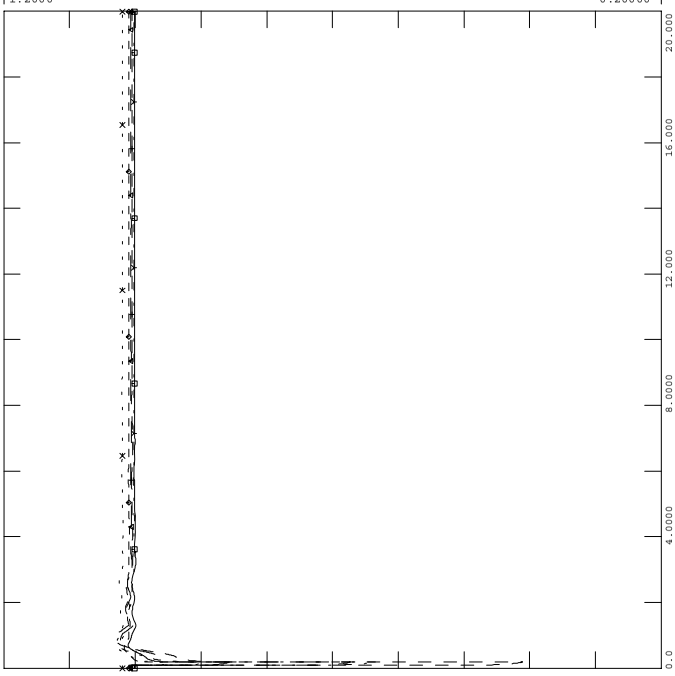



TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8PERYVILL 500KV BUS 337427
FILE: FLT_3_3PH.OUT

CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

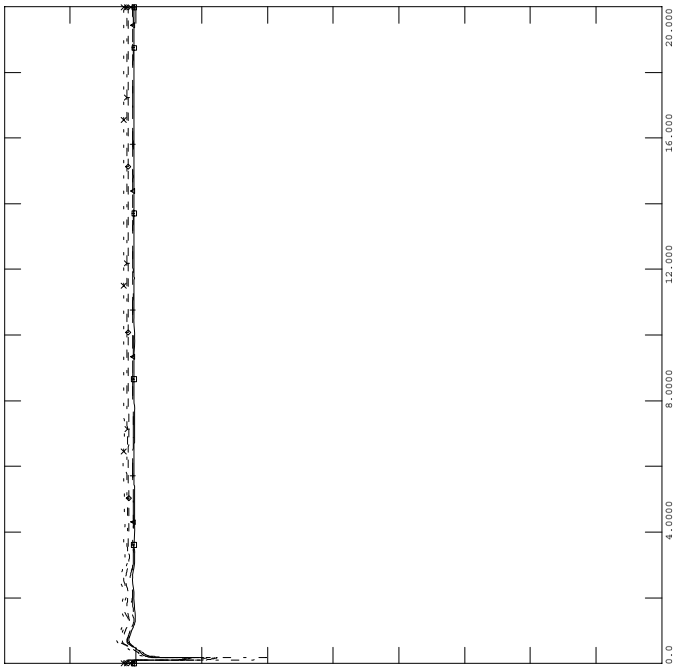



TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8PERYVILL 500KV BUS 337427
FILE: FLT_3_3PH.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

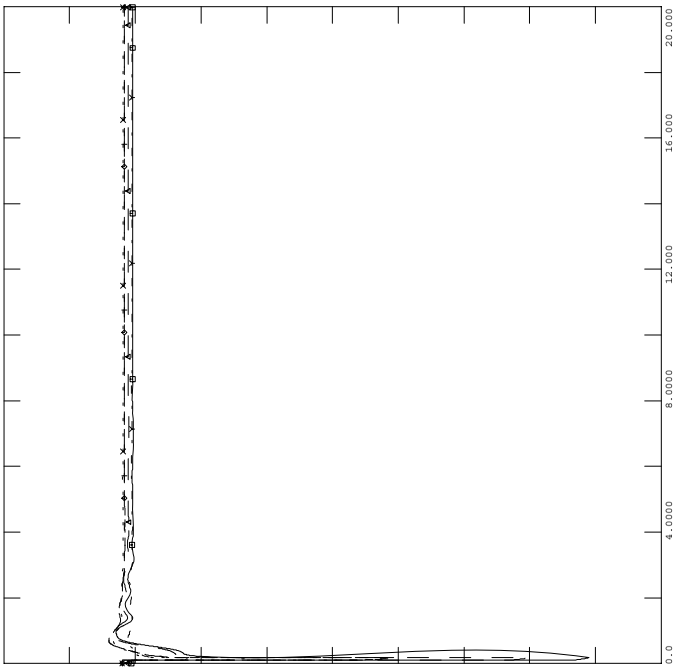



TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8PERYVILL 500KV BUS 337427
FILE: FLT_3_3PH.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000

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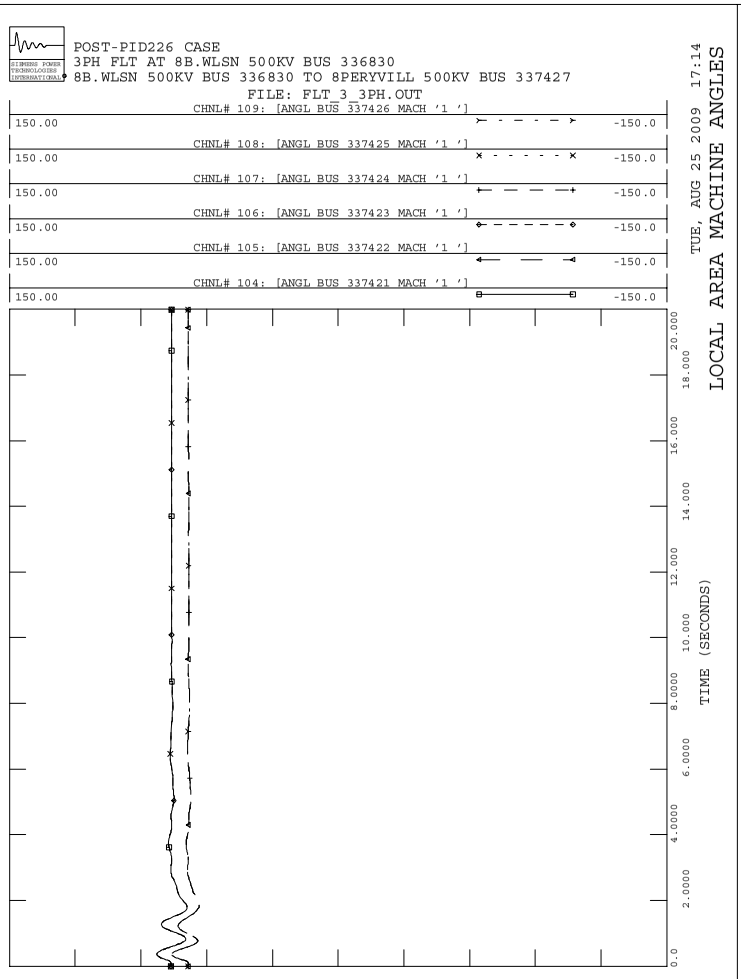
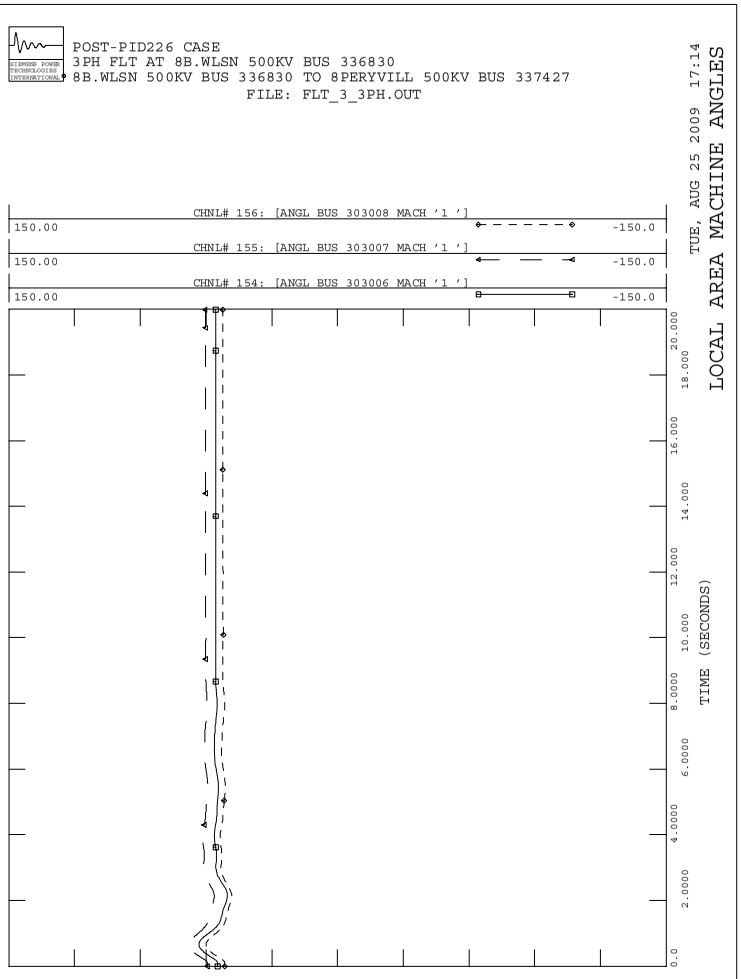
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8PERYVILL 500KV BUS 337427
FILE: FLT_3_3PH.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8PERYVILL 500KV BUS 337427
FILE: FLT_3_3PH.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
150.00
-150.0
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2.0000
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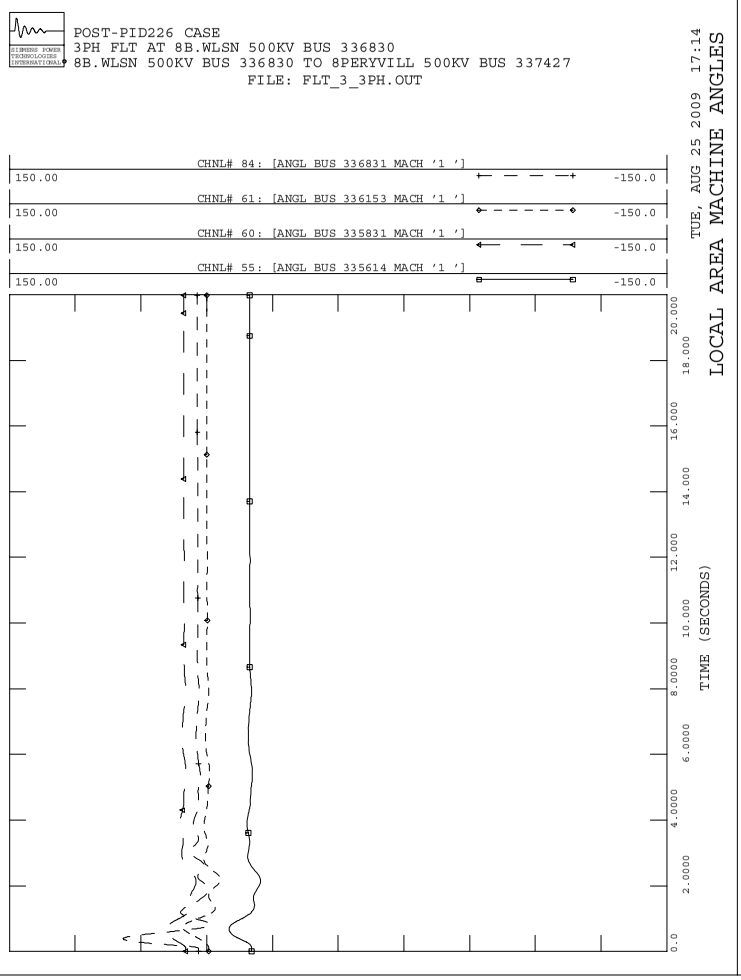
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8PERYVILL 500KV BUS 337427
FILE: FLT_3_3PH.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
150.00
-150.0
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2.0000
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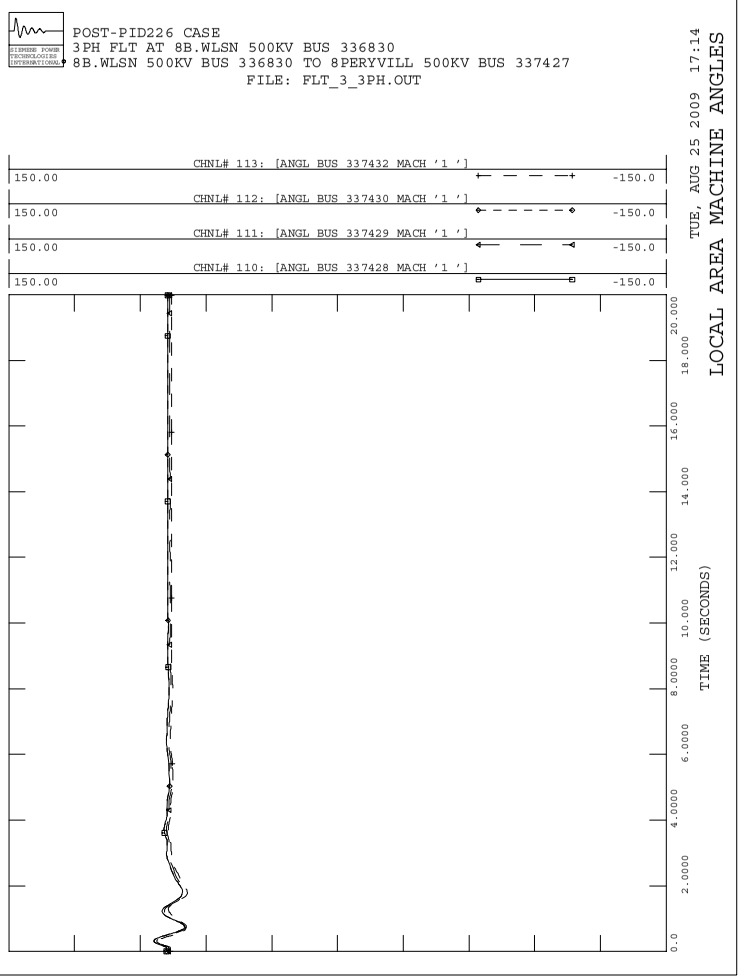
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8PERYVILL 500KV BUS 337427
FILE: FLT_3_3PH.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
150.00
-150.0
0.0
2.0000
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12.000
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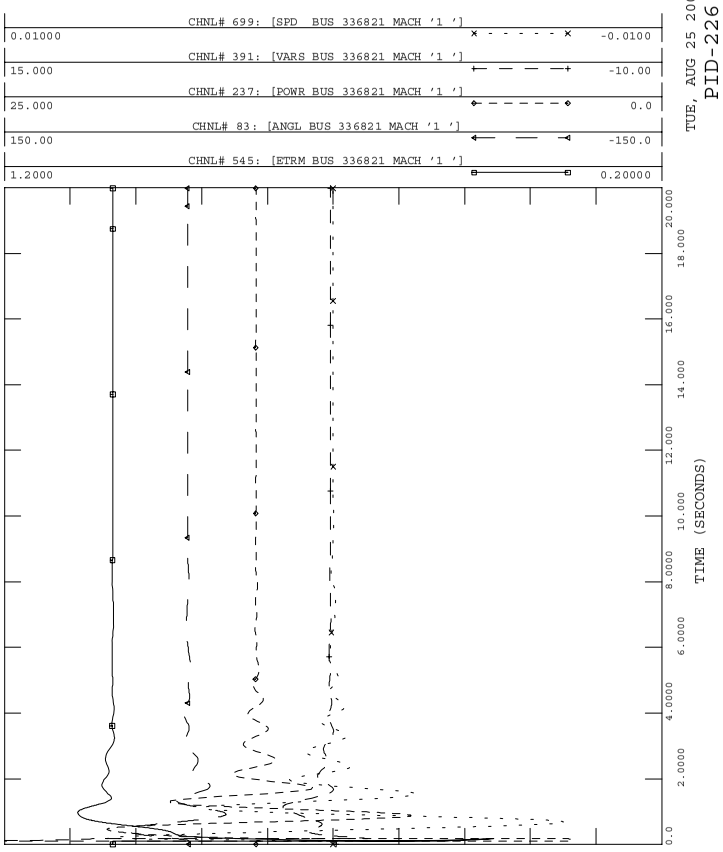
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8PERYVILL 500KV BUS 337427
FILE: FLT_3_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.4 FLT_4_3PH

Three phase fault on the 8B.WLSN (#336830)) to 8R.BRAS (#336839) 500 kV line, near the 8B.WLSN.

a) Apply 3 Phase Fault at 8B.WLSN 500KV BUS 336830
b) Clear fault after 5 cycles by tripping line from 8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839

POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4_3PH.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4_3PH.OUT

CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4_3PH.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

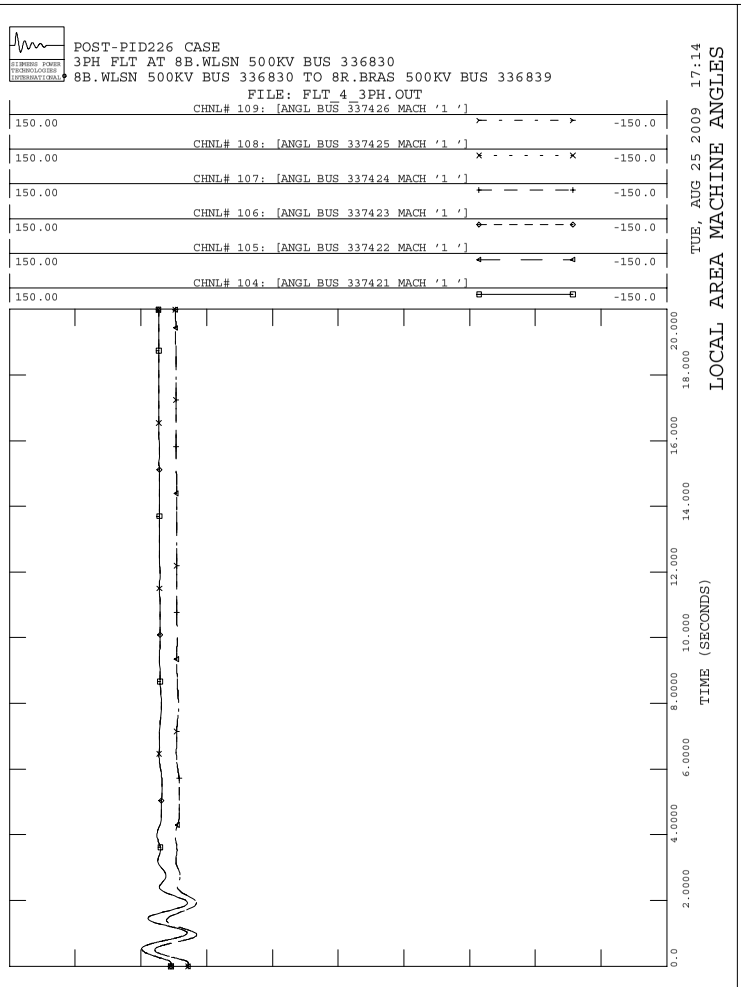
POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4_3PH.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4_3PH.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
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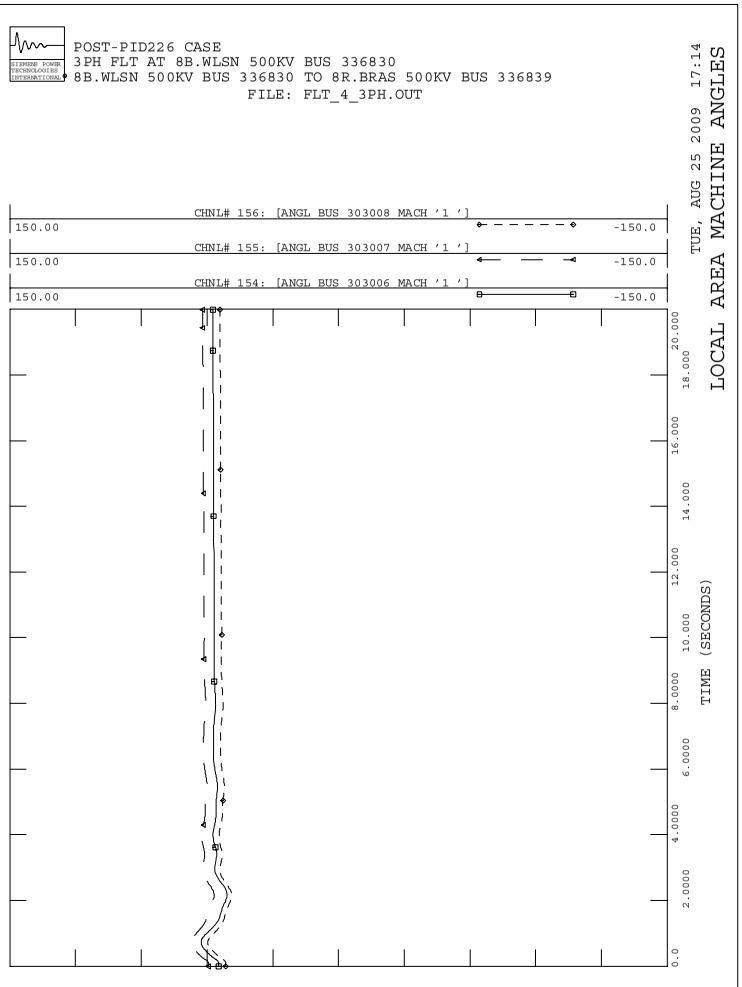
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4_3PH.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
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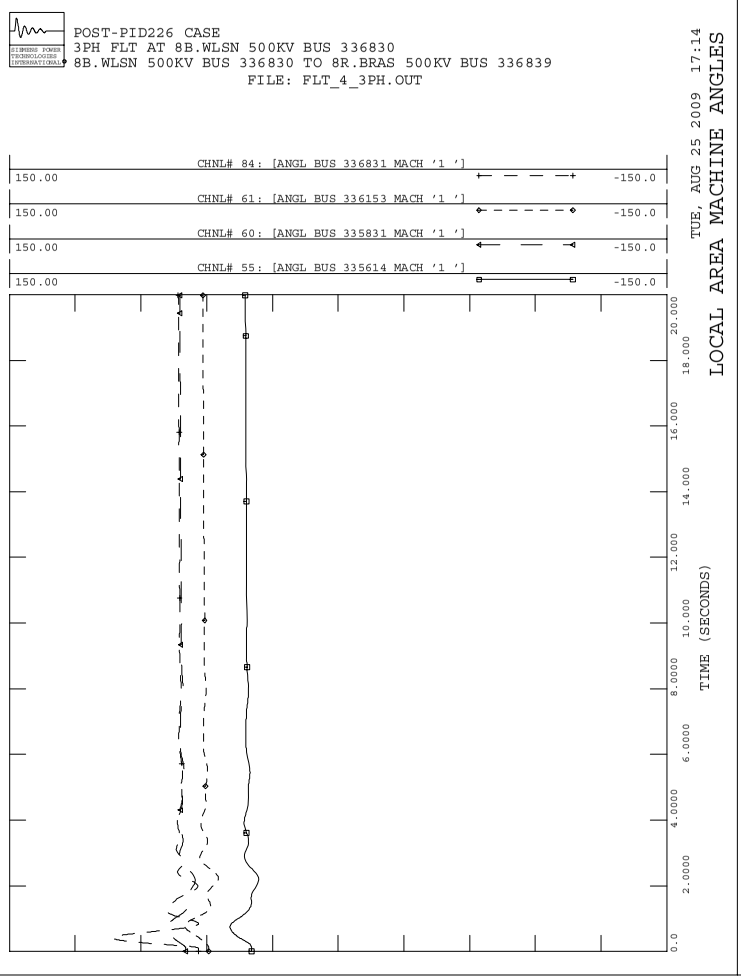
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4_3PH.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
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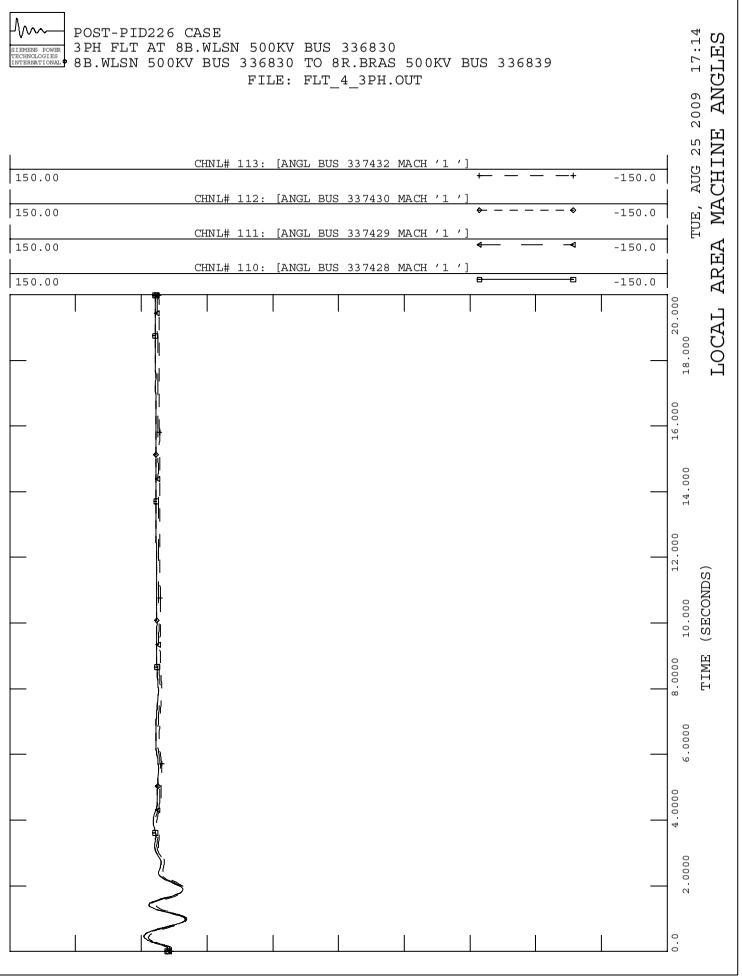
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4_3PH.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
150.00
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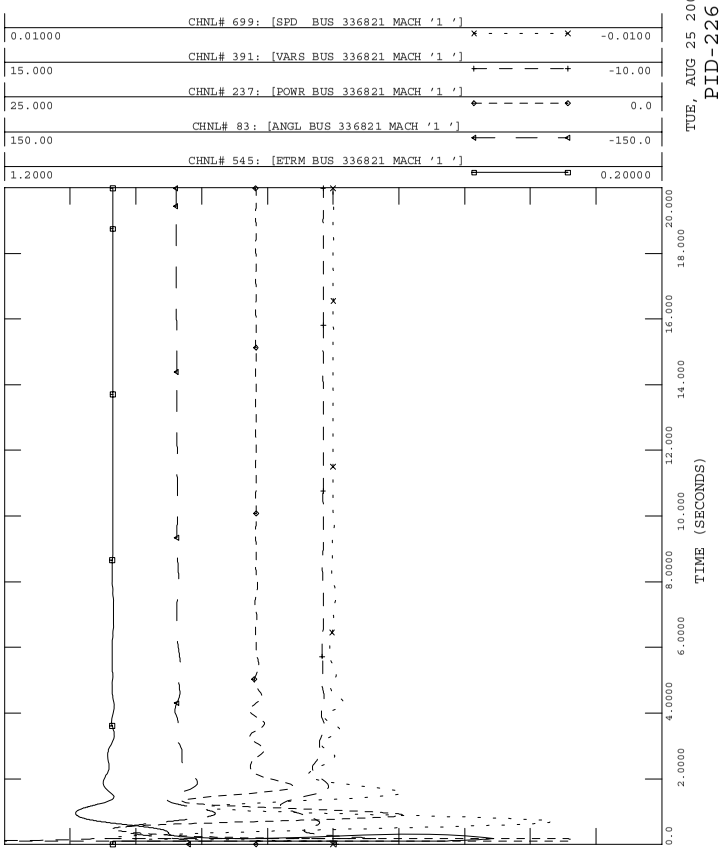
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4_3PH.OUT

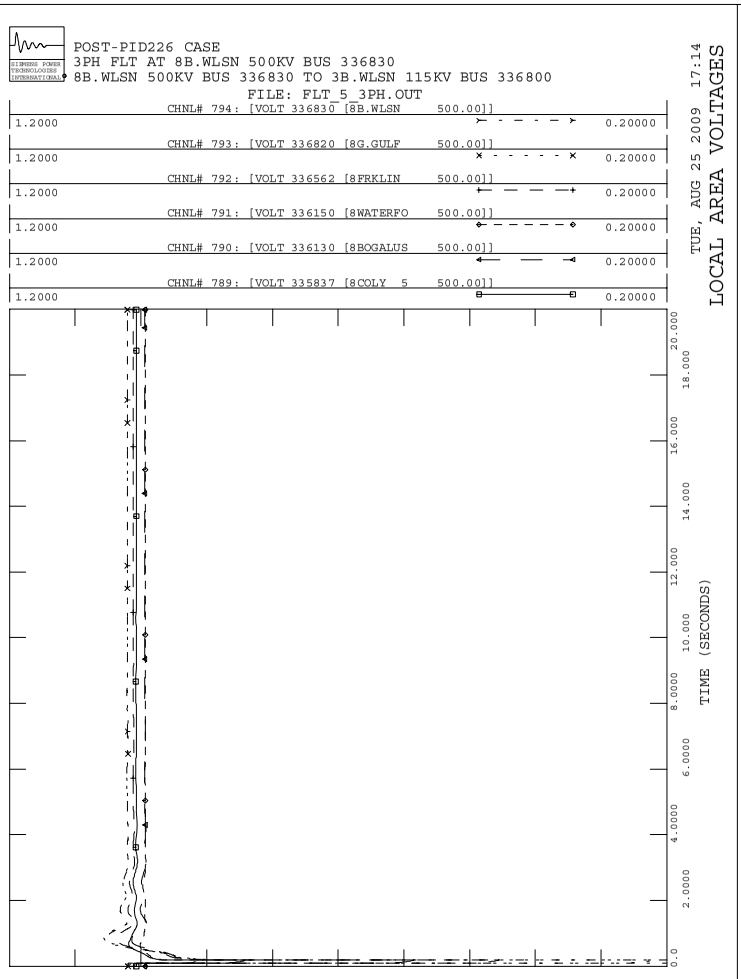
TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.5 FLT_5_3PH

Three phase fault on the 8B.WLSN (#336830) to 3B.WLSN (#336800) transformer, near the 8B.WLSN.

a) Apply 3 Phase Fault AT 8B.WLSN 500KV BUS 336830
b) Clear fault after 5 cycles by tripping transformer from 8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5_3PH.OUT
CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]
1.2000
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8.0000
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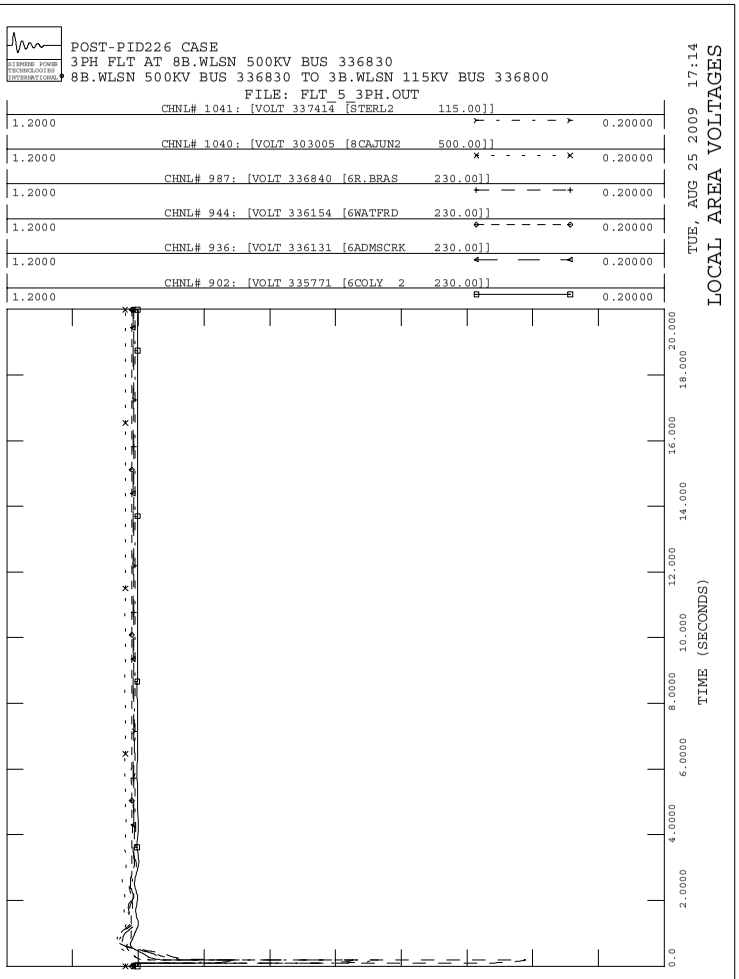
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5_3PH.OUT
CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]
1.2000
0.20000
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16.000
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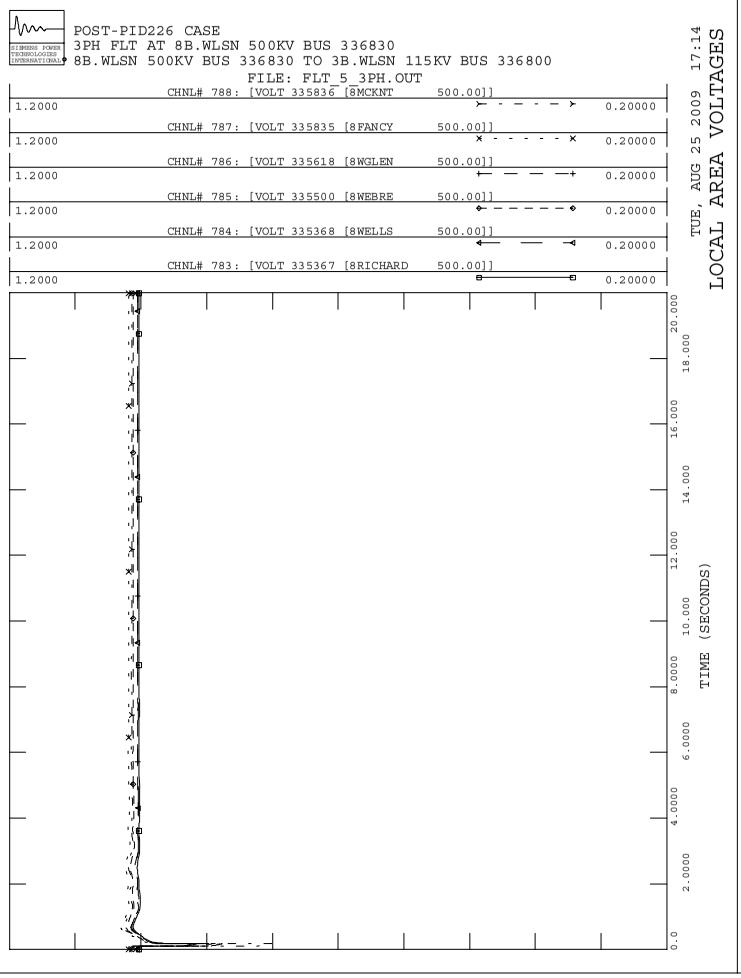
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5_3PH.OUT
CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]
1.2000
0.20000
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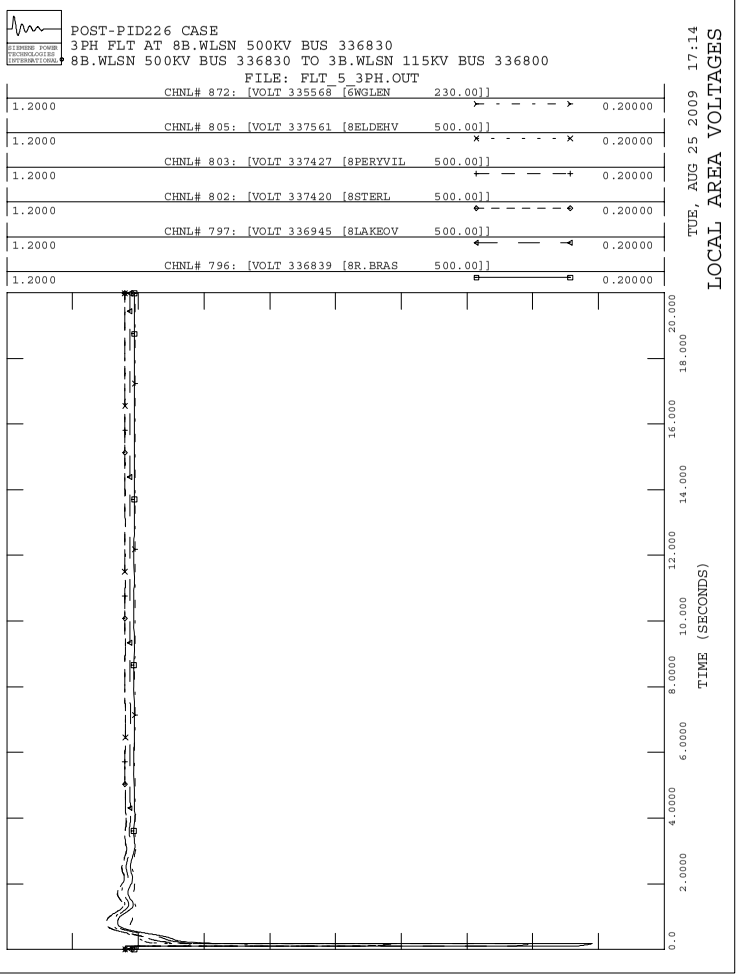
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5_3PH.OUT
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]
1.2000
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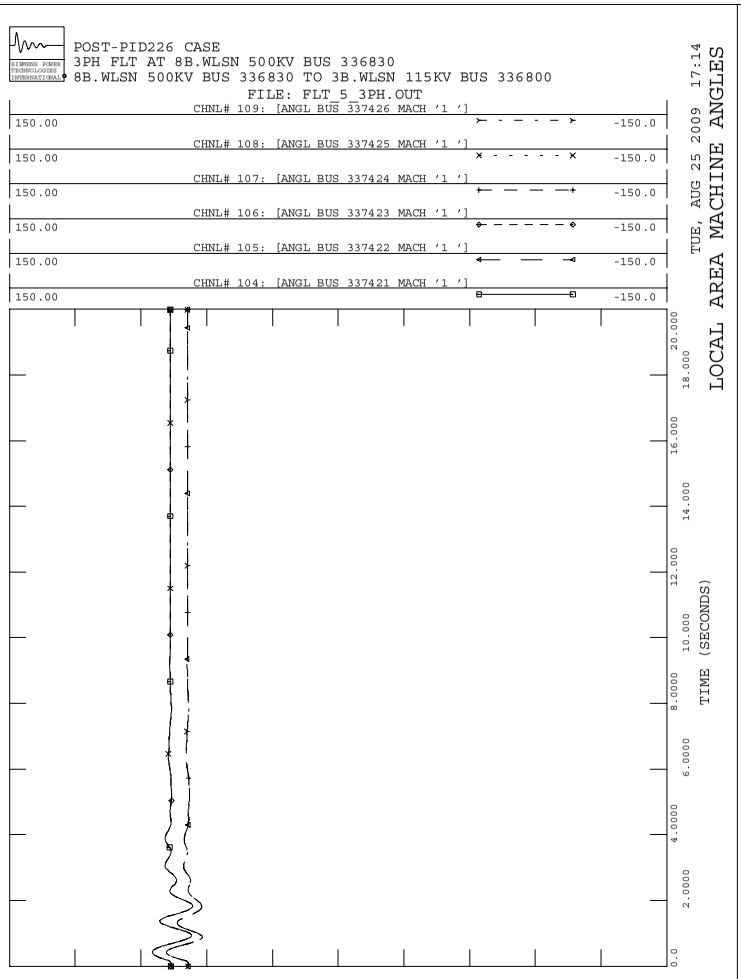
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5_3PH.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
150.00
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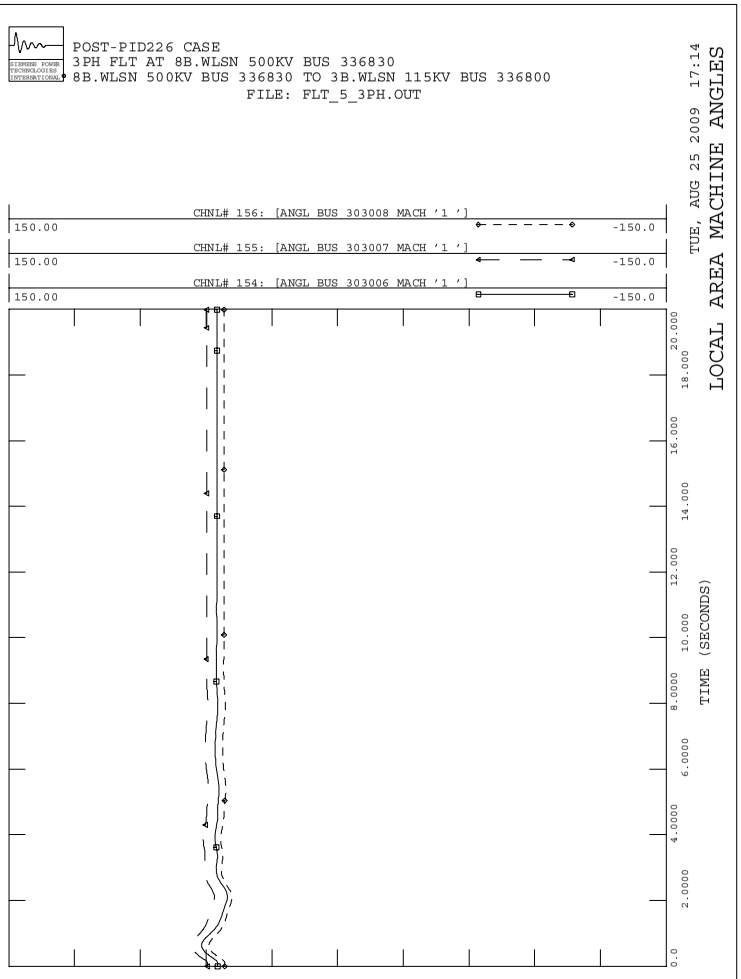
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5_3PH.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
150.00
-150.0
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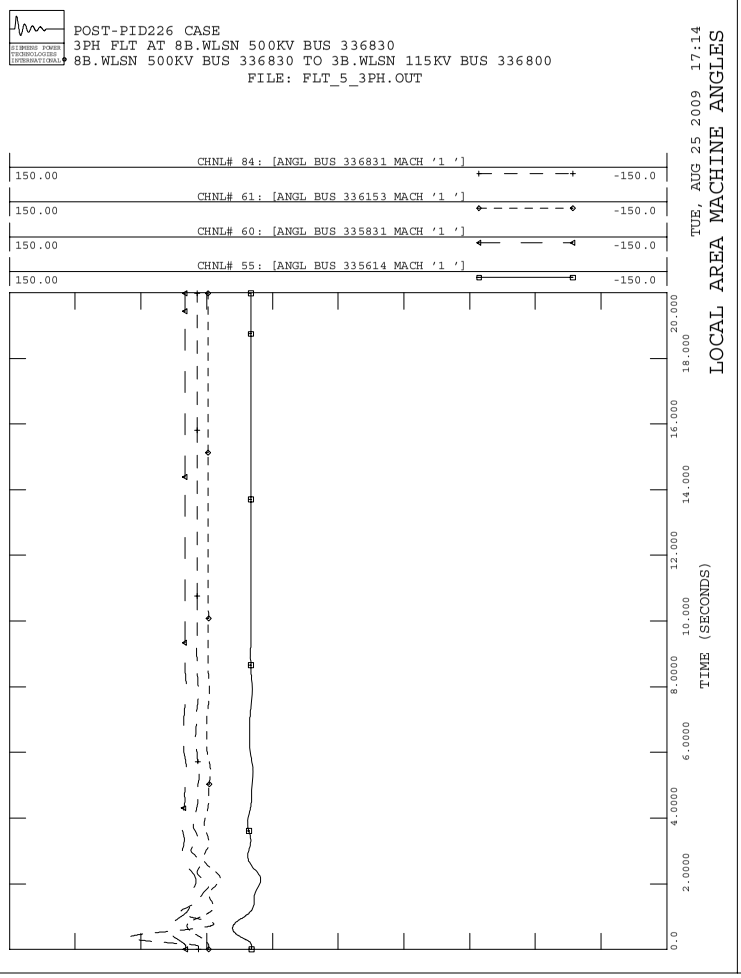
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5_3PH.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
150.00
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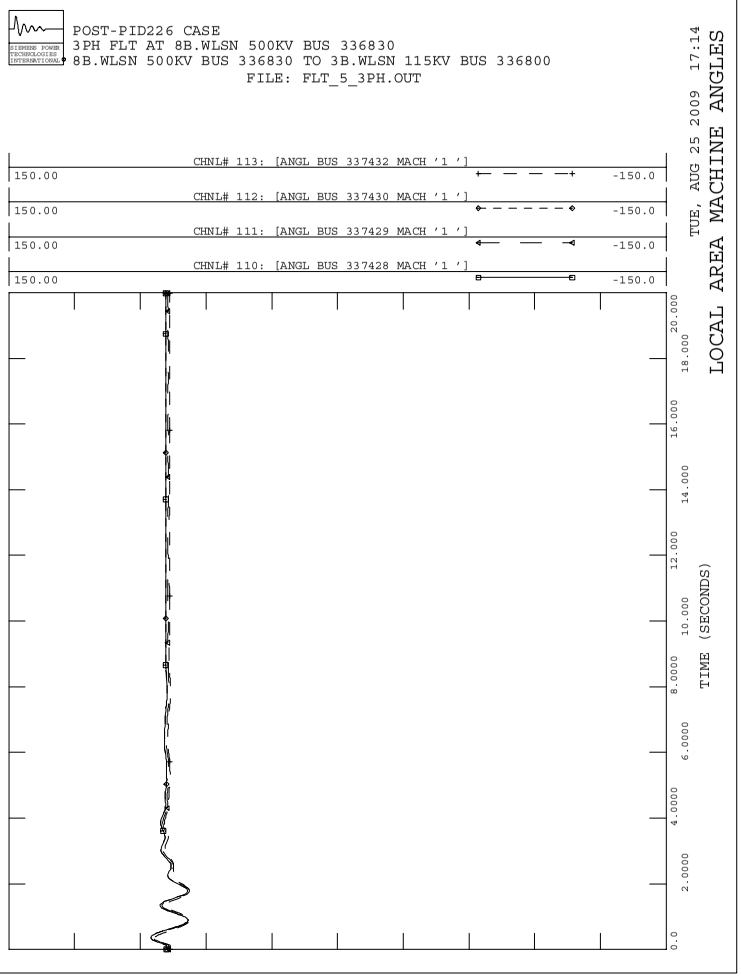
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5_3PH.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
150.00
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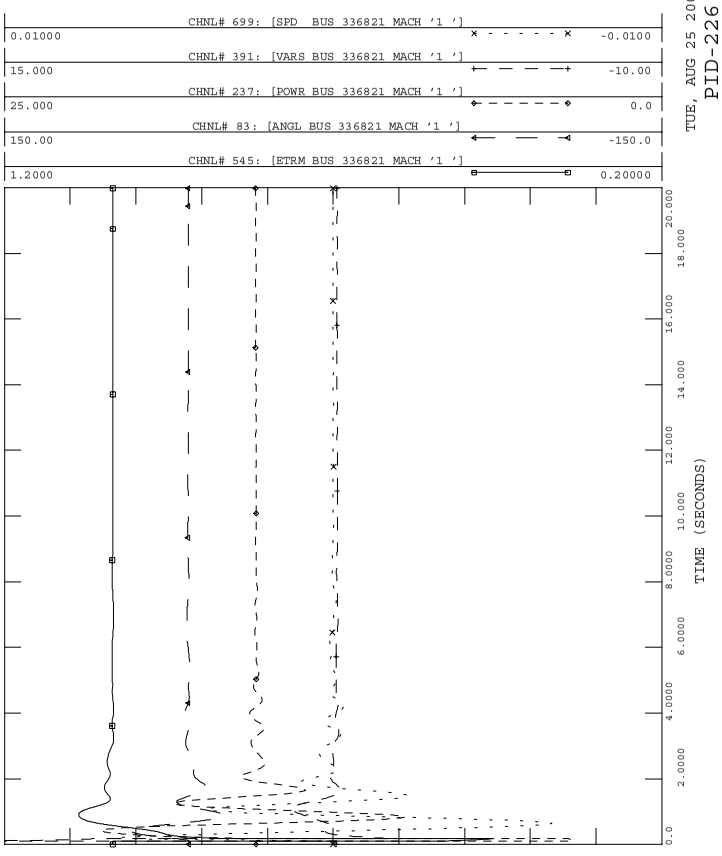
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.6 FLT_6_3PH

Three phase fault on the 8R.BRAS (#336839) to 8FRKLIN (#336562) 500 kV line, near the 8R.BRAS.

a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Clear fault after 5 cycles by tripping line from 8R.BRAS 500KV BUS 336839 TO 8FRKLIN 500KV BUS 336562

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_6_3PH.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_6_3PH.OUT

CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

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TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_6_3PH.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

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TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_6_3PH.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

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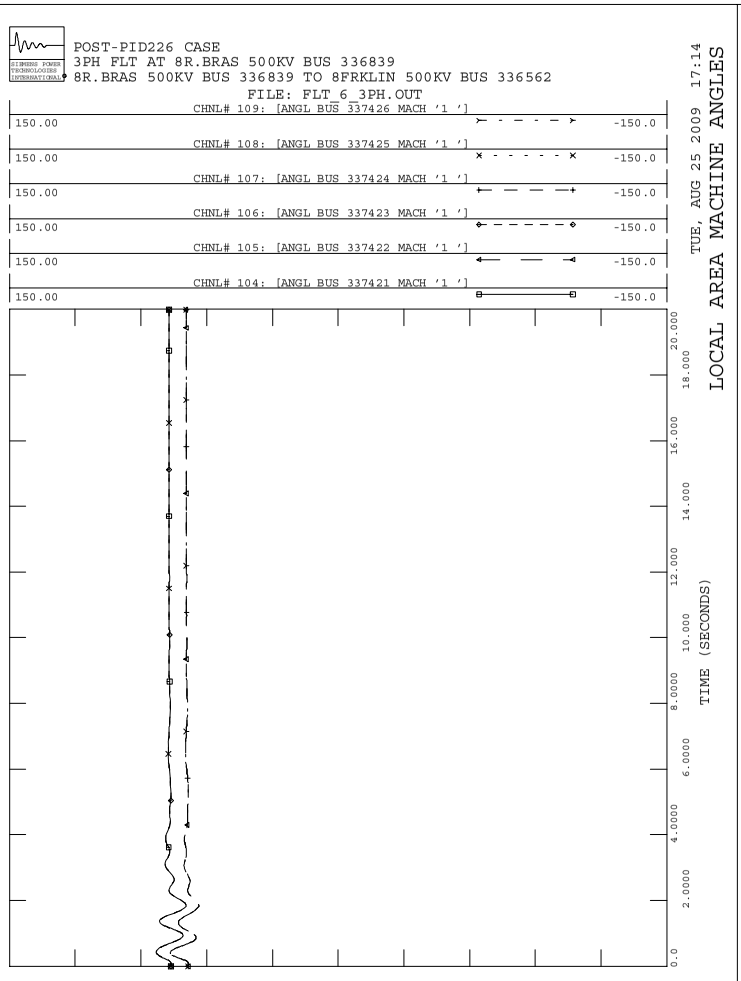
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_6_3PH.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
150.00
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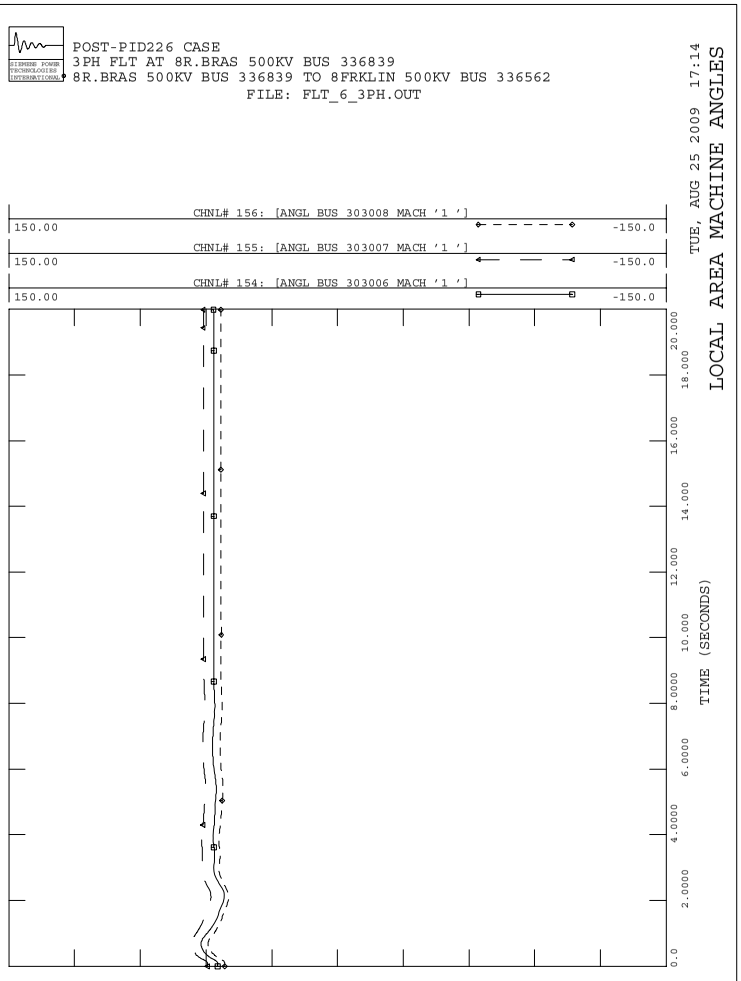
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_6_3PH.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
150.00
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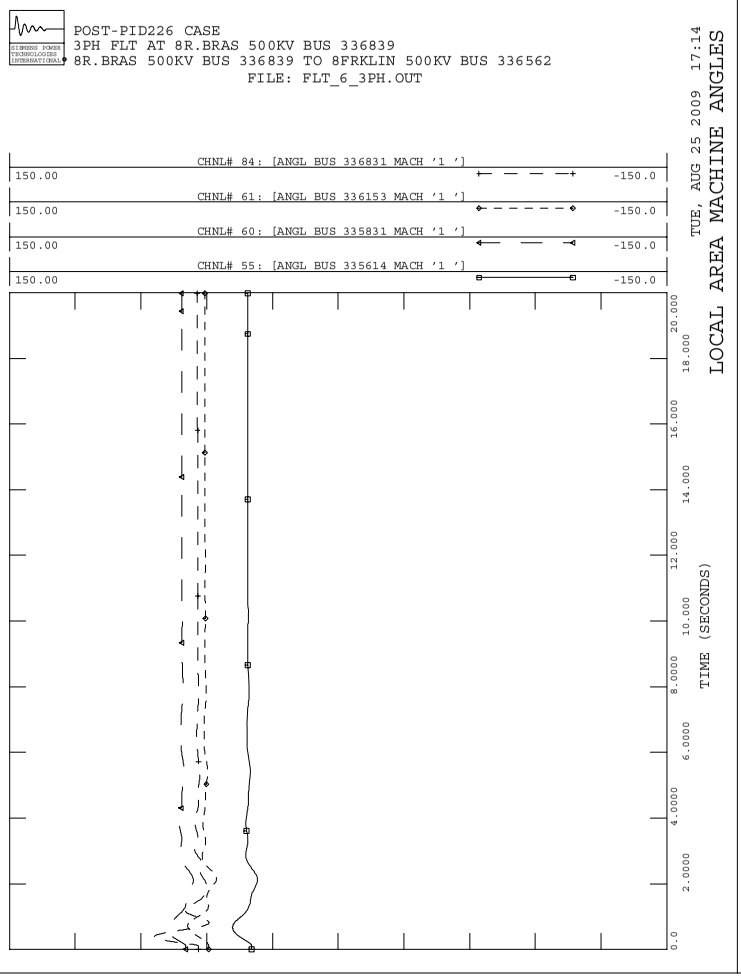
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_6_3PH.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
150.00
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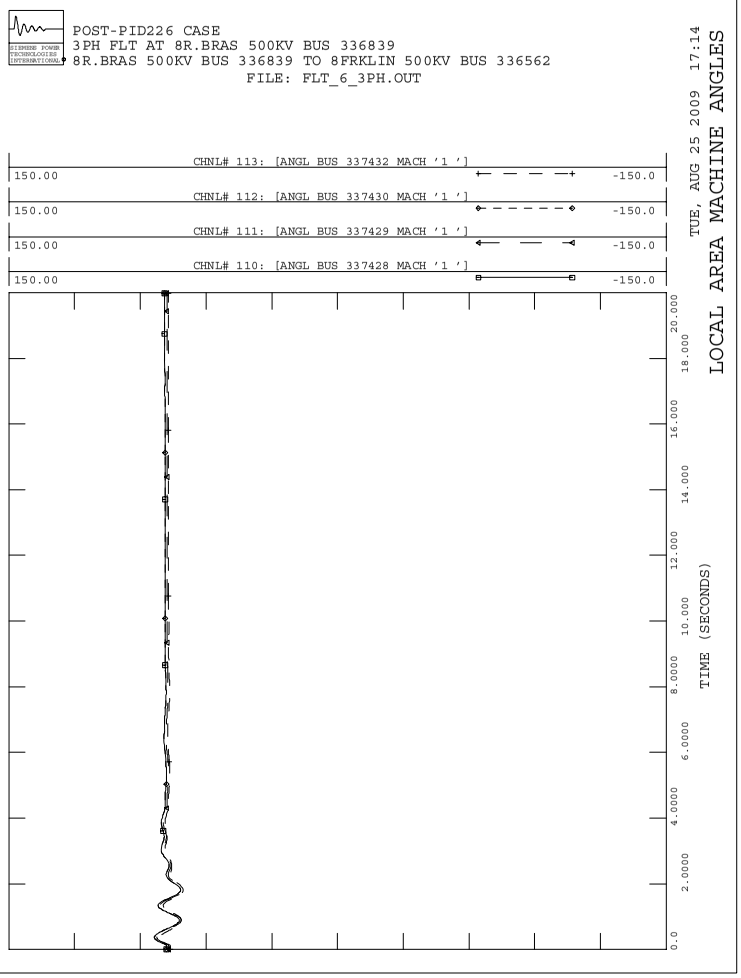
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_6_3PH.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
150.00
-150.0
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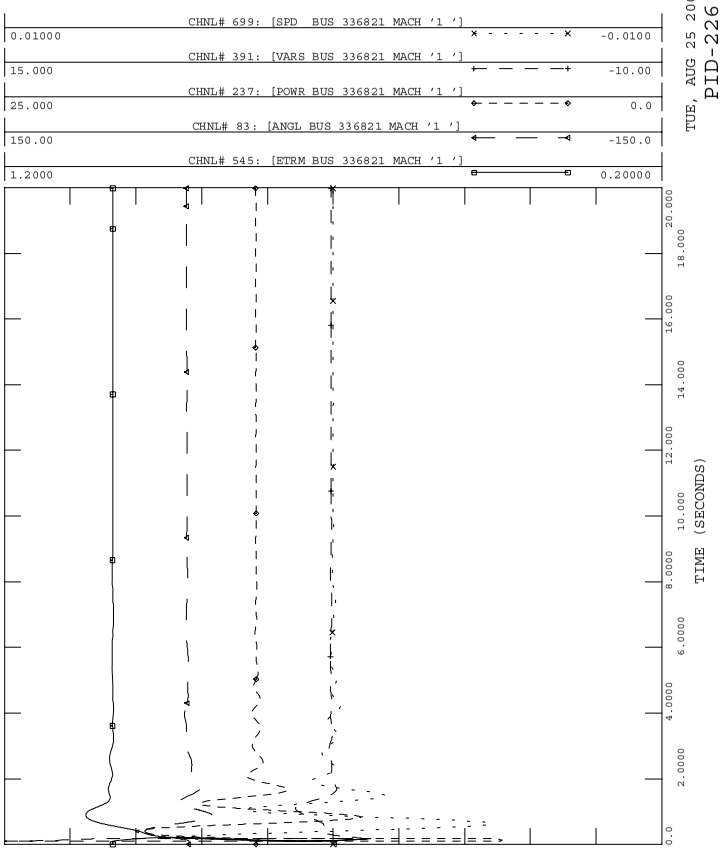
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_6_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS

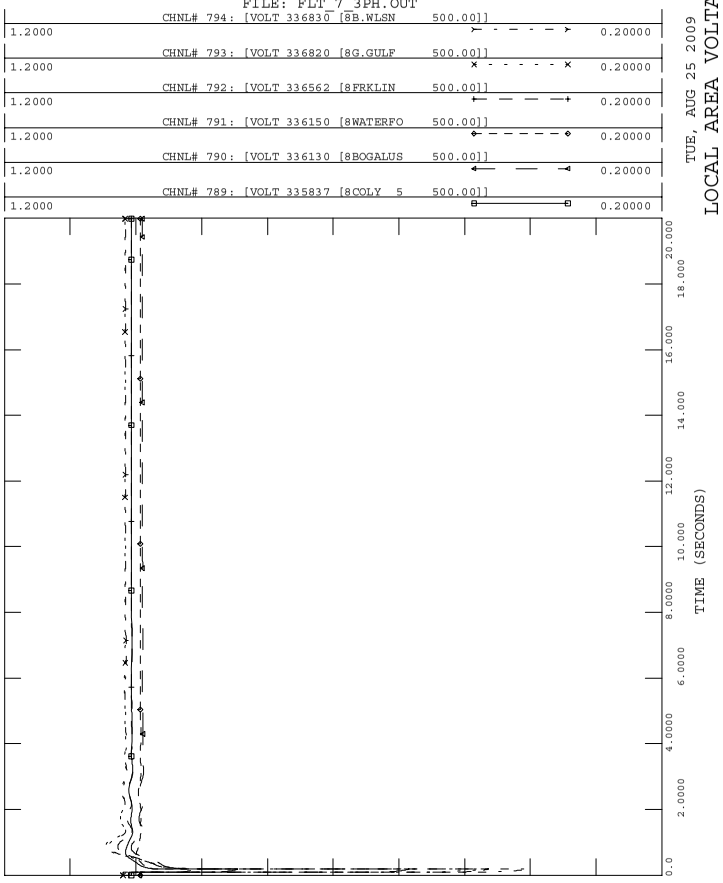


## C.7 FLT_7_3PH

Three phase fault on the 8R.BRAS (#336839) to 8LAKEOV (#336945) 500 kV line, near the 8R.BRAS.

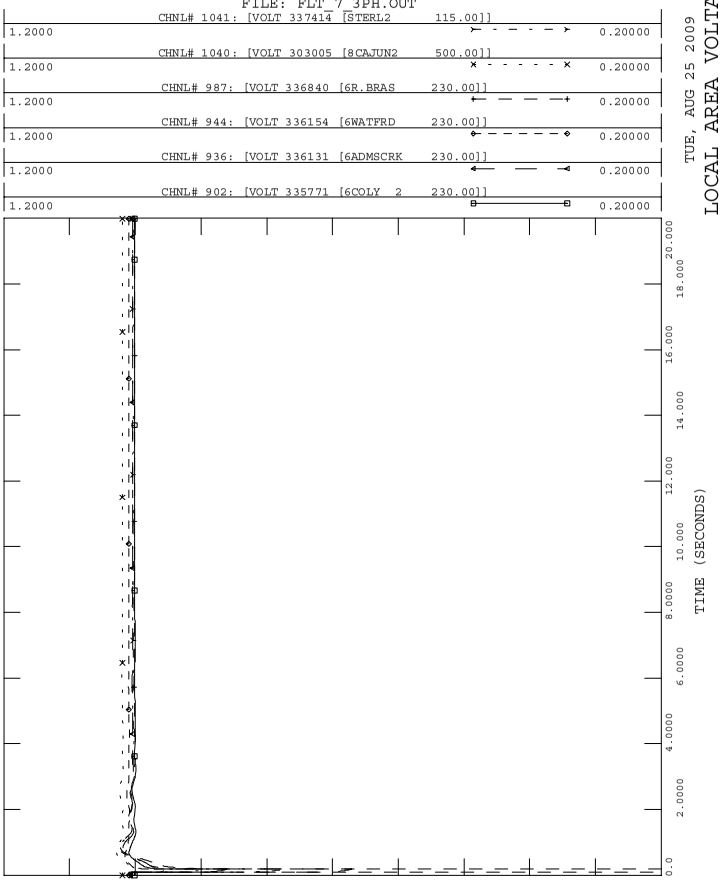
a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Clear fault after 5 cycles by tripping line from 8R.BRAS 500KV BUS 336839 TO 8LAKEOV 500KV BUS 336945

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8LAKEOV 500KV BUS 336945
FILE: FLT_7_3PH.OUT



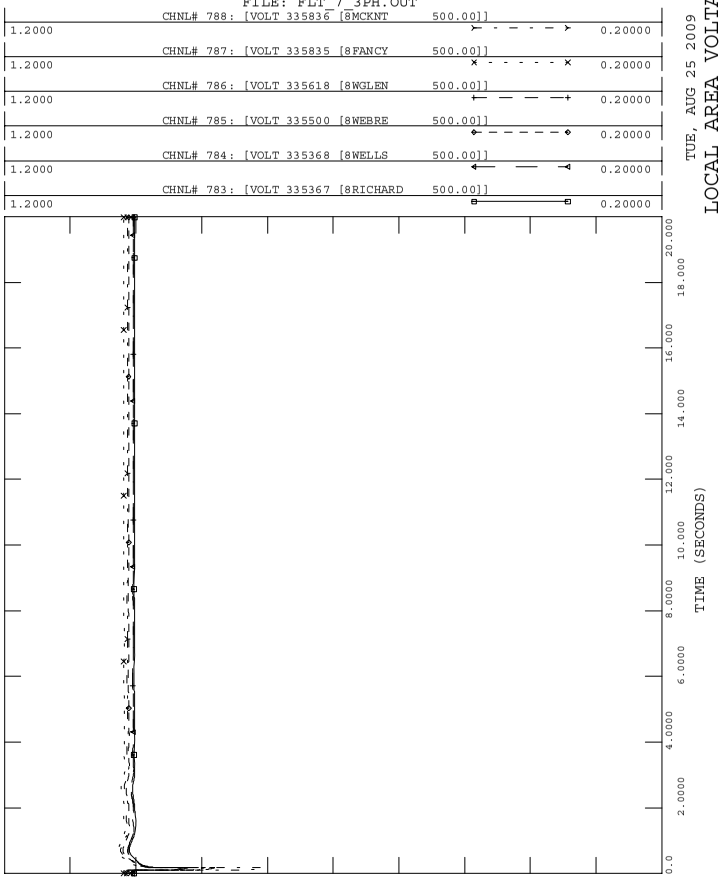

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8LAKEOV 500KV BUS 336945
FILE: FLT_7_3PH.OUT



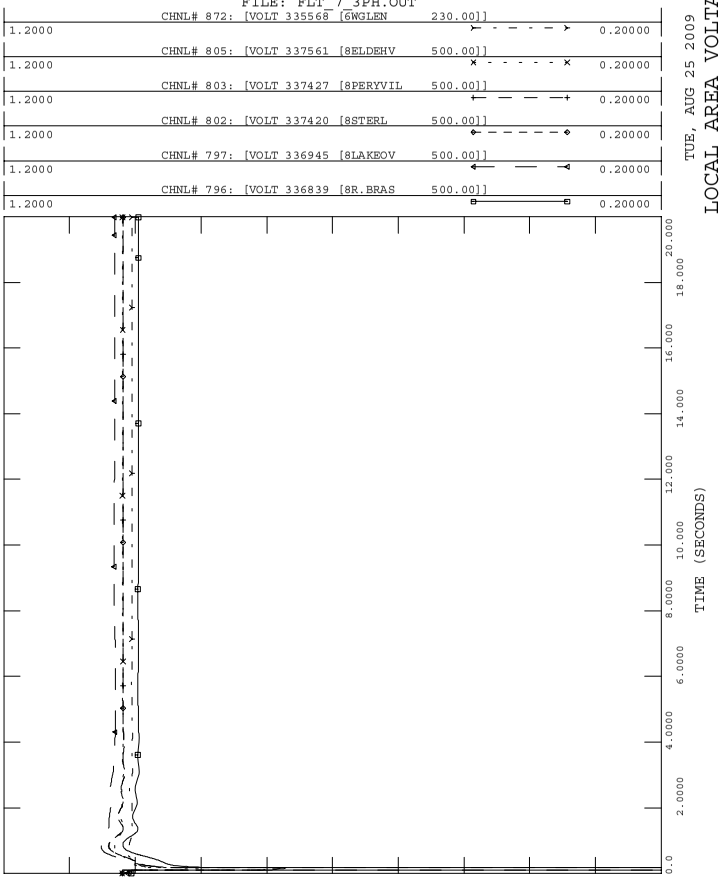

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8LAKEOV 500KV BUS 336945
FILE: FLT_7_3PH.OUT



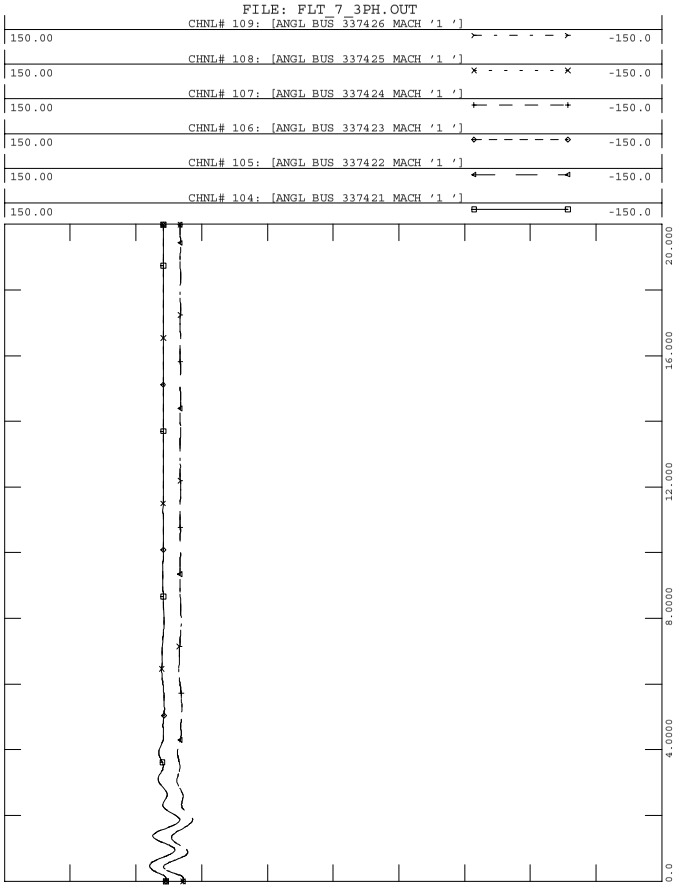

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8LAKEOV 500KV BUS 336945
FILE: FLT_7_3PH.OUT



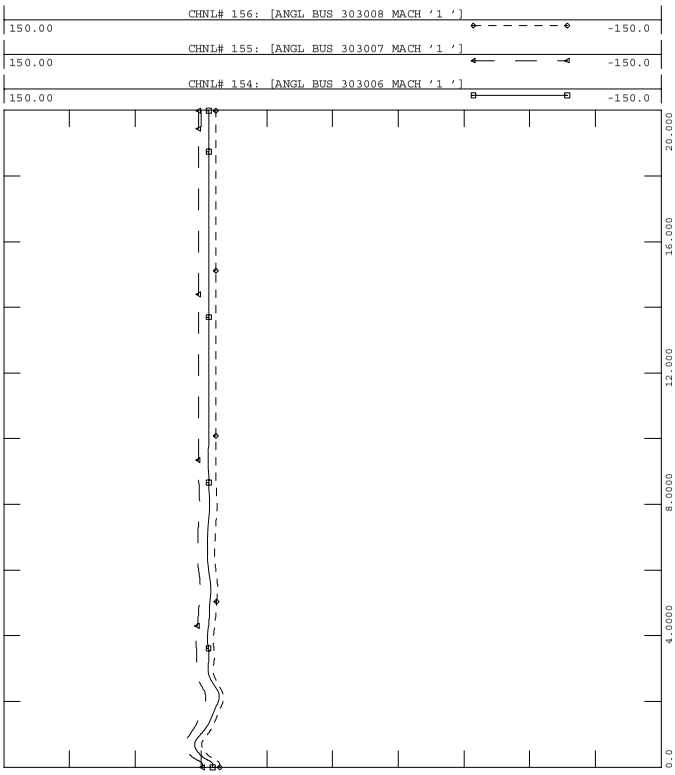

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8LAKEOV 500KV BUS 336945
FILE: FLT_7_3PH.OUT



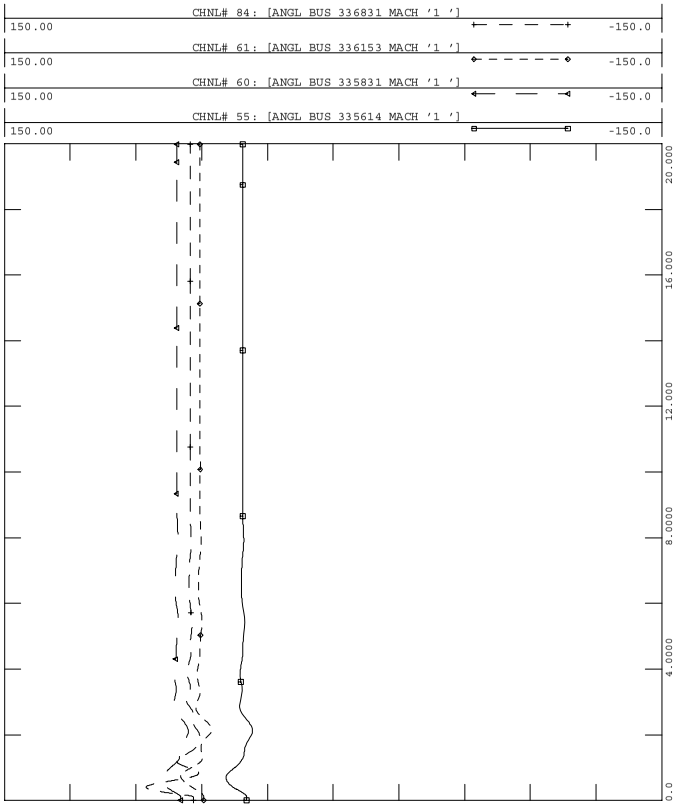

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8LAKEOV 500KV BUS 336945
FILE: FLT_7_3PH.OUT



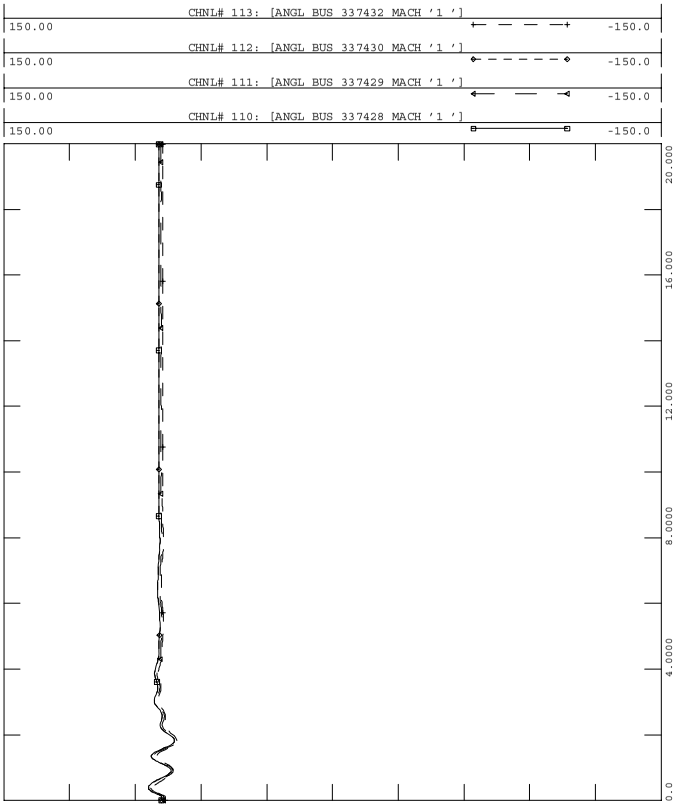

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8LAKEOV 500KV BUS 336945
FILE: FLT_7_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

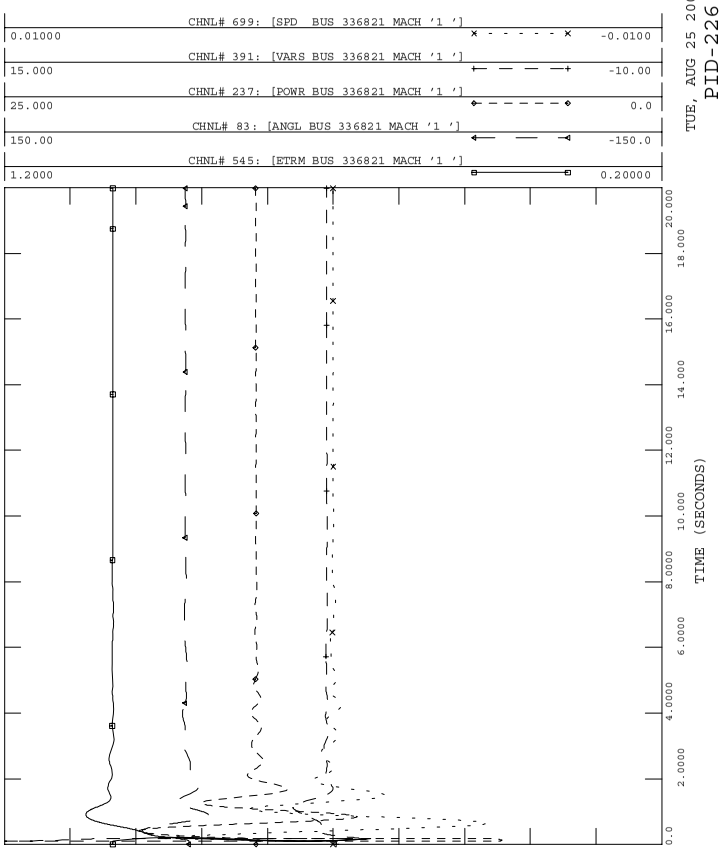
POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8LAKEOV 500KV BUS 336945
FILE: FLT_7_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8LAKEOV 500KV BUS 336945
FILE: FLT_7_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS

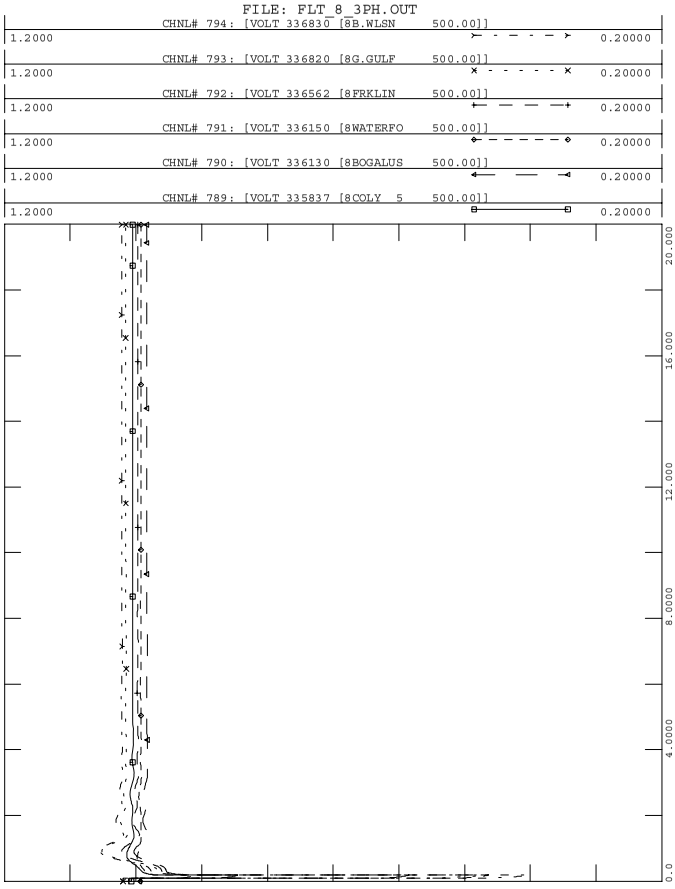


## C.8 FLT_8_3PH

Three phase fault on the 8R.BRAS (#336839) to 8B.WLSN (#336830) 500 kV line, near the 8R.BRAS.

