

Final Report R19-04B

***Stability Studies of the Proposed Cielo
Caprock-East Wind Farm Project***

Addendum: Simulation results with the
Revised Design of the DVARTM Reactive
Support System

Prepared for

Xcel Energy Services, Inc.

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Shaw PTI Project Number: 1000034



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Introduction

This attachment is to supplement the report R19-04, “*Stability Studies of the Proposed Cielo Caprock-East Wind Farm*”, issued on April 28, 2004.

Based on the findings described in the previous report, the reactive power support system was revised by AMSC to provide additional voltage support for the Cielo Caprock-East Wind Farm.

A set of stability studies was performed to evaluate the wind farm using PTI's power system simulation program PSS/E, revision 29.

Revised Design of the DVAR™ System Solution

Cielo Wind Power contracted American Super Conductor (AMSC) to propose a design of the reactive power support required in order to comply with the voltage and power factor design criteria proposed by XES. The original design was revised to provide additional voltage support of the Cielo Wind Farm during disturbances. The revised DVAR™ System Solution contains the following items:

1. Two 8 MVAR D-VAR units: the size of the 480 V / 34.5 kV transformer connecting each DVAR to the collector bus was increased from 8 MVA to 10 MVA
2. Nine 3.6 MVAR steady state capacitor banks
3. Two dynamic capacitor banks: the size of each capacitor banks was increased from 16 MVAR each to 18 MVAR each

The D-VARs have three major functions:

- provide the major dynamic voltage boost for all faults
- control both the steady state and dynamic capacitor banks
- regulate the 115 kV system voltage at the desired level

The D-VARs control the steady state capacitor banks to regulate the 115 kV system voltage at the desired level. To regulate the voltage at the Cielo 115 kV bus, these capacitors are switched in and out of service by the D-VARs as the wind farm's generation varies.

For most of the faults, the dynamic capability of the D-VARs is sufficient to restore the voltage of the wind farm above 95%. For more severe faults, the assistance of the dynamic capacitor banks will be used. If the voltage at the collector bus is below 95% for longer than 5.75 cycles, the D-VARs will switch in the dynamic capacitor banks to assist in raising the voltage. Since the dynamic capacitor banks are only needed to restore the voltage quickly and not for the steady state, they can be switched out after the fault has been cleared. The transmission lines in the area of the wind farm have a fast automatic re-close, so the dynamic caps need to be kept in-service thru the possible second fault occurrence (unsuccessful reclosing) and the following voltage recovery. Thus, if the dynamic capacitors are placed in-service by the DVAR™, the voltage should be recovered sufficiently to remove them from service 0.7 seconds after the first fault is initiated.

Stability Analysis

3.1 Disturbances

The same faults studied in the previous report were simulated with the revised DVAR™ design (3 phase and single phase):

1. Faults on the Tolk (51435) – Cloviss (51205) 230kV Line (mid-line). A new bus (*Mid-Line bus*) was established in the electrical middle of the line.
 - FLT13PH** - 3 Phase Fault
 - a. Apply the fault at the *Mid-Line bus*.
 - b. Clear Fault after 5 cycles, by remove lines from 51435 to *Mid-Line bus* and *Mid-Line bus* to 51205.
 - c. Wait 20 cycles and then re-close both lines in (b) back into the fault.
 - d. Leave fault on for 5 cycles, then trip both lines in (b) to remove fault.
 - FLT11PH** - 1 phase Fault
 - a. Same as FLT13PH above.
2. Fault on the Tucumcari 115kV Bus (51070), removing the load bus.
 - FLT23PH** - 3 Phase Fault
 - a. Apply the fault on the Tucumcari 115kV Bus (51070).
 - b. Clear Fault after 5 cycles, by removing the lines from 99991 to 51076 and from 51076 to 51070
 - c. DO NOT RE-CLOSEThis simulates a high side transformer fault at Tucumcari.
 - FLT21PH** - 1 phase Fault
 - a. Same as FLT23PH above.
3. Fault on the Roosevelt (51202) – Cloviss(51206) 115kV Line, near Roosevelt.
 - FLT33PH** - 3 Phase Fault
 - a. Apply fault at the Roosevelt bus (51202).
 - b. Clear Fault after 5 cycles¹ by remove the 115kV line from 51202 to 51206.
 - c. Wait 20 cycles, then re-close line in (b) into the fault.
 - d. Leave fault on for 5 cycles, then trip the line in (b) and remove the fault.
 - FLT31PH** - 1 phase Fault
 - a. Same as FLT33PH above.

¹ The existing relay pick-up time

4. Fault on the Tolk (51440) – Eddy County (52186) 345kV Line, near Eddy County.

FLT43PH - 3 Phase Fault

- b. Apply fault at bus 52186.
- c. Clear Fault after 5 cycles by remove the line from 51440 to 52186.
- d. Wait 30 cycles, then re-close line in (b) into the fault.
- e. Leave fault on for 5 cycles, then trip the line in (b) and remove the fault.

FLT41PH - 1 phase Fault

- a. Same as FLT43PH above.

5. Fault on Curry County (51176) – Caprock East Tap (99991) 115kV Line, near Curry

FLT53PH - 3 Phase Fault

- a. Apply fault at the Curry County bus (51176).
- b. Clear Fault after 5 cycles by remove the line from 51176 to 99991.
- c. DO NOT RE-CLOSE

This fault has no re-closing. XES is concerned with “Voltage Holdup” at Tucumcari (51070) and at FEC-Tucumcari (51076) (i.e. what does having the wind farm and the DVAR™ device connected to these two buses do to the voltage at these locations immediately following the fault).

FLT51PH - 1 phase Fault

- a. Same as FLT53PH above.

6. Fault on Tolk (51435) – Tuco (51533) 230kV Line

FLT63PH - 3 Phase Fault

- a. Apply fault at the Tuco bus (51533).
- b. Clear Fault after 5 cycles by remove the 230 kV line from 51533 to 51435.
- c. Wait 20 cycles, then re-close line in (b) into the fault.
- d. Leave fault on fro 5 cycles, then trip the line in (b) and remove the fault.

FLT61PH - 1 phase Fault

- a. Same as FLT63PH above.

7. Fault on Cloviss (51206) – Curry County (51176) 115kV Line, near Cloviss

FLT73PH - 3 Phase Fault

- e. Apply fault at the Cloviss bus (51206).
- f. Clear Fault after 5 cycles by remove the line from 51206 to 51176.
- g. Wait 20 cycles, then re-close line in (b) into the fault.
- h. Leave fault on fro 5 cycles, then trip the line in (b) and remove the fault.

FLT71PH - 1 phase Fault

- a. Same as FLT73PH above.

The locations of the faults are illustrated in **Error! Reference source not found.**

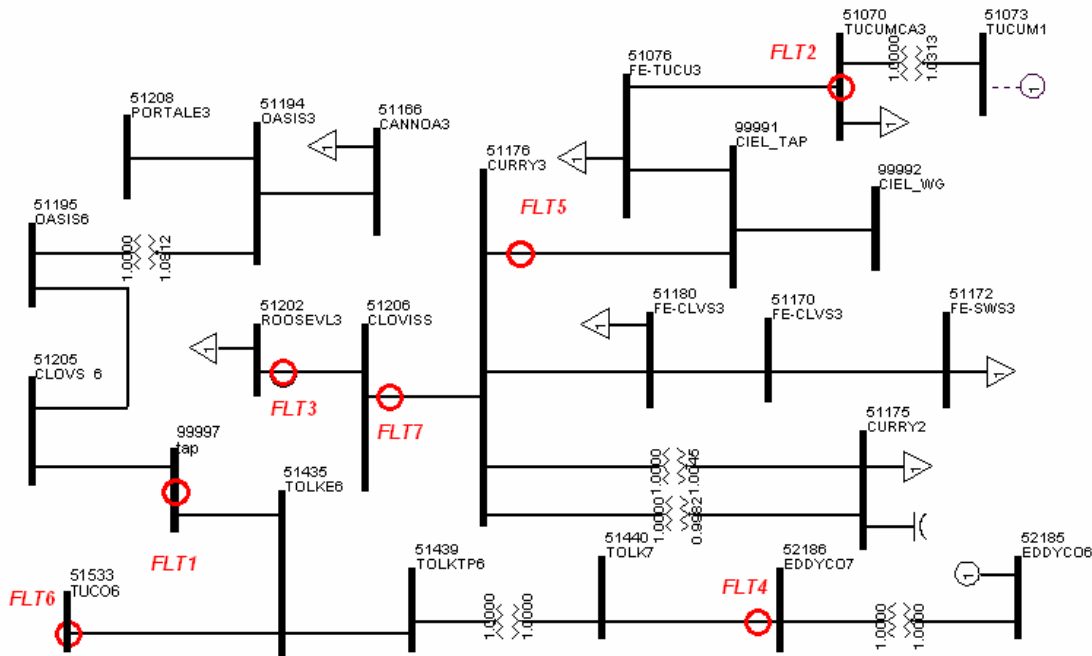


Figure 3-1: fault locations

3.2 Results and Discussions

With the revised design of the DVAR™ system solution, the wind farm was able to ride through all simulated disturbances in both peak and light load conditions except for three faults: FLT23PH (three-phase fault on the Tucumcari 115 kV bus), and FLT5 (both single and three-phase-to-ground fault near Curry County on the 115 kV line between Curry County and Caprock East Tap).

Two levels of under-voltage protections of the wind turbine generators are simulated:

- Instantaneous trip for WTG 600-V bus voltage less than 0.6 p.u
- Trip when WTG 600-V bus voltage is between 0.6 p.u and 0.95 p.u. for greater than 0.2-seconds

During the simulation of FLT23PH, the pickup timer of the relay associated with the Tucumcari and Cielo Tap 115 kV line was assumed to be the same as the existing setting of 5 cycles. The voltages of the wind turbine generators fell below 60% after the disturbance occurred, and the under-voltage relays were triggered to disconnect all 80 units. The DVAR™ system was disconnected after all wind turbine generators were tripped. Note that the system response was acceptable for the single-phase-to-ground fault on the same line (FLT21PH), and the wind farm was able to ride through the disturbance.

FLT53PH and FLT51PH are the most severe faults among all those simulated. Both disturbances caused the 115 kV line to be tripped from the Cielo Wind farm to Curry County, leaving the wind farm and the loads isolated at Tucumcari (bus 51070) and FEC-Tucumcari (bus 51076). During peak load conditions, the combined load at both substations is 22 MW, while during light load conditions; the combined load is 10 MW. When the load is isolated with

the wind farm output at 80 MW, the severe power unbalance causes the network to collapse, at both peak and light load. The generator terminal voltages exceed 110% at approximately 0.4 seconds after the fault occurred. The over-speed and over-voltage protection schemes were not given in the manufacturer's data sheet, and thus not modeled in the simulation; otherwise, the wind farm would have been tripped and the load at Tucumcari would have been lost.

XES indicated that a transfer-trip relay would be installed to prevent the neighboring system from being affected by the instability of the wind farm. Should the fault occur and the 115 kV line between Cielo Caprock-East Wind farm and Curry trip, a relay would send a signal to the wind farm and trip the wind turbine generators and the DVAR™ system. The exact timing of the tripping scheme is not yet available. Thus, the Cielo Wind Farm was assumed to be tripped 0.1 seconds after the 115 kV branch is tripped.

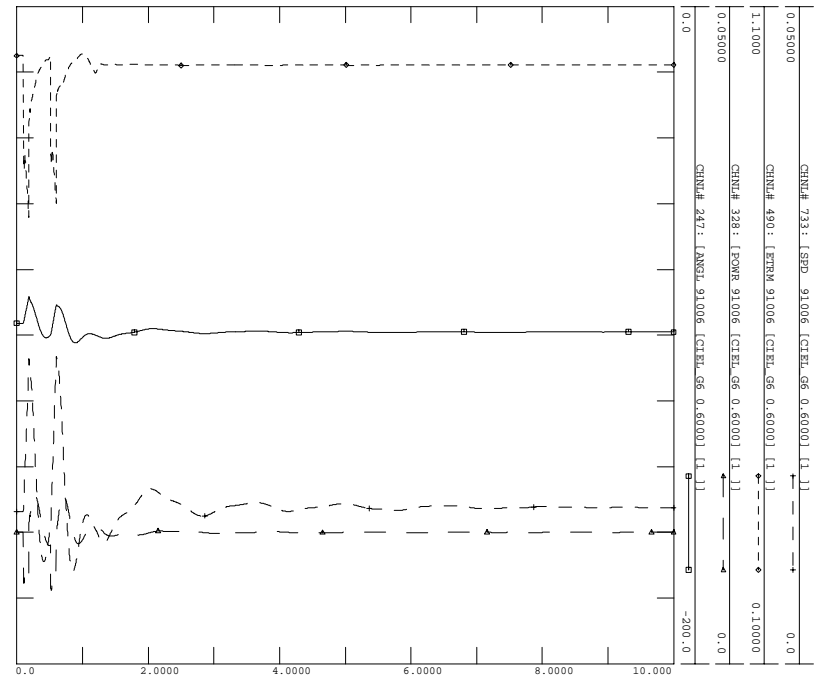
High voltages were observed in the previous report. With the revised design for the reactive power support system, the wind farm received better voltage support during disturbances. As a result, the wind farm was able to ride through all of the other less severe disturbances tested in the study, and high voltages did not occur in the neighboring system.

Appendix

A

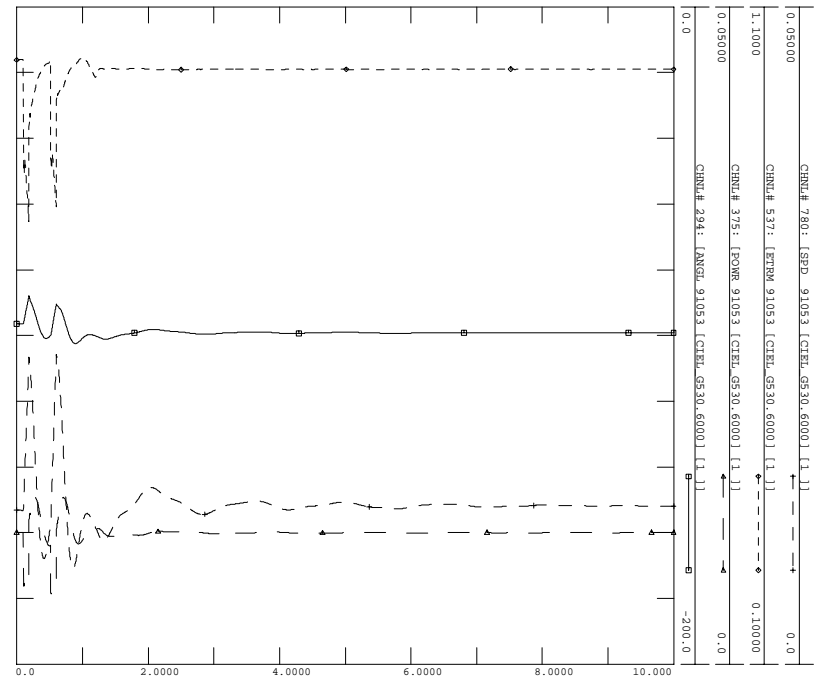
Plots of Dynamic Simulation with Cielo Wind Farm on-line during Peak Load Conditions

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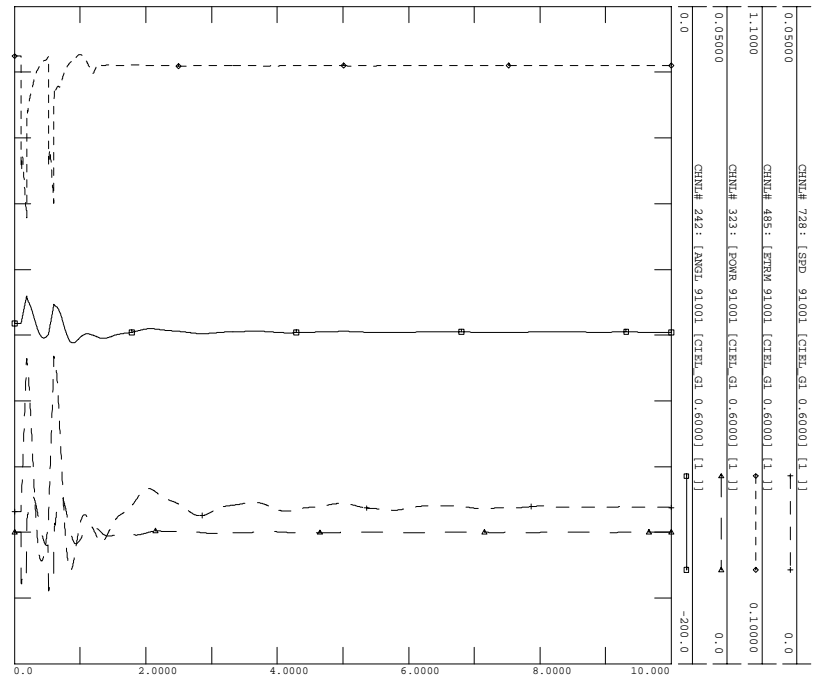
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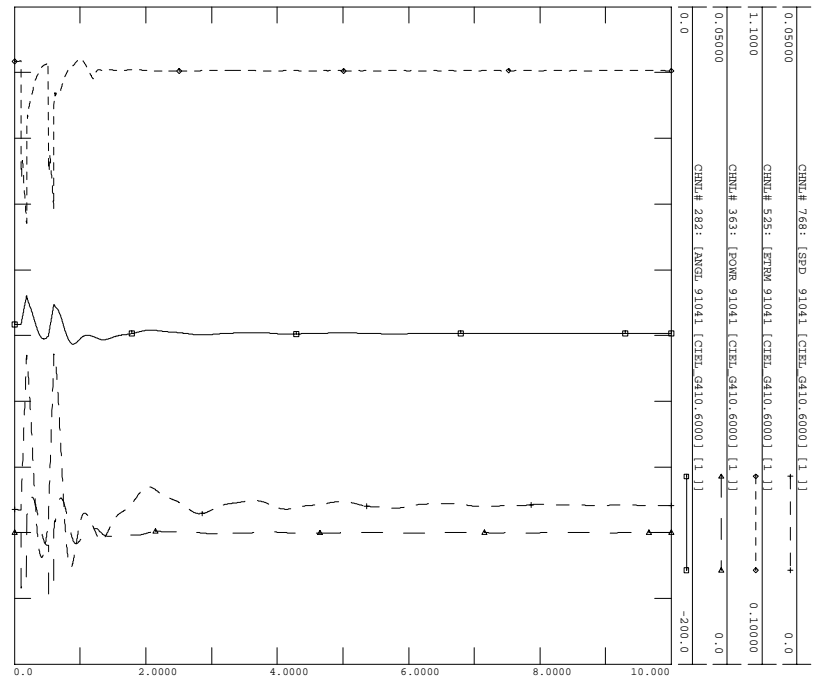
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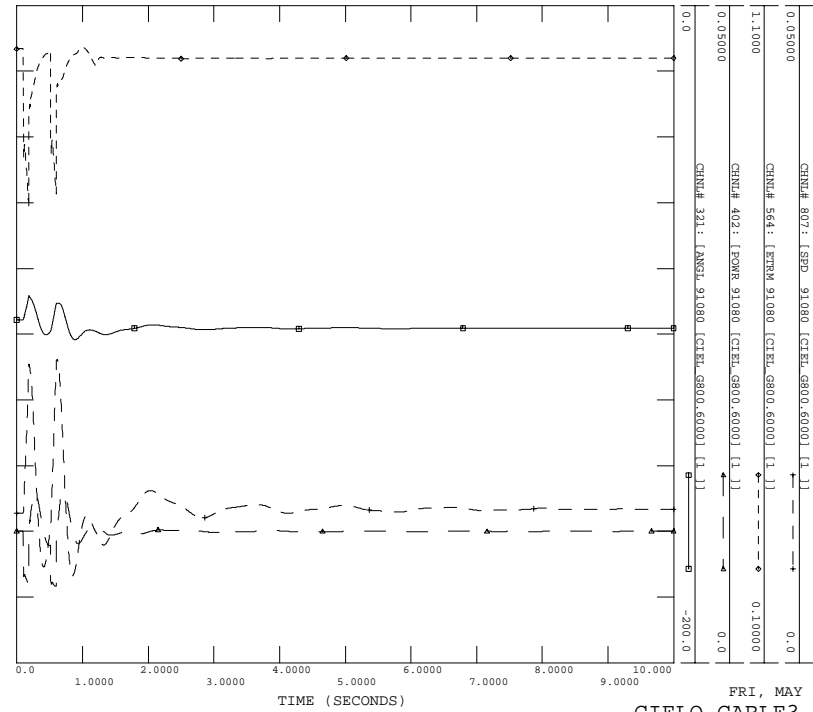
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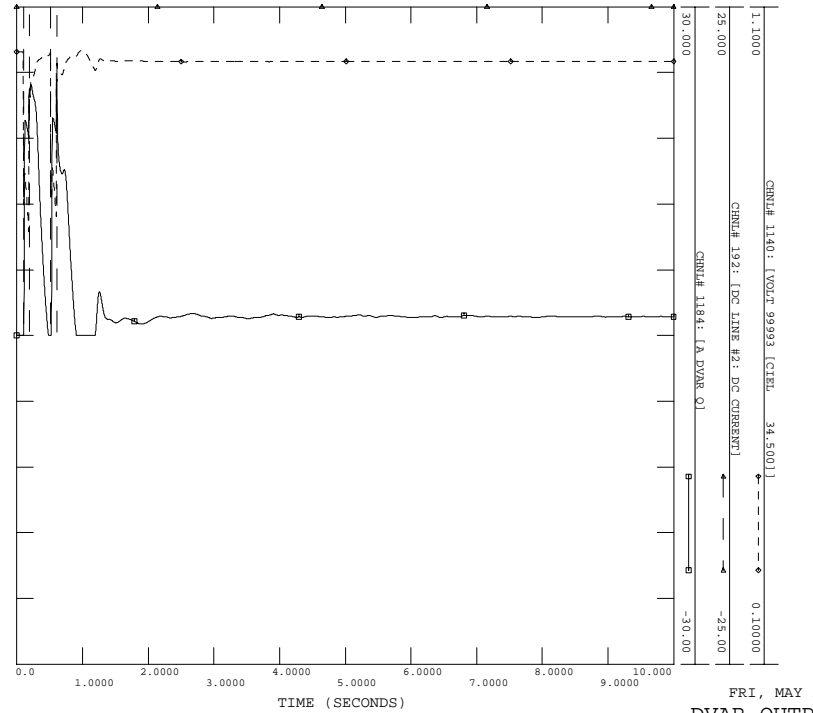
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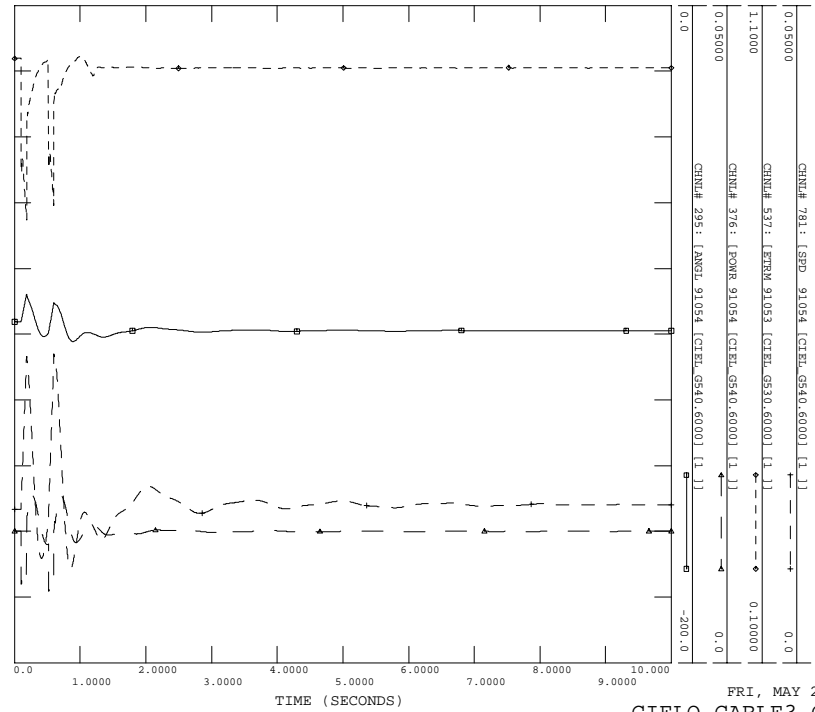
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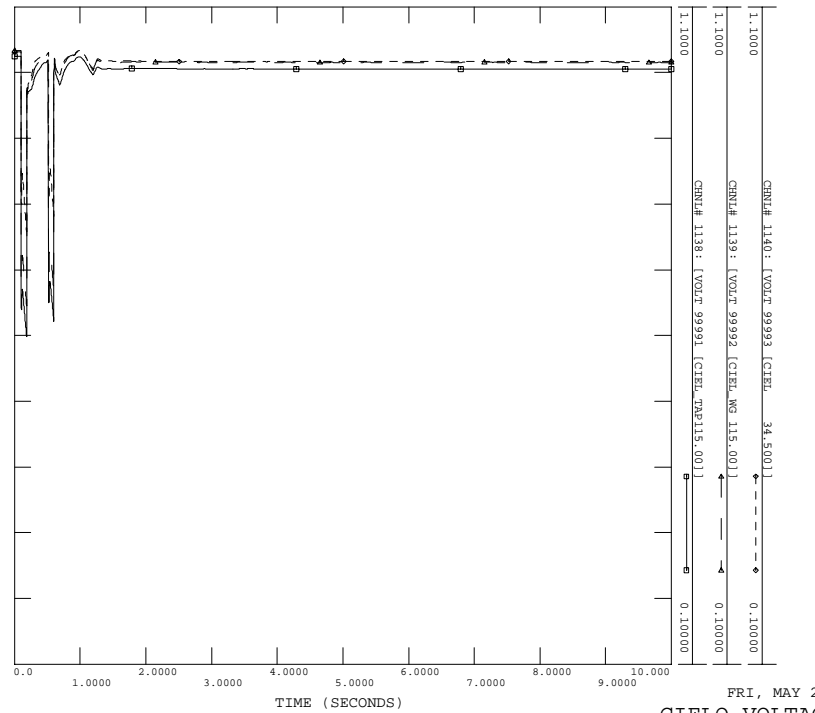
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 DVAR OUTPUT 8

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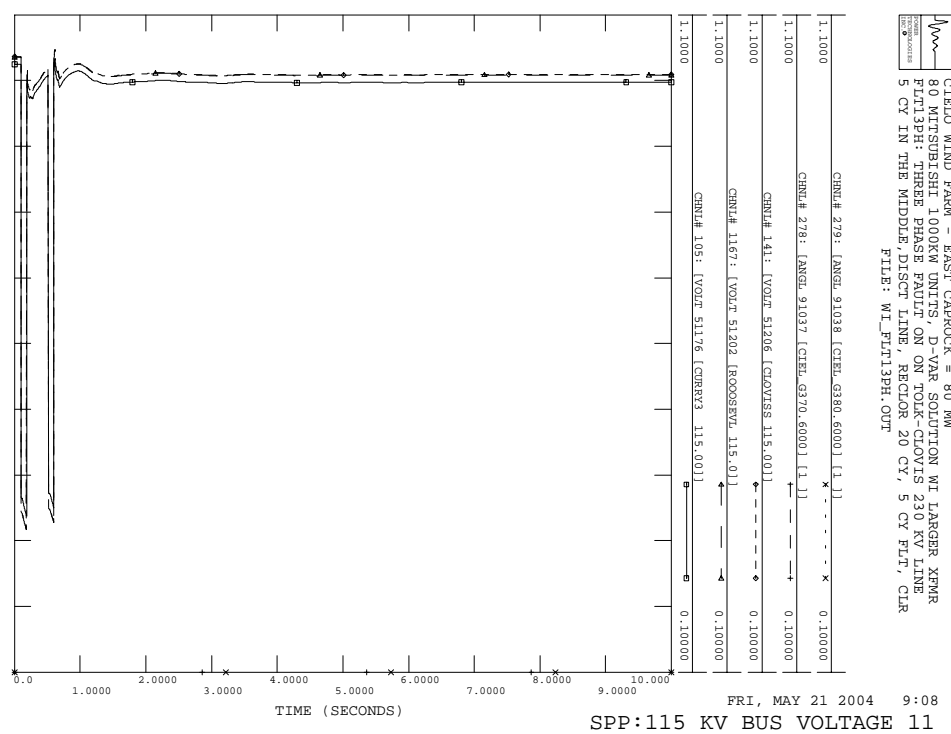
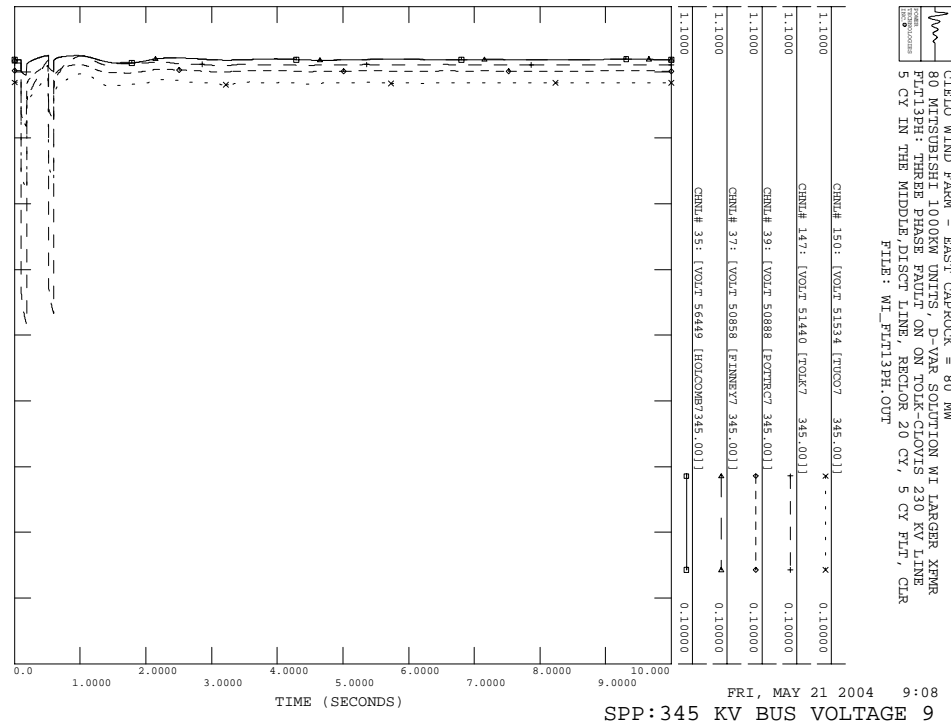
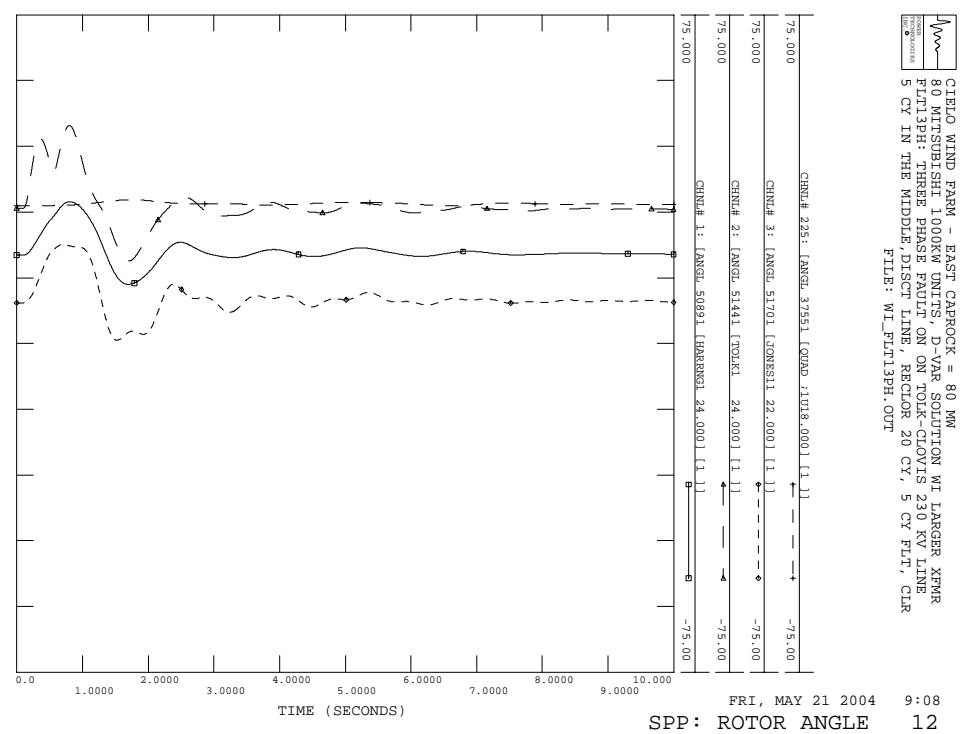
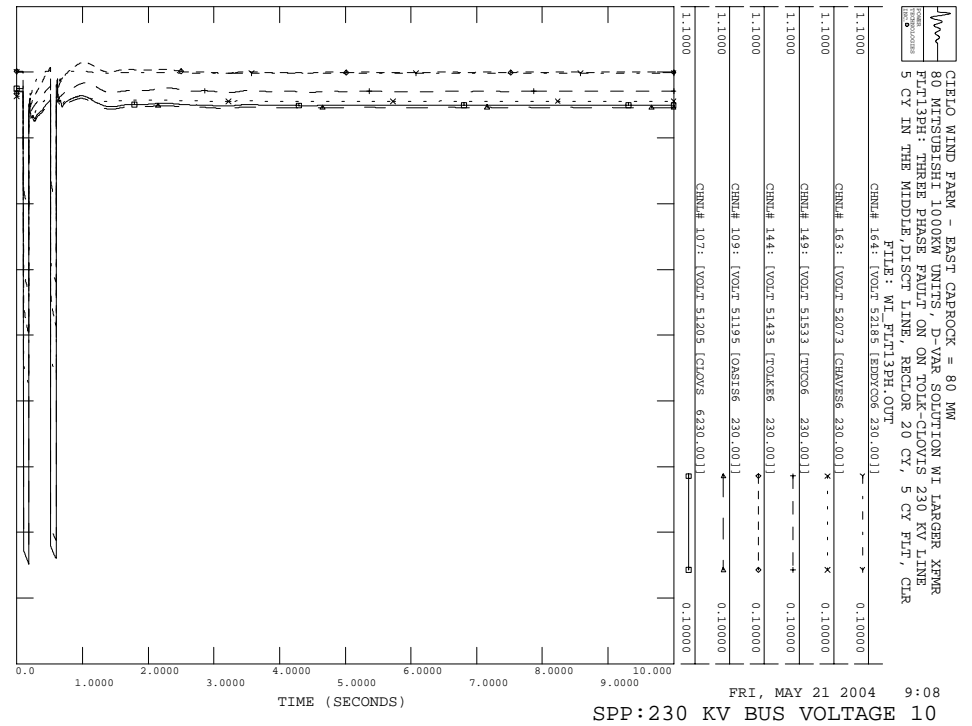


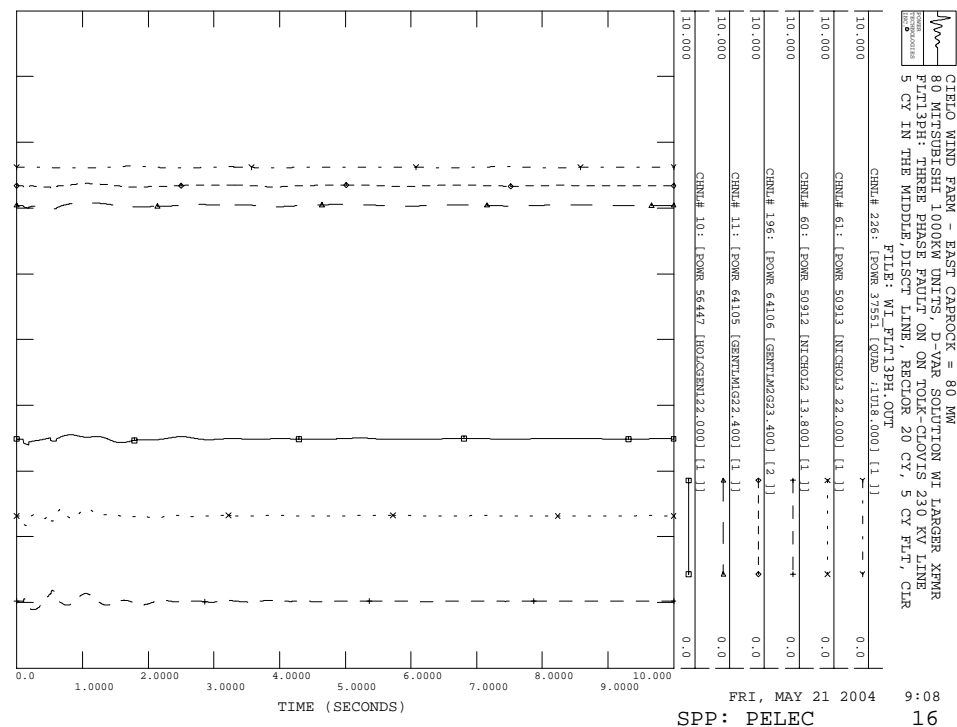
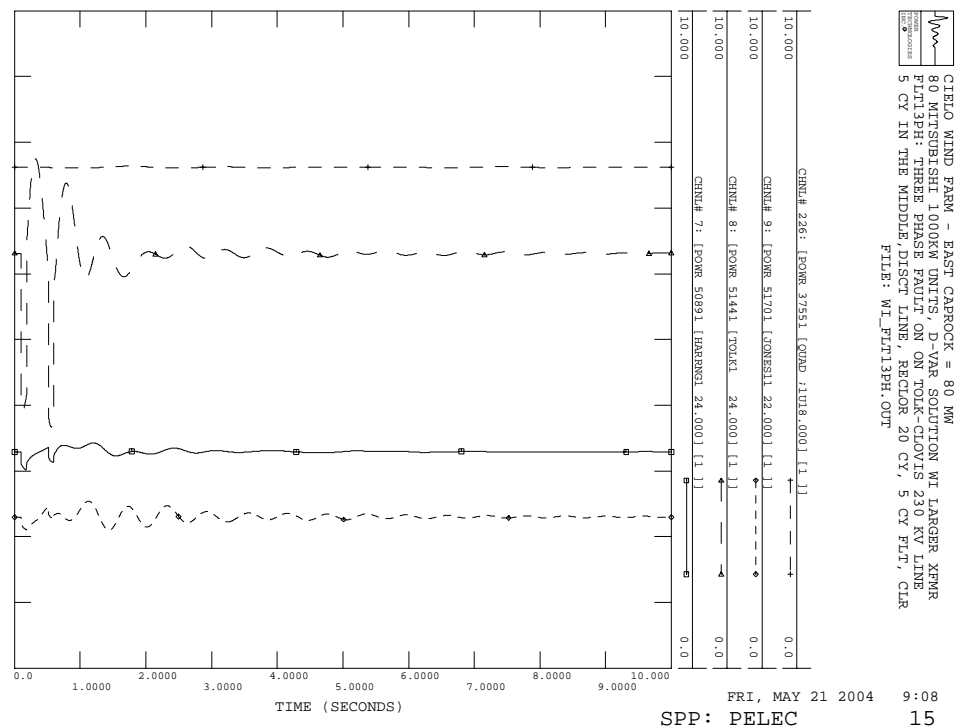
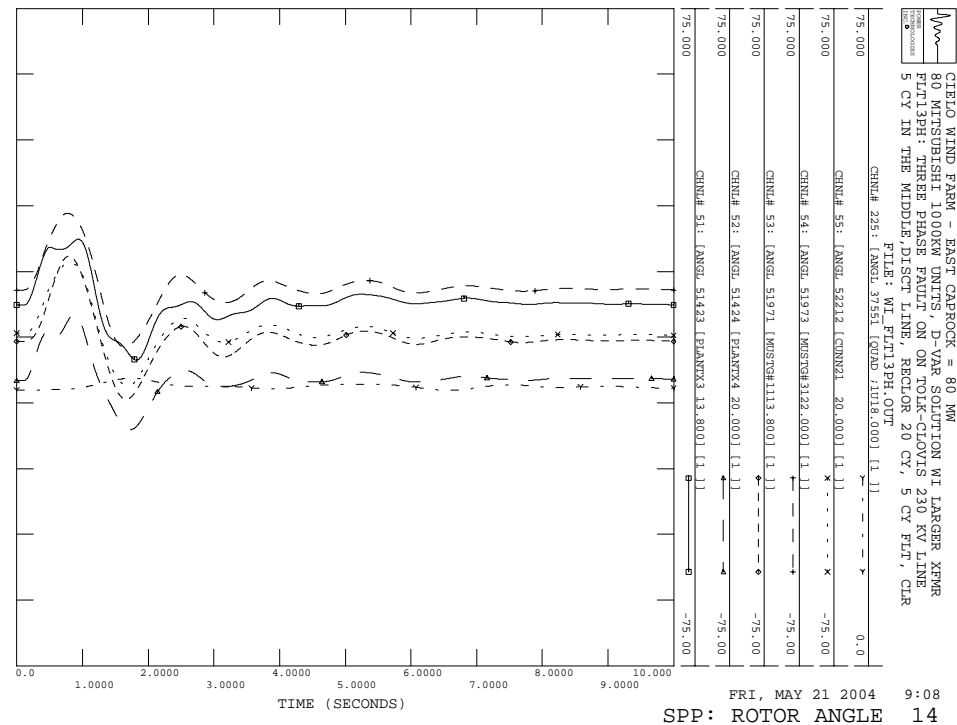
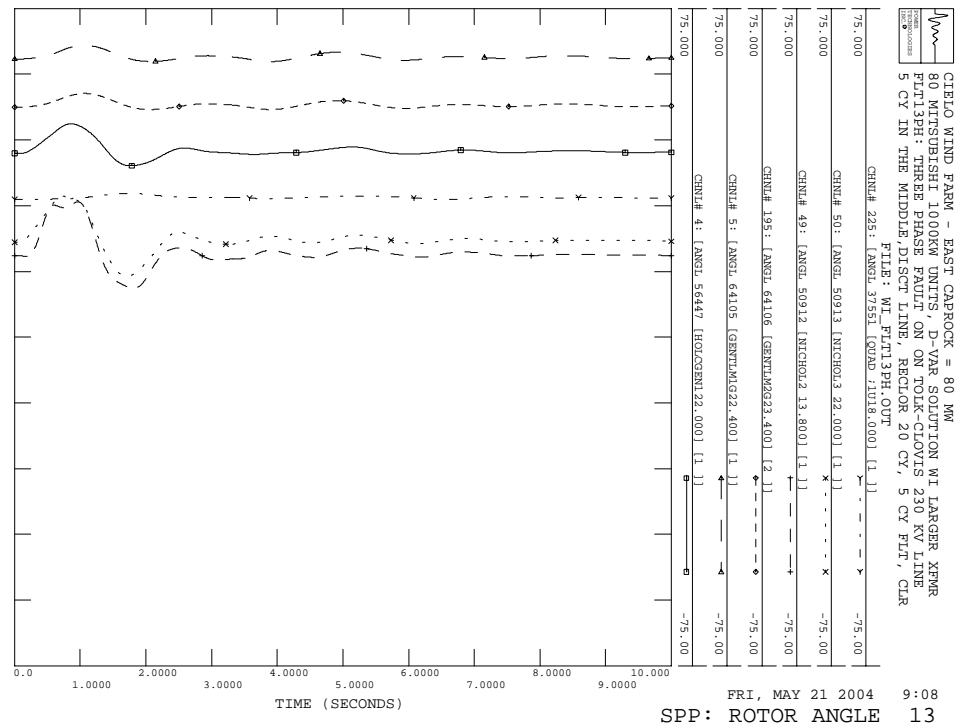
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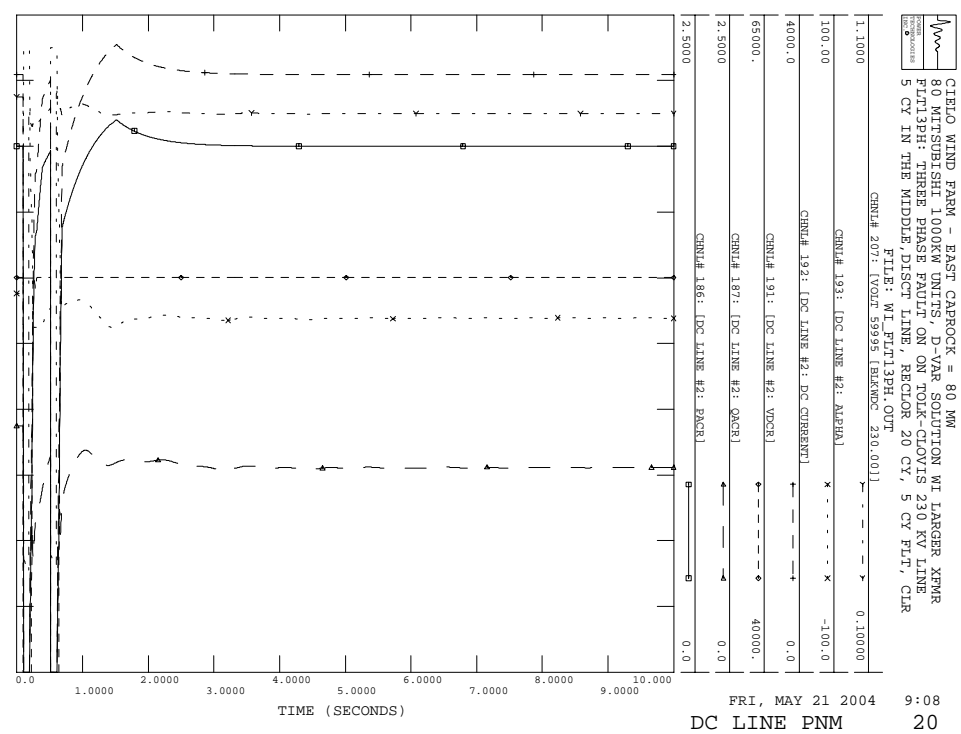
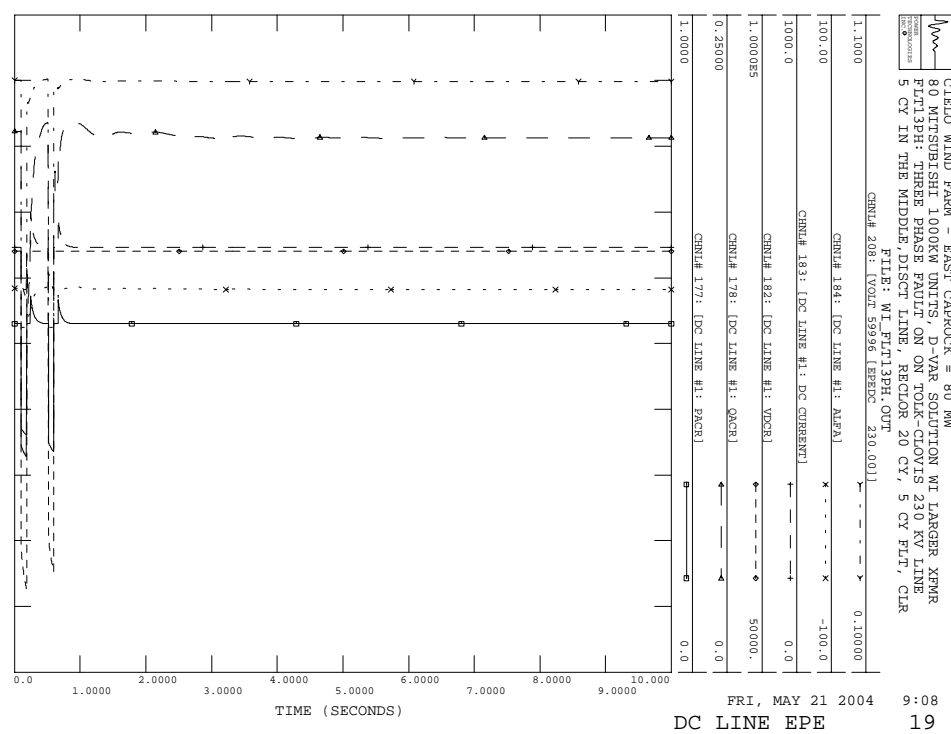
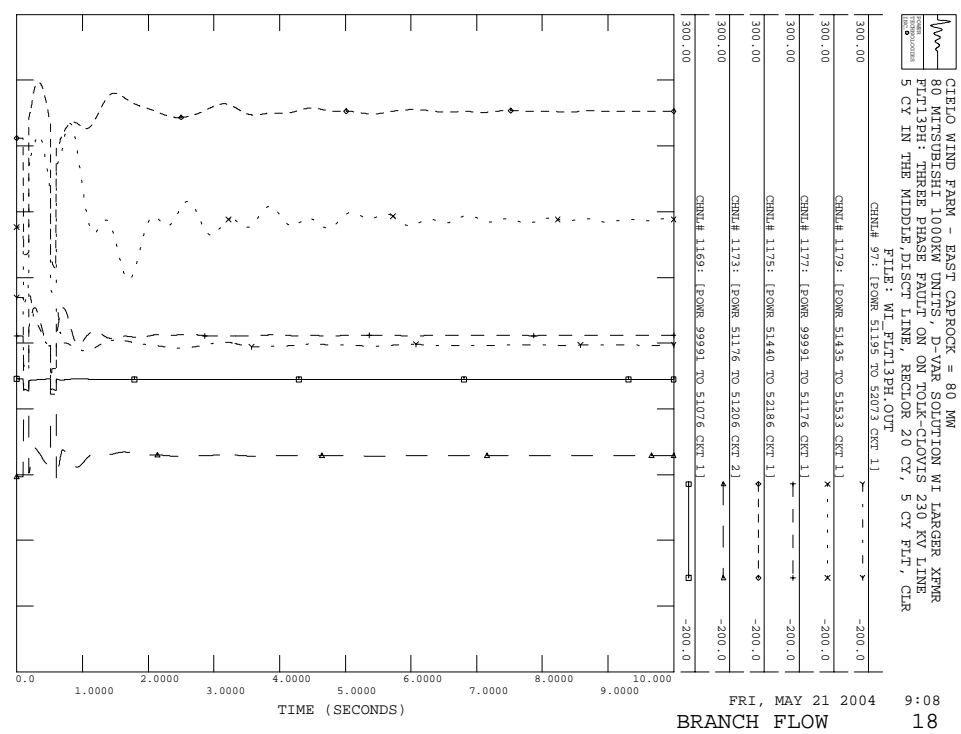
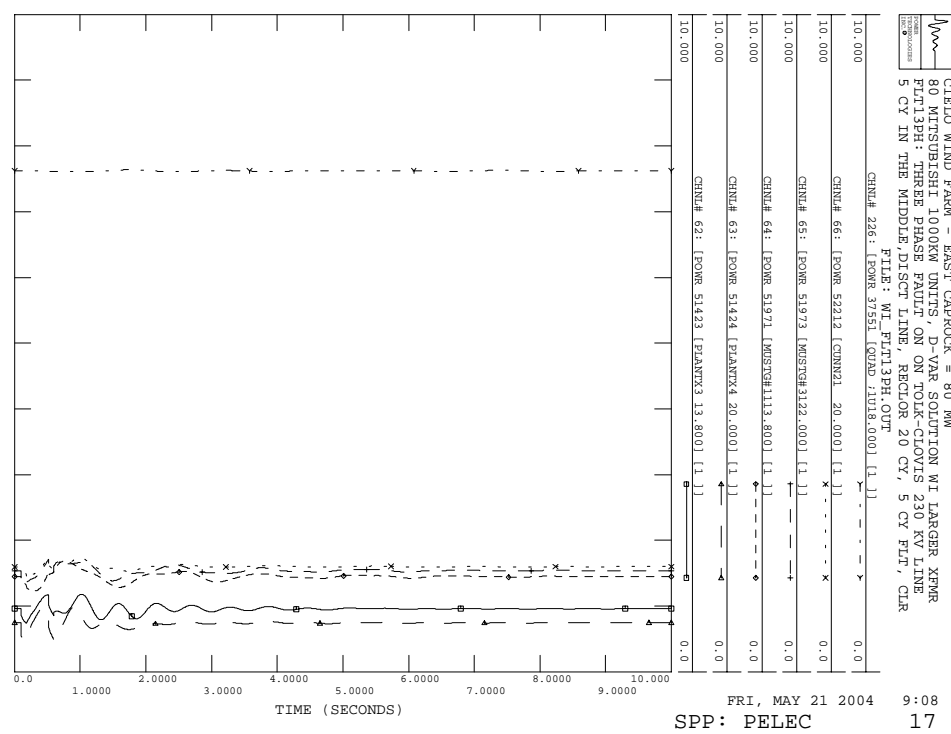
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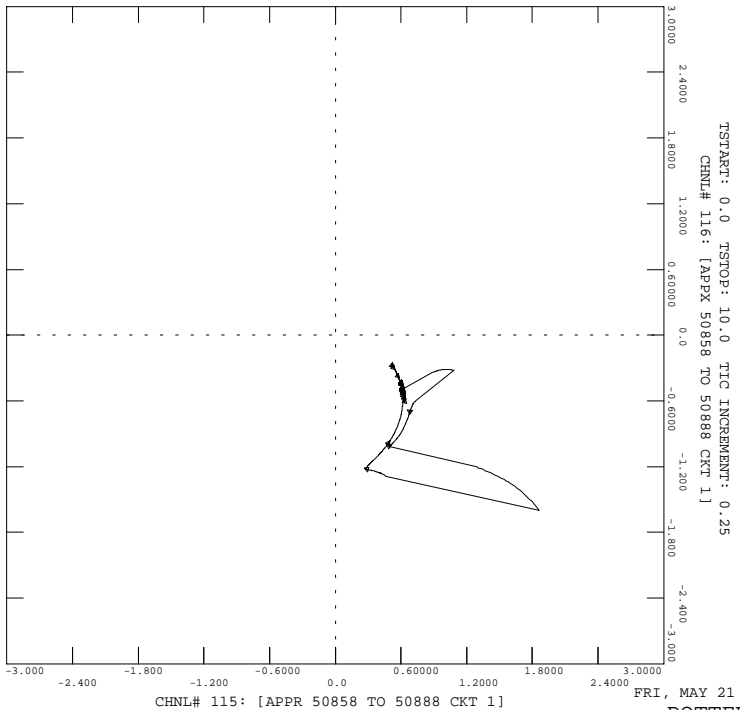






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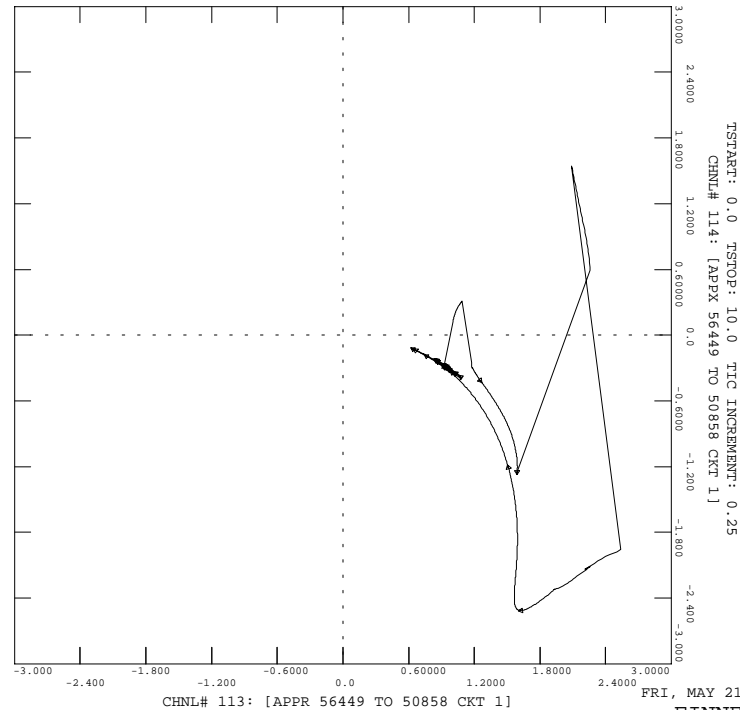


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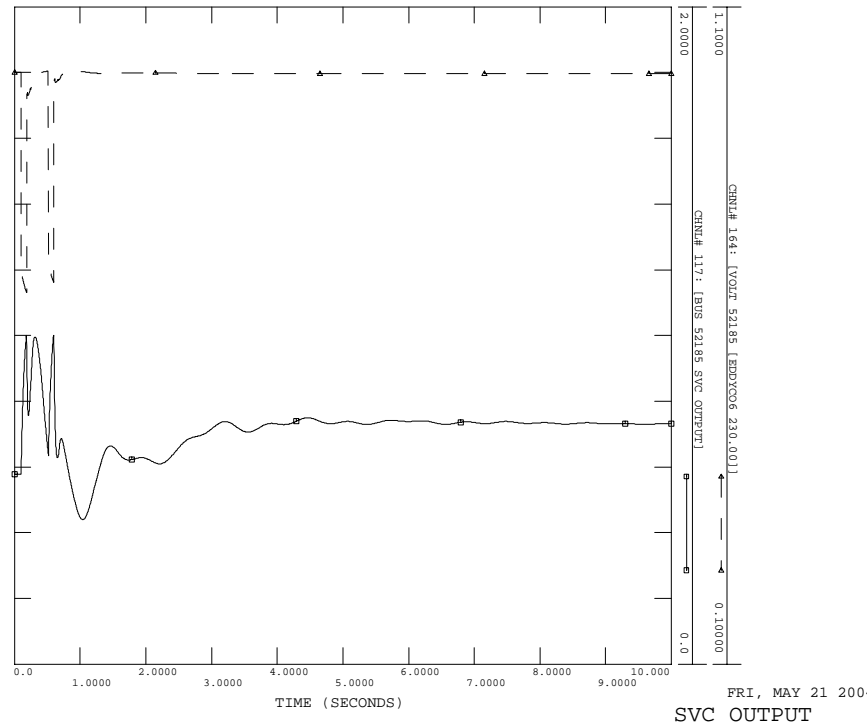
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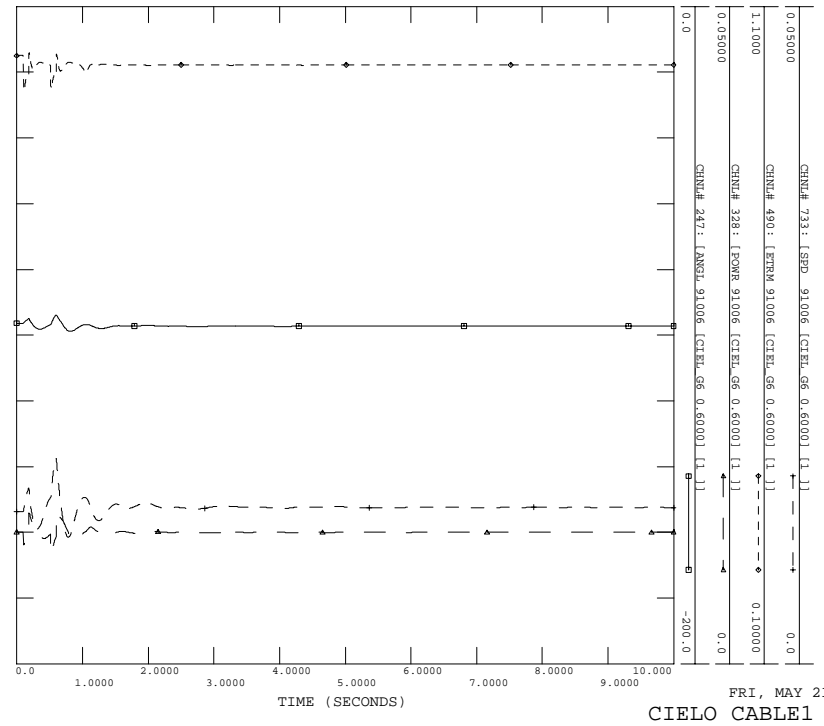


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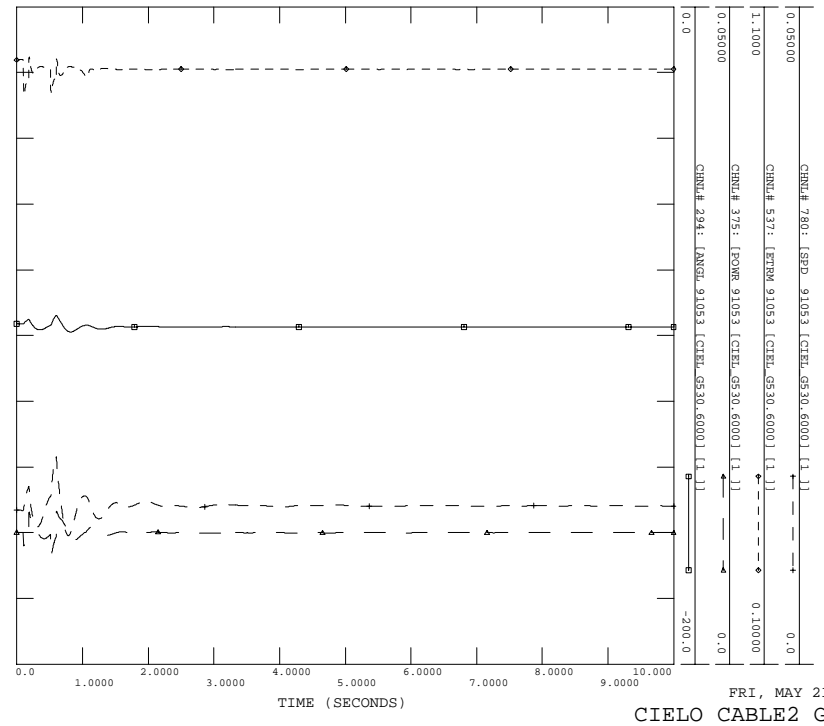


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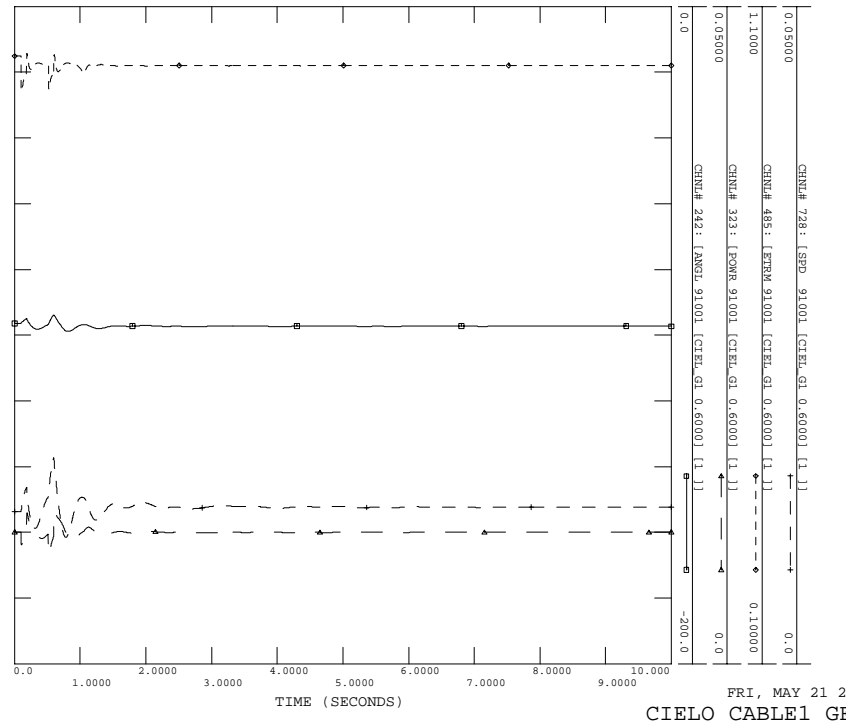
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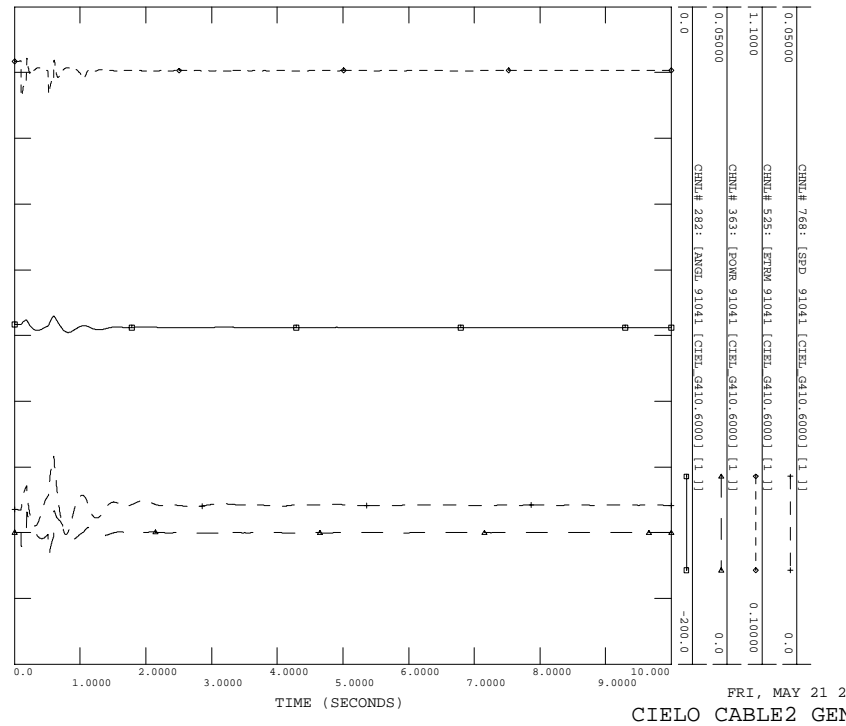
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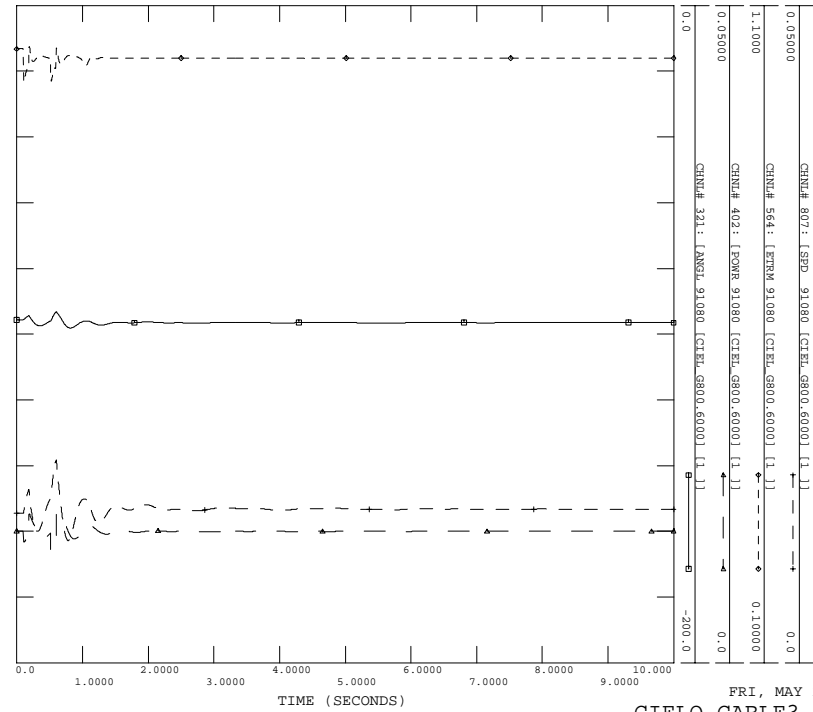
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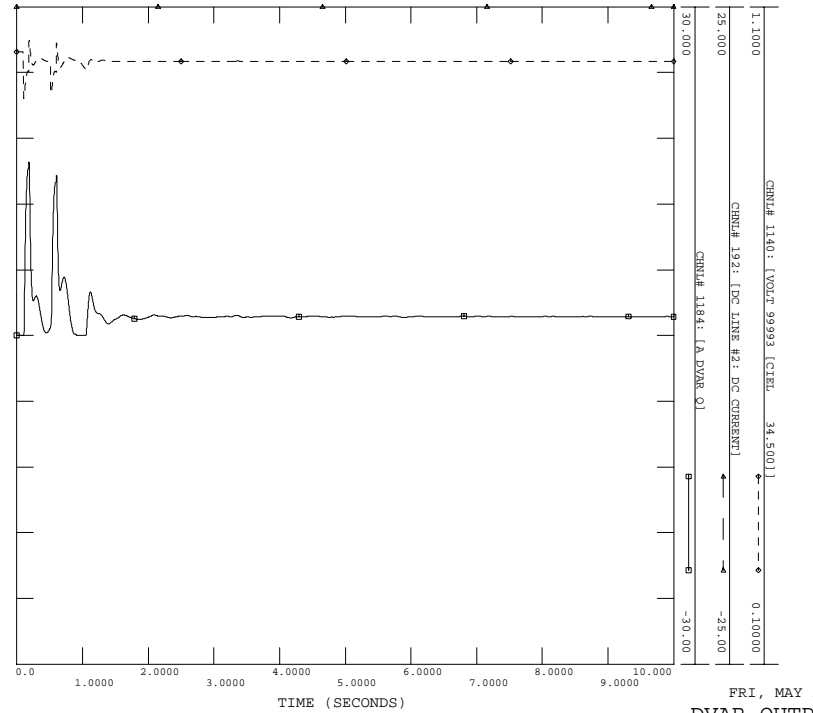


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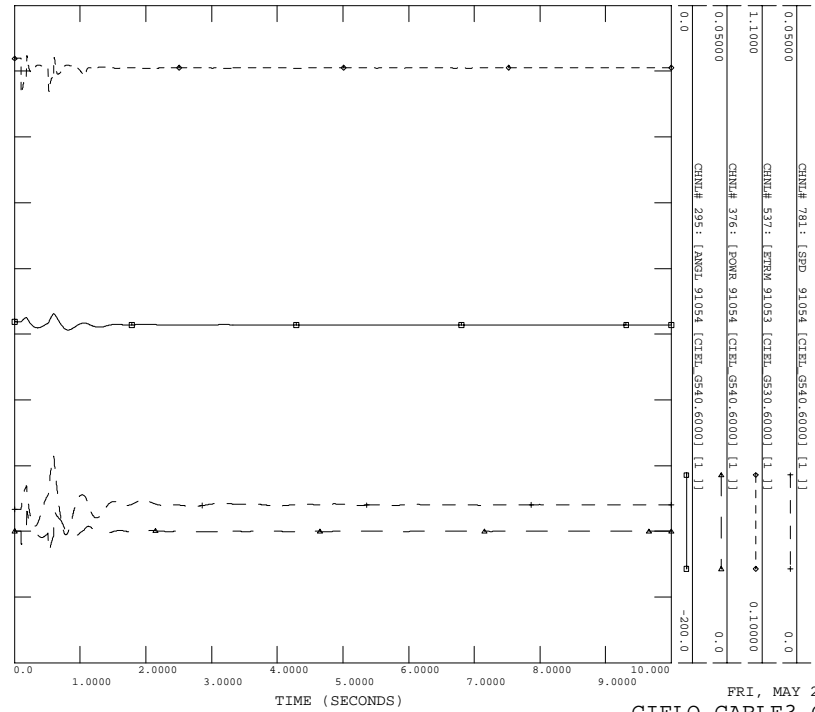
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 CIELO CABLE3 GEN80 6

CIELO WIND FARM - EAST CABROCK = 80 MW
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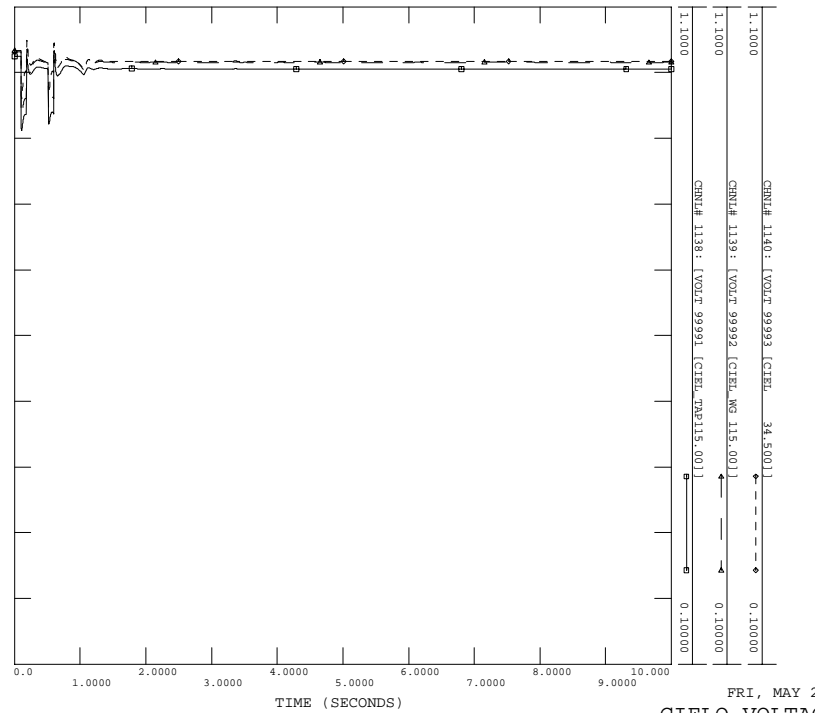
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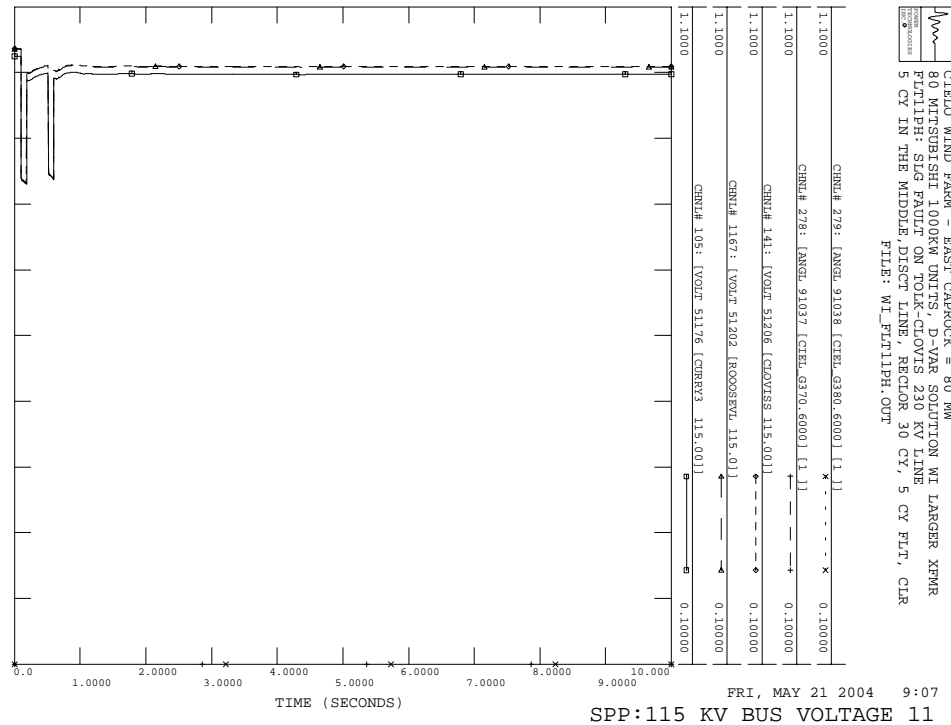
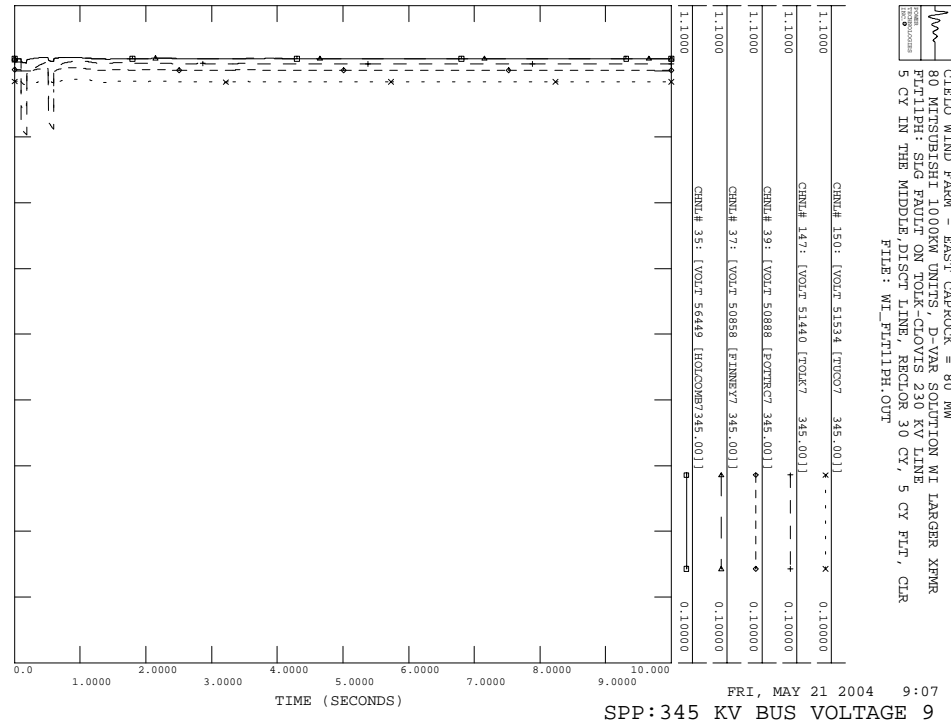
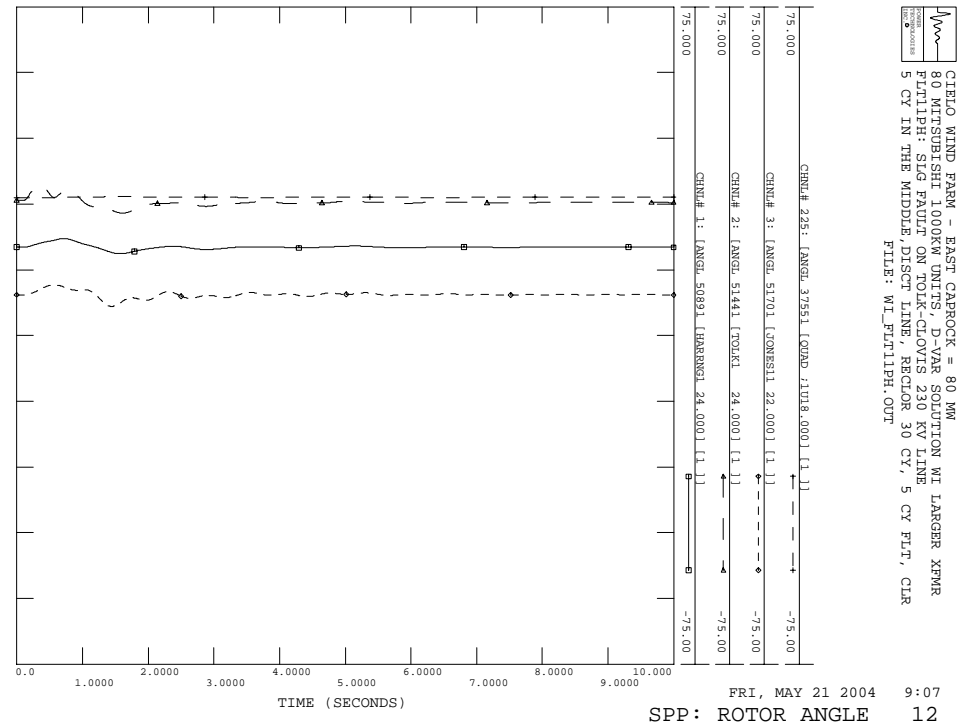
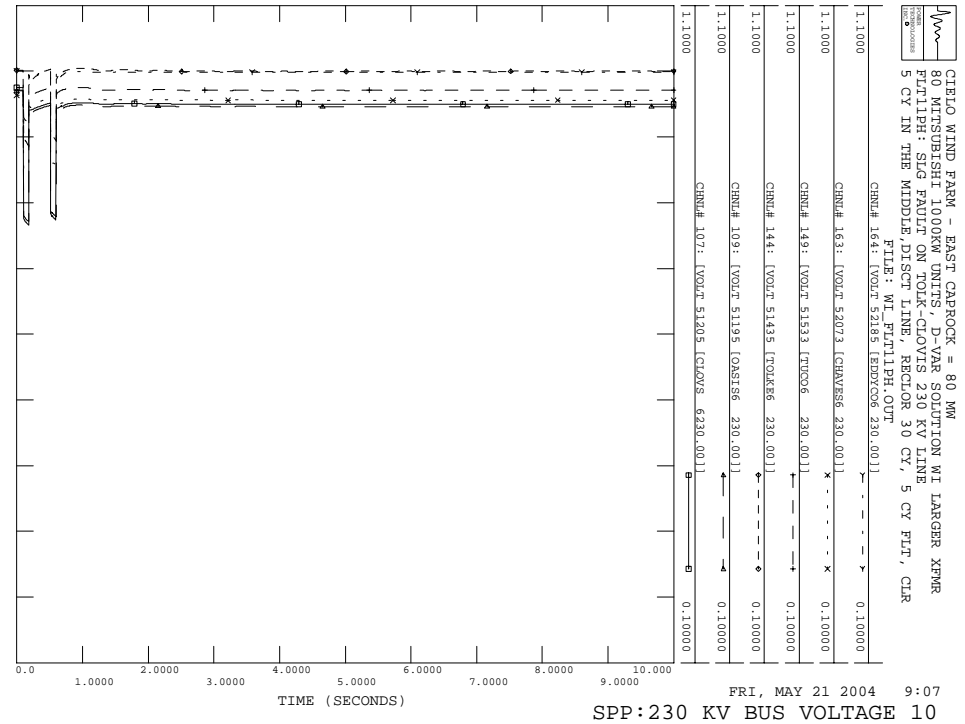


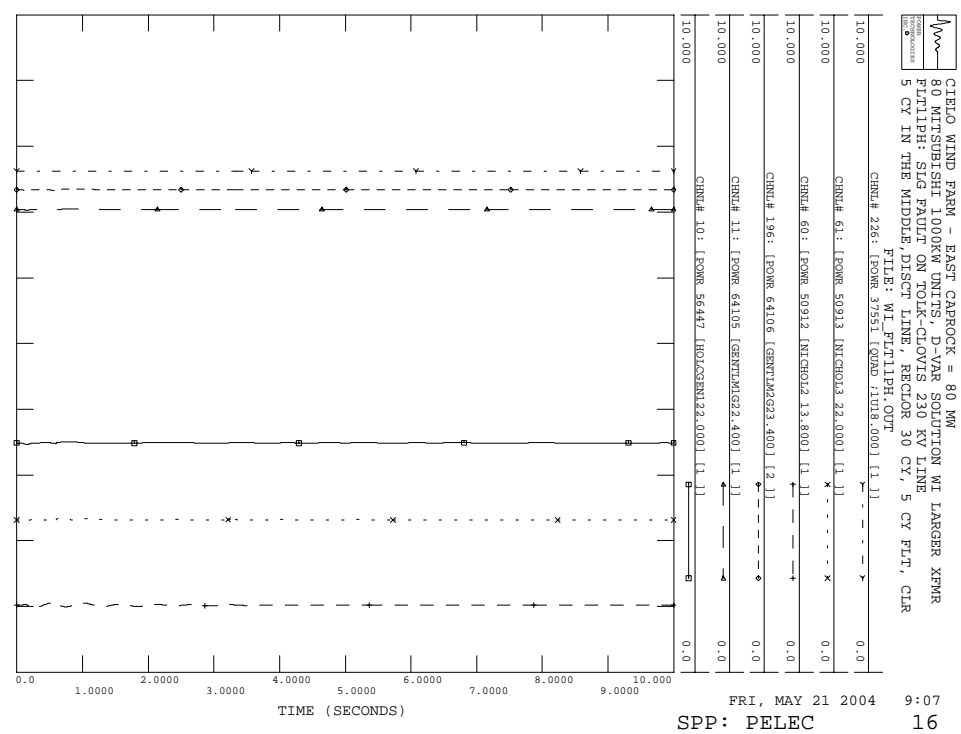
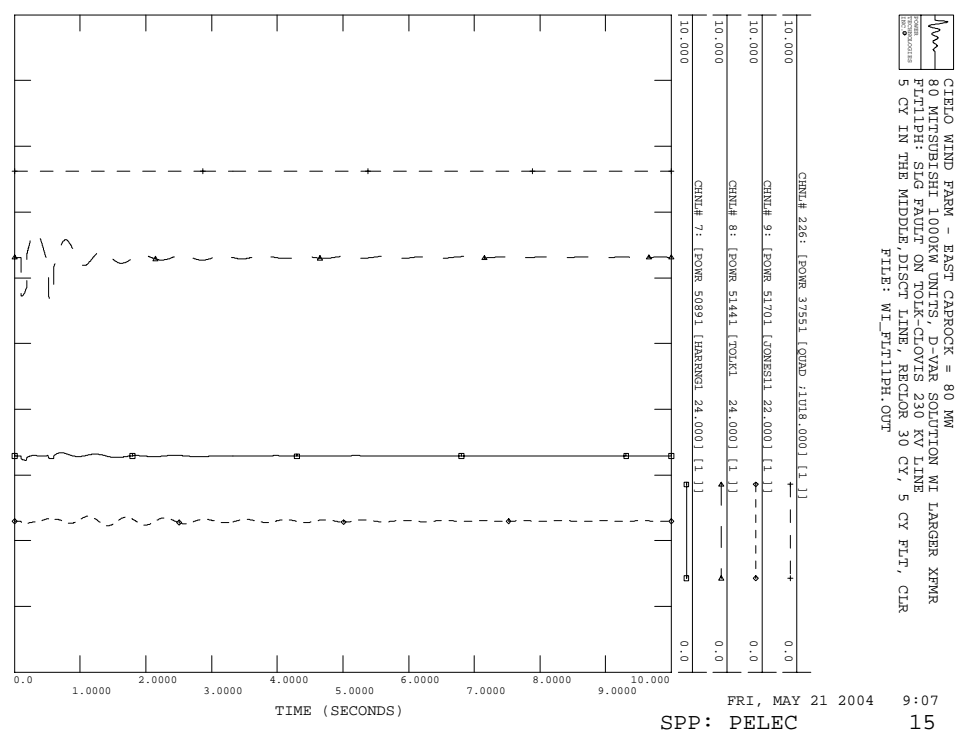
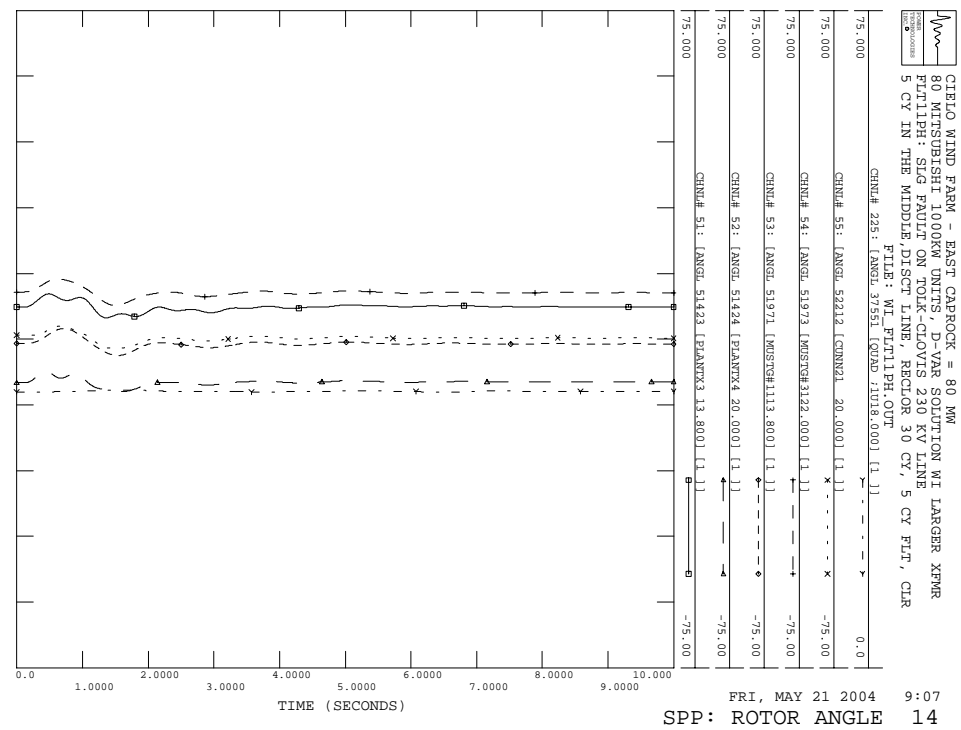
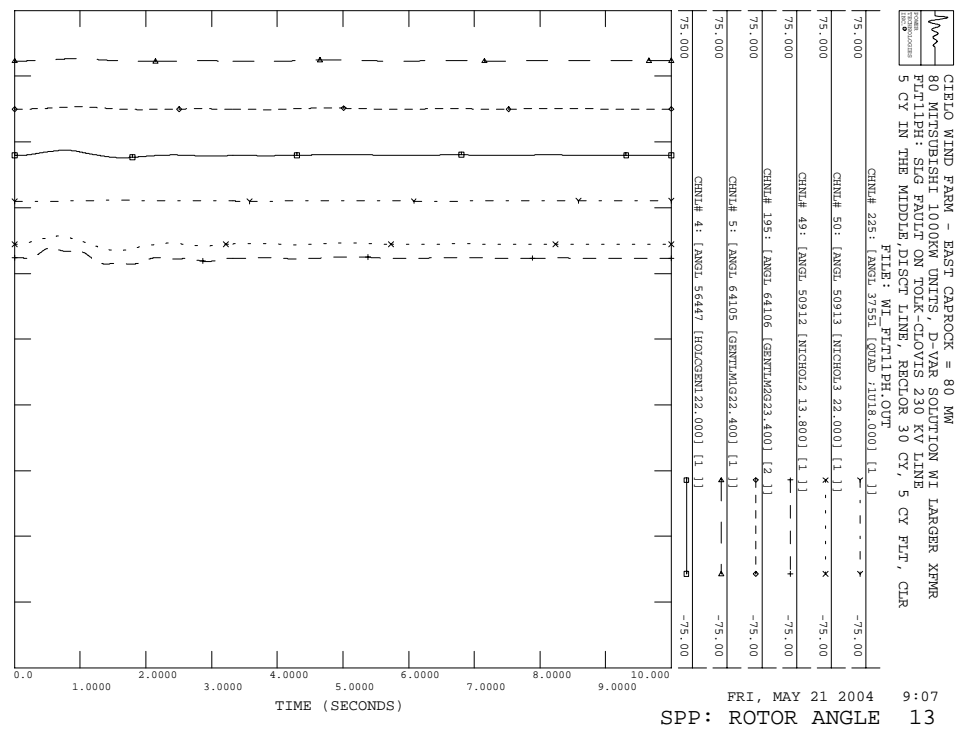
FRI, MAY 21 2004 9:07
 CIELO CABLE3 GEN54 5

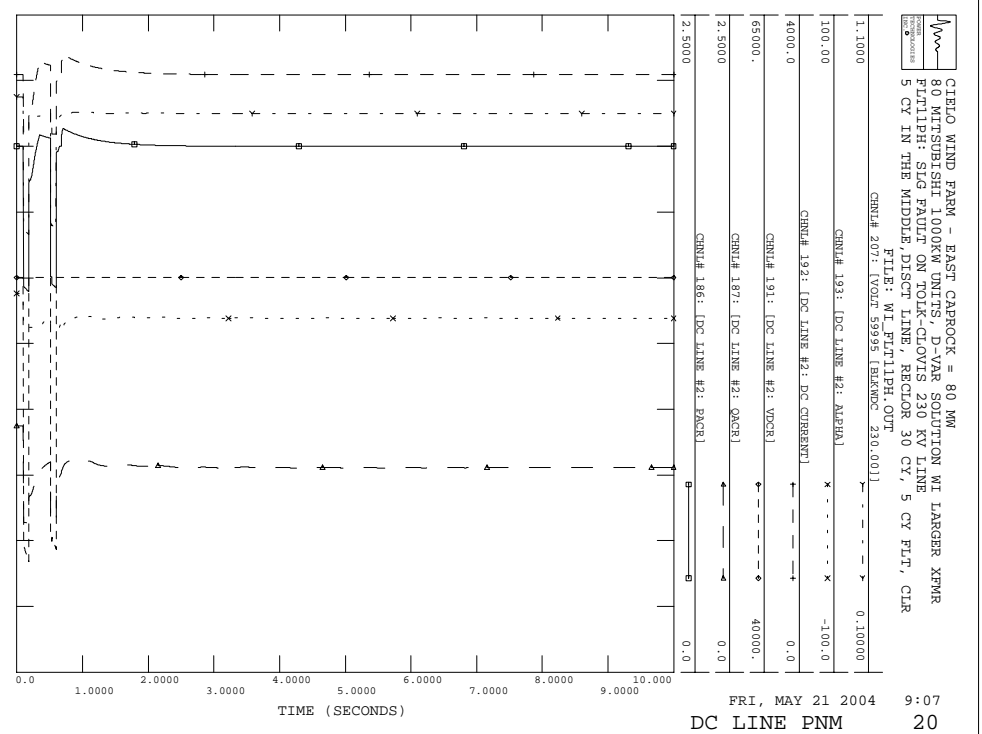
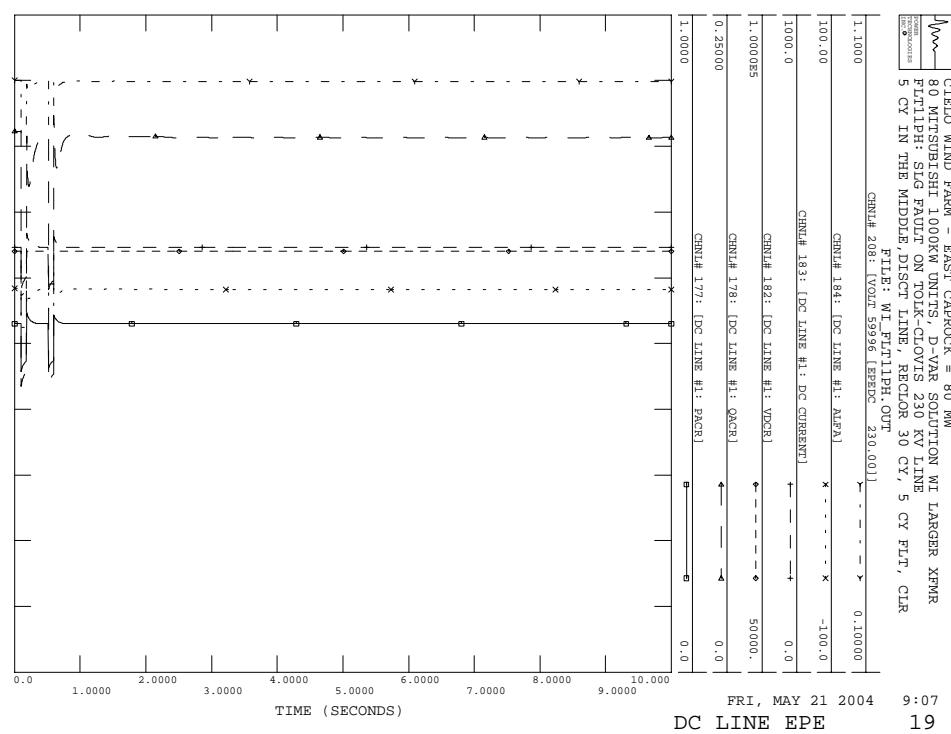
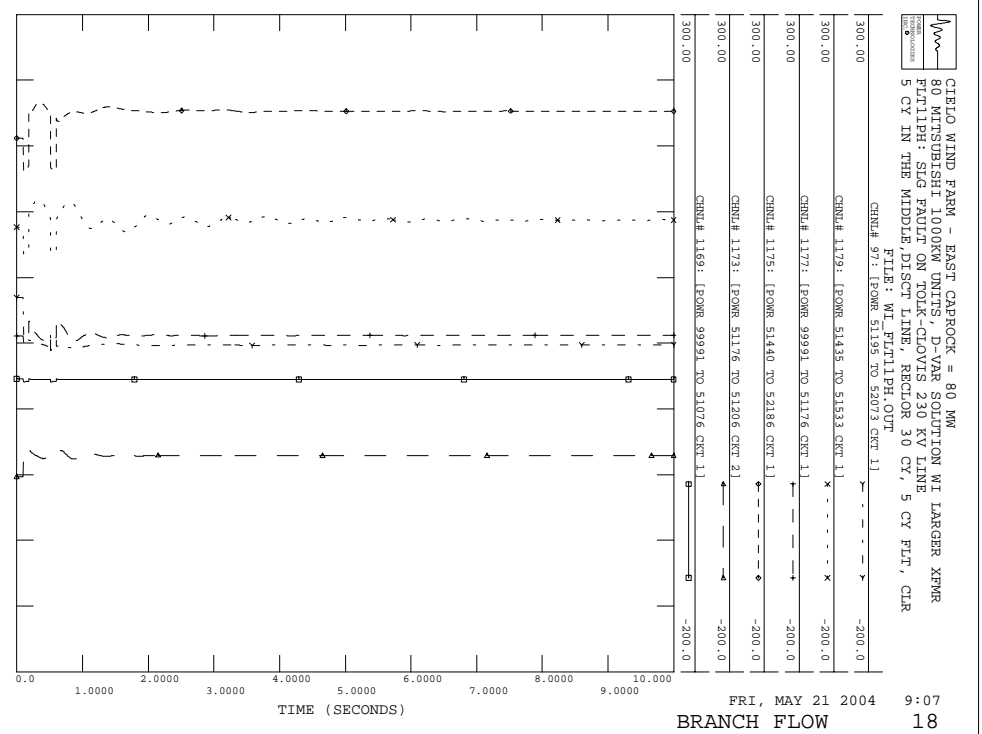
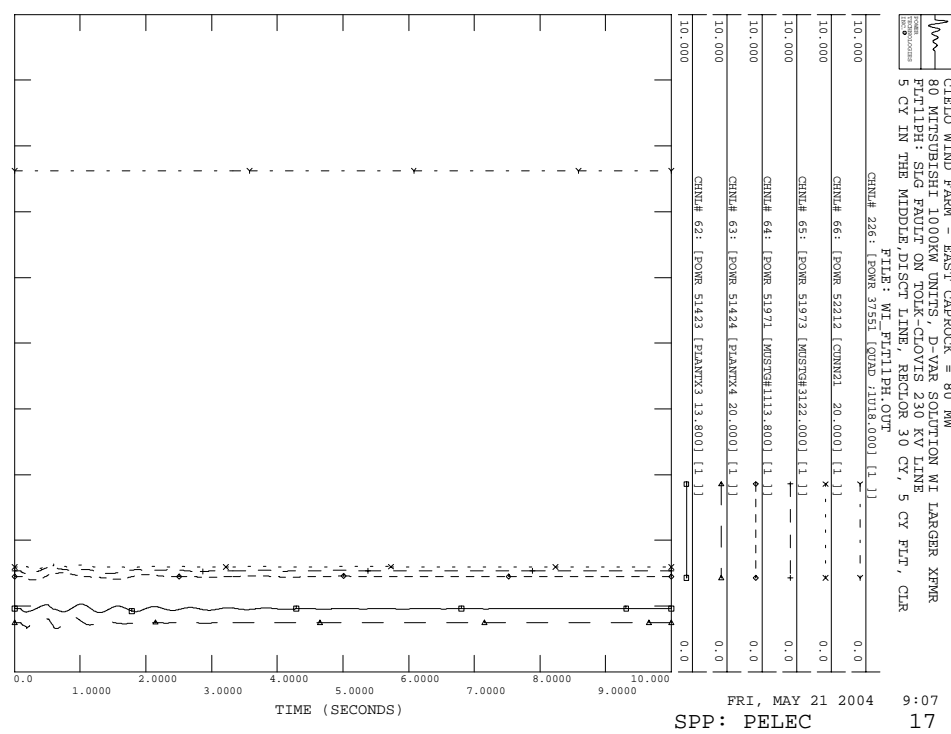
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FILTER, SLG FAULT ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE, DISC LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT11PH.OUT



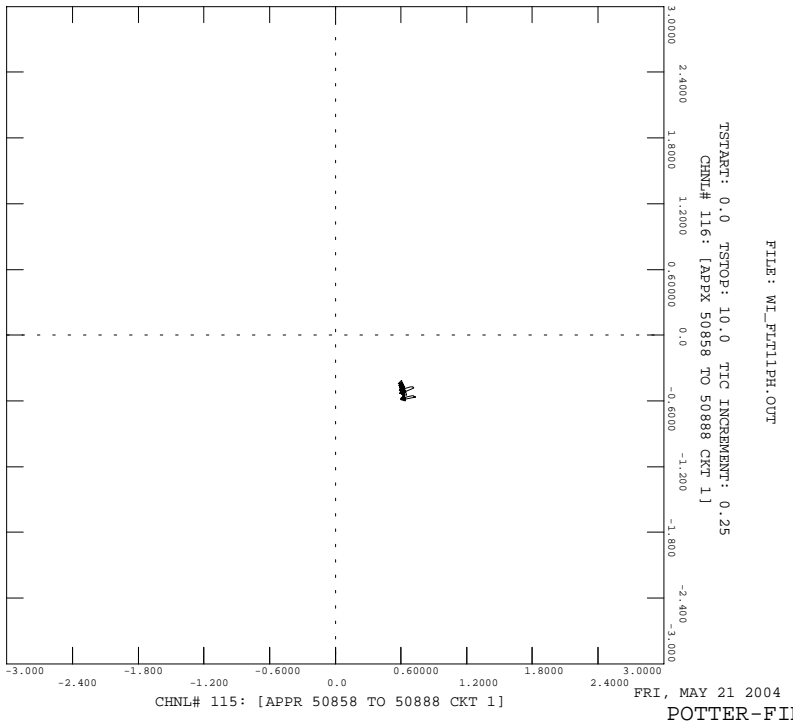
FRI, MAY 21 2004 9:07
 CIELO VOLTAGE 7





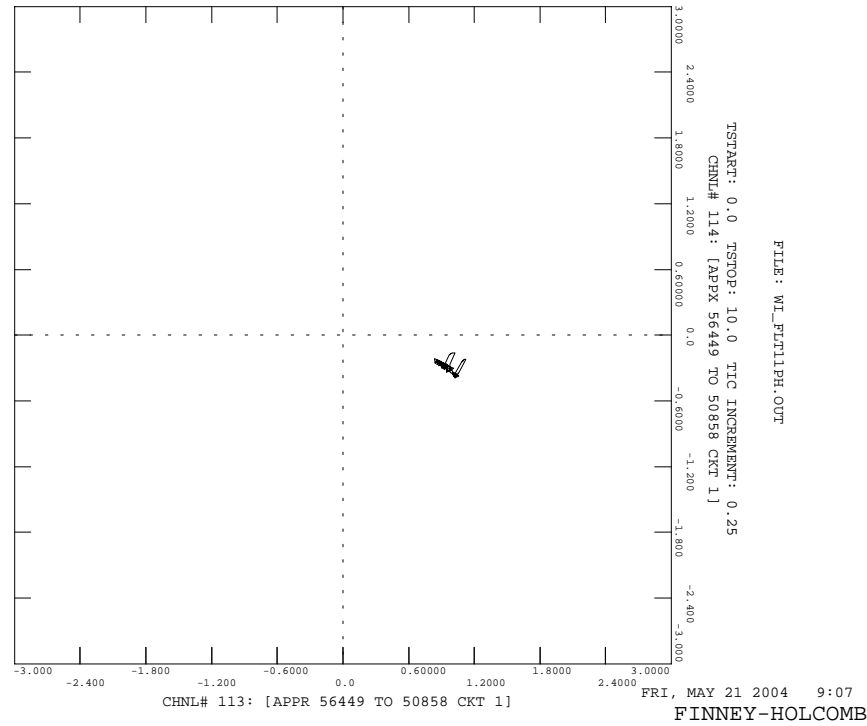


CIELLO WIND FARM - EAST CABROCK = 80 MW
80 MITSUBISHI 100KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
FILTER, SLG FAULT ON TOLK-CLOVIS 230 KV LINE
5 CY IN THE MIDDLE, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR



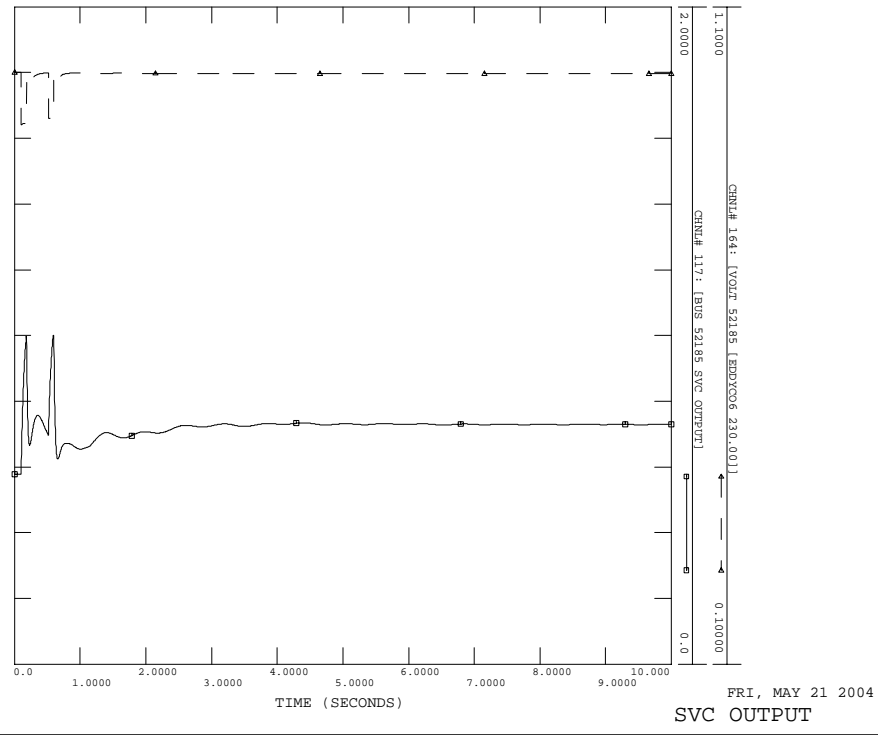
22

CIELLO WIND FARM - EAST CABROCK = 80 MW
80 MITSUBISHI 100KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
FILTER, SLG FAULT ON TOLK-CLOVIS 230 KV LINE
5 CY IN THE MIDDLE, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR




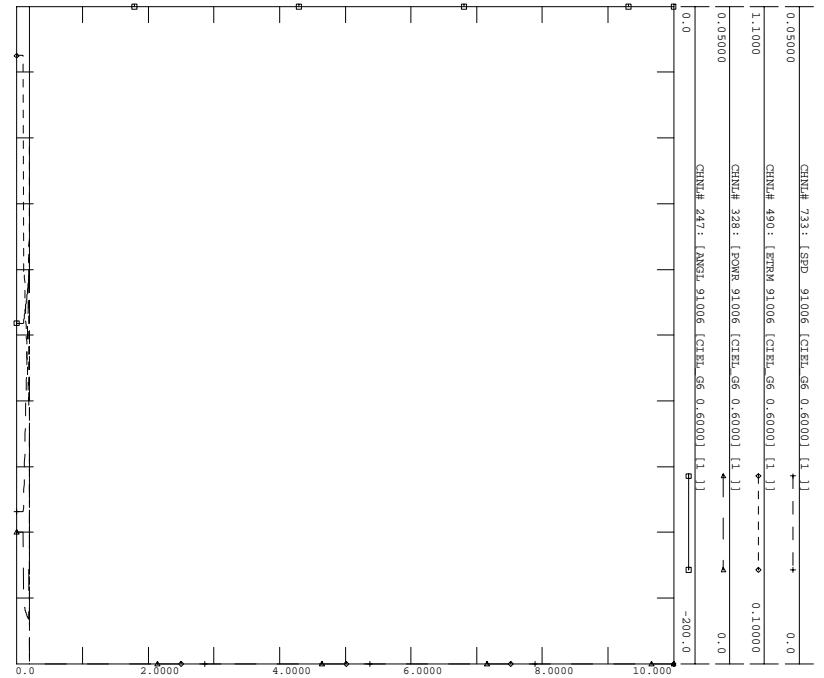
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CIELLO WIND FARM - EAST CABROCK = 80 MW
80 MITSUBISHI 100KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
FILTER, SLG FAULT ON TOLK-CLOVIS 230 KV LINE
5 CY IN THE MIDDLE, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR




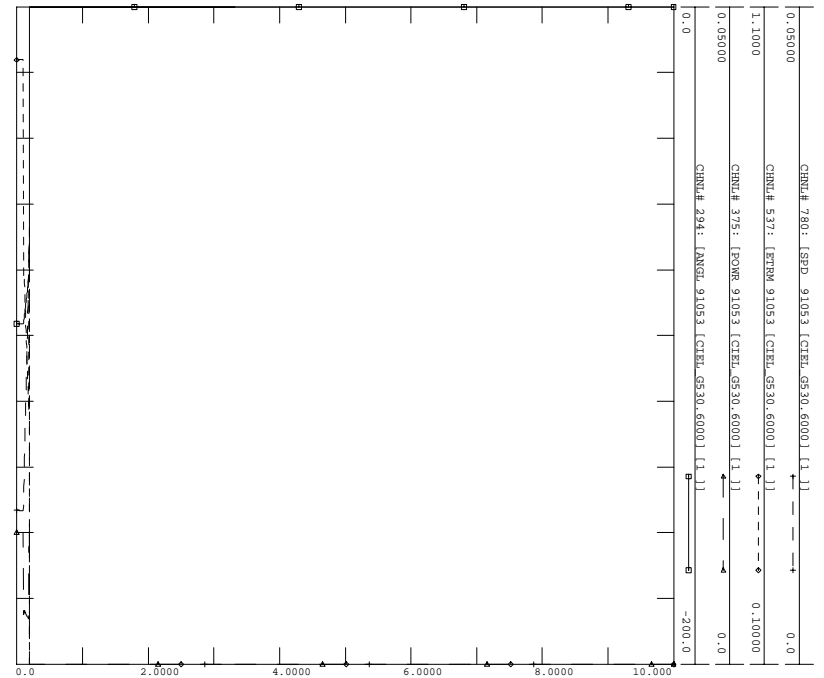
23


 CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH.OUT




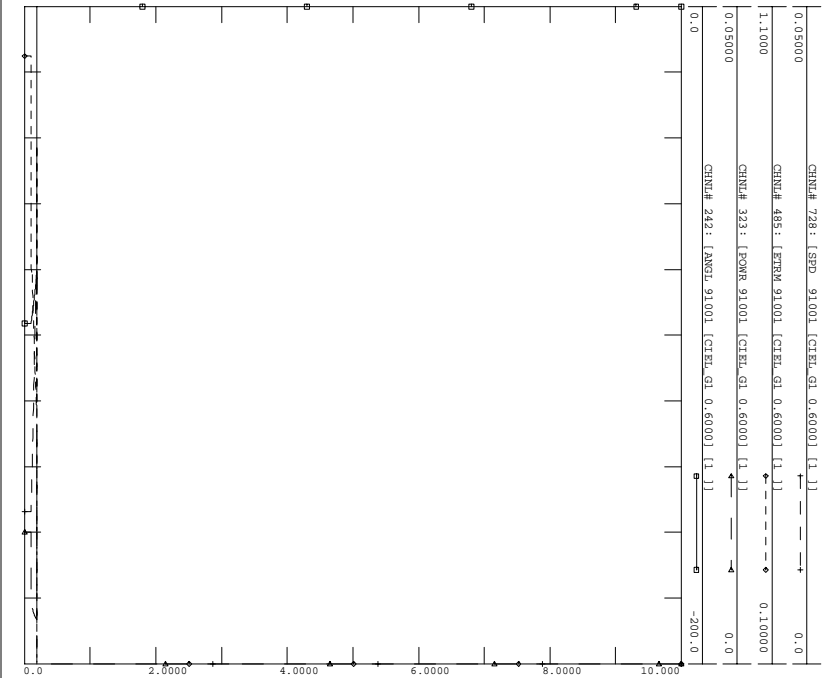
FRI, MAY 21 2004 9:08
CIELO CABLE1 GEN6 2


 CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH.OUT




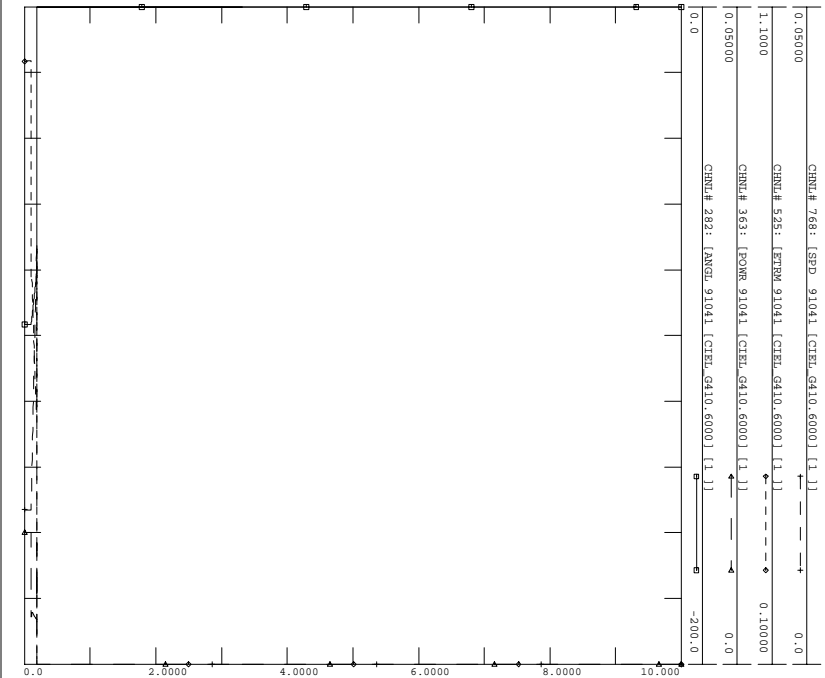
FRI, MAY 21 2004 9:08
CIELO CABLE2 GEN53 4


 CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH.OUT



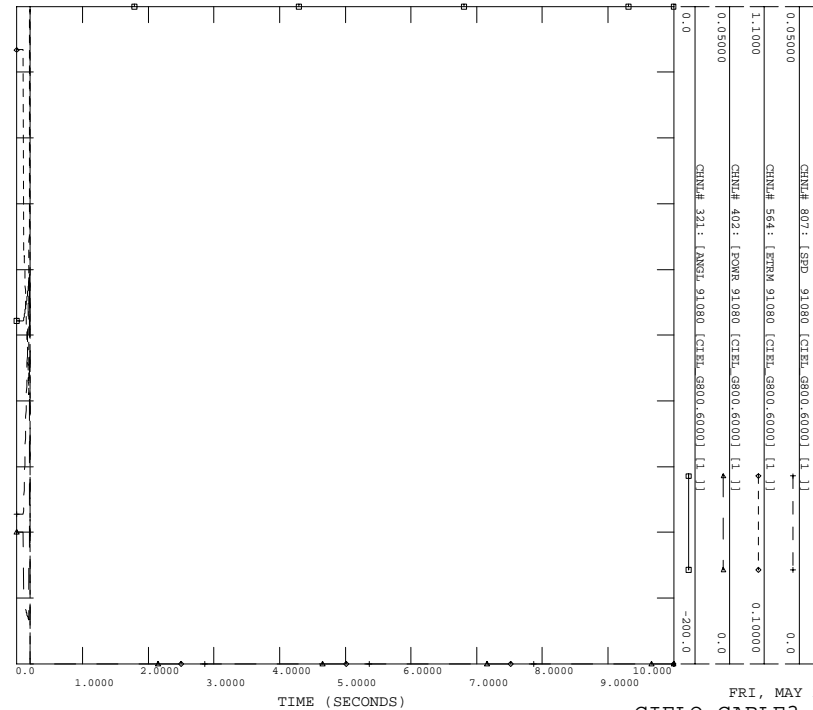
FRI, MAY 21 2004 9:08
CIELO CABLE1 GEN1 1


 CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH.OUT



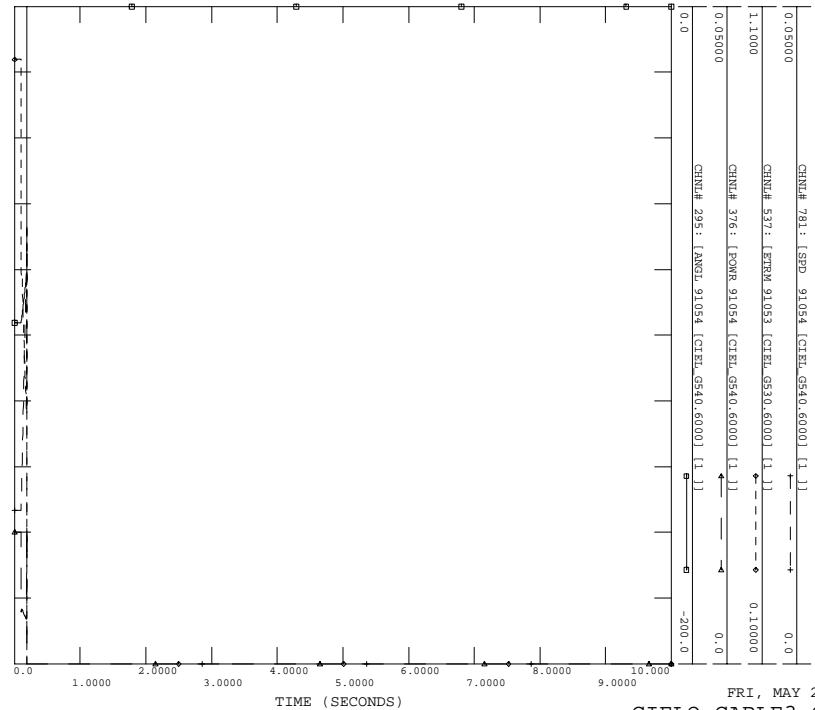
FRI, MAY 21 2004 9:08
CIELO CABLE2 GEN41 3

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH.OUT



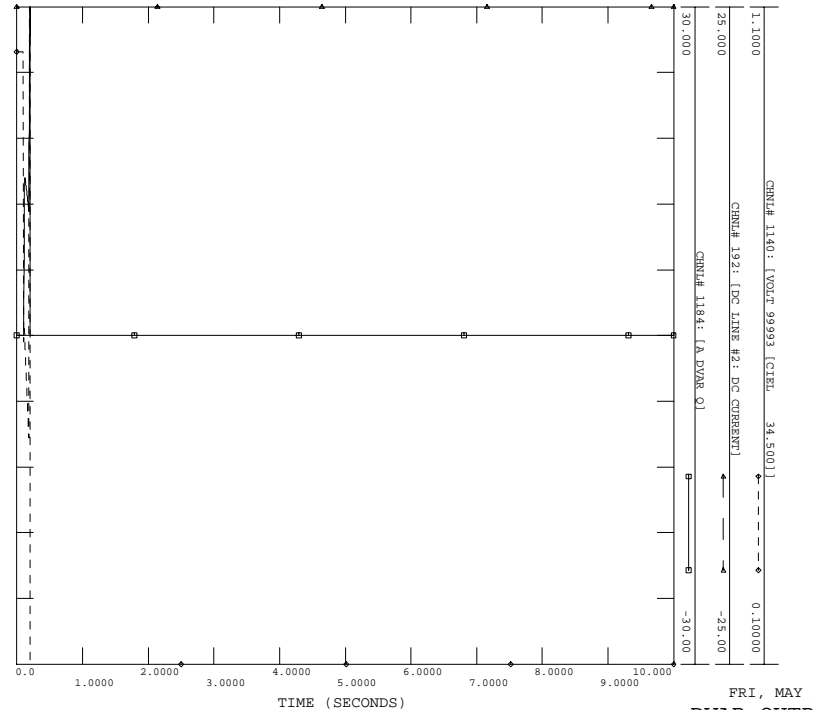
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 CIELO CABLE3 GEN80 6

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH.OUT



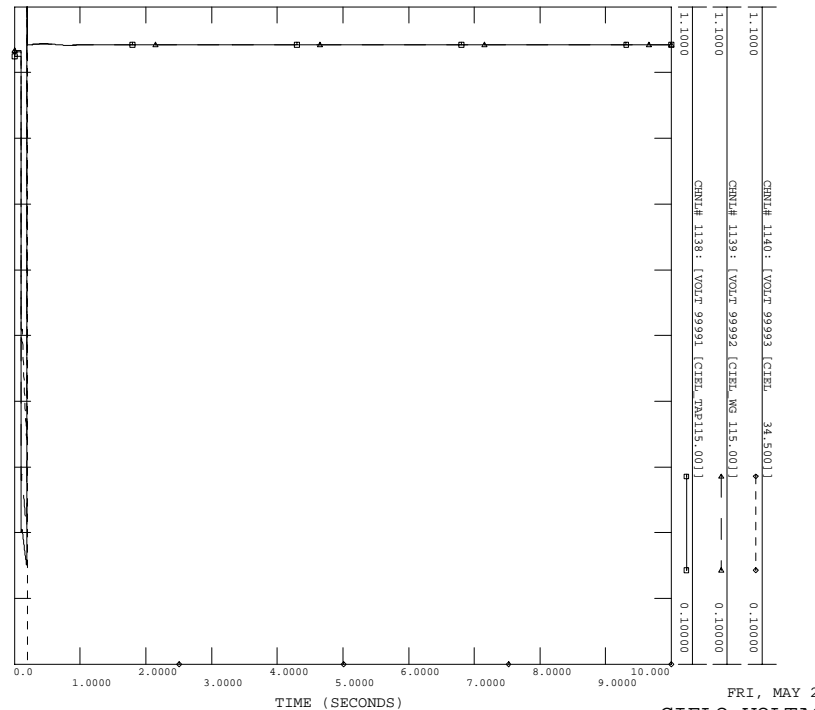
FRI, MAY 21 2004 9:08
 CIELO CABLE3 GEN54 5

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH.OUT

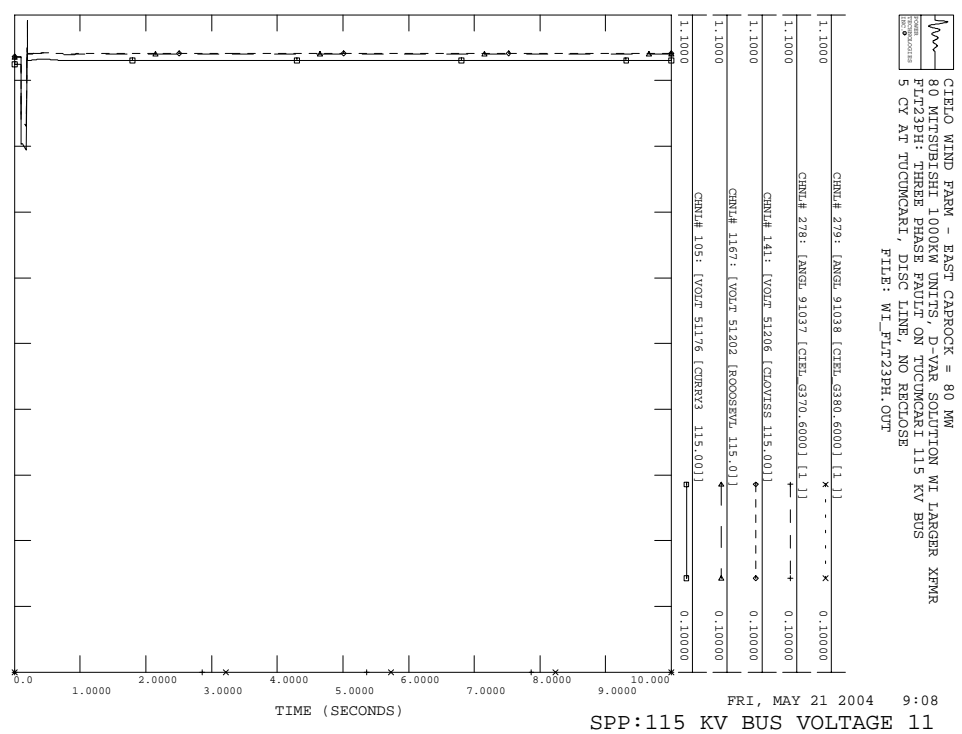
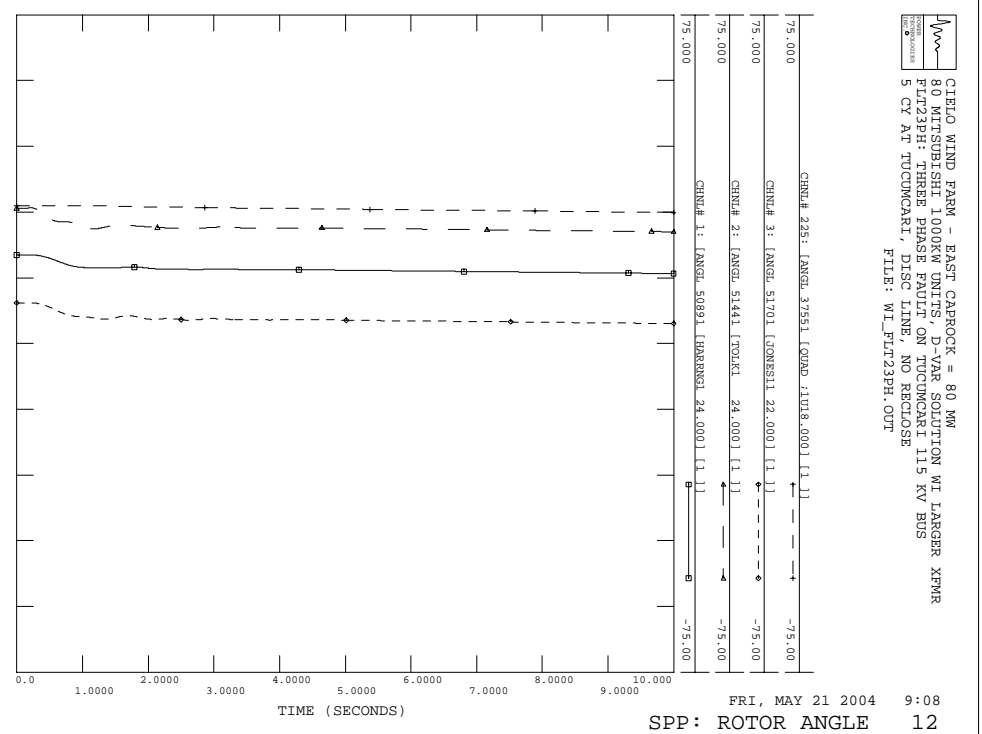
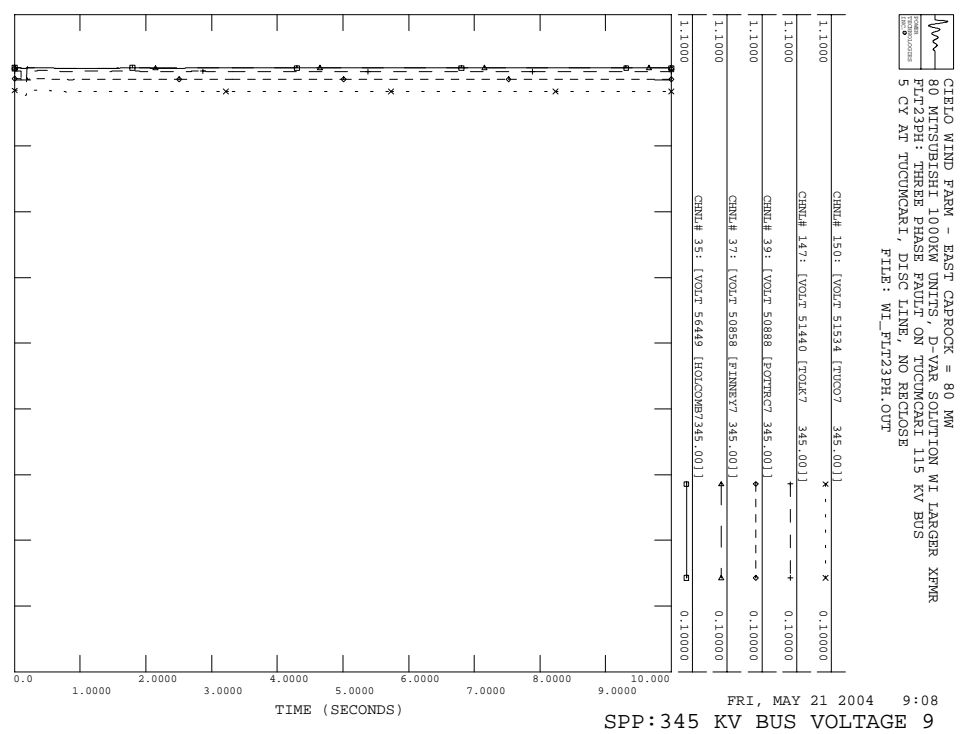
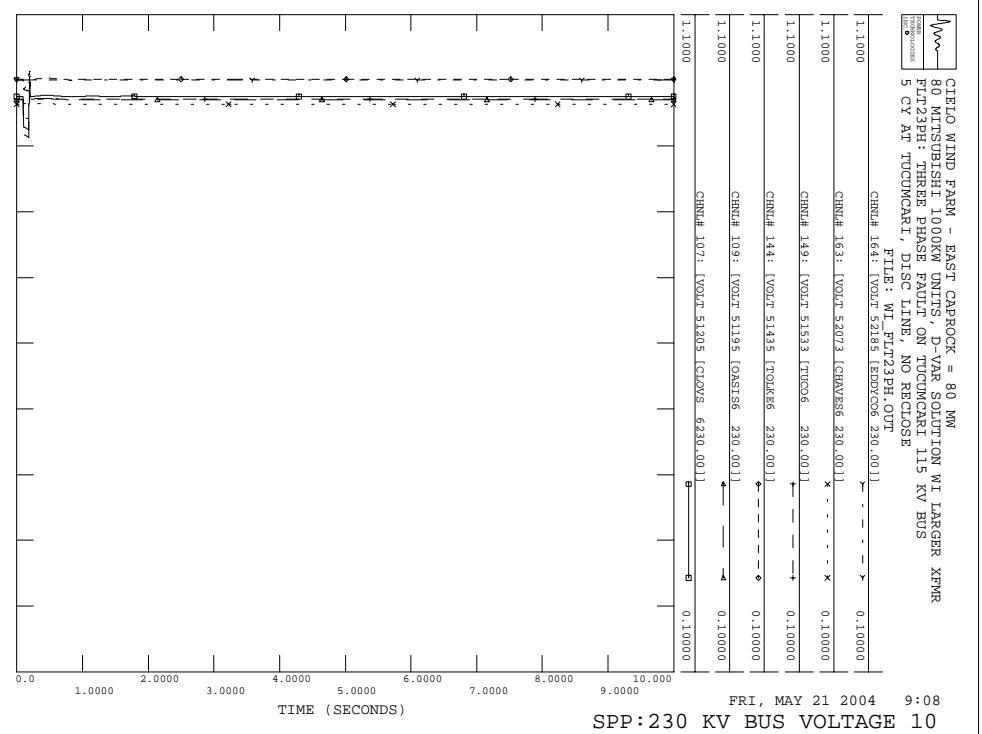


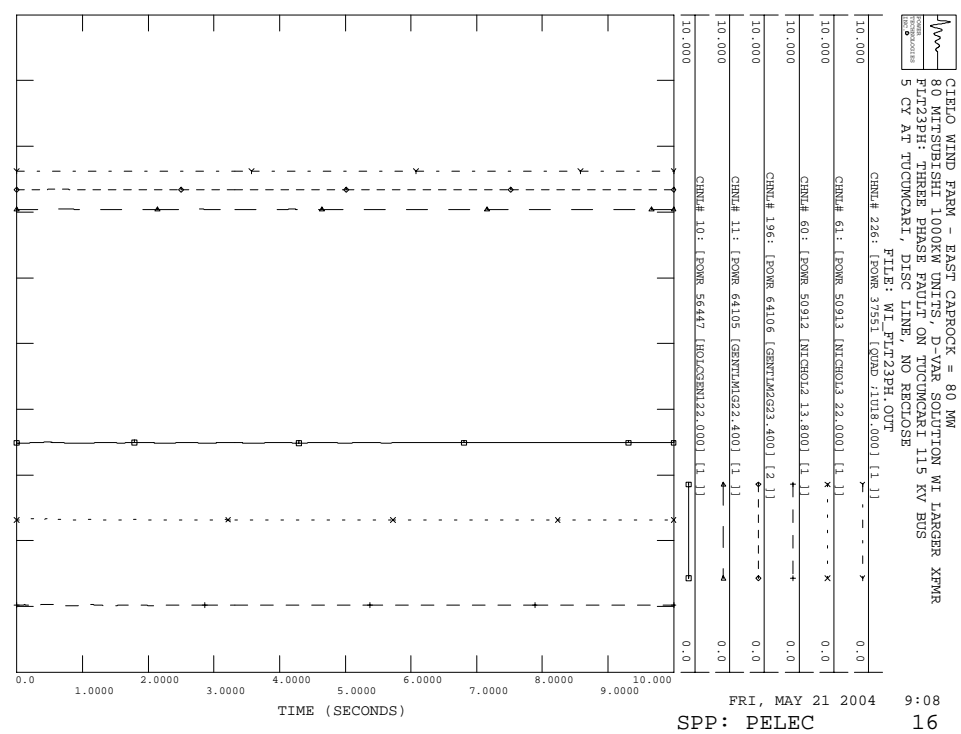
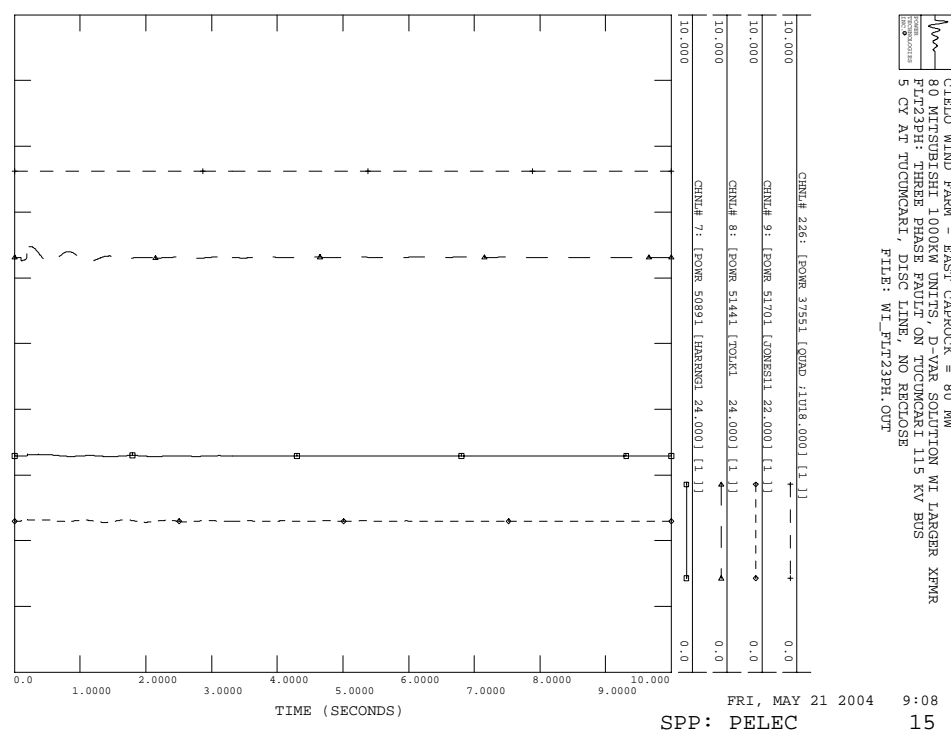
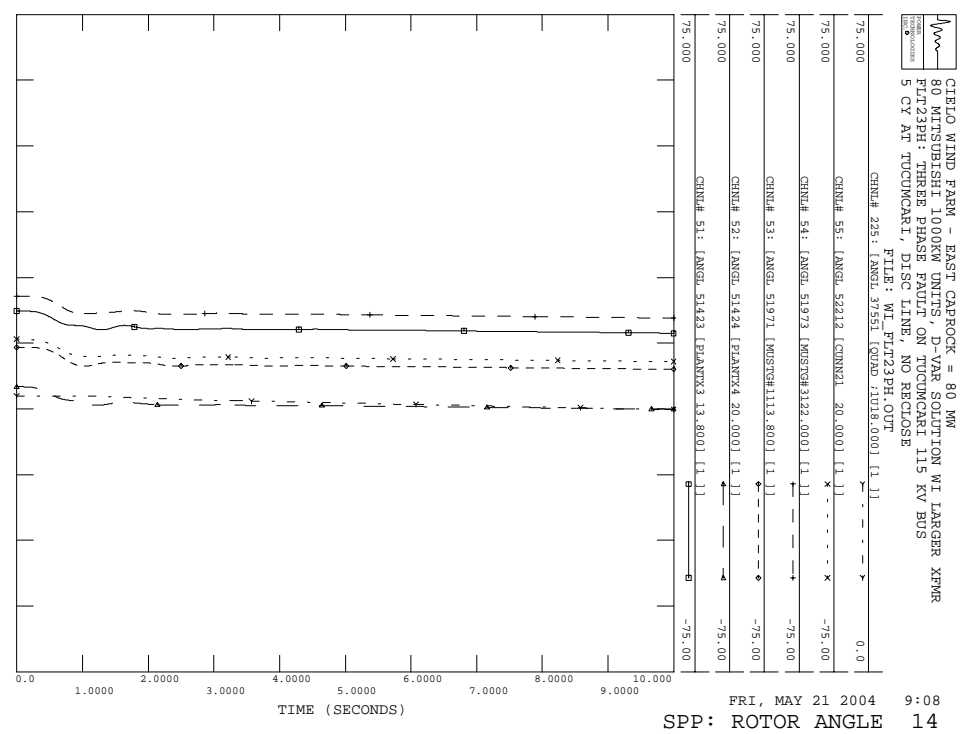
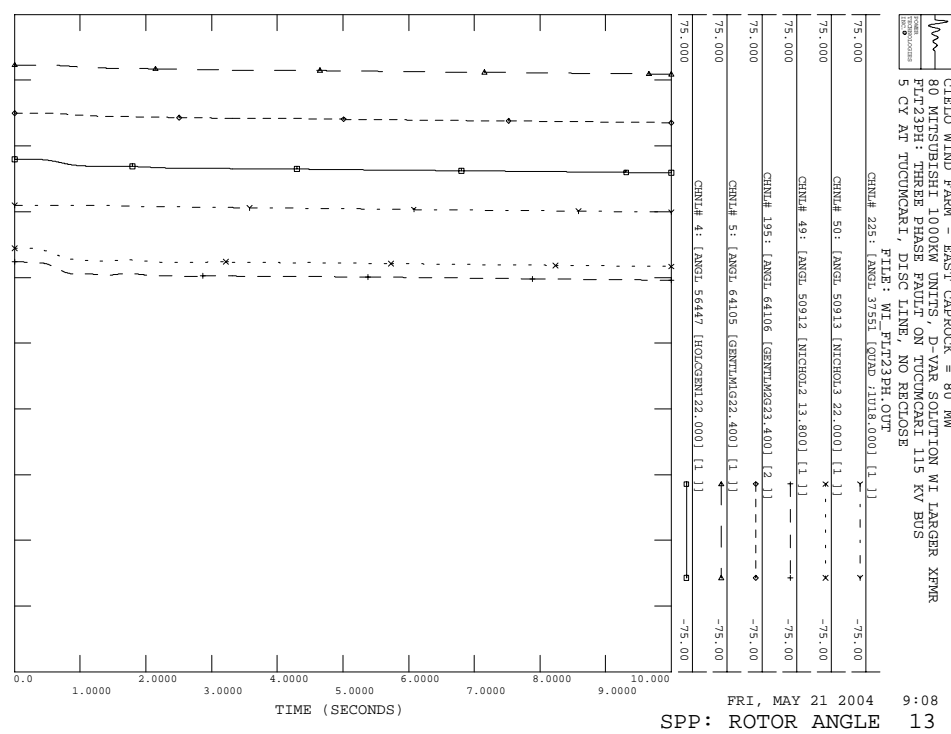
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 DVAR OUTPUT 8

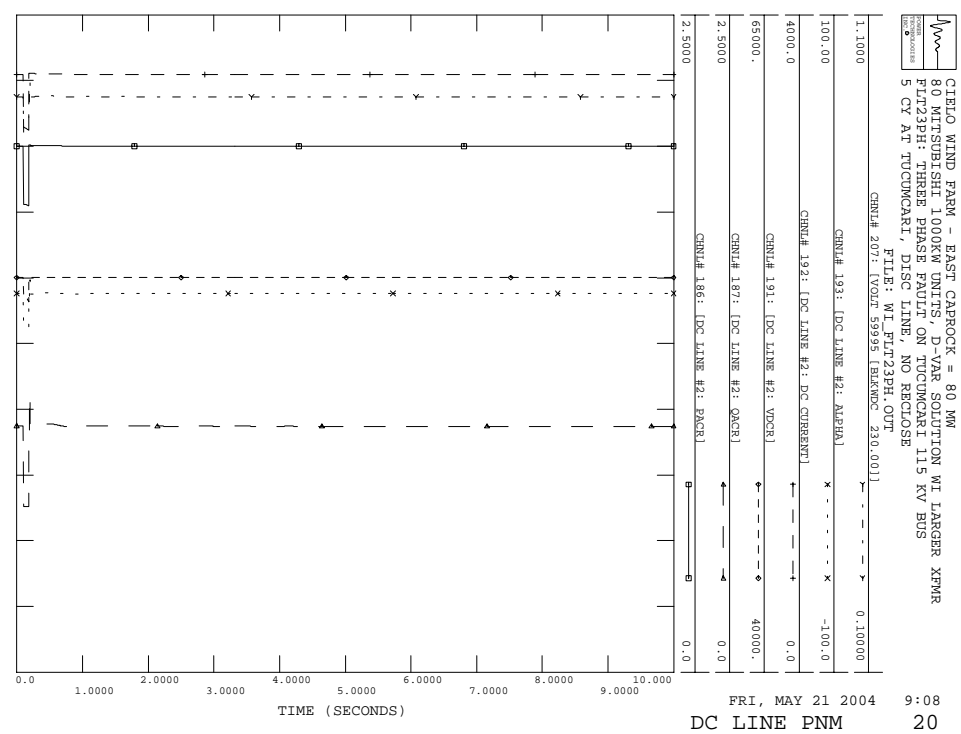
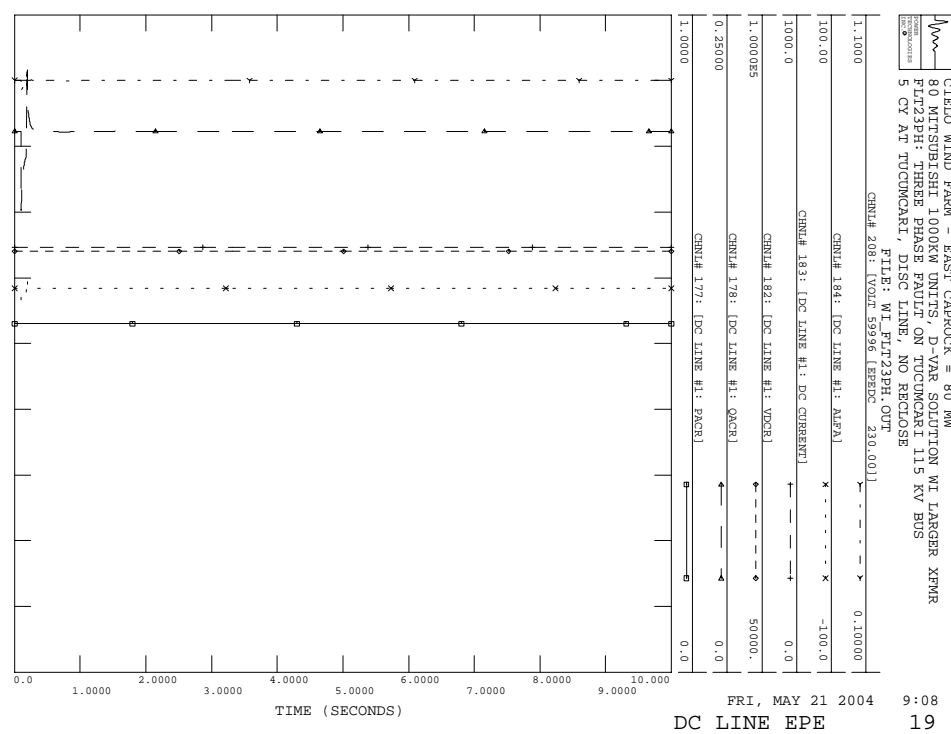
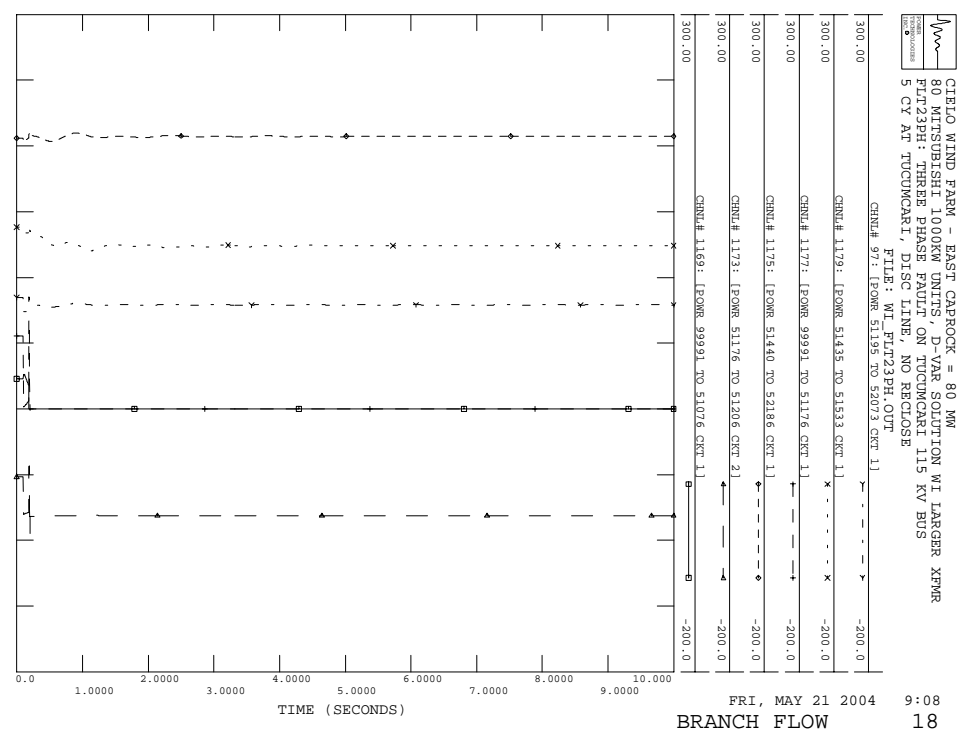
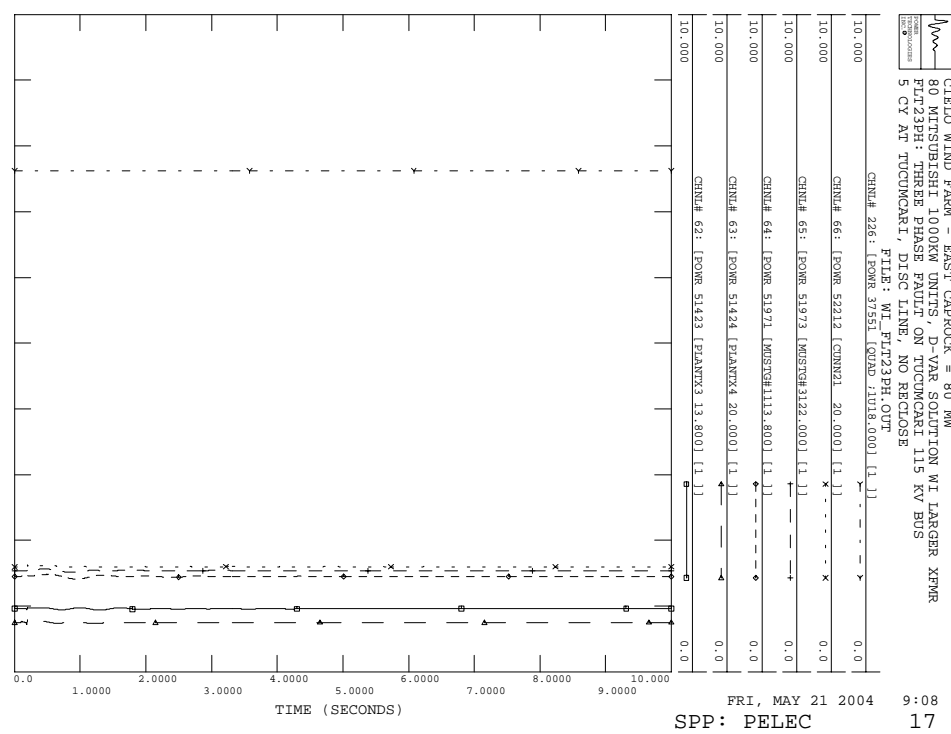
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH.OUT