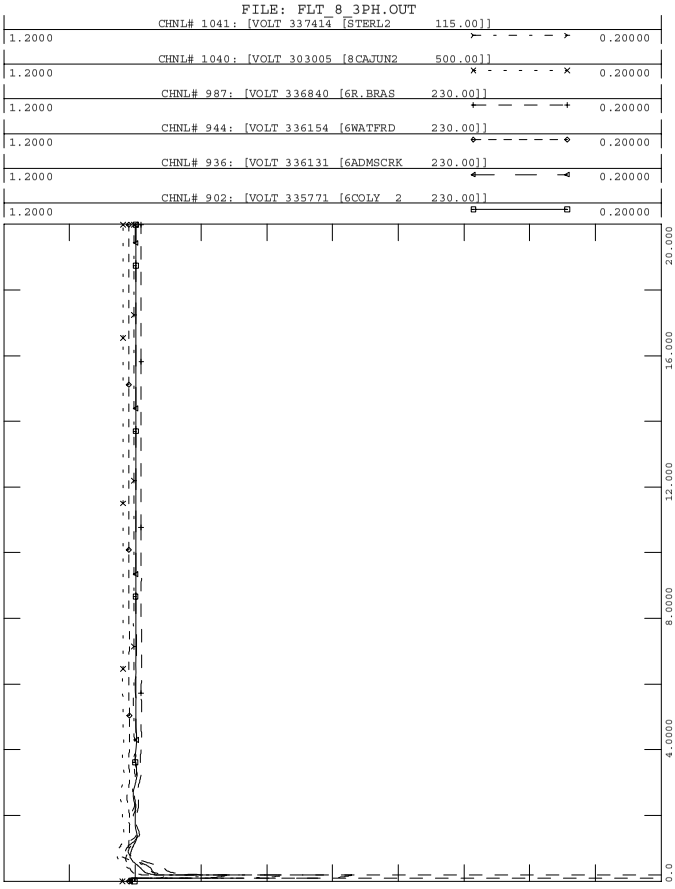
a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Clear fault after 5 cycles by tripping line from 8R.BRAS 500KV BUS 336839 TO 8B.WLSN 500KV BUS 336830

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_8_3PH.OUT



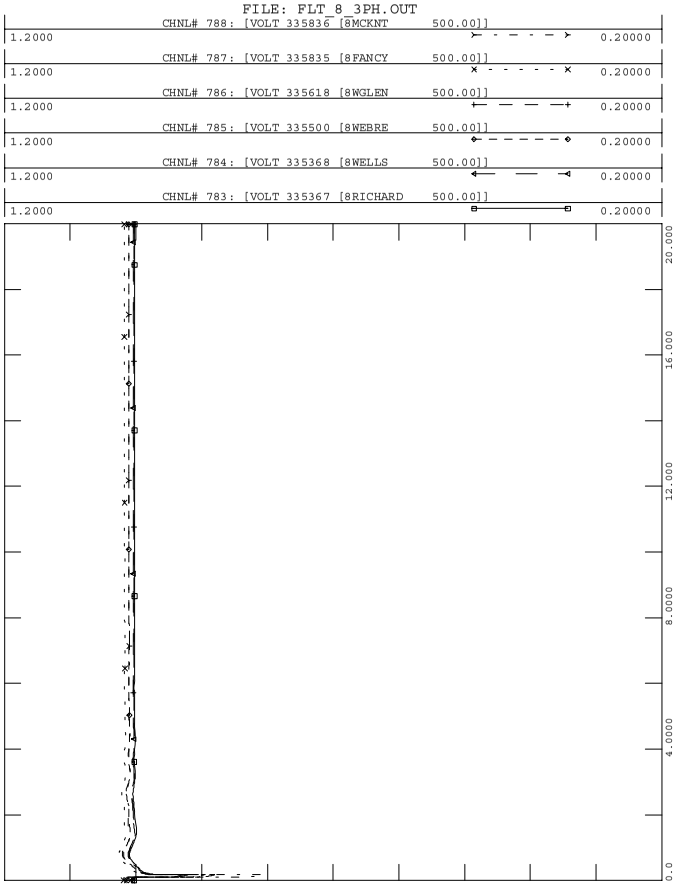

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_8_3PH.OUT



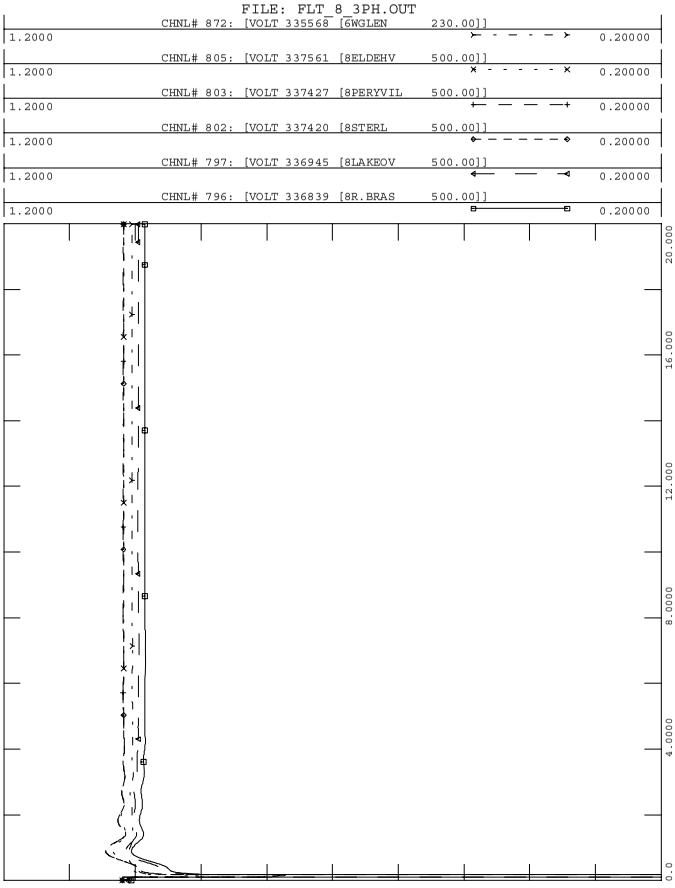

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_8_3PH.OUT



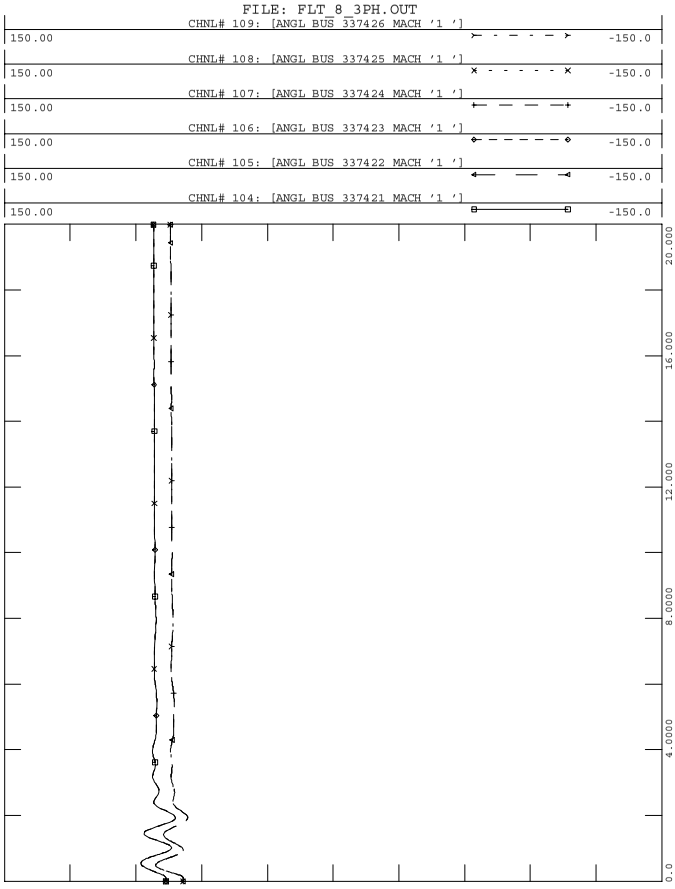

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_8_3PH.OUT



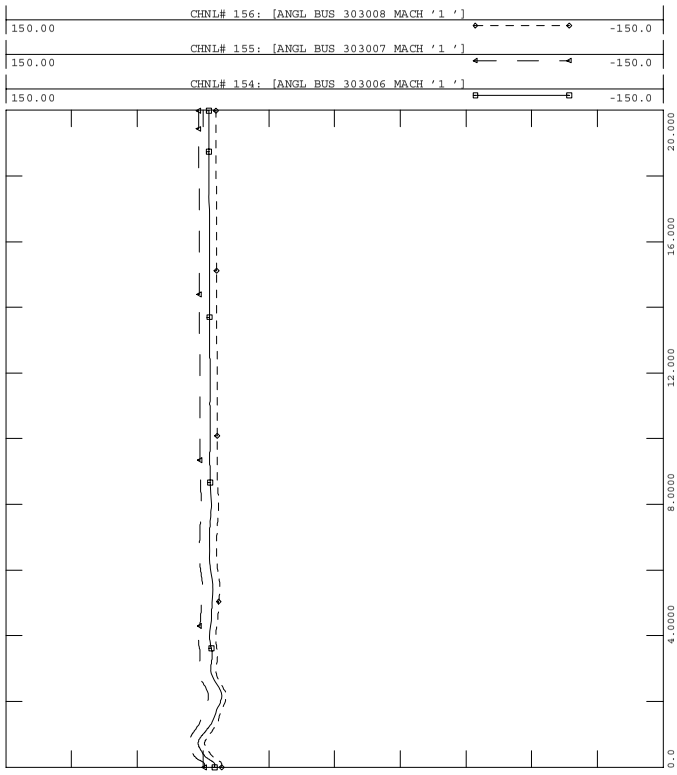

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_8_3PH.OUT



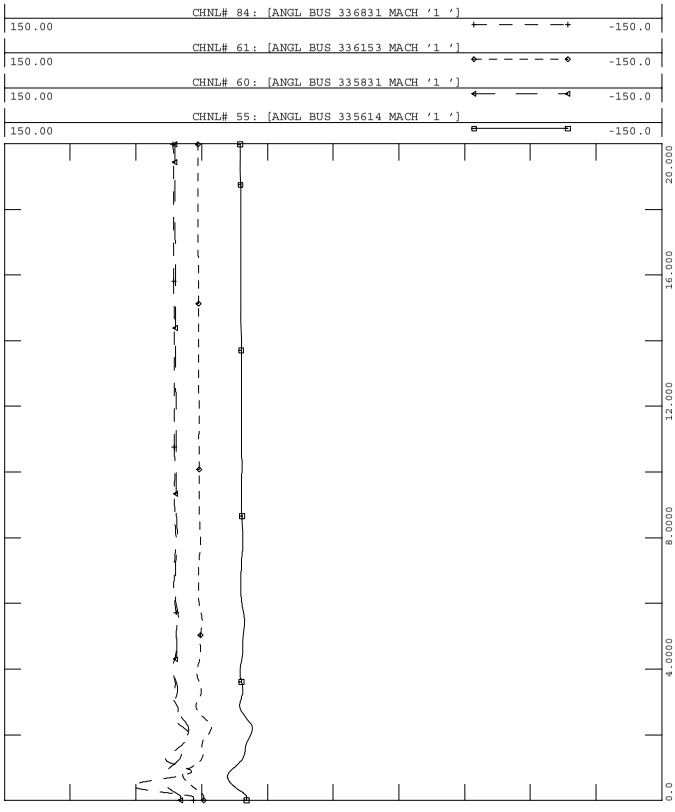

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_8_3PH.OUT



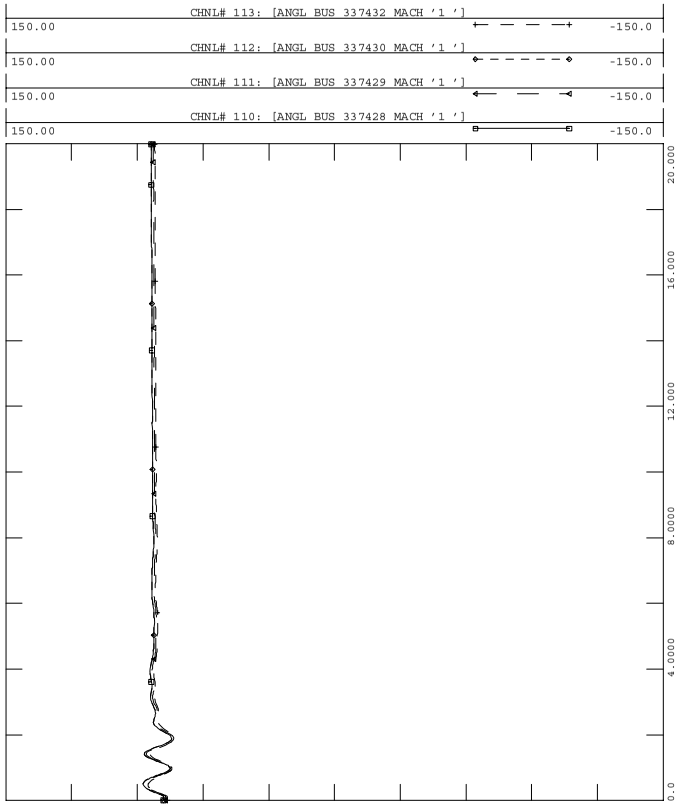

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_8_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

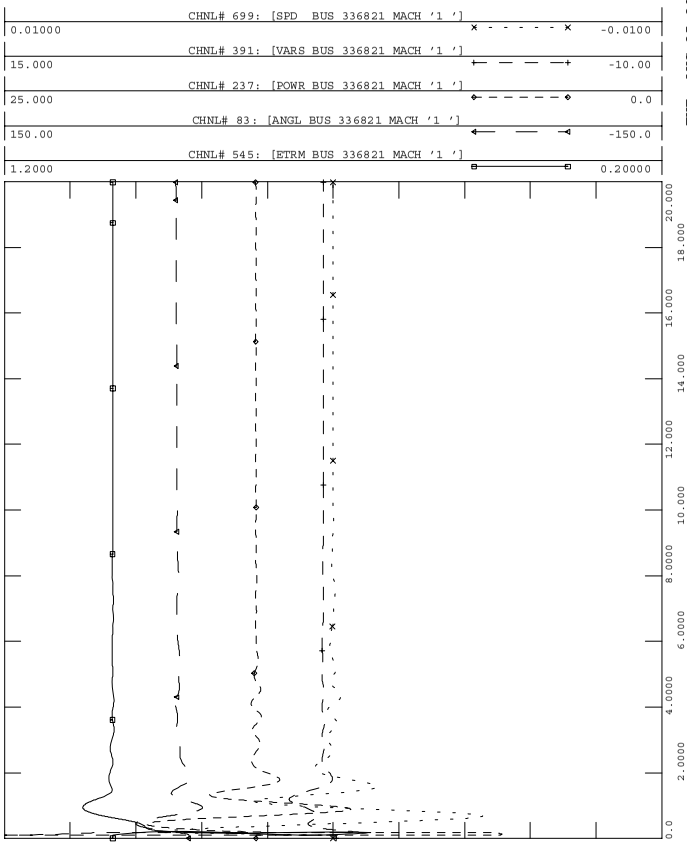
POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_8_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_8_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.9 FLT_9_3PH

Three phase fault on the 8R.BRAS (#336839) to 3R.BRA (#335827) transformer, near the 8R.BRAS.

a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Clear fault after 5 cycles by tripping transformer from 8R.BRAS 500KV BUS 336839 TO 3R.BRAS 115KV BUS 336880

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 3R.BRAS 115KV BUS 336880
FILE: FLT_9_3PH.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

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TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 3R.BRAS 115KV BUS 336880
FILE: FLT_9_3PH.OUT

CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

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TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 3R.BRAS 115KV BUS 336880
FILE: FLT_9_3PH.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

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TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 3R.BRAS 115KV BUS 336880
FILE: FLT_9_3PH.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

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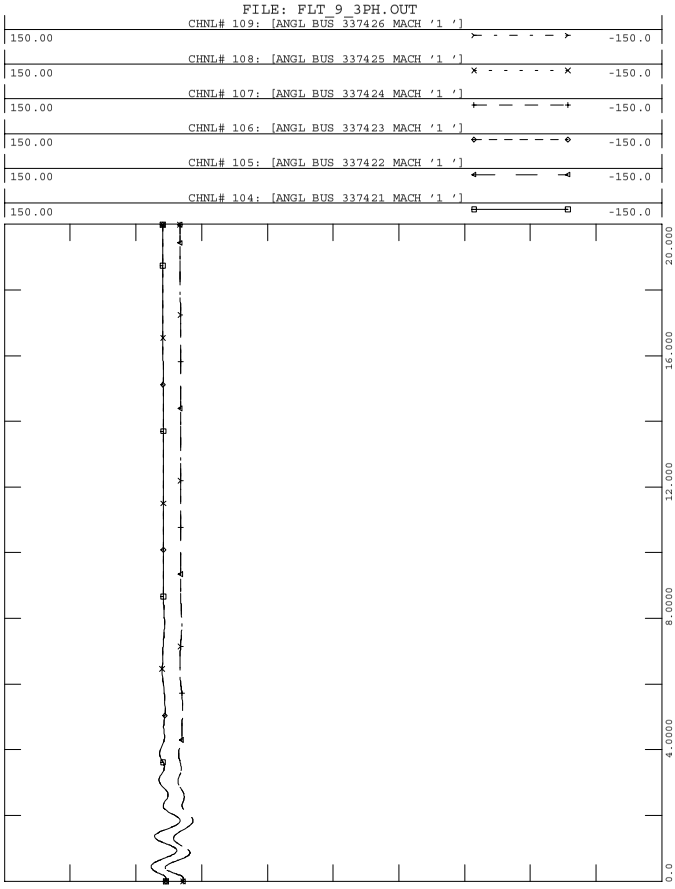
TIME (SECONDS)

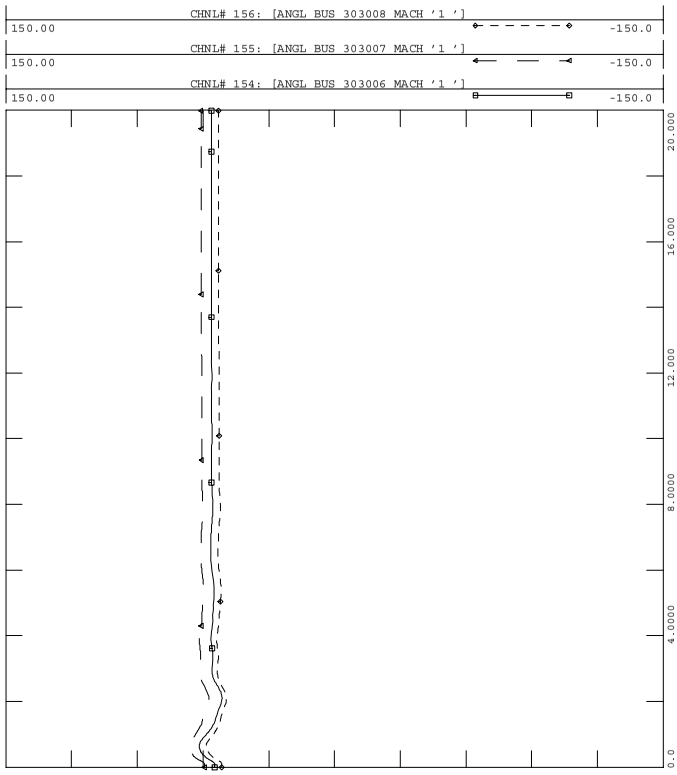
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 3R.BRAS 115KV BUS 336880
FILE: FLT_9_3PH.OUT



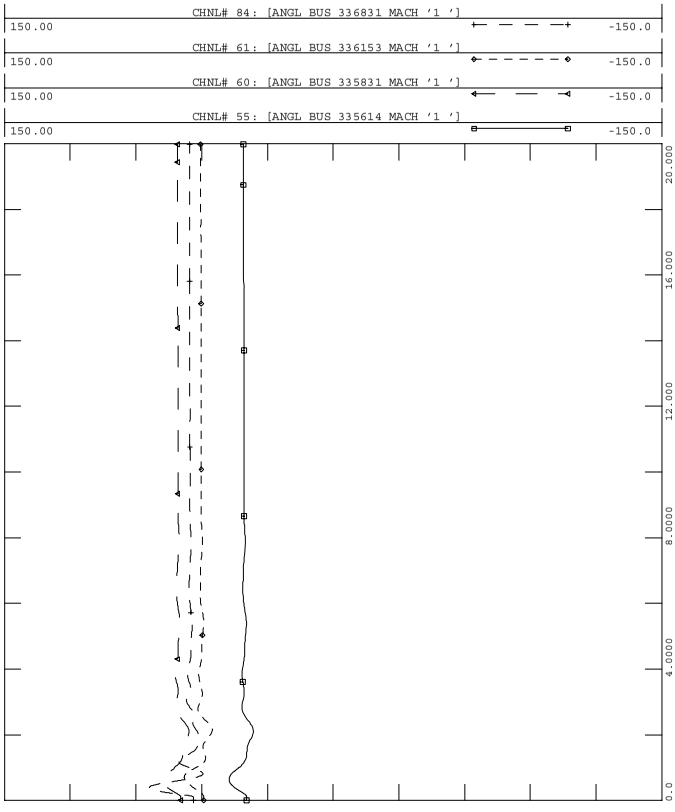

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 3R.BRAS 115KV BUS 336880
FILE: FLT_9_3PH.OUT



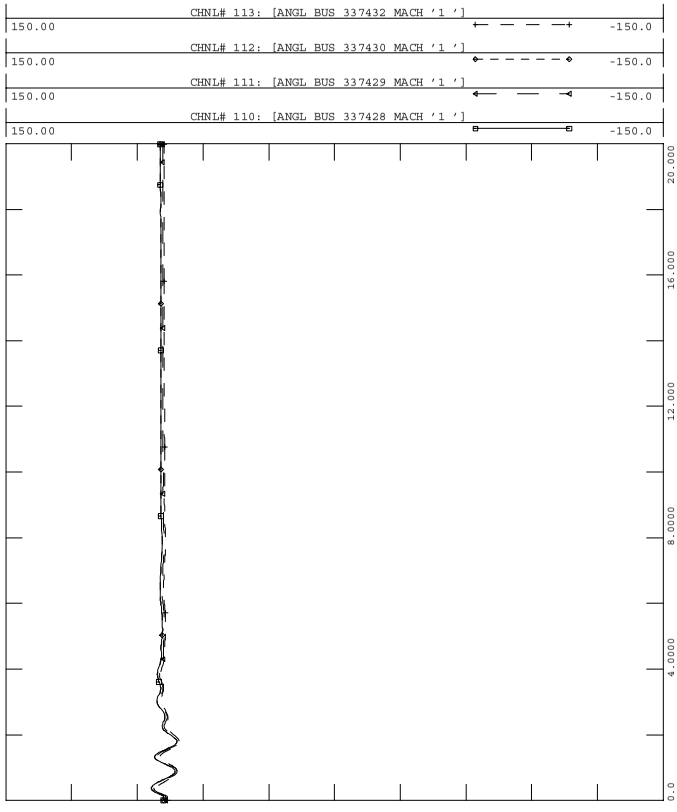

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 3R.BRAS 115KV BUS 336880
FILE: FLT_9_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

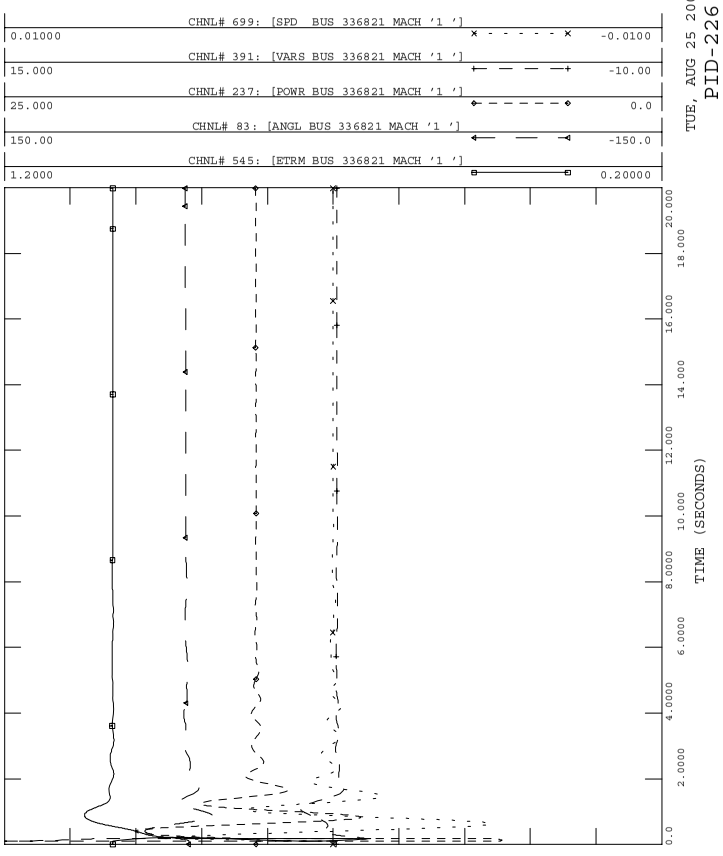
POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 3R.BRAS 115KV BUS 336880
FILE: FLT_9_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 3R.BRAS 115KV BUS 336880
FILE: FLT_9_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.10 FLT_10_3PH

Three phase fault on the 8R.BRAS (#336839) to 6R.BRAS (#336840) transformer, near the 8R.BRAS.

a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Clear fault after 5 cycles by tripping transformer from 8R.BRAS 500KV BUS 336839 TO 6R.BRAS 230KV BUS 336840

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 6R.BRAS 230KV BUS 336840
FILE: FLT_10_3PH.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 6R.BRAS 230KV BUS 336840
FILE: FLT_10_3PH.OUT

CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 6R.BRAS 230KV BUS 336840
FILE: FLT_10_3PH.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 6R.BRAS 230KV BUS 336840
FILE: FLT_10_3PH.OUT

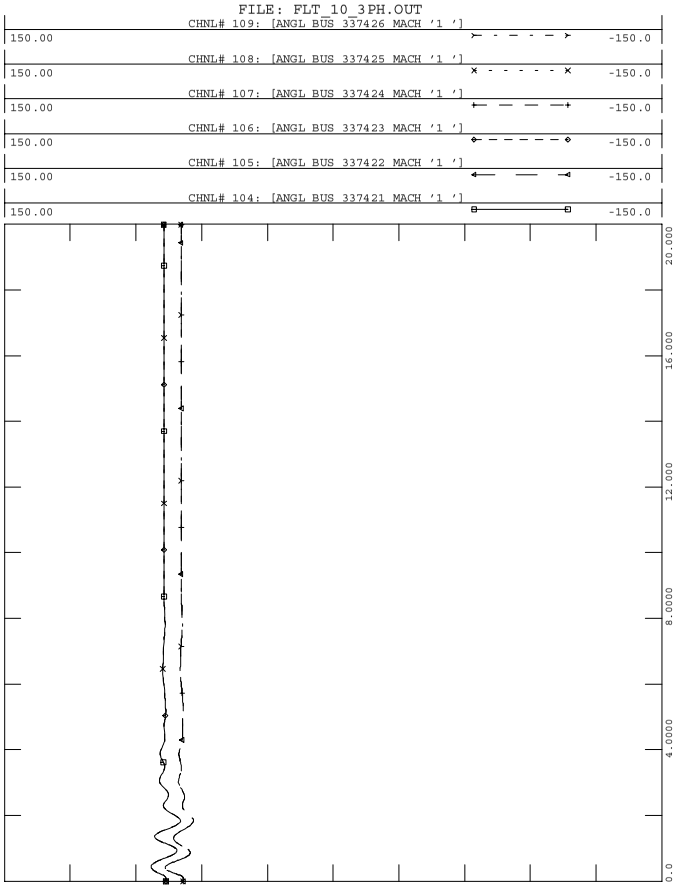
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

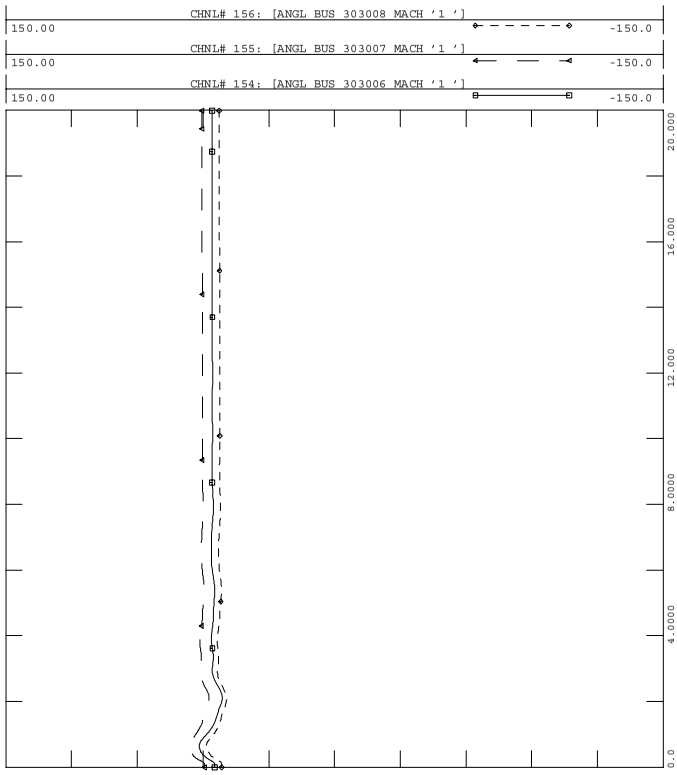
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 6R.BRAS 230KV BUS 336840
FILE: FLT_10_3PH.OUT



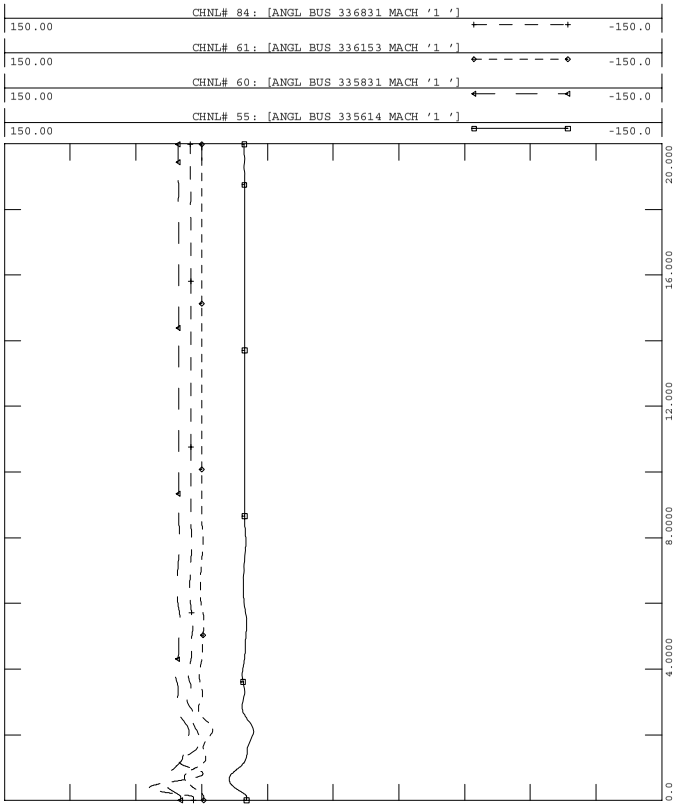

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 6R.BRAS 230KV BUS 336840
FILE: FLT_10_3PH.OUT



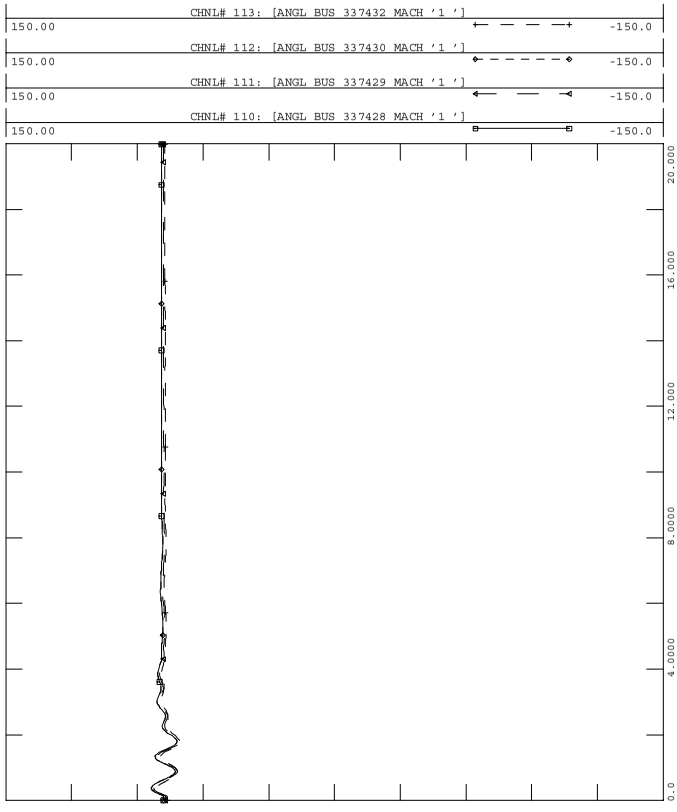

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 6R.BRAS 230KV BUS 336840
FILE: FLT_10_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

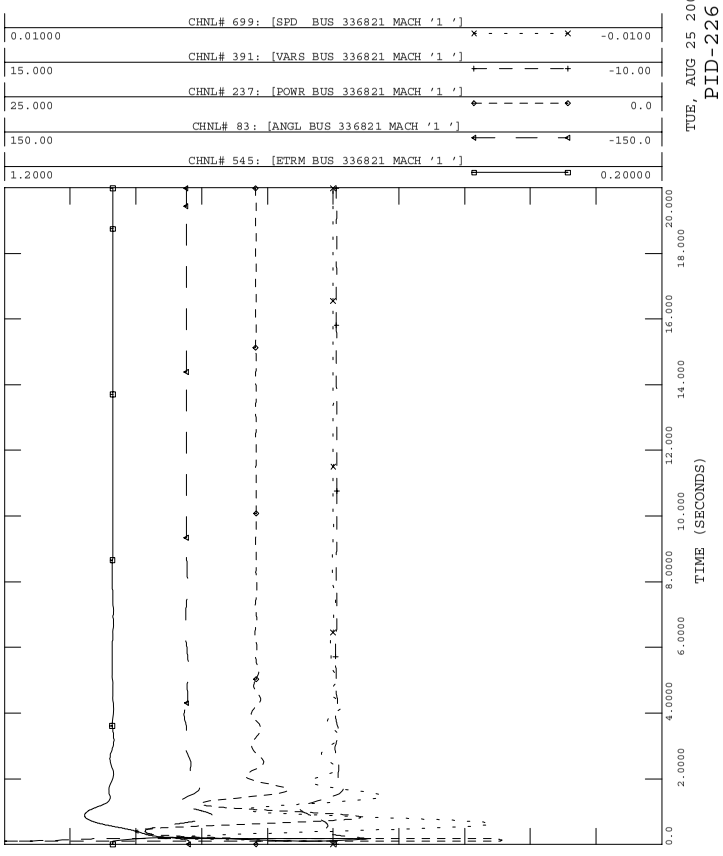
POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 6R.BRAS 230KV BUS 336840
FILE: FLT_10_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS 500KV BUS 336839 TO 6R.BRAS 230KV BUS 336840
FILE: FLT_10_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.11 FLT_11_3PH

Three phase fault on the 8FRKLIN (#336562) to 8MCKNT (#335836) 500 kV line, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Clear fault after 5 cycles by tripping line from 8FRKLIN 500KV BUS 336562 TO 8MCKNT 500KV BUS 335836

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8MCKNT 500KV BUS 335836
FILE: FLT_11_3PH.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8MCKNT 500KV BUS 335836
FILE: FLT_11_3PH.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8MCKNT 500KV BUS 335836
FILE: FLT_11_3PH.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8MCKNT 500KV BUS 335836
FILE: FLT_11_3PH.OUT

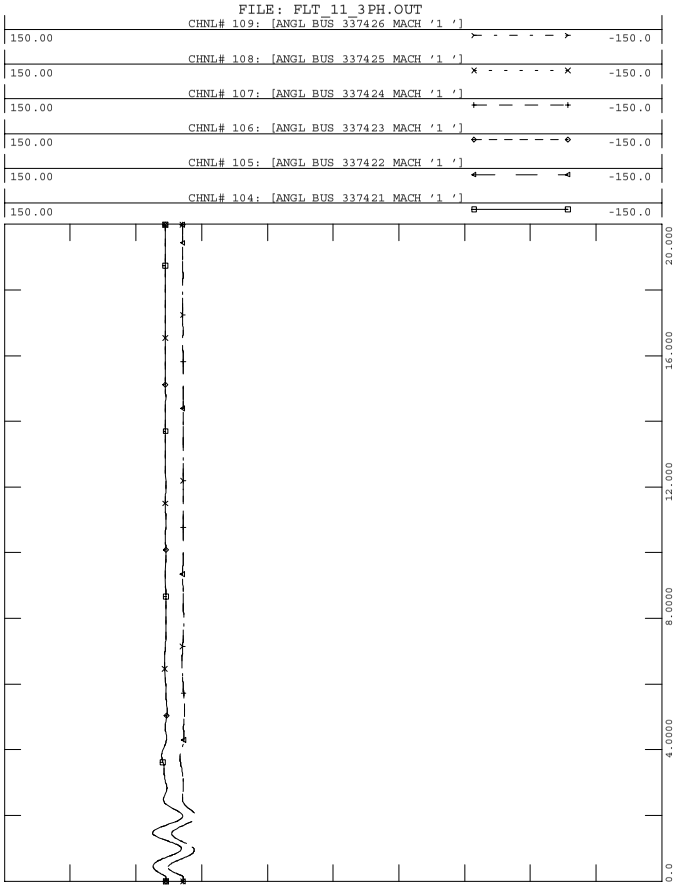
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

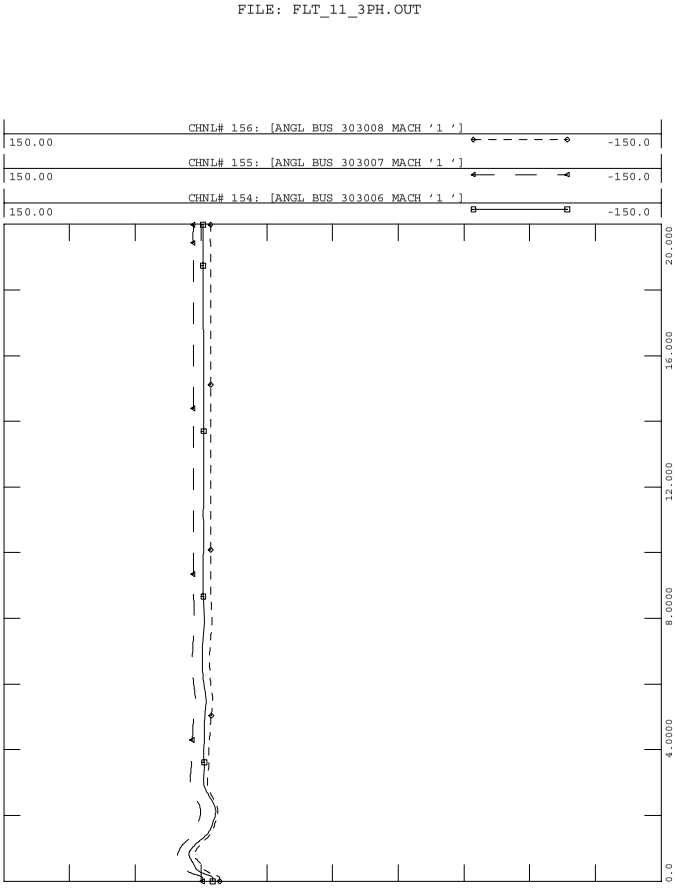
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8MCKNT 500KV BUS 335836
FILE: FLT_11_3PH.OUT



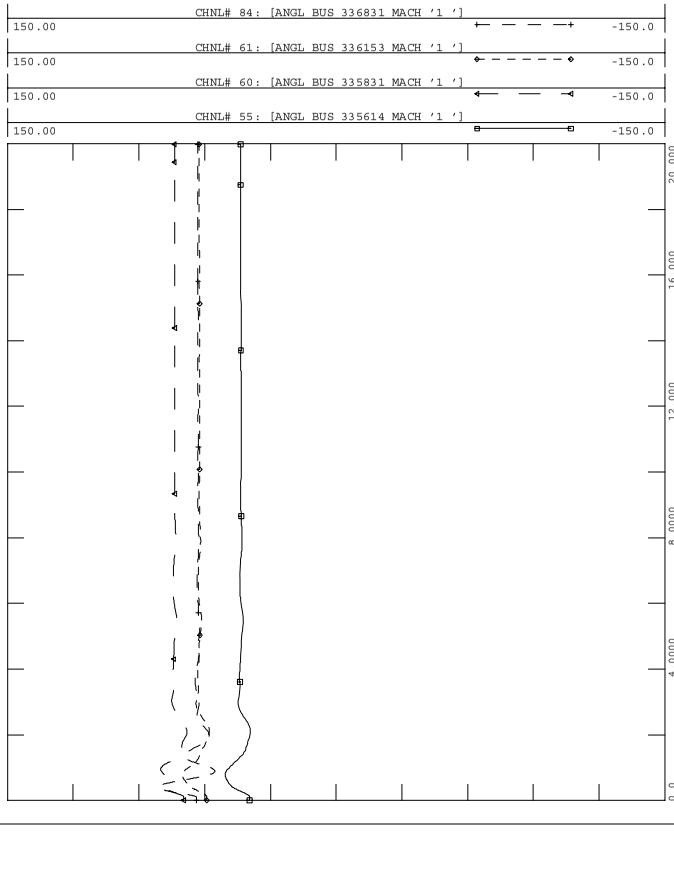

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8MCKNT 500KV BUS 335836
FILE: FLT_11_3PH.OUT



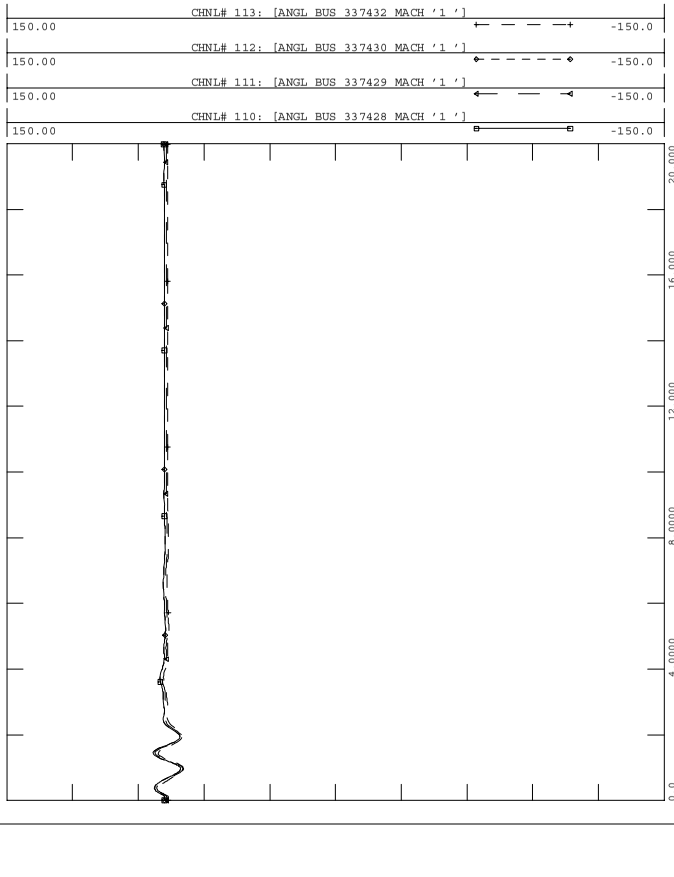

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8MCKNT 500KV BUS 335836
FILE: FLT_11_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

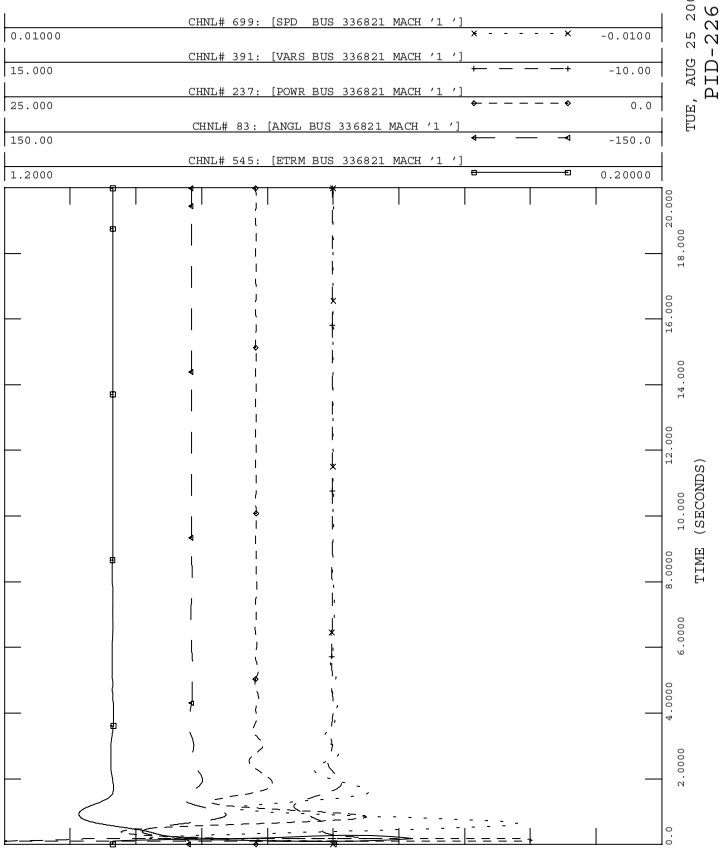
POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8MCKNT 500KV BUS 335836
FILE: FLT_11_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8MCKNT 500KV BUS 335836
FILE: FLT_11_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.12 FLT_12_3PH

Three phase fault on the 8FRKLIN (#336562) to 8BOGALUS to 6ADMSCRK(#336131) branch, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Clear fault after 5 cycles by tripping line from 8FRKLIN TO 8BOGALUS and 8BOGALUS TO 6ADMSCRK 230KV BUS 336131

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK 230KV BUS 336131
FILE: FLT_12_3PH.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK 230KV BUS 336131
FILE: FLT_12_3PH.OUT

CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK 230KV BUS 336131
FILE: FLT_12_3PH.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK 230KV BUS 336131
FILE: FLT_12_3PH.OUT

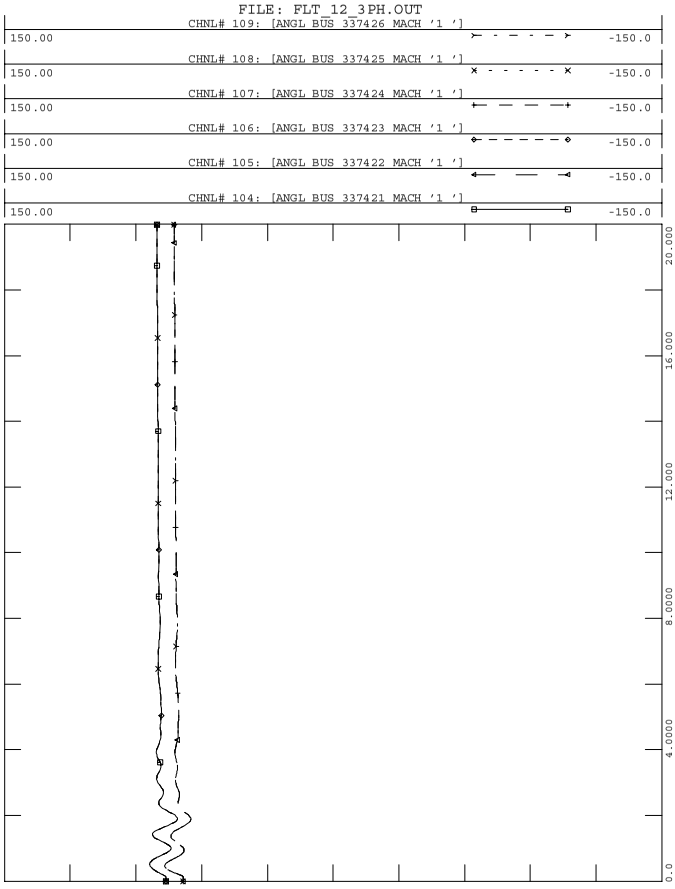
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

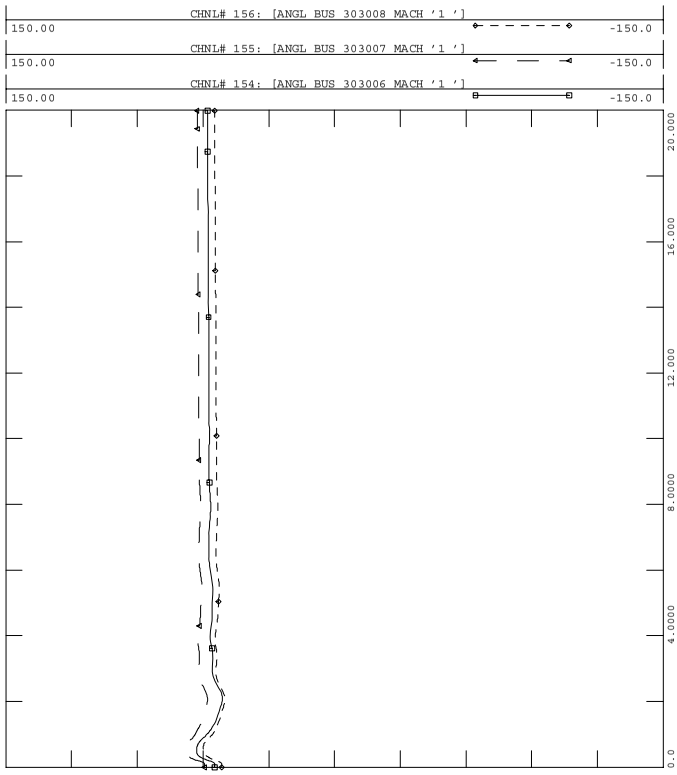
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK 230KV BUS 336131
FILE: FLT_12_3PH.OUT



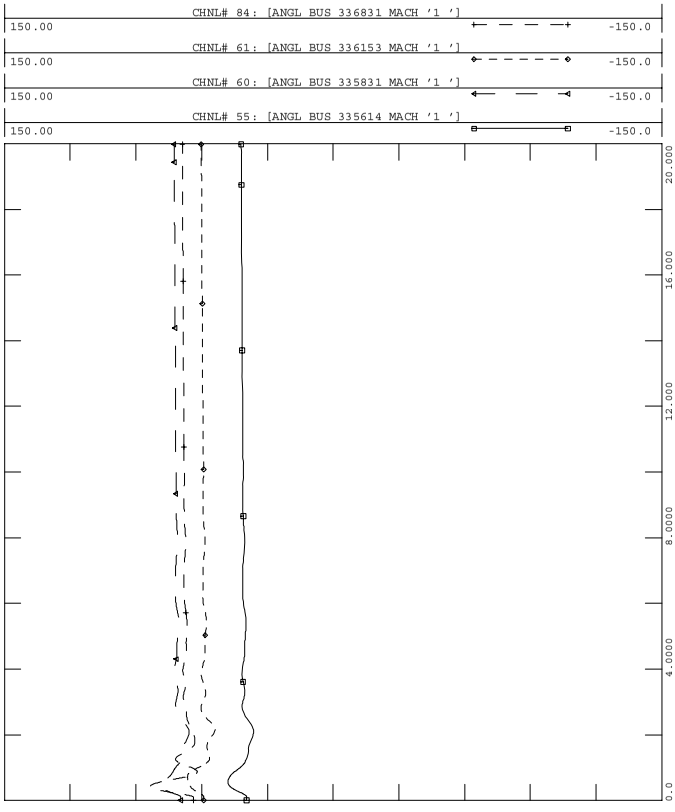

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK 230KV BUS 336131
FILE: FLT_12_3PH.OUT



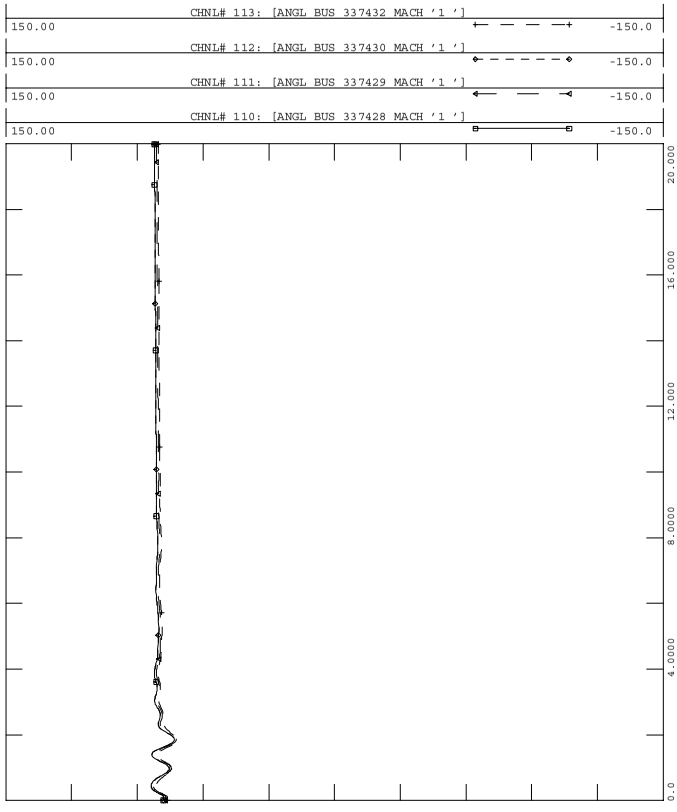

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK 230KV BUS 336131
FILE: FLT_12_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

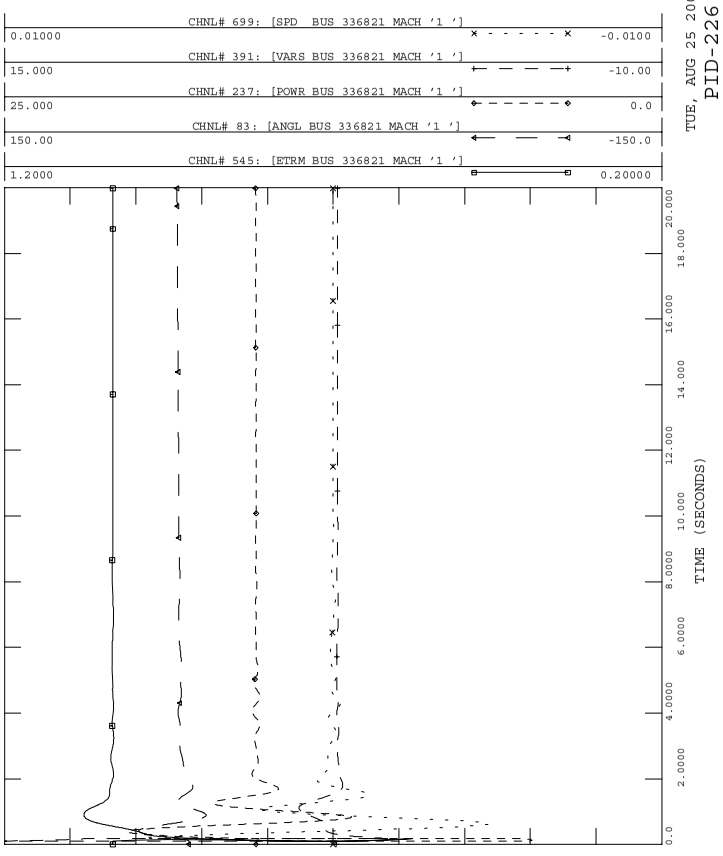
POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK 230KV BUS 336131
FILE: FLT_12_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK 230KV BUS 336131
FILE: FLT_12_3PH.OUT

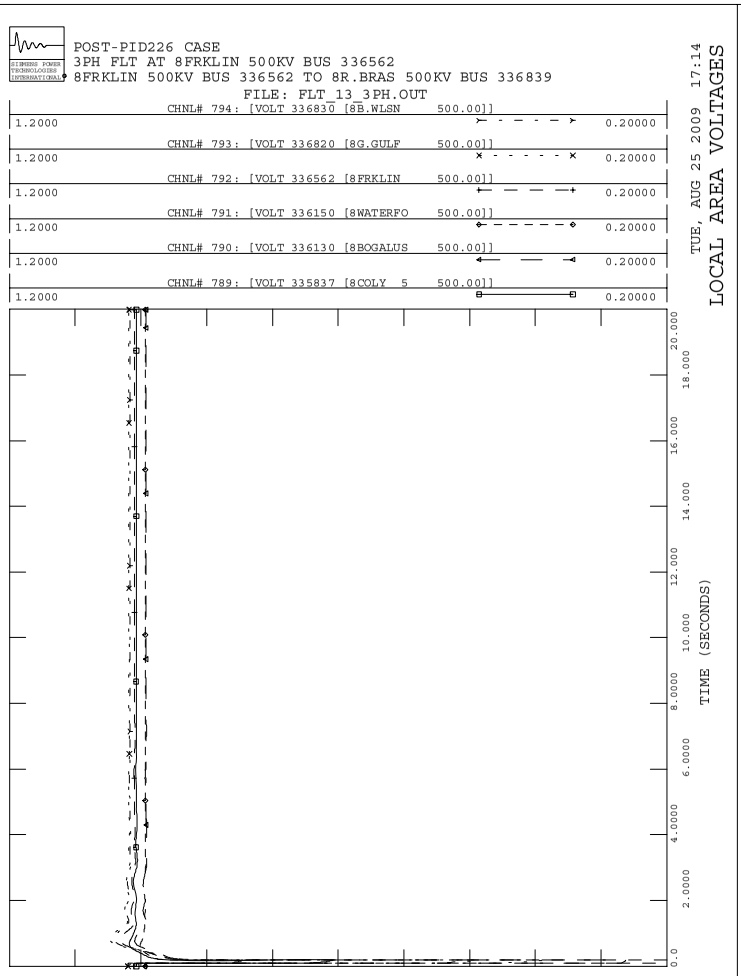
TUE, AUG 25 2009 17:14
PID-226 PLOTS

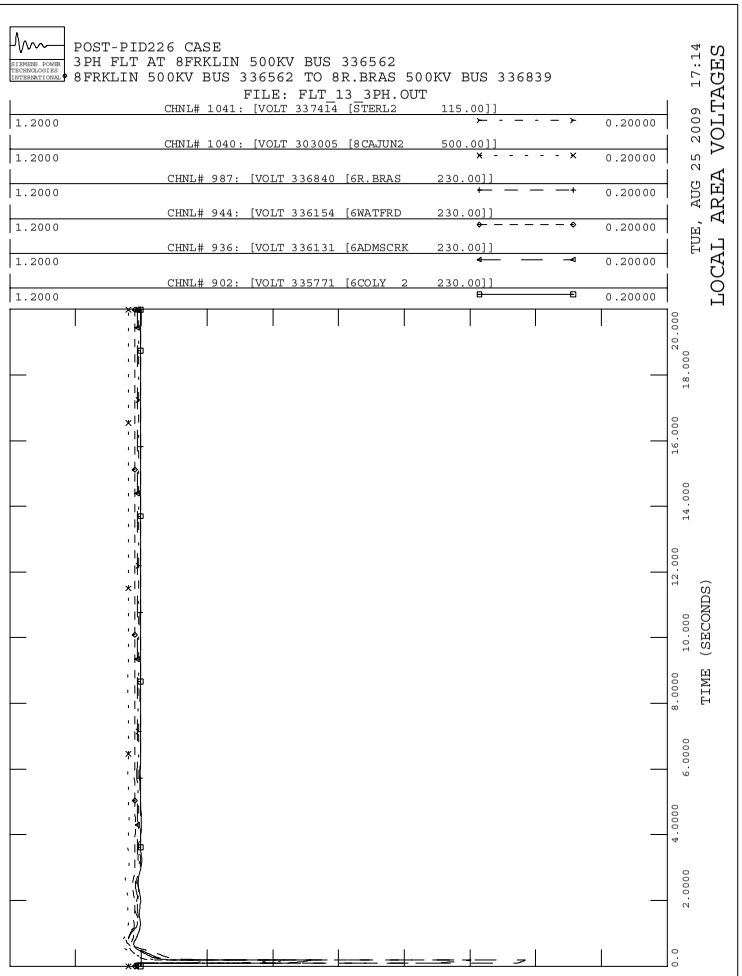


## C.13 FLT_13_3PH

Three phase fault on the 8FRKLIN (#336562) to 8R.BRAS (#336839) branch, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Clear fault after 5 cycles by tripping line from 8FRKLIN 500KV BUS 336562 TO 8R.BRAS 500KV BUS 336839


POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_13_3PH.OUT
CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]
1.2000
0.20000
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
LOCAL AREA VOLTAGES
TUE, AUG 25 2009 17:14


POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_13_3PH.OUT
CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]
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8.0000
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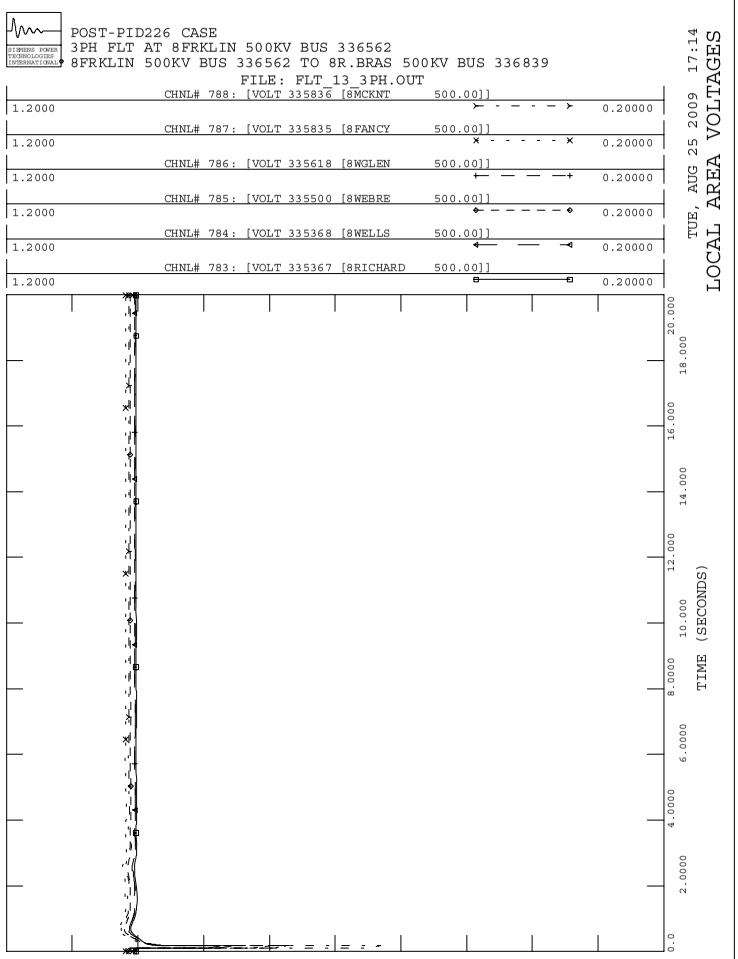
TIME (SECONDS)
LOCAL AREA VOLTAGES
TUE, AUG 25 2009 17:14


POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_13_3PH.OUT
CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]
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0.0
2.0000
4.0000
6.0000
8.0000
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14.000
16.000
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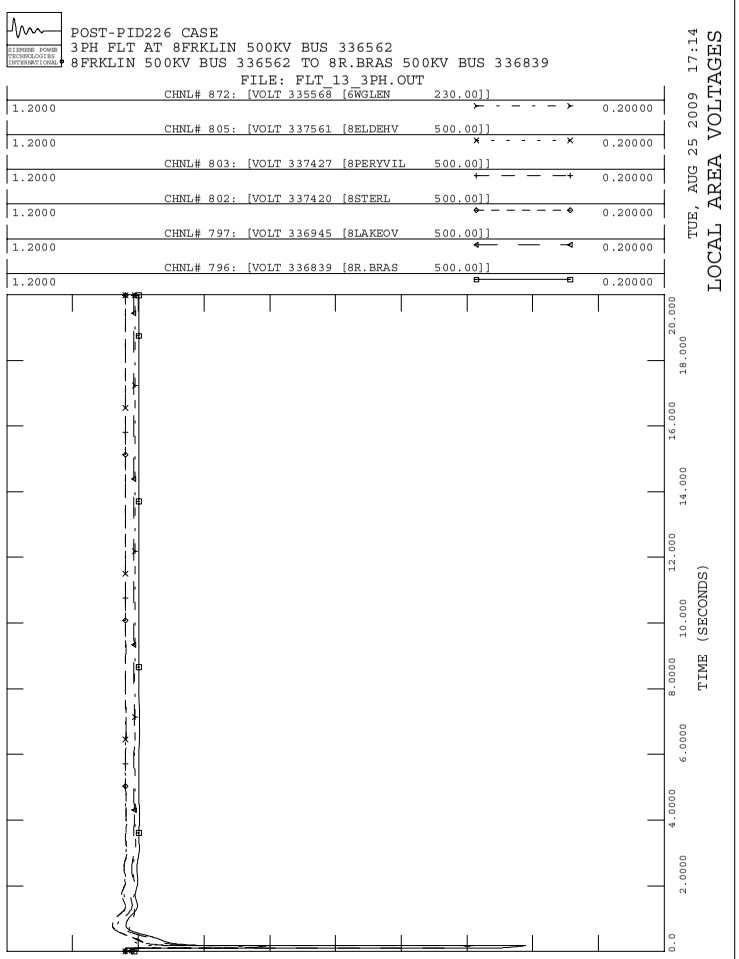
20.000
TIME (SECONDS)
LOCAL AREA VOLTAGES
TUE, AUG 25 2009 17:14


POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_13_3PH.OUT
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]
1.2000
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2.0000
4.0000
6.0000
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10.000
12.000
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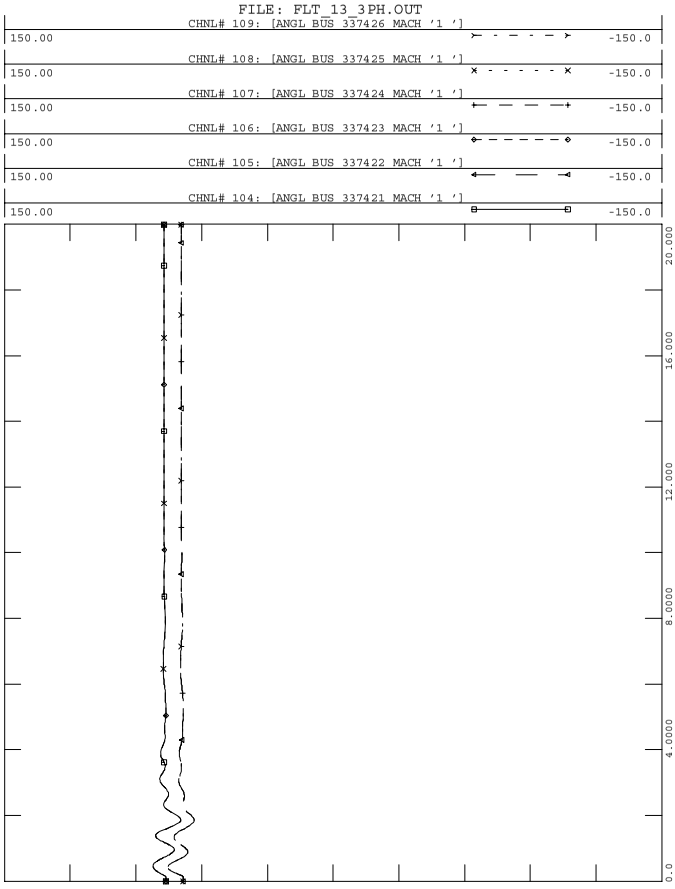
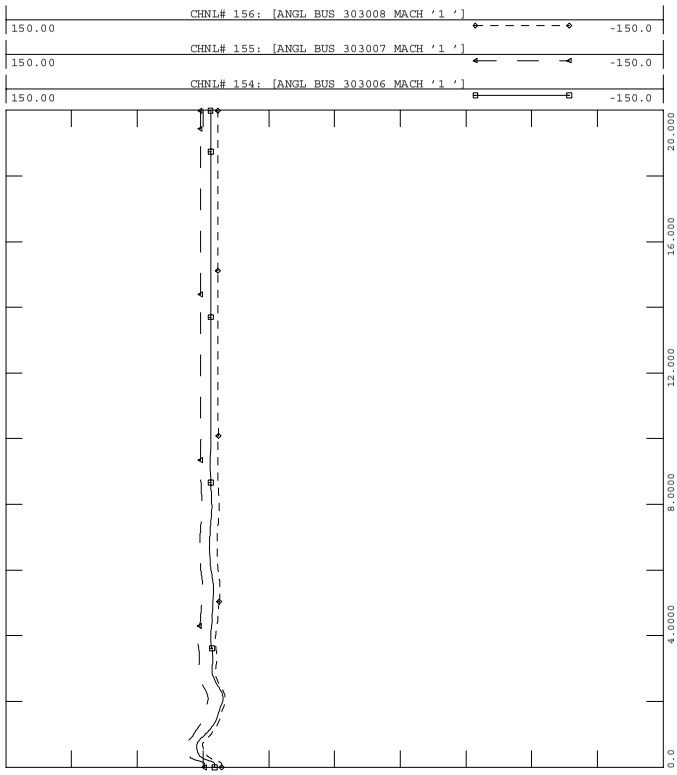
16.000
18.000
20.000
TIME (SECONDS)
LOCAL AREA VOLTAGES
TUE, AUG 25 2009 17:14

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_13_3PH.OUT



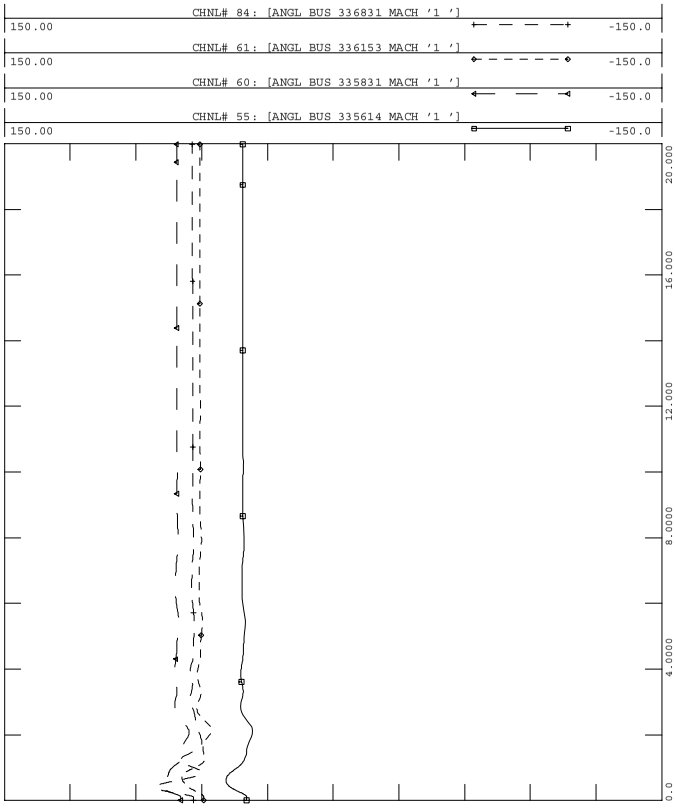

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_13_3PH.OUT



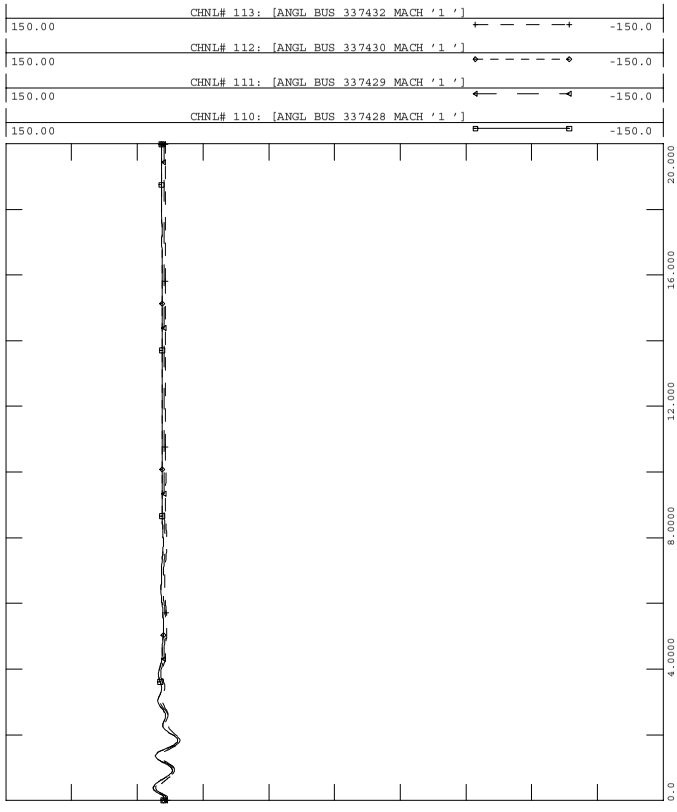

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_13_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

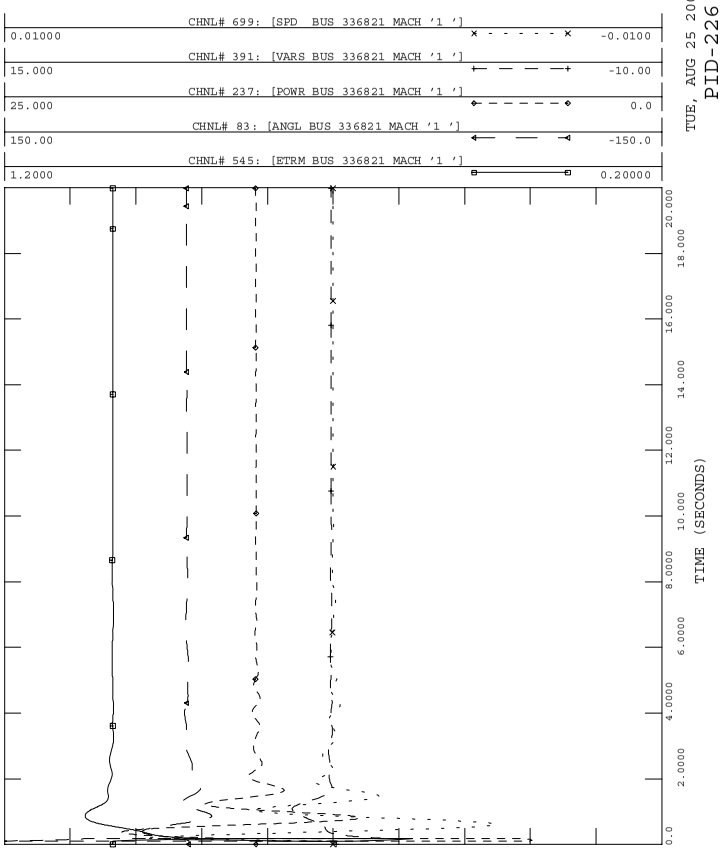
POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_13_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_13_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.14 FLT_14_3PH

Three phase fault on the 8FRKLIN (#336562) to 8G.GULF (#336820) 500 kV line, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Clear fault after 5 cycles by tripping line from 8FRKLIN 500KV BUS 336562 TO 8G.GULF 500KV BUS 336820

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8G.GULF 500KV BUS 336820
FILE: FLT_14_3PH.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8G.GULF 500KV BUS 336820
FILE: FLT_14_3PH.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8G.GULF 500KV BUS 336820
FILE: FLT_14_3PH.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8G.GULF 500KV BUS 336820
FILE: FLT_14_3PH.OUT

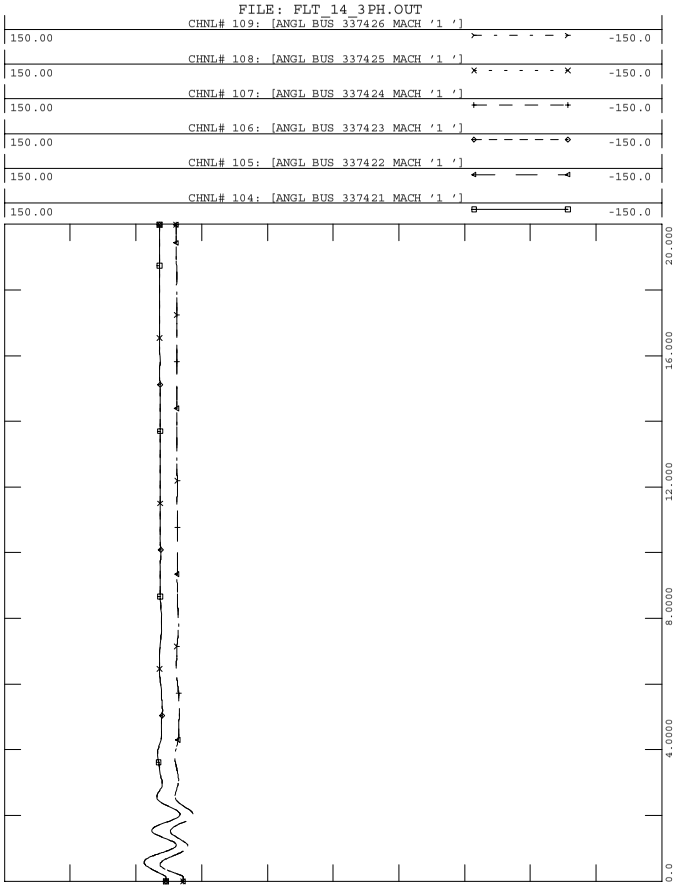
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

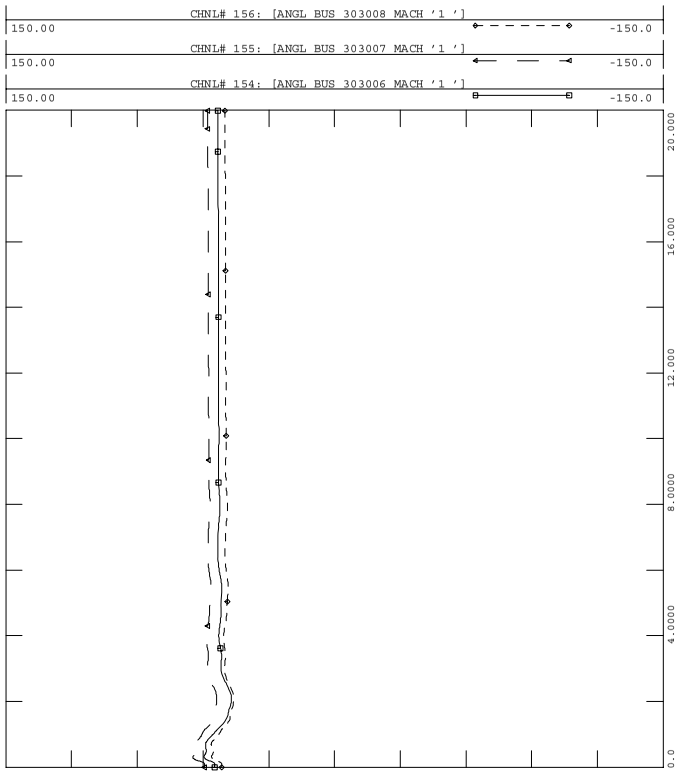
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8G.GULF 500KV BUS 336820
FILE: FLT_14_3PH.OUT



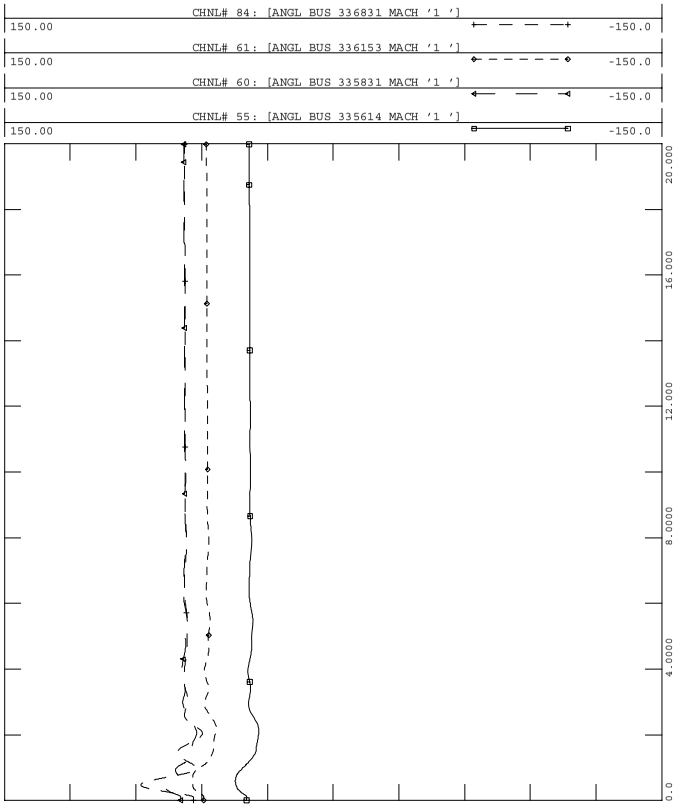

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8G.GULF 500KV BUS 336820
FILE: FLT_14_3PH.OUT



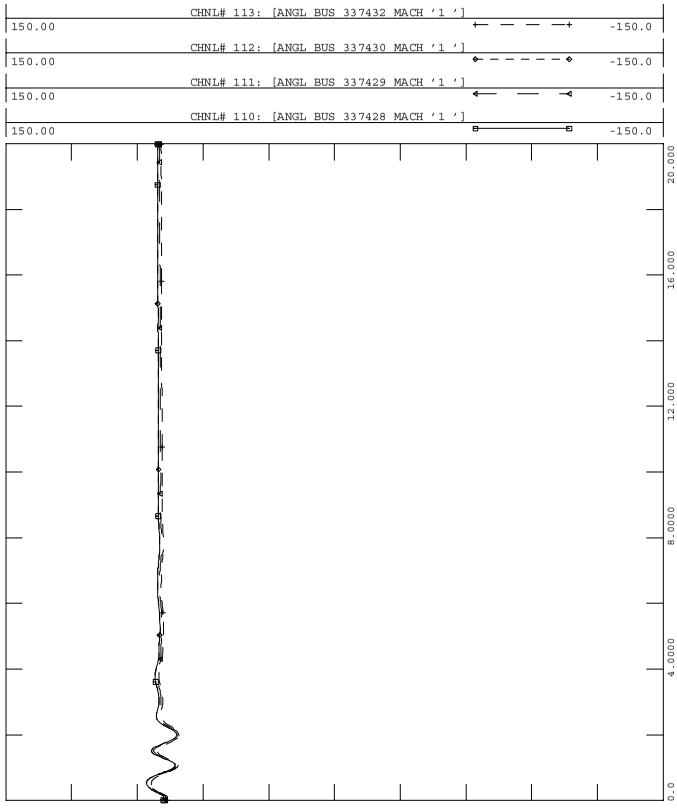

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8G.GULF 500KV BUS 336820
FILE: FLT_14_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

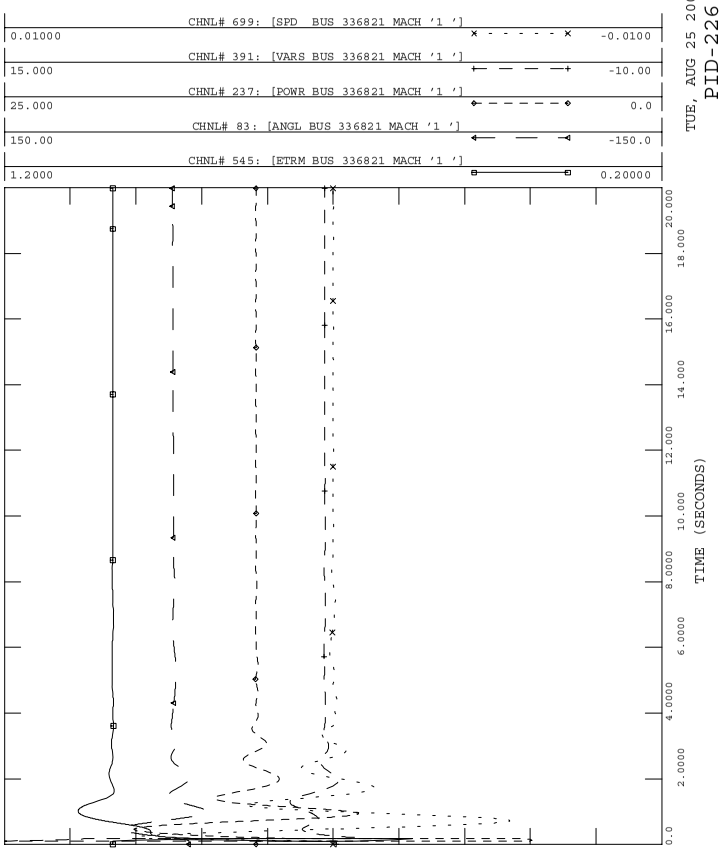
POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8G.GULF 500KV BUS 336820
FILE: FLT_14_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 8G.GULF 500KV BUS 336820
FILE: FLT_14_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.15 FLT_15_3PH

Three phase fault on the 8FRKLIN (#336562) to 3FRKLIN (#336559) 500 kV line, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Clear fault after 5 cycles by tripping transformer from 8FRKLIN 500KV BUS 336562 TO 3FRKLIN 115KV BUS 336559

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 3FRKLIN 115KV BUS 336559
FILE: FLT_15_3PH.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 3FRKLIN 115KV BUS 336559
FILE: FLT_15_3PH.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 3FRKLIN 115KV BUS 336559
FILE: FLT_15_3PH.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 3FRKLIN 115KV BUS 336559
FILE: FLT_15_3PH.OUT

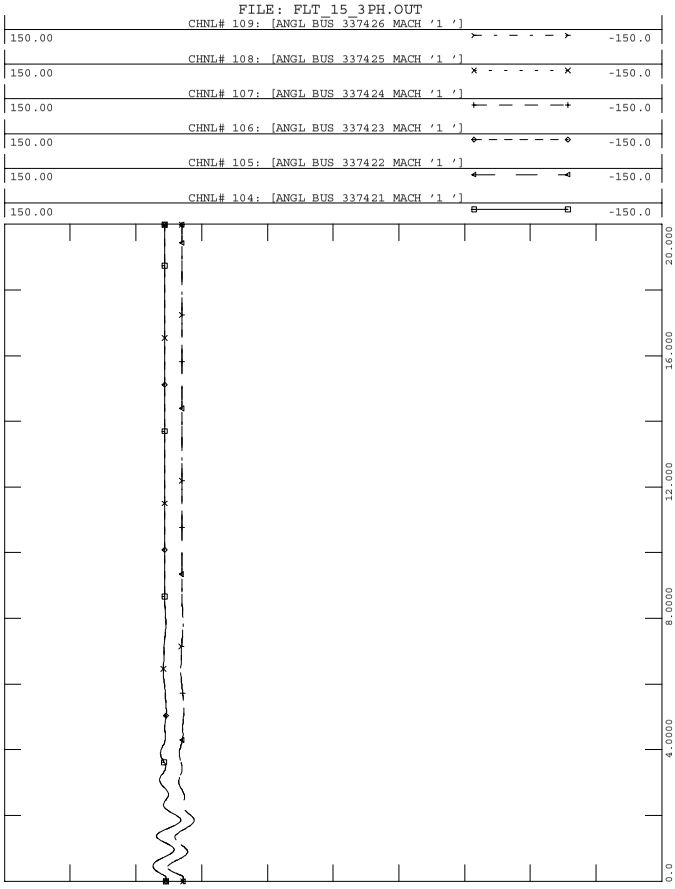
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

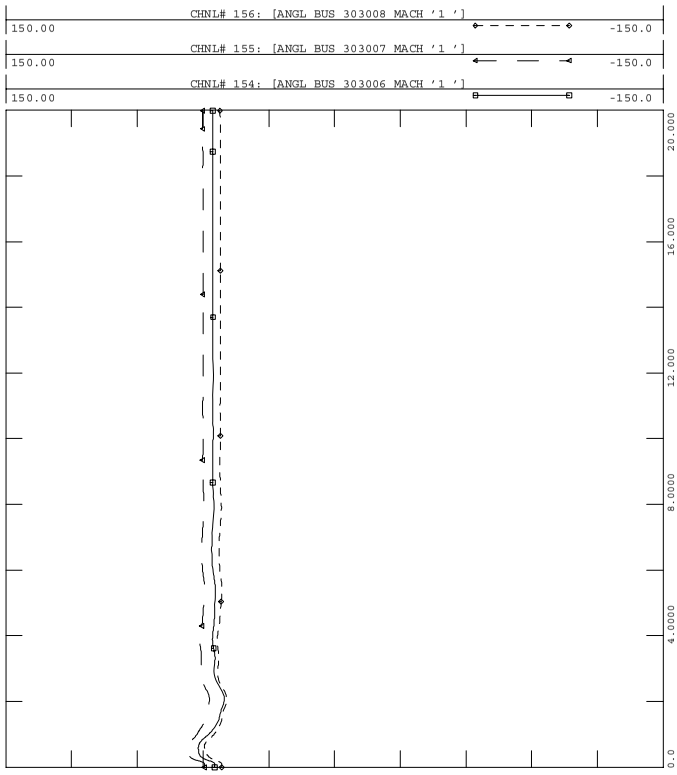
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 3FRKLIN 115KV BUS 336559
FILE: FLT_15_3PH.OUT



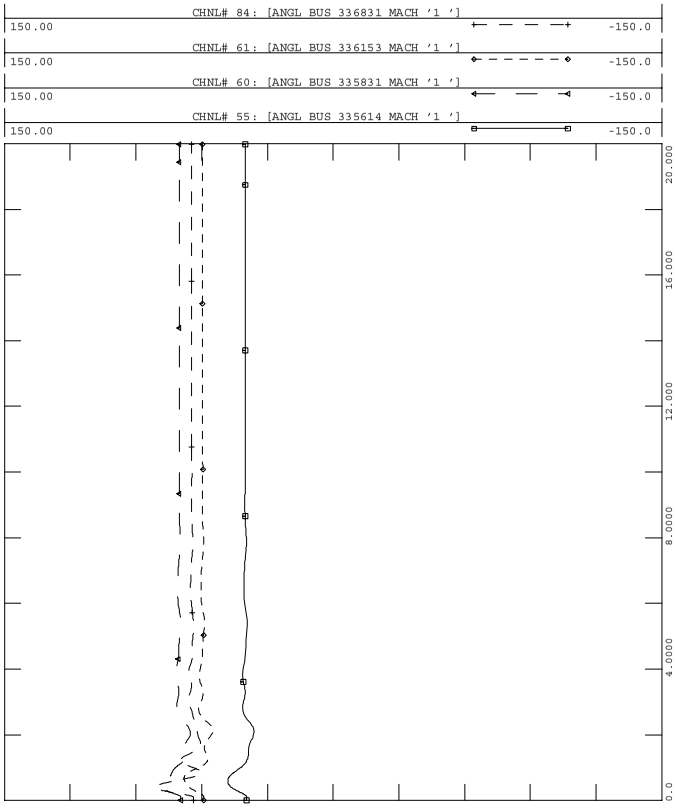

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 3FRKLIN 115KV BUS 336559
FILE: FLT_15_3PH.OUT



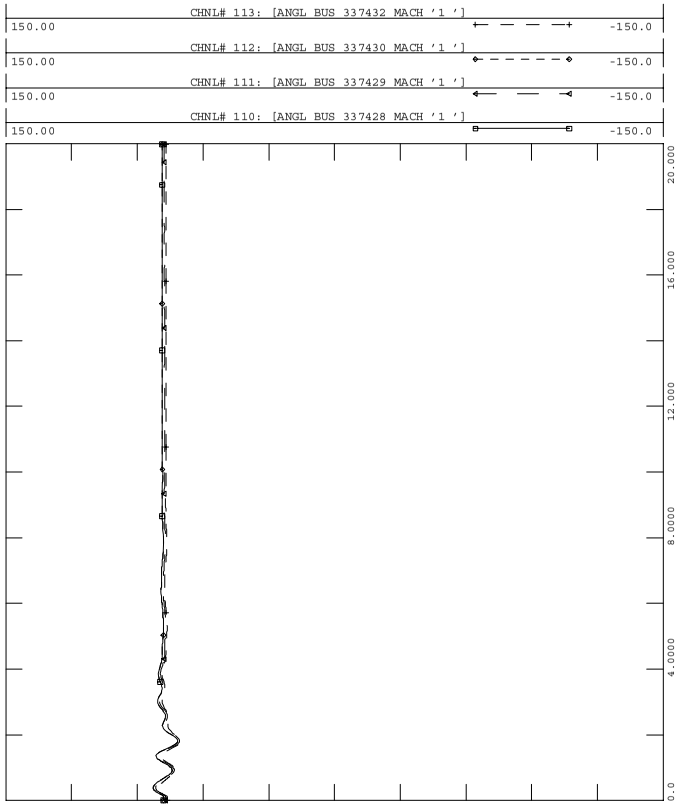

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 3FRKLIN 115KV BUS 336559
FILE: FLT_15_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

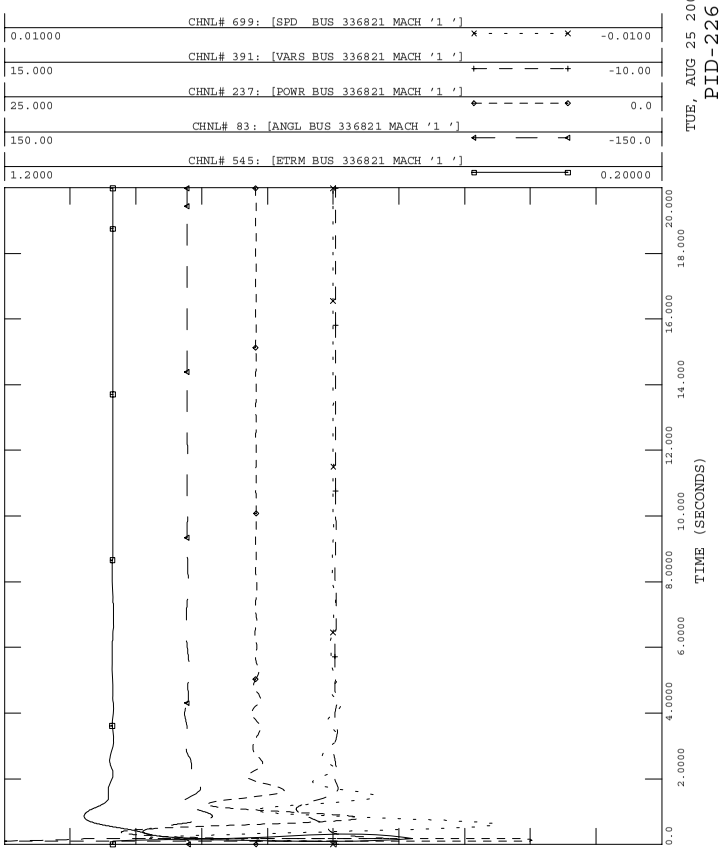
POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 3FRKLIN 115KV BUS 336559
FILE: FLT_15_3PH.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN 500KV BUS 336562 TO 3FRKLIN 115KV BUS 336559
FILE: FLT_15_3PH.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS

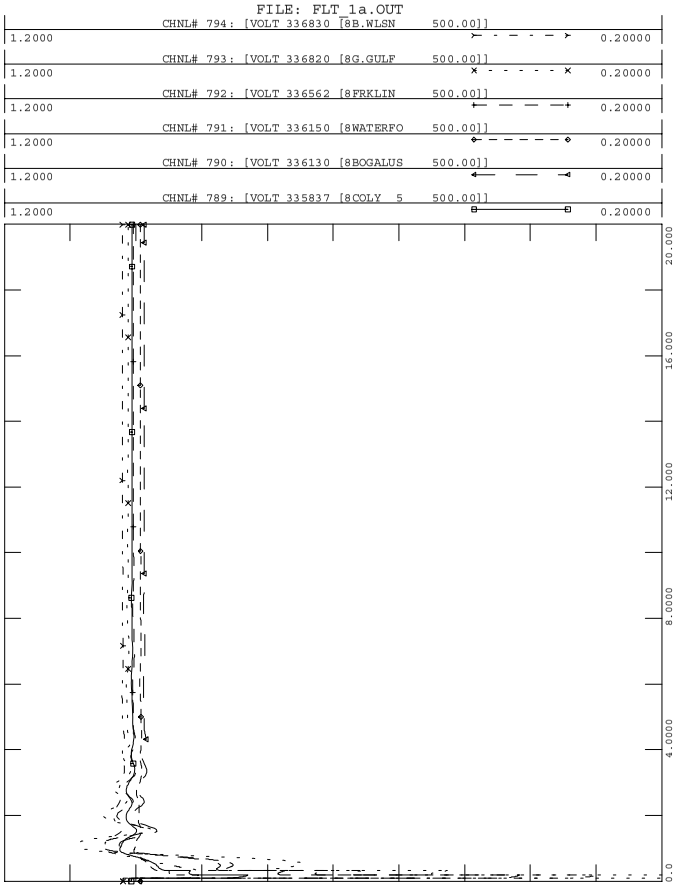


## C.16 FLT_1a

Stuck breaker fault on the 8G.GULF (#336820) to 8B.WLSN (#336830) 500 kV line, near the 8G.GULF.

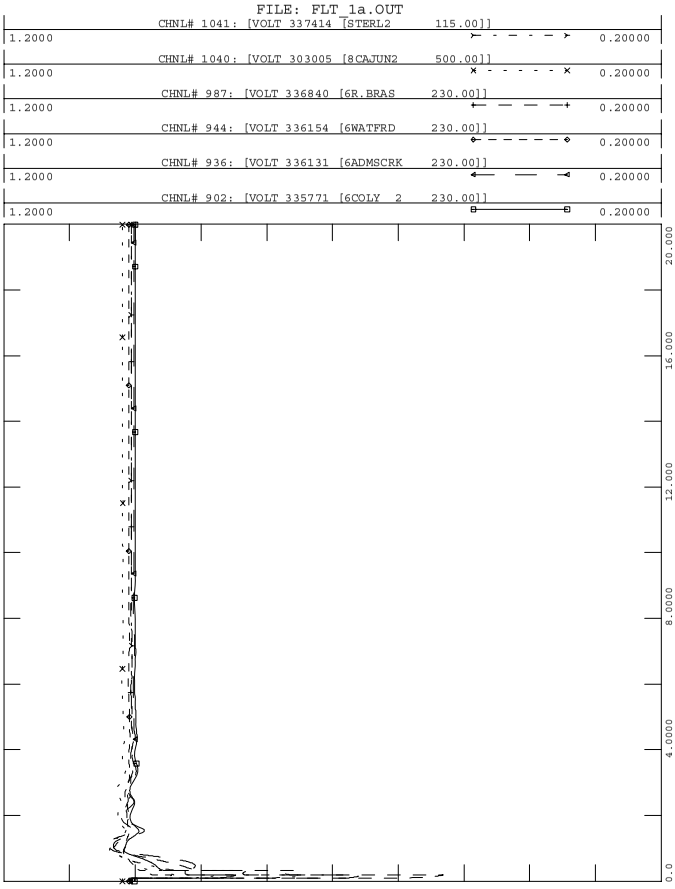
a) Apply 3 Phase Fault AT 8G.GULF 500KV BUS 336820
b) Run fault for 5 cycles.
c) Remove Fault AT 8G.GULF 500KV BUS 336820
d) Apply 3 Phase fault at #336820 with admittance 640.02 -j 8505.34 MVA
e) Clear fault after 9 cycles by tripping line from 8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1a.OUT



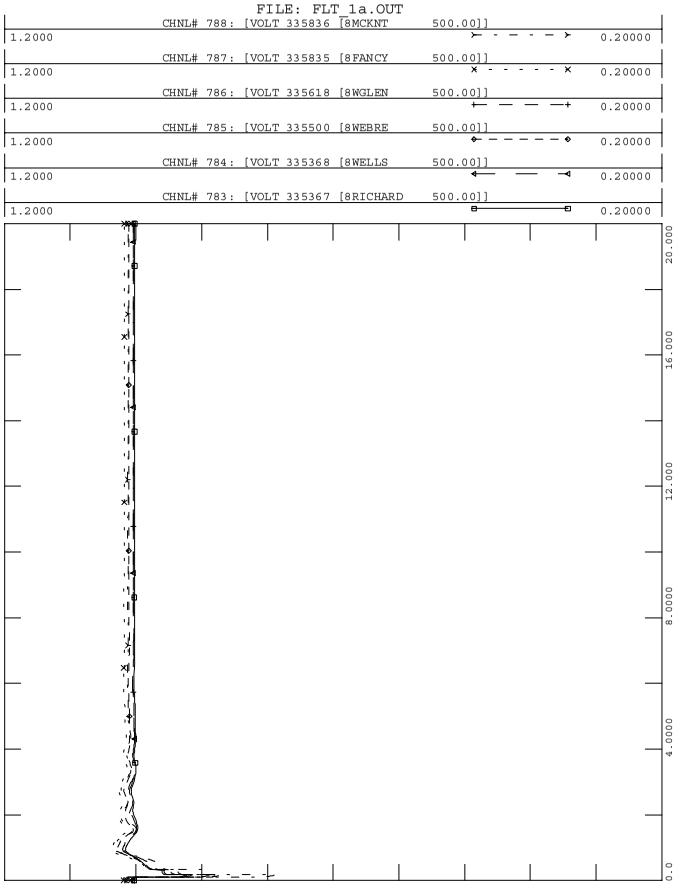

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1a.OUT



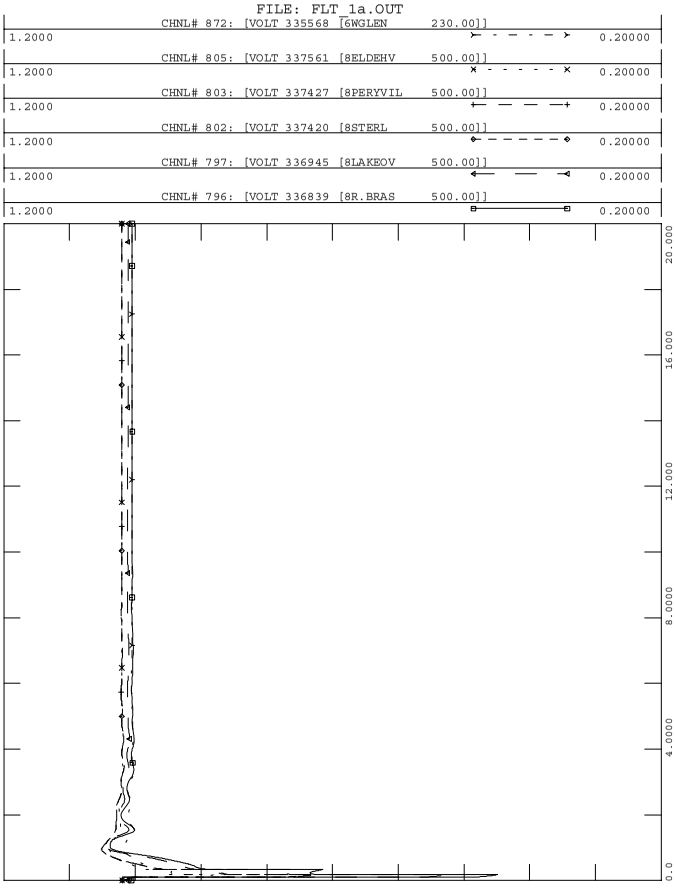

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1a.OUT



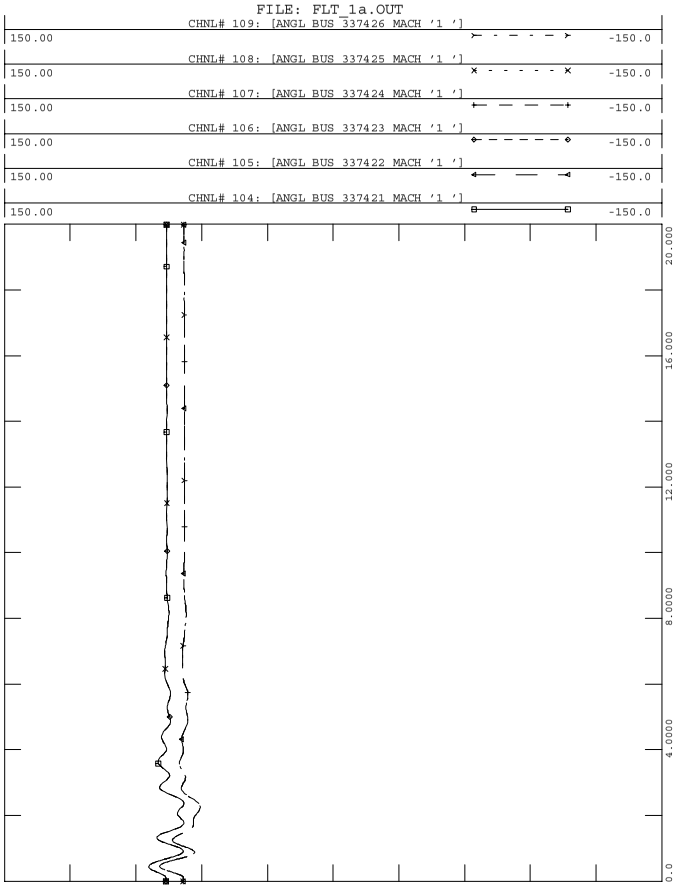

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1a.OUT



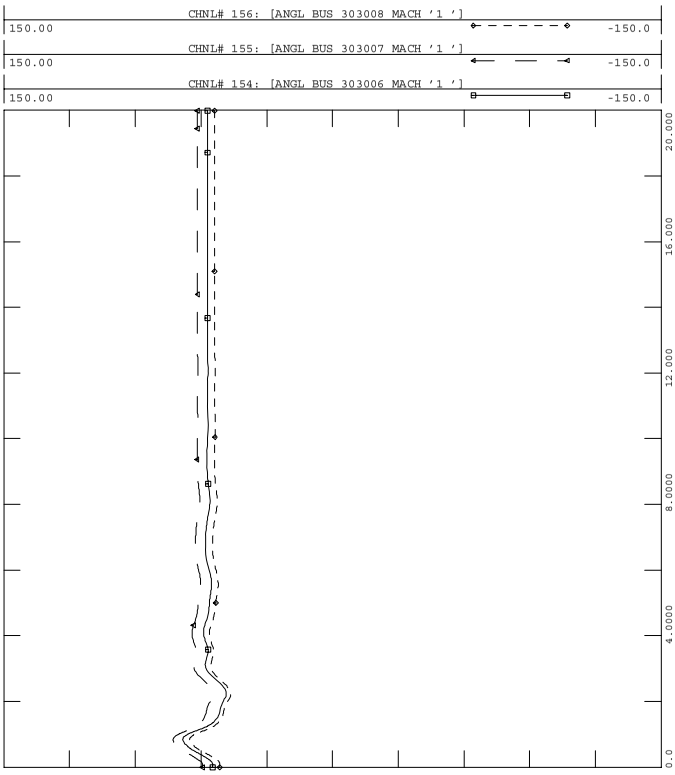

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1a.OUT



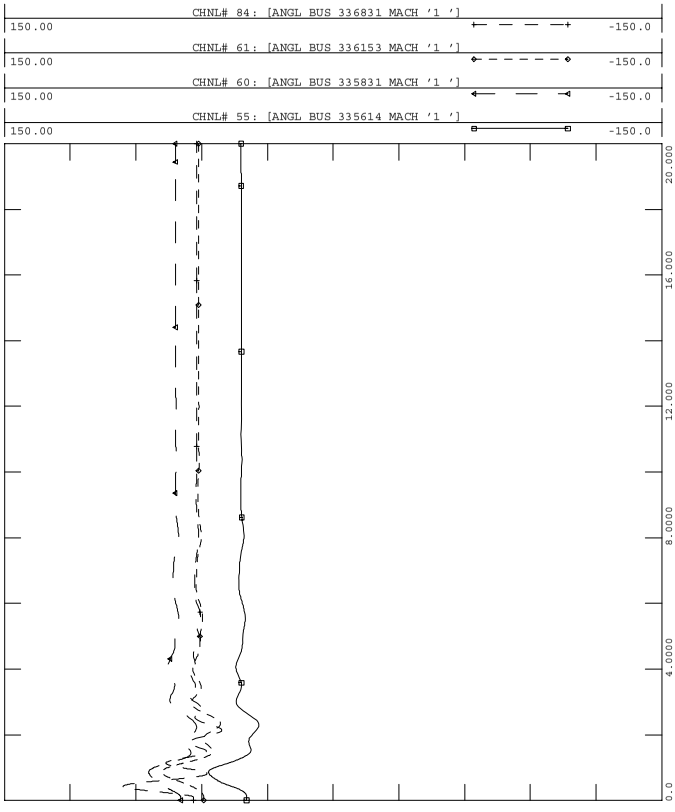

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1a.OUT



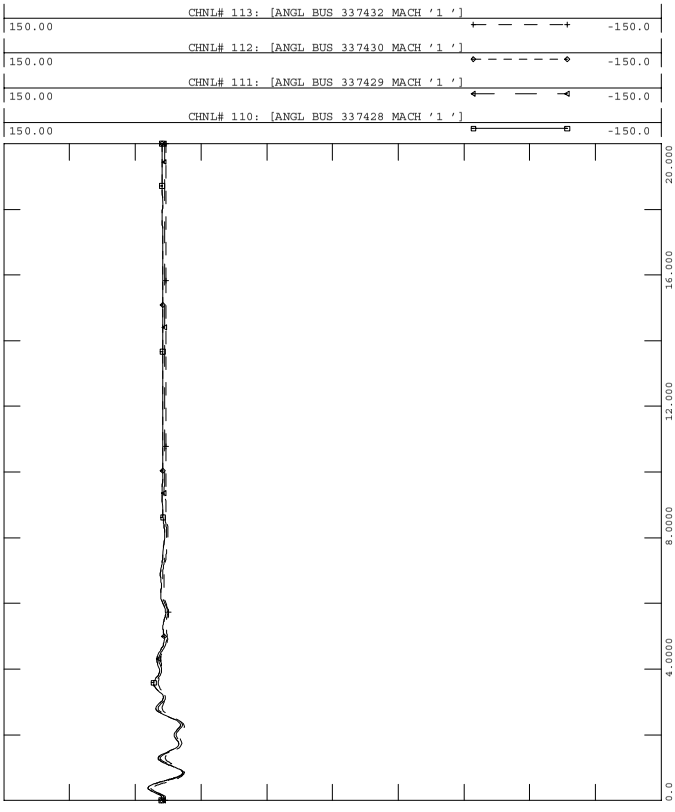

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1a.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

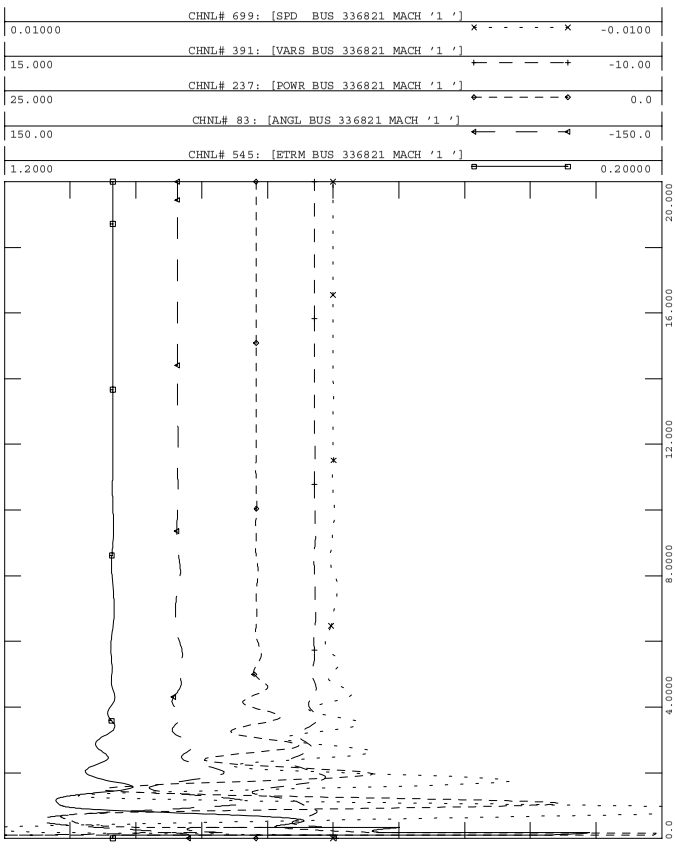
POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1a.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8B.WLSN 500KV BUS 336830
FILE: FLT_1a.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



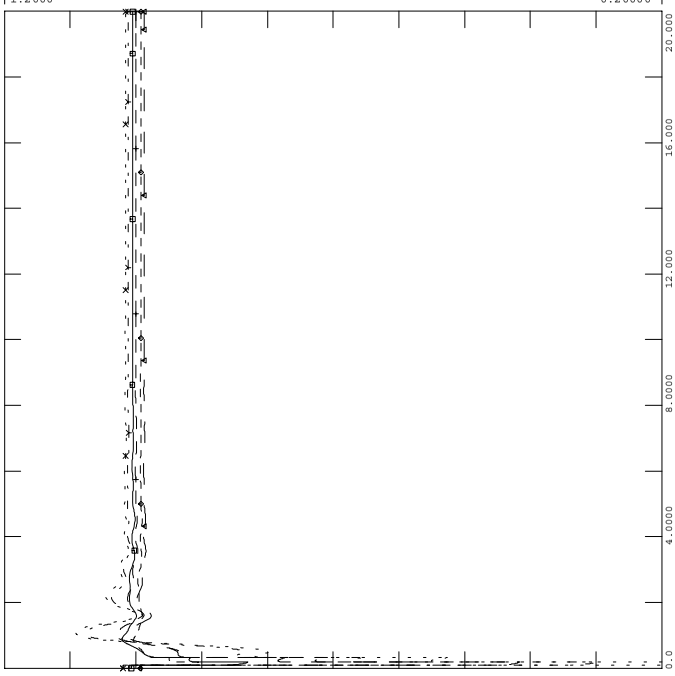
## C.17 FLT_2a

Stuck breaker fault on the 8G.GULF (#336820) to 8FRKLIN (#336562) 500 kV line, near the 8G.GULF.

a) Apply 3 Phase Fault AT 8G.GULF 500KV BUS 336820
b) Run fault for 5 cycles.
c) Remove Fault AT 8G.GULF 500KV BUS 336820
d) Apply 3 Phase fault at #336820 with admittance 640.02 -j 8505.34 MVA
e) Clear fault after 9 cycles by tripping line from 8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2a.OUT

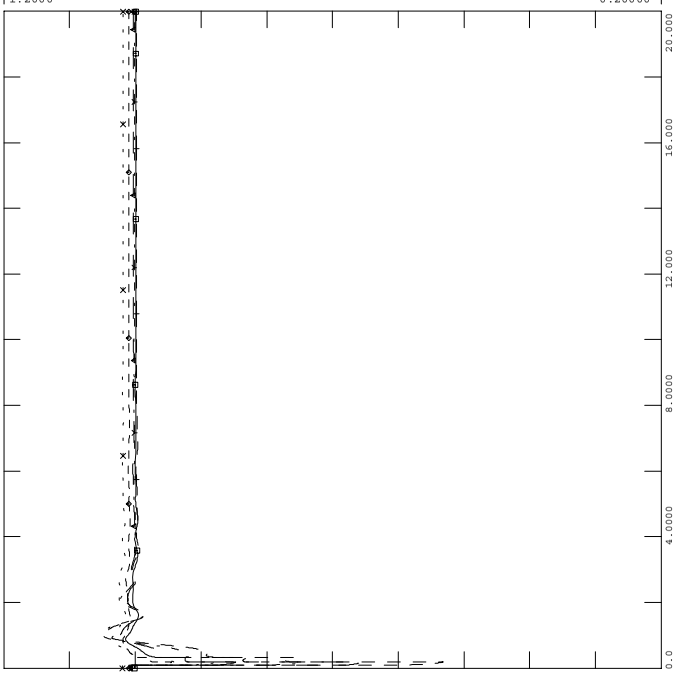
CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]




TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2a.OUT

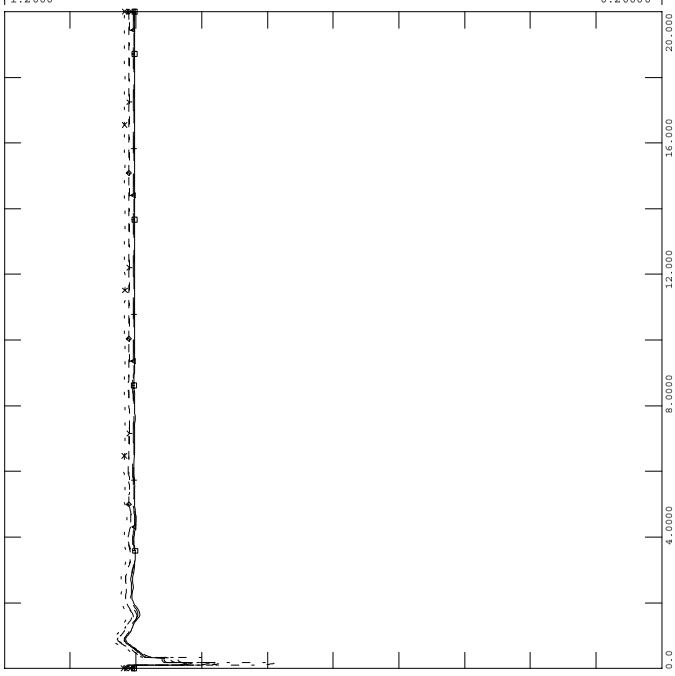
CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]




TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2a.OUT

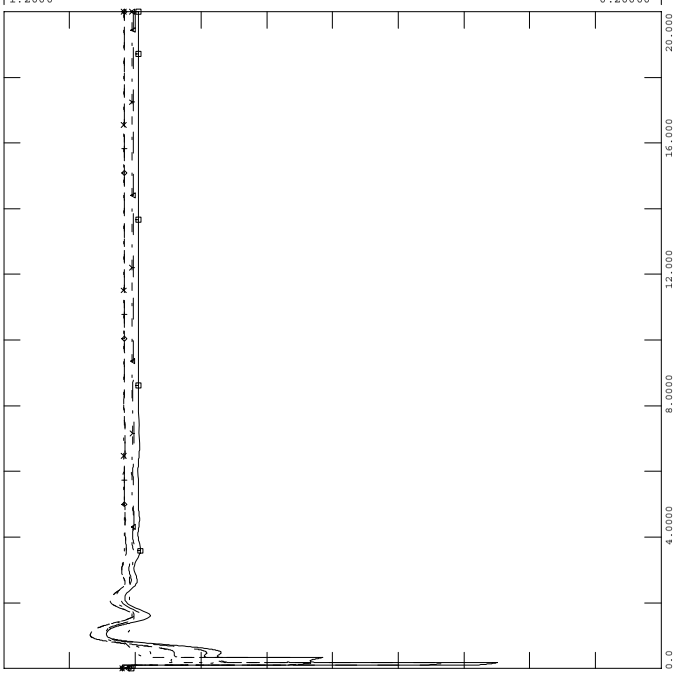
CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]



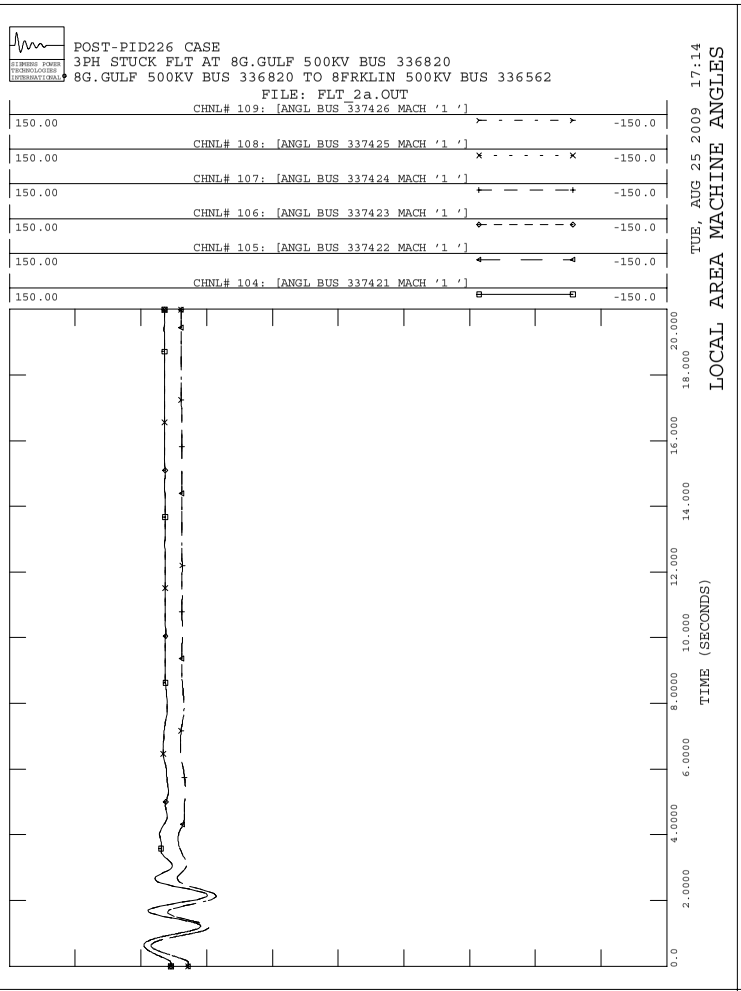

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2a.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]




TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2a.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
150.00
-150.0
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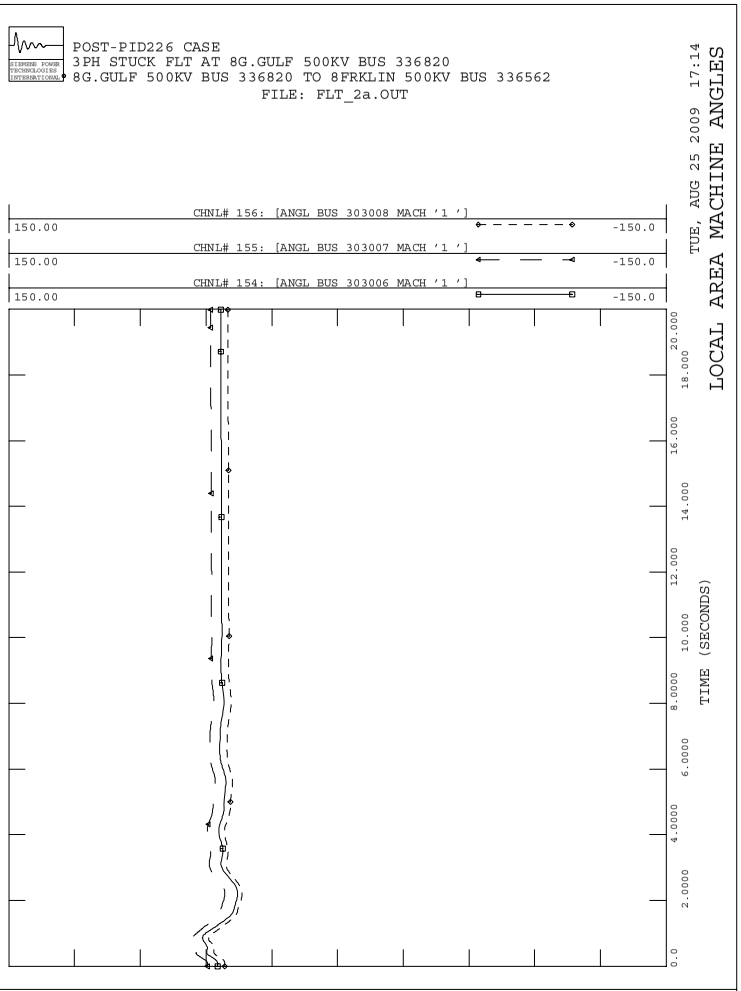
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2a.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
150.00
-150.0
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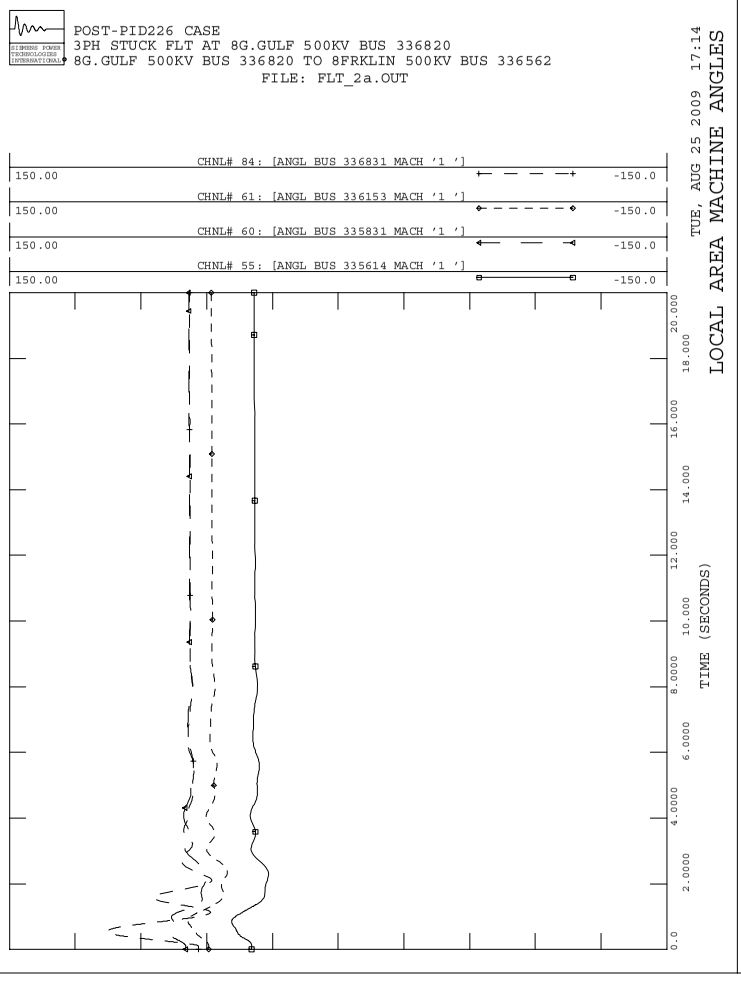
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2a.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
150.00
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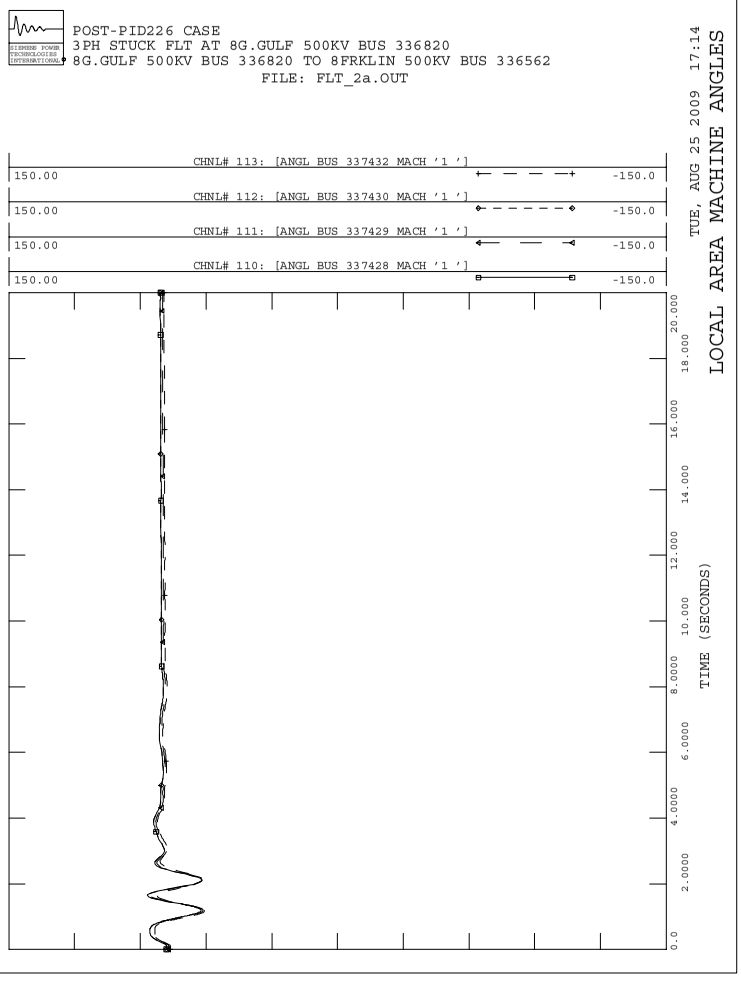
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2a.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
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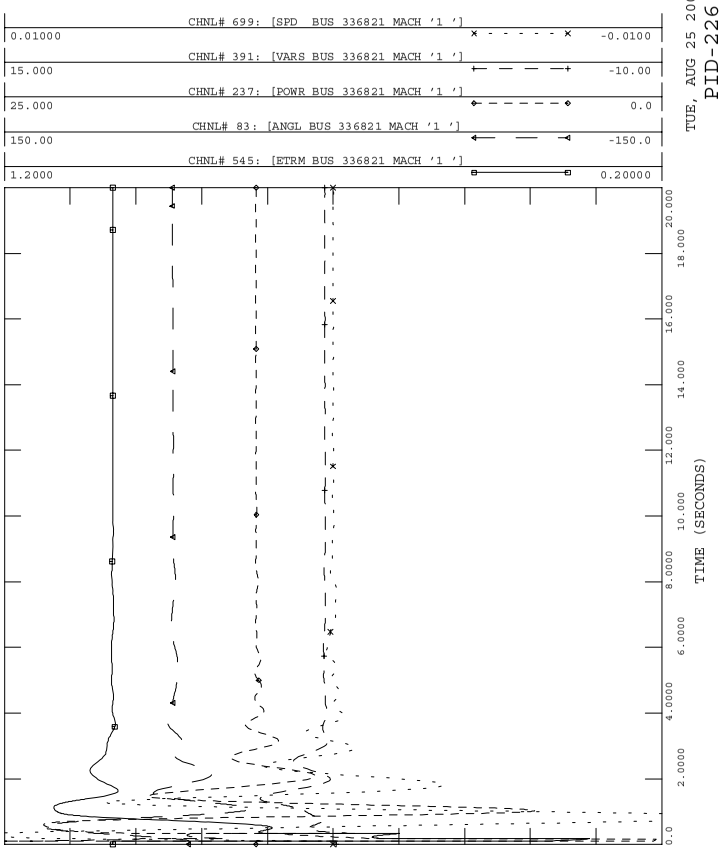
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8G.GULF 500KV BUS 336820
8G.GULF 500KV BUS 336820 TO 8FRKLIN 500KV BUS 336562
FILE: FLT_2a.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS

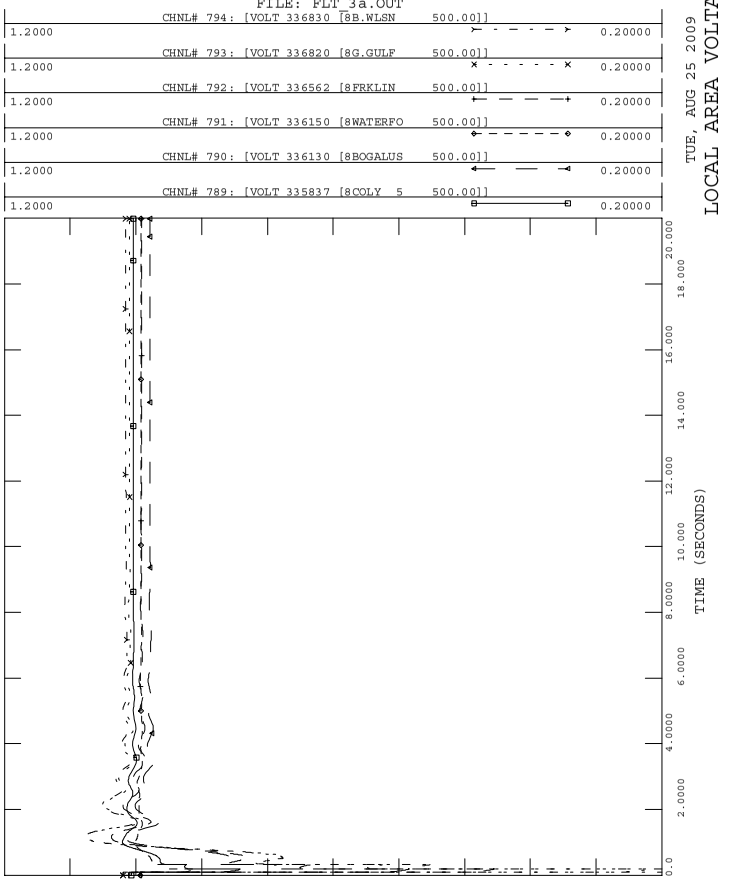


## C.18 FLT_3a

Stuck breaker fault on the 8B.WLSN (#336830) to 8PERYVILL (#337427) 500 kV line, near the 8B.WLSN.