FRI, MAY 21 2004 9:08
 CIELO VOLTAGE 7



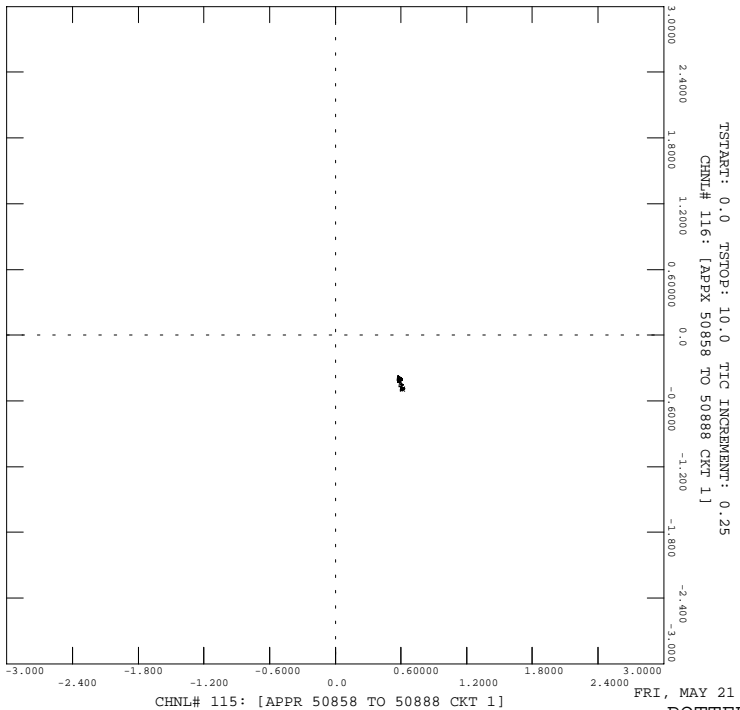






CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT23PH - THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE

FILE: WI_FLT23PH.OUT

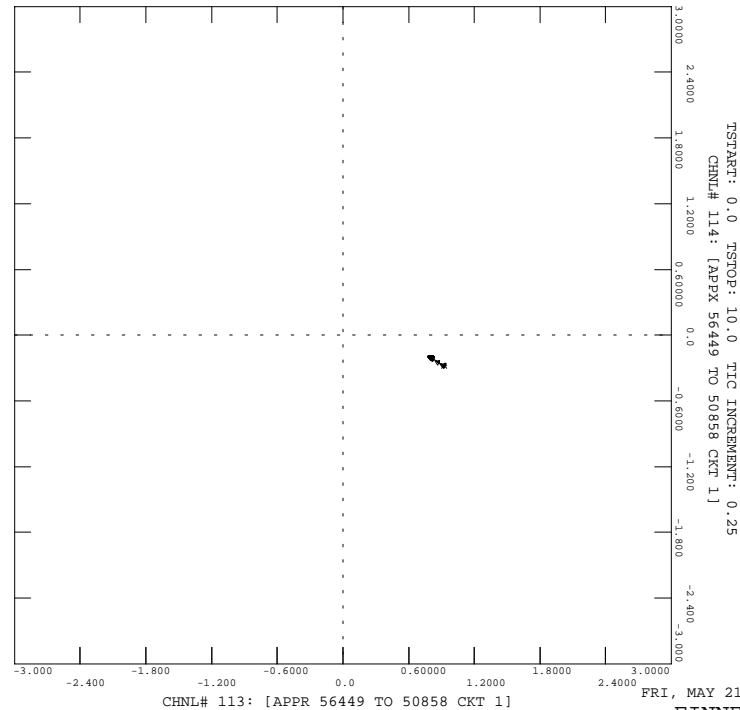


FRI, MAY 21 2004 9:08
 CHNL# 115: [APPR 50858 TO 50888 CKT 1] POTTER-FINNEY 22



CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT23PH - THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE

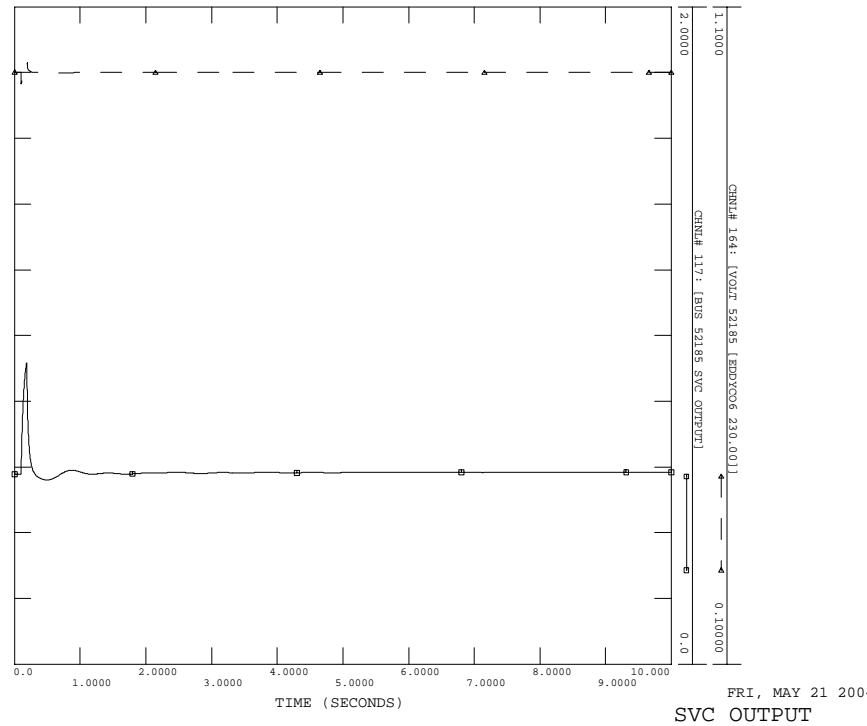
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FRI, MAY 21 2004 9:08
 CHNL# 113: [APPR 56449 TO 50858 CKT 1] FINNEY-HOLCOMB 21

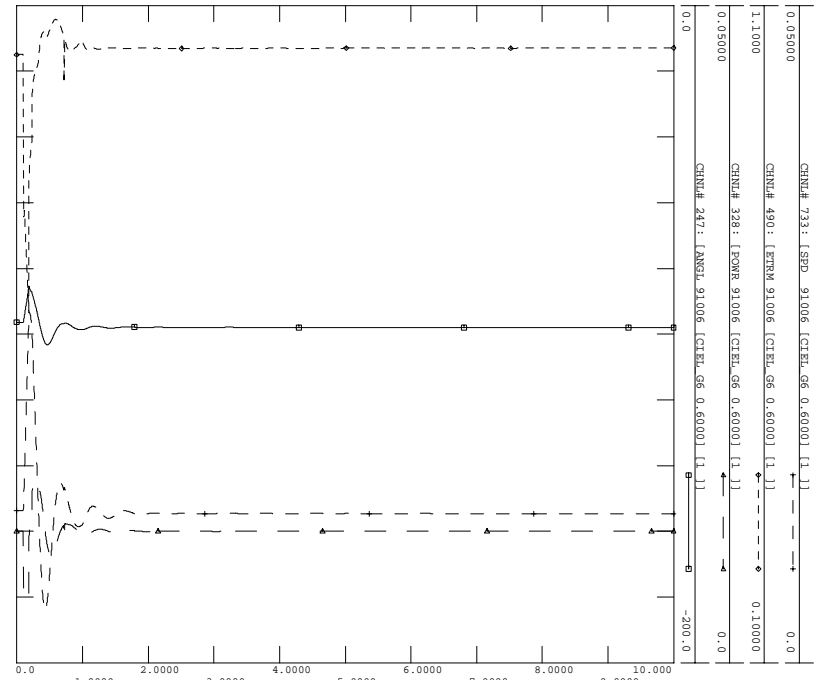


CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT23PH - THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH.OUT



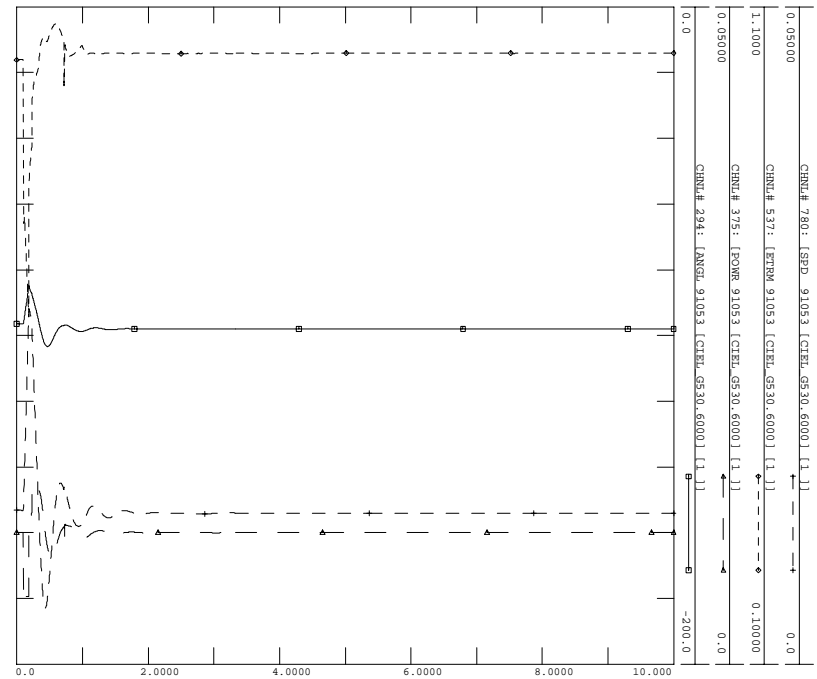
FRI, MAY 21 2004 9:08
 SVC OUTPUT 23

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH.OUT



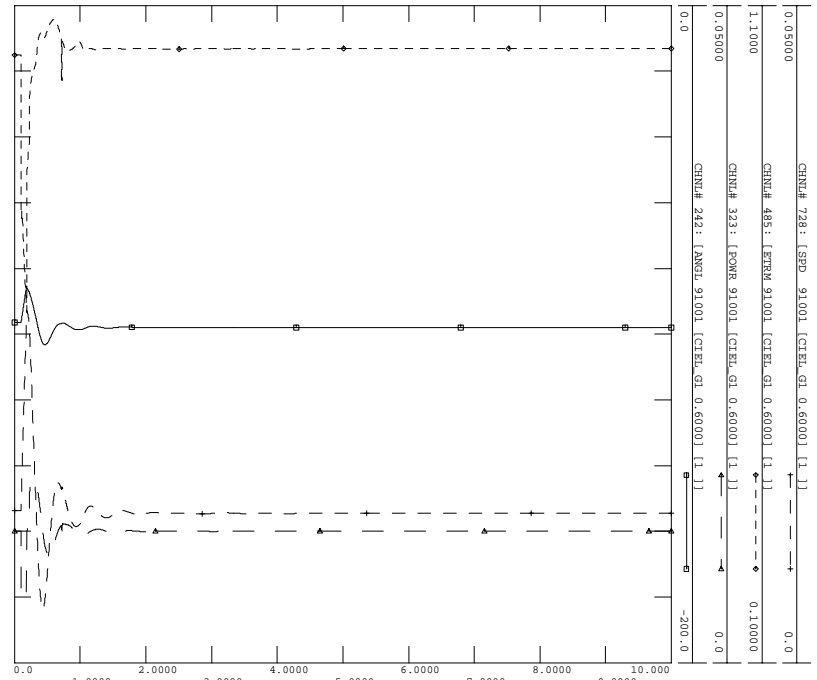
FRI, MAY 21 2004 9:08
 CIELO CABLE1 GEN6 2

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH.OUT



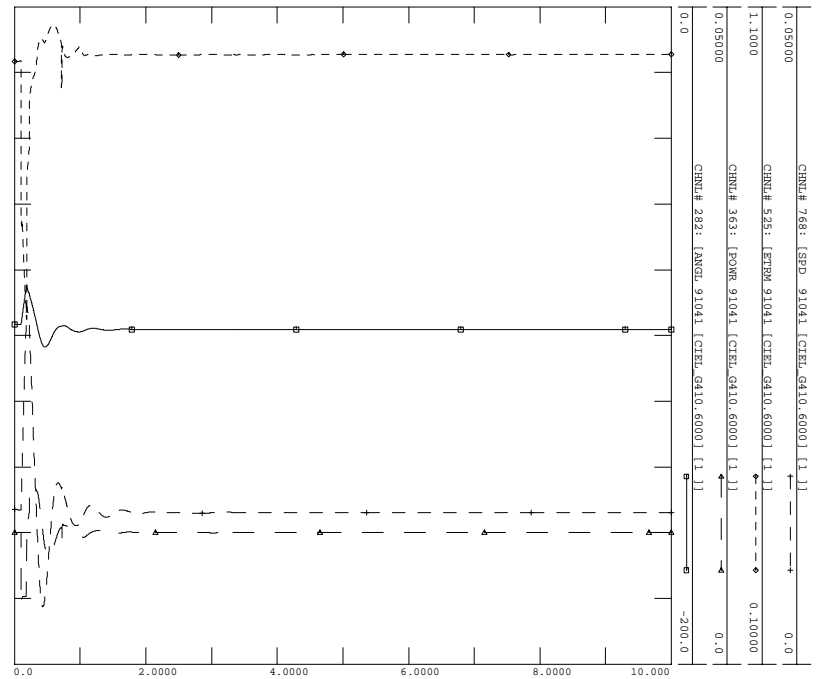
FRI, MAY 21 2004 9:08
 CIELO CABLE2 GEN53 4

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH.OUT



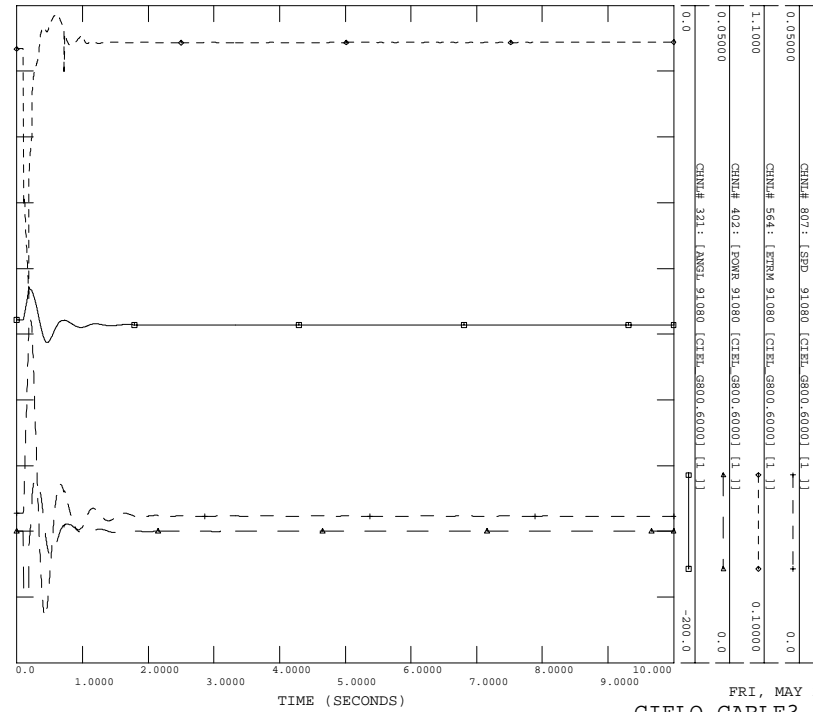
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 CIELO CABLE1 GEN1 1

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH.OUT



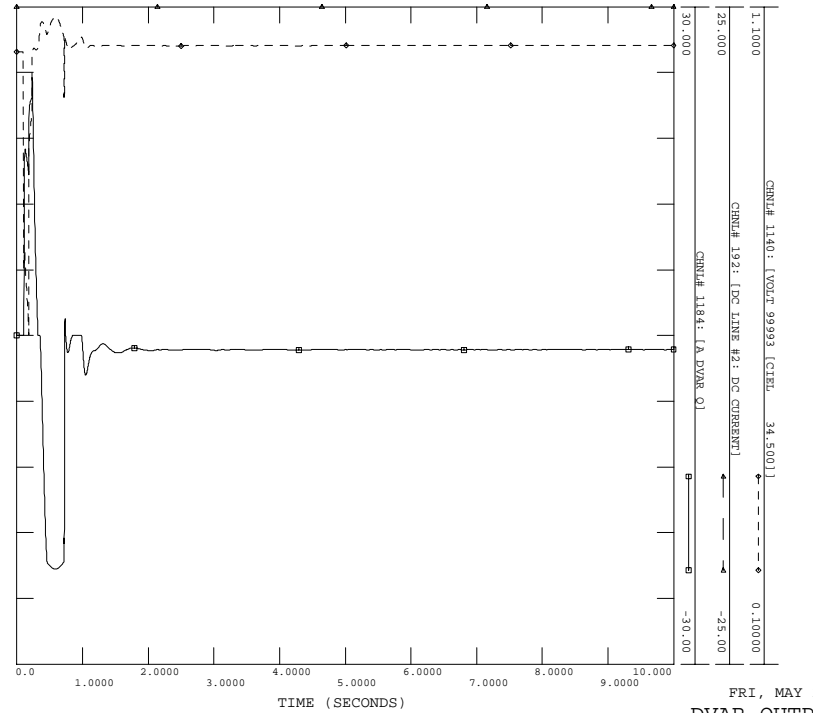
FRI, MAY 21 2004 9:08
 CIELO CABLE2 GEN41 3

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH.OUT



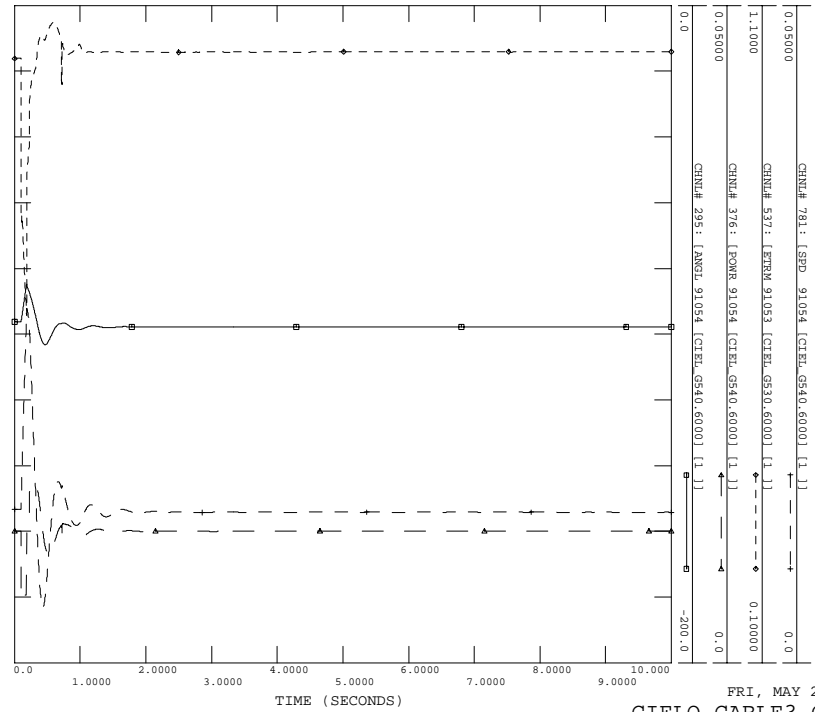
FRI, MAY 21 2004 9:08
 CIELO CABLE3 GEN80 6

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH.OUT



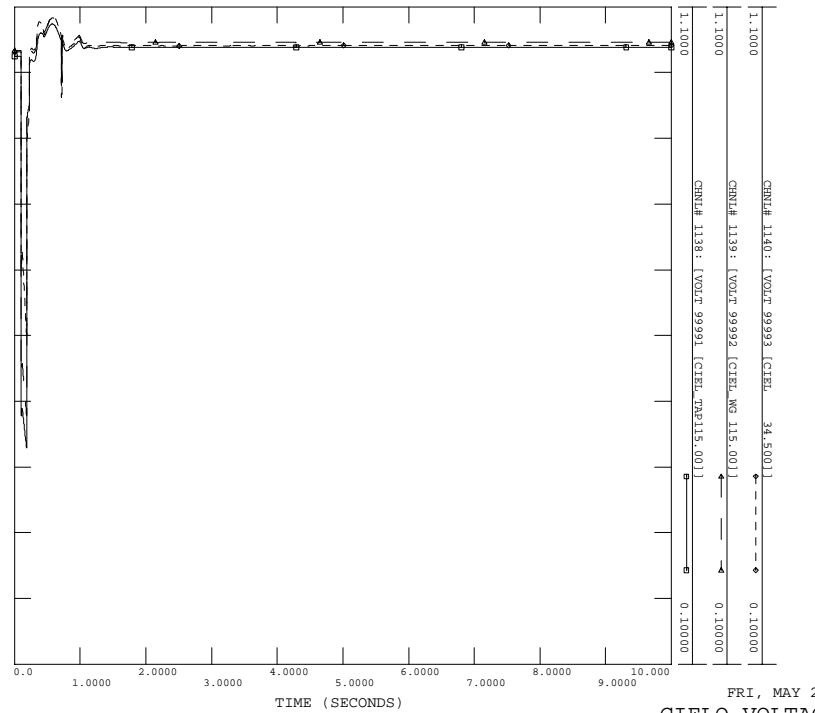
FRI, MAY 21 2004 9:08
 DVAR OUTPUT 8

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH.OUT

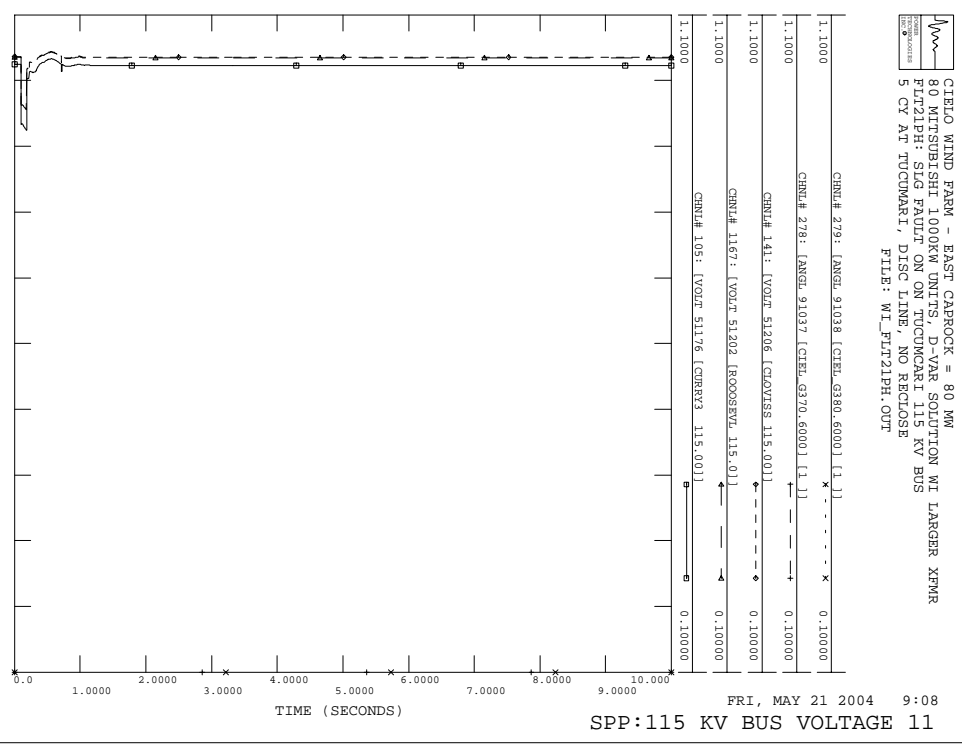
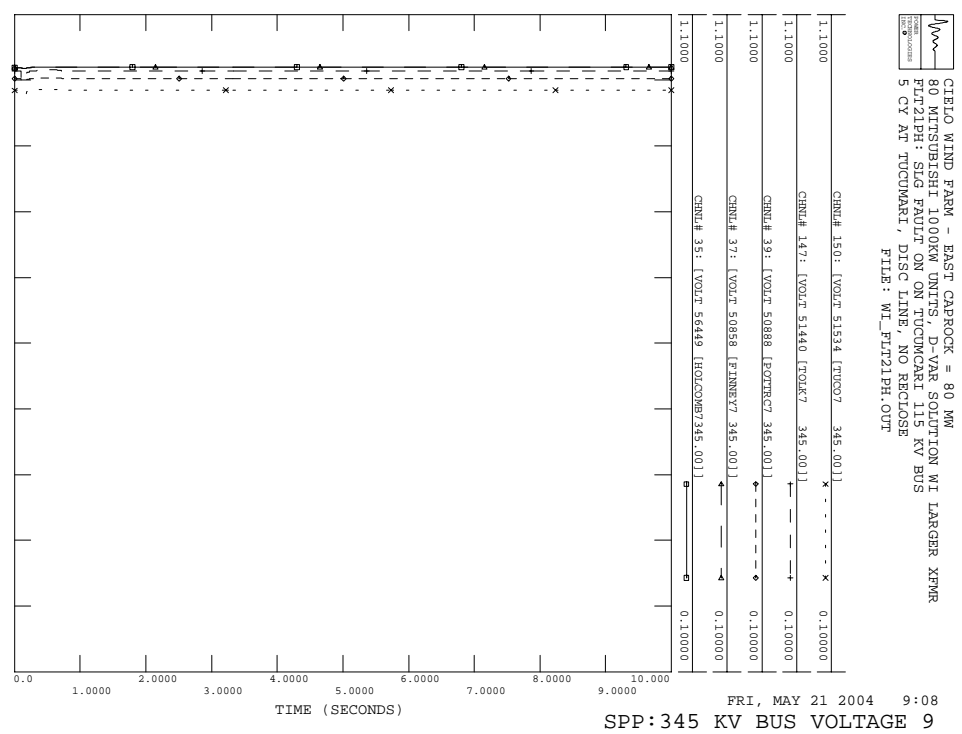
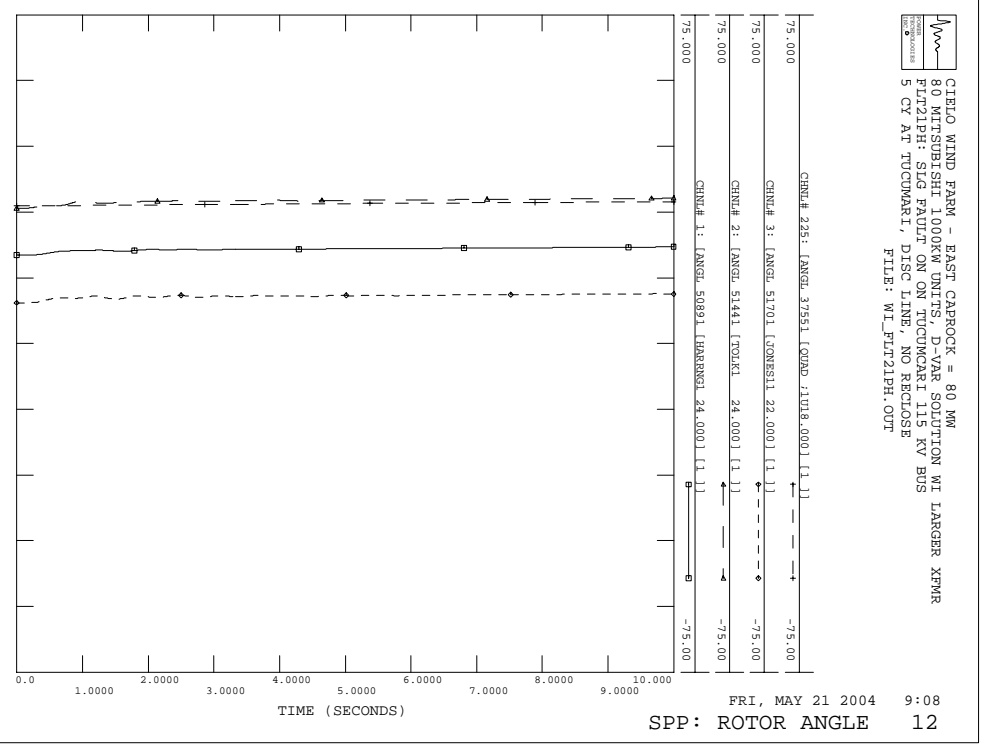
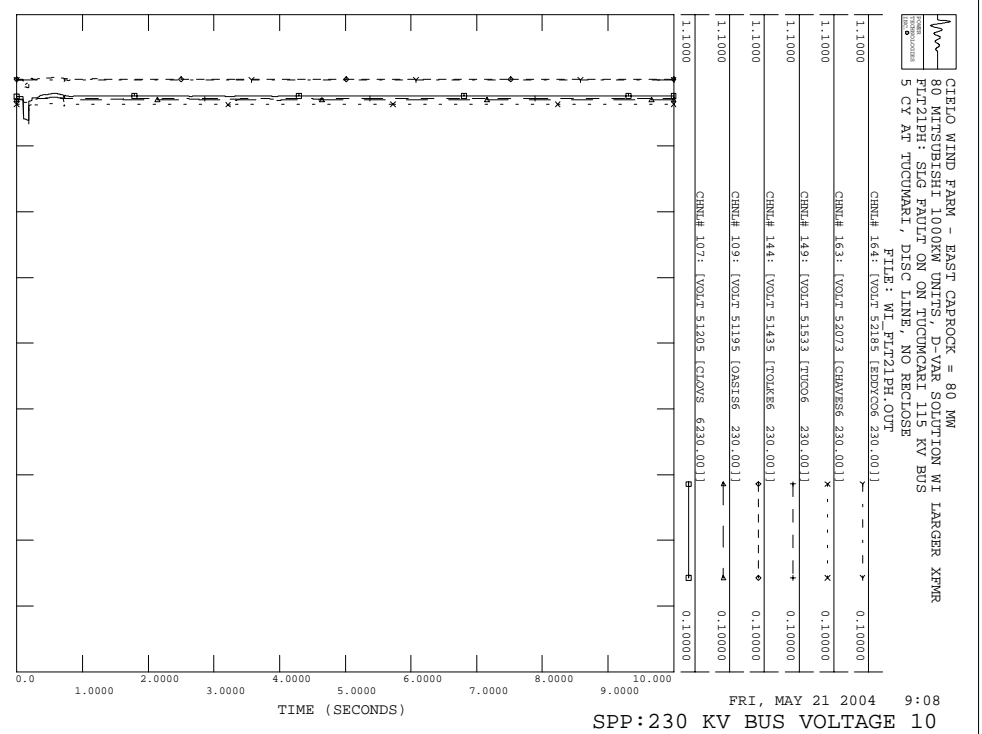


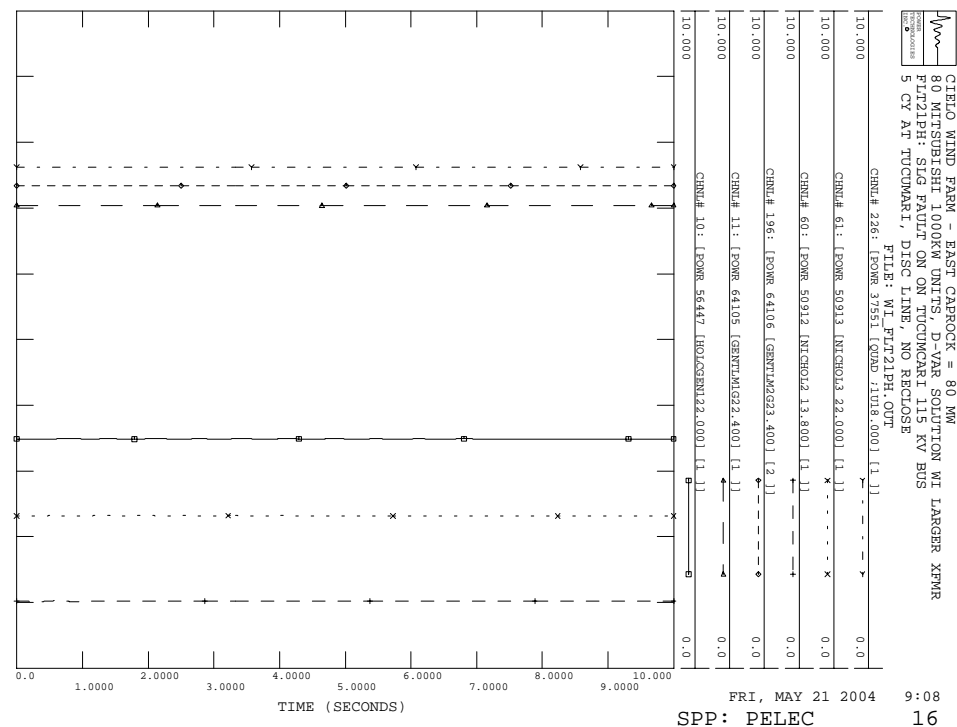
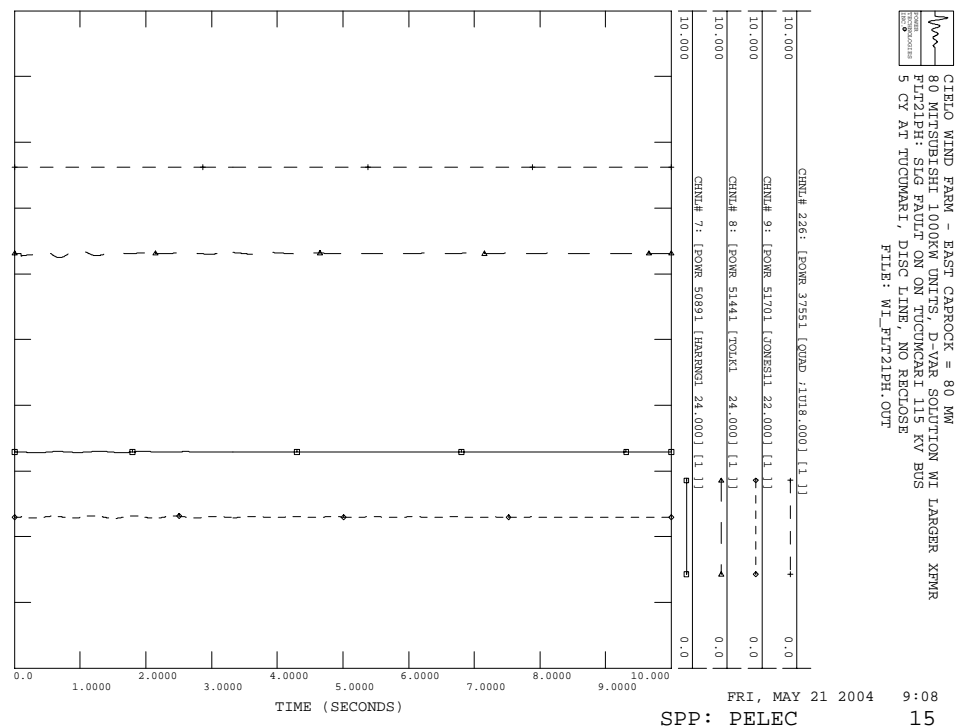
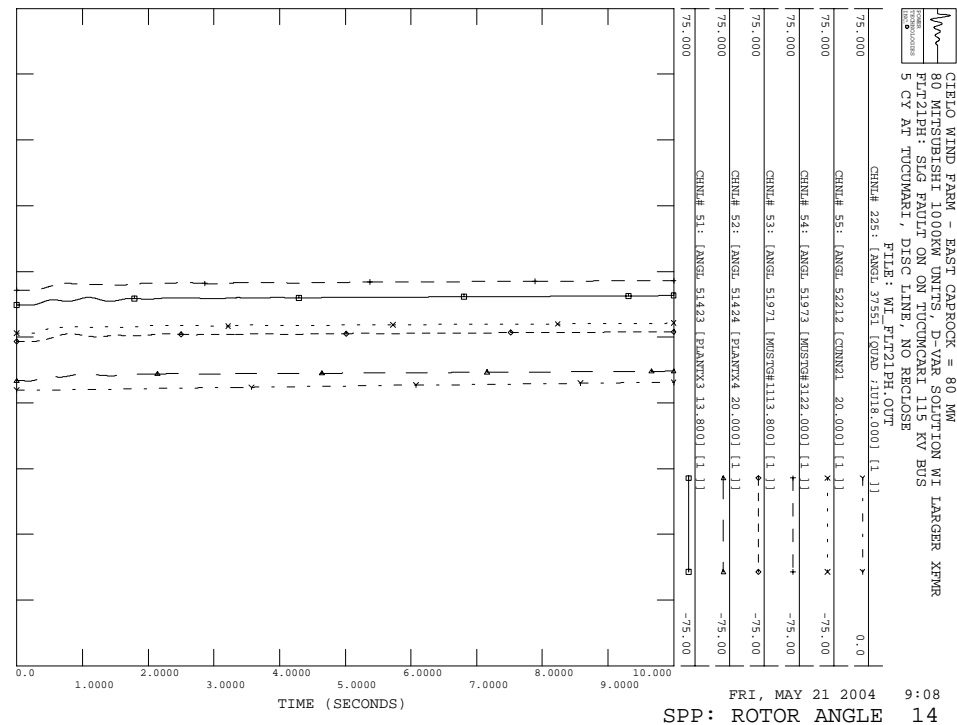
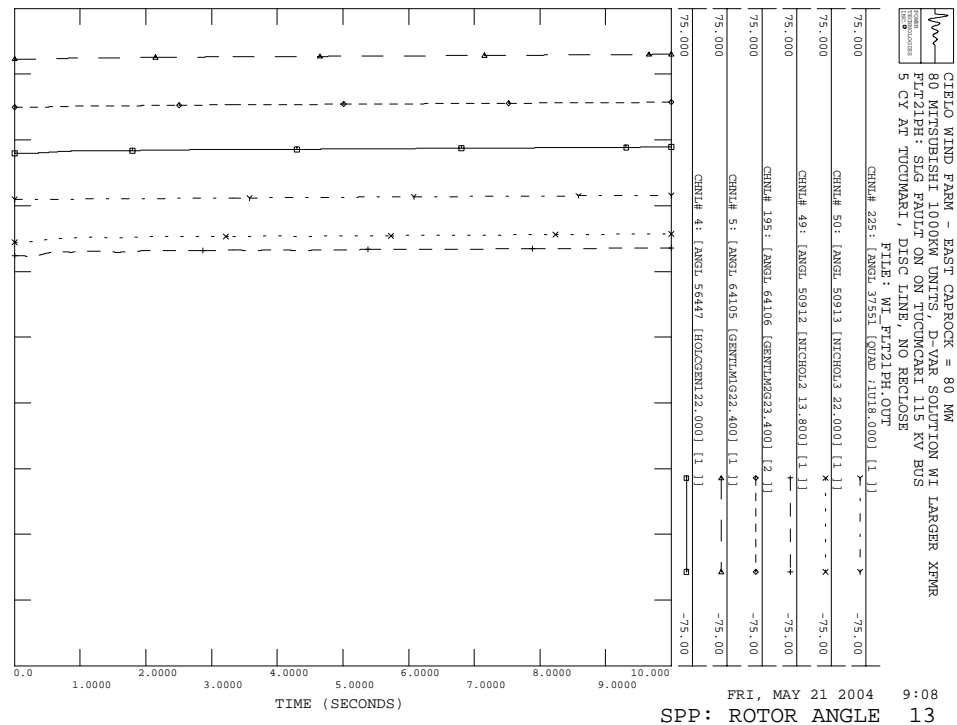
FRI, MAY 21 2004 9:08
 CIELO CABLE3 GEN54 5

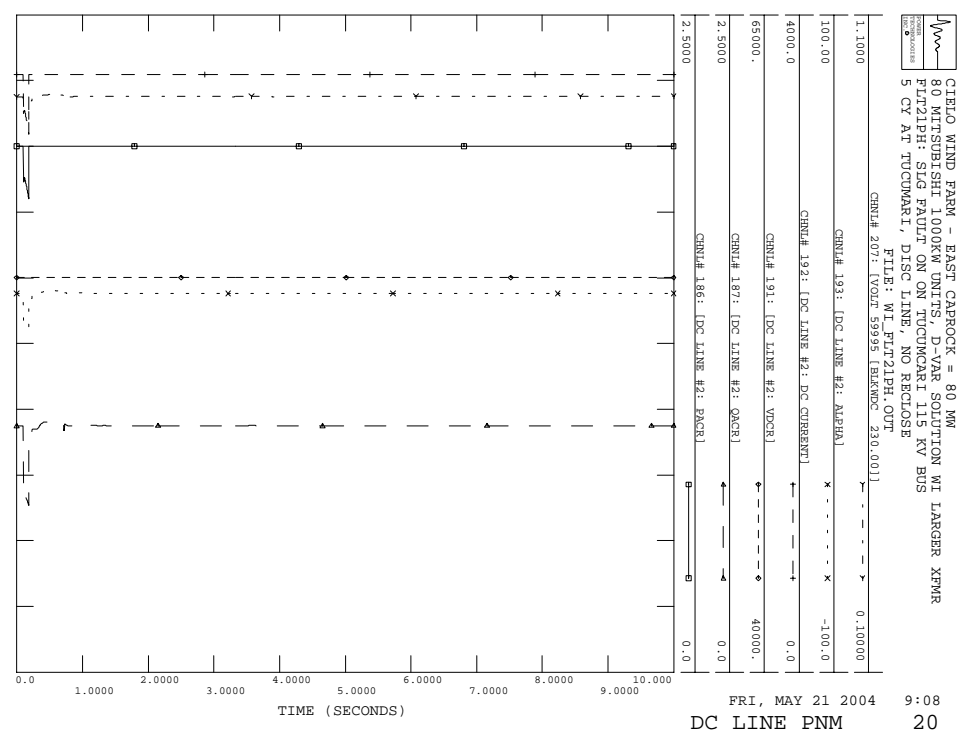
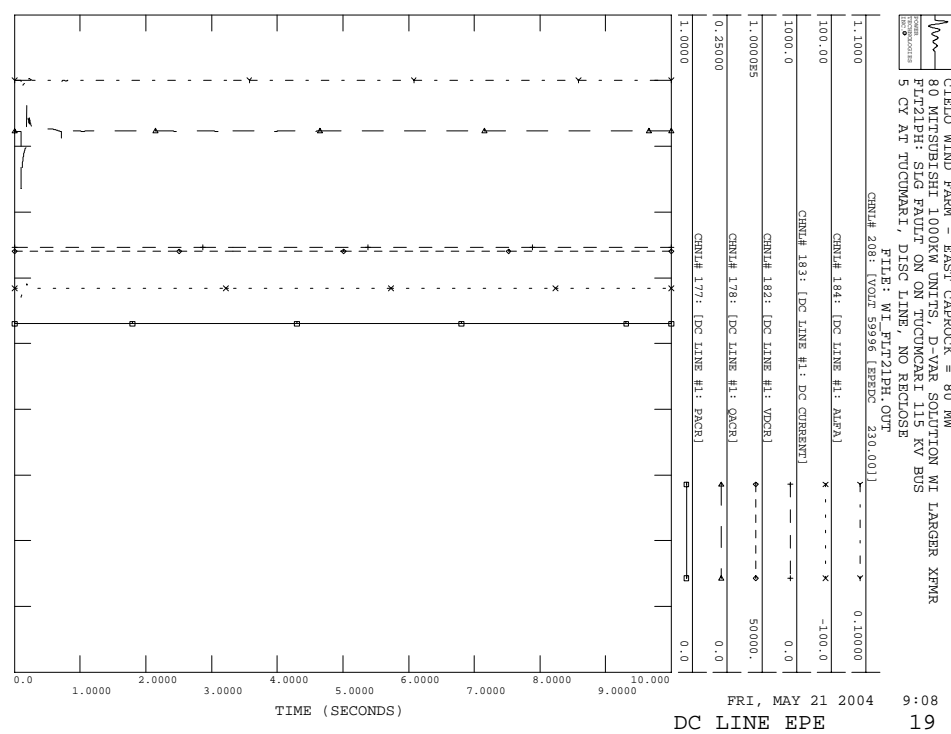
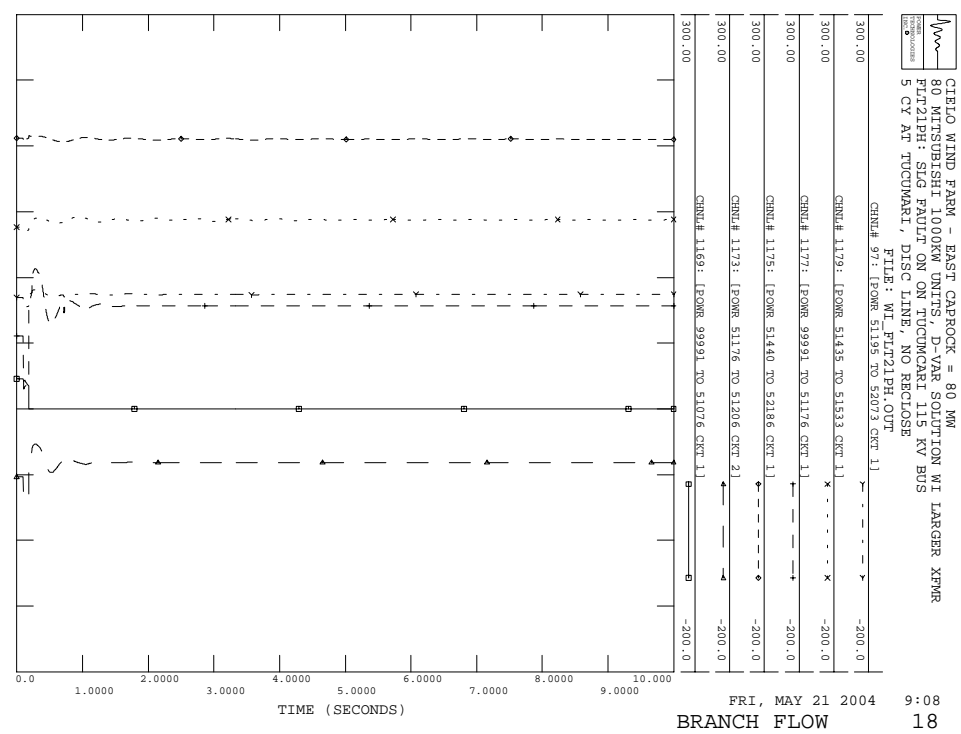
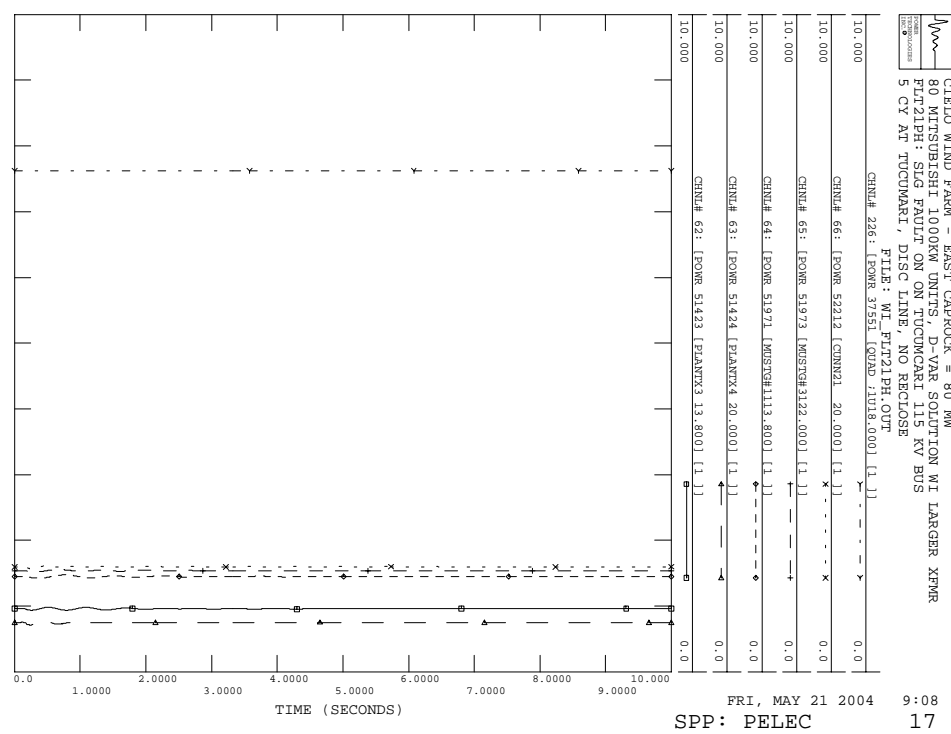
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH.OUT



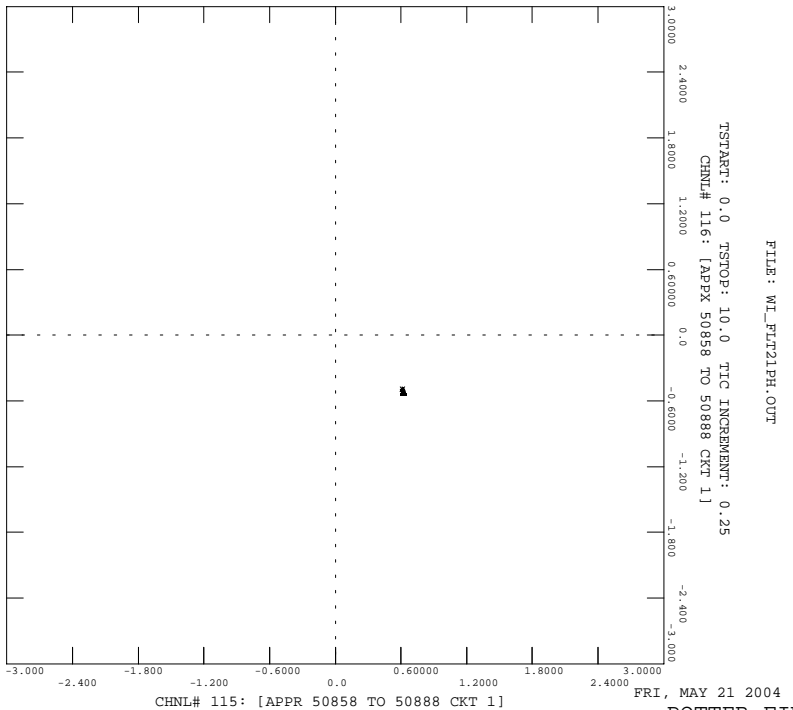
FRI, MAY 21 2004 9:08
 CIELO VOLTAGE 7



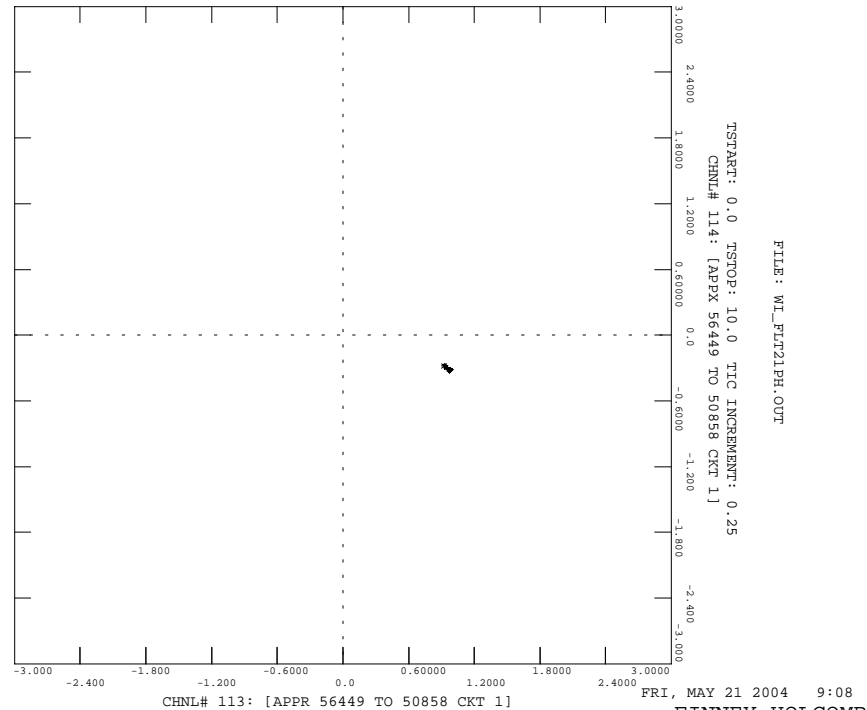




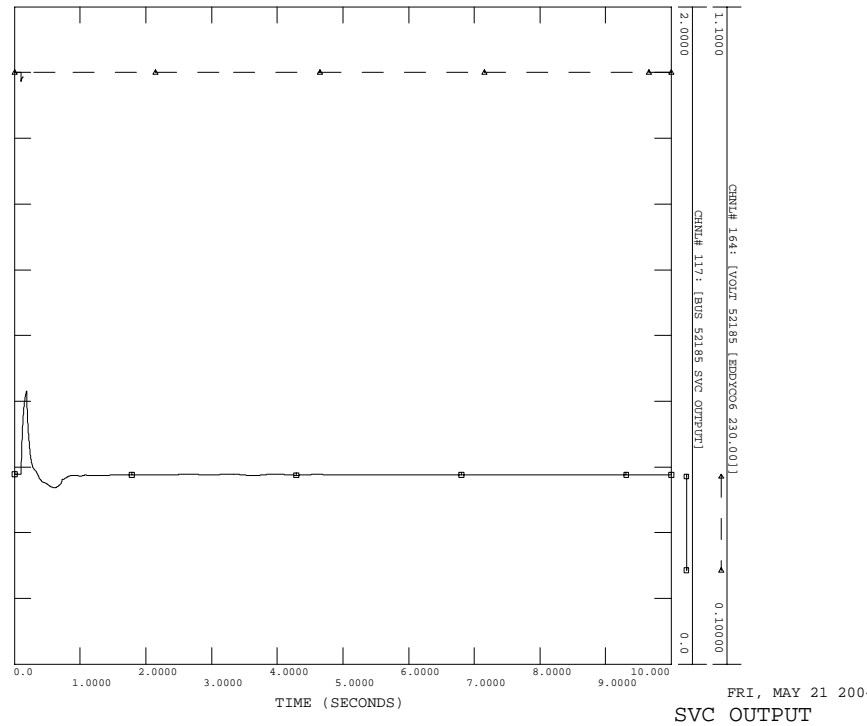
CIELLO WIND FARM - EAST CABROCK = 80 MW
80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
5 CT AT TUCUMARI, DISC LINE, NO RECLOSE



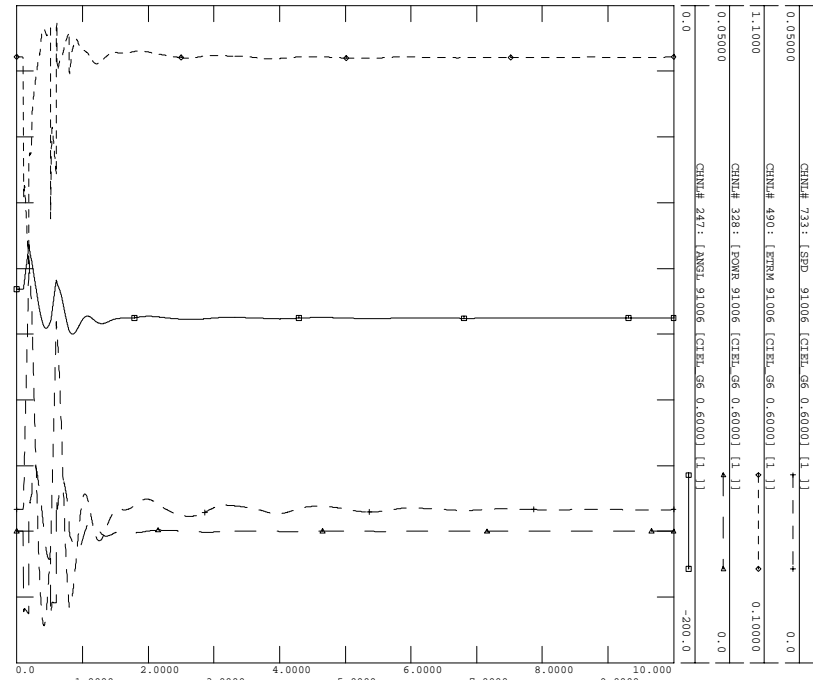
CIELLO WIND FARM - EAST CABROCK = 80 MW
80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
5 CT AT TUCUMARI, DISC LINE, NO RECLOSE



CIELLO WIND FARM - EAST CABROCK = 80 MW
80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
5 CT AT TUCUMARI, DISC LINE, NO RECLOSE

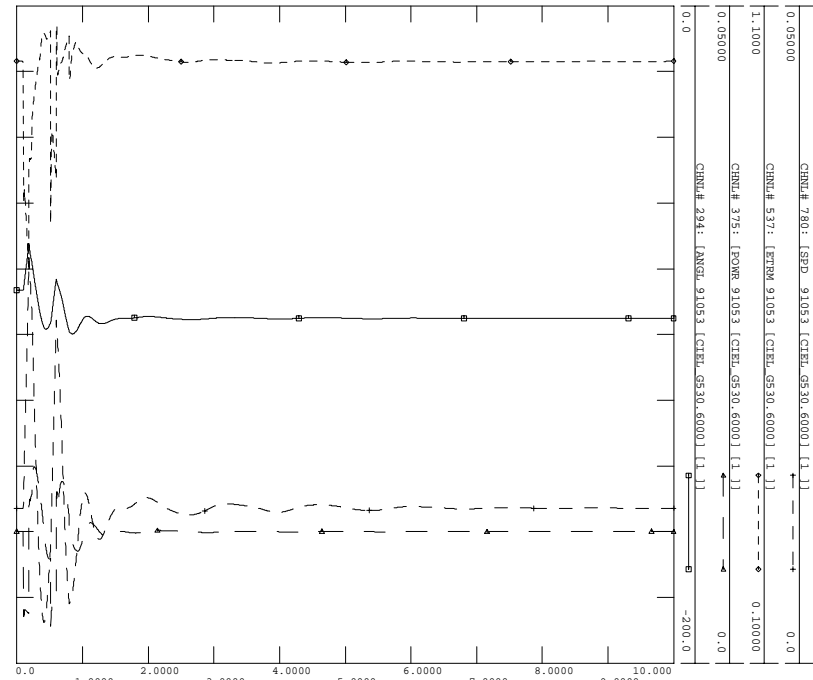


SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH.OUT



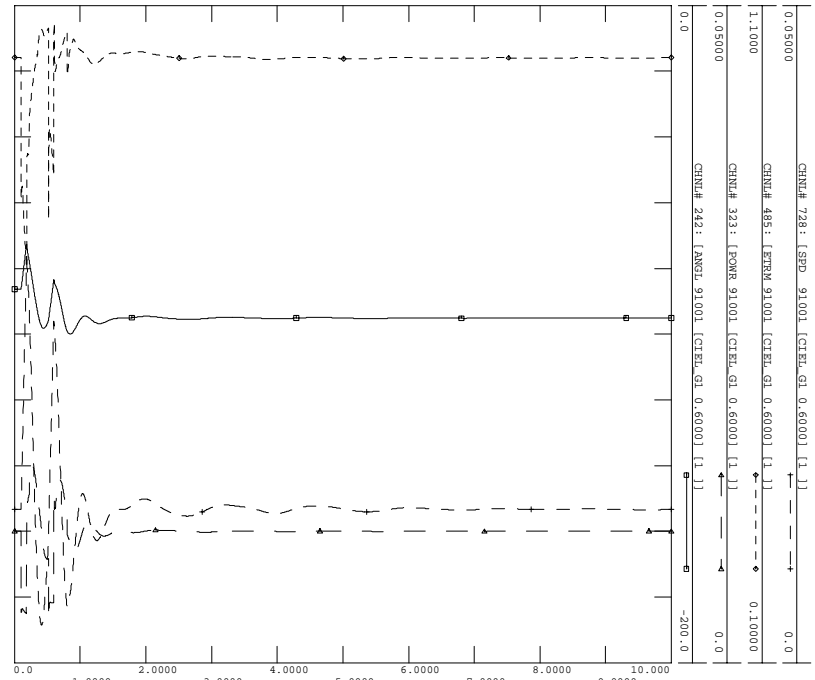
FRI, MAY 21 2004 9:09
 CIELO CABLE1 GEN6 2

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH.OUT



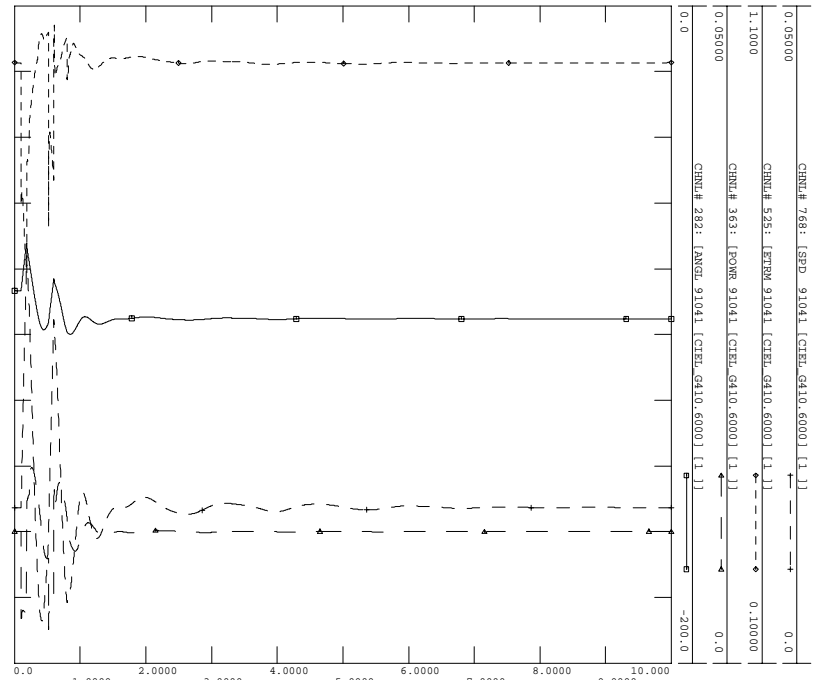
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 CIELO CABLE2 GEN53 4

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH.OUT



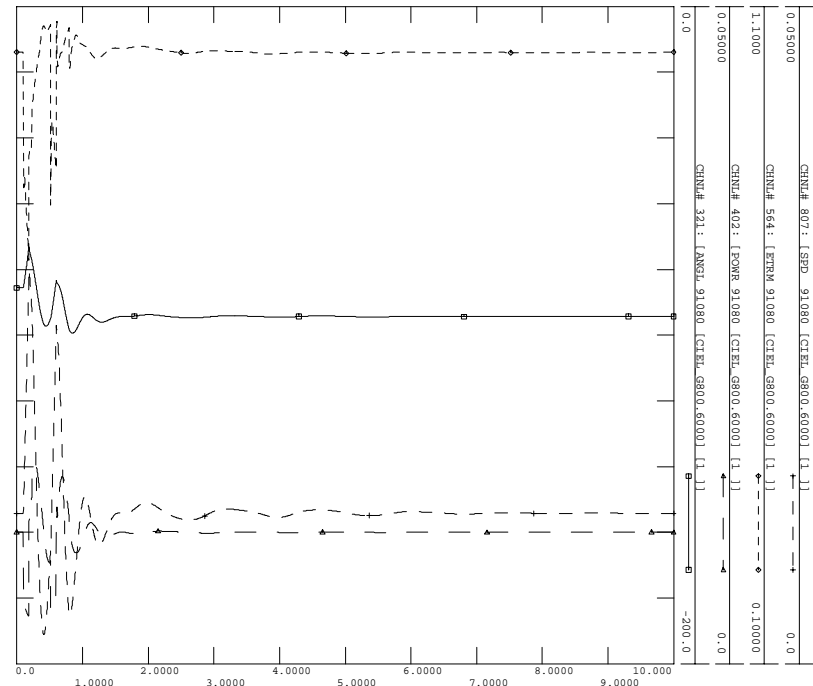
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 CIELO CABLE1 GEN1 1

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH.OUT



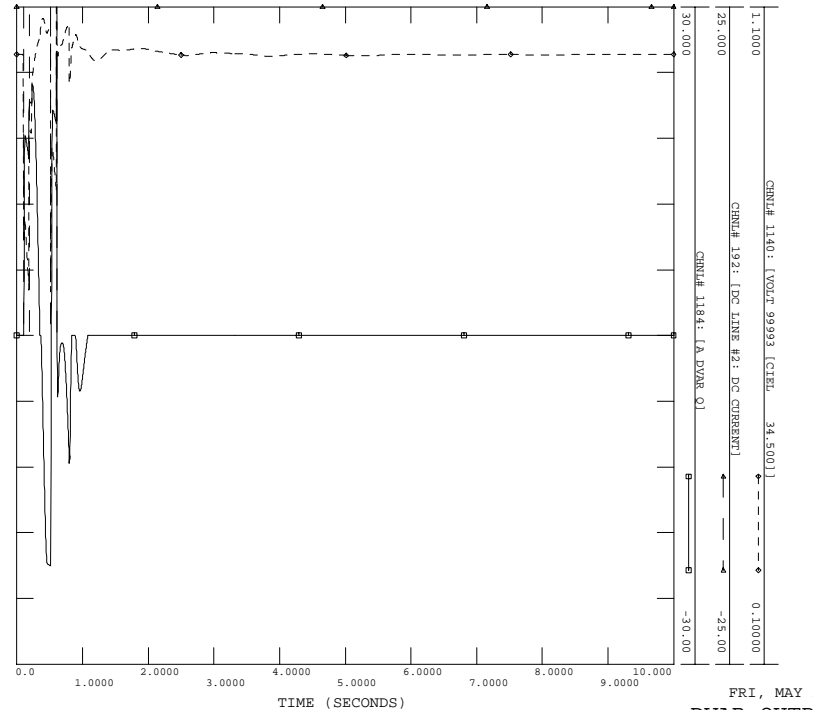
FRI, MAY 21 2004 9:09
 CIELO CABLE2 GEN41 3

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH.OUT



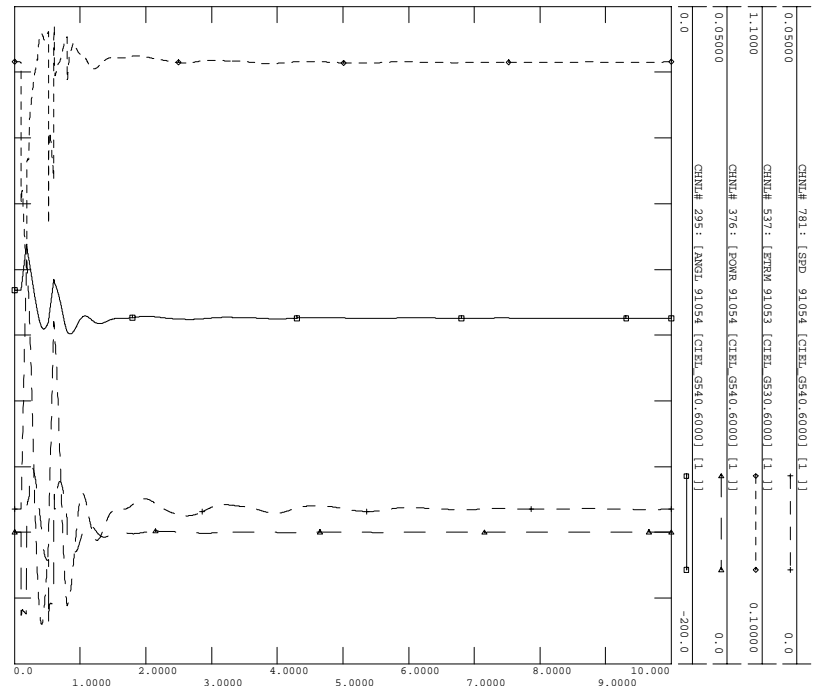
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 CIELO CABLE3 GEN80 6

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH.OUT



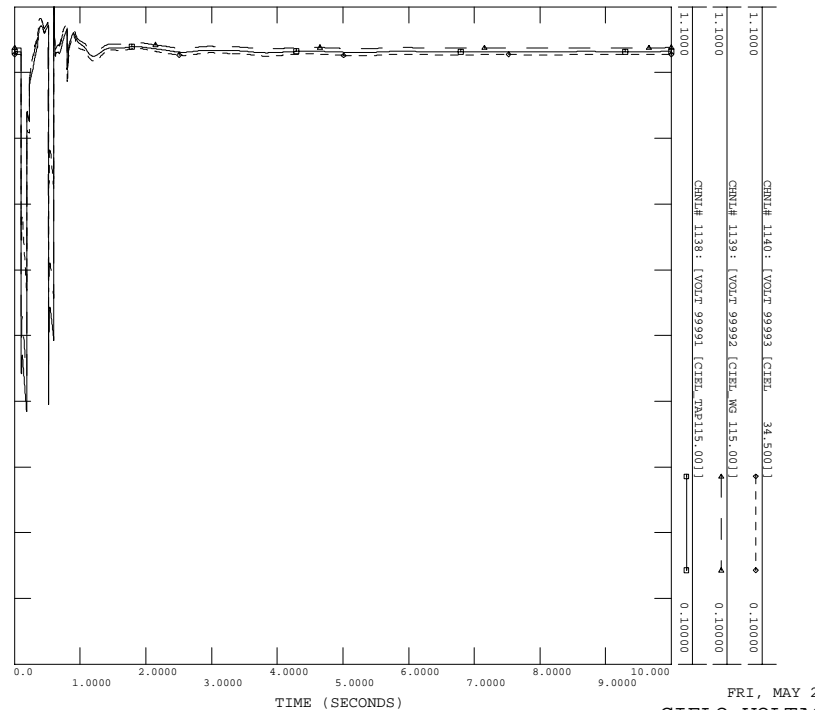
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 DVAR OUTPUT 8

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH.OUT

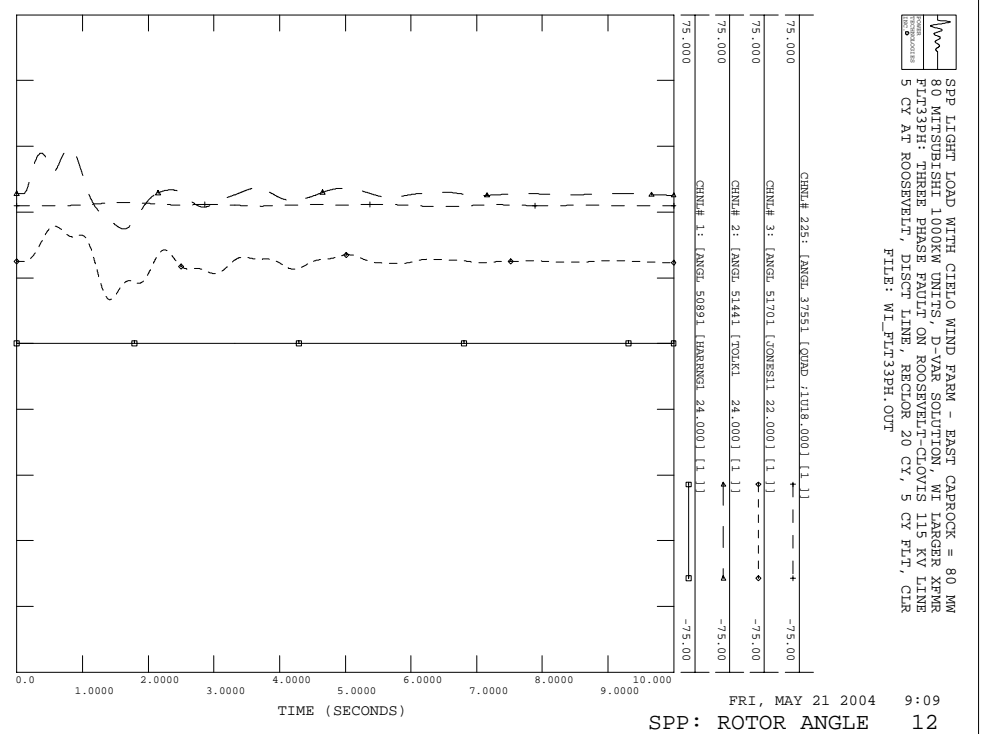
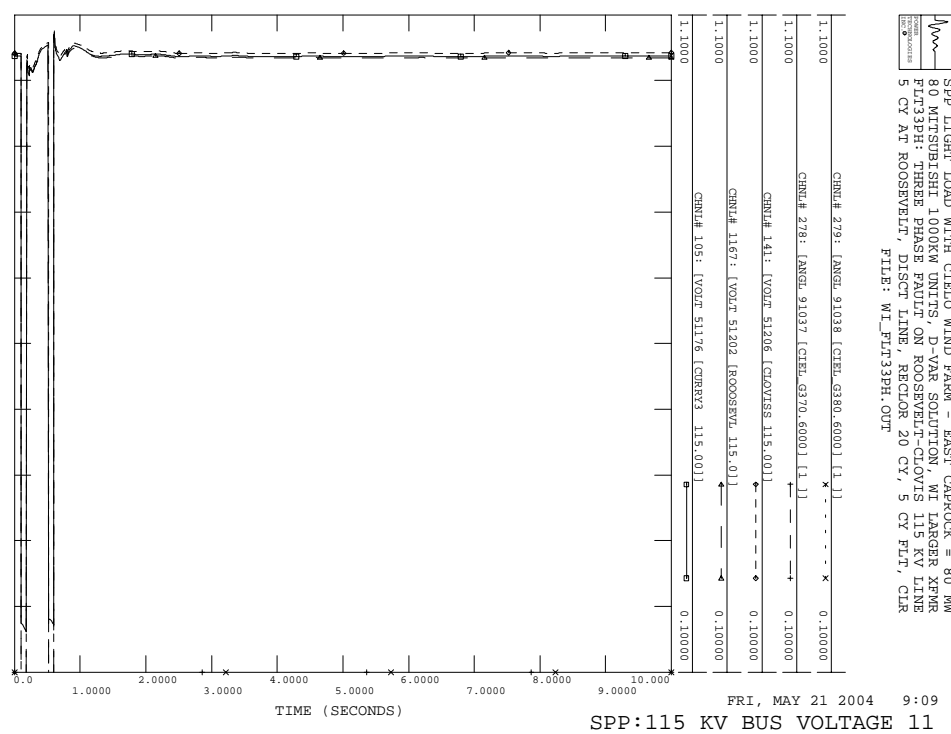
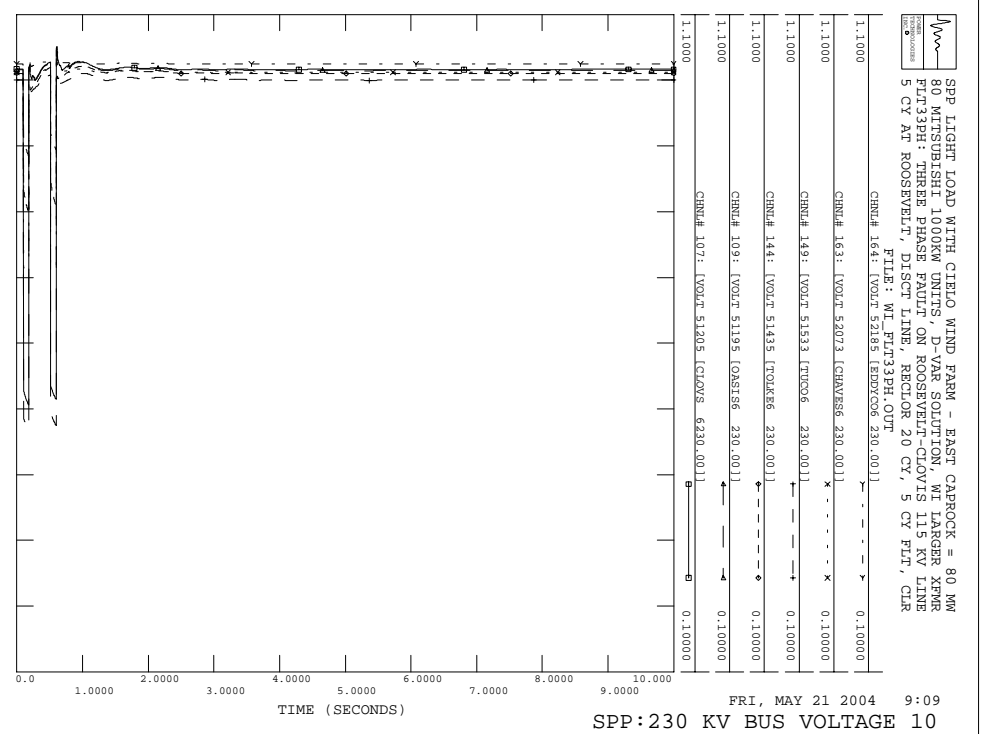
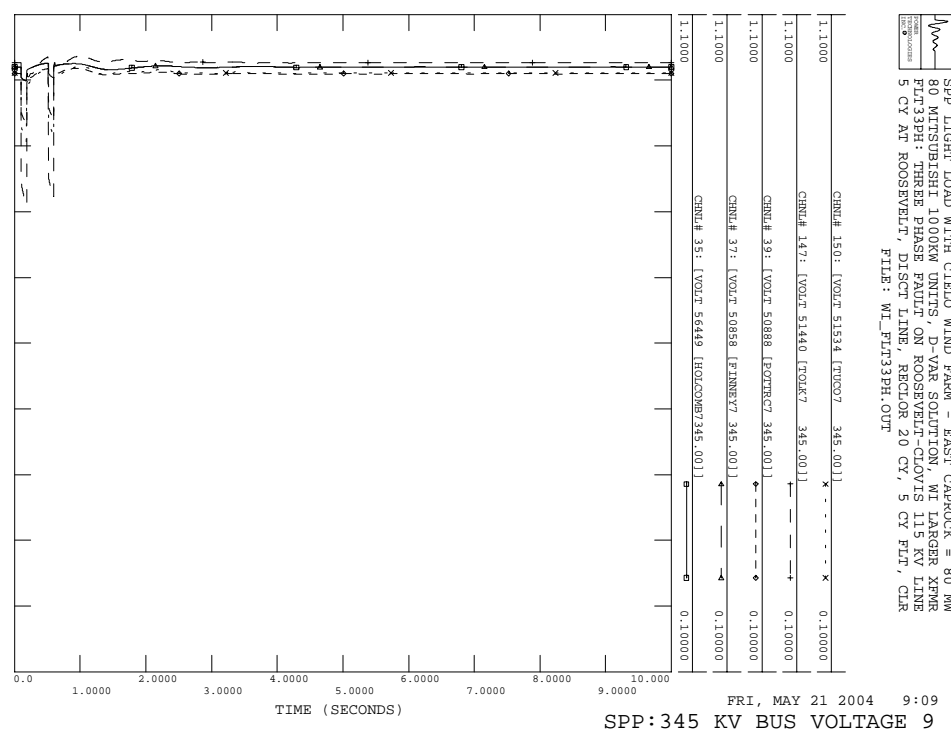


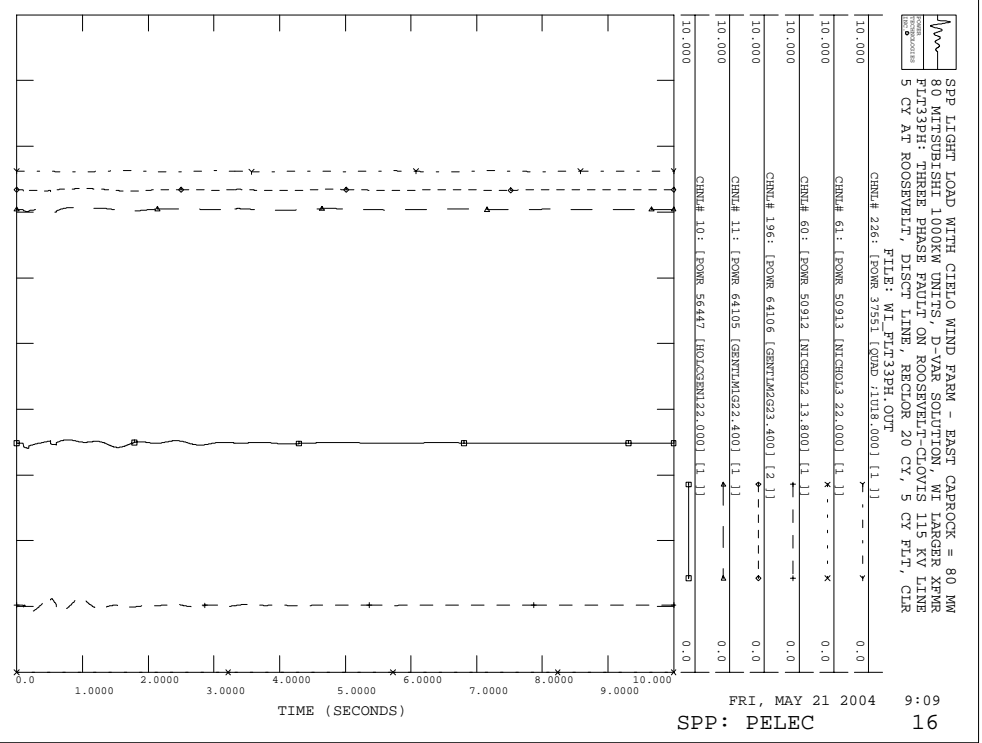
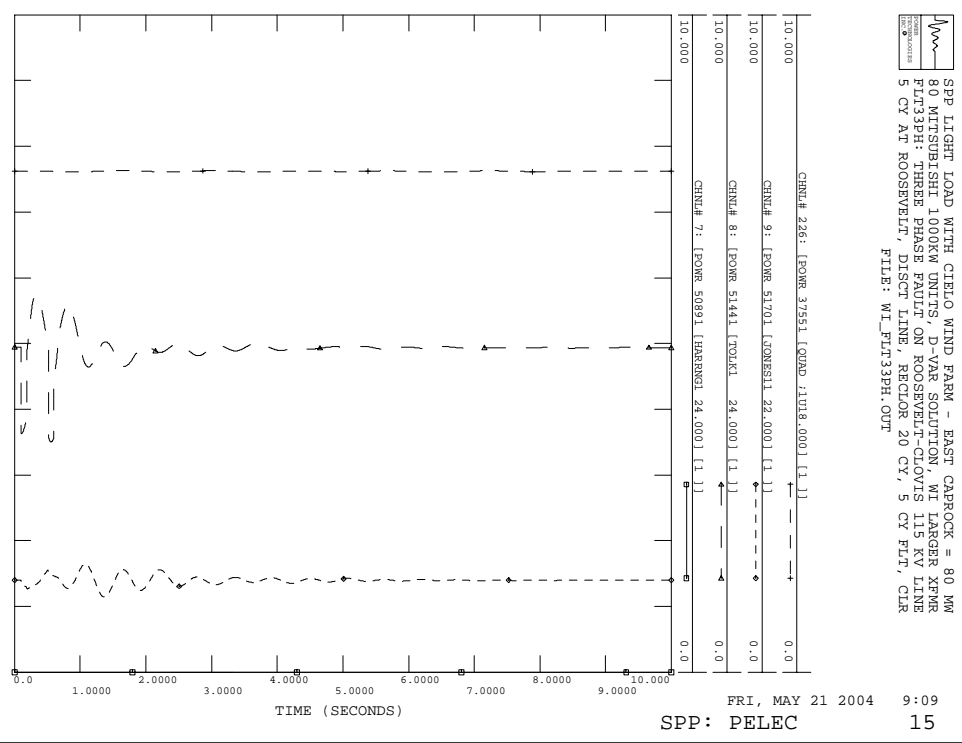
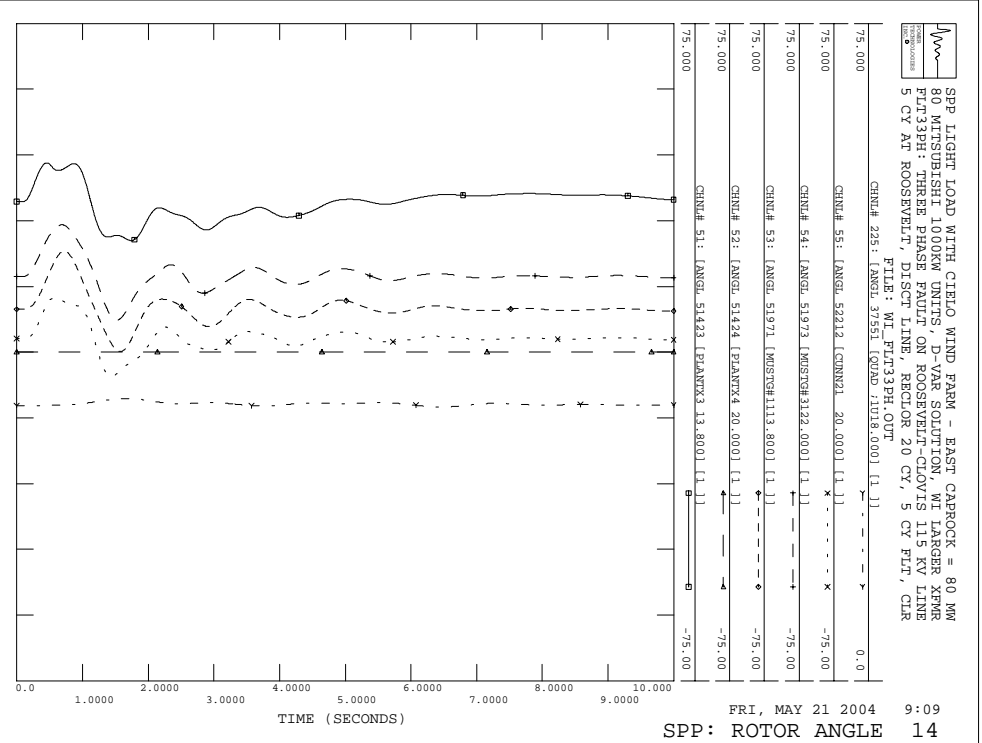
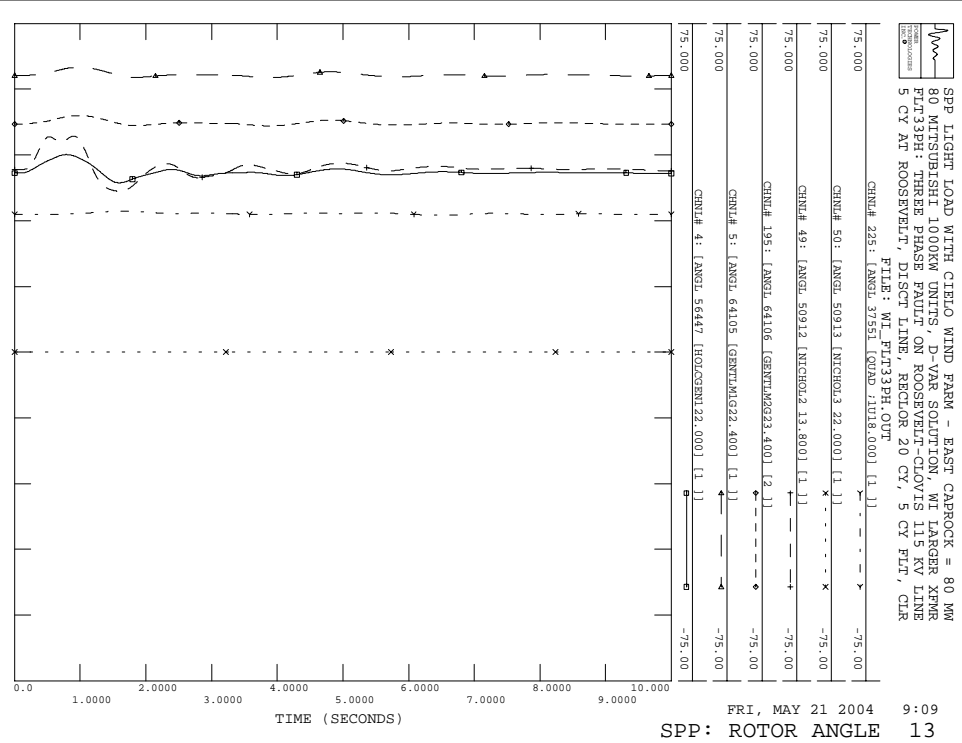
FRI, MAY 21 2004 9:09
 CIELO CABLE3 GEN54 5

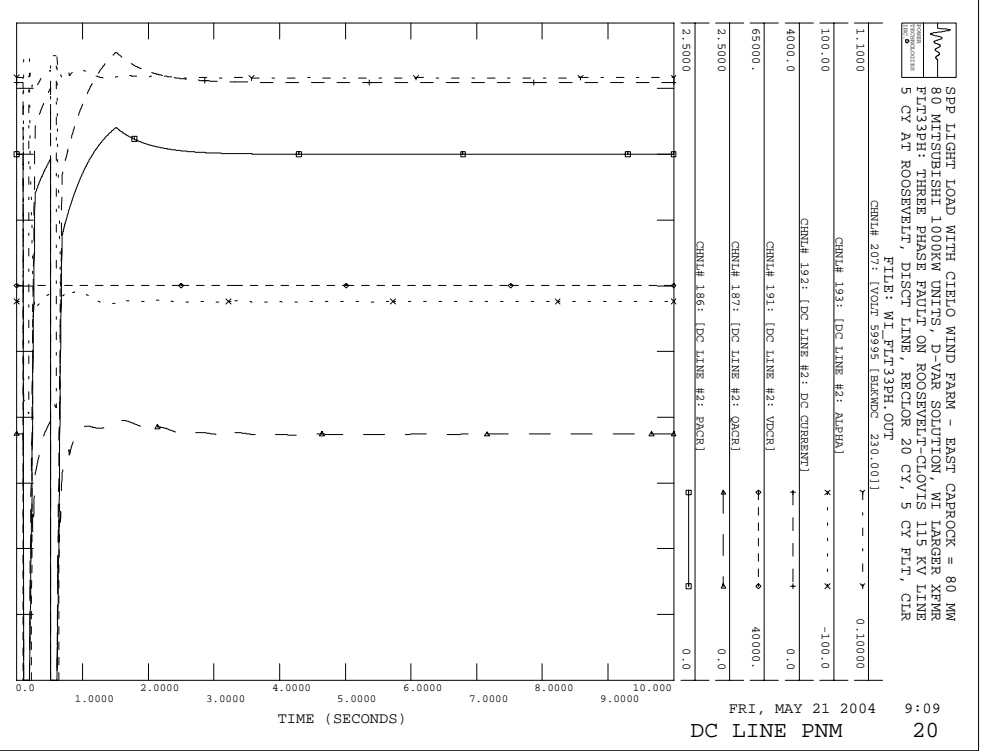
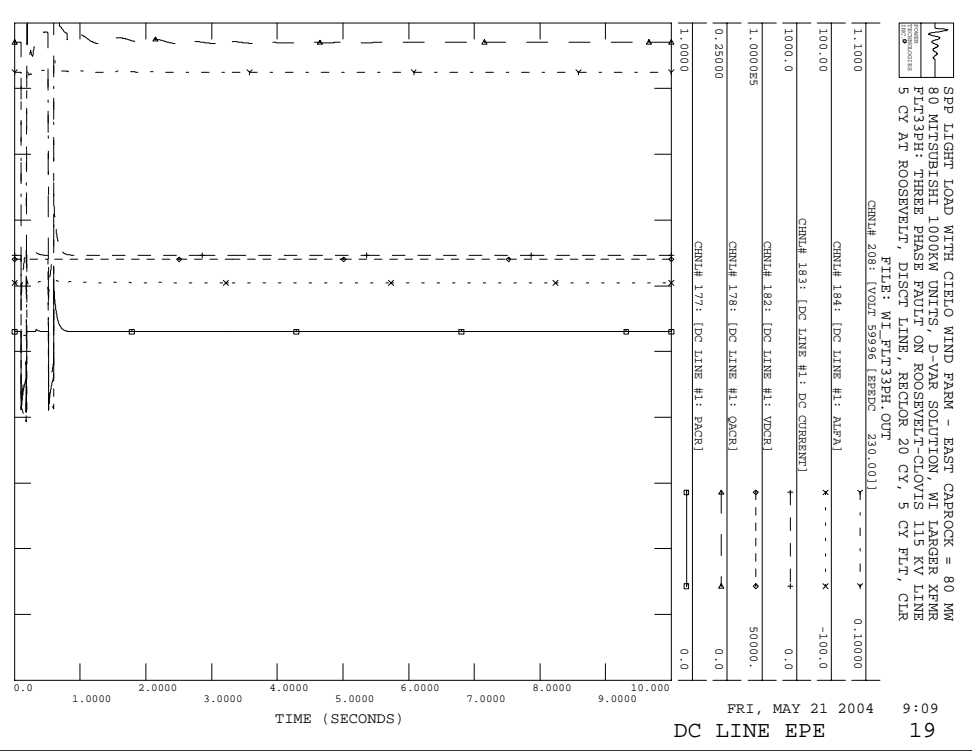
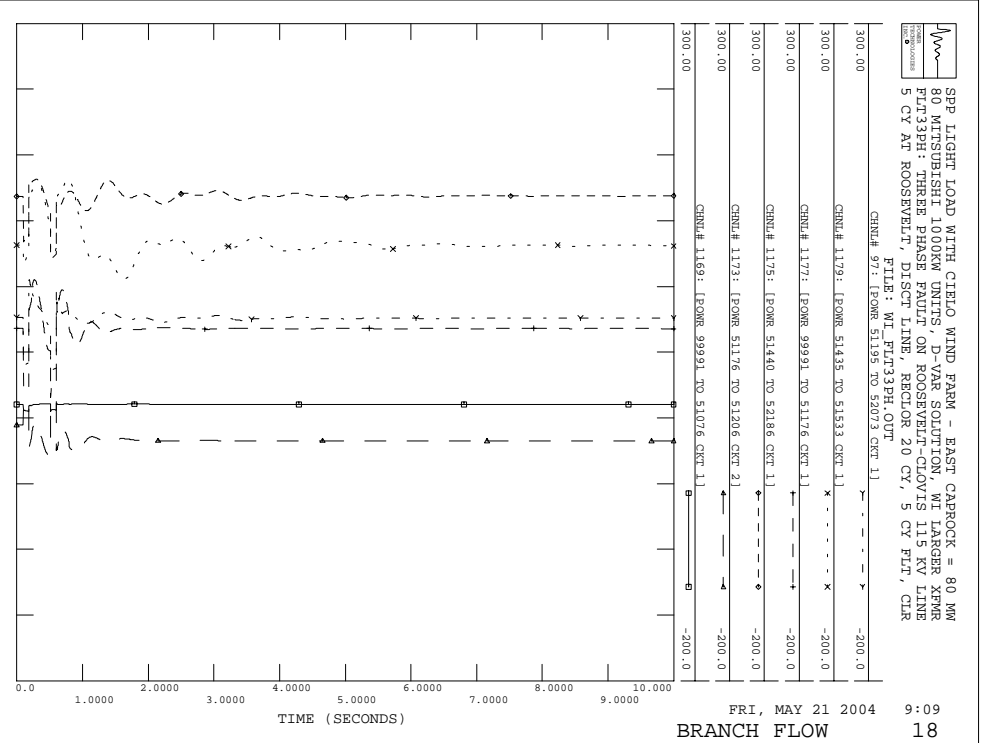
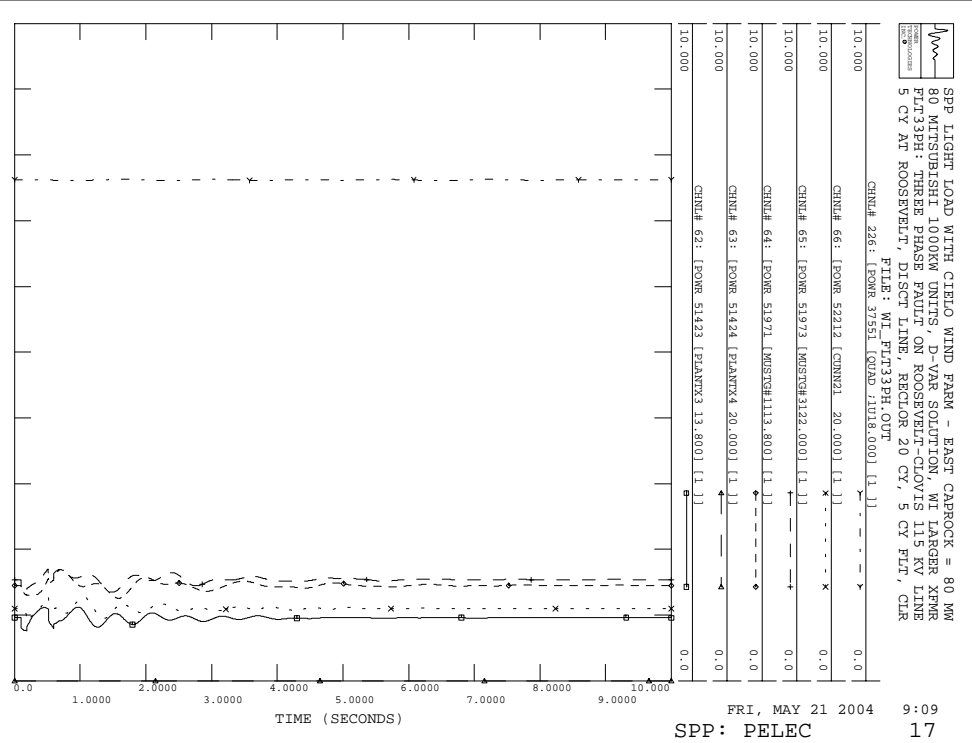
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH.OUT



FRI, MAY 21 2004 9:09
 CIELO VOLTAGE 7

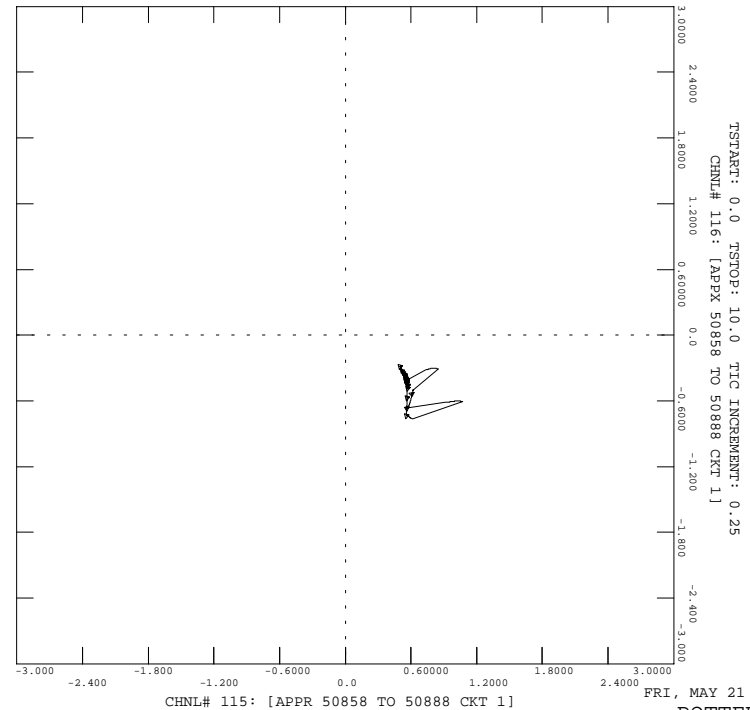






SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH - THREE PHASE FAULT ON ROOSEVELT-GLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

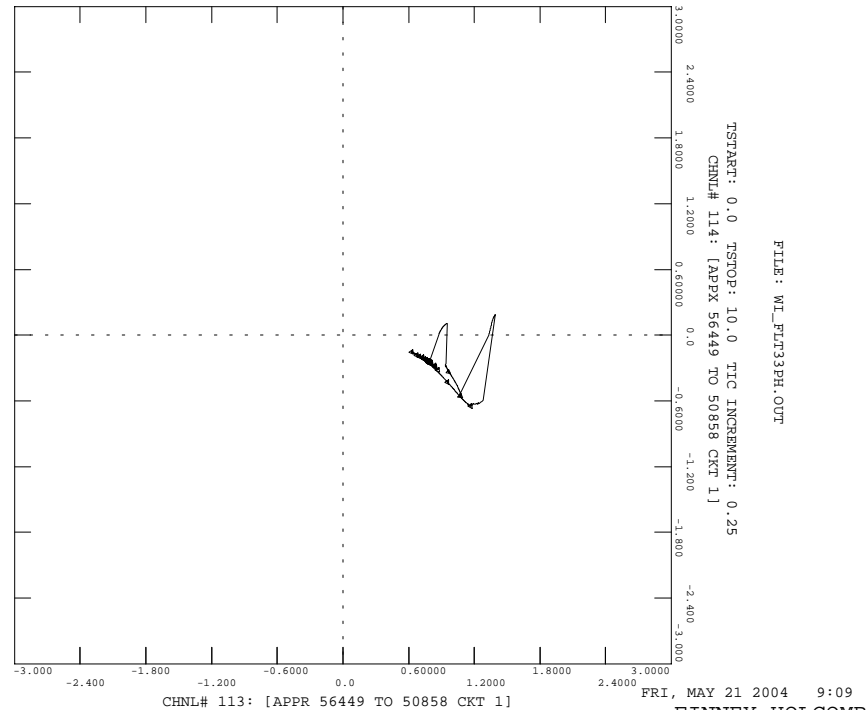
FILE: WI_FLT33PH.OUT



22

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH - THREE PHASE FAULT ON ROOSEVELT-GLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

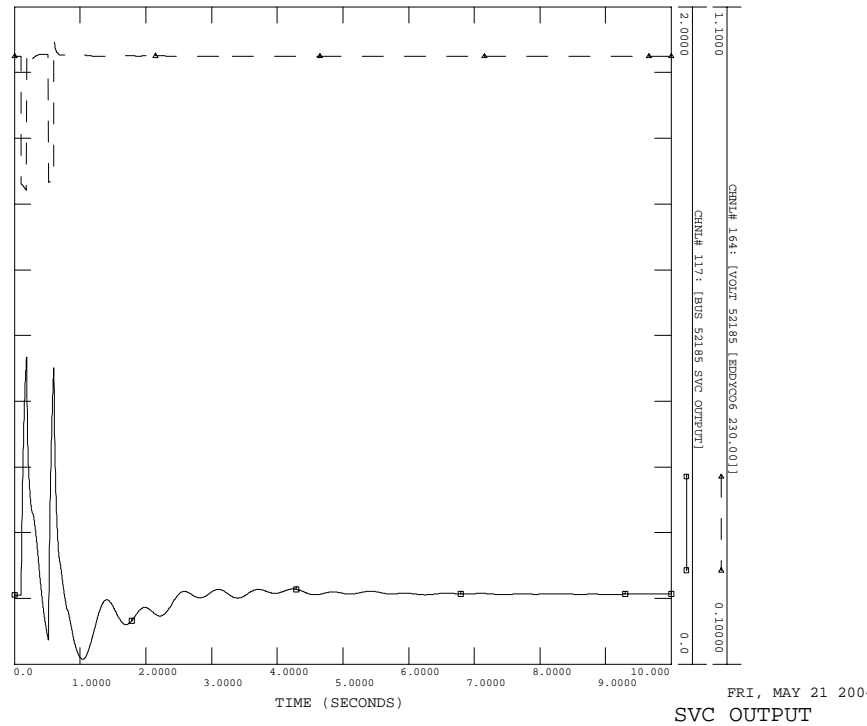
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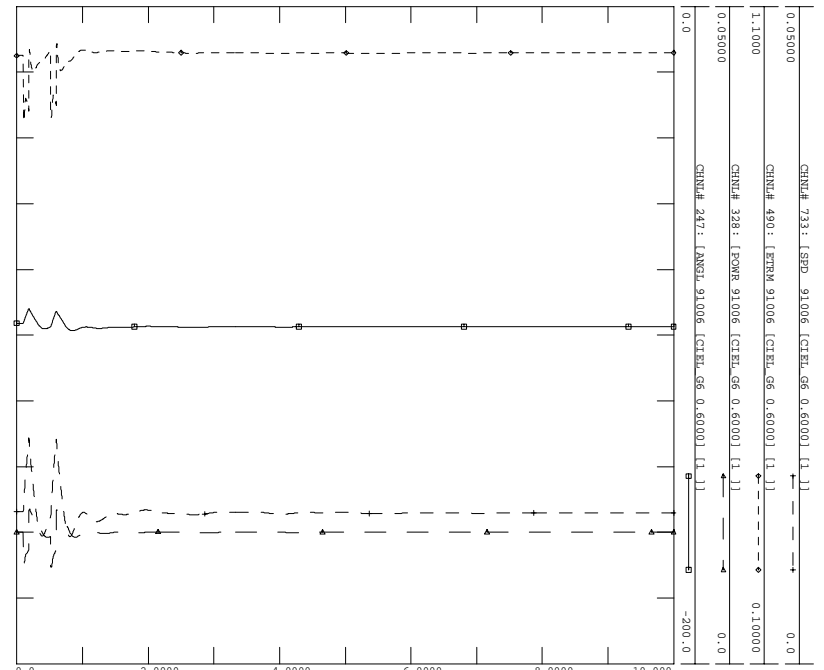
SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH - THREE PHASE FAULT ON ROOSEVELT-GLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

FILE: WI_FLT33PH.OUT



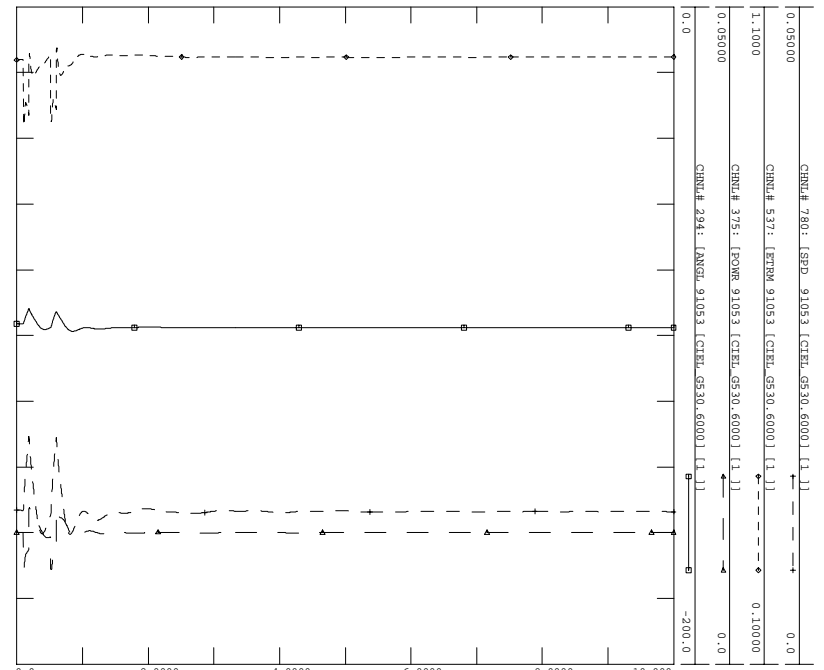
23

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH.OUT



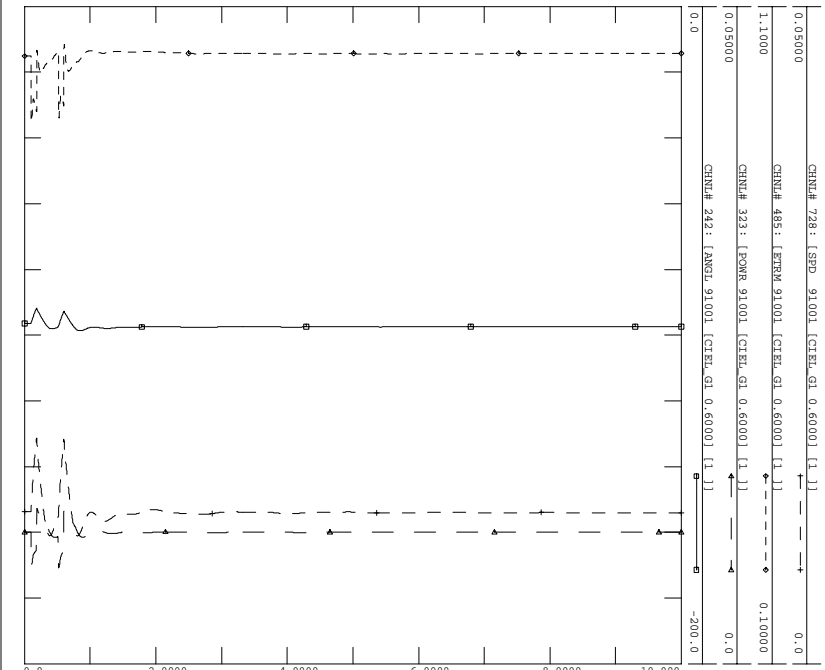
FRI, MAY 21 2004 9:08
 CIELO CABLE1 GEN6 2

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH.OUT



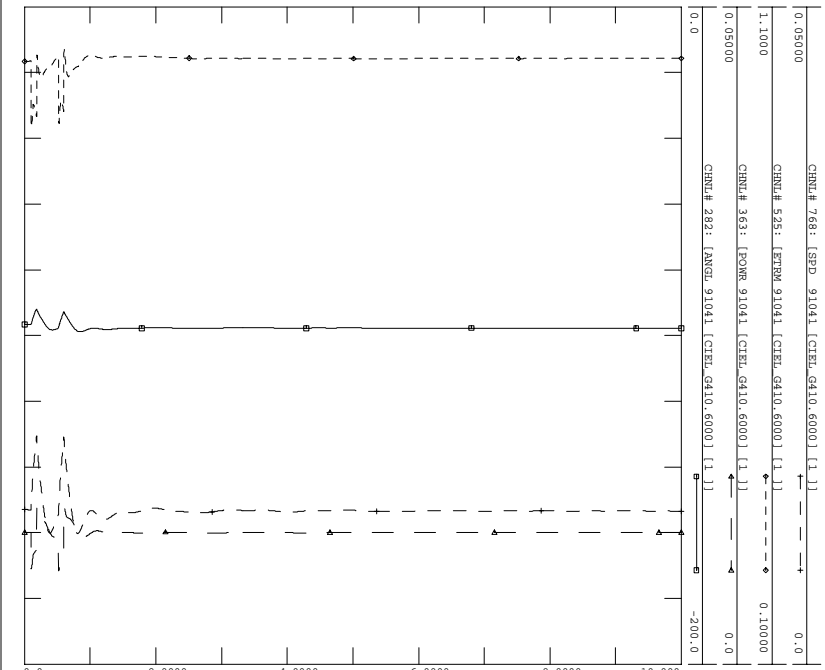
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 CIELO CABLE2 GEN53 4

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH.OUT



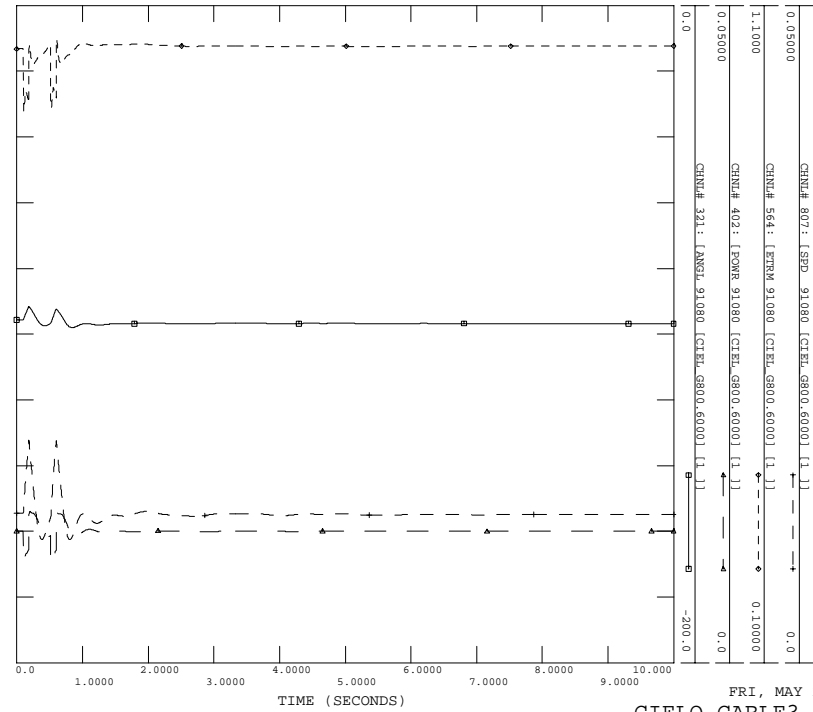
FRI, MAY 21 2004 9:08
 CIELO CABLE1 GEN1 1

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH.OUT

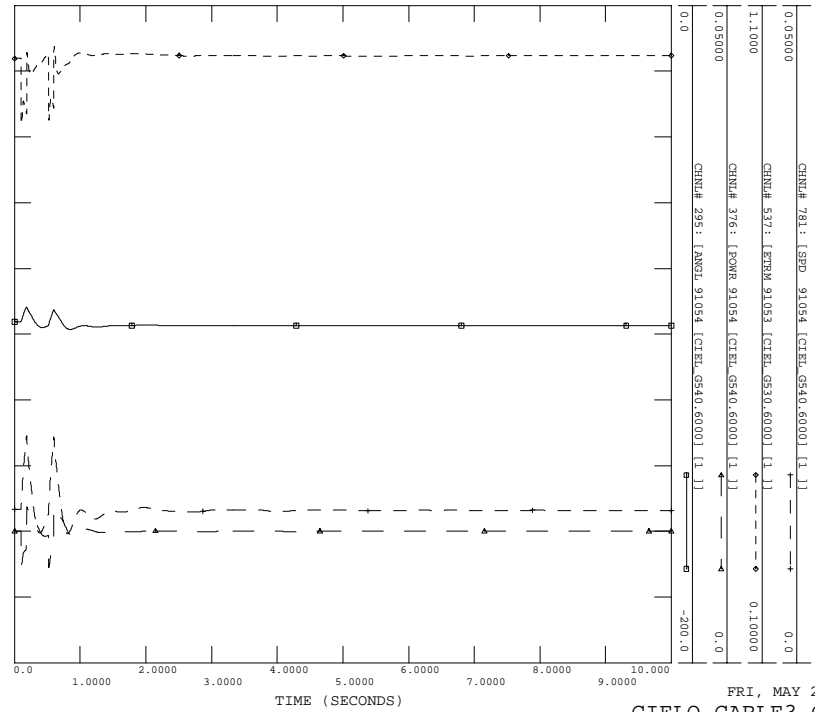


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 CIELO CABLE2 GEN41 3

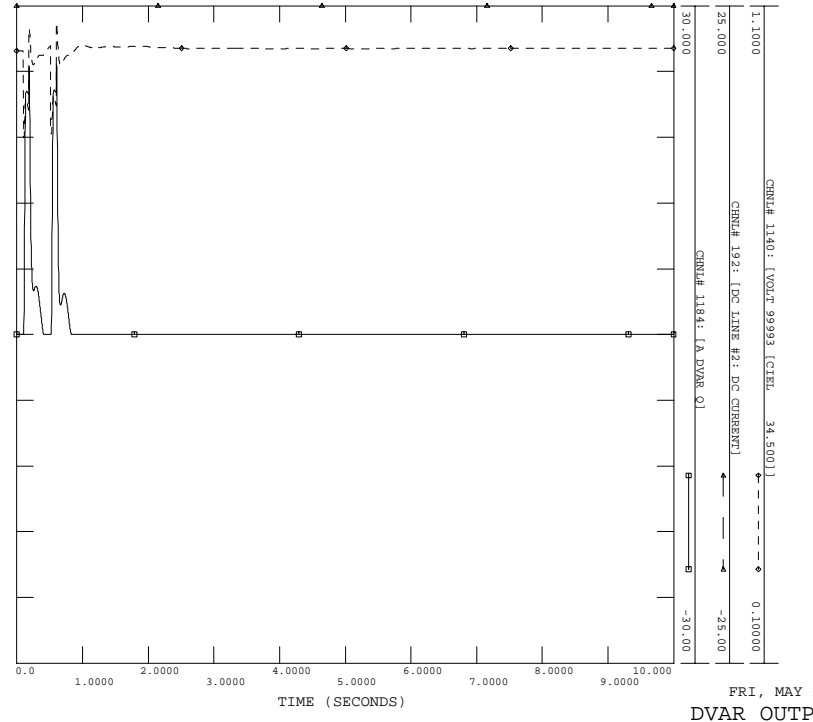
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH.OUT



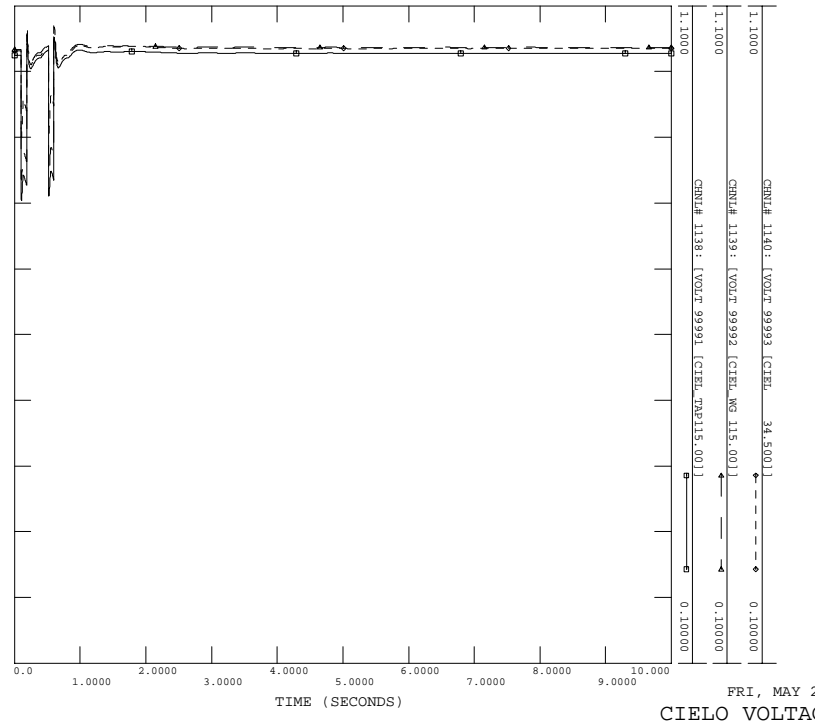
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH.OUT

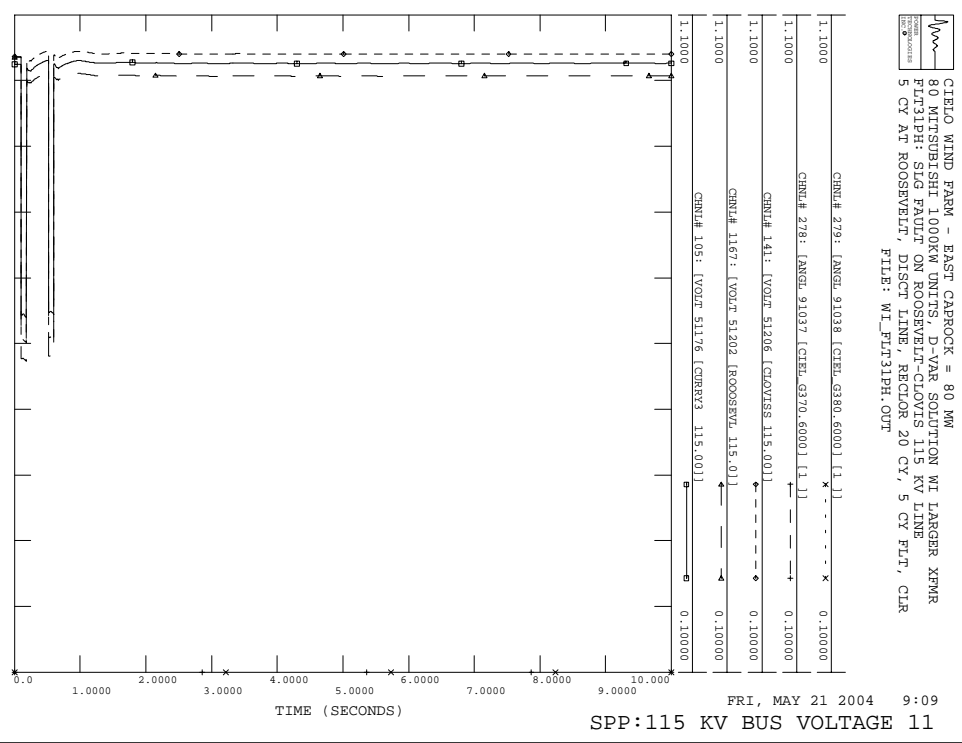
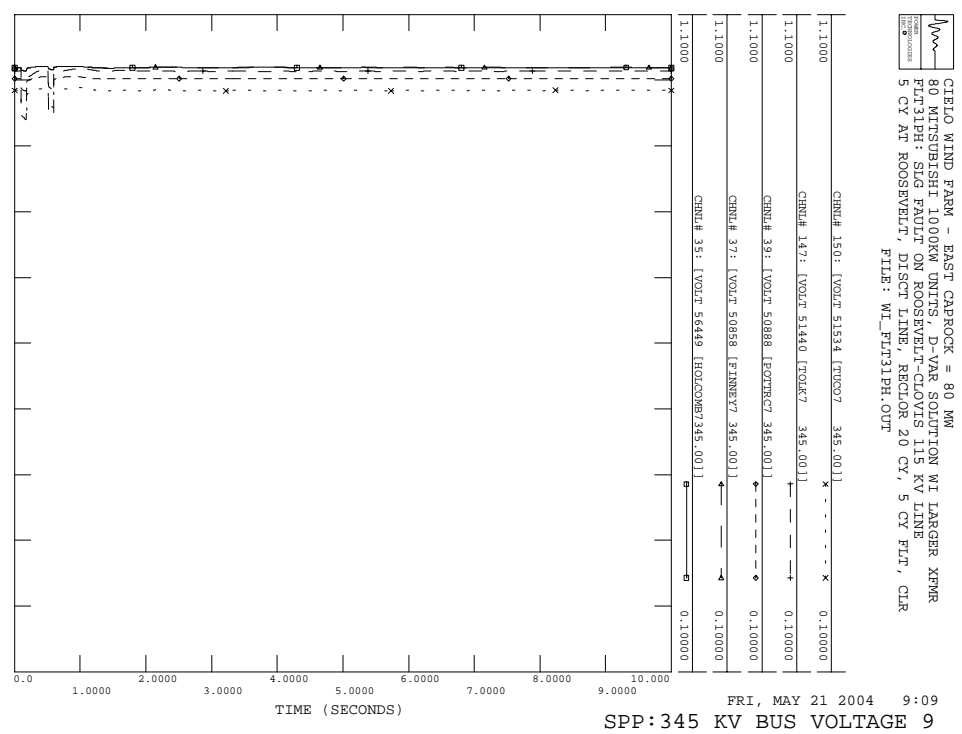
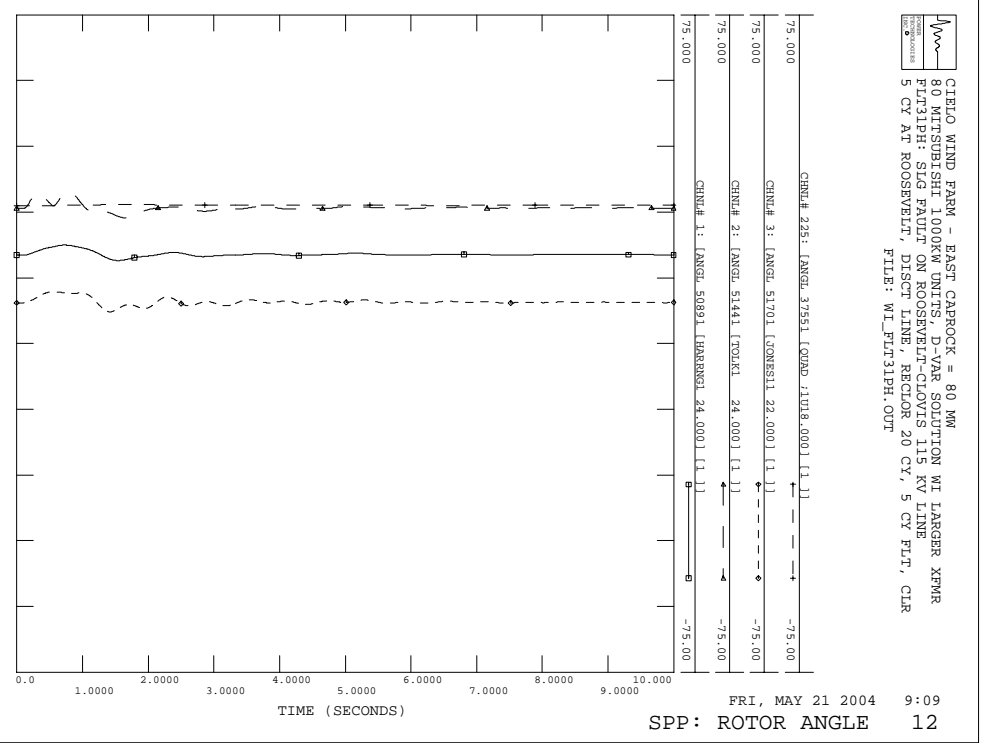
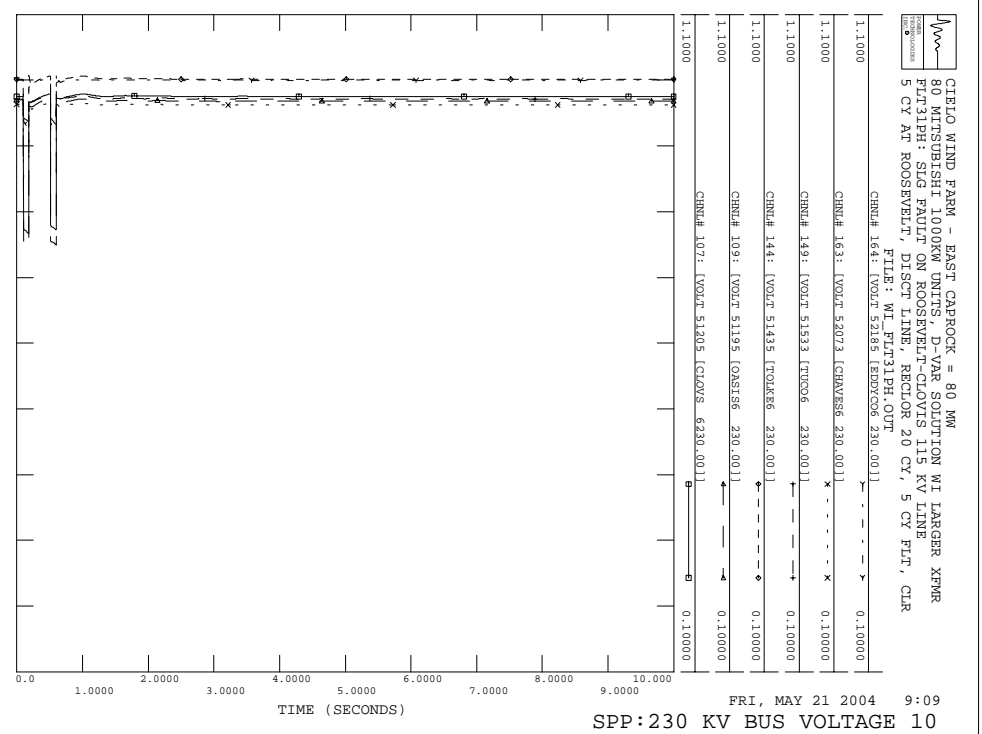


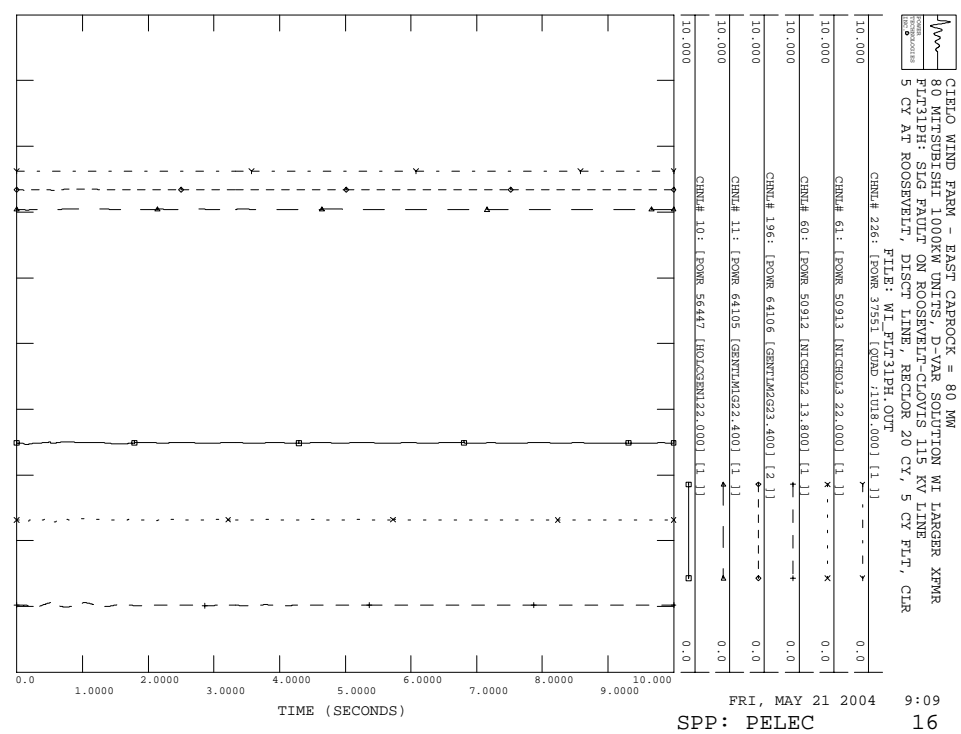
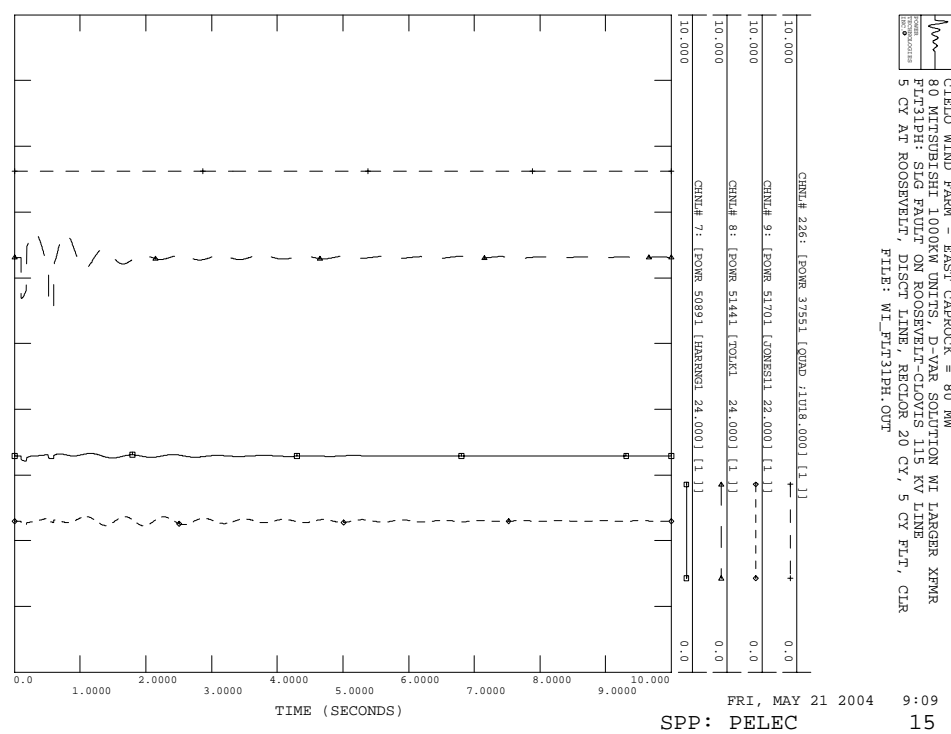
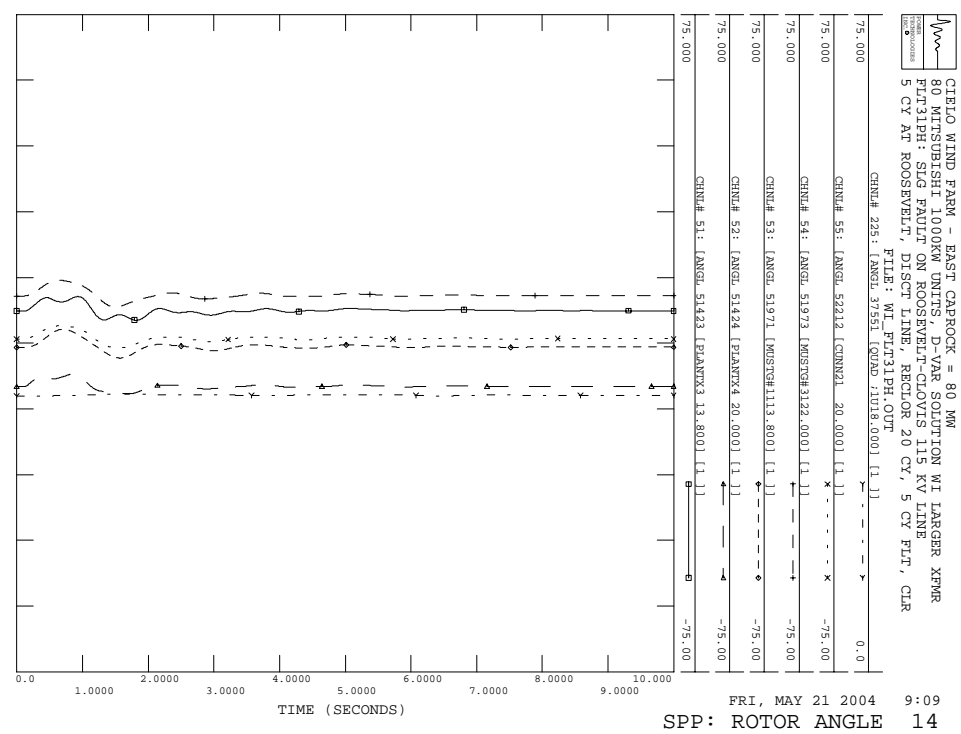
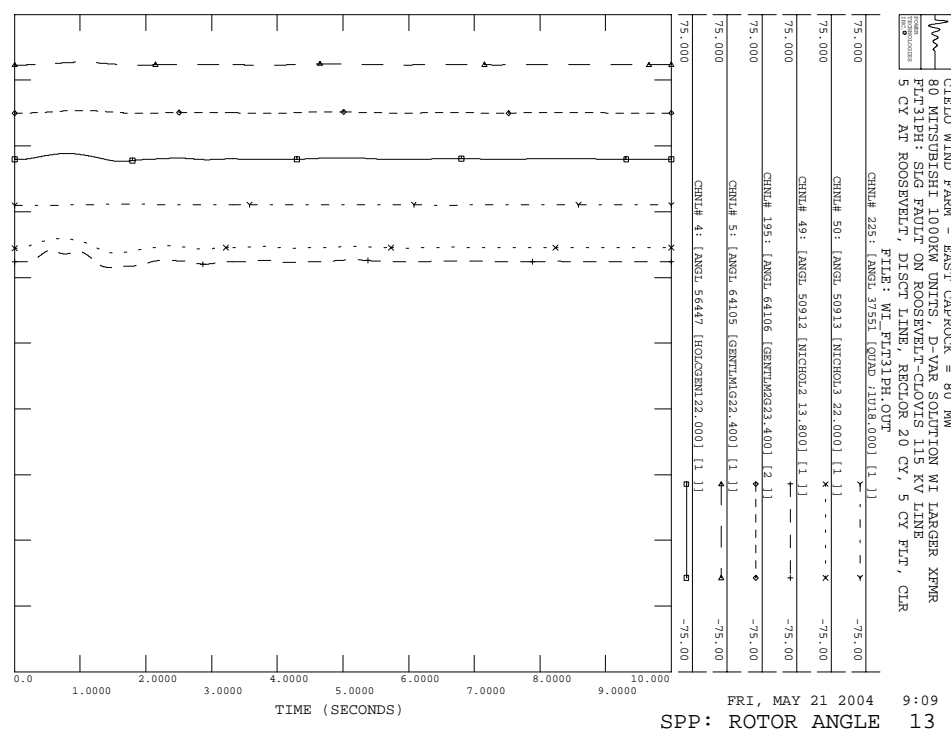
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH.OUT

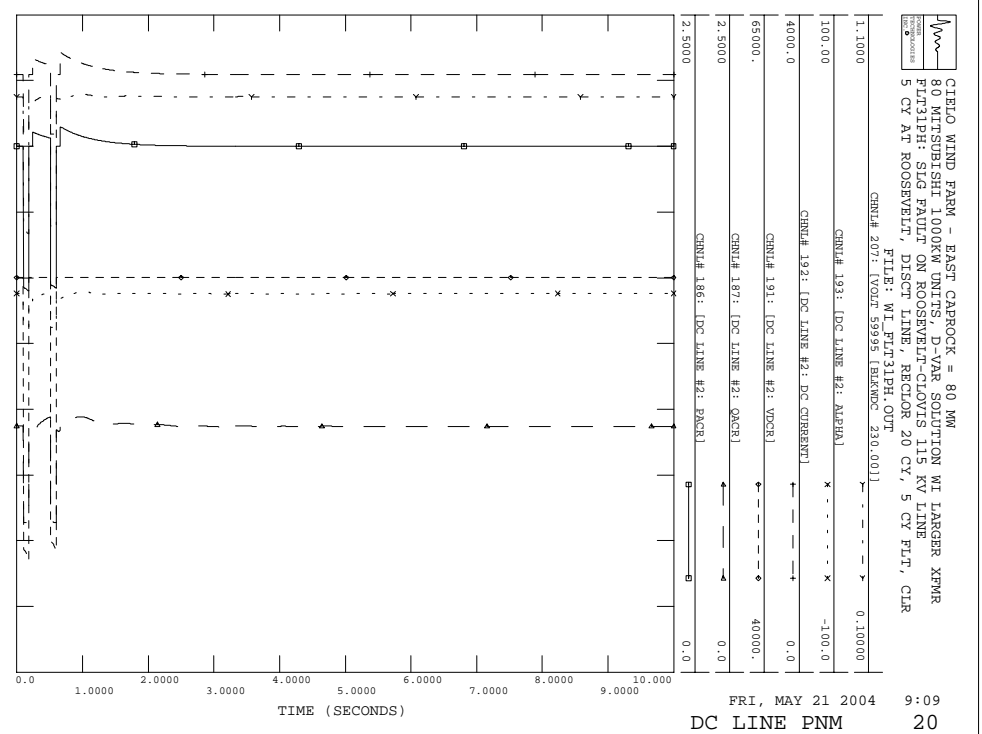
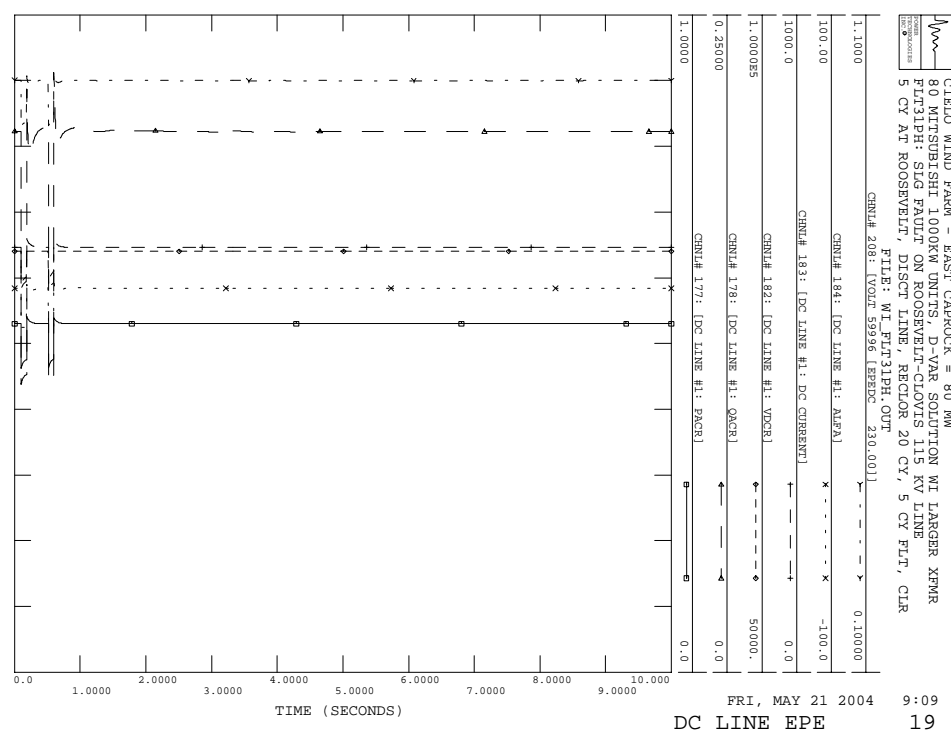
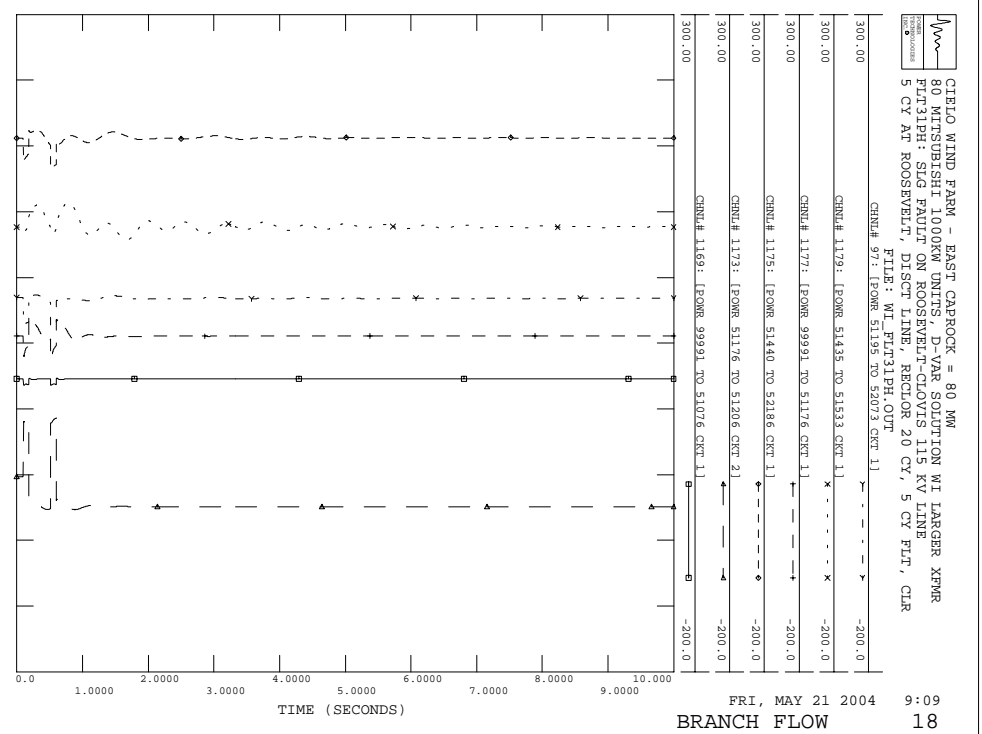
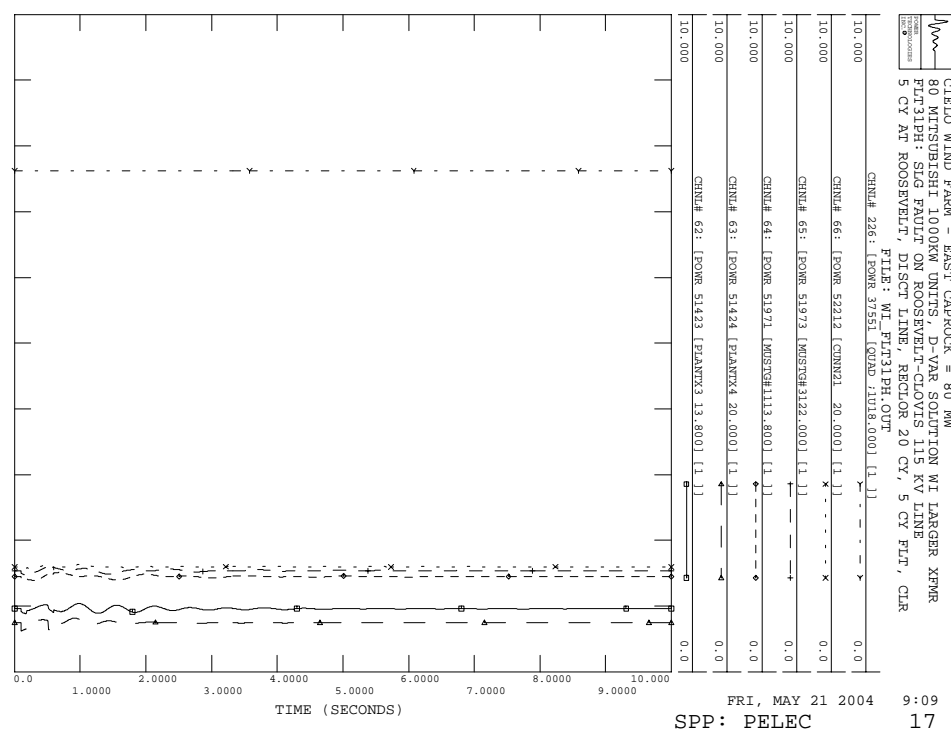


CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH.OUT



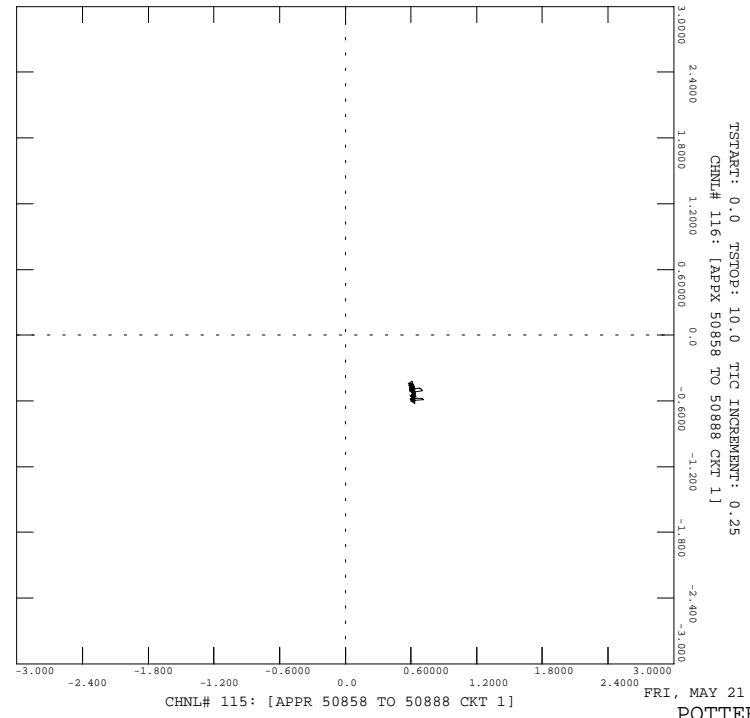






CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000W UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT31PH- SIG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

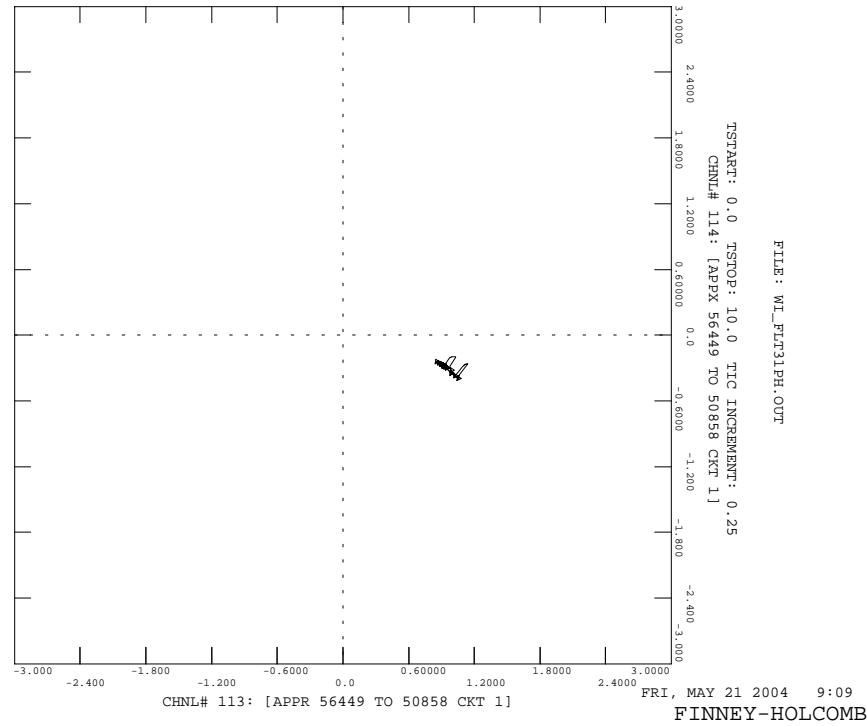
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22

CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000W UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT31PH- SIG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

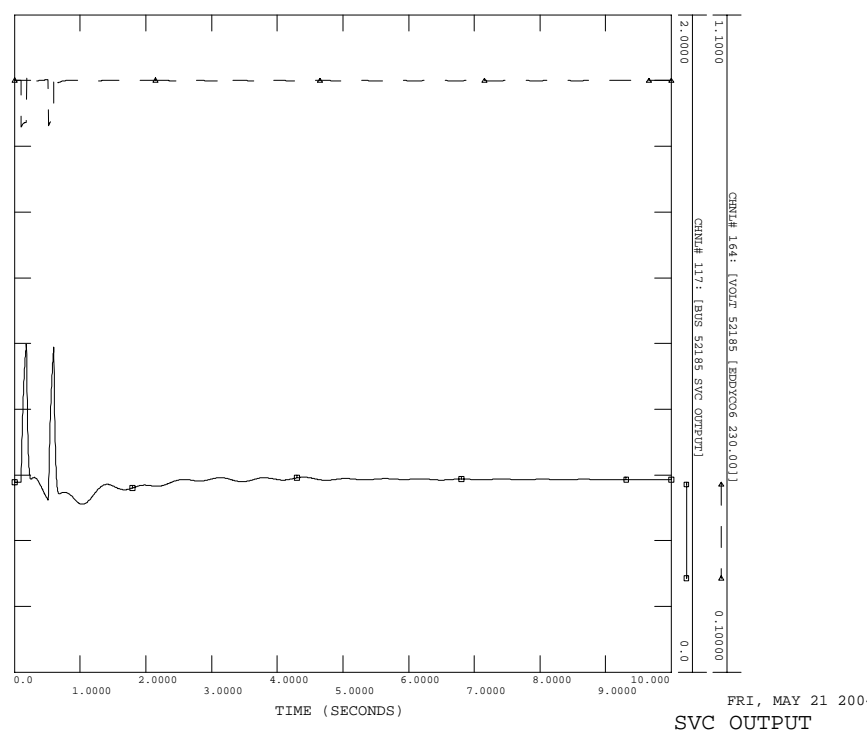
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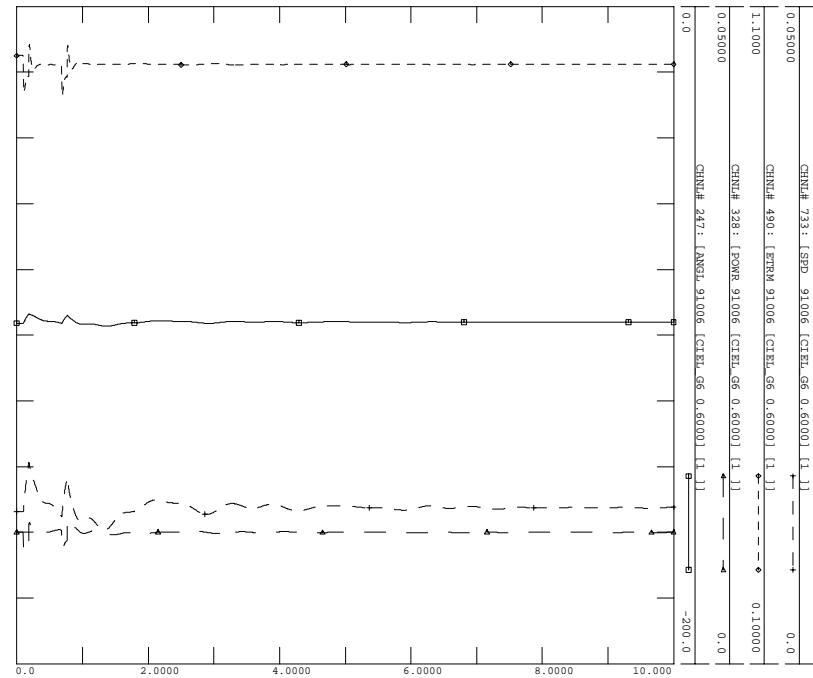
CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000W UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT31PH- SIG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

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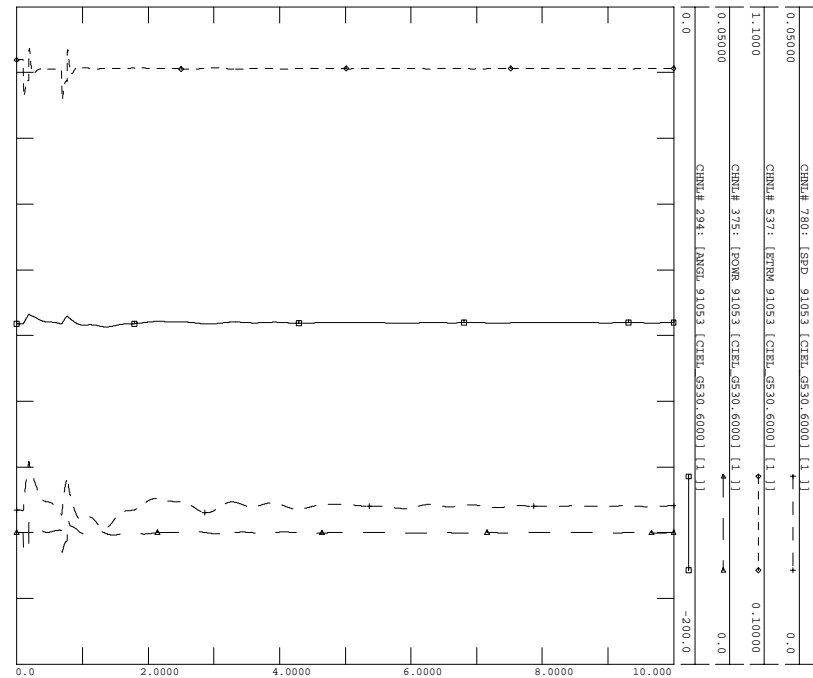
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CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH.OUT



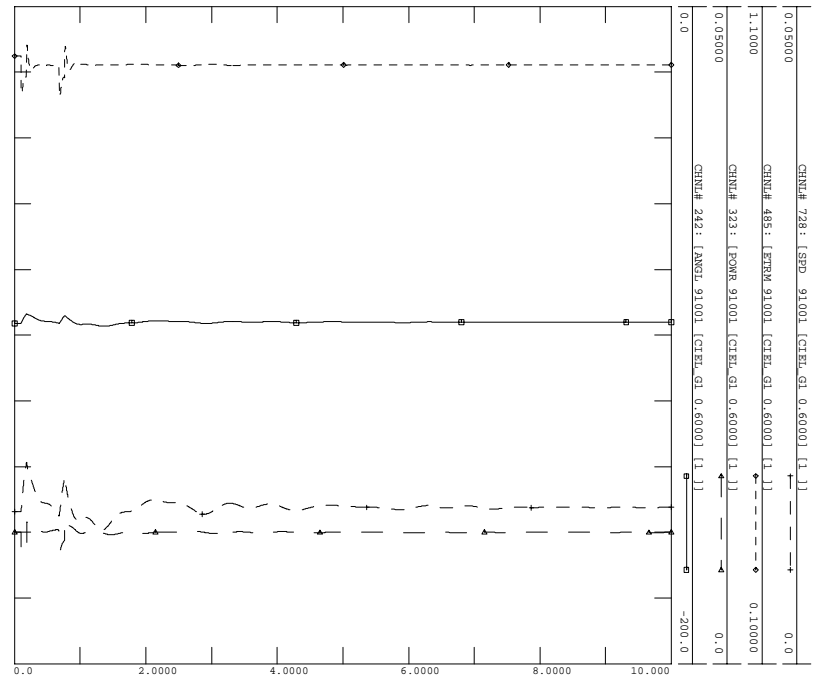
FRI, MAY 21 2004 9:09
 CIELO CABLE1 GEN6 2

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH.OUT



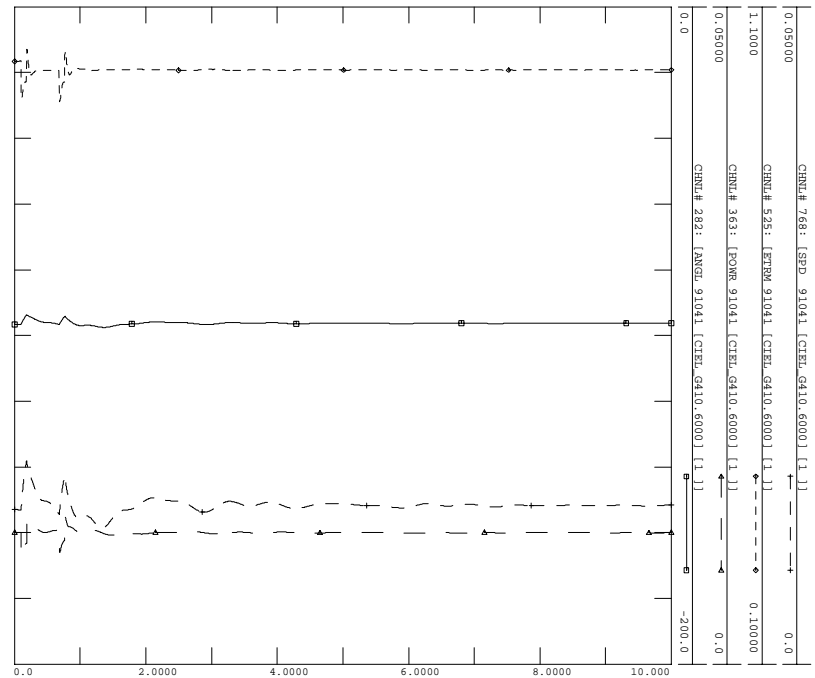
FRI, MAY 21 2004 9:09
 CIELO CABLE2 GEN53 4

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH.OUT



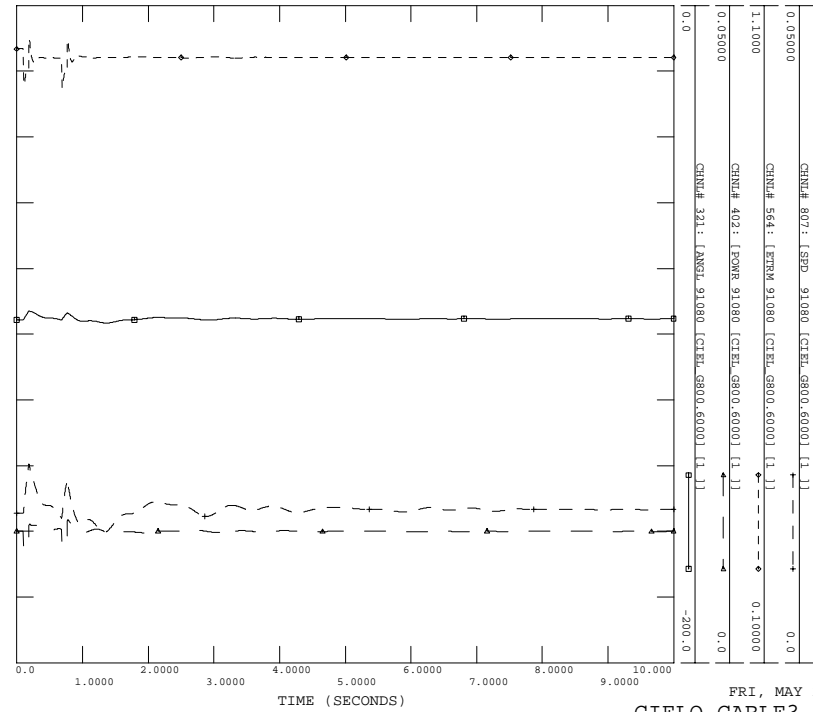
FRI, MAY 21 2004 9:09
 CIELO CABLE1 GEN1 1

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH.OUT

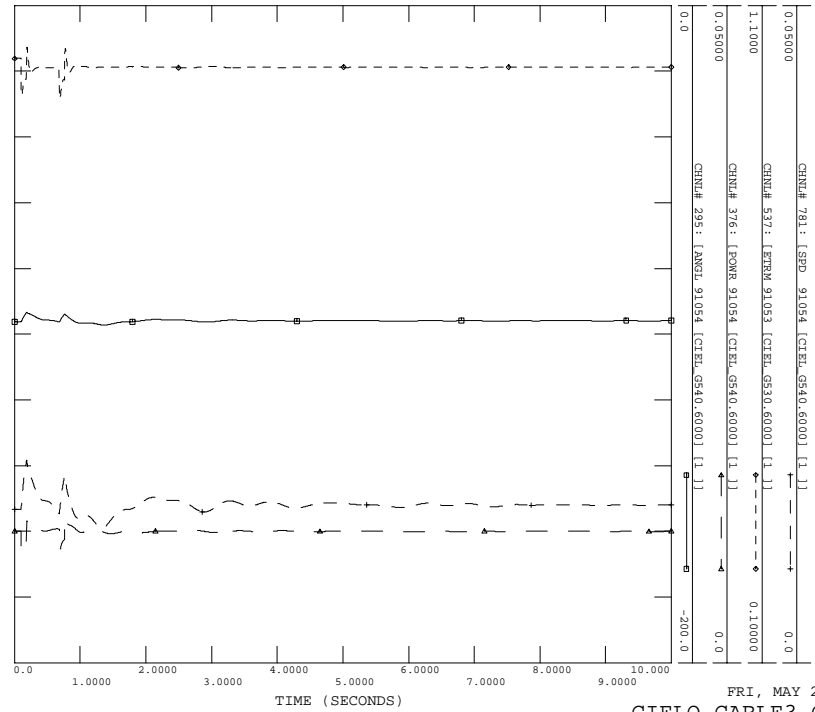


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 CIELO CABLE2 GEN41 3

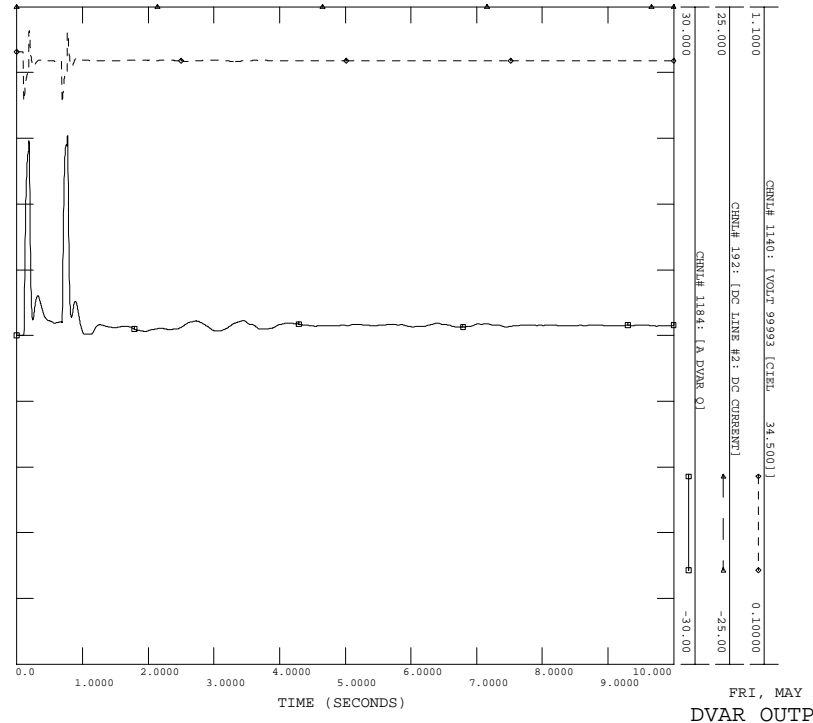
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH.OUT



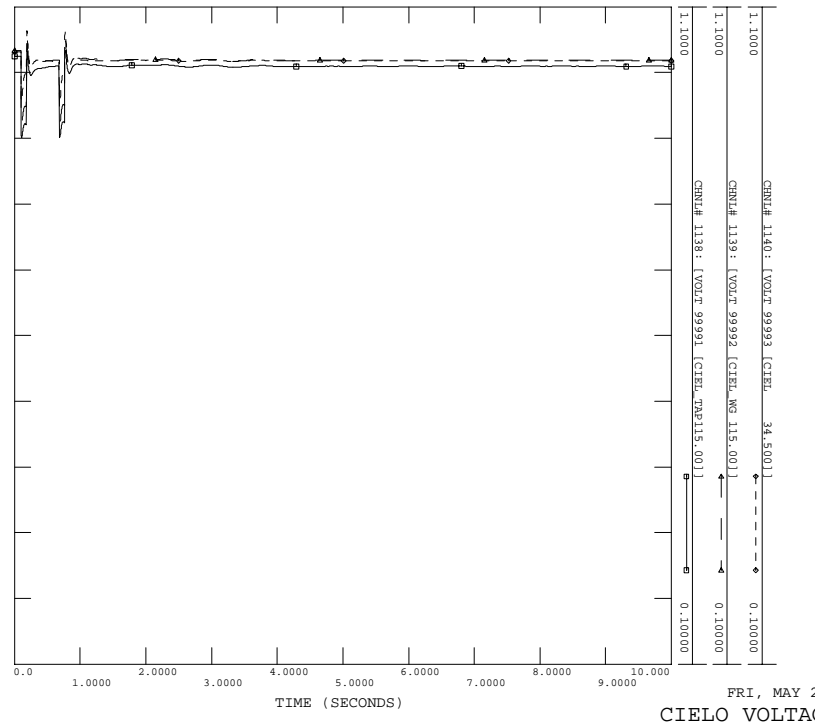
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH.OUT

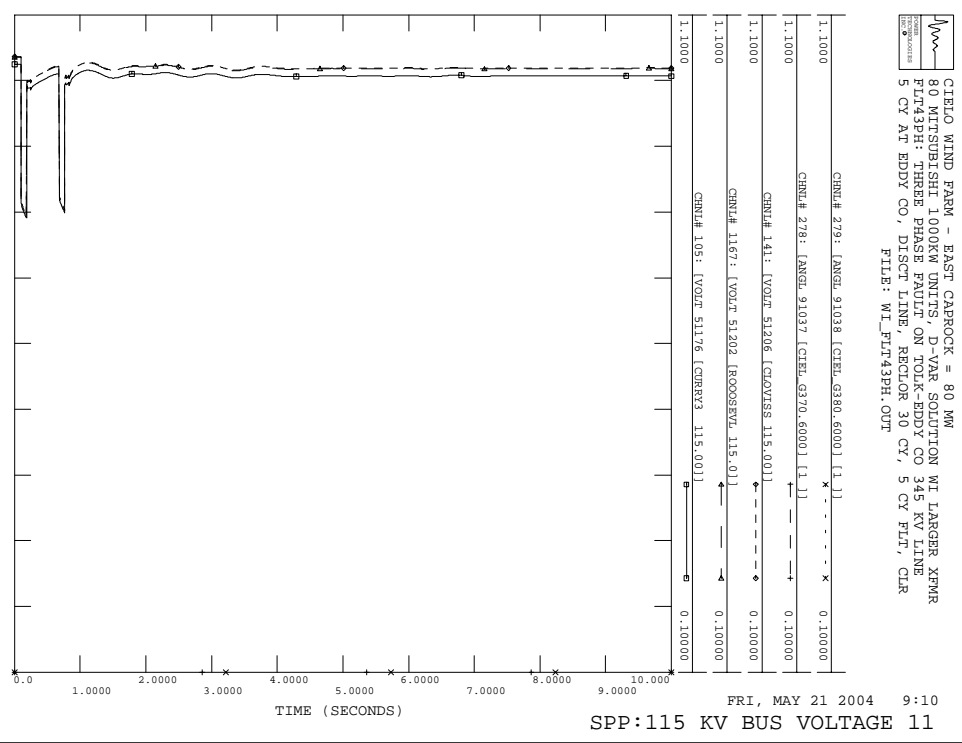
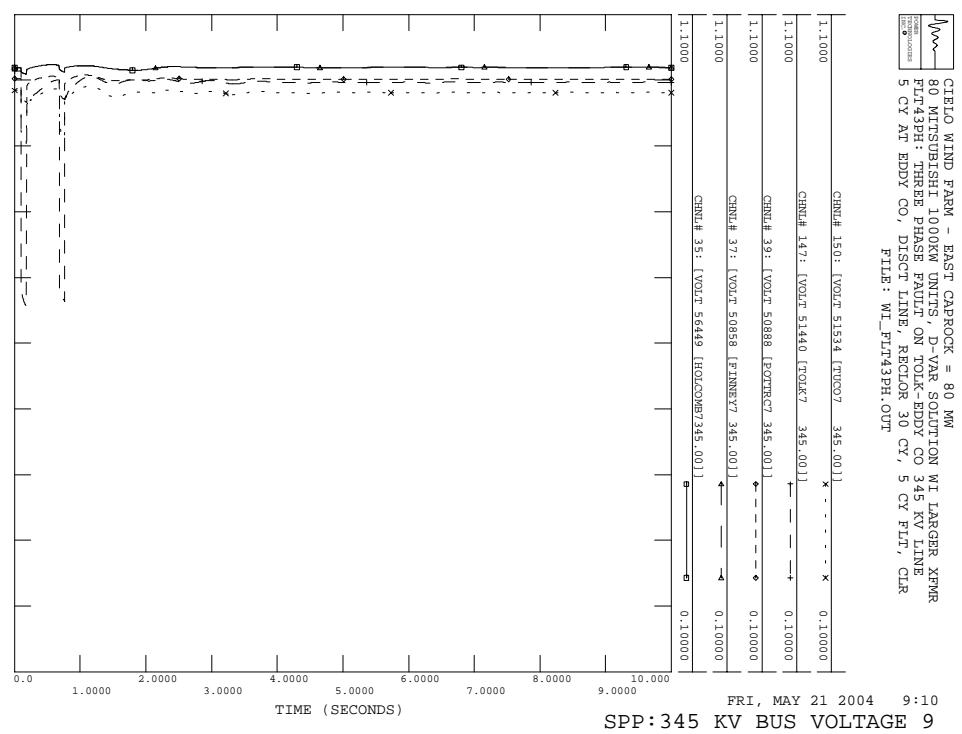
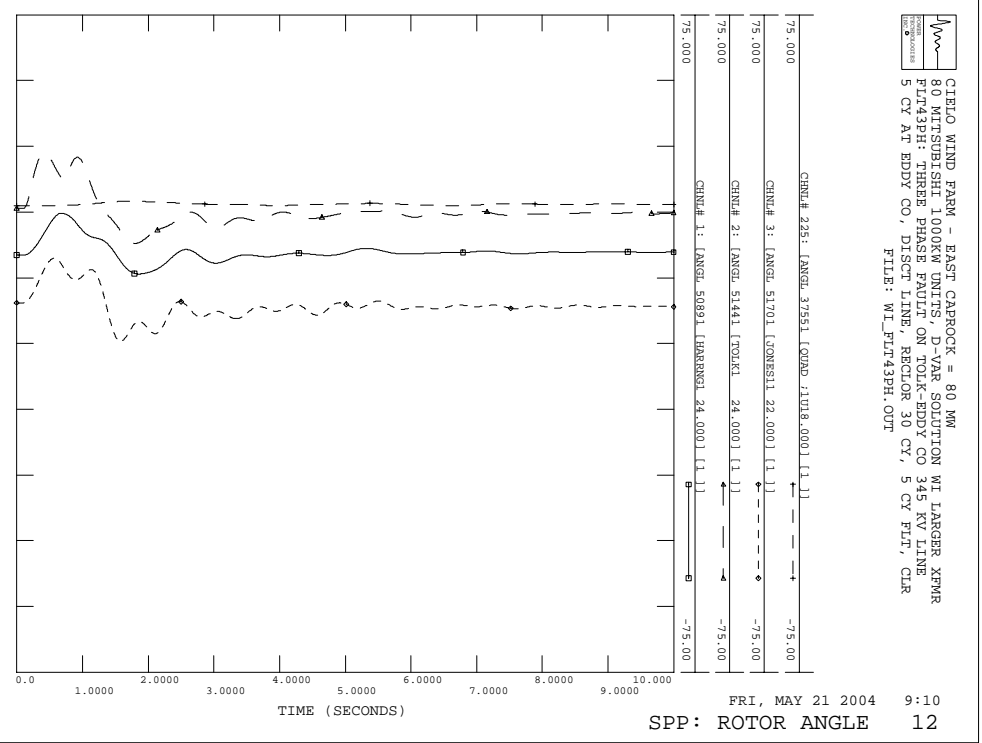
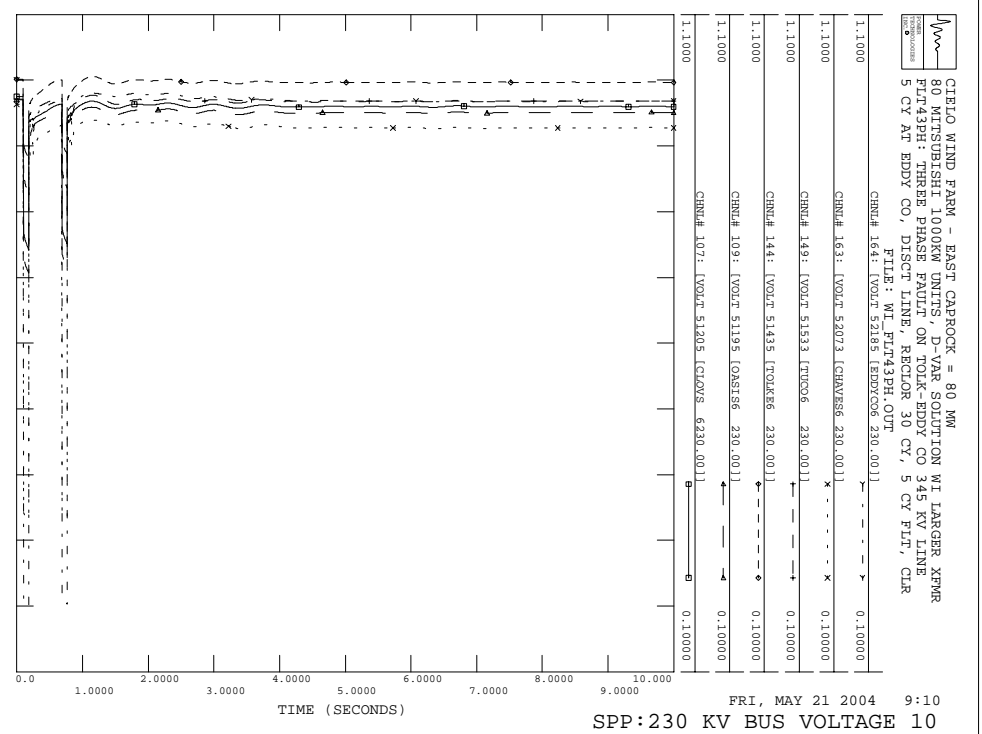


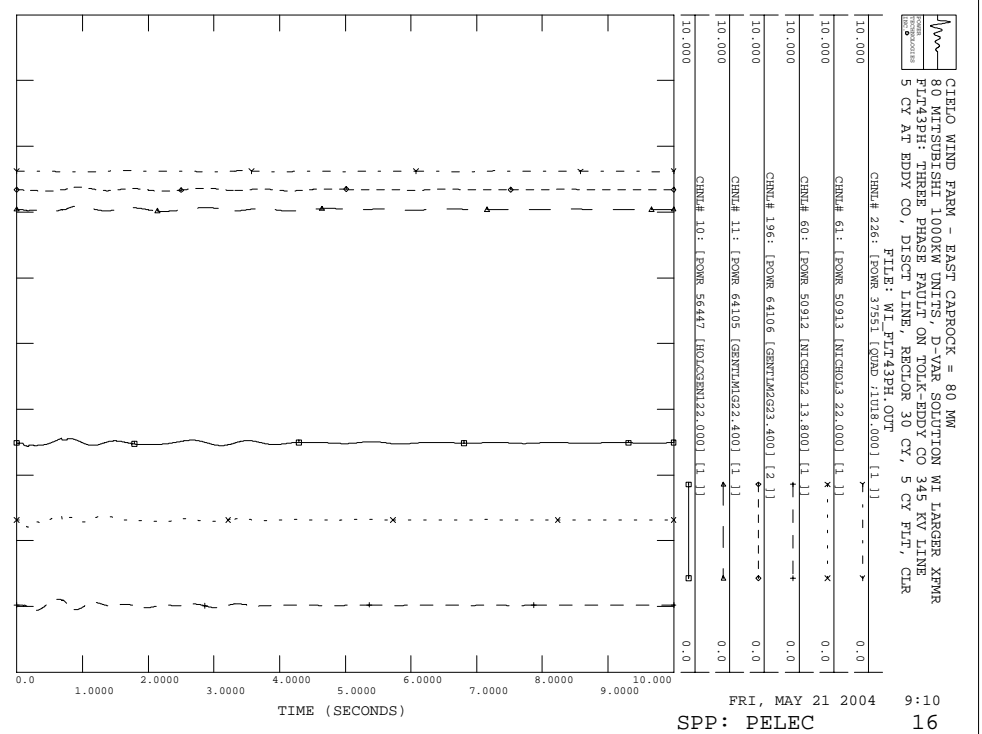
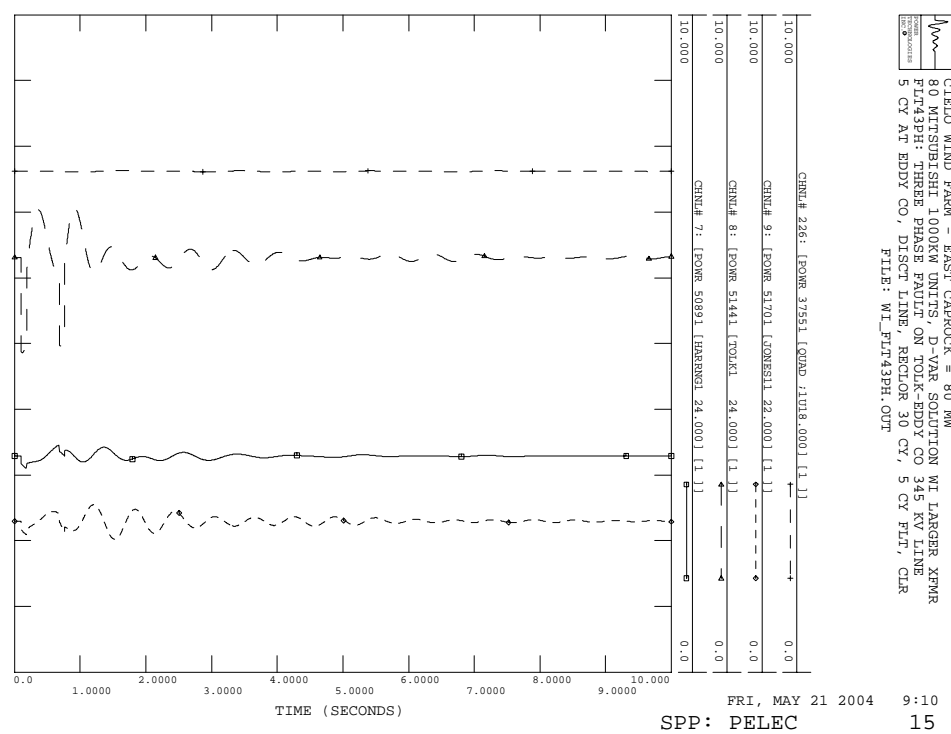
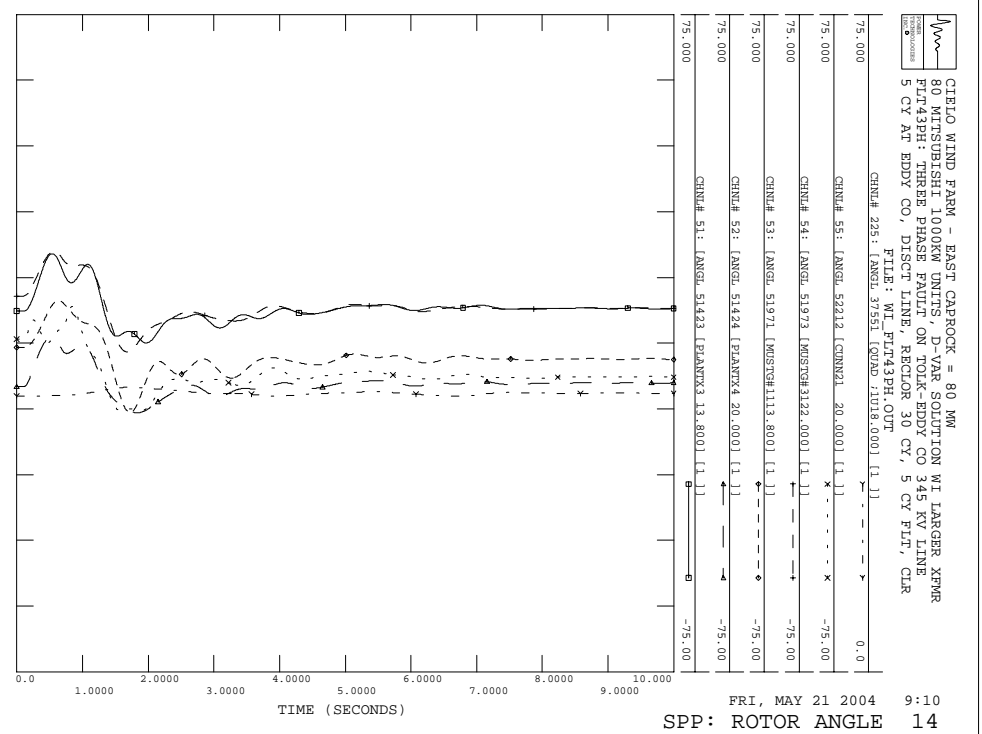
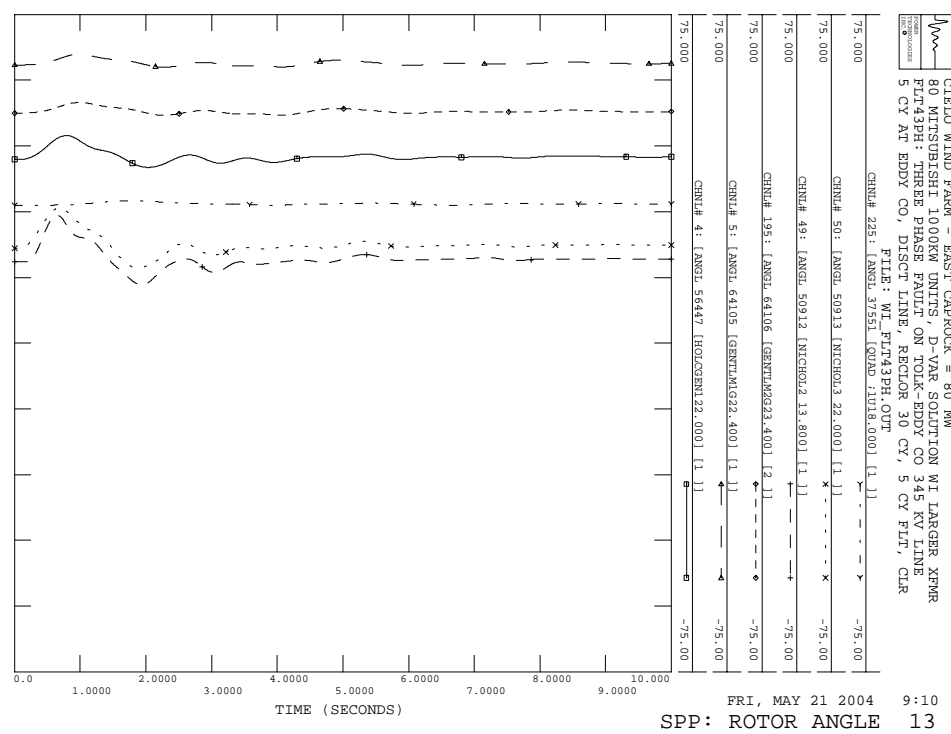
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH.OUT

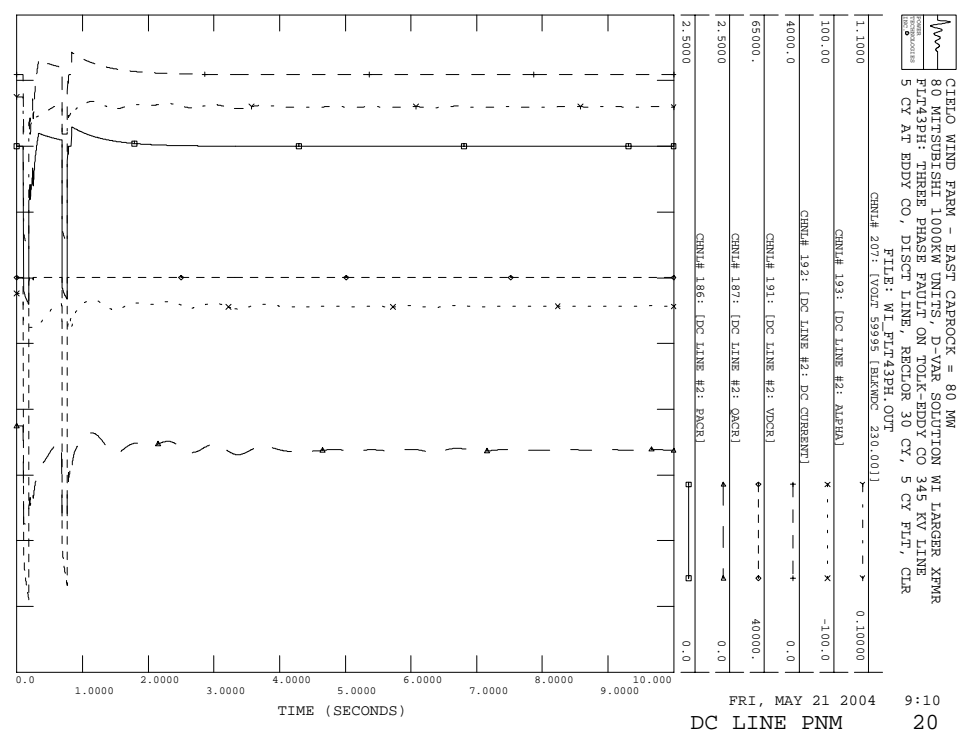
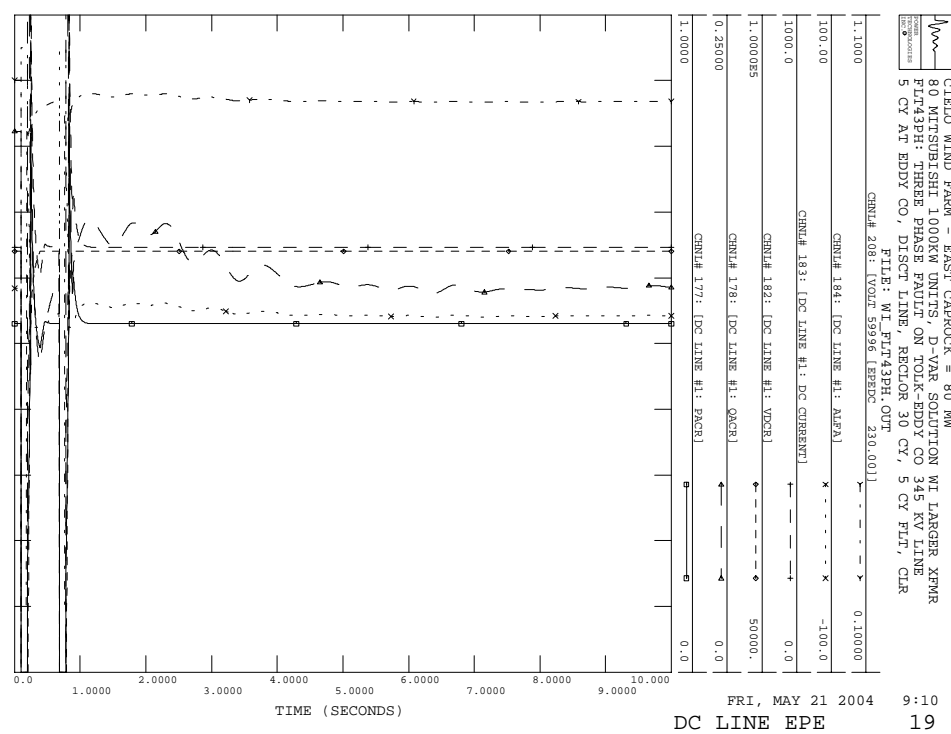
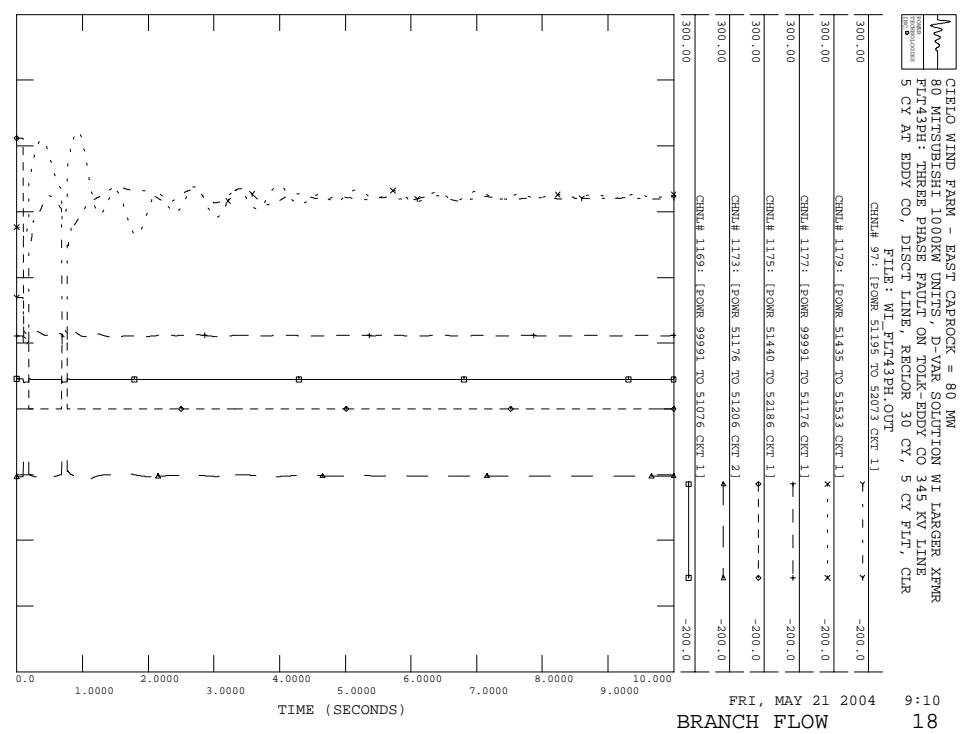
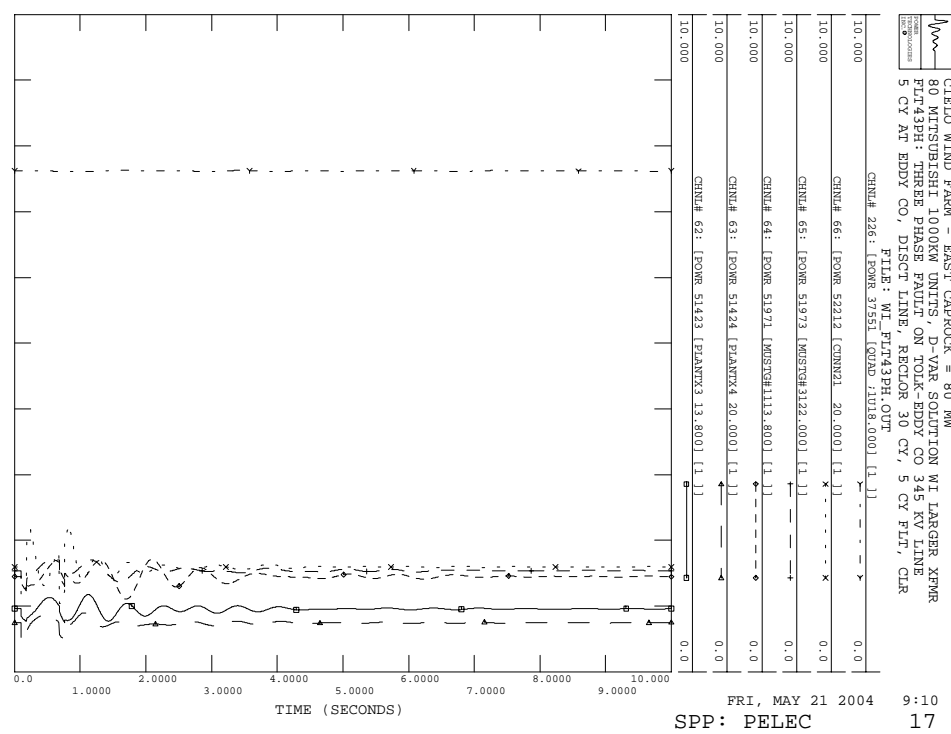


CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
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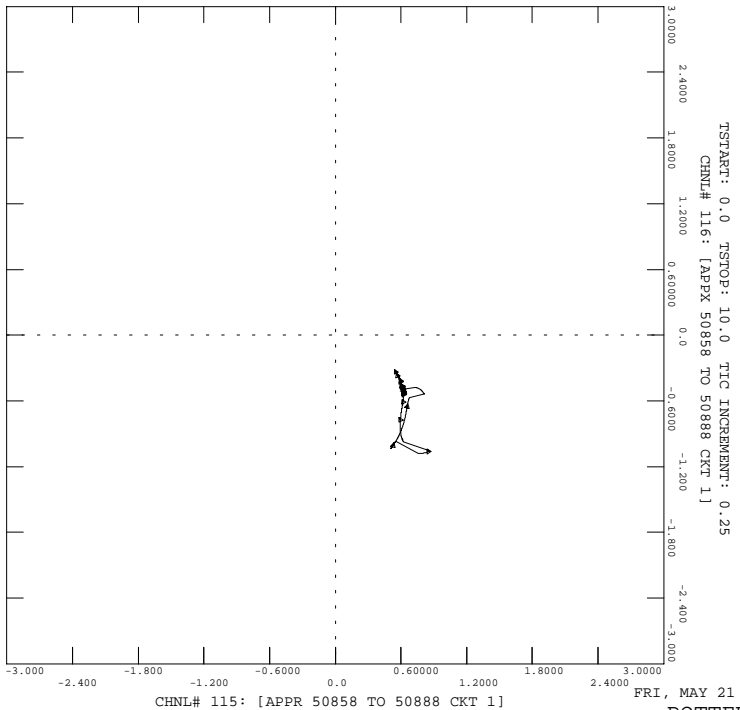






CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPRM
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDT CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR

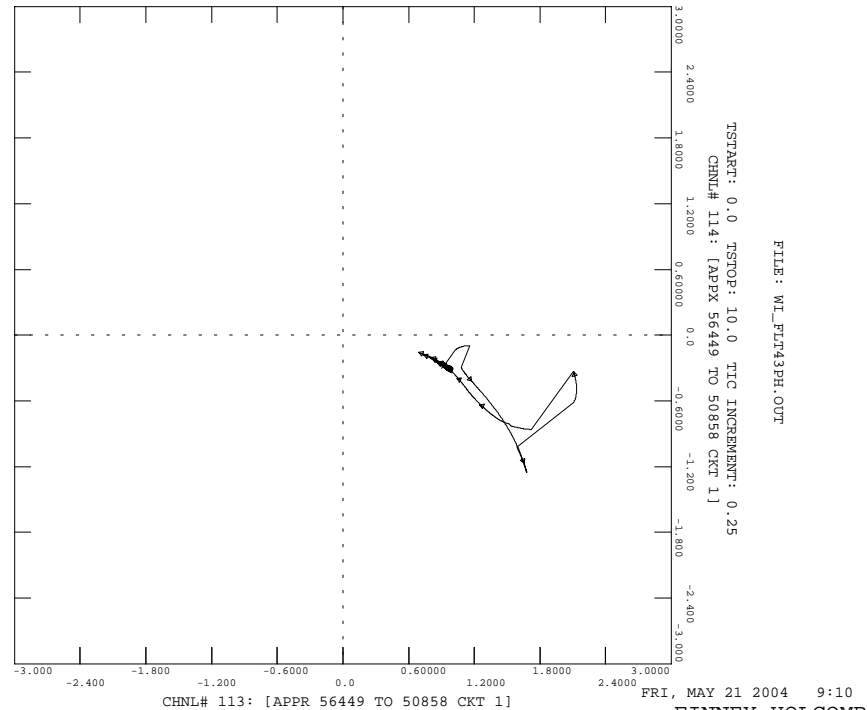
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22

CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPRM
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDT CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR

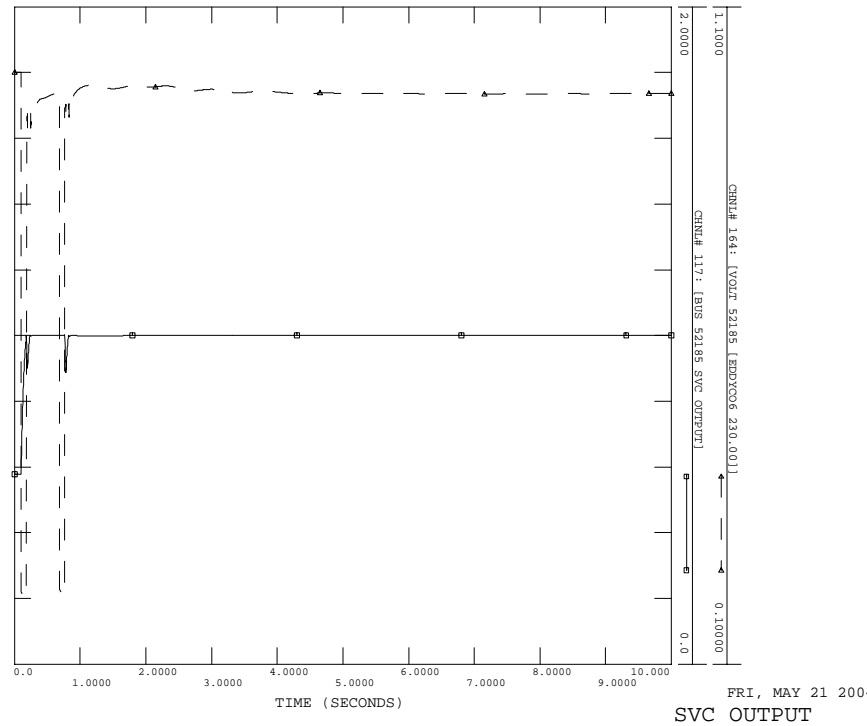
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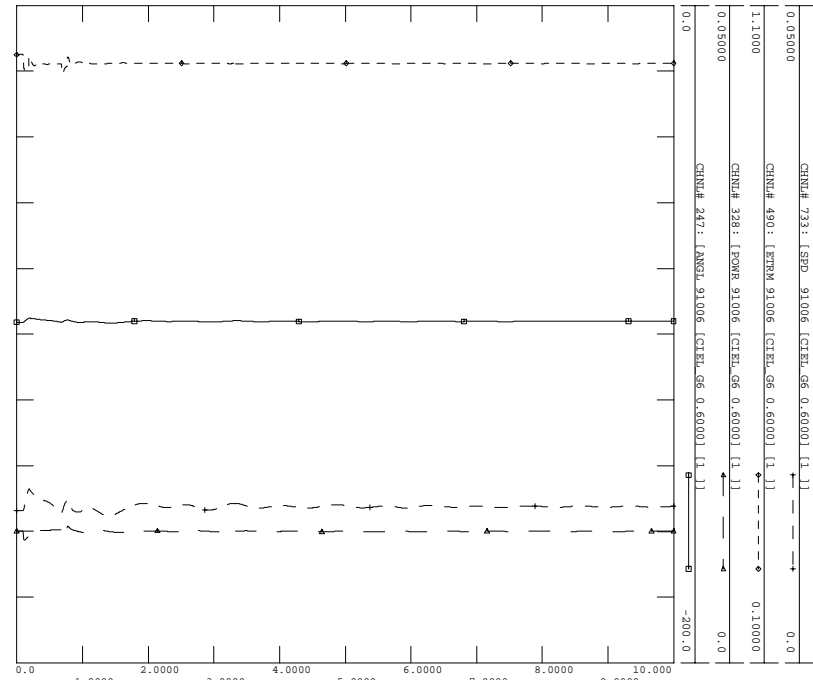
CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPRM
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDT CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR

FILE: WI_FLT43PH.OUT



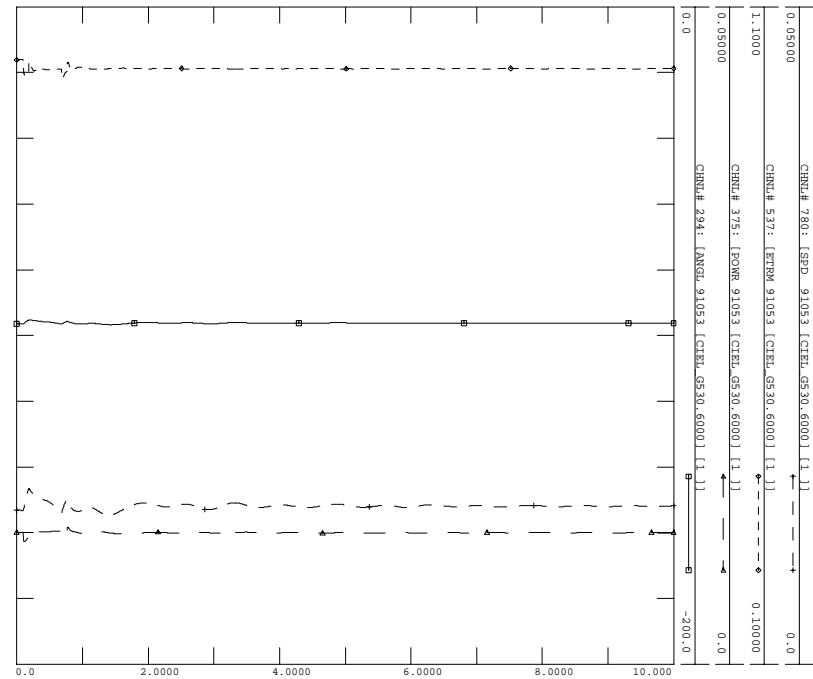
23

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT41PH.OUT



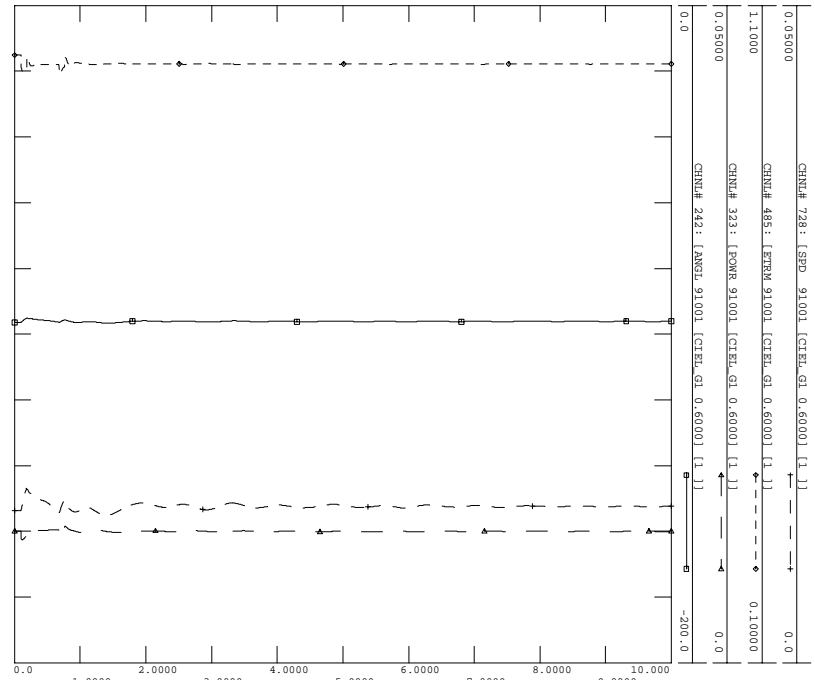
FRI, MAY 21 2004 9:09
 CIELO CABLE1 GEN6 2

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT41PH.OUT



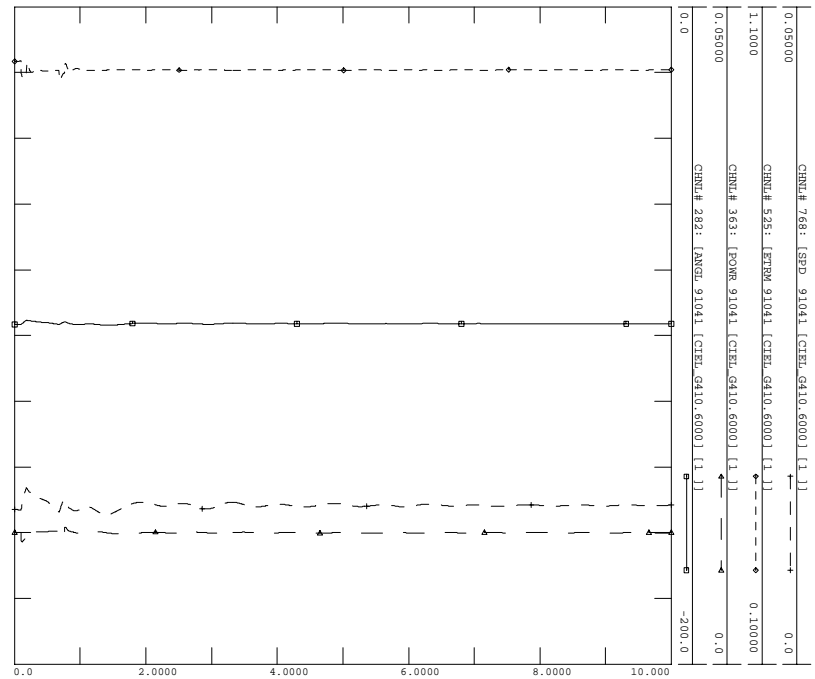
FRI, MAY 21 2004 9:09
 CIELO CABLE2 GEN53 4

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
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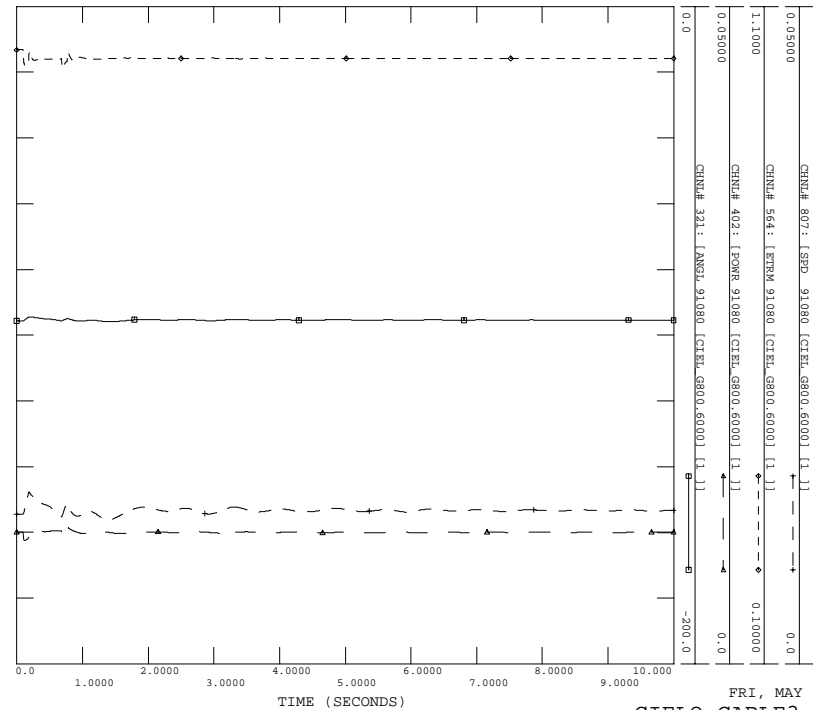
FRI, MAY 21 2004 9:09
 CIELO CABLE1 GEN1 1

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
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 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT41PH.OUT



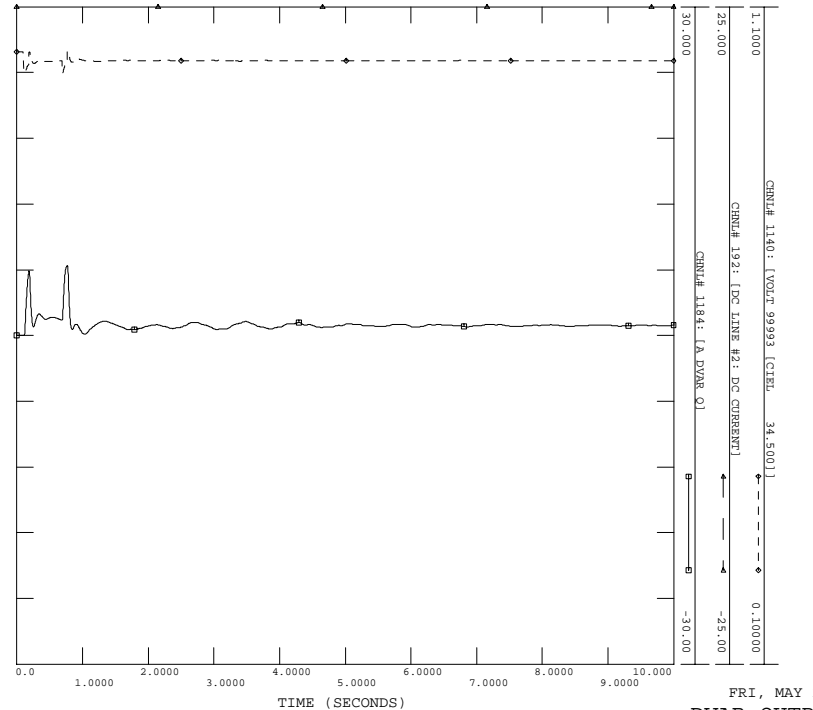
FRI, MAY 21 2004 9:09
 CIELO CABLE2 GEN41 3

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000W UNITS, D-VAR SOLUTION W/ LARGER XFMR
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 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
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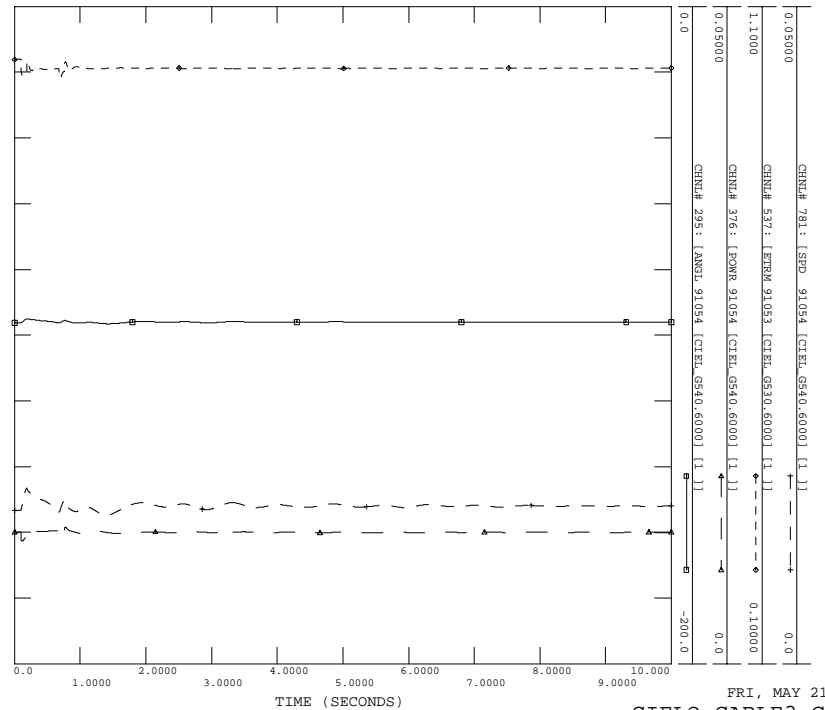
FRI, MAY 21 2004 9:09
 CIELO CABLE3 GEN80 6

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000W UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT41PH.OUT



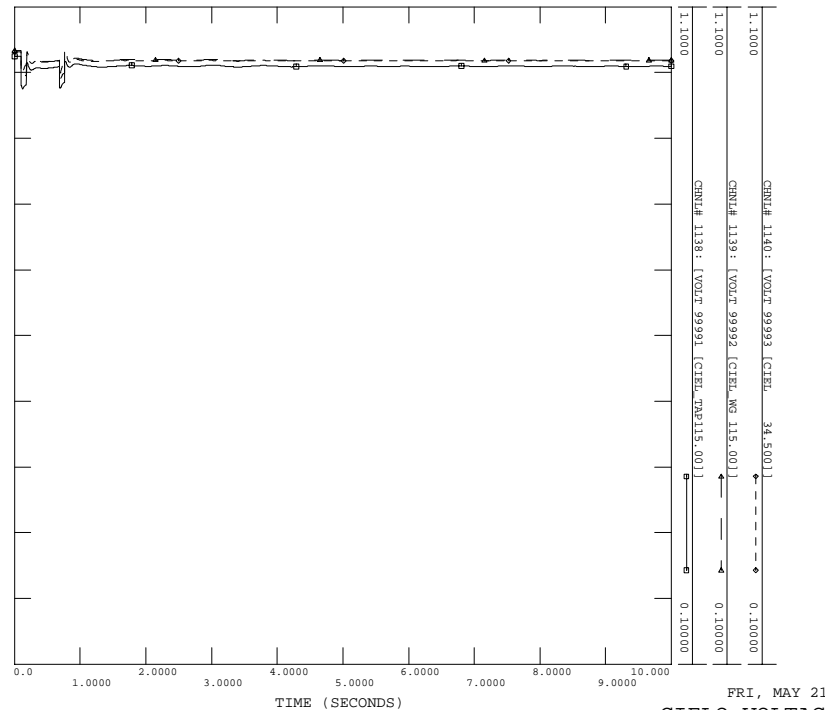
FRI, MAY 21 2004 9:09
 DVAR OUTPUT 8

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000W UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
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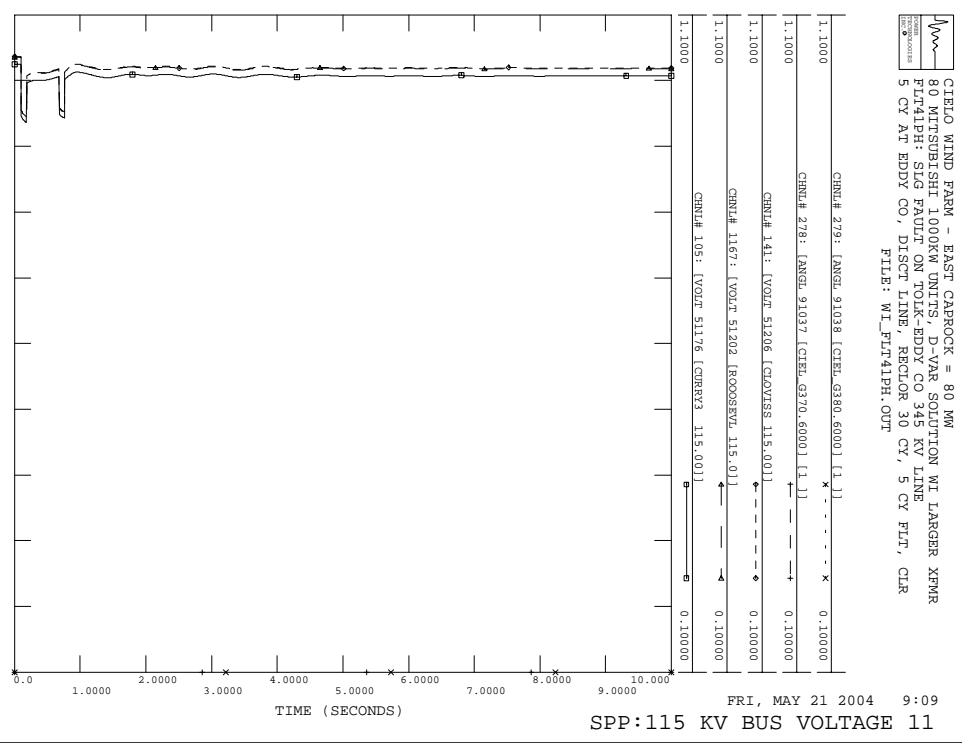
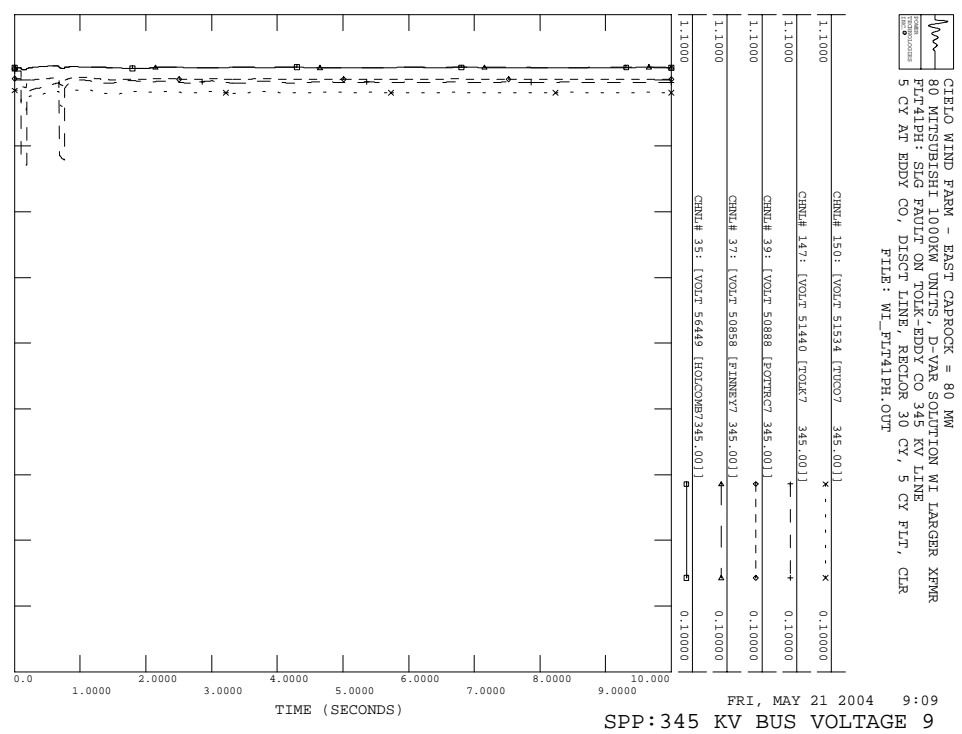
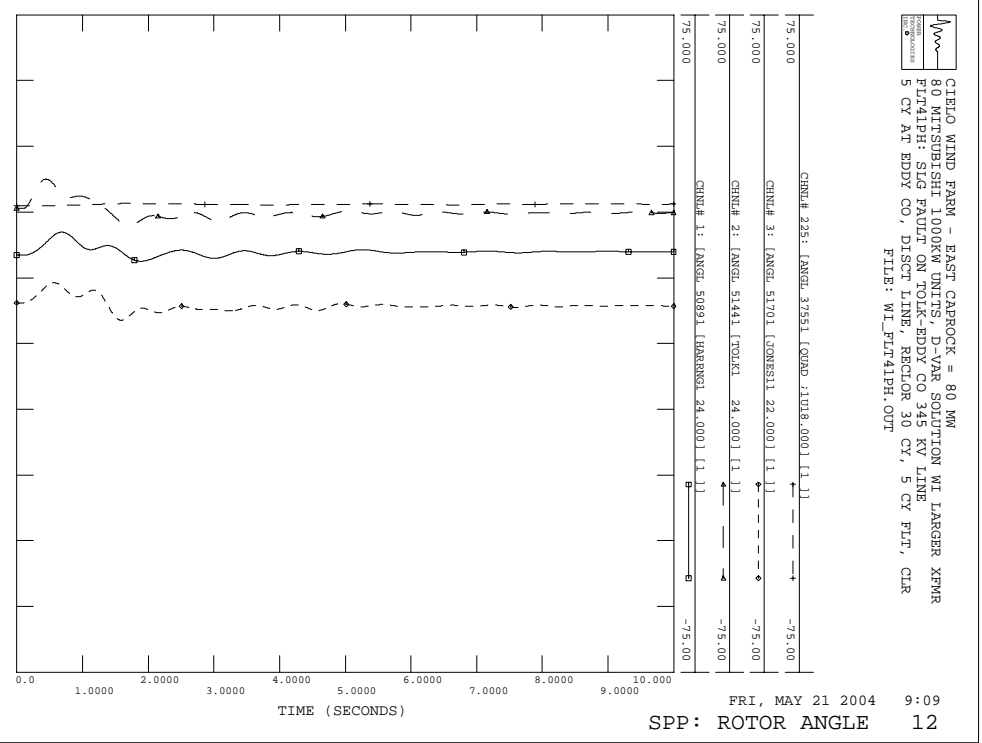
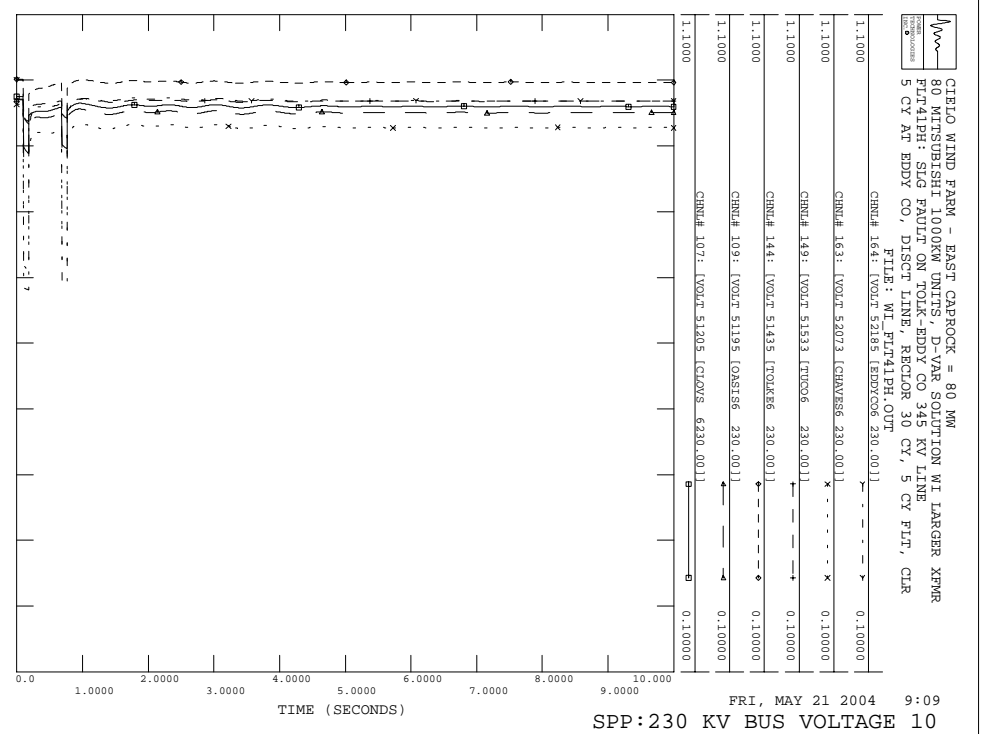


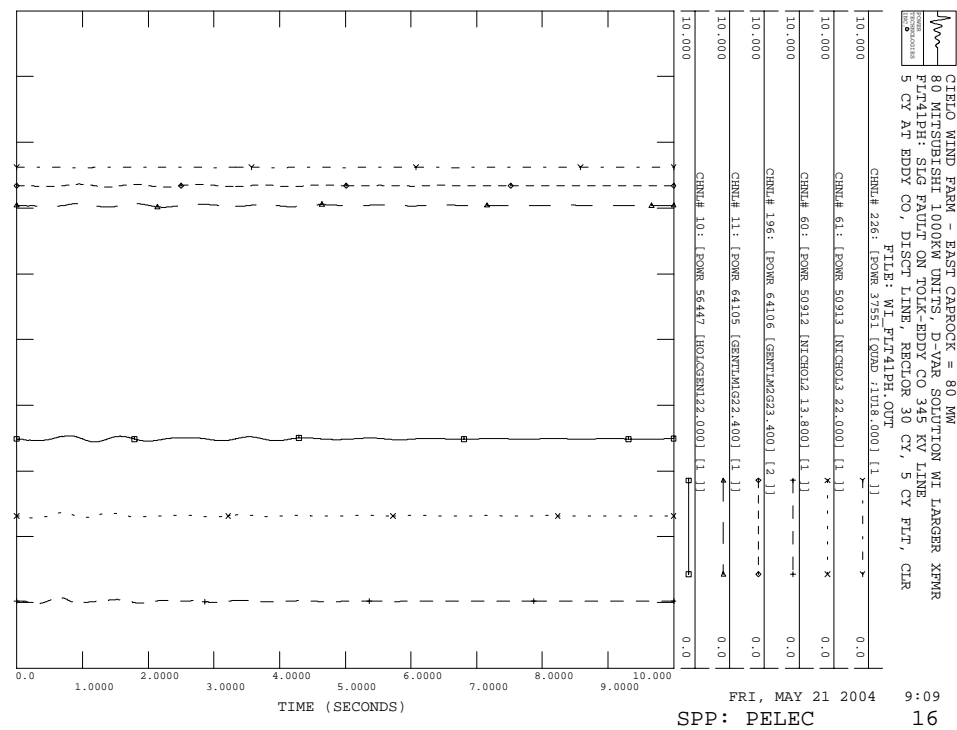
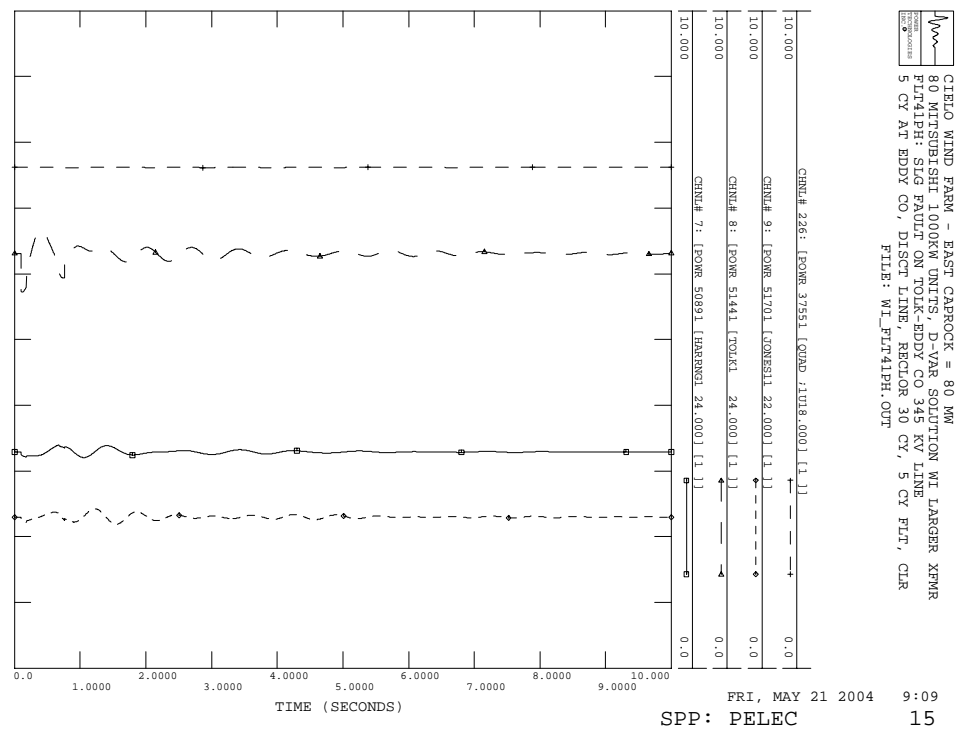
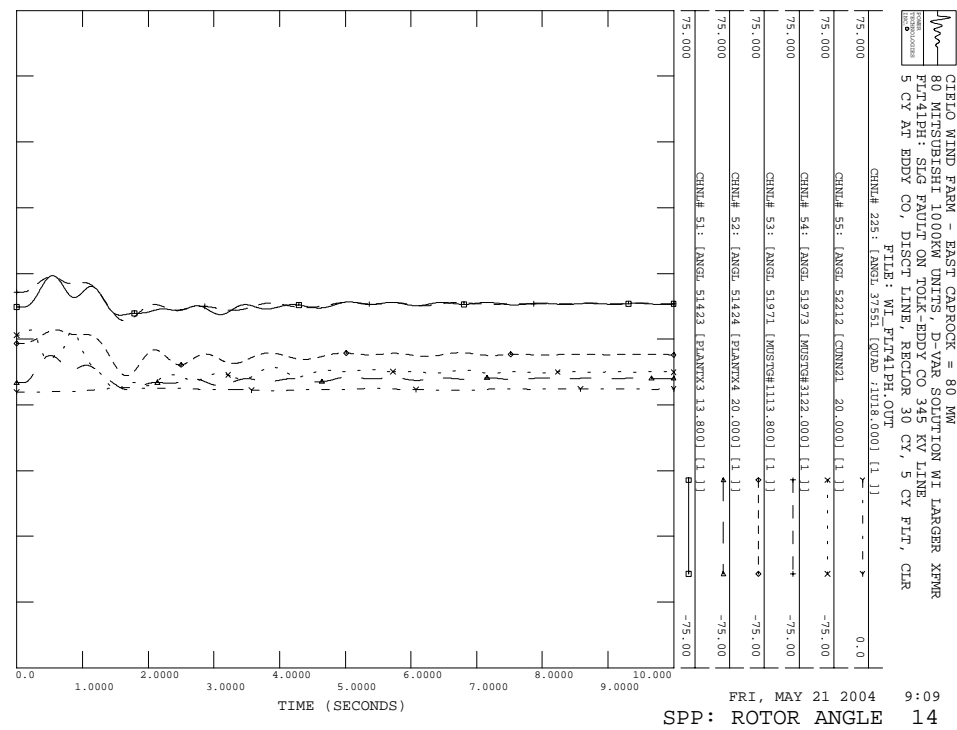
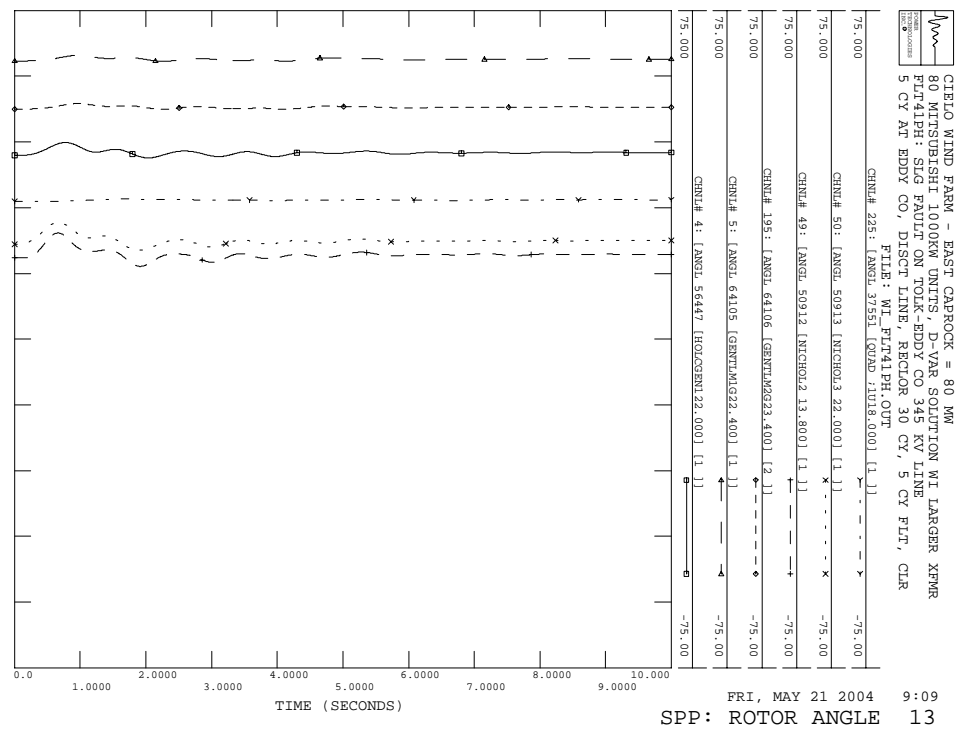
FRI, MAY 21 2004 9:09
 CIELO CABLE3 GEN54 5

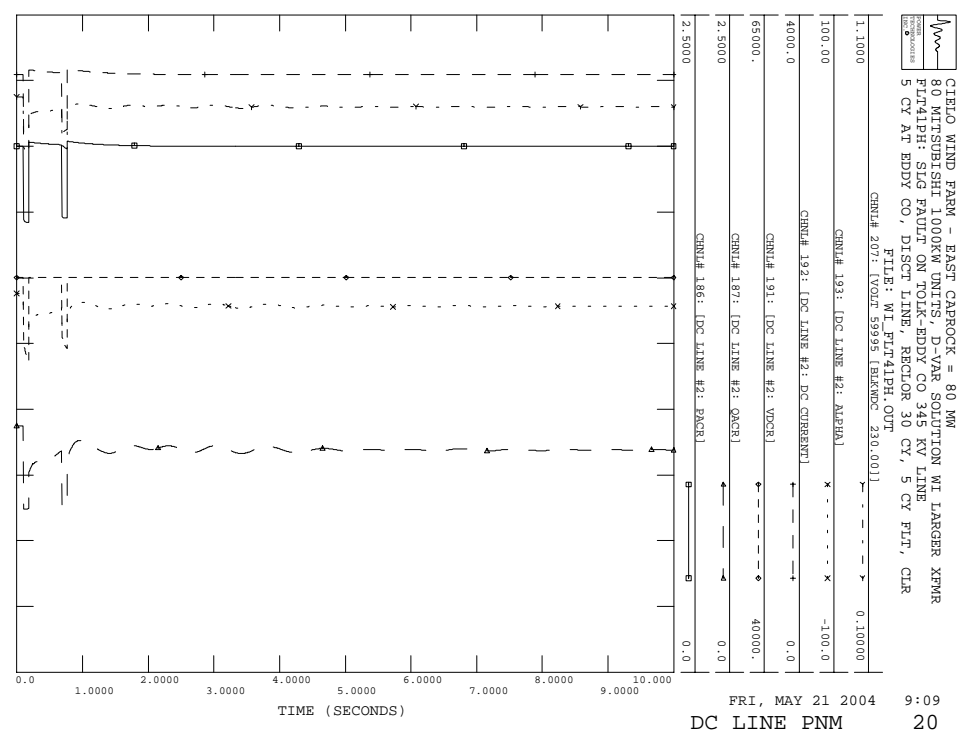
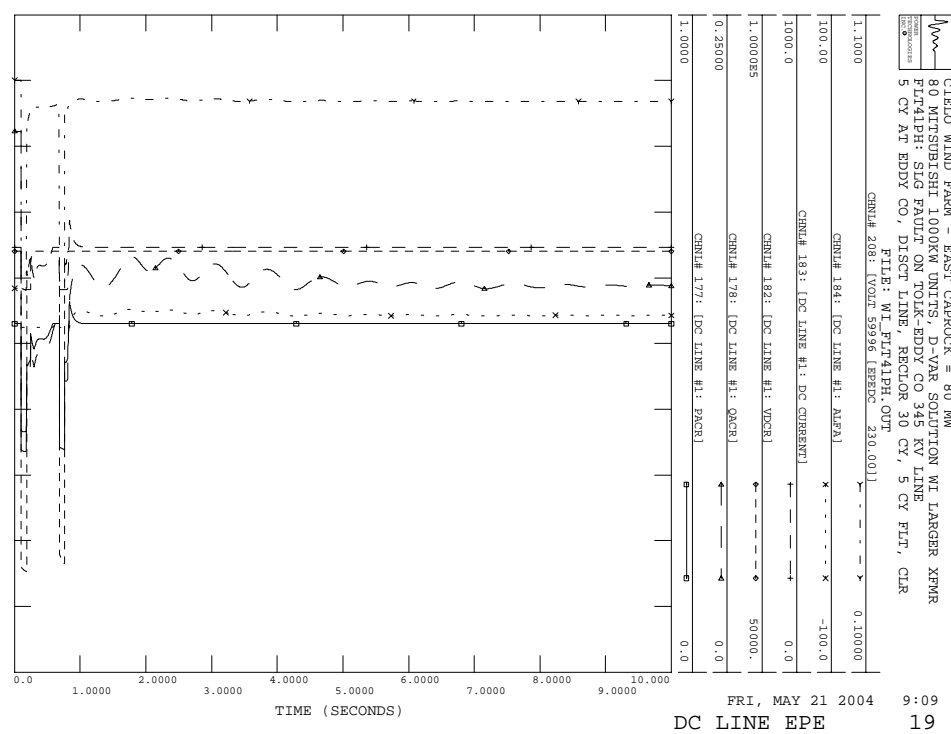
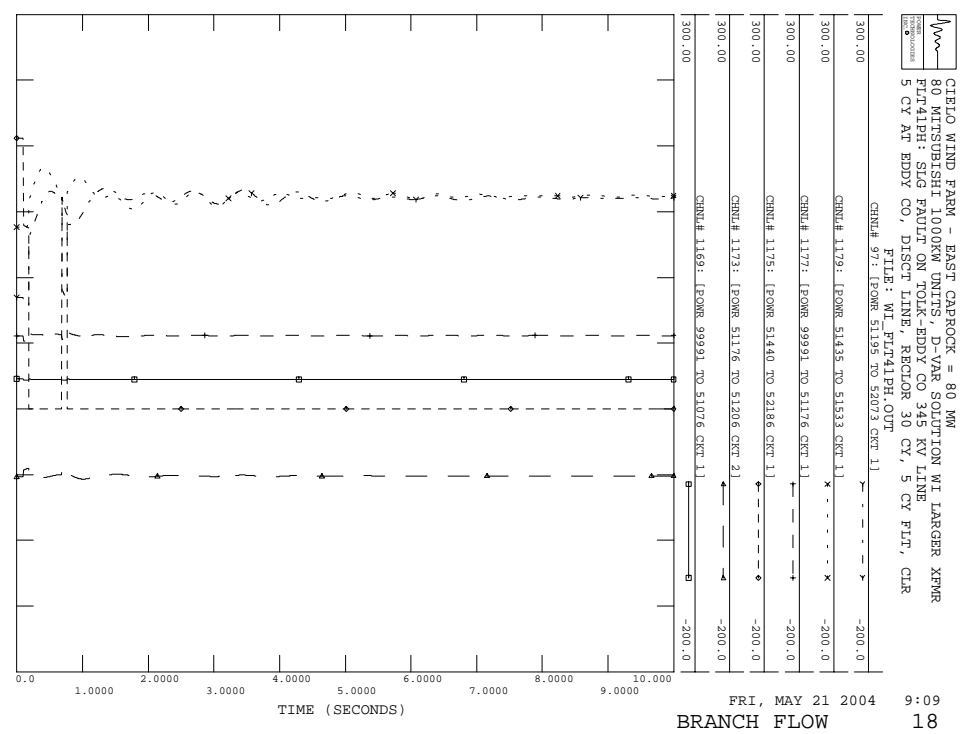
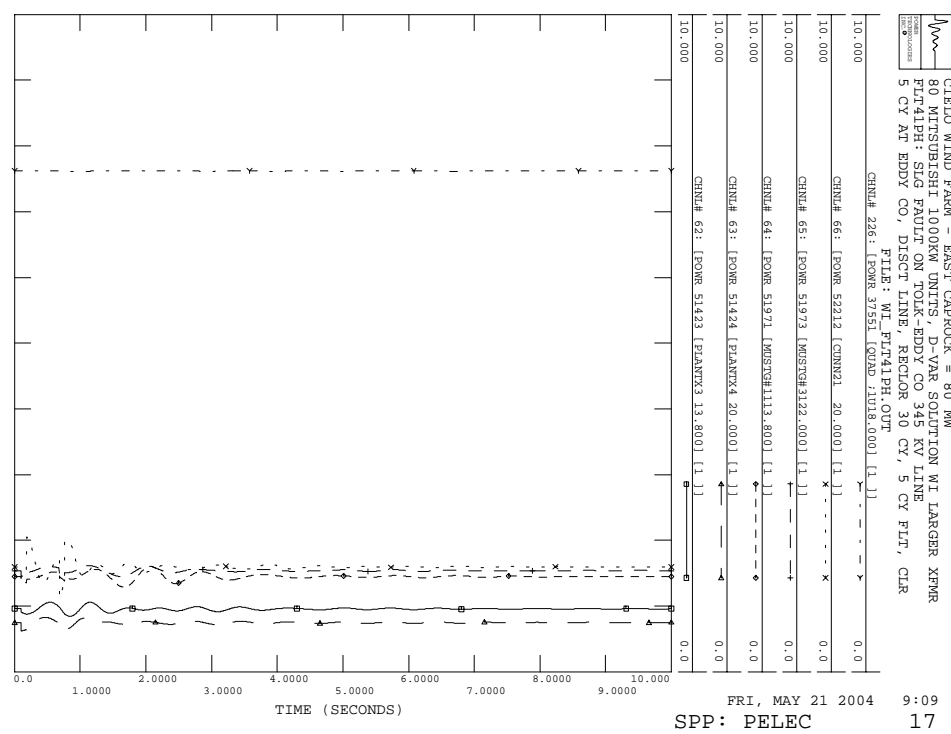
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000W UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT41PH.OUT



FRI, MAY 21 2004 9:09
 CIELO VOLTAGE 7

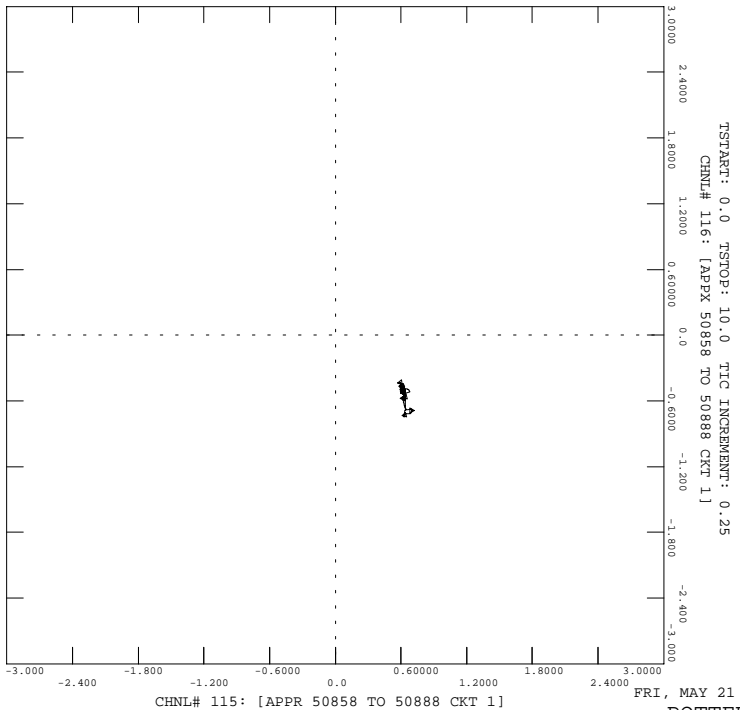






CIRLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT41PH - SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR

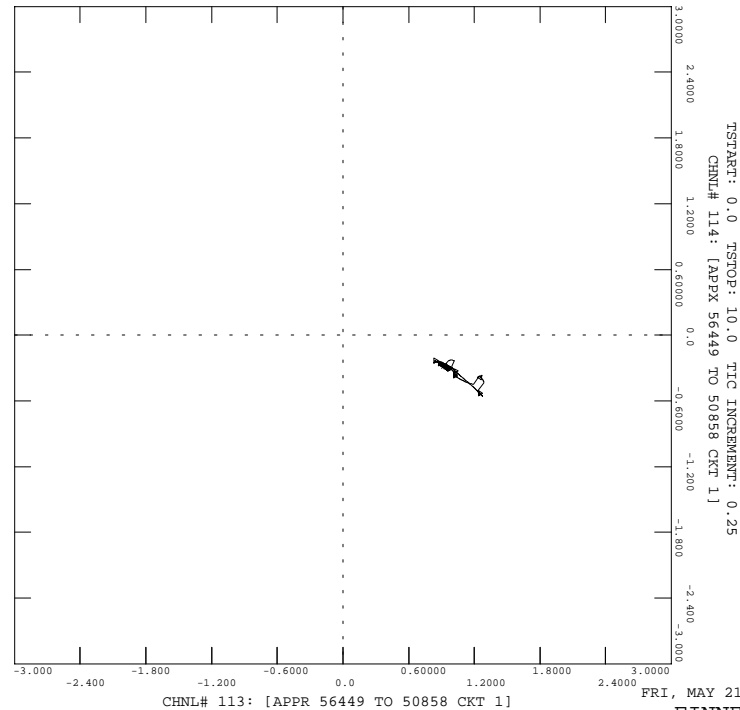
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FRI, MAY 21 2004 9:09
 CHNL# 115: [APPR 50858 TO 50888 CKT 1] POTTER-FINNEY 22

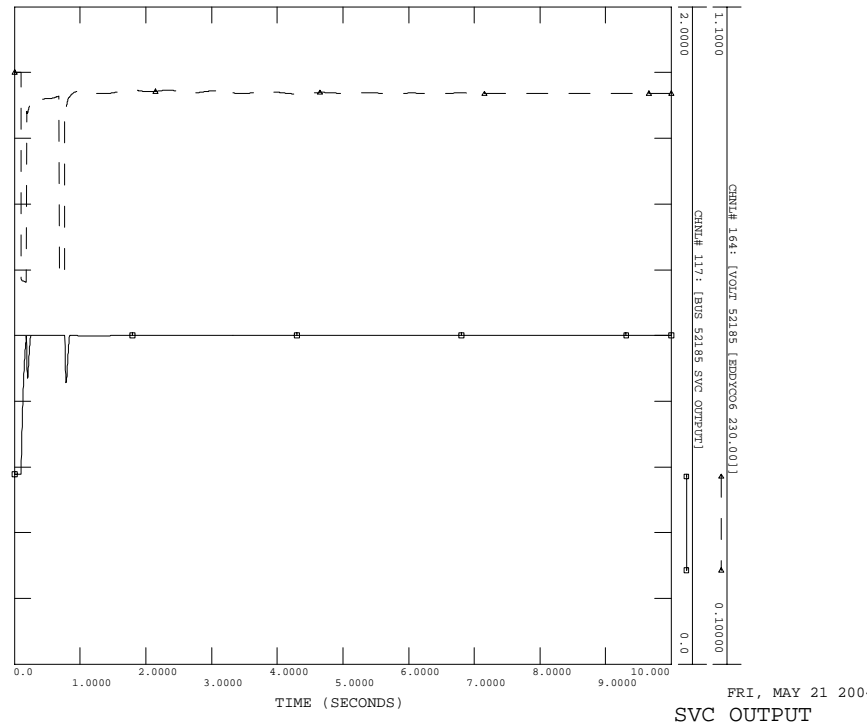
CIRLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT41PH - SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR

FILE: WI_FLT41PH.OUT



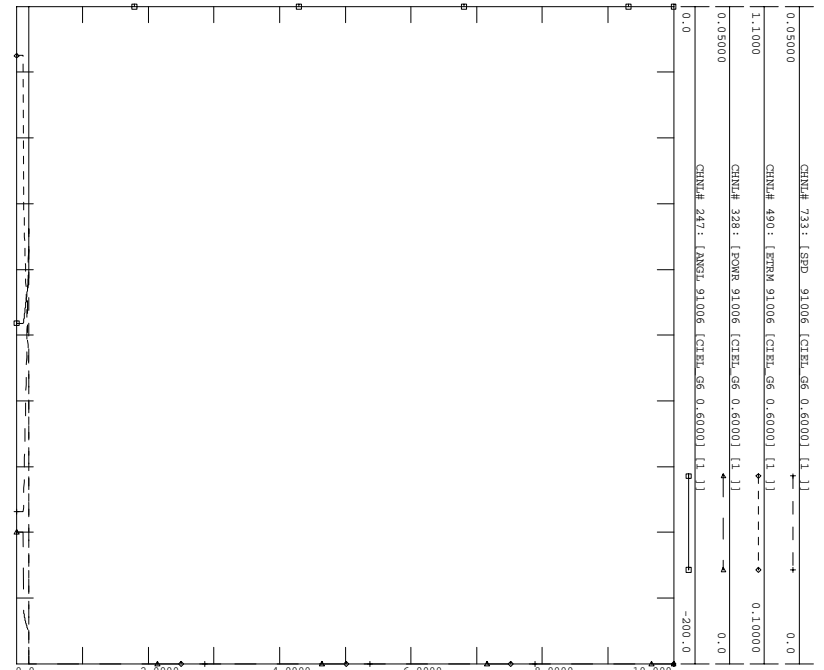
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 CHNL# 113: [APPR 56449 TO 50858 CKT 1] FINNEY-HOLCOMB 21

CIRLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT41PH - SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR



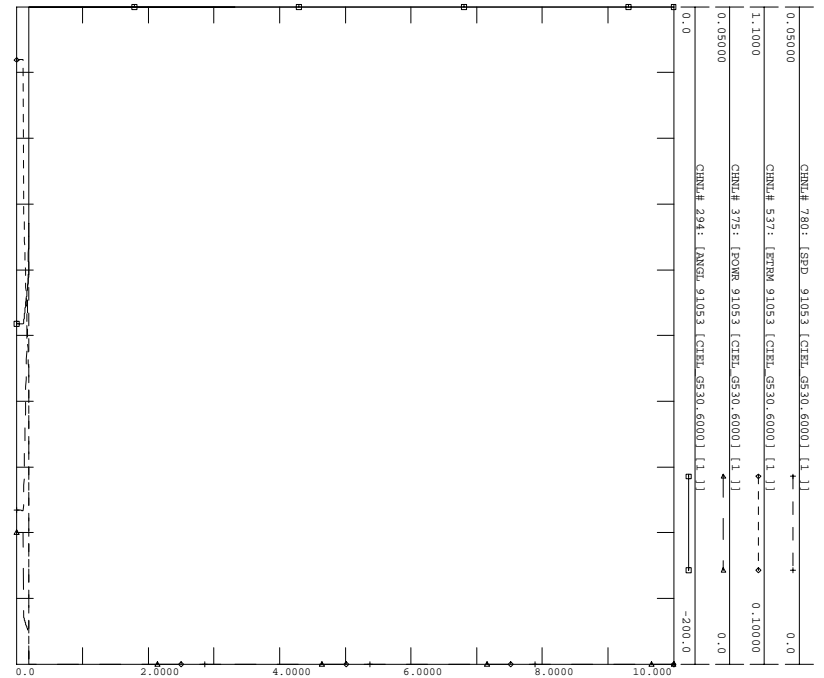
FRI, MAY 21 2004 9:09
 SVC OUTPUT 23

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH.OUT



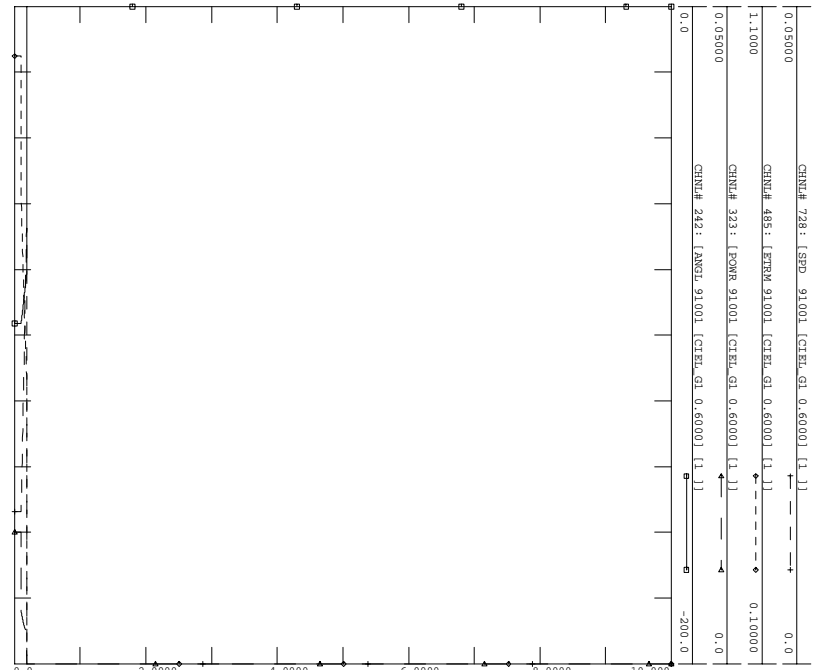
FRI, MAY 21 2004 9:10
 CIELO CABLE1 GEN6 2

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH.OUT



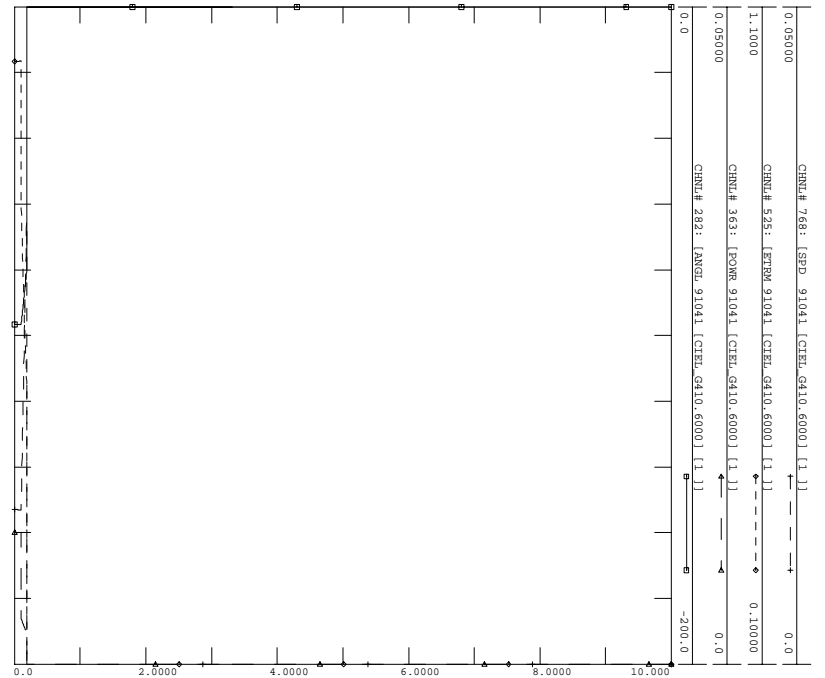
FRI, MAY 21 2004 9:10
 CIELO CABLE2 GEN53 4

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH.OUT



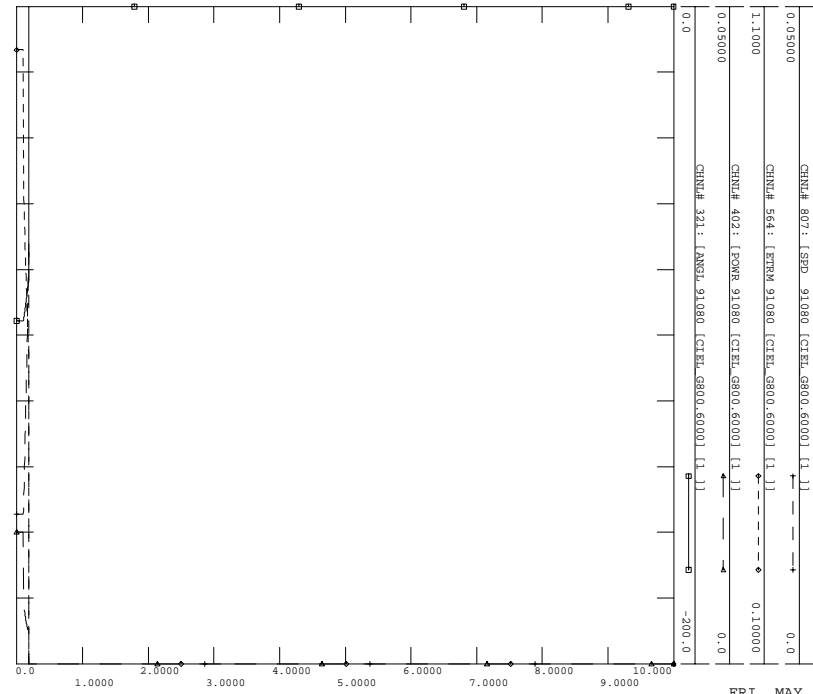
FRI, MAY 21 2004 9:10
 CIELO CABLE1 GEN1 1

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH.OUT



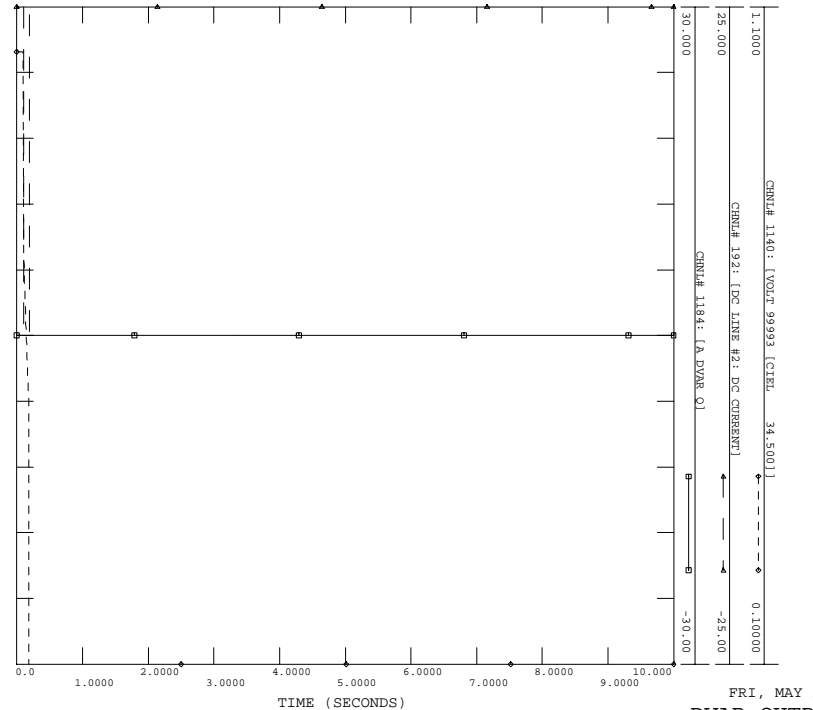
FRI, MAY 21 2004 9:10
 CIELO CABLE2 GEN41 3

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH.OUT



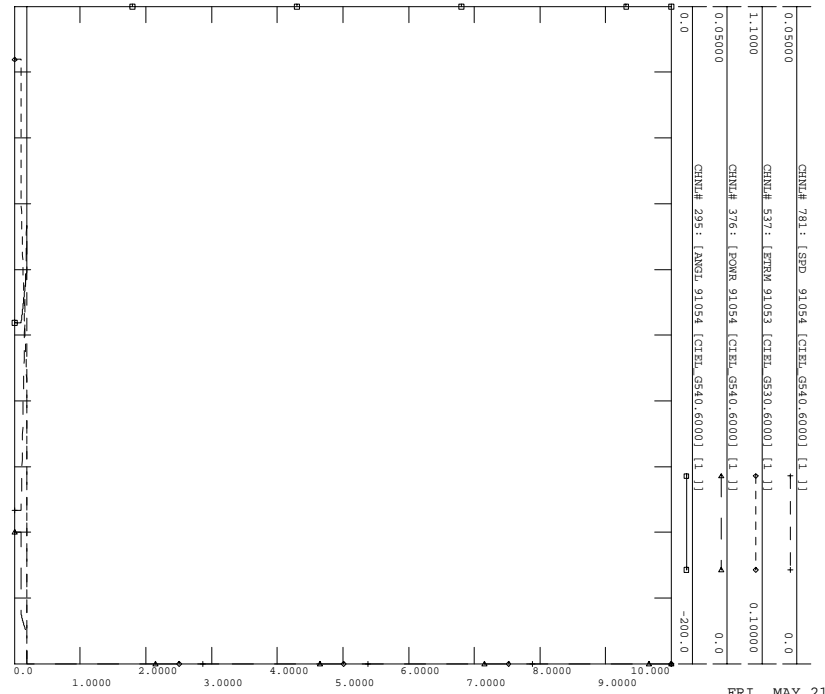
FRI, MAY 21 2004 9:10
 CIELO CABLE3 GEN80 6

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH.OUT



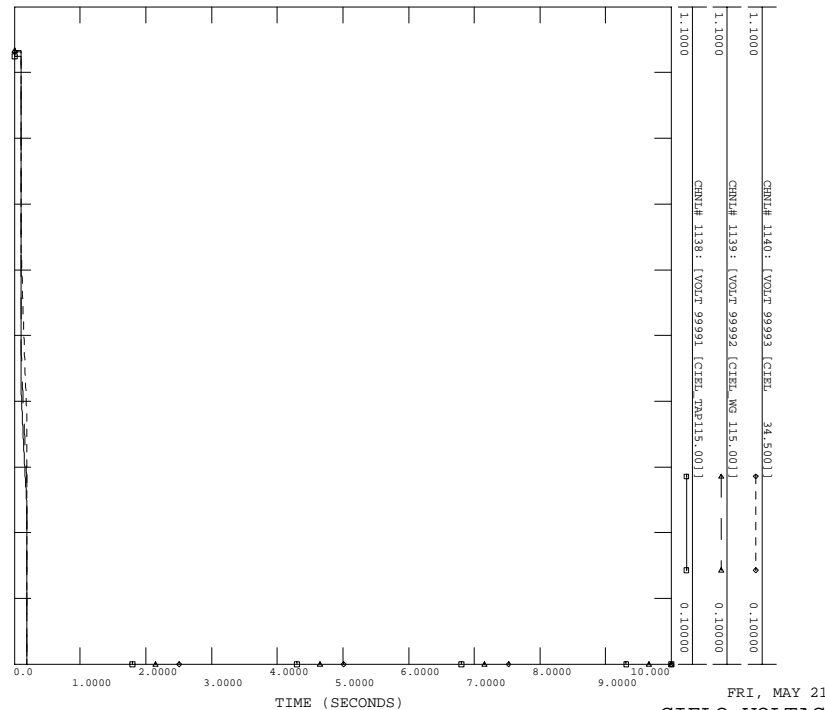
FRI, MAY 21 2004 9:10
 DVAR OUTPUT 8

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH.OUT

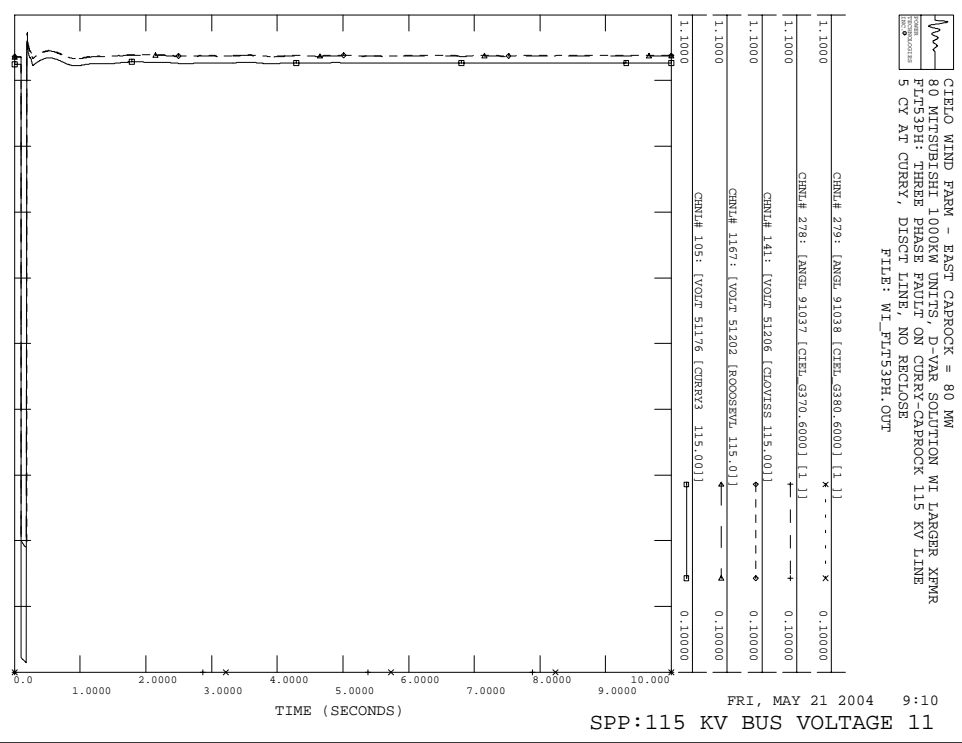
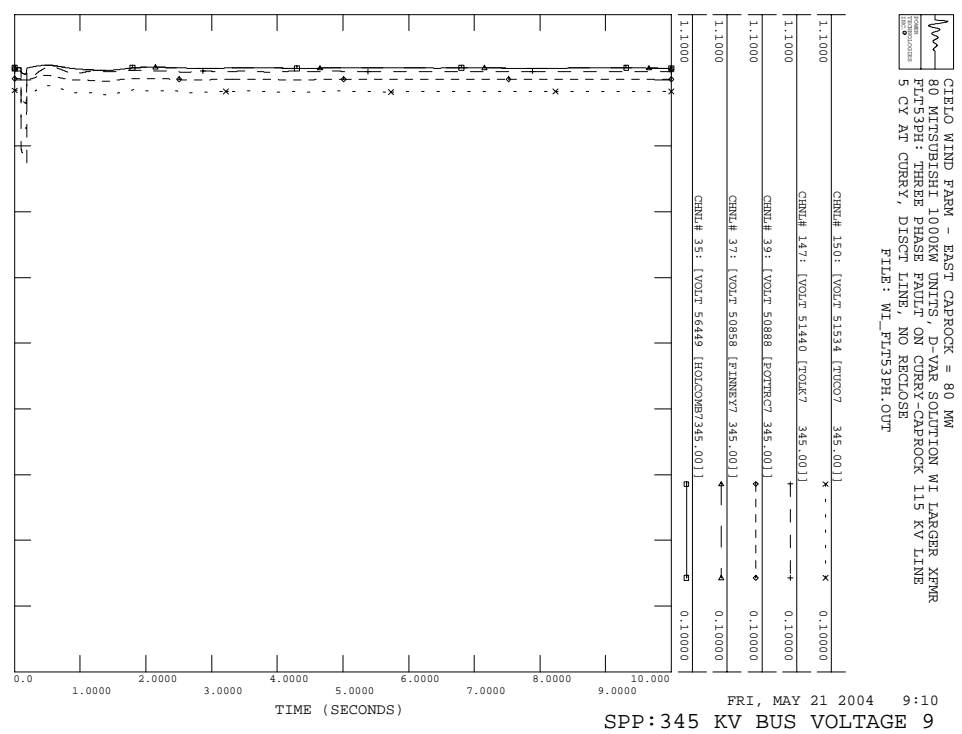
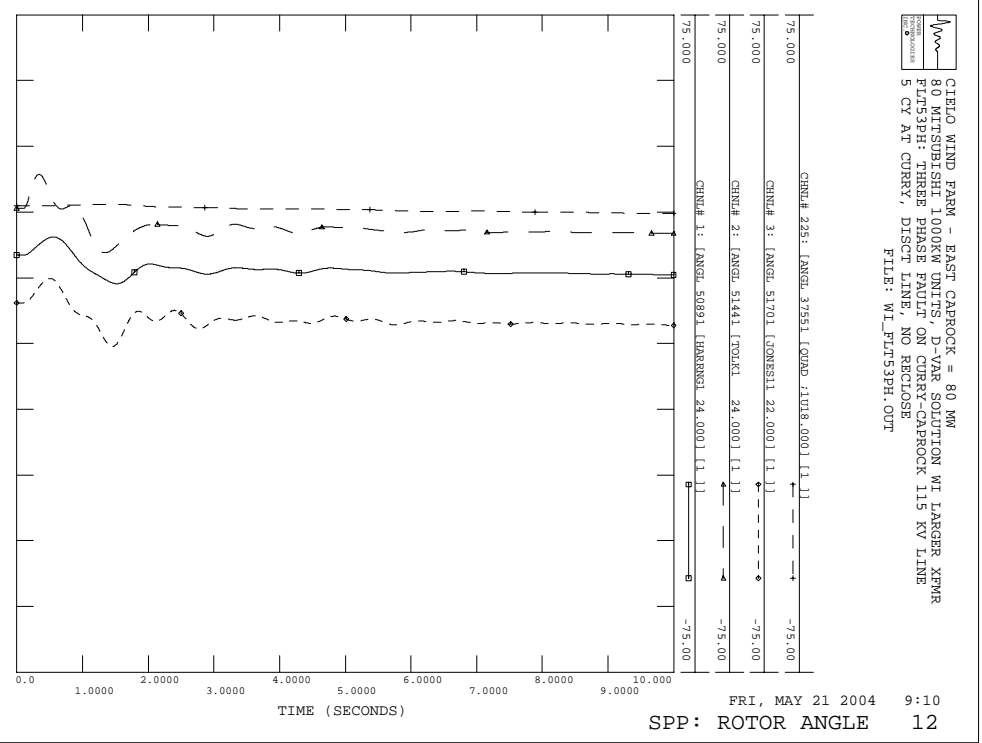
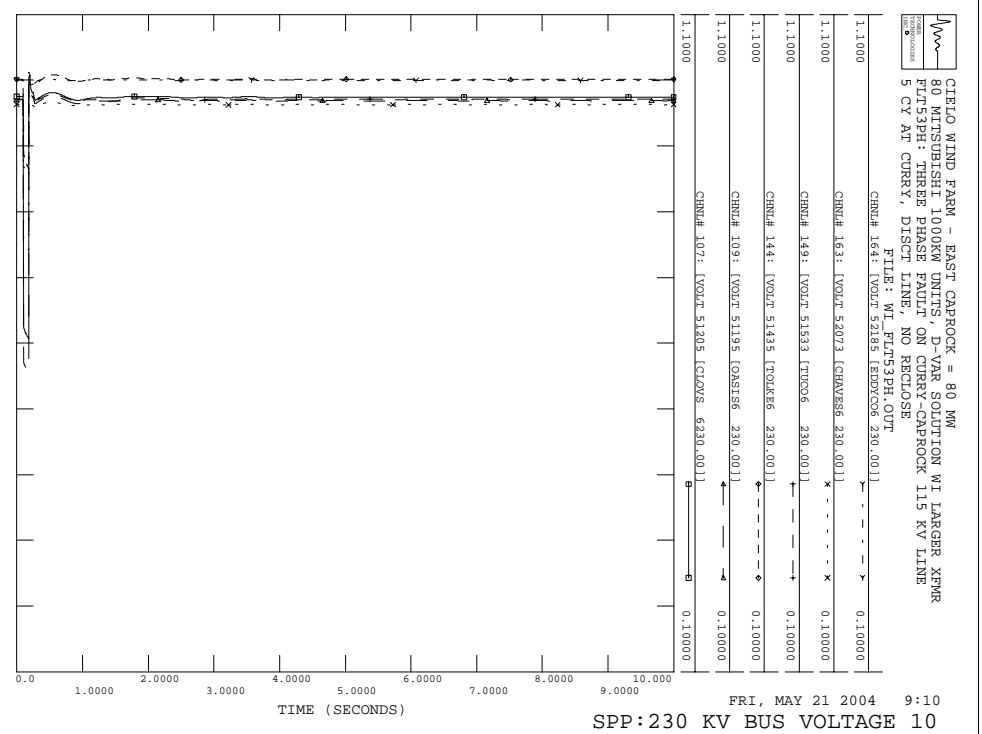


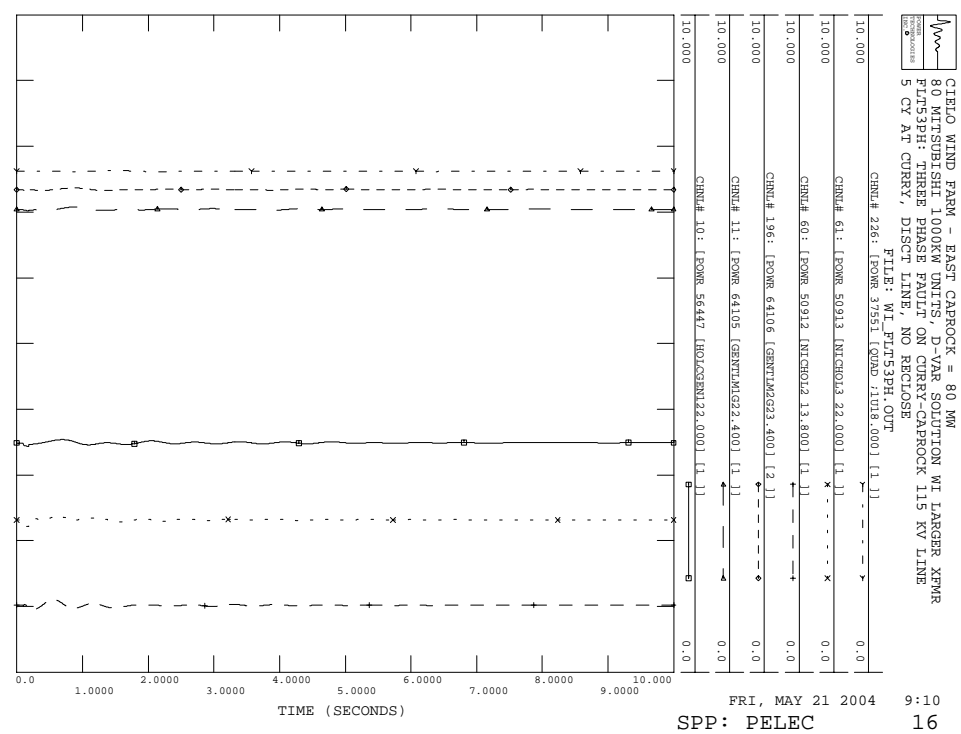
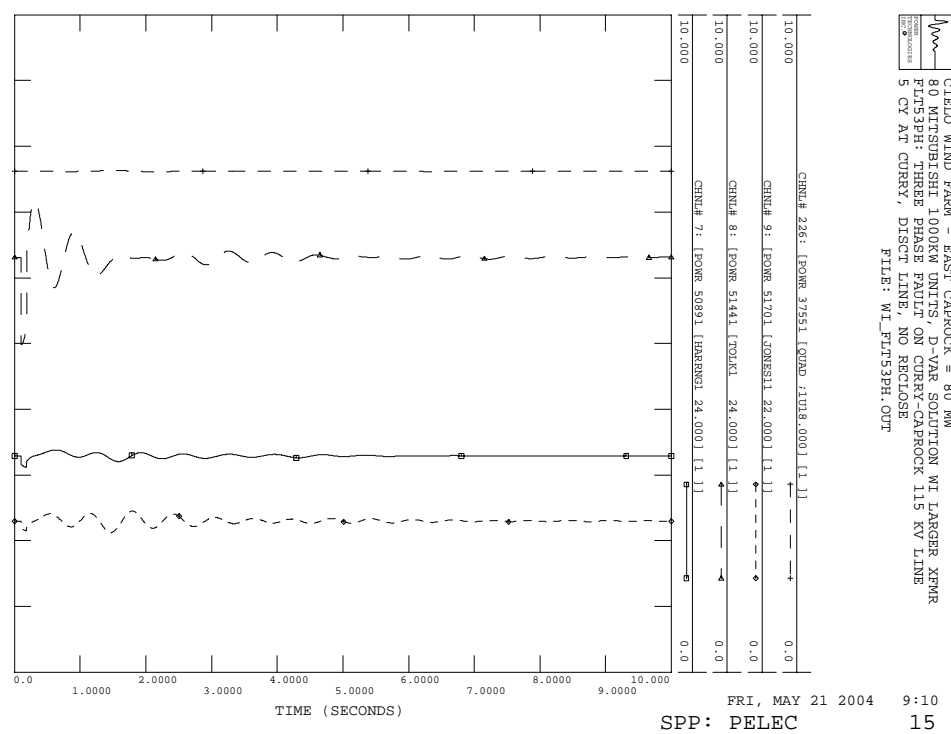
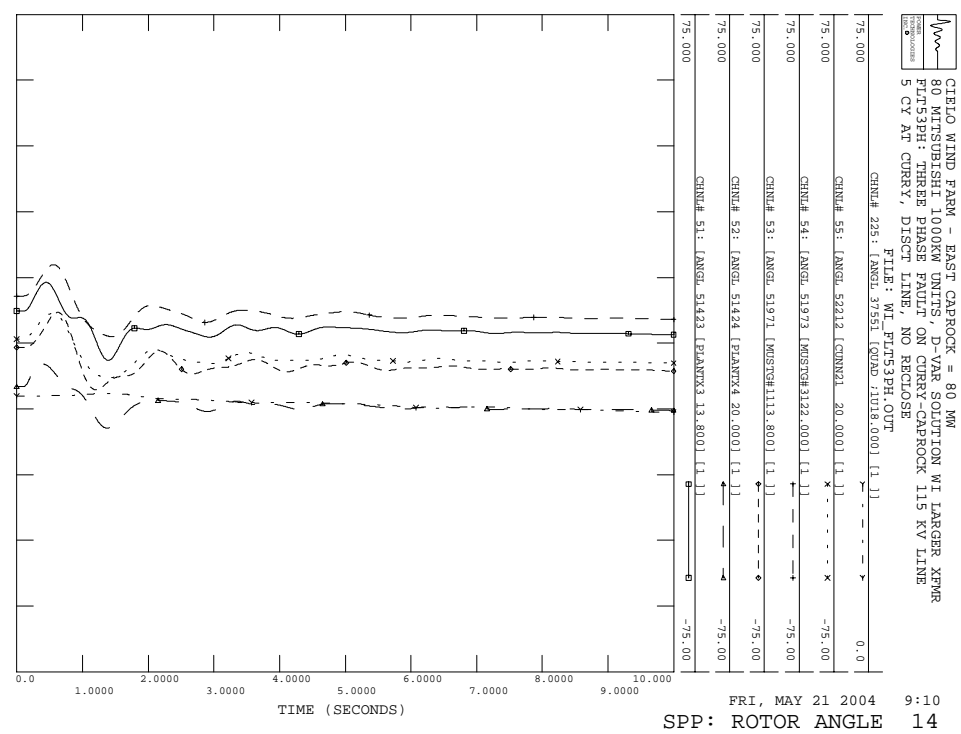
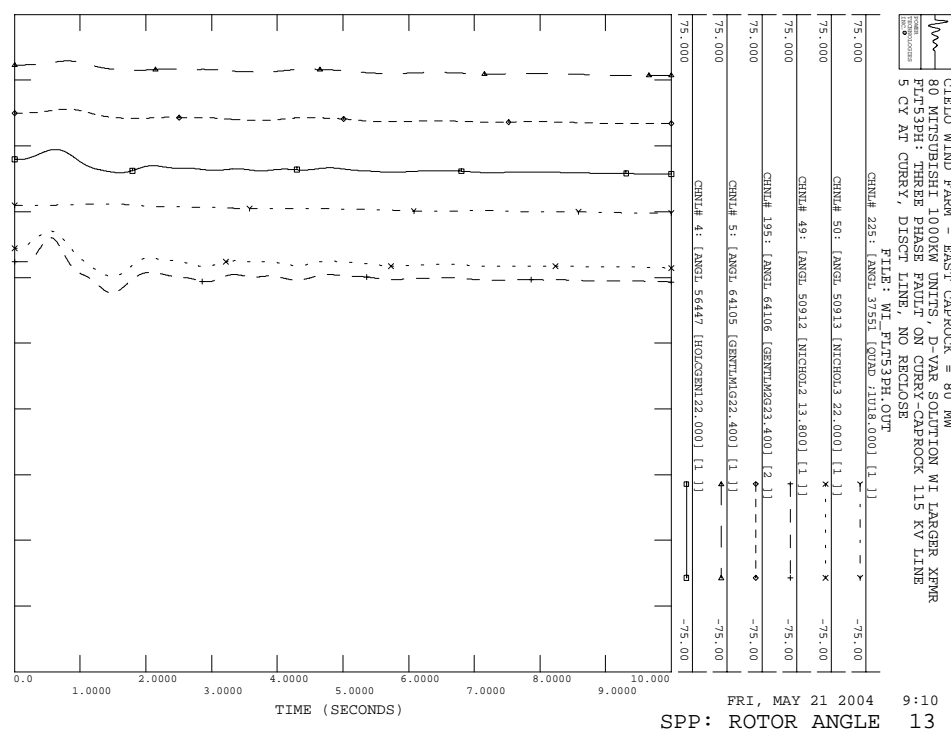
FRI, MAY 21 2004 9:10
 CIELO CABLE3 GEN54 5

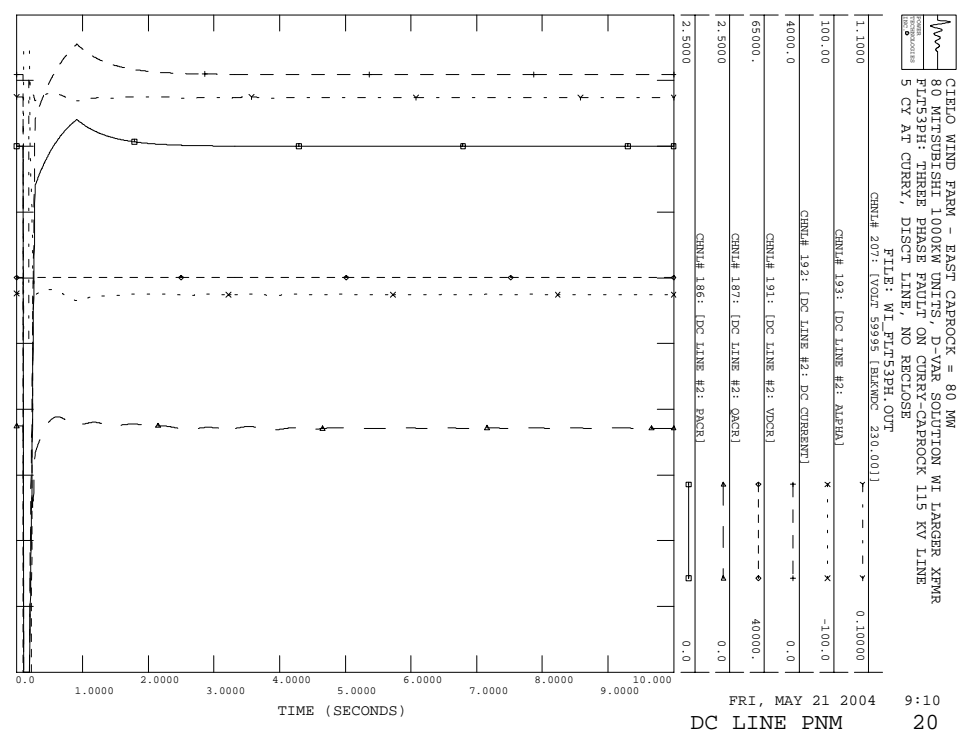
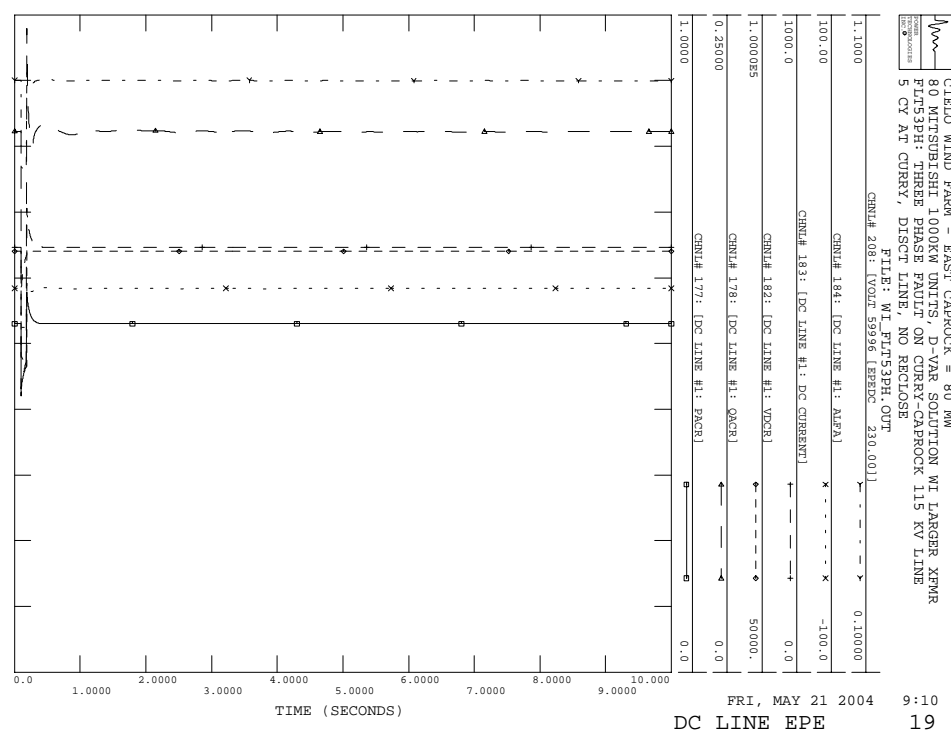
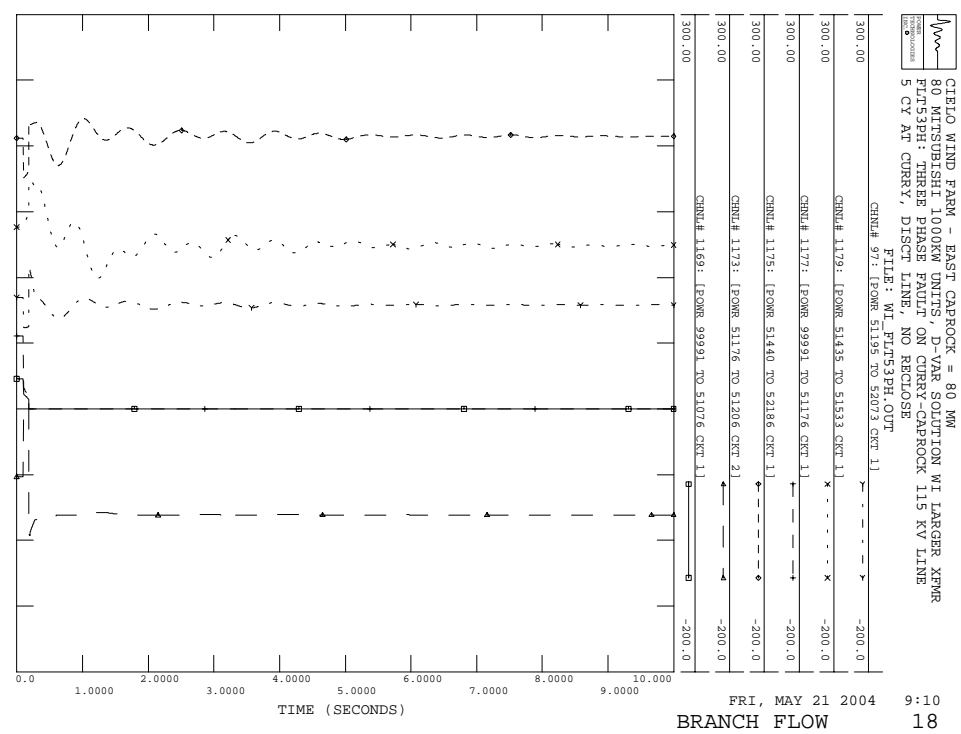
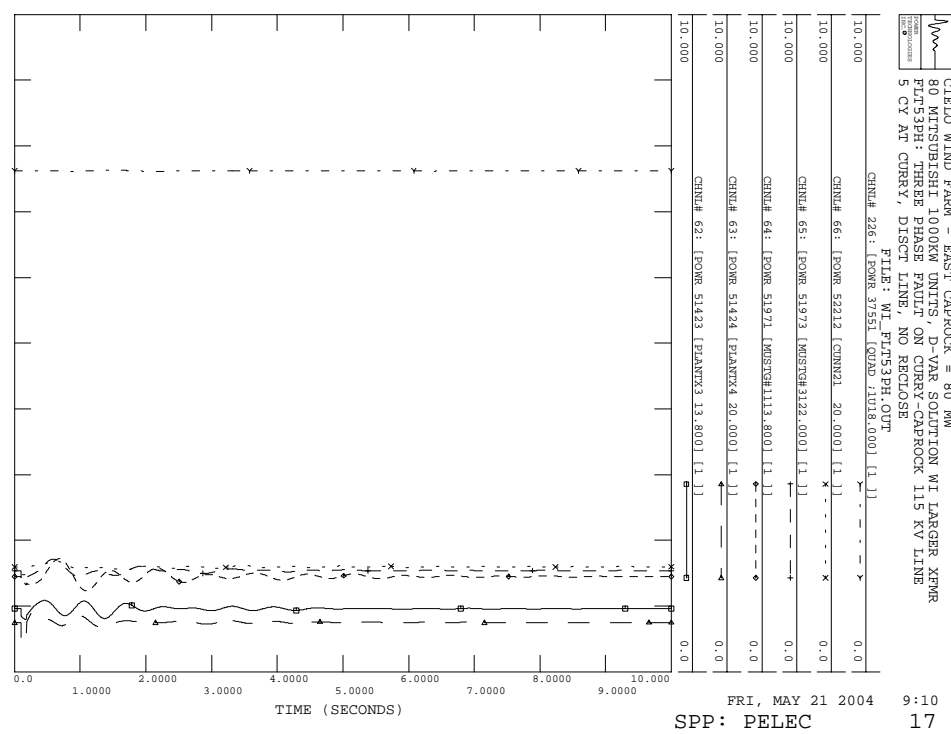
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH.OUT