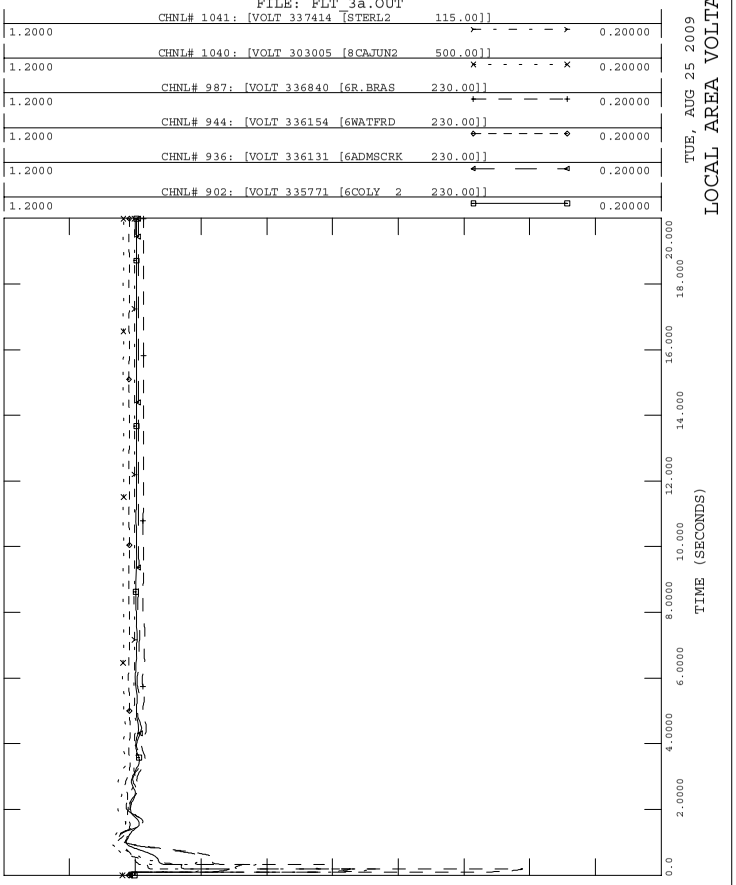
a) Apply 3 Phase Fault AT 8B.WLSN 500KV BUS 336830
b) Run fault for 5 cycles.
c) Remove Fault AT 8B.WLSN 500KV BUS 336830
d) Apply 3 Phase fault at #336830 with admittance 779.96 -j 8641.41 MVA
e) Clear fault after 9 cycles by tripping line from 8B.WLSN TO PERYVILL AND 8B.WLSN TO 8R.BRAS"

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 8R.BRAS
FILE: FLT_3a.OUT



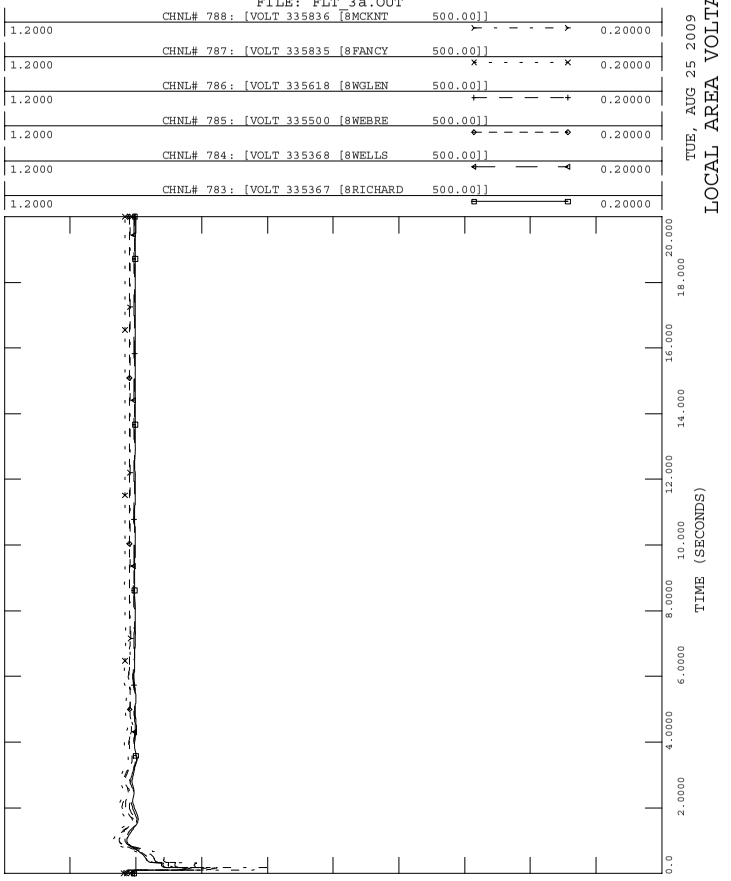

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 8R.BRAS
FILE: FLT_3a.OUT



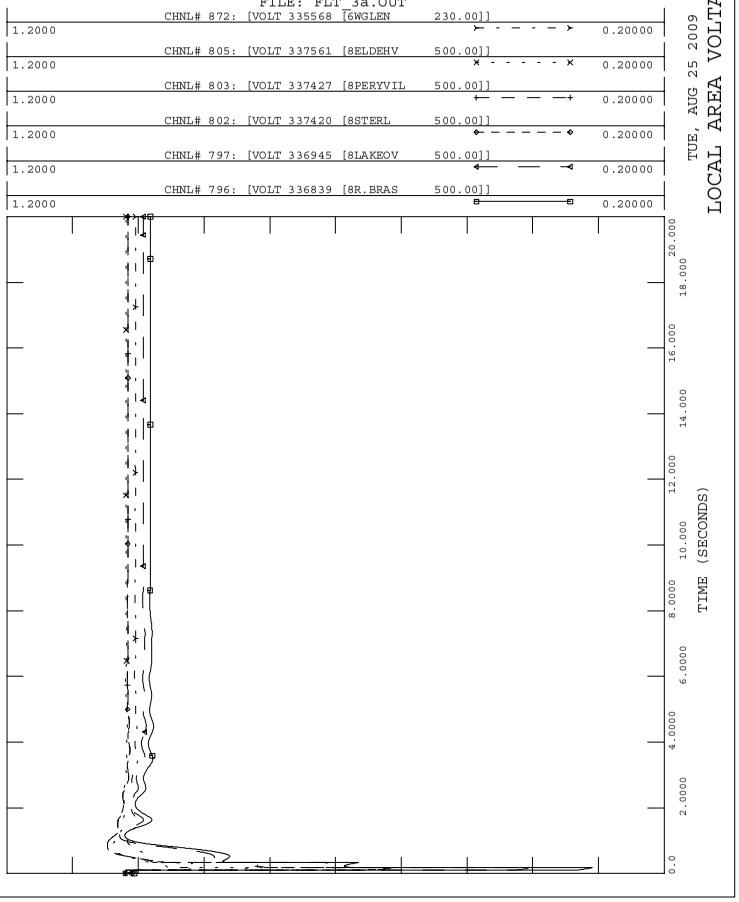

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 8R.BRAS
FILE: FLT_3a.OUT

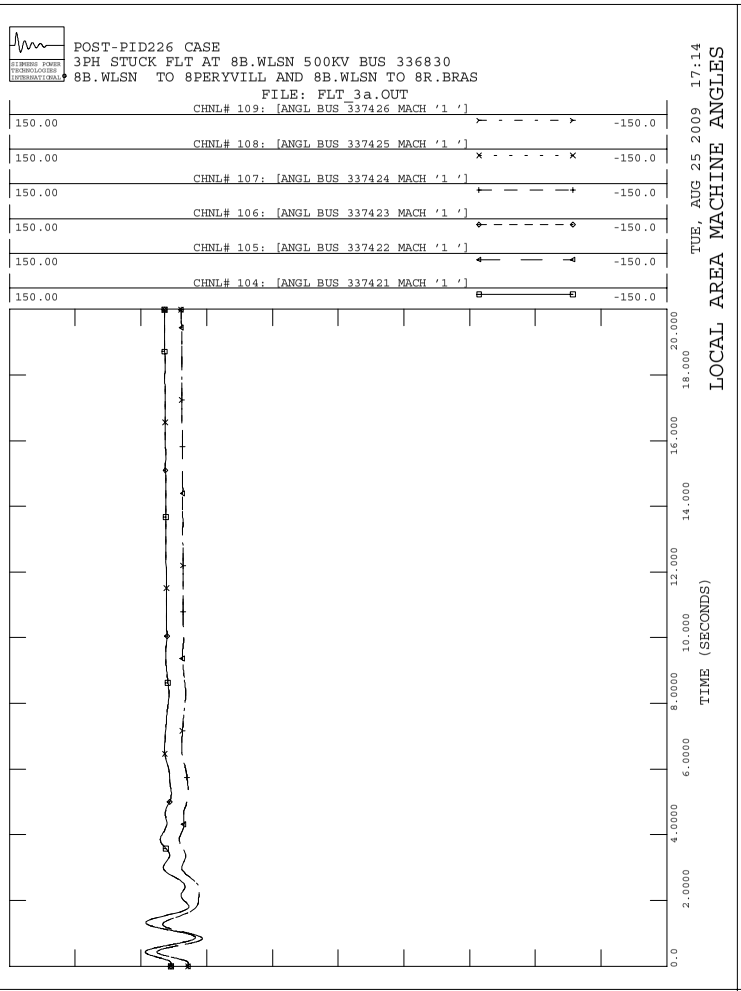



TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 8R.BRAS
FILE: FLT_3a.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 8R.BRAS
FILE: FLT_3a.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
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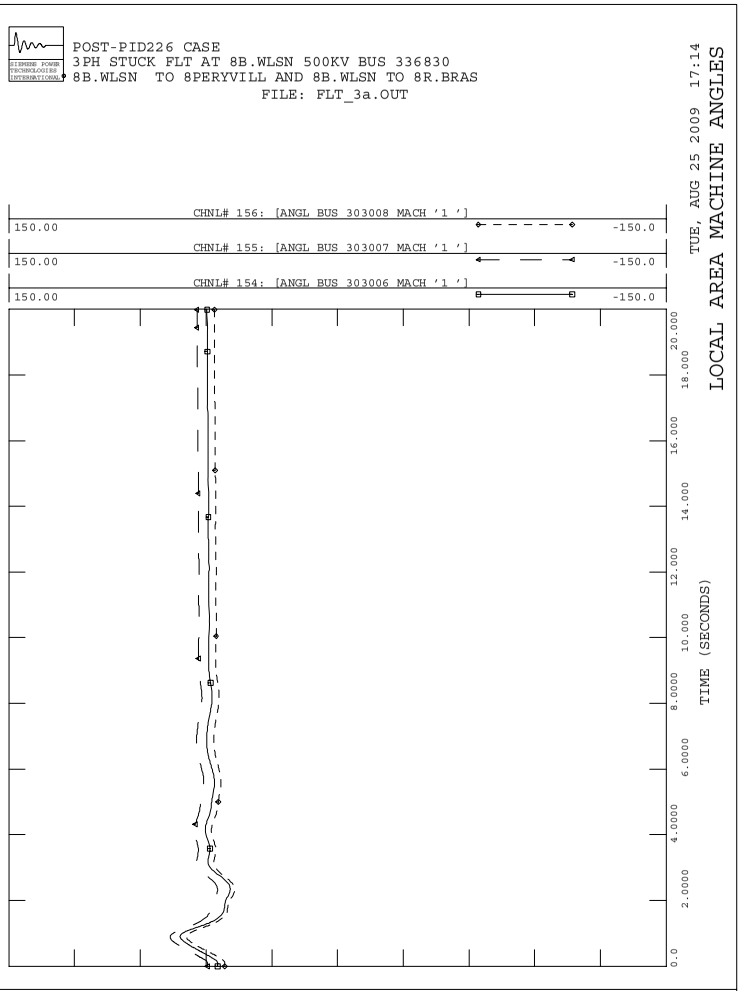
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 8R.BRAS
FILE: FLT_3a.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
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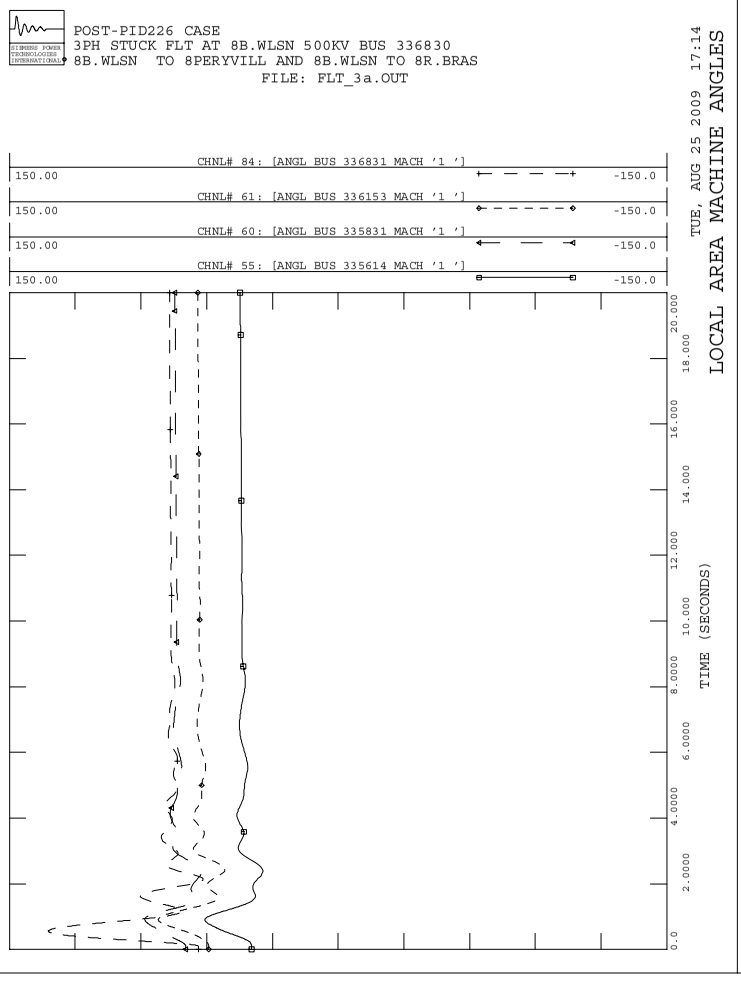
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 8R.BRAS
FILE: FLT_3a.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
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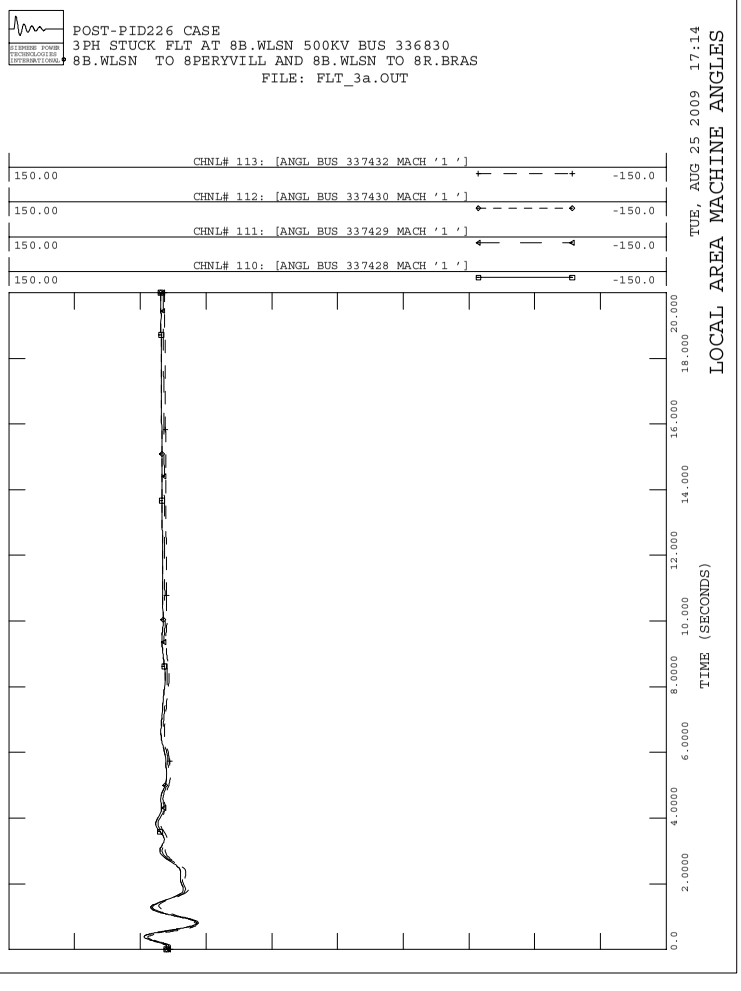
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 8R.BRAS
FILE: FLT_3a.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
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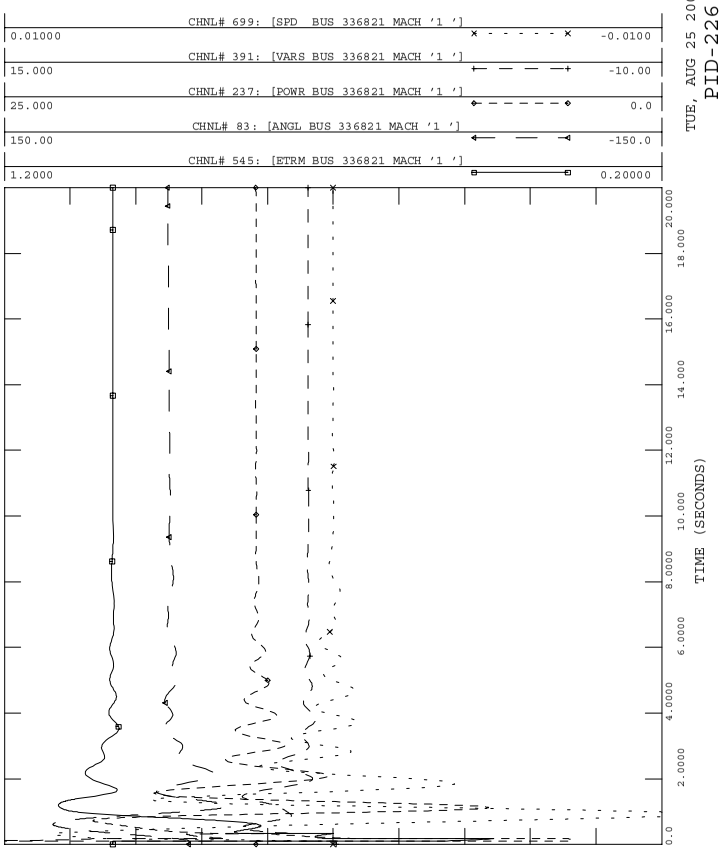
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 8R.BRAS
FILE: FLT_3a.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS

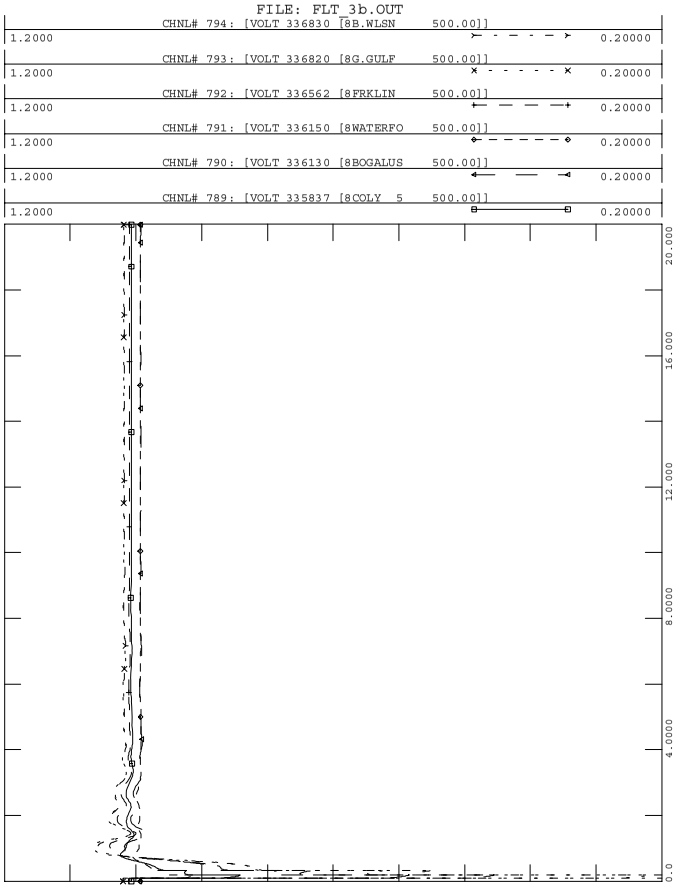


## C.19 FLT_3b

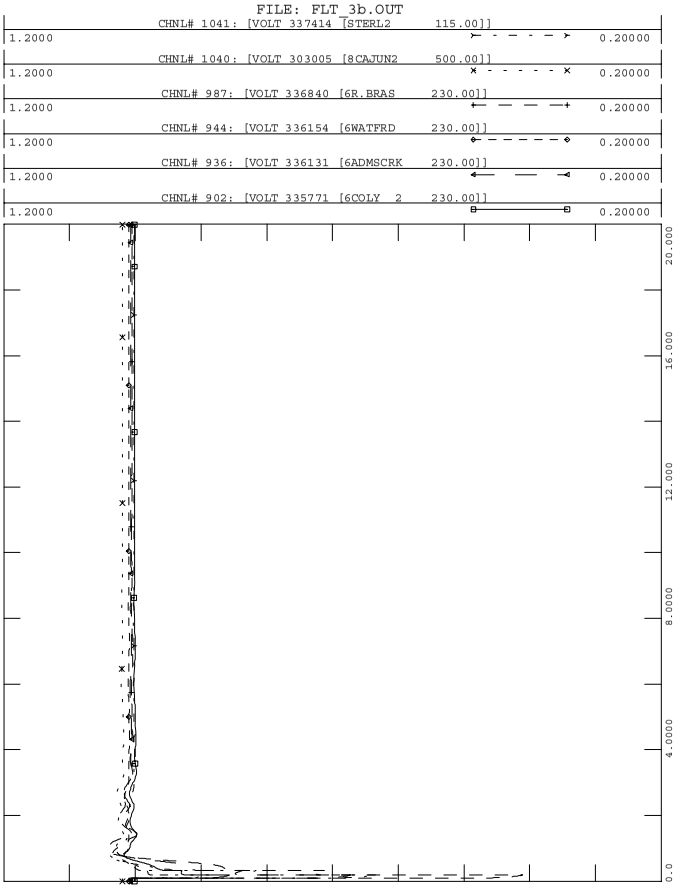
Stuck breaker fault on the 8B.WLSN (#336830) to 8PERYVILL (#337427) 500 kV line, near the 8B.WLSN.

a) Apply 3 Phase Fault AT 8B.WLSN 500KV BUS 336830
b) Run fault for 5 cycles.
c) Remove Fault AT 8B.WLSN 500KV BUS 336830
d) Apply 3 Phase fault at #336830 with admittance 779.96 -j 8641.41 MVA
e) Clear fault after 9 cycles by tripping line from 8B.WLSN TO 8PERYVILL AND transformer from 8B.WLSN TO 3B.WLSN

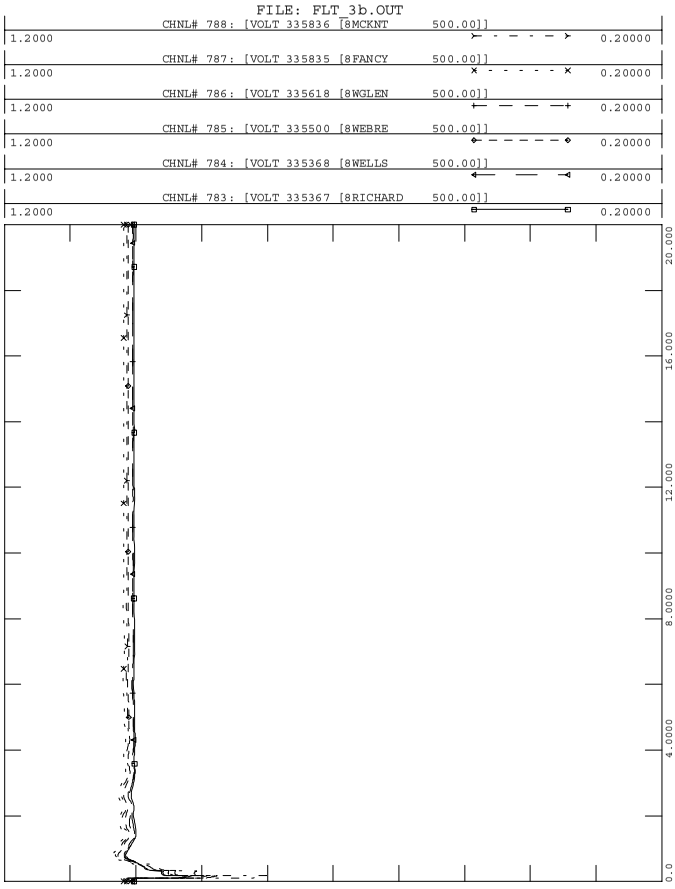
POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 3B.WLSN
FILE: FLT_3b.OUT



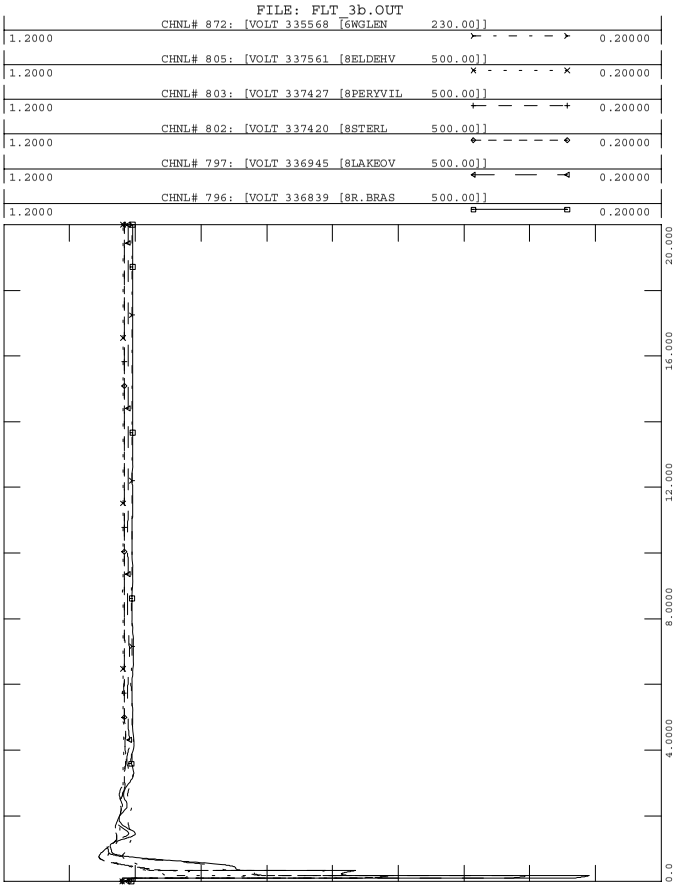

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 3B.WLSN
FILE: FLT_3b.OUT

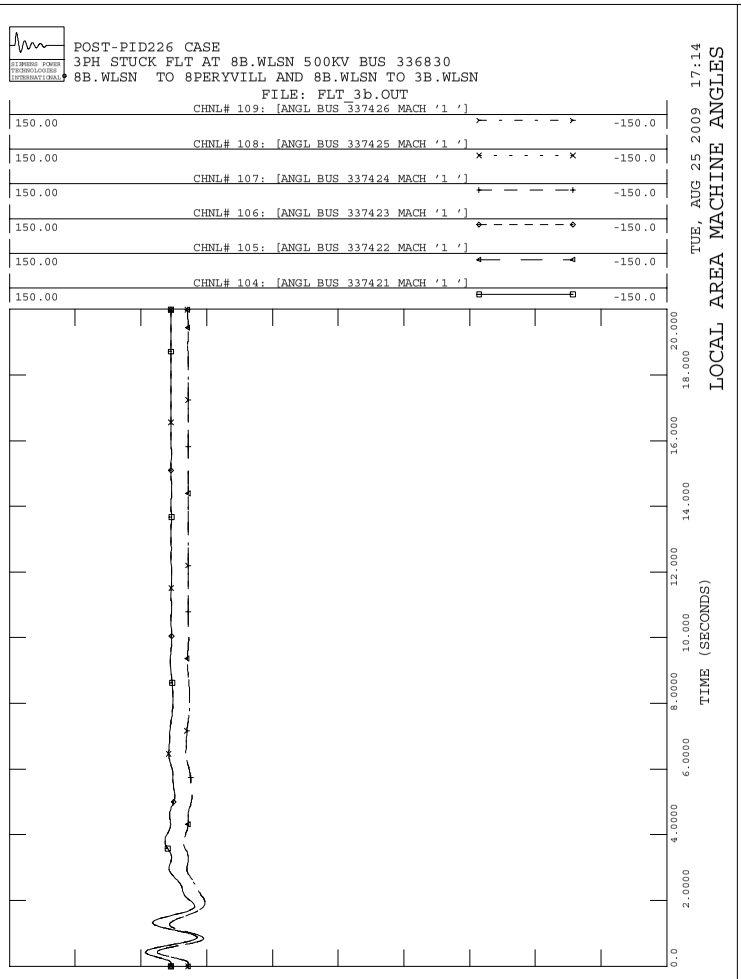


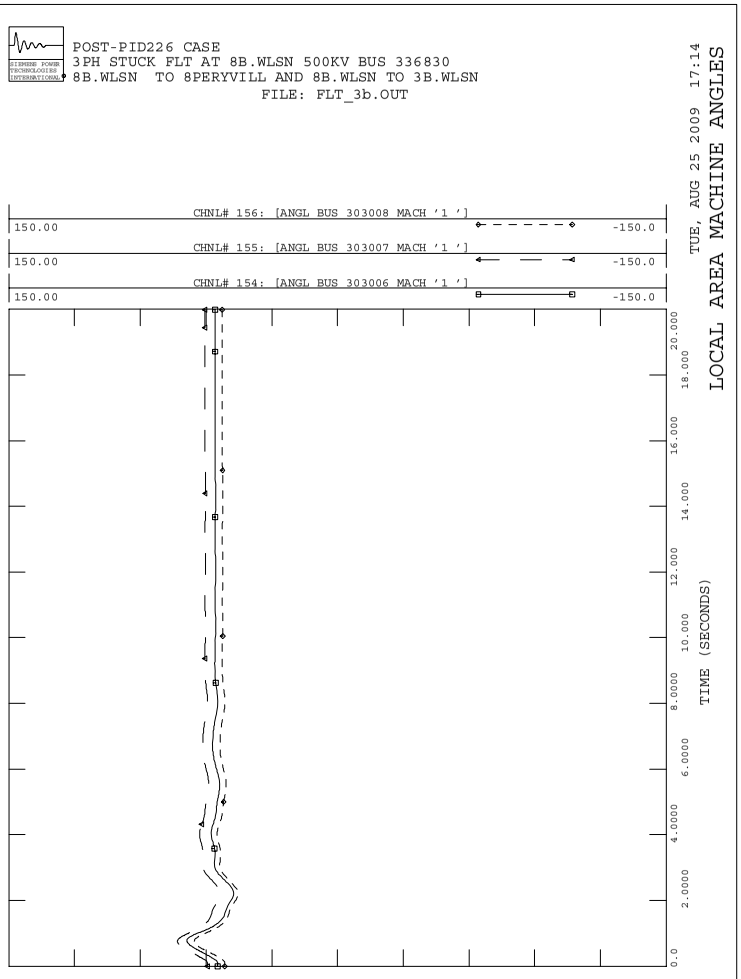

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 3B.WLSN
FILE: FLT_3b.OUT

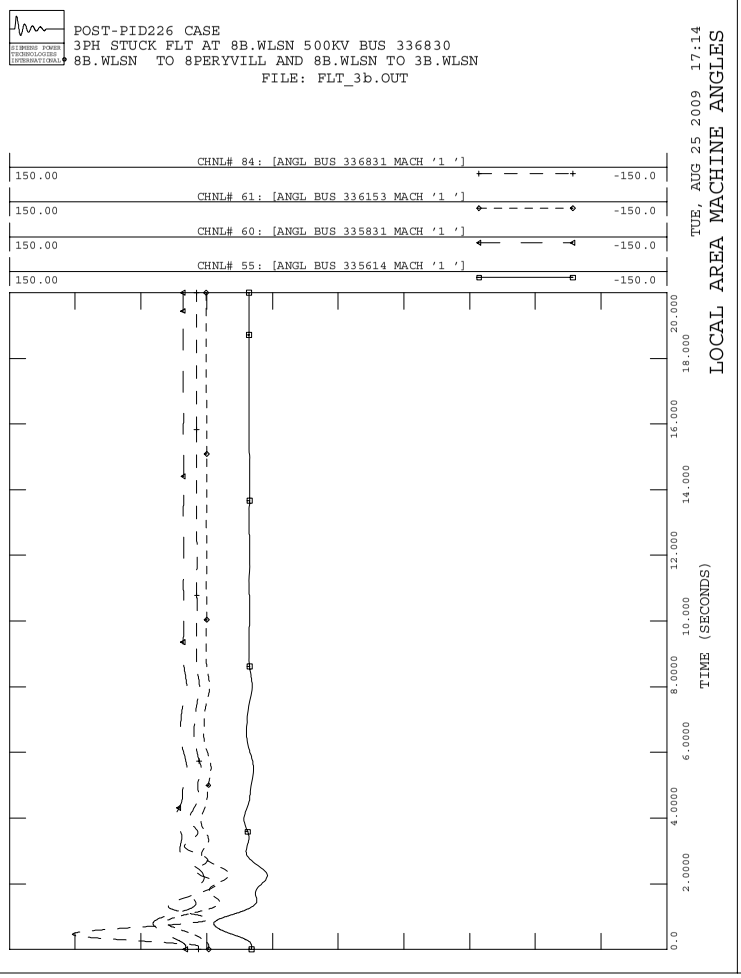


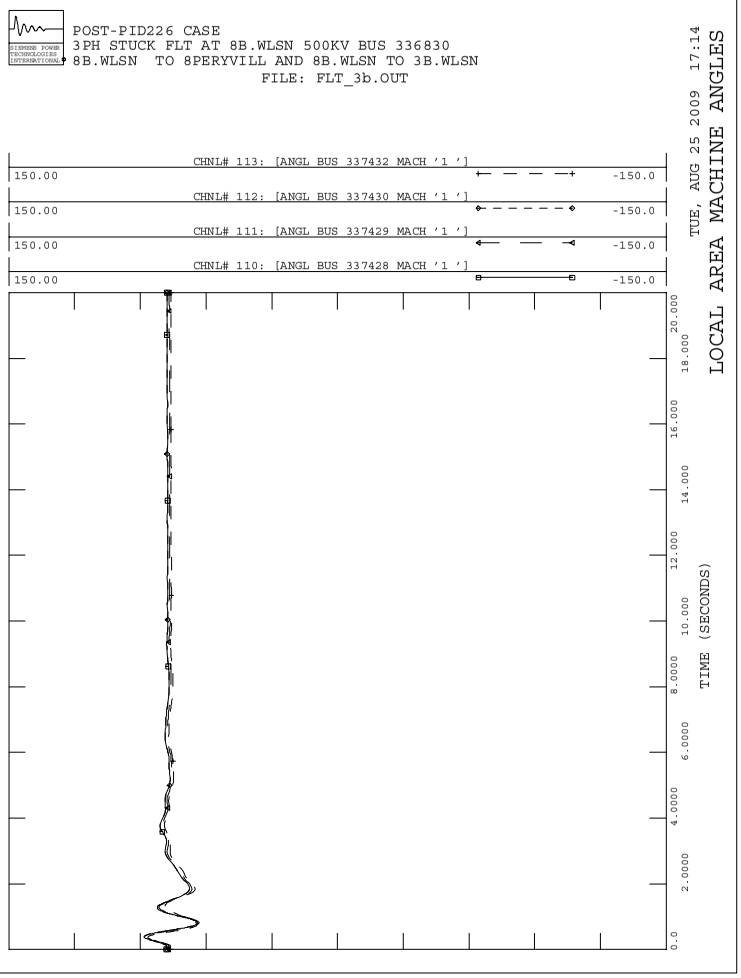

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 3B.WLSN
FILE: FLT_3b.OUT




POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 3B.WLSN
FILE: FLT_3b.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

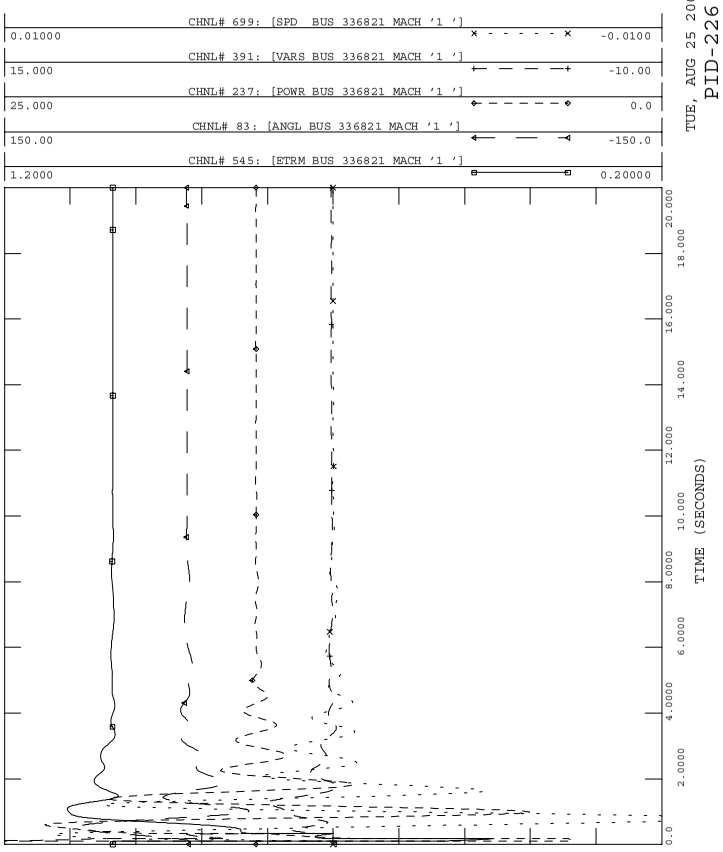

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 3B.WLSN
FILE: FLT_3b.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 3B.WLSN
FILE: FLT_3b.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 3B.WLSN
FILE: FLT_3b.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8PERYVILL AND 8B.WLSN TO 3B.WLSN
FILE: FLT_3b.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS

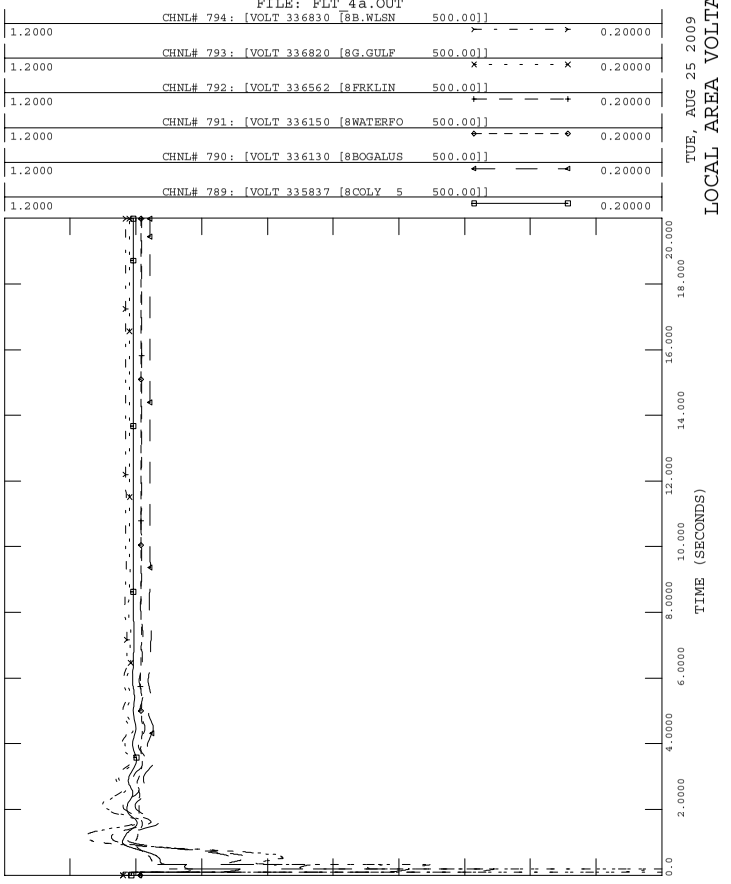


## C.20 FLT_4a

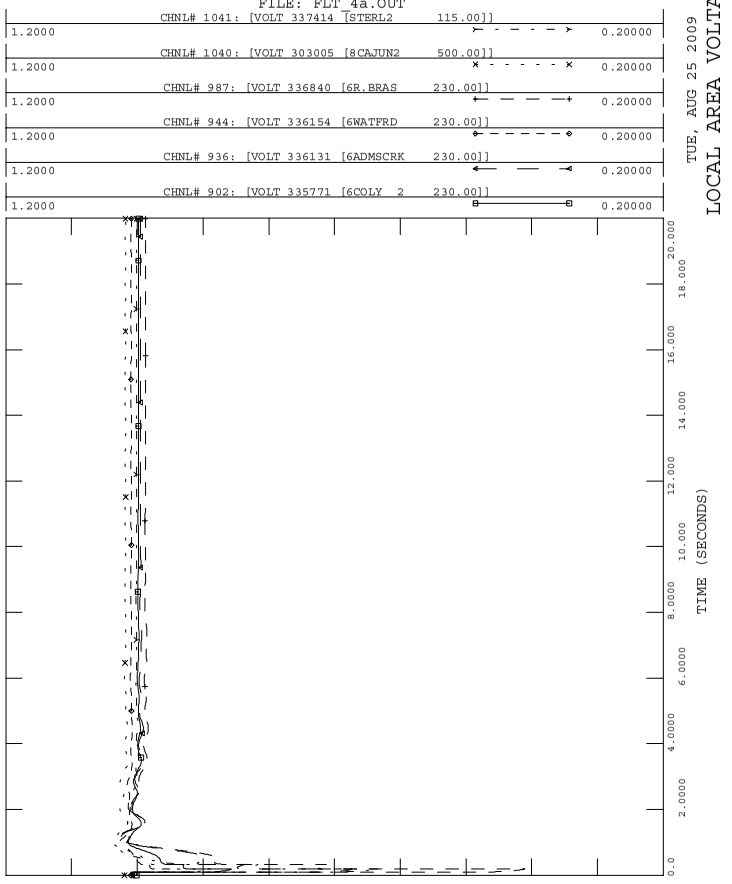
Stuck breaker fault on the 8B.WLSN (#336830) to 8R.BRAS (#336839) 500 kV line, near the 8B.WLSN.

a) Apply 3 Phase Fault AT 8B.WLSN 500KV BUS 336830
b) Run fault for 5 cycles.
c) Remove Fault AT 8B.WLSN 500KV BUS 336830
d) Apply 3 Phase fault at #336830 with admittance 779.96 -j 8641.41 MVA
e) Clear fault after 9 cycles by tripping lines from 8B.WLSN TO 8R.BRAS AND 8B.WLSN TO 8PERYVILL

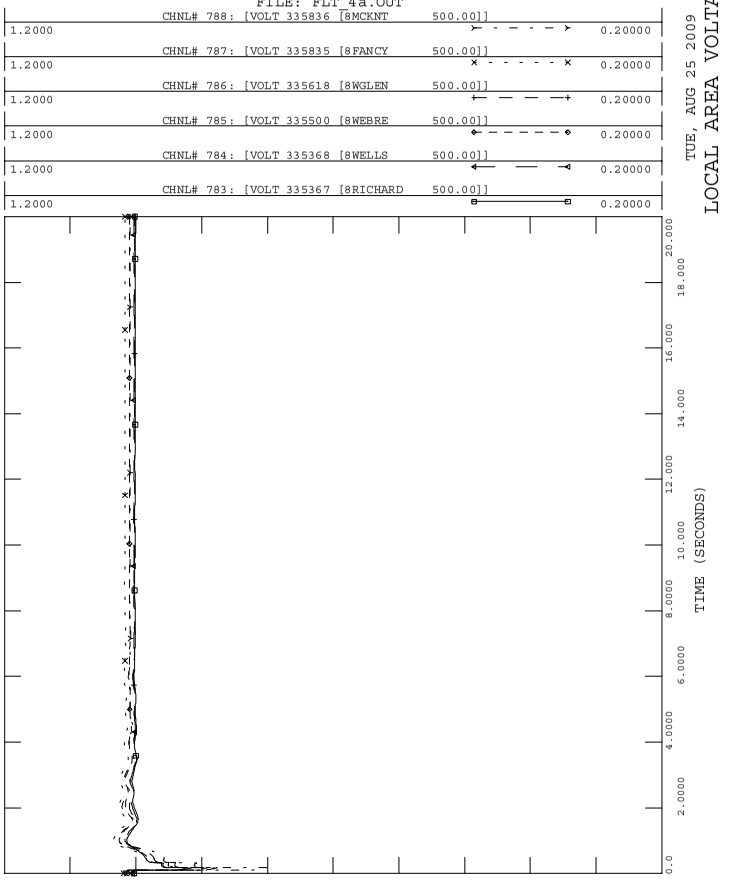
POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8R.BRAS AND 8B.WLSN TO 8PERYVILL
FILE: FLT_4a.OUT



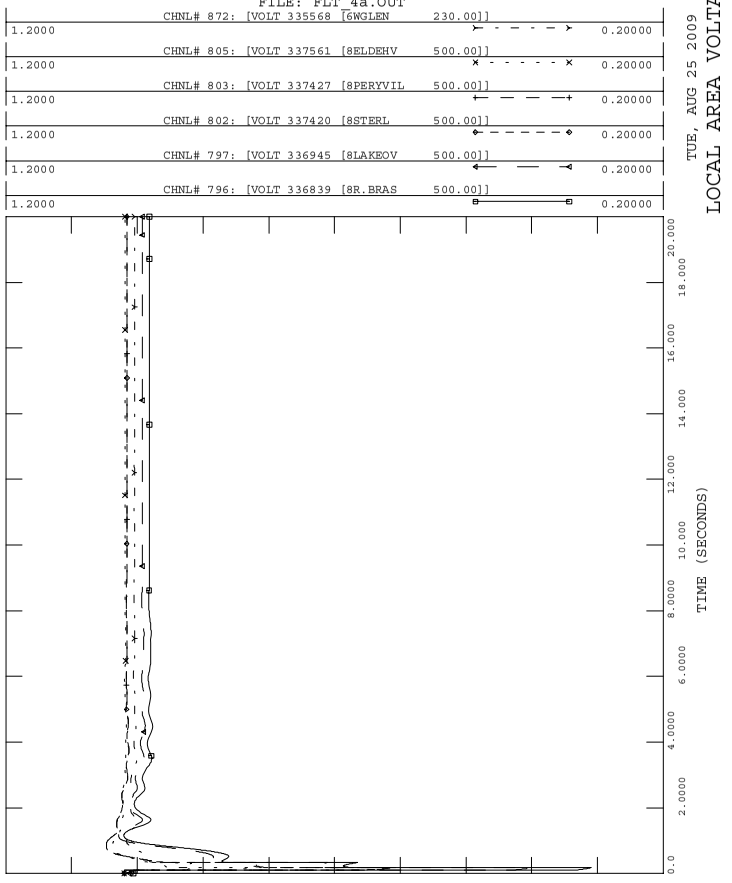

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8R.BRAS AND 8B.WLSN TO 8PERYVILL
FILE: FLT_4a.OUT



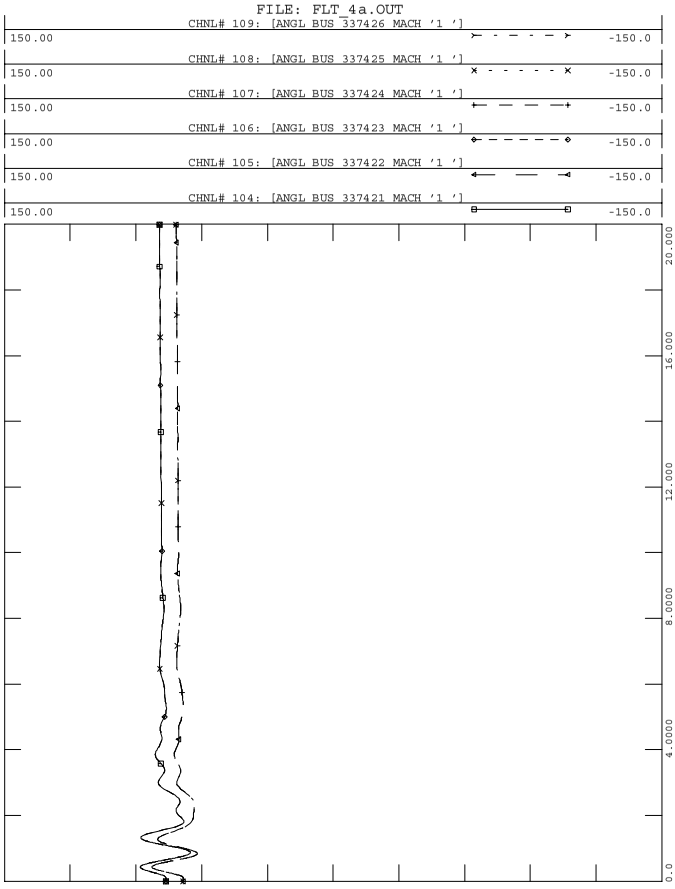

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8R.BRAS AND 8B.WLSN TO 8PERYVILL
FILE: FLT_4a.OUT




POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8R.BRAS AND 8B.WLSN TO 8PERYVILL
FILE: FLT_4a.OUT

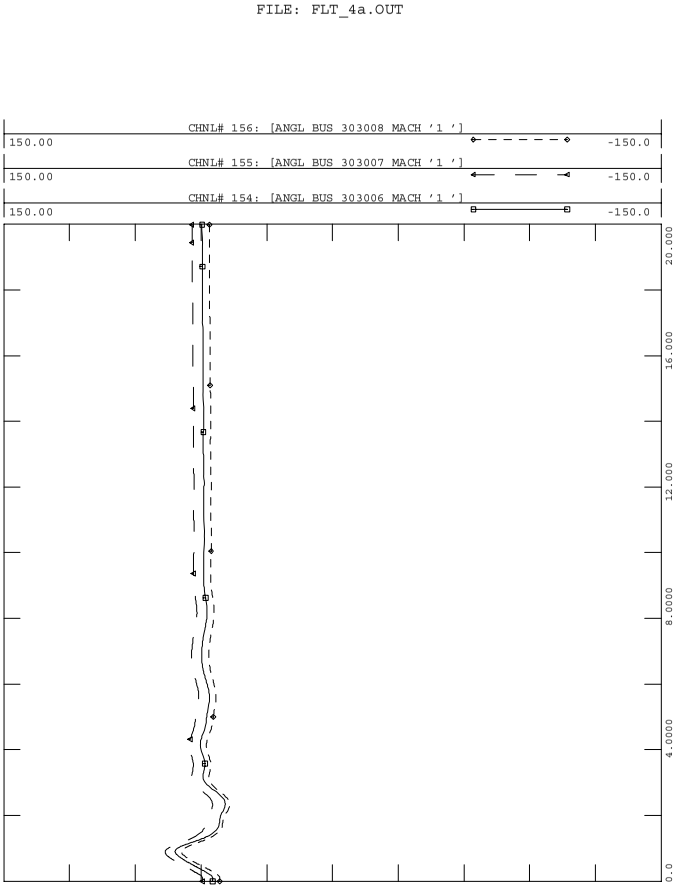


POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8R.BRAS AND 8B.WLSN TO 8PERYVILL
FILE: FLT_4a.OUT



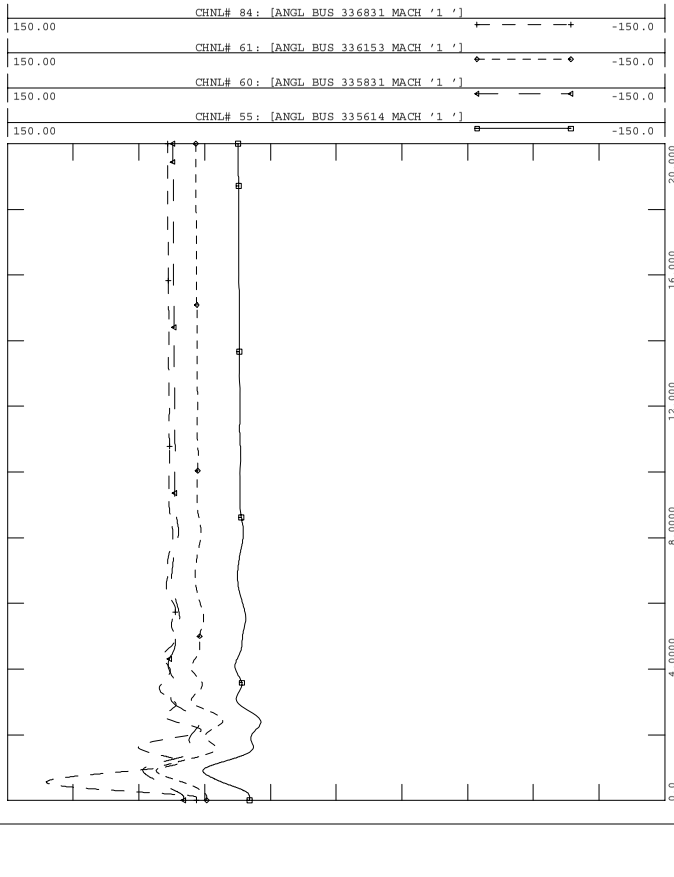

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8R.BRAS AND 8B.WLSN TO 8PERYVILL
FILE: FLT_4a.OUT



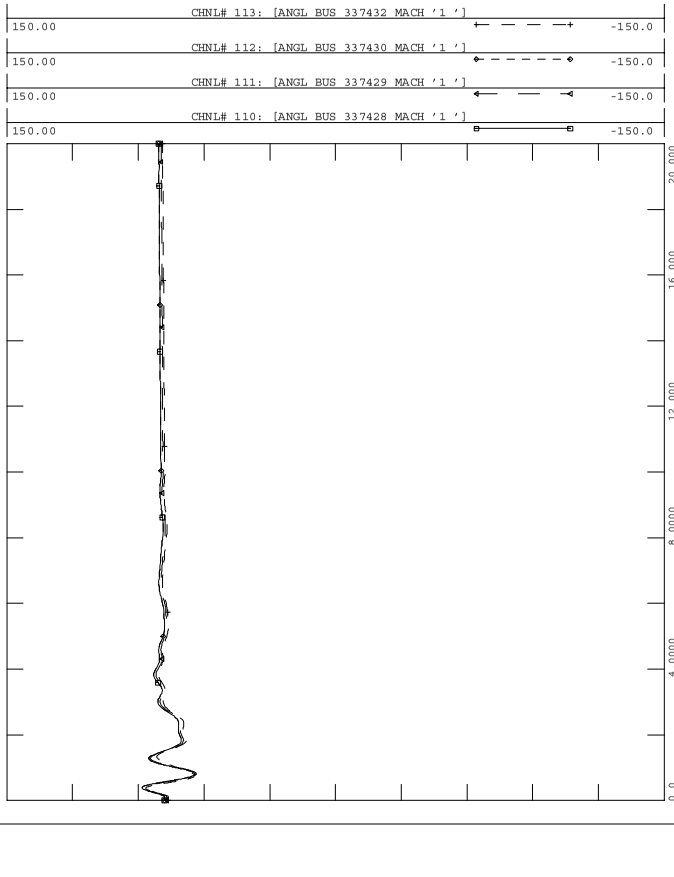

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8R.BRAS AND 8B.WLSN TO 8PERYVILL
FILE: FLT_4a.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

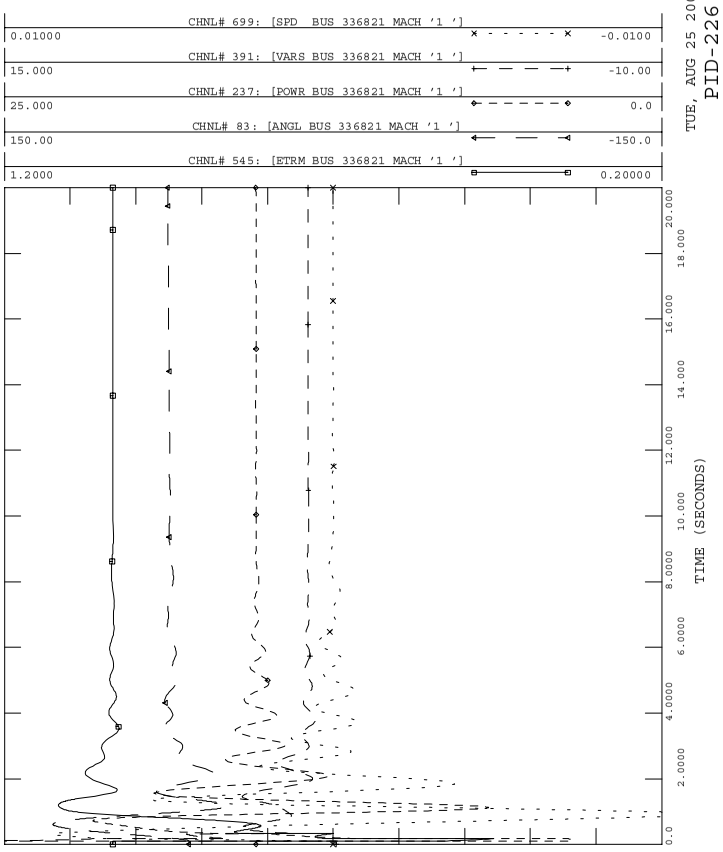
POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8R.BRAS AND 8B.WLSN TO 8PERYVILL
FILE: FLT_4a.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN TO 8R.BRAS AND 8B.WLSN TO 8PERYVILL
FILE: FLT_4a.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



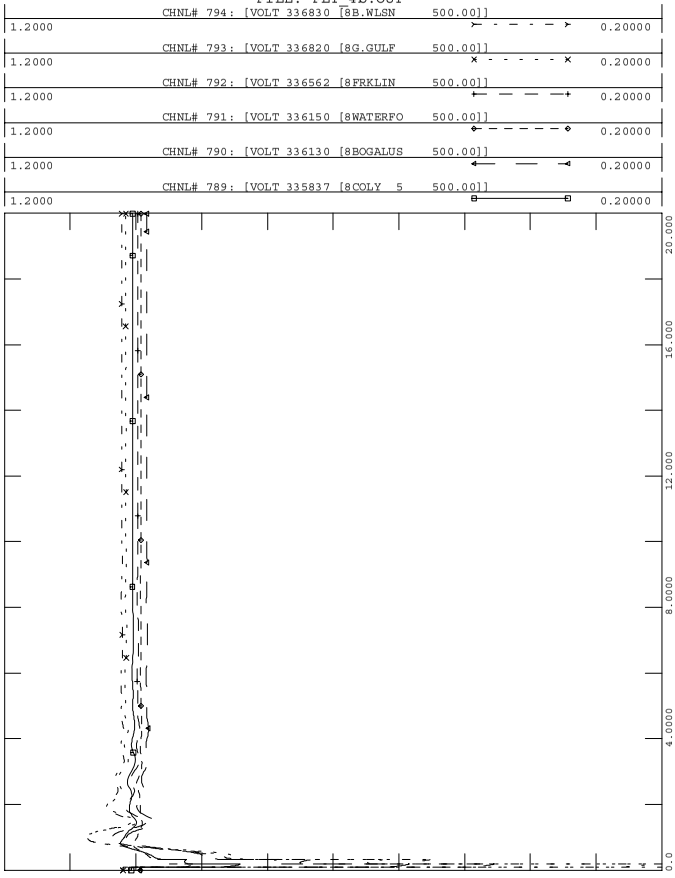
## C.21 FLT_4b

Stuck breaker fault on the 8B.WLSN (#336830) to 8R.BRAS (#336839) 500 kV line, near the 8B.WLSN.

a) Apply 3 Phase Fault AT 8B.WLSN 500KV BUS 336830
b) Run fault for 5 cycles.
c) Remove Fault AT 8B.WLSN 500KV BUS 336830
d) Apply 3 Phase fault at #336830 with admittance 779.96 -j 8641.41 MVA
e) Clear fault after 9 cycles by tripping lines from 8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4b.OUT

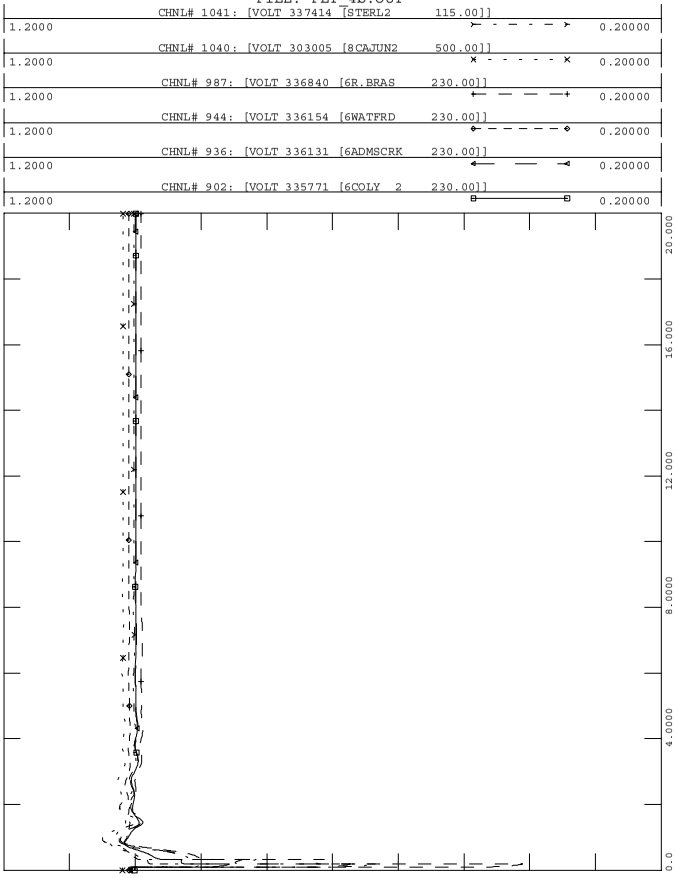
CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]




TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4b.OUT

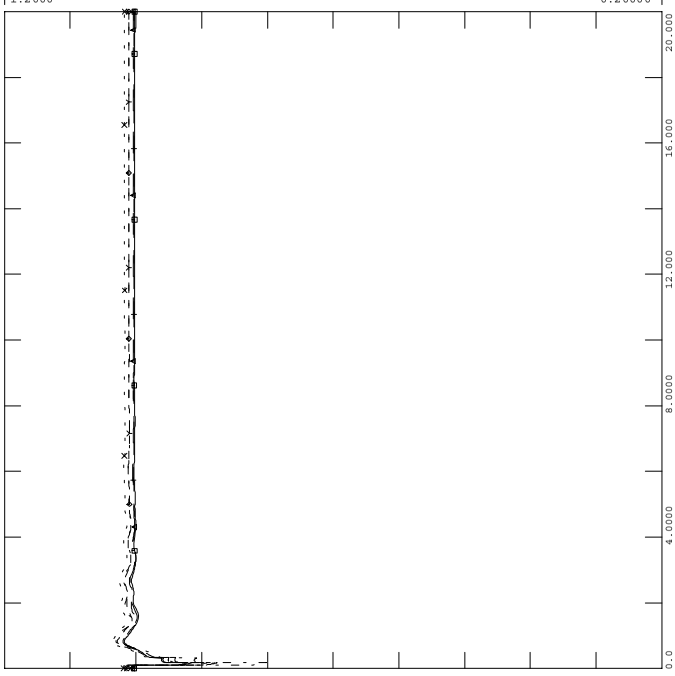
CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]




TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4b.OUT

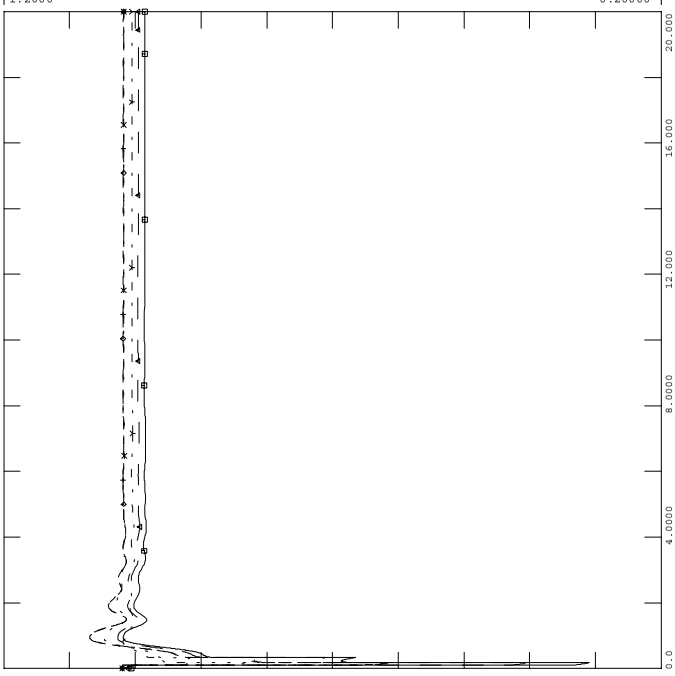
CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]




TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

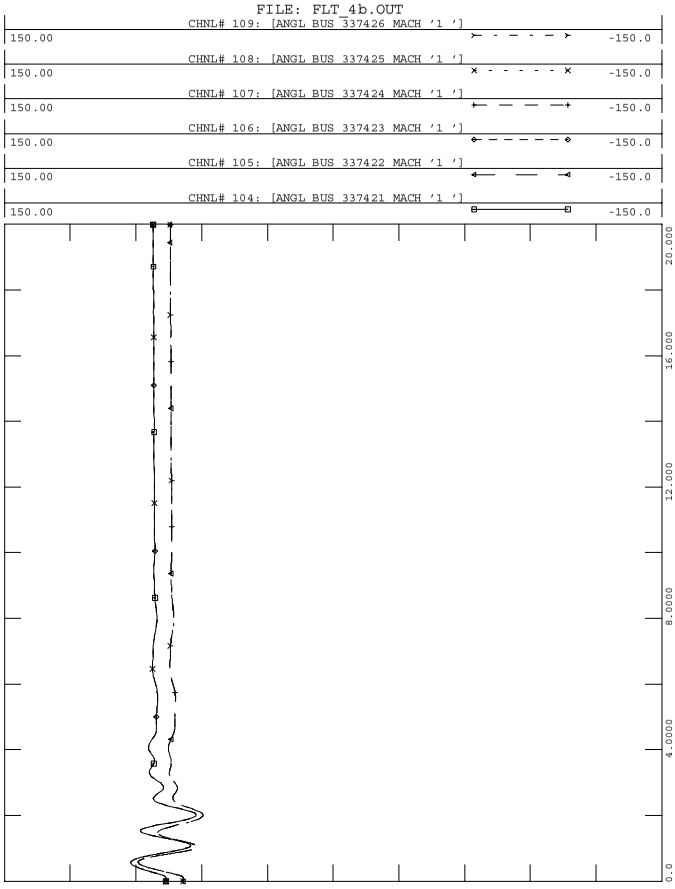
POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4b.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]



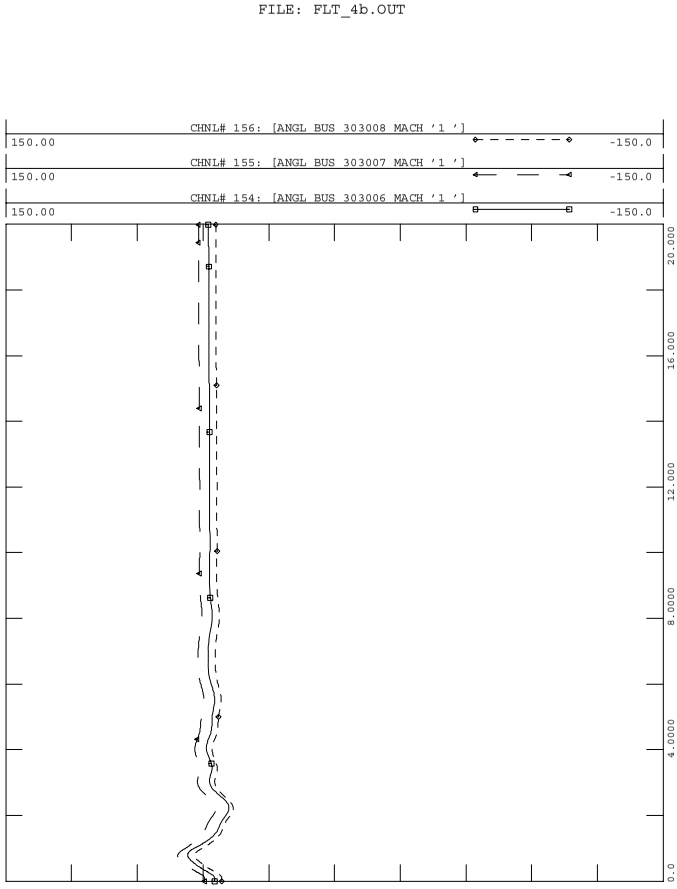

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4b.OUT



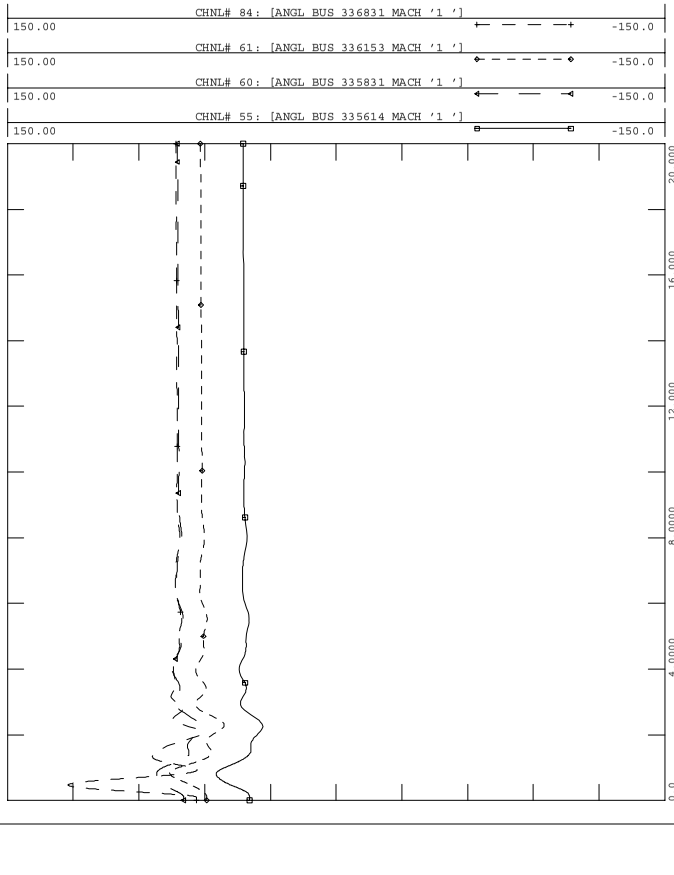

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4b.OUT



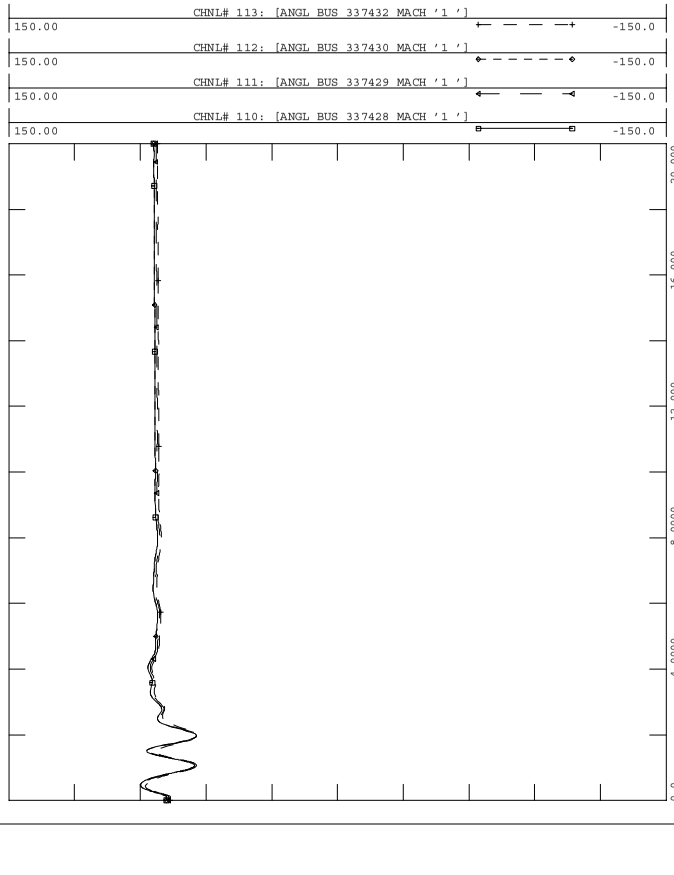

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4b.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

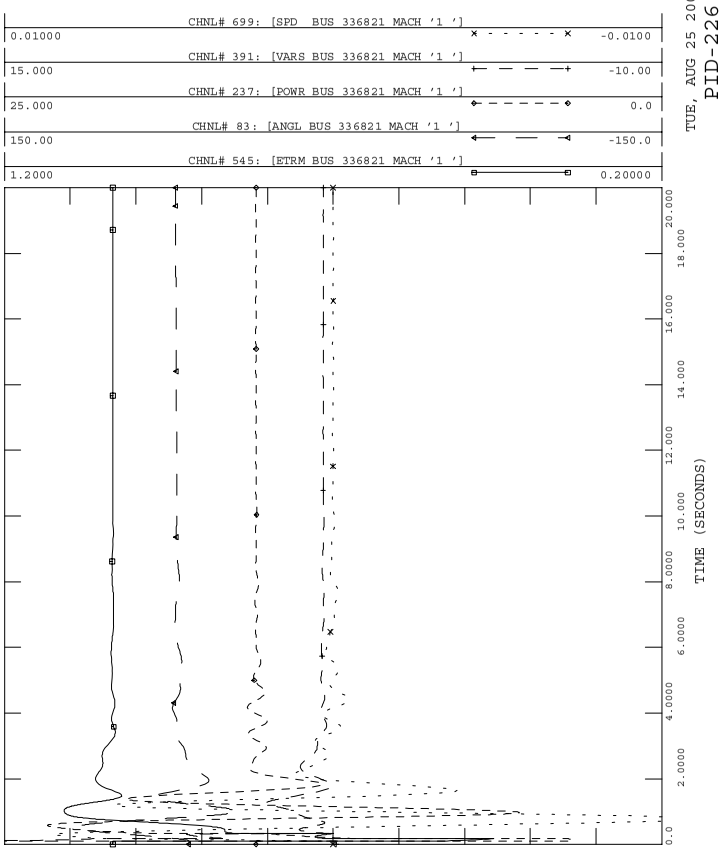
POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4b.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 8R.BRAS 500KV BUS 336839
FILE: FLT_4b.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.22 FLT_5a

Stuck breaker fault on the 8B.WLSN (#336830) to 3B.WLSN (#336800) transformer, near the 8B.WLSN.

a) Apply 3 Phase Fault AT 8B.WLSN 500KV BUS 336830
b) Run fault for 5 cycles.
c) Remove Fault AT 8B.WLSN 500KV BUS 336830
d) Apply 3 Phase fault at #336830 with admittance 779.96 -j 8641.41 MVA
e) Clear fault after 9 cycles by tripping transformer from 8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5a.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5a.OUT

CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5a.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5a.OUT

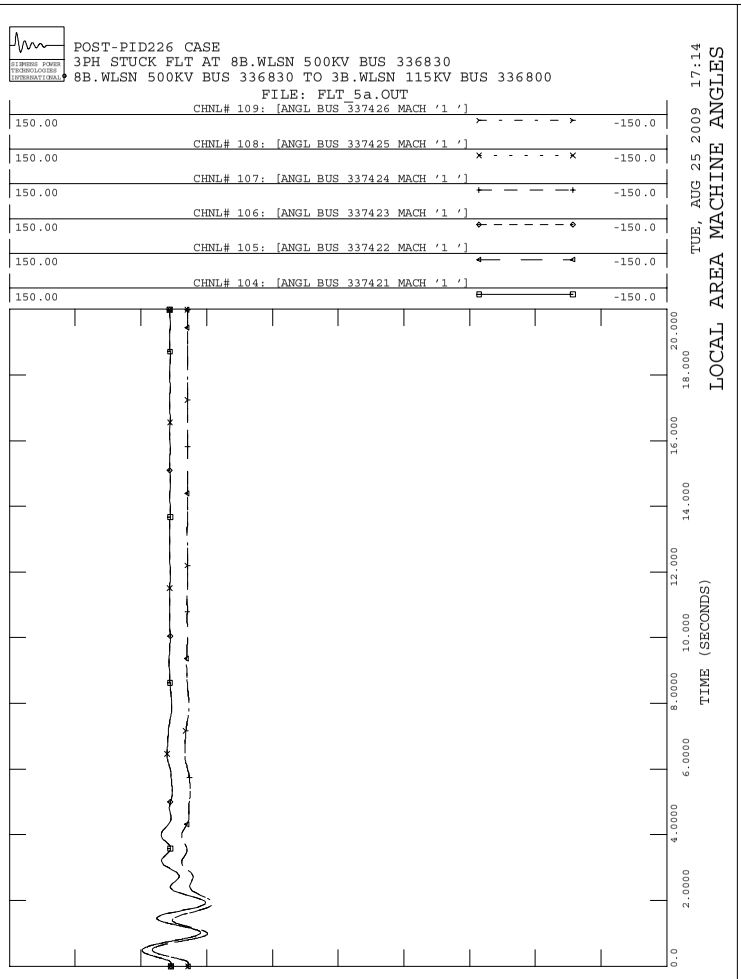
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

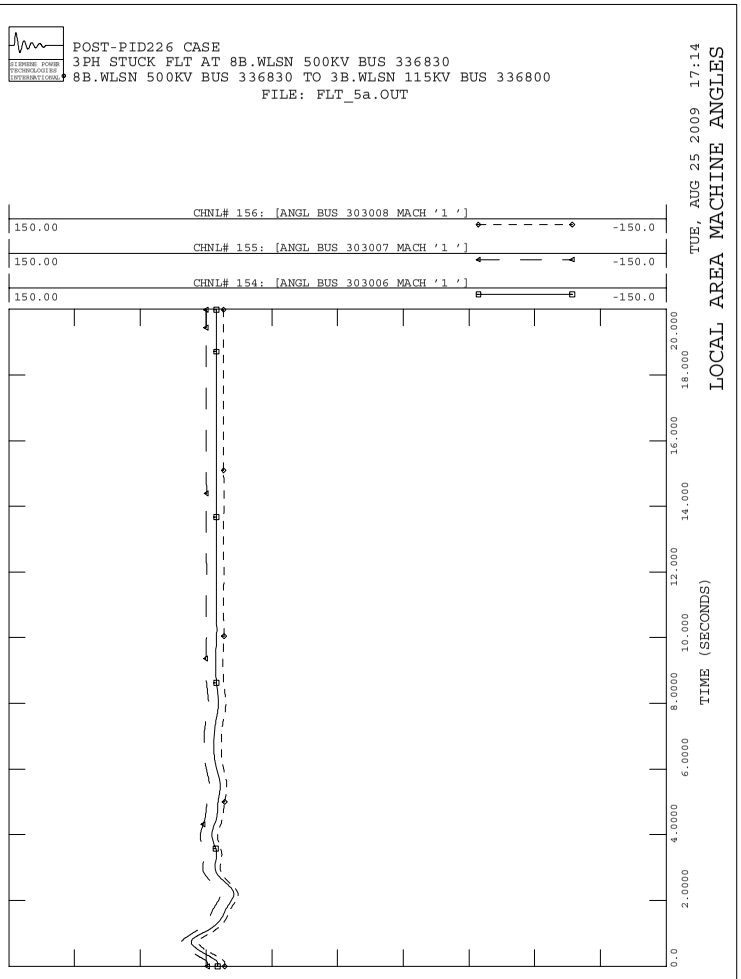
1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5a.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5a.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
150.00
-150.0
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2.0000
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6.0000
8.0000
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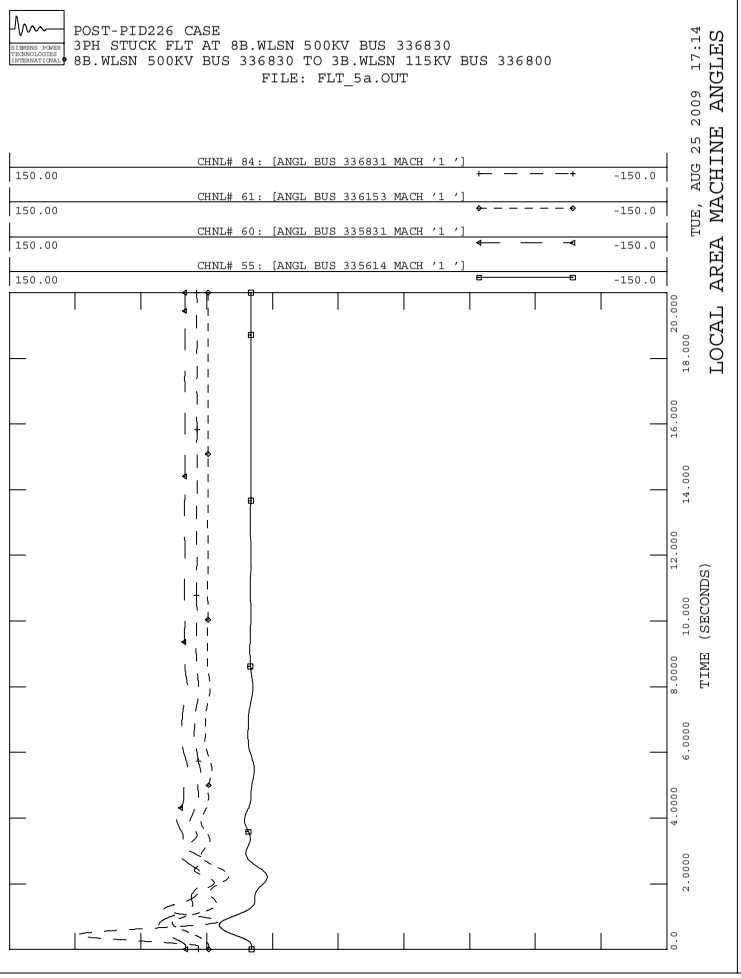
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5a.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
150.00
-150.0
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6.0000
8.0000
10.000
12.000
14.000
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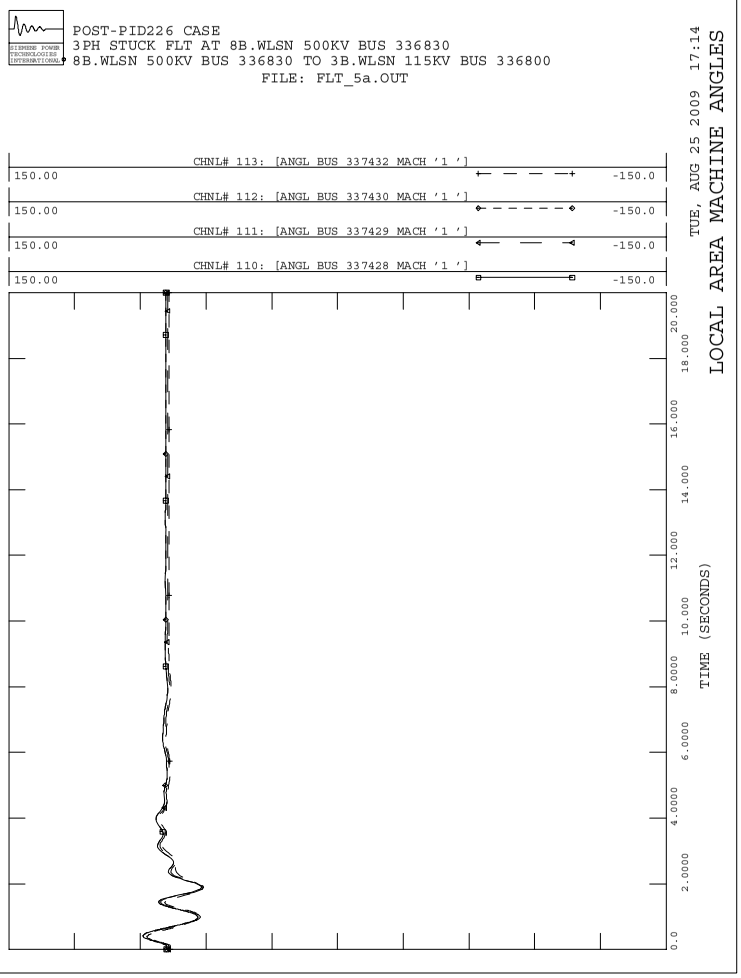
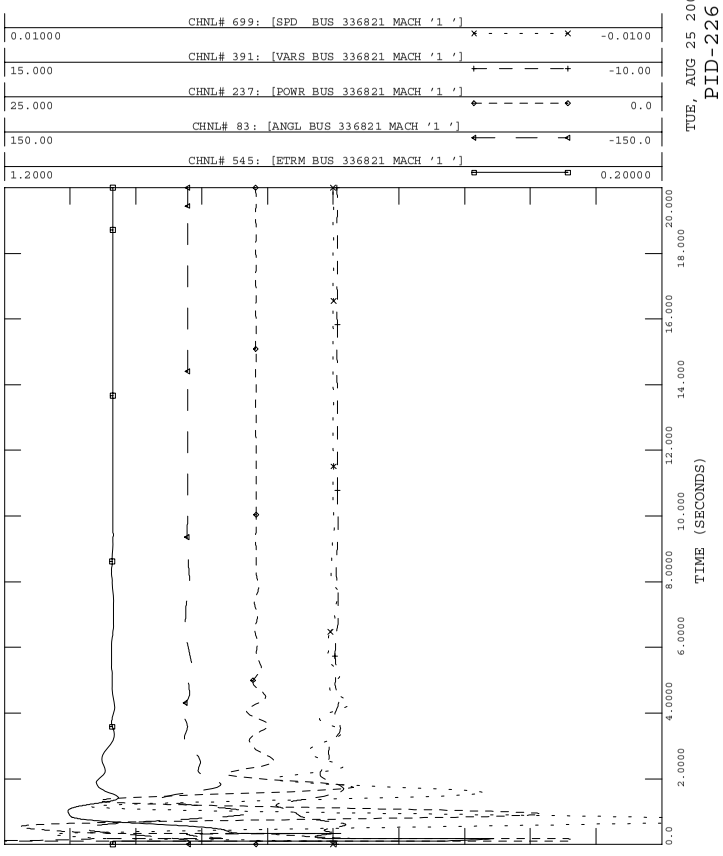
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5a.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8B.WLSN 500KV BUS 336830
8B.WLSN 500KV BUS 336830 TO 3B.WLSN 115KV BUS 336800
FILE: FLT_5a.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS

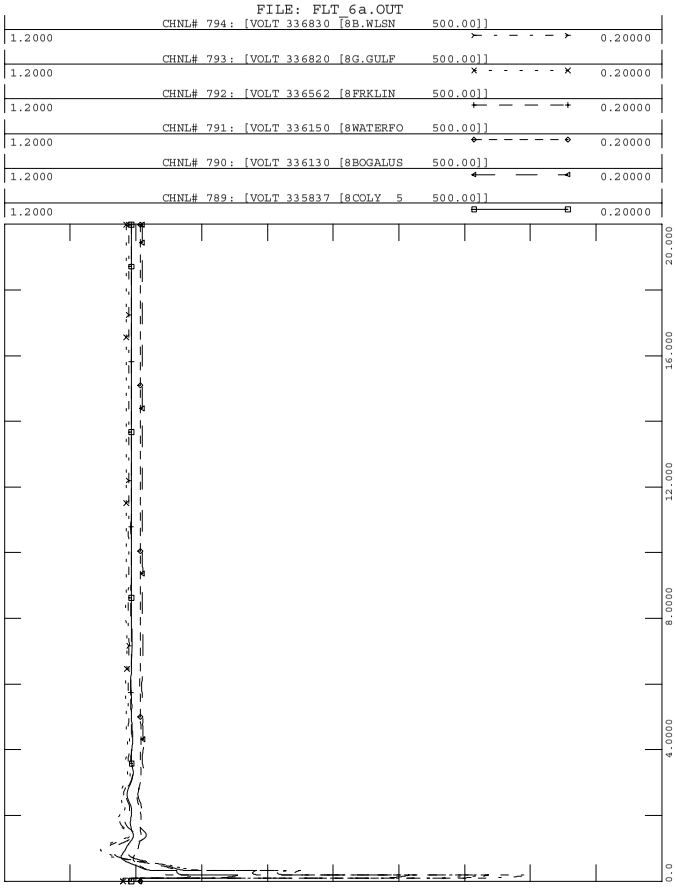


## C.23 FLT_6a

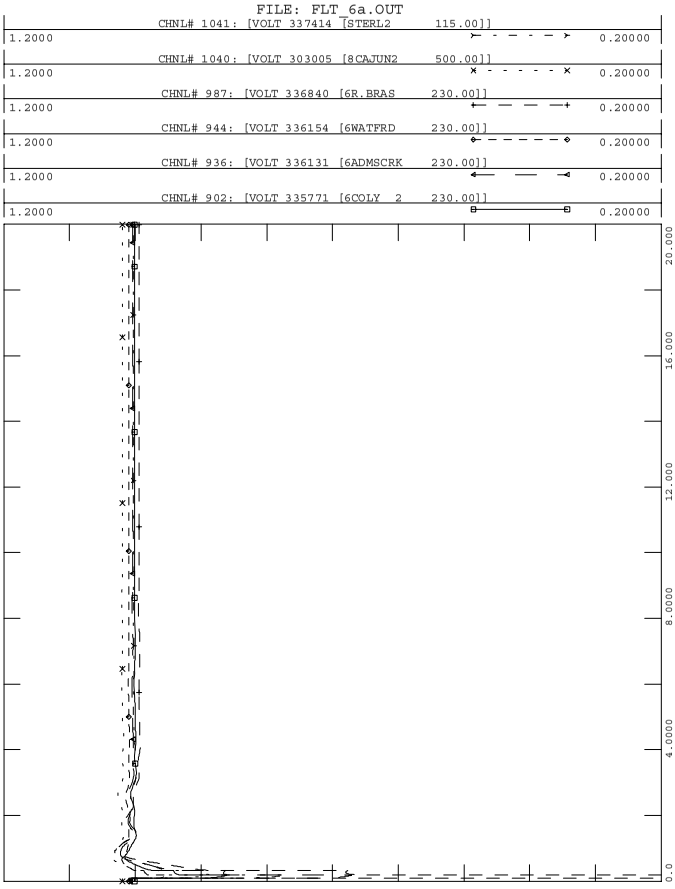
Stuck breaker fault on the 8R.BRAS (#336839) to 8FRKLIN (#336562) 500 kV line, near the 8R.BRAS.

a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Run fault for 5 cycles.
c) Remove Fault AT 8R.BRAS 500KV BUS 336839
d) Apply 3 Phase fault at #336839 with admittance 765.3 -j 6686.74 MVA
e) Clear fault after 9 cycles by tripping lines from 8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 8LAKEOV

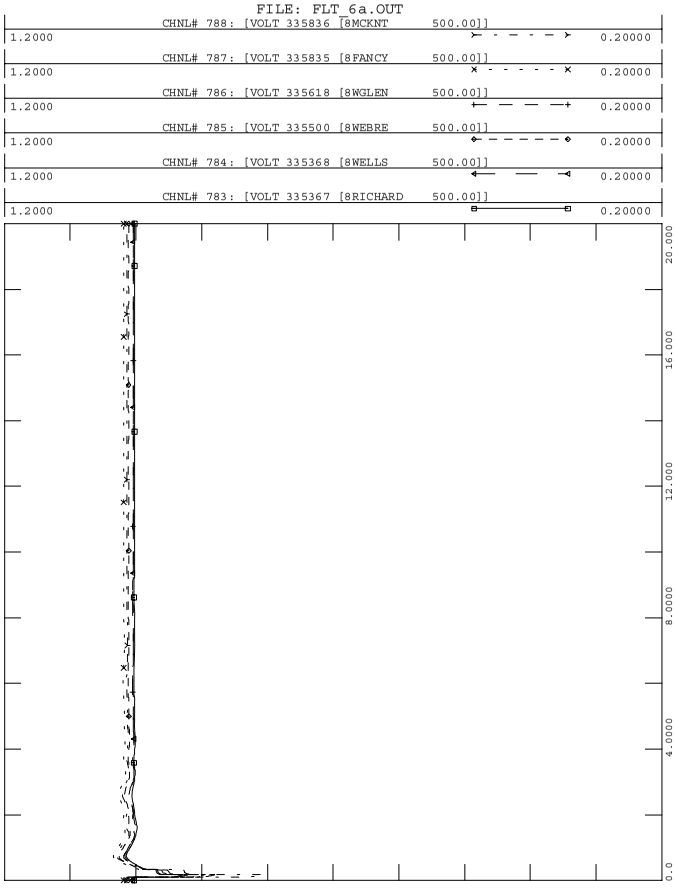
POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_6a.OUT



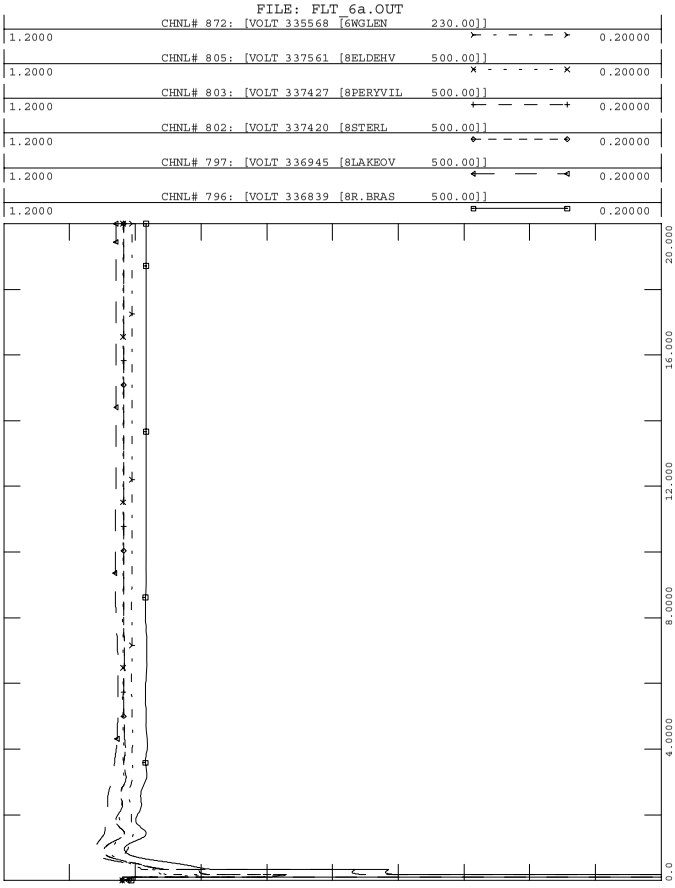

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_6a.OUT



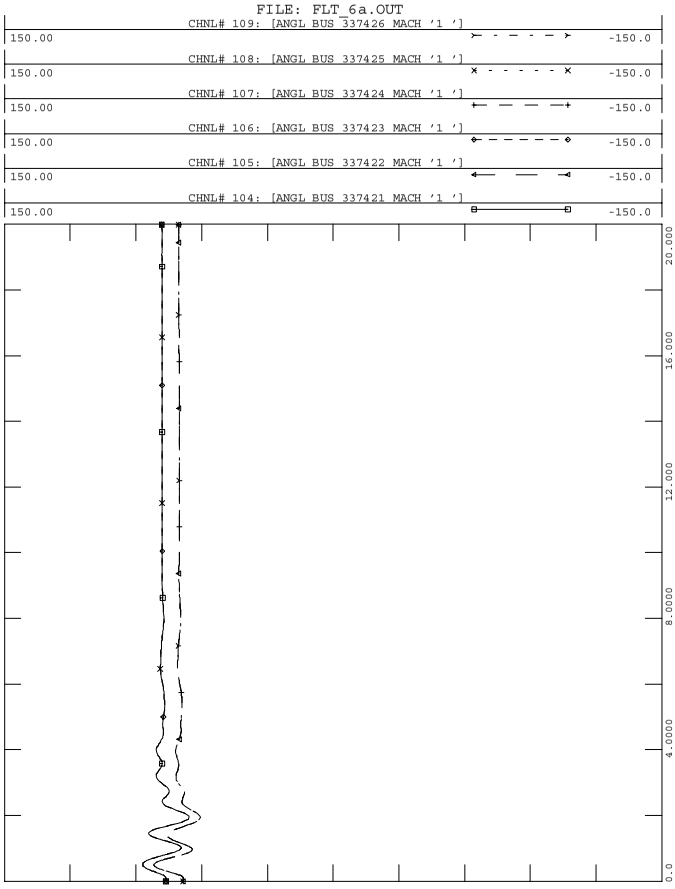

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_6a.OUT




POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_6a.OUT

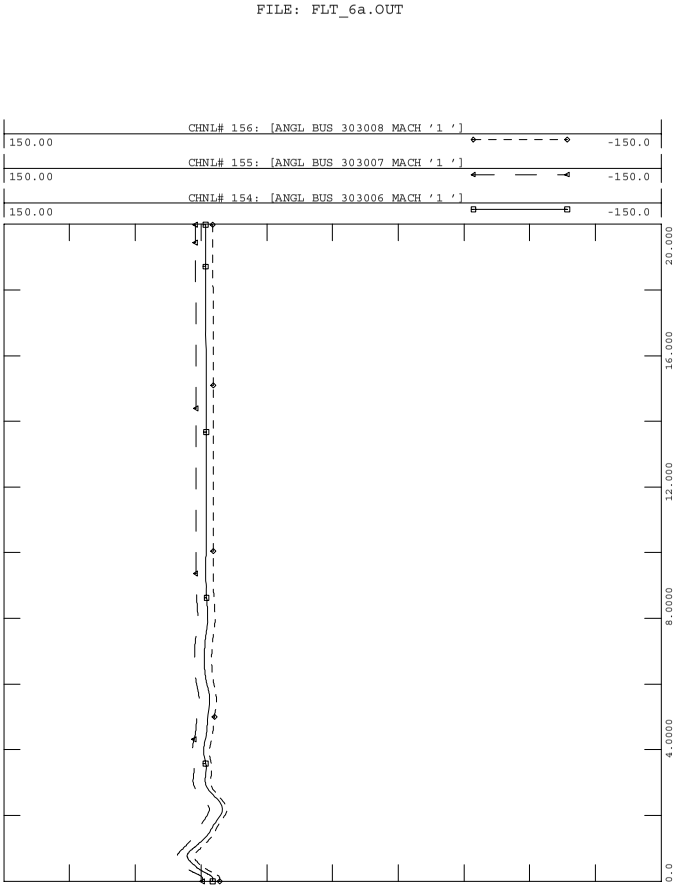


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_6a.OUT



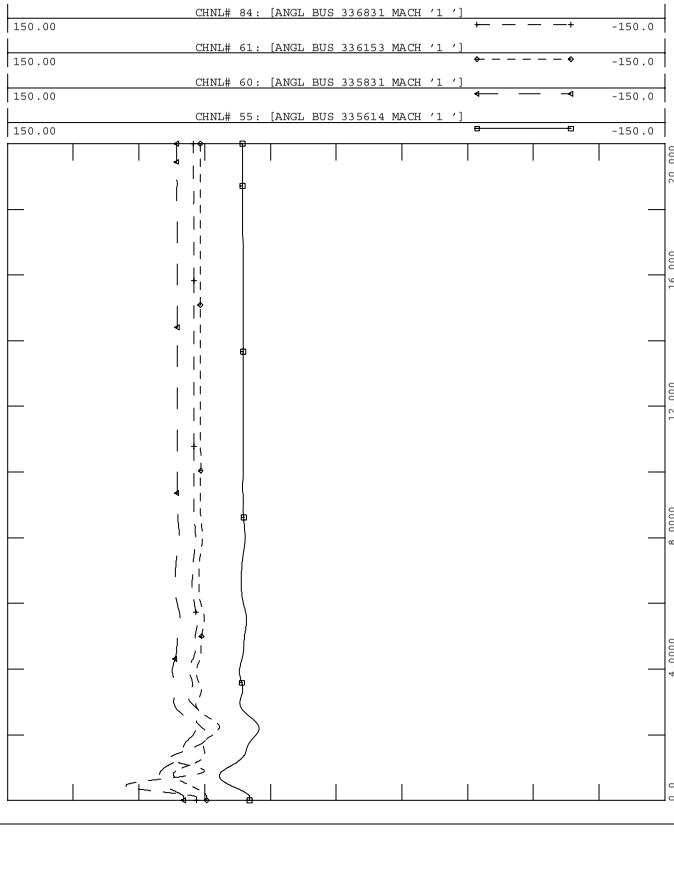

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_6a.OUT



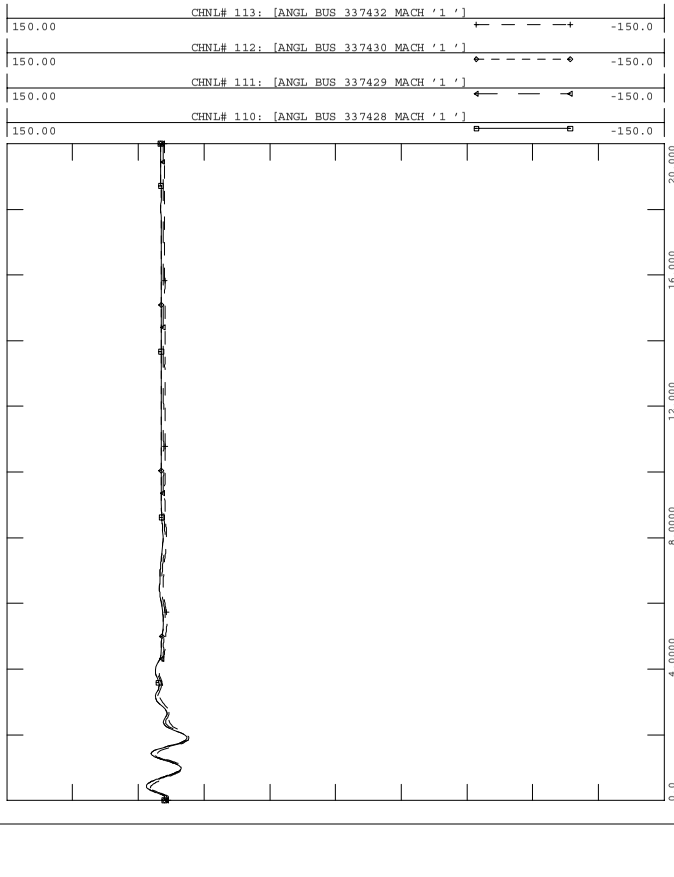

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_6a.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

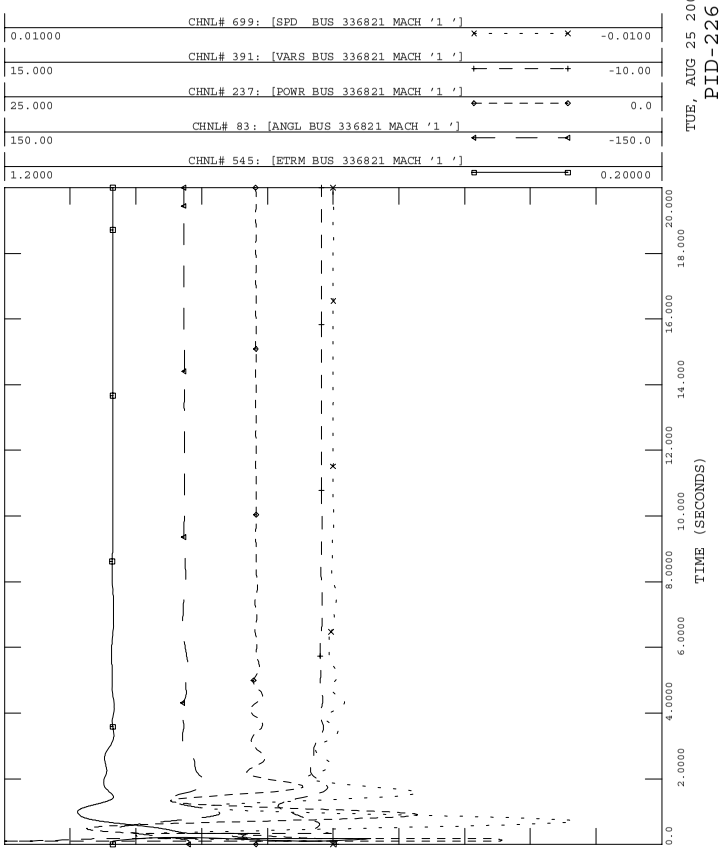
POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_6a.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_6a.OUT

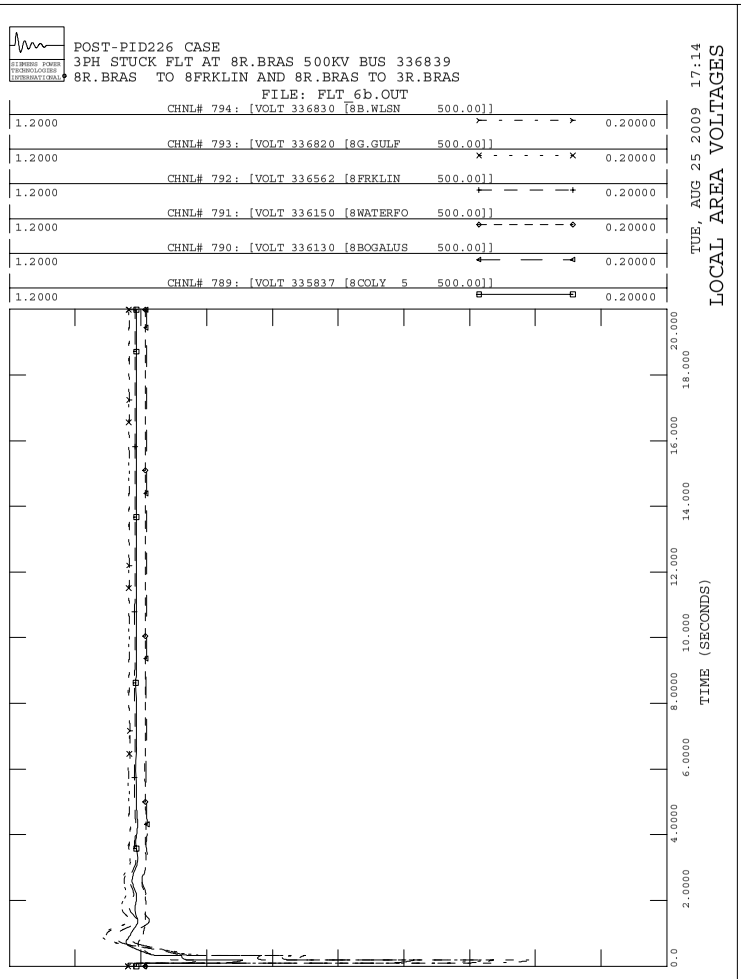
TUE, AUG 25 2009 17:14
PID-226 PLOTS

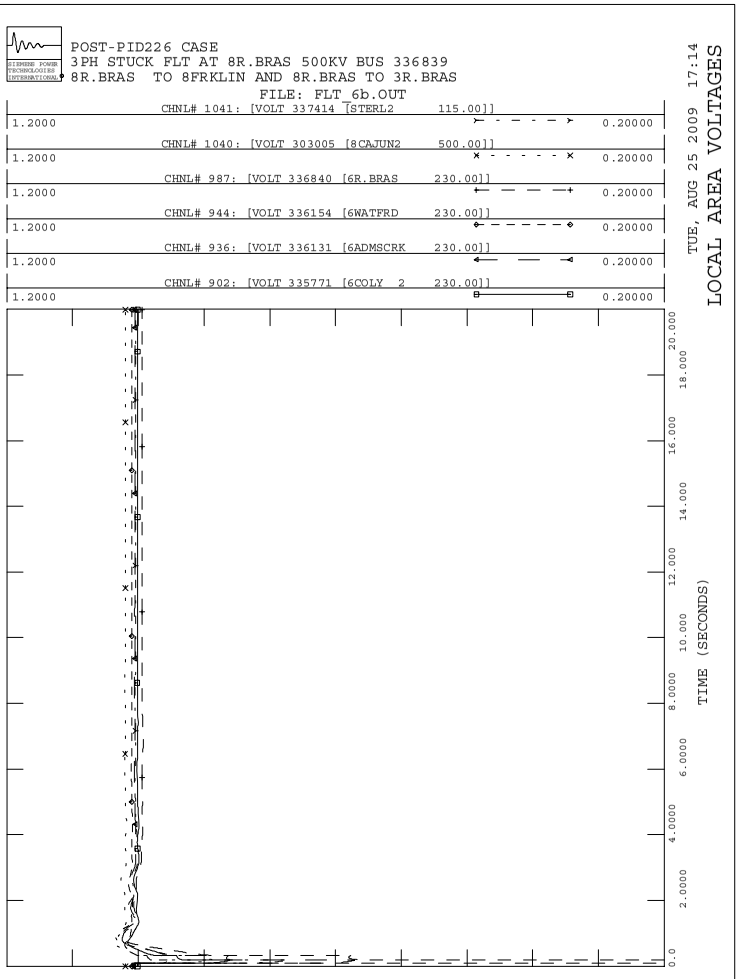


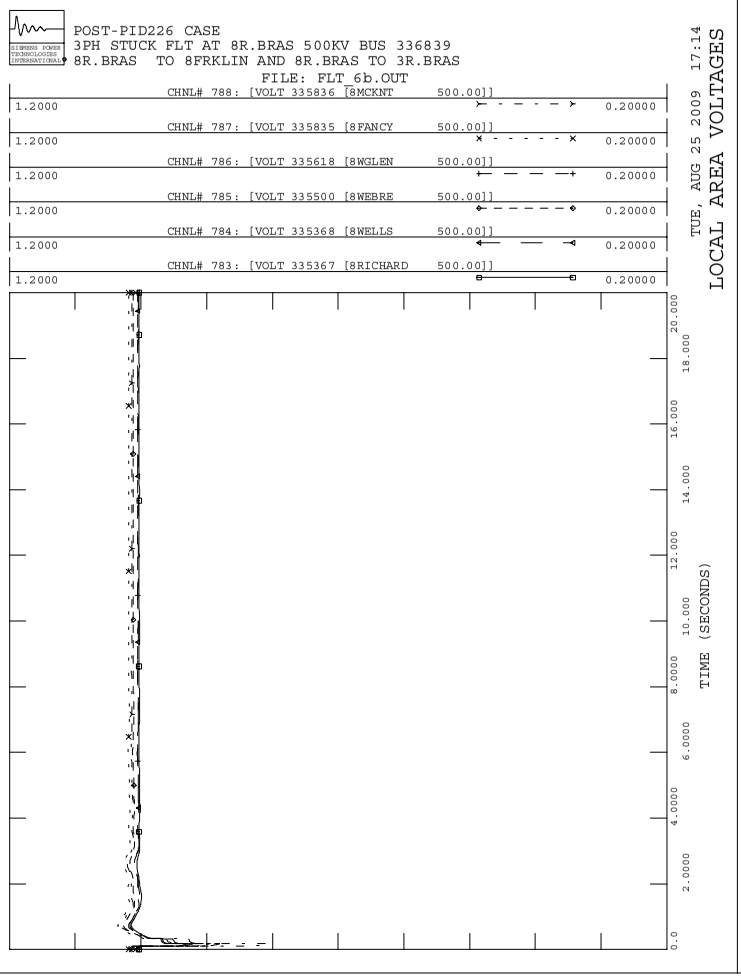
## C.24 FLT_6b

Stuck breaker fault on the 8R.BRAS (#336839) to 8FRKLIN (#336562) 500 kV line, near the 8R.BRAS.

a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Run fault for 5 cycles.
c) Remove Fault AT 8R.BRAS 500KV BUS 336839
d) Apply 3 Phase fault at #336839 with admittance 765.3 -j 6686.74 MVA
e) Clear fault after 9 cycles by tripping lines from 8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 3R.BRAS


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 3R.BRAS
FILE: FLT_6b.OUT
CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]
1.2000
0.20000
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 3R.BRAS
FILE: FLT_6b.OUT
CHNL# 1041: [VOLT 337414 [8TERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]
1.2000
0.20000
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 3R.BRAS
FILE: FLT_6b.OUT
CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]
1.2000
0.20000
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2.0000
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8.0000
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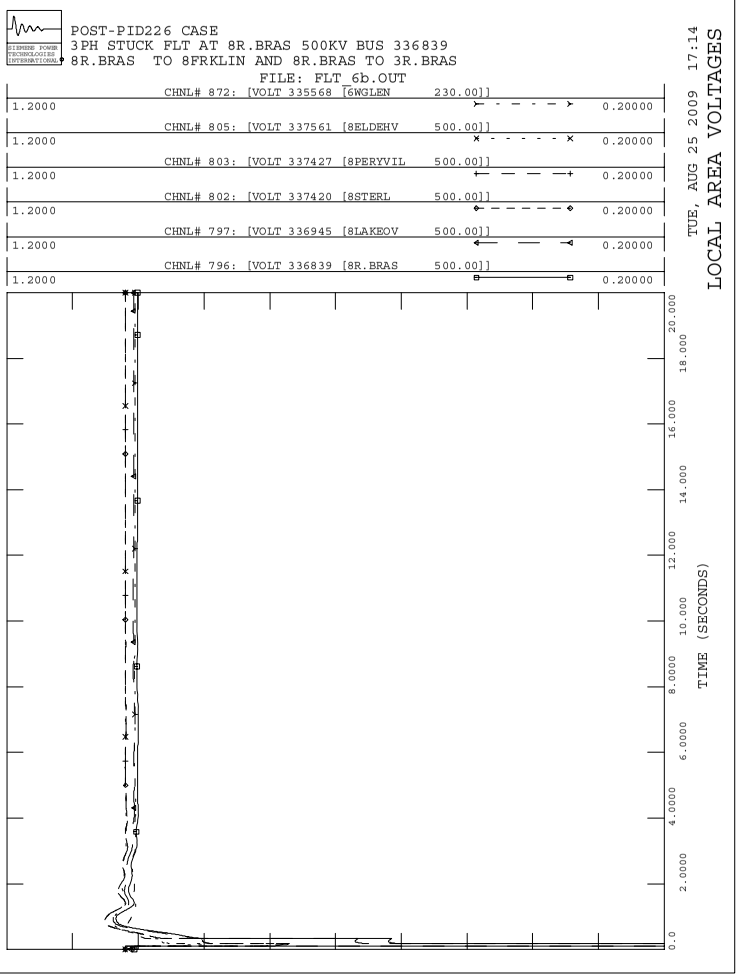
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 3R.BRAS
FILE: FLT_6b.OUT
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]
1.2000
0.20000
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12.000
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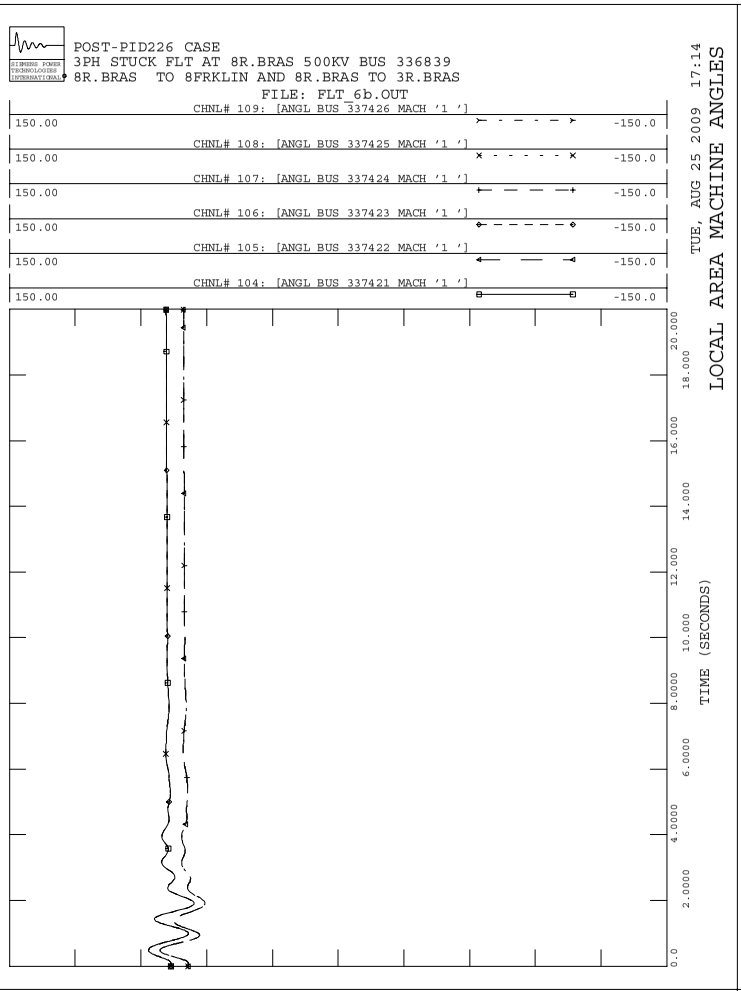
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 3R.BRAS
FILE: FLT_6b.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
150.00
-150.0
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2.0000
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8.0000
10.000
12.000
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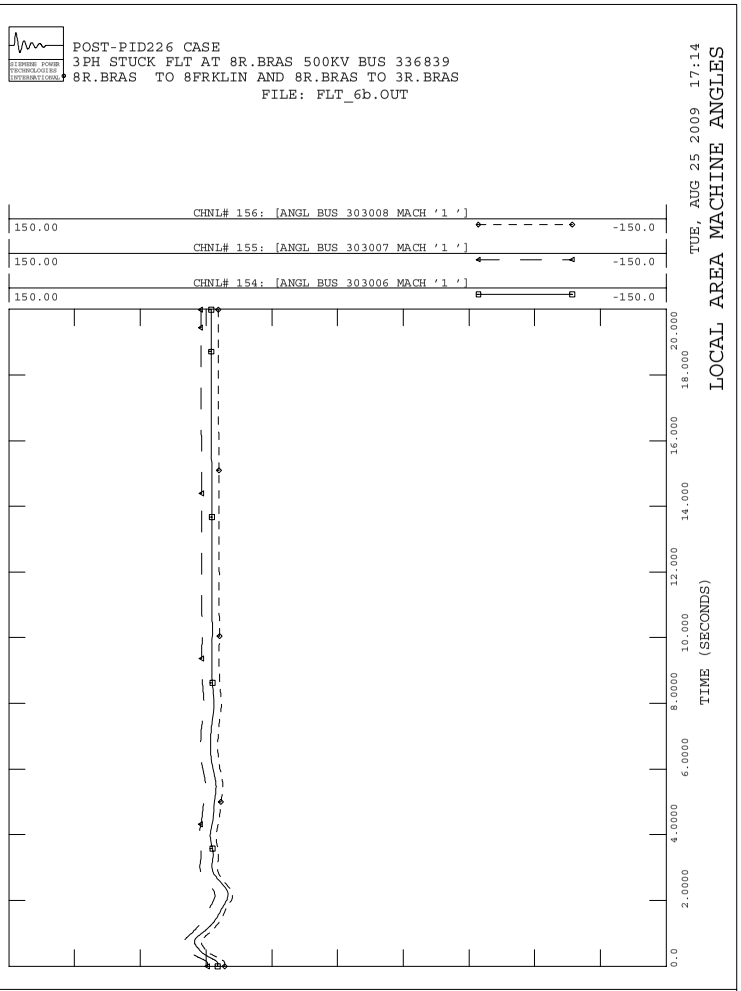
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 3R.BRAS
FILE: FLT_6b.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
150.00
-150.0
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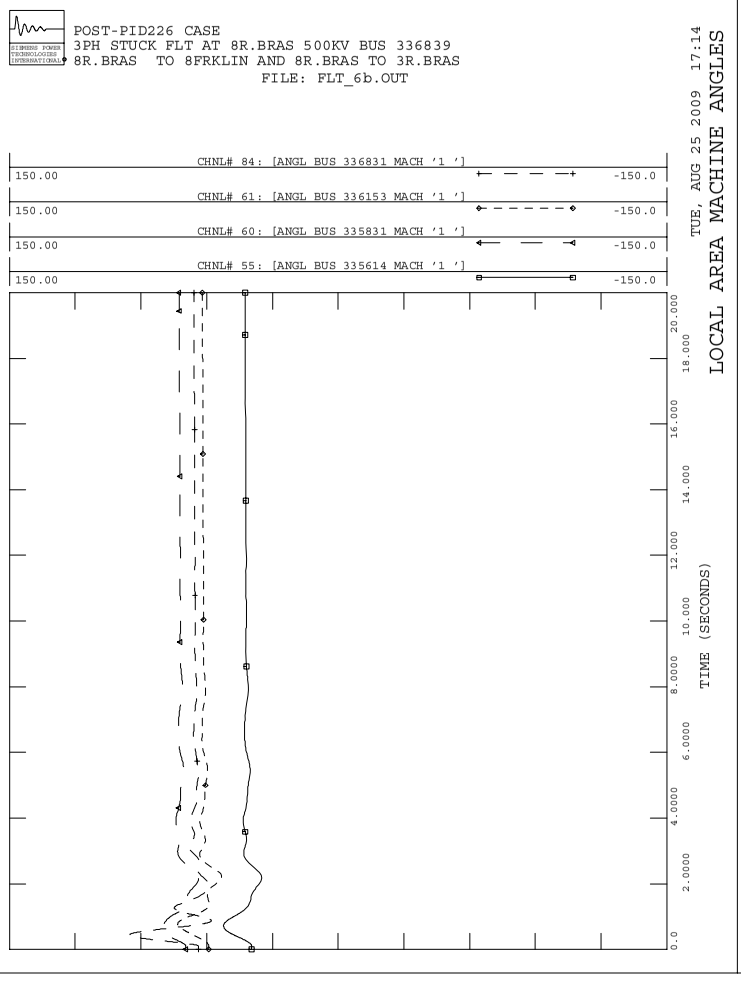
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 3R.BRAS
FILE: FLT_6b.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
150.00
-150.0
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2.0000
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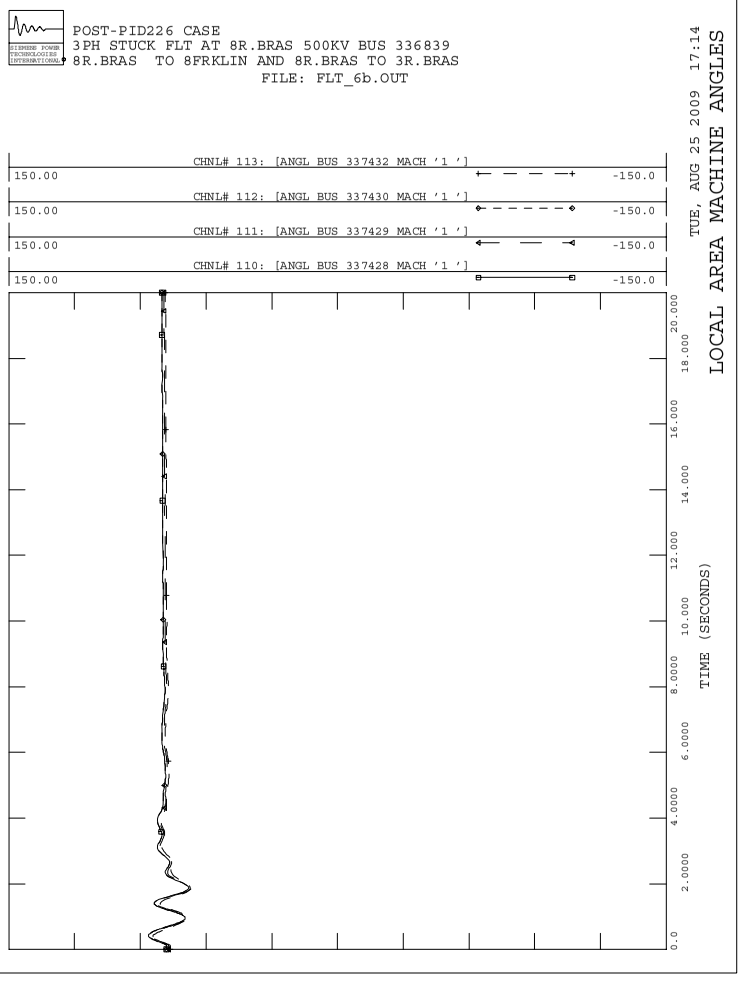
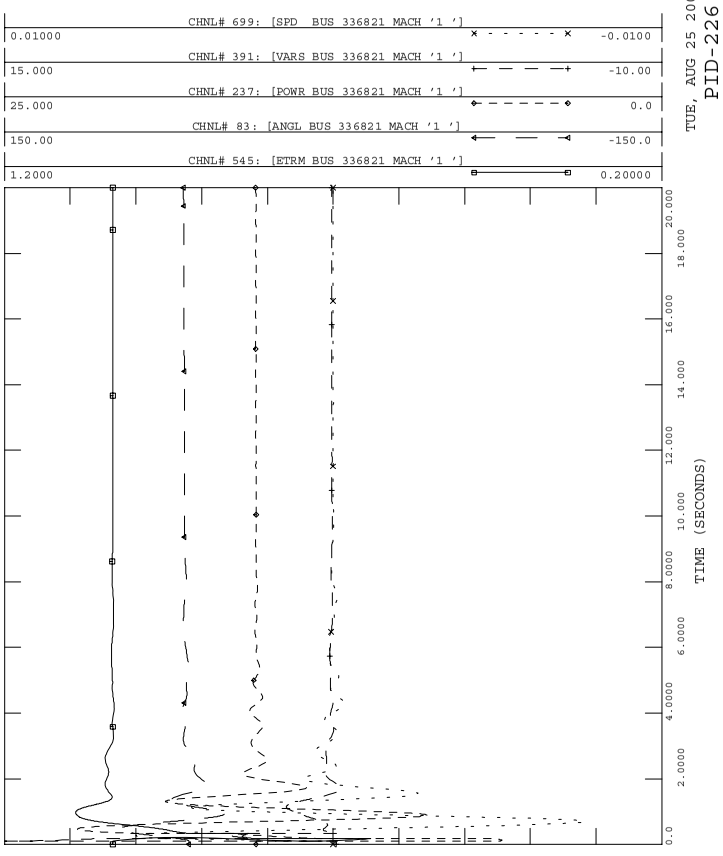
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 3R.BRAS
FILE: FLT_6b.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8FRKLIN AND 8R.BRAS TO 3R.BRAS
FILE: FLT_6b.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.25 FLT_7a

Stuck breaker fault on the 8R.BRAS (#336839) to 8LAKEOV (#336945) 500 kV line, near the 8R.BRAS.

a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Run fault for 5 cycles.
c) Remove Fault AT 8R.BRAS 500KV BUS 336839
d) Apply 3 Phase fault at #336839 with admittance 765.3 -j 6686.74 MVA
e) Clear fault after 9 cycles by tripping lines from 8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8B.WLSN

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8B.WLSN
FILE: FLT_7a.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8B.WLSN
FILE: FLT_7a.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8B.WLSN
FILE: FLT_7a.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

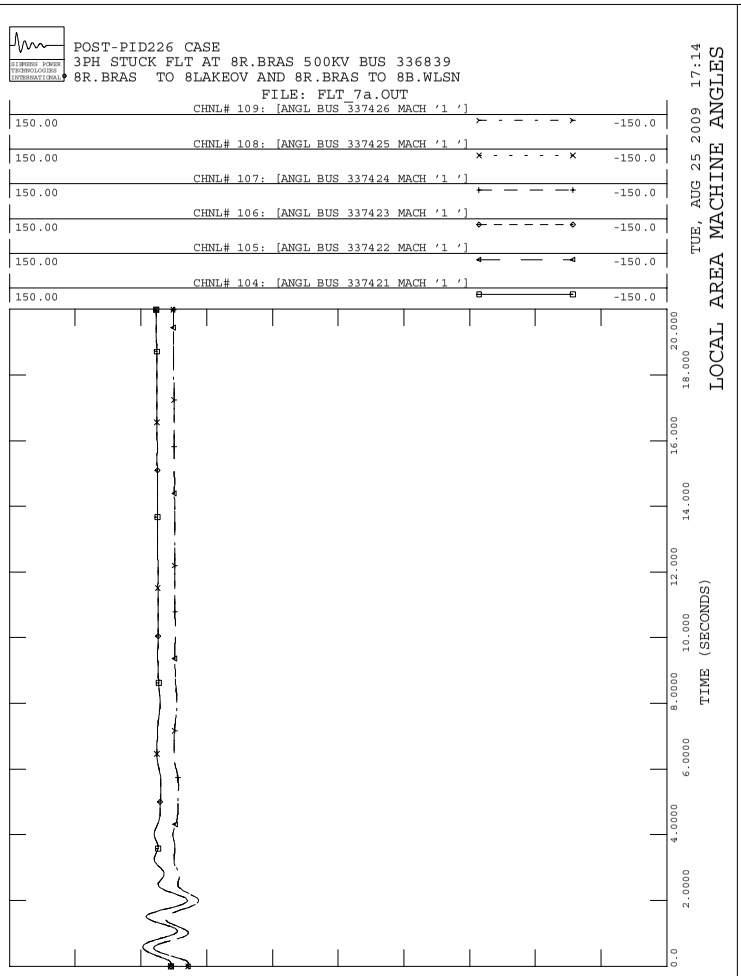
POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8B.WLSN
FILE: FLT_7a.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8B.WLSN
FILE: FLT_7a.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
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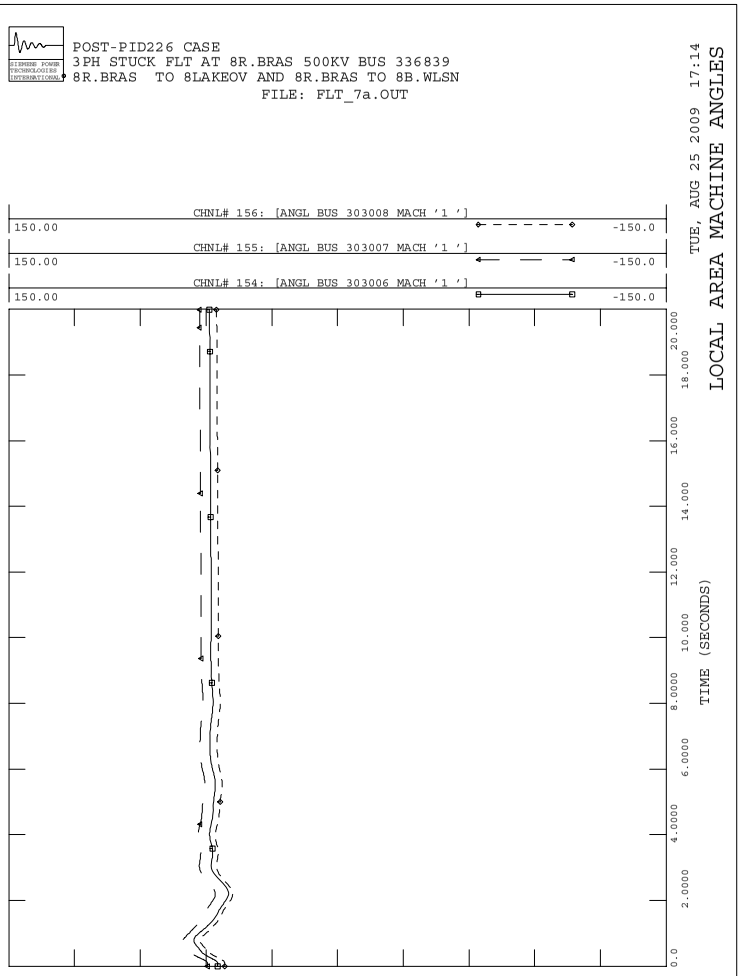
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8B.WLSN
FILE: FLT_7a.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
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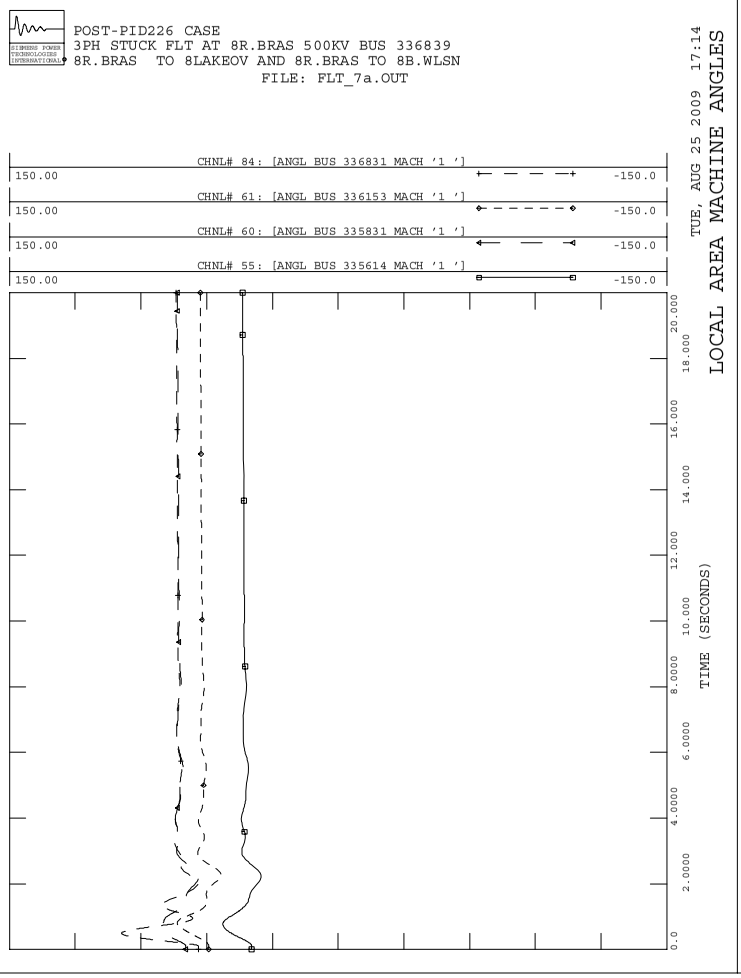
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8B.WLSN
FILE: FLT_7a.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
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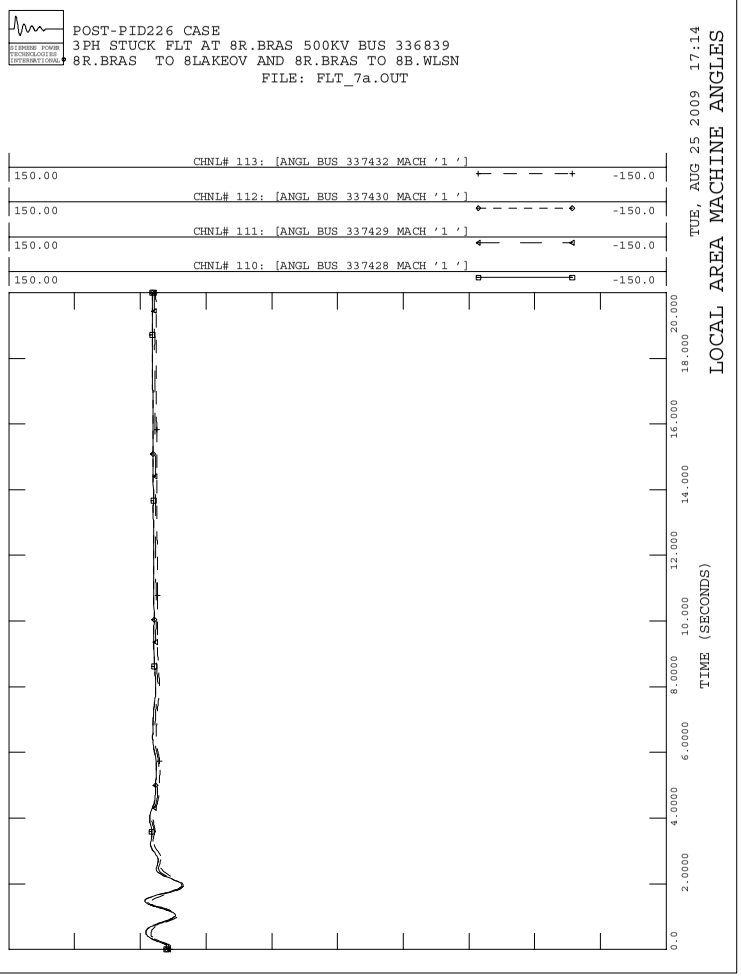
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8B.WLSN
FILE: FLT_7a.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
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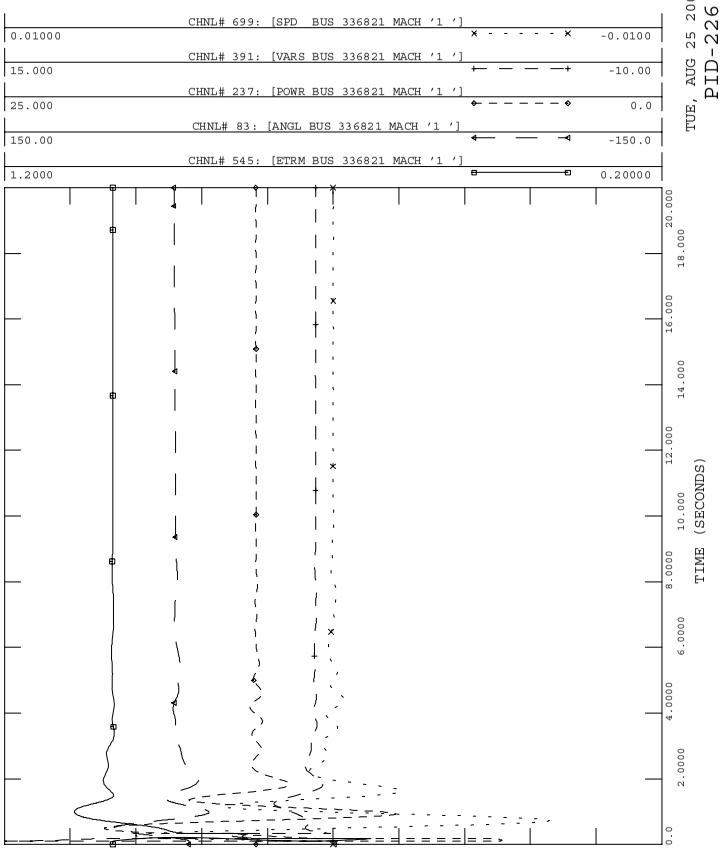
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8B.WLSN
FILE: FLT_7a.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.26 FLT_7b

Stuck breaker fault on the 8R.BRAS (#336839) to 8LAKEOV (#336945) 500 kV line, near the 8R.BRAS.

a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Run fault for 5 cycles.
c) Remove Fault AT 8R.BRAS 500KV BUS 336839
d) Apply 3 Phase fault at #336839 with admittance 765.3 -j 6686.74 MVA
e) Clear fault after 9 cycles by tripping lines from 8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8FRKLIN

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8FRKLIN
FILE: FLT_7b.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

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TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8FRKLIN
FILE: FLT_7b.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

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TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8FRKLIN
FILE: FLT_7b.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

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TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8FRKLIN
FILE: FLT_7b.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

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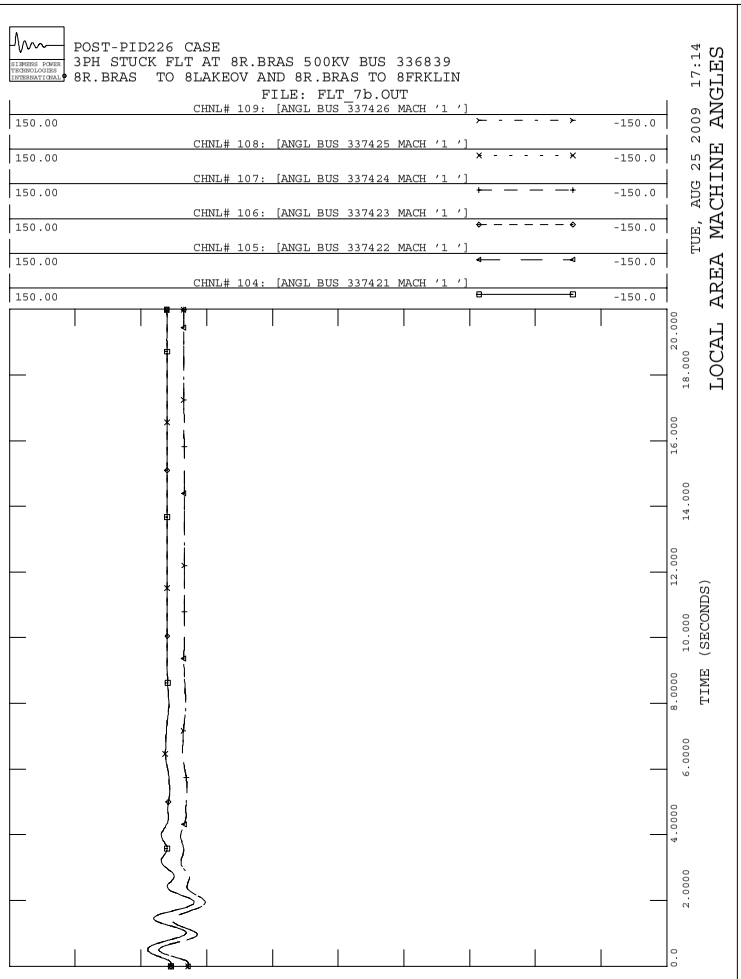
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8FRKLIN
FILE: FLT_7b.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
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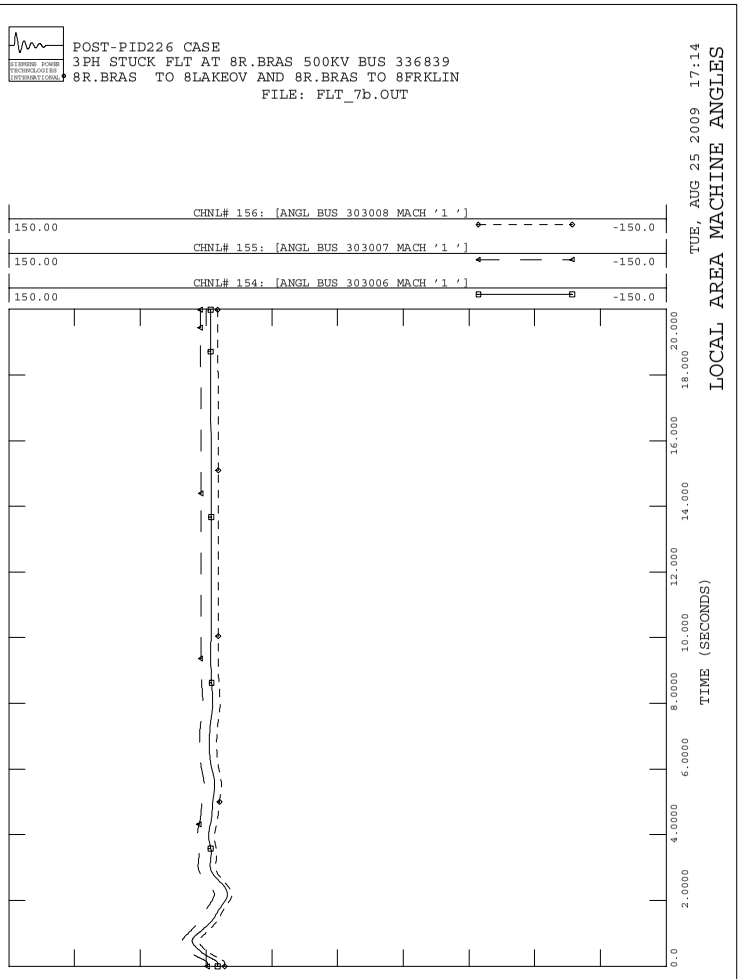
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8FRKLIN
FILE: FLT_7b.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
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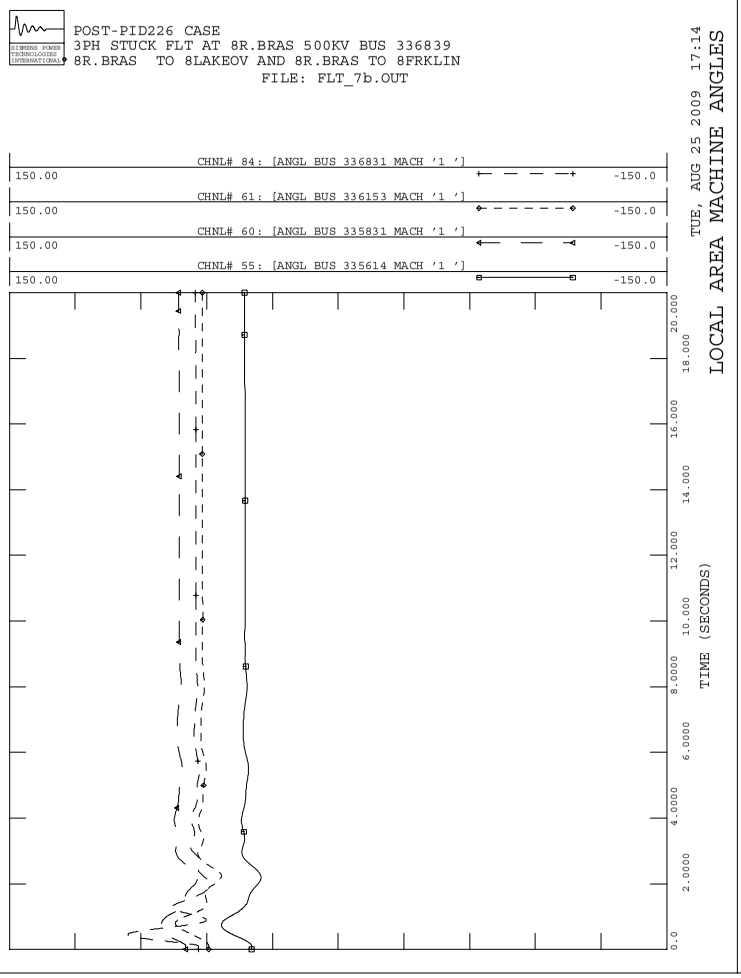
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8FRKLIN
FILE: FLT_7b.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
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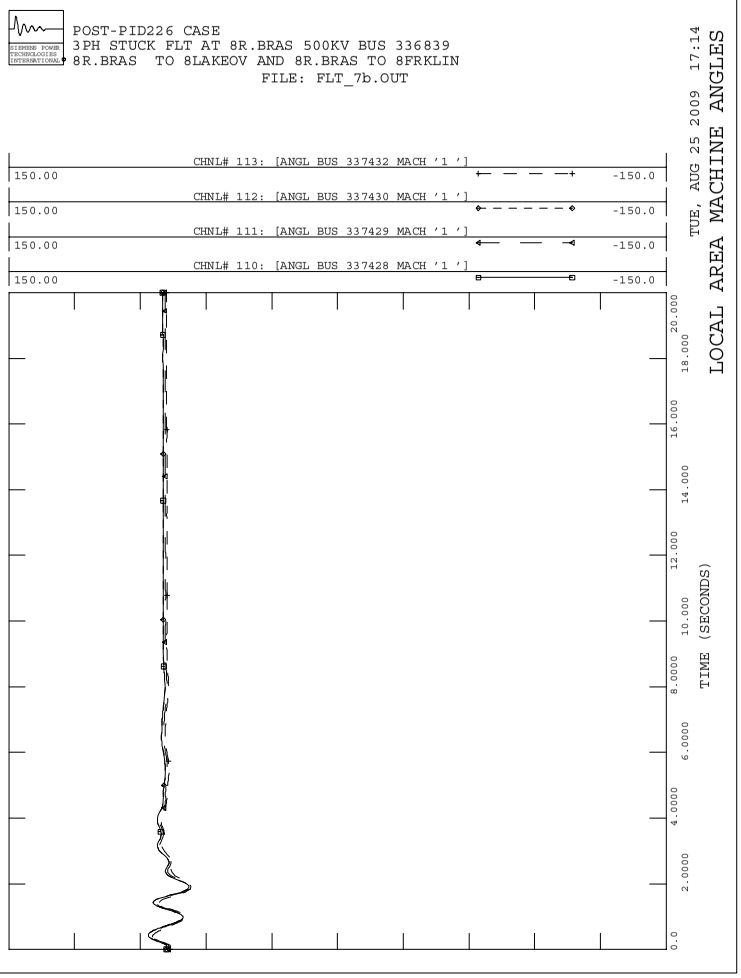
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8FRKLIN
FILE: FLT_7b.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
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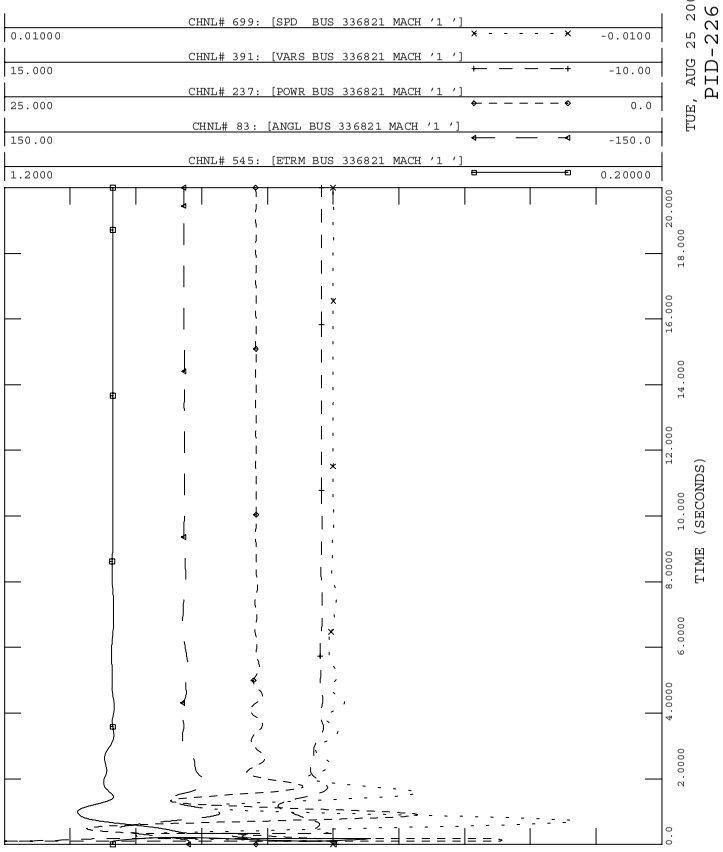
TIME (SECONDS)
TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8LAKEOV AND 8R.BRAS TO 8FRKLIN
FILE: FLT_7b.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS



## C.27 FLT_8a

Stuck breaker fault on the 8R.BRAS (#336839) to 8B.WLSN (#336830) 500 kV line, near the 8R.BRAS.

a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Run fault for 5 cycles
c) Remove Fault AT 8R.BRAS 500KV BUS 336839
d) Apply 3 Phase fault at #336839 with admittance 765.3 -j 6686.74 MVA
e) Clear fault after 9 cycles by tripping lines from 8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 8LAKEOV.

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_8a.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_8a.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

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TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_8a.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

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TIME (SECONDS)

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_8a.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000

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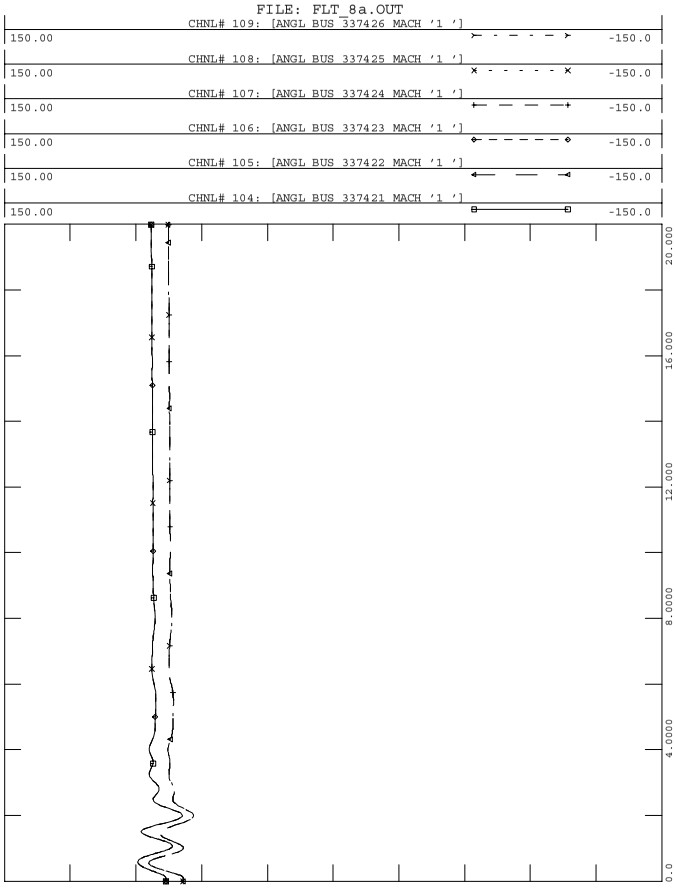
TIME (SECONDS)

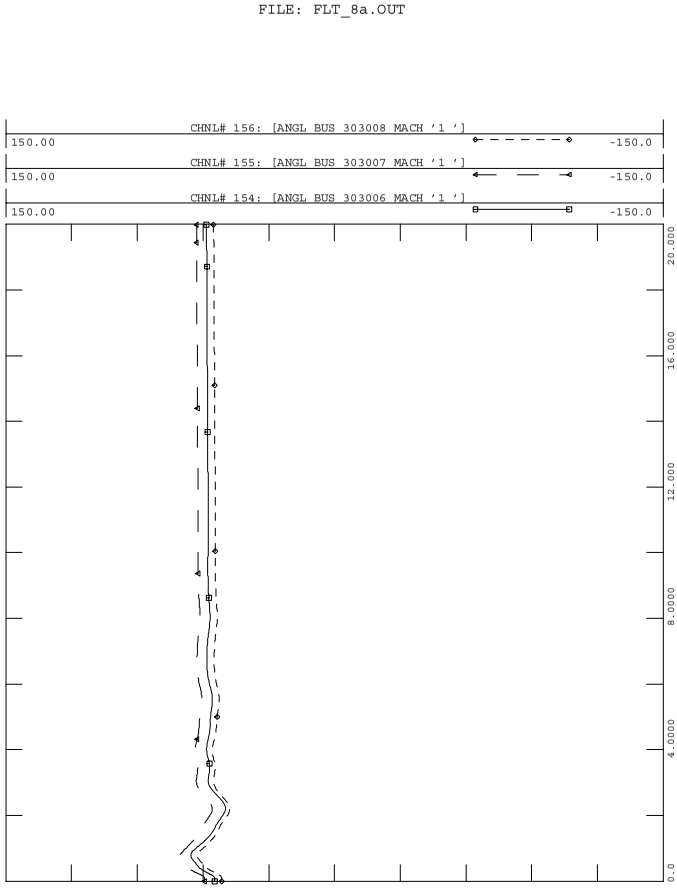
TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_8a.OUT



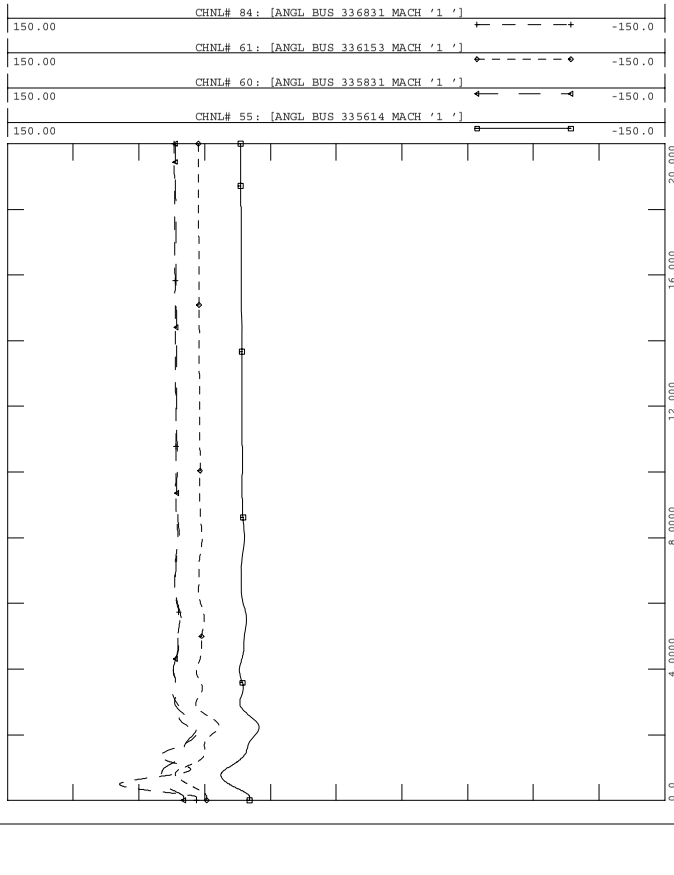

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_8a.OUT



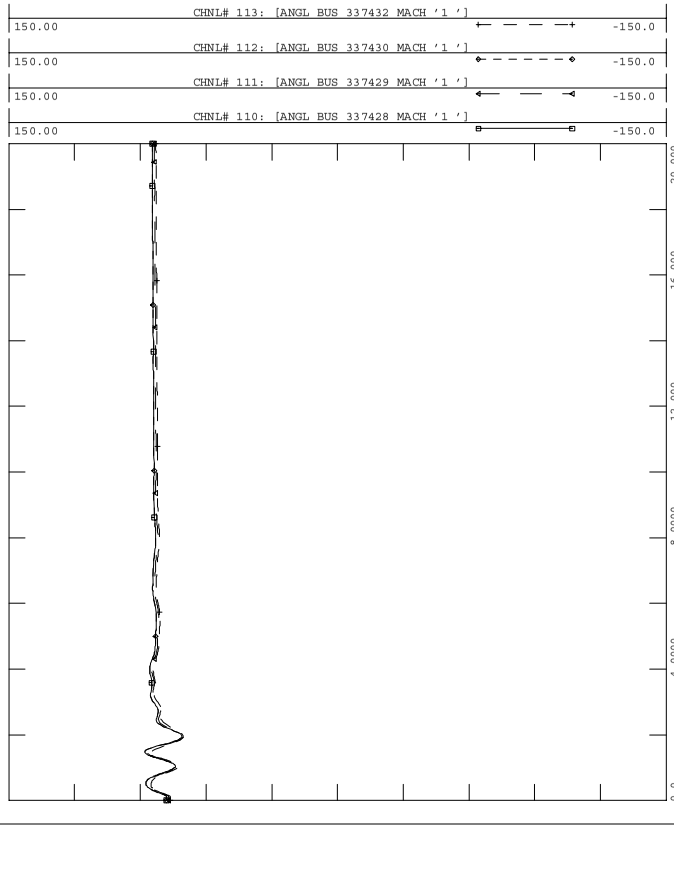

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_8a.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

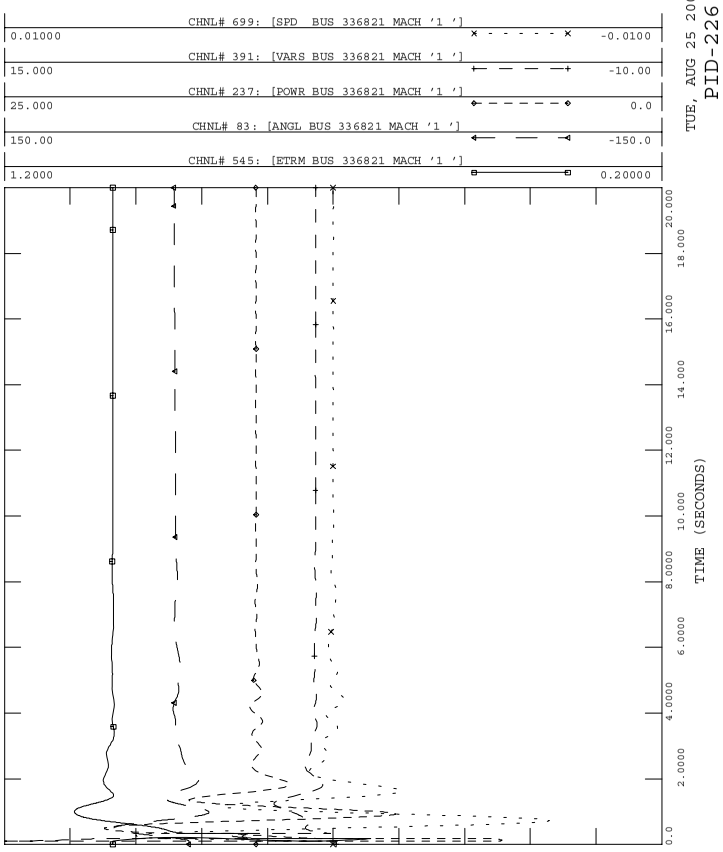
POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_8a.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 8LAKEOV
FILE: FLT_8a.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS

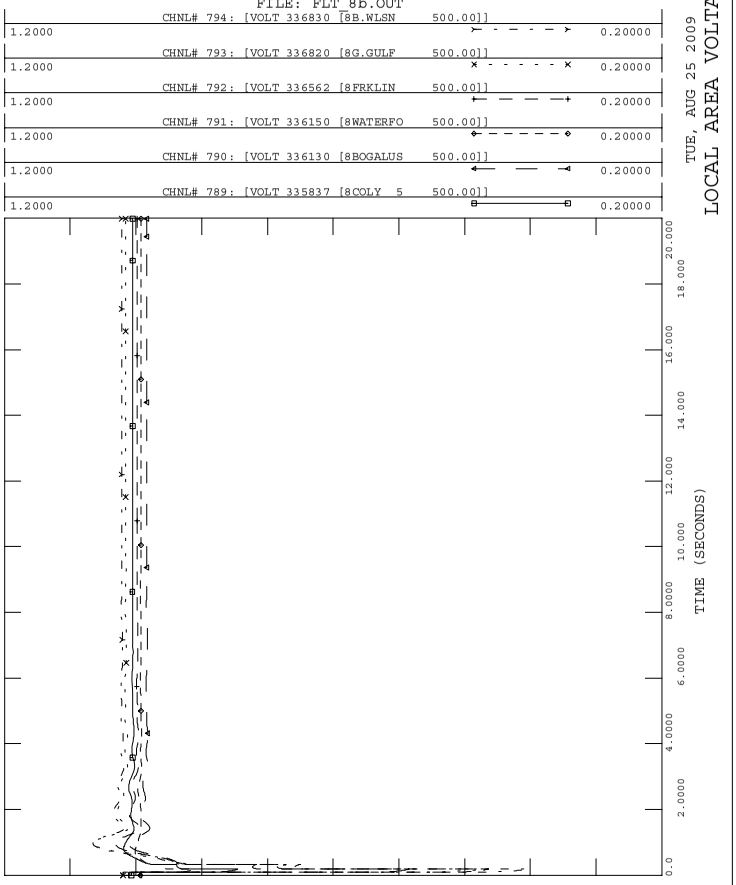


## C.28 FLT_8b

Stuck breaker fault on the 8R.BRAS (#336839) to 8B.WLSN (#336830) 500 kV line, near the 8R.BRAS.

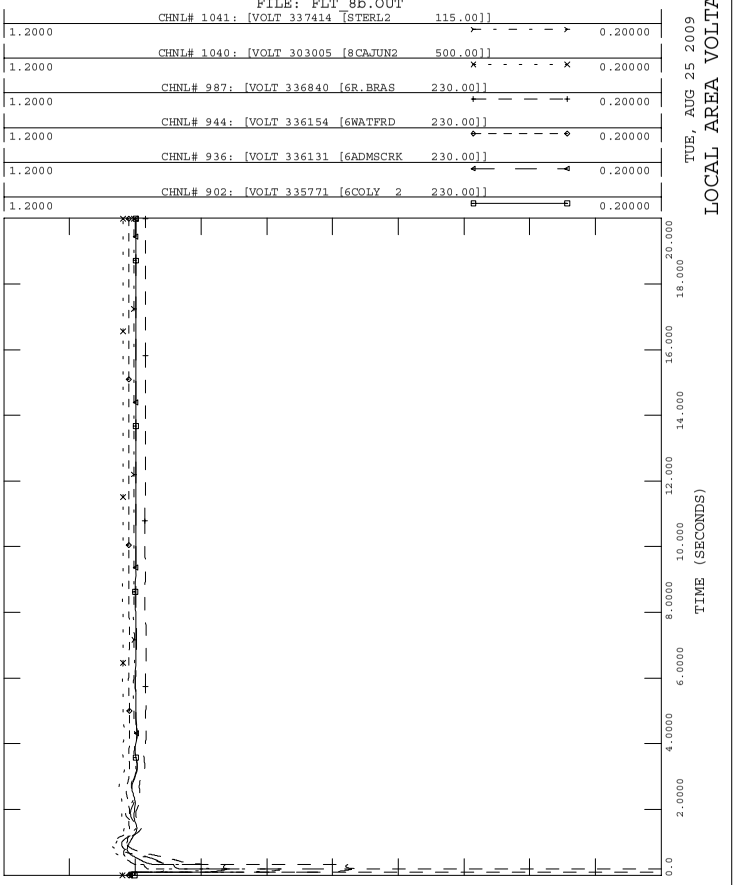
a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Run fault for 5 cycles
c) Remove Fault AT 8R.BRAS 500KV BUS 336839
d) Apply 3 Phase fault at #336839 with admittance 765.3 -j 6686.74 MVA
e) Clear fault after 9 cycles by tripping lines from 8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 6R.BRAS

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 6R.BRAS
FILE: FLT_8b.OUT



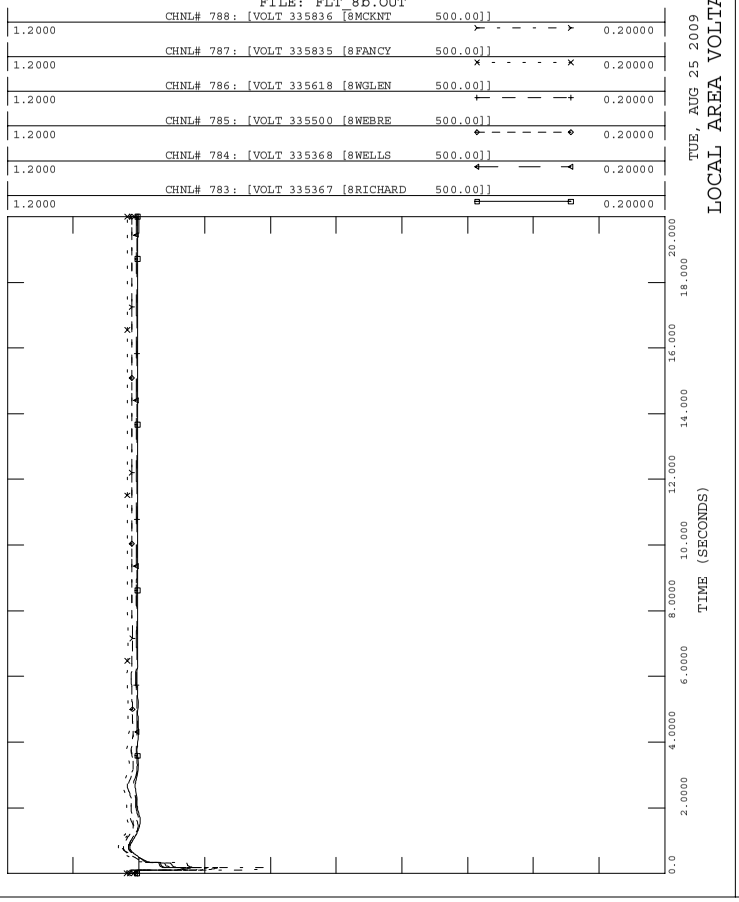

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 6R.BRAS
FILE: FLT_8b.OUT



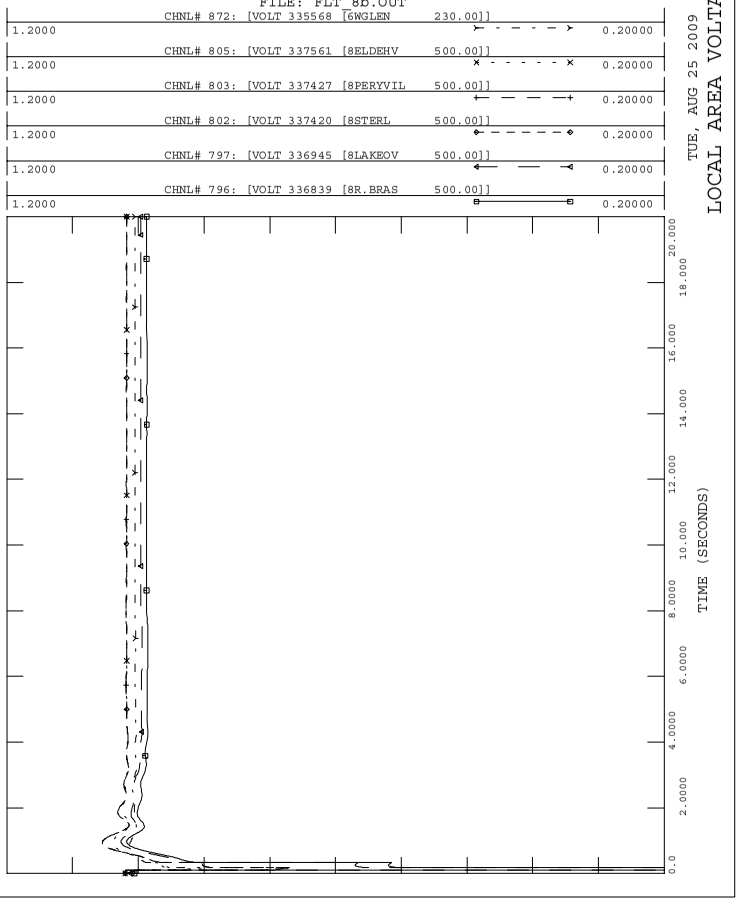

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 6R.BRAS
FILE: FLT_8b.OUT



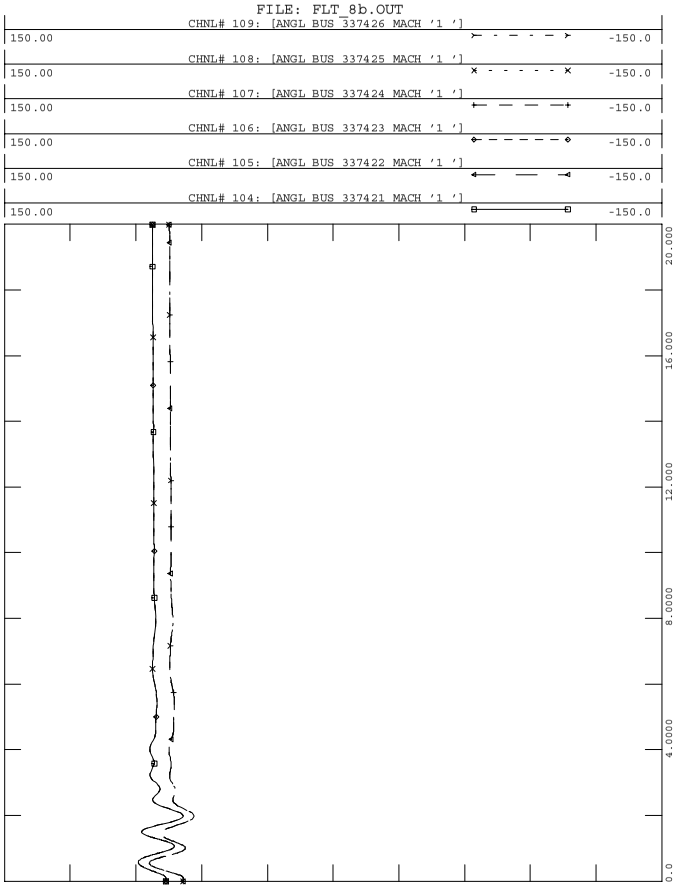

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 6R.BRAS
FILE: FLT_8b.OUT



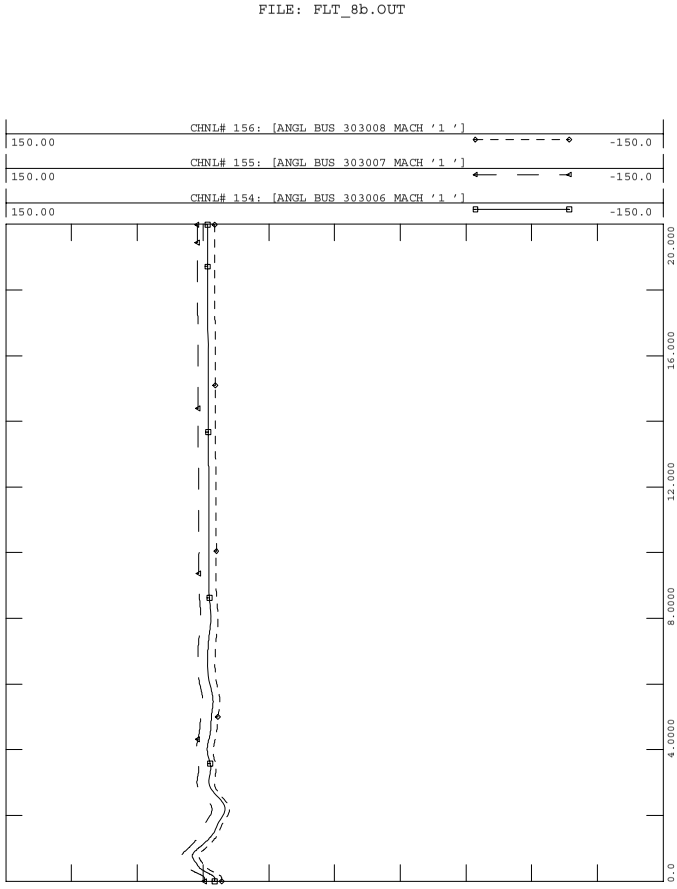

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 6R.BRAS
FILE: FLT_8b.OUT



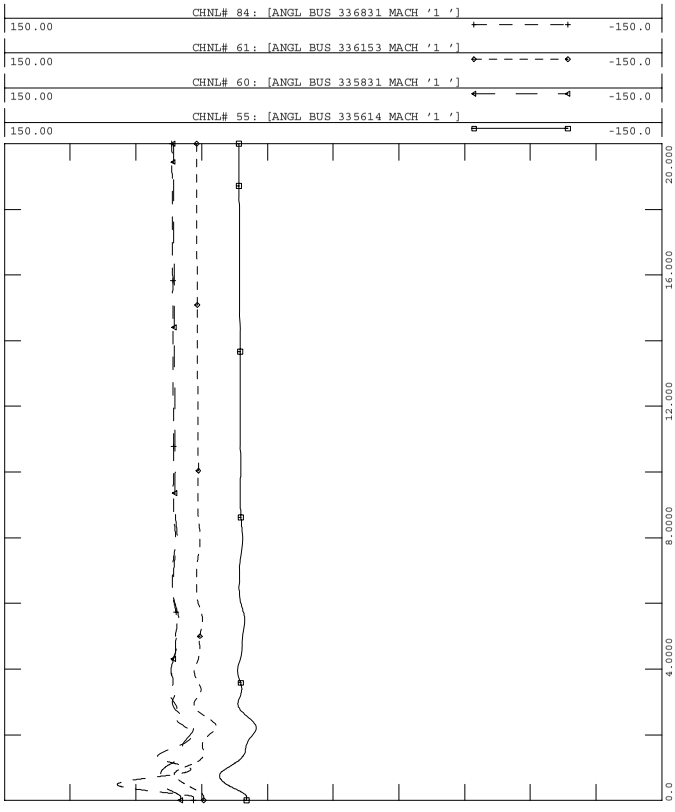

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 6R.BRAS
FILE: FLT_8b.OUT



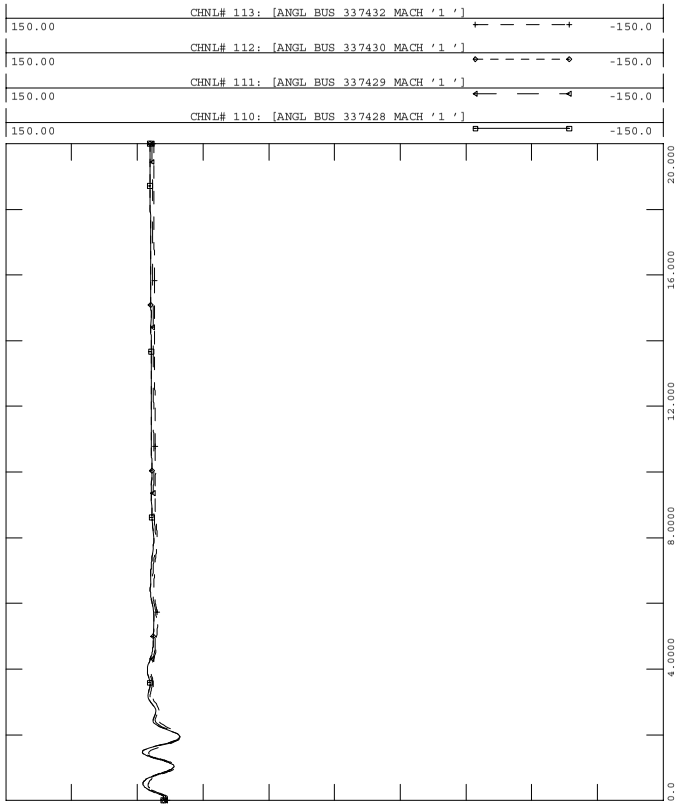

TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 6R.BRAS
FILE: FLT_8b.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

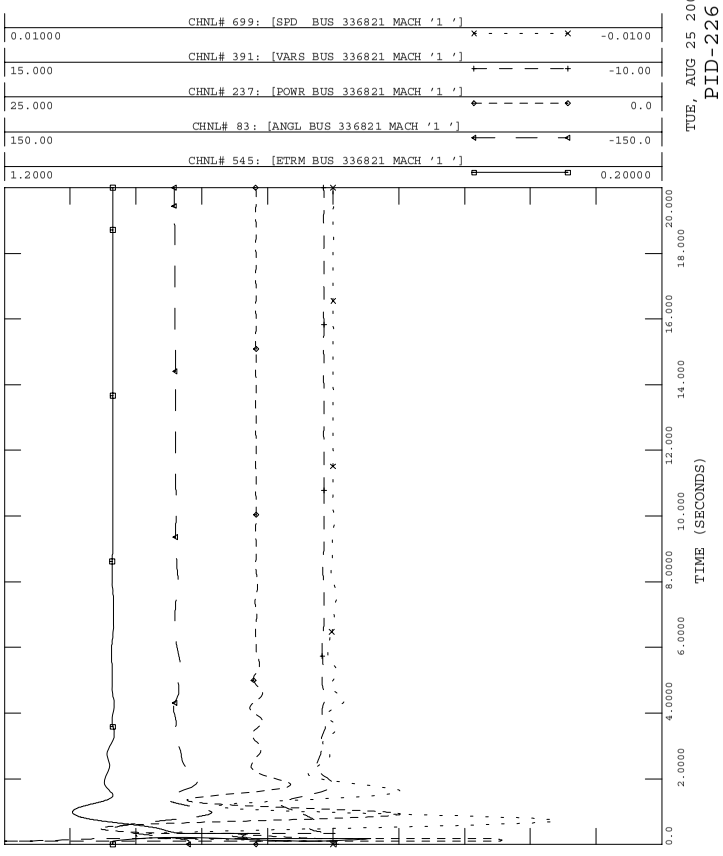
POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 6R.BRAS
FILE: FLT_8b.OUT




TUE, AUG 25 2009 17:14
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 8B.WLSN AND 8R.BRAS TO 6R.BRAS
FILE: FLT_8b.OUT

TUE, AUG 25 2009 17:14
PID-226 PLOTS

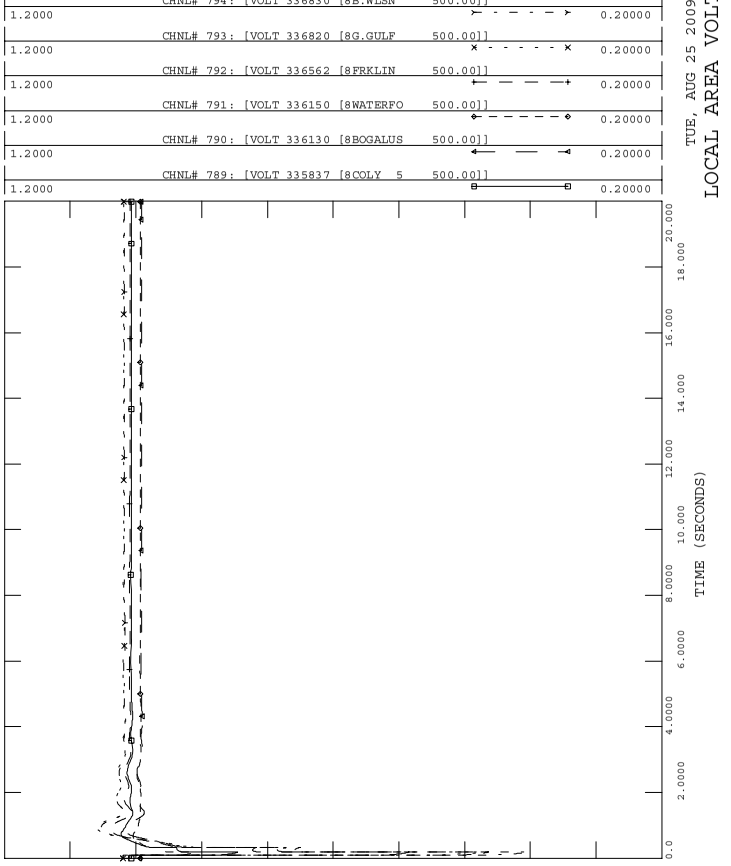


## C.29 FLT_9a

Stuck breaker fault on 8R.BRAS (#336839) to 3R.BRA (#335827) transformer, near the 8R.BRAS.

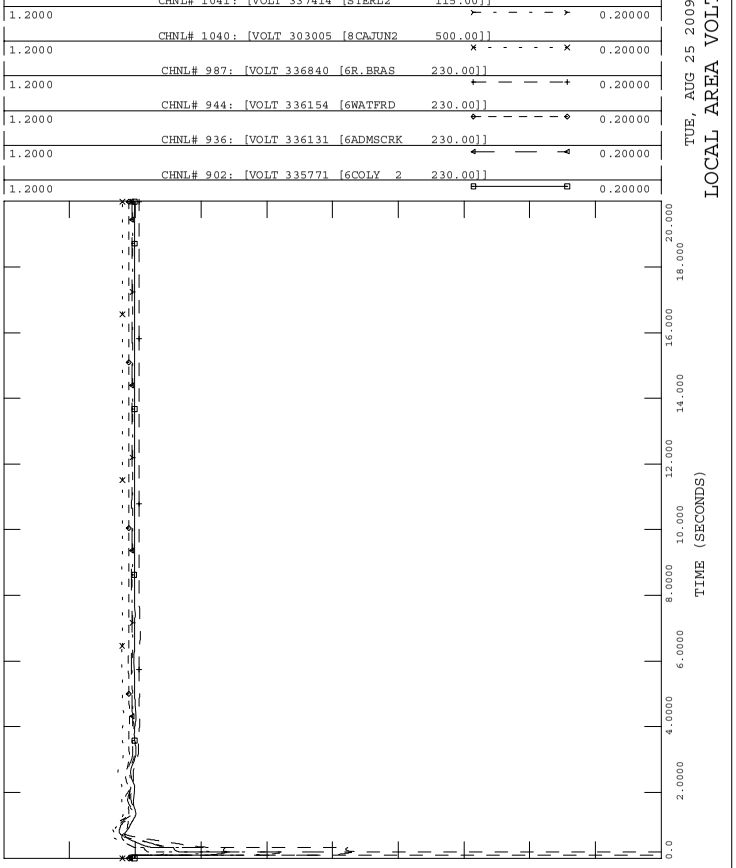
a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Run fault for 5 cycles
c) Remove Fault AT 8R.BRAS 500KV BUS 336839
d) Apply 3 Phase fault at #336839 with admittance 765.3 -j 6686.74 MVA
e) Clear fault after 9 cycles by tripping lines from 8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 8FRKLIN.

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 8FRKLIN
FILE: FLT_9a.OUT



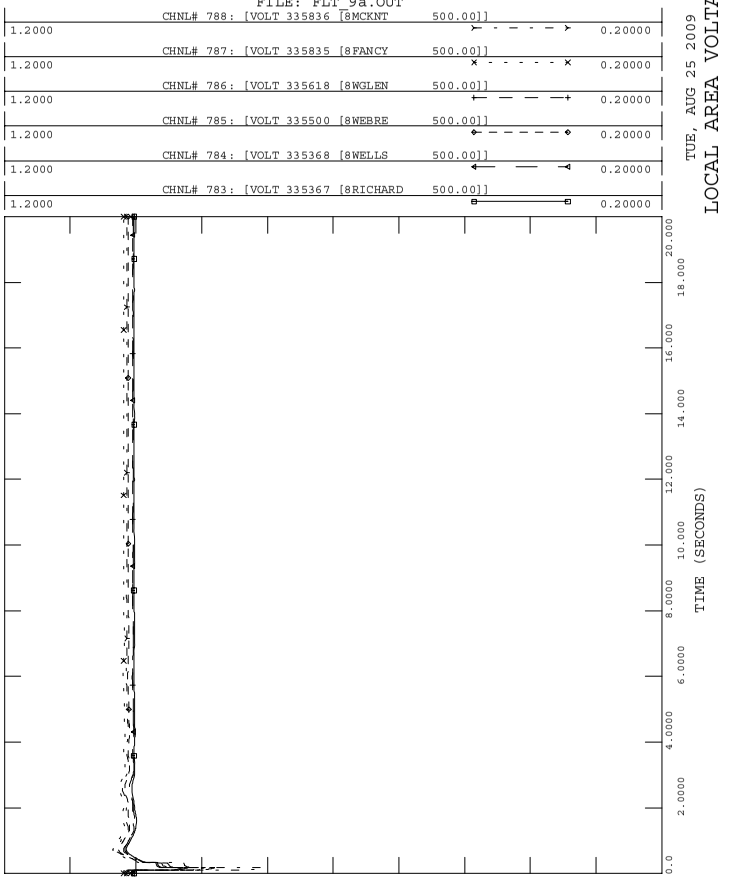

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 8FRKLIN
FILE: FLT_9a.OUT



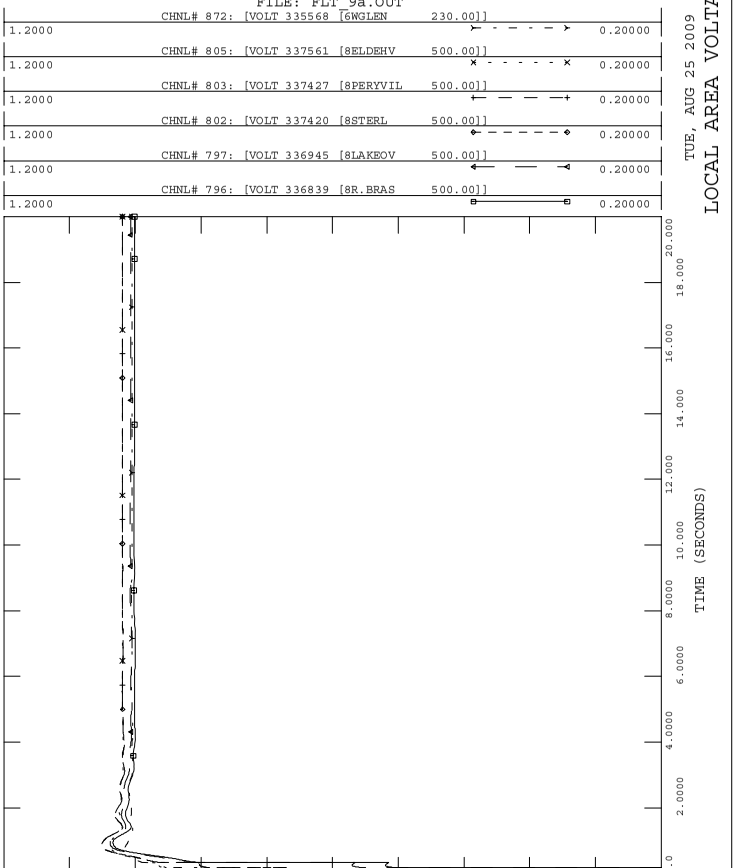

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 8FRKLIN
FILE: FLT_9a.OUT



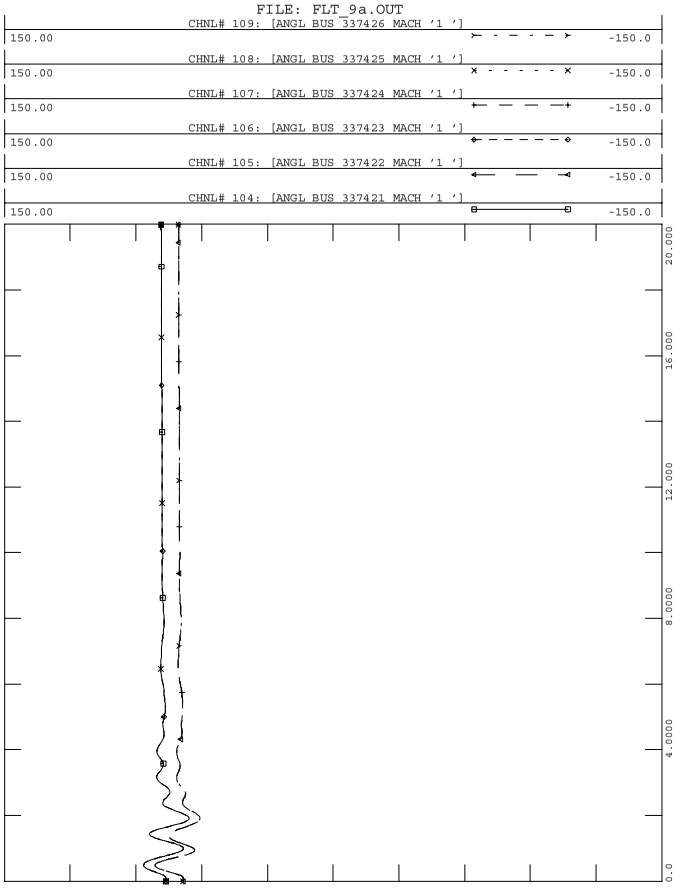

TUE, AUG 25 2009 17:14
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 8FRKLIN
FILE: FLT_9a.OUT



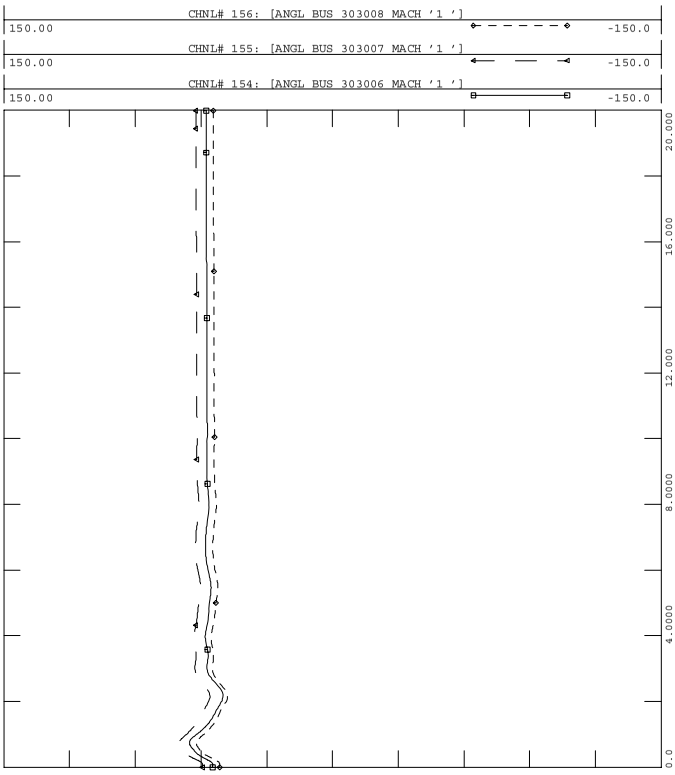

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 8FRKLIN
FILE: FLT_9a.OUT



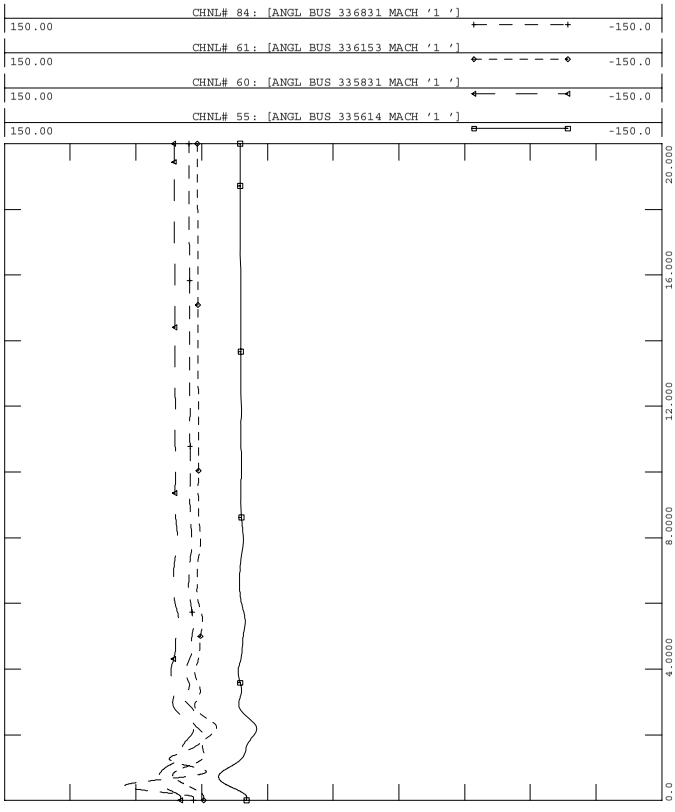

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 8FRKLIN
FILE: FLT_9a.OUT



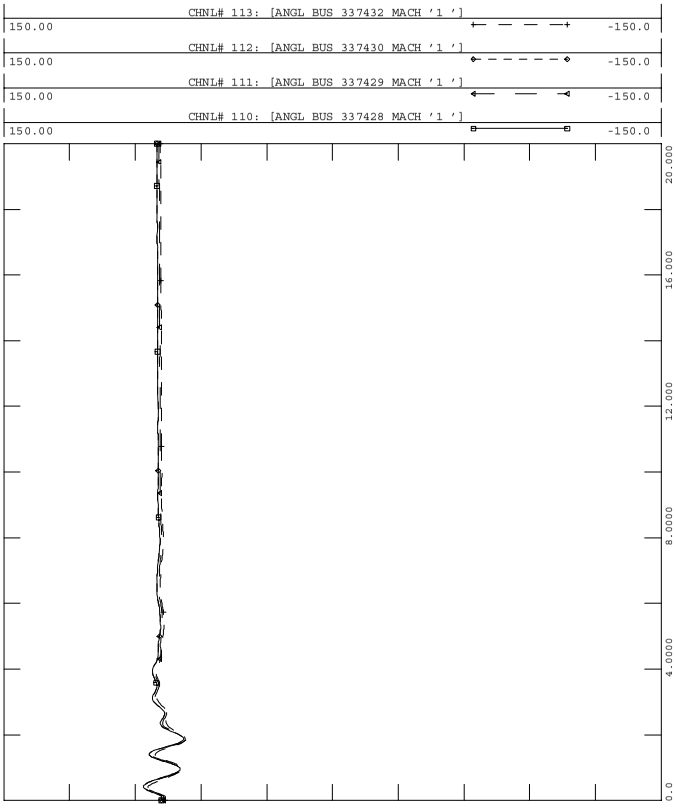

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 8FRKLIN
FILE: FLT_9a.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

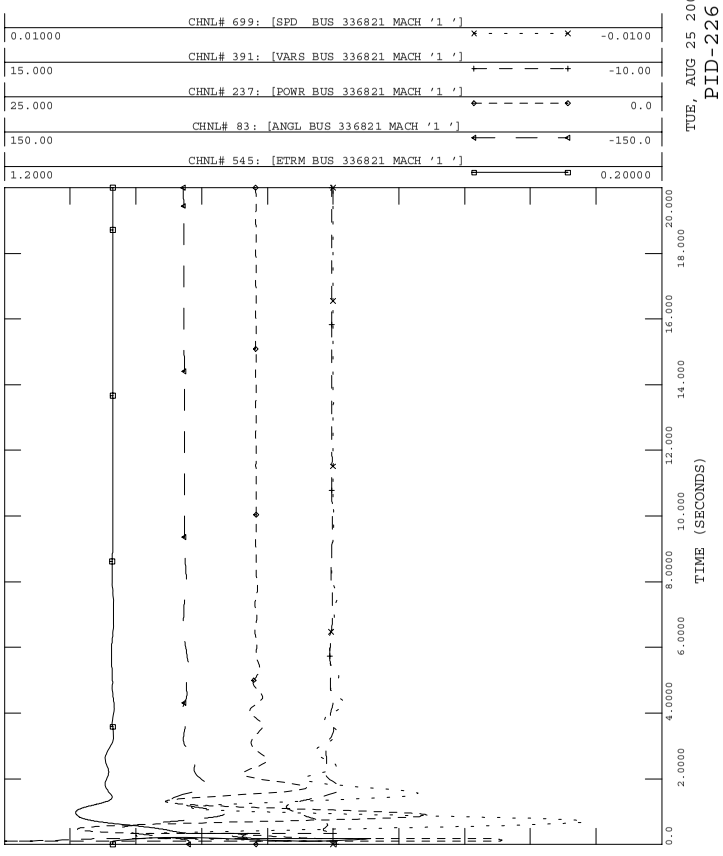
POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 8FRKLIN
FILE: FLT_9a.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 8FRKLIN
FILE: FLT_9a.OUT

TUE, AUG 25 2009 17:15
PID-226 PLOTS

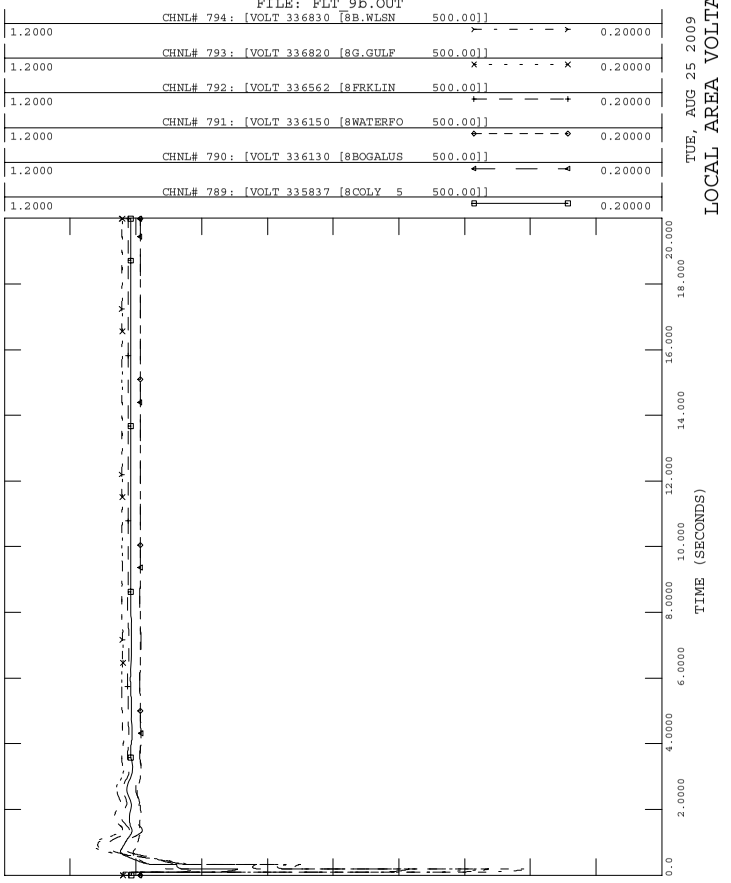


## C.30 FLT_9b

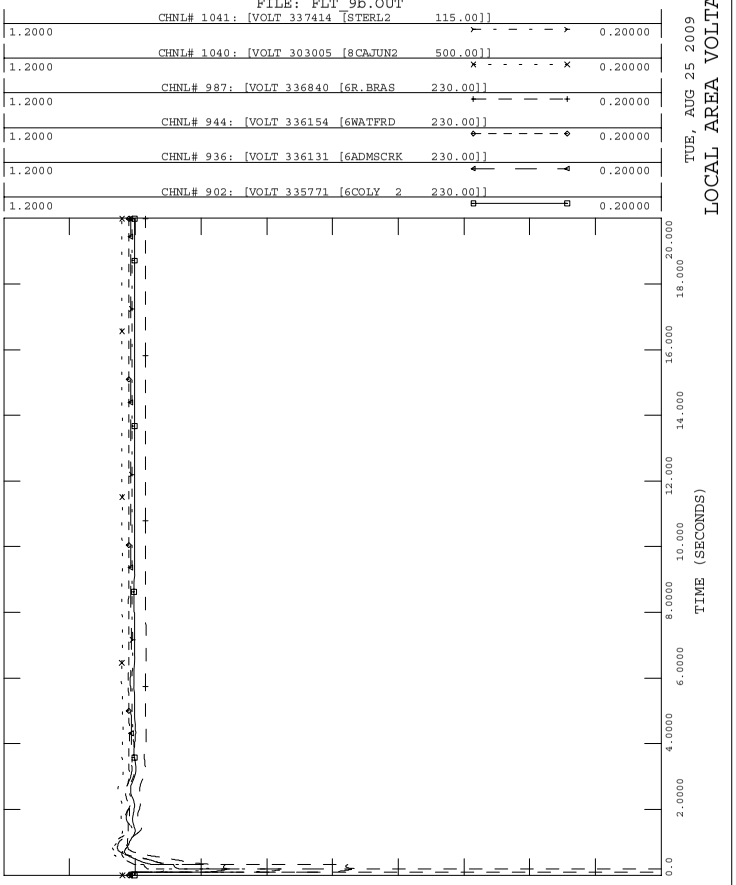
Stuck breaker fault on 8R.BRAS (#336839) to 3R.BRA (#335827) transformer, near the 8R.BRAS.

a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Run fault for 5 cycles
c) Remove Fault AT 8R.BRAS 500KV BUS 336839
d) Apply 3 Phase fault at #336839 with admittance 765.3 -j 6686.74 MVA
e) Clear fault after 9 cycles by tripping lines from 8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 6R.BRAS

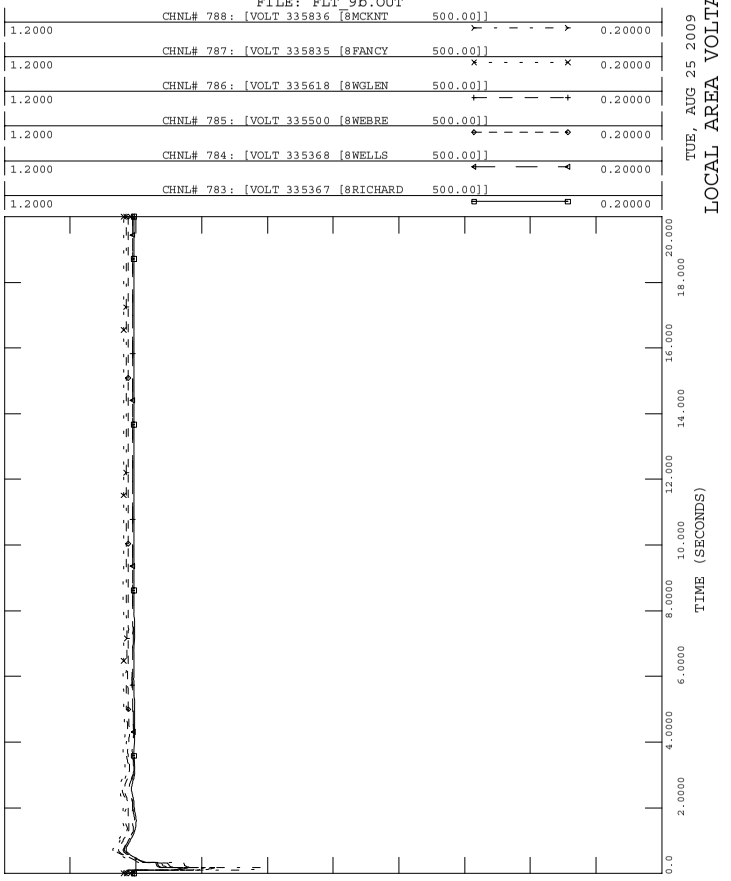
POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 6R.BRAS
FILE: FLT_9b.OUT



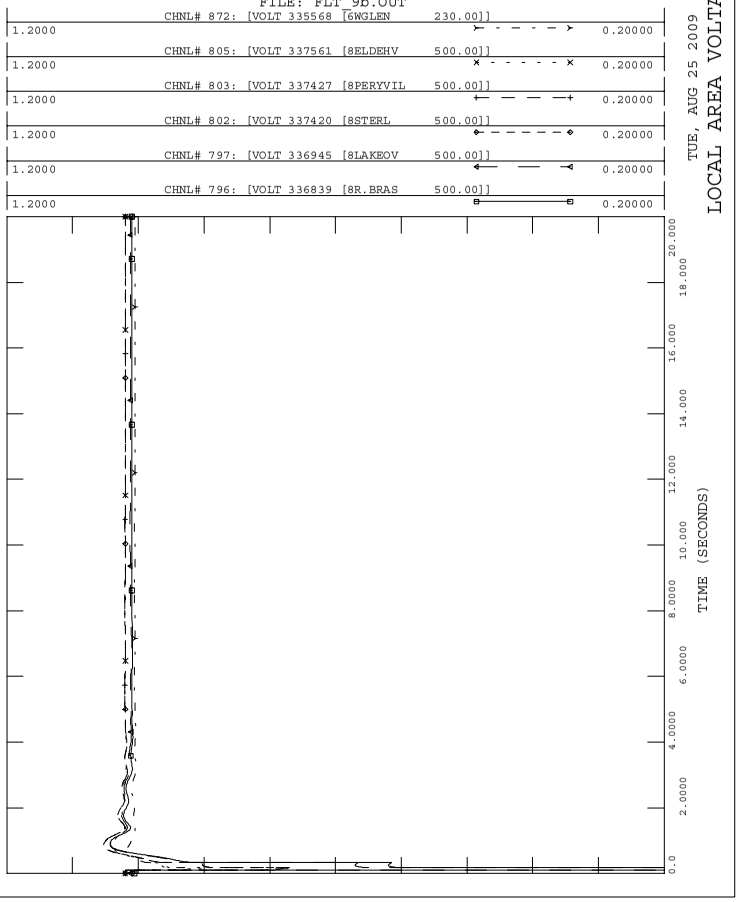

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 6R.BRAS
FILE: FLT_9b.OUT



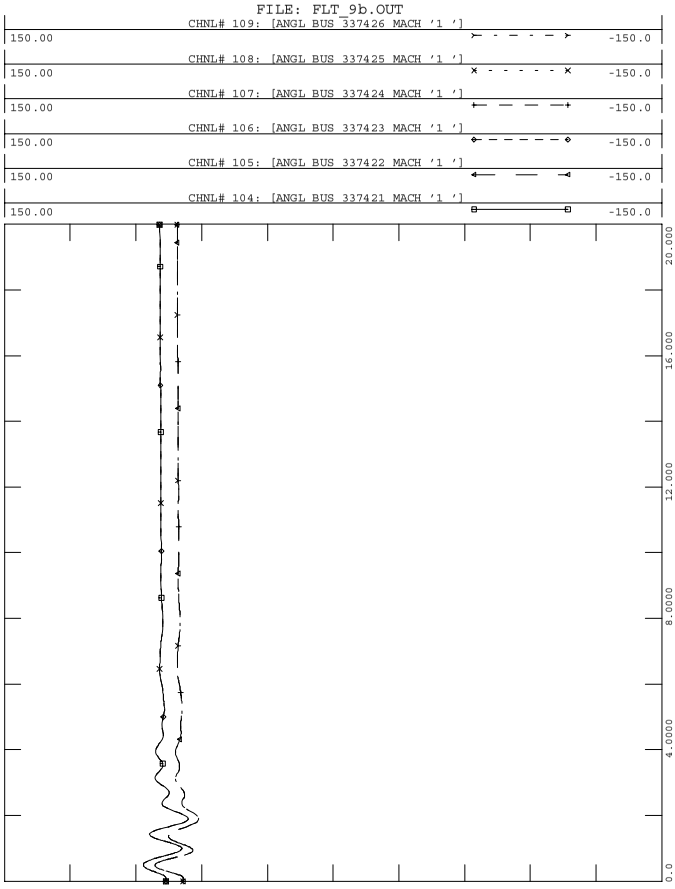

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 6R.BRAS
FILE: FLT_9b.OUT




POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 6R.BRAS
FILE: FLT_9b.OUT

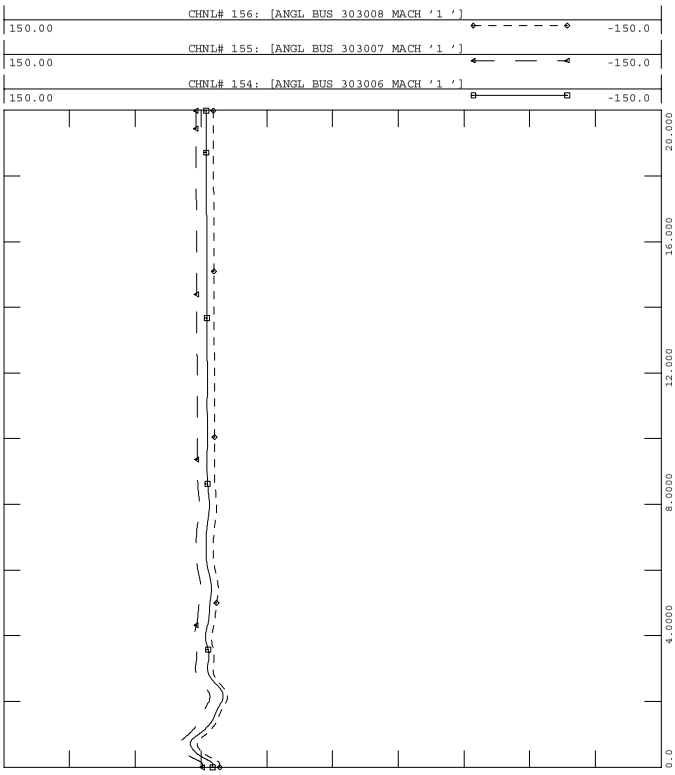


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 6R.BRAS
FILE: FLT_9b.OUT



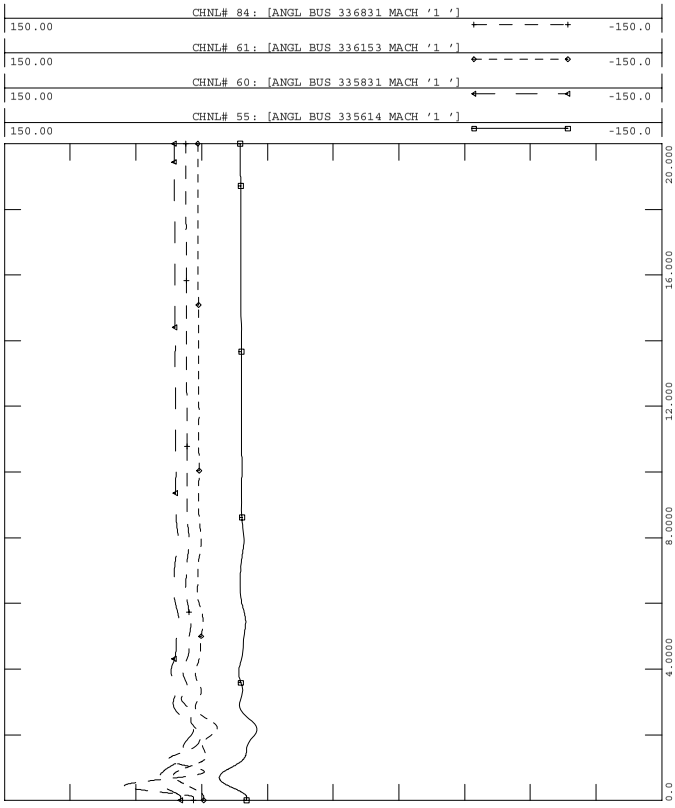

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 6R.BRAS
FILE: FLT_9b.OUT



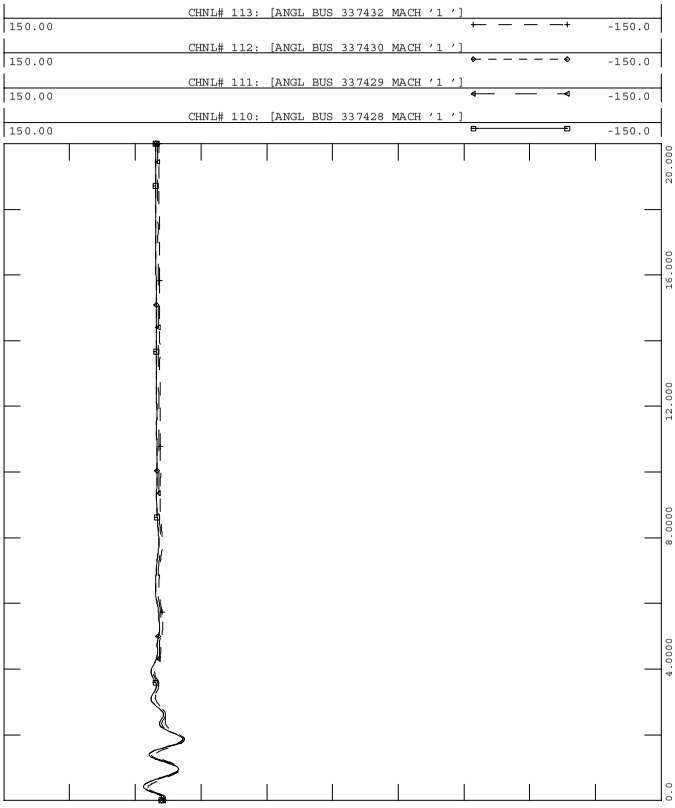

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 6R.BRAS
FILE: FLT_9b.OUT



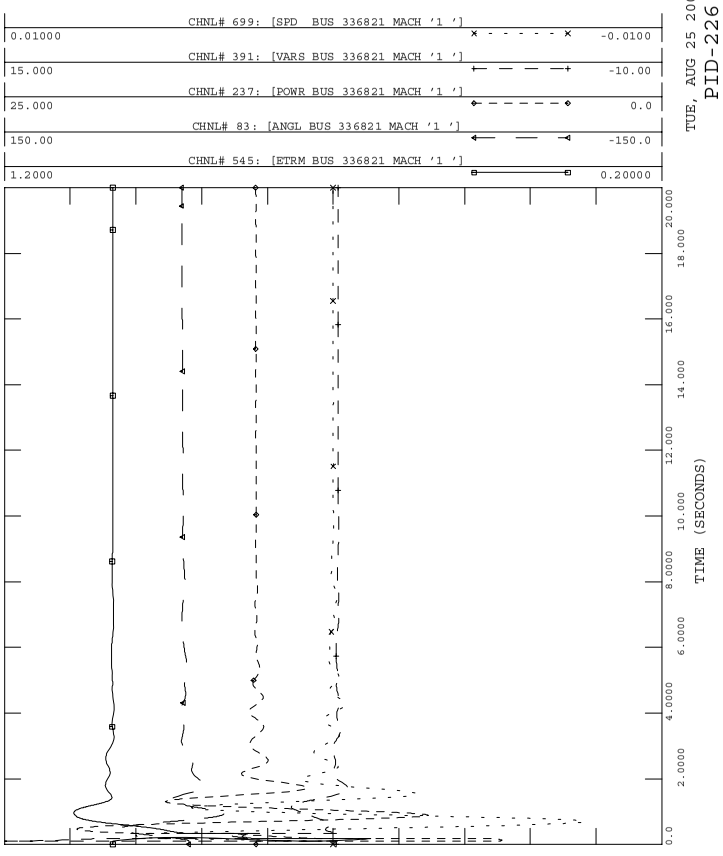

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 6R.BRAS
FILE: FLT_9b.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 3R.BRAS AND 8R.BRAS TO 6R.BRAS
FILE: FLT_9b.OUT




TUE, AUG 25 2009 17:15
PID-226 PLOTS

## C.31 FLT_10a

Stuck breaker fault on 8R.BRAS (#336839) to 6R.BRAS (#336840) transformer, near the 8R.BRAS.

a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Run fault for 5 cycles
c) Remove Fault AT 8R.BRAS 500KV BUS 336839
d) Apply 3 Phase fault at #336839 with admittance 765.3 -j 6686.74 MVA
e) Clear fault after 9 cycles by tripping lines from 8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 8B.WLSN.

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 8B.WLSN
FILE: FLT_10a.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 8B.WLSN
FILE: FLT_10a.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 8B.WLSN
FILE: FLT_10a.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 8B.WLSN
FILE: FLT_10a.OUT

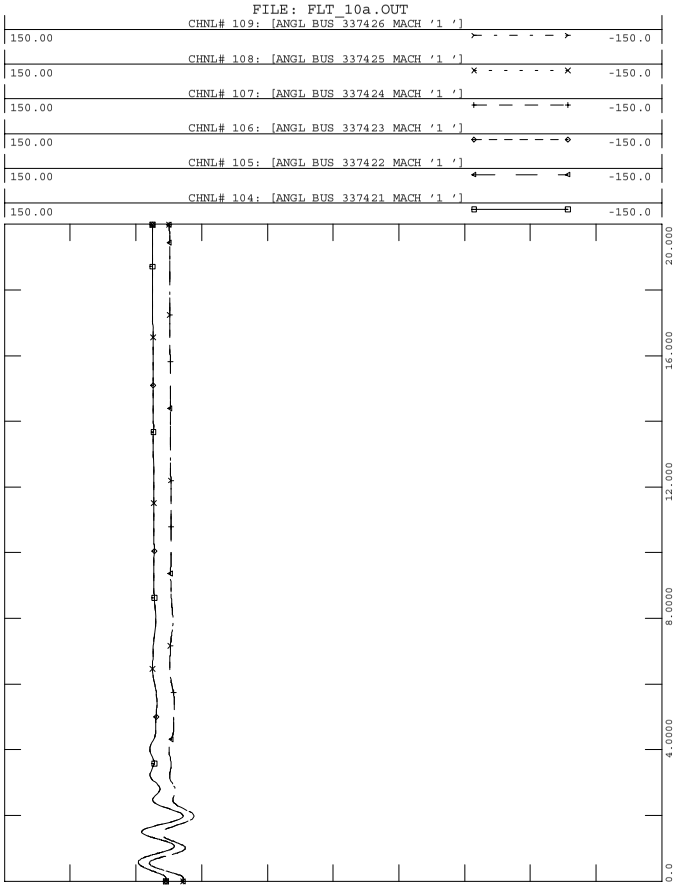
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

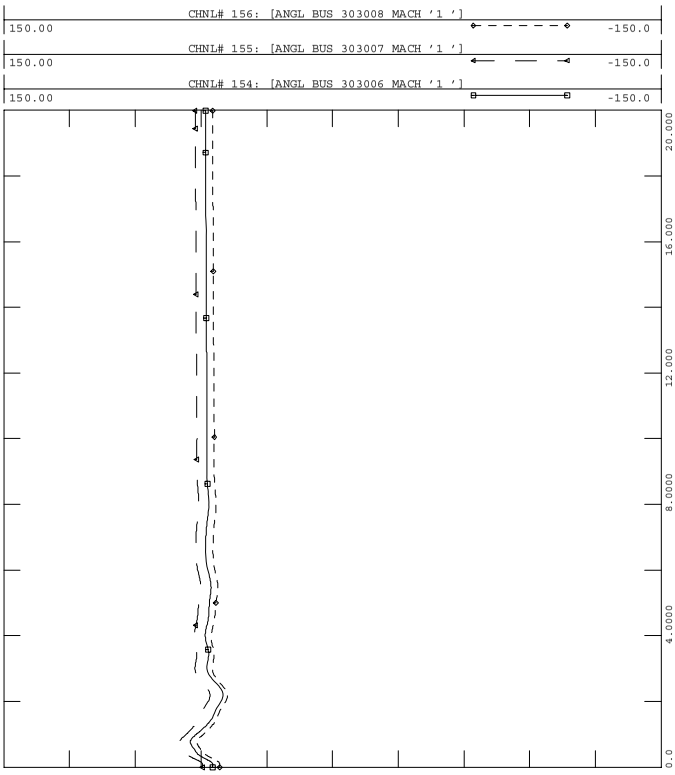
TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 8B.WLSN
FILE: FLT_10a.OUT



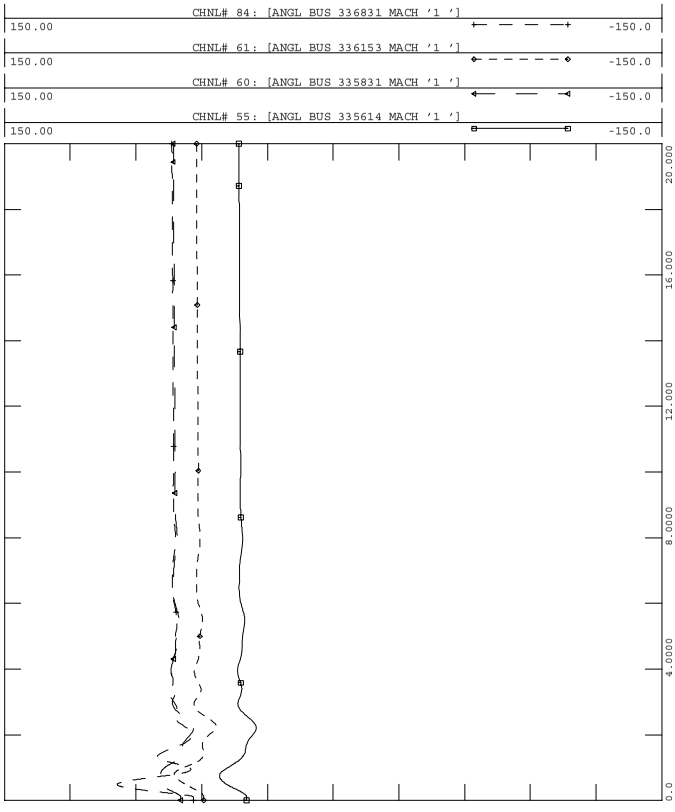

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 8B.WLSN
FILE: FLT_10a.OUT



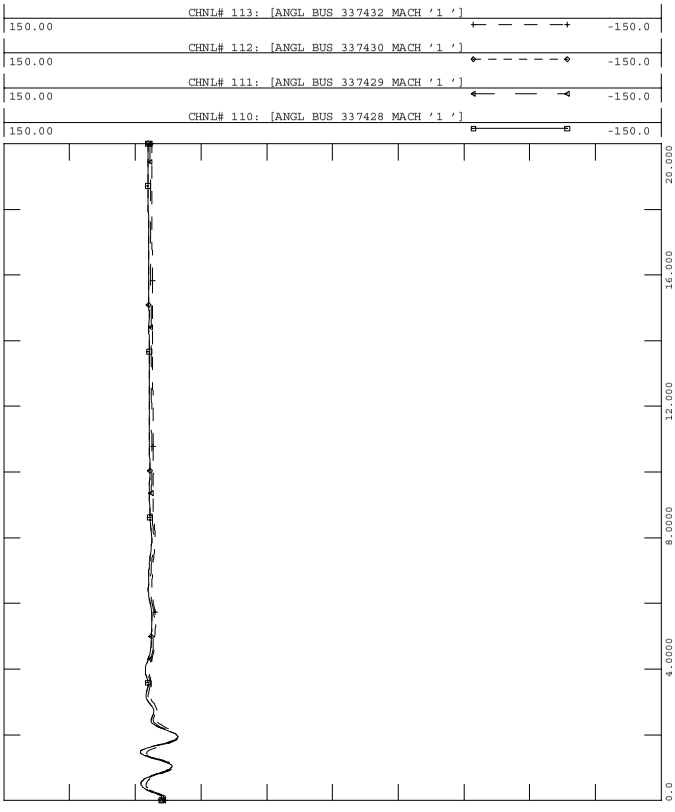

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 8B.WLSN
FILE: FLT_10a.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

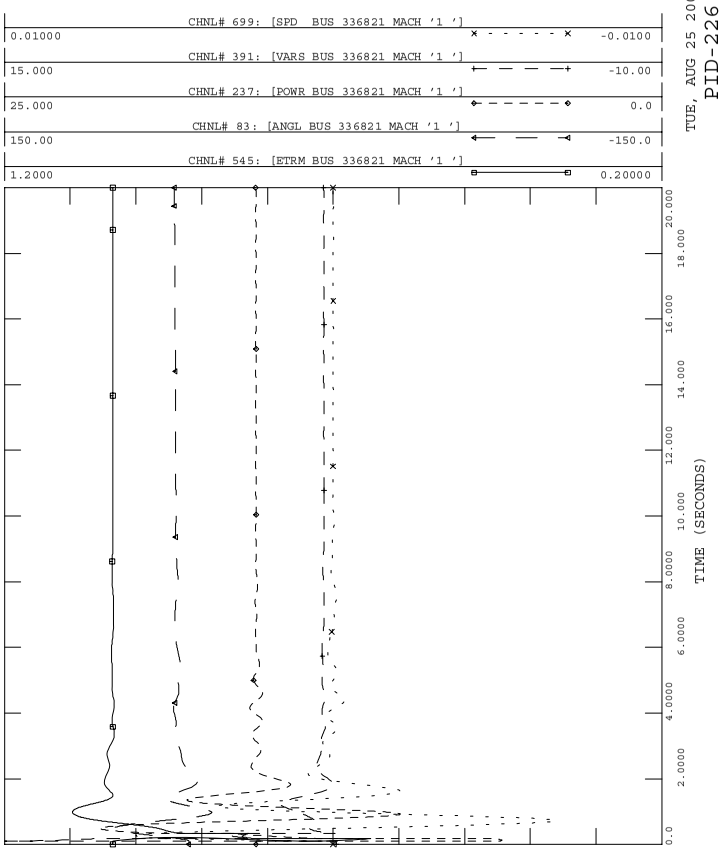
POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 8B.WLSN
FILE: FLT_10a.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 8B.WLSN
FILE: FLT_10a.OUT

TUE, AUG 25 2009 17:15
PID-226 PLOTS

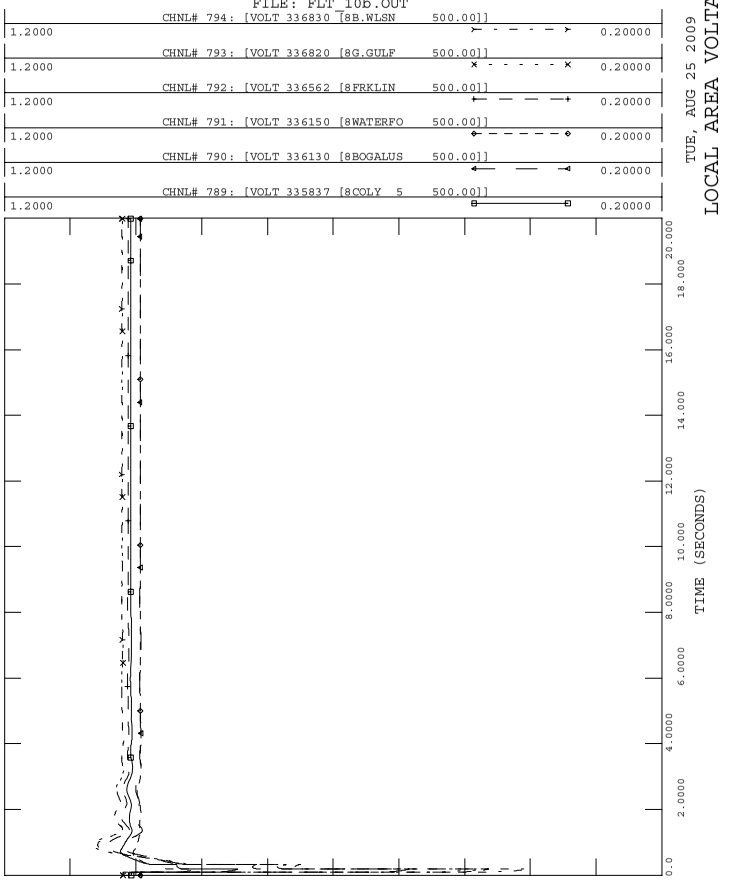


## C.32 FLT_10b

Stuck breaker fault on 8R.BRAS (#336839) to 6R.BRAS (#336840) transformer, near the 8R.BRAS.

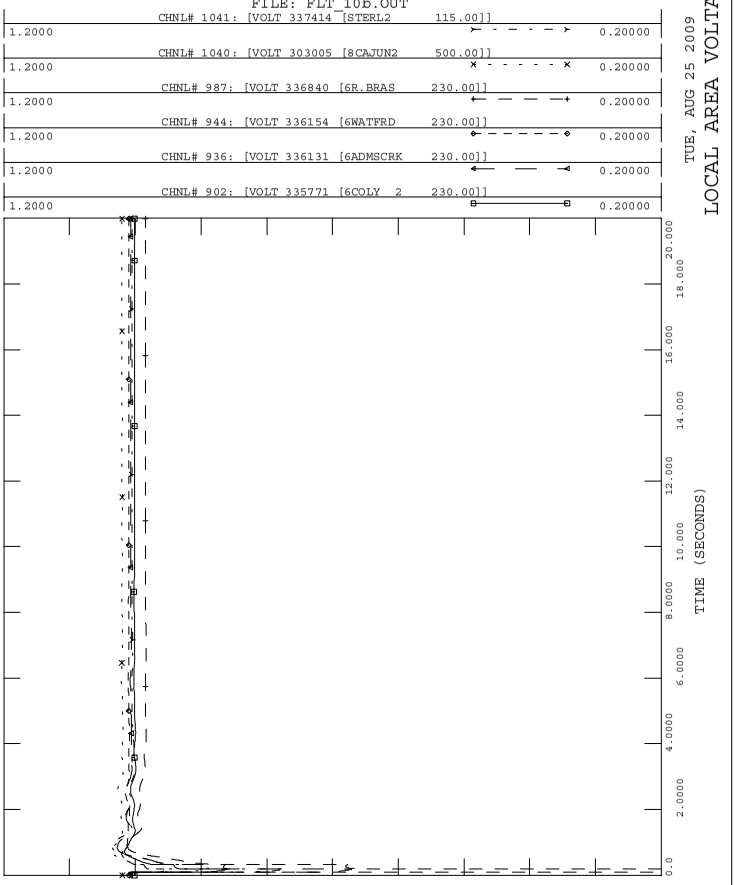
a) Apply 3 Phase Fault AT 8R.BRAS 500KV BUS 336839
b) Run fault for 5 cycles
c) Remove Fault AT 8R.BRAS 500KV BUS 336839
d) Apply 3 Phase fault at #336839 with admittance 765.3 -j 6686.74 MVA
e) Clear fault after 9 cycles by tripping lines from 8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 3R.BRAS.