FRI, MAY 21 2004 9:10
 CIELO VOLTAGE 7

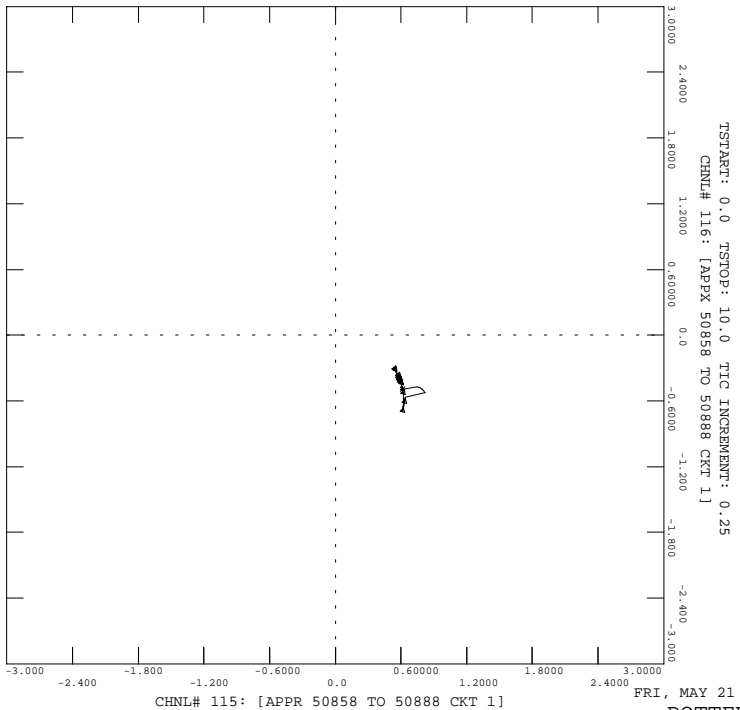






CIELLO WIND FARM - EAST CABROCK = 80 MW
80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPR
FLT53PH - THREE PHASE FAULT ON CURREY-CAPROCK 115 KV LINE
5 CY AT CURREY, DISCT LINE, NO RECLOSE

FILE: WI_FLT53PH.OUT

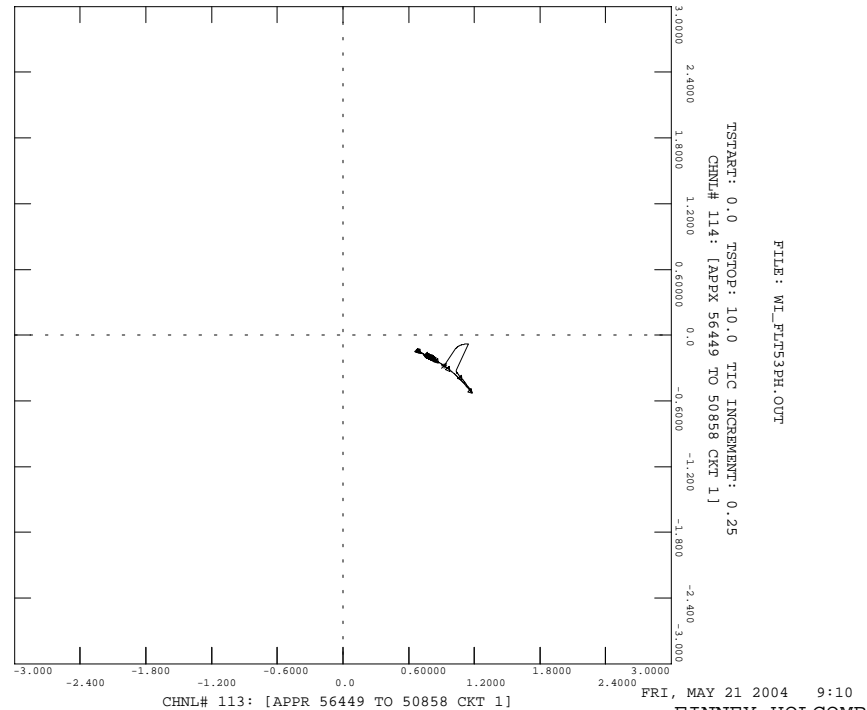


FRI, MAY 21 2004 9:10
POTTER-FINNEY

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CIELLO WIND FARM - EAST CABROCK = 80 MW
80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPR
FLT53PH - THREE PHASE FAULT ON CURREY-CAPROCK 115 KV LINE
5 CY AT CURREY, DISCT LINE, NO RECLOSE

FILE: WI_FLT53PH.OUT

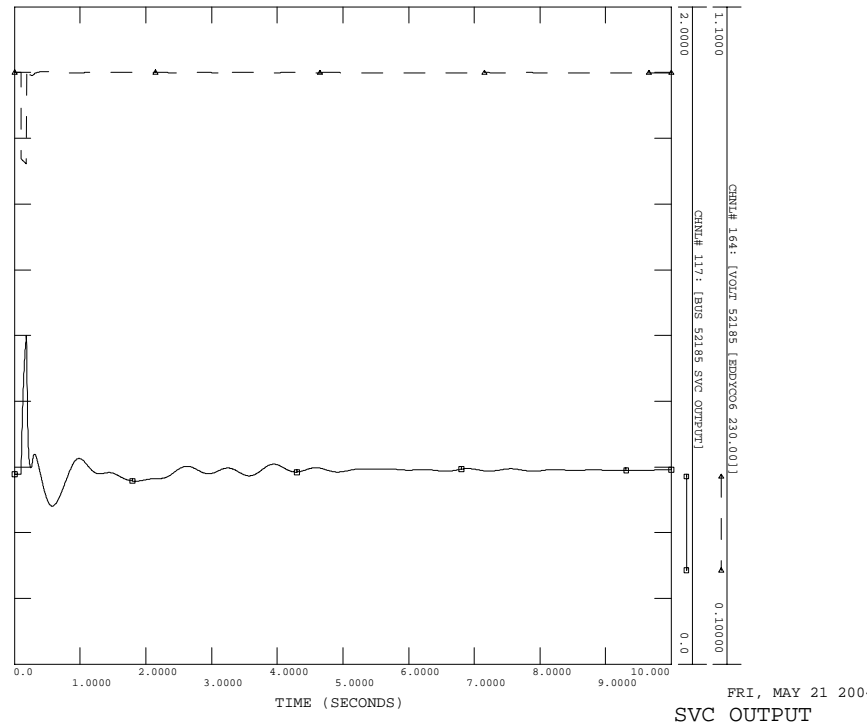


FRI, MAY 21 2004 9:10
FINNEY-HOLCOMB

21

CIELLO WIND FARM - EAST CABROCK = 80 MW
80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPR
FLT53PH - THREE PHASE FAULT ON CURREY-CAPROCK 115 KV LINE
5 CY AT CURREY, DISCT LINE, NO RECLOSE

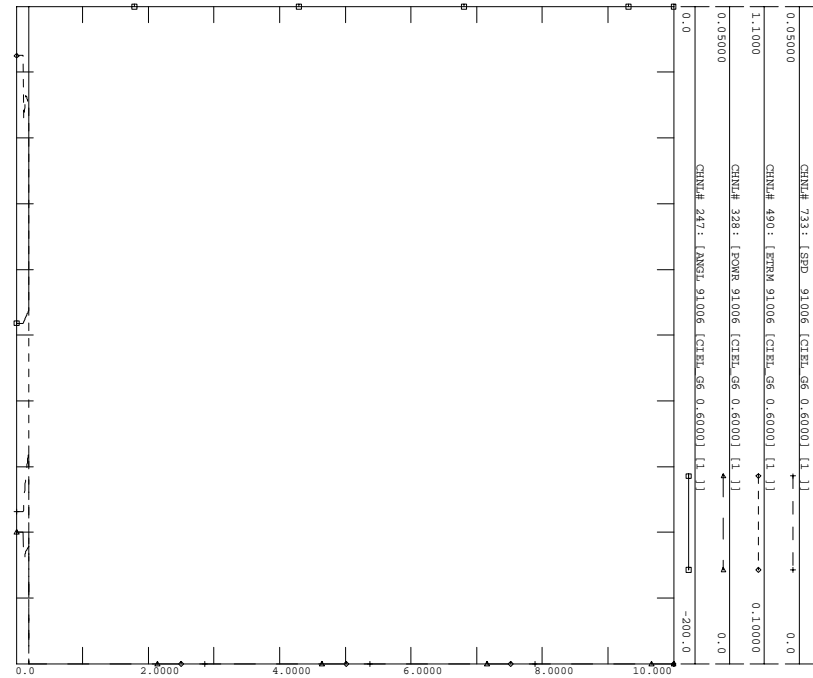
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FRI, MAY 21 2004 9:10
SVC OUTPUT

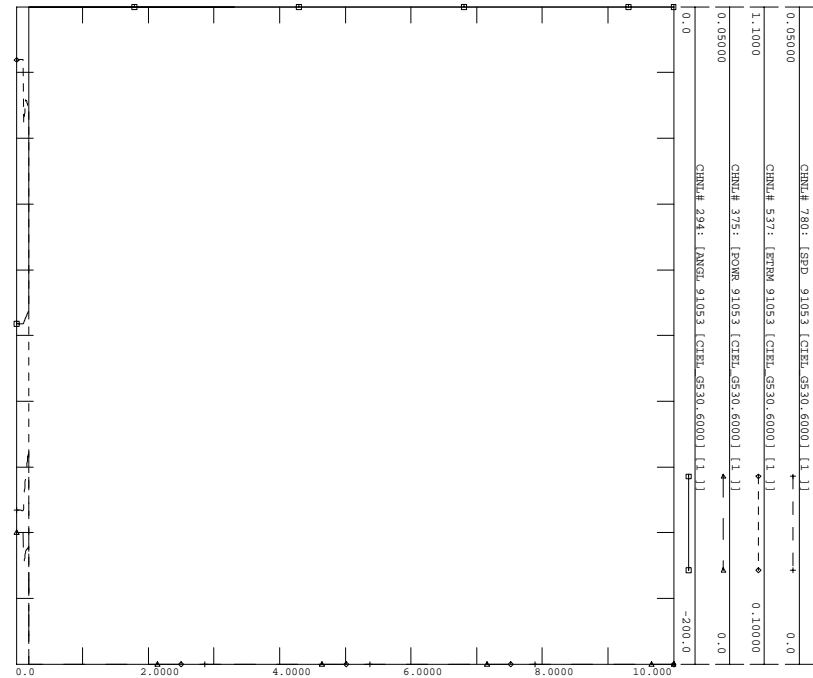
23

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000W UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT51PH.OUT



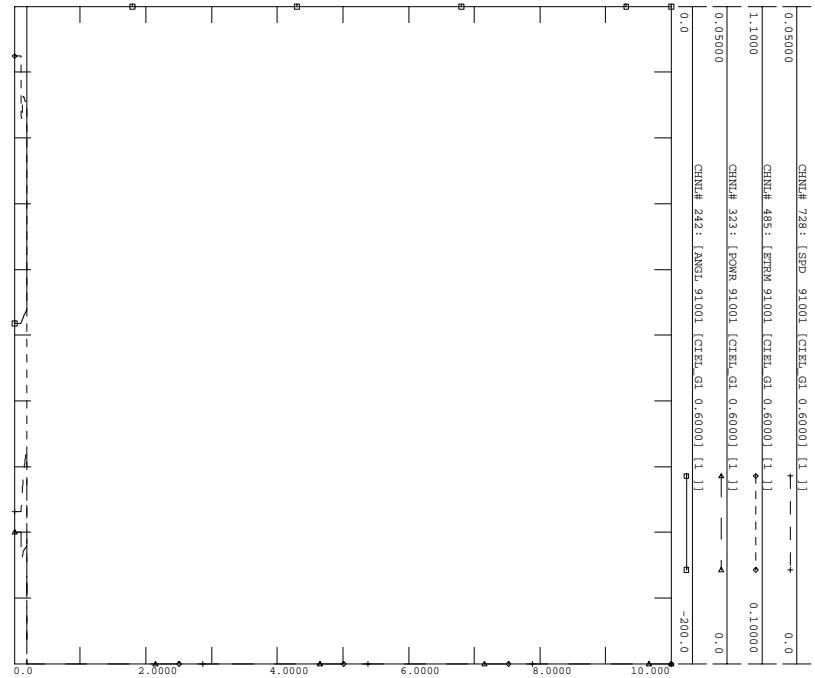
FRI, MAY 21 2004 9:10
 CIELO CABLE1 GEN6 2

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000W UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
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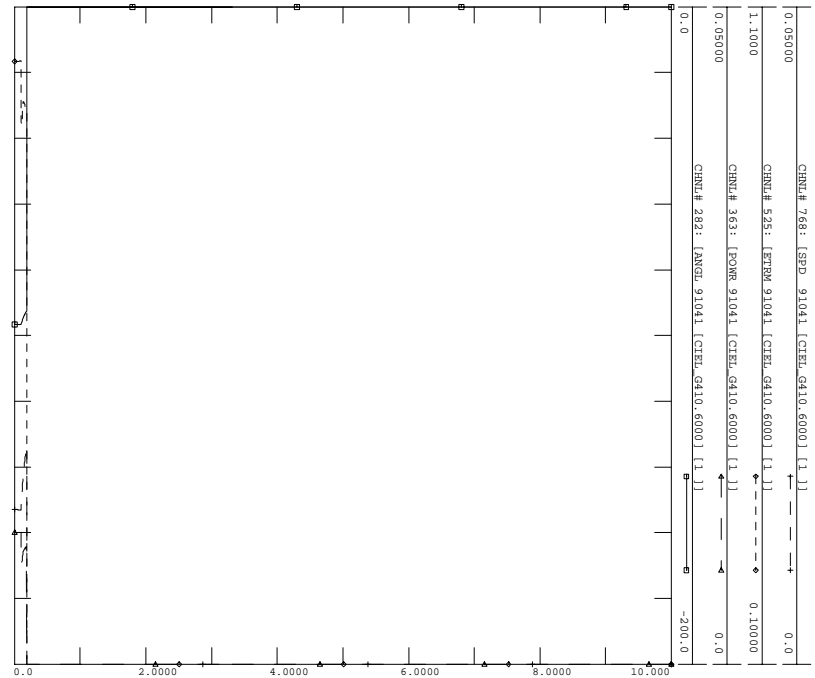
FRI, MAY 21 2004 9:10
 CIELO CABLE2 GEN53 4

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000W UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
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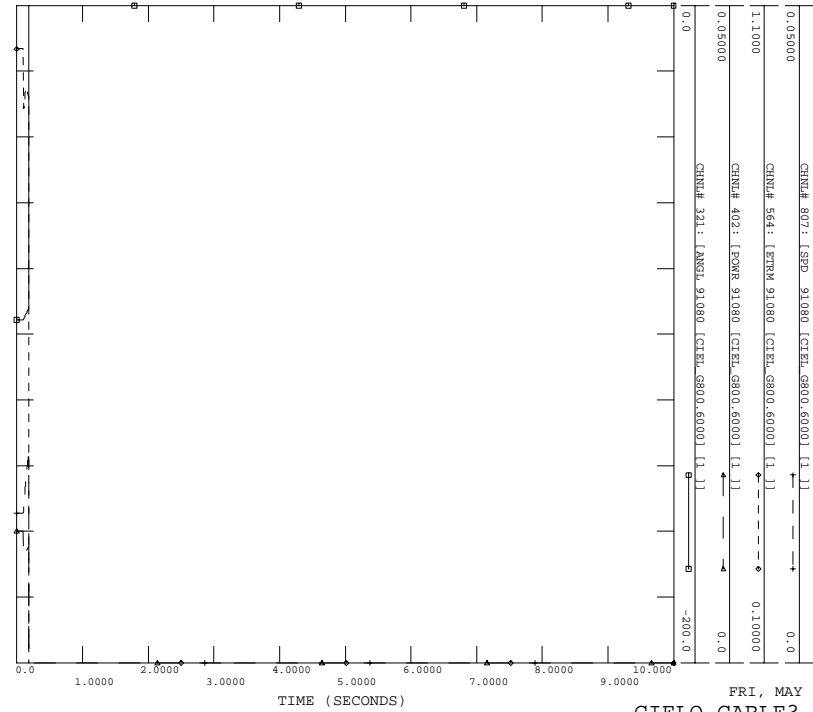
FRI, MAY 21 2004 9:10
 CIELO CABLE1 GEN1 1

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000W UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT51PH.OUT



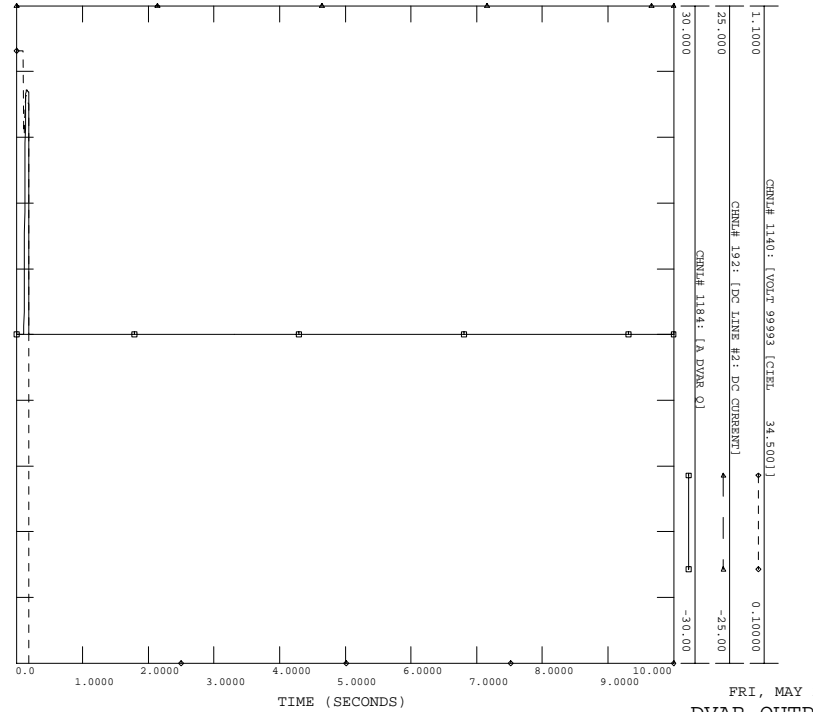
FRI, MAY 21 2004 9:10
 CIELO CABLE2 GEN41 3

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT51PH.OUT



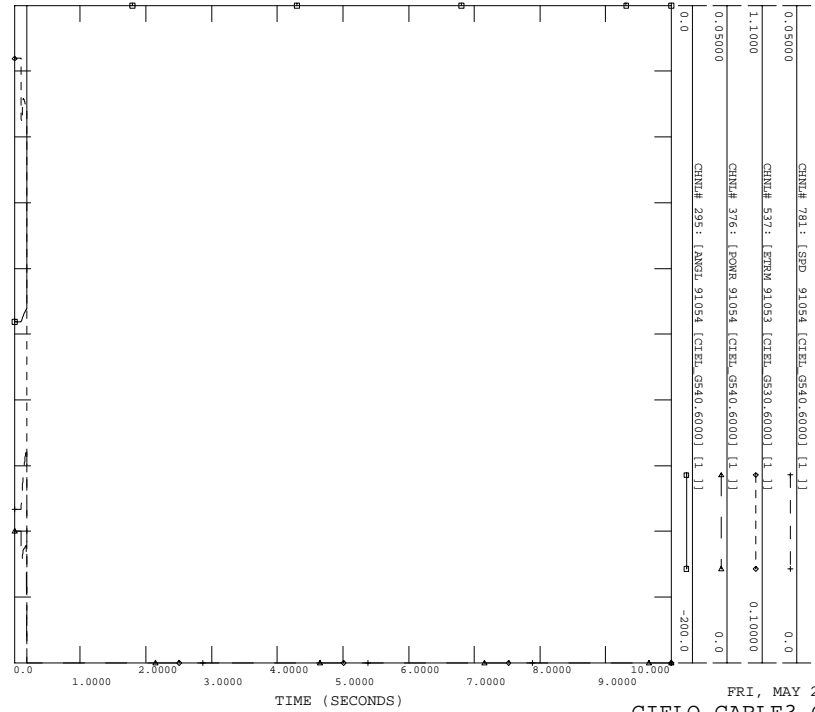
FRI, MAY 21 2004 9:10
 CIELO CABLE3 GEN80 6

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT51PH.OUT



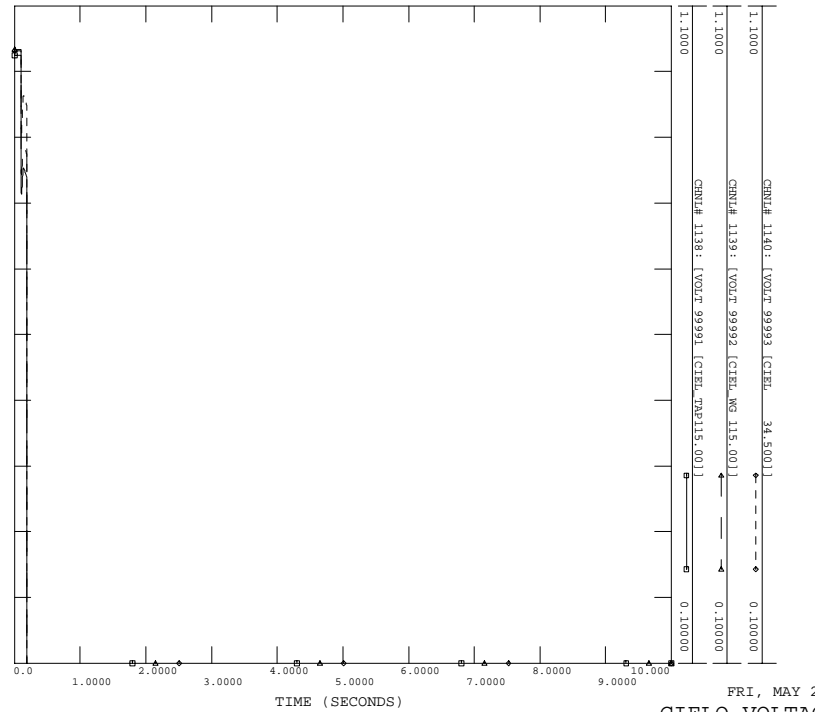
FRI, MAY 21 2004 9:10
 DVAR OUTPUT 8

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT51PH.OUT




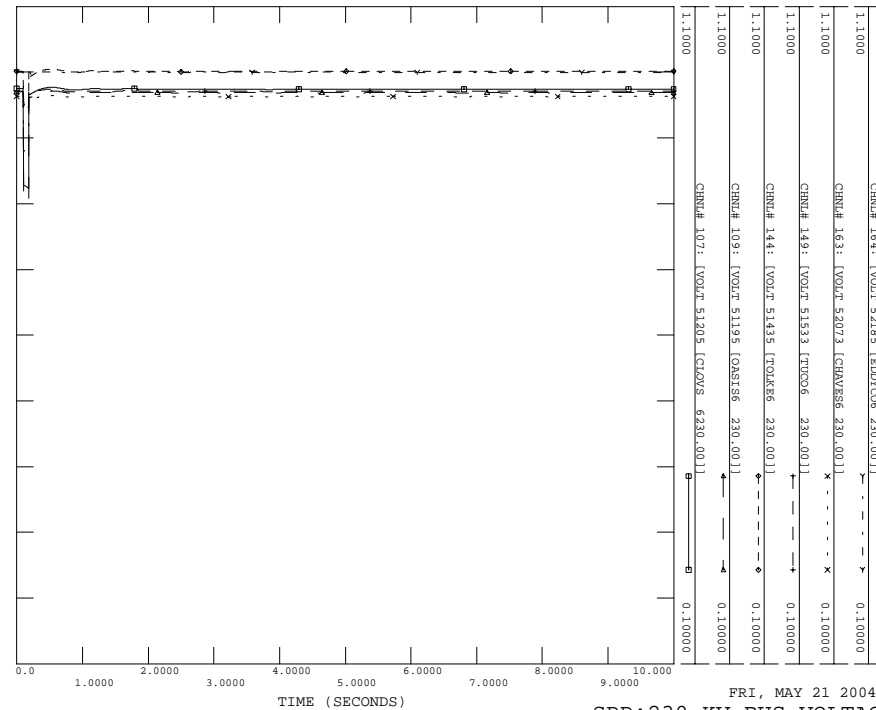
FRI, MAY 21 2004 9:10
 CIELO CABLE3 GEN54 5


CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
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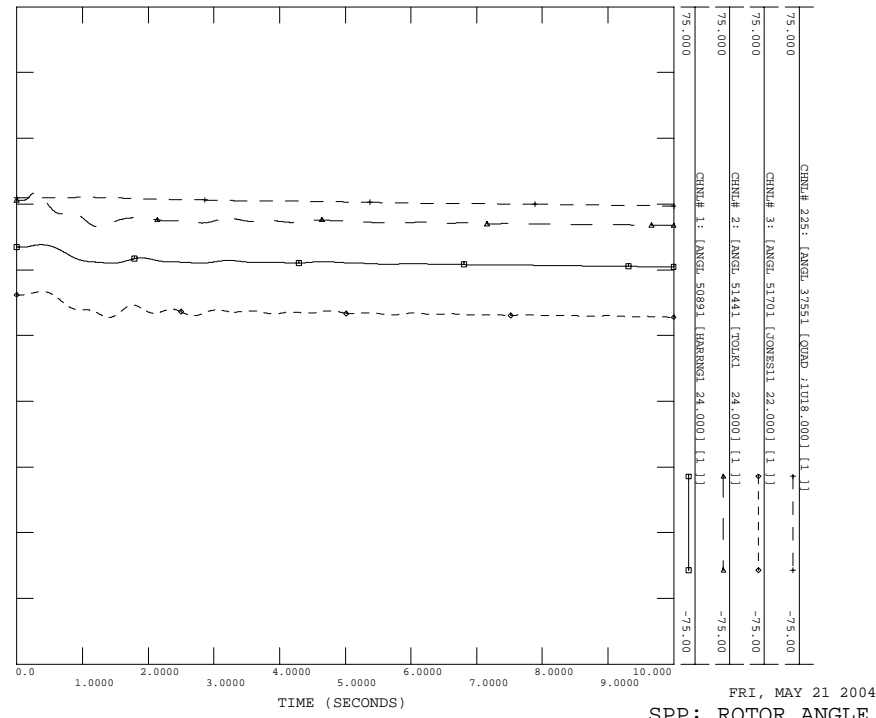



FRI, MAY 21 2004 9:10
 CIELO VOLTAGE 7

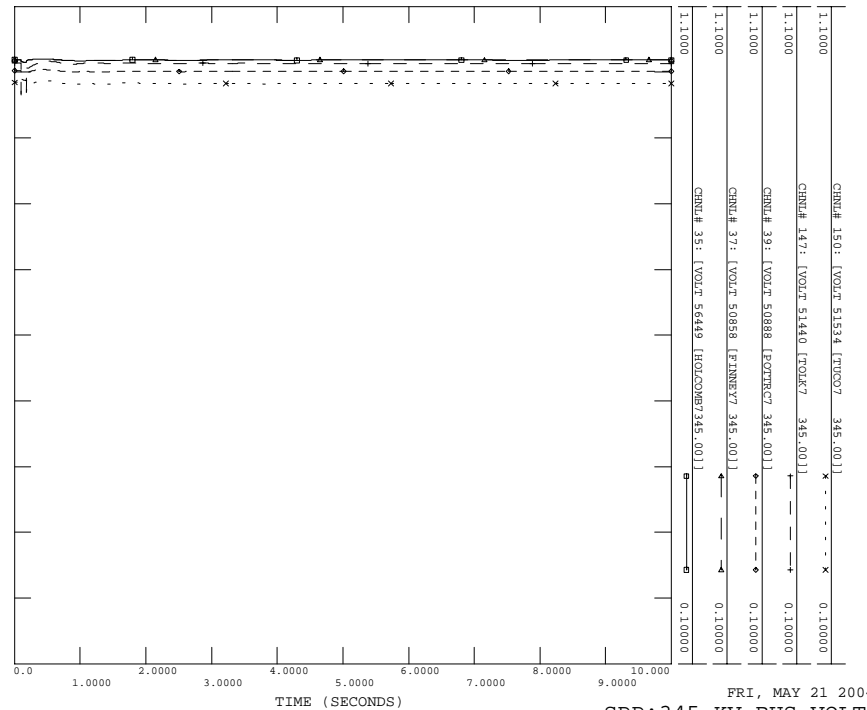

 CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT51PH.OUT




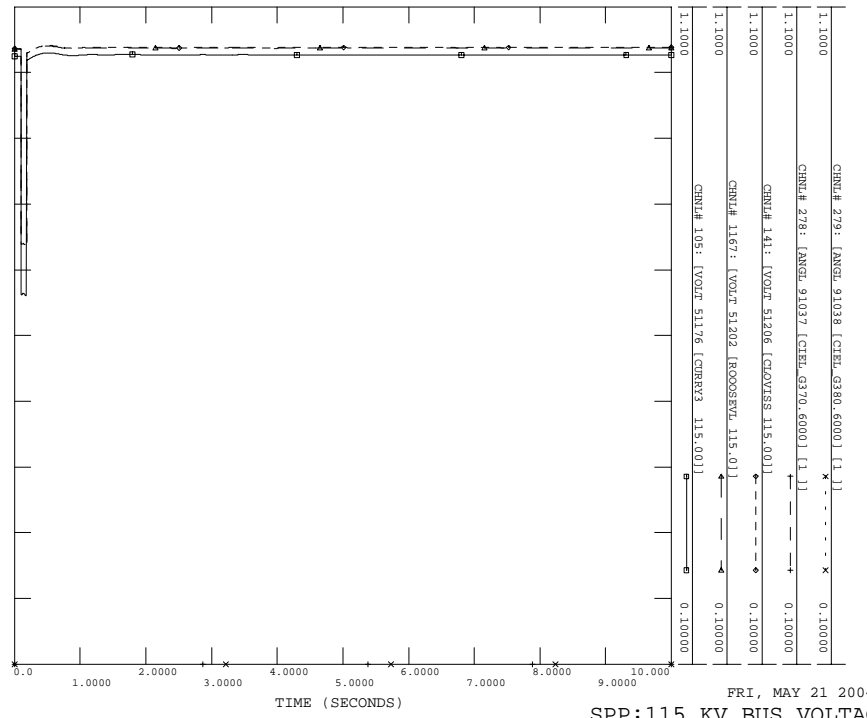

 CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT51PH.OUT

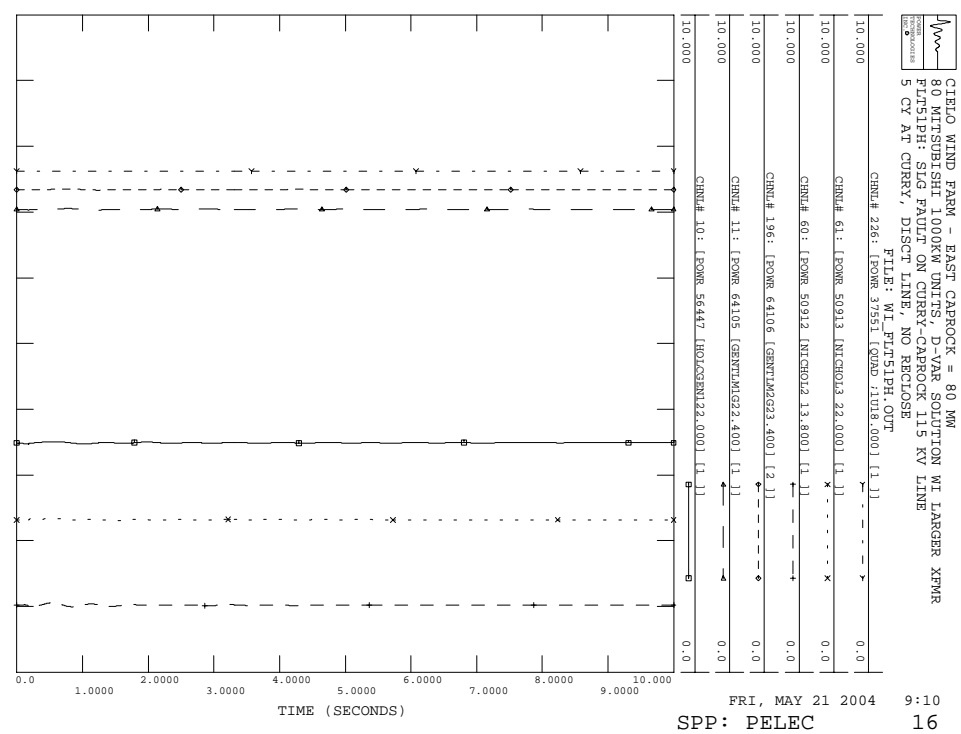
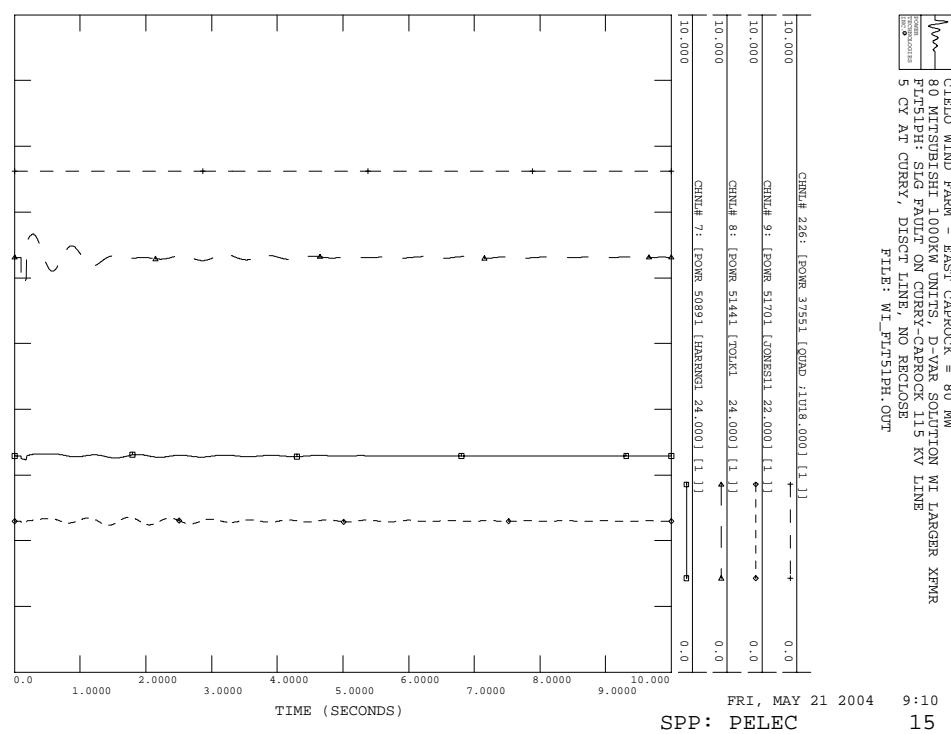
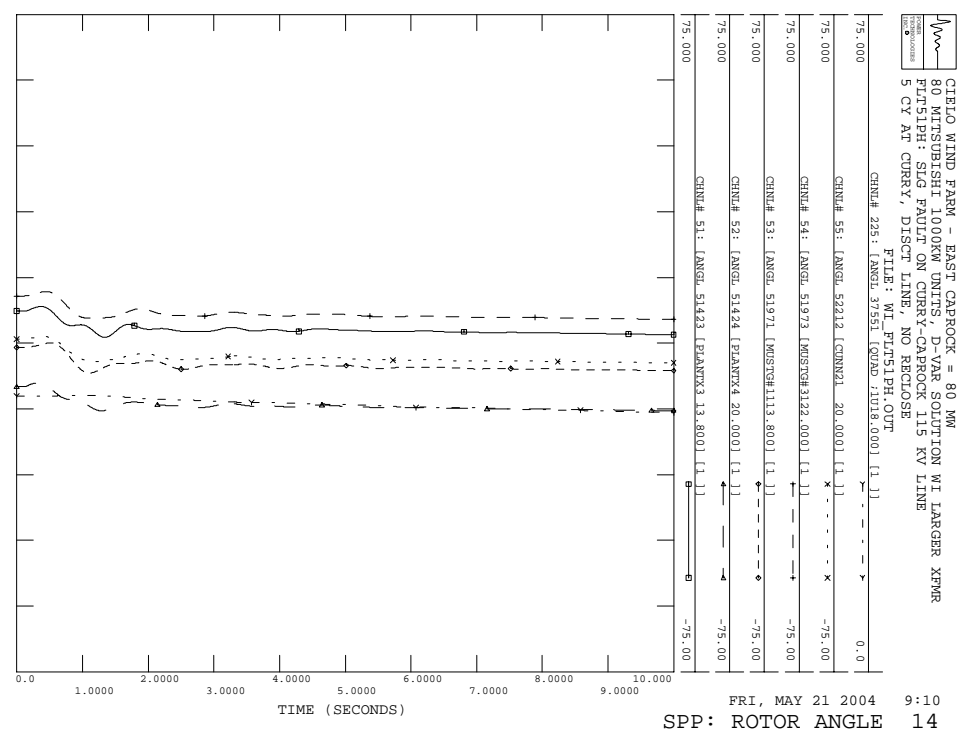
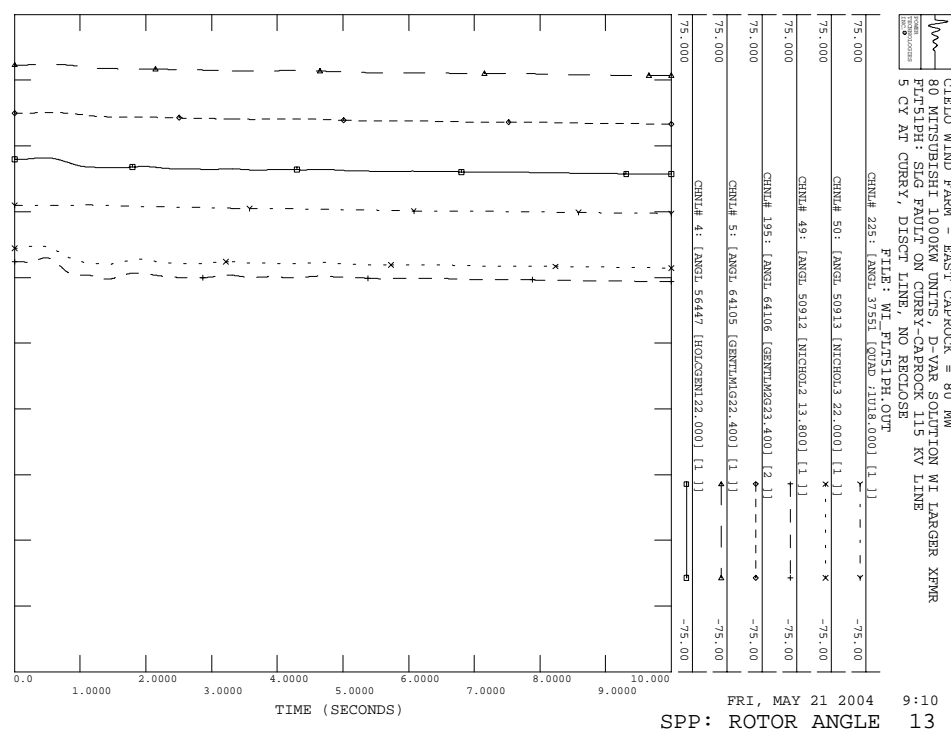


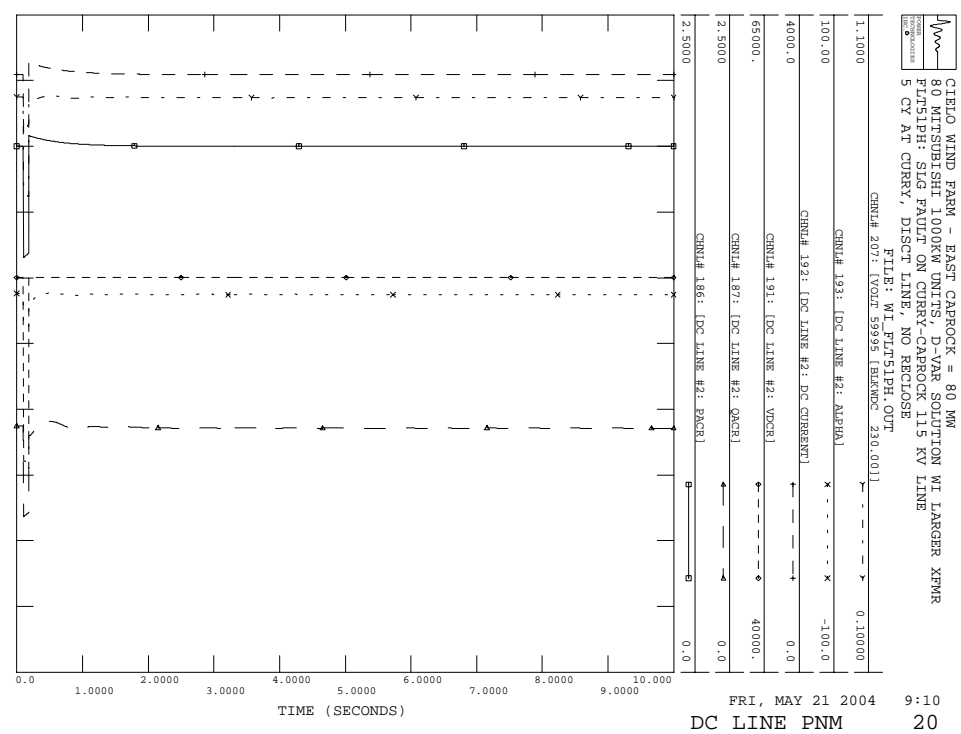
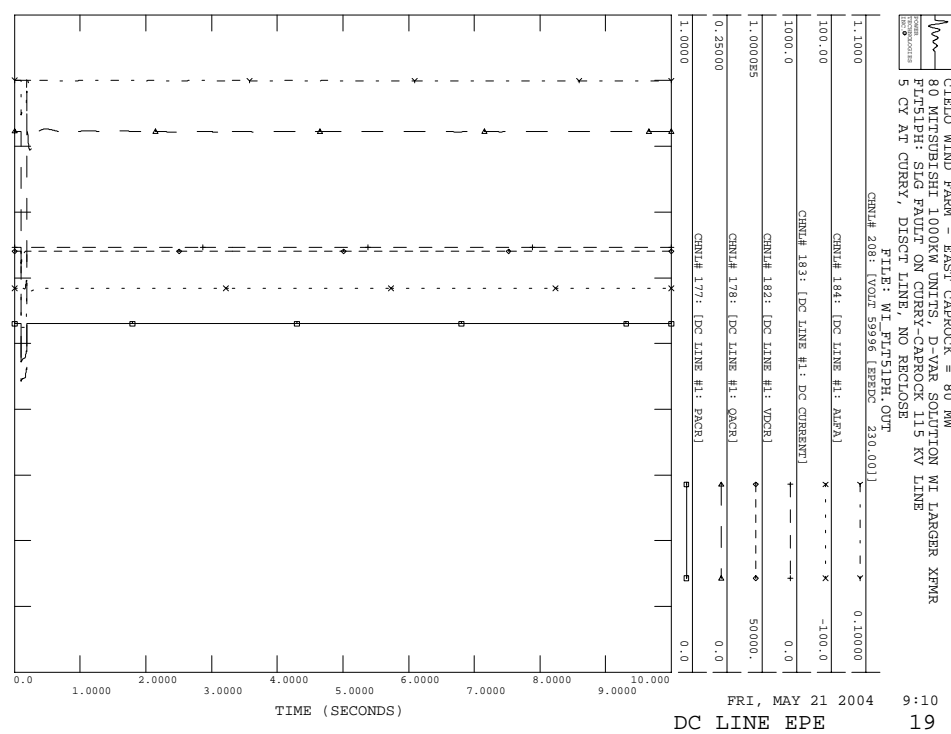
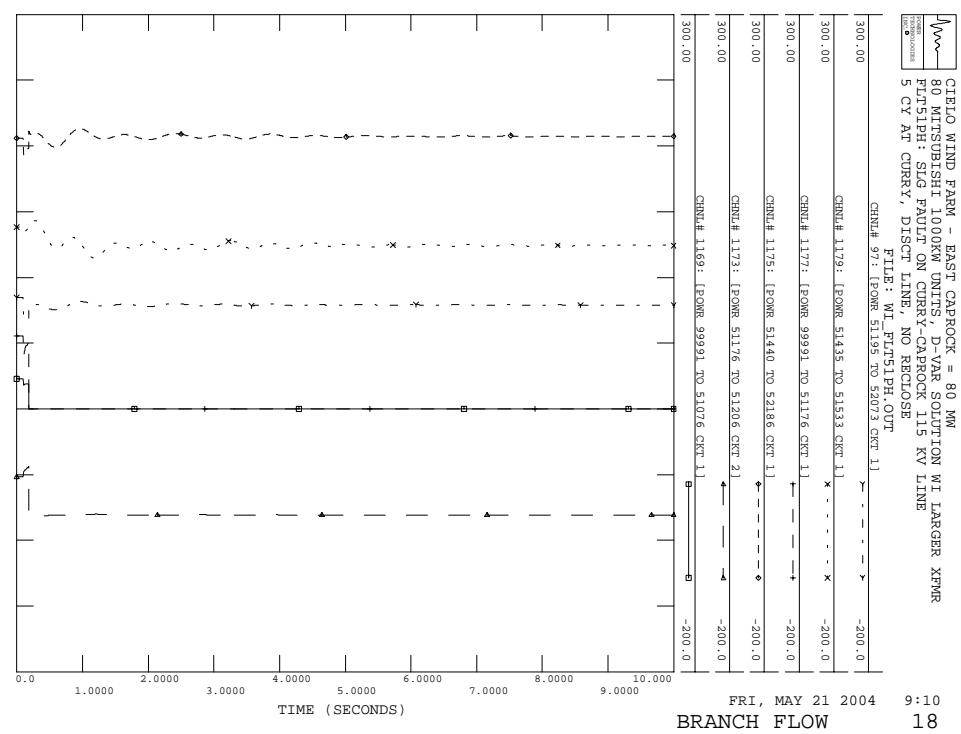
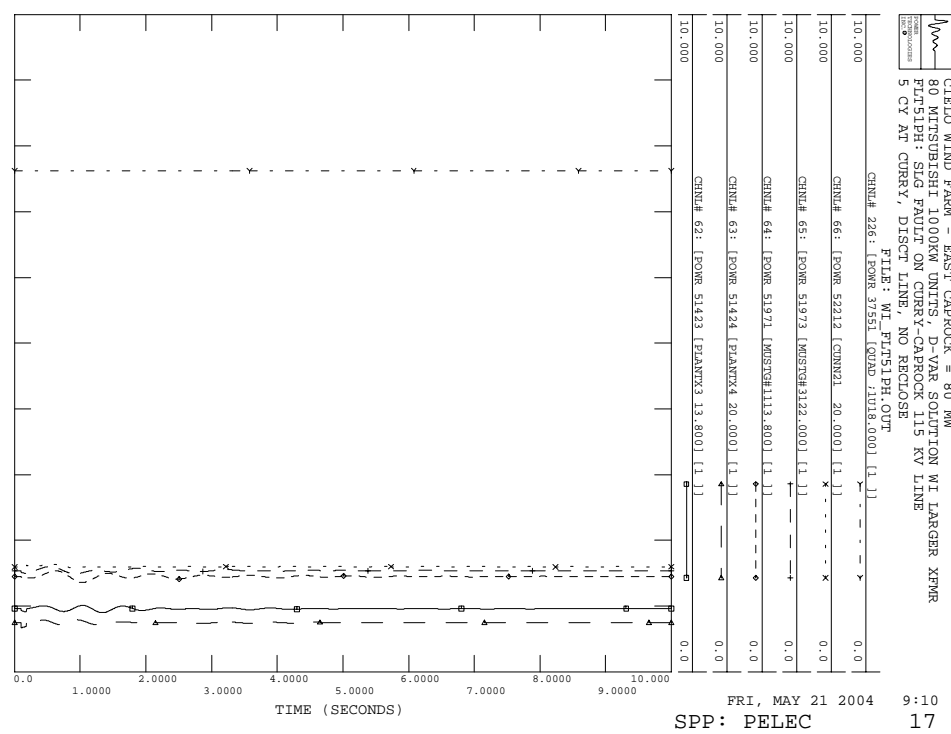

 CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT51PH.OUT




 CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT51PH.OUT

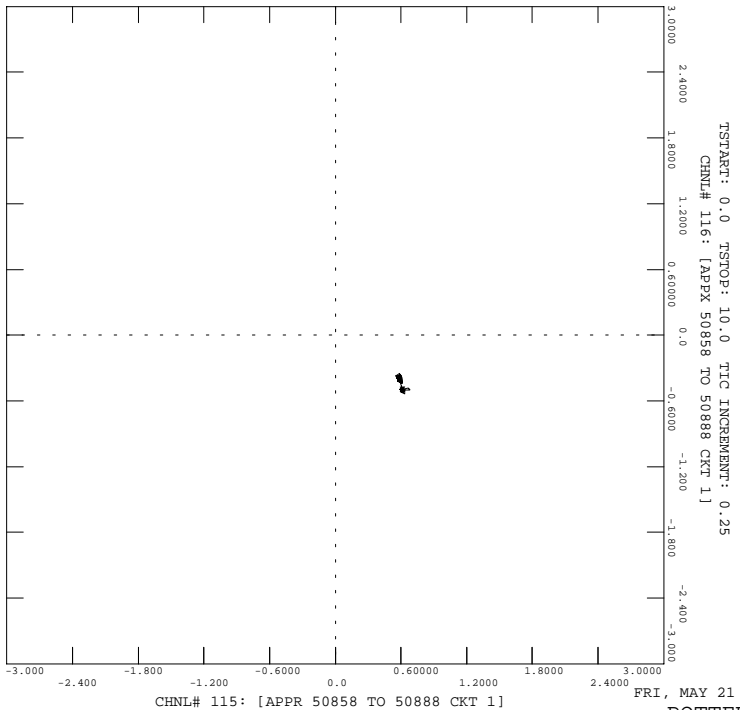






CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE

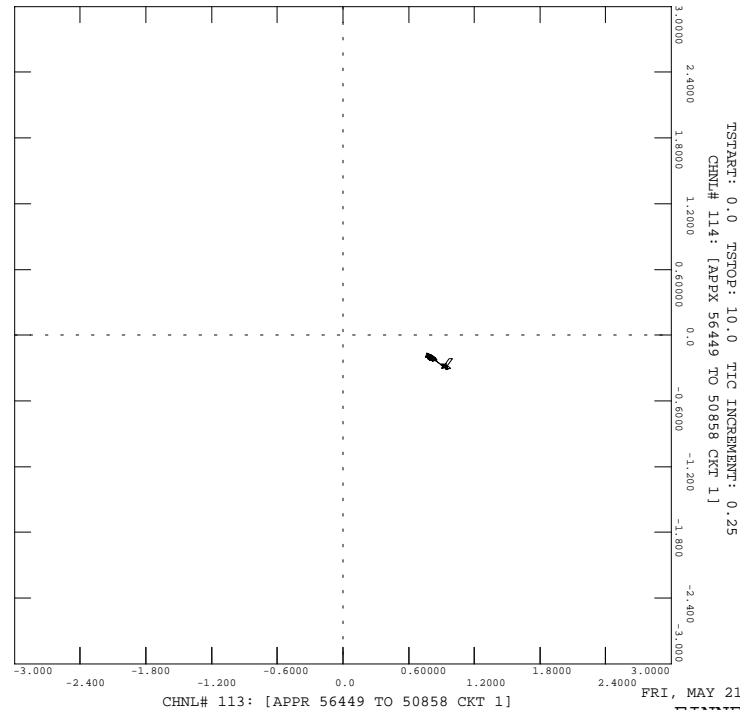
FILE: WI_FLT51PH.OUT



22

CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE

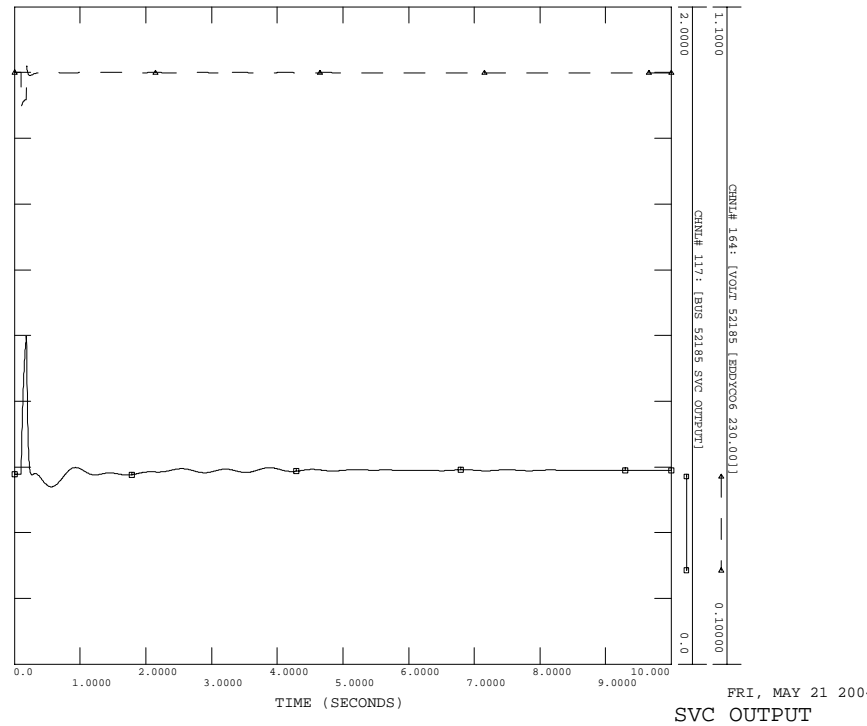
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21

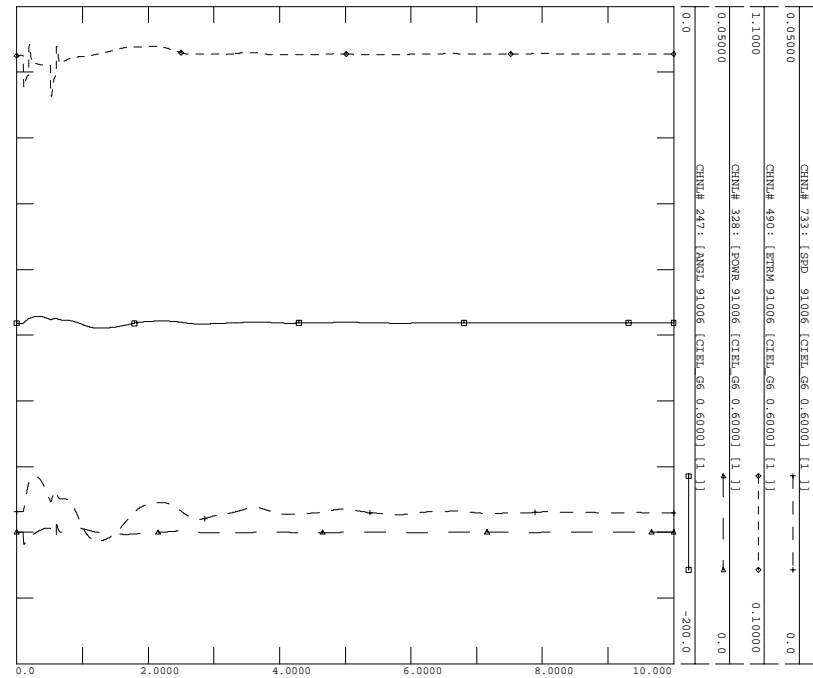
CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT51PH: SLG FAULT ON CURRY-CABROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE

FILE: WI_FLT51PH.OUT



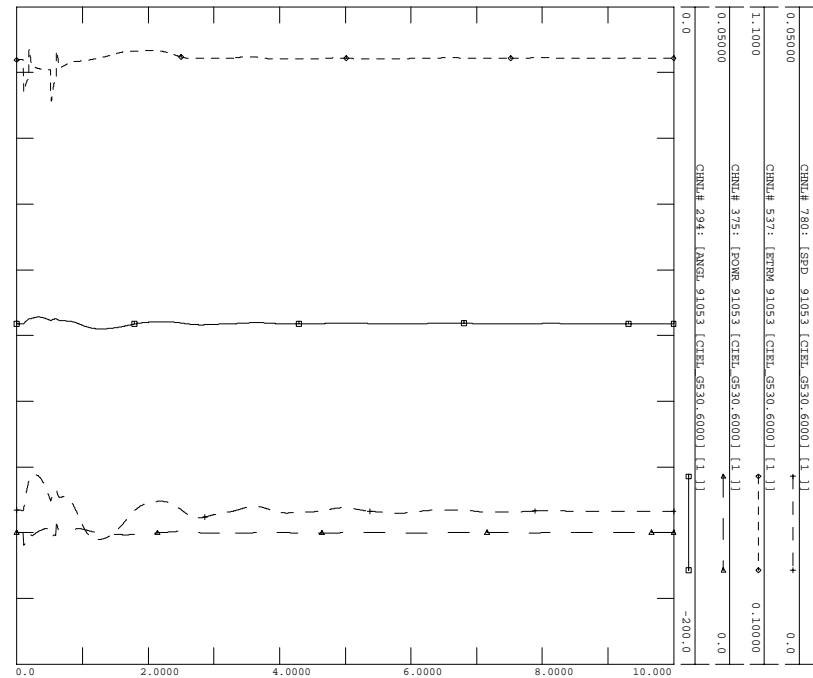
23

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUOO 230 KV LINE
 5 CY AT TUOO, DISC1 LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH.OUT



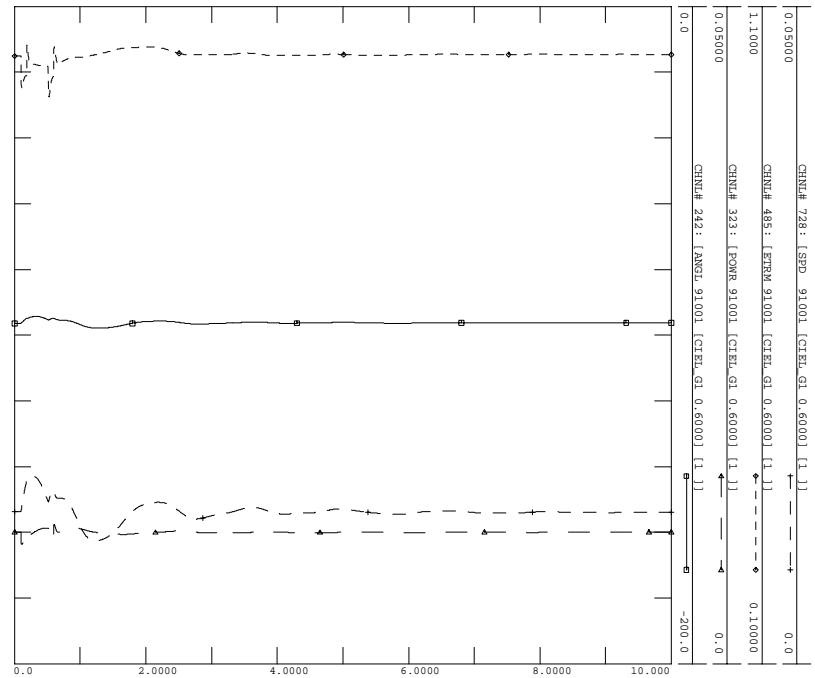
FRI, MAY 21 2004 9:11
 CIELO CABLE1 GEN6 2

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUOO 230 KV LINE
 5 CY AT TUOO, DISC1 LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH.OUT



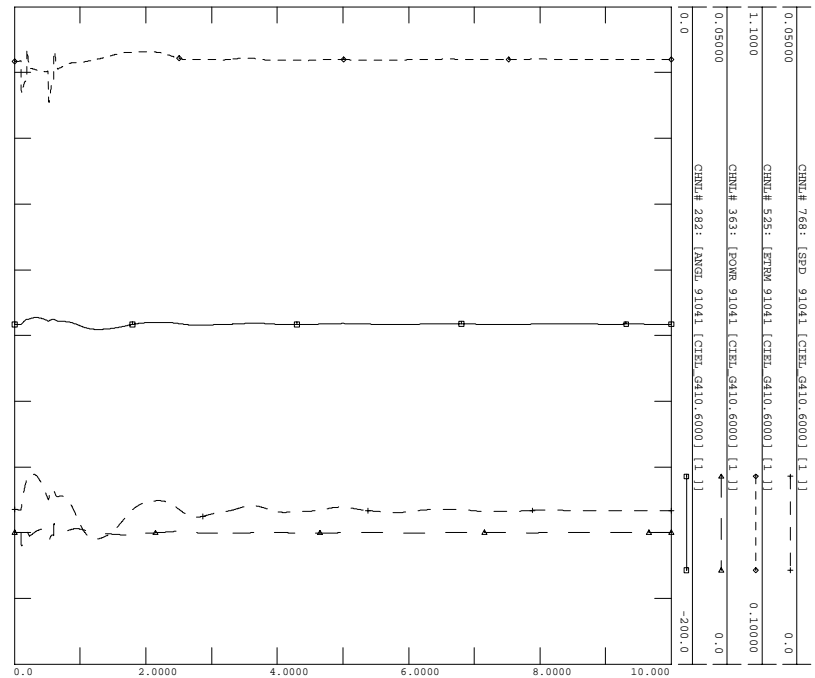
FRI, MAY 21 2004 9:11
 CIELO CABLE2 GEN53 4

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUOO 230 KV LINE
 5 CY AT TUOO, DISC1 LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH.OUT



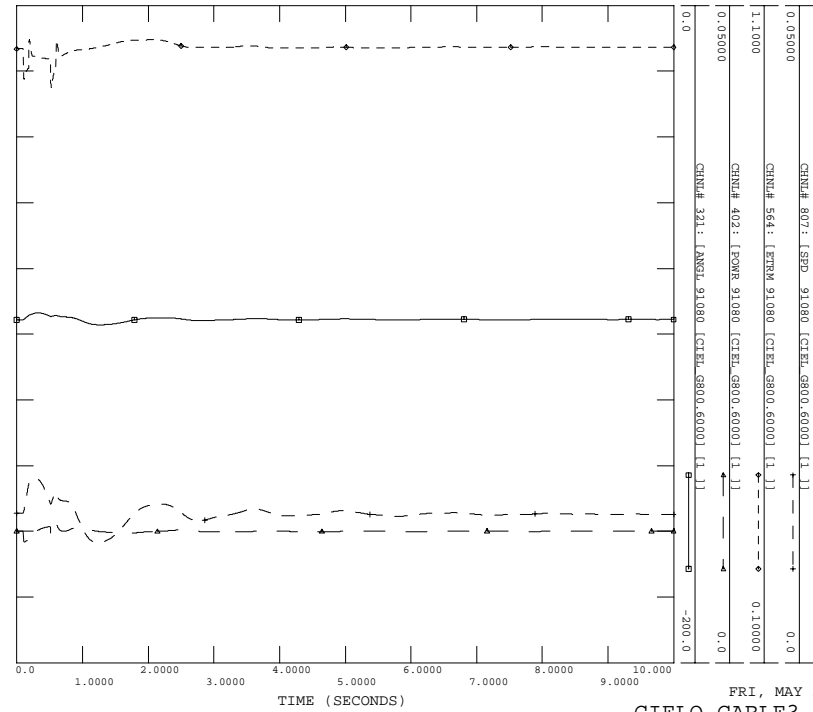
FRI, MAY 21 2004 9:11
 CIELO CABLE1 GEN1 1

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUOO 230 KV LINE
 5 CY AT TUOO, DISC1 LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH.OUT

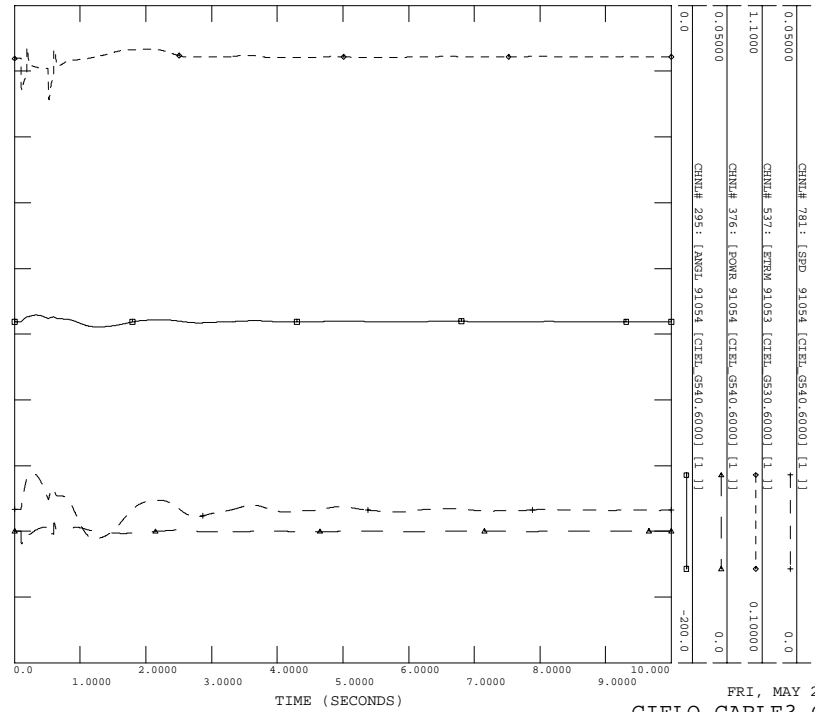


FRI, MAY 21 2004 9:11
 CIELO CABLE2 GEN41 3

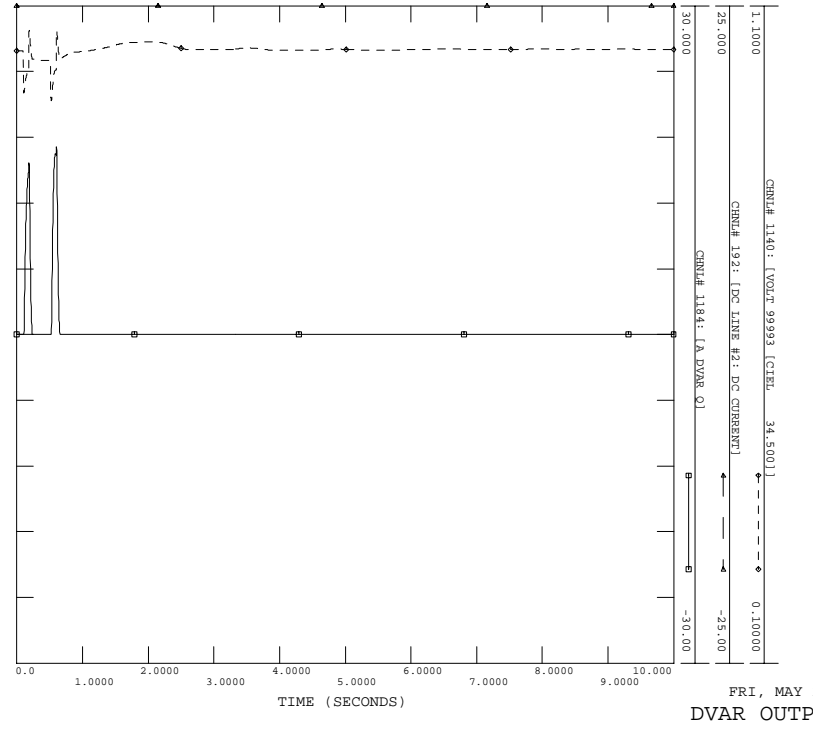
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUO 230 KV LINE
 5 CY AT TUO, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH.OUT



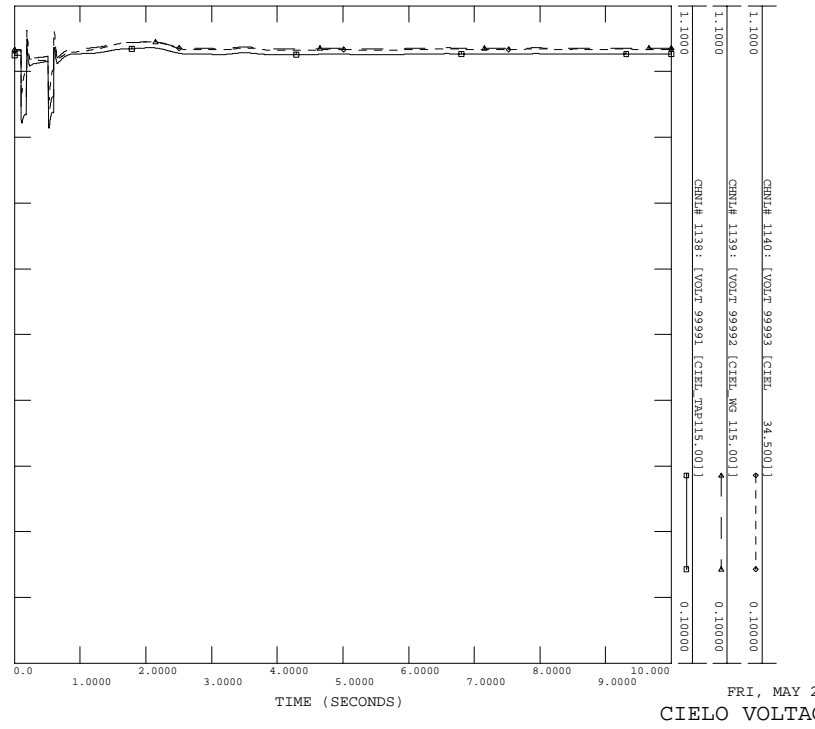
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUO 230 KV LINE
 5 CY AT TUO, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH.OUT

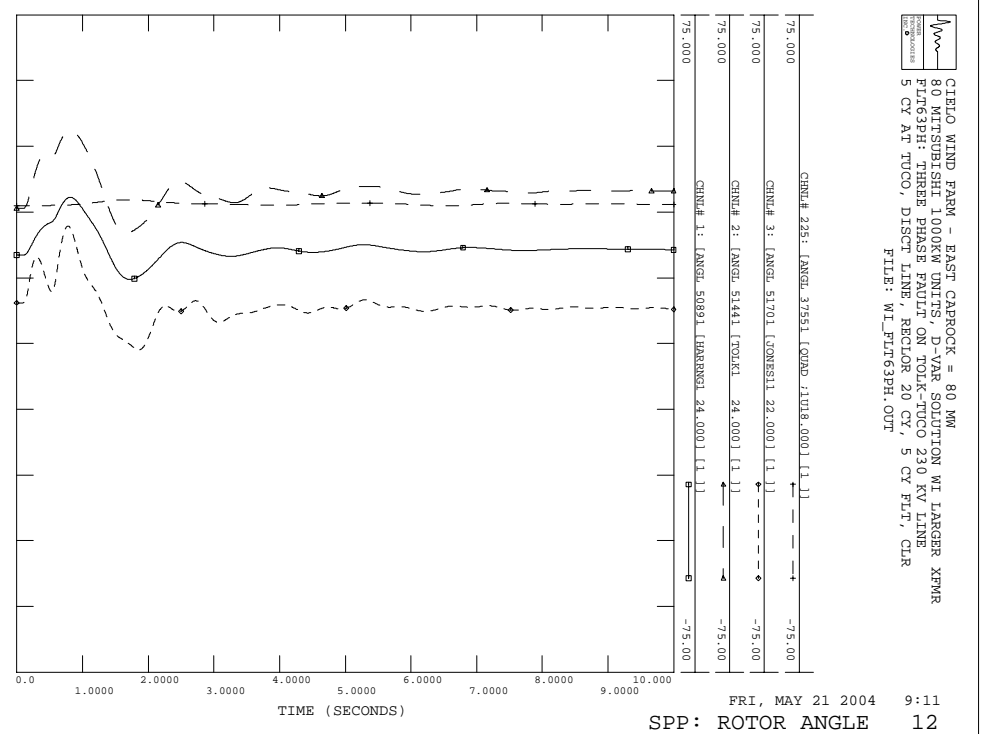
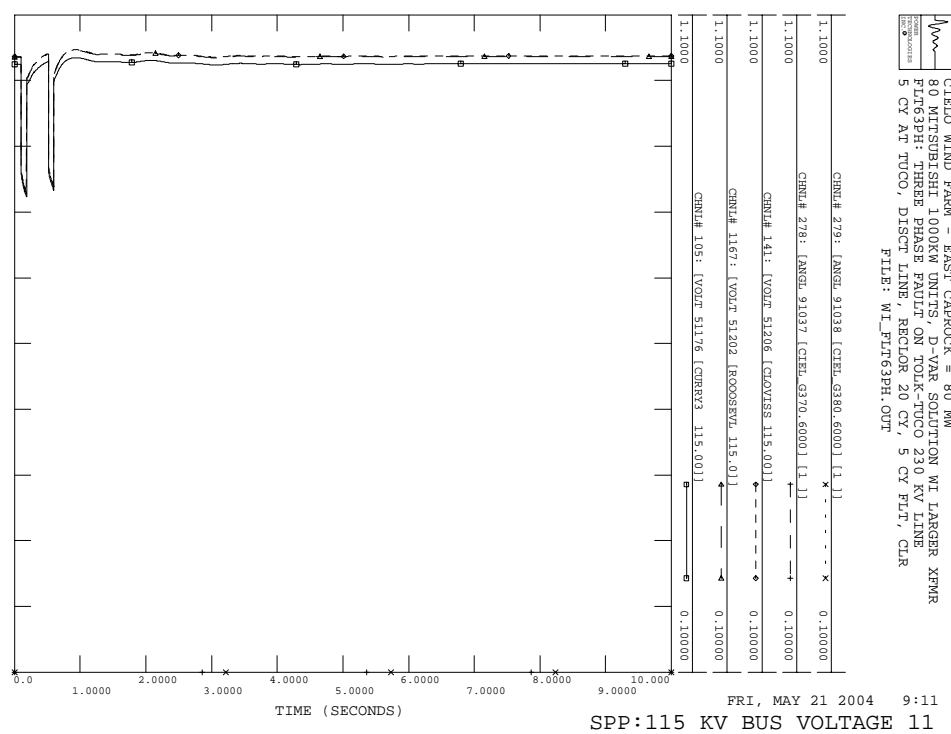
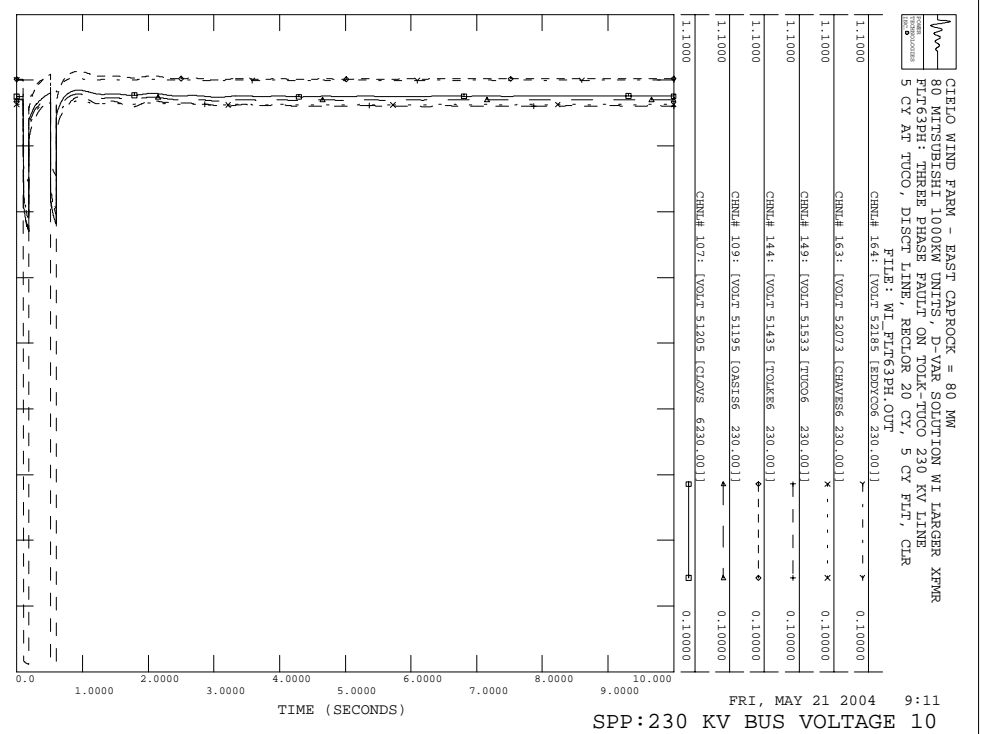
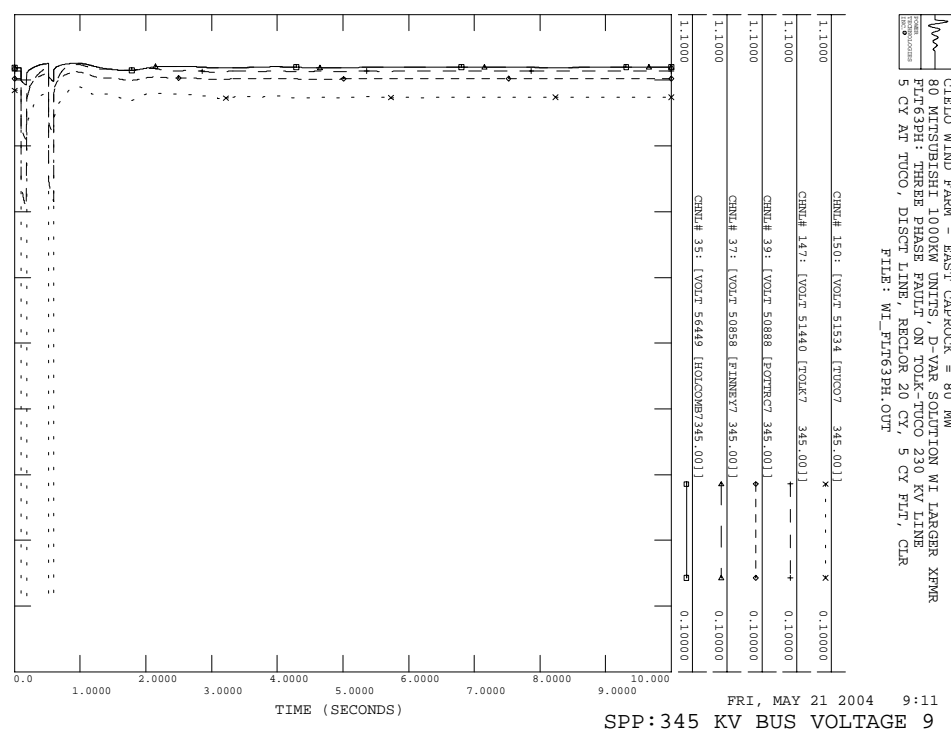


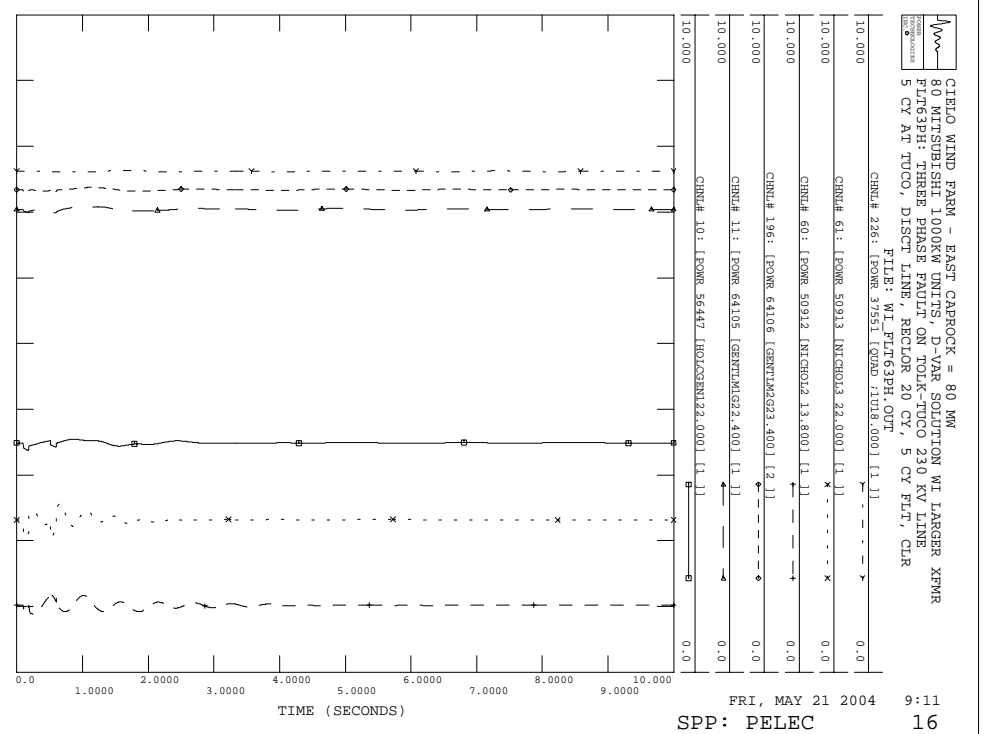
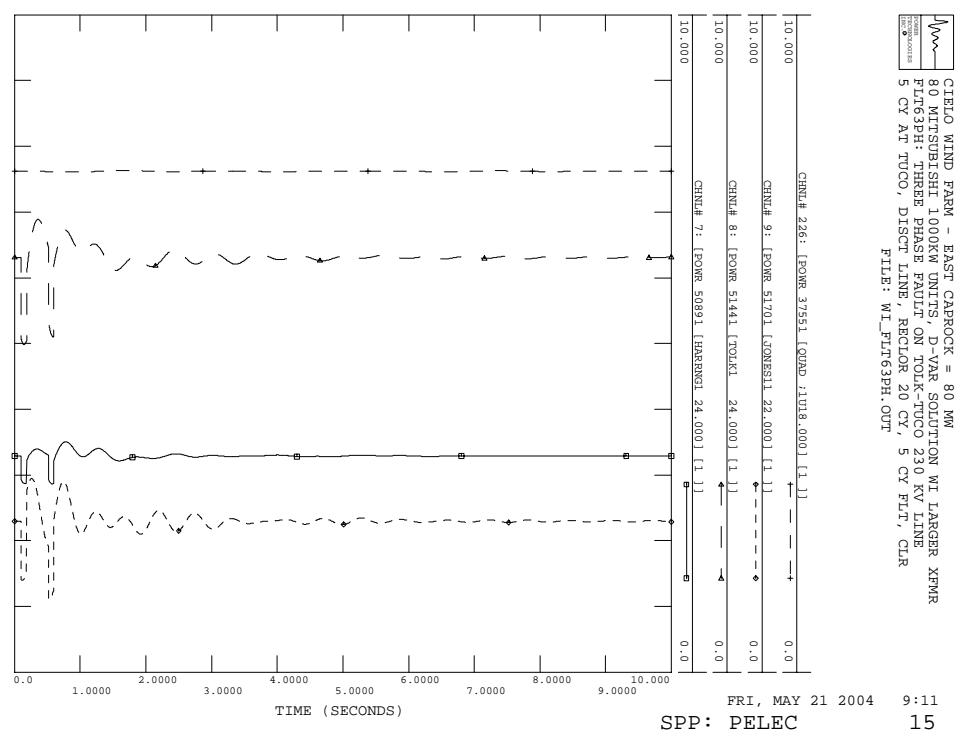
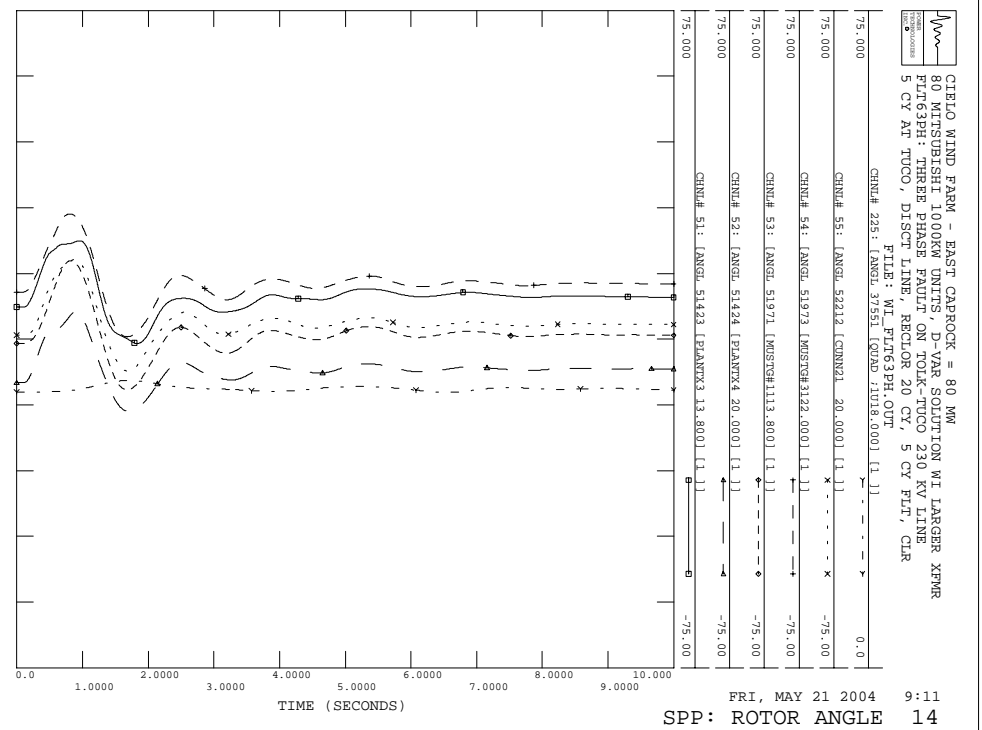
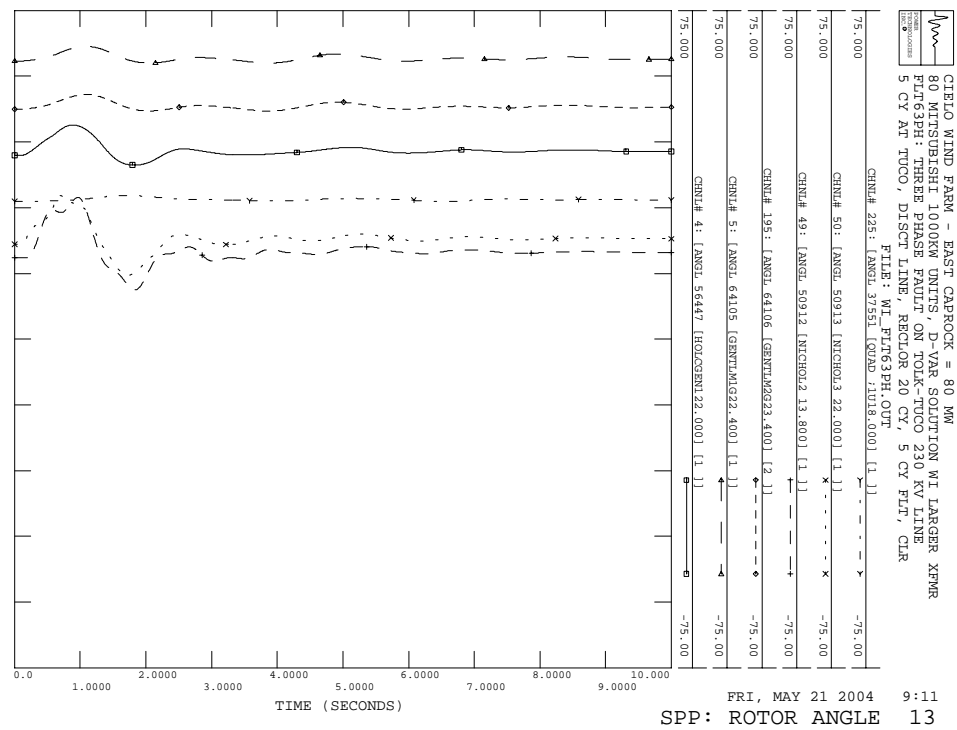
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUO 230 KV LINE
 5 CY AT TUO, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH.OUT

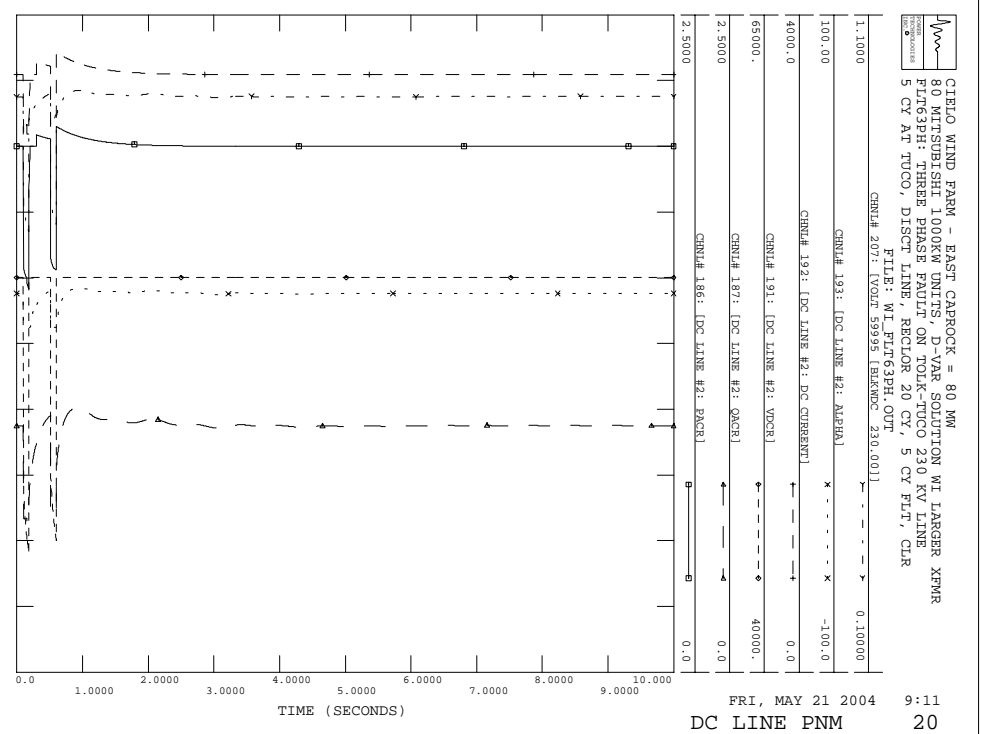
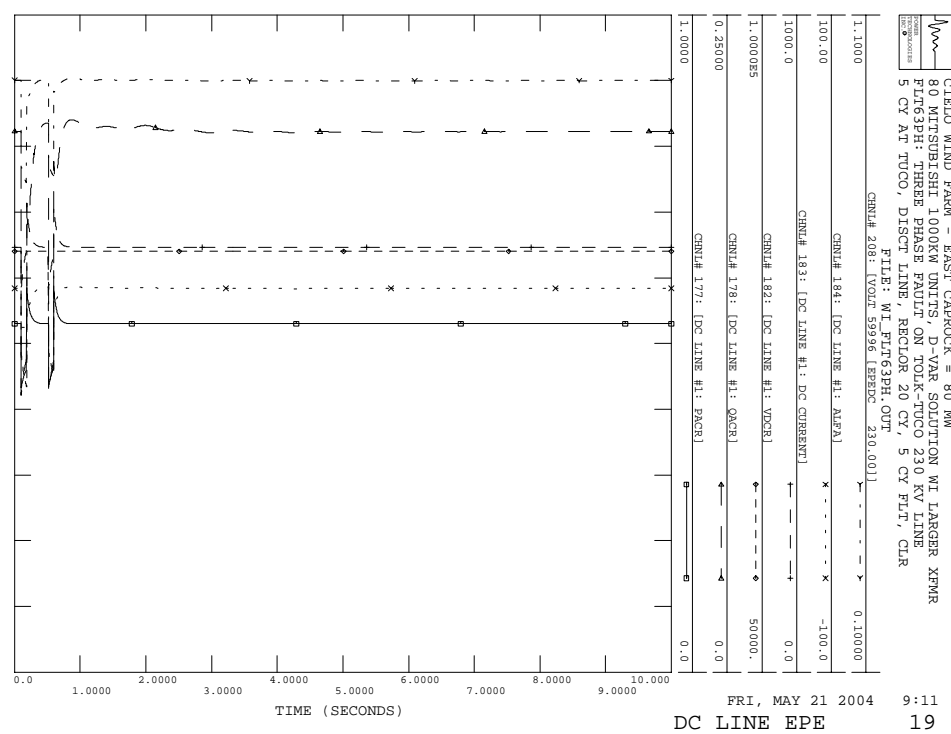
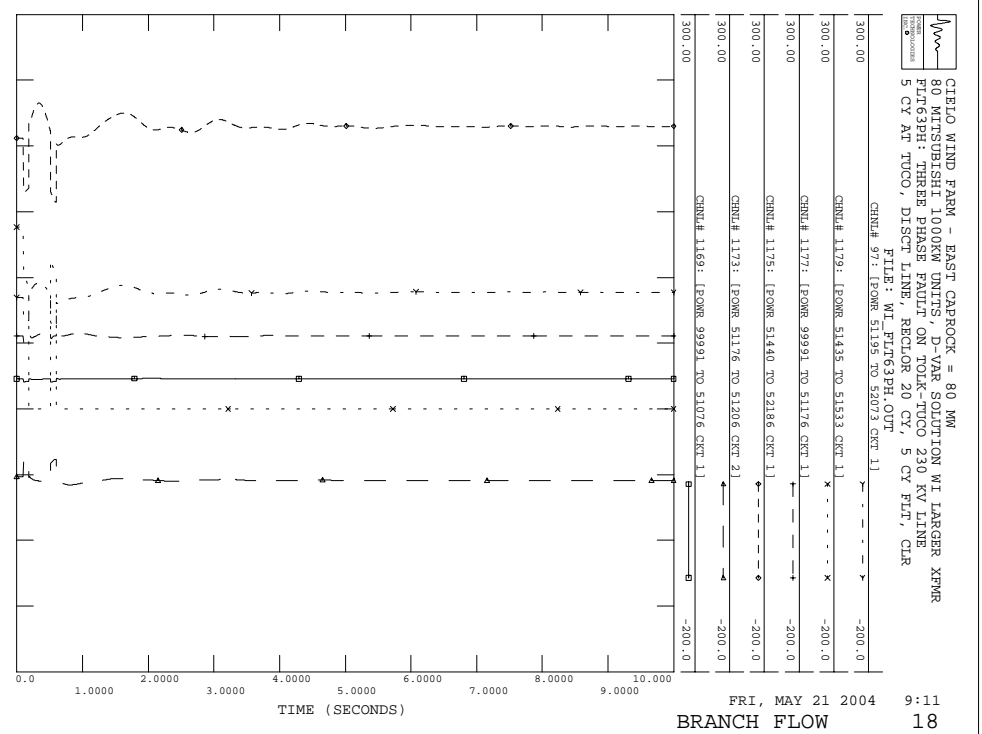
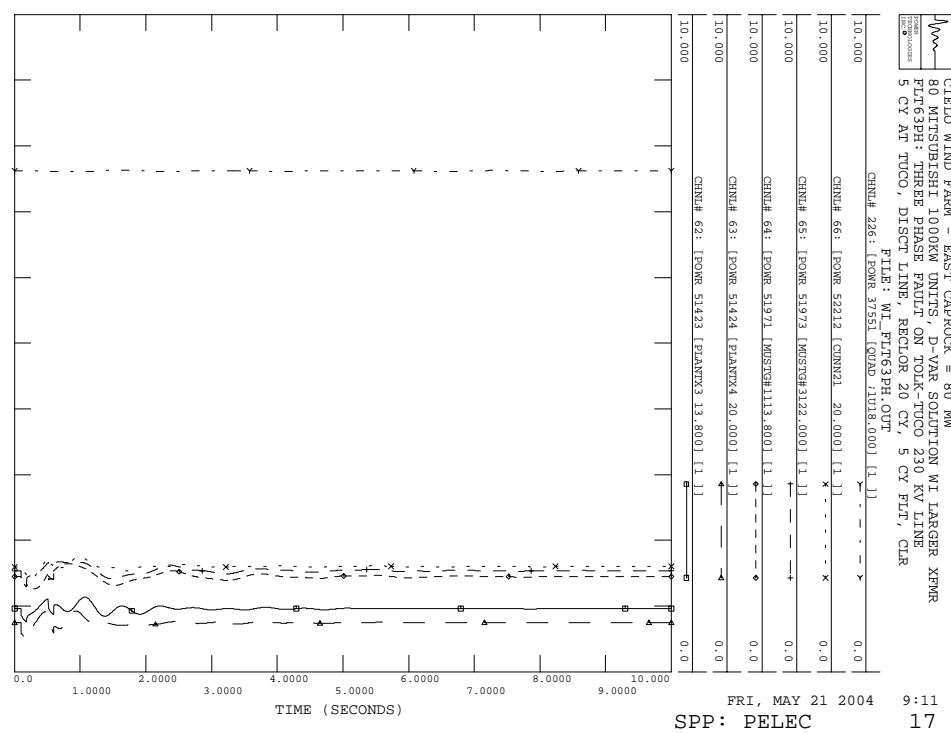


CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUO 230 KV LINE
 5 CY AT TUO, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH.OUT



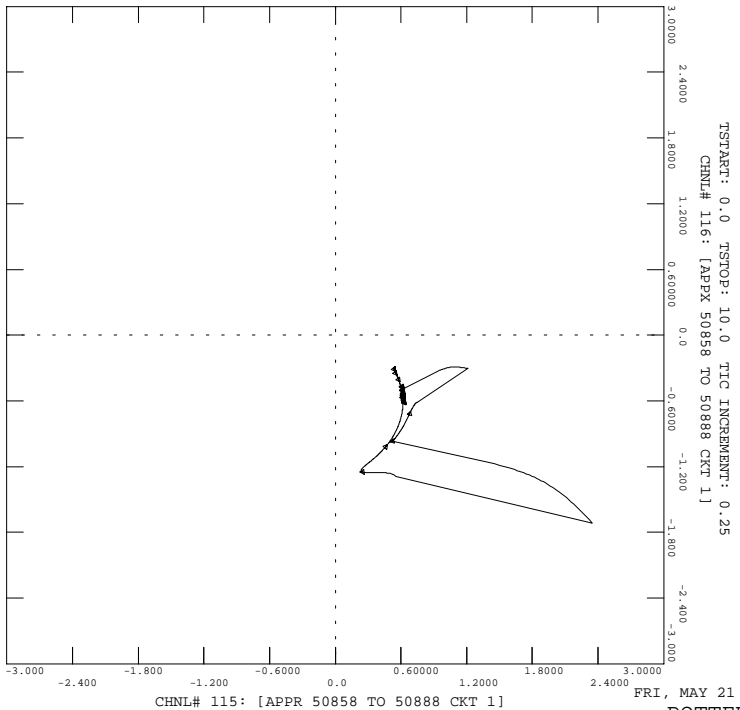






CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT63PH - THREE PHASE FAULT ON TOLK-TUCO 230 KV LINE
 5 CY AT TUCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

FILE: WI_FLT63PH.OUT

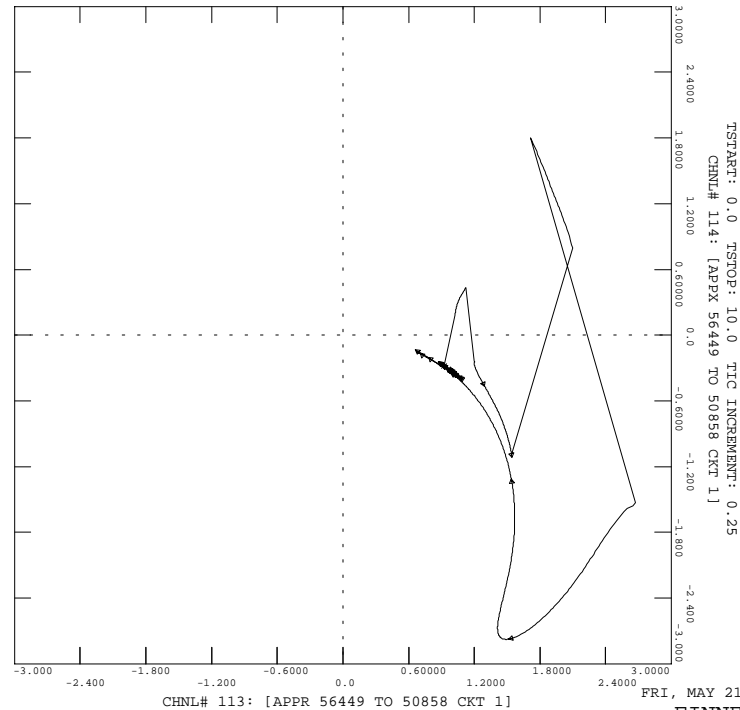


FRI, MAY 21 2004 9:11
 POTTER-FINNEY

22

CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT63PH - THREE PHASE FAULT ON TOLK-TUCO 230 KV LINE
 5 CY AT TUCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

FILE: WI_FLT63PH.OUT

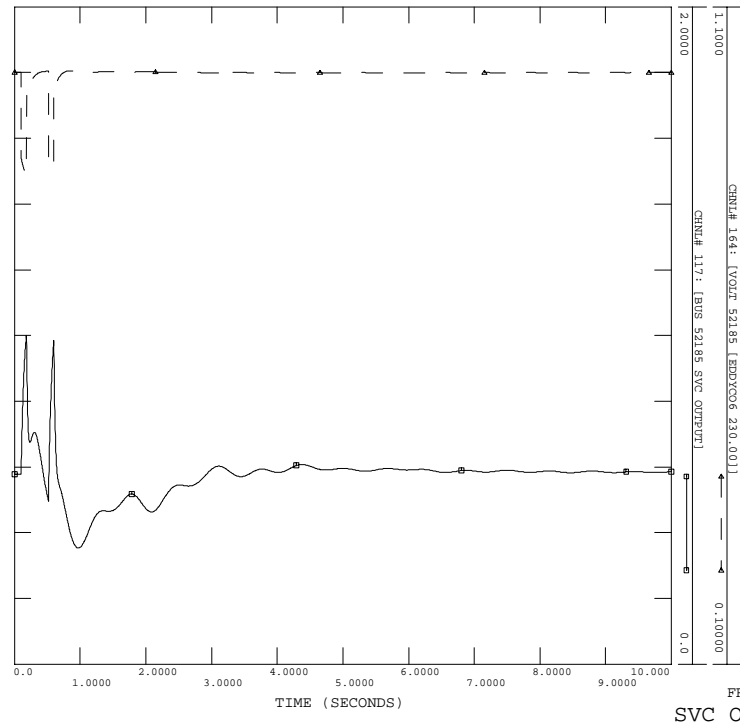


FRI, MAY 21 2004 9:11
 FINNEY-HOLCOMB

21

CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT63PH - THREE PHASE FAULT ON TOLK-TUCO 230 KV LINE
 5 CY AT TUCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

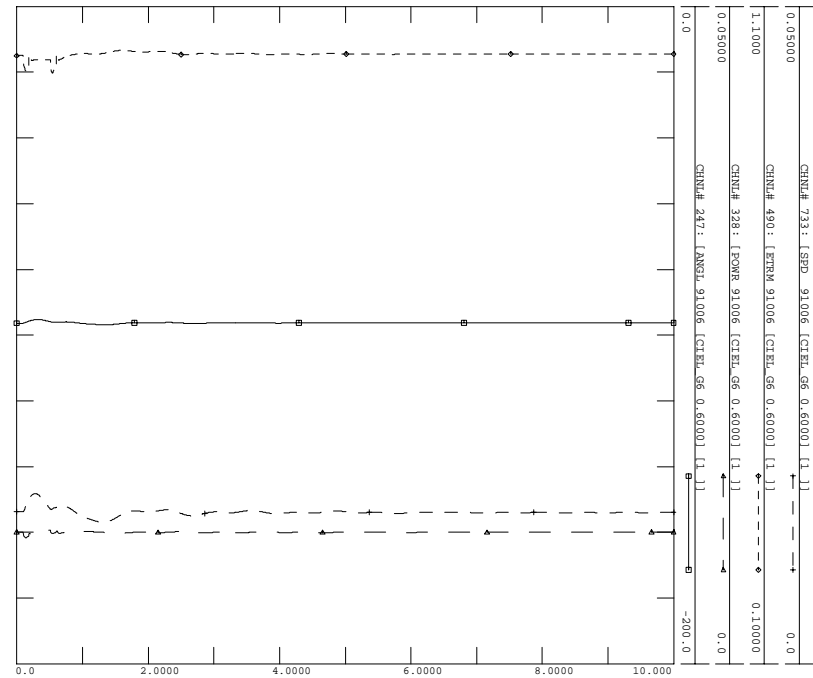
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 SVC OUTPUT

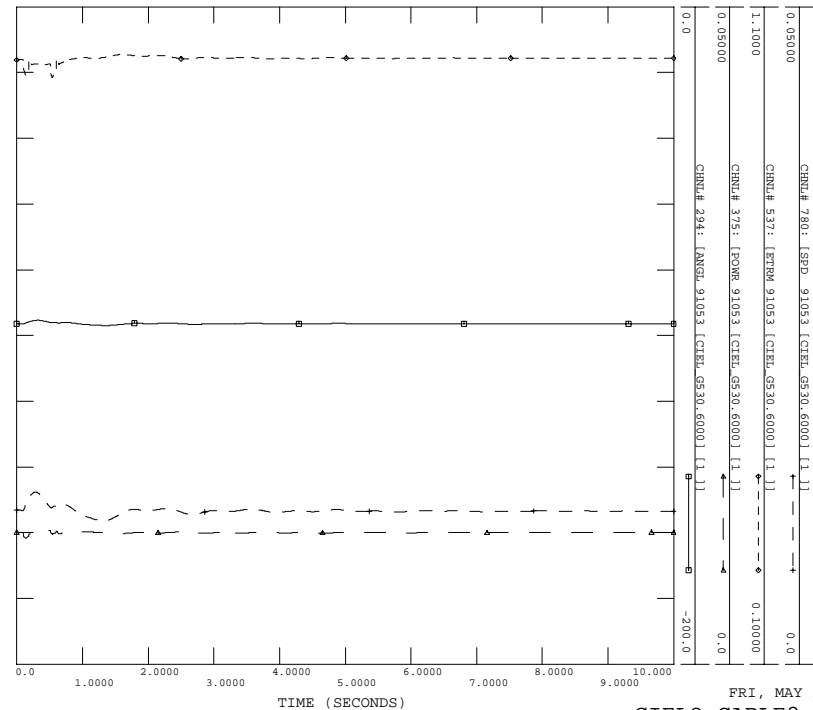
23

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT61PH: SLG FAULT ON TOLK-TUCC 230 KV LINE
 5 CY AT TUCC, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH.OUT



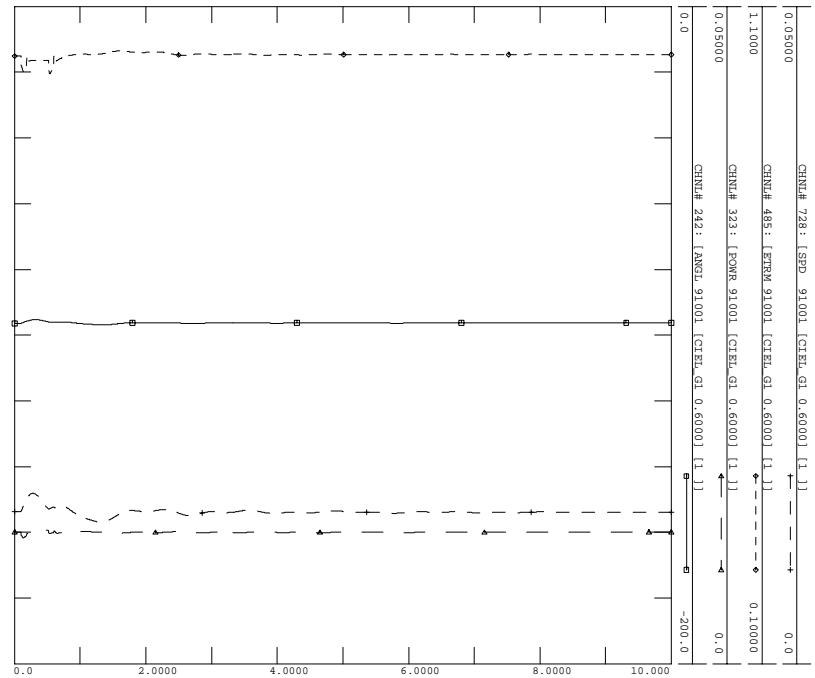
FRI, MAY 21 2004 9:10
 CIELO CABLE1 GEN6 2

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT61PH: SLG FAULT ON TOLK-TUCC 230 KV LINE
 5 CY AT TUCC, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH.OUT



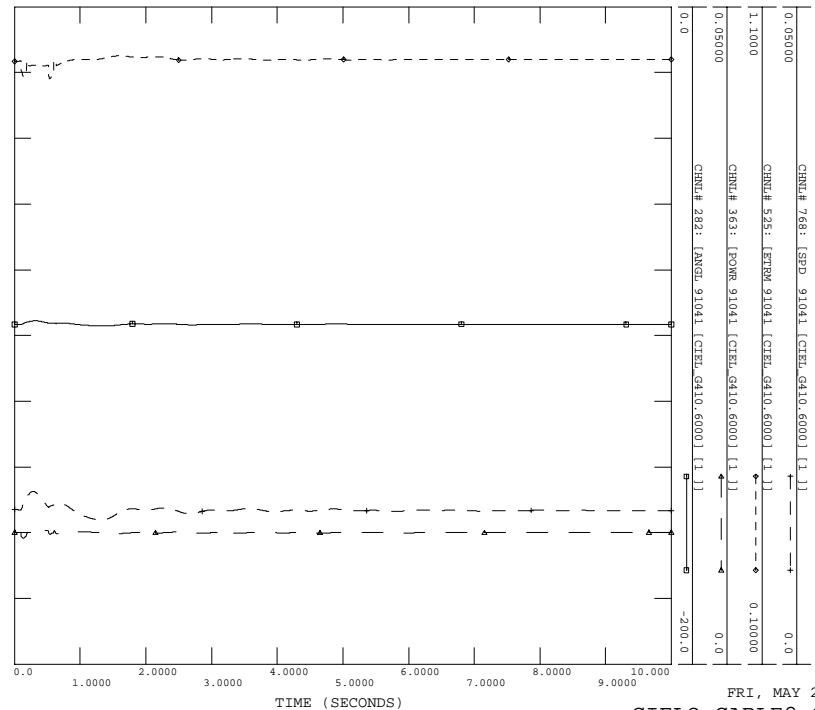
FRI, MAY 21 2004 9:10
 CIELO CABLE2 GEN5 4

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT61PH: SLG FAULT ON TOLK-TUCC 230 KV LINE
 5 CY AT TUCC, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH.OUT



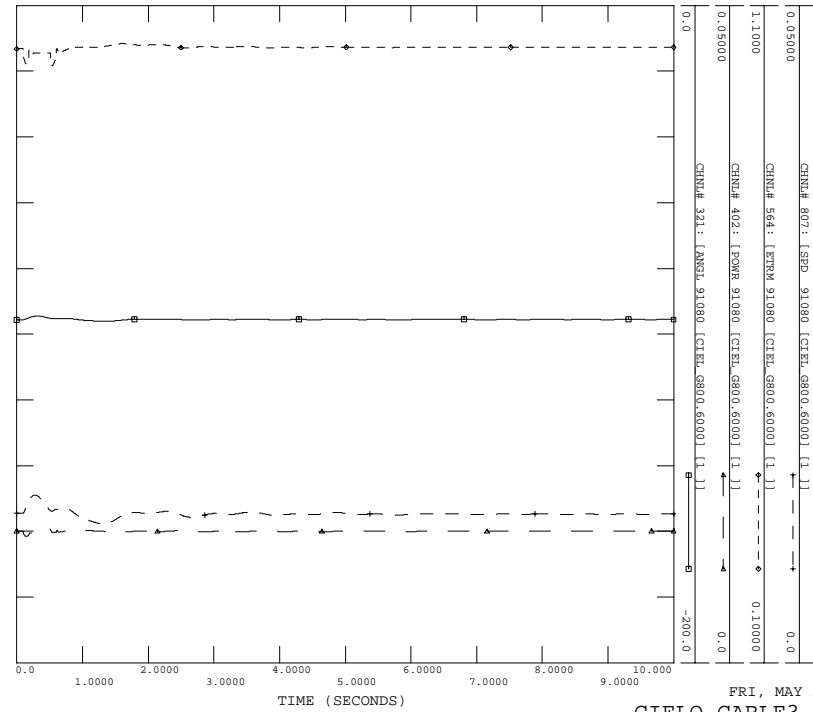
FRI, MAY 21 2004 9:10
 CIELO CABLE1 GEN1 1

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XPMR
 FLT61PH: SLG FAULT ON TOLK-TUCC 230 KV LINE
 5 CY AT TUCC, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH.OUT

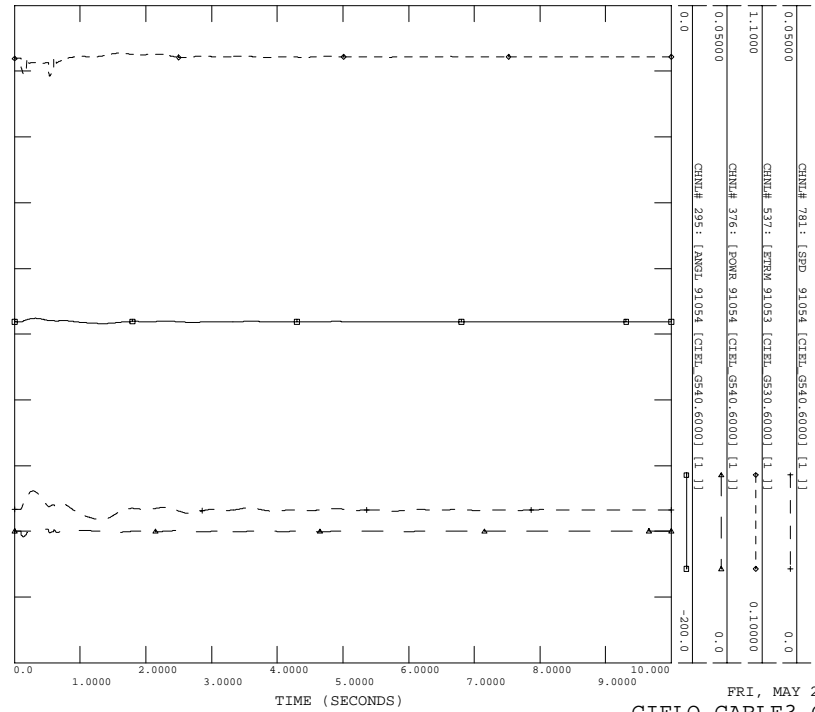


FRI, MAY 21 2004 9:10
 CIELO CABLE2 GEN4 3

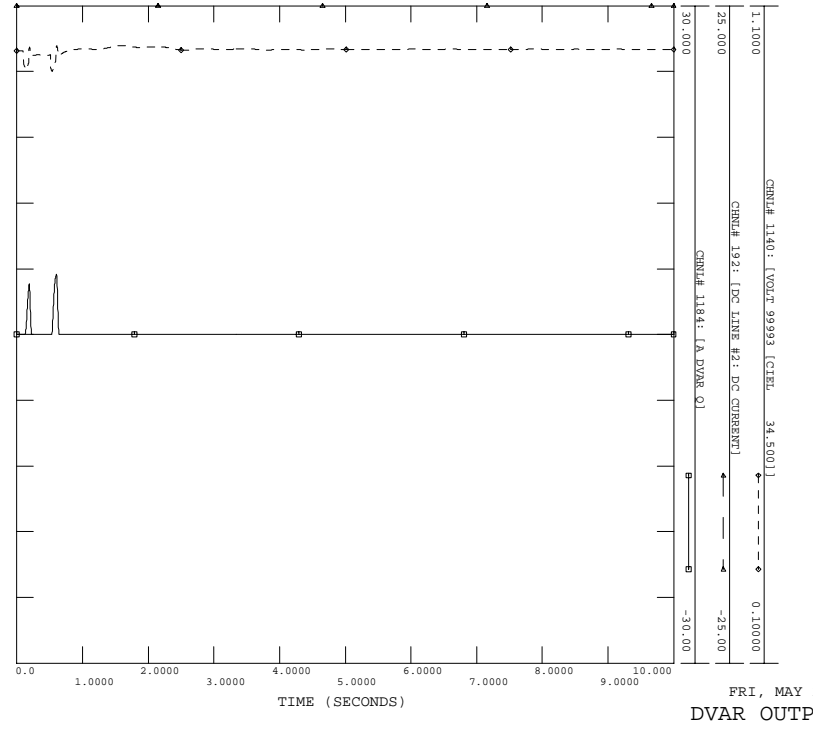
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TUCC 230 KV LINE
 5 CY AT TUCC, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH.OUT



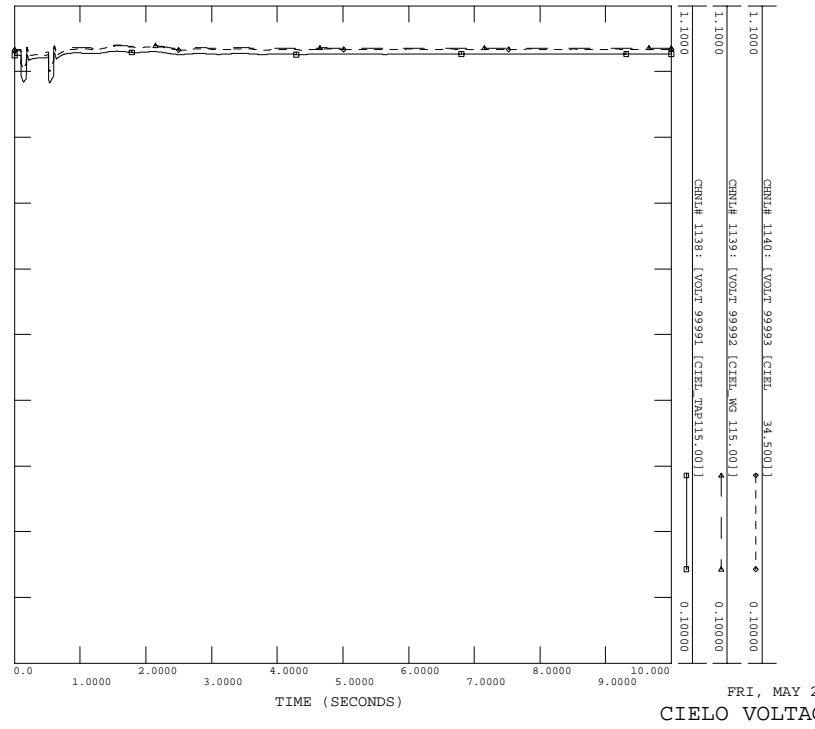
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TUCC 230 KV LINE
 5 CY AT TUCC, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH.OUT

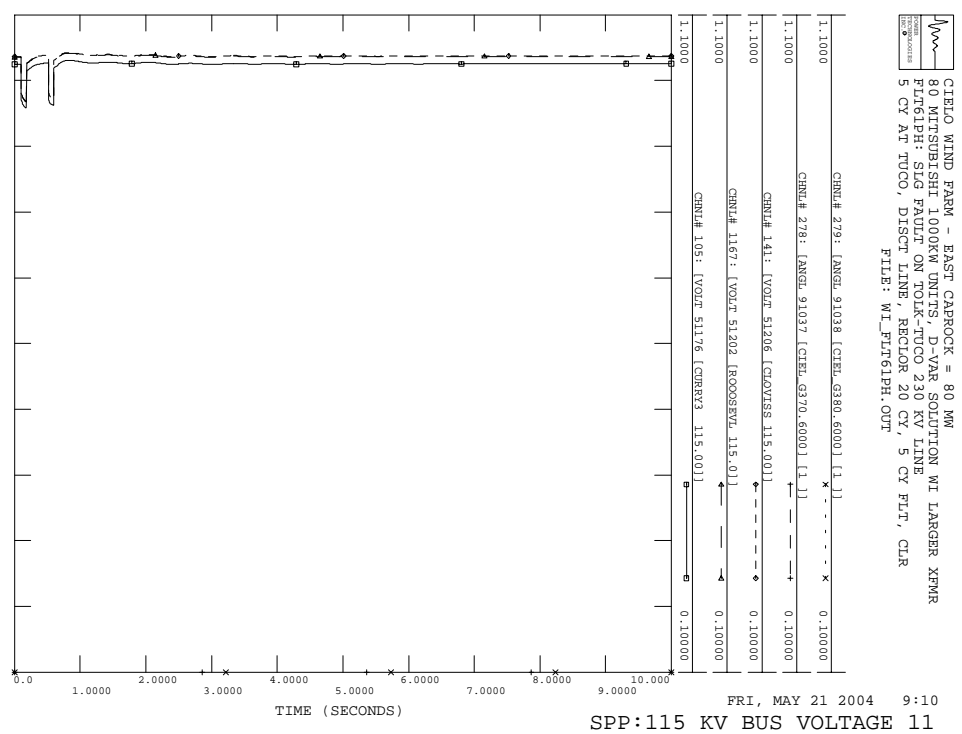
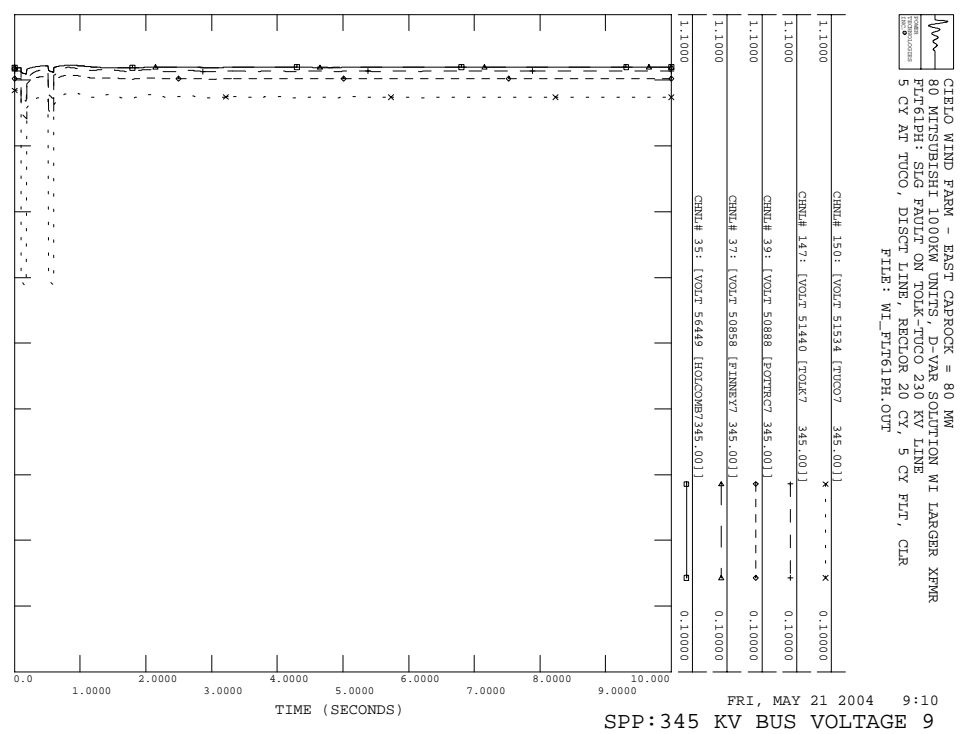
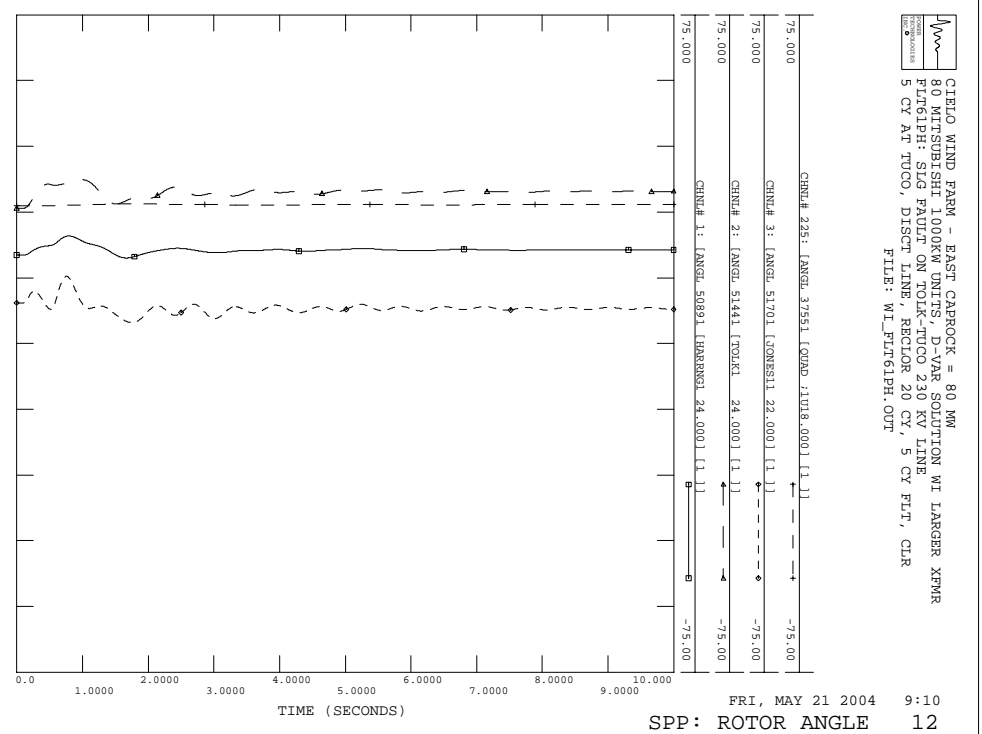
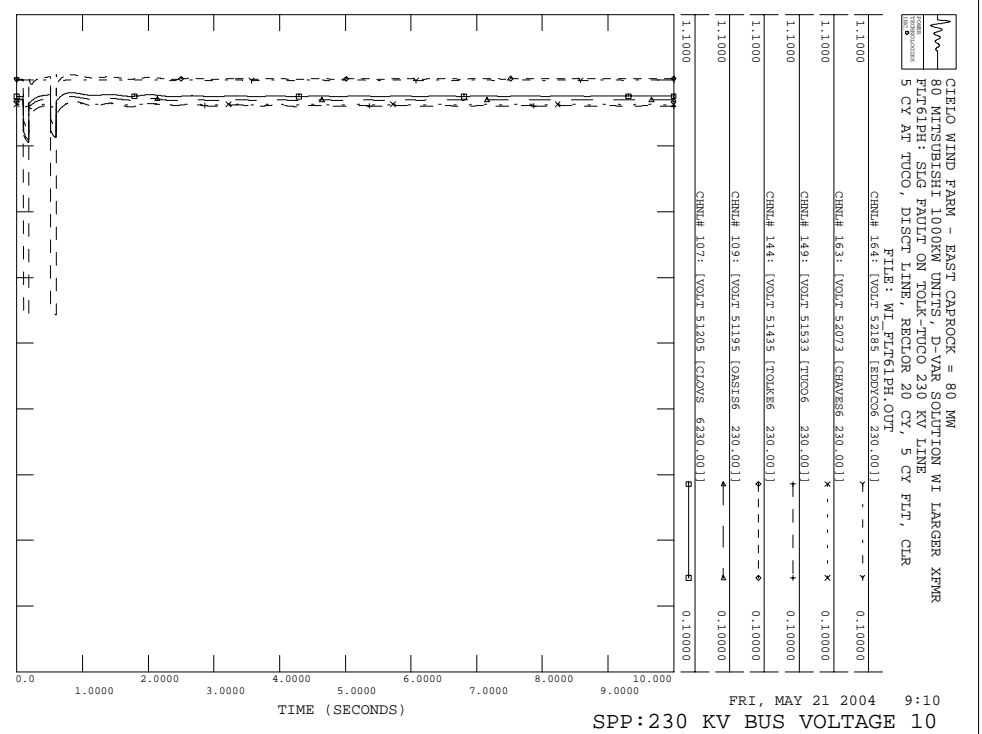


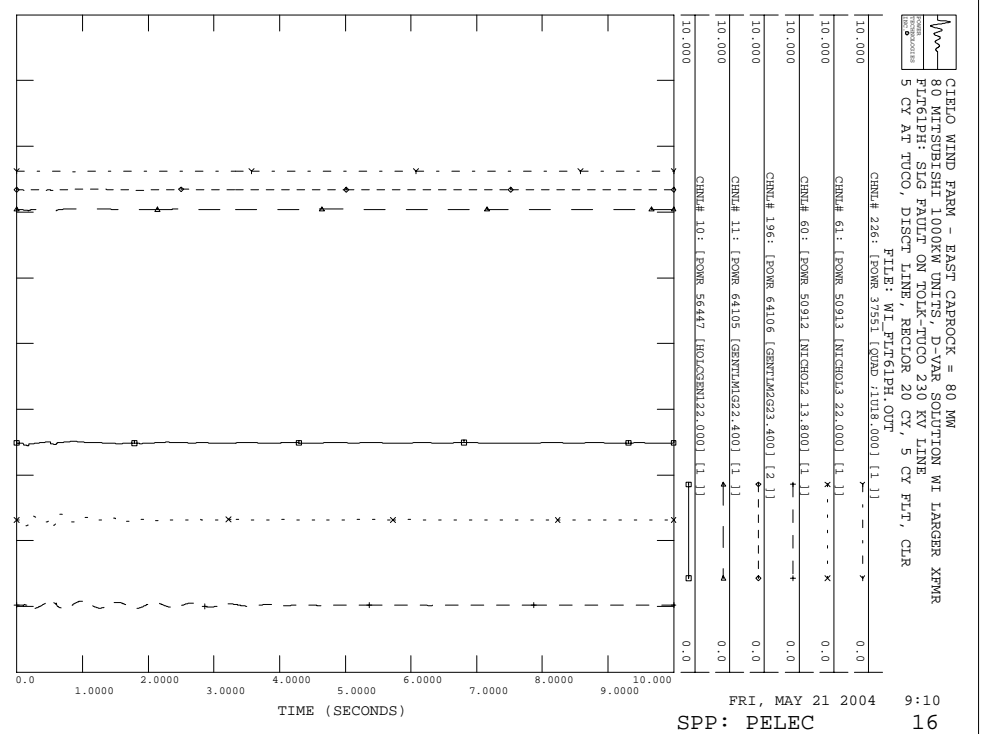
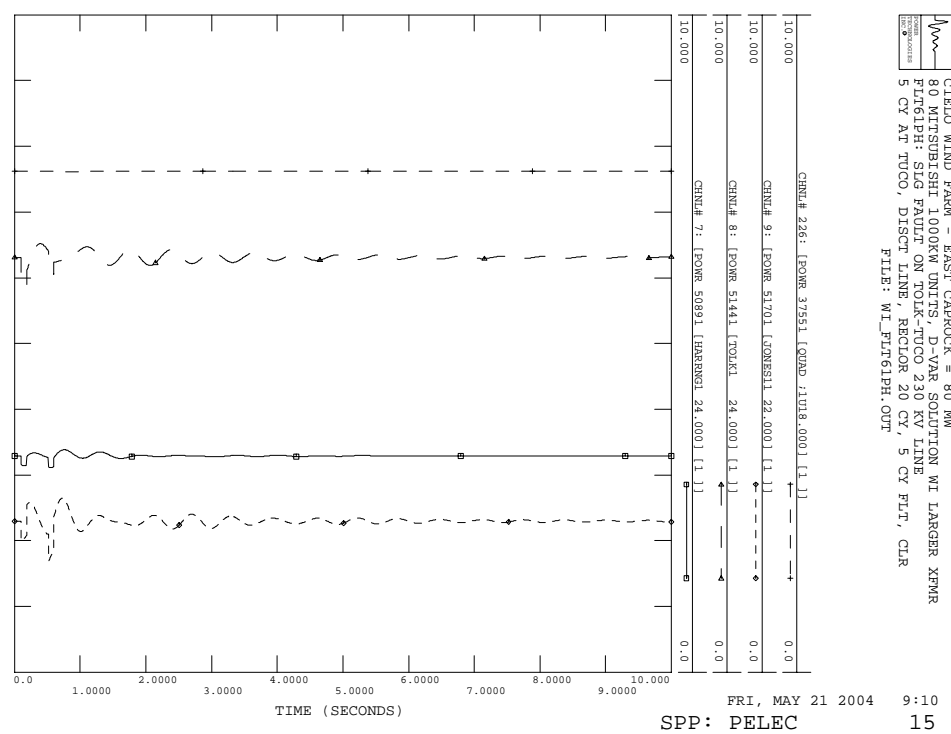
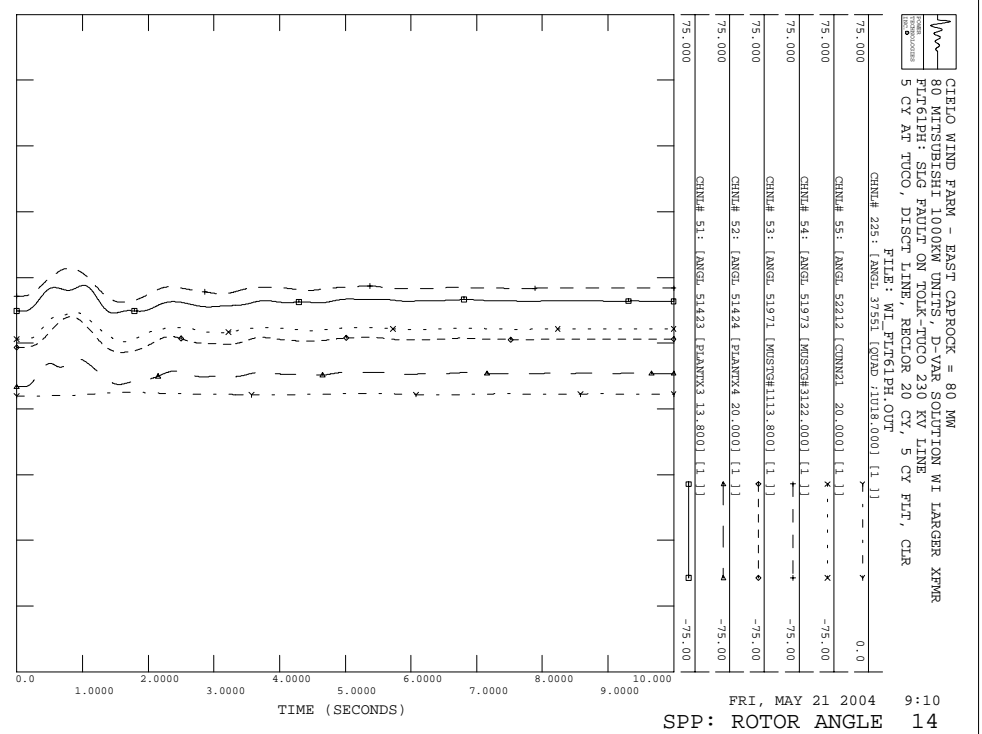
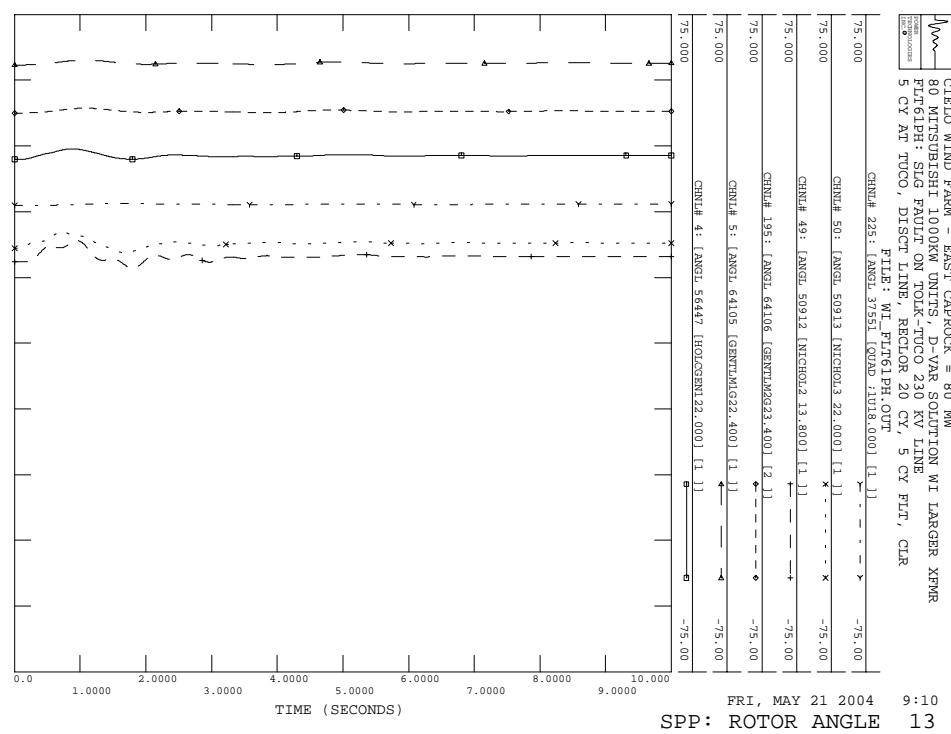
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TUCC 230 KV LINE
 5 CY AT TUCC, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH.OUT

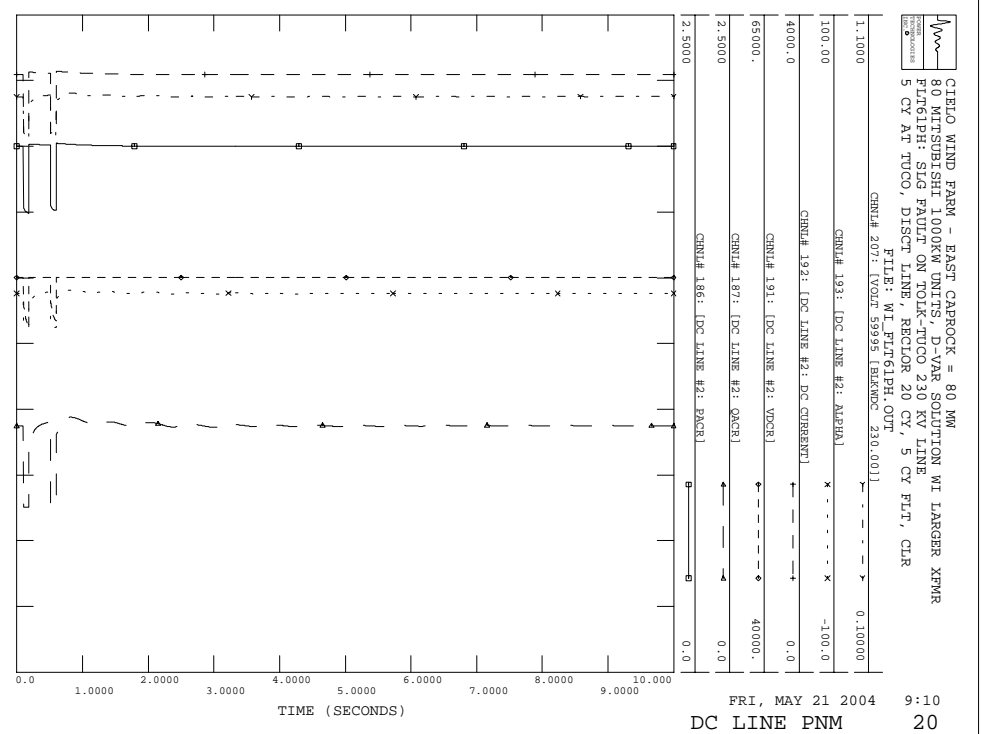
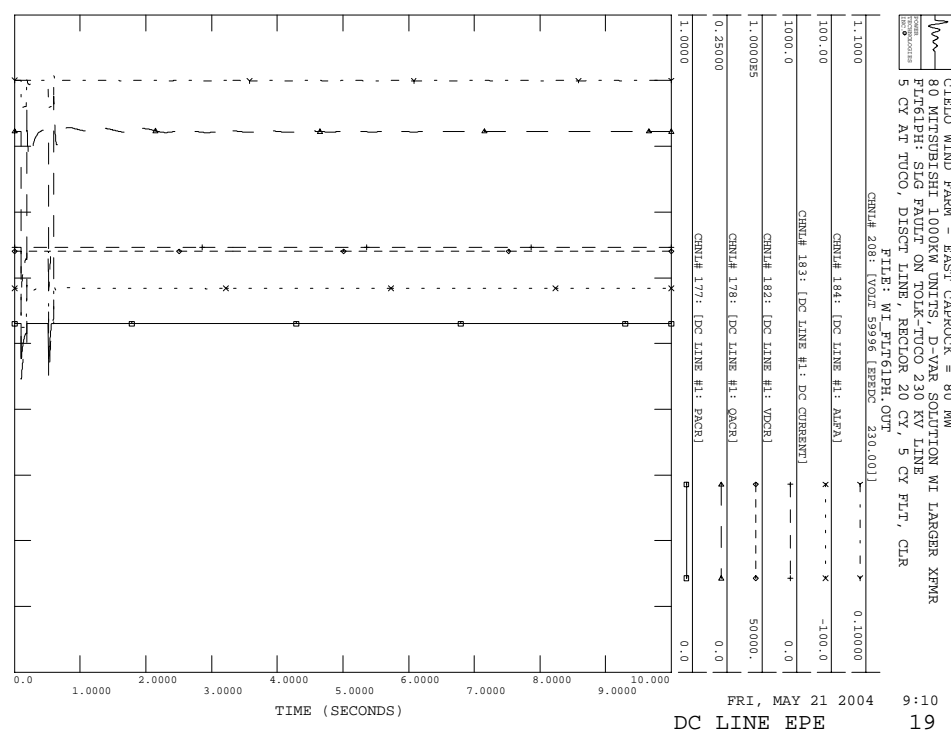
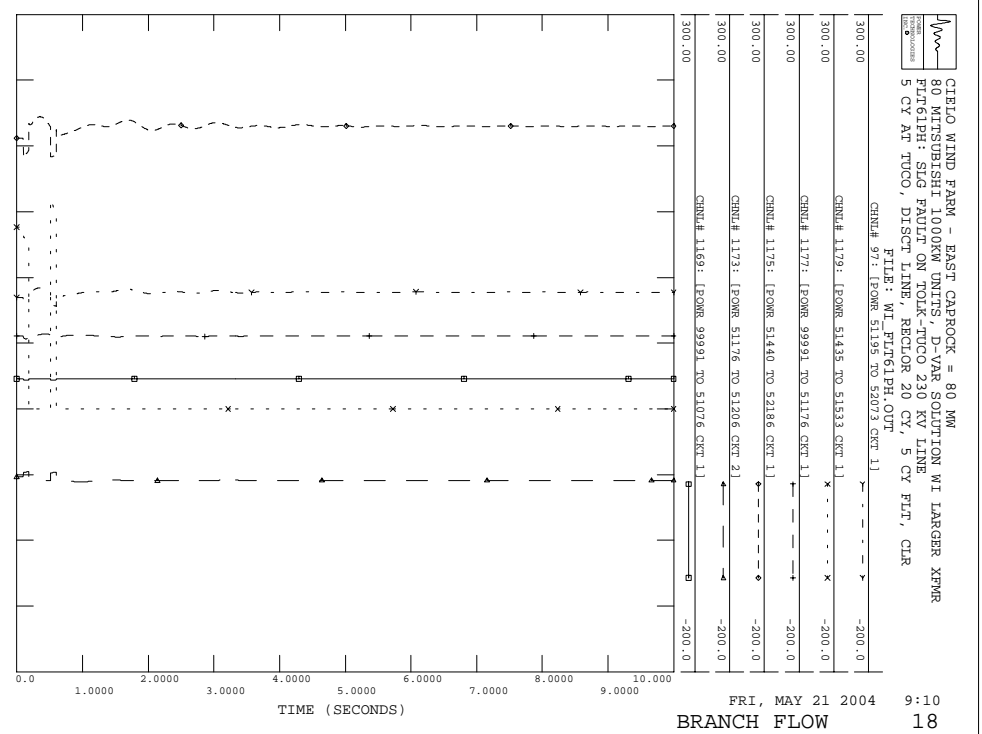
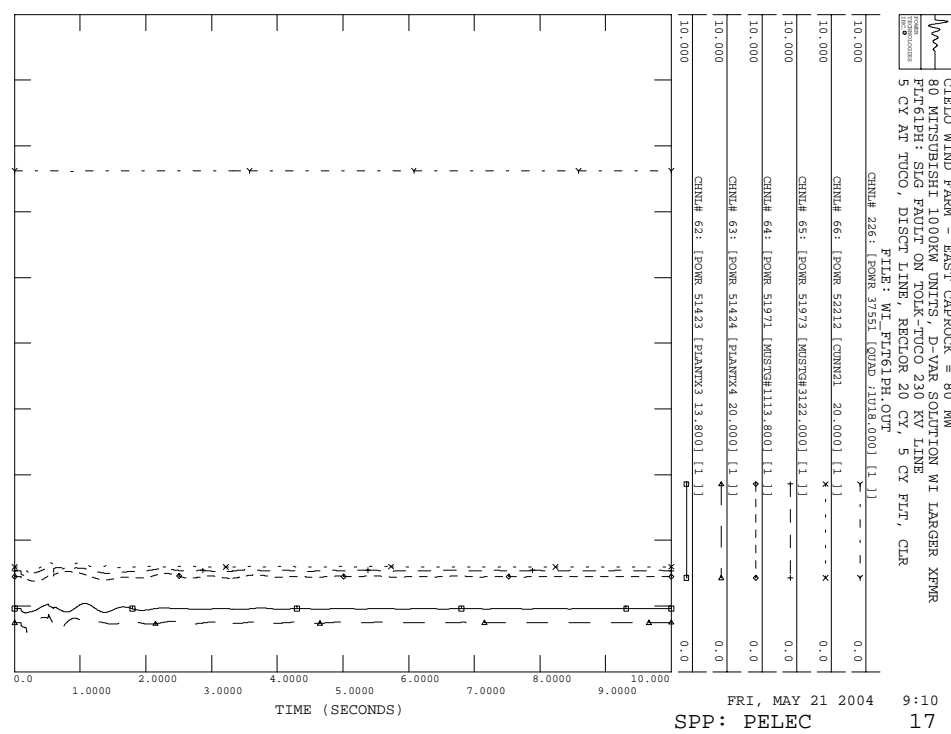


CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TUCC 230 KV LINE
 5 CY AT TUCC, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH.OUT



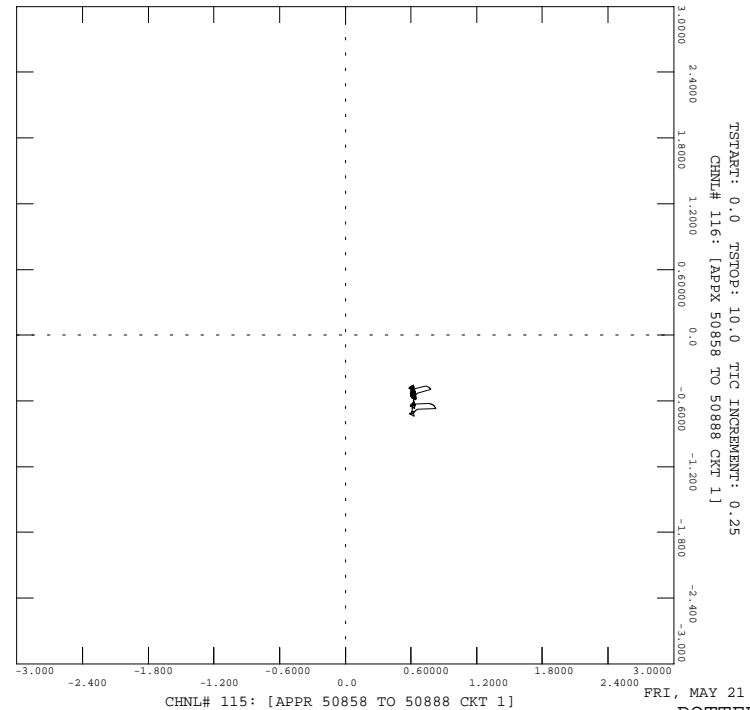






CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TOCO 230 KV LINE
 5 CY AT TOCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

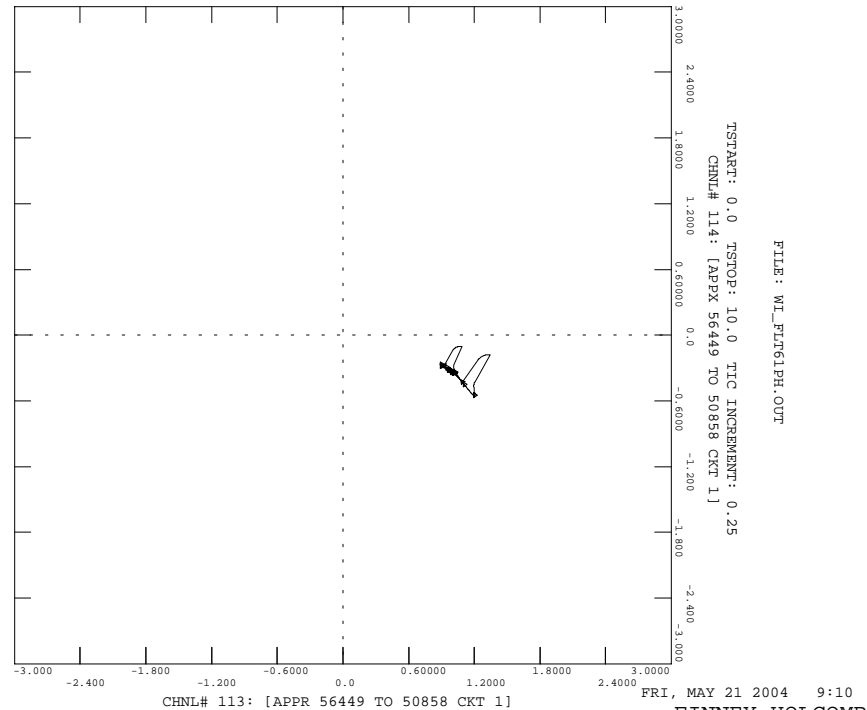
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22

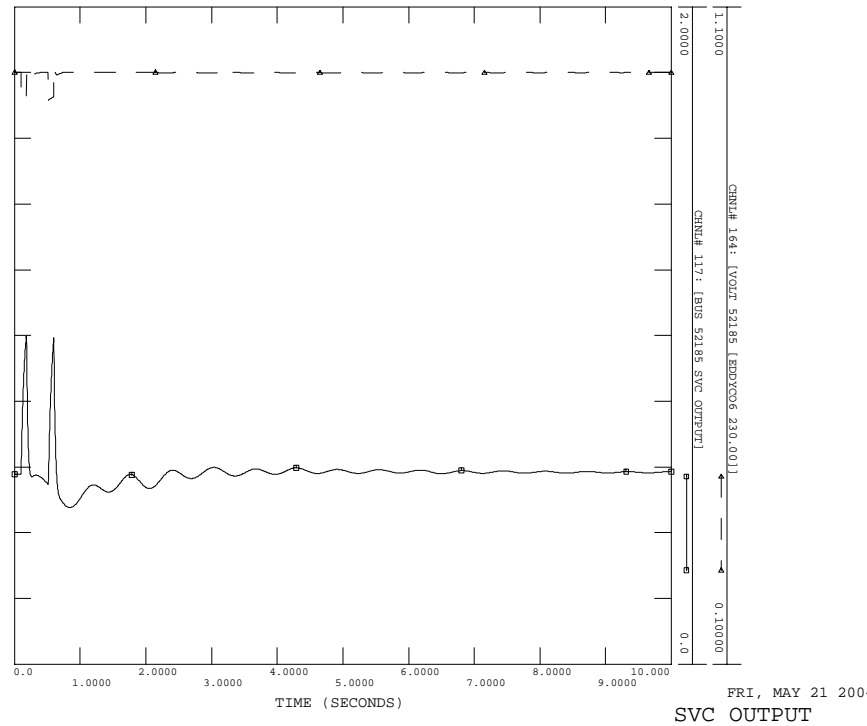
CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TOCO 230 KV LINE
 5 CY AT TOCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

FILE: WI_FLT61PH.OUT



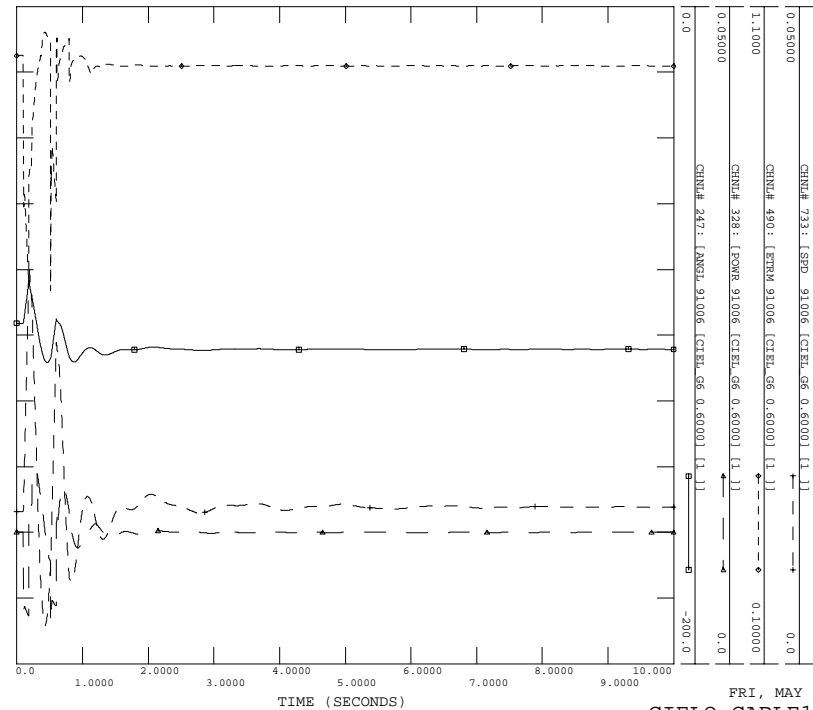
21

CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TOCO 230 KV LINE
 5 CY AT TOCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR



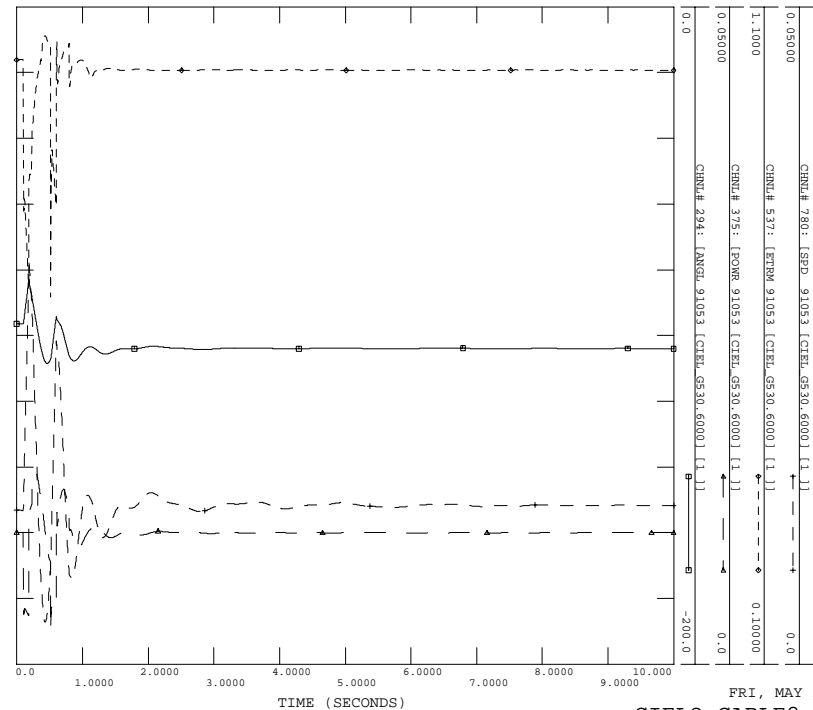
23

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH.OUT



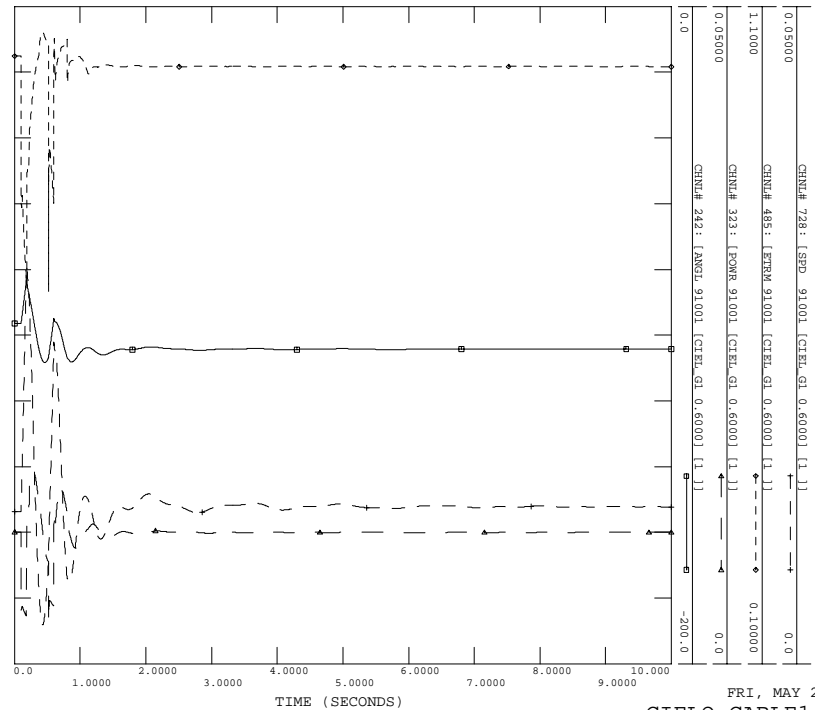
FRI, MAY 21 2004 9:11
 CIELO CABLE1 GEN6 2

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH.OUT



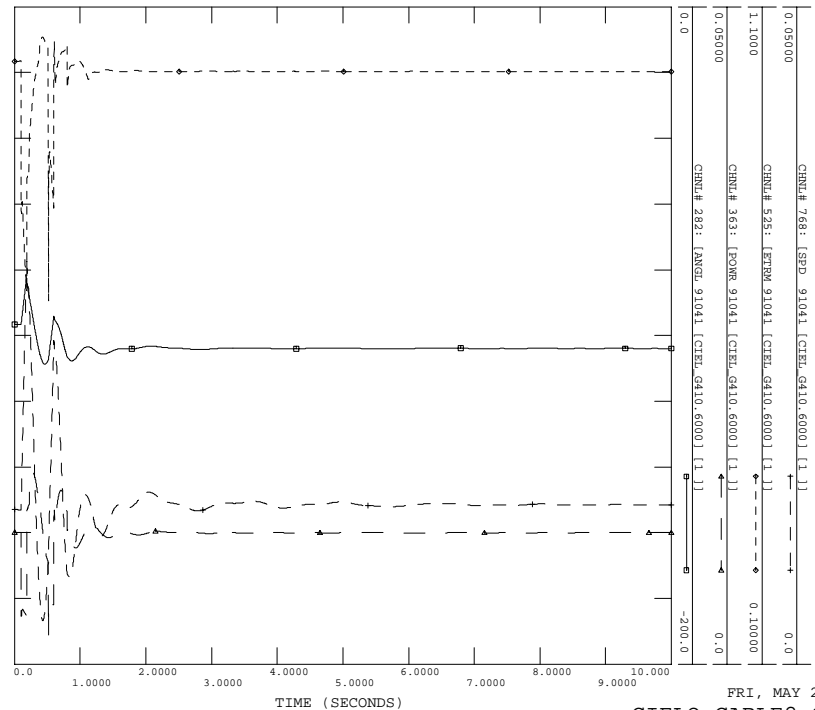
FRI, MAY 21 2004 9:11
 CIELO CABLE2 GEN53 4

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH.OUT



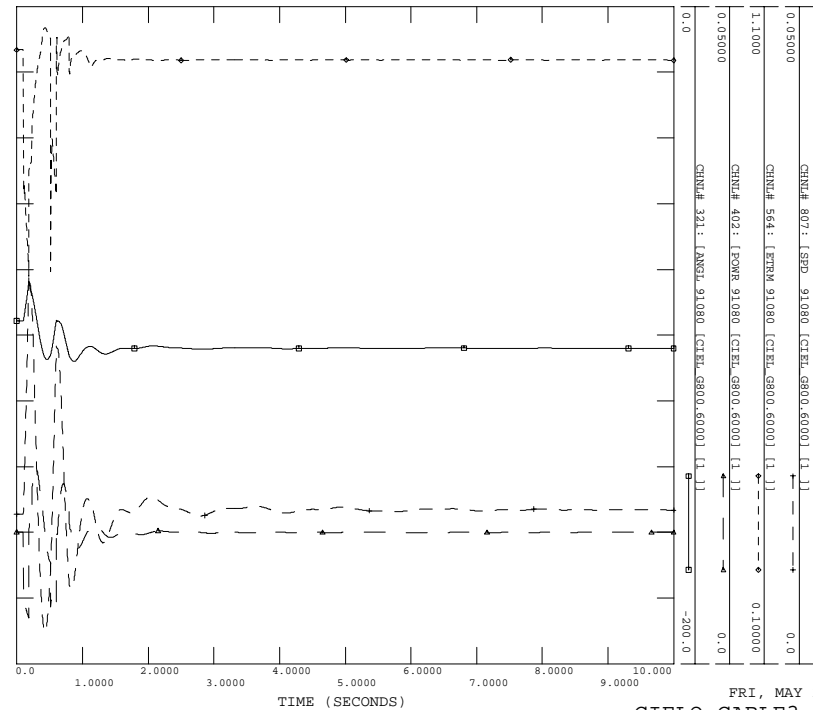
FRI, MAY 21 2004 9:11
 CIELO CABLE1 GEN1 1

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH.OUT



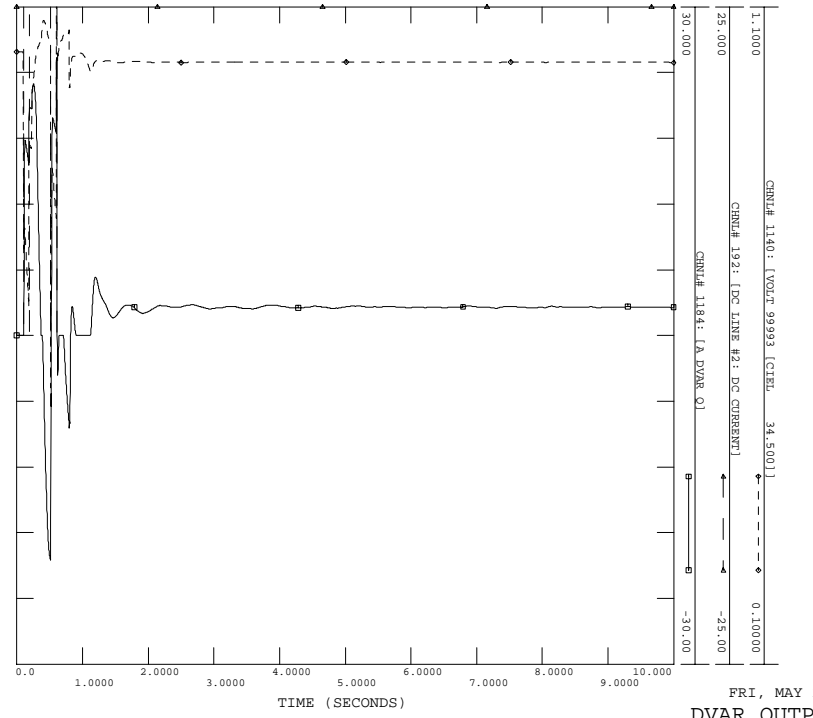
FRI, MAY 21 2004 9:11
 CIELO CABLE2 GEN41 3

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH.OUT



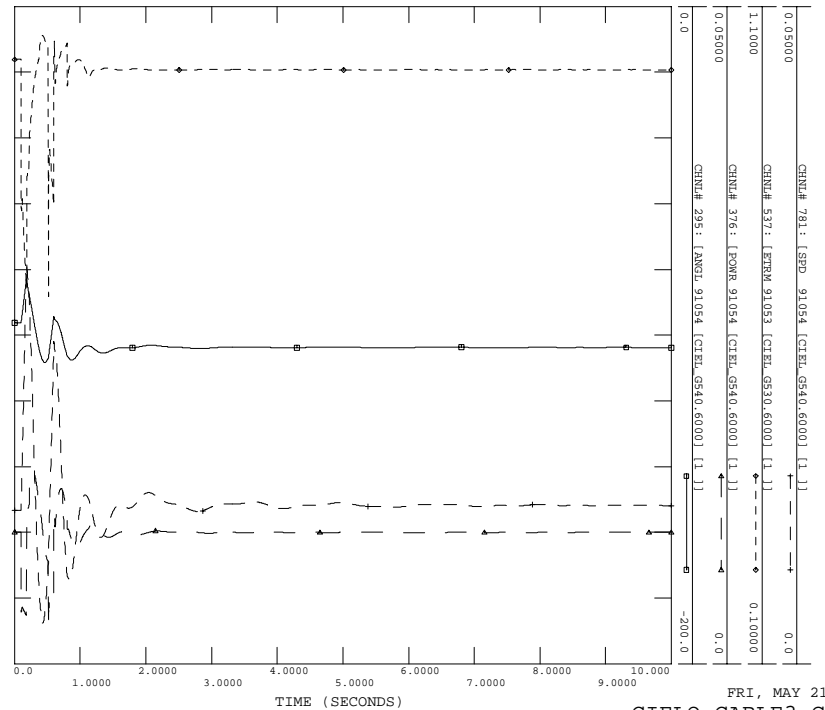
FRI, MAY 21 2004 9:11
 CIELO CABLE3 GEN80 6

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH.OUT



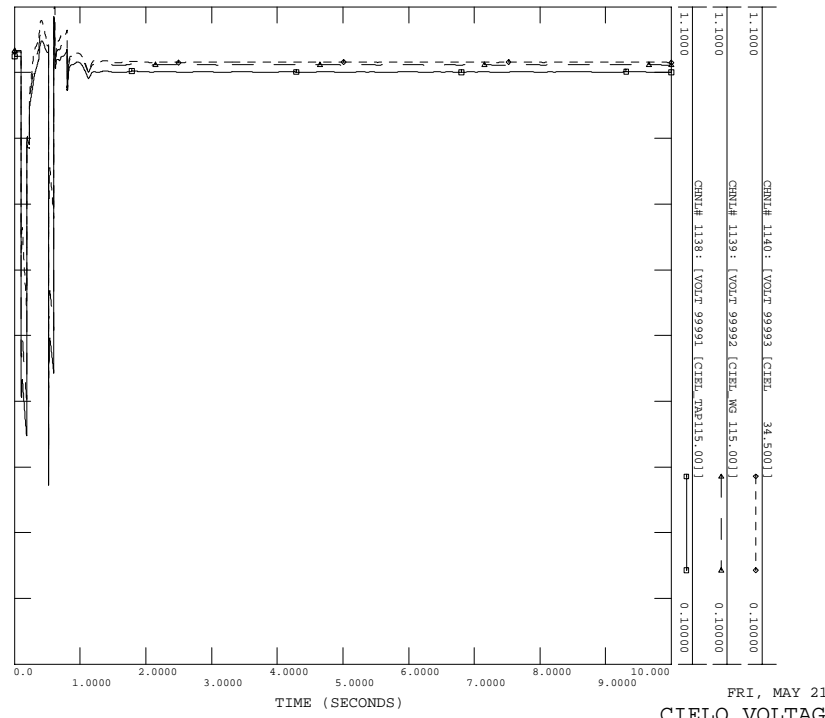
FRI, MAY 21 2004 9:11
 DVAR OUTPUT 8

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH.OUT



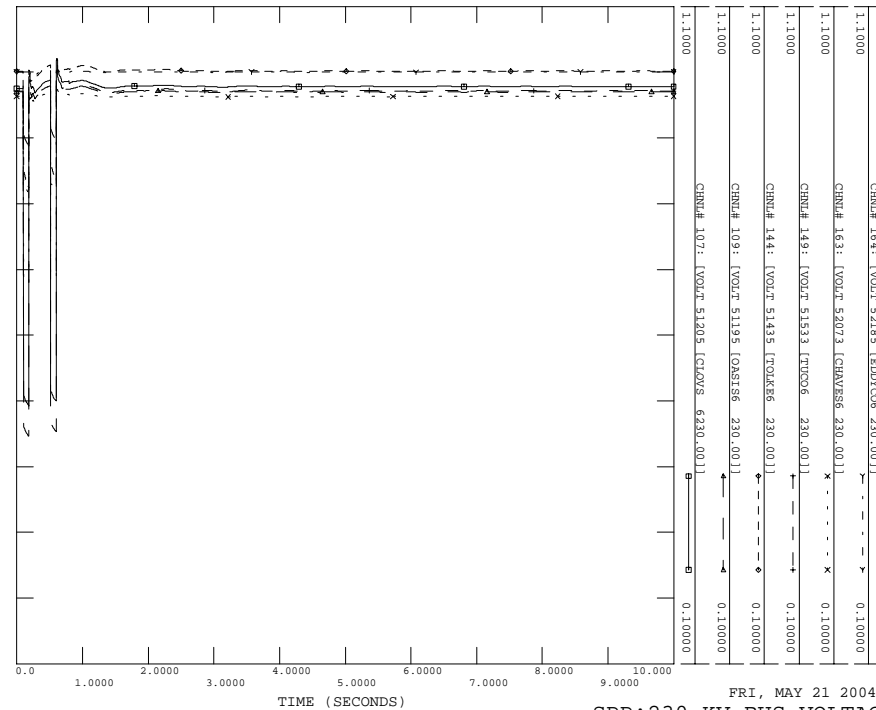
FRI, MAY 21 2004 9:11
 CIELO CABLE3 GEN54 5

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH.OUT

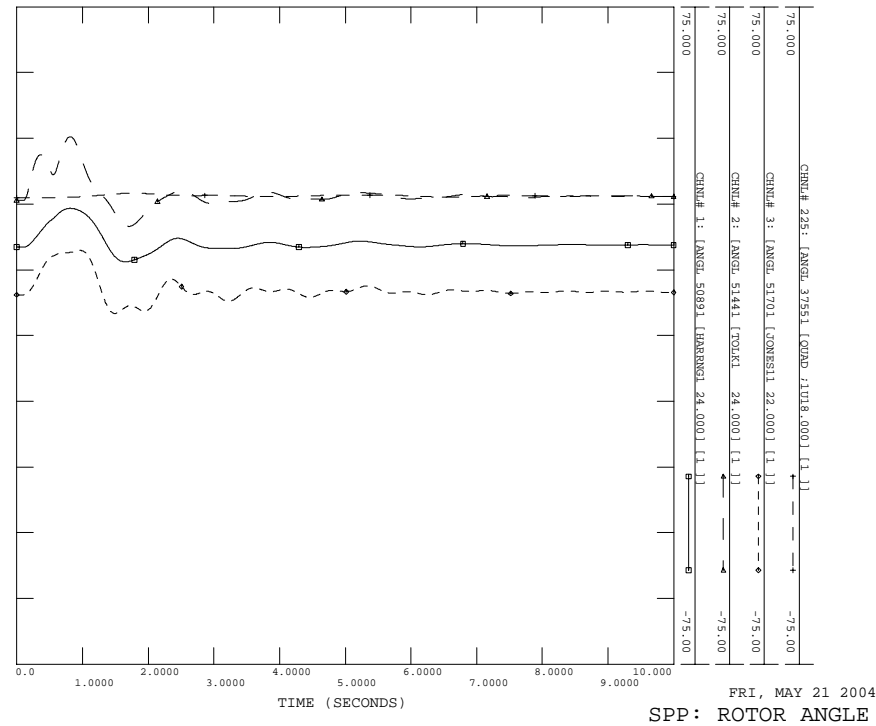


FRI, MAY 21 2004 9:11
 CIELO VOLTAGE 7

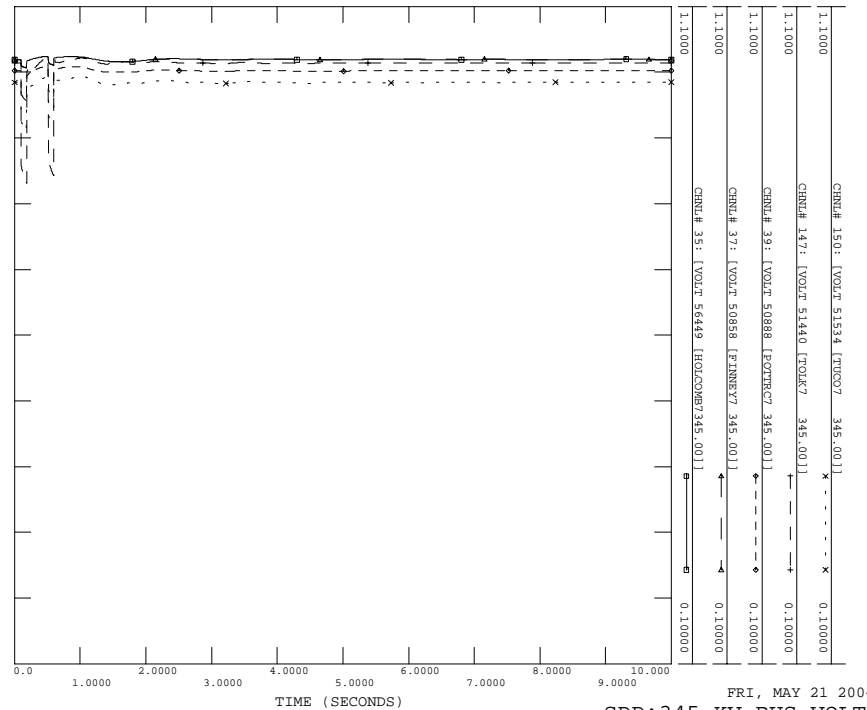
CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT/3PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH.OUT



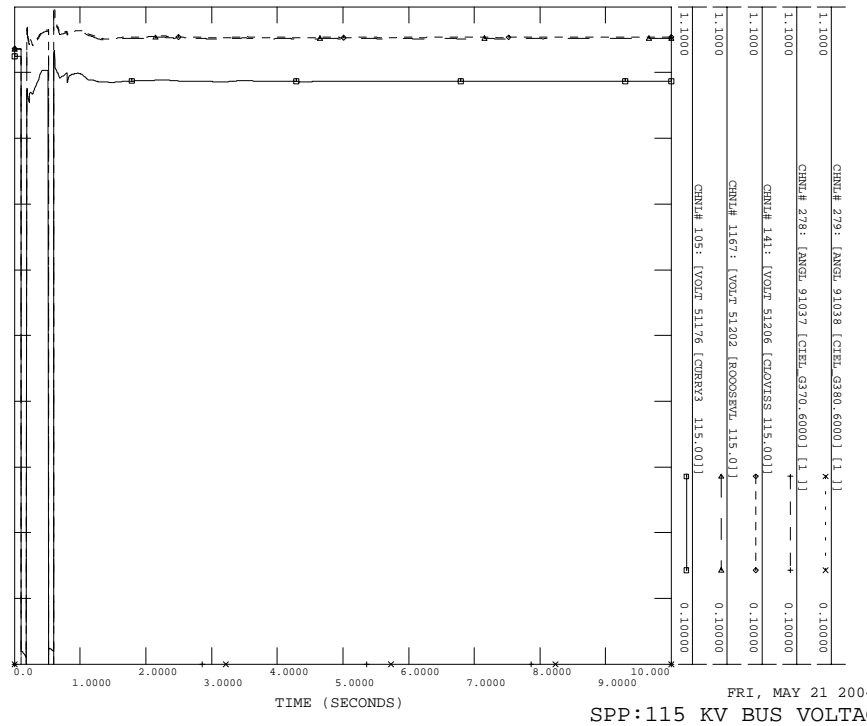
CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT/3PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH.OUT

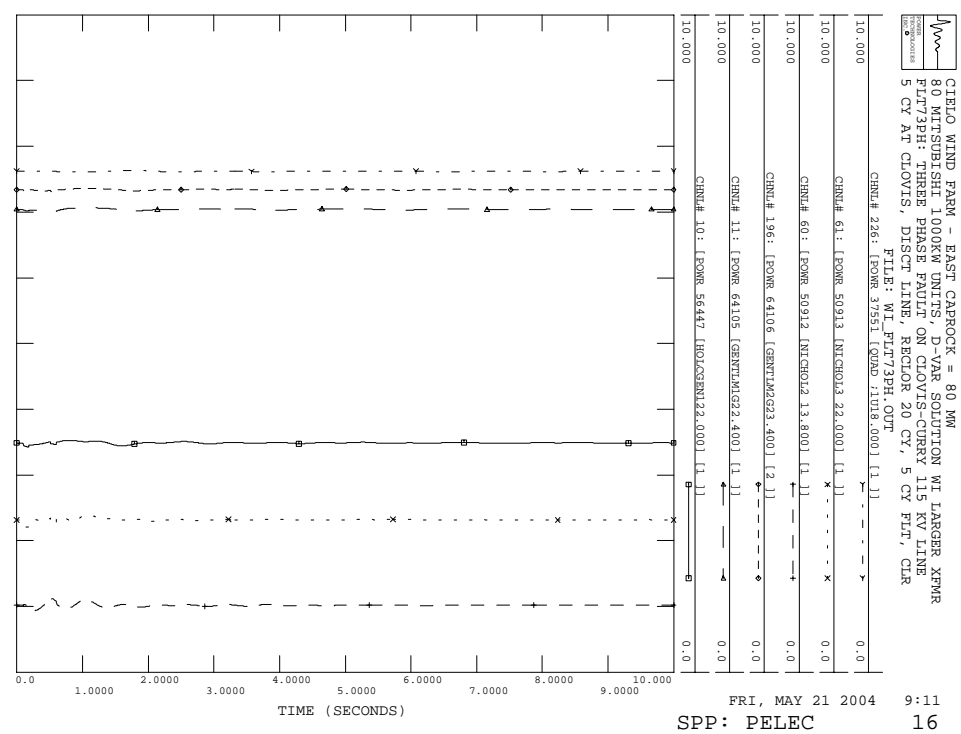
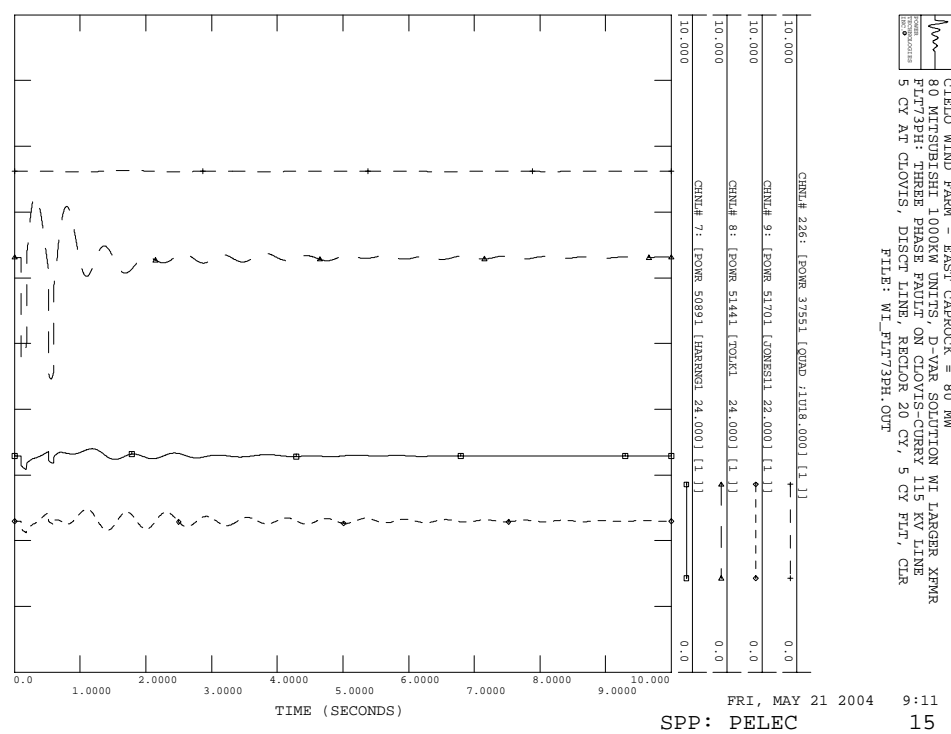
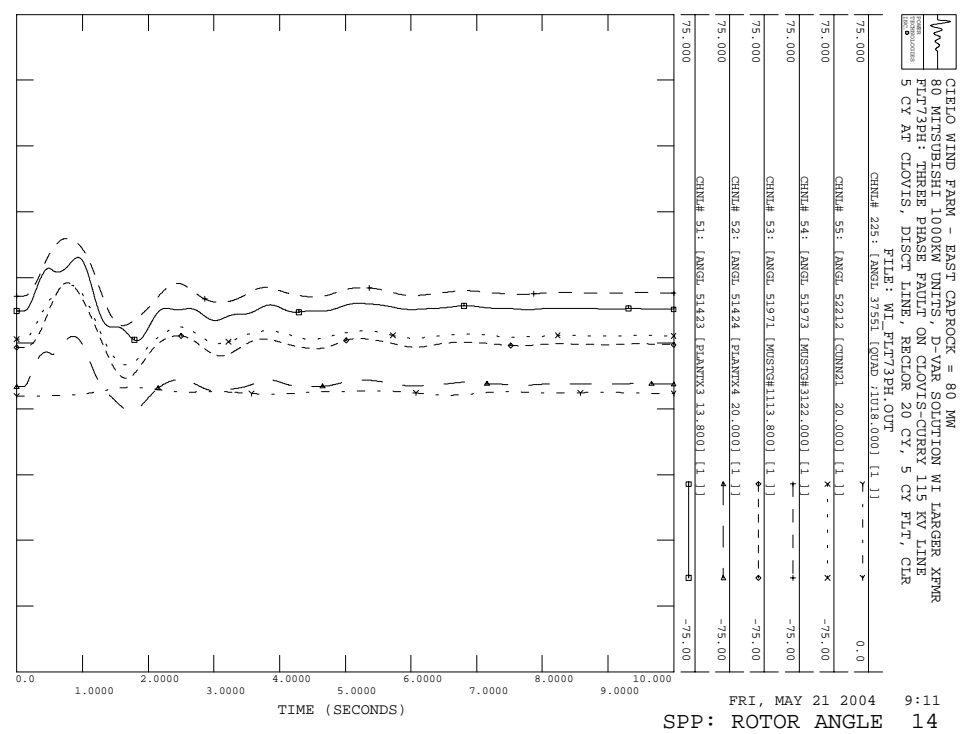
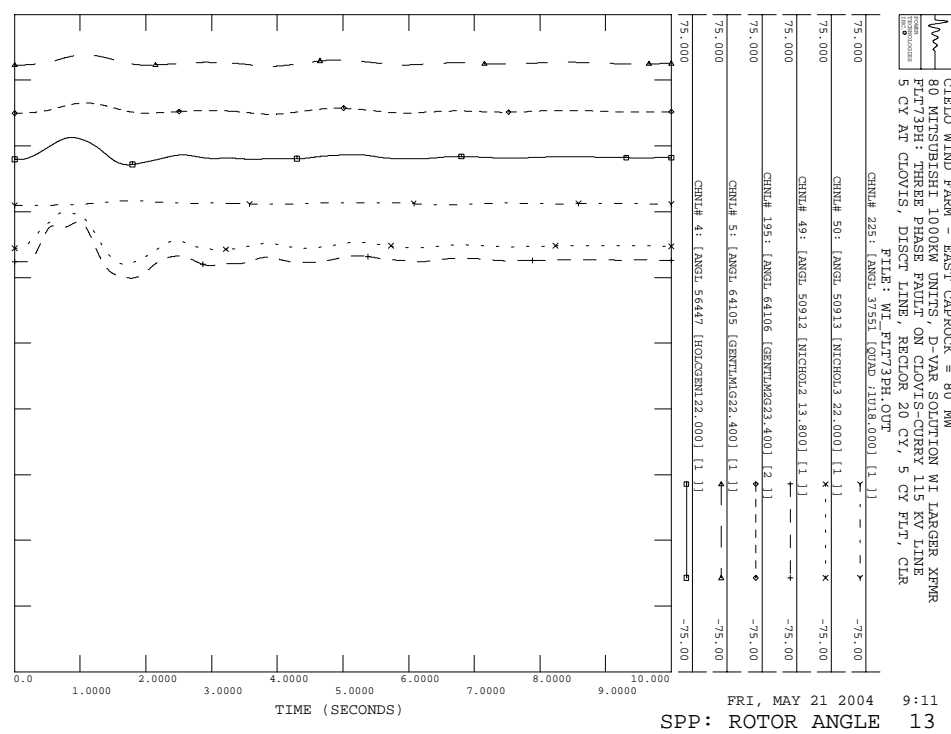


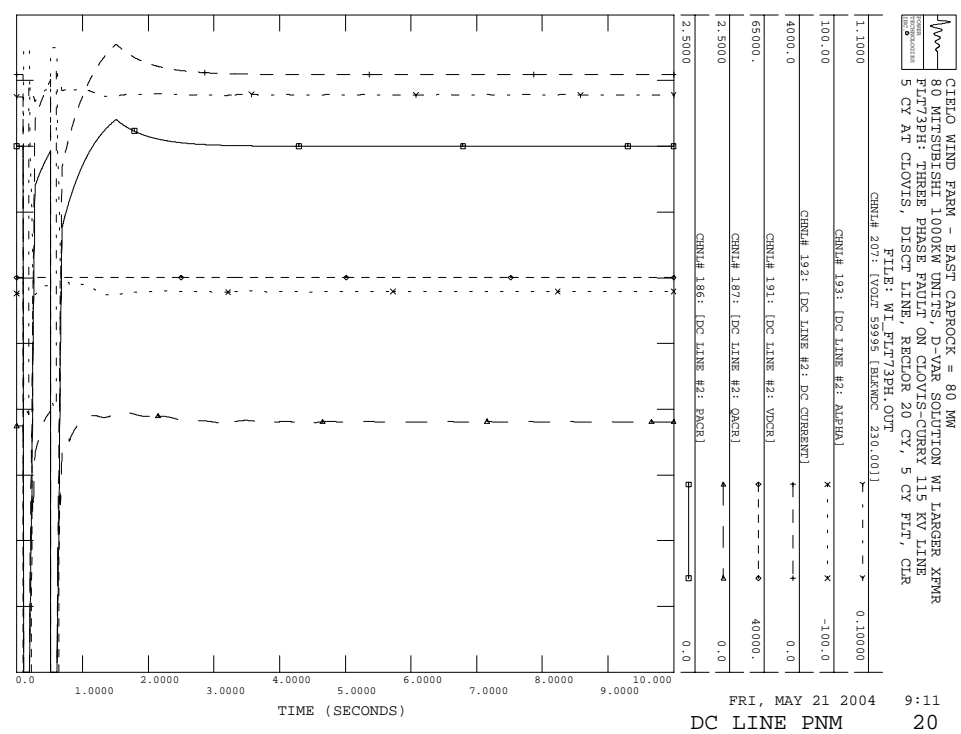
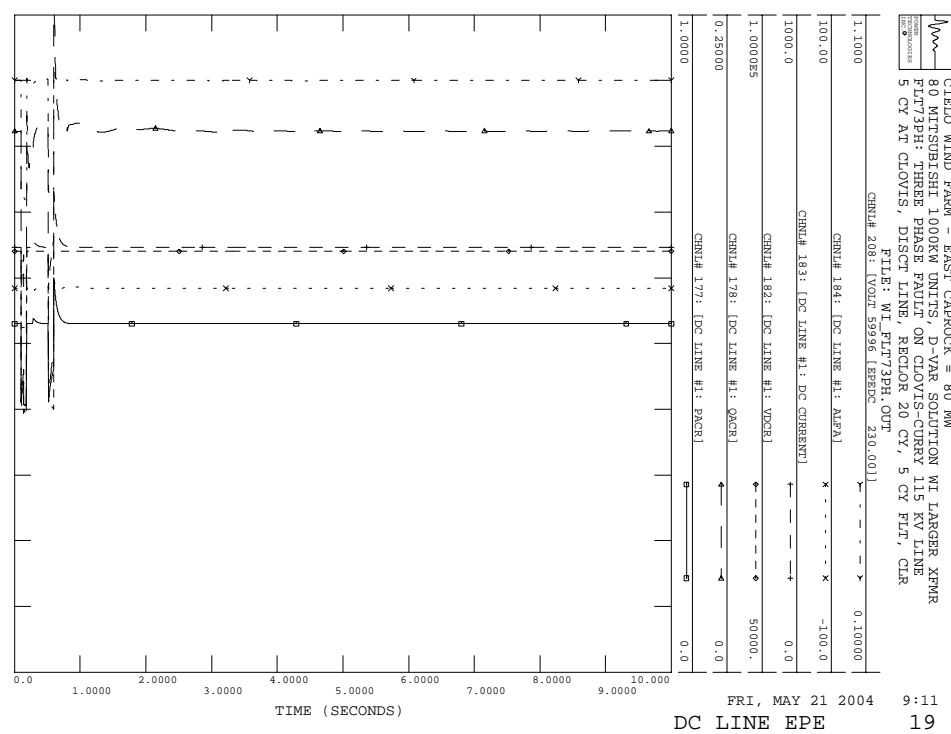
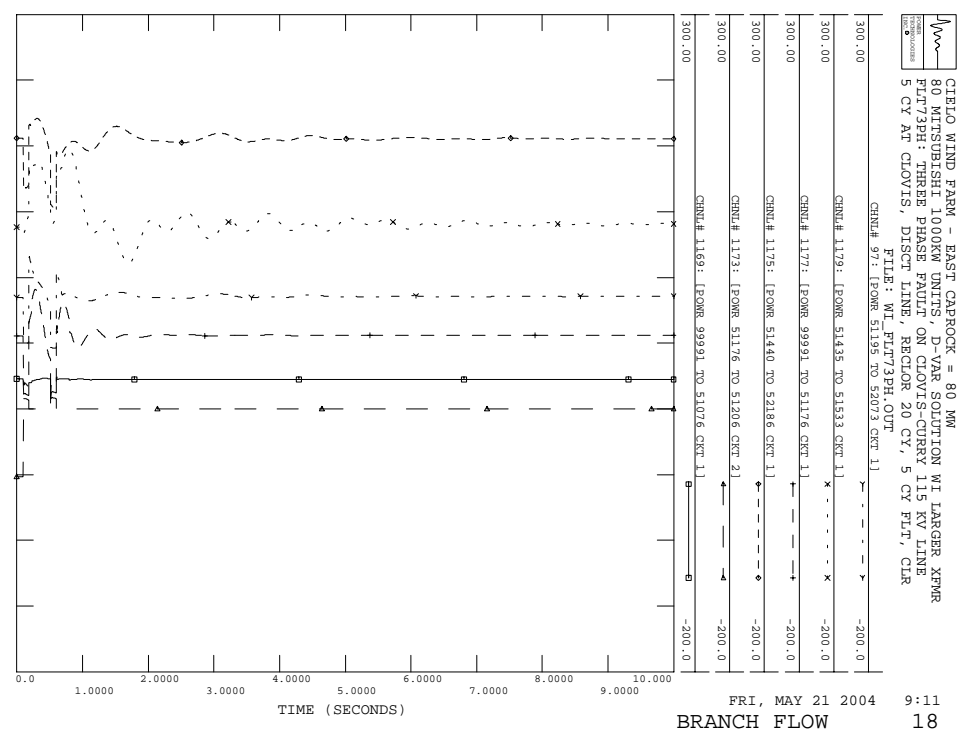
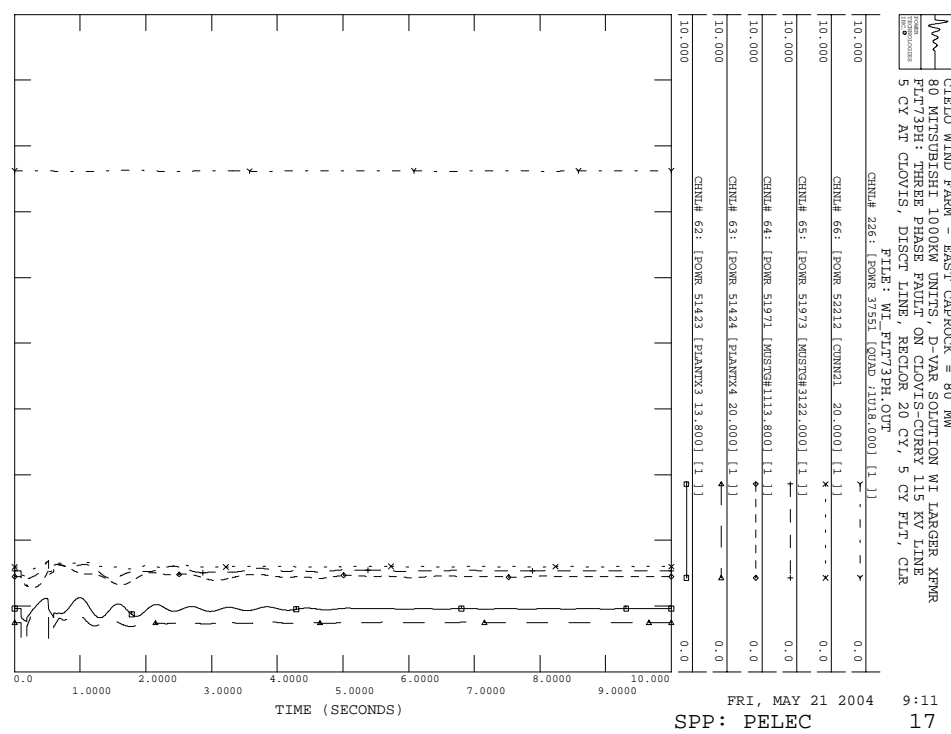
CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT/3PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH.OUT



CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPMR
 FLT/3PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH.OUT

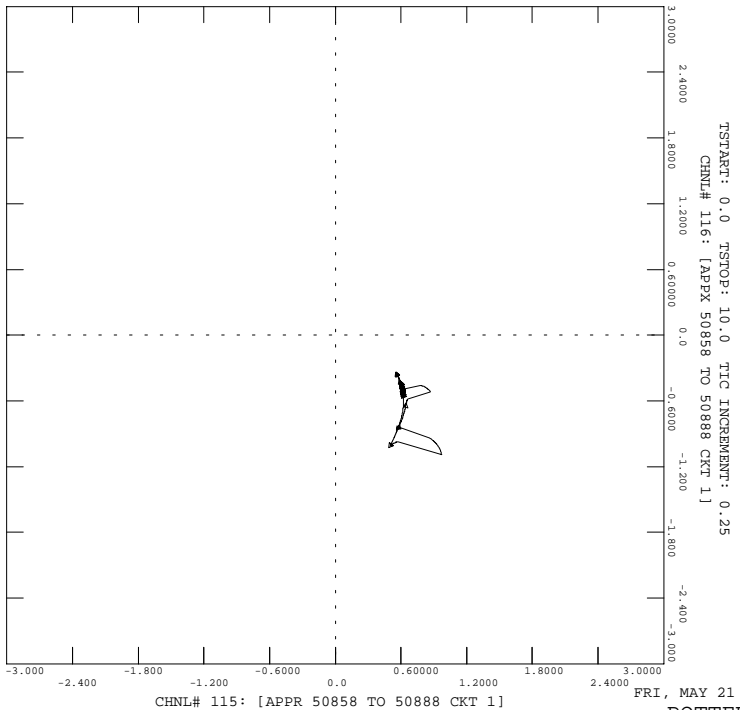






CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPRM
 FLT/3PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

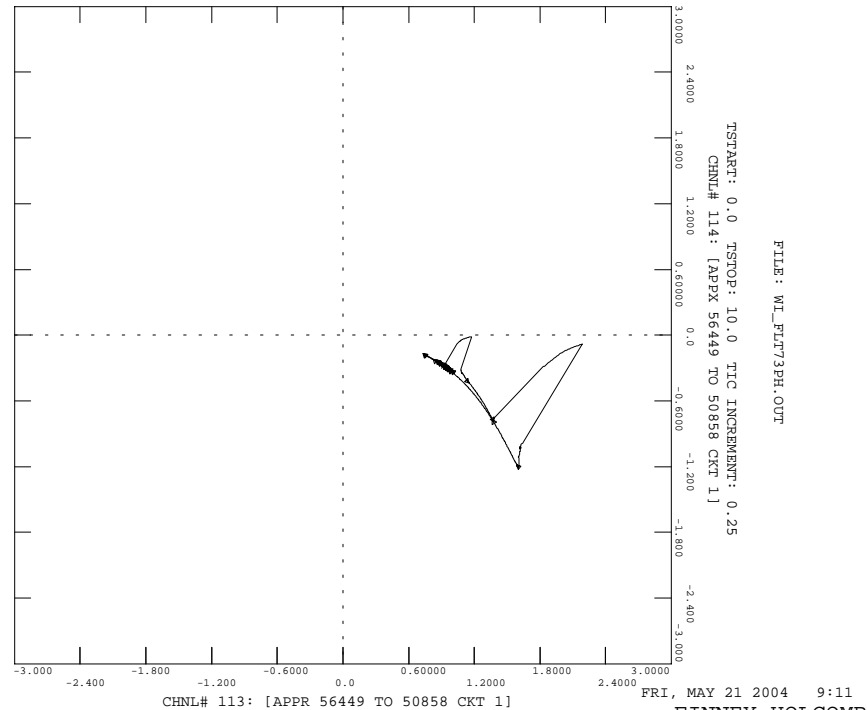
FILE: WI_FLT73PH.OUT



FRI, MAY 21 2004 9:11
 POTTER-FINNEY 22

CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPRM
 FLT/3PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

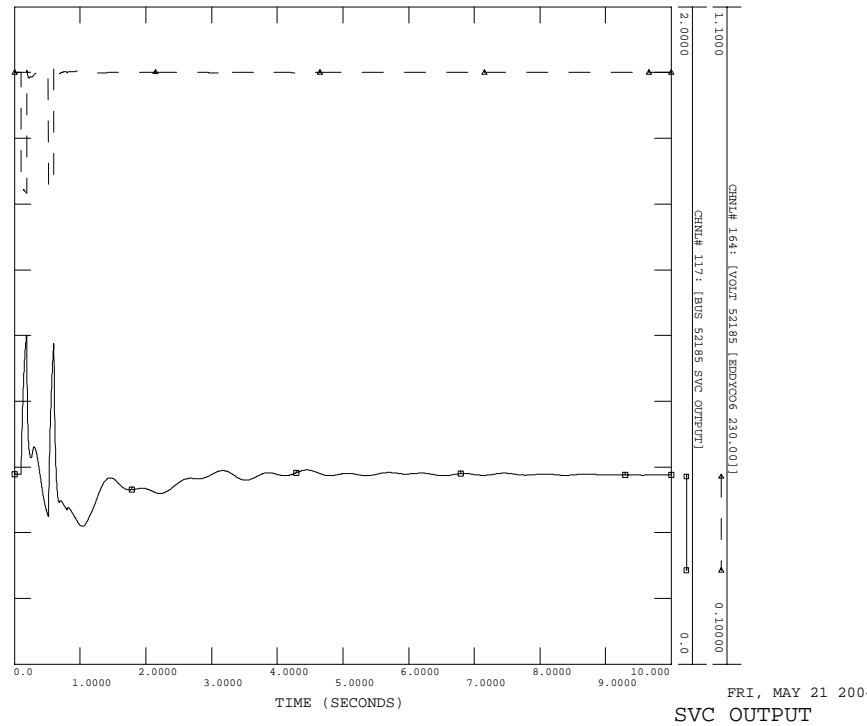
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FRI, MAY 21 2004 9:11
 FINNEY-HOLCOMB 21

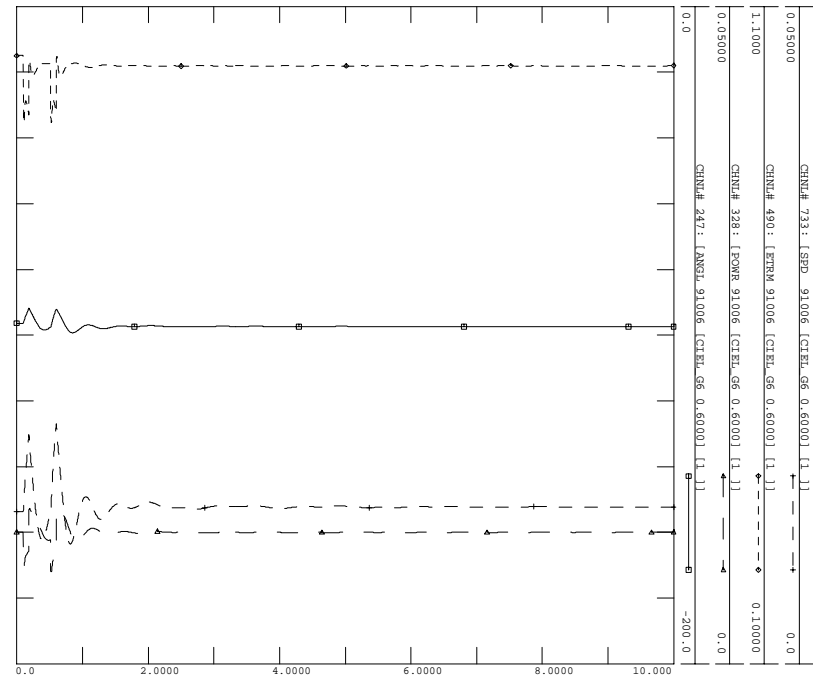
CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XPRM
 FLT/3PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

FILE: WI_FLT73PH.OUT



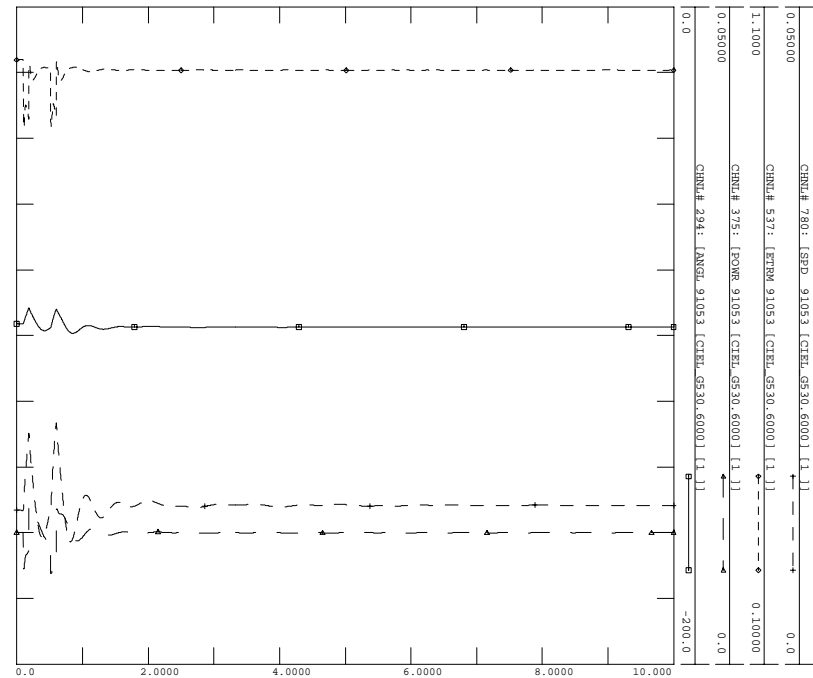
FRI, MAY 21 2004 9:11
 SVC OUTPUT 23

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT71PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT71PH.OUT



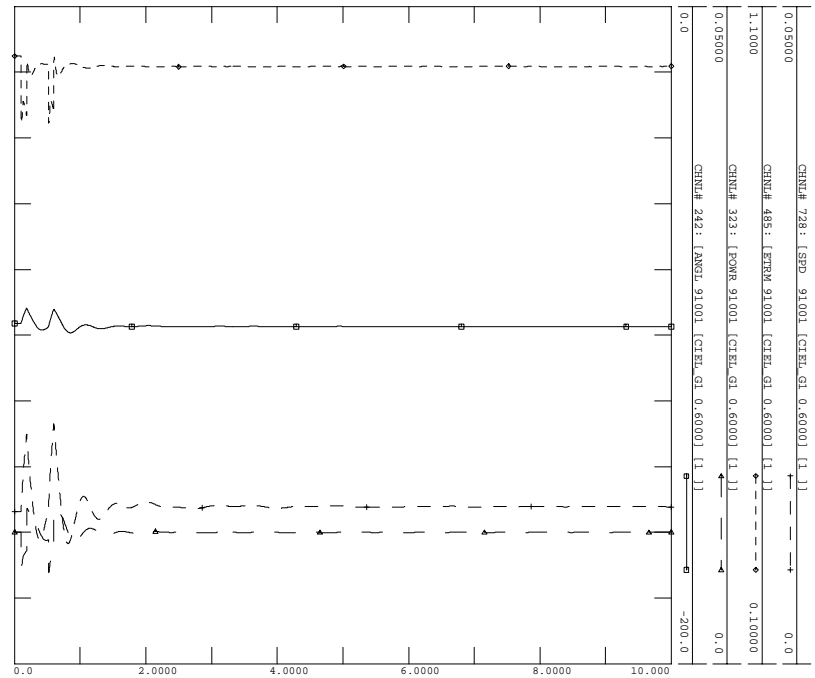
FRI, MAY 21 2004 9:11
 CIELO CABLE1 GEN6 2

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT71PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT71PH.OUT



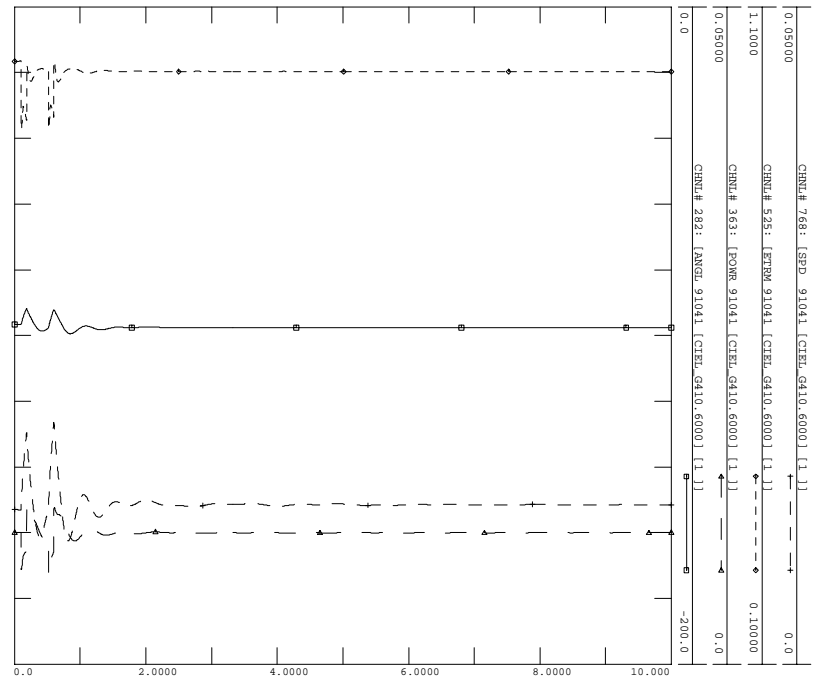
FRI, MAY 21 2004 9:11
 CIELO CABLE2 GEN53 4

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT71PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT71PH.OUT



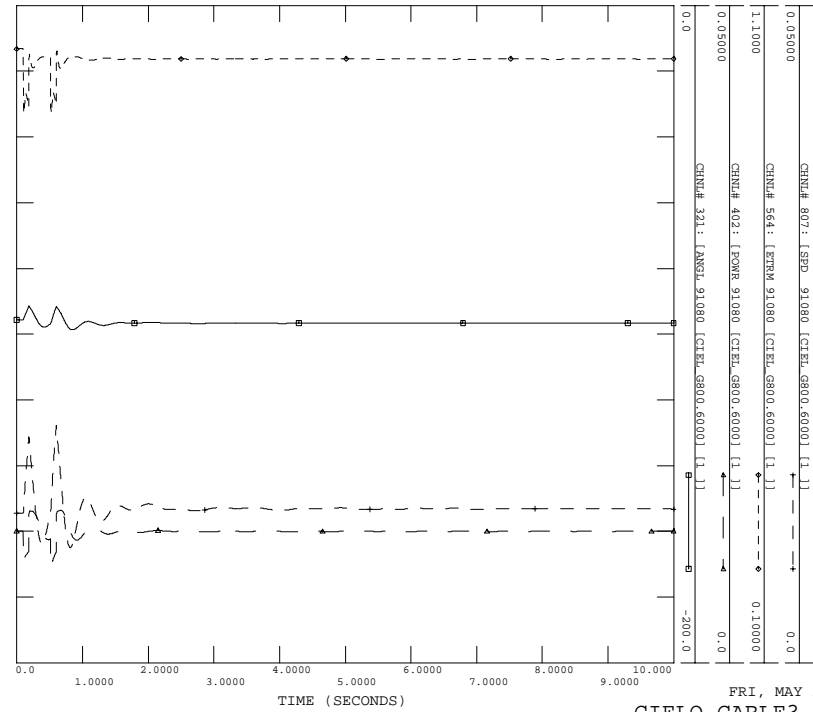
FRI, MAY 21 2004 9:11
 CIELO CABLE1 GEN1 1

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION WI LARGER XFMR
 FLT71PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT71PH.OUT



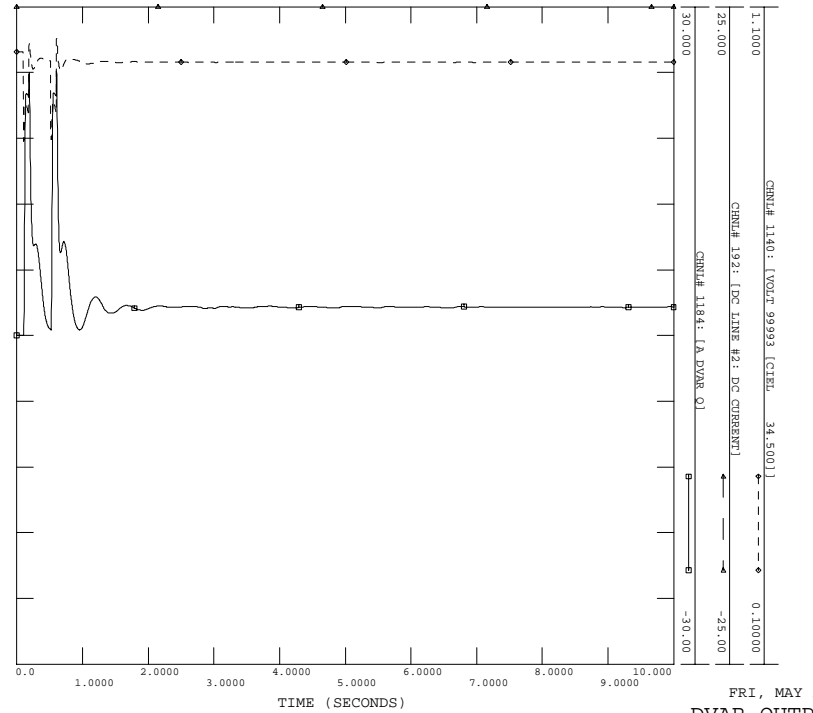
FRI, MAY 21 2004 9:11
 CIELO CABLE2 GEN41 3

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT/1PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT71PH.OUT



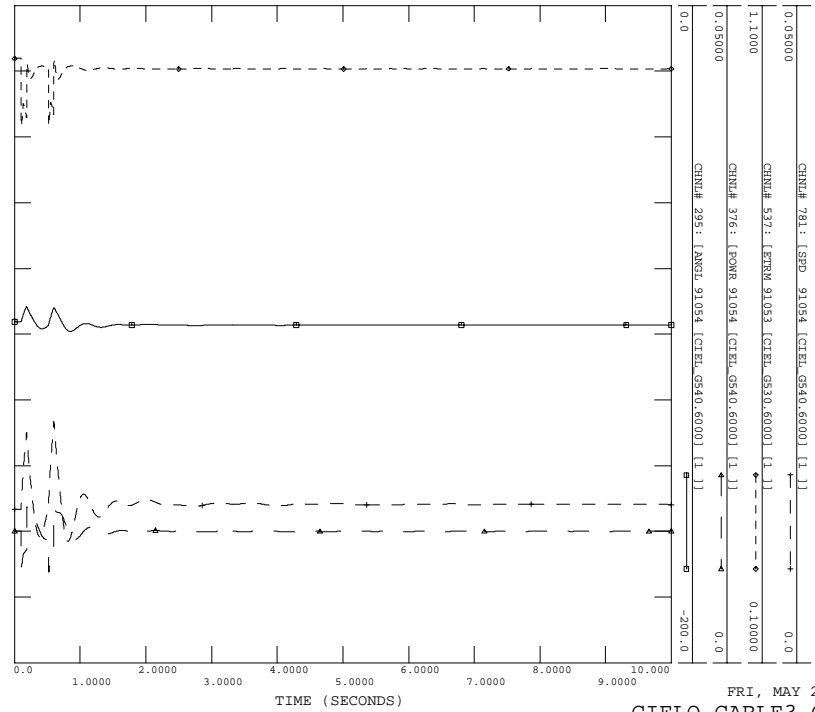
FRI, MAY 21 2004 9:11
 CIELO CABLE3 GEN80 6

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT/1PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT71PH.OUT



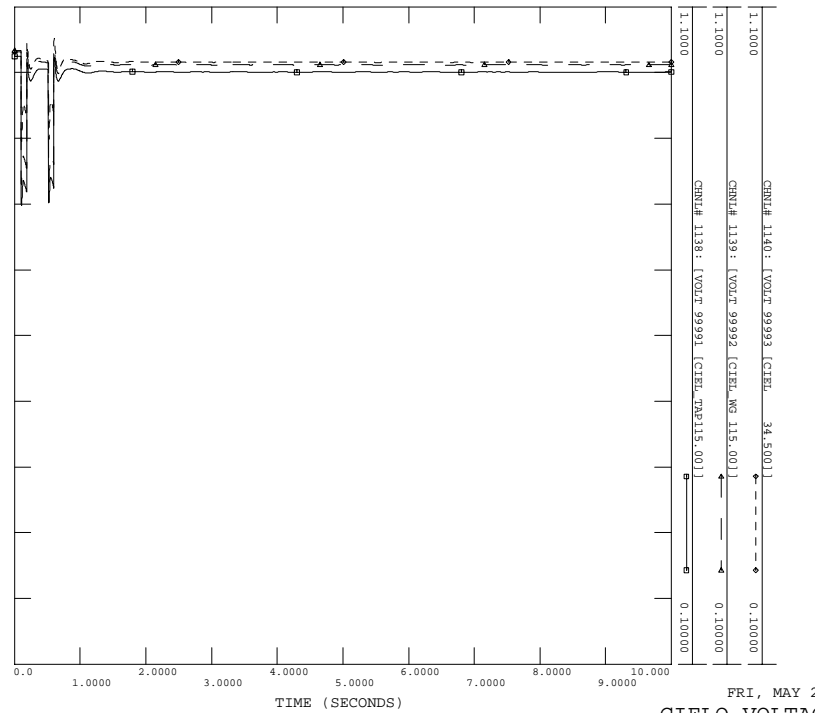
FRI, MAY 21 2004 9:11
 DVAR OUTPUT 8

CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT/1PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT71PH.OUT

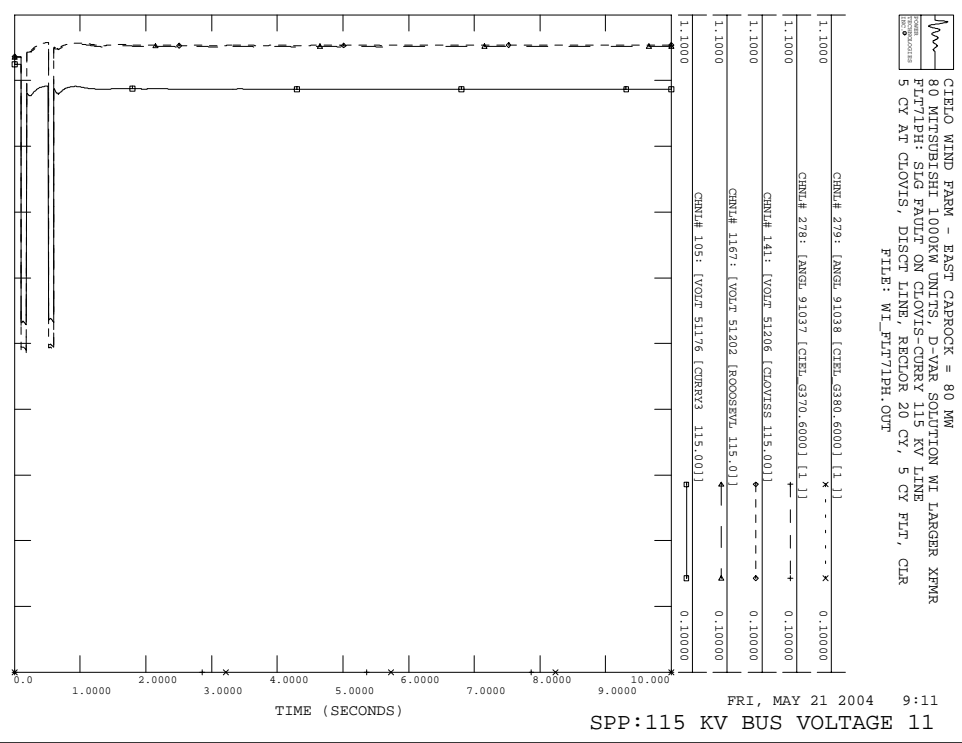
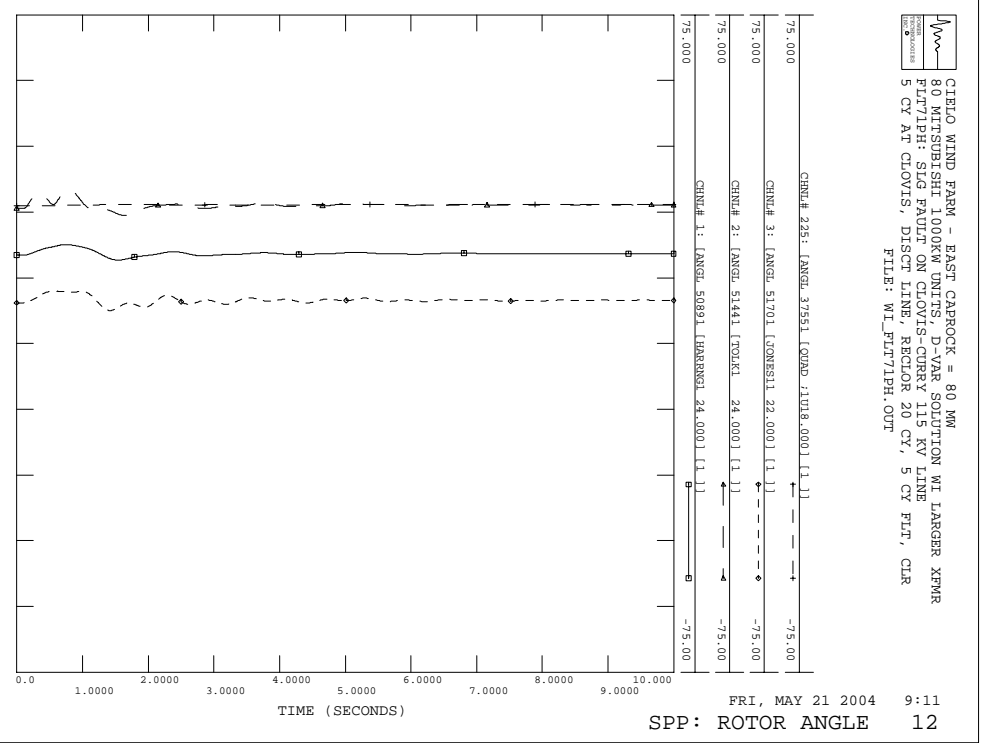
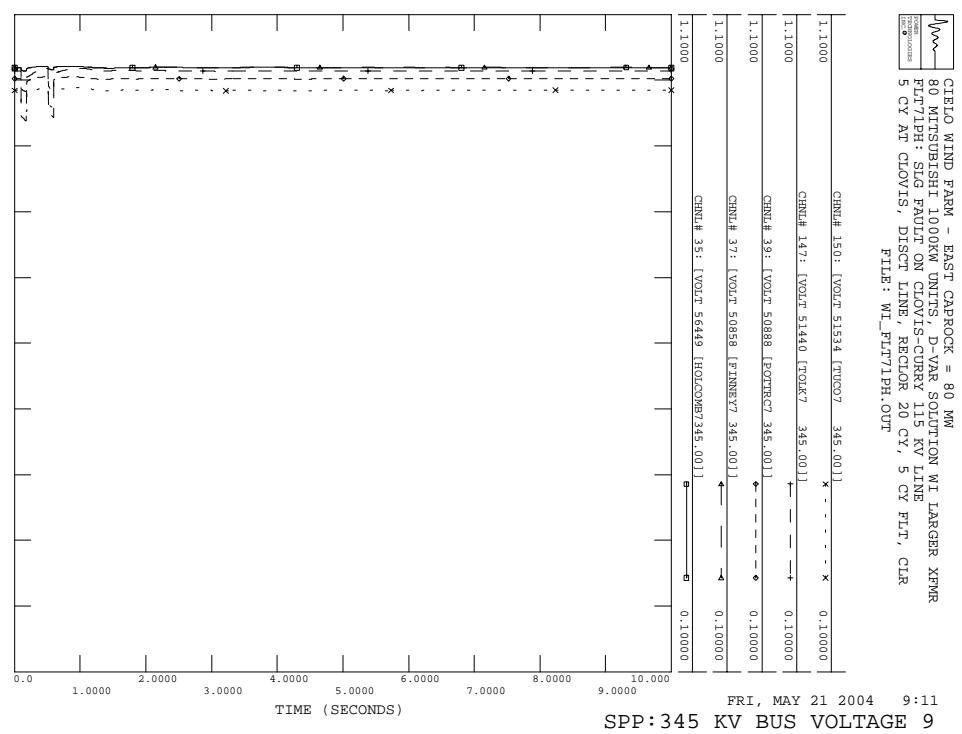
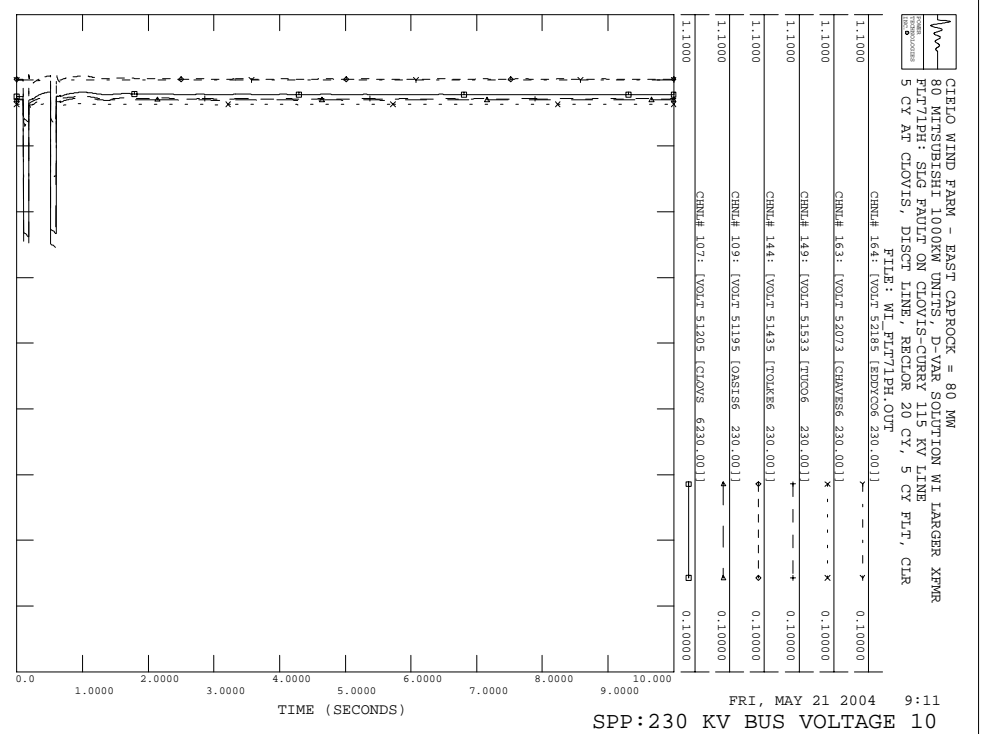


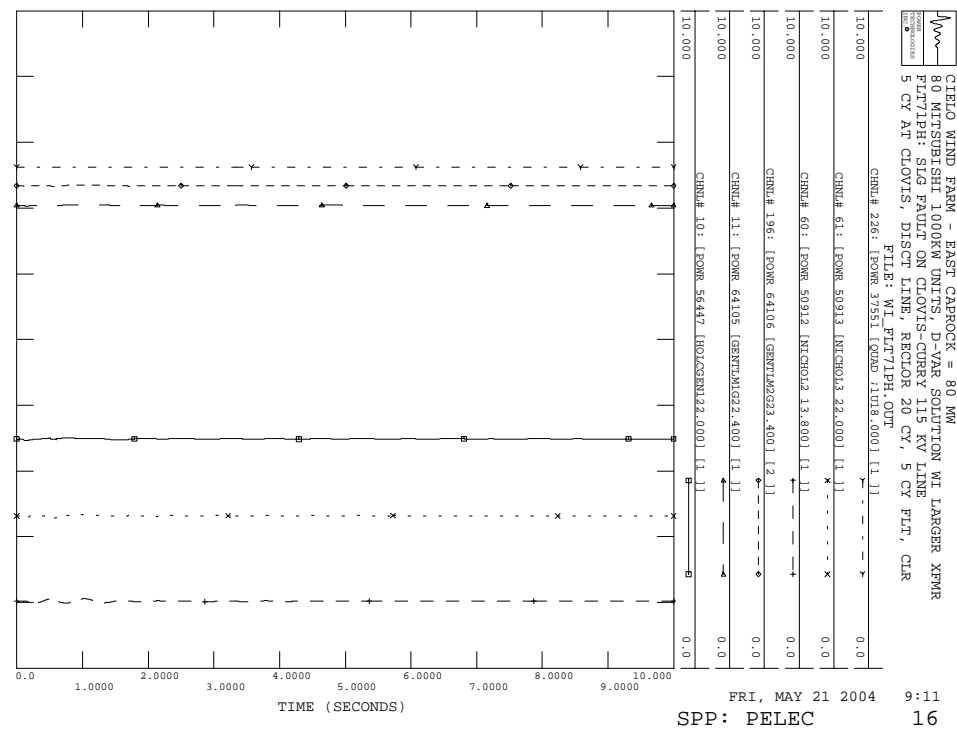
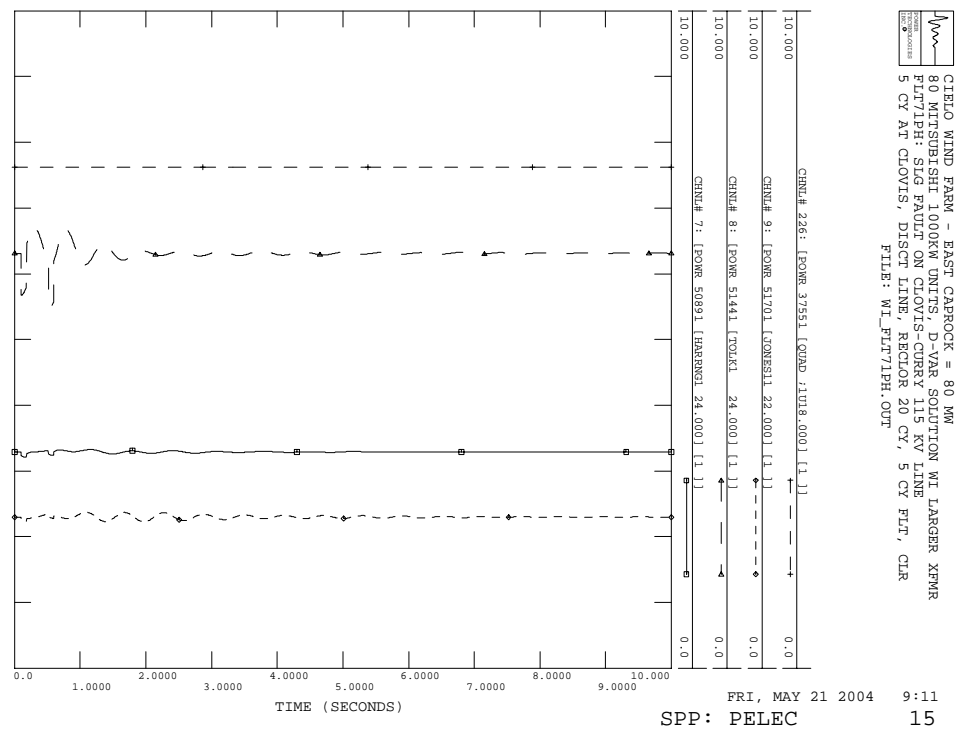
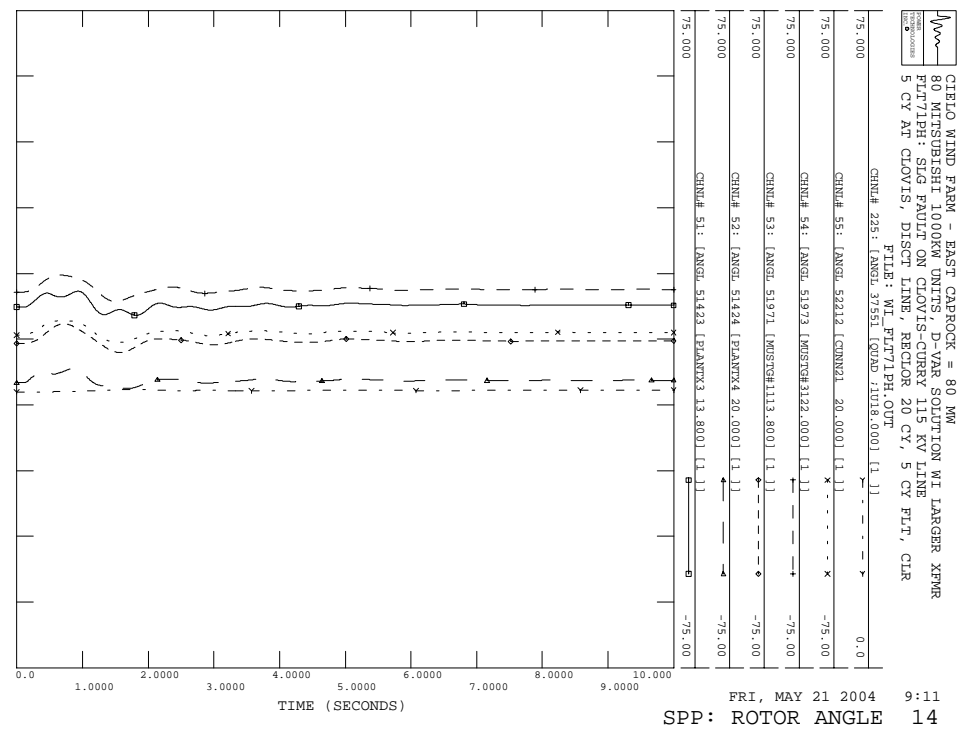
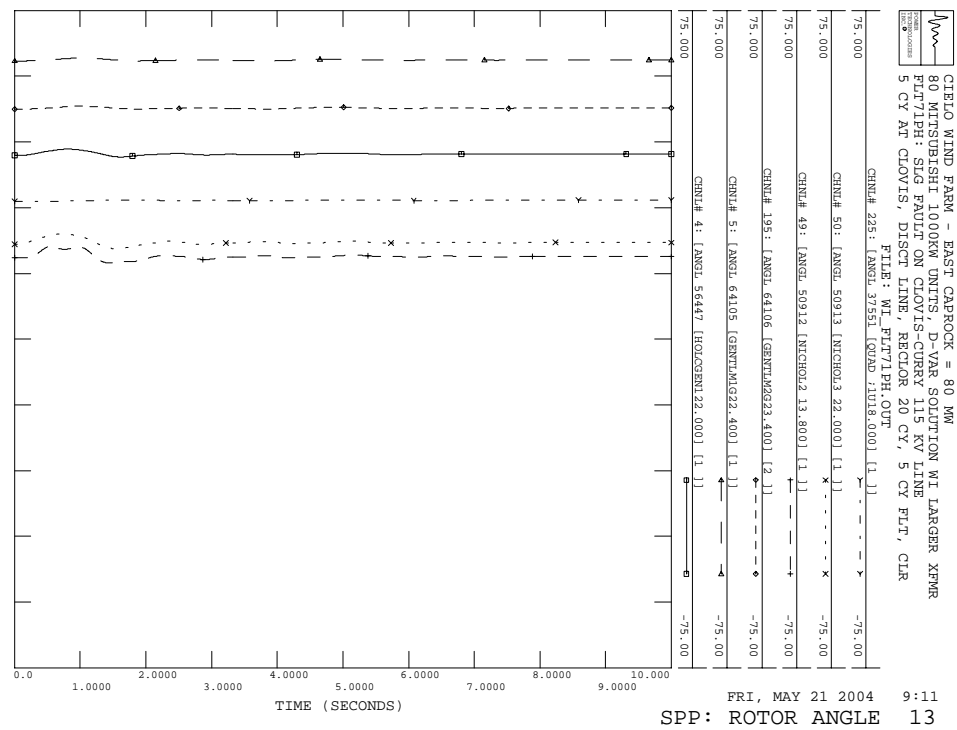
FRI, MAY 21 2004 9:11
 CIELO CABLE3 GEN54 5

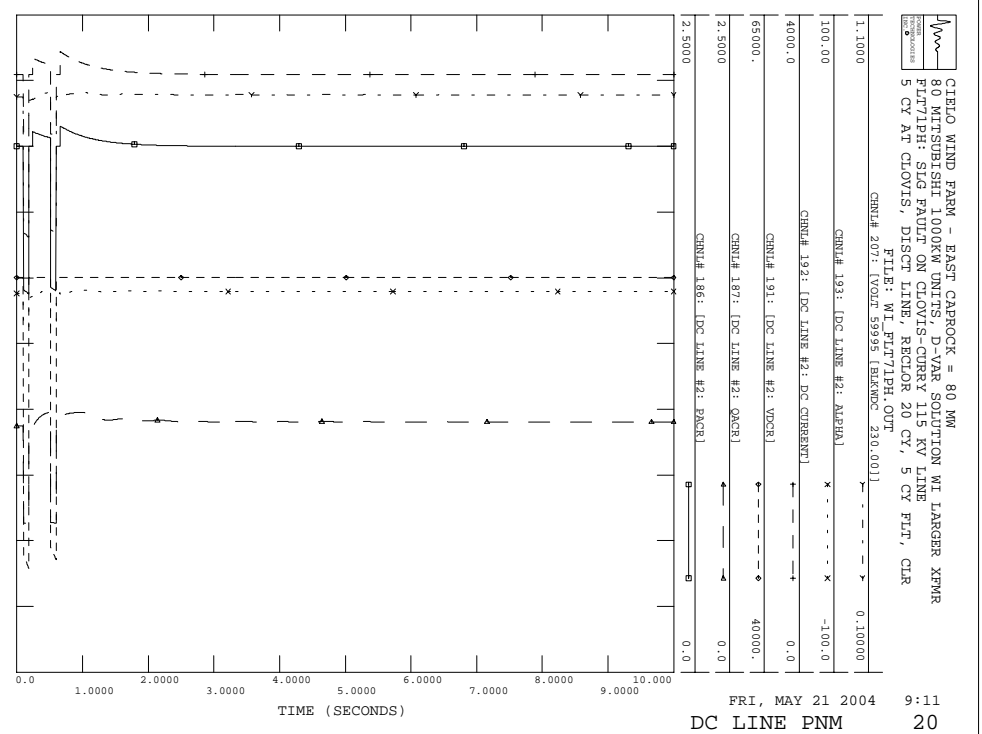
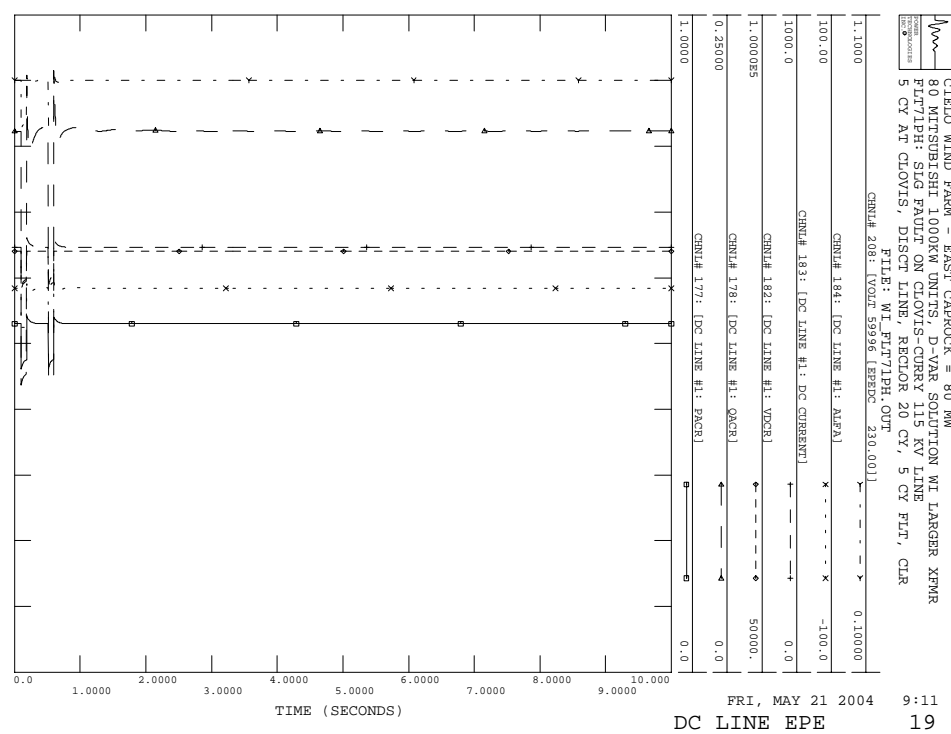
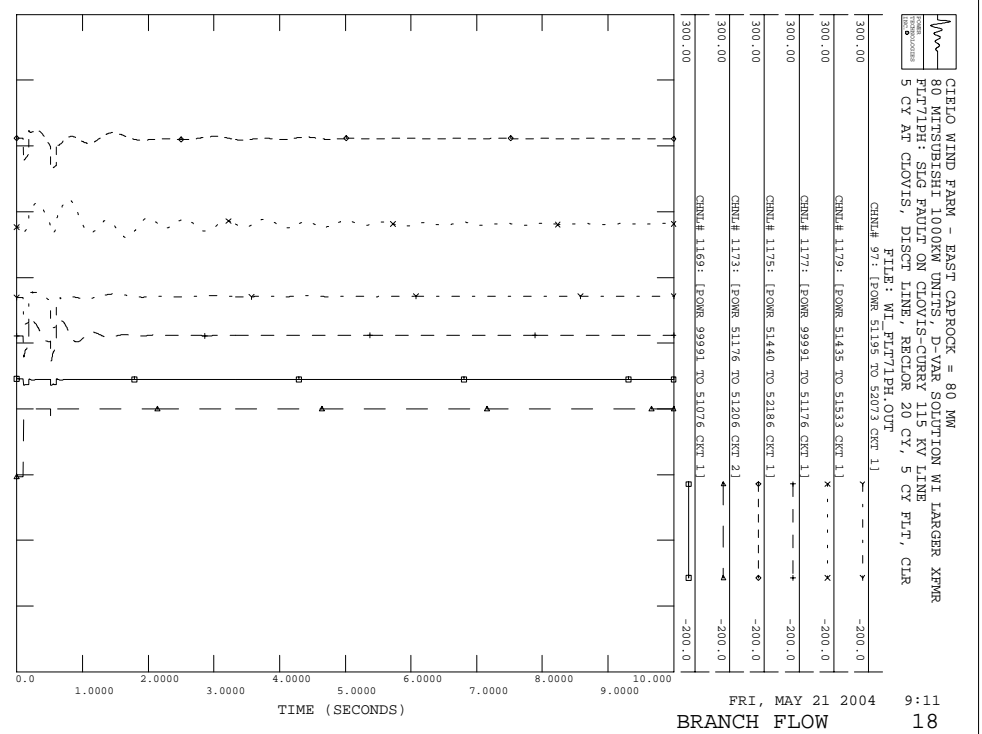
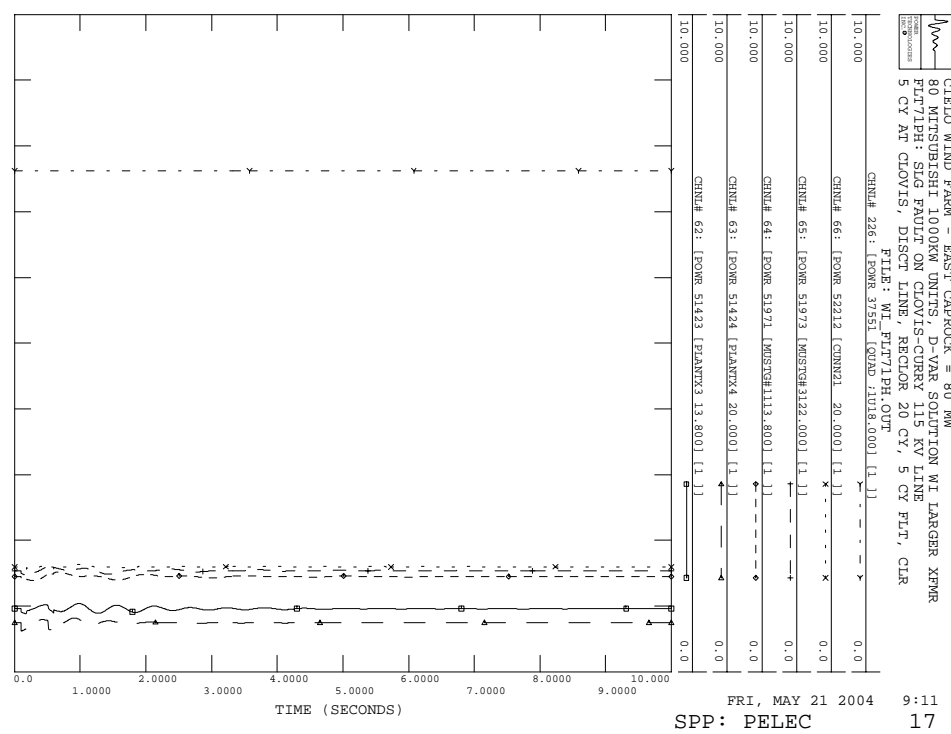
CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION W/ LARGER XFMR
 FLT/1PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT71PH.OUT




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 CIELO VOLTAGE 7

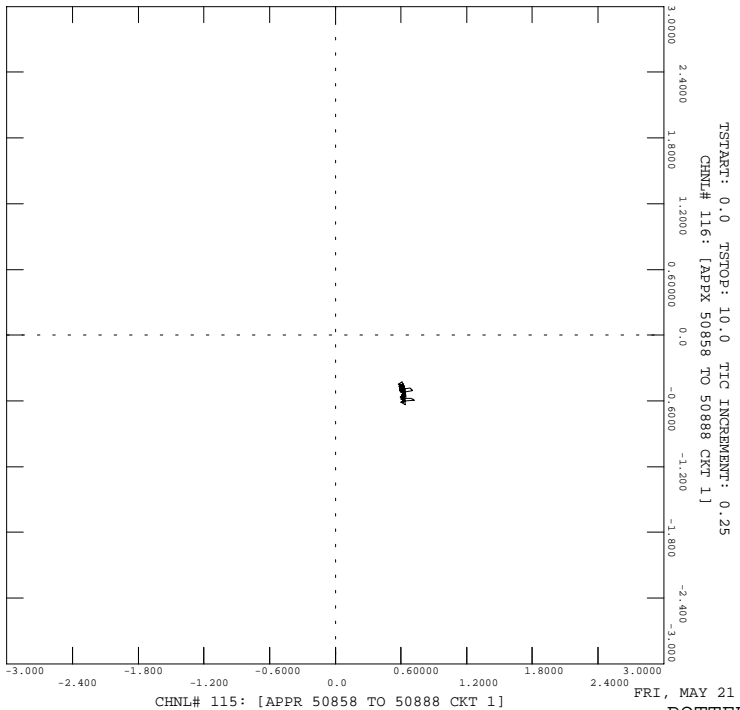








 CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION W/ LARGER XPRM
 FLT/1PH: SLG FAULT ON CLOVIS-CORR 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

FILE: WI_FLT71PH.OUT

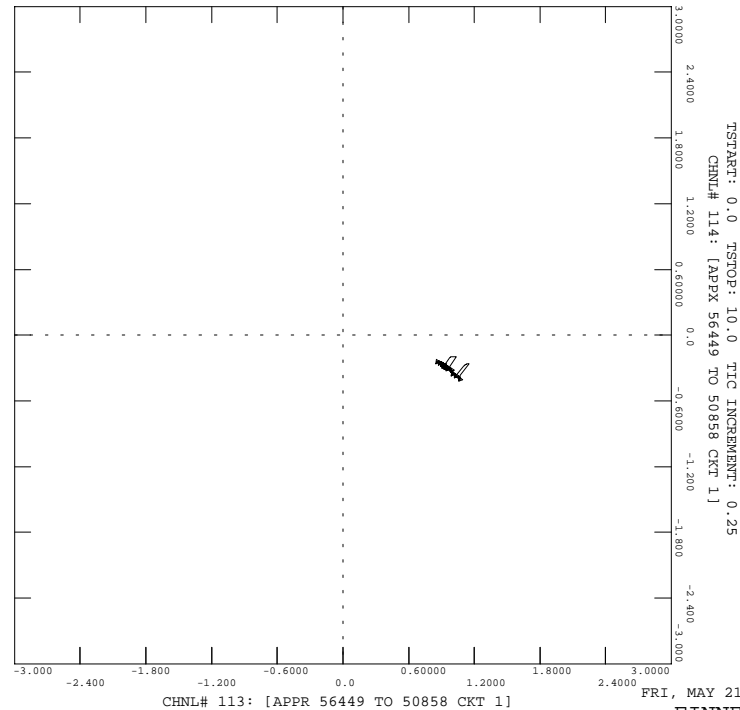


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FRI, MAY 21 2004 9:11
POTTER-FINNEY



 CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION W/ LARGER XPRM
 FLT/1PH: SLG FAULT ON CLOVIS-CORR 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

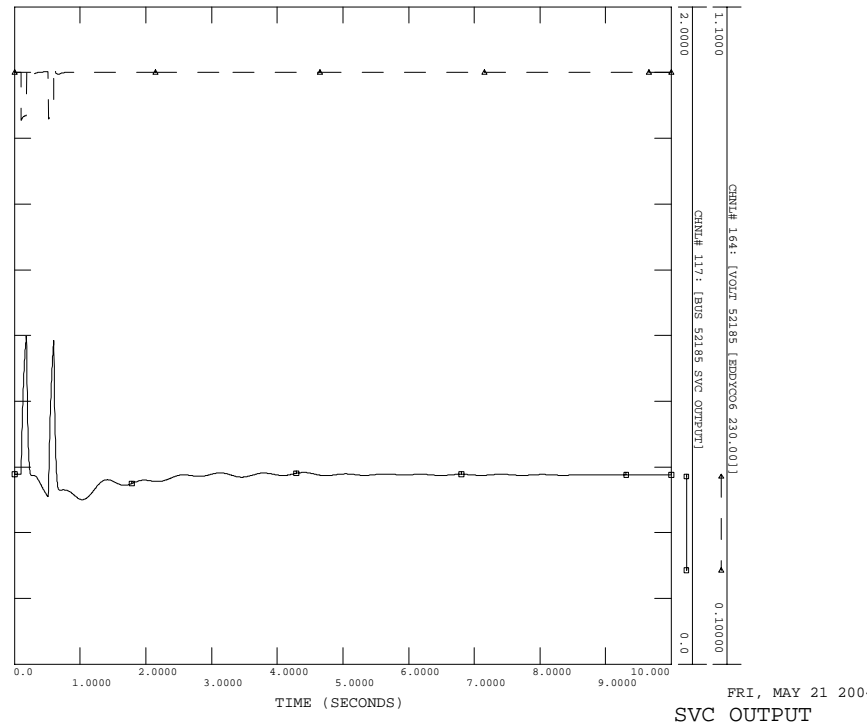
FILE: WI_FLT71PH.OUT



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FRI, MAY 21 2004 9:11
FINNEY-HOLCOMB


 CIELLO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION W/ LARGER XPRM
 FLT/1PH: SLG FAULT ON CLOVIS-CORR 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR




23

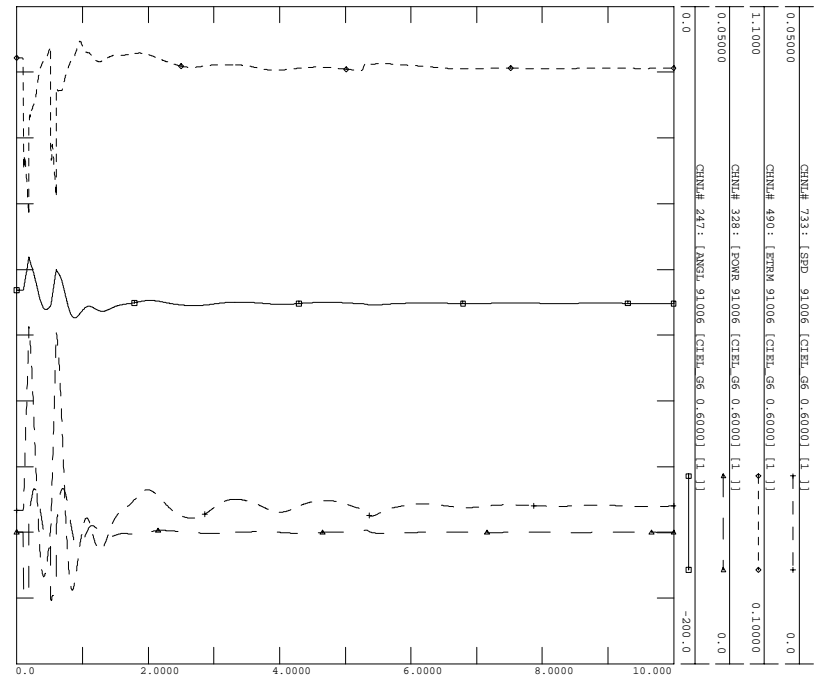
FRI, MAY 21 2004 9:11
SVC OUTPUT

Appendix


B

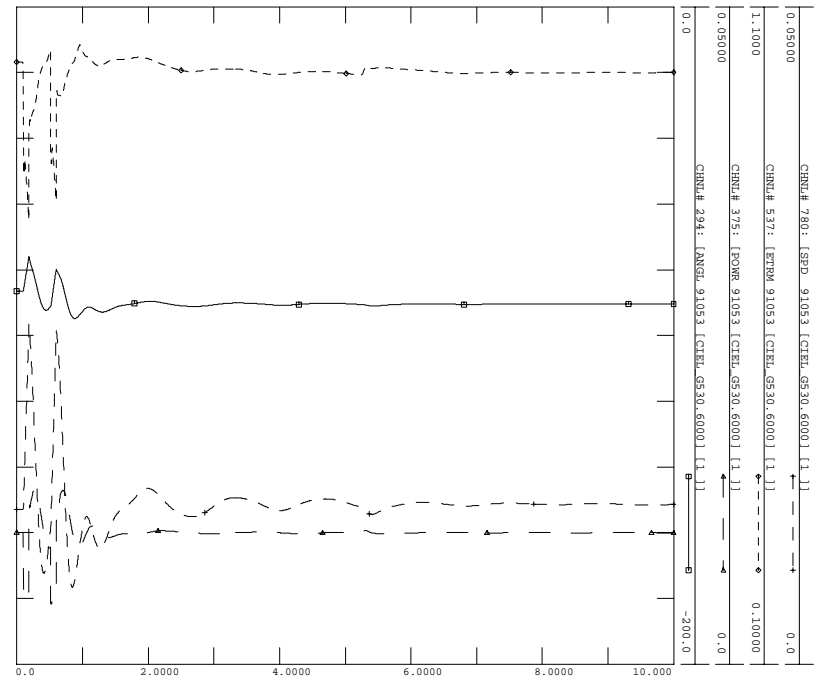
Plots of Dynamic Simulation with Cielo Wind Farm on-line during Light Load Condition


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT13PH: THREE PHASE FAULT ON ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT13PH_LITE.OUT




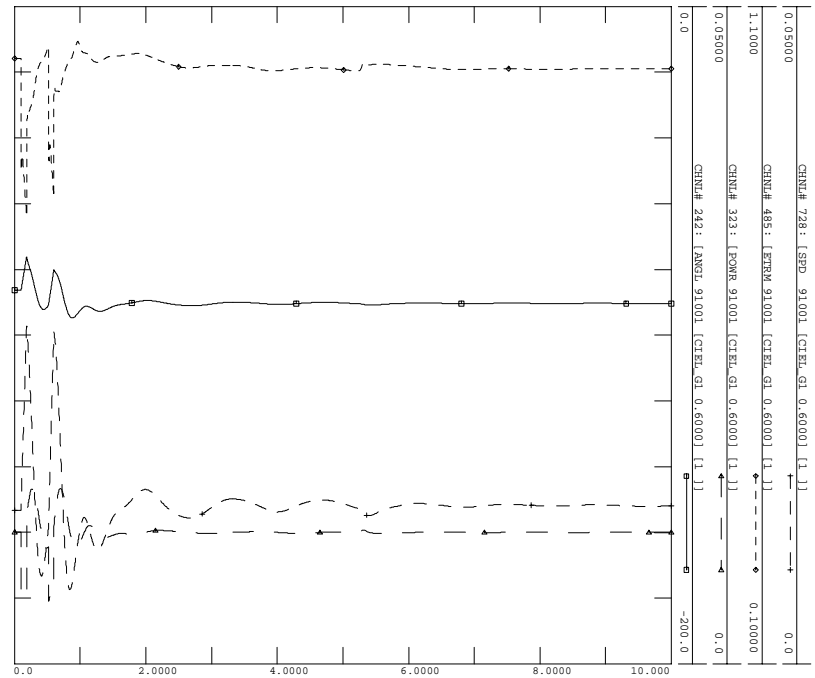
FRI, MAY 21 2004 9:32
 CIELO CABLE1 GEN6 2


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT13PH: THREE PHASE FAULT ON ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT13PH_LITE.OUT




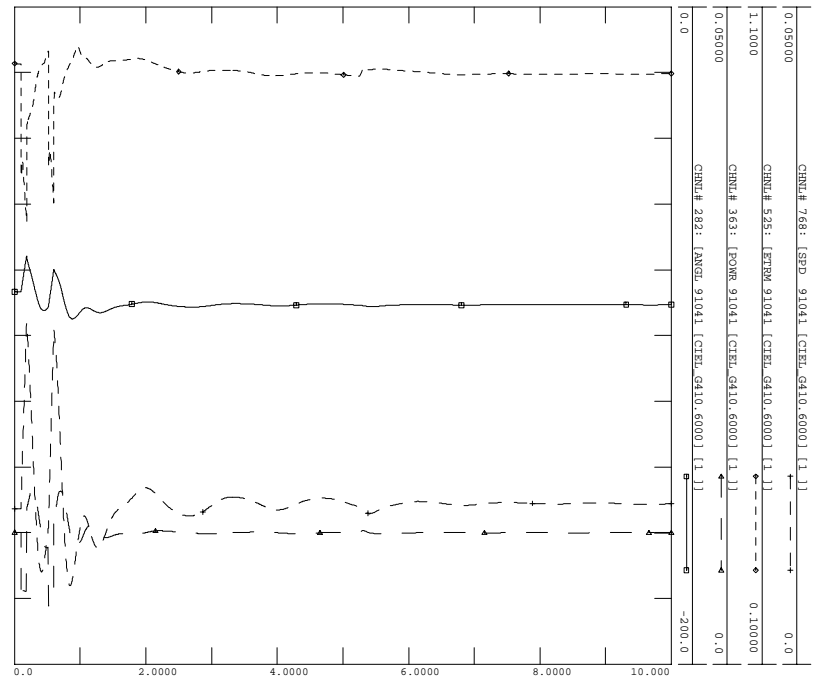
FRI, MAY 21 2004 9:32
 CIELO CABLE2 GEN53 4


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT13PH: THREE PHASE FAULT ON ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT13PH_LITE.OUT



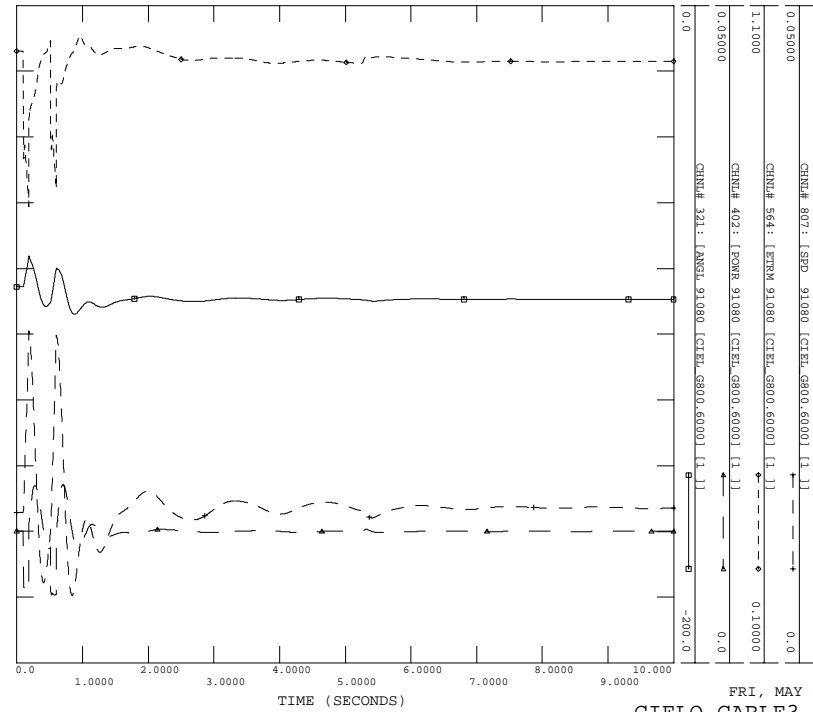
FRI, MAY 21 2004 9:32
 CIELO CABLE1 GEN1 1


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT13PH: THREE PHASE FAULT ON ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT13PH_LITE.OUT



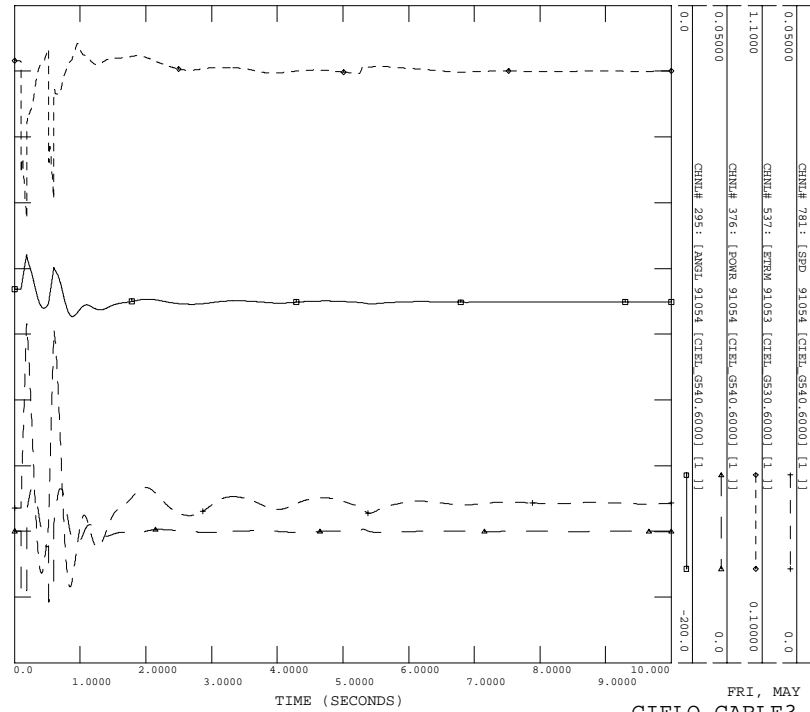
FRI, MAY 21 2004 9:32
 CIELO CABLE2 GEN41 3

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FL113PH: THREE PHASE FAULT ON ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FL113PH_LITE.OUT



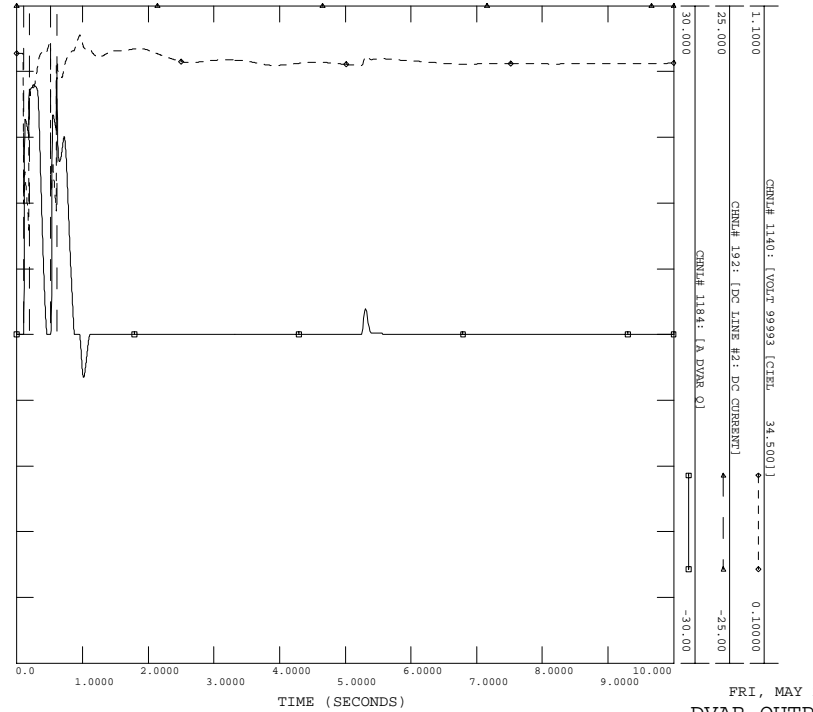
FRI, MAY 21 2004 9:32
 CIELO CABLE3 GEN80 6

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FL113PH: THREE PHASE FAULT ON ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FL113PH_LITE.OUT



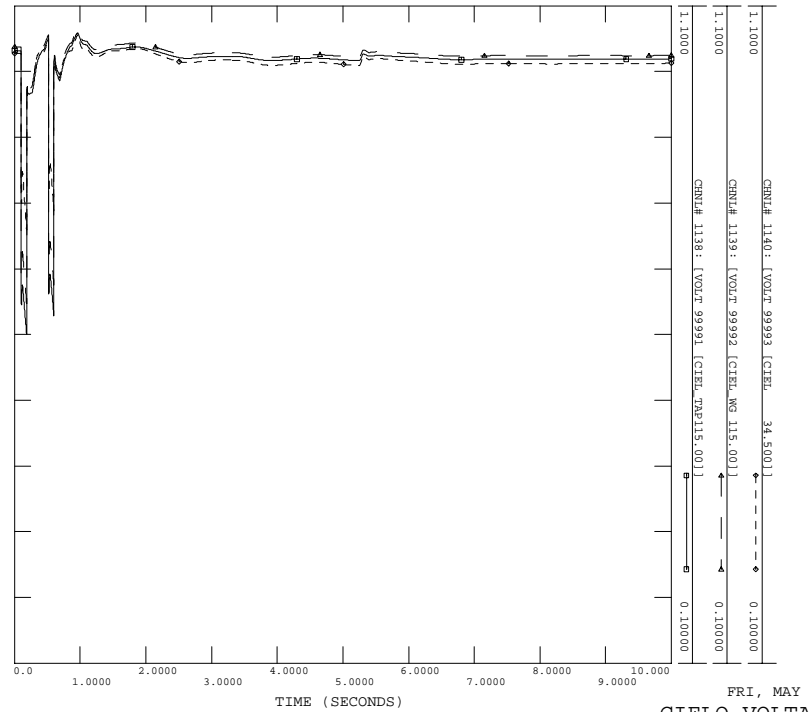
FRI, MAY 21 2004 9:32
 CIELO CABLE3 GEN54 5

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FL113PH: THREE PHASE FAULT ON ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FL113PH_LITE.OUT

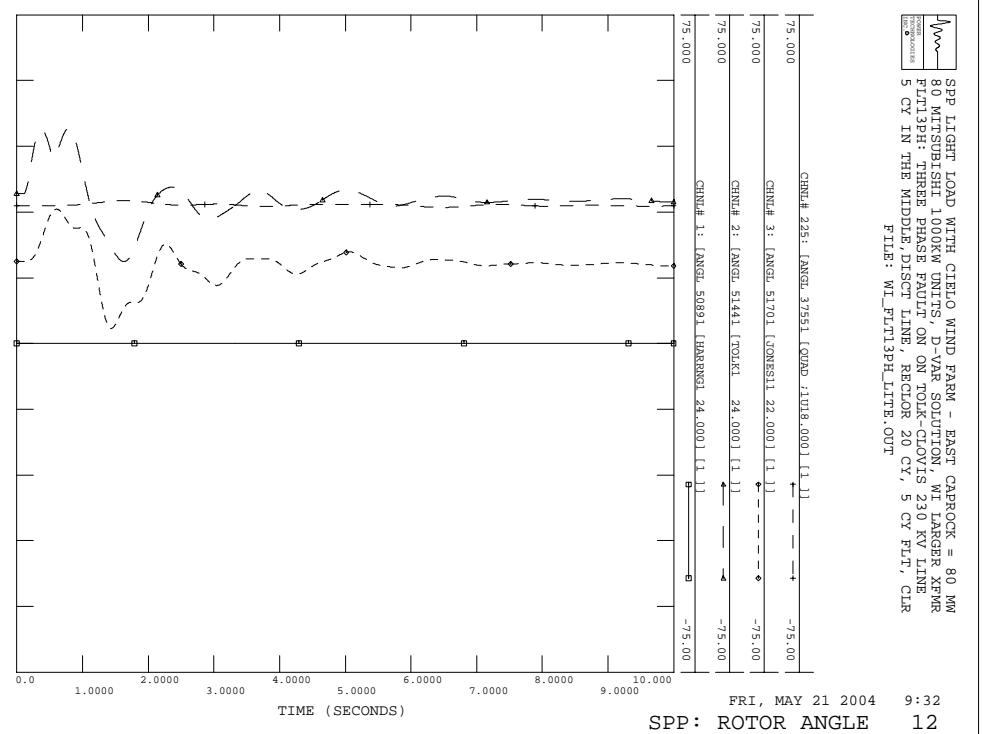
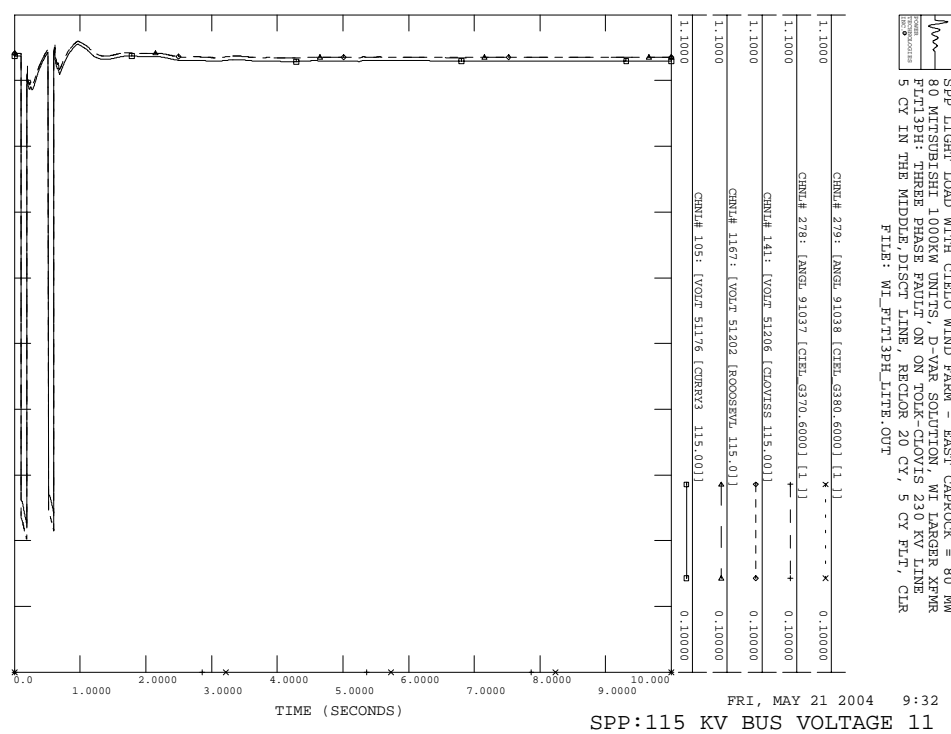
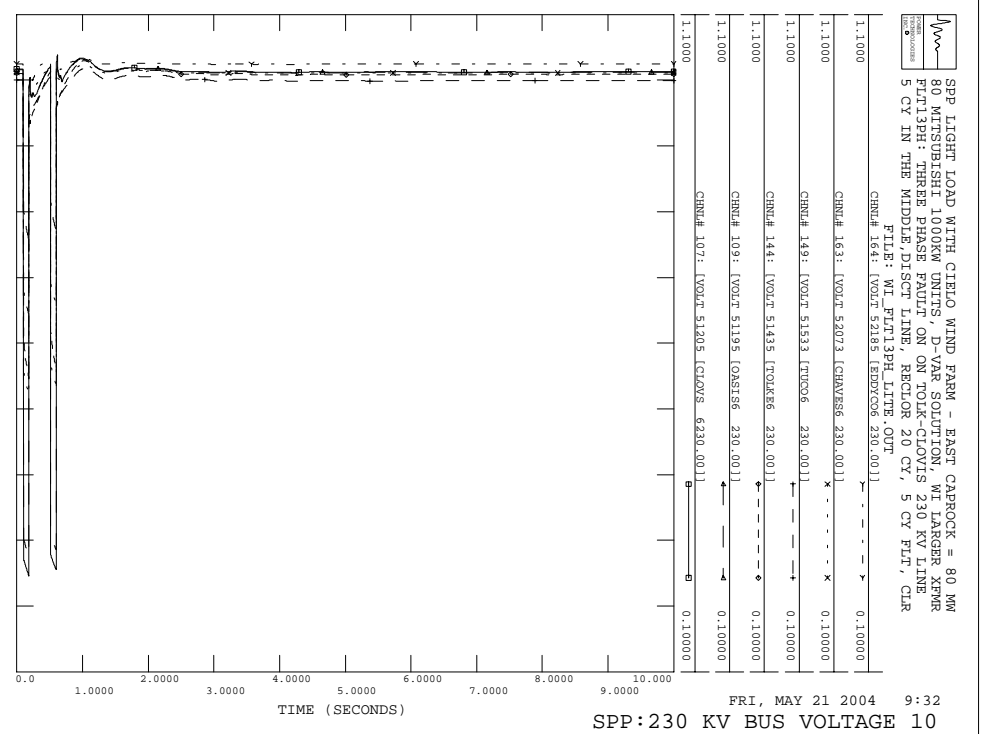
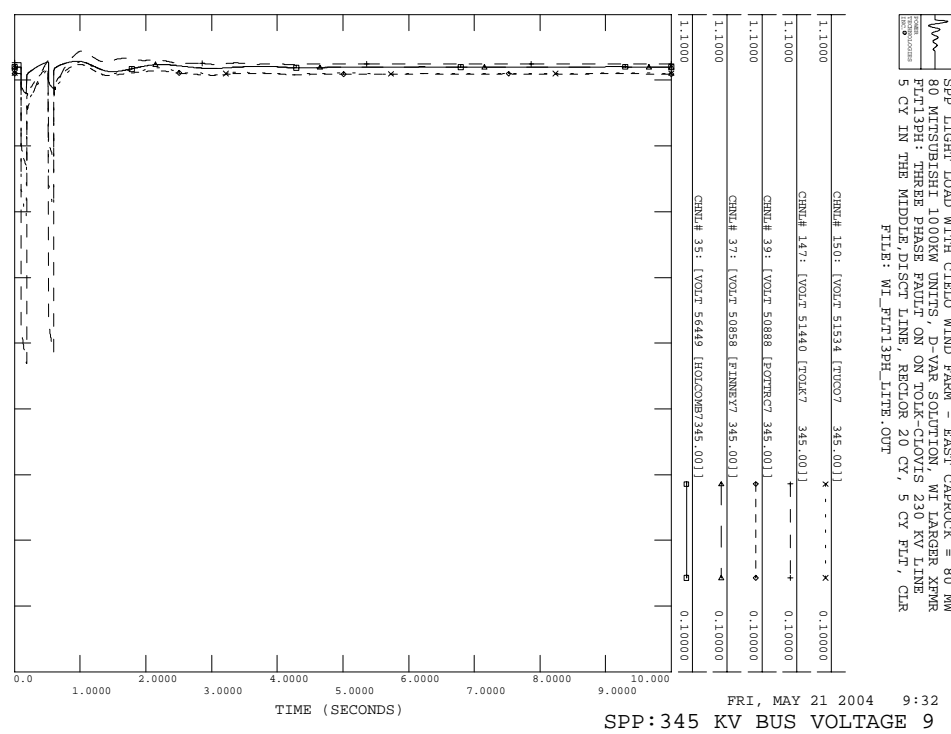


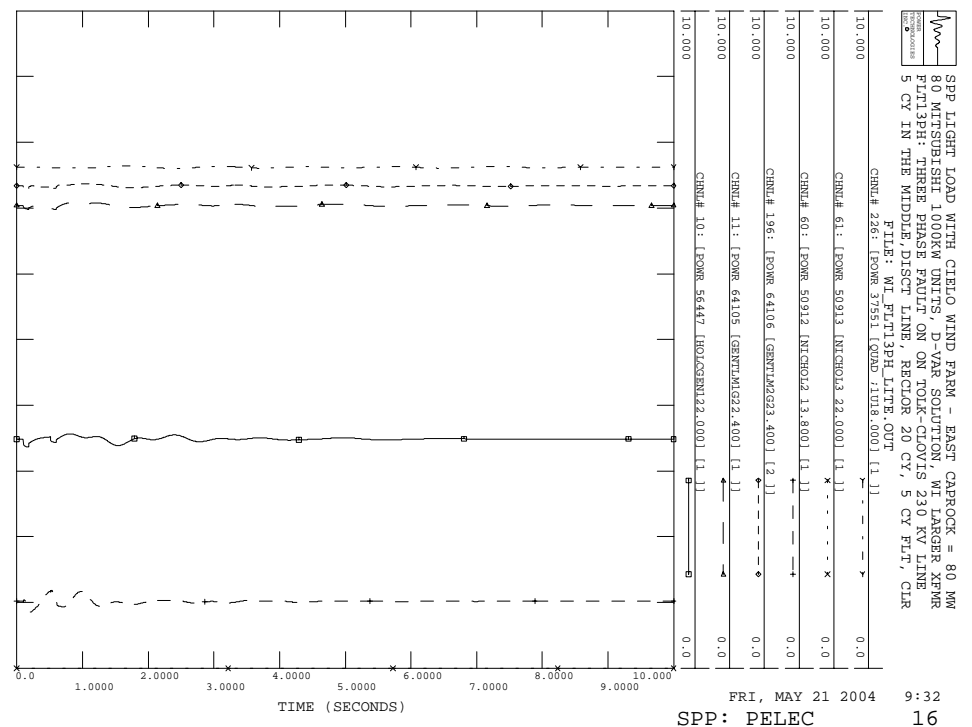
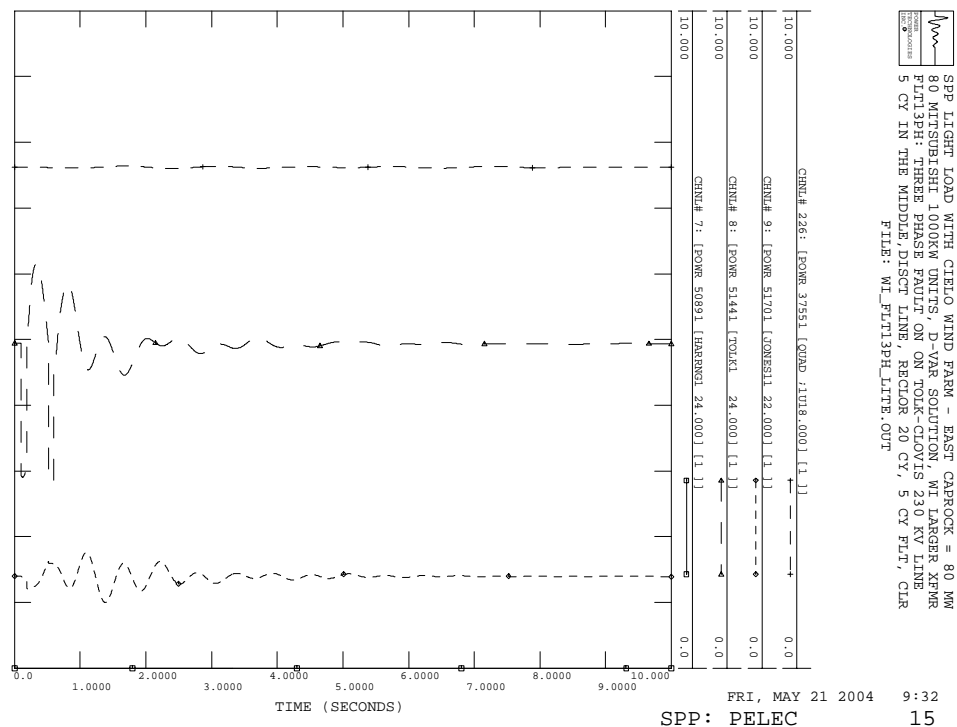
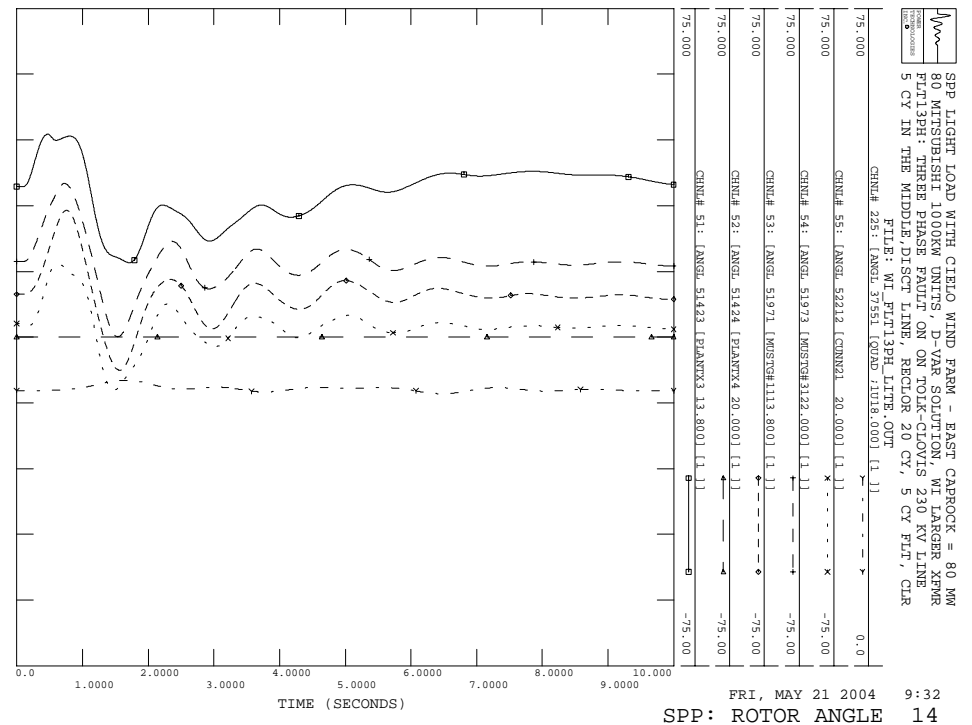
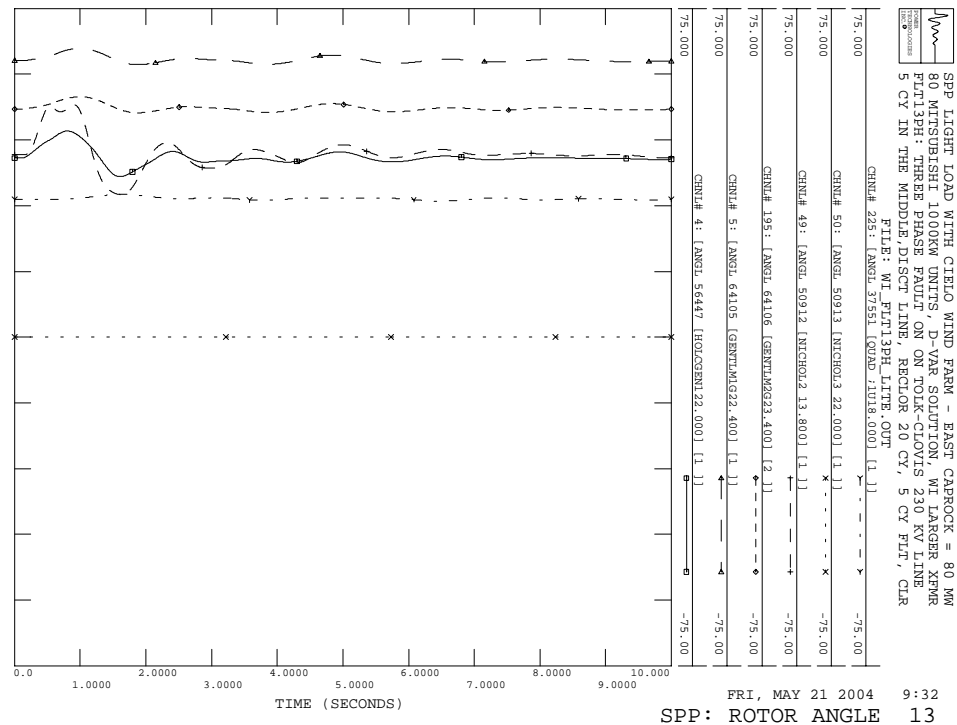
FRI, MAY 21 2004 9:32
 DVAR OUTPUT 8

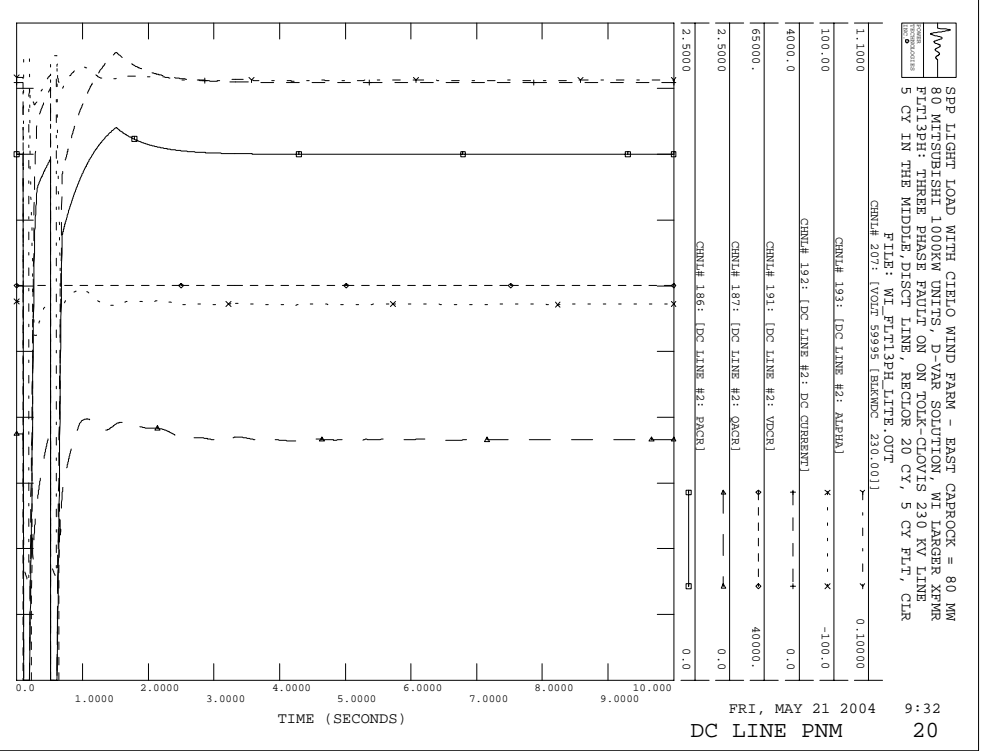
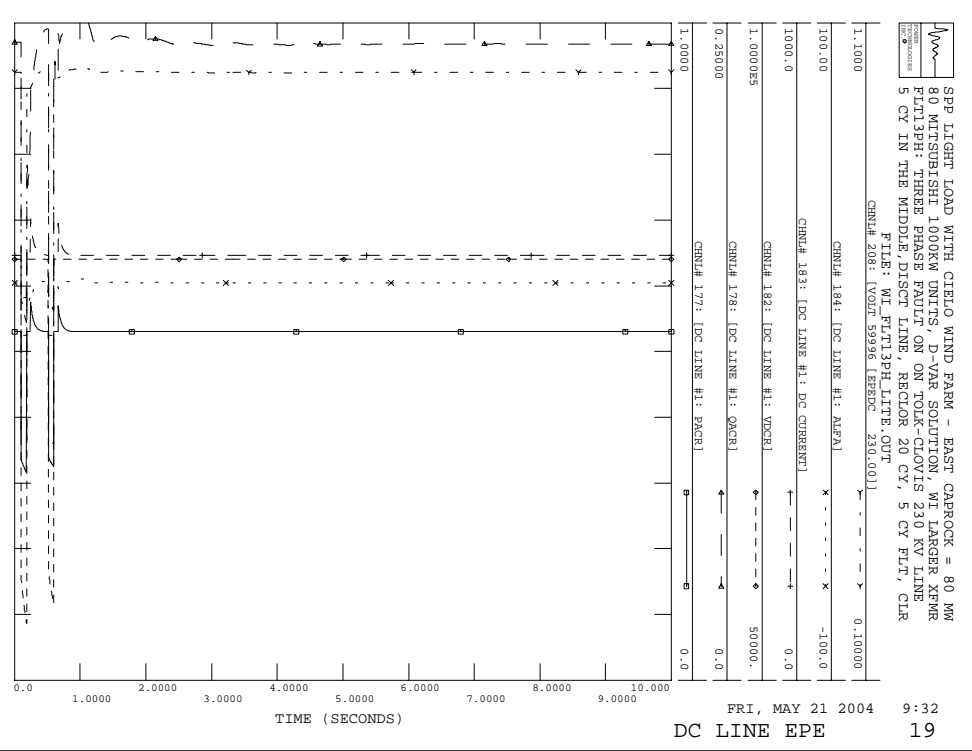
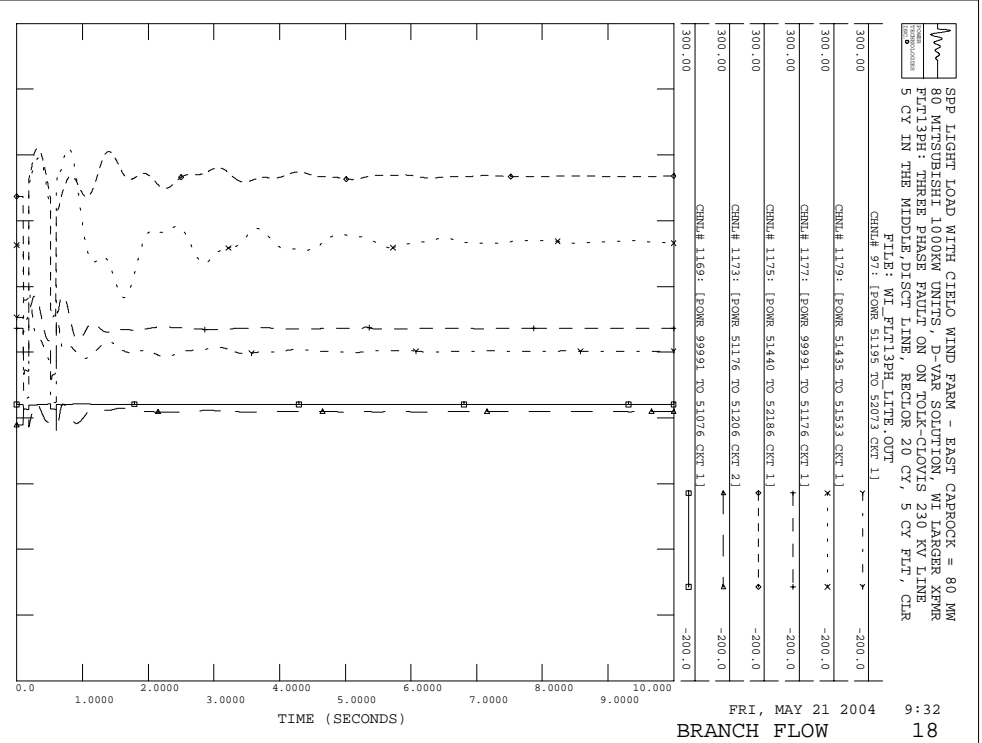
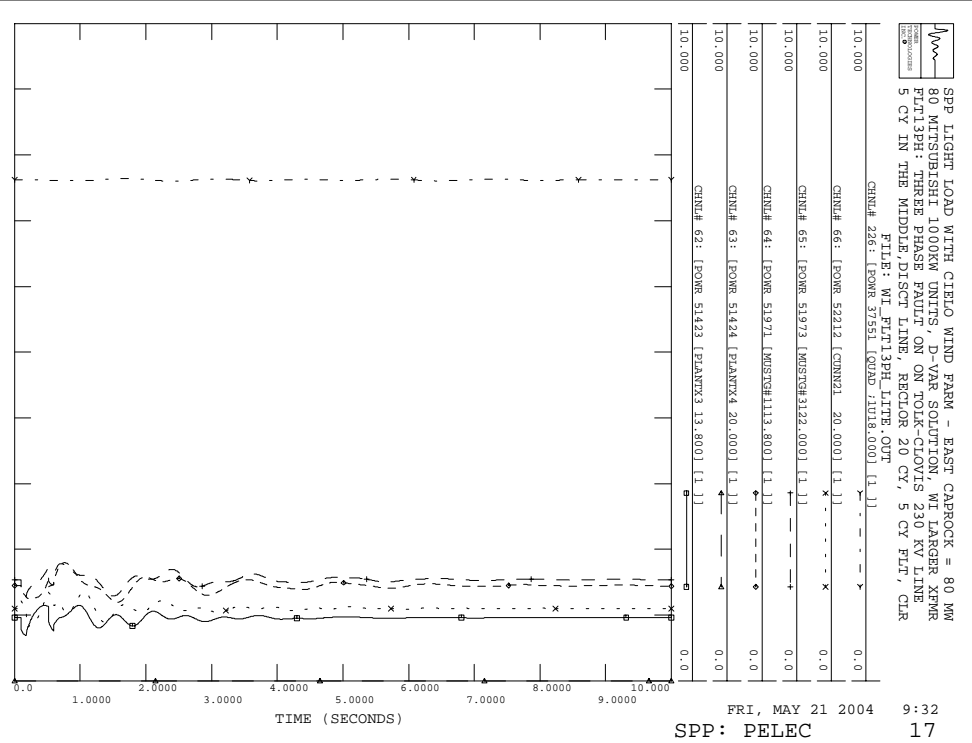
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FL113PH: THREE PHASE FAULT ON ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FL113PH_LITE.OUT