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 3R.BRAS
FILE: FLT_10b.OUT



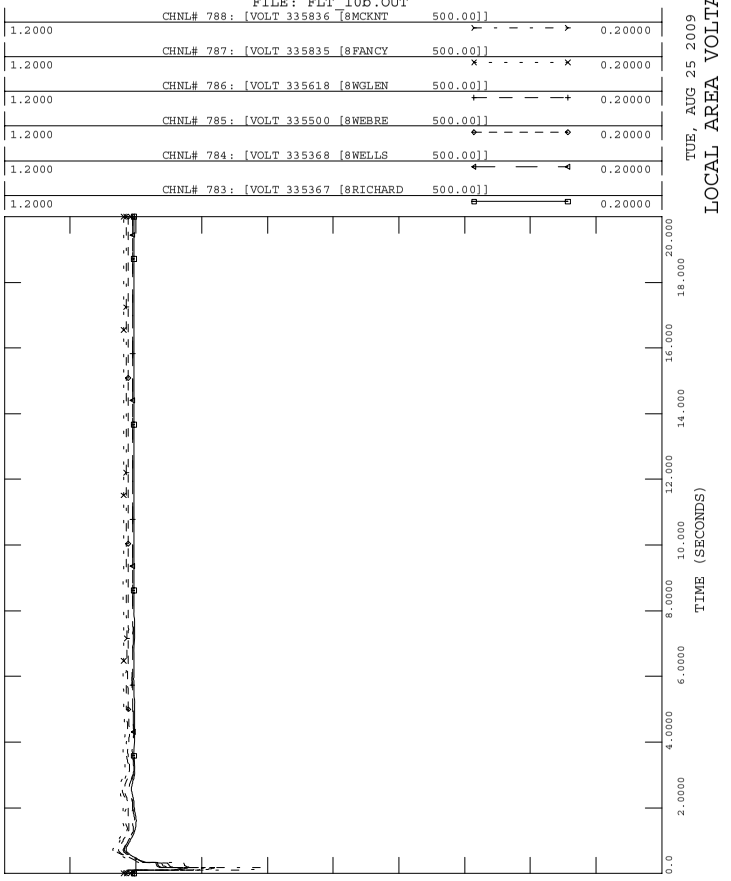

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 3R.BRAS
FILE: FLT_10b.OUT



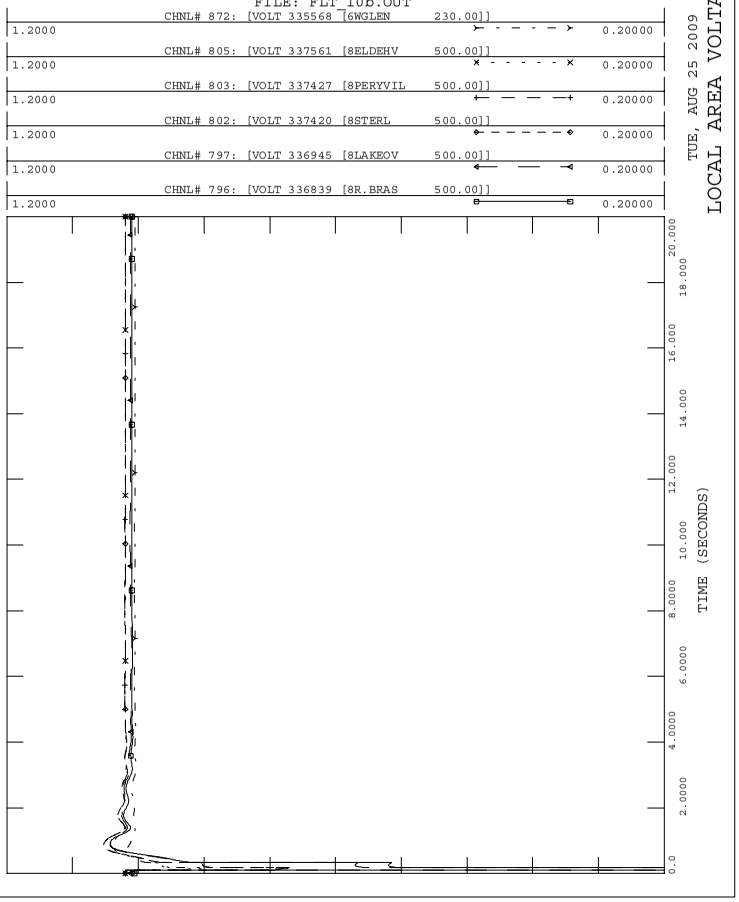

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 3R.BRAS
FILE: FLT_10b.OUT

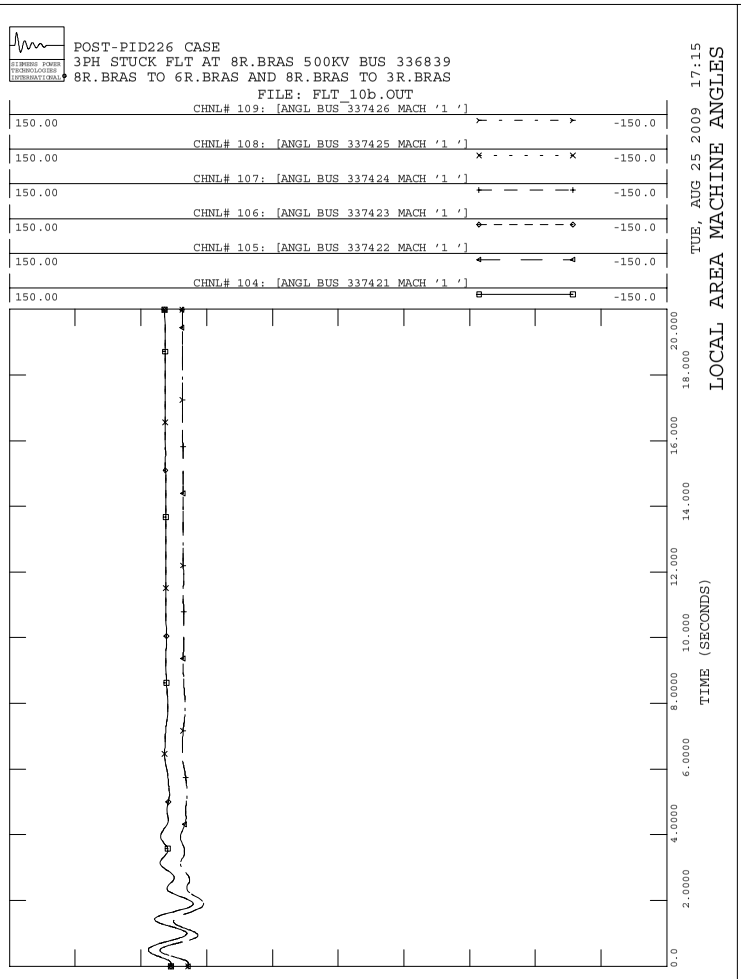


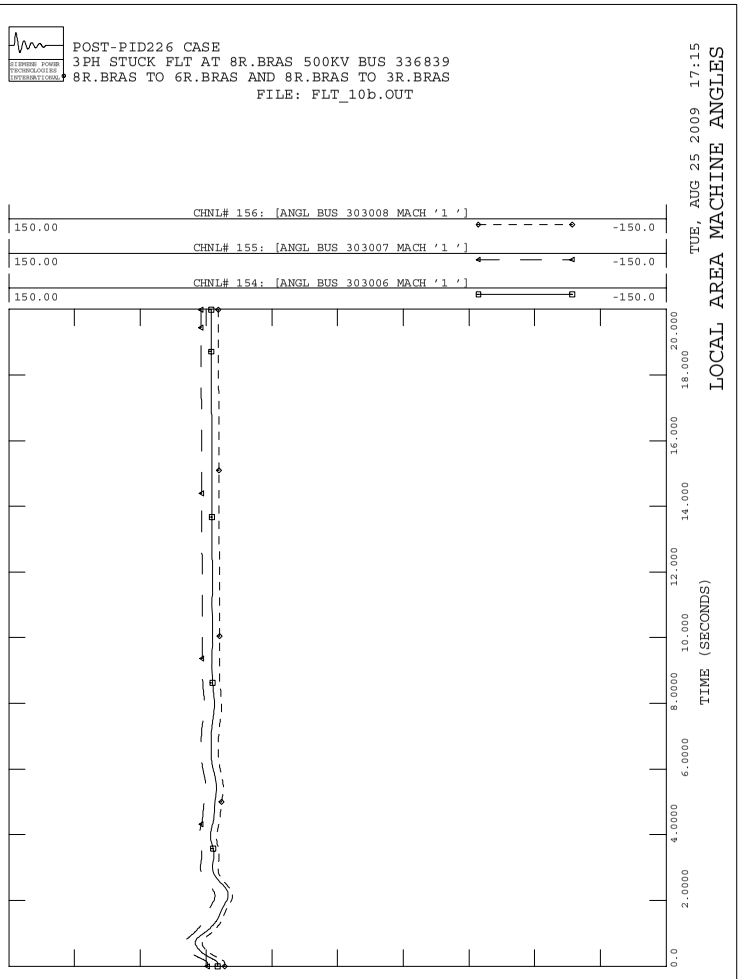

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 3R.BRAS
FILE: FLT_10b.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 3R.BRAS
FILE: FLT_10b.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 3R.BRAS
FILE: FLT_10b.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
150.00
-150.0
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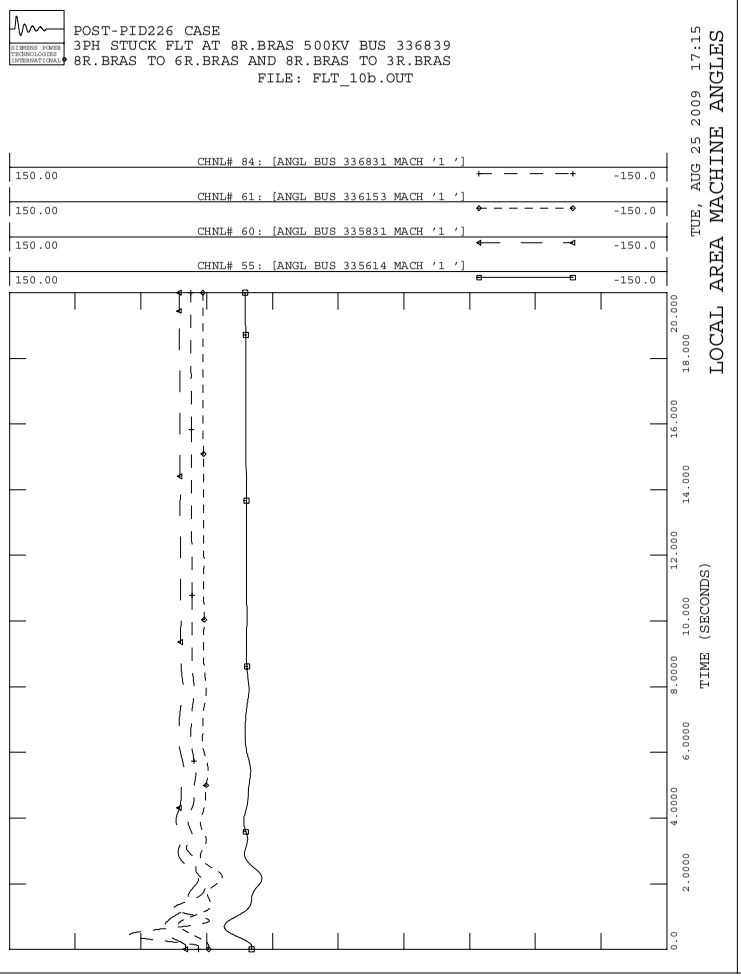
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 3R.BRAS
FILE: FLT_10b.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
150.00
-150.0
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6.0000
8.0000
10.000
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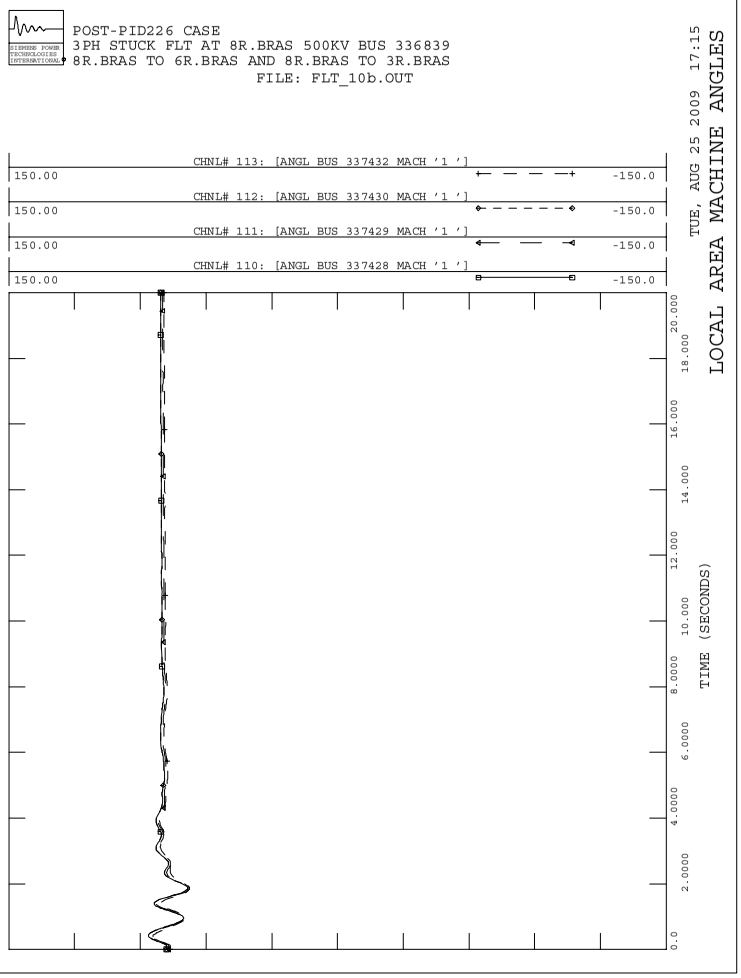
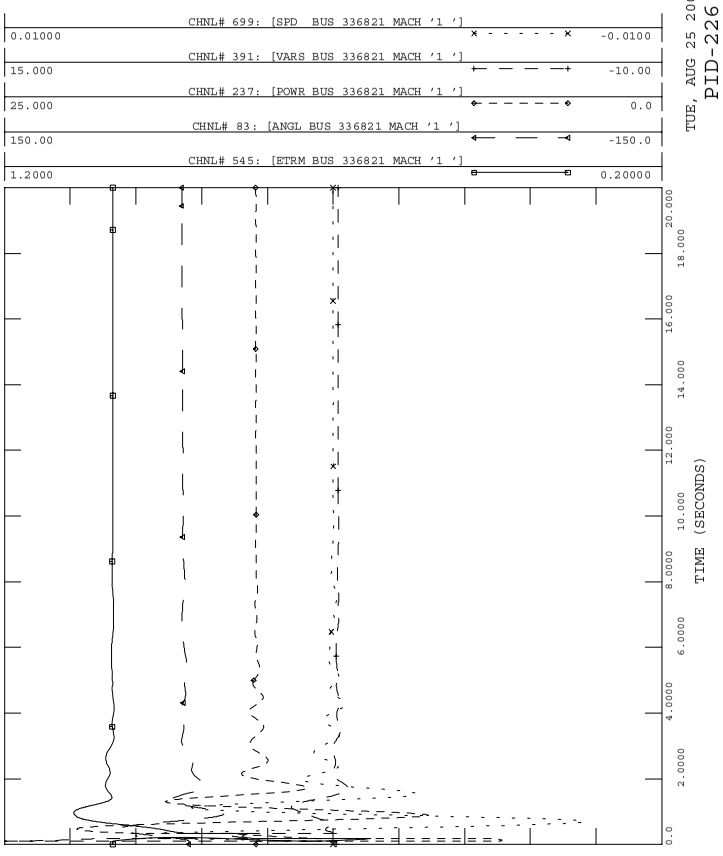
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 3R.BRAS
FILE: FLT_10b.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
150.00
-150.0
0.0
2.0000
4.0000
6.0000
8.0000
10.000
12.000
14.000
16.000
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8R.BRAS 500KV BUS 336839
8R.BRAS TO 6R.BRAS AND 8R.BRAS TO 3R.BRAS
FILE: FLT_10b.OUT

TUE, AUG 25 2009 17:15
PID-226 PLOTS



## C.33 FLT_11a

Stuck breaker fault on the 8FRKLIN (#336562) to 8MCKNT (#335836) 500 kV line, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Run fault for 5 cycles
c) Remove Fault AT 8FRKLIN 500KV BUS 336562
d) Apply 3 Phase fault at #336562 with admittance 823.73 -j 5887.89 MVA
e) Clear fault after 9 cycles by tripping lines from 8FRKLIN TO 8MCKNT AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_11a.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_11a.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_11a.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_11a.OUT

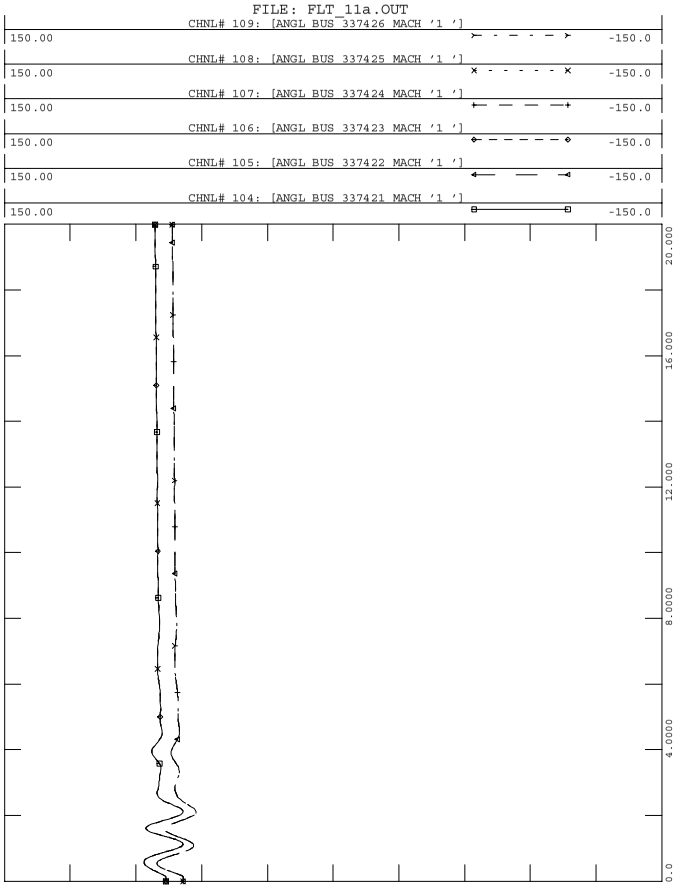
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000
TIME (SECONDS)

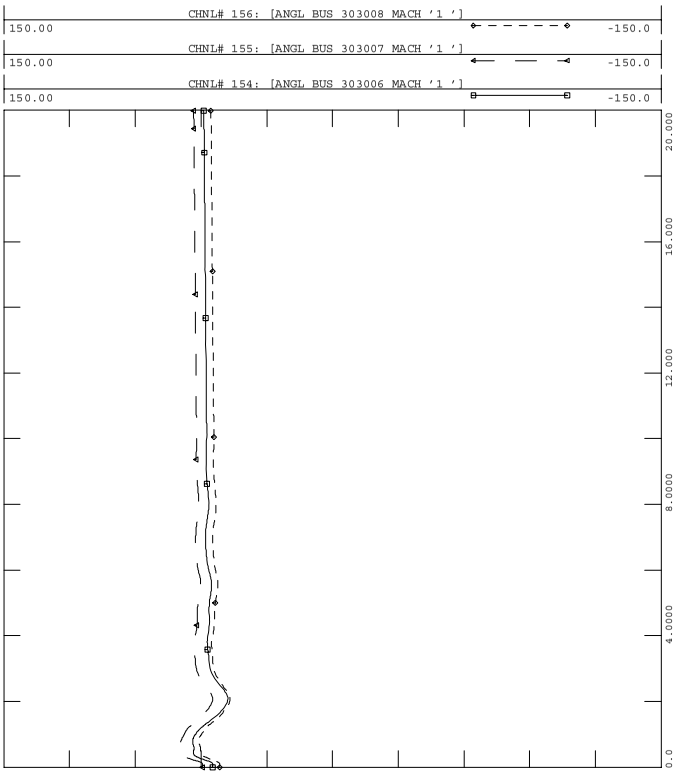
TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_11a.OUT



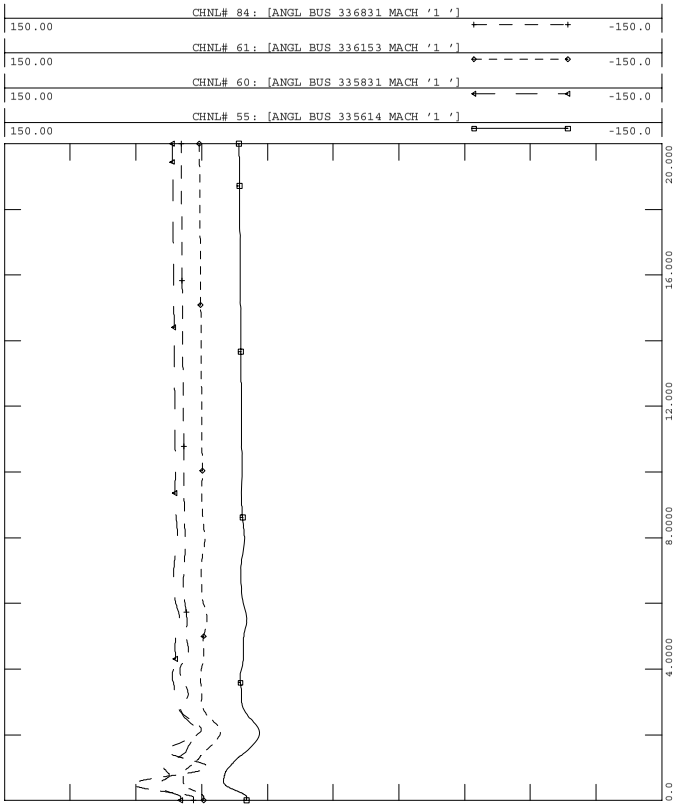

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_11a.OUT



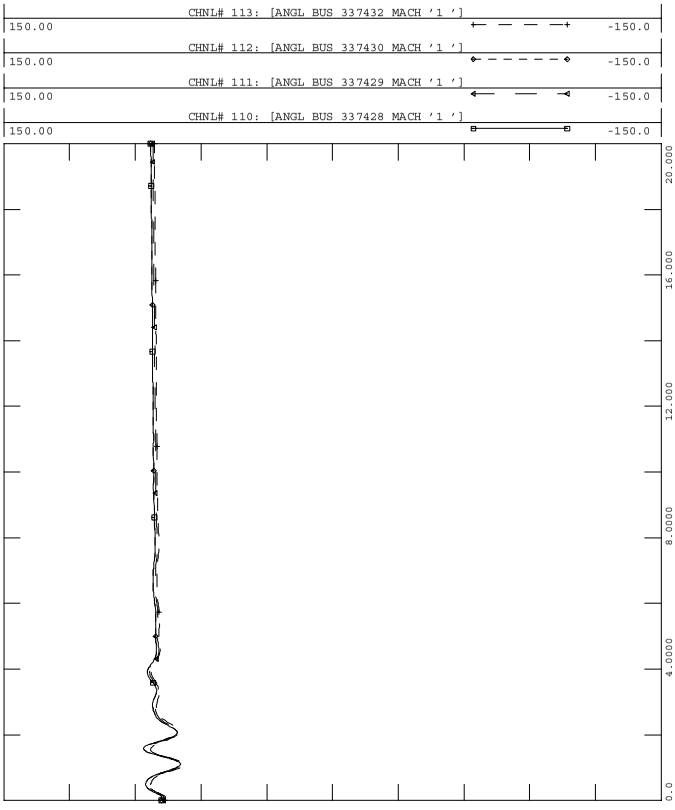

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_11a.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

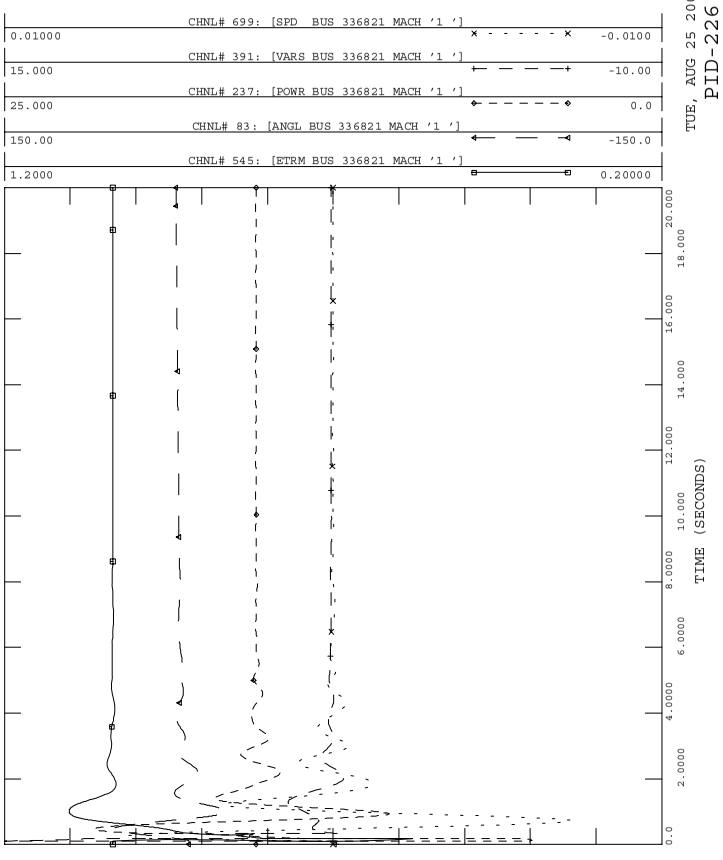
POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_11a.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_11a.OUT

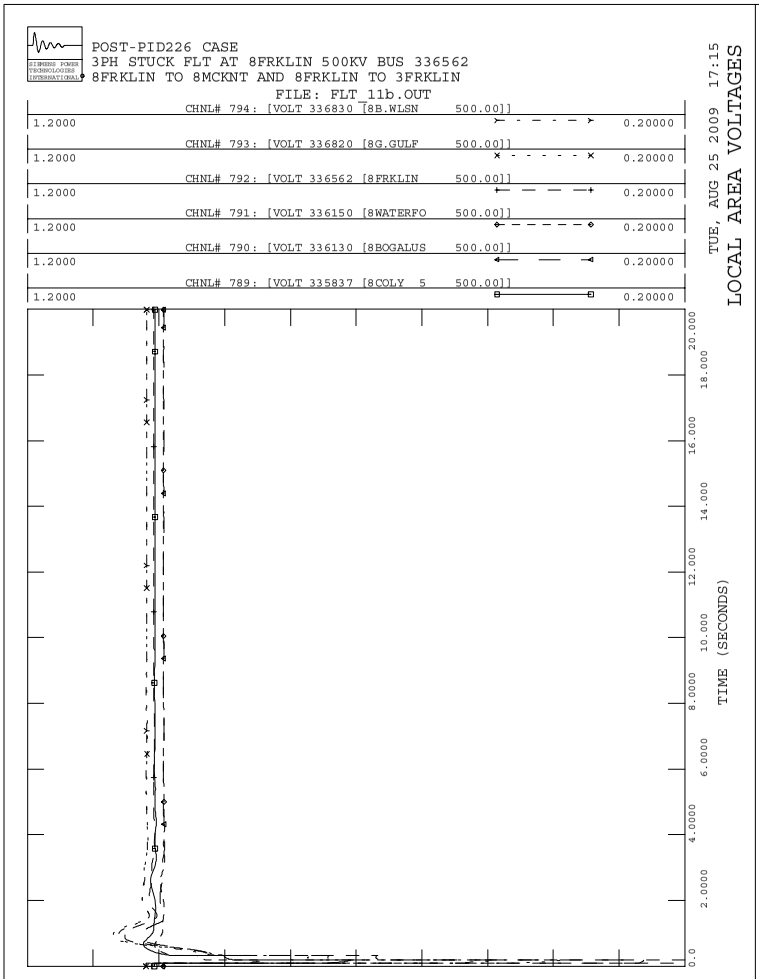
TUE, AUG 25 2009 17:15
PID-226 PLOTS



## C.34 FLT_11b

Stuck breaker fault on the 8FRKLIN (#336562) to 8MCKNT (#335836) 500 kV line, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Run fault for 5 cycles
c) Remove Fault AT 8FRKLIN 500KV BUS 336562
d) Apply 3 Phase fault at #336562 with admittance 823.73 -j 5887.89 MVA
e) Clear fault after 9 cycles by tripping lines from 8FRKLIN TO 8MCKNT AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 3FRKLIN
FILE: FLT_11b.OUT
CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]
1.2000
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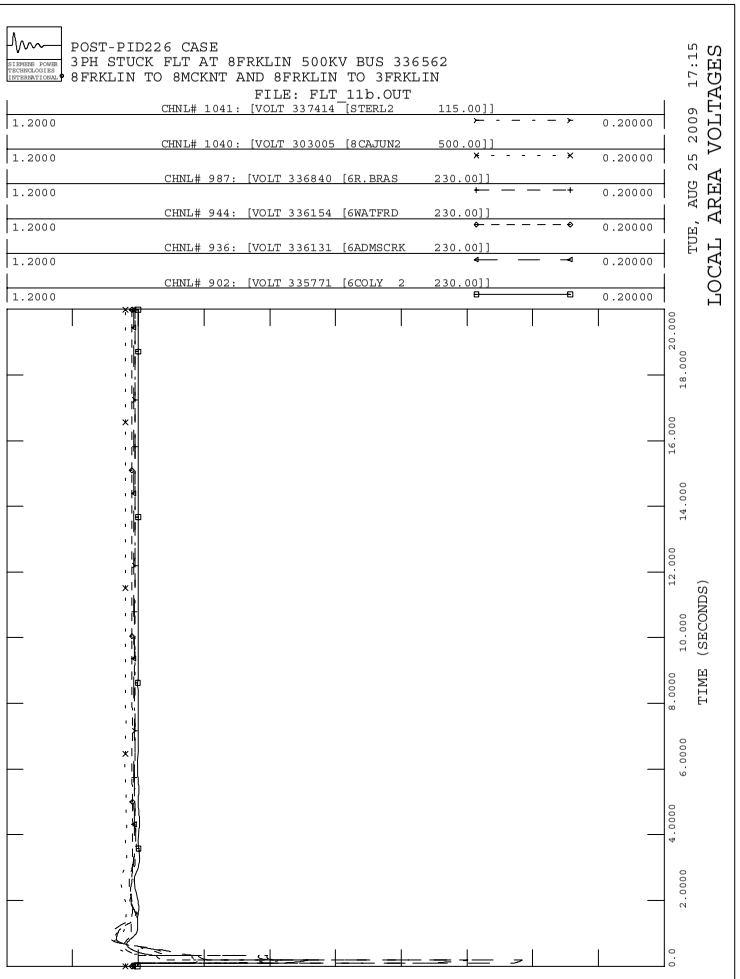
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 3FRKLIN
FILE: FLT_11b.OUT
CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]
1.2000
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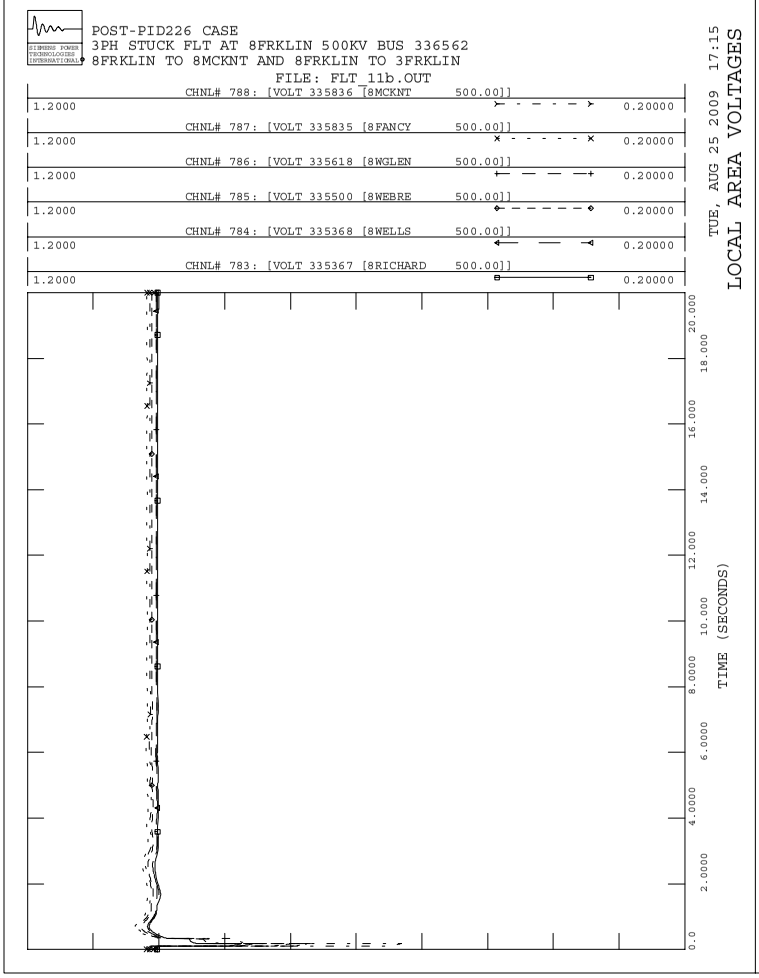
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 3FRKLIN
FILE: FLT_11b.OUT
CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]
1.2000
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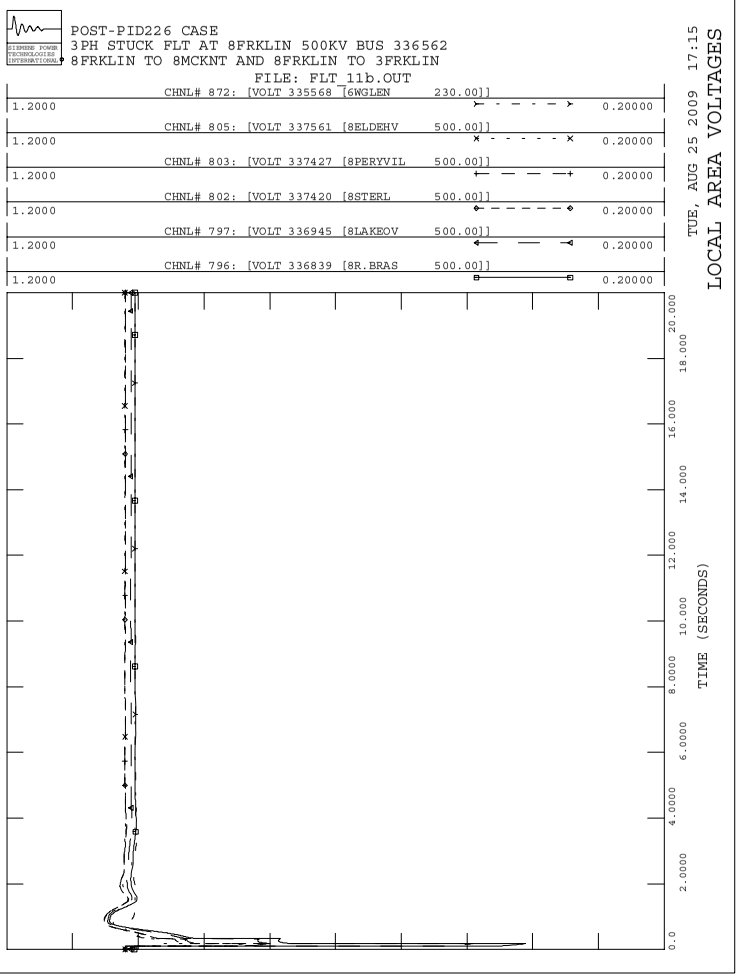
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 3FRKLIN
FILE: FLT_11b.OUT
CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]
1.2000
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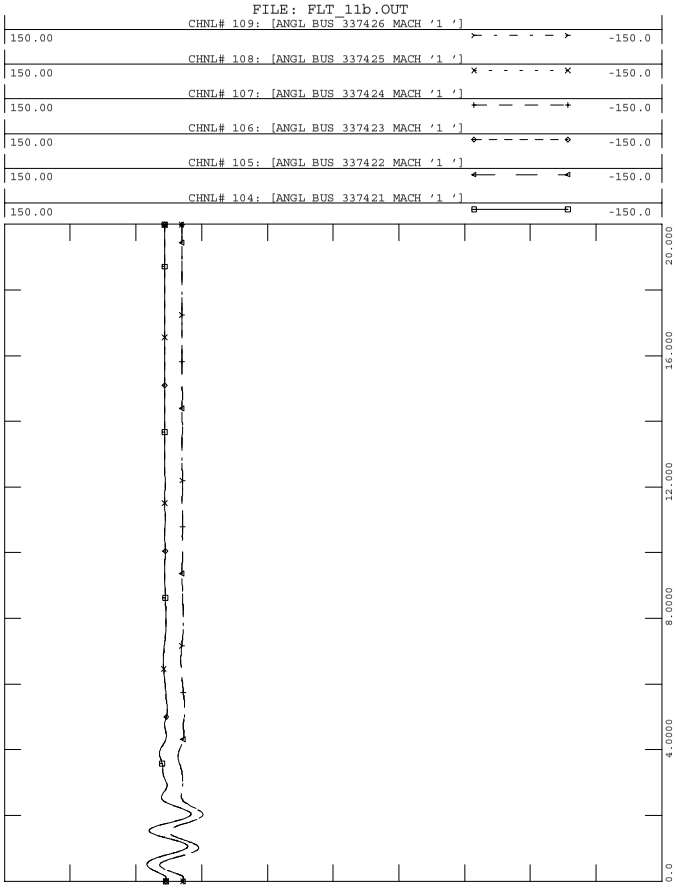
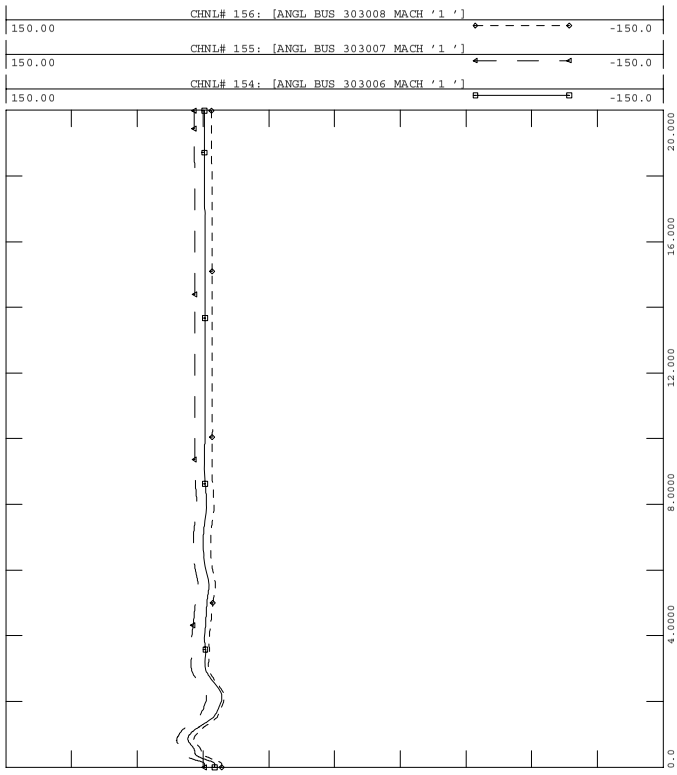
18.000
20.000
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 3FRKLIN
FILE: FLT_11b.OUT



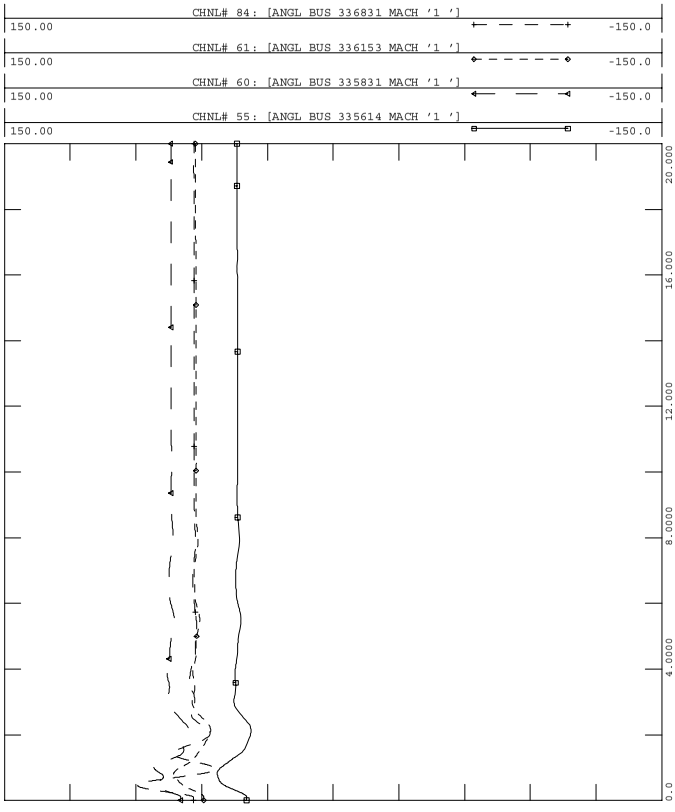

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 3FRKLIN
FILE: FLT_11b.OUT



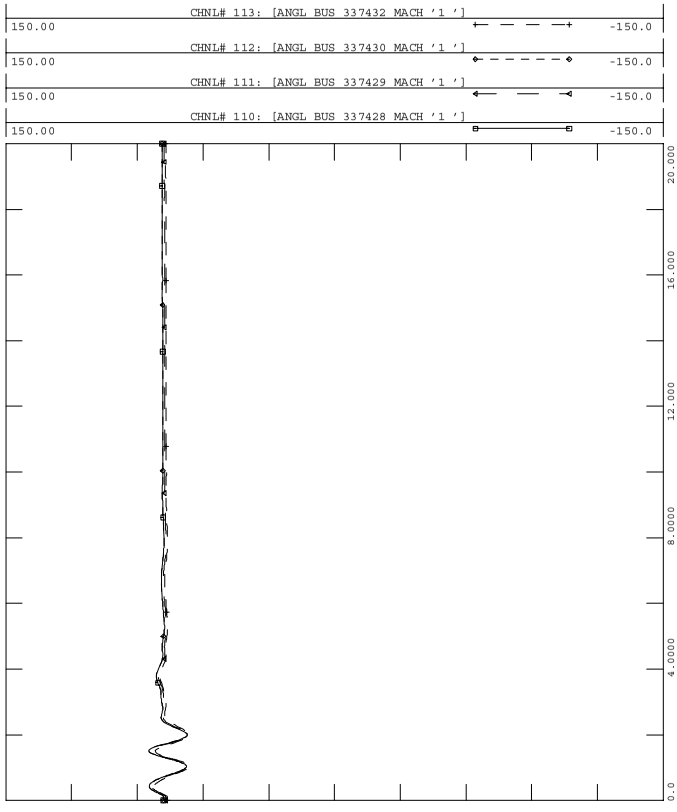

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 3FRKLIN
FILE: FLT_11b.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

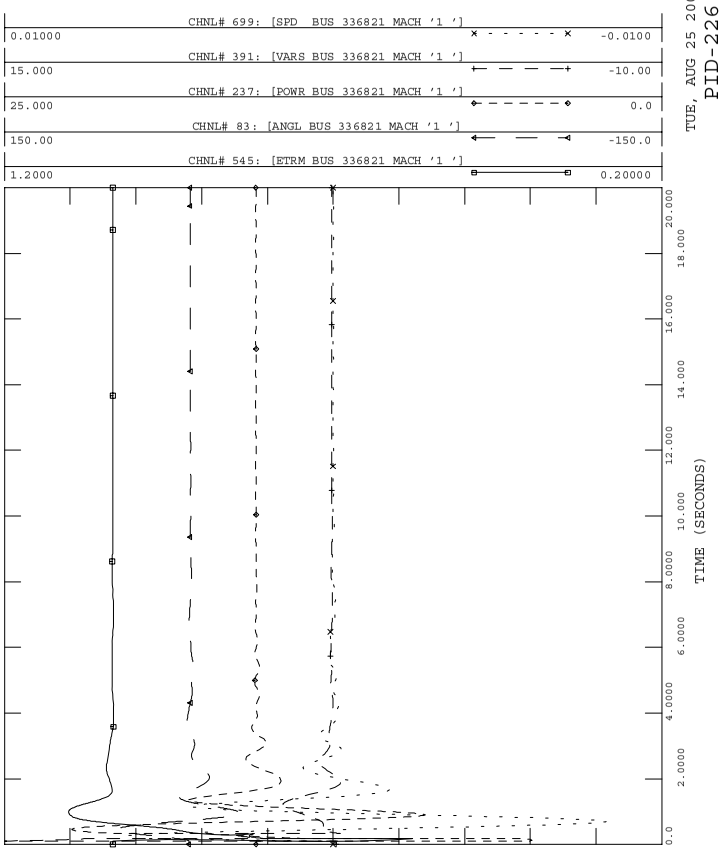
POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 3FRKLIN
FILE: FLT_11b.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8MCKNT AND 8FRKLIN TO 3FRKLIN
FILE: FLT_11b.OUT

TUE, AUG 25 2009 17:15
PID-226 PLOTS



## C.35 FLT_12a

Stuck breaker fault on the 8FRKLIN (#336562) to 8BOGALUS to 6ADMSCRK(#336131) branch, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Run fault for 5 cycles
c) Remove Fault AT 8FRKLIN 500KV BUS 336562
d) Apply 3 Phase fault at #336562 with admittance 823.73 -j 5887.89 MVA
e) Clear fault after 9 cycles by tripping lines from 8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8MCKNT

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8MCKNT
FILE: FLT_12a.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8MCKNT
FILE: FLT_12a.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

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TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8MCKNT
FILE: FLT_12a.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

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TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8MCKNT
FILE: FLT_12a.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

1.2000 0.20000

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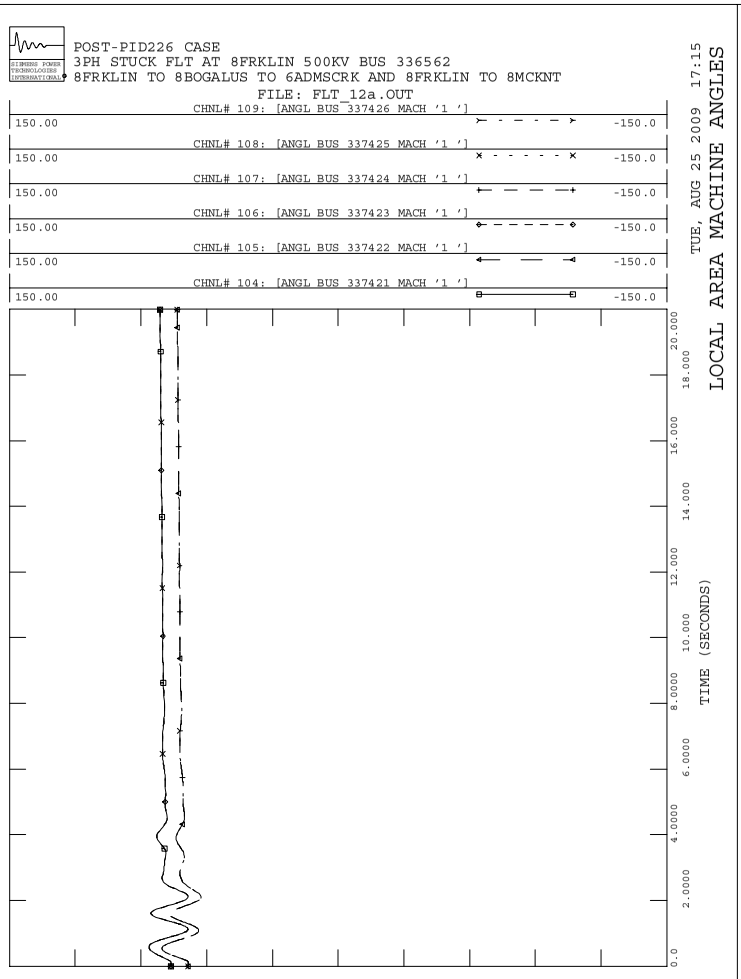
TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8MCKNT
FILE: FLT_12a.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
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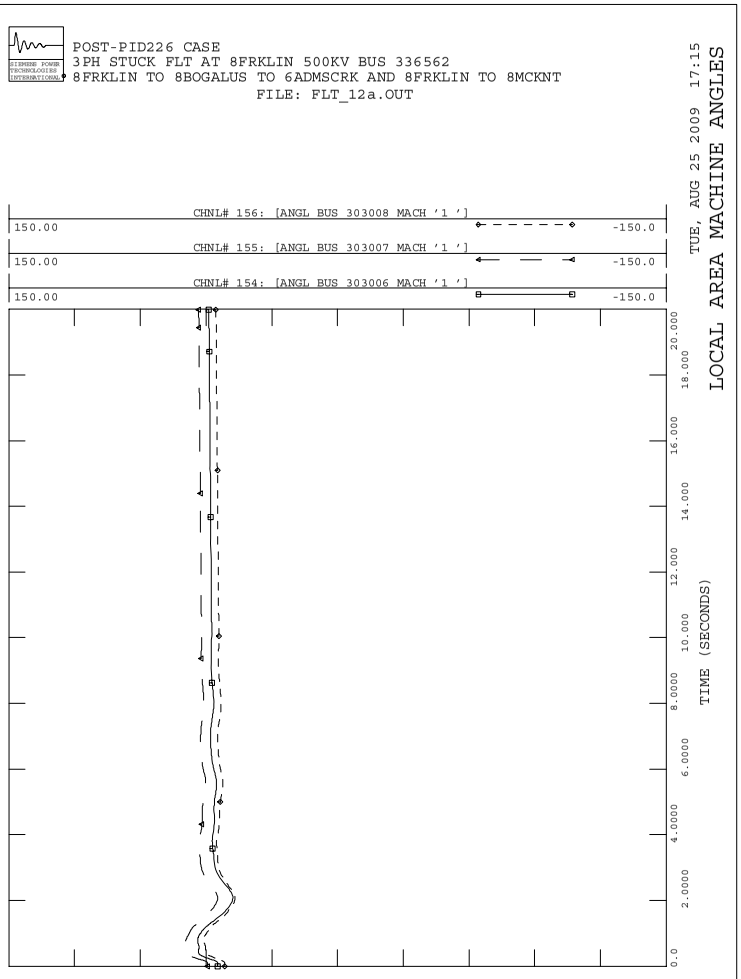
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8MCKNT
FILE: FLT_12a.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
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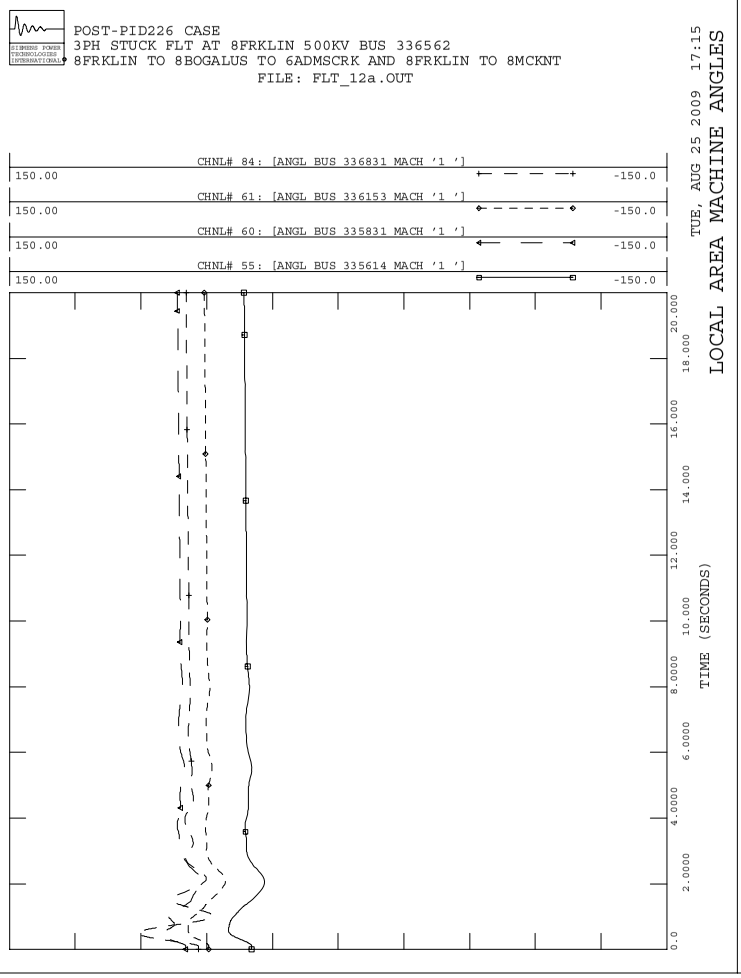
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8MCKNT
FILE: FLT_12a.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
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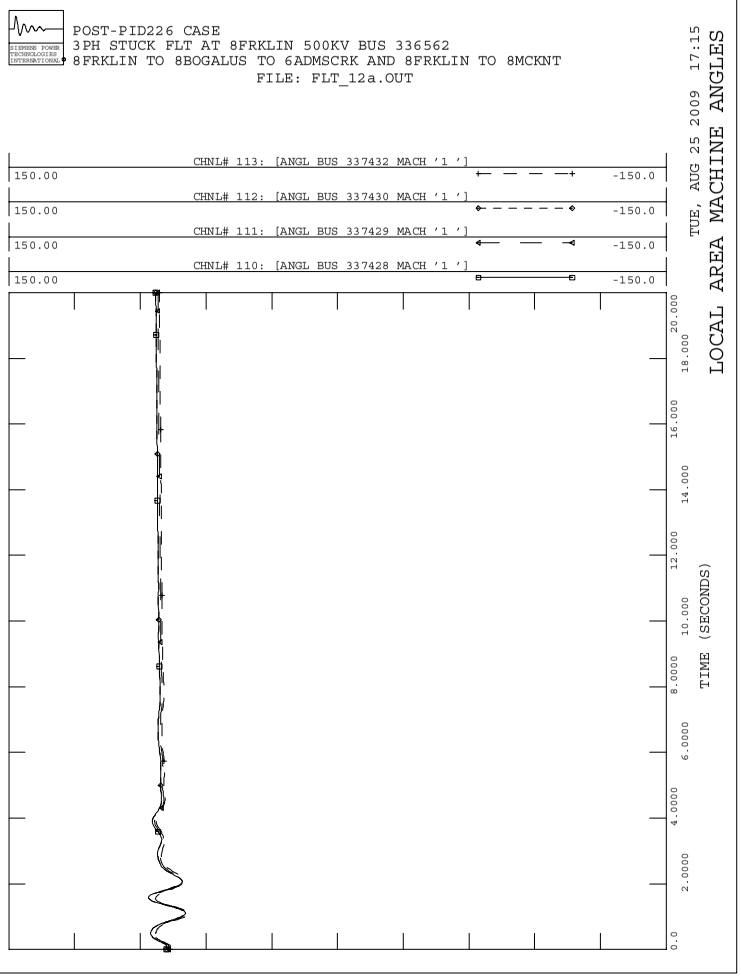
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8MCKNT
FILE: FLT_12a.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
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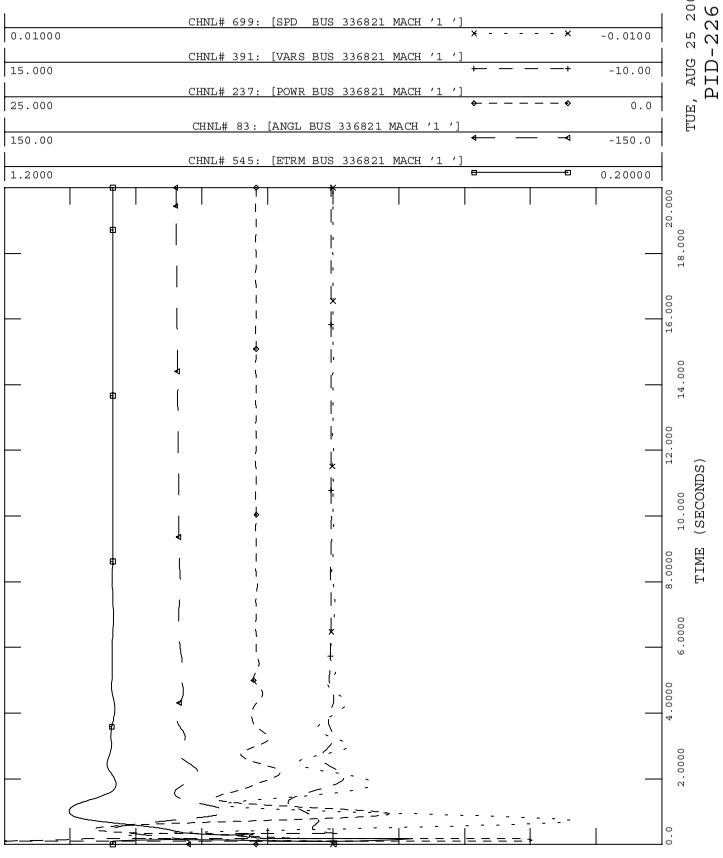
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8MCKNT
FILE: FLT_12a.OUT

TUE, AUG 25 2009 17:15
PID-226 PLOTS



## C.36 FLT_12b

Stuck breaker fault on the 8FRKLIN (#336562) to 8BOGALUS to 6ADMSCRK(#336131) branch, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Run fault for 5 cycles
c) Remove Fault AT 8FRKLIN 500KV BUS 336562
d) Apply 3 Phase fault at #336562 with admittance 823.73 -j 5887.89 MVA
e) Clear fault after 9 cycles by tripping lines from 8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8G.GULF

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8G.GULF
FILE: FLT_12b.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

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TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8G.GULF
FILE: FLT_12b.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

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TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8G.GULF
FILE: FLT_12b.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

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TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8G.GULF
FILE: FLT_12b.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

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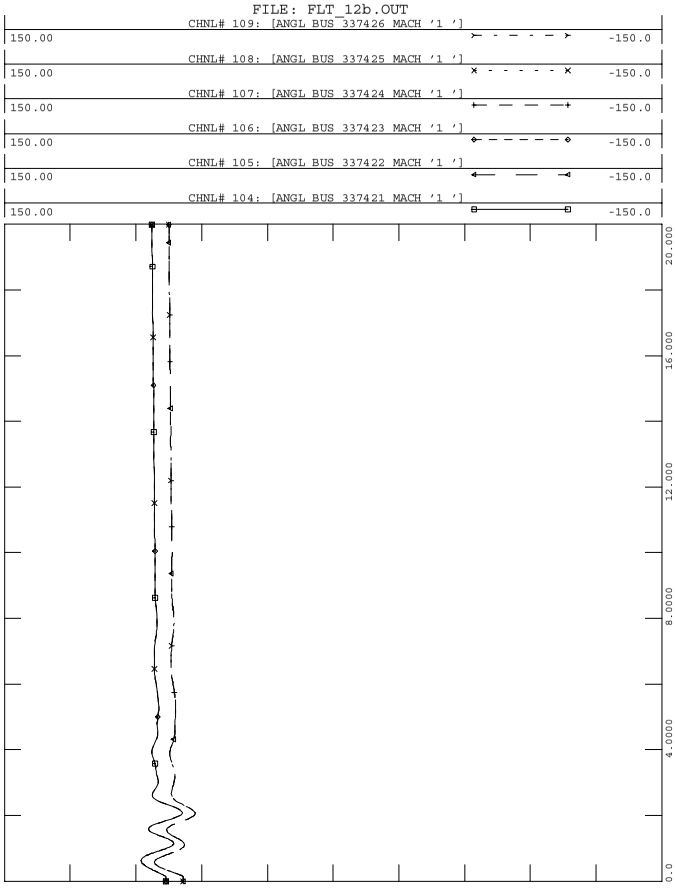
TIME (SECONDS)

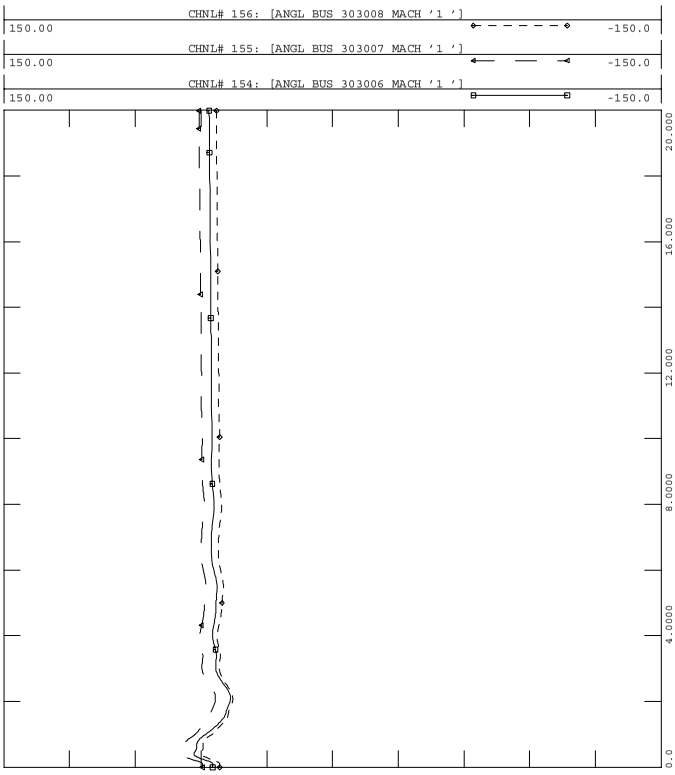
TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8G.GULF
FILE: FLT_12b.OUT



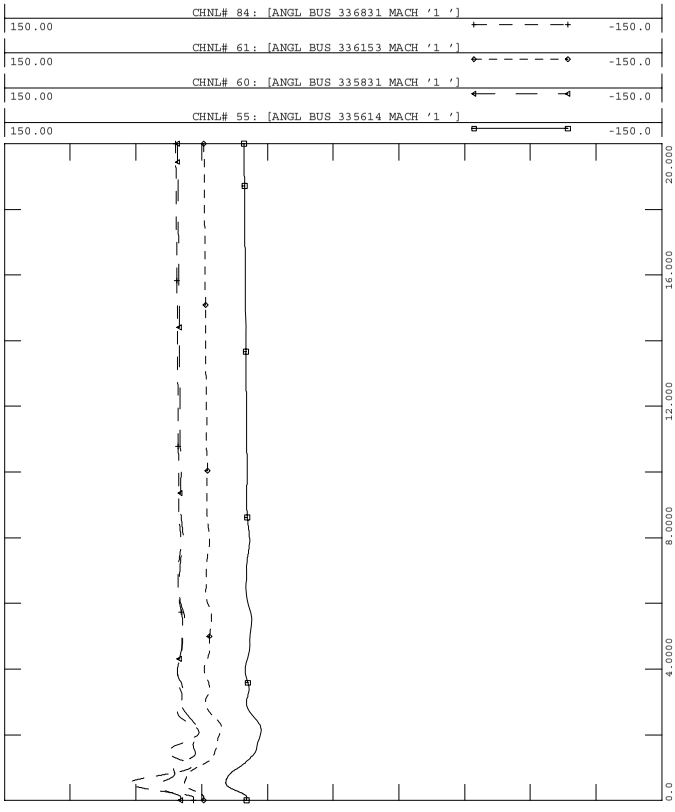

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8G.GULF
FILE: FLT_12b.OUT



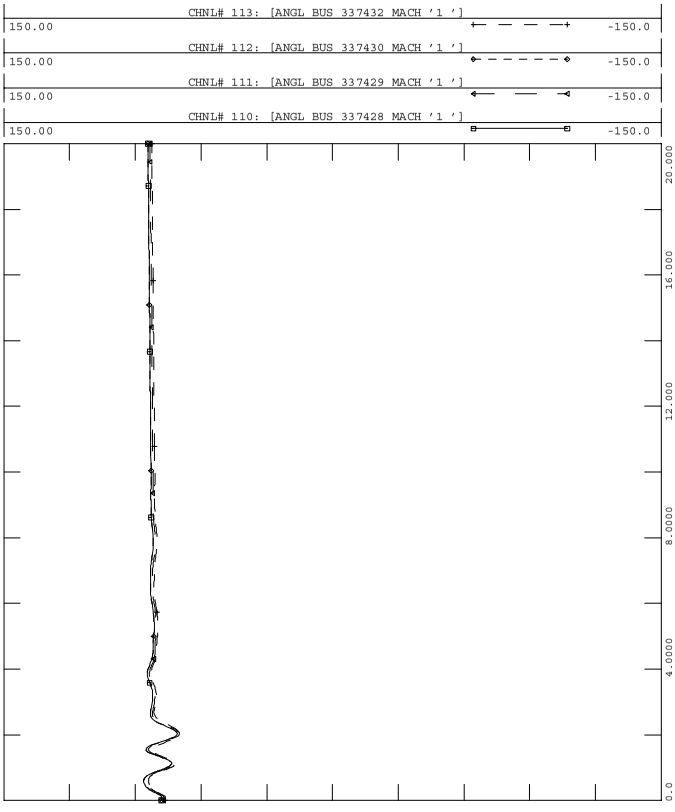

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8G.GULF
FILE: FLT_12b.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

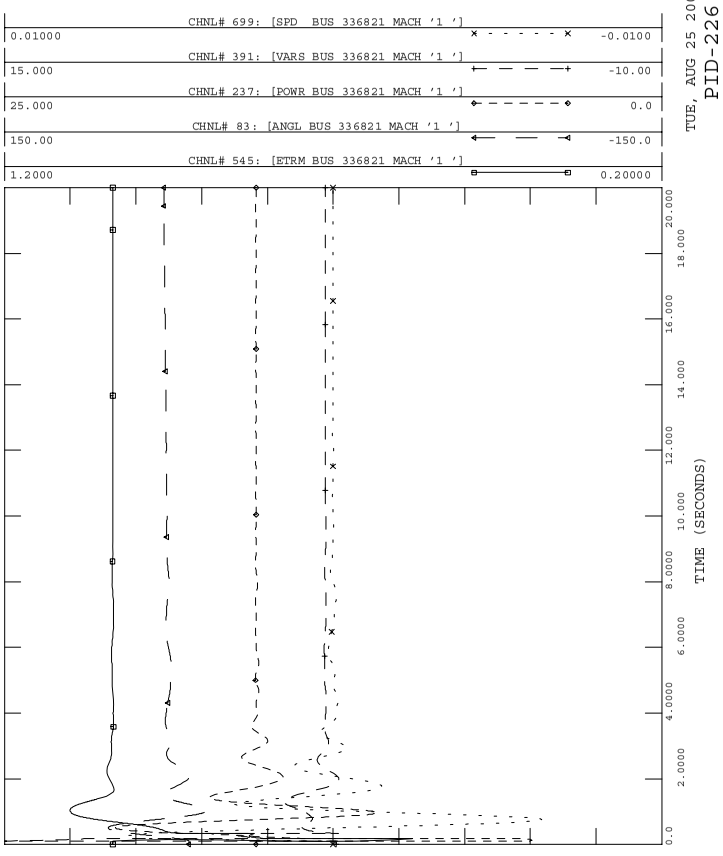
POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8G.GULF
FILE: FLT_12b.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8BOGALUS TO 6ADMSCRK AND 8FRKLIN TO 8G.GULF
FILE: FLT_12b.OUT

TUE, AUG 25 2009 17:15
PID-226 PLOTS



## C.37 FLT_13a

Stuck breaker fault on the 8FRKLIN (#336562) to 8R.BRAS (#336839) branch, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Run fault for 5 cycles
c) Remove Fault AT 8FRKLIN 500KV BUS 336562
d) Apply 3 Phase fault at #336562 with admittance 823.73 -j 5887.89 MVA
e) Clear fault after 9 cycles by tripping lines from 8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT1

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_13a.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

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TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_13a.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

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TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_13a.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

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TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_13a.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

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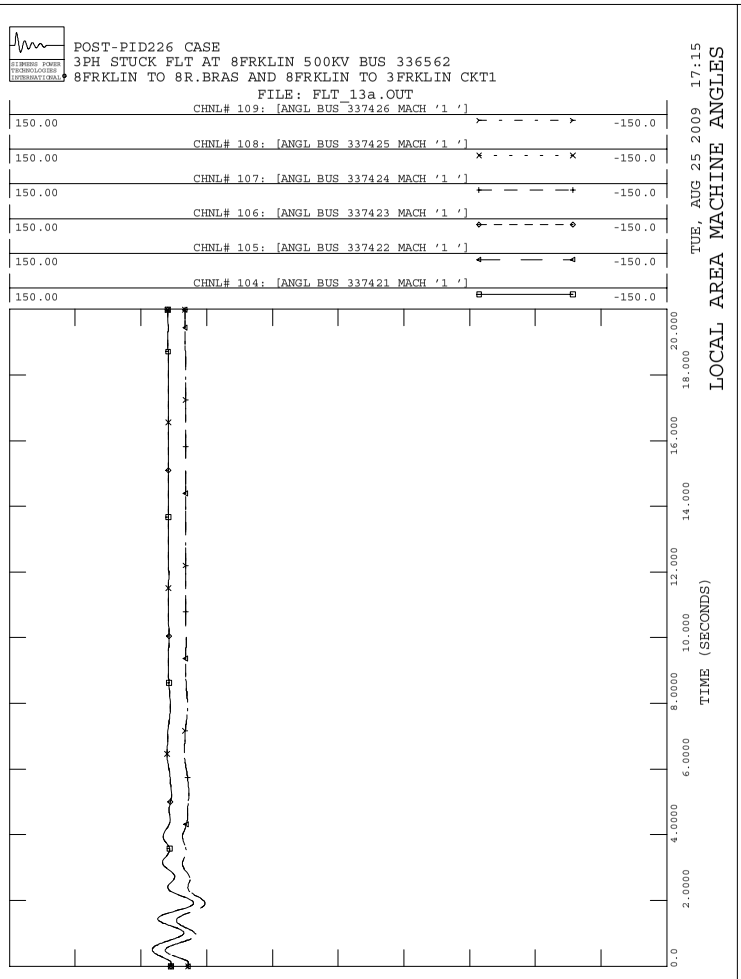
TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_13a.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
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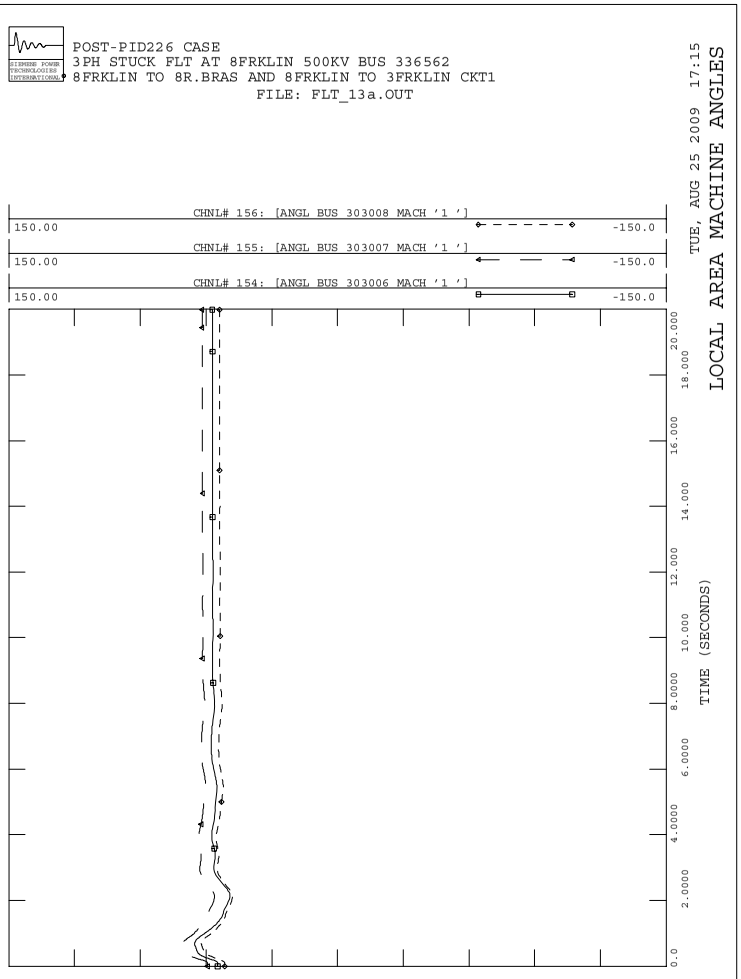
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_13a.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
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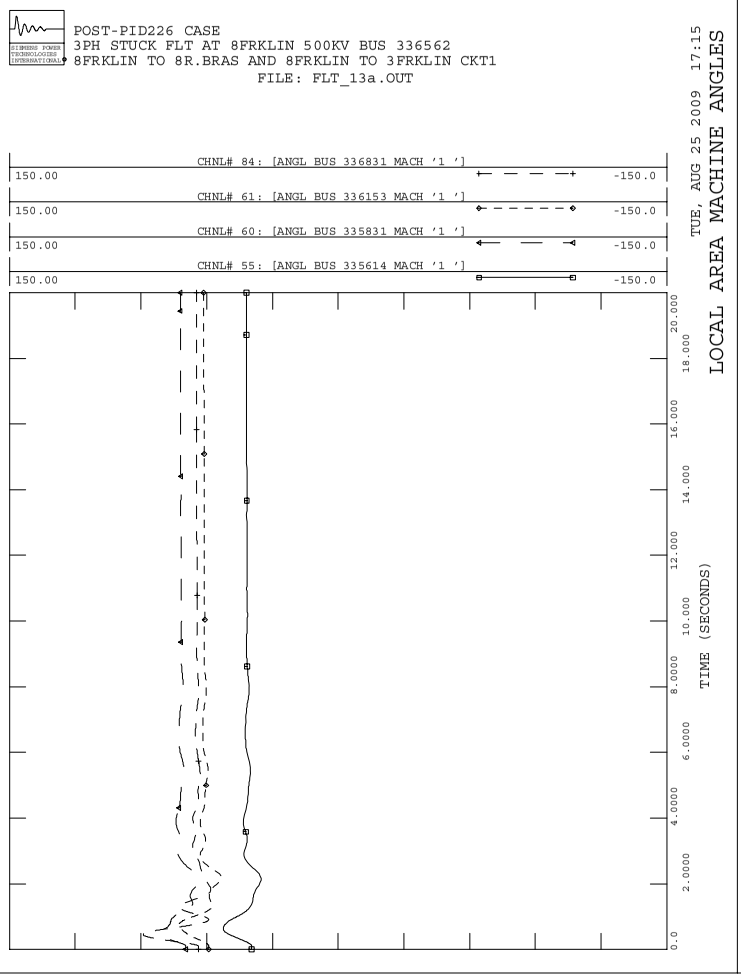
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_13a.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
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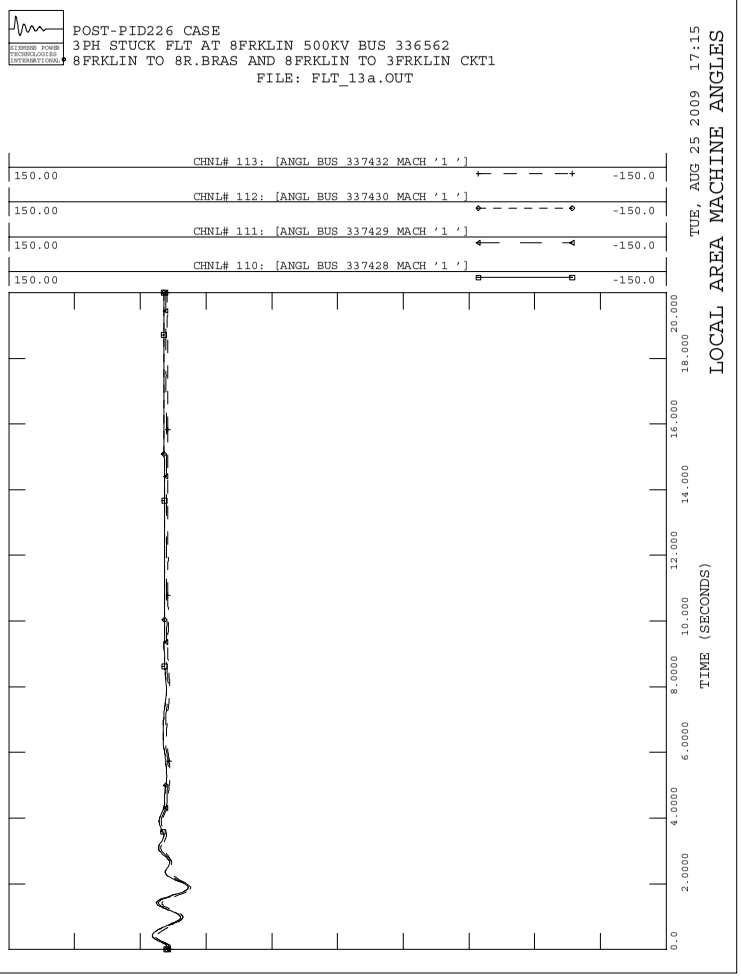
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_13a.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
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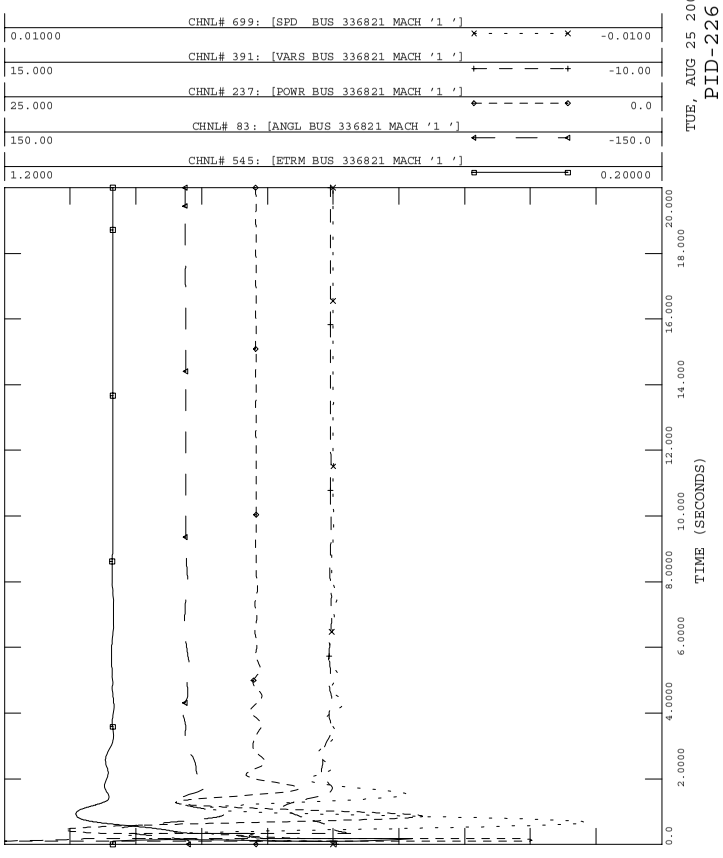
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_13a.OUT

TUE, AUG 25 2009 17:15
PID-226 PLOTS



## C.38 FLT_13b

Stuck breaker fault on the 8FRKLIN (#336562) to 8R.BRAS (#336839) branch, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Run fault for 5 cycles
c) Remove Fault AT 8FRKLIN 500KV BUS 336562
d) Apply 3 Phase fault at #336562 with admittance 823.73 -j 5887.89 MVA
e) Clear fault after 9 cycles by tripping lines from 8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT2

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT2
FILE: FLT_13b.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

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TIME (SECONDS)

TUE, AUG 25 2009 17:15

LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT2
FILE: FLT_13b.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:15

LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT2
FILE: FLT_13b.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:15

LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT2
FILE: FLT_13b.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

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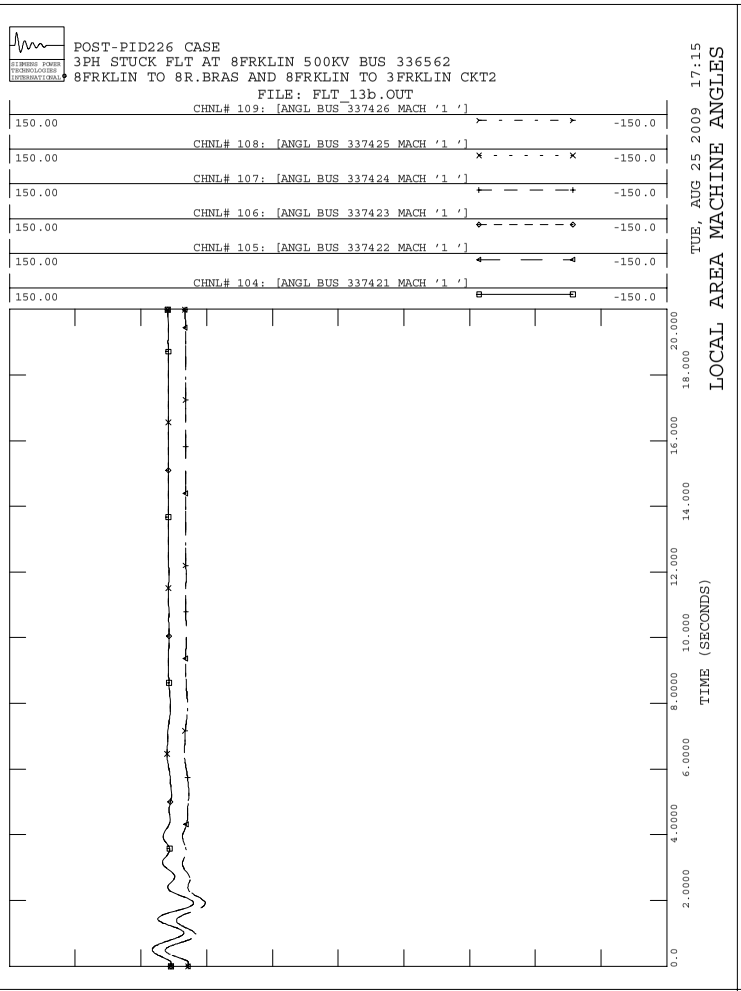
TIME (SECONDS)

TUE, AUG 25 2009 17:15

LOCAL AREA VOLTAGES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT2
FILE: FLT_13b.OUT
CHNL# 109: [ANGL BUS 337426 MACH '1 ']
CHNL# 108: [ANGL BUS 337425 MACH '1 ']
CHNL# 107: [ANGL BUS 337424 MACH '1 ']
CHNL# 106: [ANGL BUS 337423 MACH '1 ']
CHNL# 105: [ANGL BUS 337422 MACH '1 ']
CHNL# 104: [ANGL BUS 337421 MACH '1 ']
150.00
-150.0
0.0
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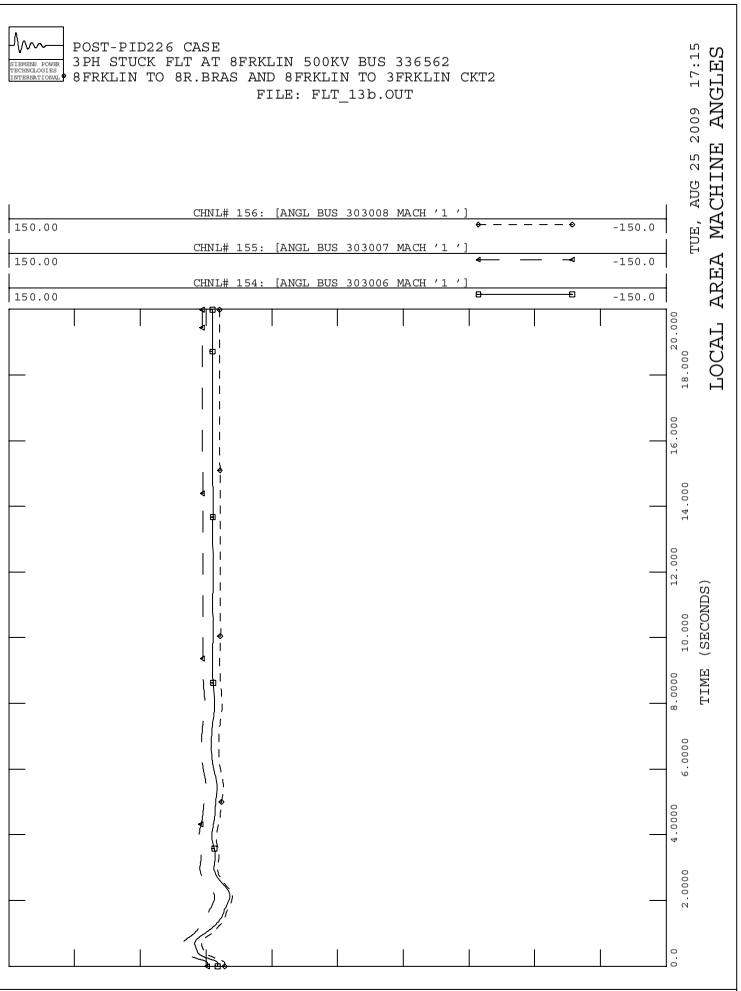
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT2
FILE: FLT_13b.OUT
CHNL# 156: [ANGL BUS 303008 MACH '1 ']
CHNL# 155: [ANGL BUS 303007 MACH '1 ']
CHNL# 154: [ANGL BUS 303006 MACH '1 ']
150.00
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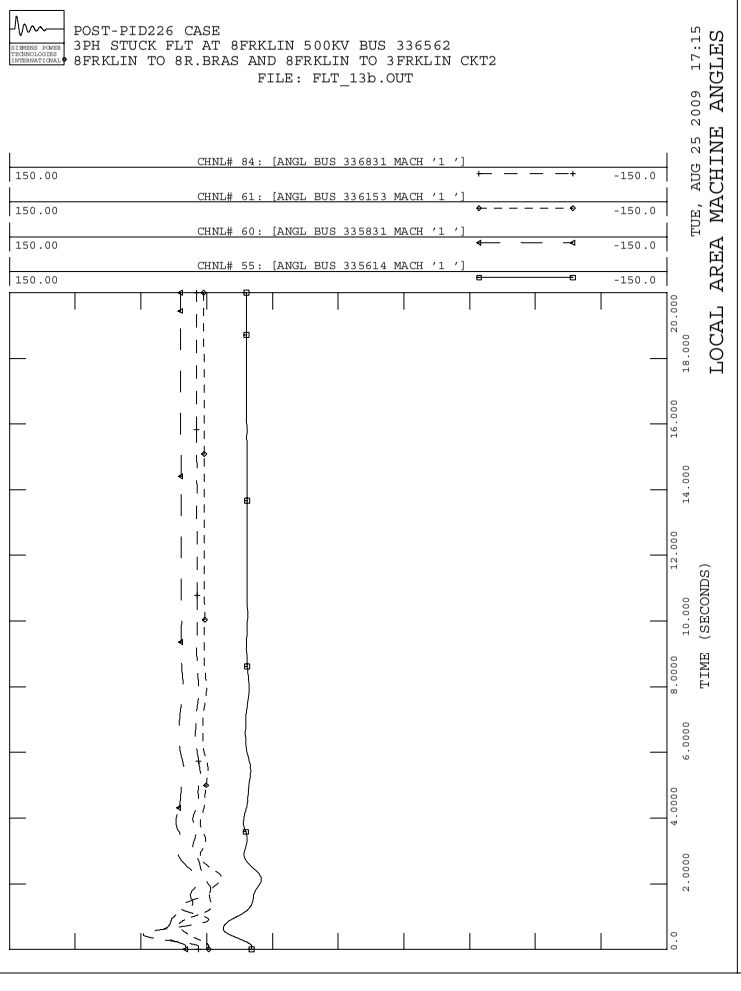
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT2
FILE: FLT_13b.OUT
CHNL# 84: [ANGL BUS 336831 MACH '1 ']
CHNL# 61: [ANGL BUS 336153 MACH '1 ']
CHNL# 60: [ANGL BUS 335831 MACH '1 ']
CHNL# 55: [ANGL BUS 335614 MACH '1 ']
150.00
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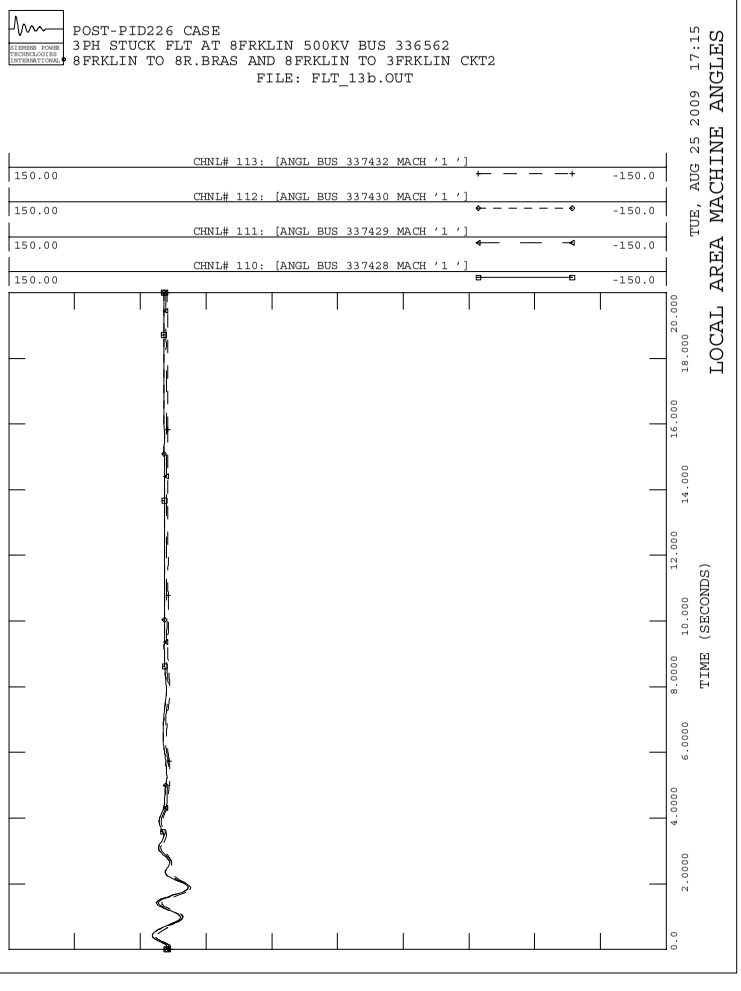
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES


POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT2
FILE: FLT_13b.OUT
CHNL# 113: [ANGL BUS 337432 MACH '1 ']
CHNL# 112: [ANGL BUS 337430 MACH '1 ']
CHNL# 111: [ANGL BUS 337429 MACH '1 ']
CHNL# 110: [ANGL BUS 337428 MACH '1 ']
150.00
-150.0
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2.0000
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16.000
18.000
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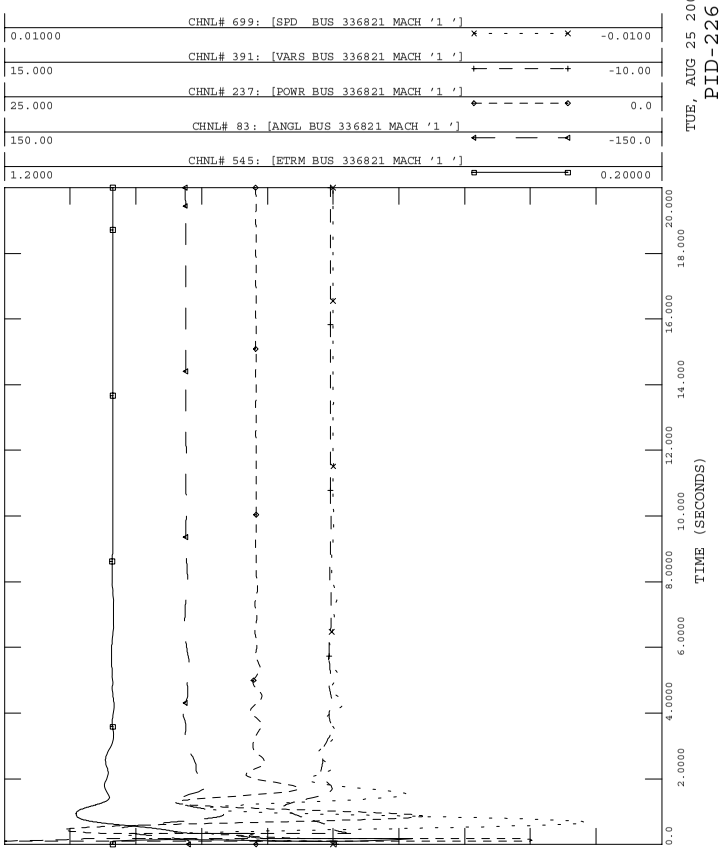
TIME (SECONDS)
TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8R.BRAS AND 8FRKLIN TO 3FRKLIN CKT2
FILE: FLT_13b.OUT

TUE, AUG 25 2009 17:15
PID-226 PLOTS



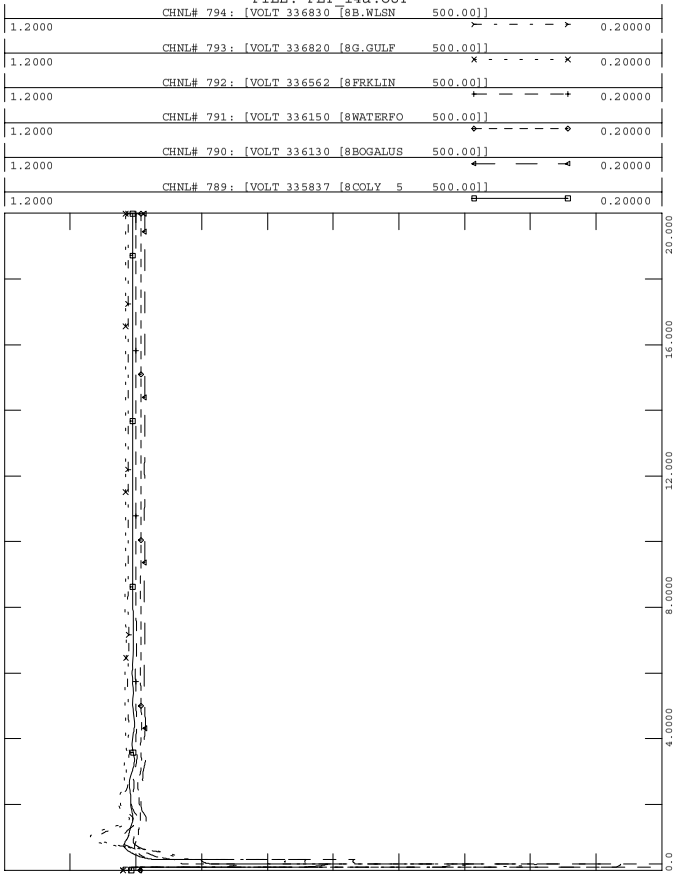
## C.39 FLT_14a

Stuck breaker fault on the 8FRKLIN (#336562) to 8G.GULF (#336820) 500 kV line, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Run fault for 5 cycles
c) Remove Fault AT 8FRKLIN 500KV BUS 336562
d) Apply 3 Phase fault at #336562 with admittance 823.73 -j 5887.89 MVA
e) Clear fault after 9 cycles by tripping lines from 8FRKLIN TO 8G.GULF AND 8FRKLIN TO 3FRKLIN CKT1

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_14a.OUT

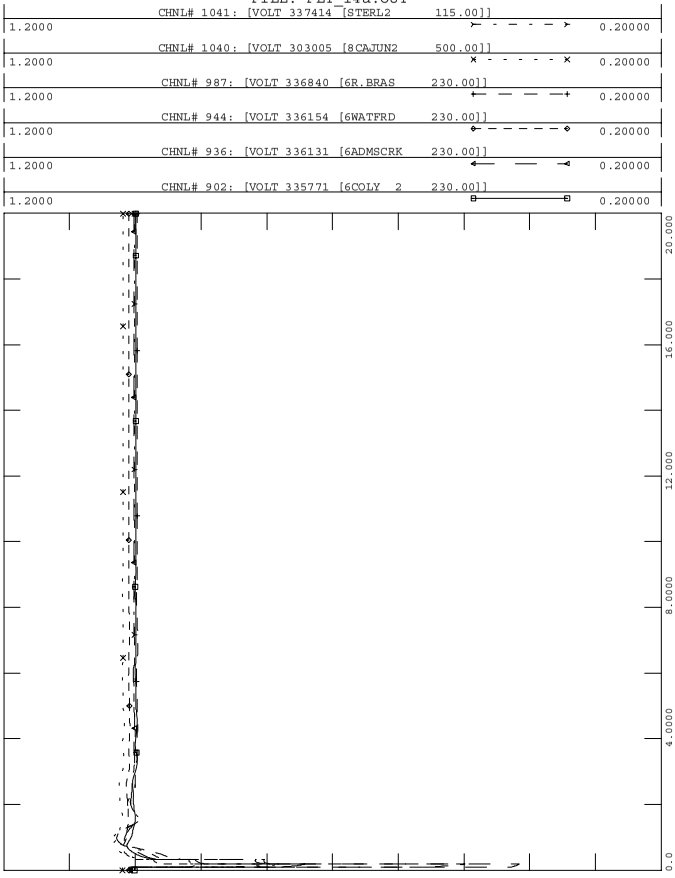
CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]




TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_14a.OUT

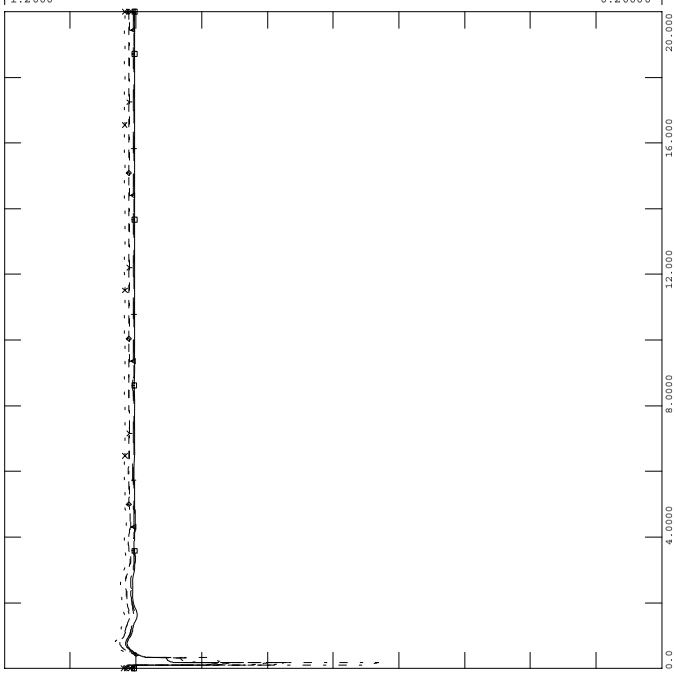
CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]




TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_14a.OUT

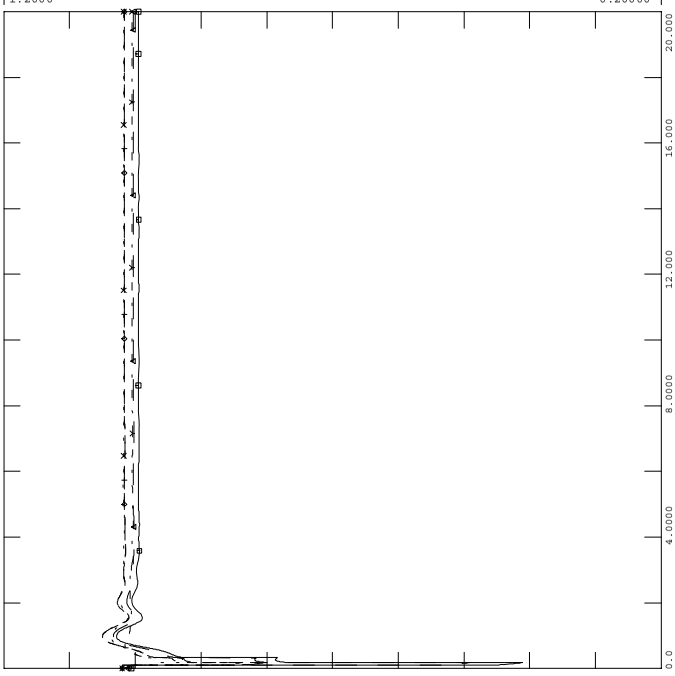
CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]




TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

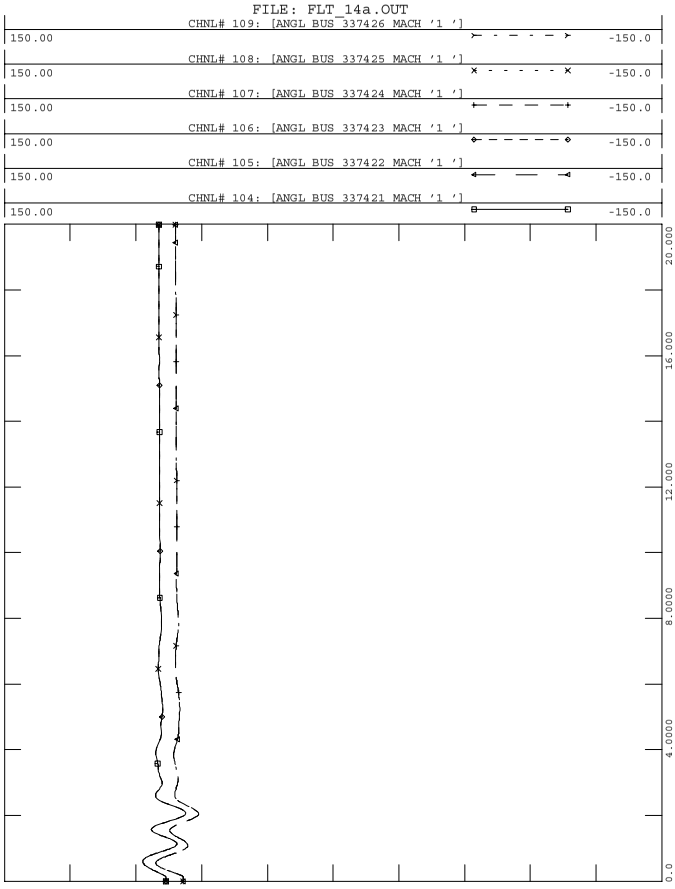
POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_14a.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]



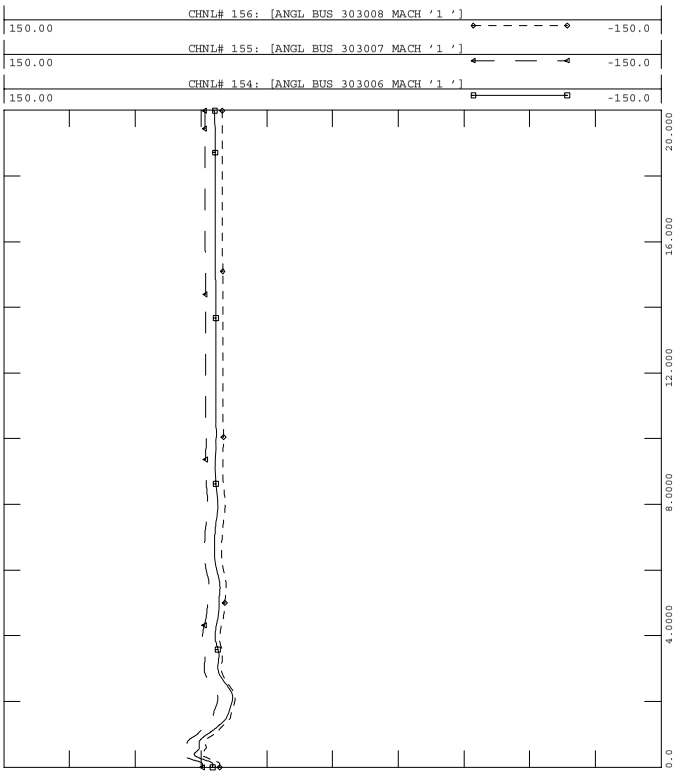

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_14a.OUT



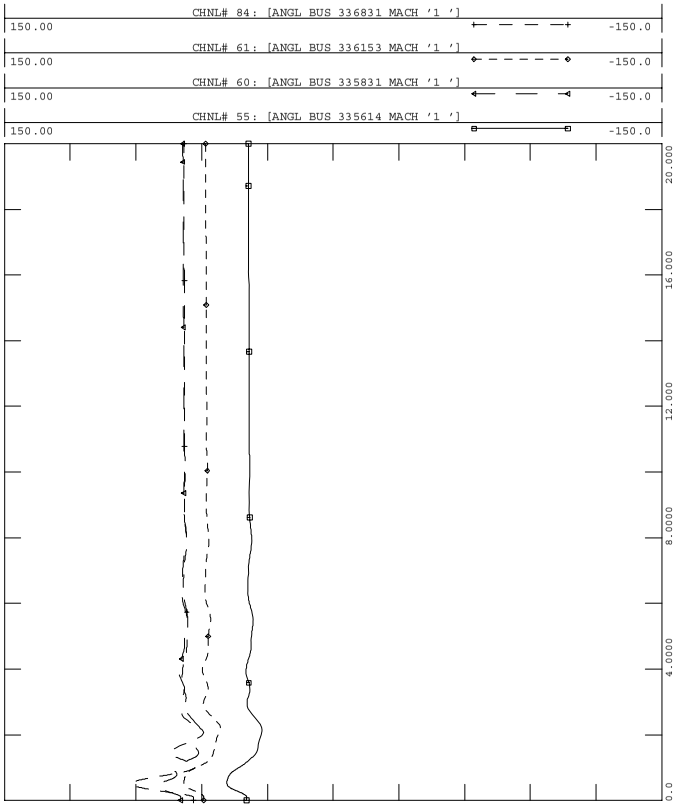

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_14a.OUT



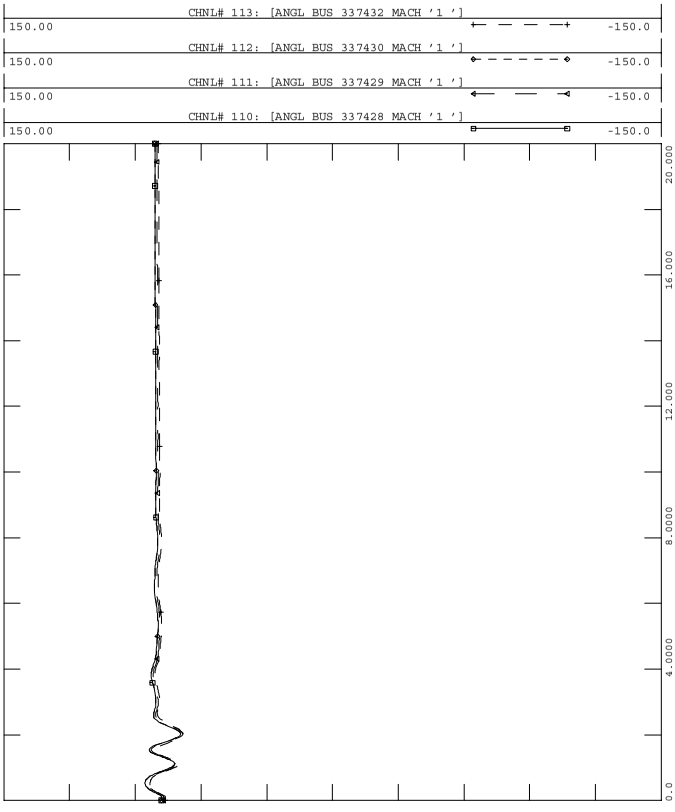

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_14a.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

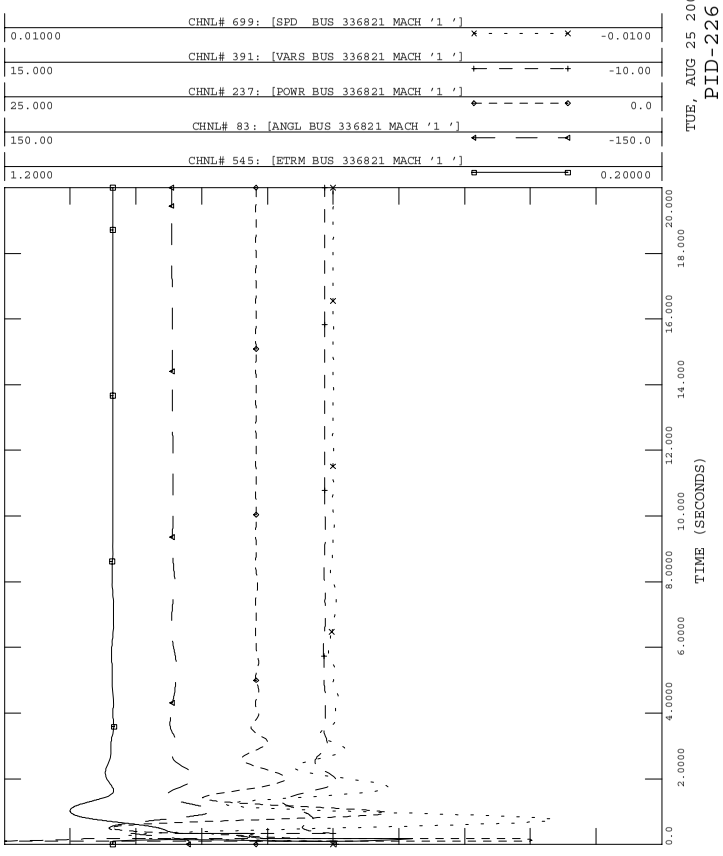
POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_14a.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 3FRKLIN CKT1
FILE: FLT_14a.OUT

TUE, AUG 25 2009 17:15
PID-226 PLOTS



## C.40 FLT_14b

Stuck breaker fault on the 8FRKLIN (#336562) to 8G.GULF (#336820) 500 kV line, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Run fault for 5 cycles
c) Remove Fault AT 8FRKLIN 500KV BUS 336562
d) Apply 3 Phase fault at #336562 with admittance 823.73 -j 5887.89 MVA
e) Clear fault after 9 cycles by tripping lines from 8FRKLIN TO 8G.GULF AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_14b.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_14b.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_14b.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_14b.OUT

CHNL# 872: [VOLT 335568 [6WGLEN 230.00]]
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

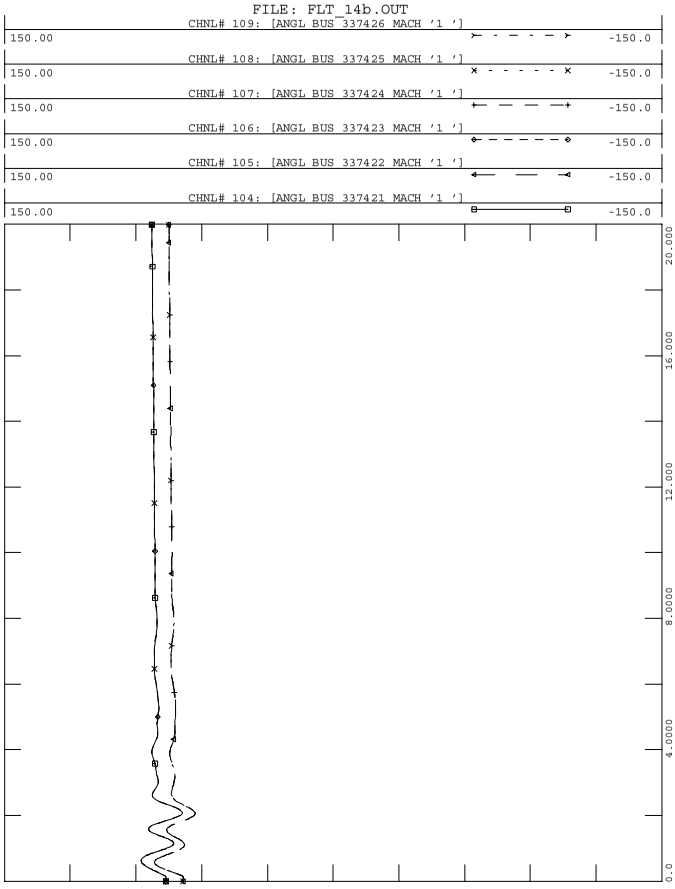
1.2000 0.20000

0.0 2.0000 4.0000 6.0000 8.0000 10.000 12.000 14.000 16.000 18.000 20.000

TIME (SECONDS)

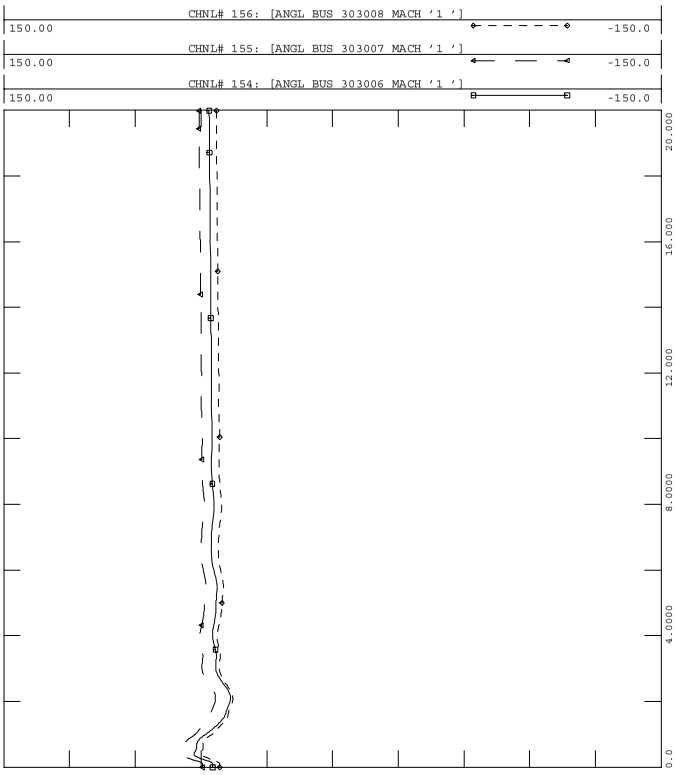
TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_14b.OUT



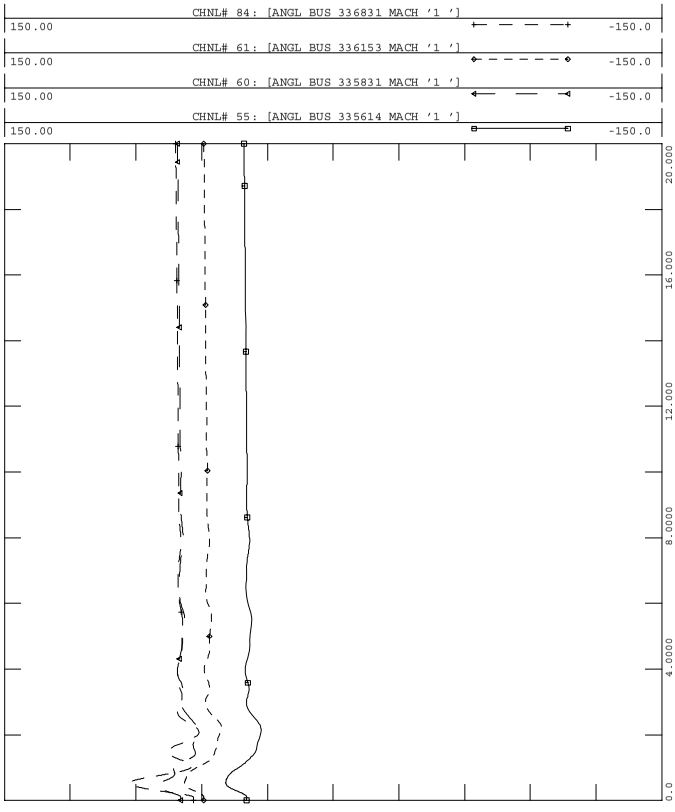

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_14b.OUT



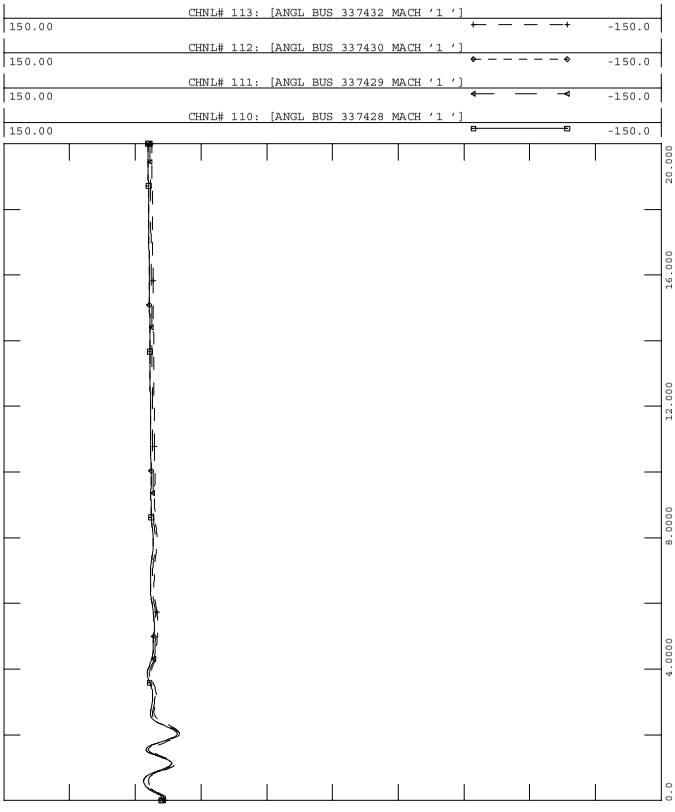

TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_14b.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

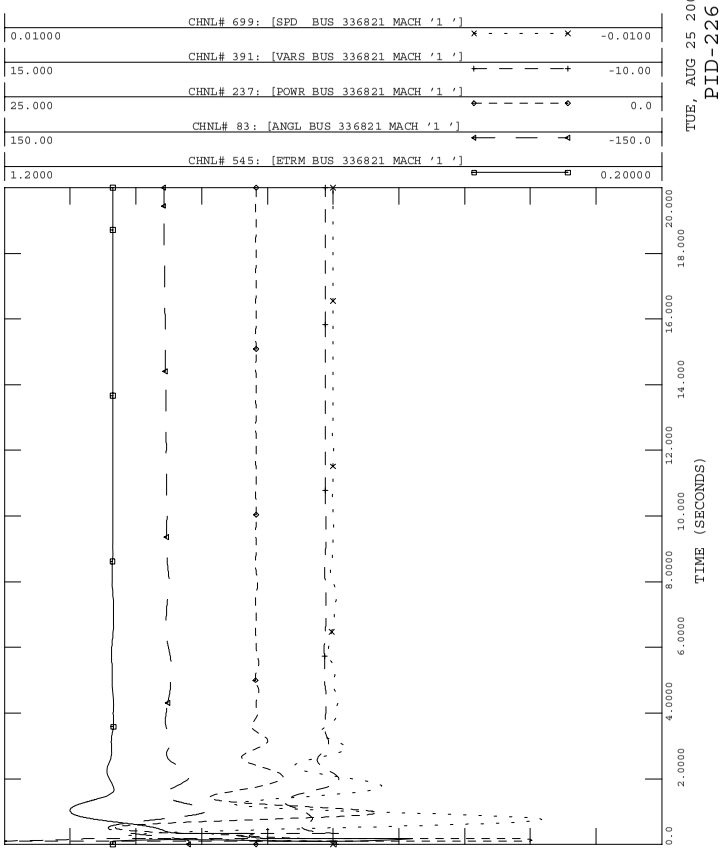
POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_14b.OUT




TUE, AUG 25 2009 17:15
LOCAL AREA MACHINE ANGLES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 8G.GULF AND 8FRKLIN TO 8BOGALUS TO 6ADMSCRK
FILE: FLT_14b.OUT

TUE, AUG 25 2009 17:15
PID-226 PLOTS



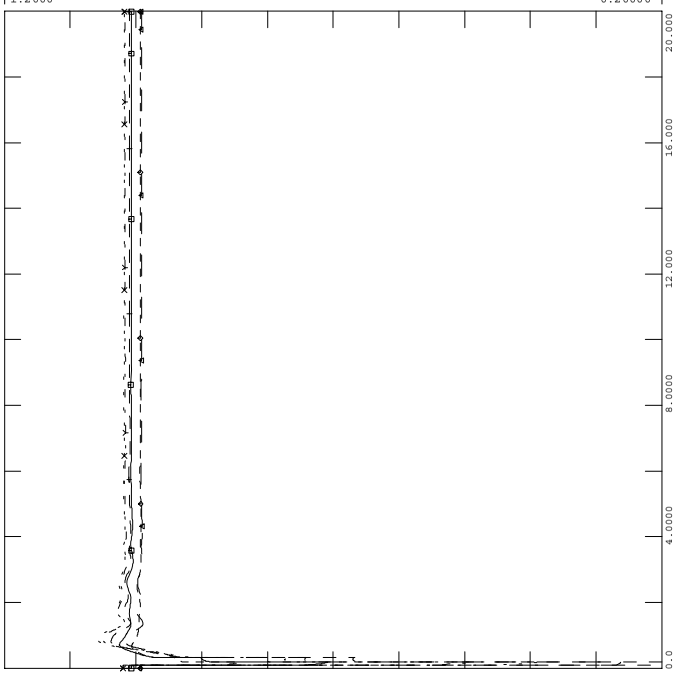
## C.41 FLT_15a

Stuck breaker fault on the 8FRKLIN (#336562) to 3FRKLIN (#336559) 500 kV line, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Run fault for 5 cycles
c) Remove Fault AT 8FRKLIN 500KV BUS 336562
d) Apply 3 Phase fault at #336562 with admittance 823.73 -j 5887.89 MVA
e) Clear fault after 9 cycles by tripping lines from 8FRKLIN TO 3FRKLIN CKT1 AND 8FRKLIN TO 8R.BRAS

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 3FRKLIN CKT1 AND 8FRKLIN TO 8R.BRAS
FILE: FLT_15a.OUT

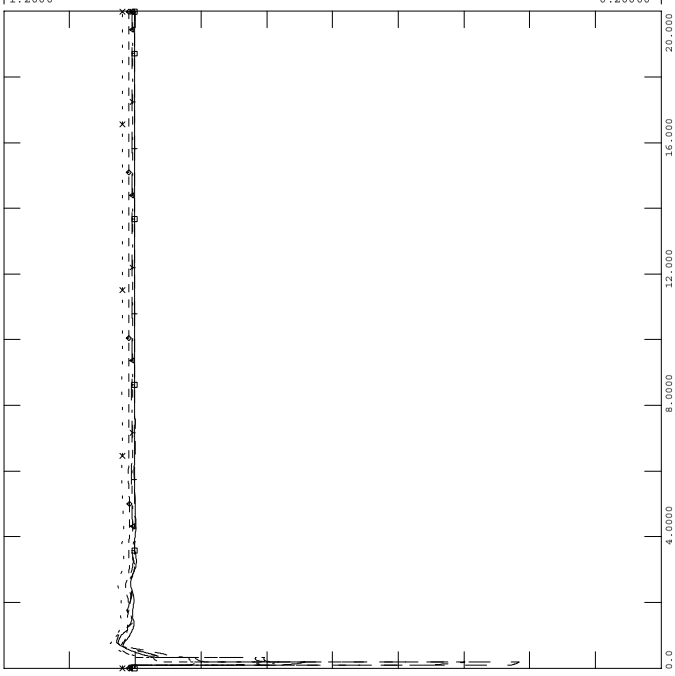
CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]




TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 3FRKLIN CKT1 AND 8FRKLIN TO 8R.BRAS
FILE: FLT_15a.OUT

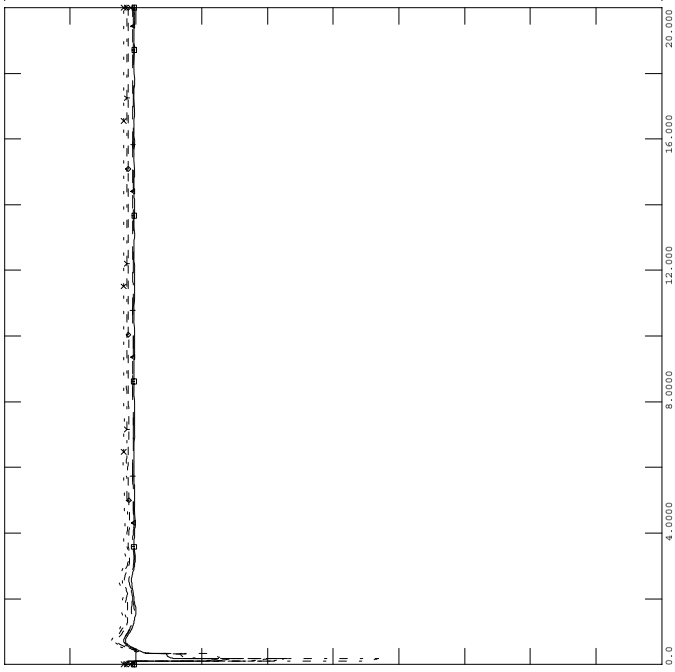
CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]




TUE, AUG 25 2009 17:15
LOCAL AREA VOLTAGES

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 3FRKLIN CKT1 AND 8FRKLIN TO 8R.BRAS
FILE: FLT_15a.OUT

CHNL# 788: [VOLT 335836 [8MCKNT 500.00]]
CHNL# 787: [VOLT 335835 [8FANCY 500.00]]
CHNL# 786: [VOLT 335618 [8WGLEN 500.00]]
CHNL# 785: [VOLT 335500 [8WEBRE 500.00]]
CHNL# 784: [VOLT 335368 [8WELLS 500.00]]
CHNL# 783: [VOLT 335367 [8RICHARD 500.00]]

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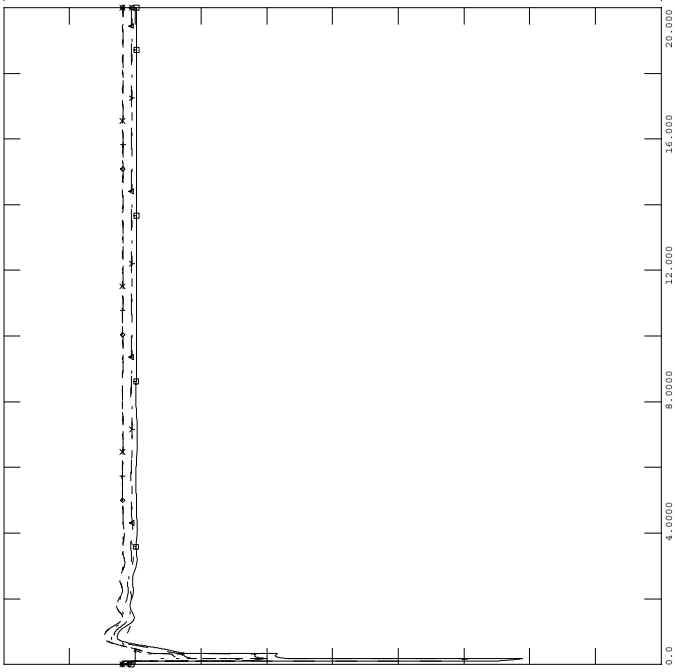
CHNL# 805: [VOLT 337561 [8ELDEHV 500.00]]
CHNL# 803: [VOLT 337427 [8PERYVIL 500.00]]
CHNL# 802: [VOLT 337420 [8STERL 500.00]]
CHNL# 797: [VOLT 336945 [8LAKEOV 500.00]]
CHNL# 796: [VOLT 336839 [8R.BRAS 500.00]]

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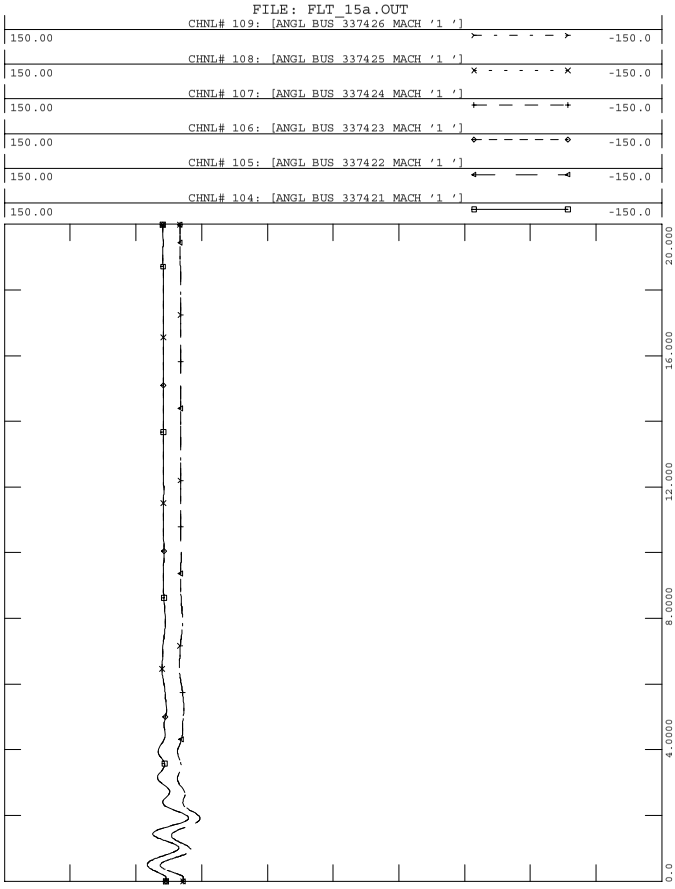


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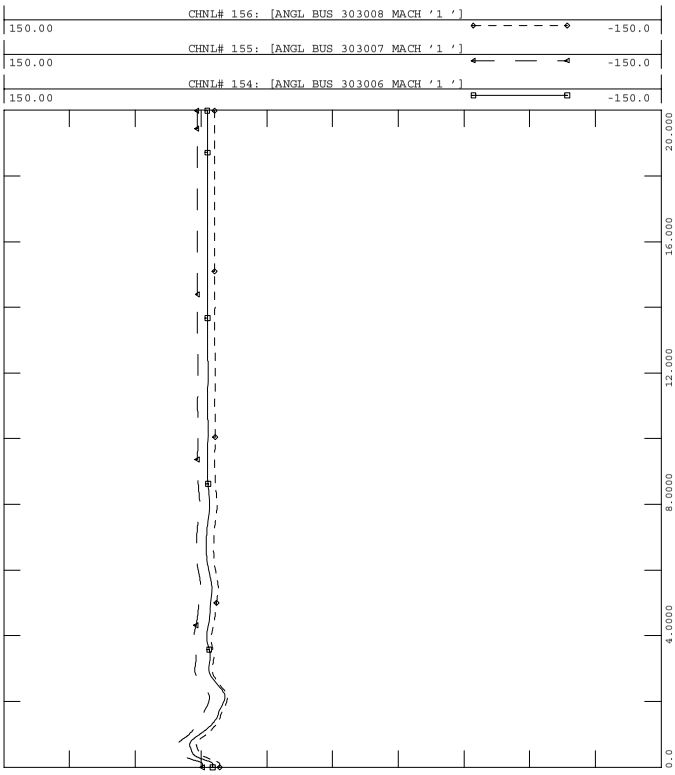


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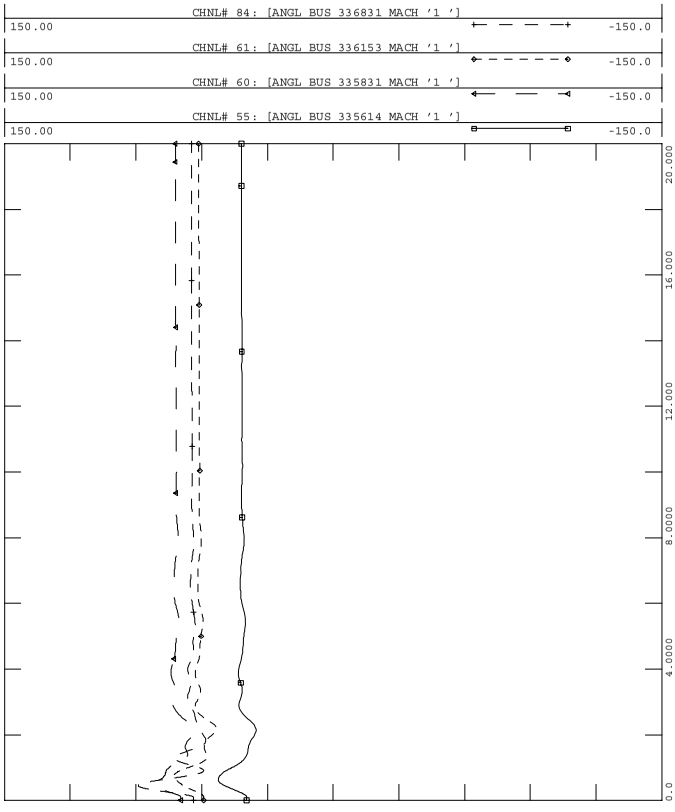


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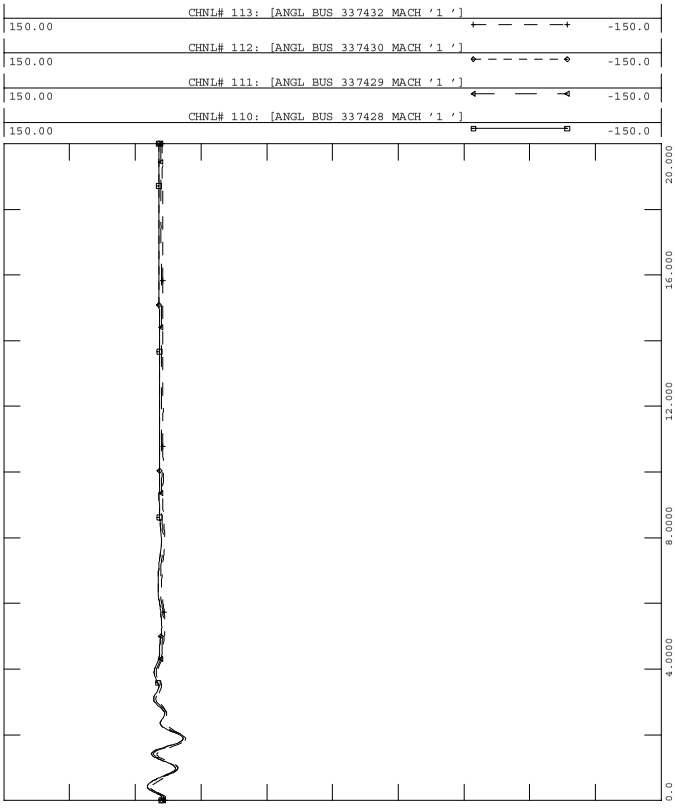


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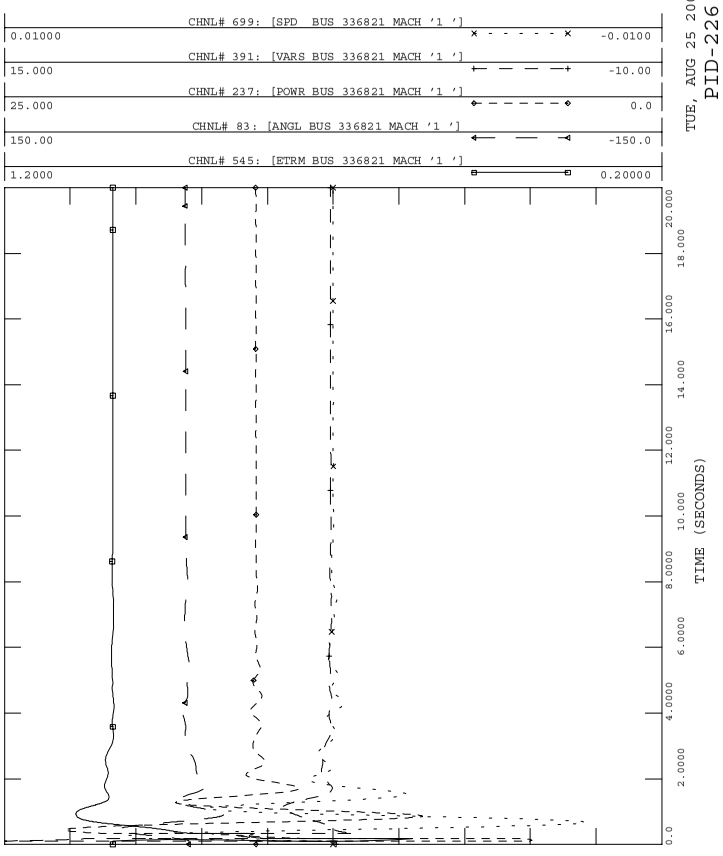
PID-226 PLOTS



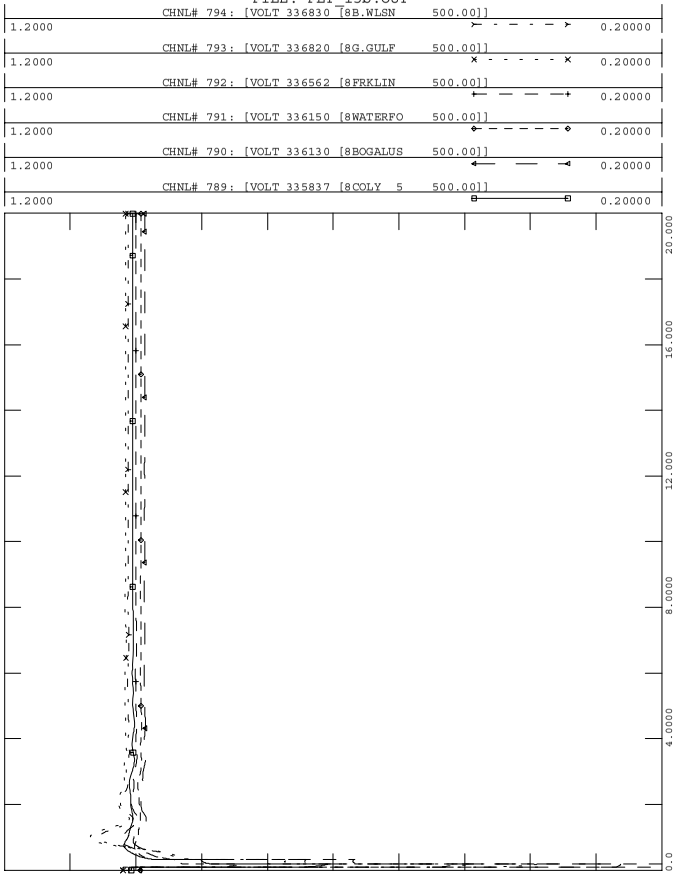
## C.42 FLT_15b

Stuck breaker fault on the 8FRKLIN (#336562) to 3FRKLIN (#336559) 500 kV line, near the 8FRKLIN.

a) Apply 3 Phase Fault at 8FRKLIN 500KV BUS 336562
b) Run fault for 5 cycles
c) Remove Fault AT 8FRKLIN 500KV BUS 336562
d) Apply 3 Phase fault at #336562 with admittance 823.73 -j 5887.89 MVA
e) Clear fault after 9 cycles by tripping lines from 8FRKLIN TO 3FRKLIN CKT1 AND 8FRKLIN TO 8G.GULF

POST-PID226 CASE
3PH STUCK FLT AT 8FRKLIN 500KV BUS 336562
8FRKLIN TO 3FRKLIN CKT1 AND 8FRKLIN TO 8G.GULF
FILE: FLT_15b.OUT

CHNL# 794: [VOLT 336830 [8B.WLSN 500.00]]
CHNL# 793: [VOLT 336820 [8G.GULF 500.00]]
CHNL# 792: [VOLT 336562 [8FRKLIN 500.00]]
CHNL# 791: [VOLT 336150 [8WATERFO 500.00]]
CHNL# 790: [VOLT 336130 [8BOGALUS 500.00]]
CHNL# 789: [VOLT 335837 [8COLY 5 500.00]]

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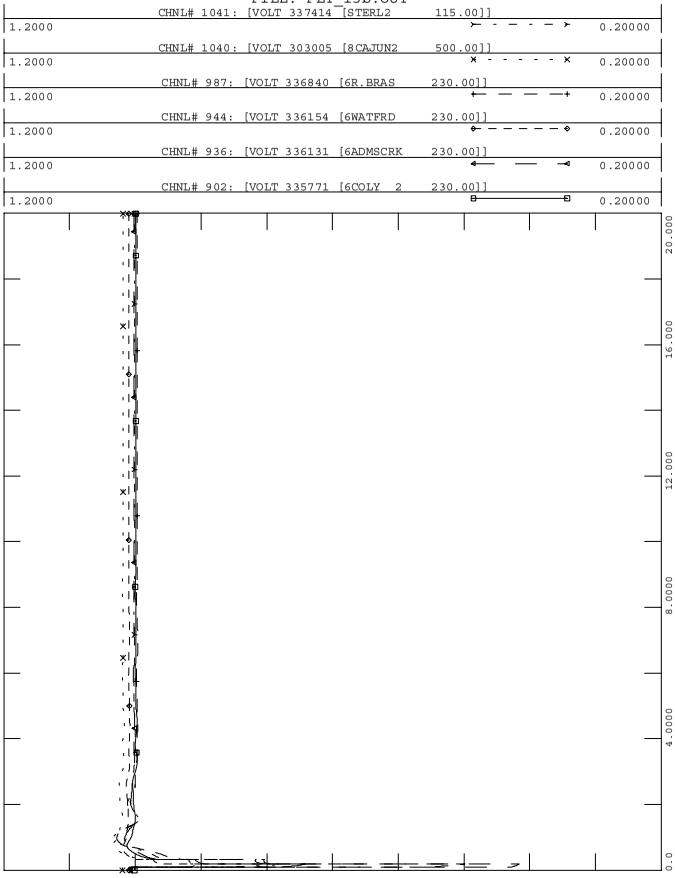
FILE: FLT_15b.OUT

CHNL# 1041: [VOLT 337414 [STERL2 115.00]]
CHNL# 1040: [VOLT 303005 [8CAJUN2 500.00]]
CHNL# 987: [VOLT 336840 [6R.BRAS 230.00]]
CHNL# 944: [VOLT 336154 [6WATFRD 230.00]]
CHNL# 936: [VOLT 336131 [6ADMSCRK 230.00]]
CHNL# 902: [VOLT 335771 [6COLY 2 230.00]]

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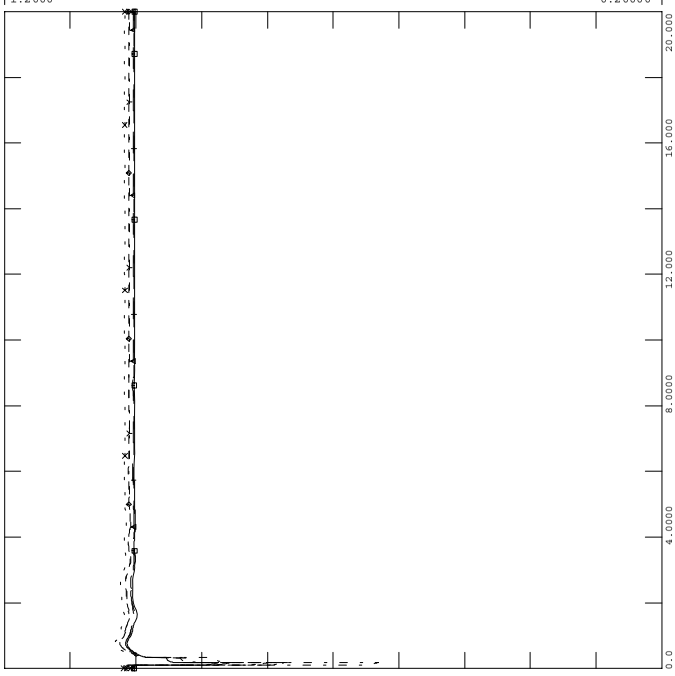


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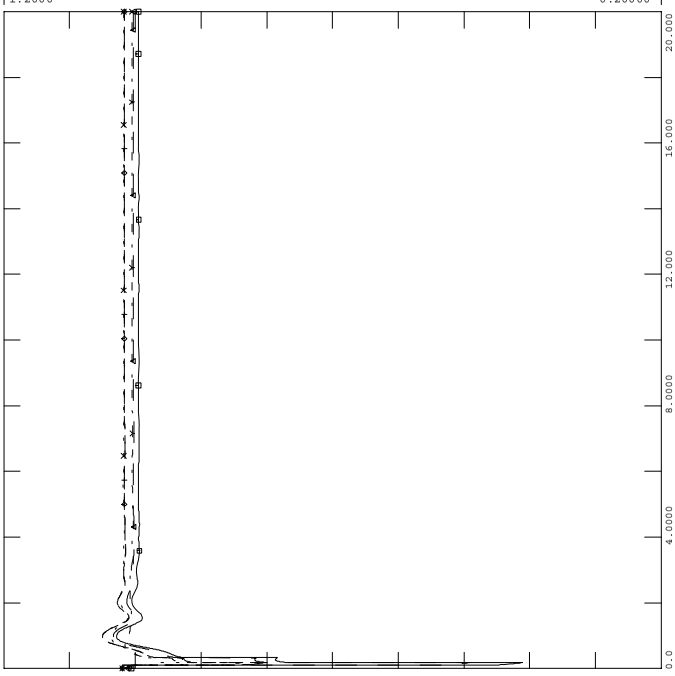


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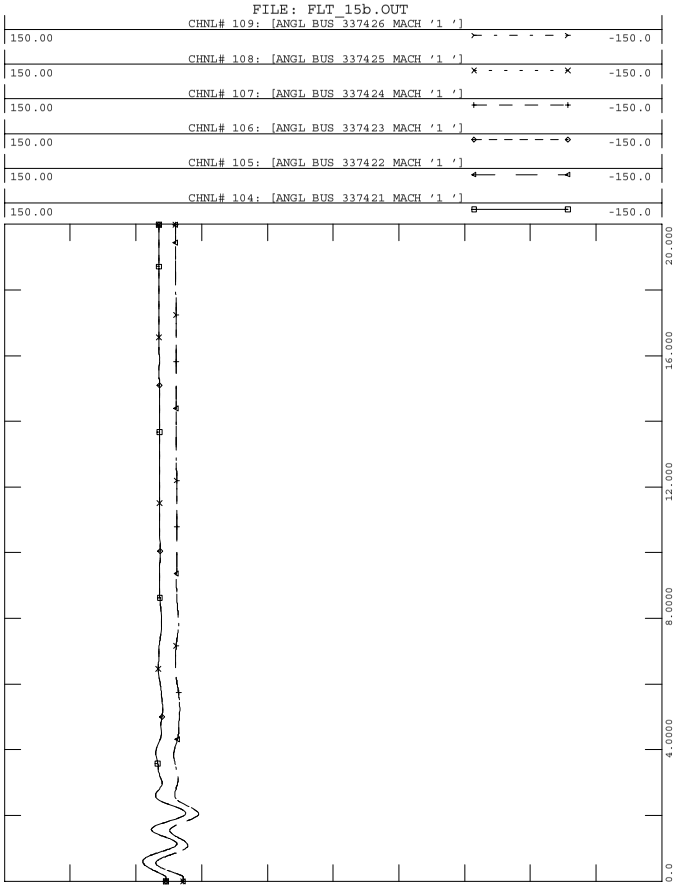


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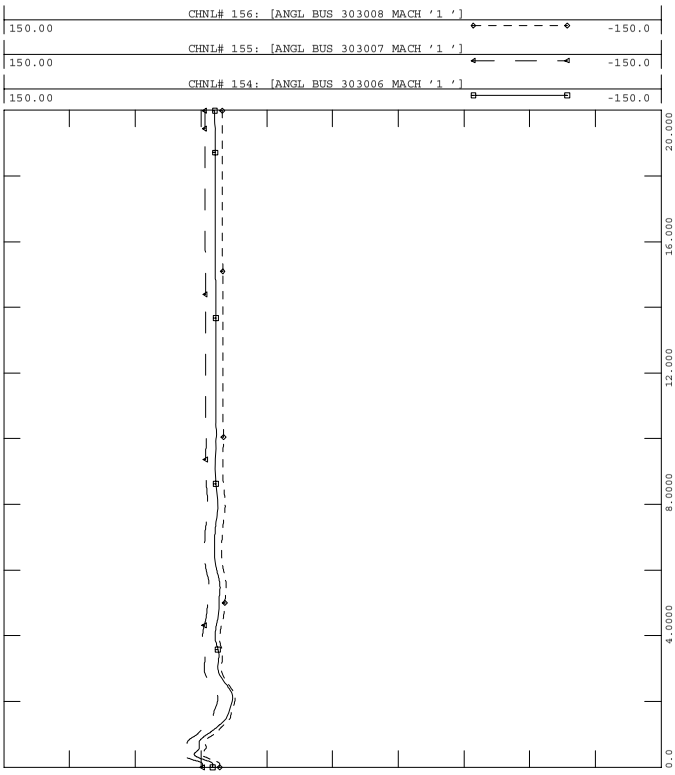


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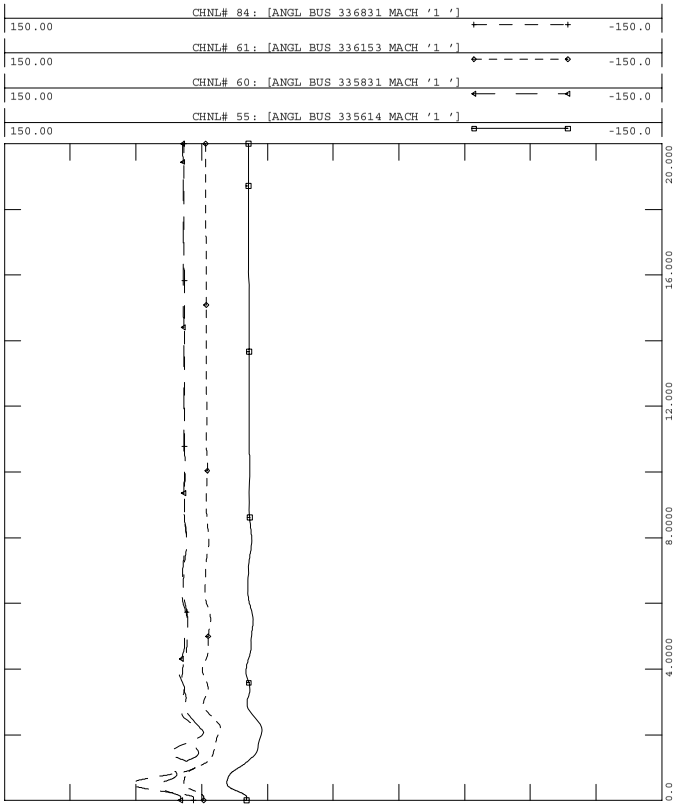


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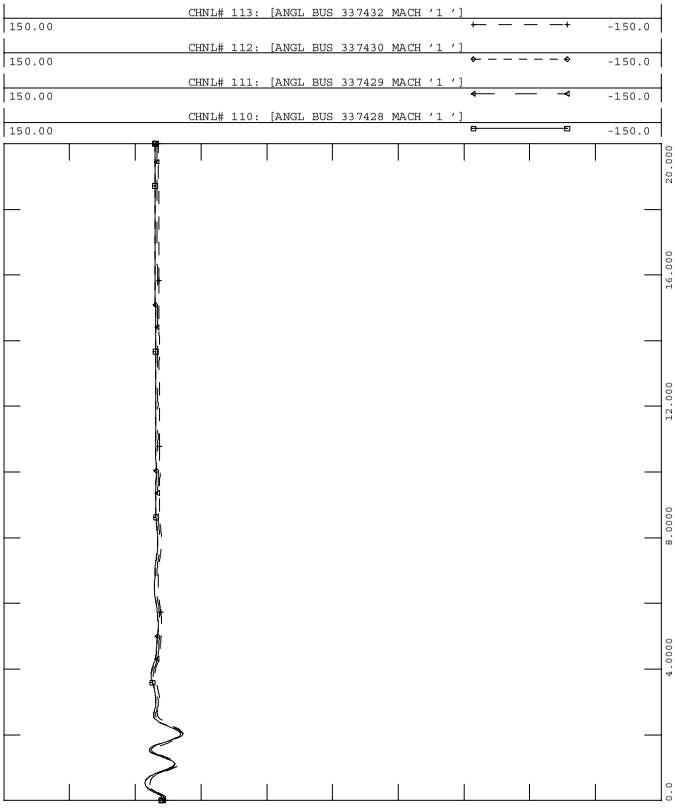


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PID-226 PLOTS