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 CIELO VOLTAGE 7

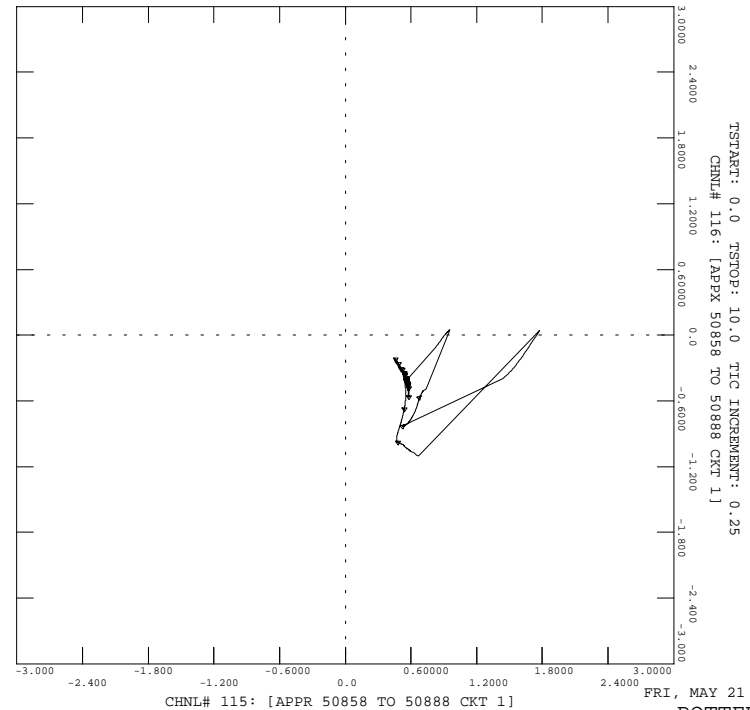






SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FL113PH - THREE PHASE FAULT ON ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR

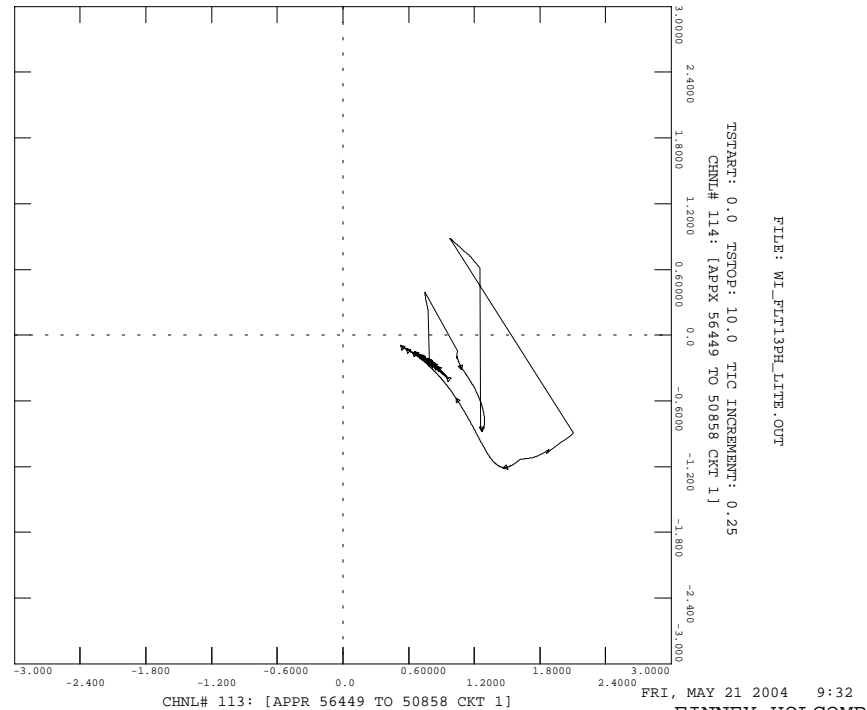
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 POTTER-FINNEY 22

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FL113PH - THREE PHASE FAULT ON ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR

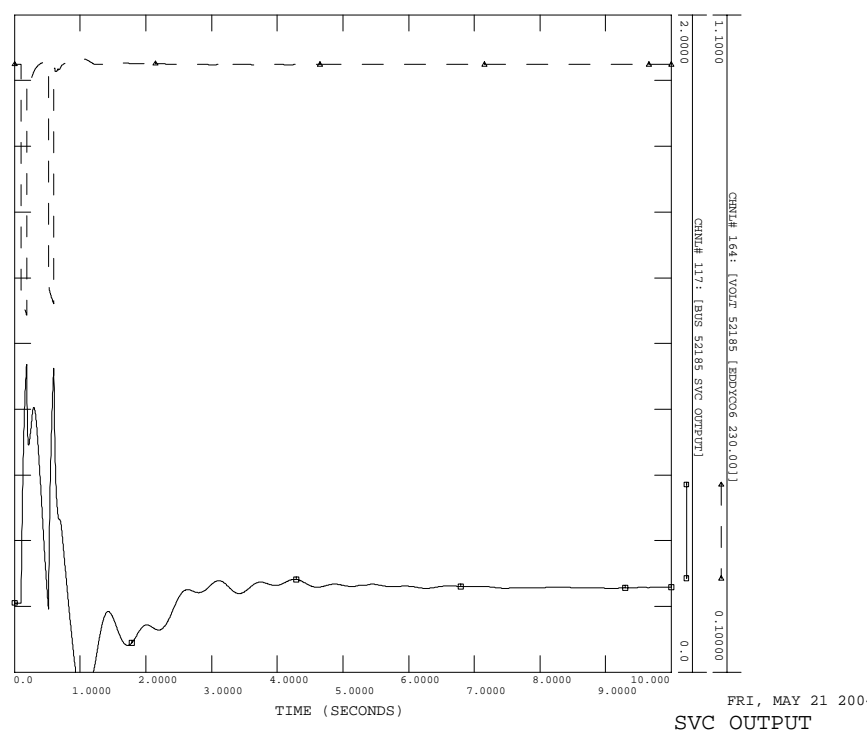
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
FRI, MAY 21 2004 9:32
 FINNEY-HOLCOMB 21

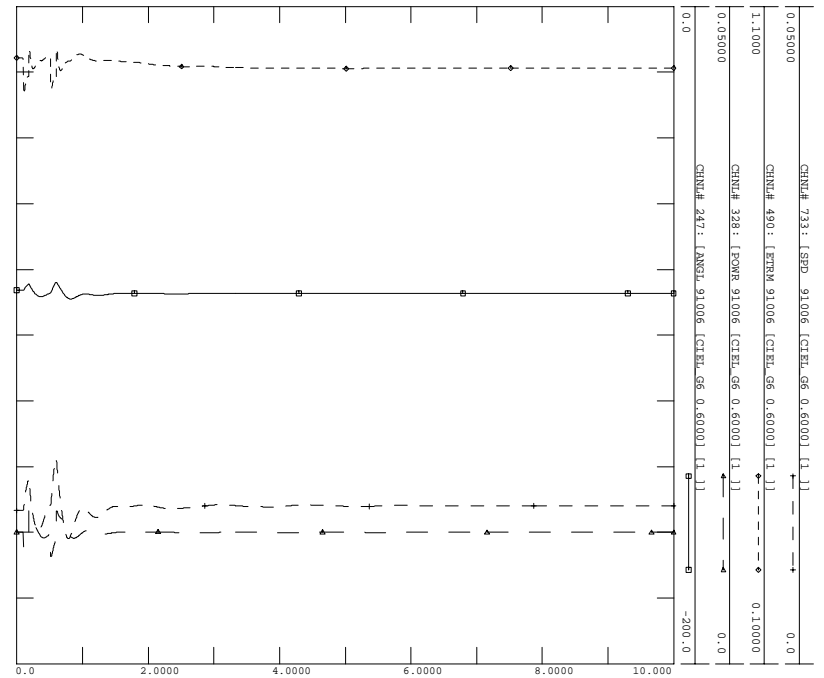
SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FL113PH - THREE PHASE FAULT ON ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FL113PH - THREE PHASE FAULT ON ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR




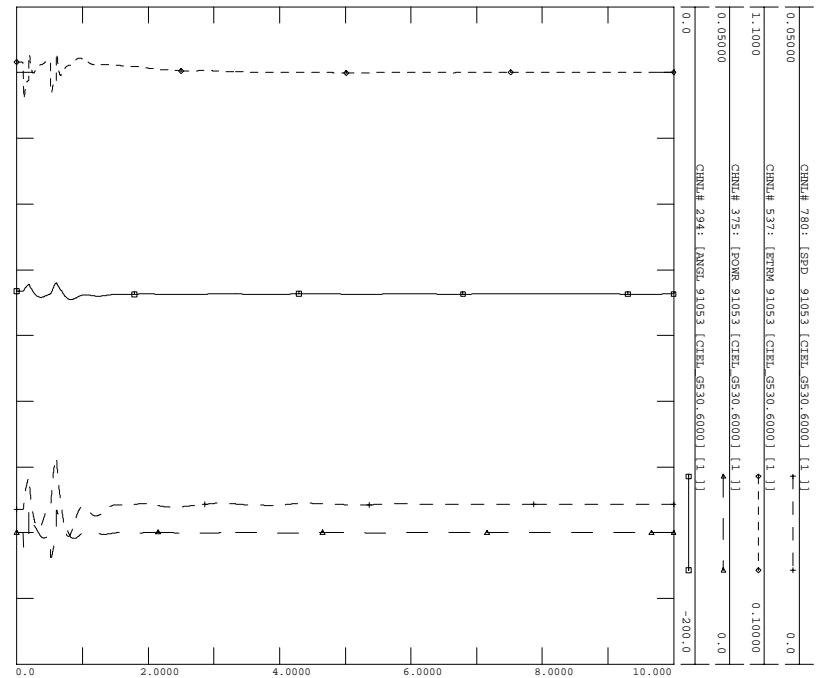
FRI, MAY 21 2004 9:32
 23


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLTLPH: SLG FAULT ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLTLPH_LITE.OUT




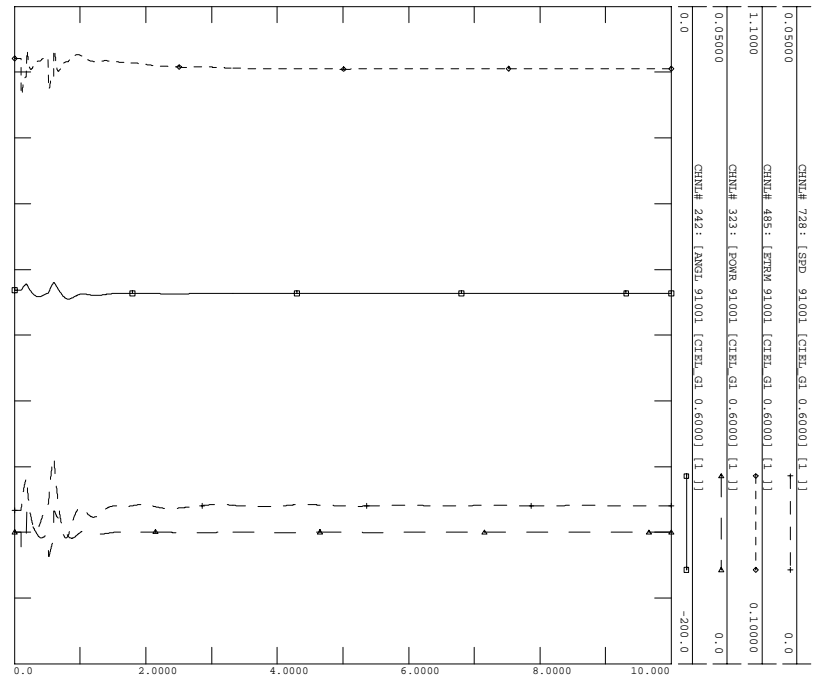
FRI, MAY 21 2004 9:32
 CIELO CABLE1 GEN6 2


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
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 FLTLPH: SLG FAULT ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLTLPH_LITE.OUT




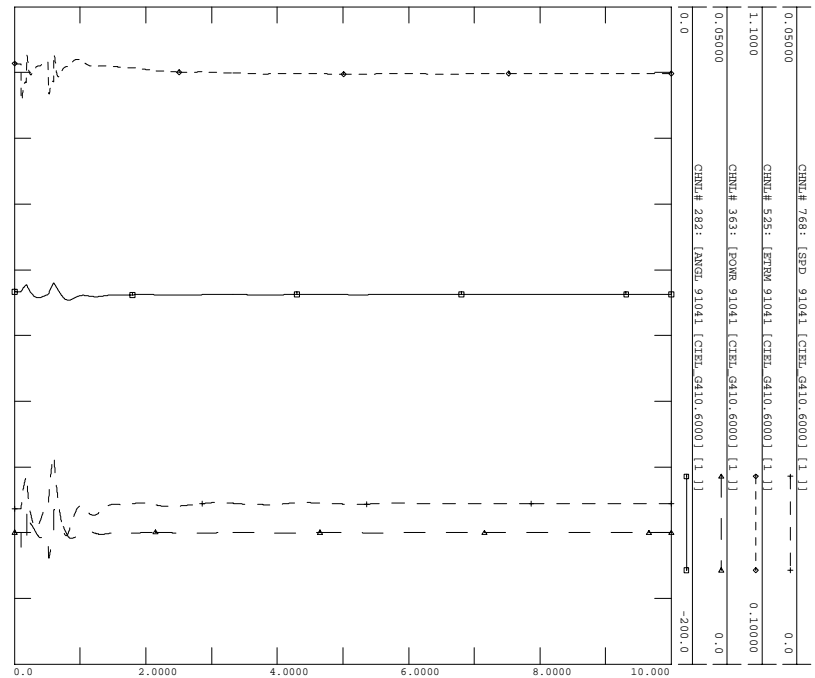
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 CIELO CABLE2 GEN53 4


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLTLPH: SLG FAULT ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLTLPH_LITE.OUT



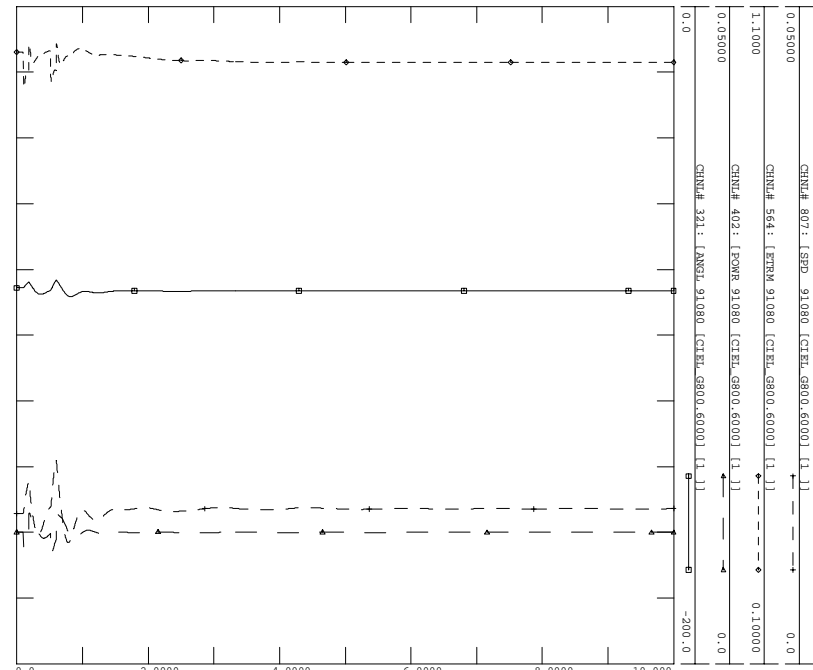
FRI, MAY 21 2004 9:32
 CIELO CABLE1 GEN1 1


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLTLPH: SLG FAULT ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLTLPH_LITE.OUT



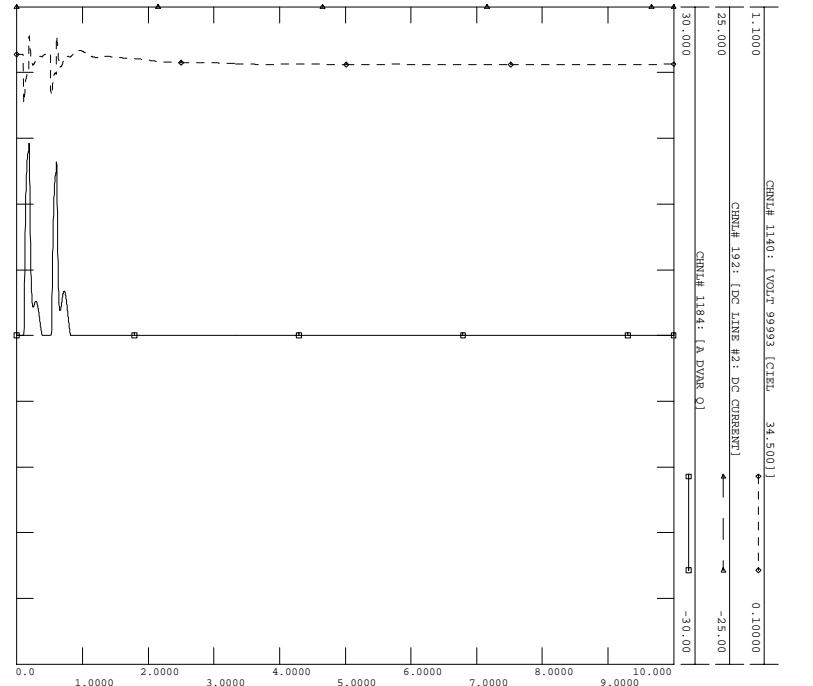
FRI, MAY 21 2004 9:32
 CIELO CABLE2 GEN41 3

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
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 5 CY IN THE MIDDLE DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLTLPH_LITE.OUT



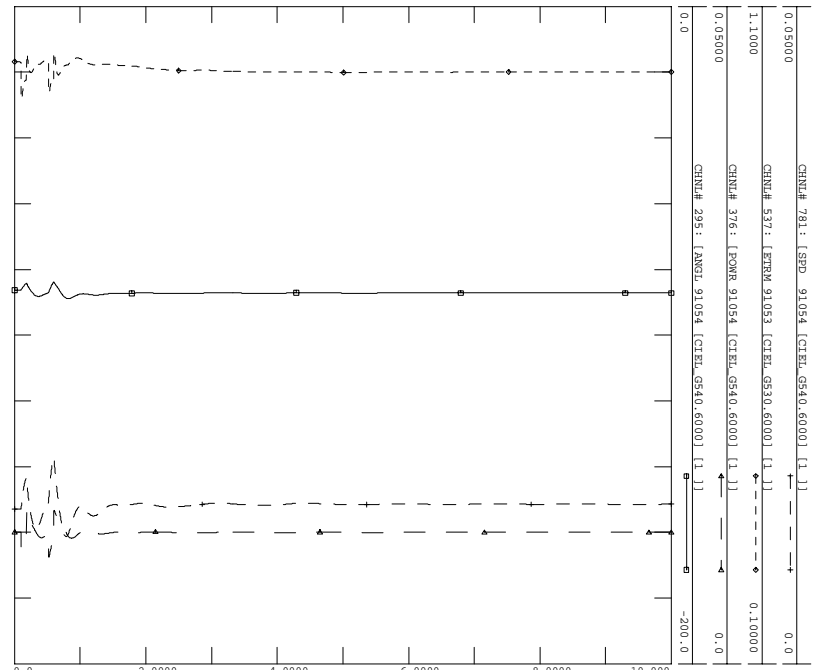
FRI, MAY 21 2004 9:32
 CIELO CABLE3 GEN80 6

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLTLPH: SLG FAULT ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLTLPH_LITE.OUT



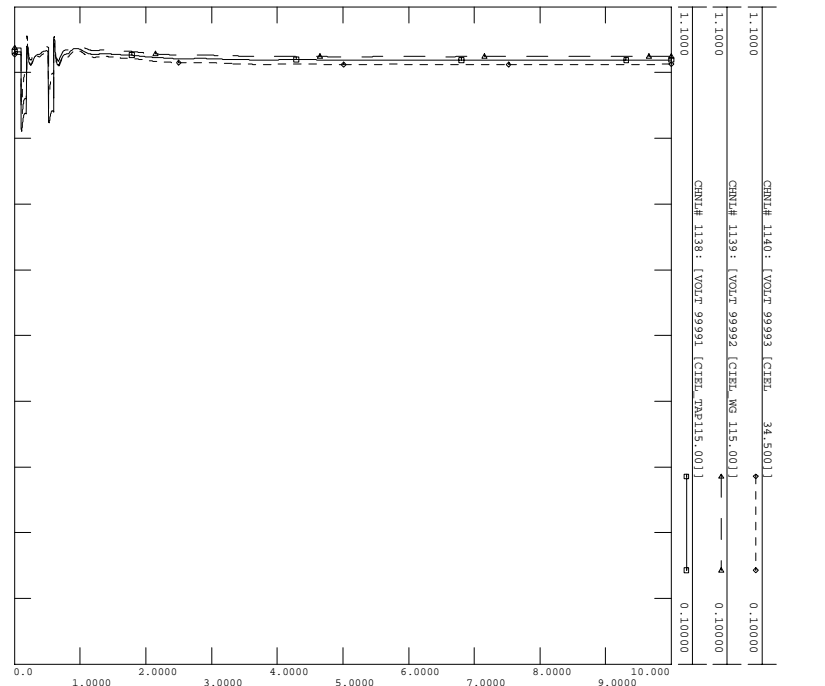
FRI, MAY 21 2004 9:32
 DVAR OUTPUT 8

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLTLPH: SLG FAULT ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLTLPH_LITE.OUT

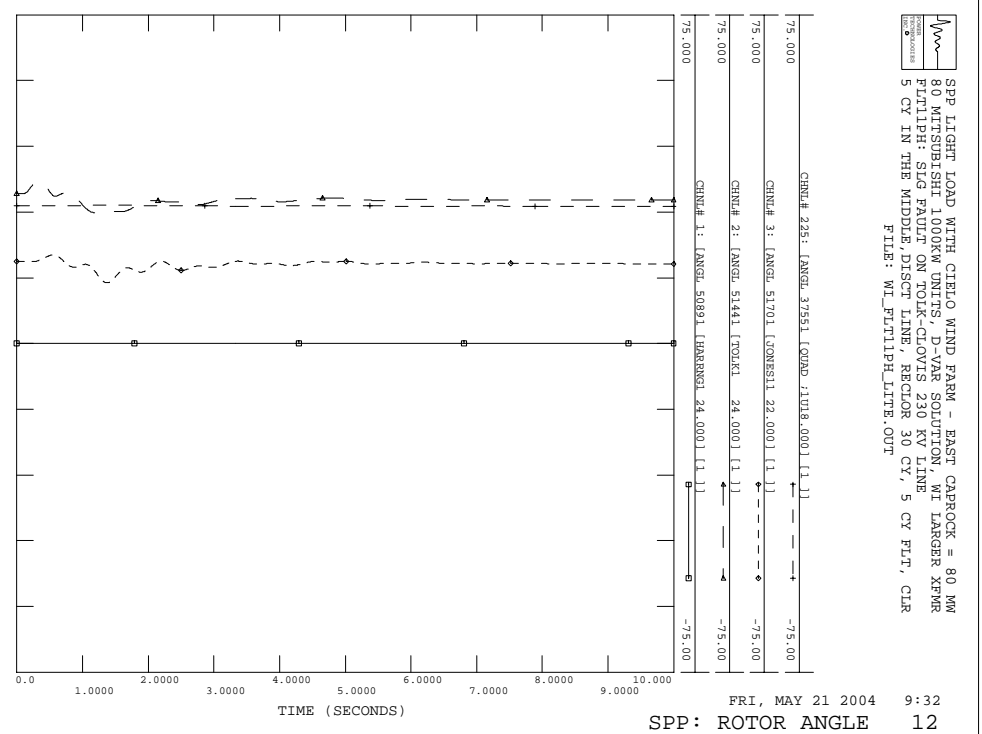
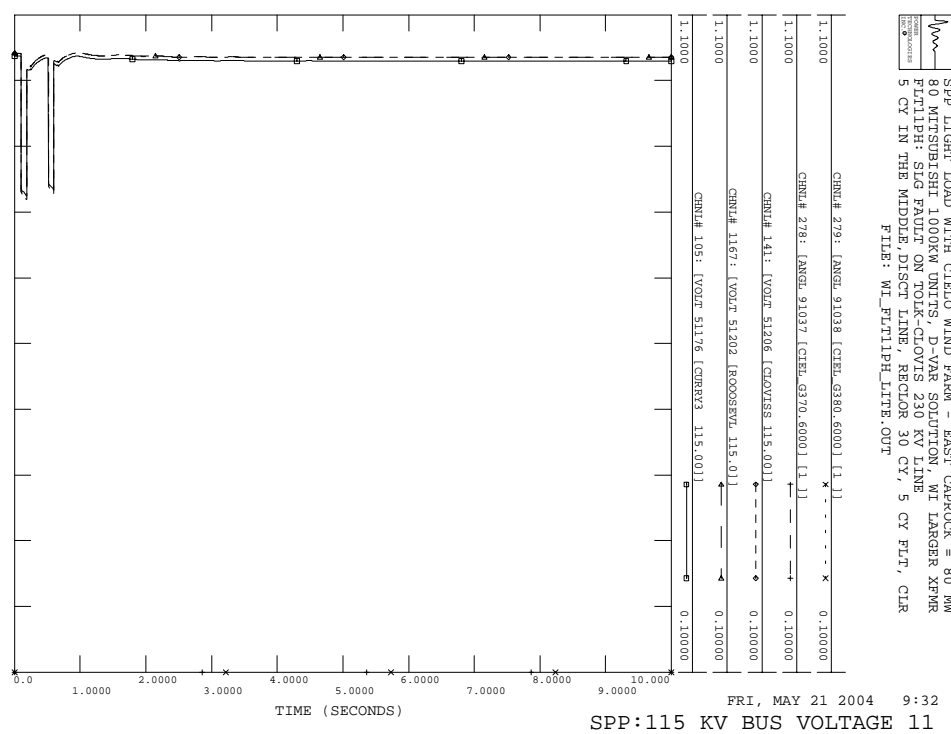
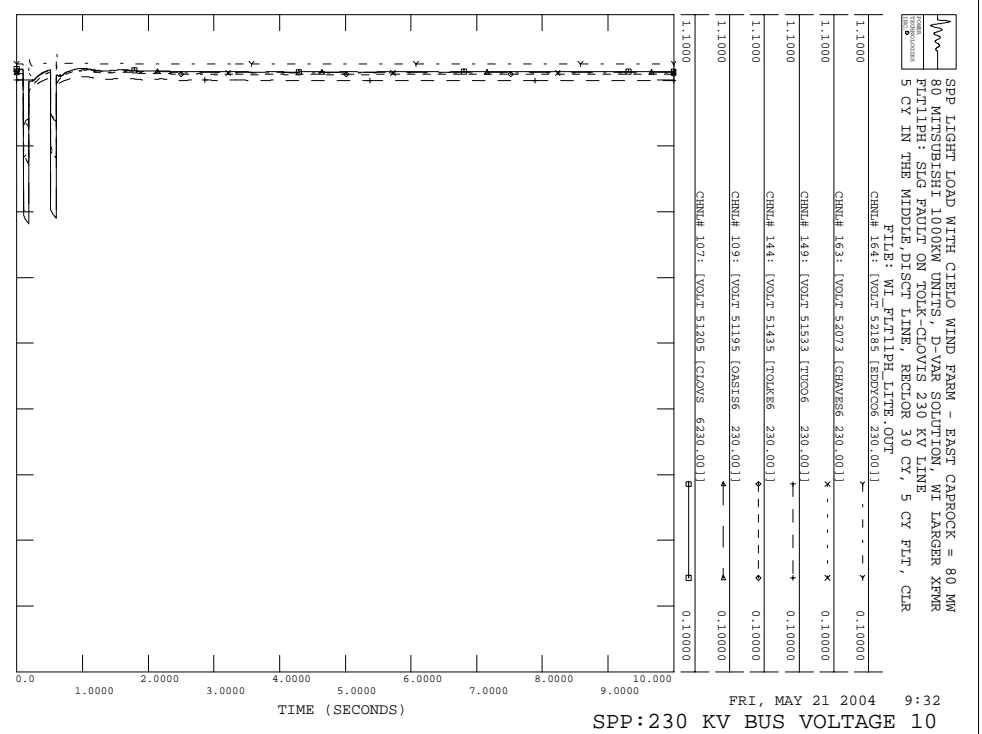
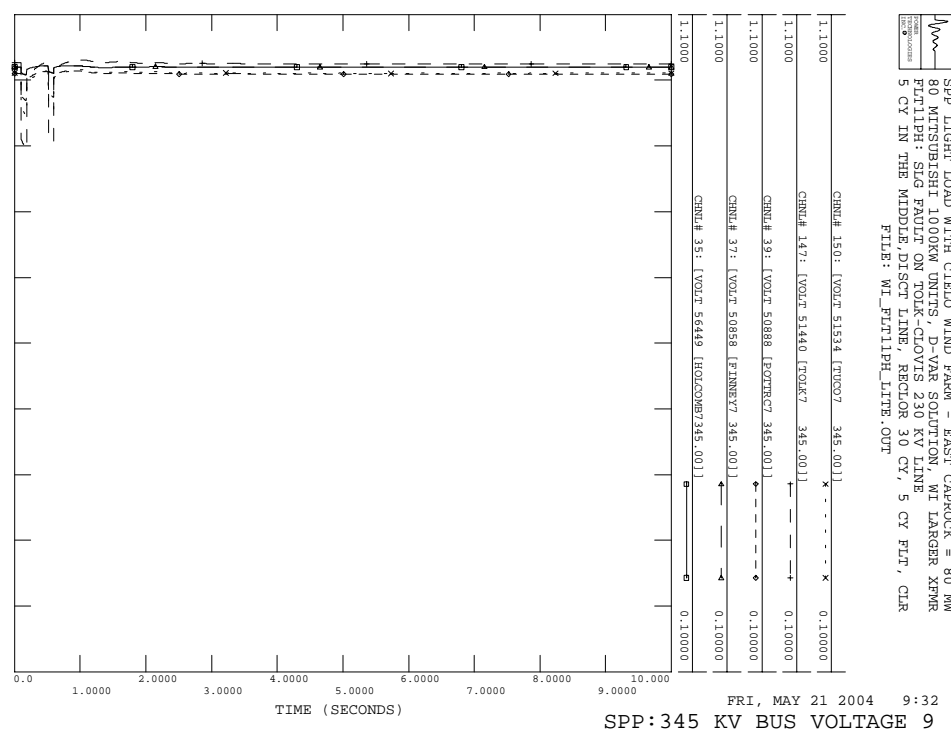


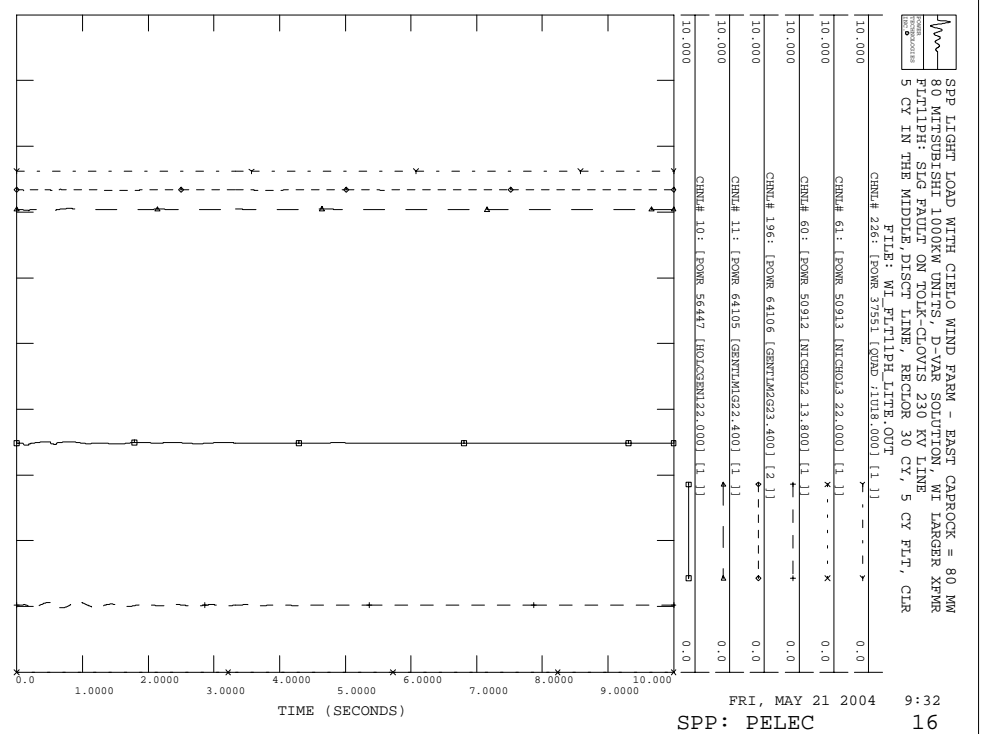
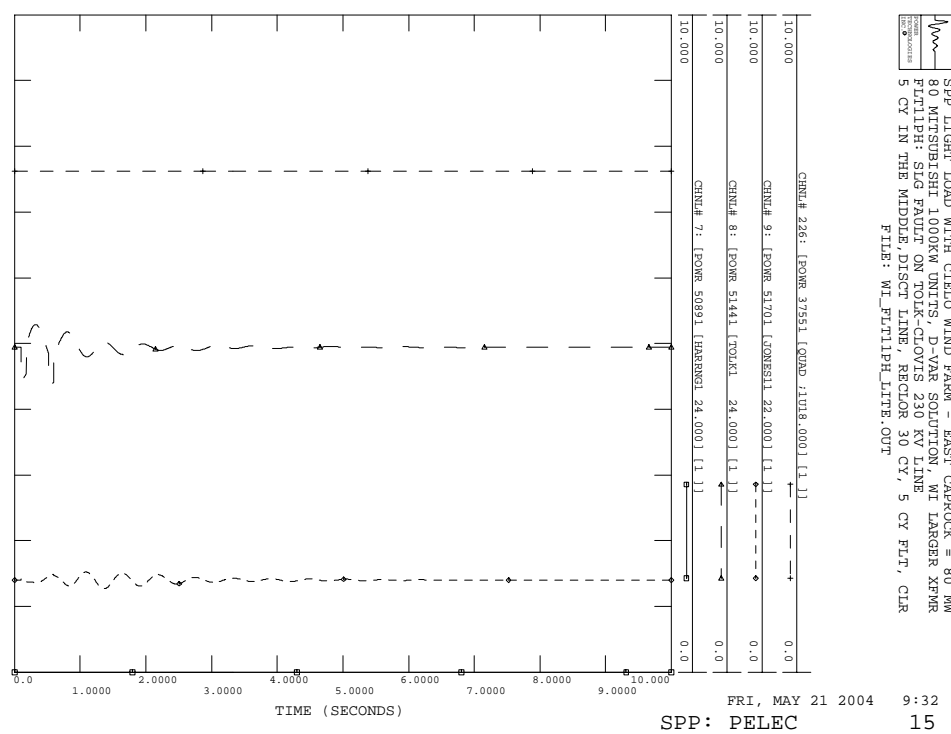
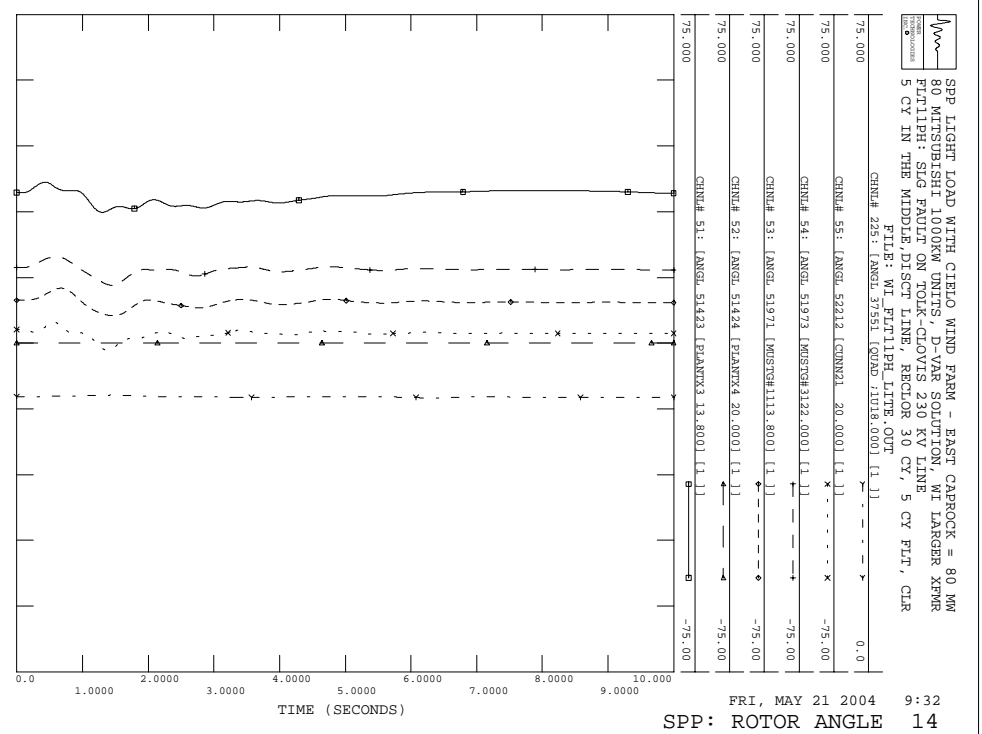
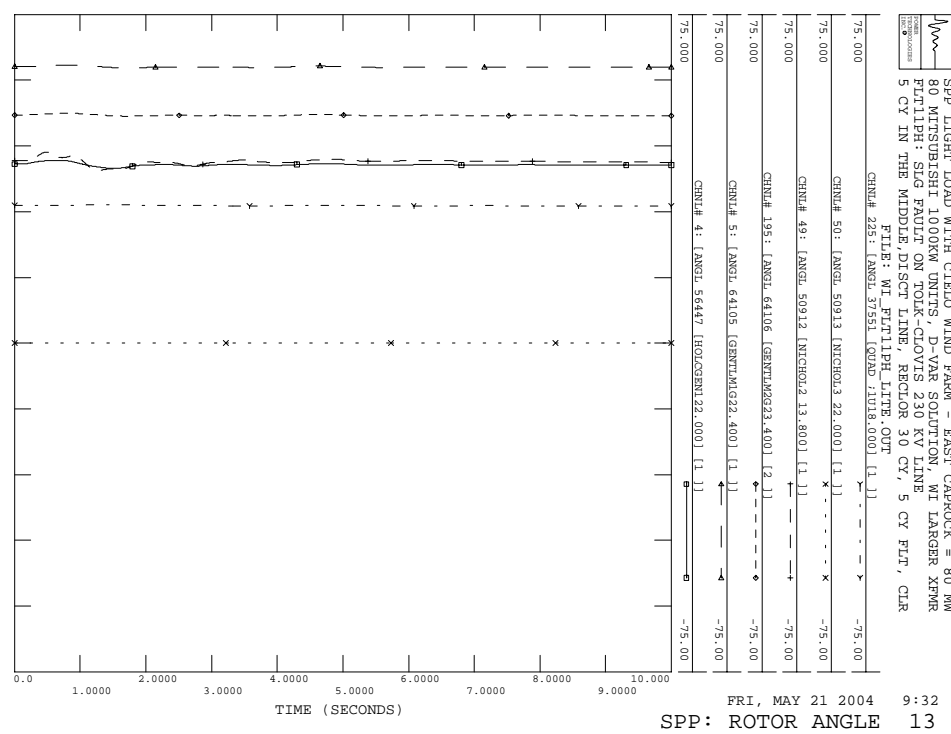
FRI, MAY 21 2004 9:32
 CIELO CABLE3 GEN54 5

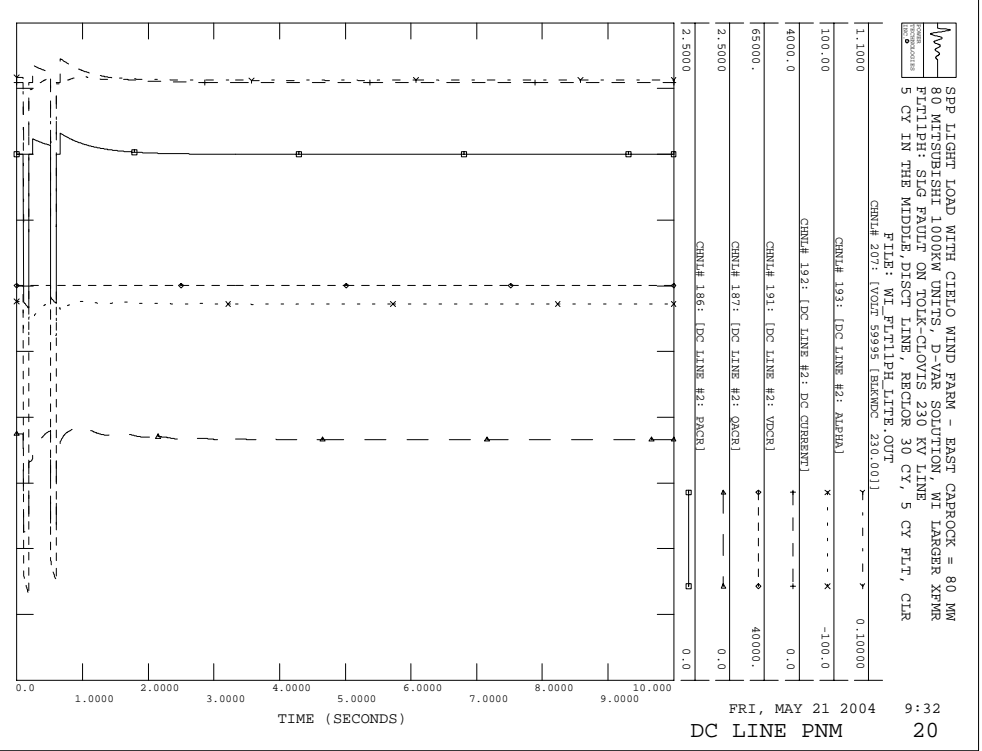
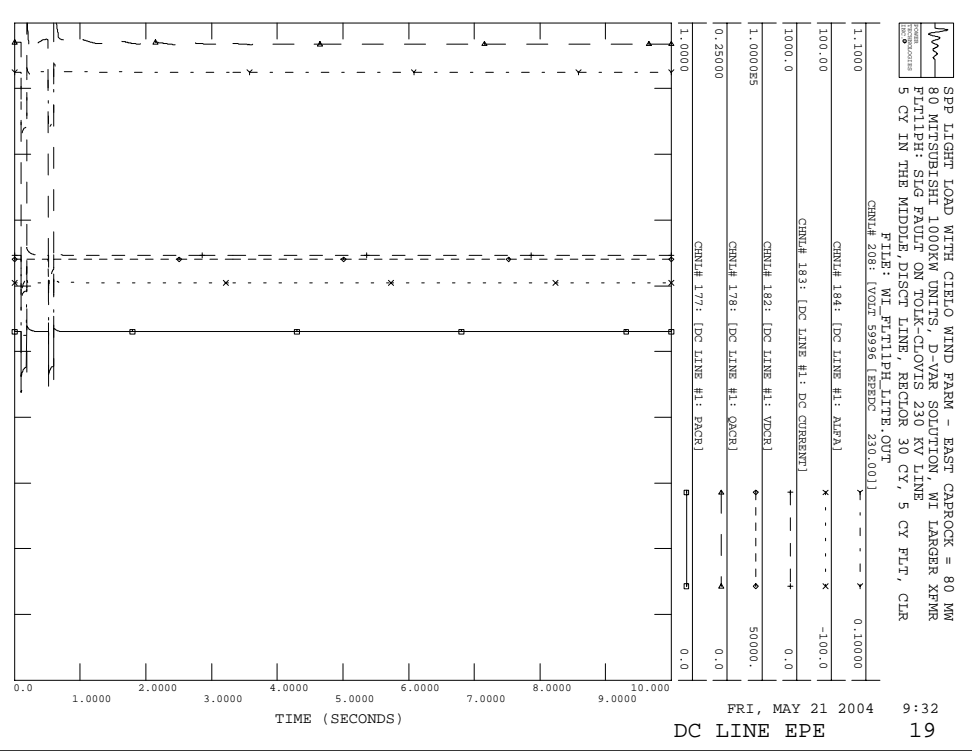
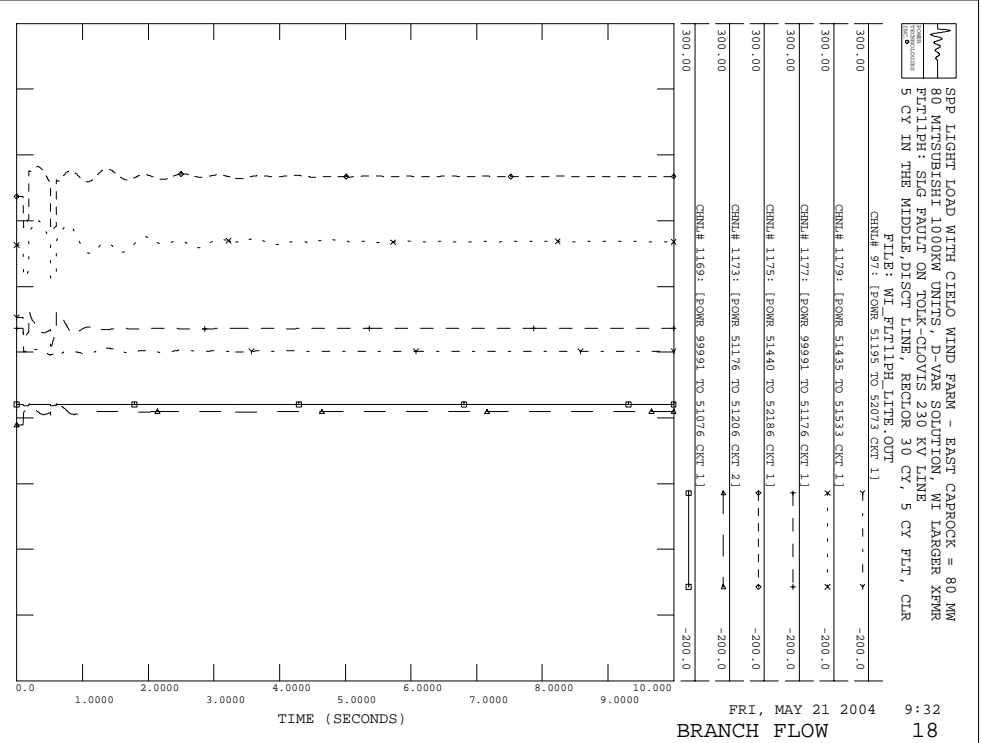
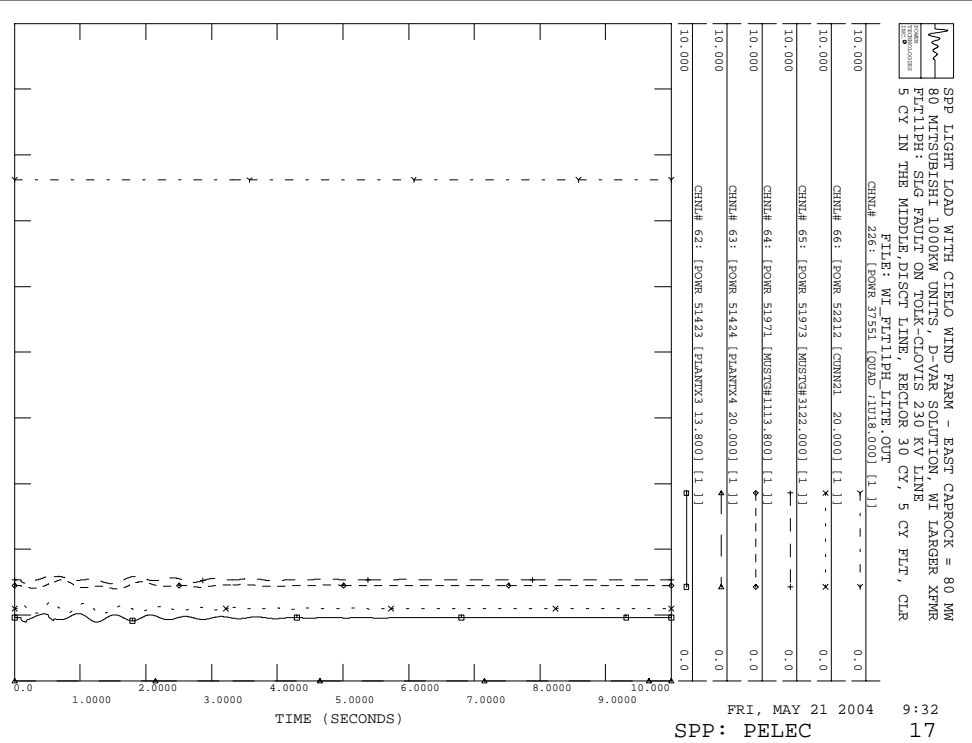
SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLTLPH: SLG FAULT ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLTLPH_LITE.OUT



FRI, MAY 21 2004 9:32
 CIELO VOLTAGE 7

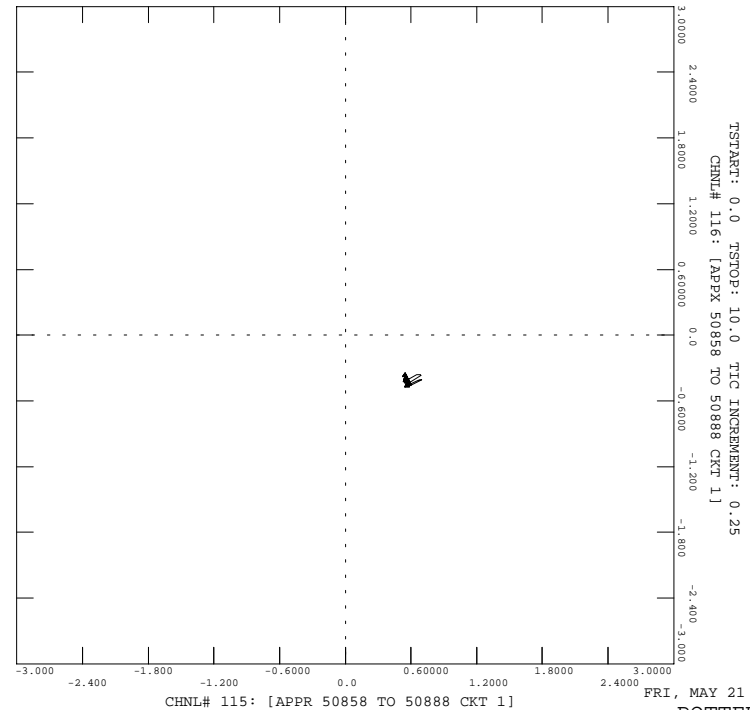






SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLTLPH - SLG FAULT ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE, DISCT LINE, RECTOR 30 CT, 5 CY FLT, CLR

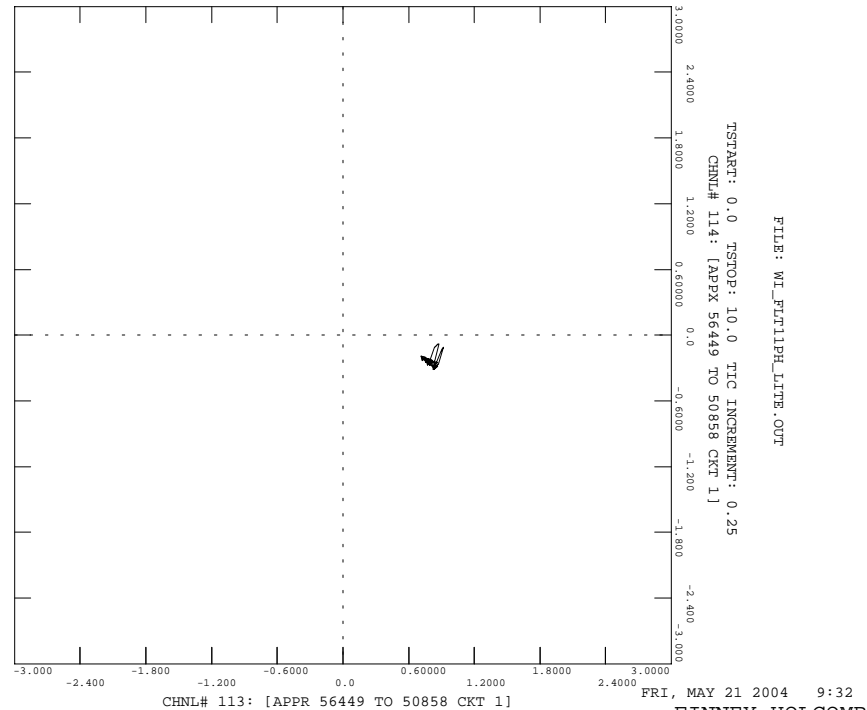
FILE: WI_FLTLPH_LITE.OUT



FRI, MAY 21 2004 9:32
 CHNL# 115: [APPR 50858 TO 50888 CKT 1]
 POTTER-FINNEY 22

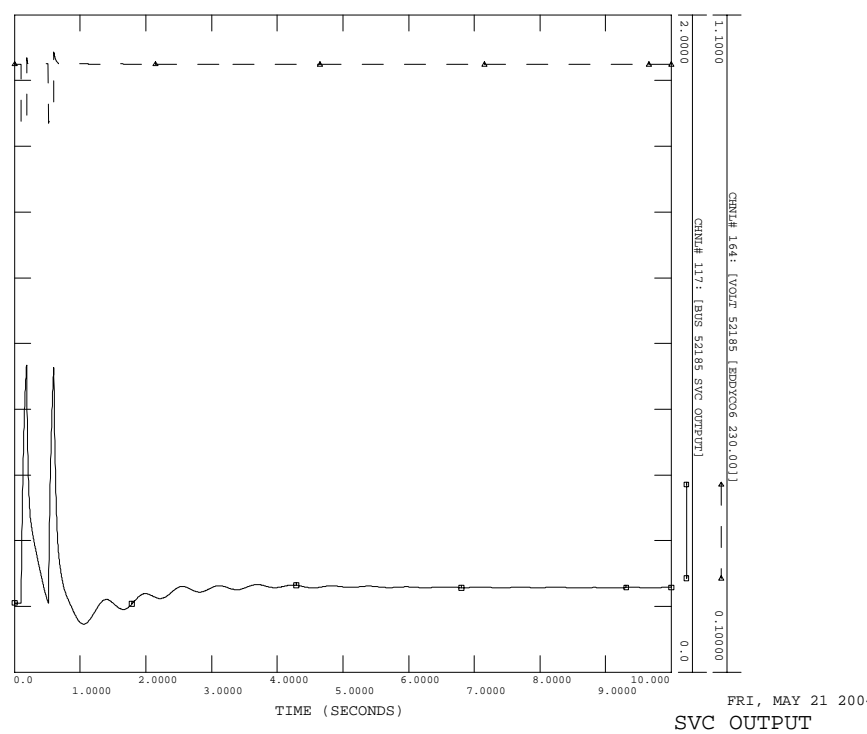
SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLTLPH - SLG FAULT ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE, DISCT LINE, RECTOR 30 CT, 5 CY FLT, CLR

FILE: WI_FLTLPH_LITE.OUT




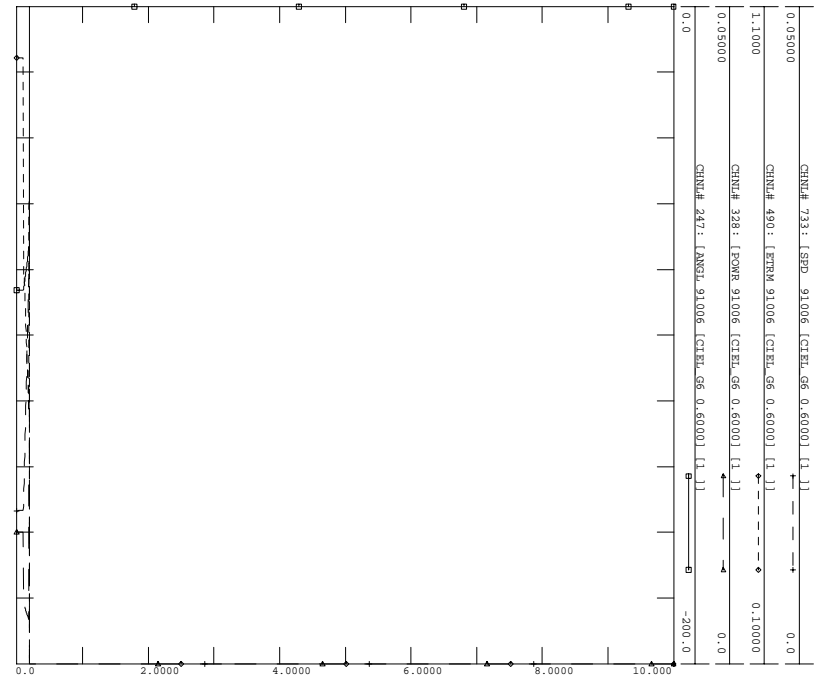
FRI, MAY 21 2004 9:32
 CHNL# 113: [APPR 56449 TO 50858 CKT 1]
 FINNEY-HOLCOMB 21

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLTLPH - SLG FAULT ON TOLK-CLOVIS 230 KV LINE
 5 CY IN THE MIDDLE, DISCT LINE, RECTOR 30 CT, 5 CY FLT, CLR




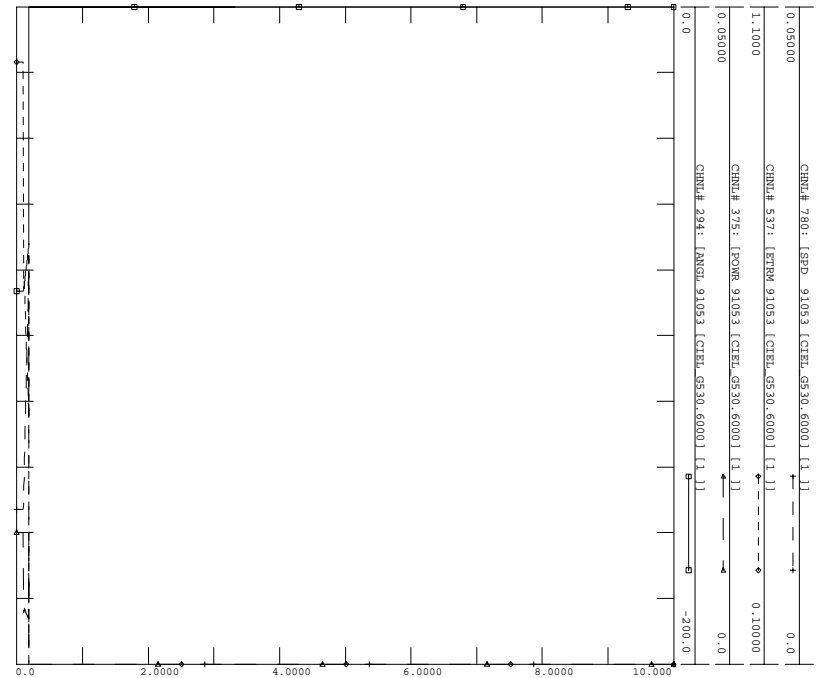
FRI, MAY 21 2004 9:32
 SVC OUTPUT 23


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH_LITE.OUT




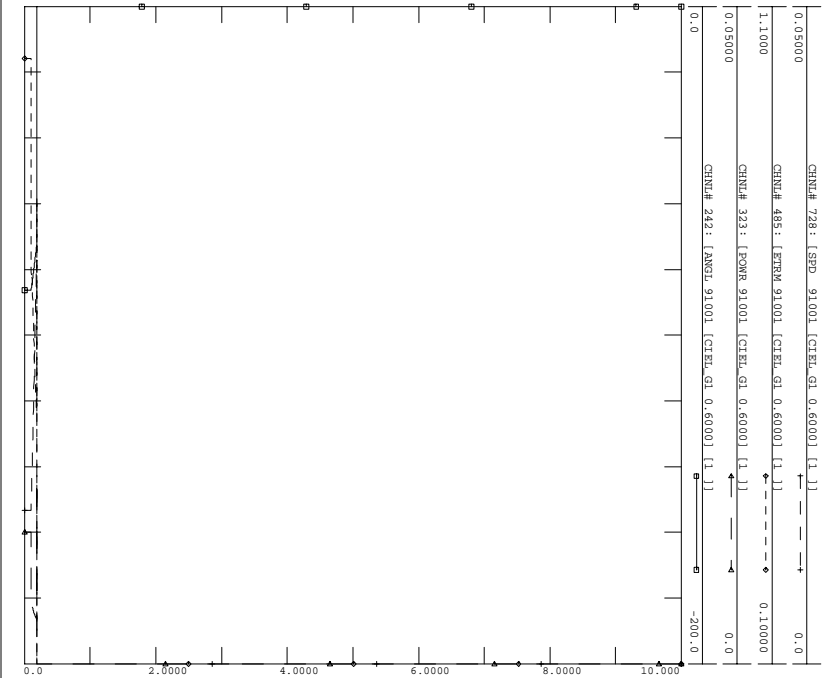
FRI, MAY 21 2004 9:33
 CIELO CABLE1 GEN6 2


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH_LITE.OUT




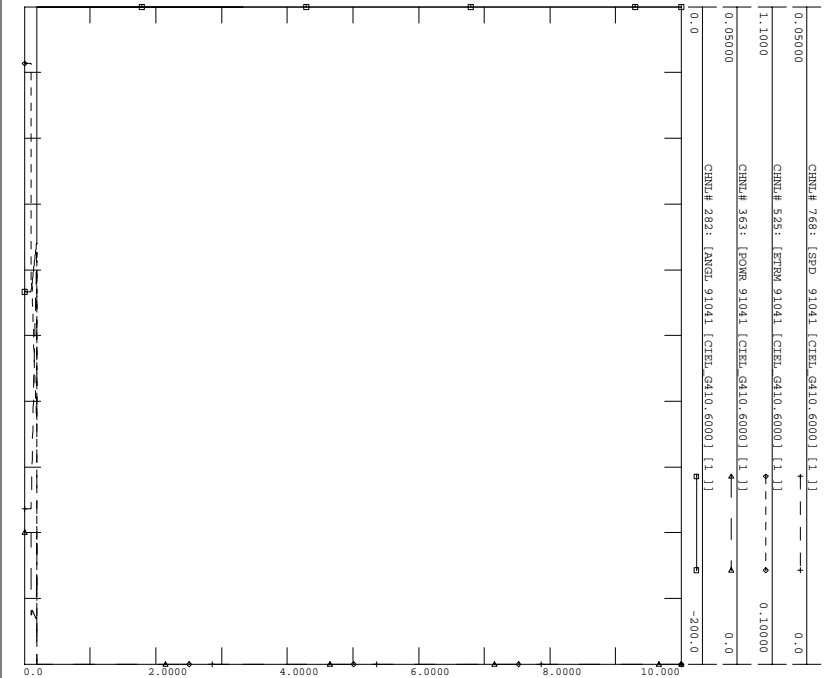
FRI, MAY 21 2004 9:33
 CIELO CABLE2 GEN53 4


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH_LITE.OUT



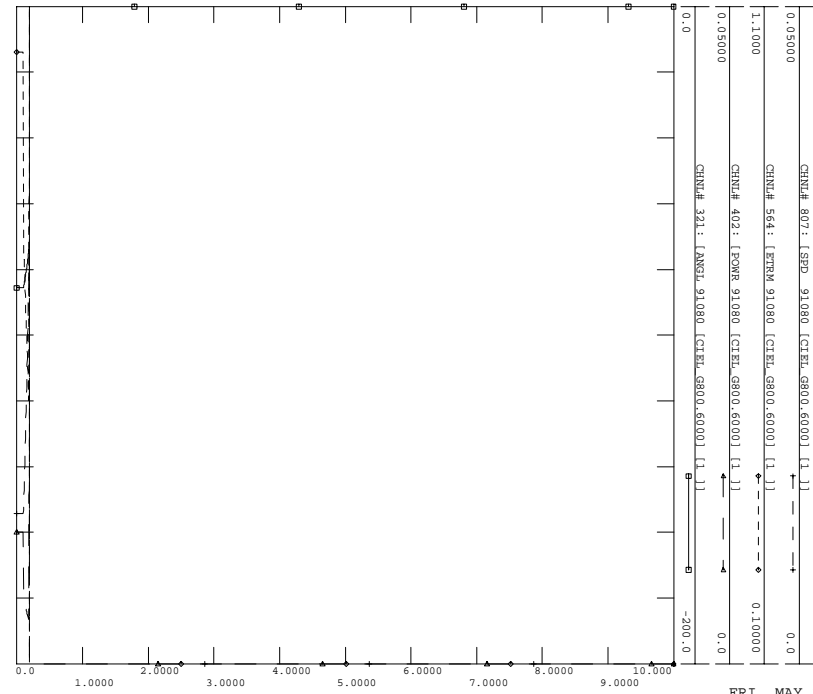
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 CIELO CABLE1 GEN1 1


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH_LITE.OUT



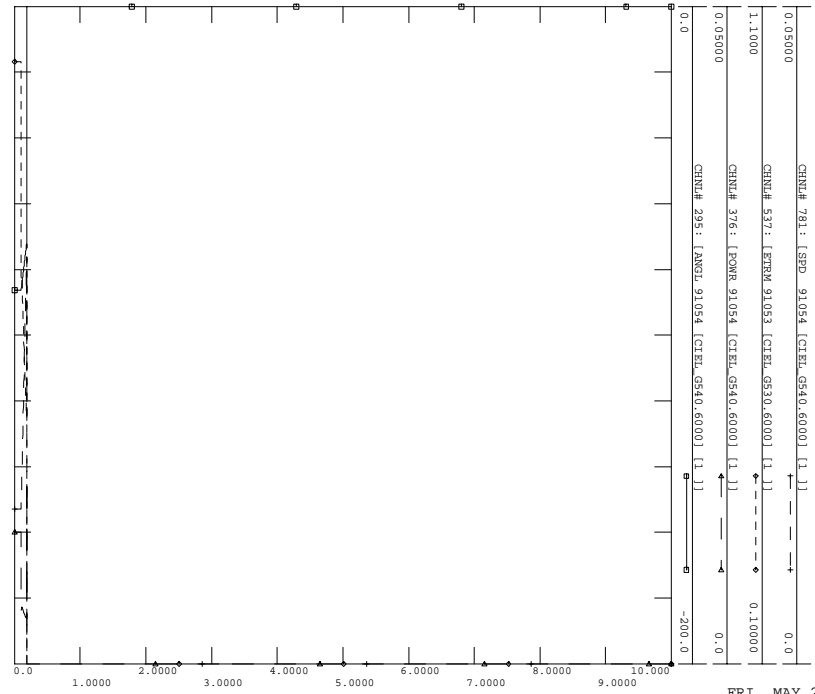
FRI, MAY 21 2004 9:33
 CIELO CABLE2 GEN41 3

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH_LITE.OUT



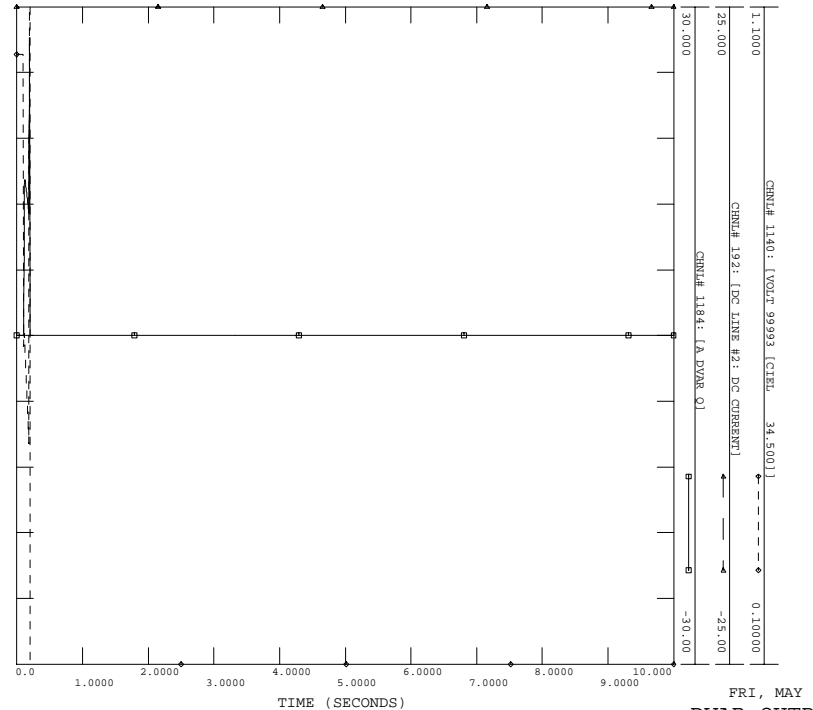
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 CIELO CABLE3 GEN80 6

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH_LITE.OUT



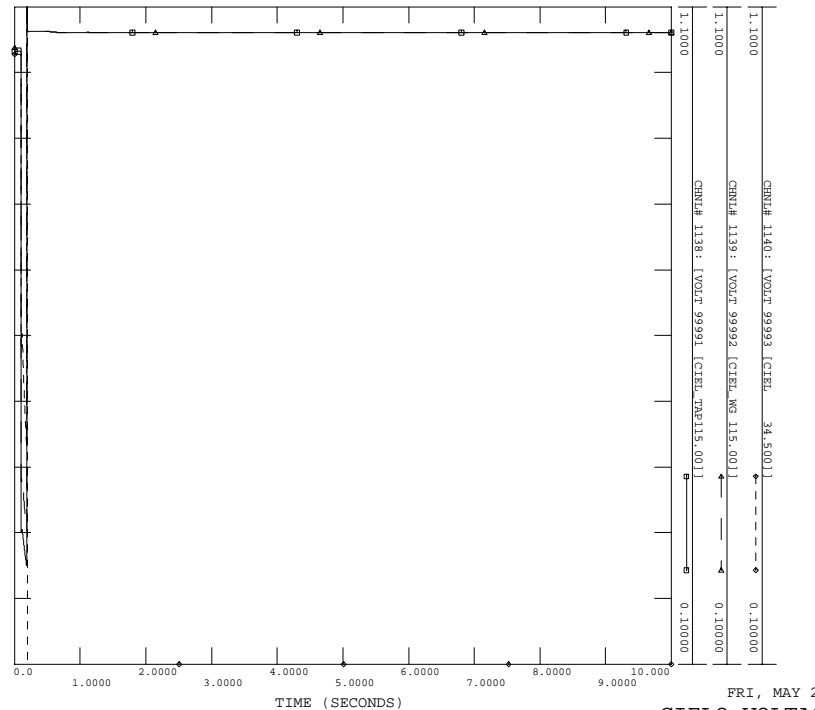
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 CIELO CABLE3 GEN54 5

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH_LITE.OUT

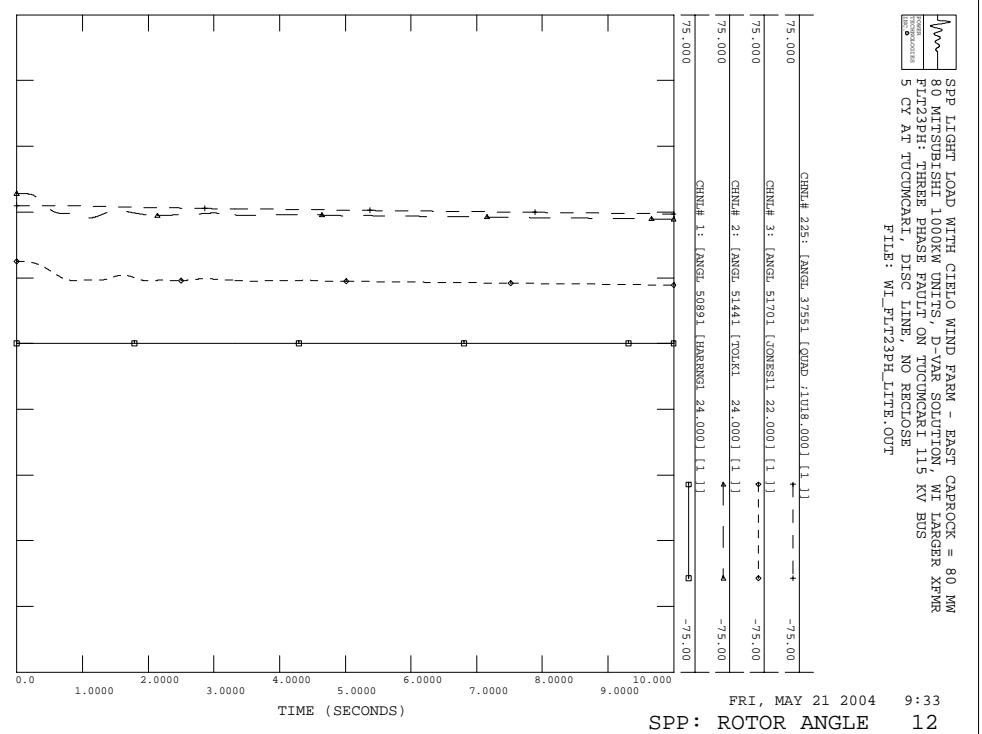
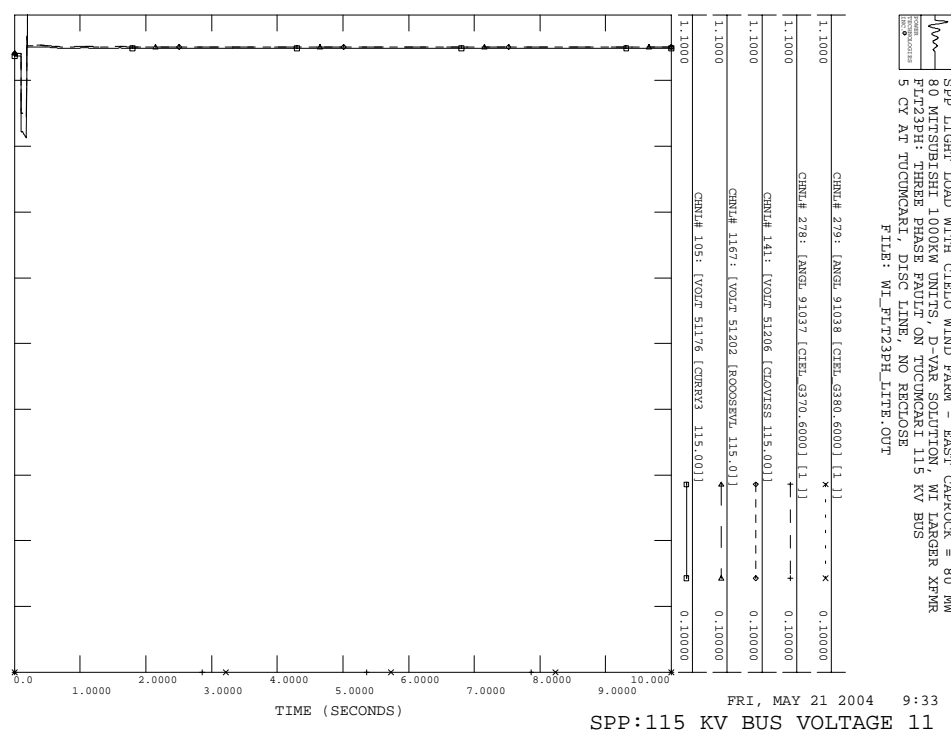
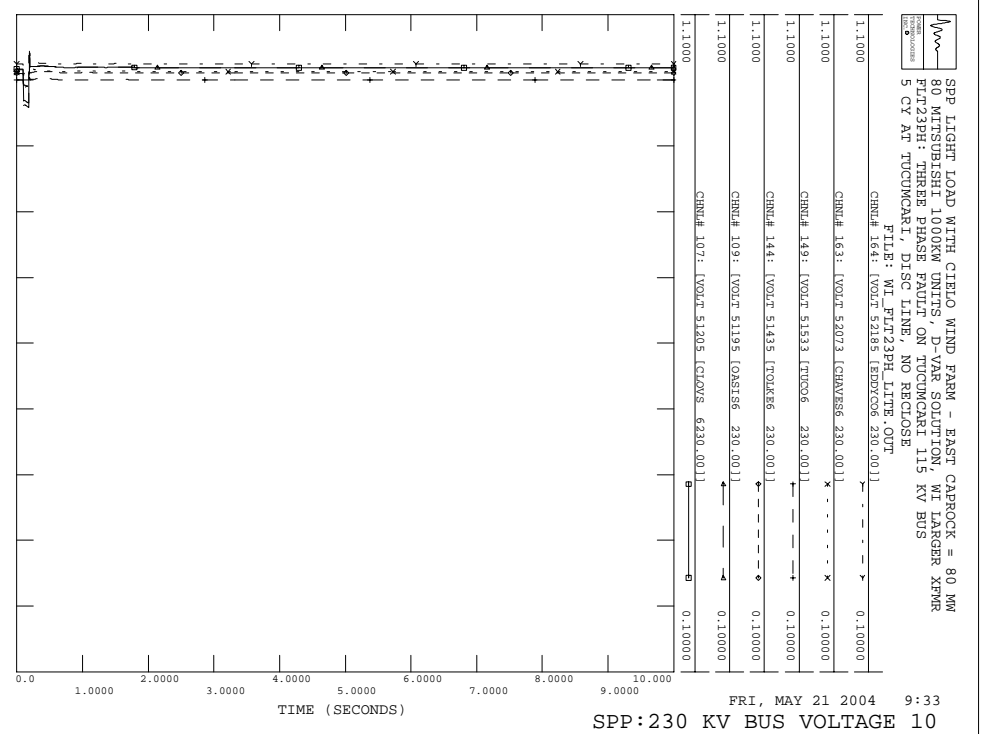
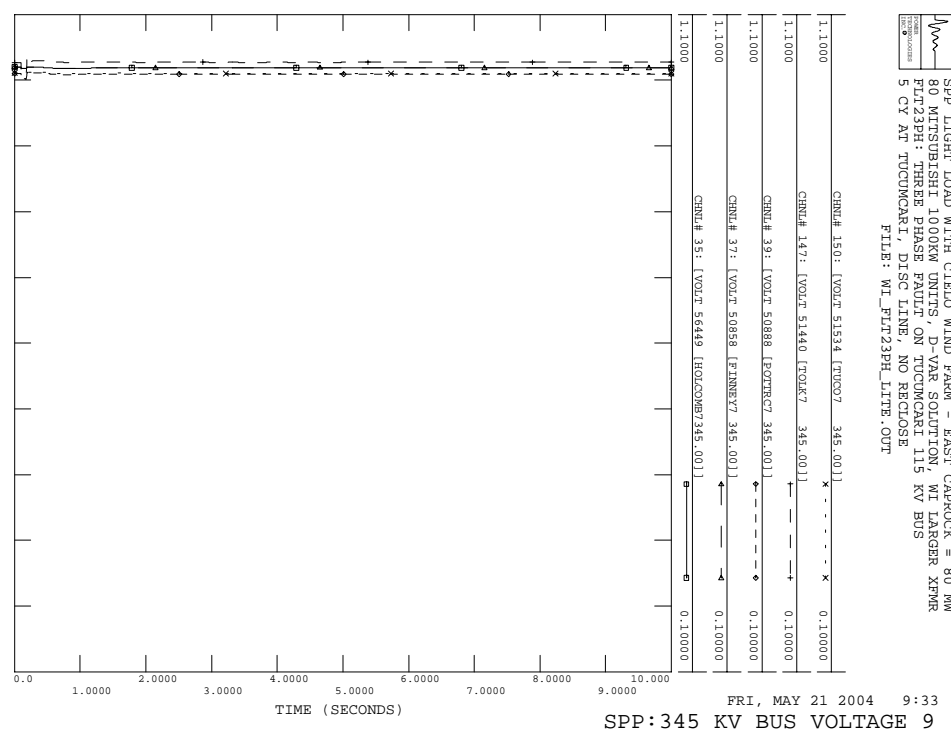


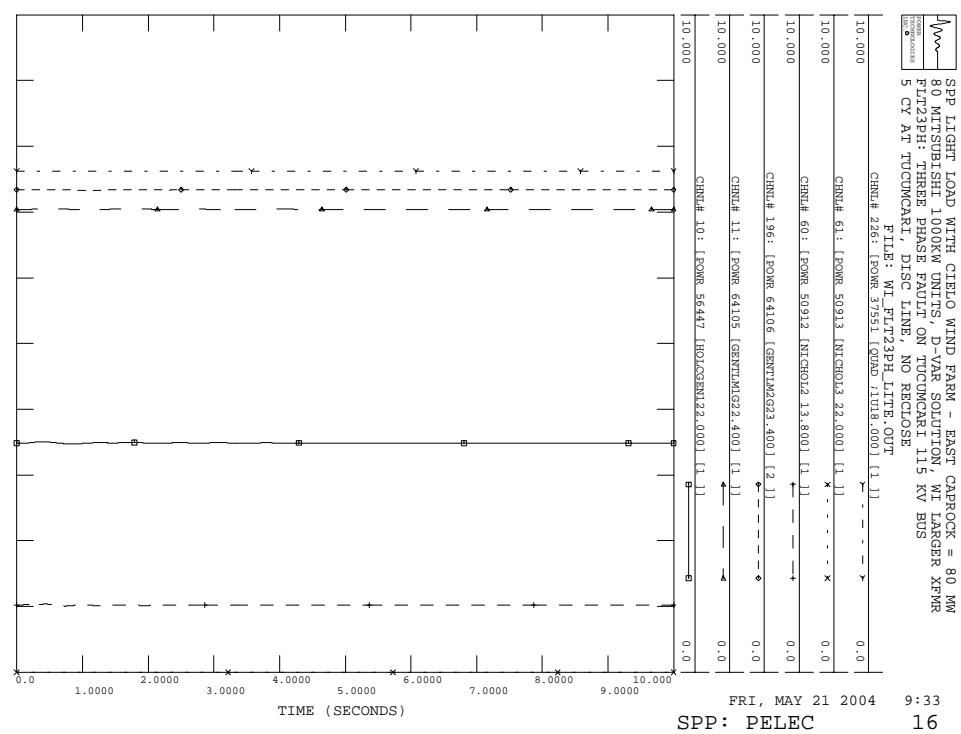
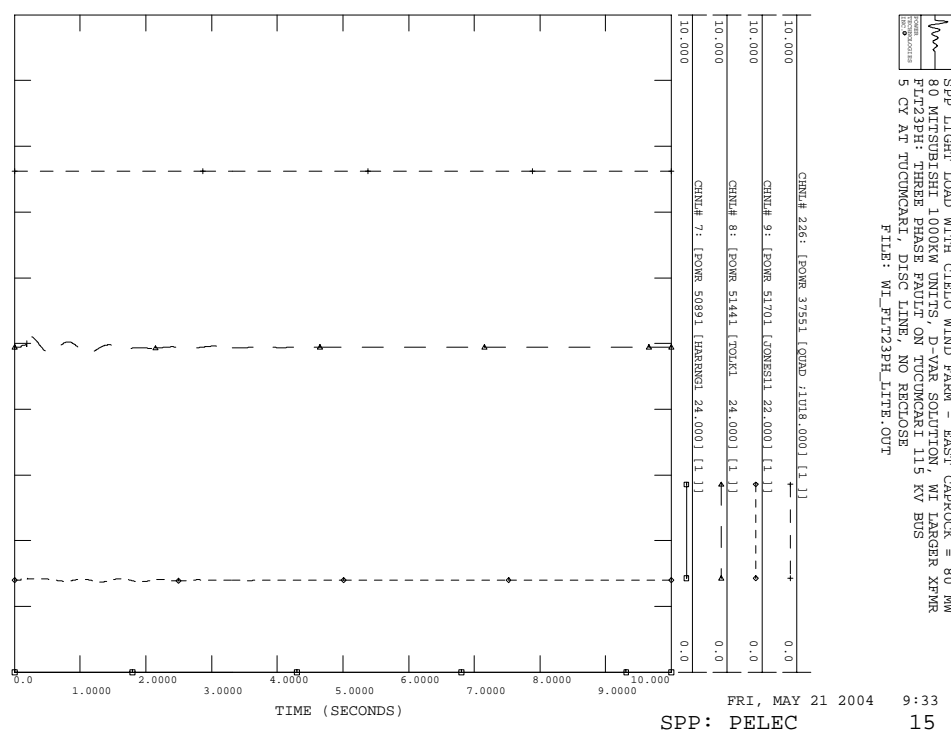
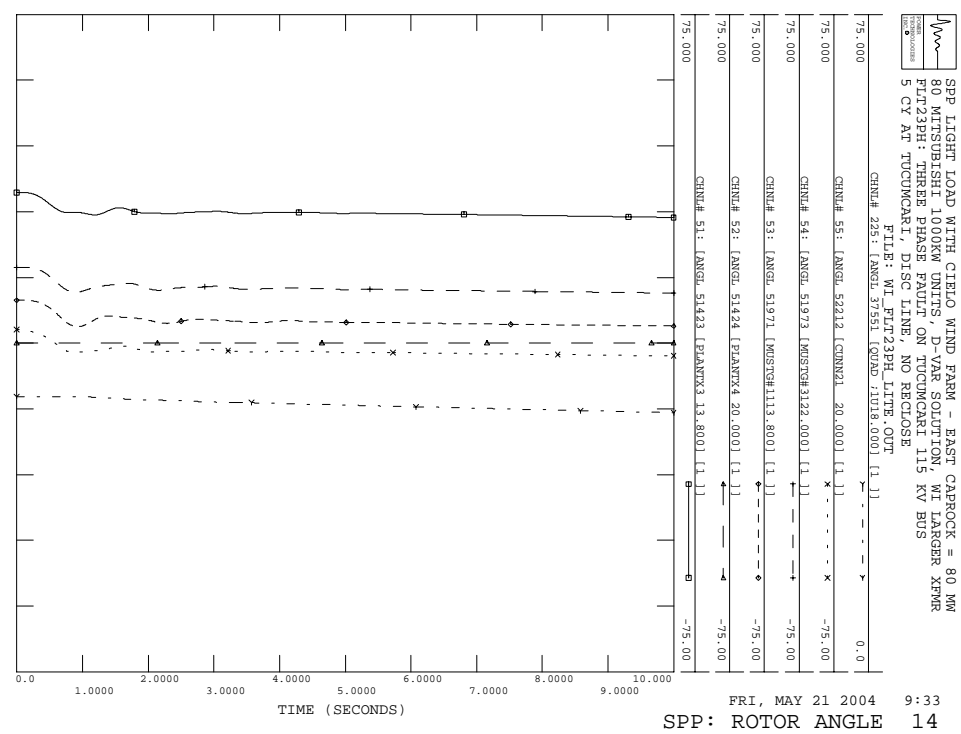
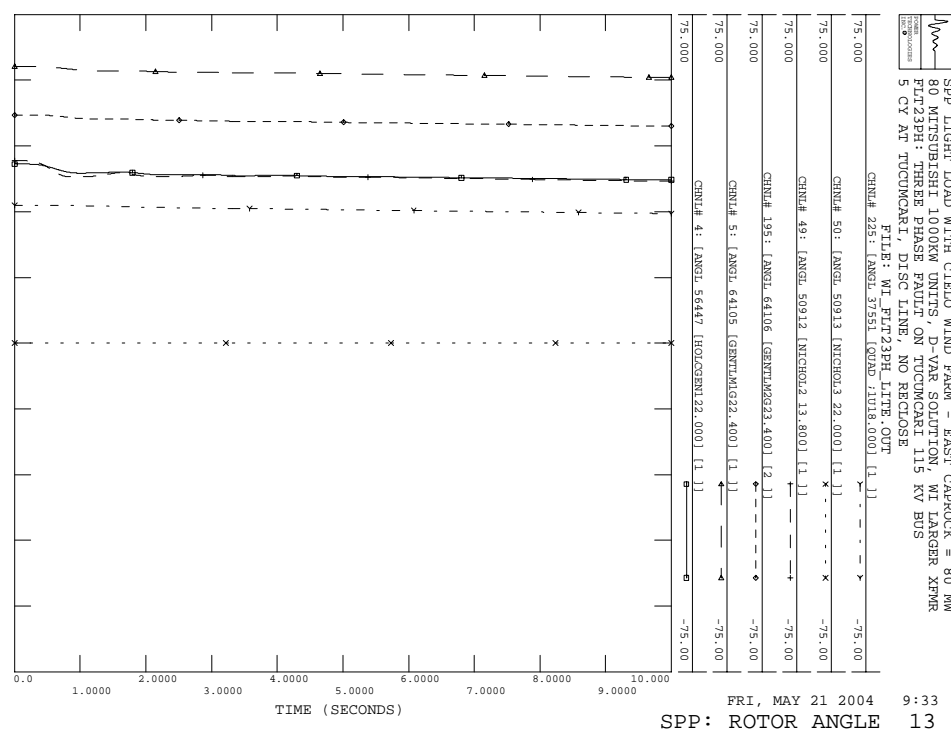
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 DVAR OUTPUT 8

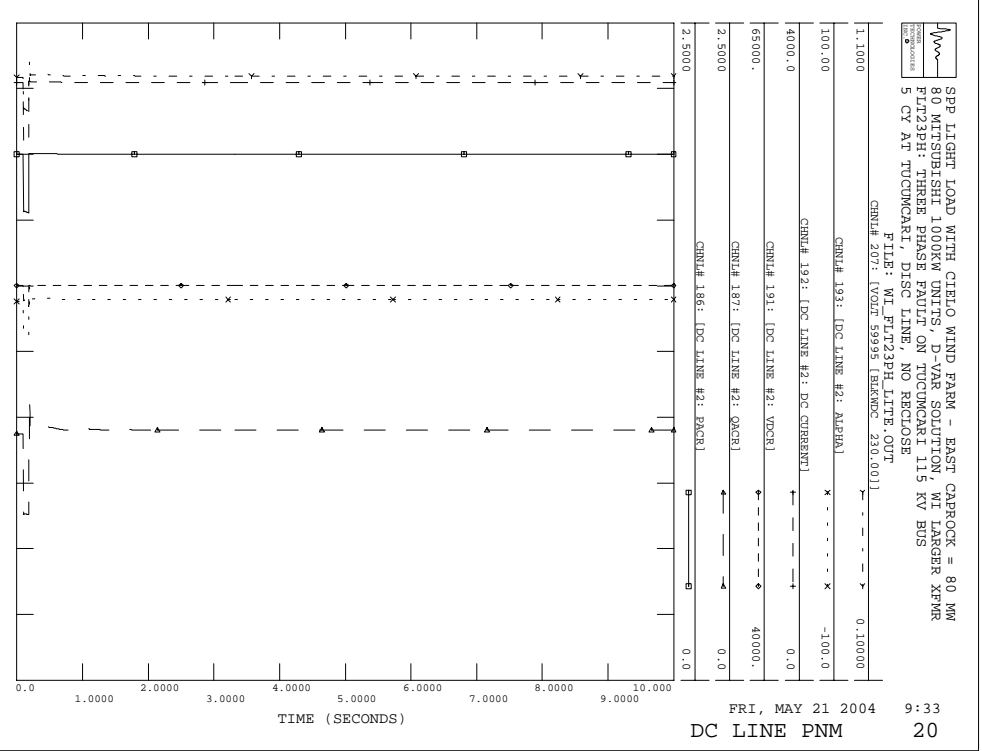
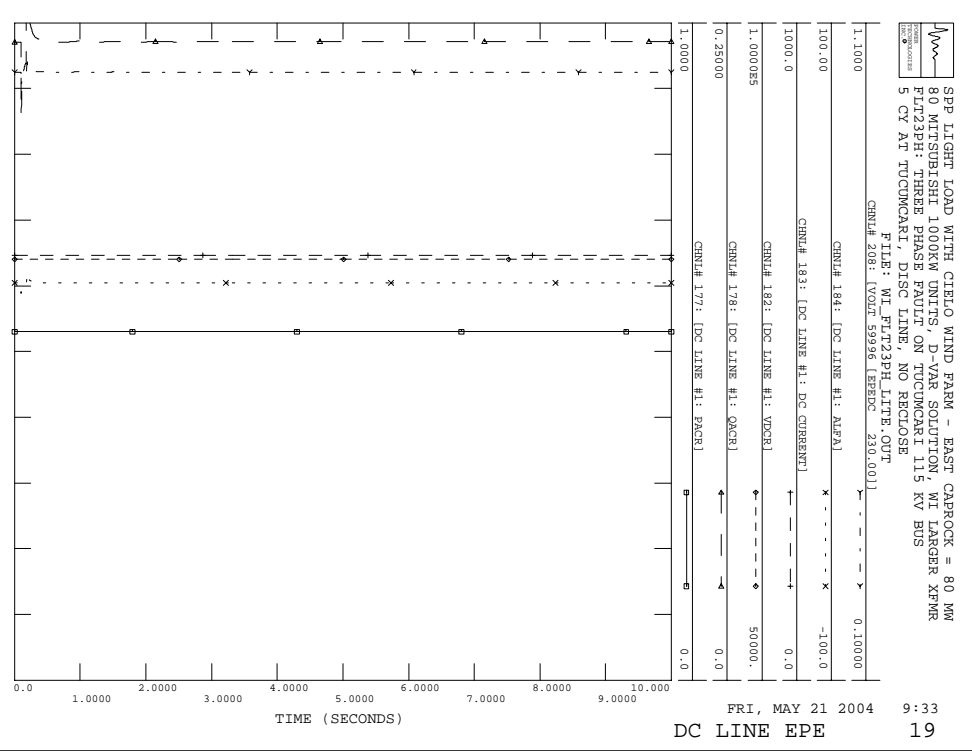
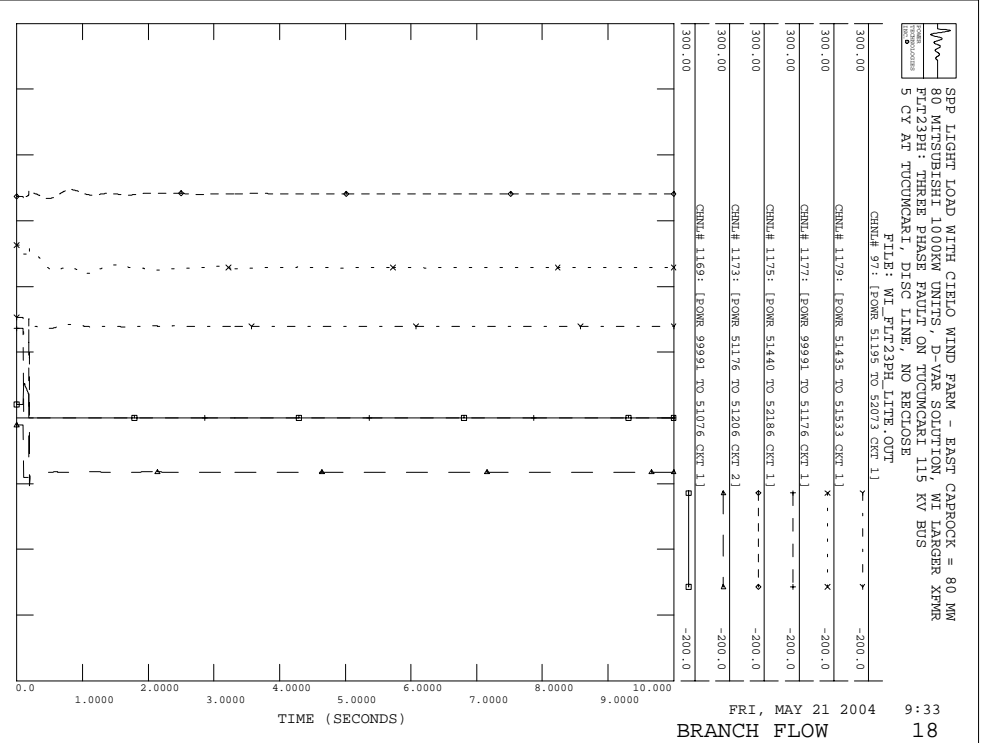
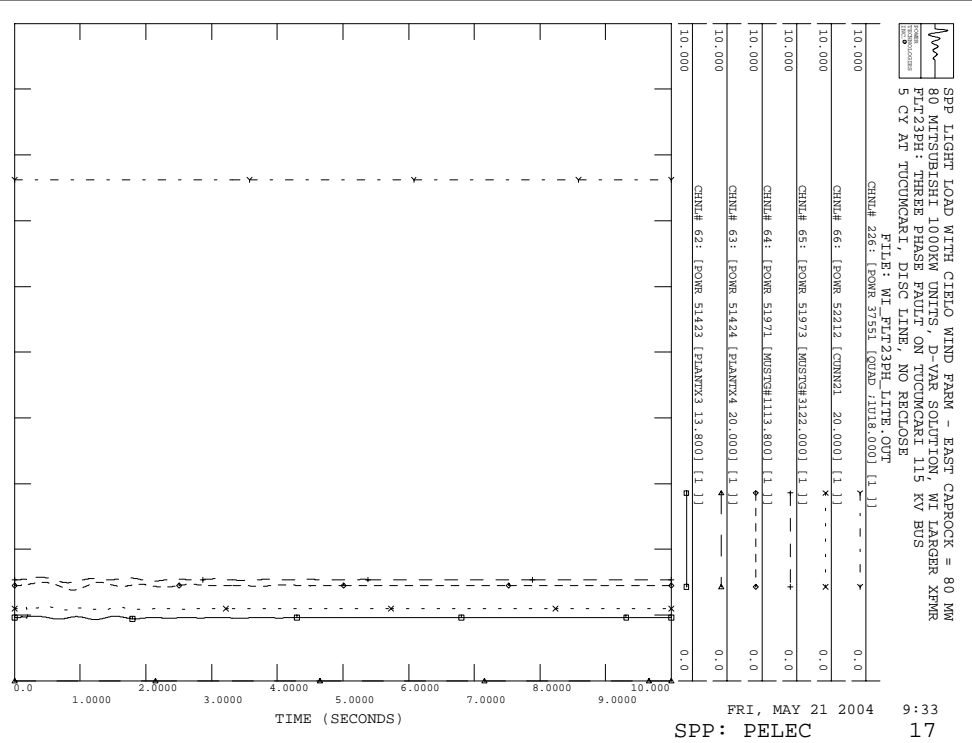
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT23PH: THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT23PH_LITE.OUT




FRI, MAY 21 2004 9:33
 CIELO VOLTAGE 7

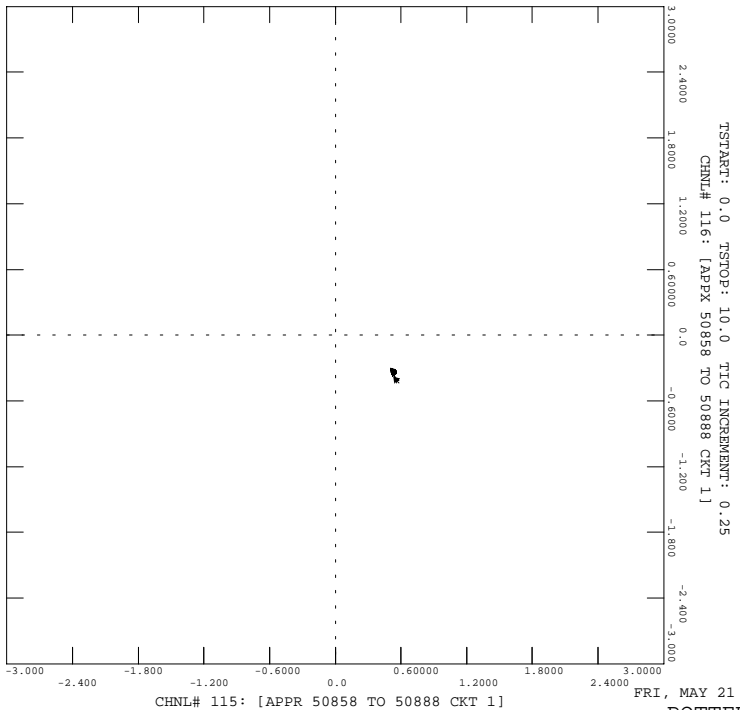








 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT23PH - THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE

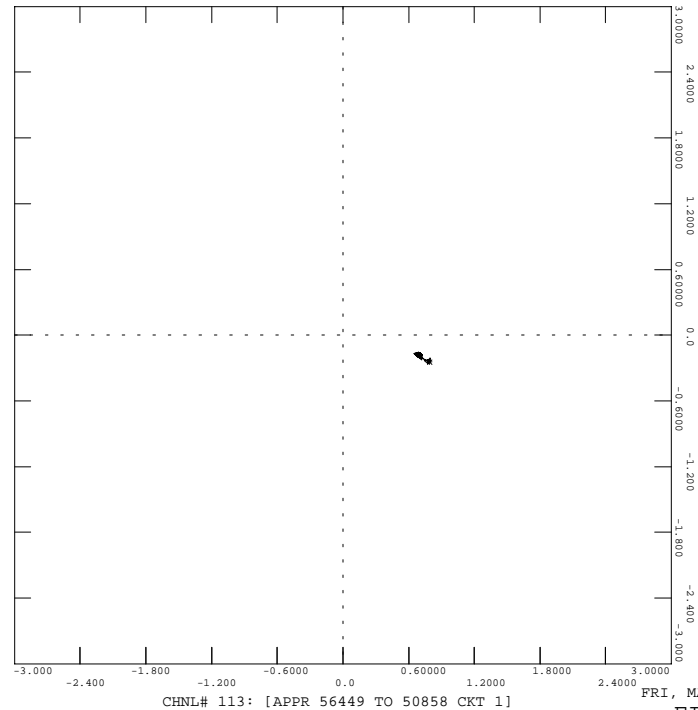
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FRI, MAY 21 2004 9:33
 CHNL# 115: [APPR 50858 TO 50888 CKT 1] POTTER-FINNEY 22


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT23PH - THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE

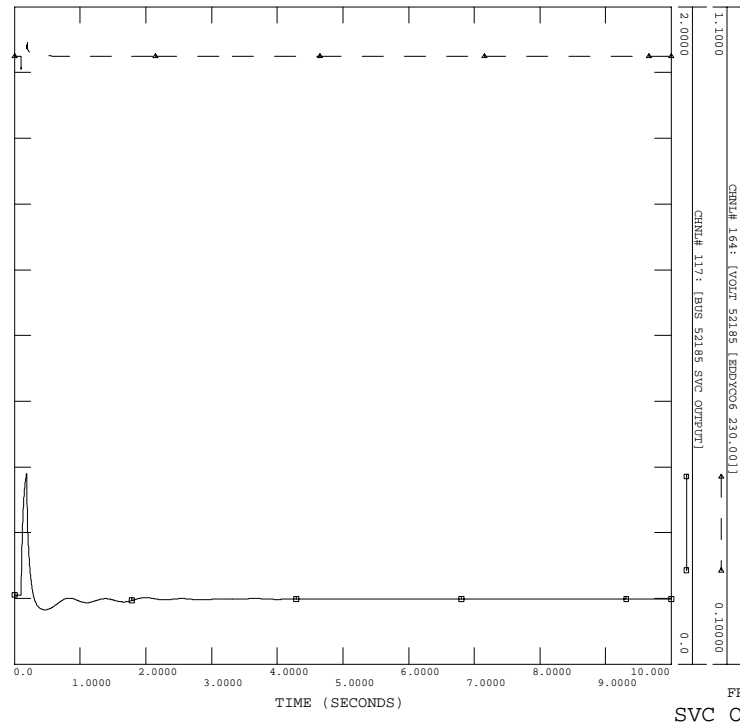
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FRI, MAY 21 2004 9:33
 CHNL# 113: [APPR 56449 TO 50858 CKT 1] FINNEY-HOLCOMB 21

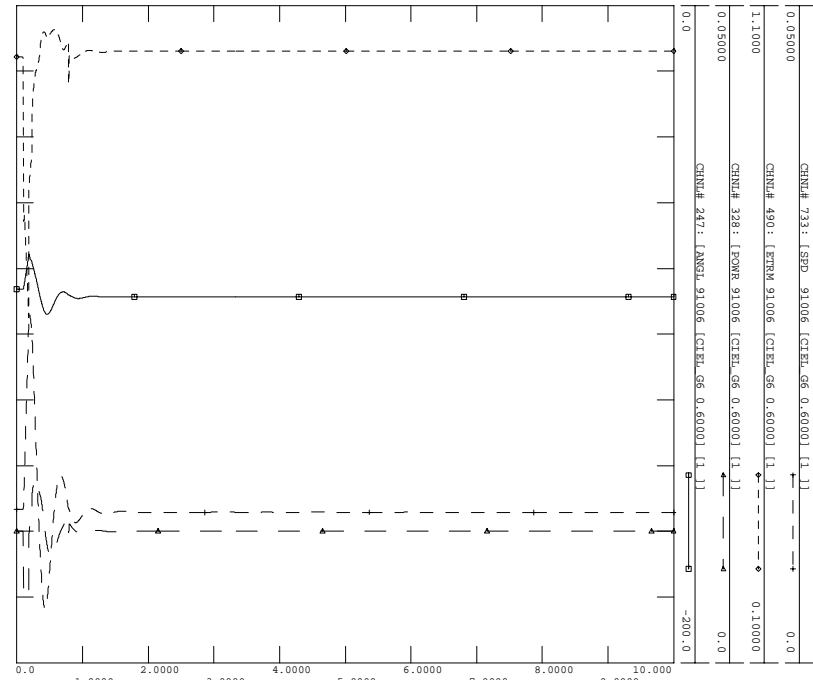

 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT23PH - THREE PHASE FAULT ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMCARI, DISC LINE, NO RECLOSE

FILE: WI_FLT23PH_LITE.OUT



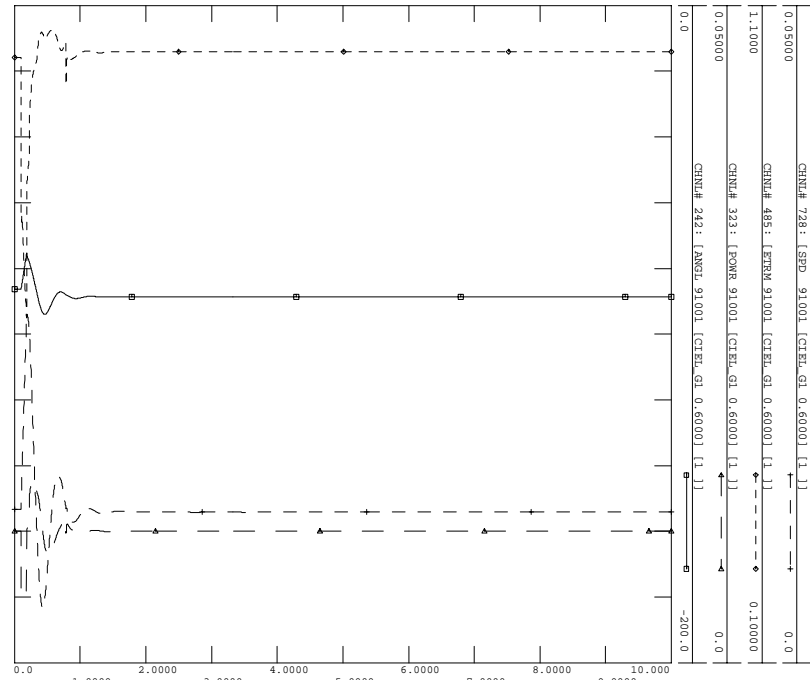
FRI, MAY 21 2004 9:33
 SVC OUTPUT 23

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH_LITE.OUT



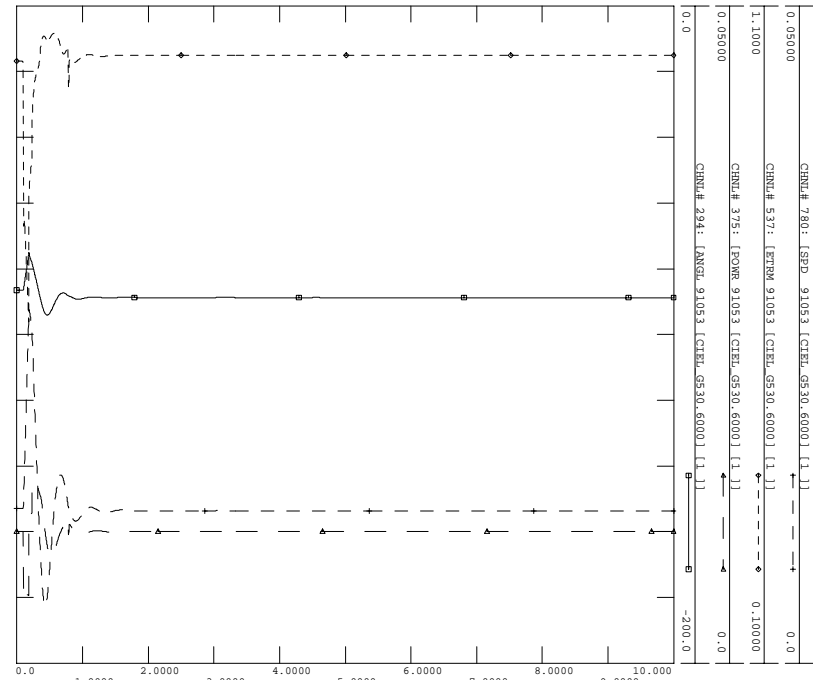
FRI, MAY 21 2004 9:32
 CIELO CABLE1 GEN6 2

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH_LITE.OUT



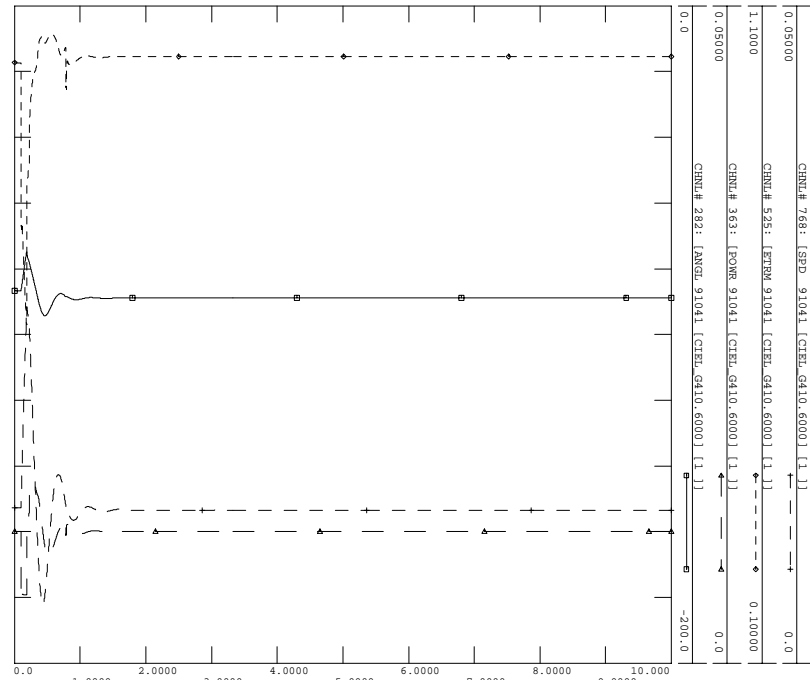
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 CIELO CABLE1 GEN1 1

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH_LITE.OUT



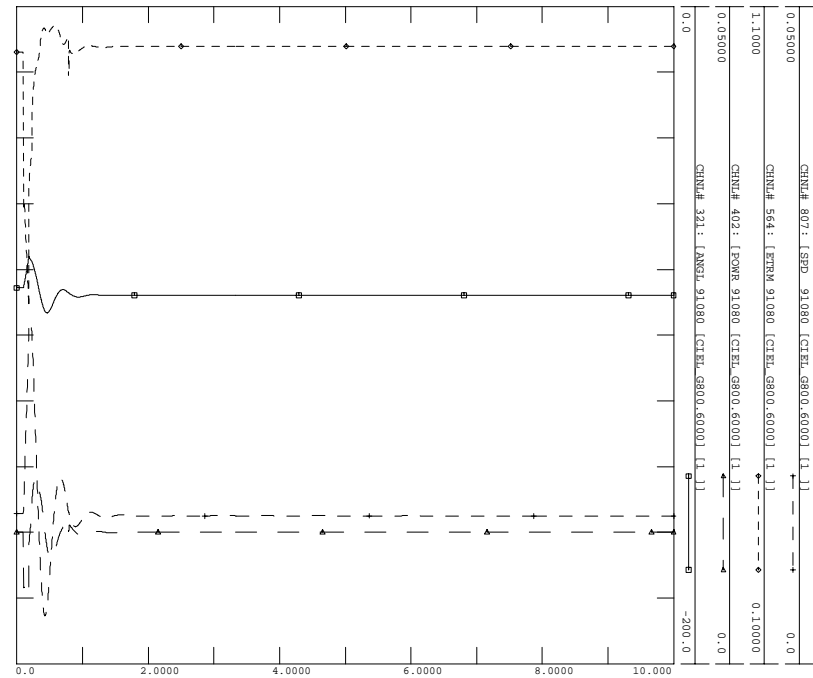
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 CIELO CABLE2 GEN53 4

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
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 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH_LITE.OUT



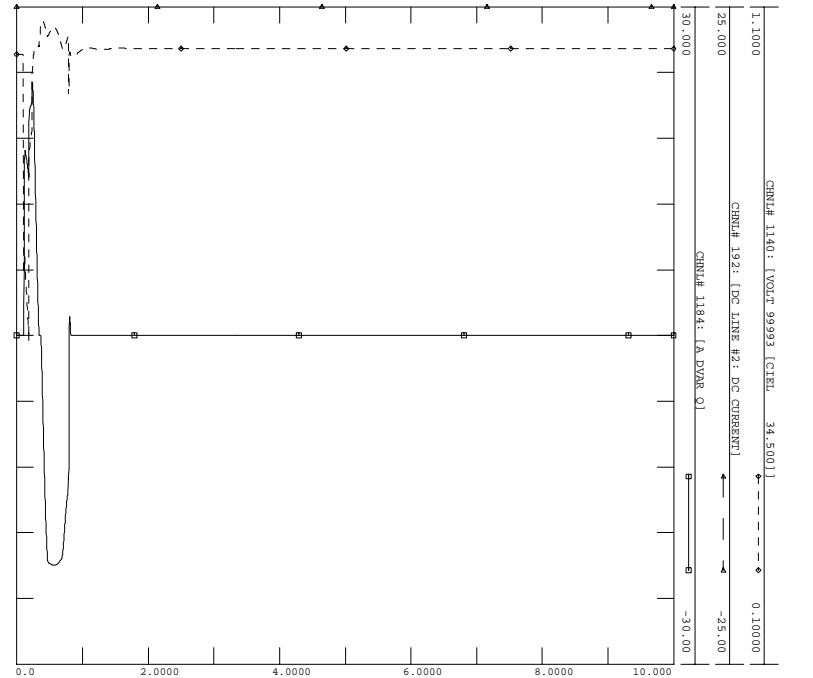
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 CIELO CABLE2 GEN41 3

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH_LITE.OUT



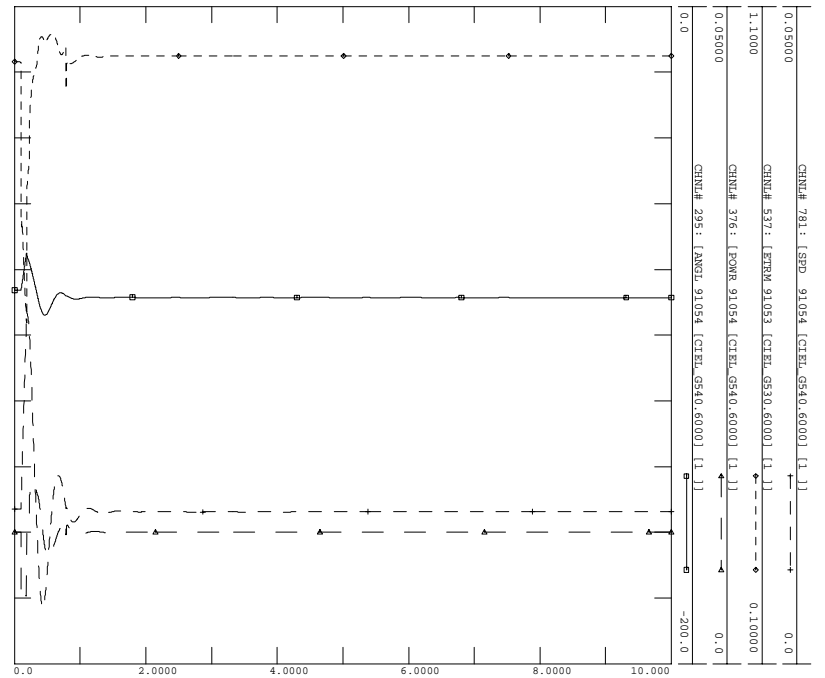
FRI, MAY 21 2004 9:32
 CIELO CABLE3 GEN80 6

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
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 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH_LITE.OUT



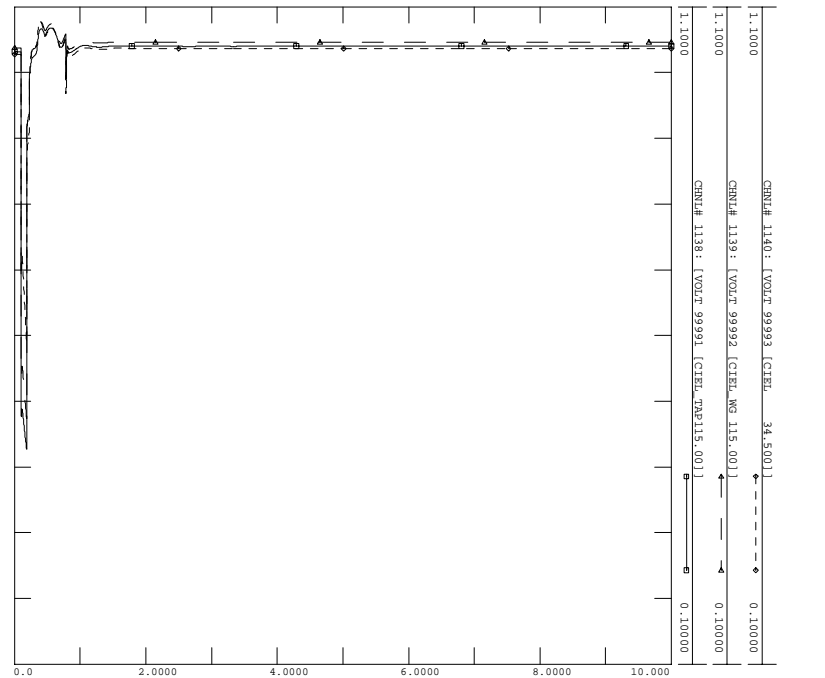
FRI, MAY 21 2004 9:32
 DVAR OUTPUT 8

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH_LITE.OUT

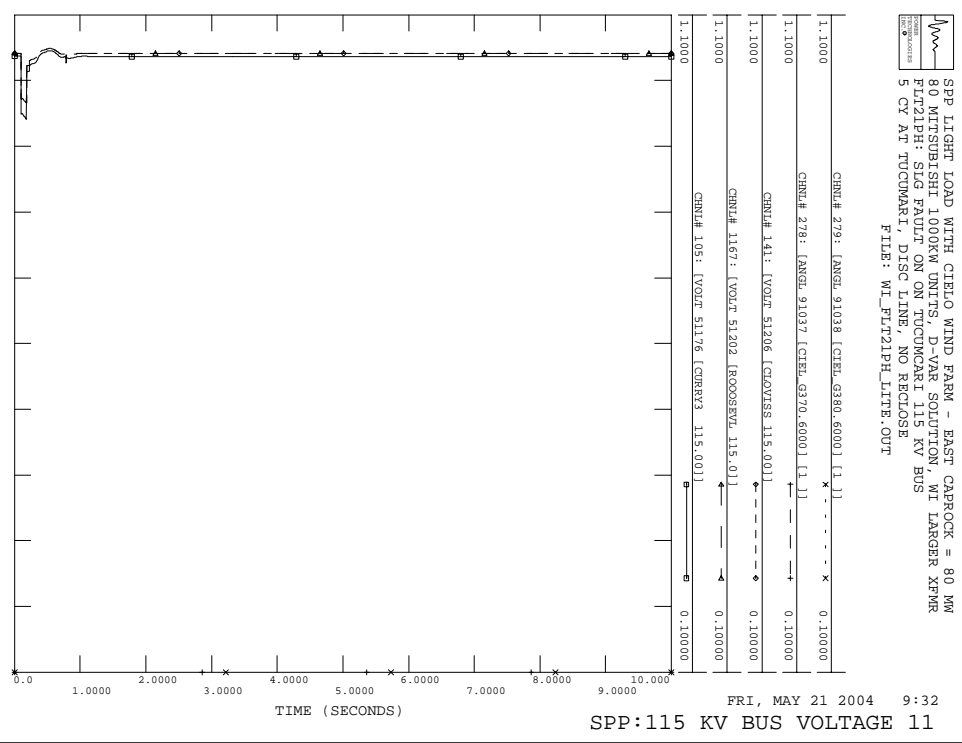
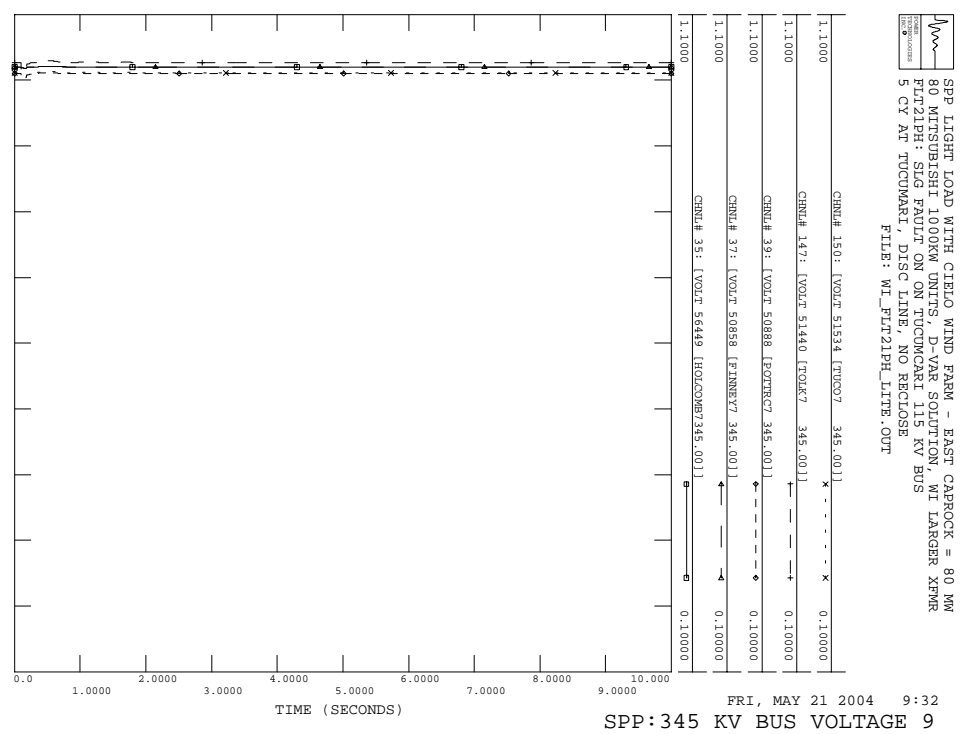
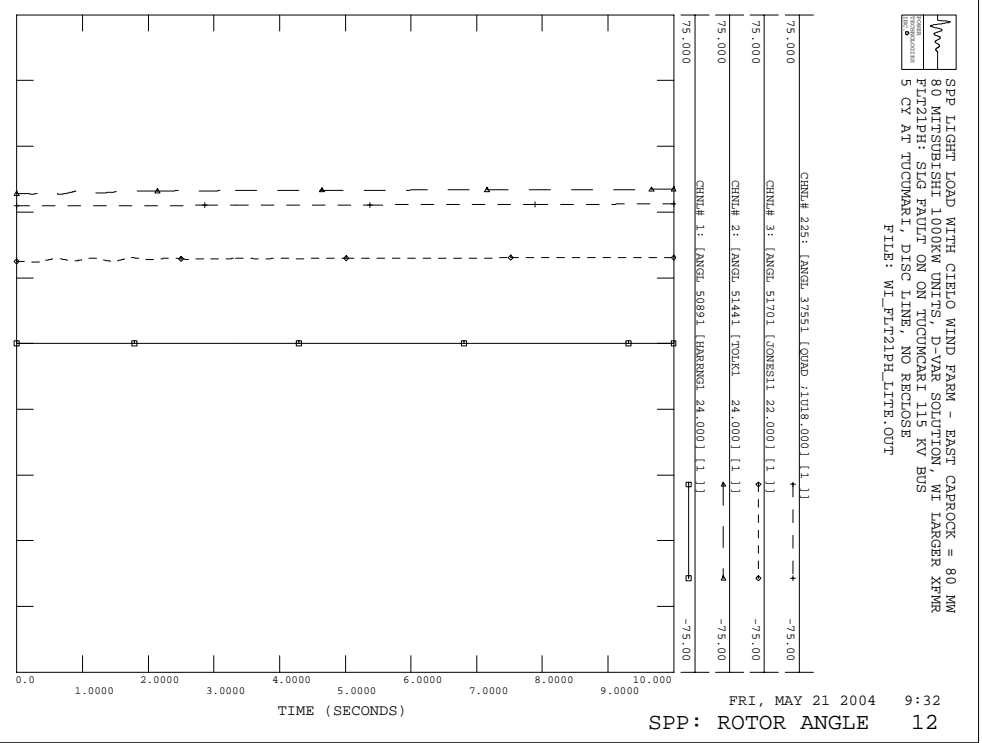
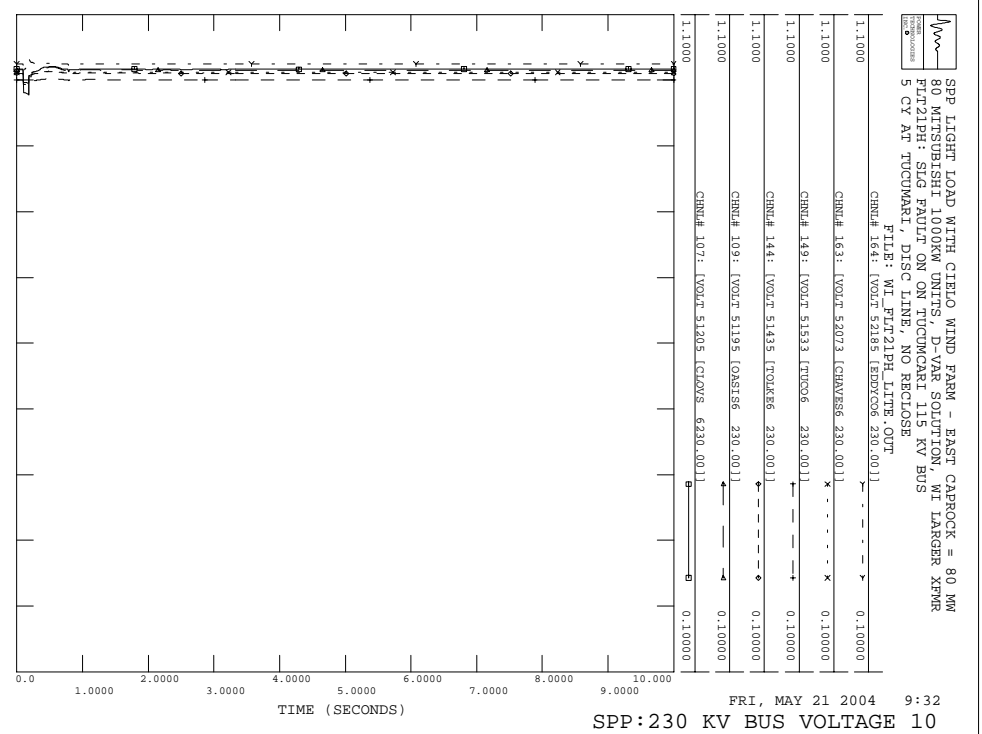


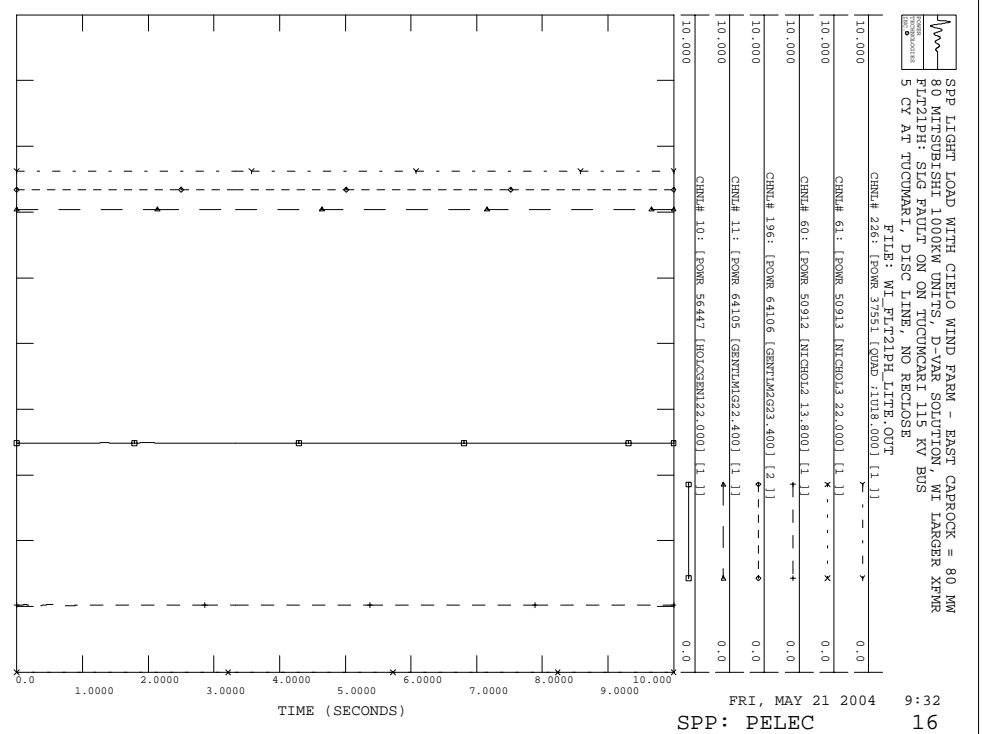
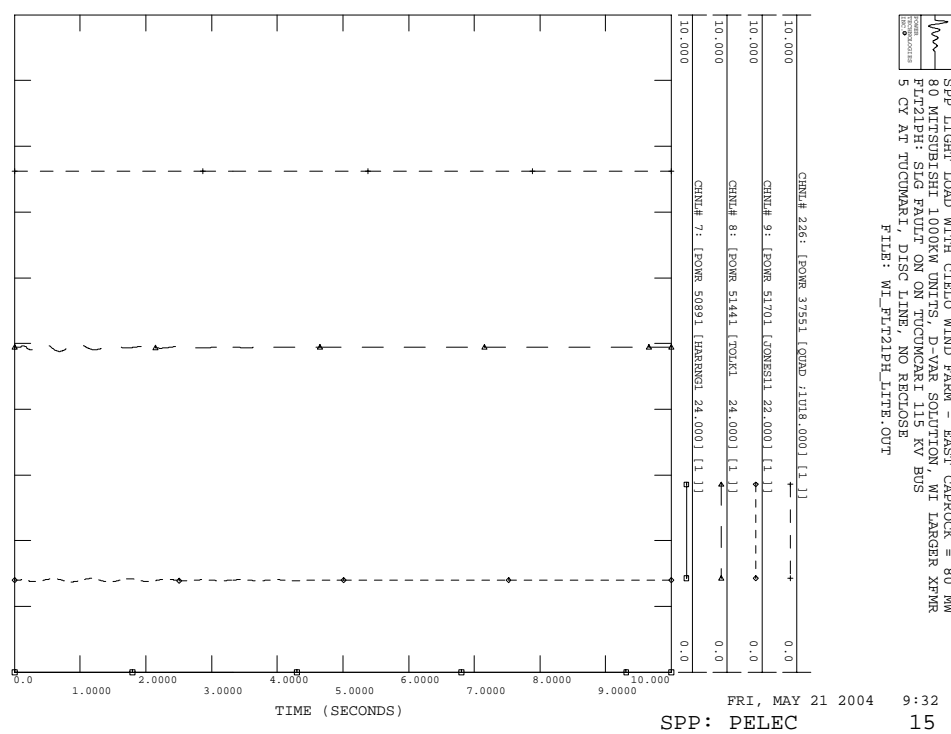
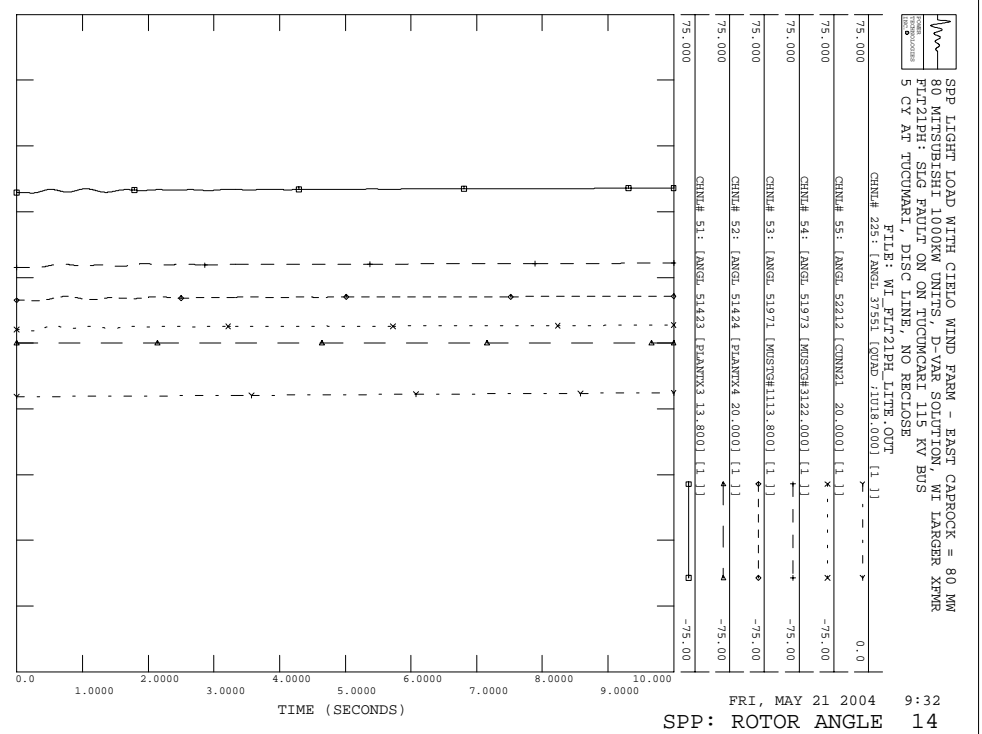
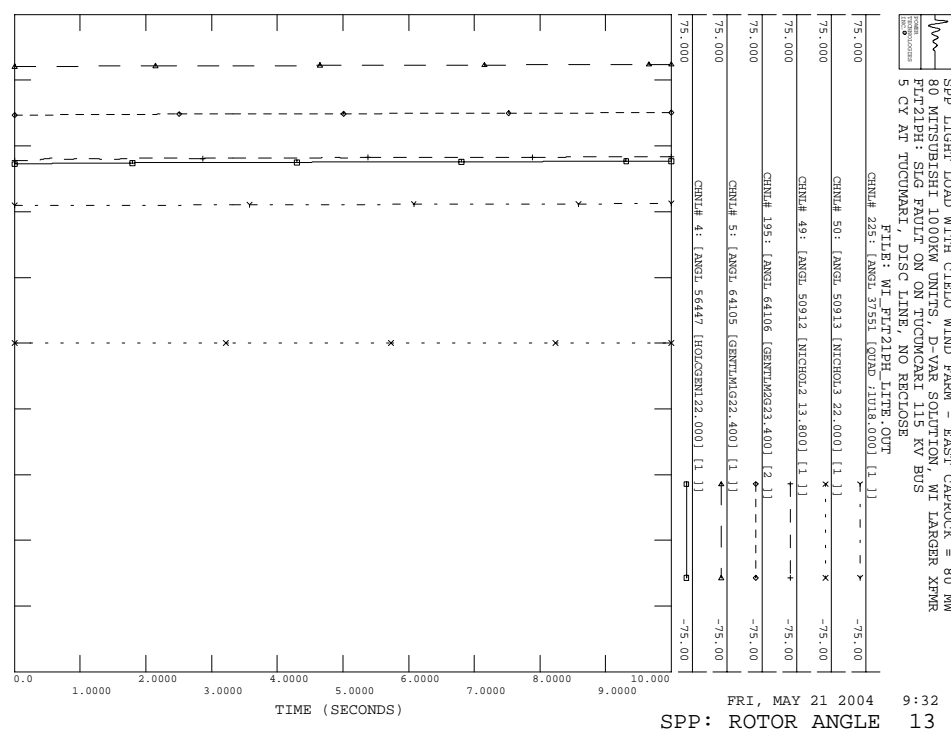
FRI, MAY 21 2004 9:32
 CIELO CABLE3 GEN54 5

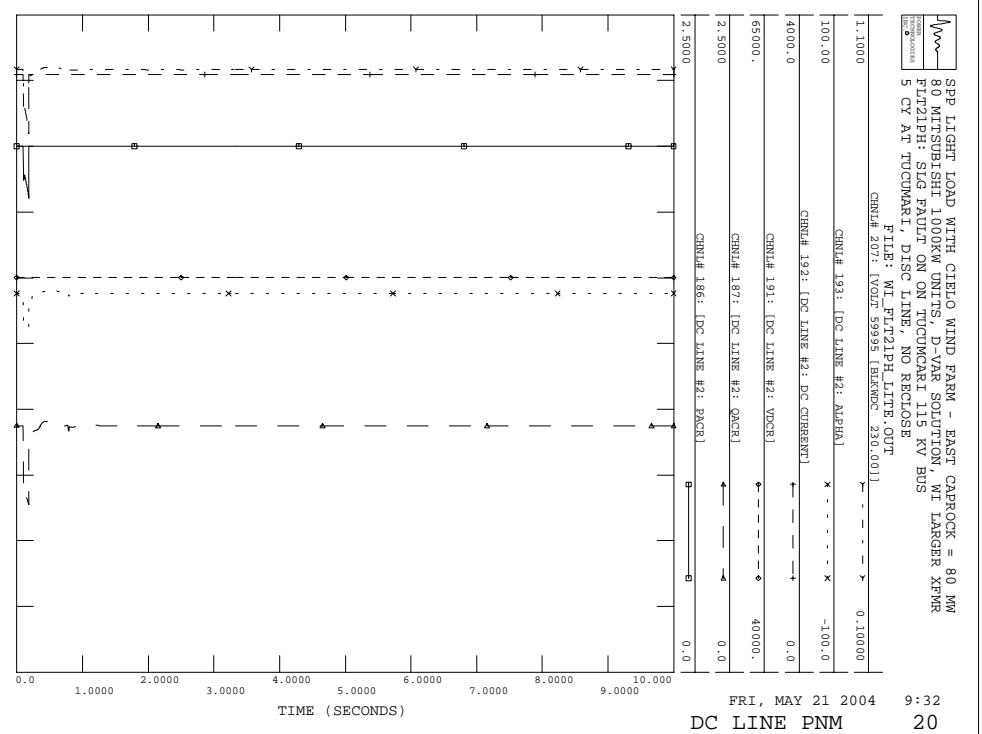
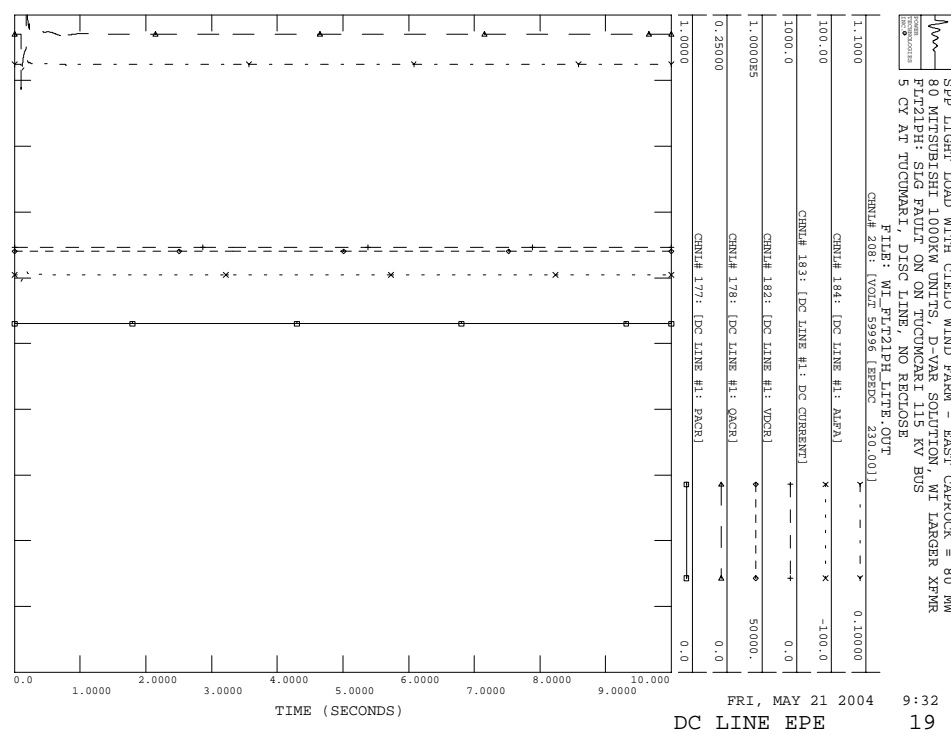
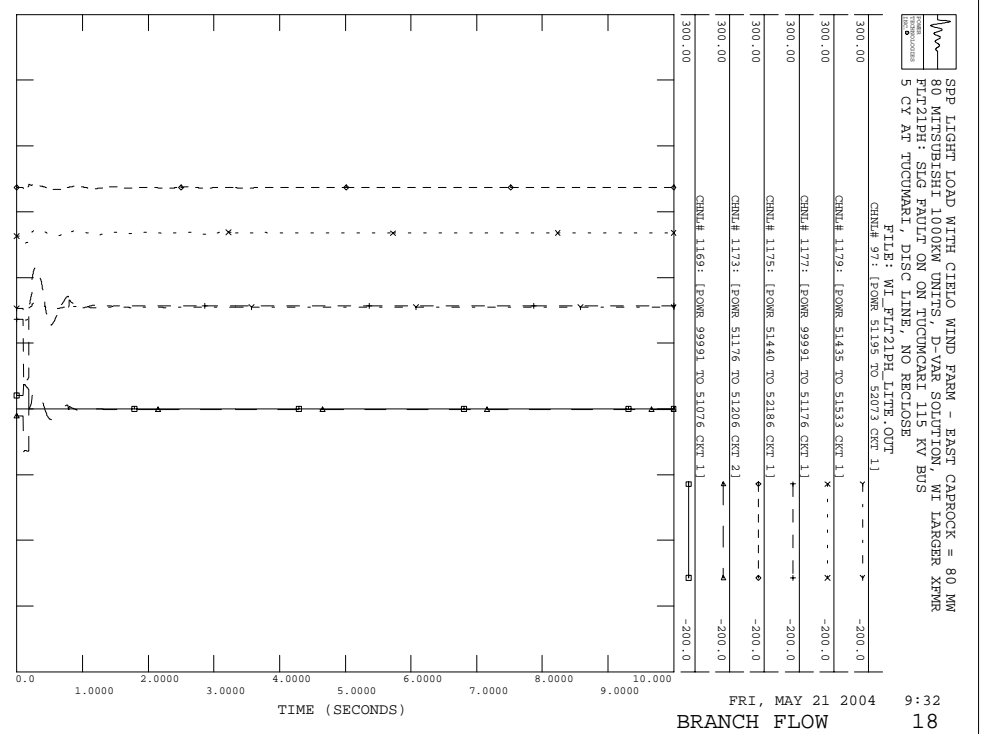
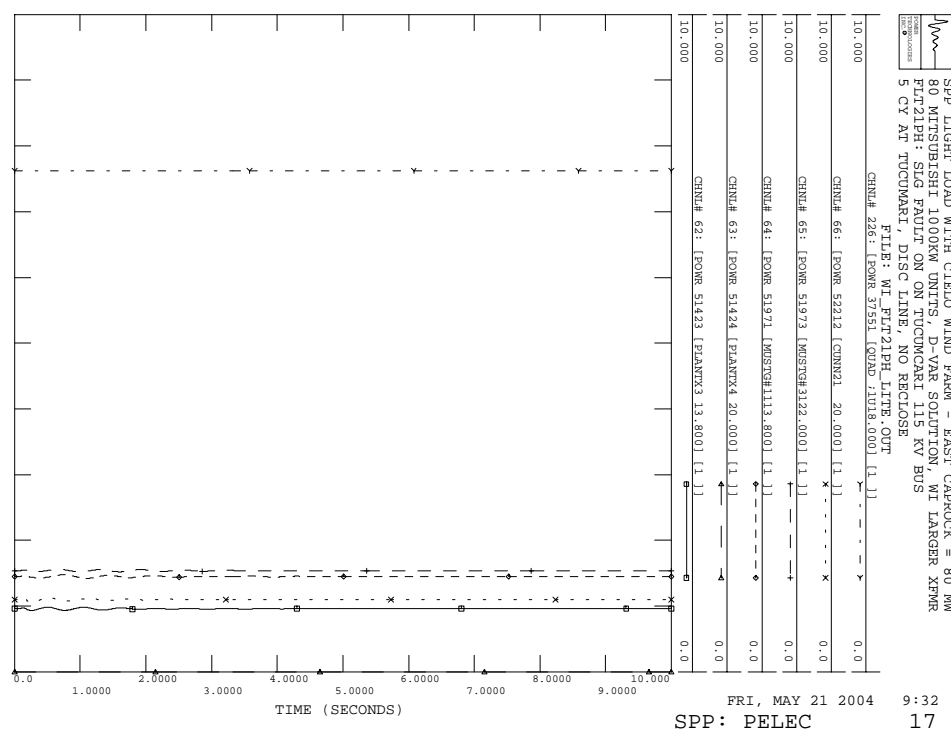
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE
 FILE: WI_FLT21PH_LITE.OUT



FRI, MAY 21 2004 9:32
 CIELO VOLTAGE 7



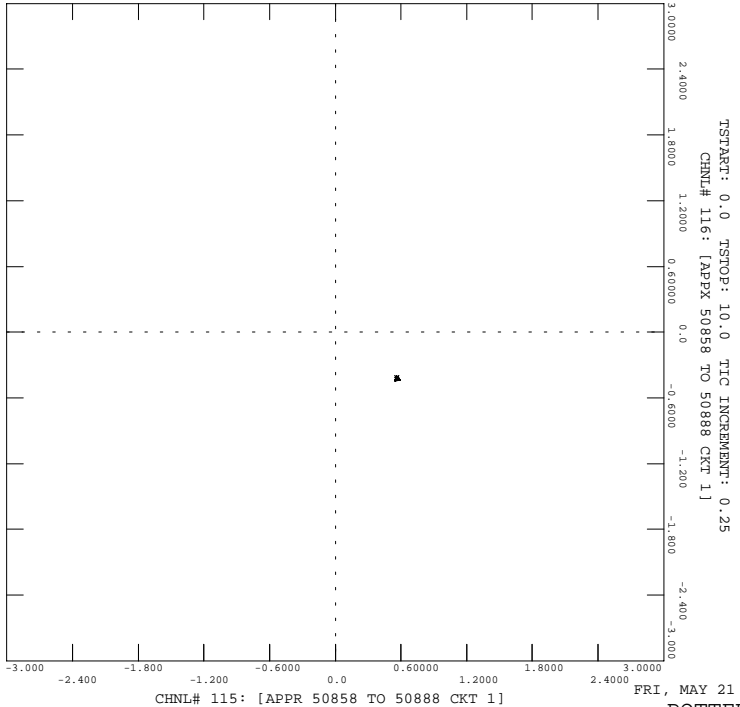






SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE

FILE: WI_FLT21PH_LITE.OUT

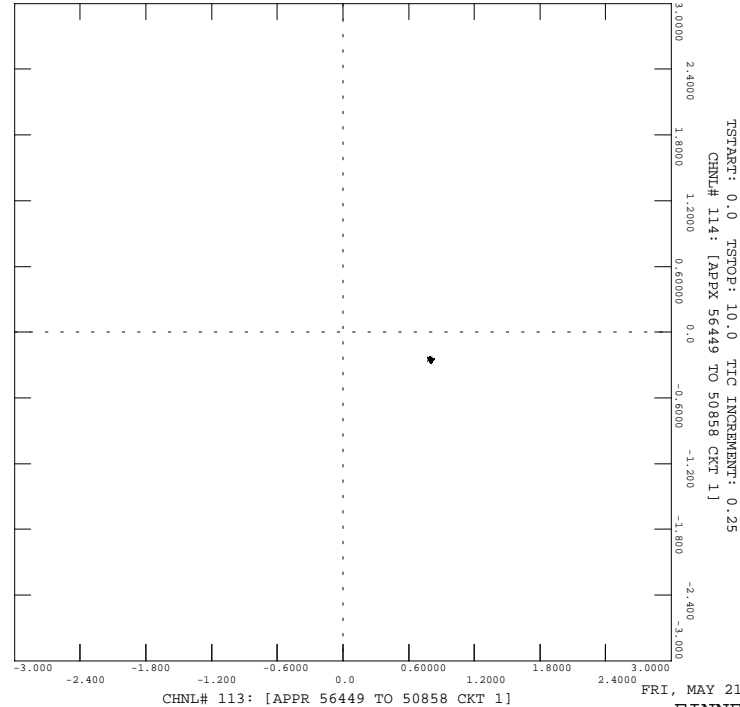


FRI, MAY 21 2004 9:33
 CHNL# 115: [APPR 50858 TO 50888 CKT 1] POTTER-FINNEY 22



SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE

FILE: WI_FLT21PH_LITE.OUT

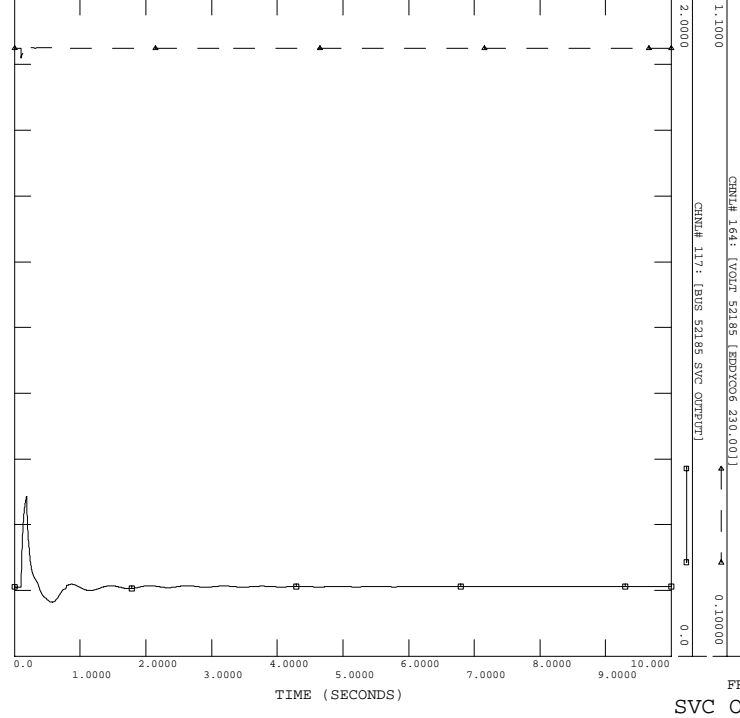


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 CHNL# 113: [APPR 56449 TO 50858 CKT 1] FINNEY-HOLCOMB 21




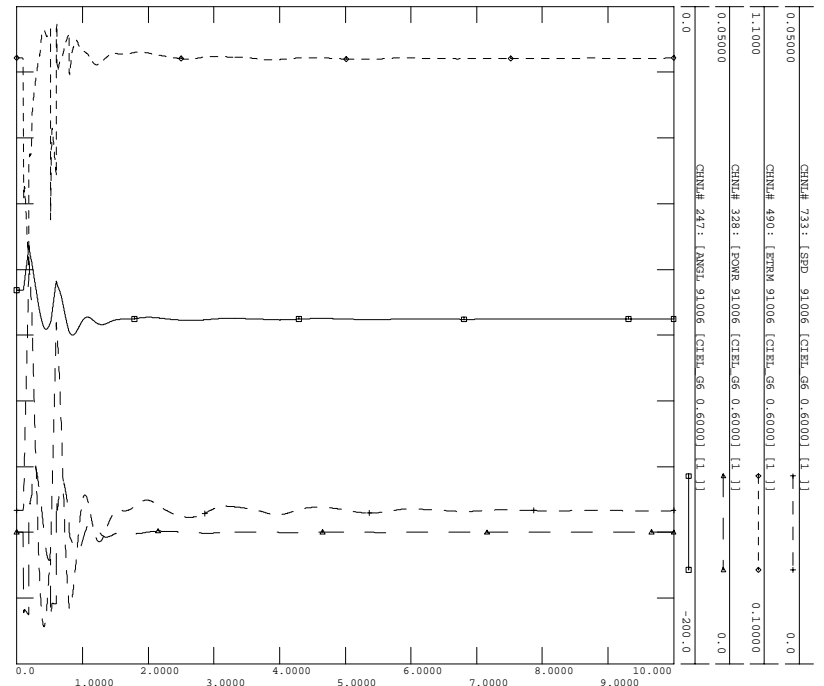
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT21PH: SLG FAULT ON ON TUCUMCARI 115 KV BUS
 5 CY AT TUCUMARI, DISC LINE, NO RECLOSE

FILE: WI_FLT21PH_LITE.OUT




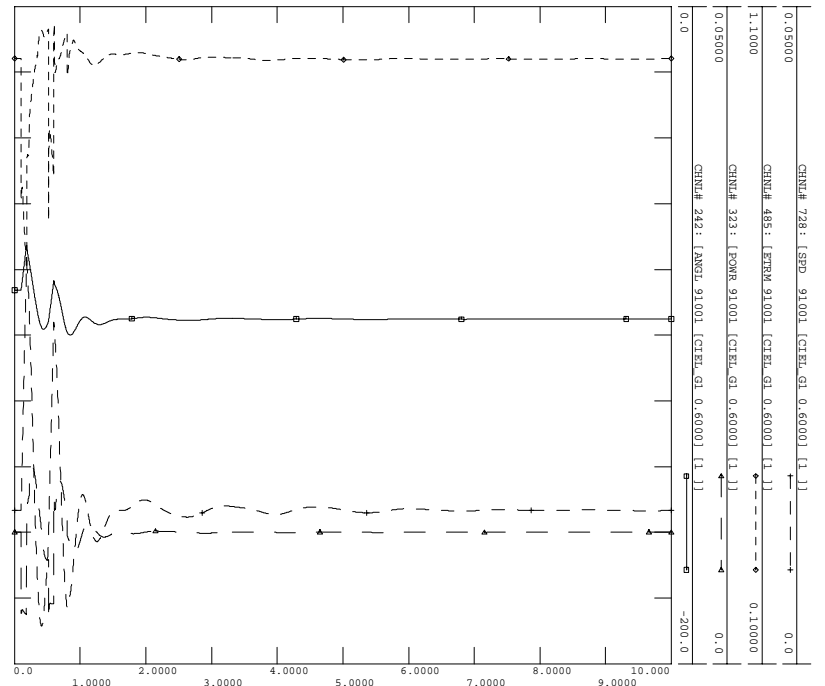
FRI, MAY 21 2004 9:33
 SVC OUTPUT 23


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH_LITE.OUT




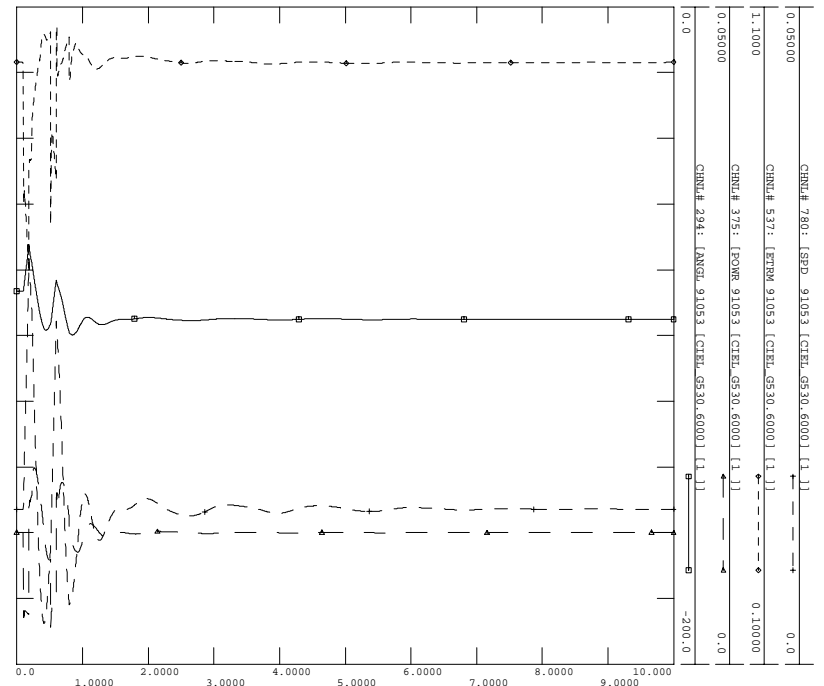
FRI, MAY 21 2004 9:33
CIELO CABLE1 GEN6 2


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH_LITE.OUT




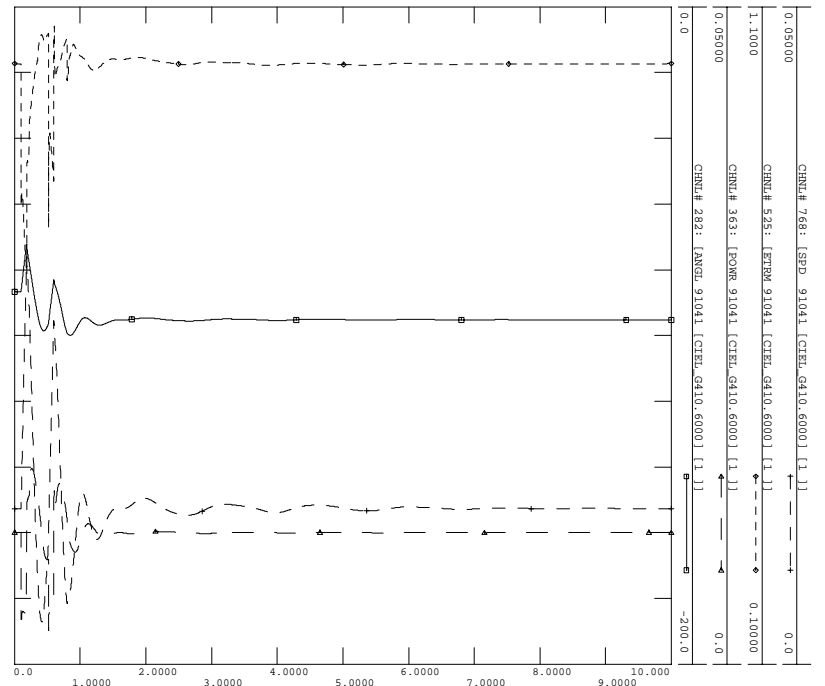
FRI, MAY 21 2004 9:33
CIELO CABLE1 GEN1 1


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH_LITE.OUT



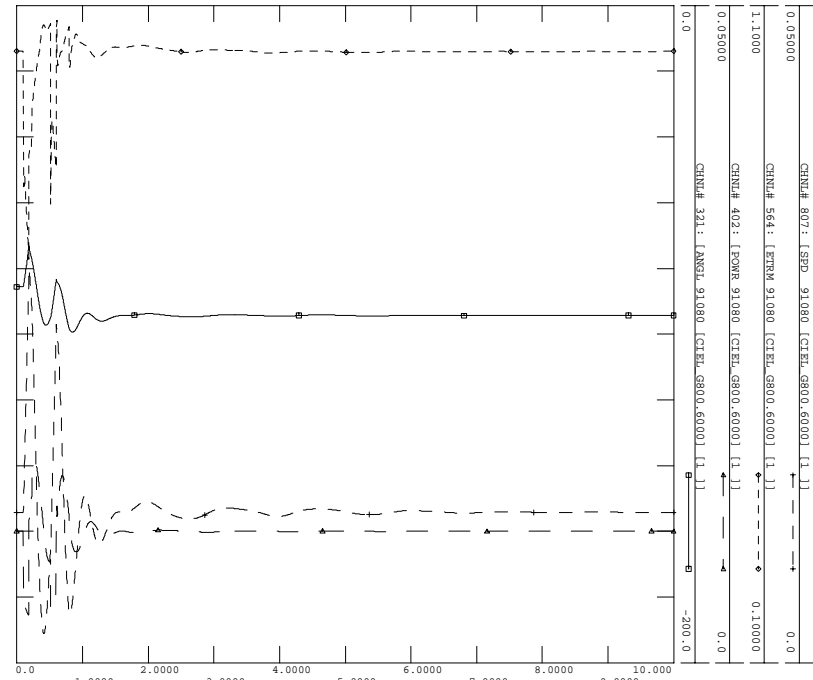
FRI, MAY 21 2004 9:33
CIELO CABLE2 GEN53 4


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH_LITE.OUT



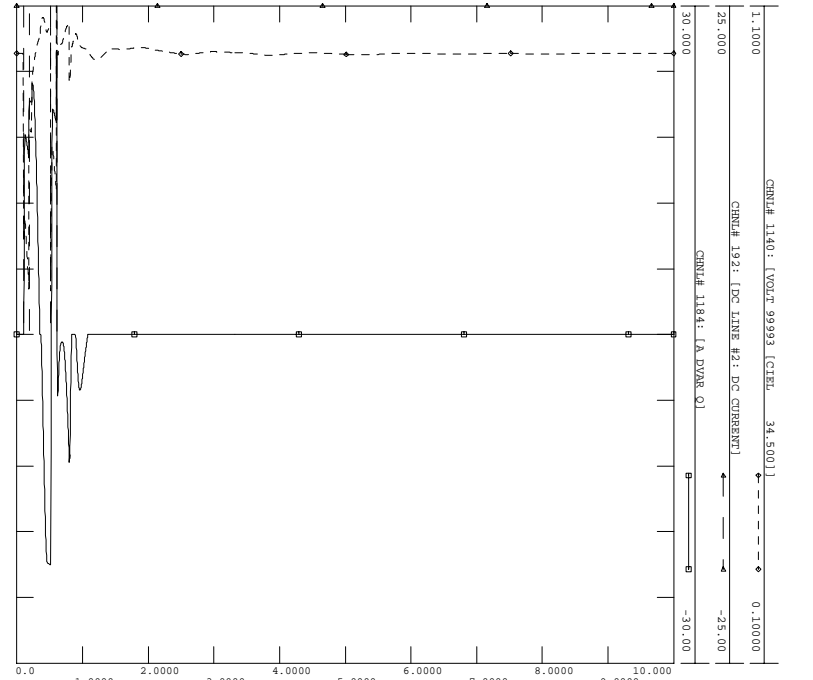
FRI, MAY 21 2004 9:33
CIELO CABLE2 GEN41 3

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH_LITE.OUT



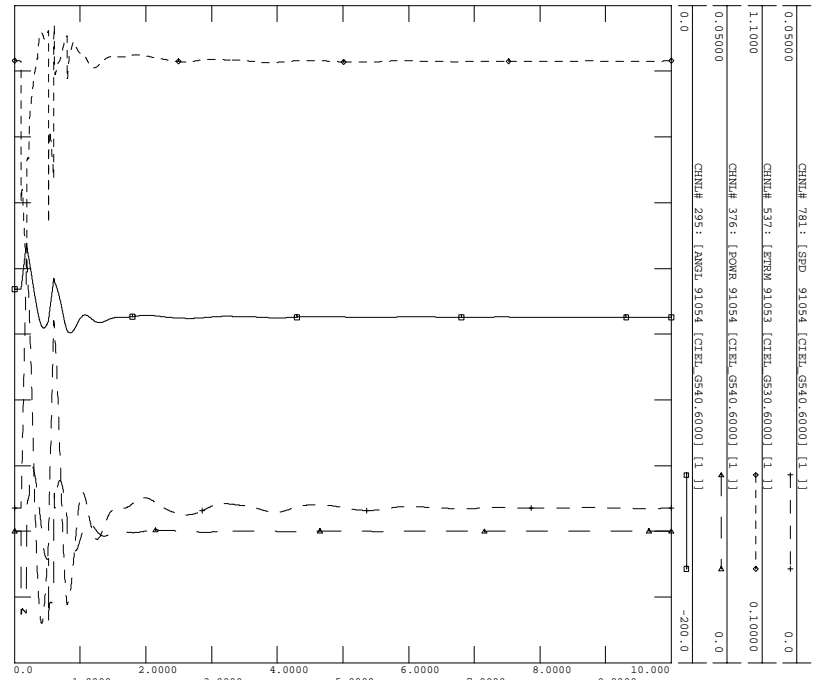
FRI, MAY 21 2004 9:33
 CIELO CABLE3 GEN80 6

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
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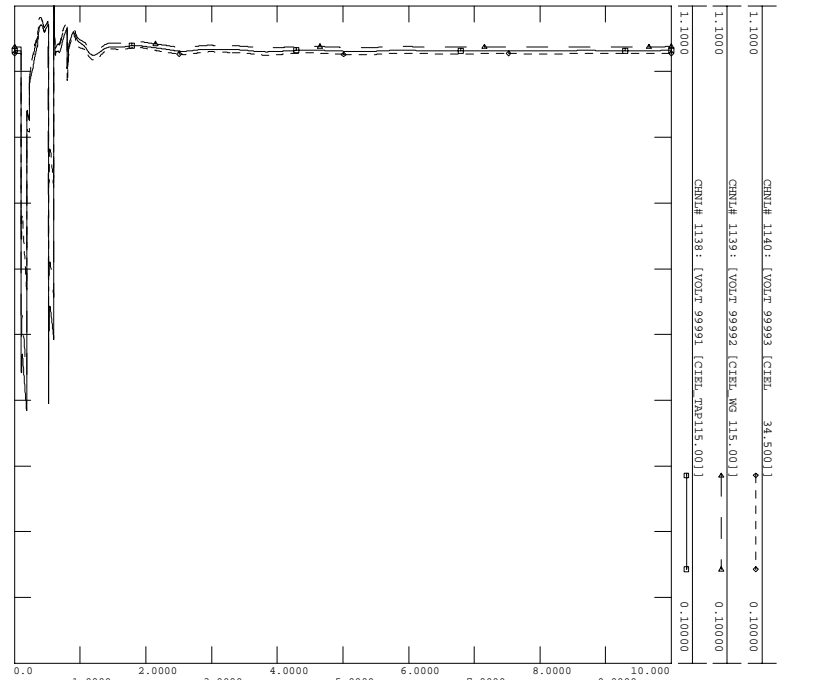
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 DVAR OUTPUT 8

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
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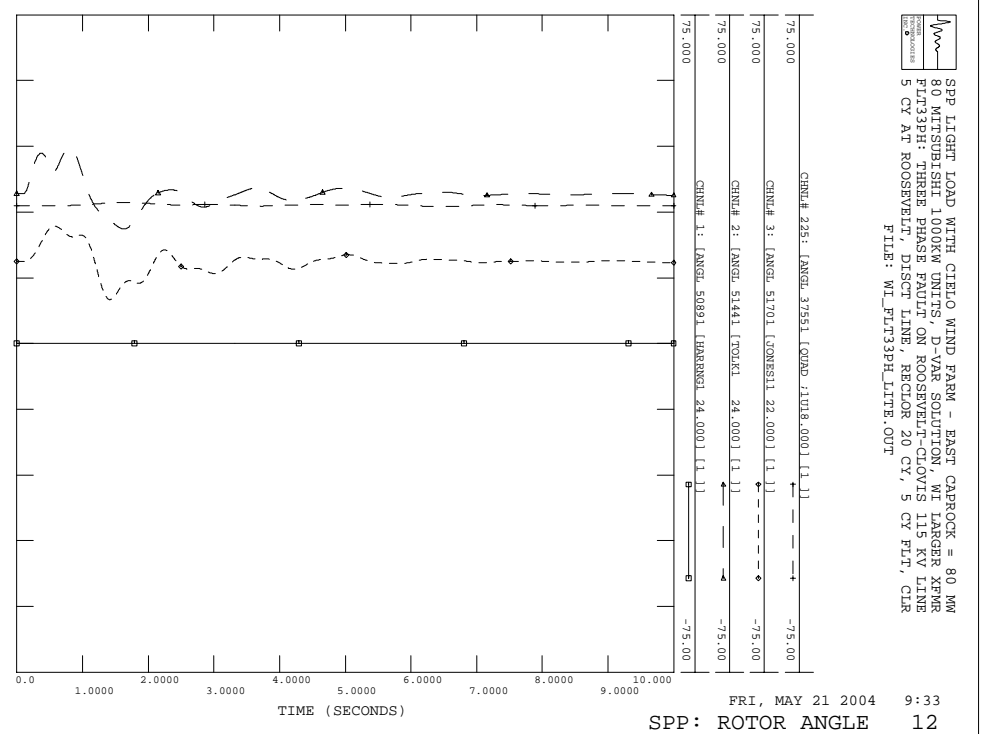
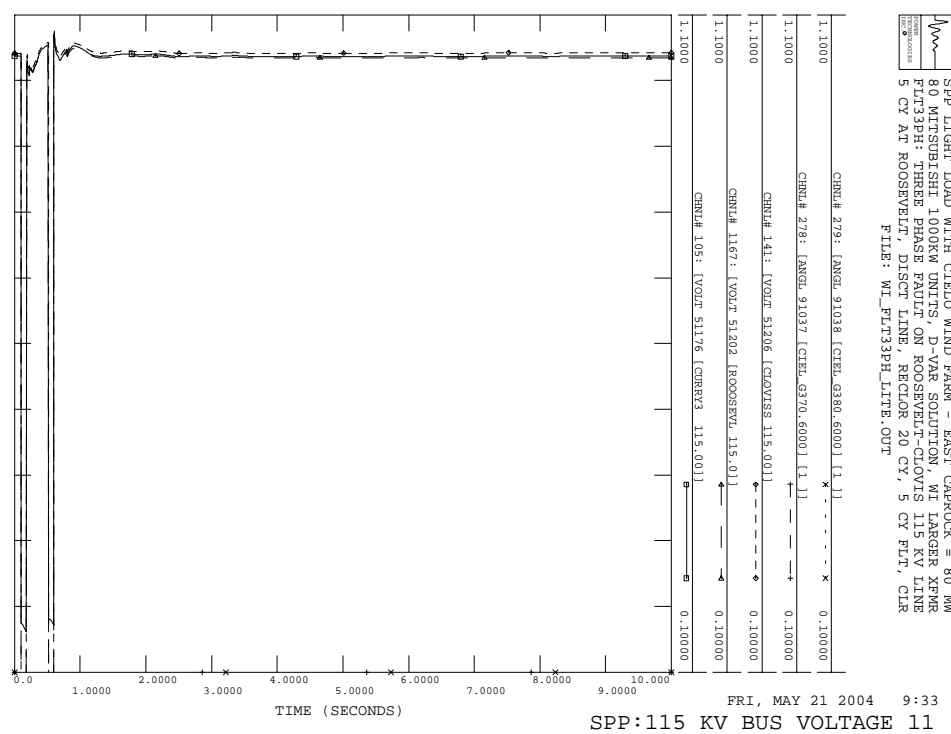
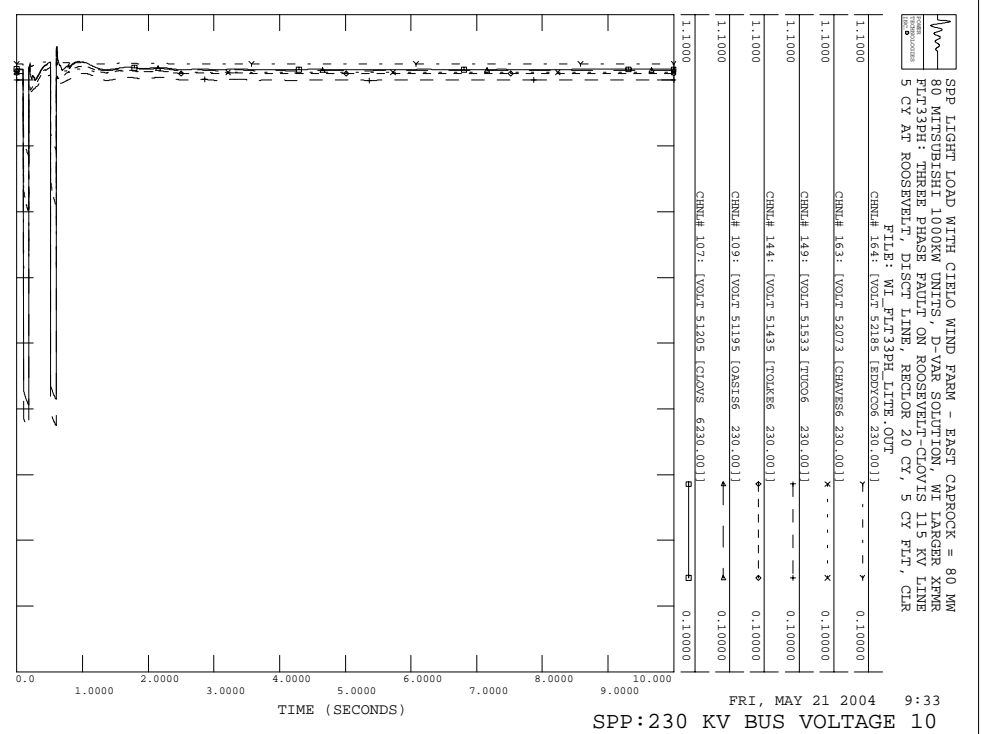
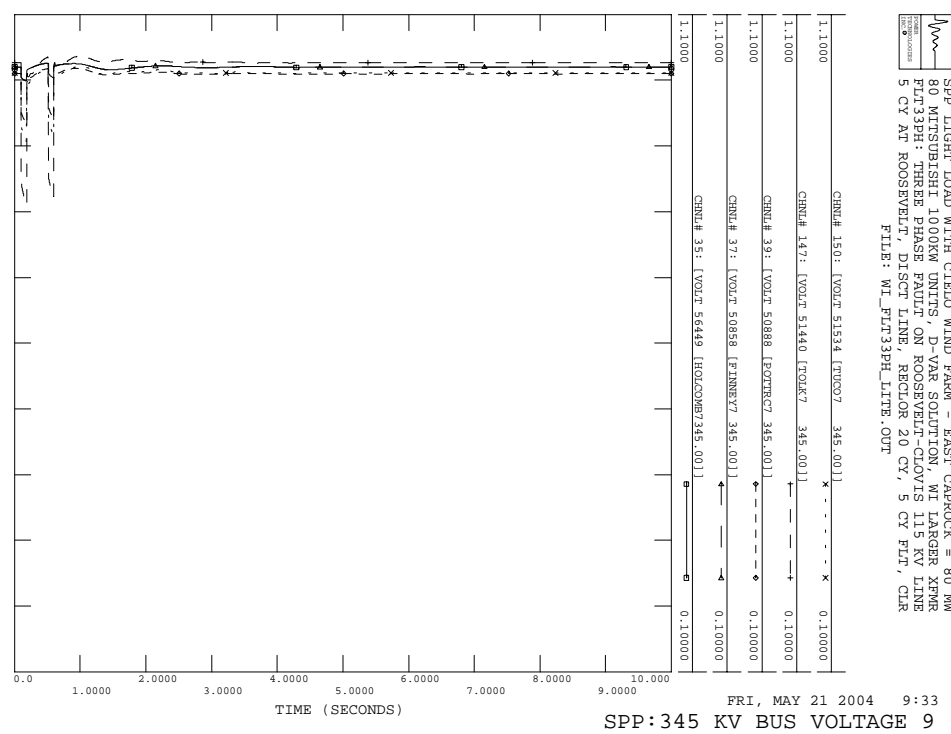


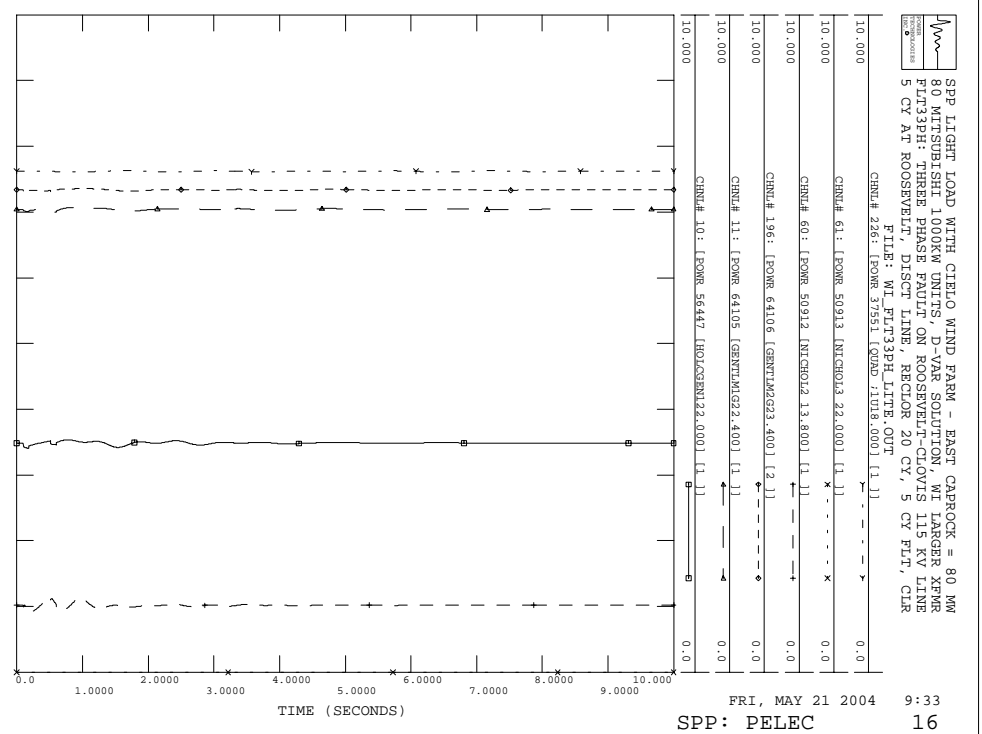
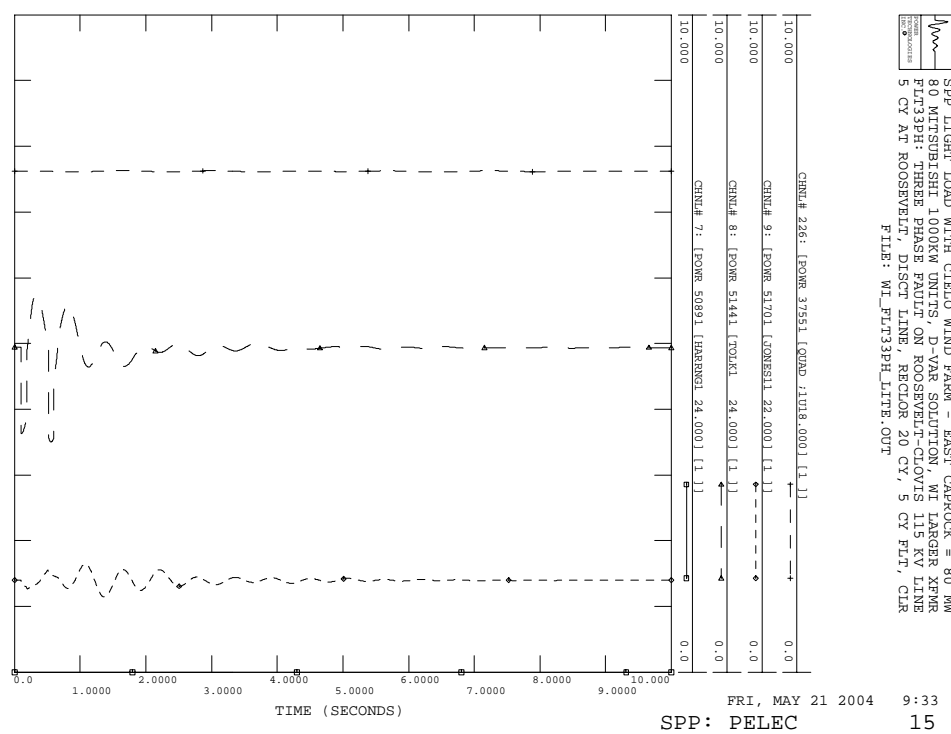
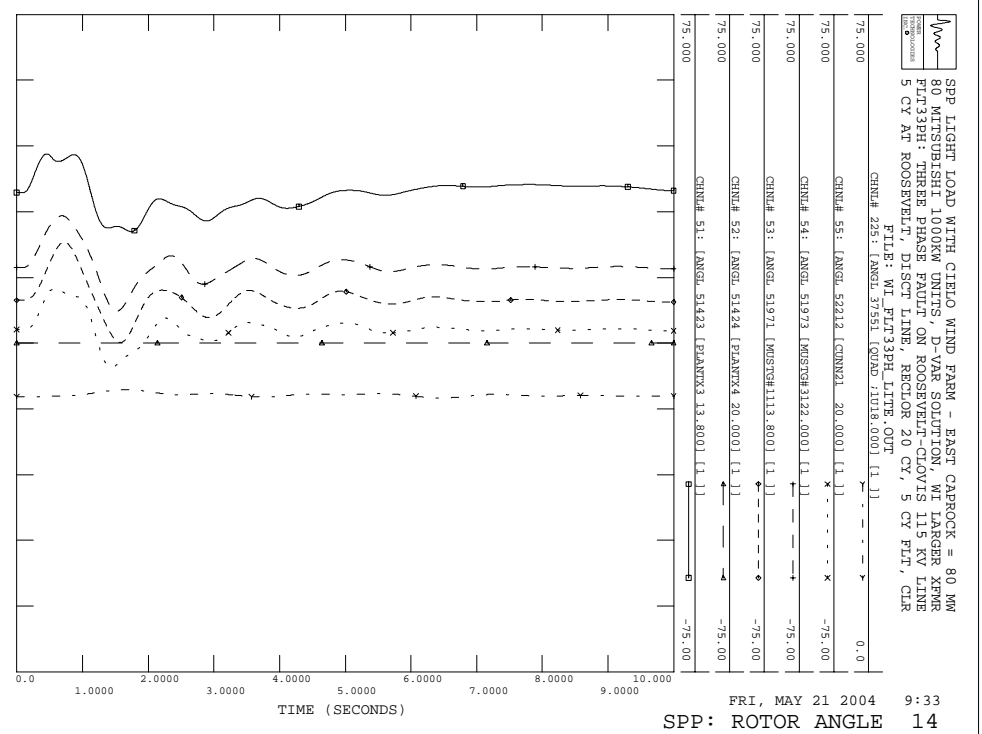
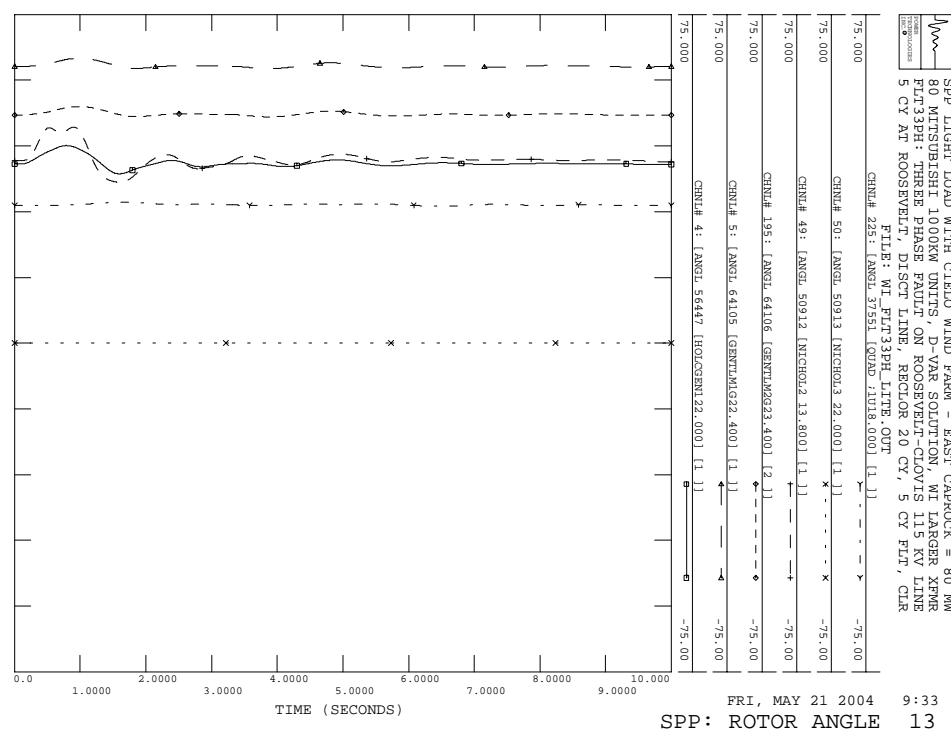
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 CIELO CABLE3 GEN54 5

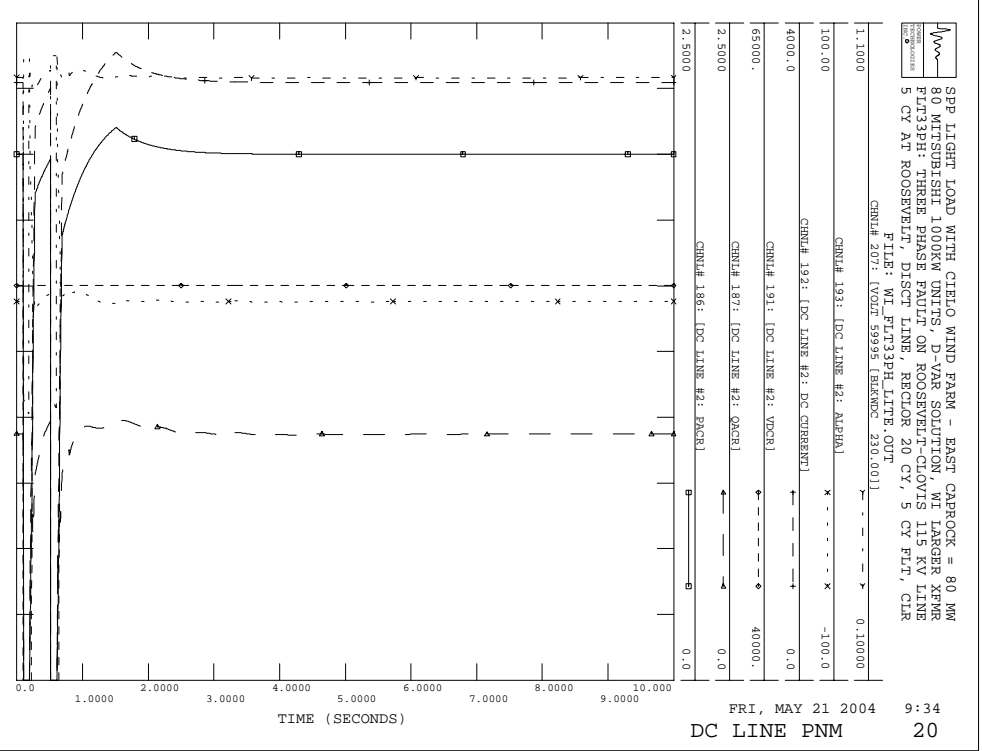
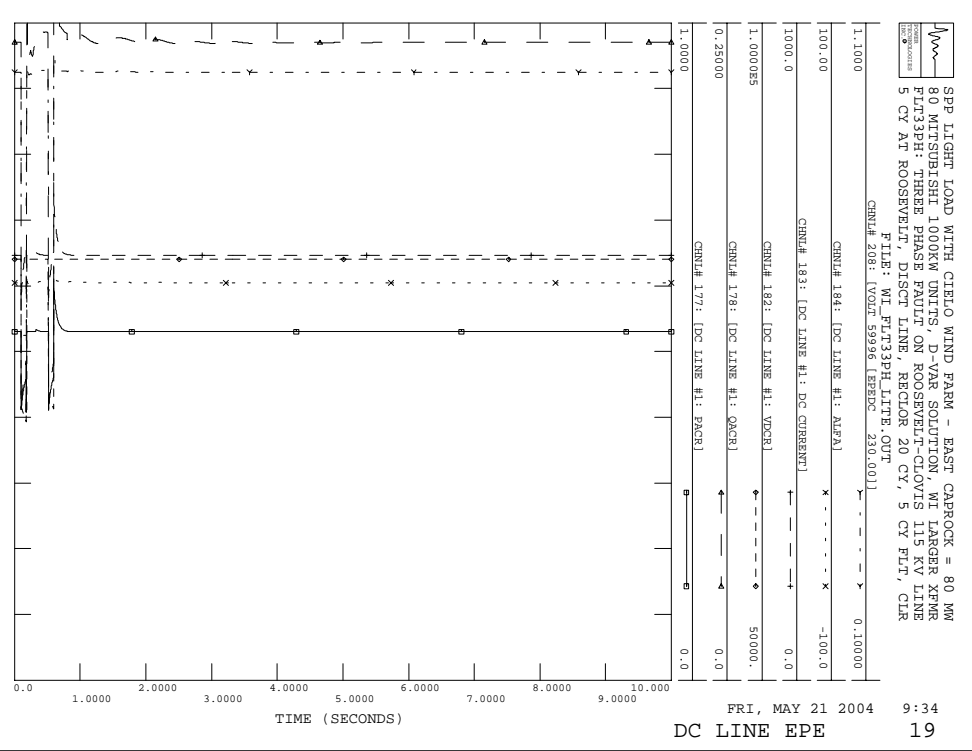
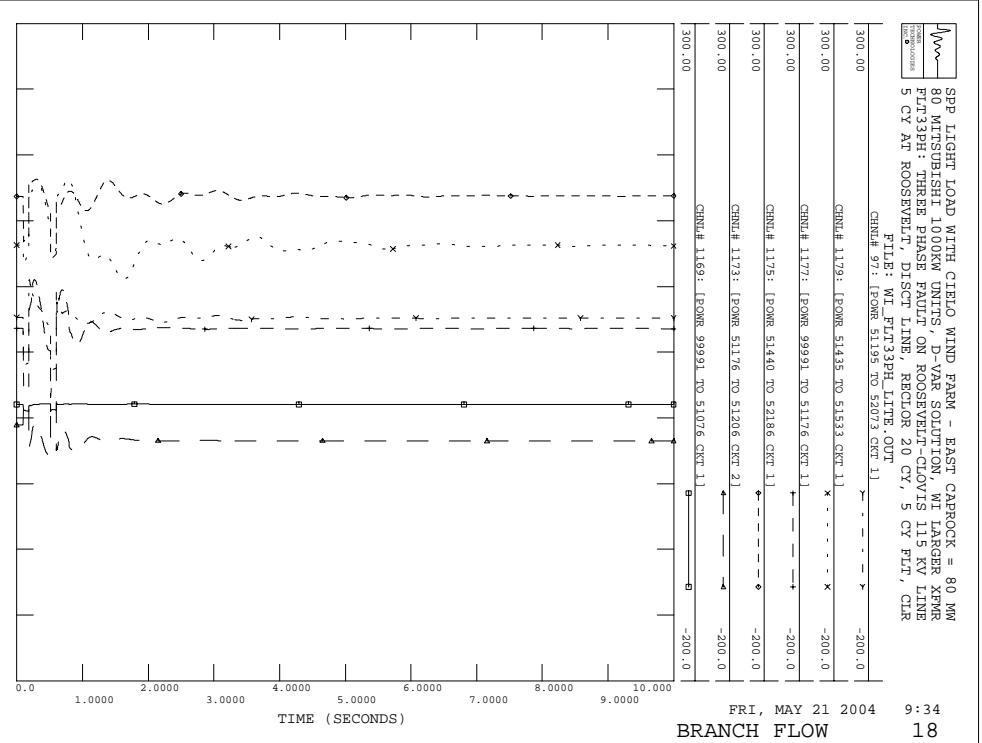
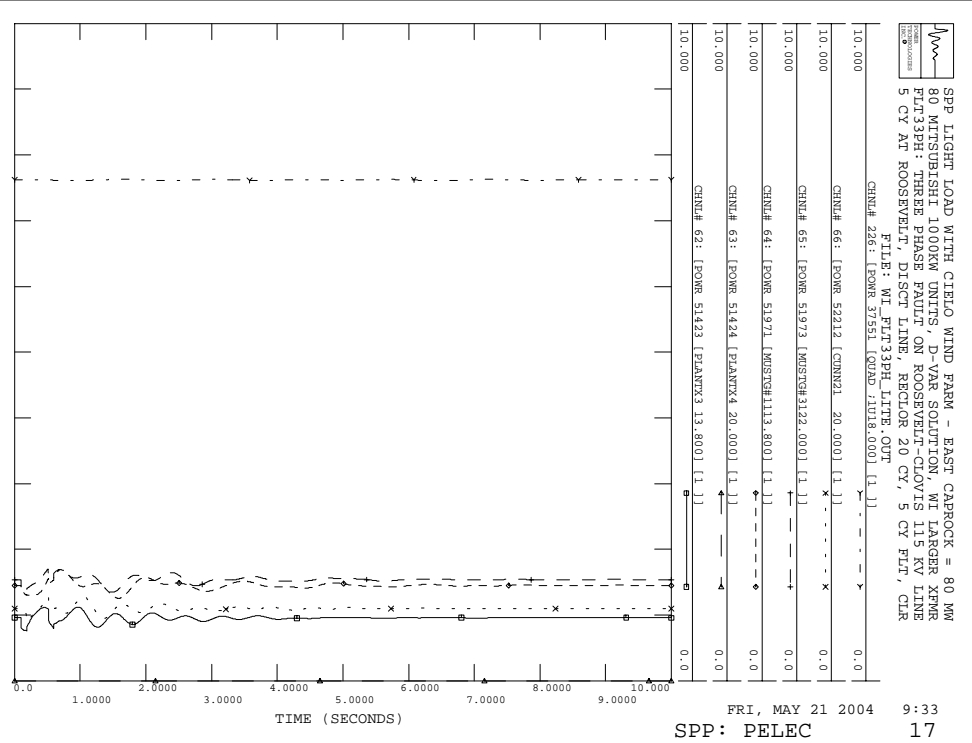
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH: THREE PHASE FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT33PH_LITE.OUT



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 CIELO VOLTAGE 7

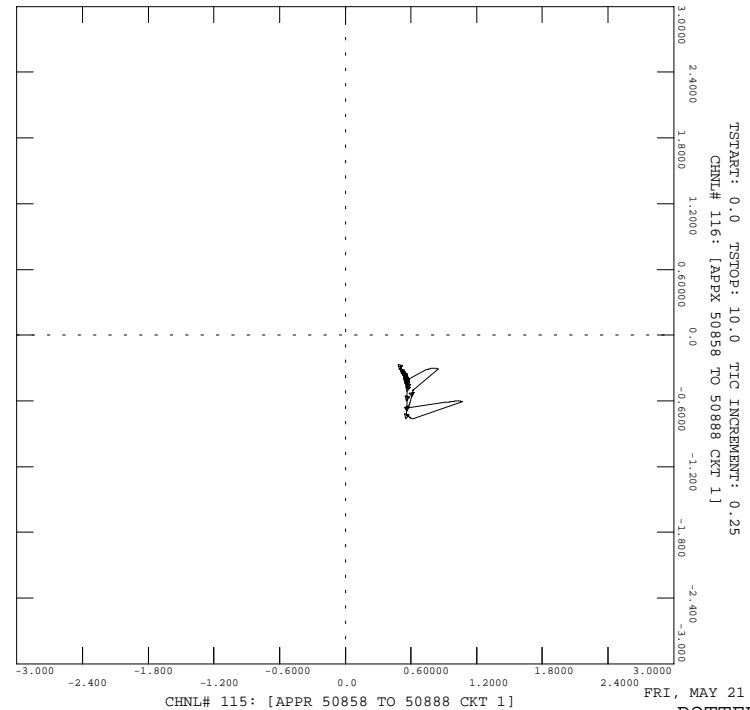






SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH - THREE PHASE FAULT ON ROOSEVELT-GLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

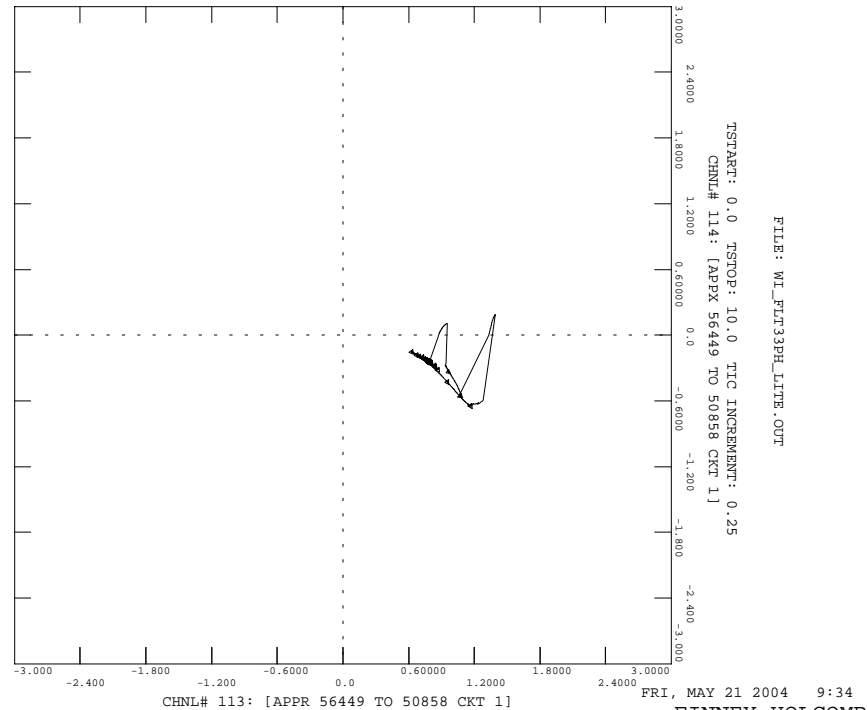
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22

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH - THREE PHASE FAULT ON ROOSEVELT-GLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

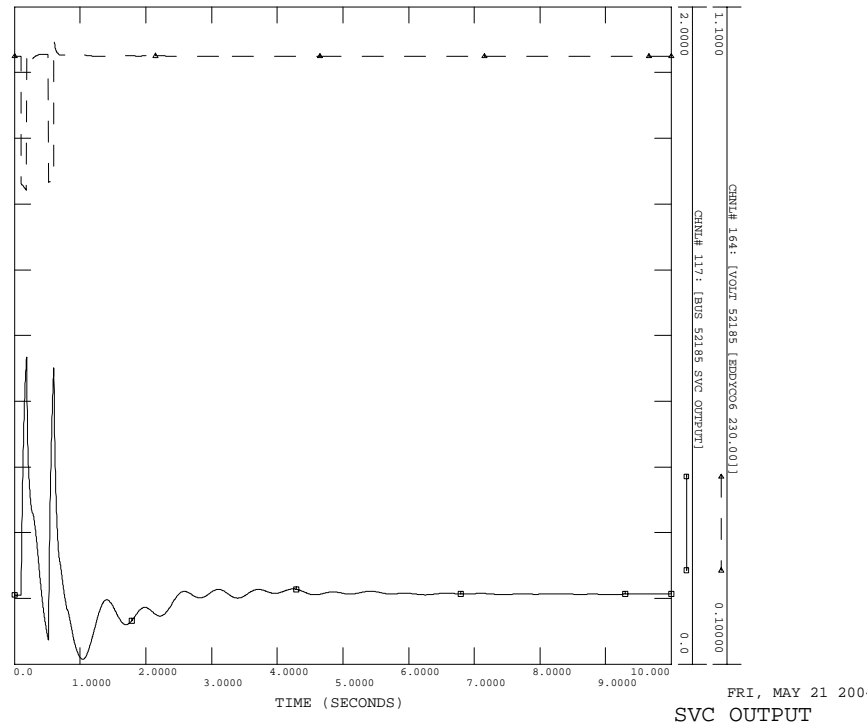
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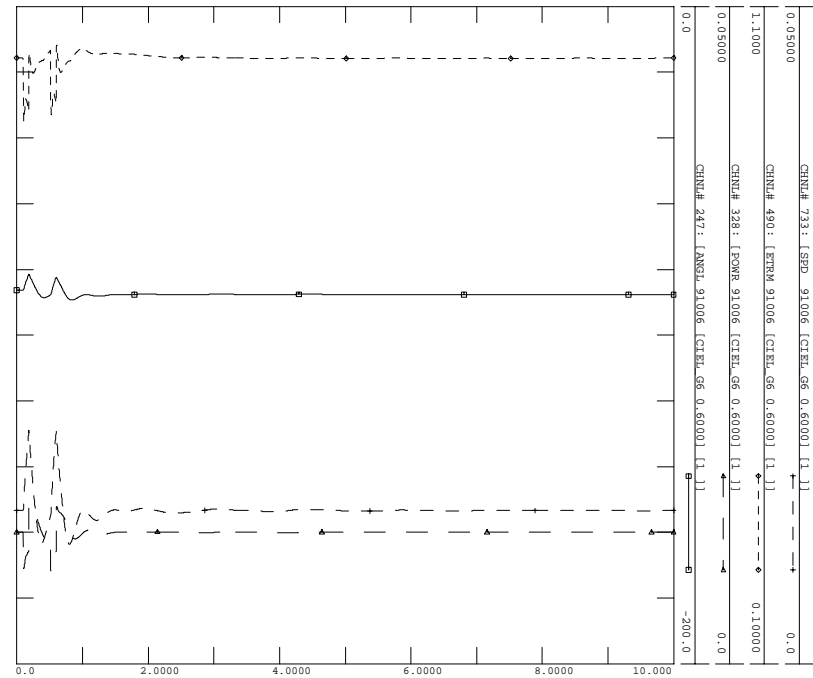
SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT33PH - THREE PHASE FAULT ON ROOSEVELT-GLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

FILE: WI_FLT33PH_LITE.OUT



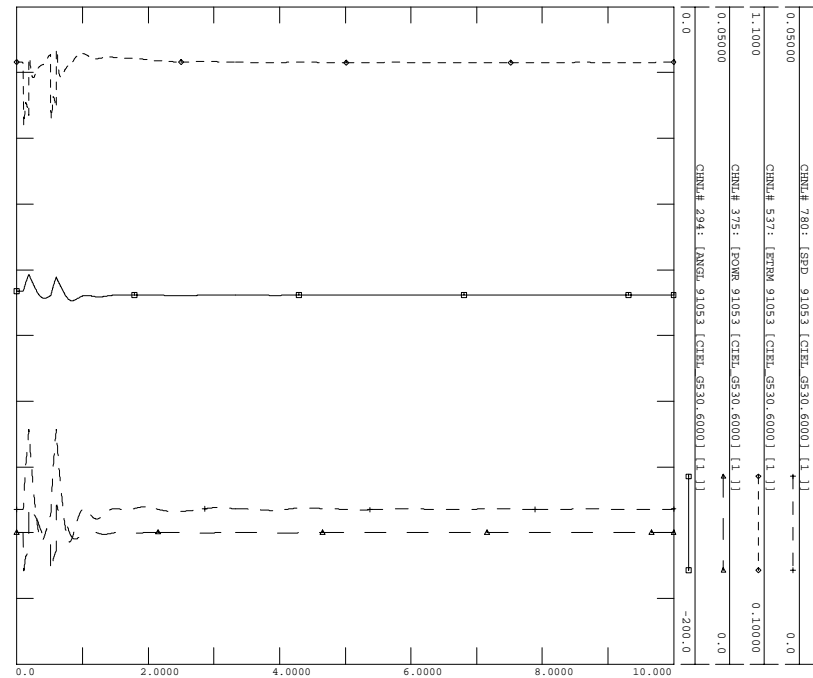
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SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH_LITE.OUT



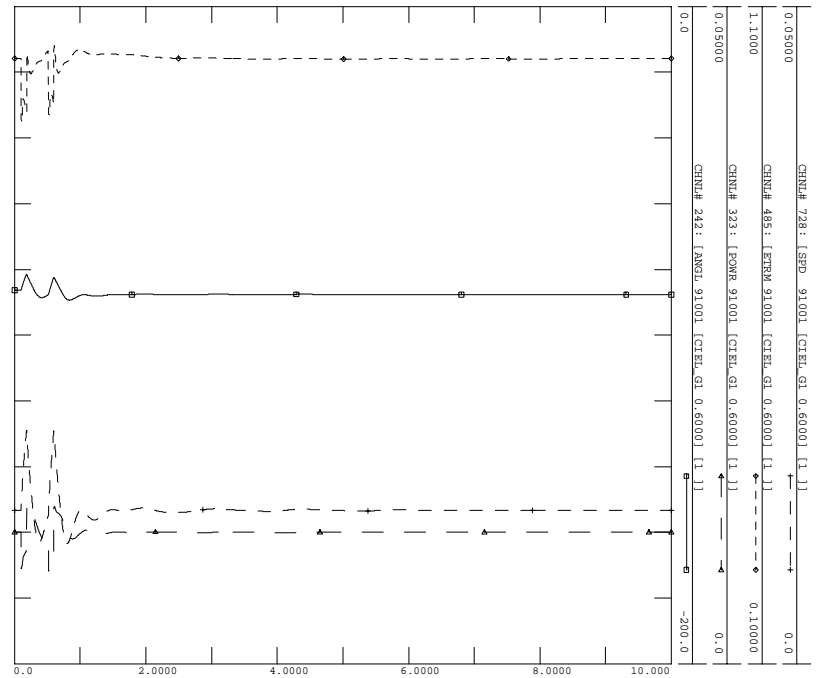
FRI, MAY 21 2004 9:33
 CIELO CABLE1 GEN6 2

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH_LITE.OUT



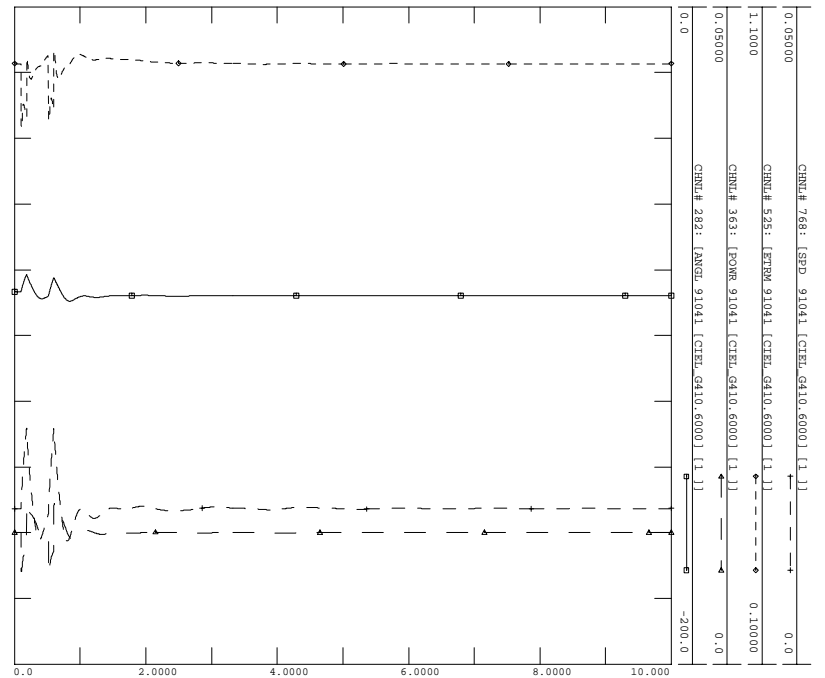
FRI, MAY 21 2004 9:33
 CIELO CABLE2 GEN53 4

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
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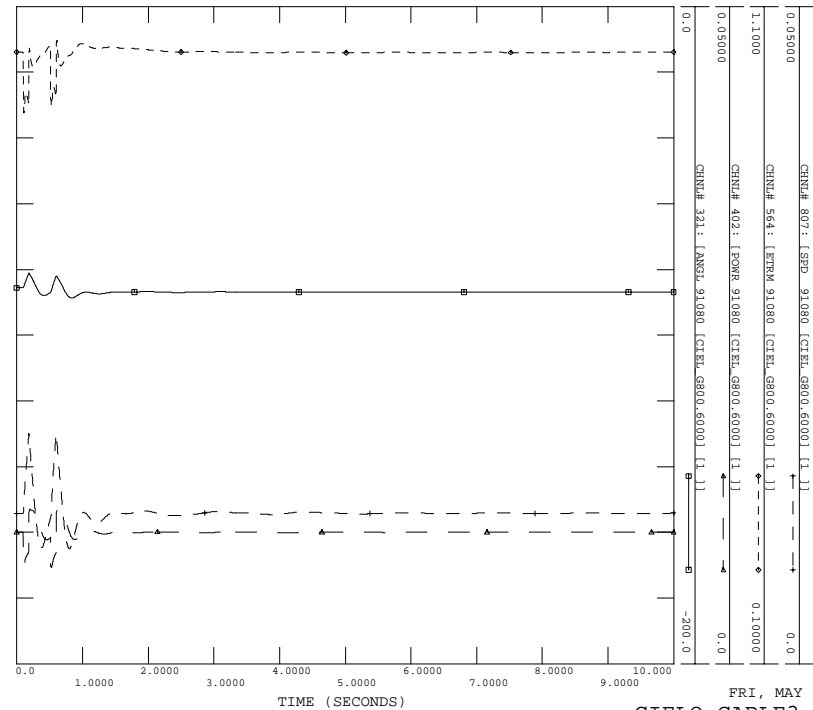
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 CIELO CABLE1 GEN1 1

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH_LITE.OUT

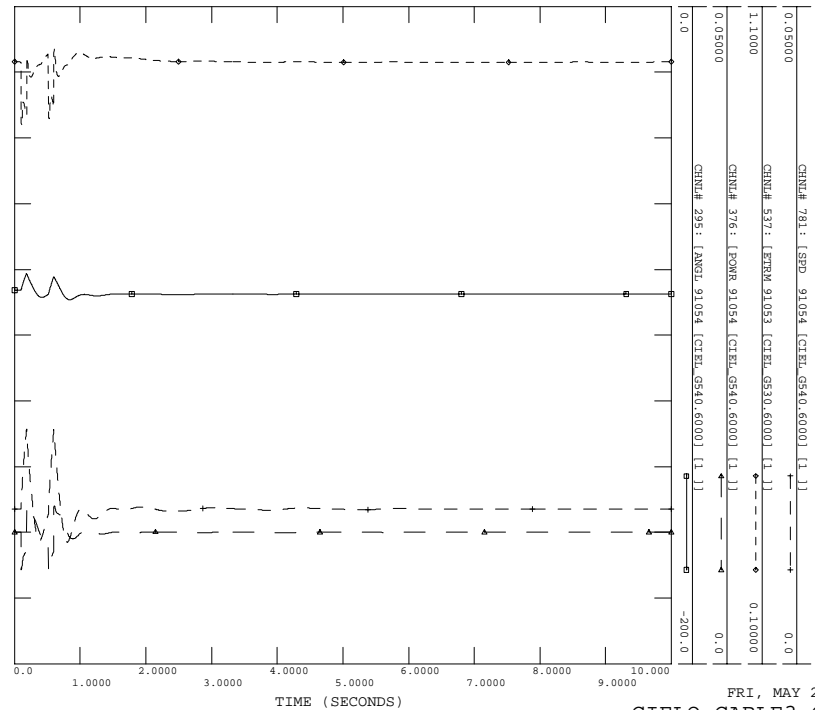


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 CIELO CABLE2 GEN41 3

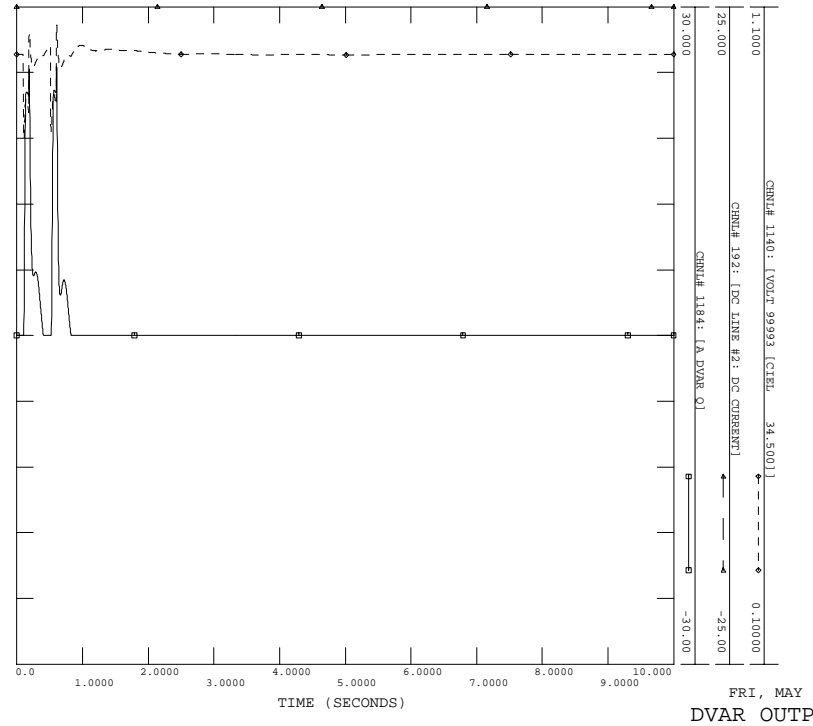
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISC LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH_LITE.OUT



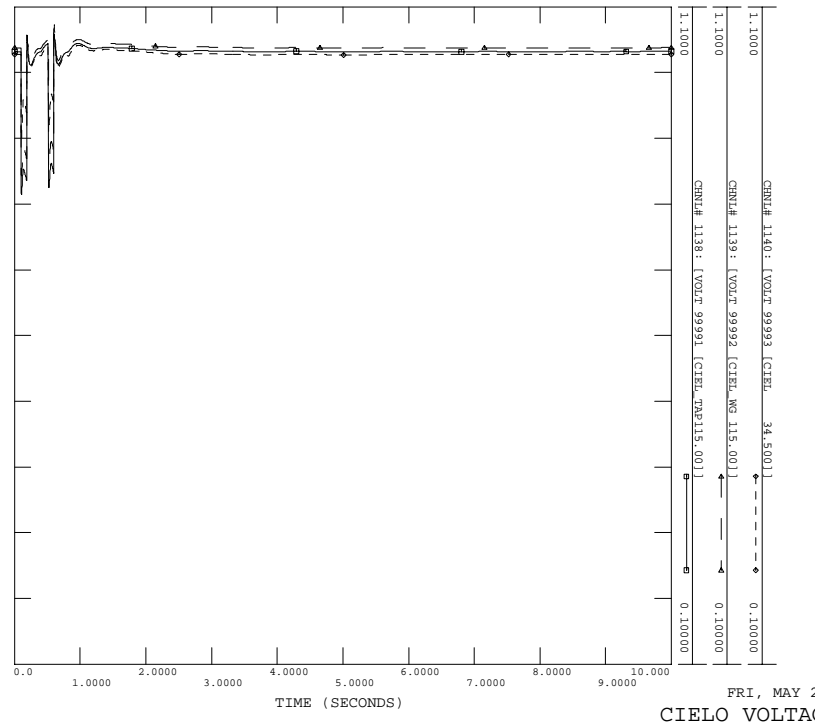
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISC LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH_LITE.OUT

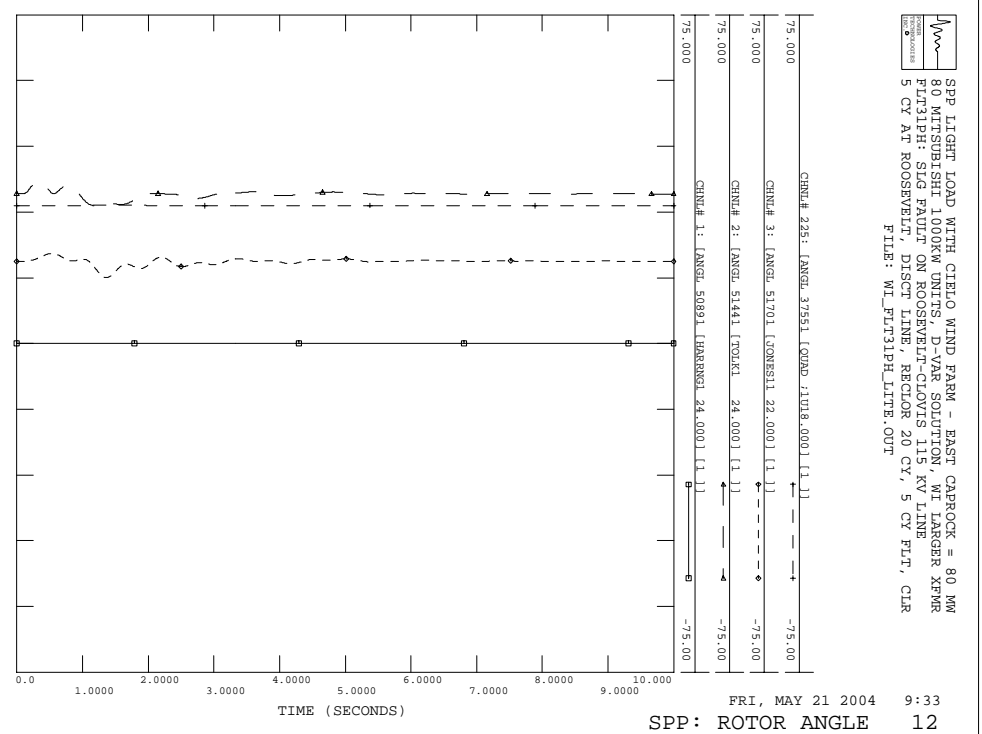
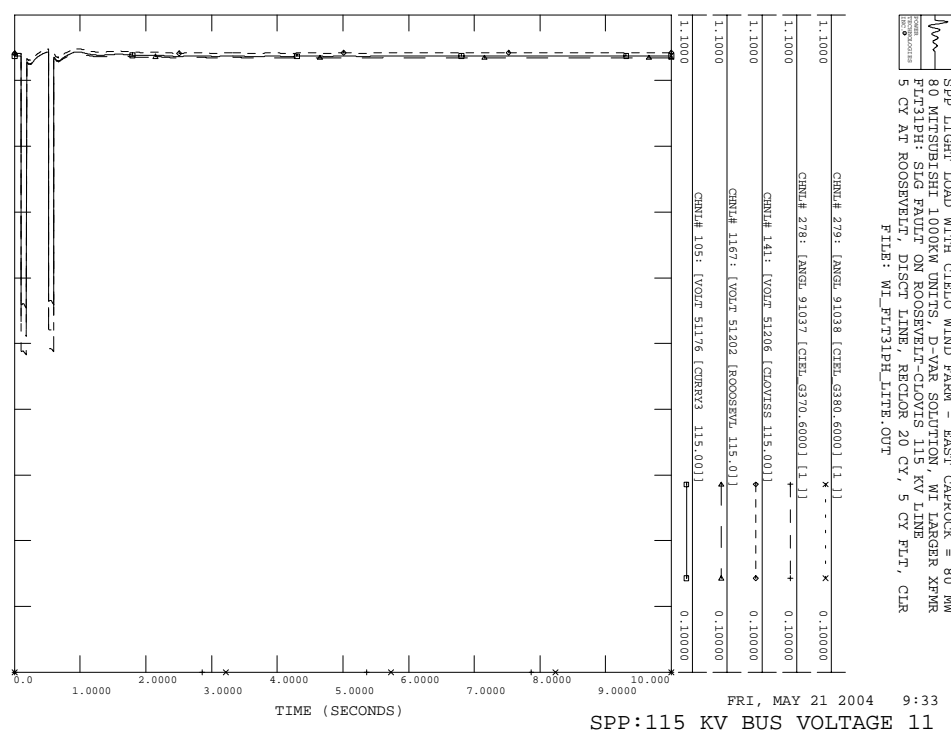
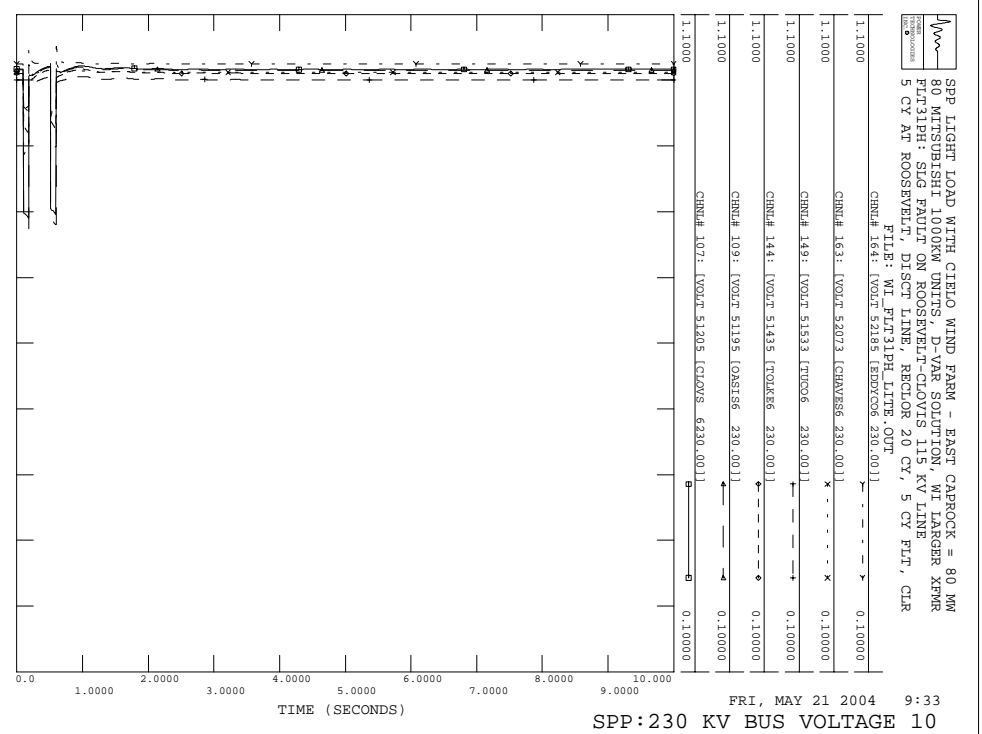
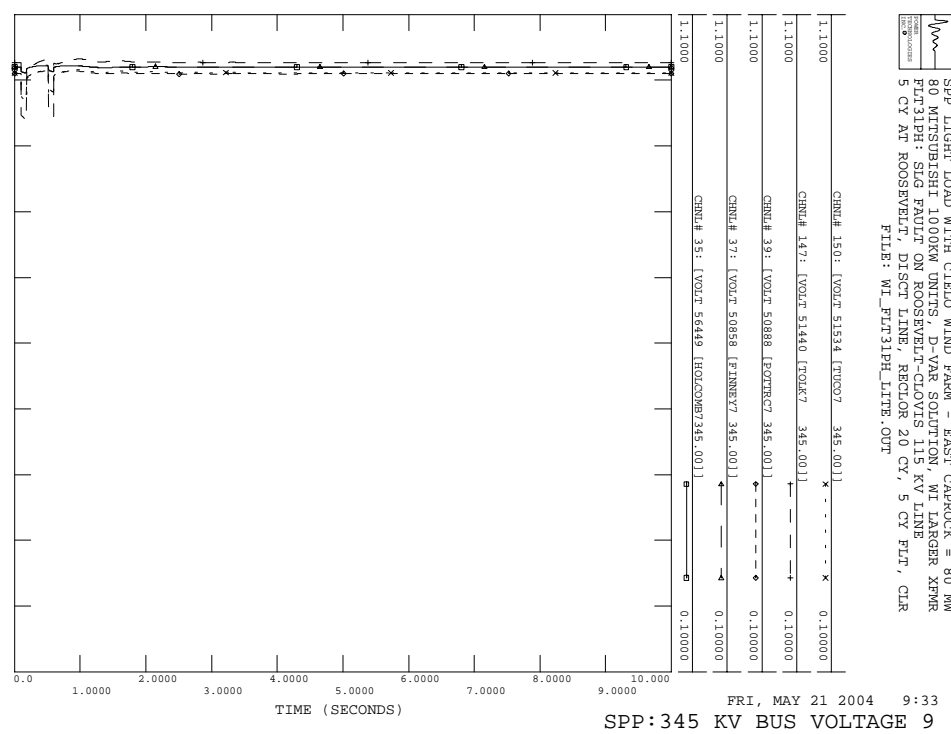


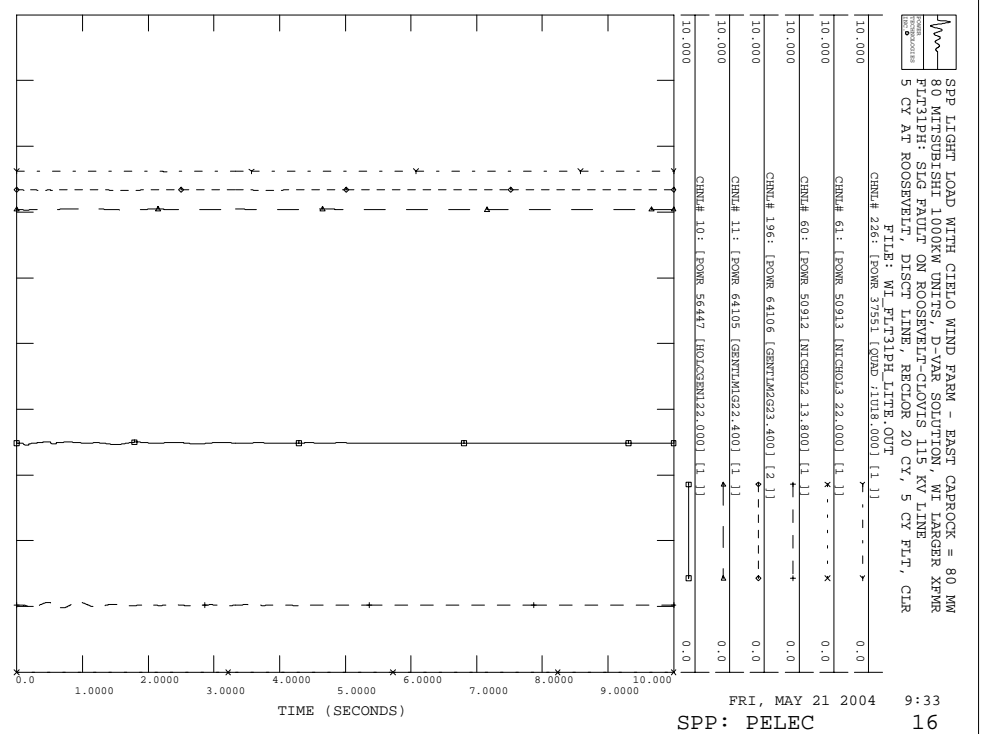
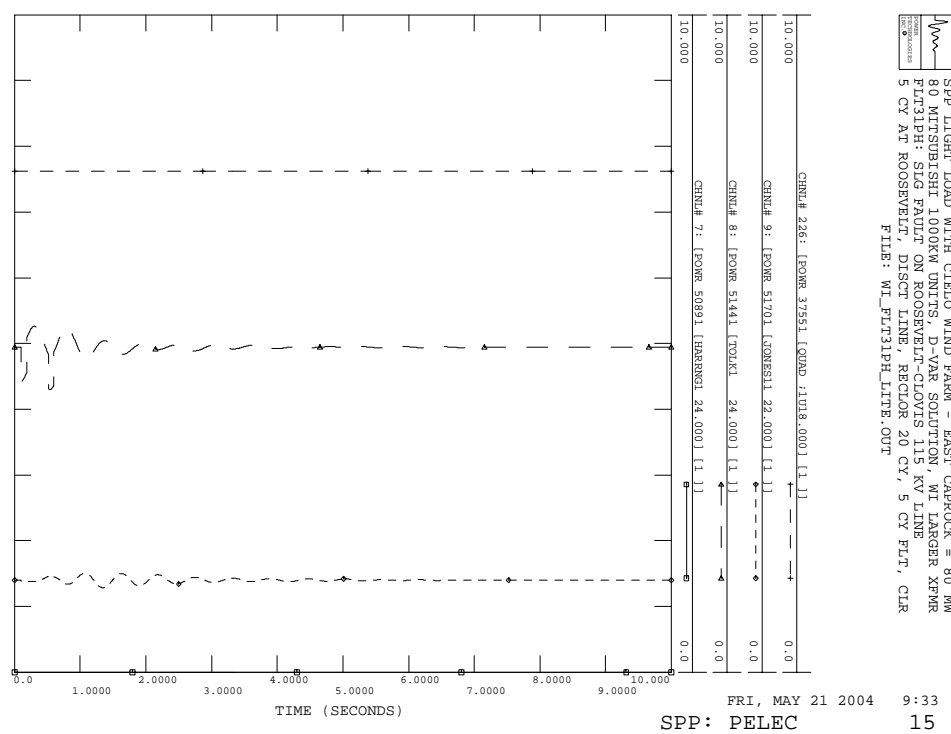
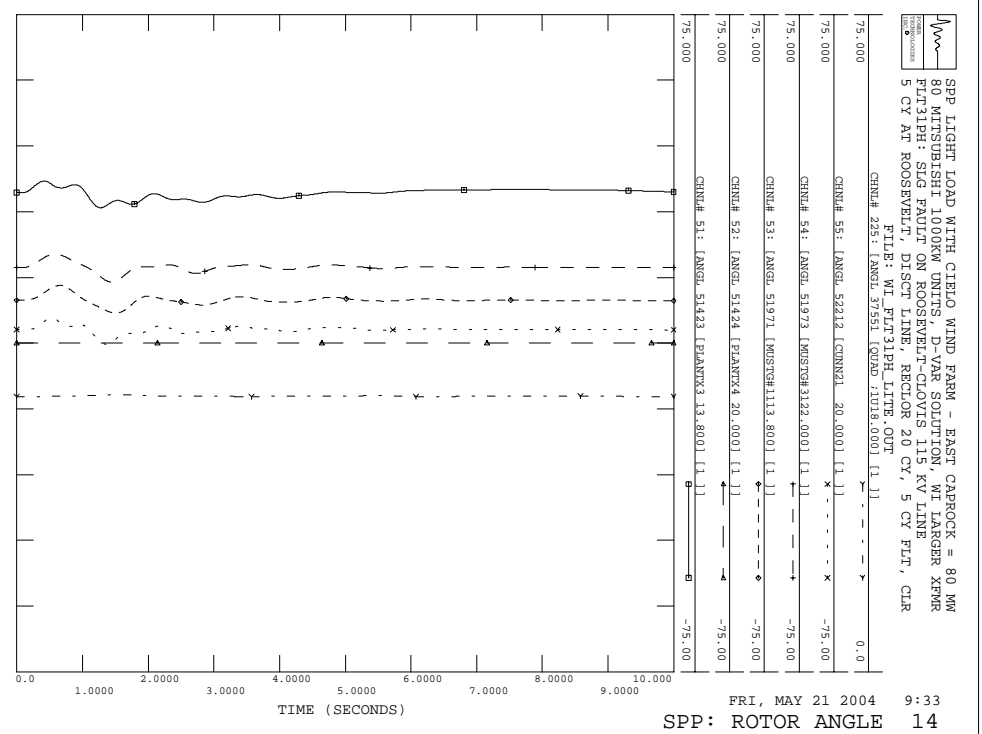
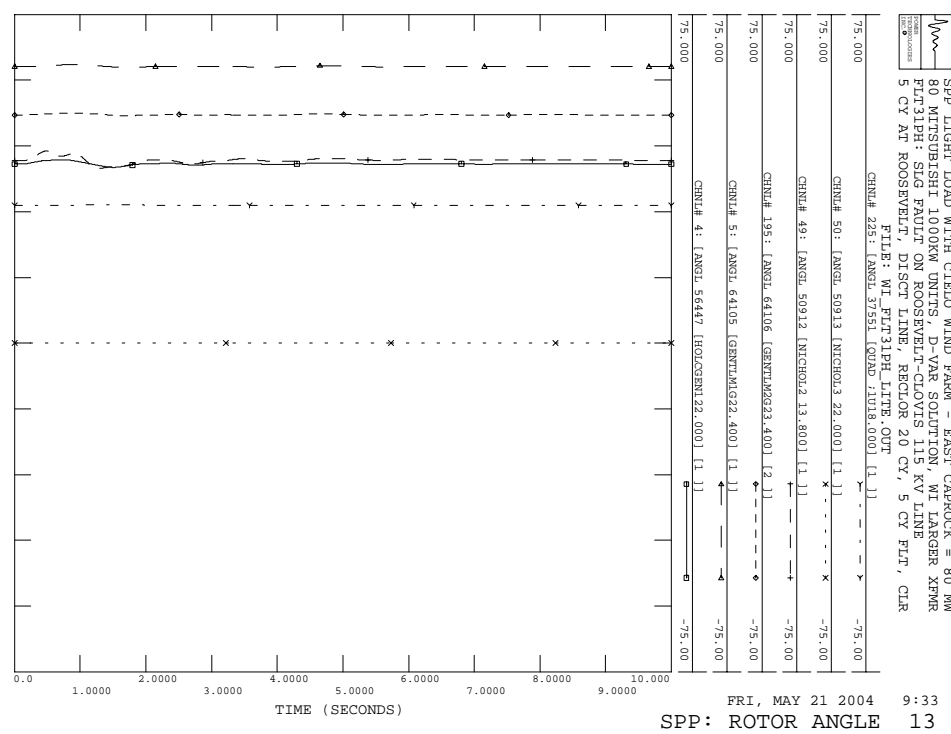
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISC LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH_LITE.OUT

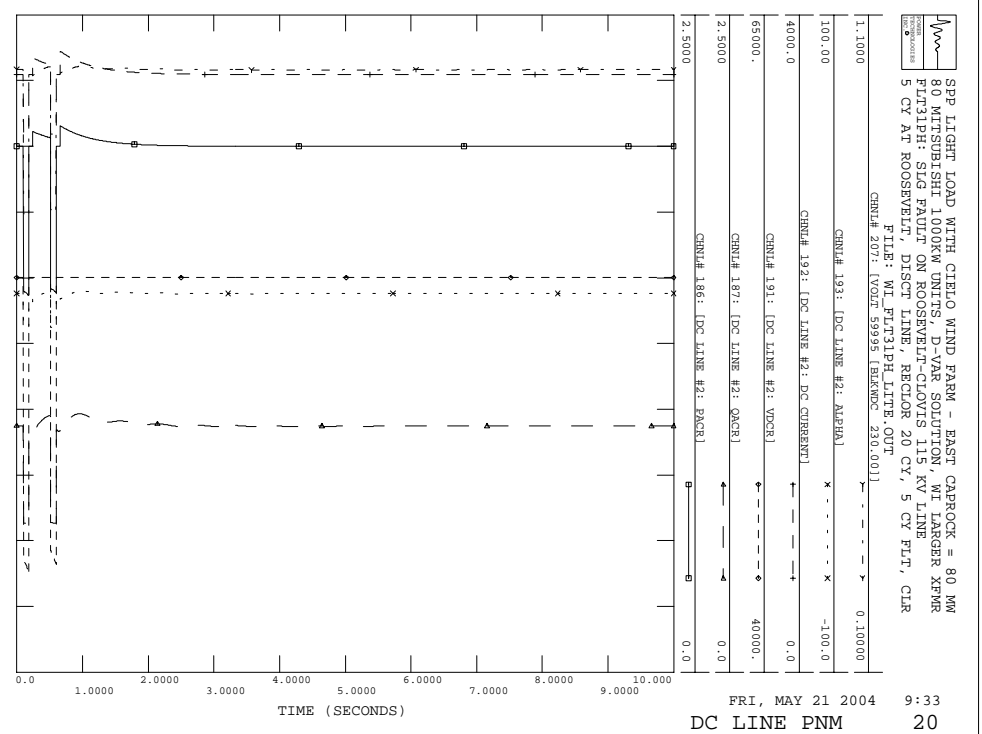
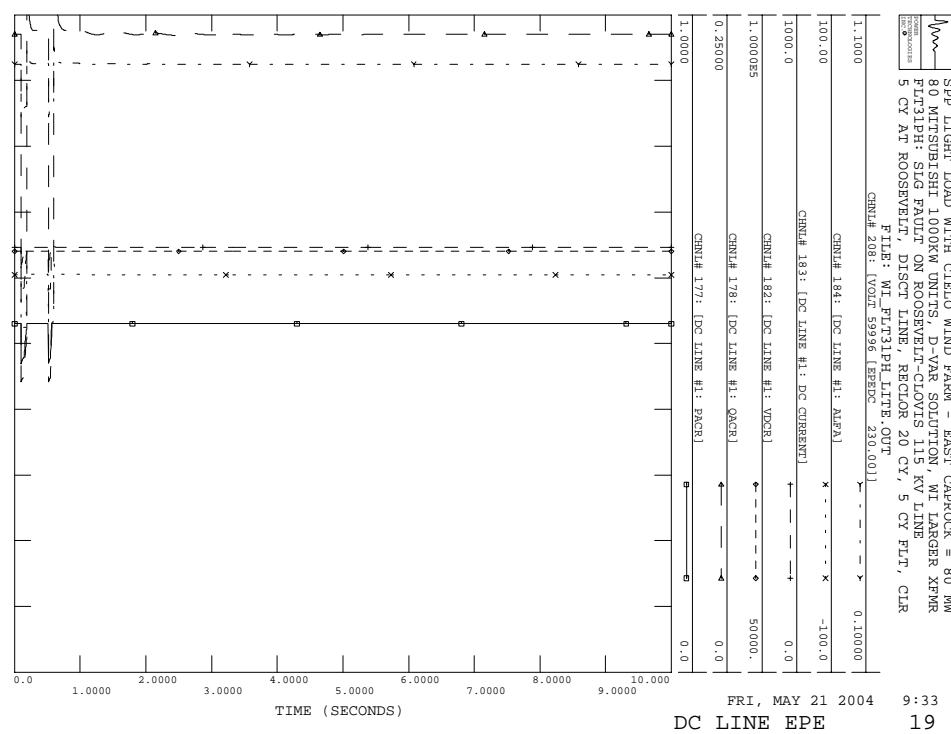
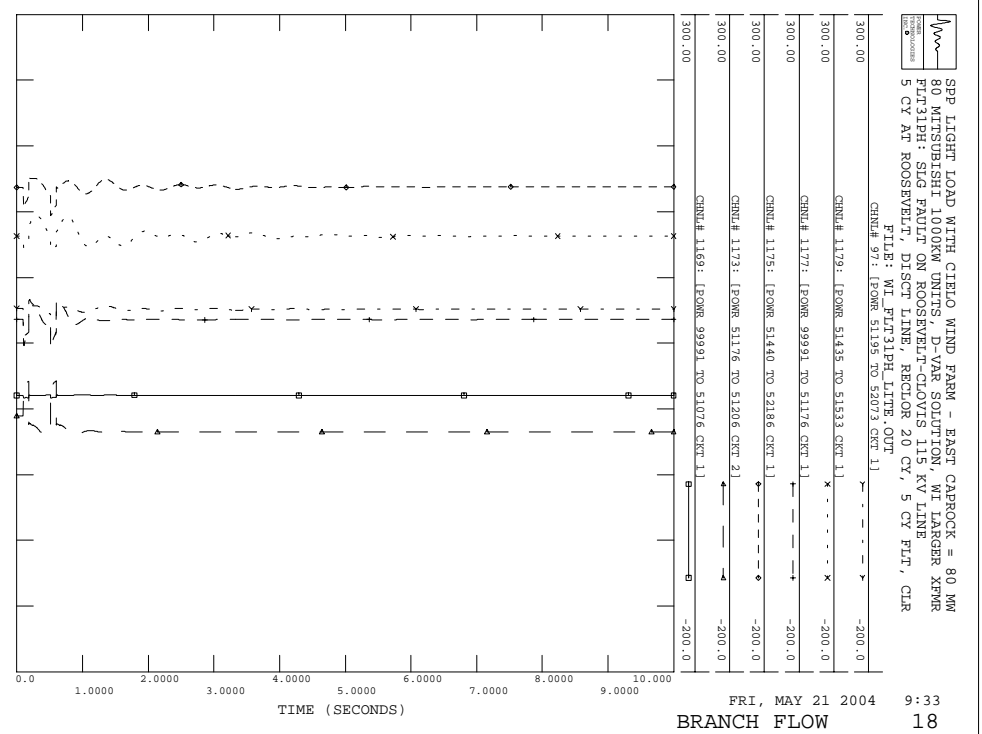
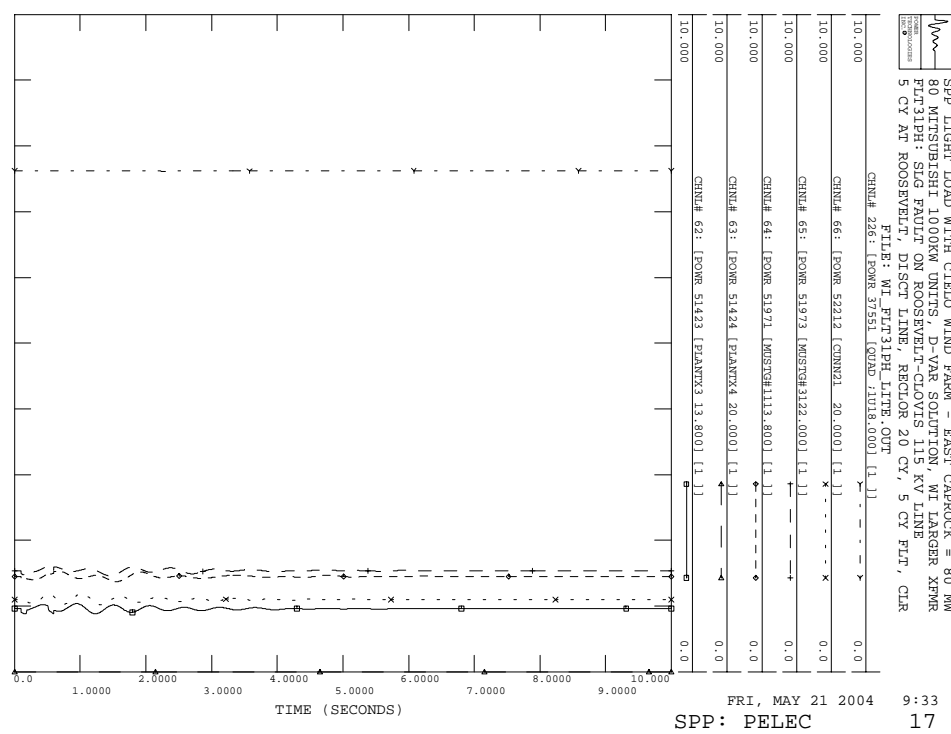


SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT31PH: SLG FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISC LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT31PH_LITE.OUT



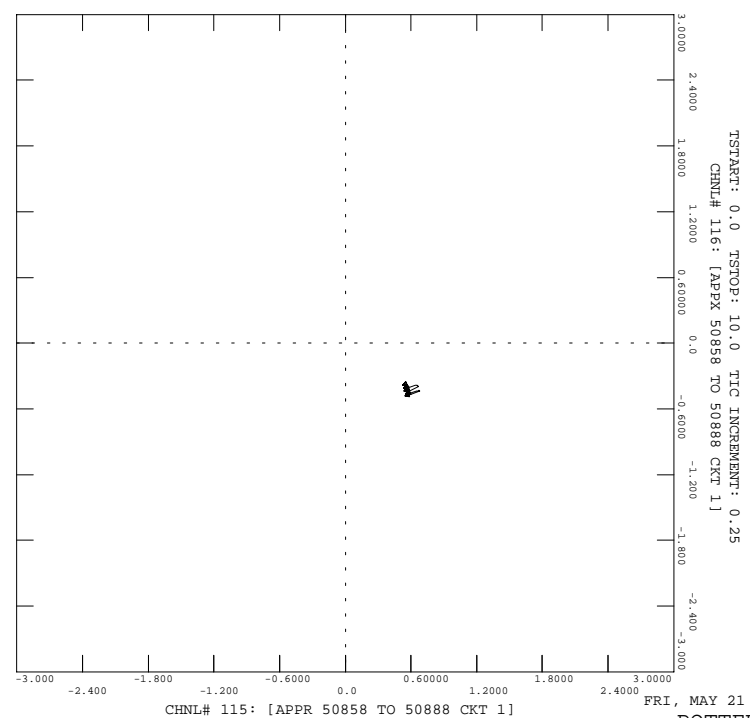






SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT31PH- SLS FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CT, 5 CY FLT, CLR

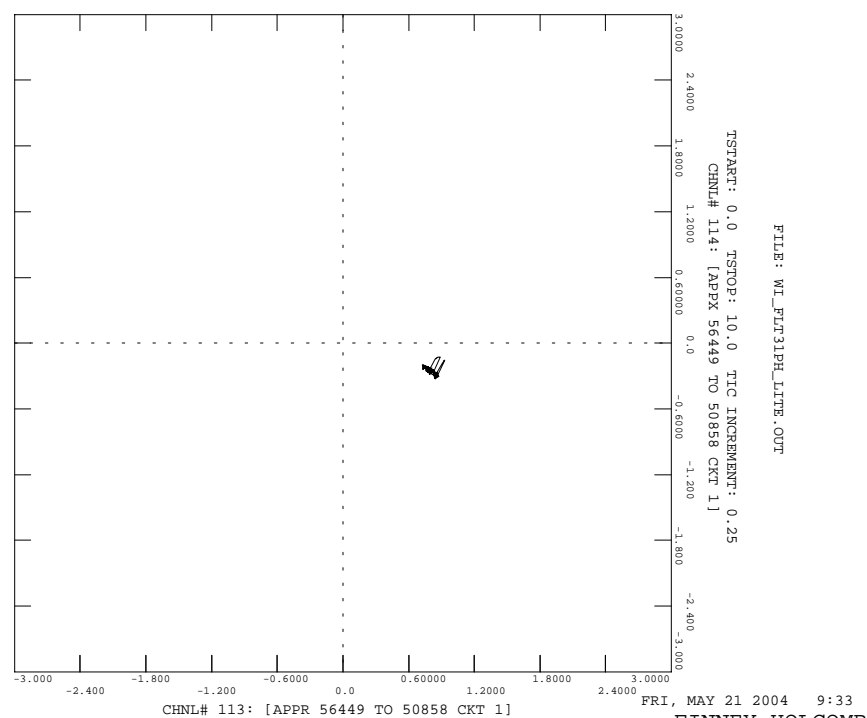
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 CHNL# 115: [APPR 50858 TO 50888 CKT 1]
 POTTER-FINNEY 22

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT31PH- SLS FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CT, 5 CY FLT, CLR

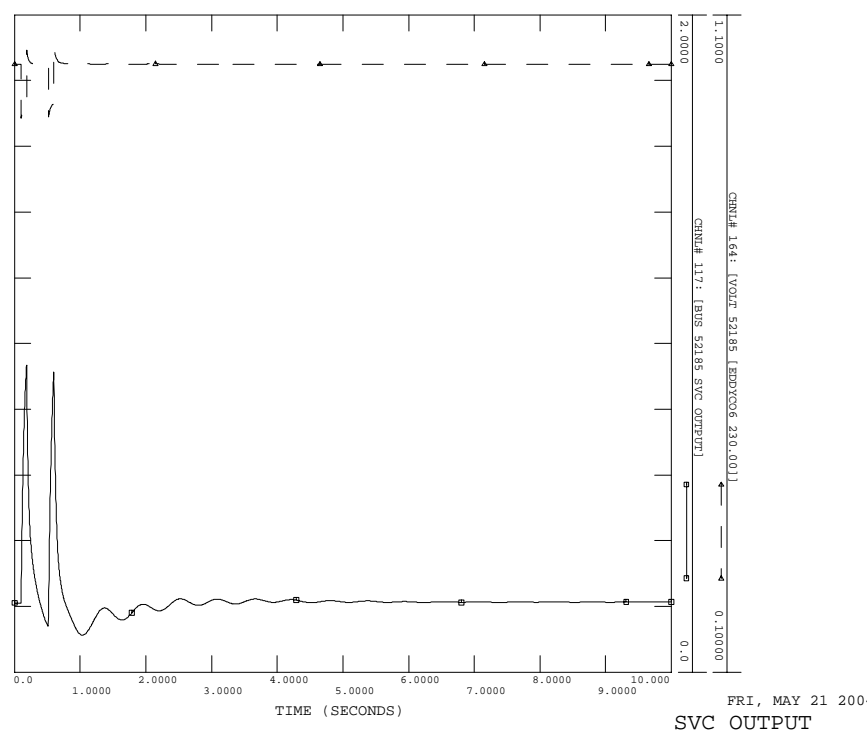
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 FINNEY-HOLCOMB 21

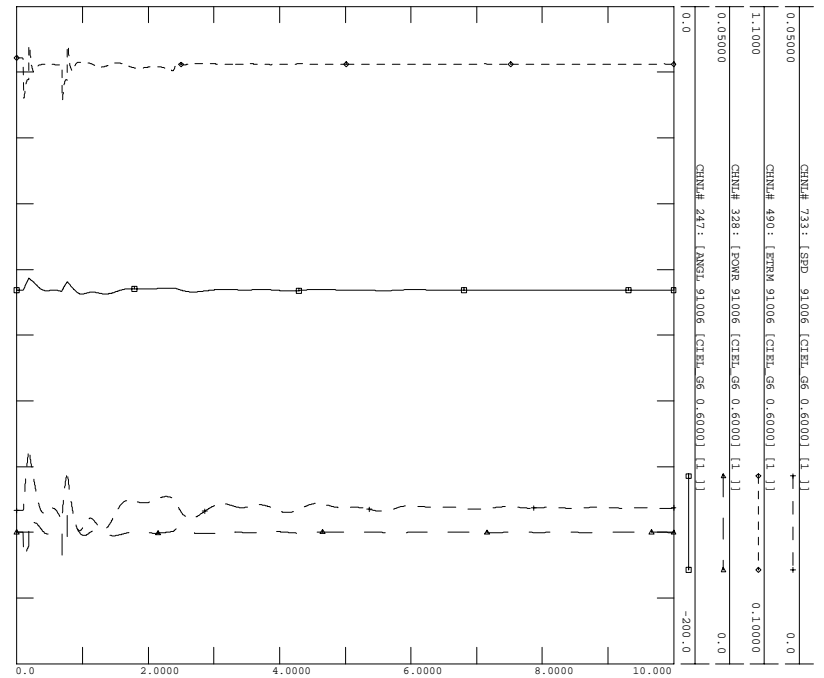
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 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT31PH- SLS FAULT ON ROOSEVELT-CLOVIS 115 KV LINE
 5 CY AT ROOSEVELT, DISCT LINE, RECTOR 20 CT, 5 CY FLT, CLR

FILE: WI_FLT31PH_LITE.OUT




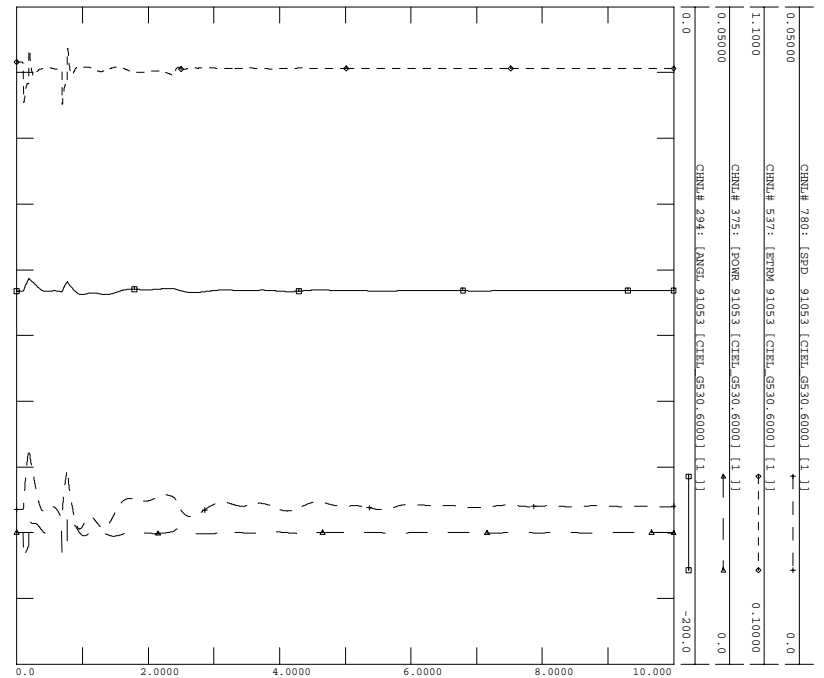
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 SVC OUTPUT 23


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH_LITE.OUT




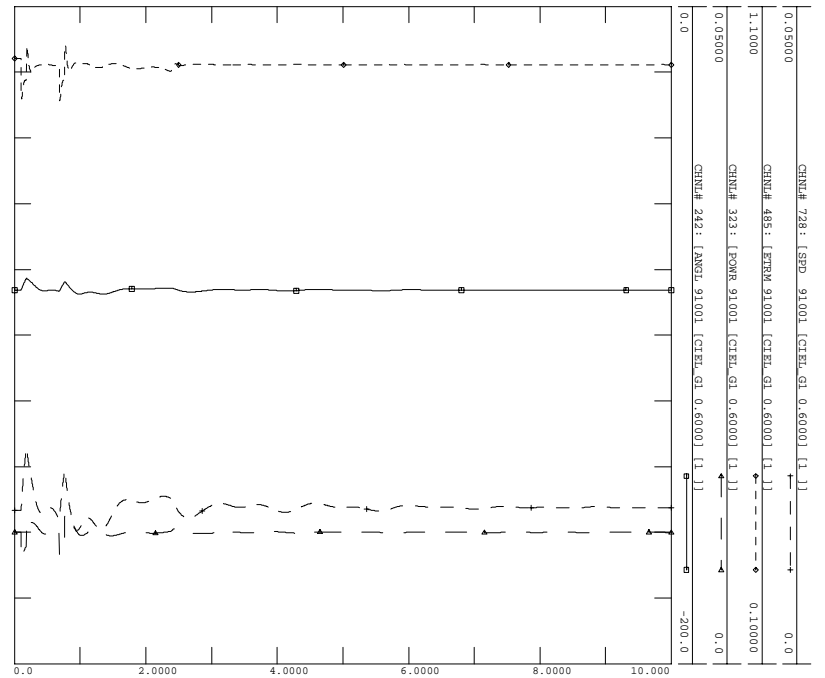
FRI, MAY 21 2004 9:34
 CIELO CABLE1 GEN6 2


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH_LITE.OUT




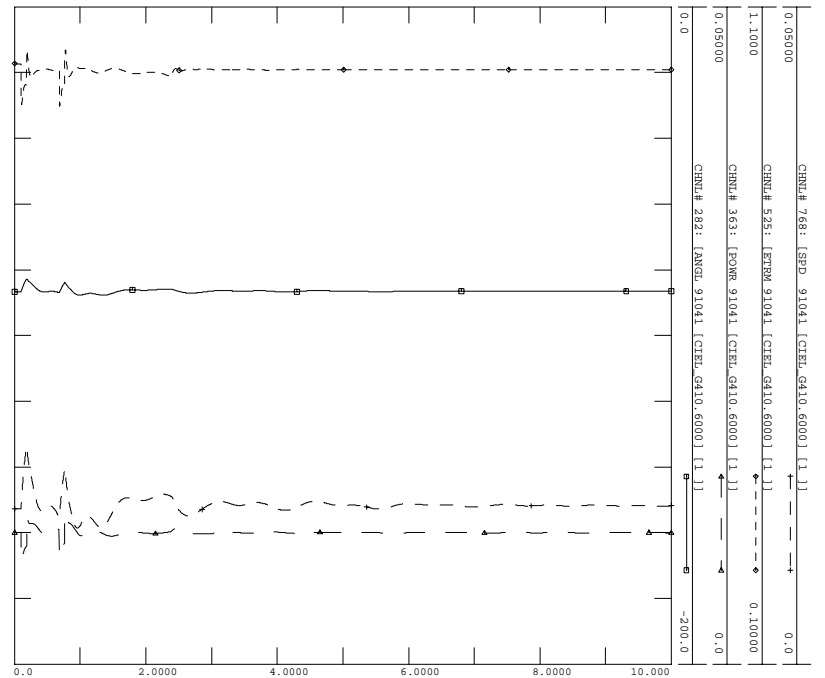
FRI, MAY 21 2004 9:34
 CIELO CABLE2 GEN53 4


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH_LITE.OUT



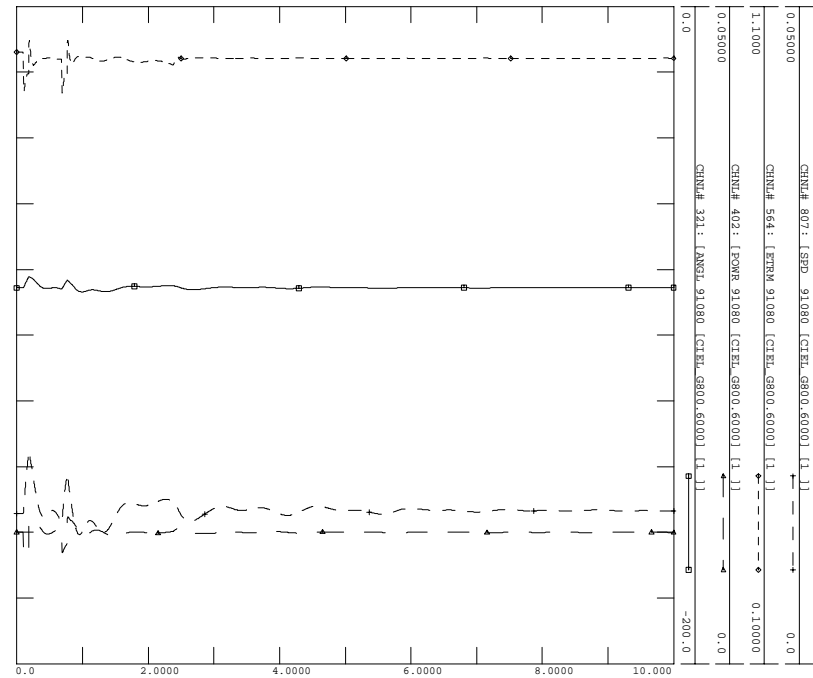
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 CIELO CABLE1 GEN1 1


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH_LITE.OUT



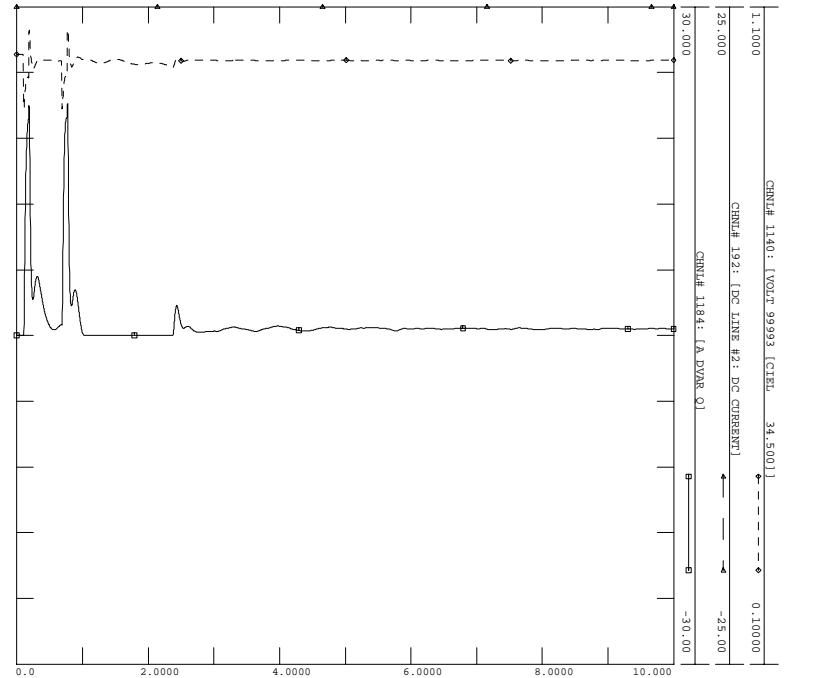
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 CIELO CABLE2 GEN41 3

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH_LITE.OUT



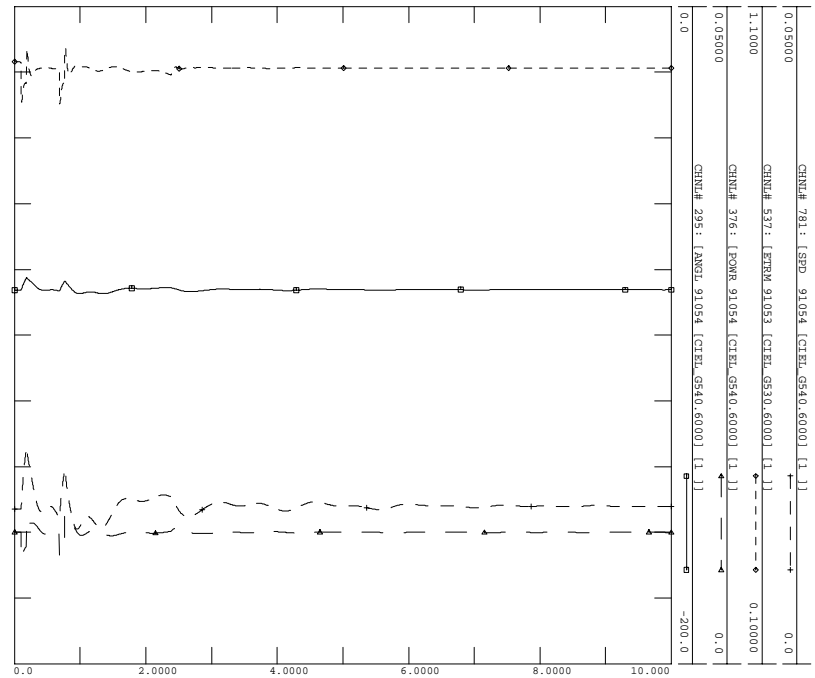
FRI, MAY 21 2004 9:34
 CIELO CABLE3 GEN80 6

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH_LITE.OUT



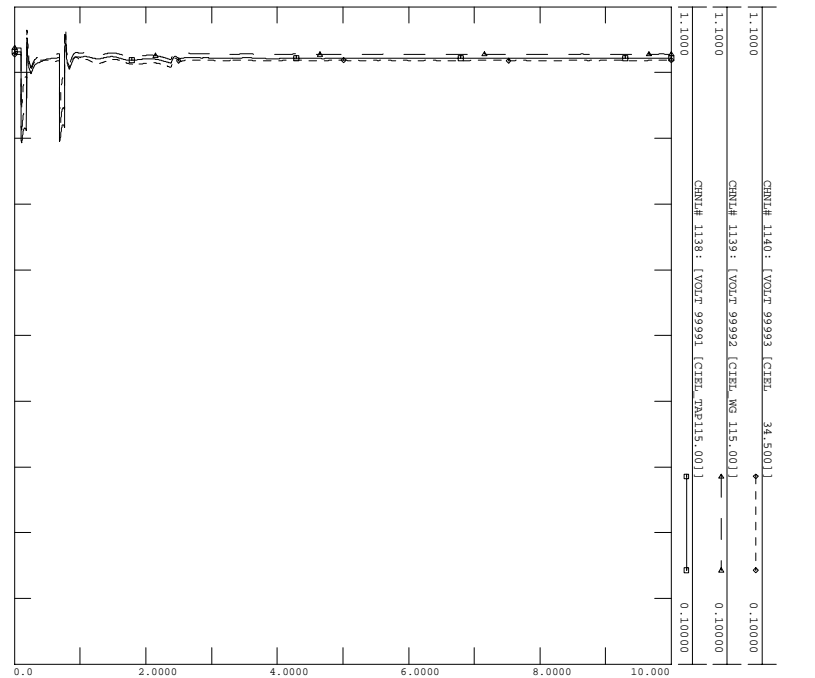
FRI, MAY 21 2004 9:34
 DVAR OUTPUT 8

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH_LITE.OUT

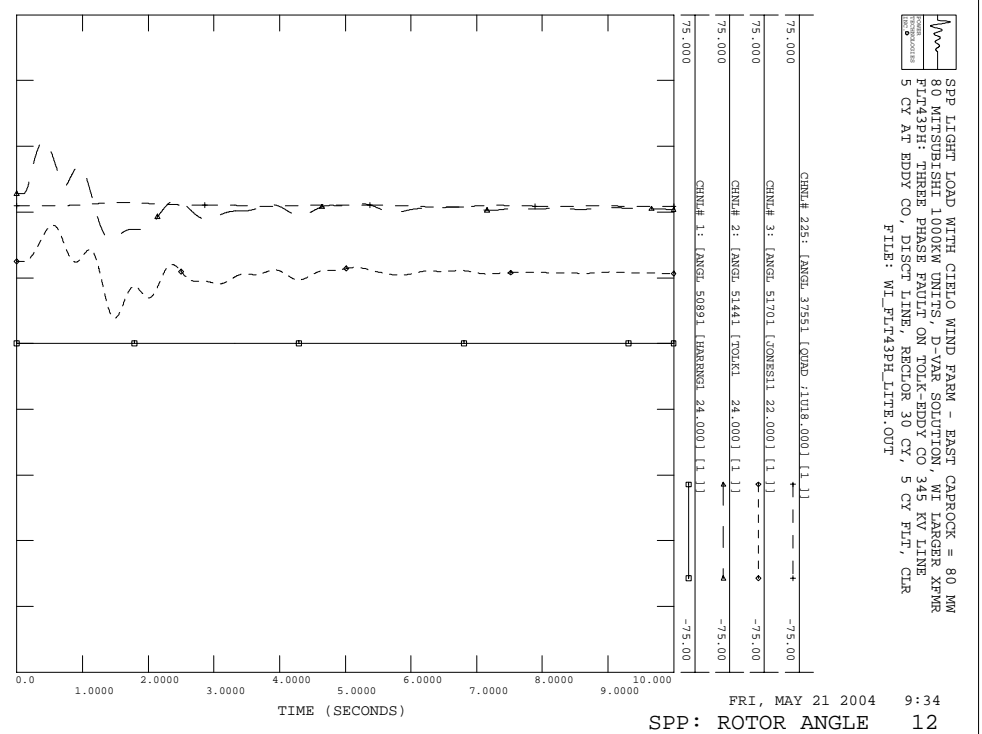
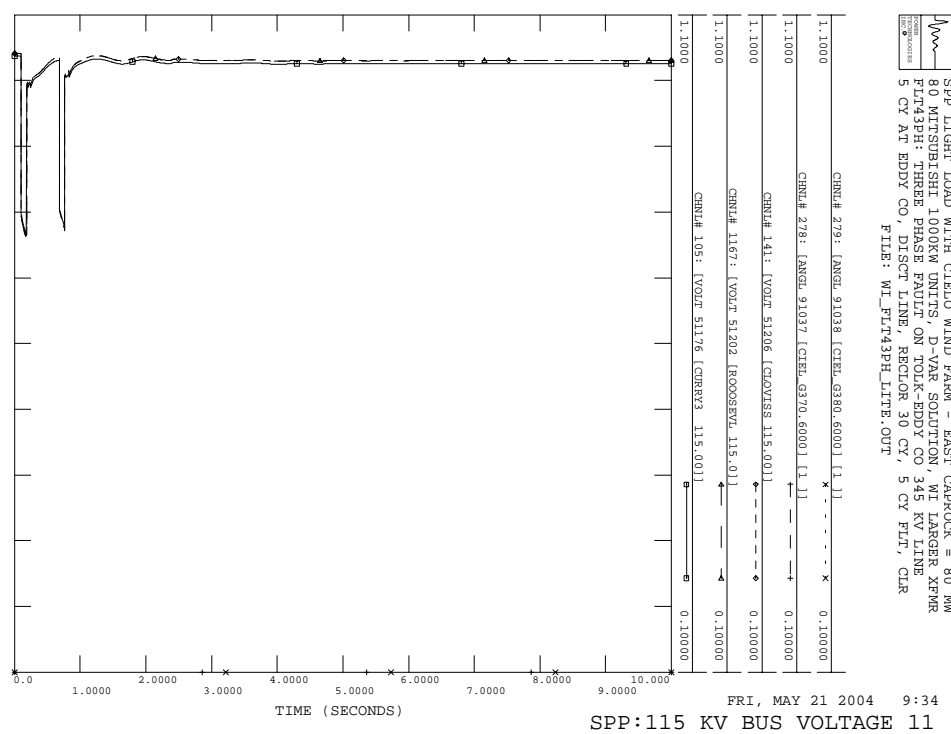
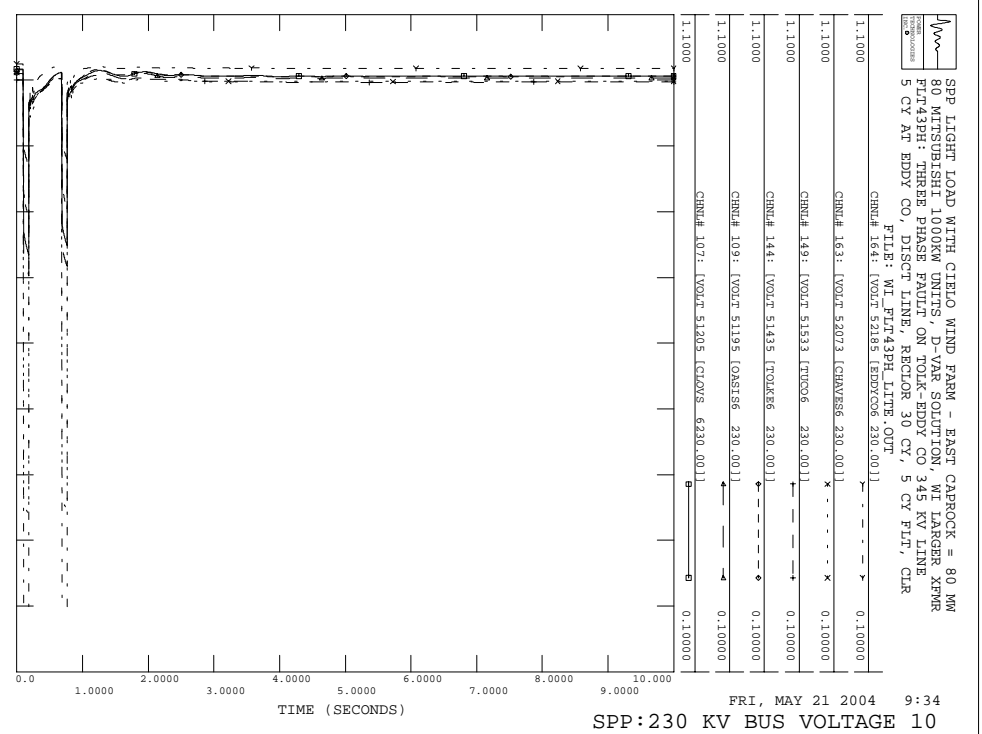
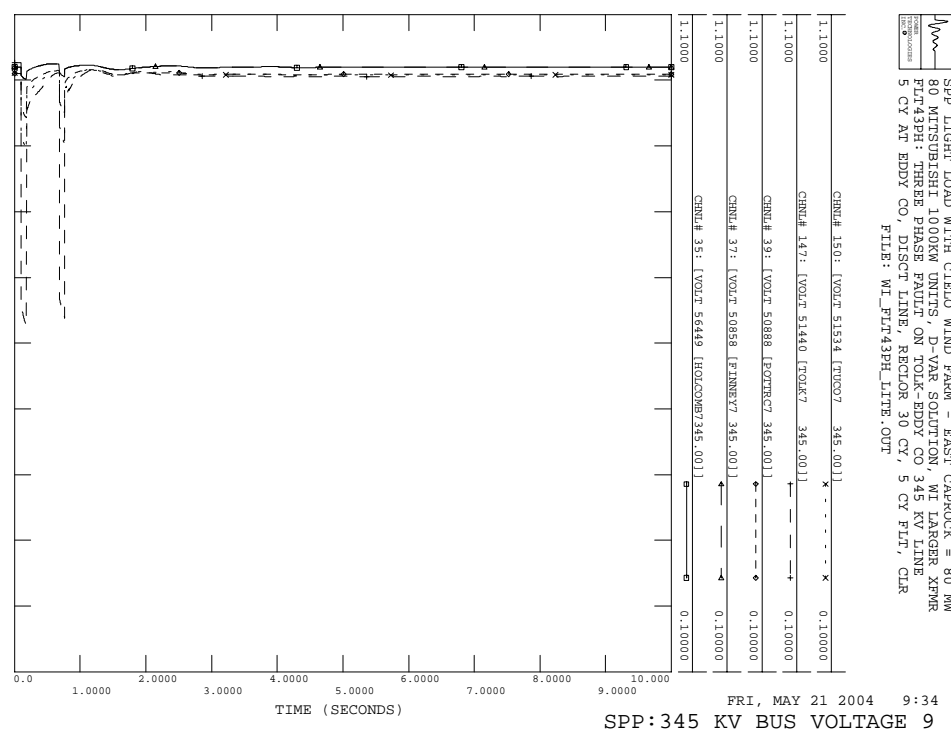


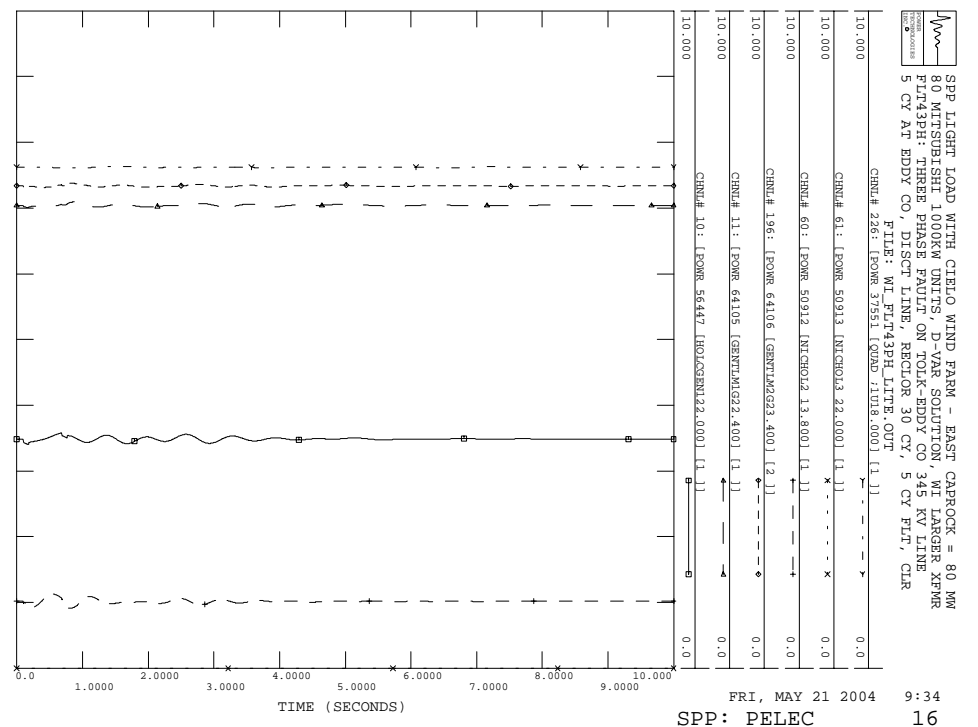
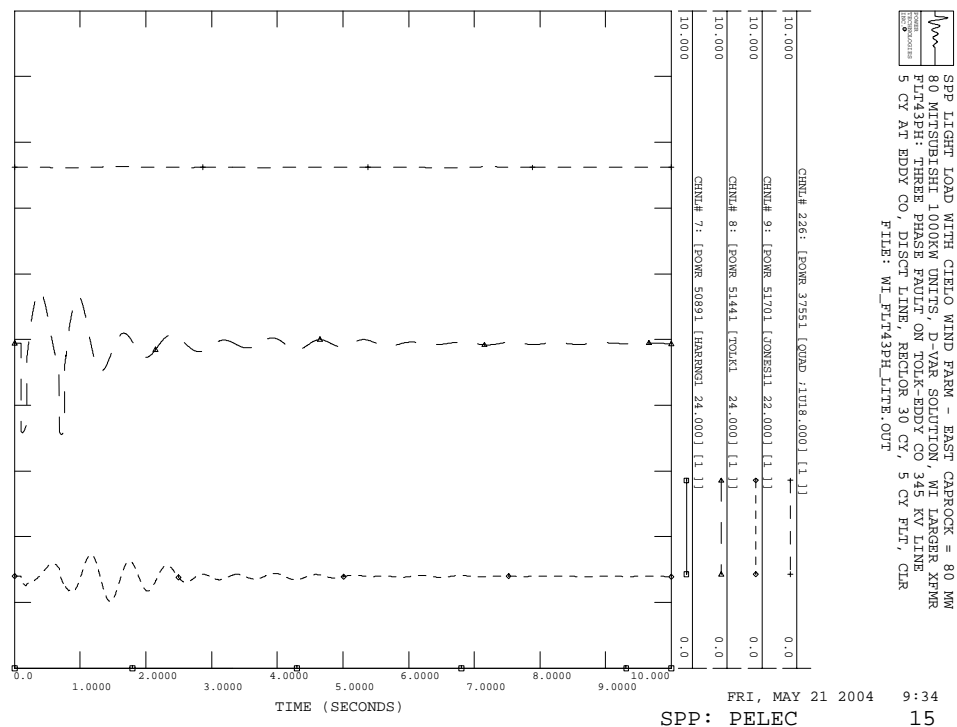
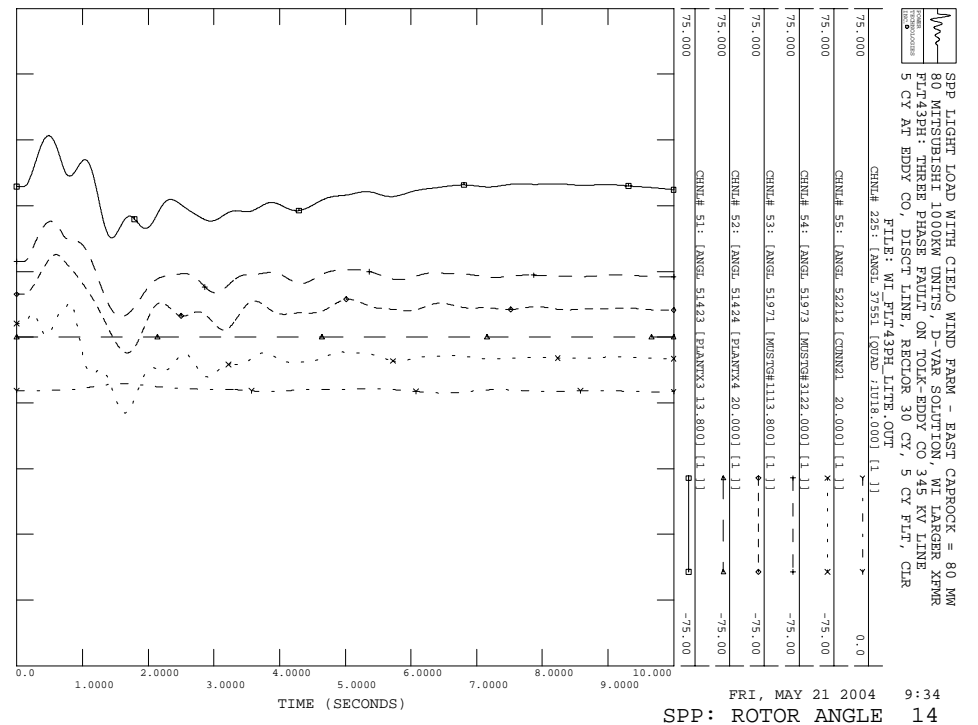
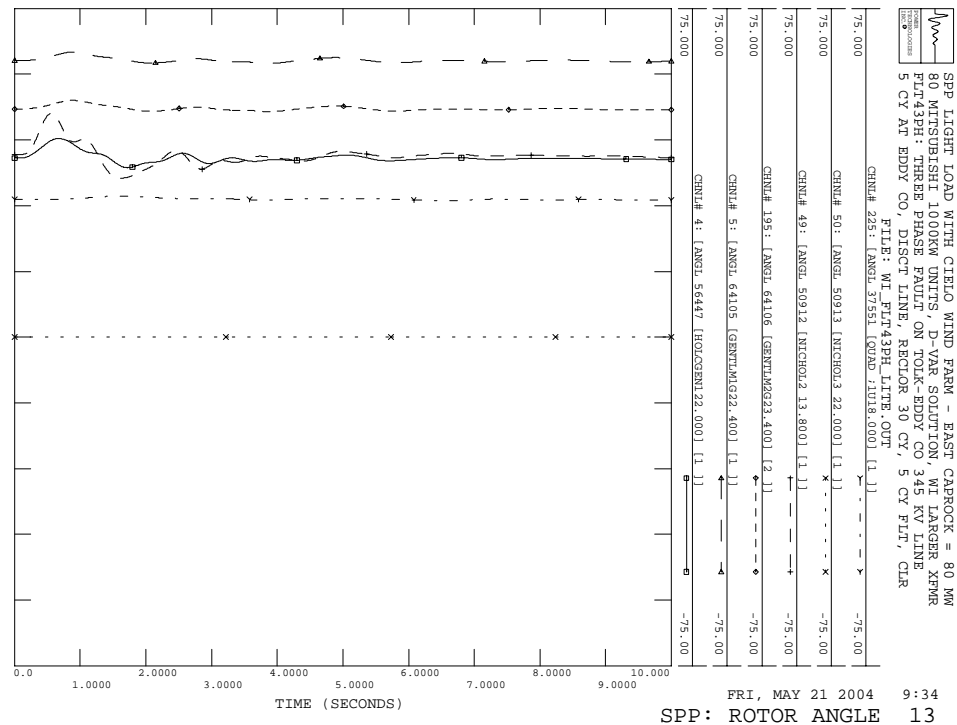
FRI, MAY 21 2004 9:34
 CIELO CABLE3 GEN54 5

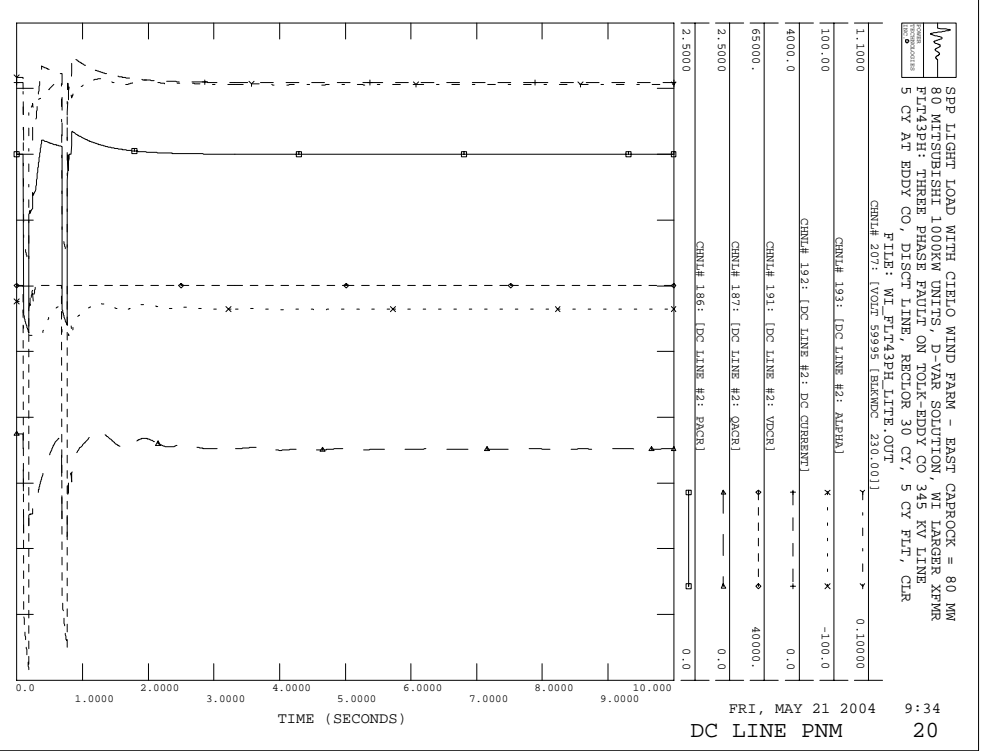
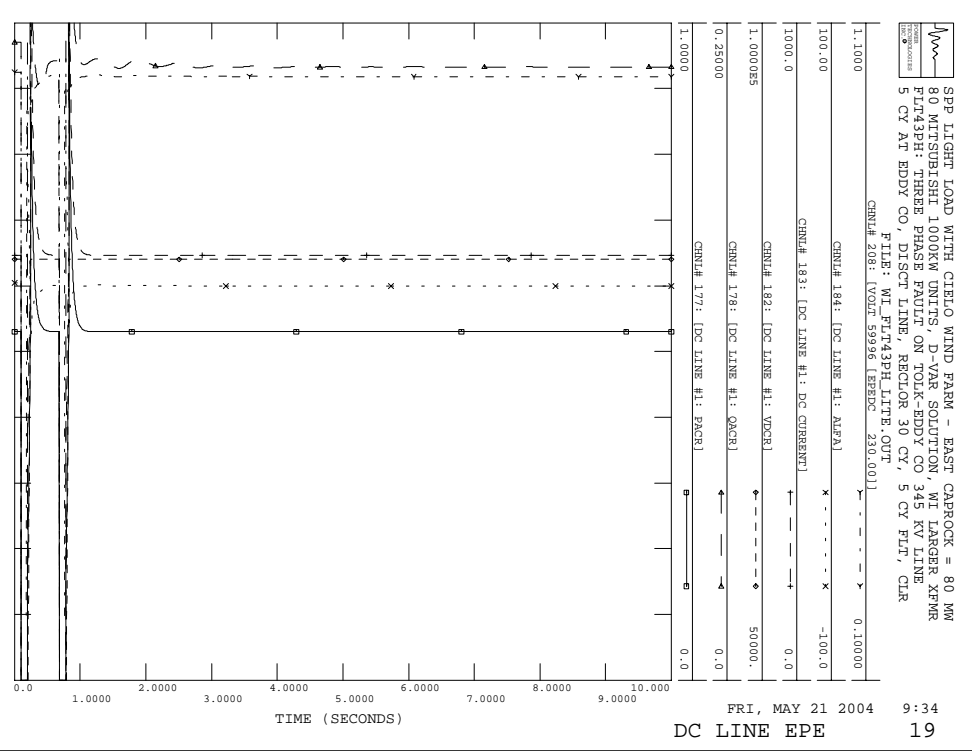
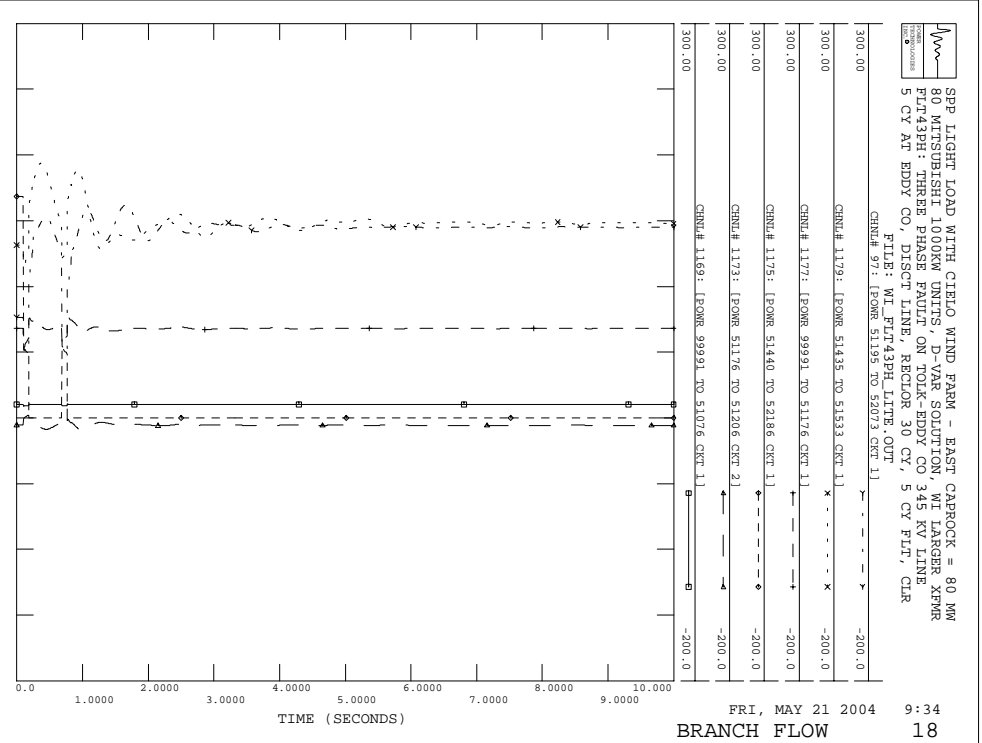
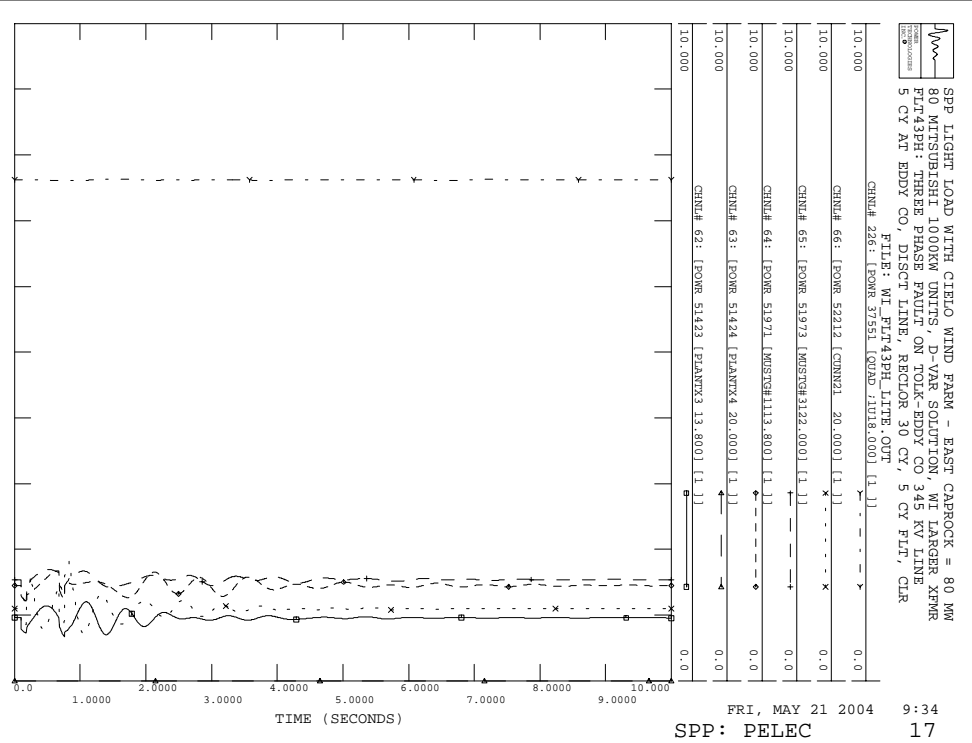
SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT43PH: THREE PHASE FAULT ON TOLK-BDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECTOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT43PH_LITE.OUT



FRI, MAY 21 2004 9:34
 CIELO VOLTAGE 7

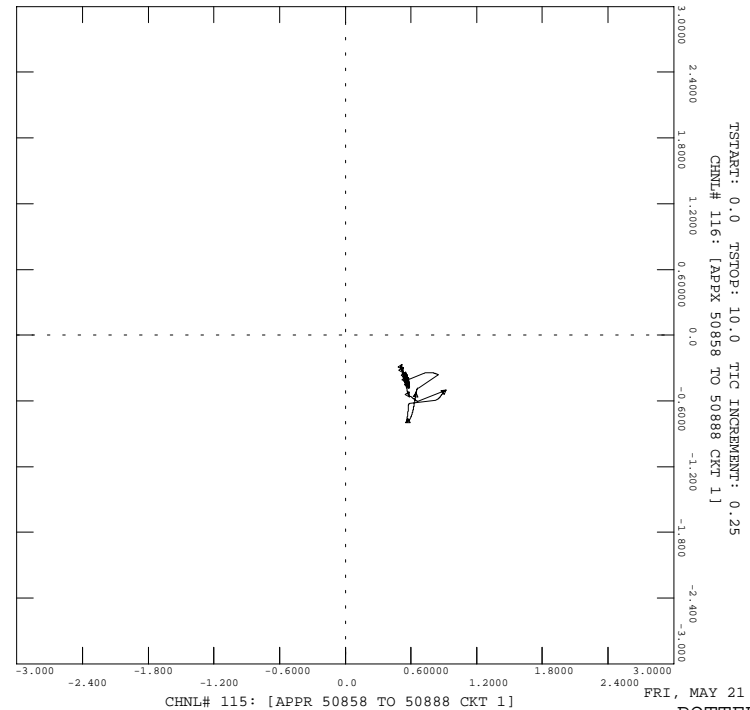






SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER AFMR
 FLT43PH: THREE PHASE FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR

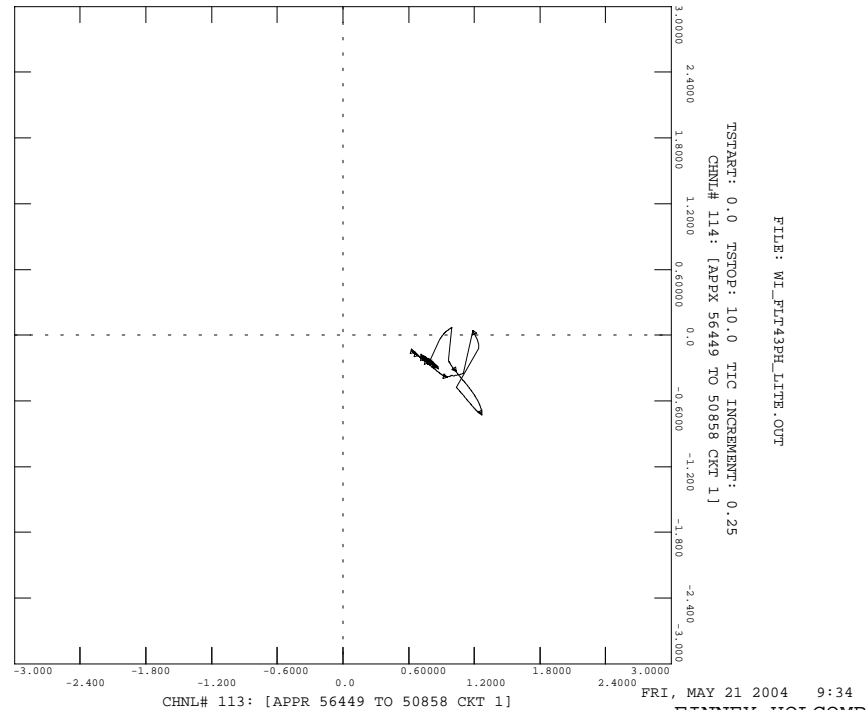
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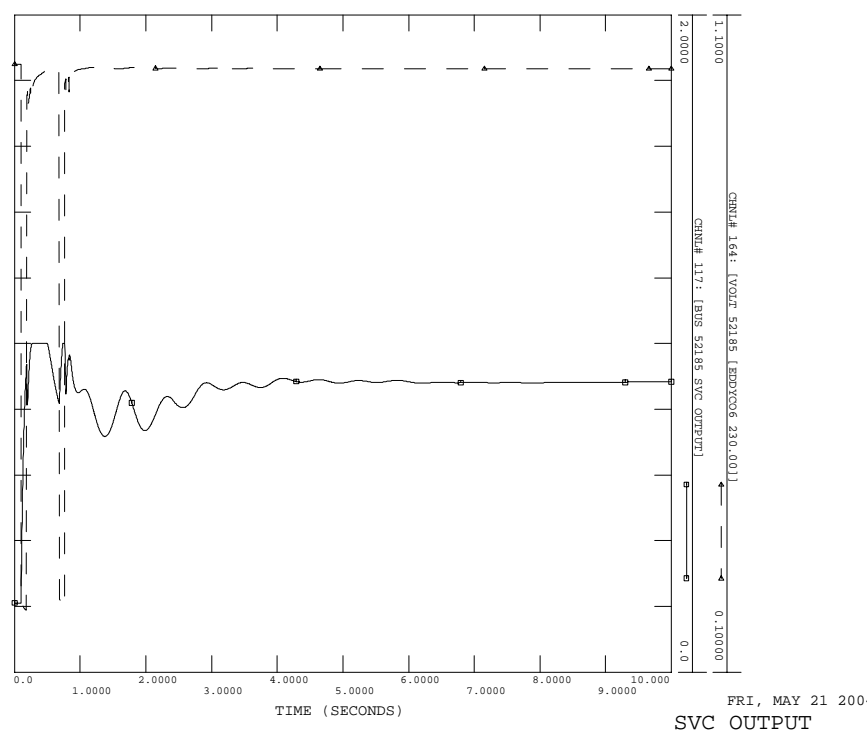
SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER AFMR
 FLT43PH: THREE PHASE FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR

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


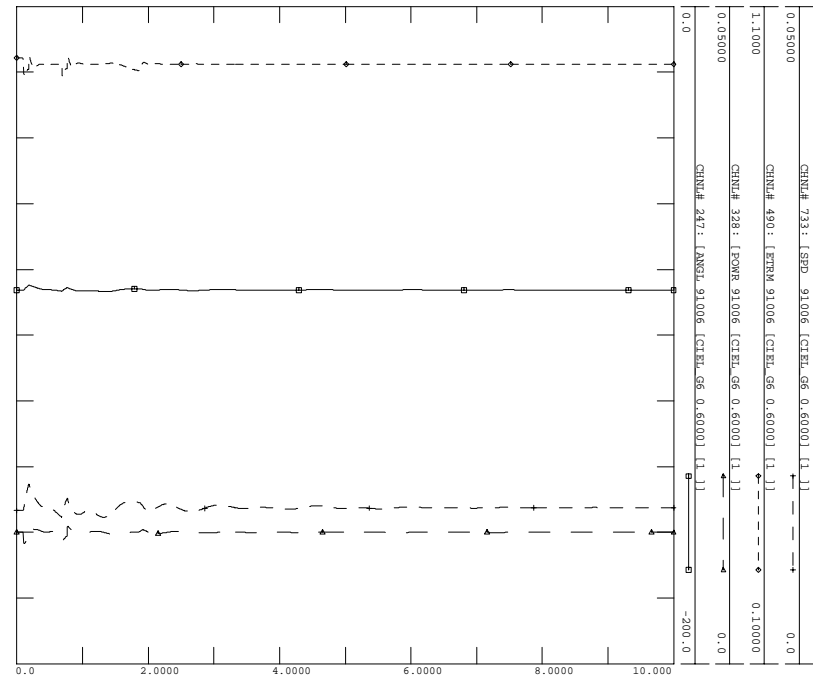
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SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER AFMR
 FLT43PH: THREE PHASE FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR




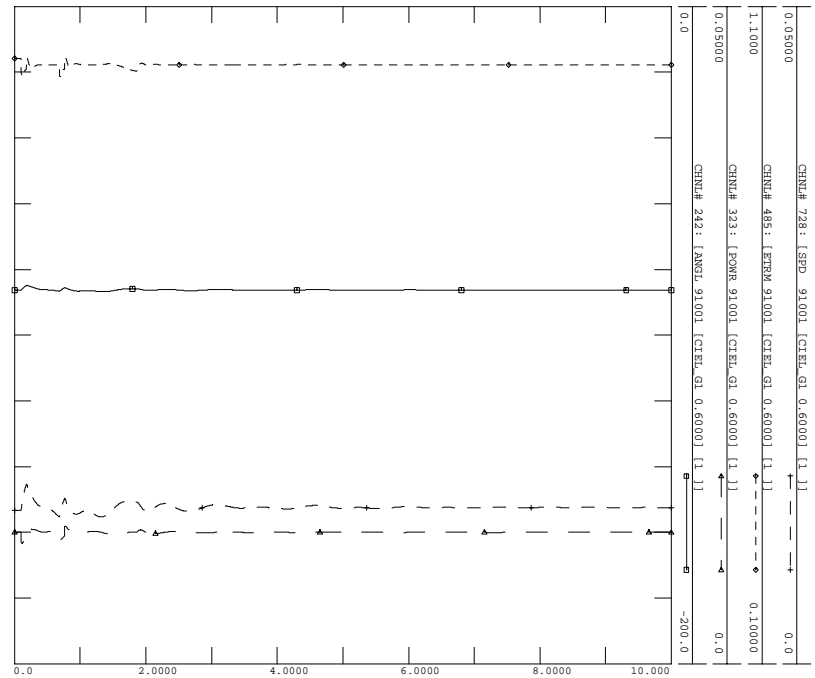
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 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
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


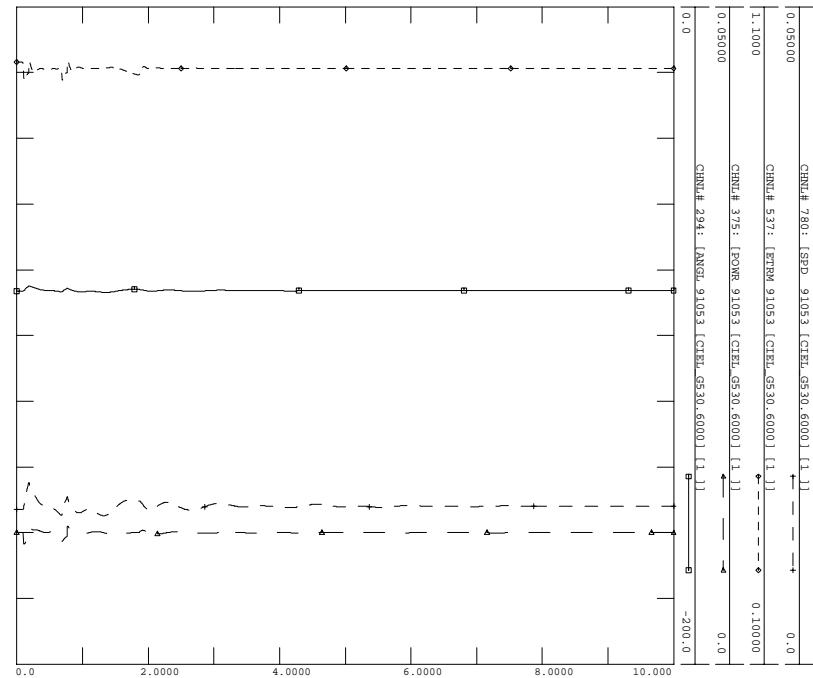
FRI, MAY 21 2004 9:34
CIELO CABLE1 GEN6 2


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT41PH_LITE.OUT




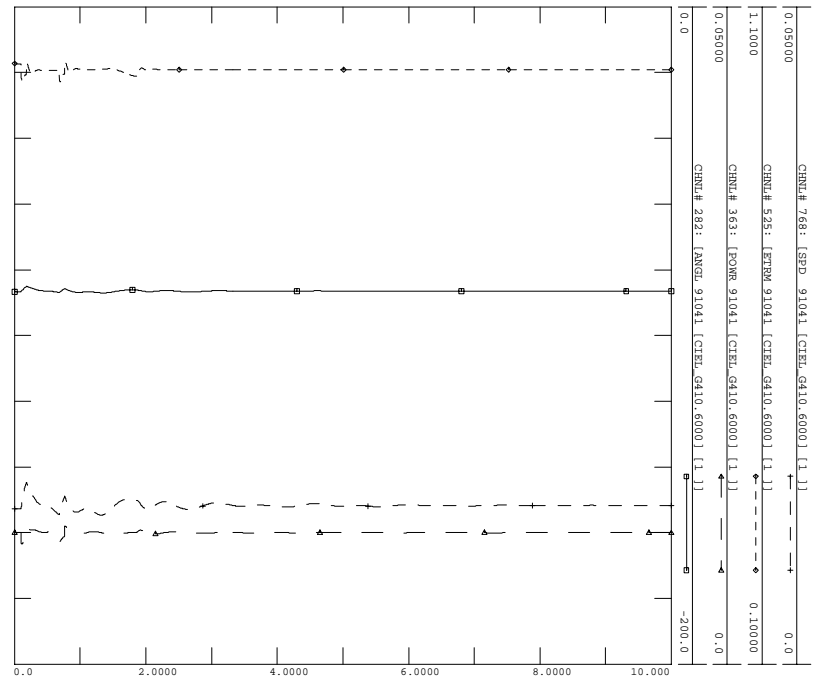
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CIELO CABLE1 GEN1 1


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
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 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
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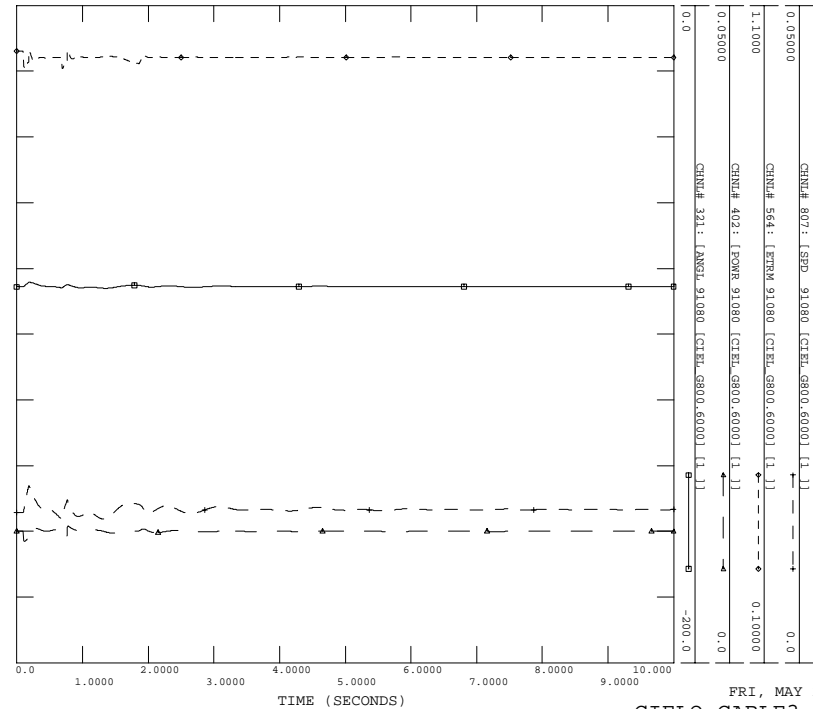
FRI, MAY 21 2004 9:34
CIELO CABLE2 GEN5 4


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
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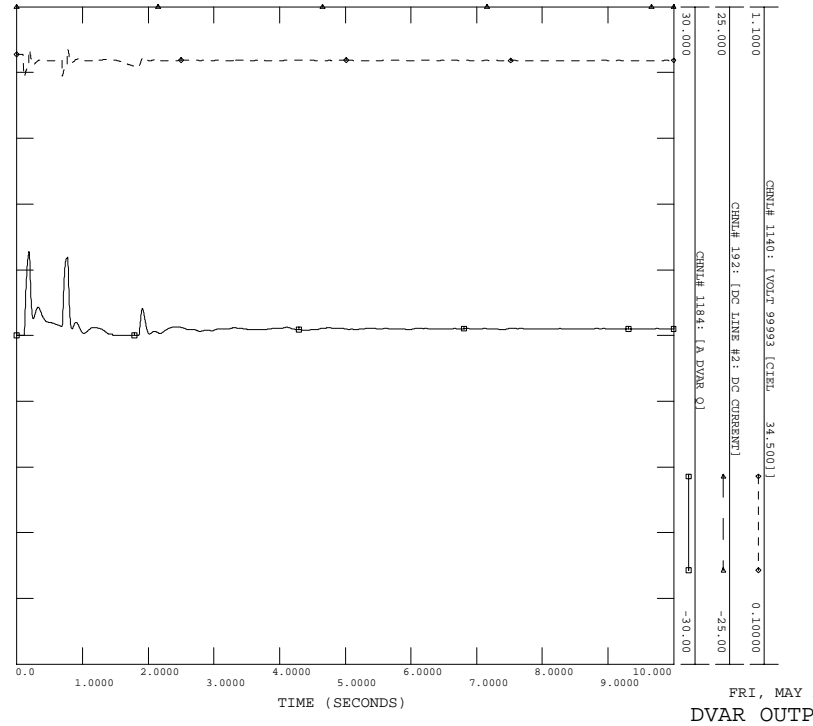
FRI, MAY 21 2004 9:34
CIELO CABLE2 GEN4 3

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT41PH_LITE.OUT



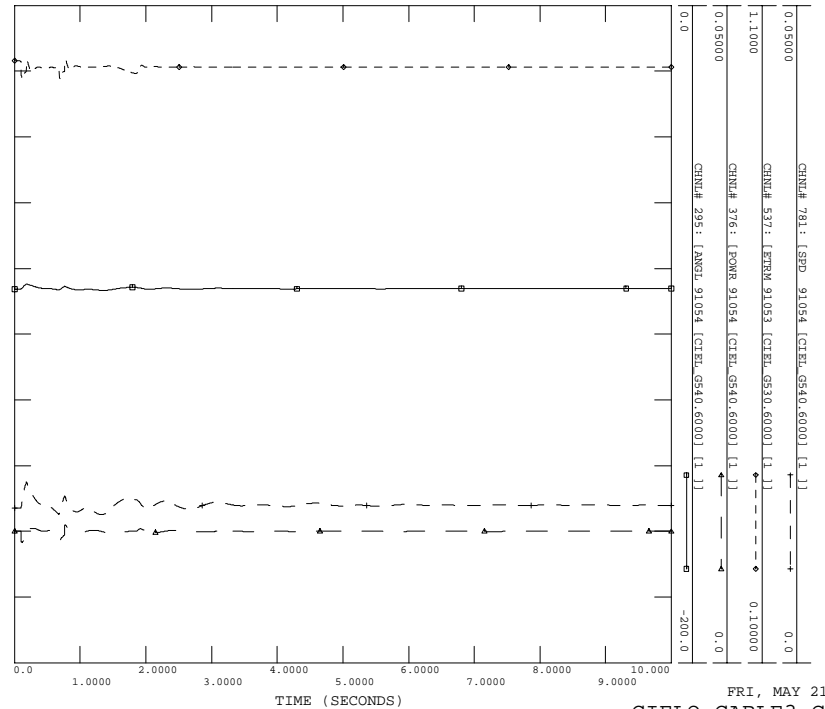
FRI, MAY 21 2004 9:34
 CIELO CABLE3 GEN80 6

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT41PH_LITE.OUT



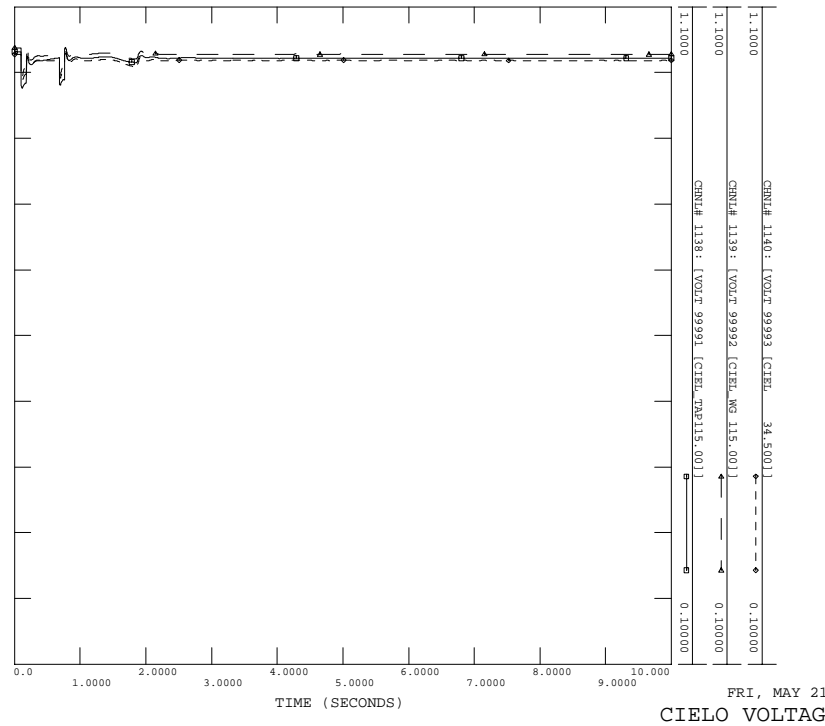
FRI, MAY 21 2004 9:34
 DVAR OUTPUT 8

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT41PH_LITE.OUT

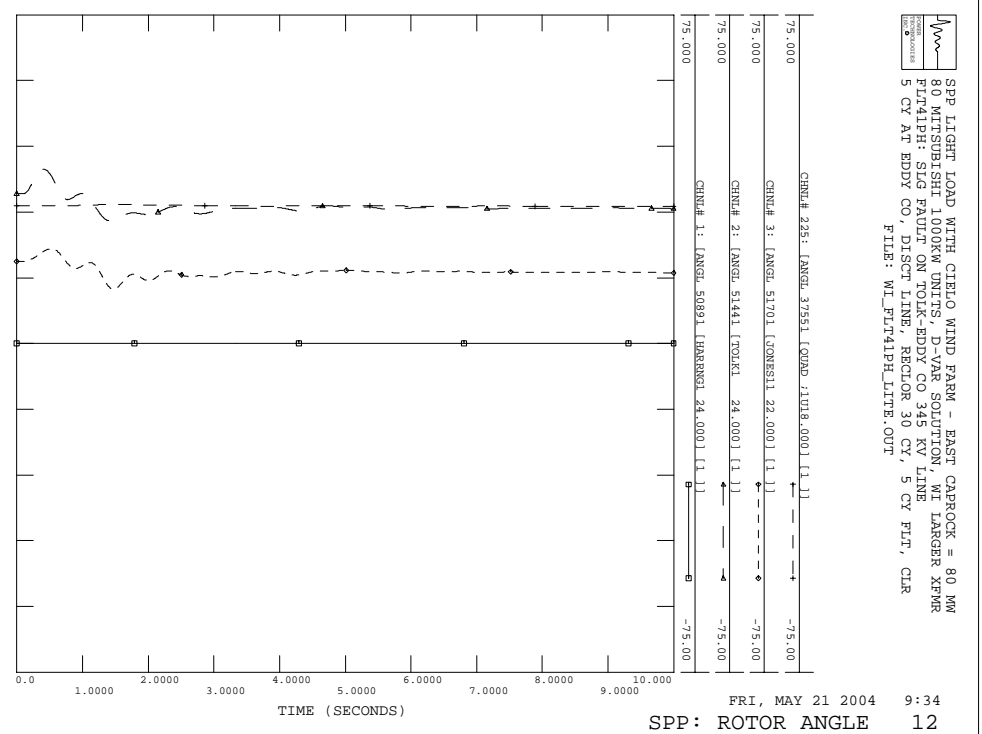
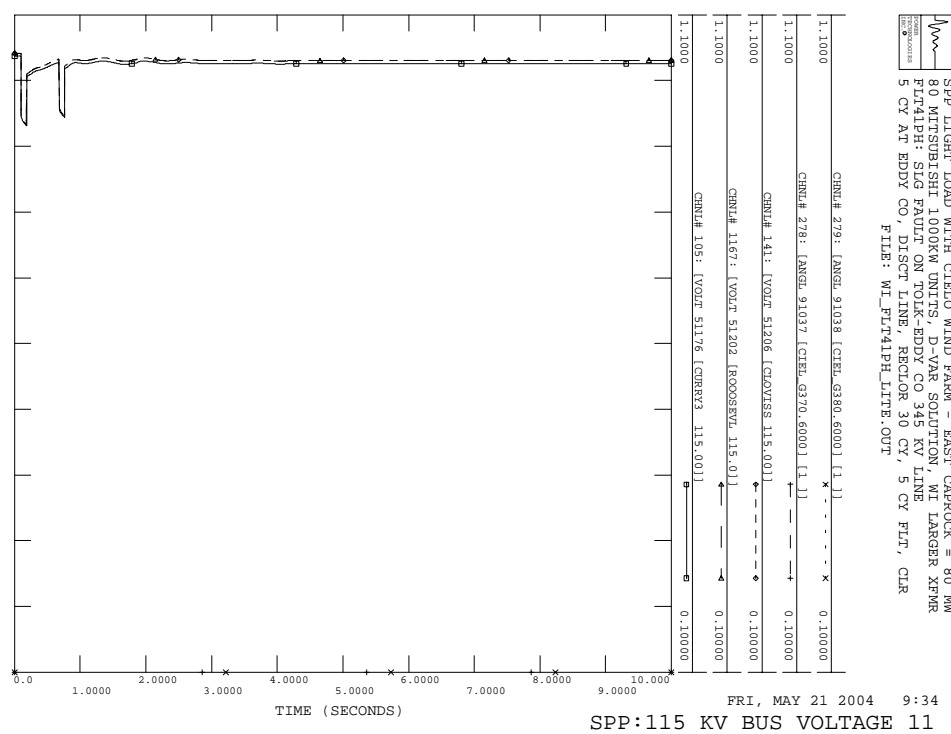
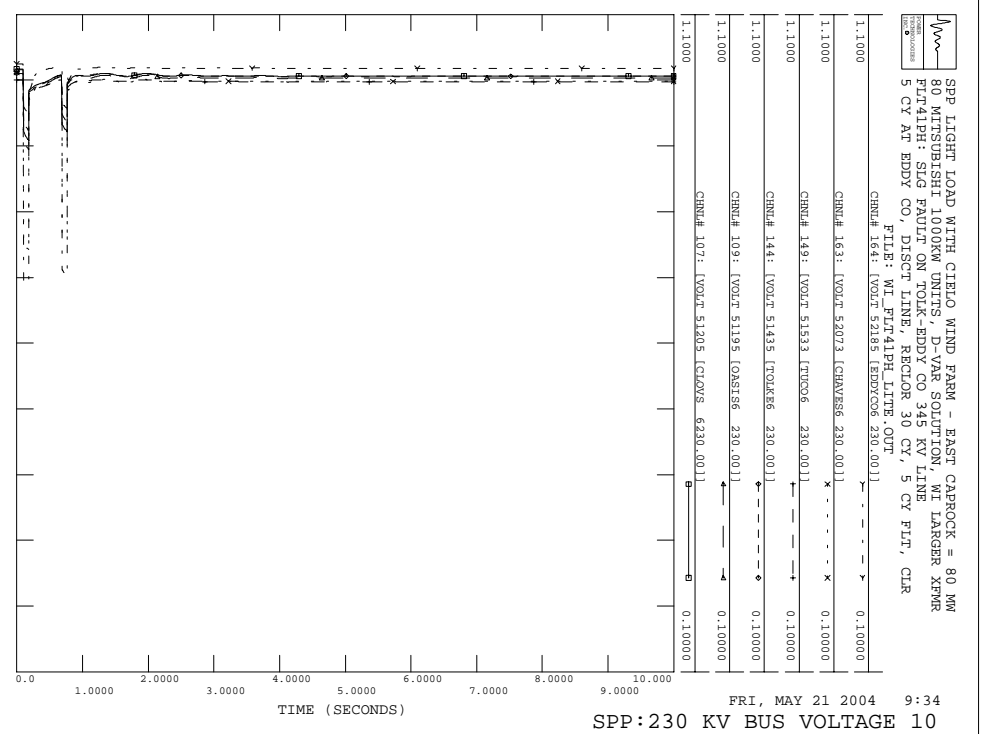
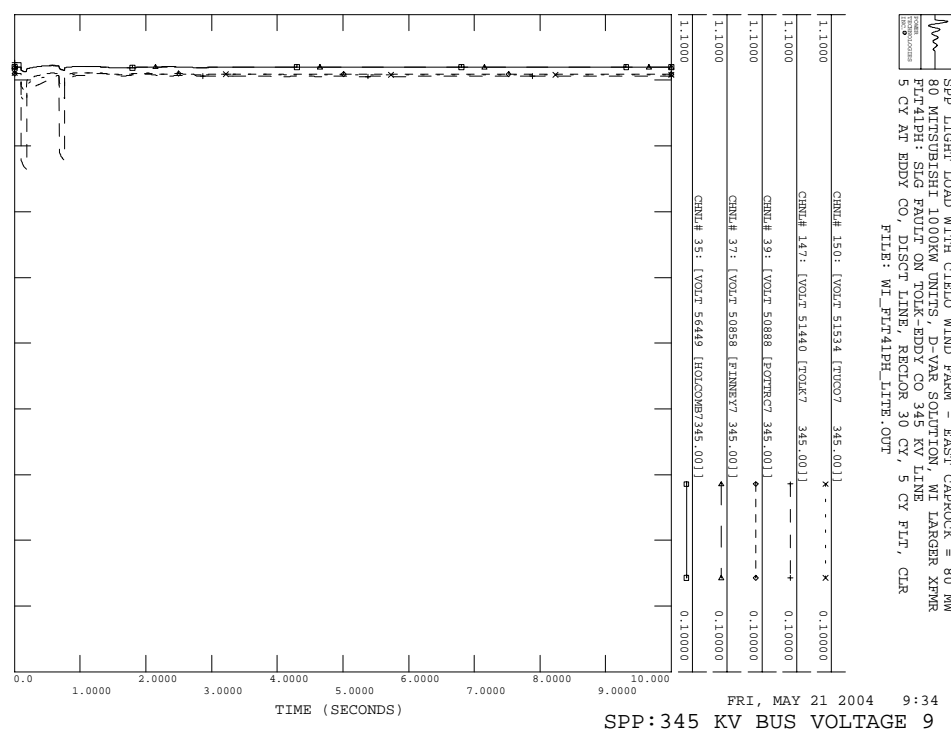


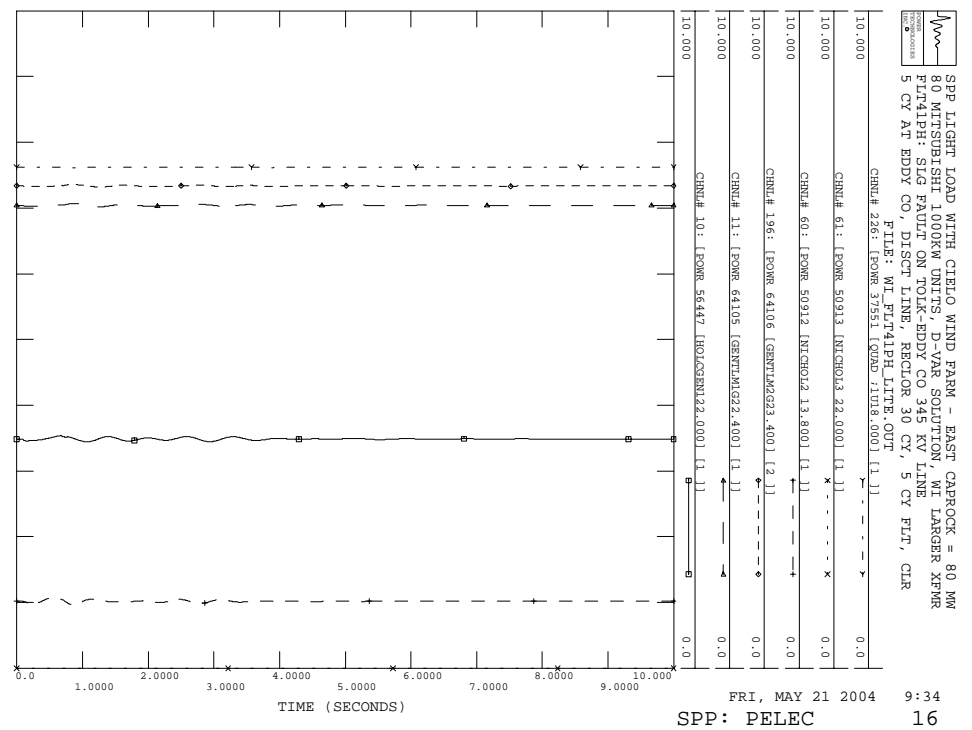
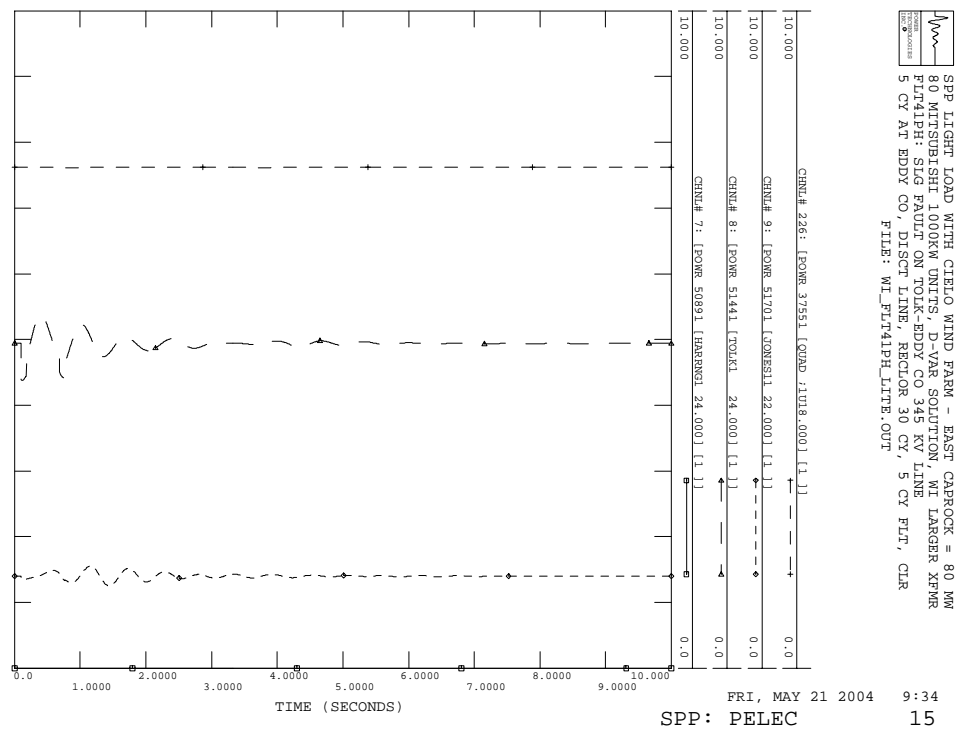
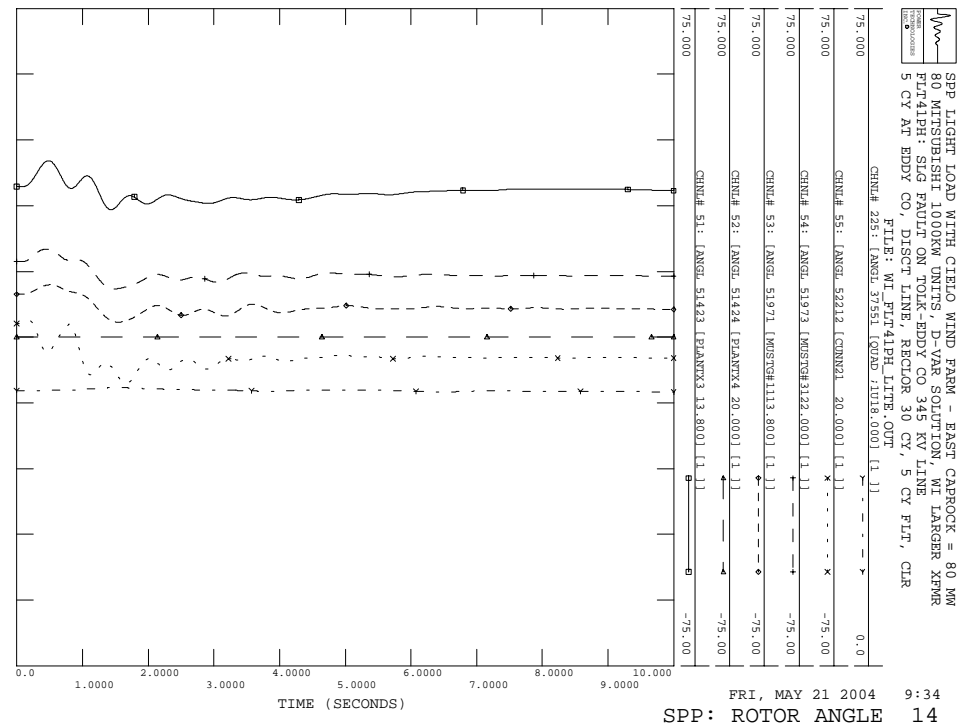
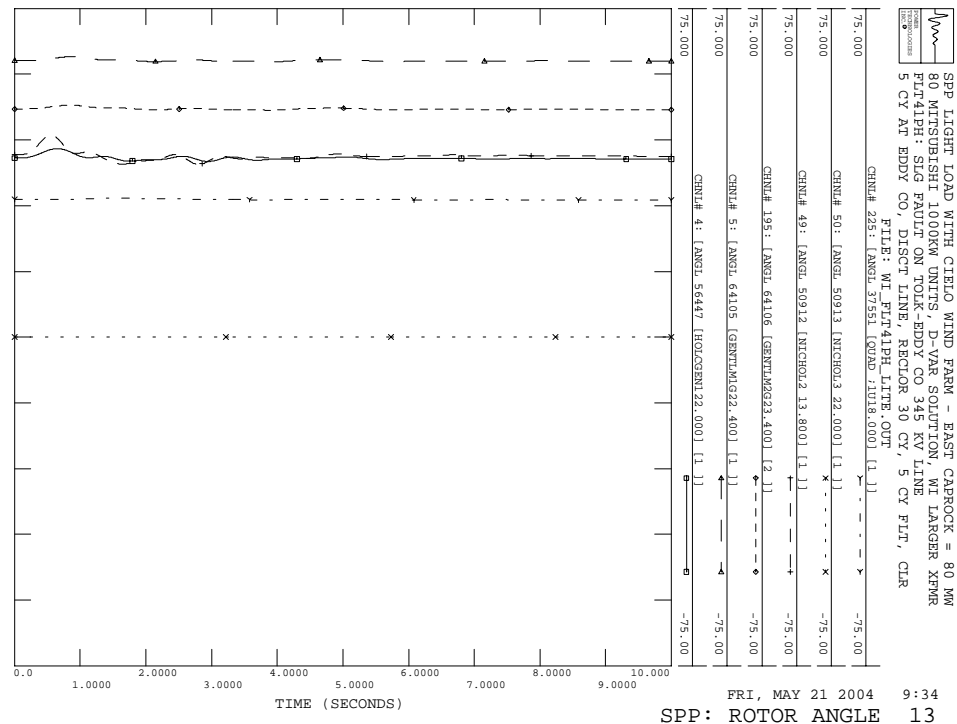
FRI, MAY 21 2004 9:34
 CIELO CABLE3 GEN54 5

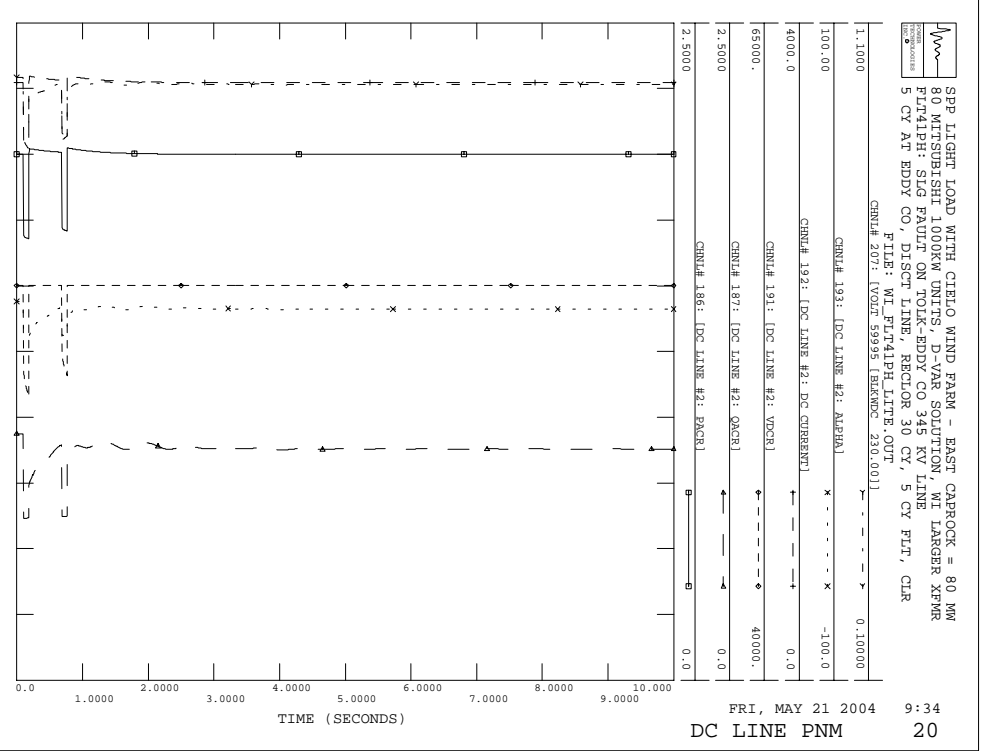
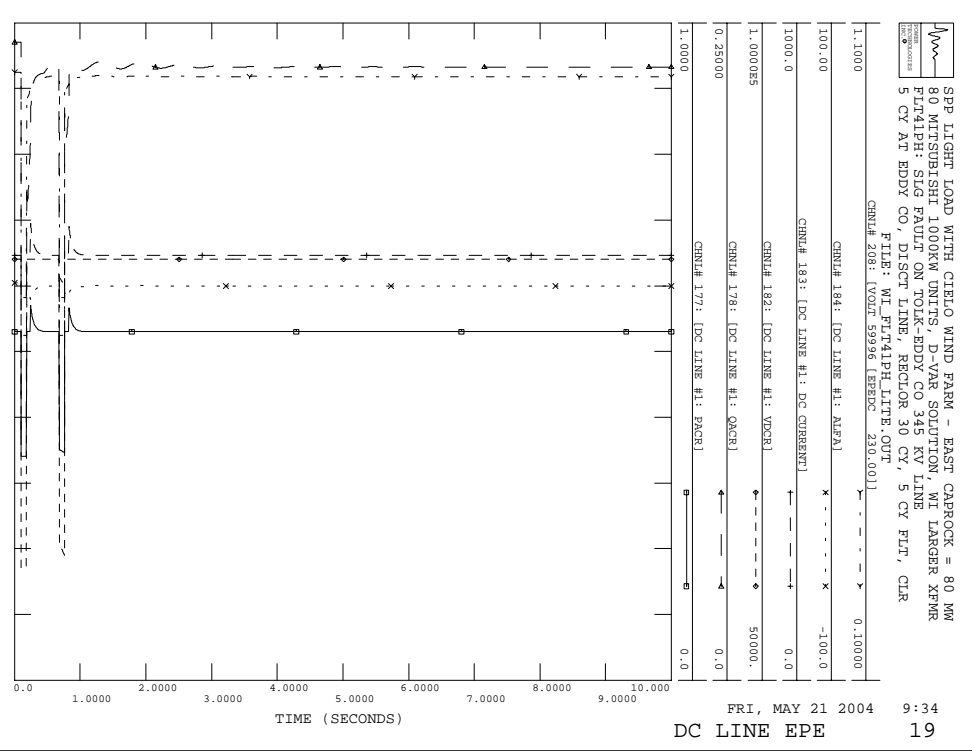
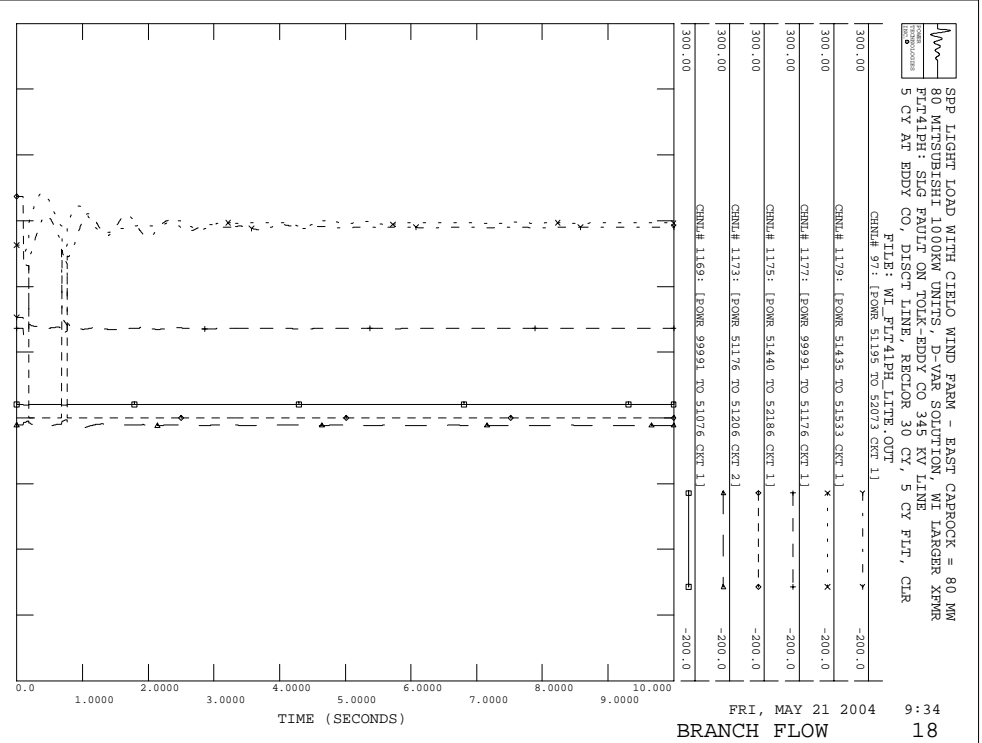
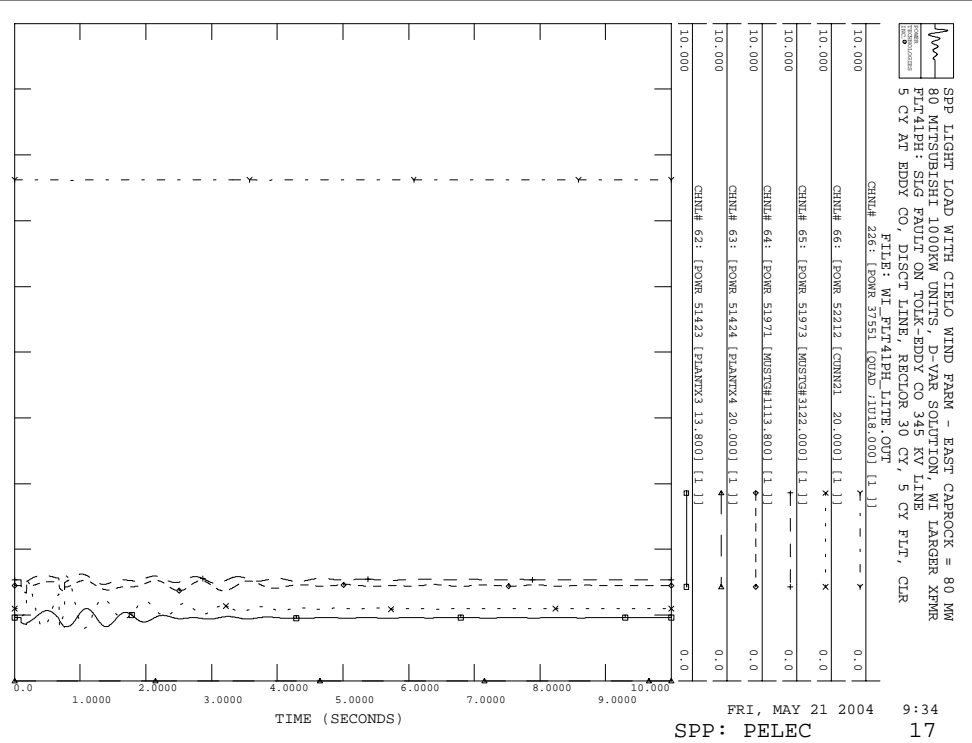
SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT41PH: SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR
 FILE: WI_FLT41PH_LITE.OUT



FRI, MAY 21 2004 9:34
 CIELO VOLTAGE 7

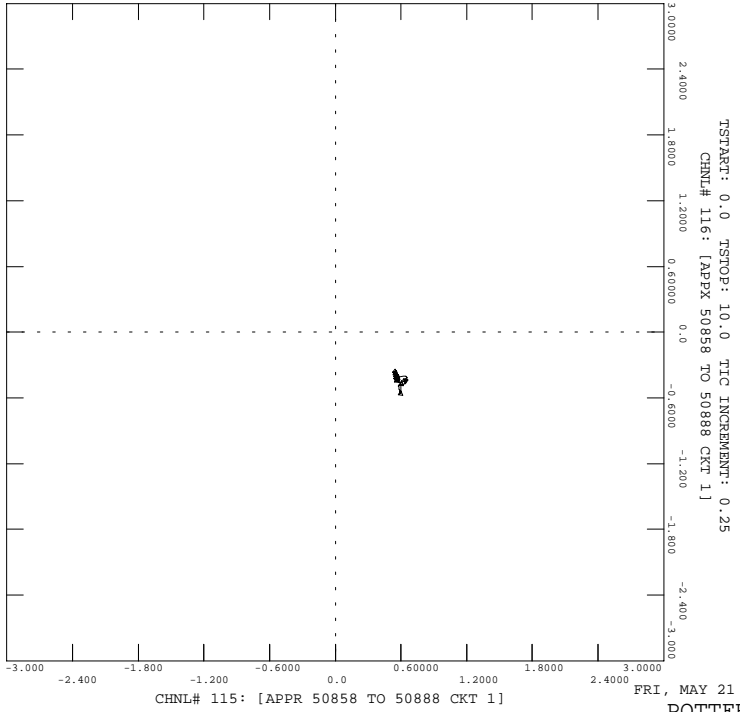






SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT41PH - SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR

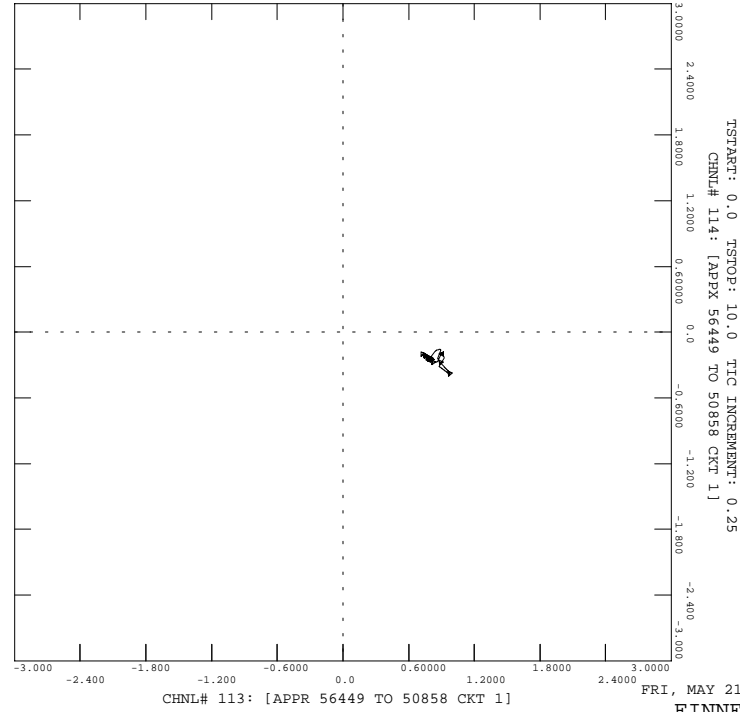
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FRI, MAY 21 2004 9:34
 CHNL# 115: [APPR 50858 TO 50888 CKT 1] POTTER-FINNEY 22

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT41PH - SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR

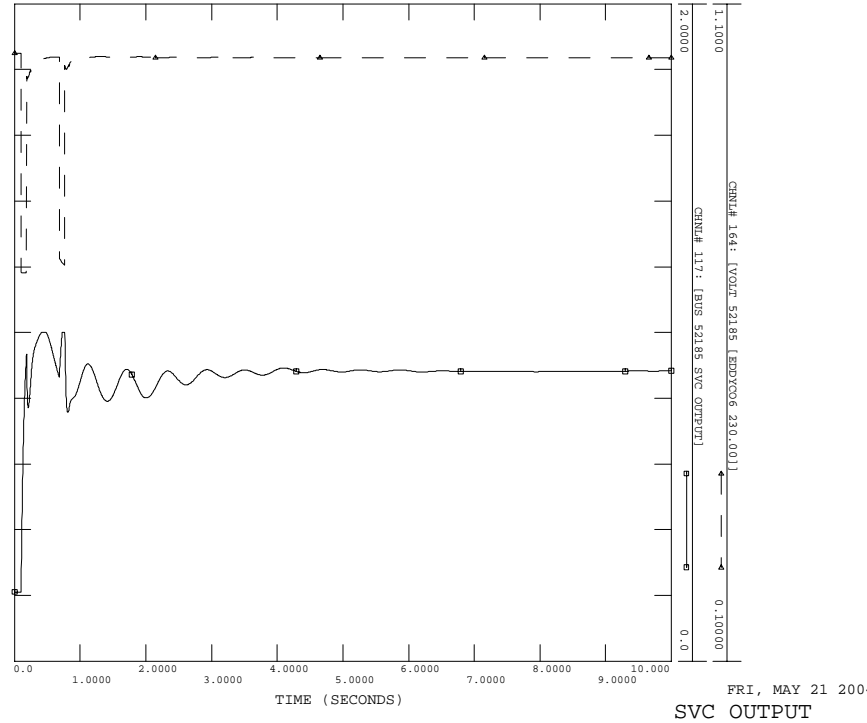
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FRI, MAY 21 2004 9:34
 CHNL# 113: [APPR 56449 TO 50858 CKT 1] FINNEY-HOLCOMB 21

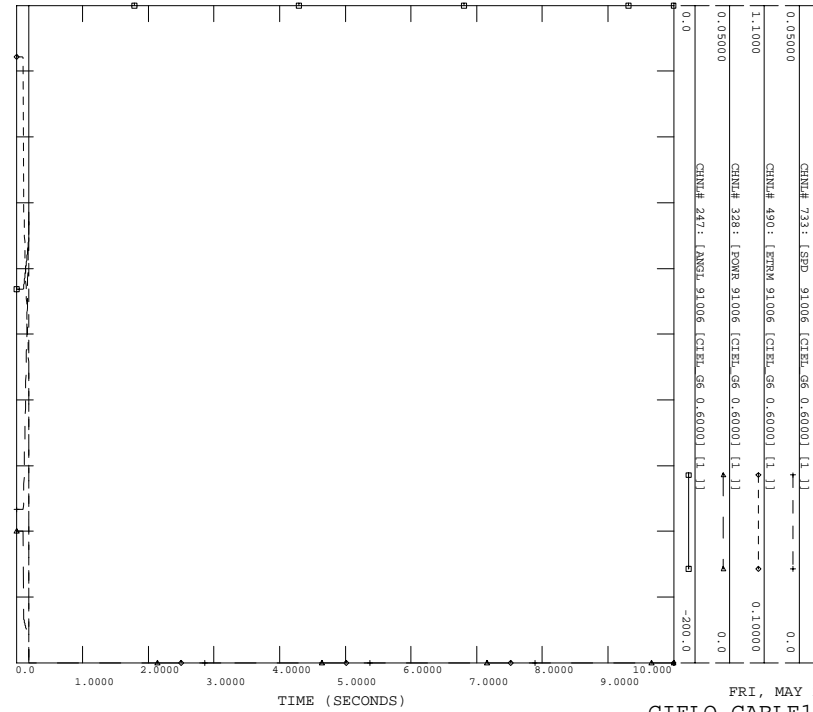
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT41PH - SLG FAULT ON TOLK-EDDY CO 345 KV LINE
 5 CY AT EDDY CO, DISCT LINE, RECLOR 30 CY, 5 CY FLT, CLR

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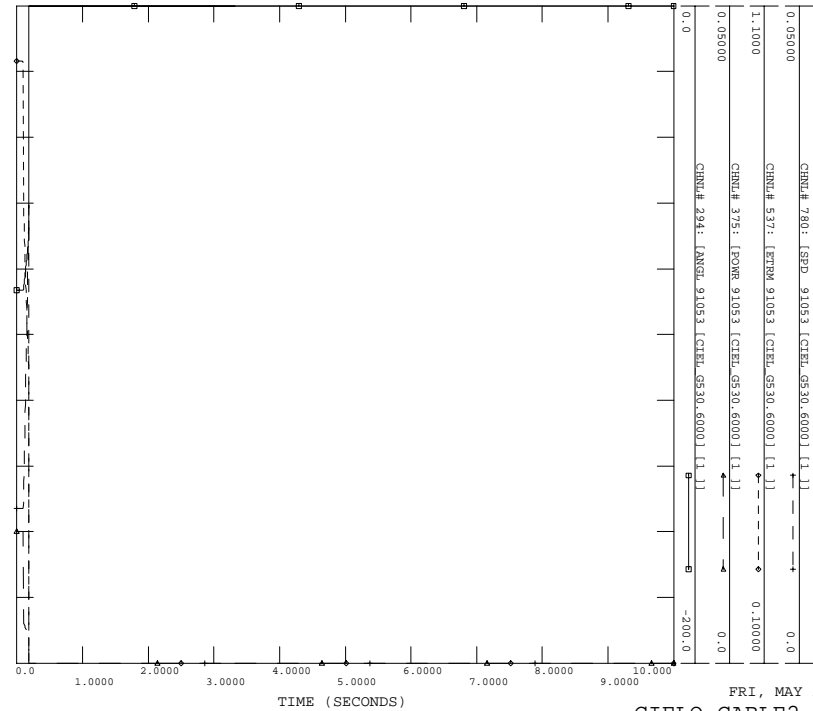
FRI, MAY 21 2004 9:34
 SVC OUTPUT 23

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH_LITE.OUT



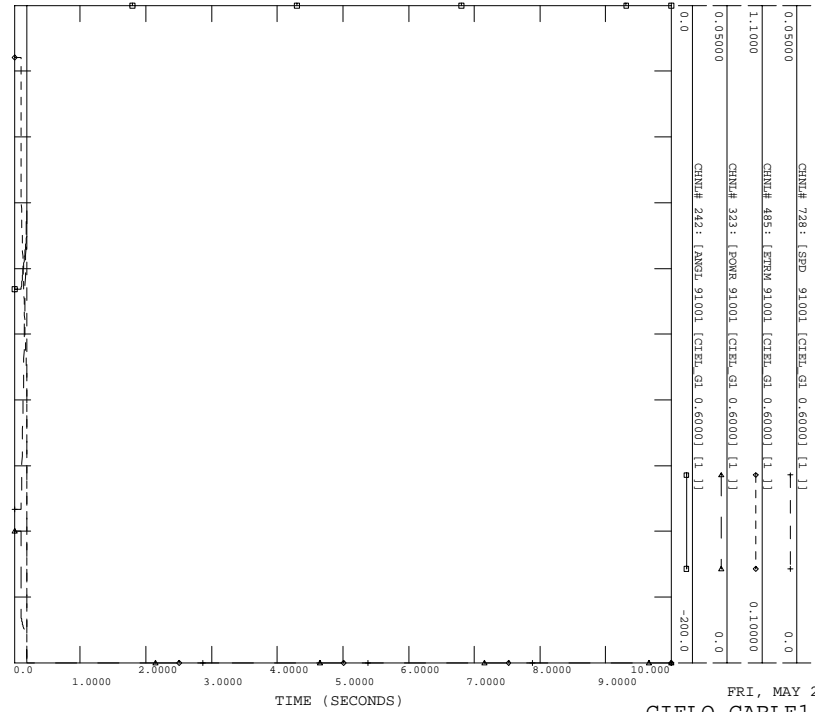
FRI, MAY 21 2004 9:35
 CIELO CABLE1 GEN6 2

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH_LITE.OUT



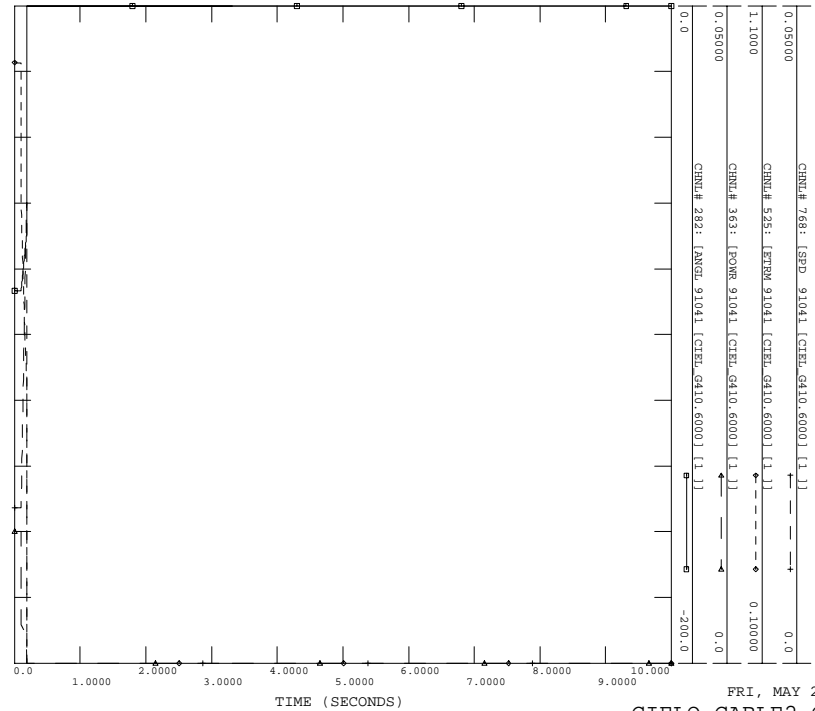
FRI, MAY 21 2004 9:35
 CIELO CABLE2 GEN53 4

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH_LITE.OUT



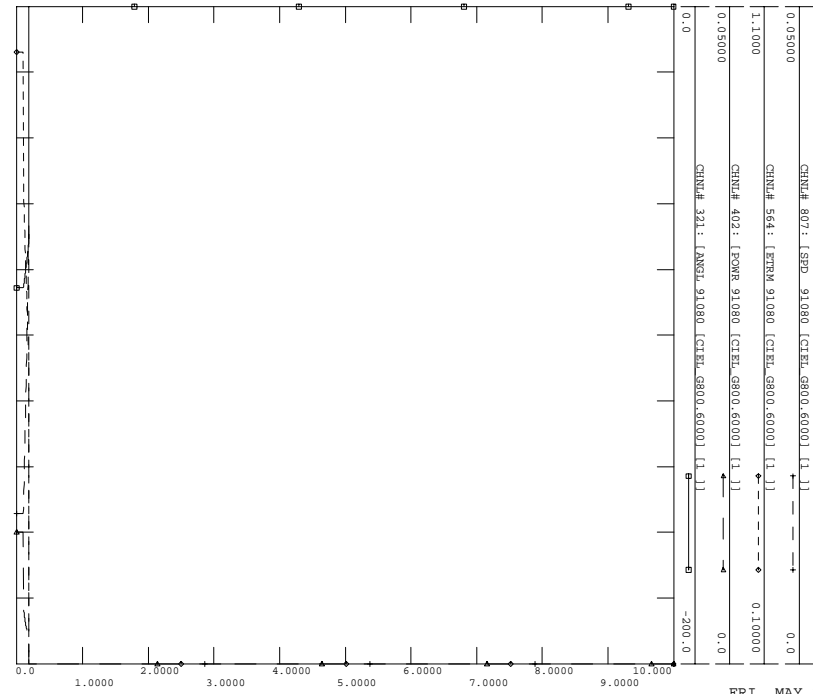
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 CIELO CABLE1 GEN1 1

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH_LITE.OUT



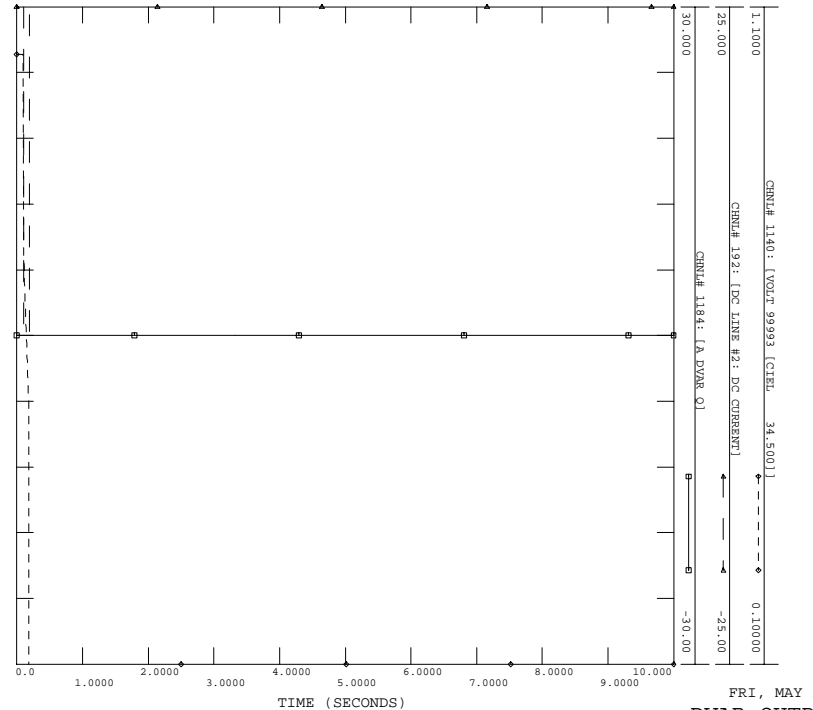
FRI, MAY 21 2004 9:35
 CIELO CABLE2 GEN41 3

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH_LITE.OUT



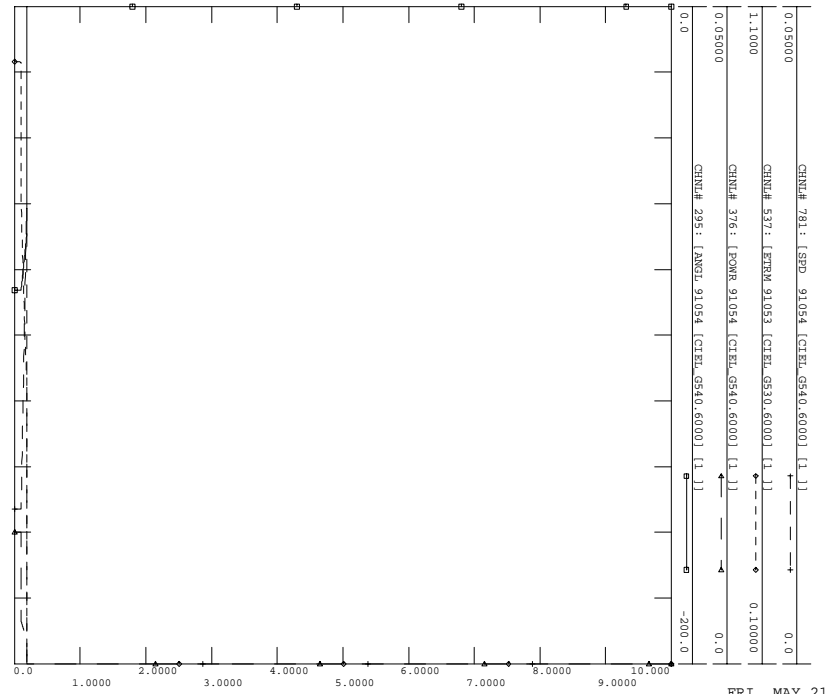
FRI, MAY 21 2004 9:35
 CIELO CABLE3 GEN80 6

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
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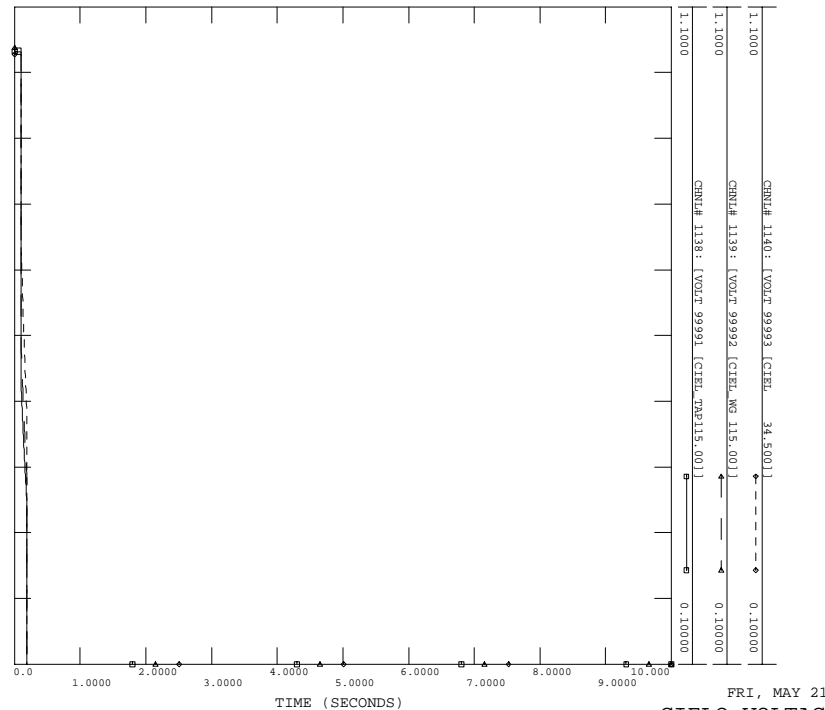
FRI, MAY 21 2004 9:35
 DVAR OUTPUT 8

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH_LITE.OUT

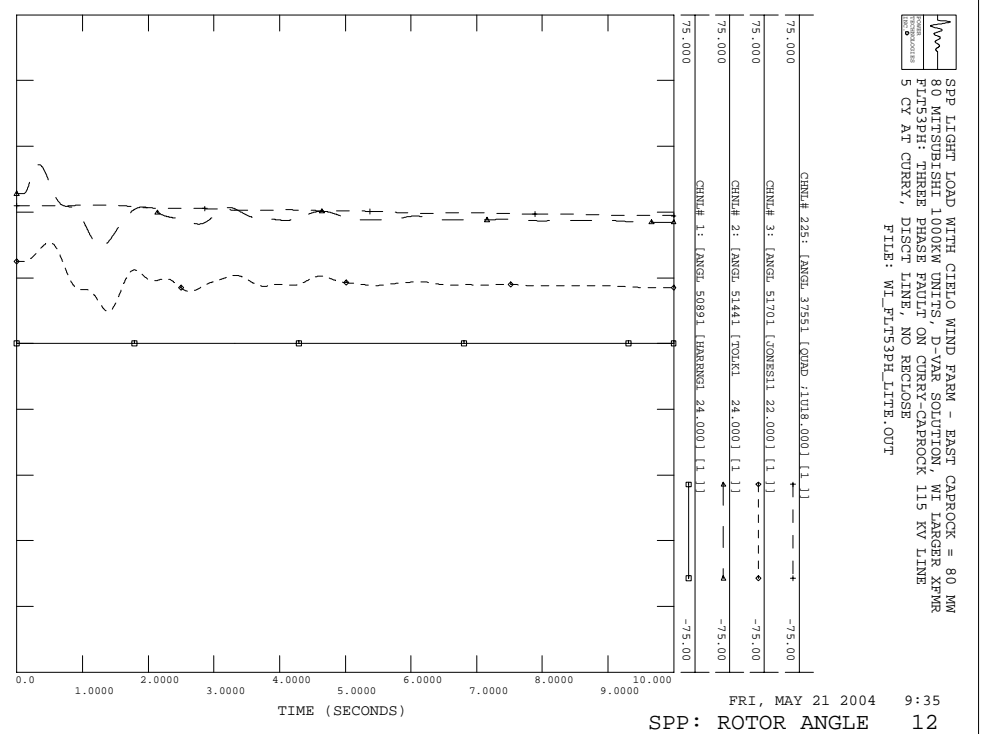
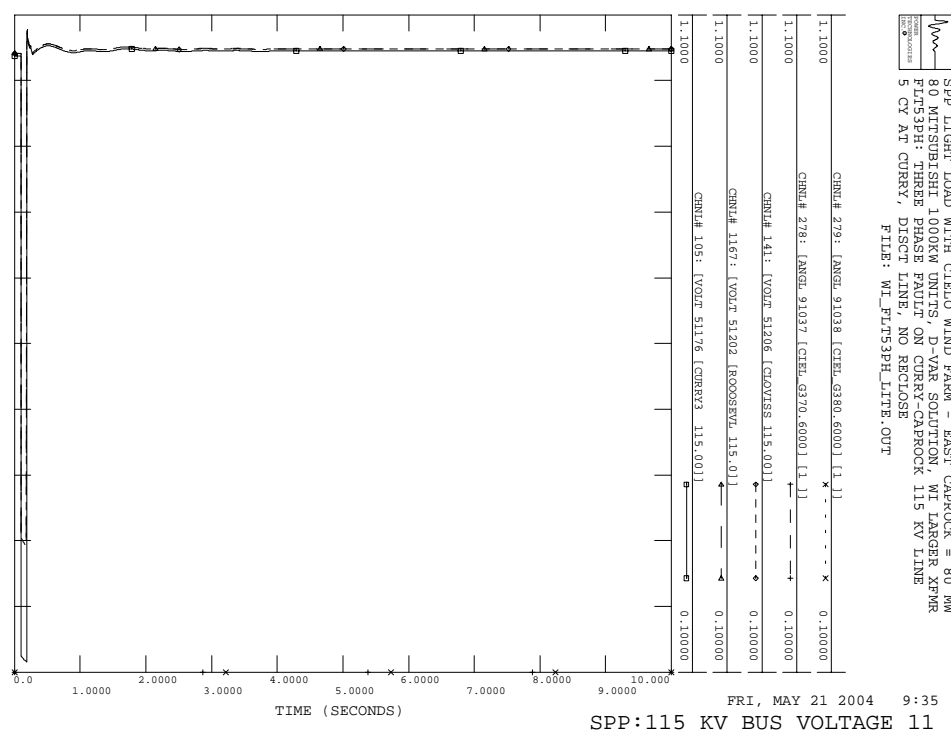
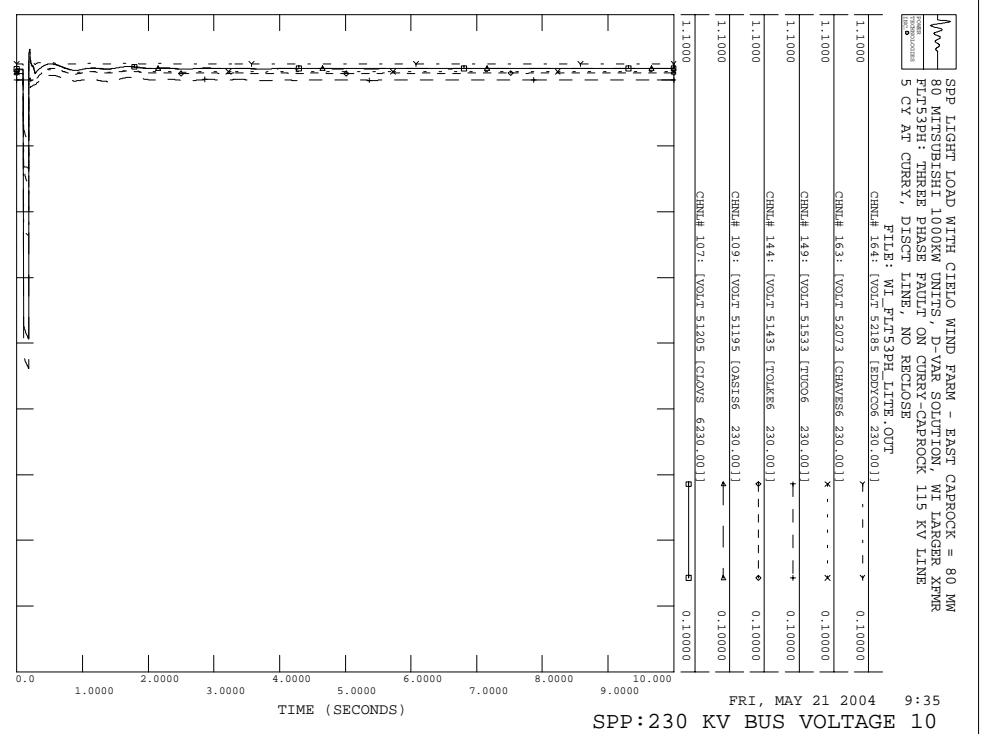
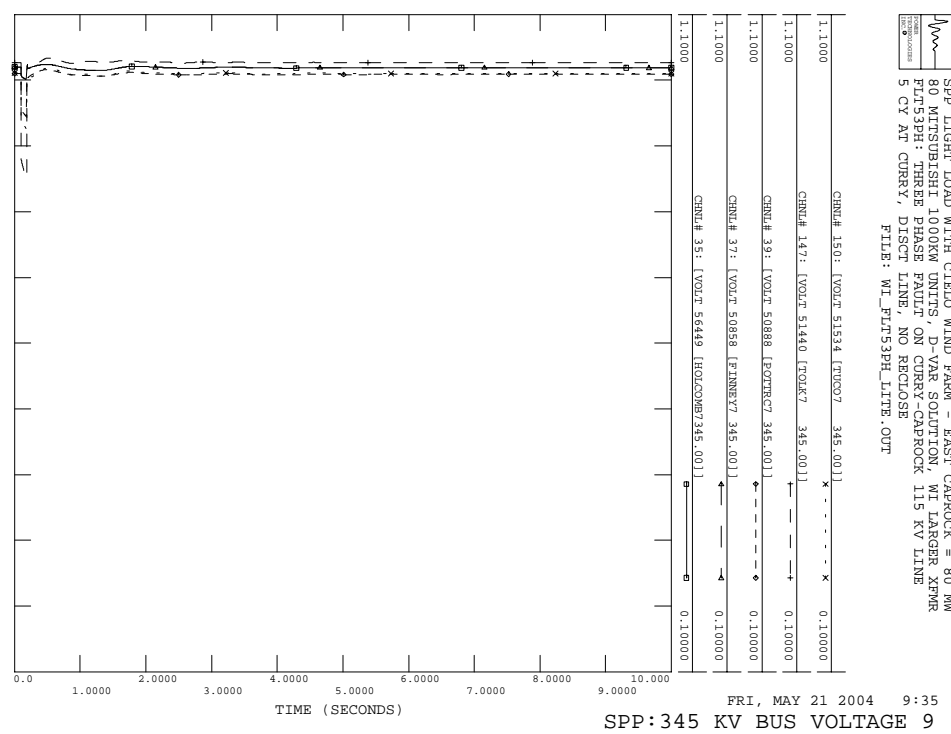


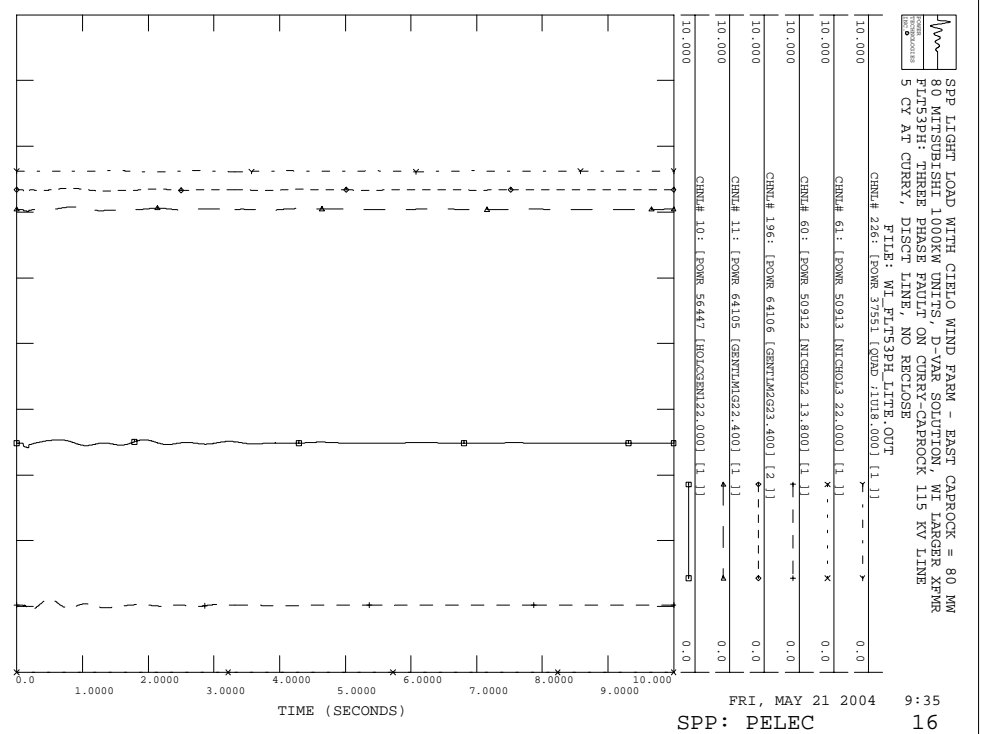
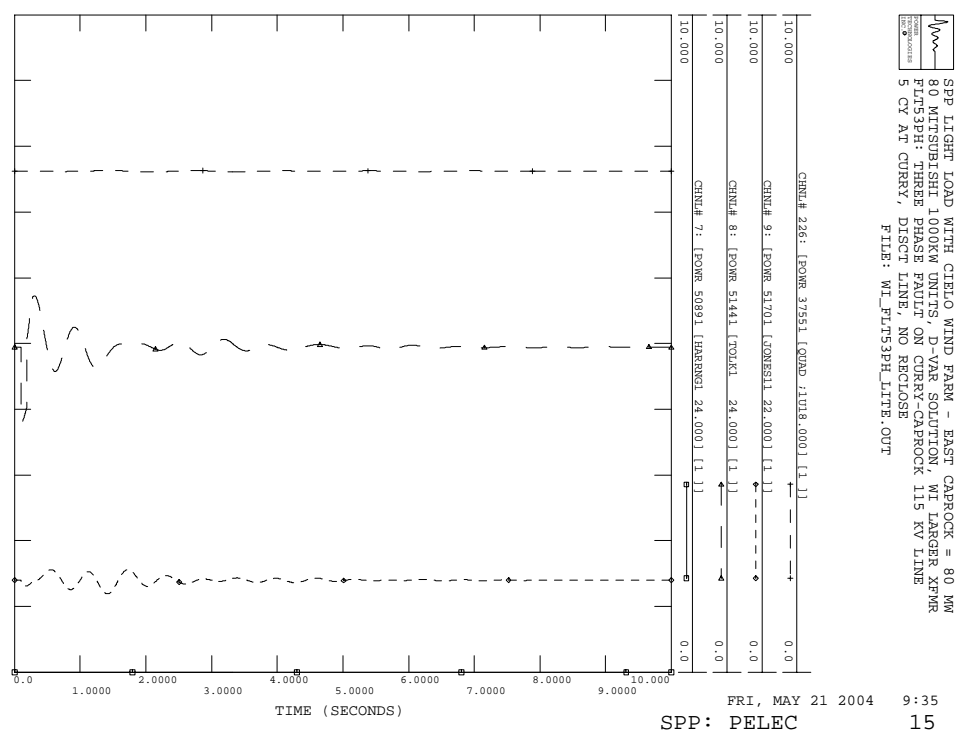
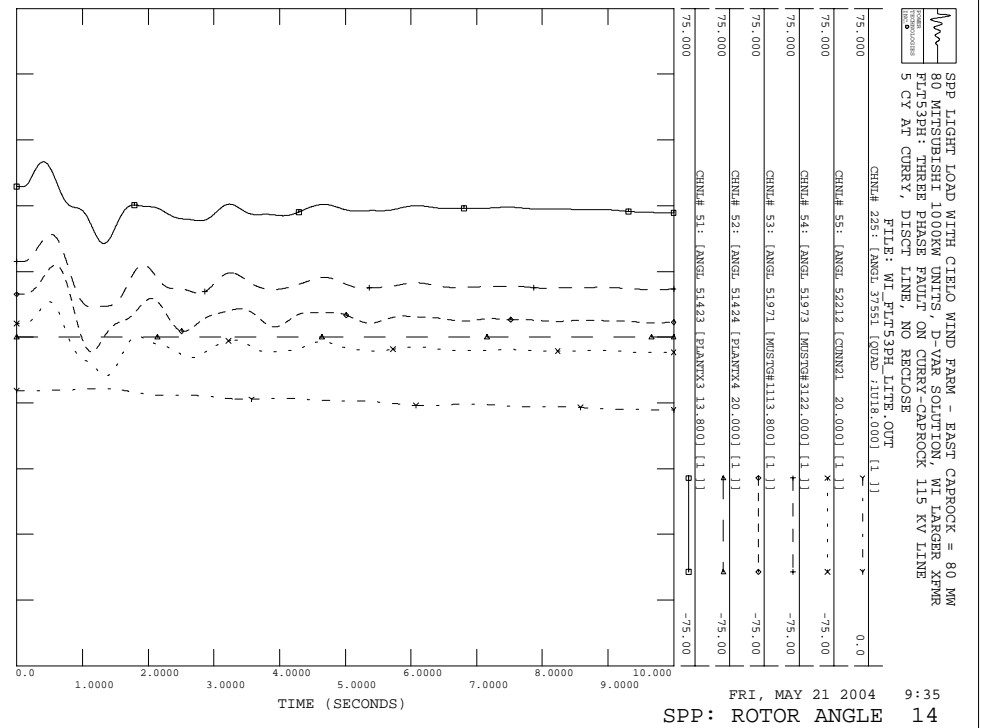
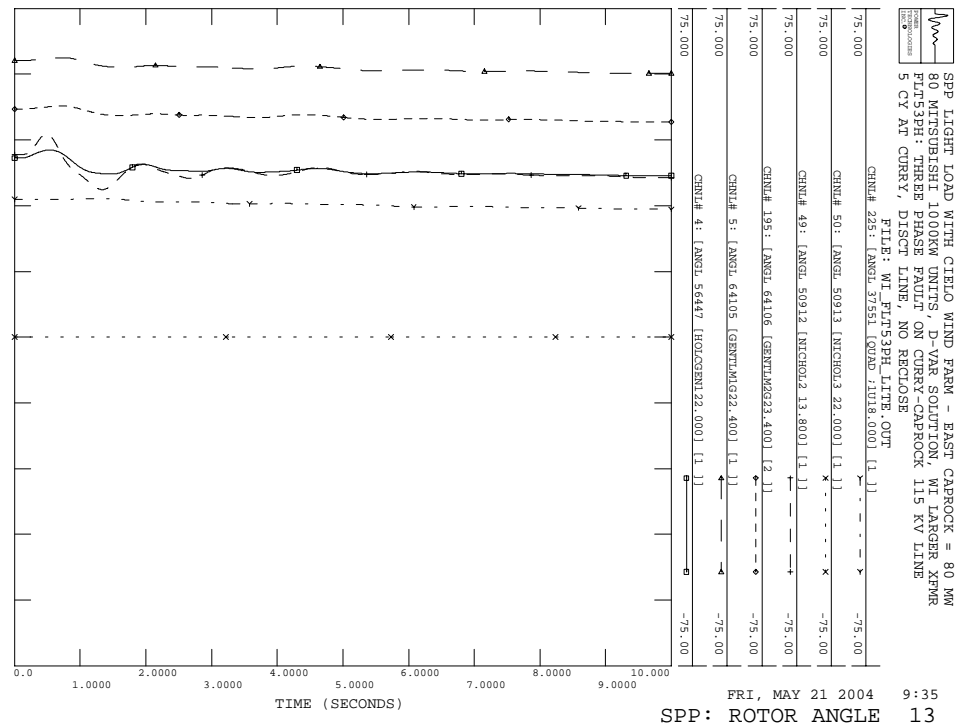
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 CIELO CABLE3 GEN54 5

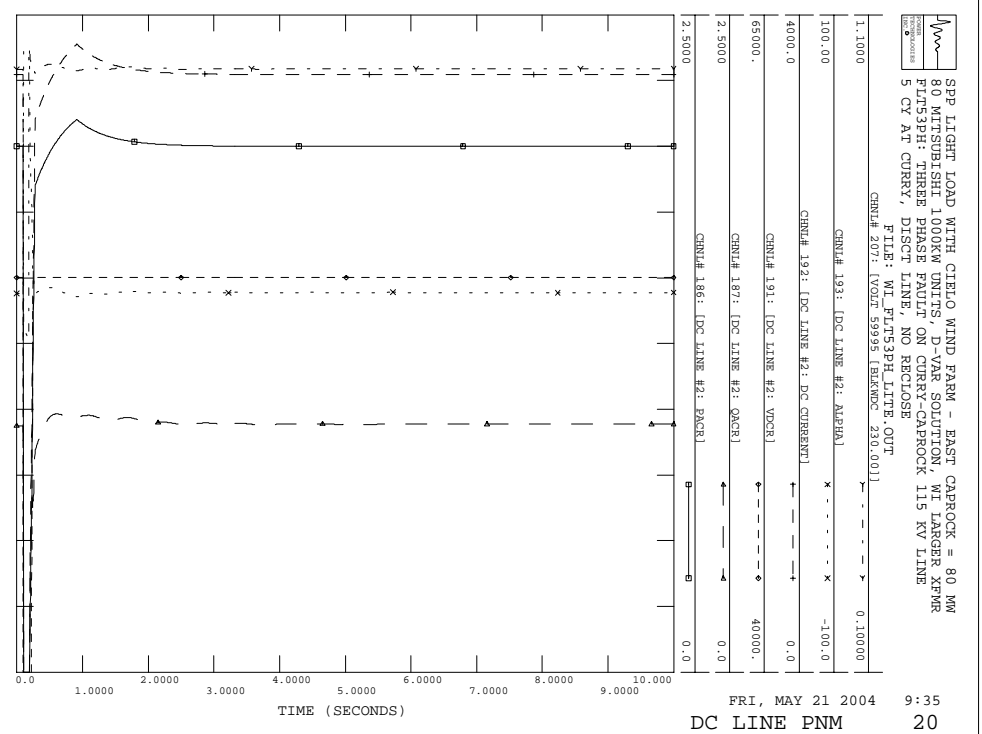
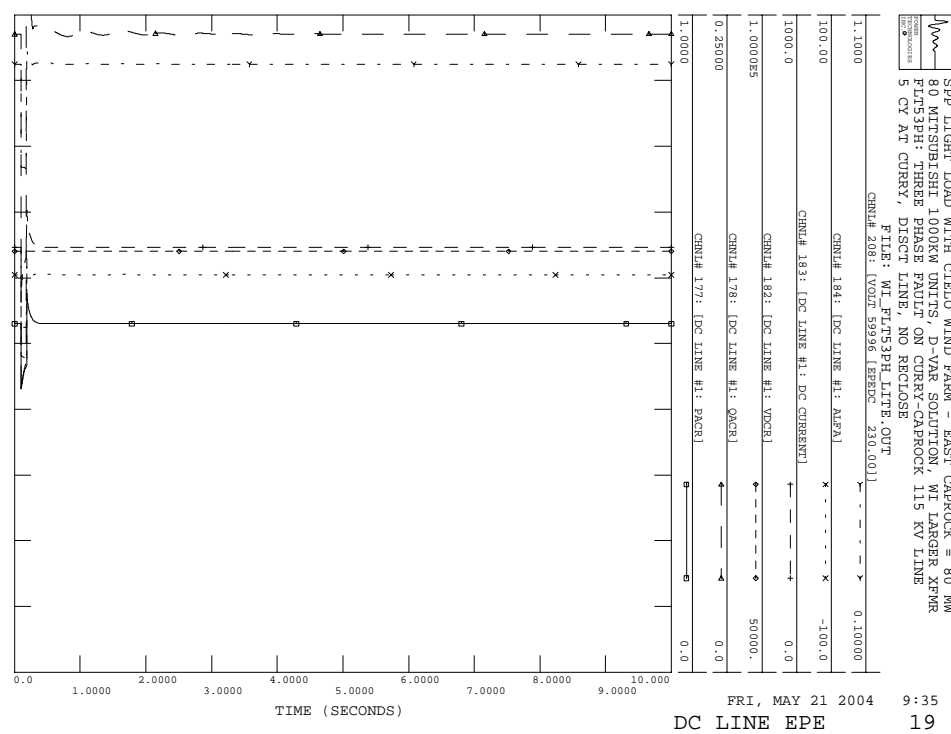
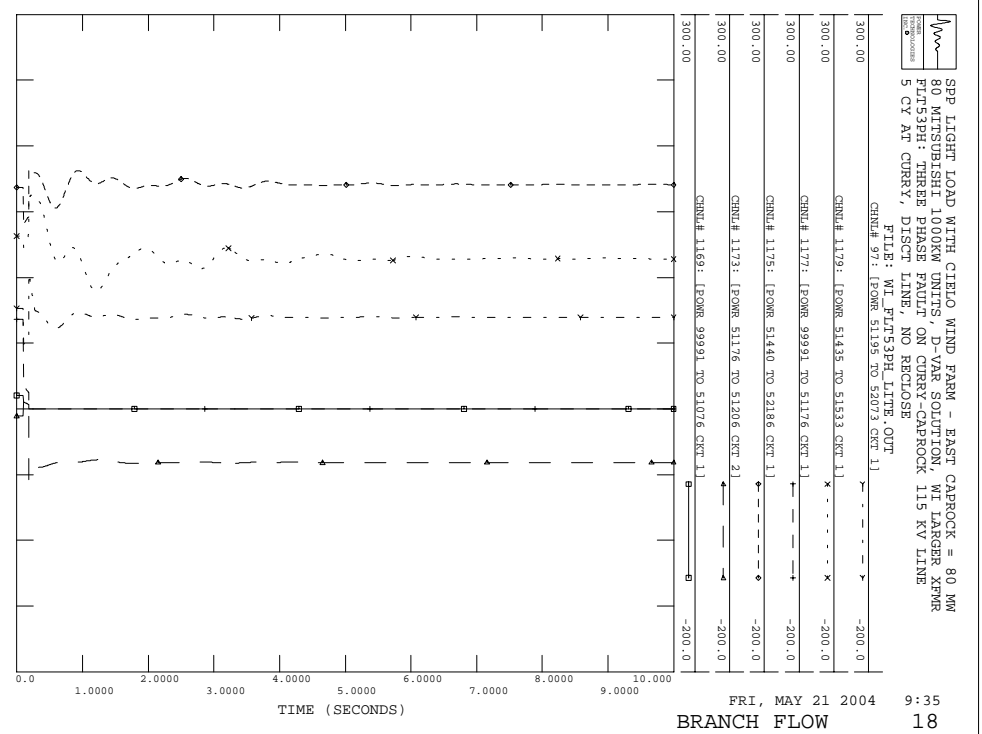
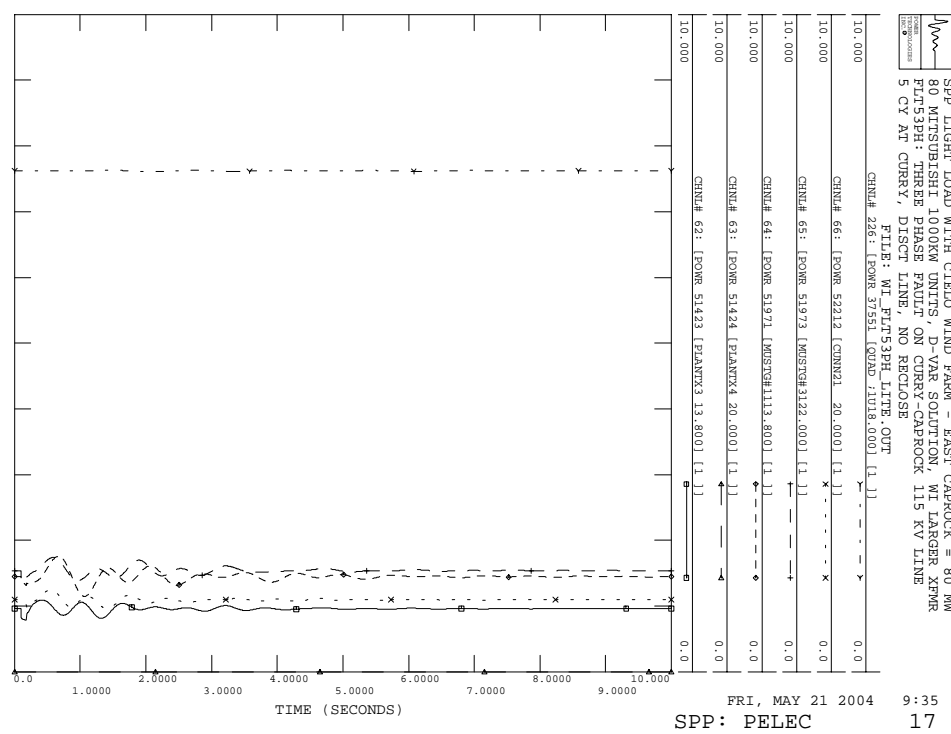
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT53PH: THREE PHASE FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT53PH_LITE.OUT



FRI, MAY 21 2004 9:35
 CIELO VOLTAGE 7

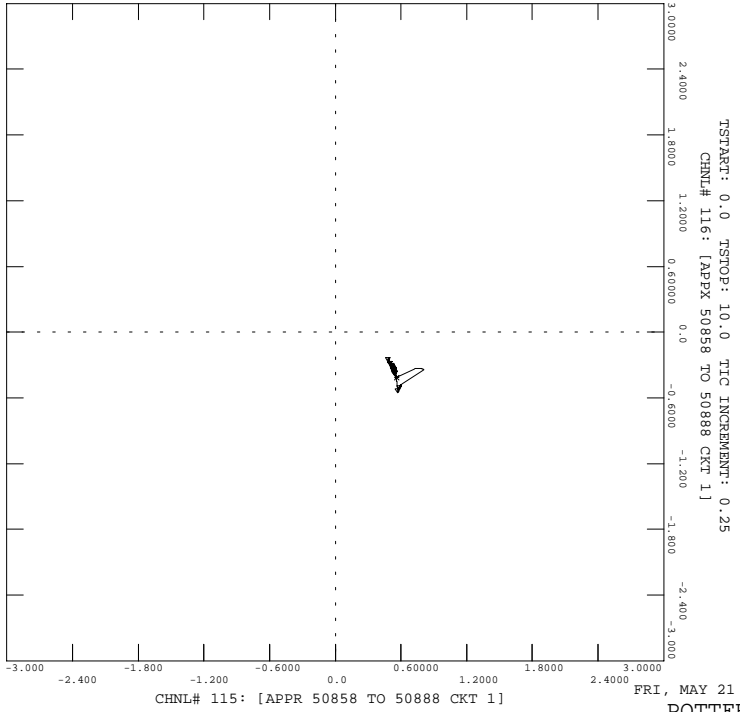






SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT53PH - THREE PHASE FAULT ON CURRY-CARROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE

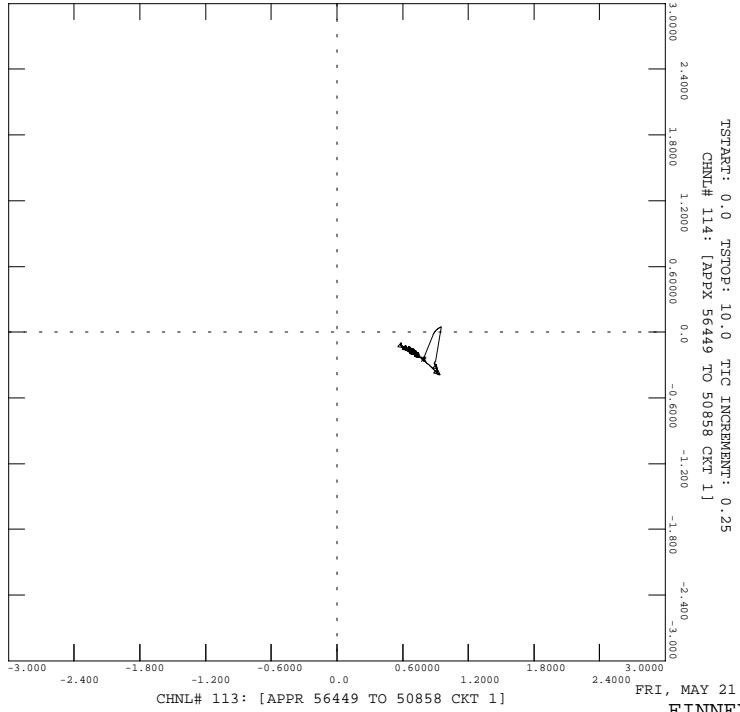
FILE: WI_FLT53PH_LITE.OUT



22

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT53PH - THREE PHASE FAULT ON CURRY-CARROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE

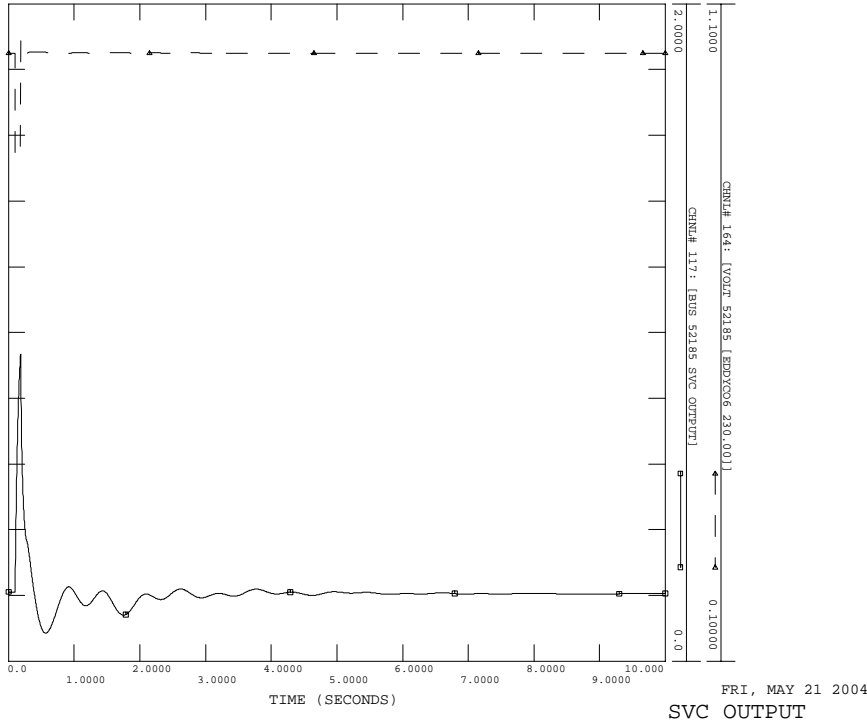
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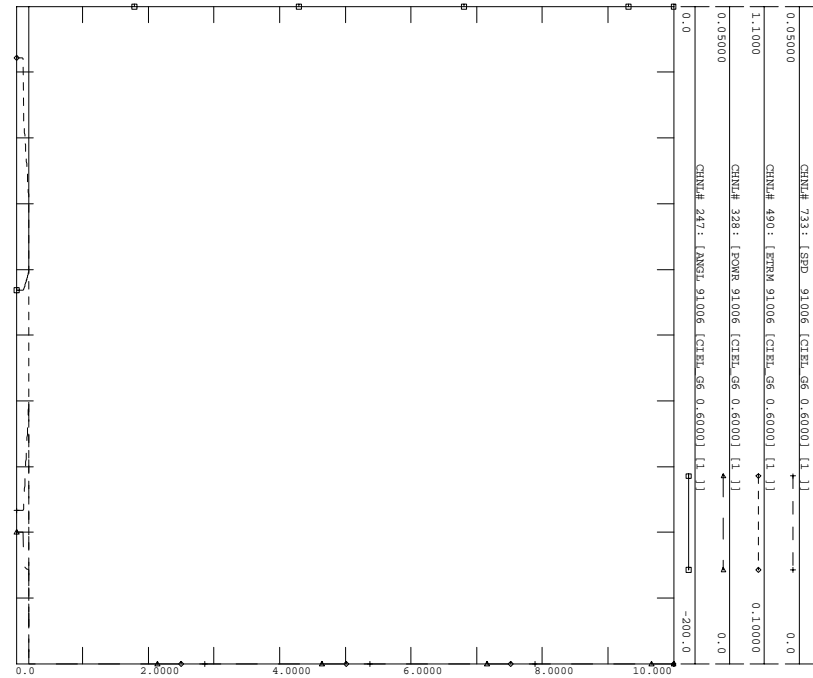
SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT53PH - THREE PHASE FAULT ON CURRY-CARROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE

FILE: WI_FLT53PH_LITE.OUT



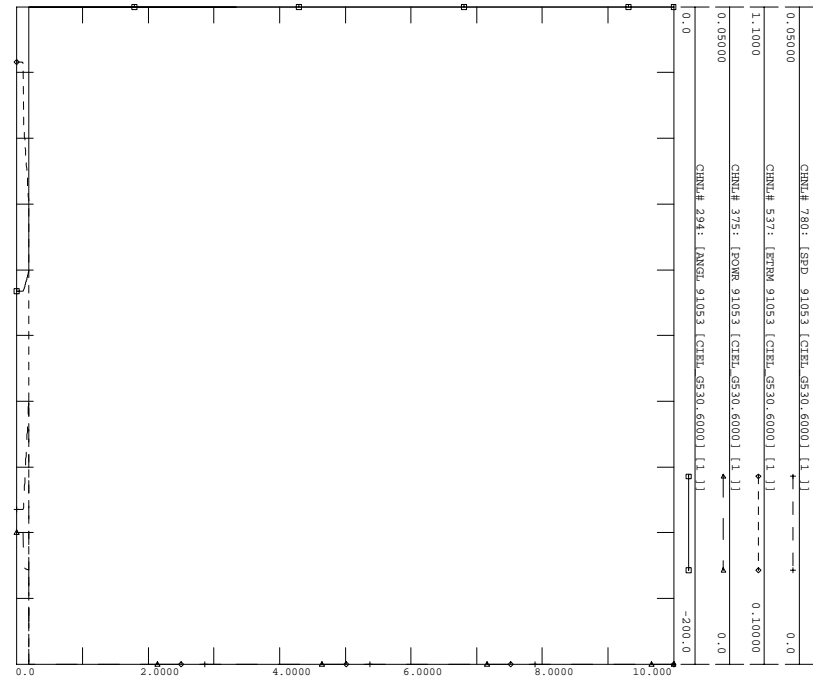
23

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT51PH_LITE.OUT



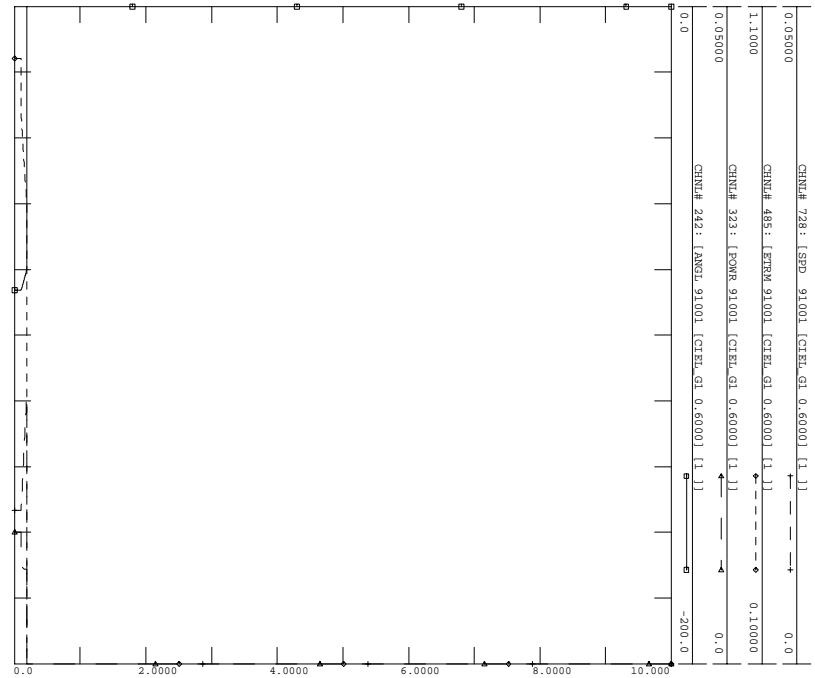
FRI, MAY 21 2004 9:34
 CIELO CABLE1 GEN6 2

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
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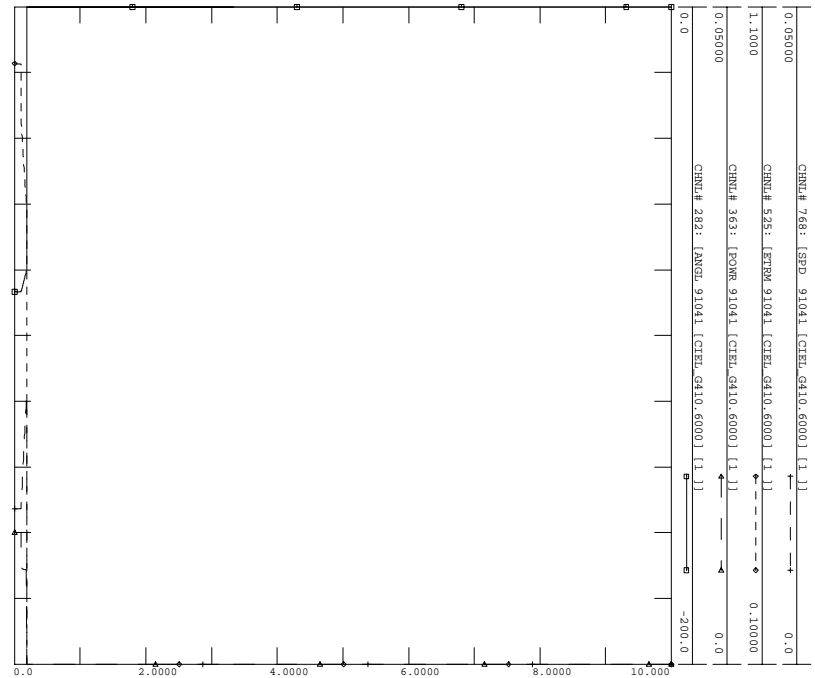
FRI, MAY 21 2004 9:34
 CIELO CABLE2 GEN53 4

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
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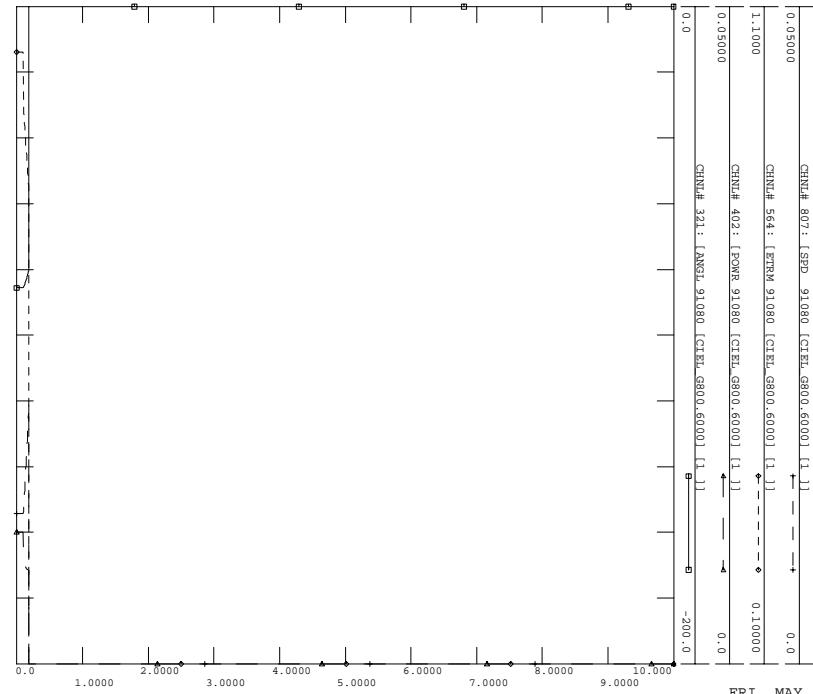
FRI, MAY 21 2004 9:34
 CIELO CABLE1 GEN1 1

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT51PH_LITE.OUT



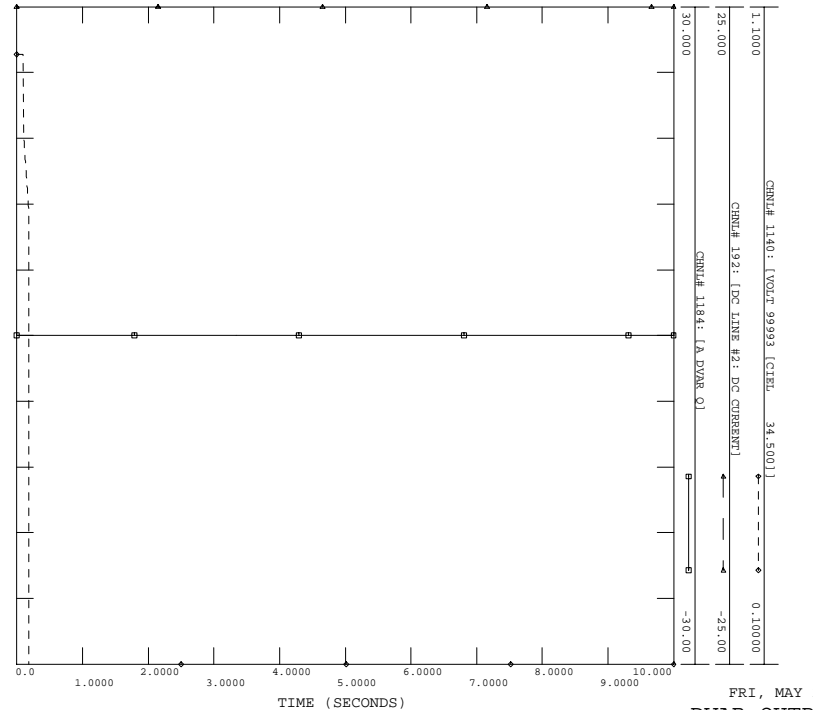
FRI, MAY 21 2004 9:34
 CIELO CABLE2 GEN41 3

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
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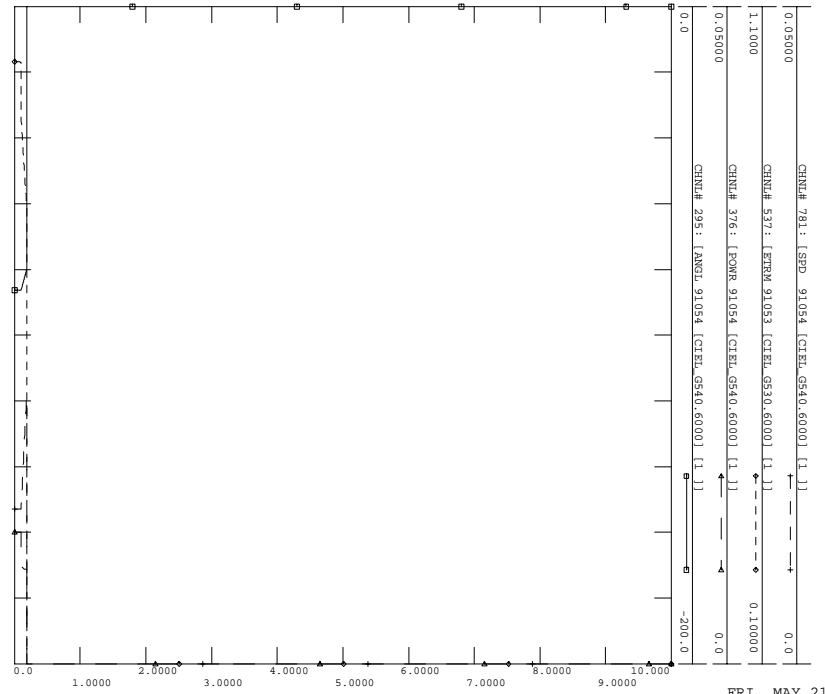
FRI, MAY 21 2004 9:34
 CIELO CABLE3 GEN80 6

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
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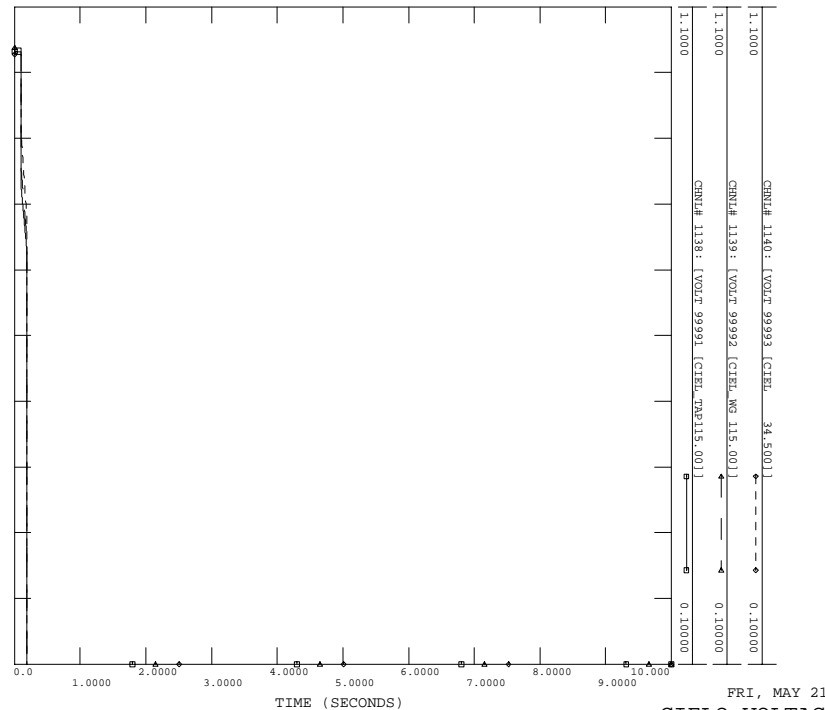
FRI, MAY 21 2004 9:34
 DVAR OUTPUT 8

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
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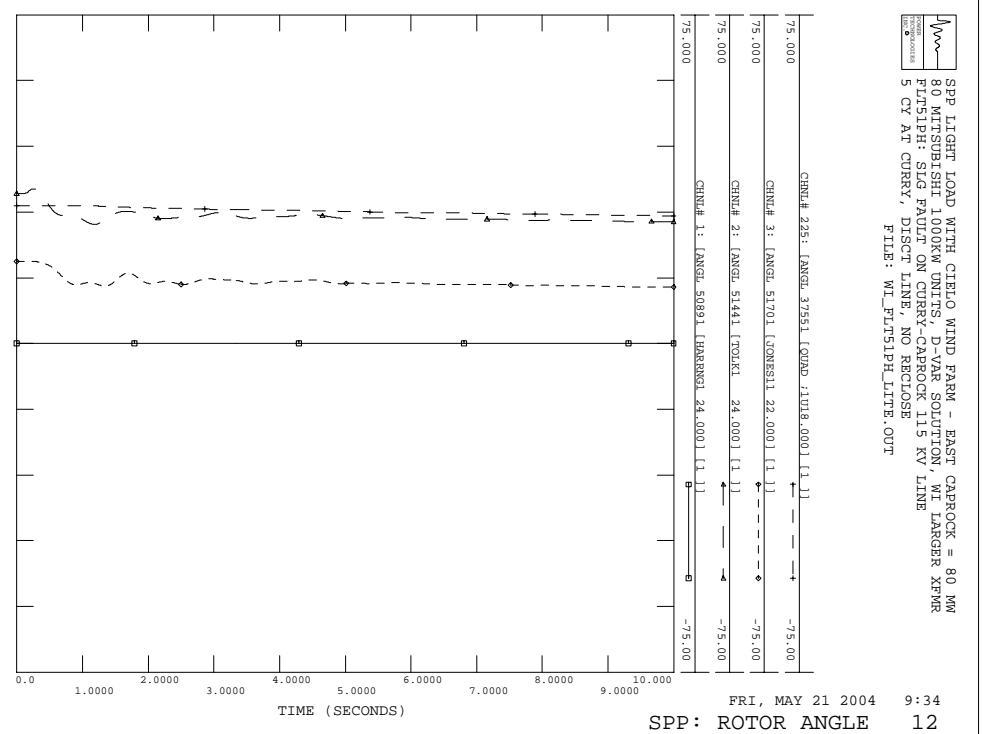
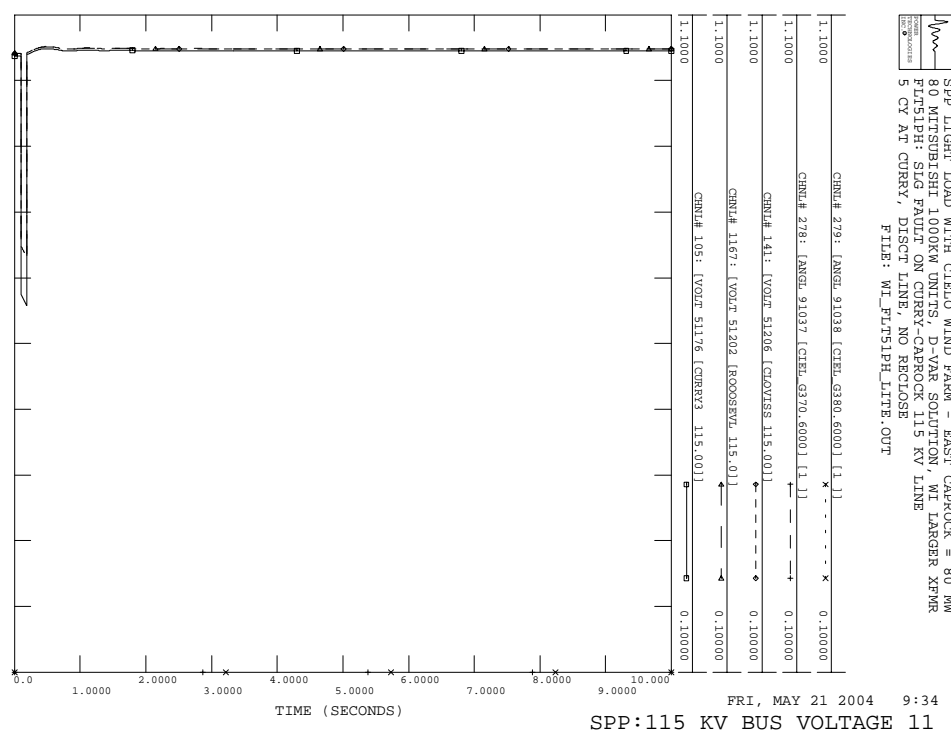
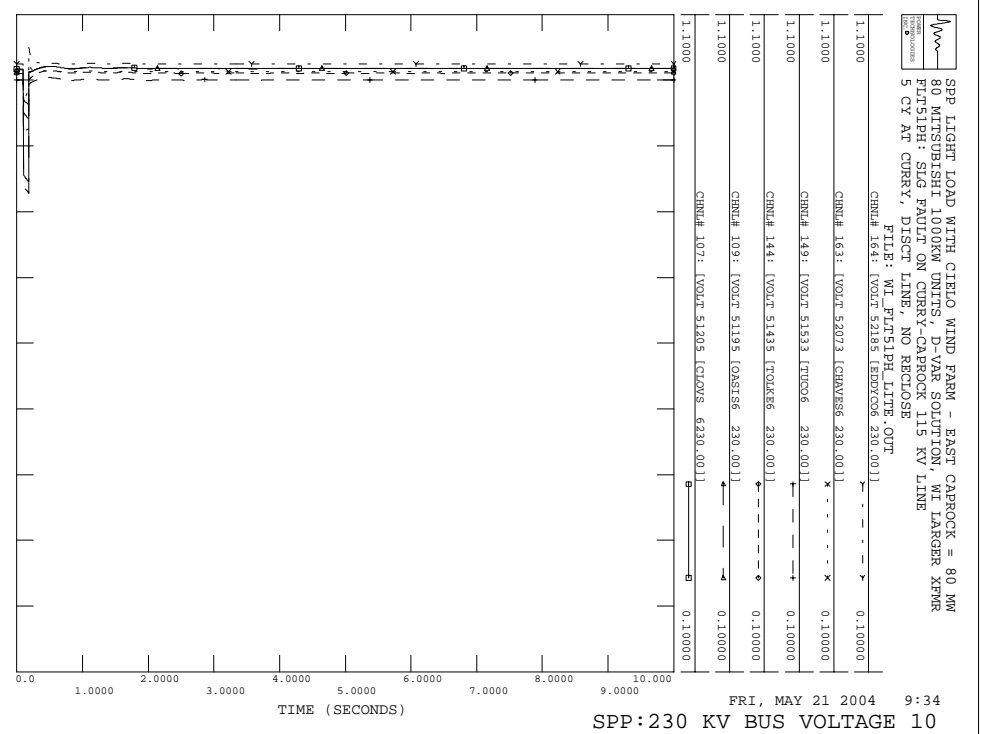
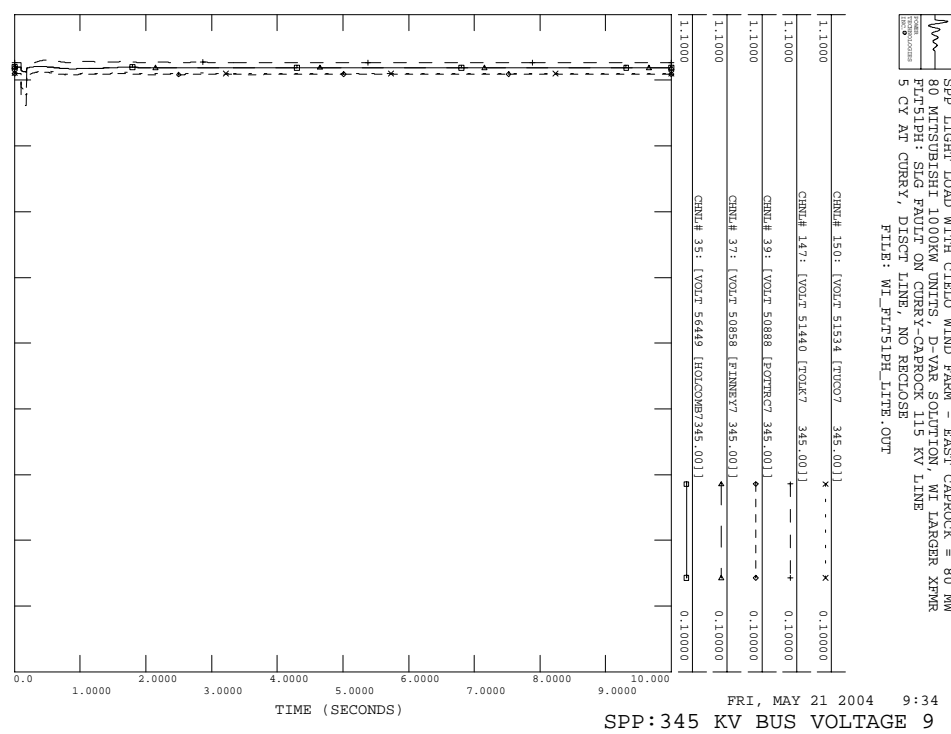


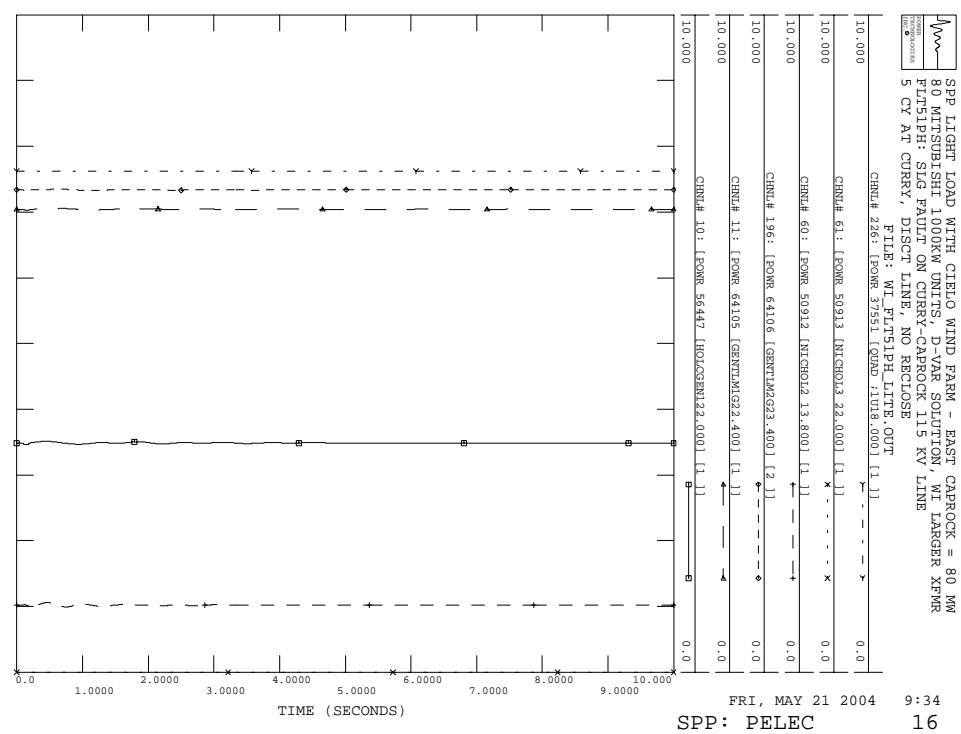
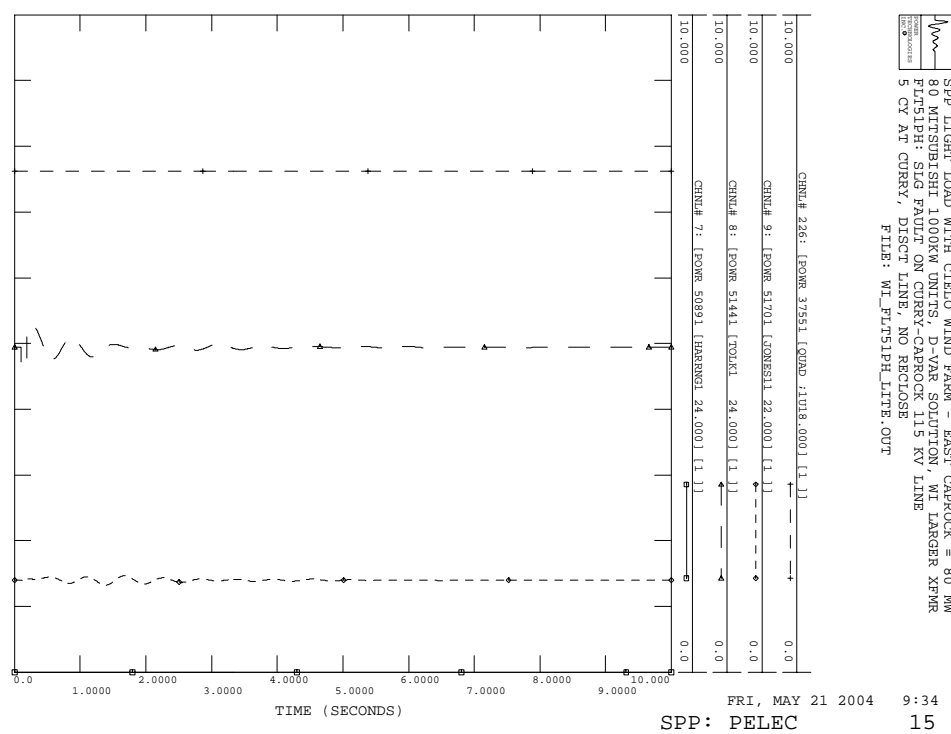
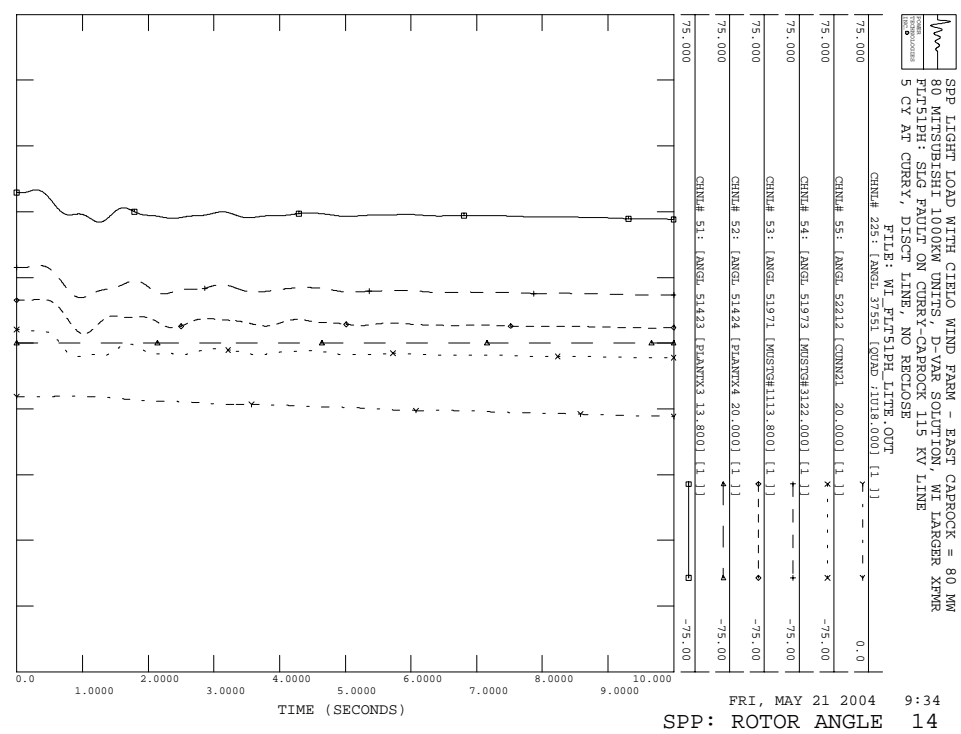
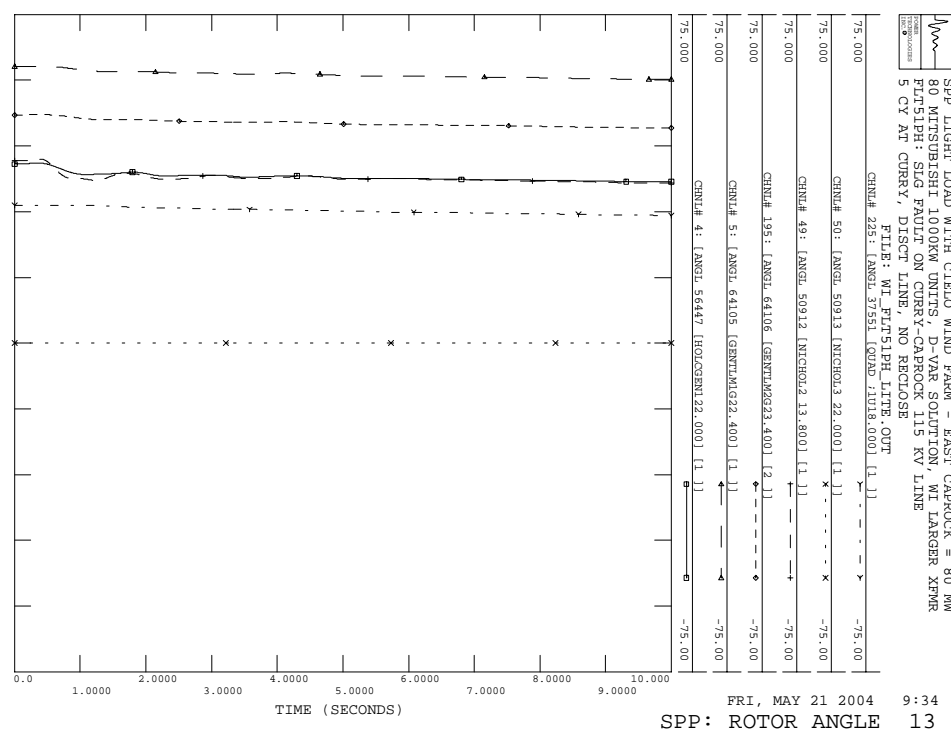
FRI, MAY 21 2004 9:34
 CIELO CABLE3 GEN54 5

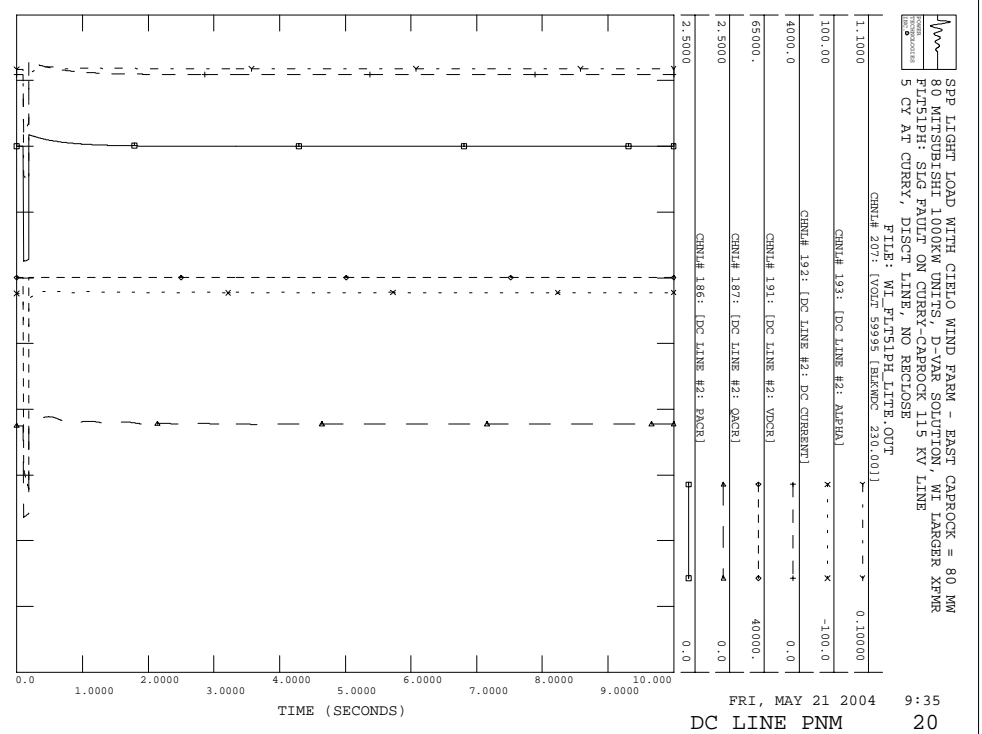
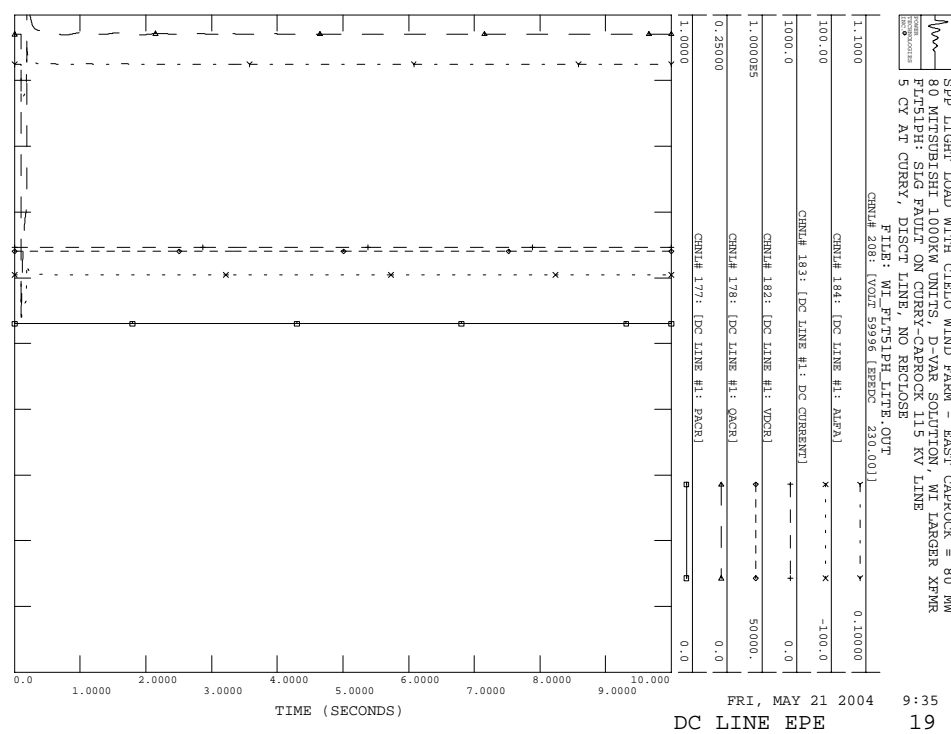
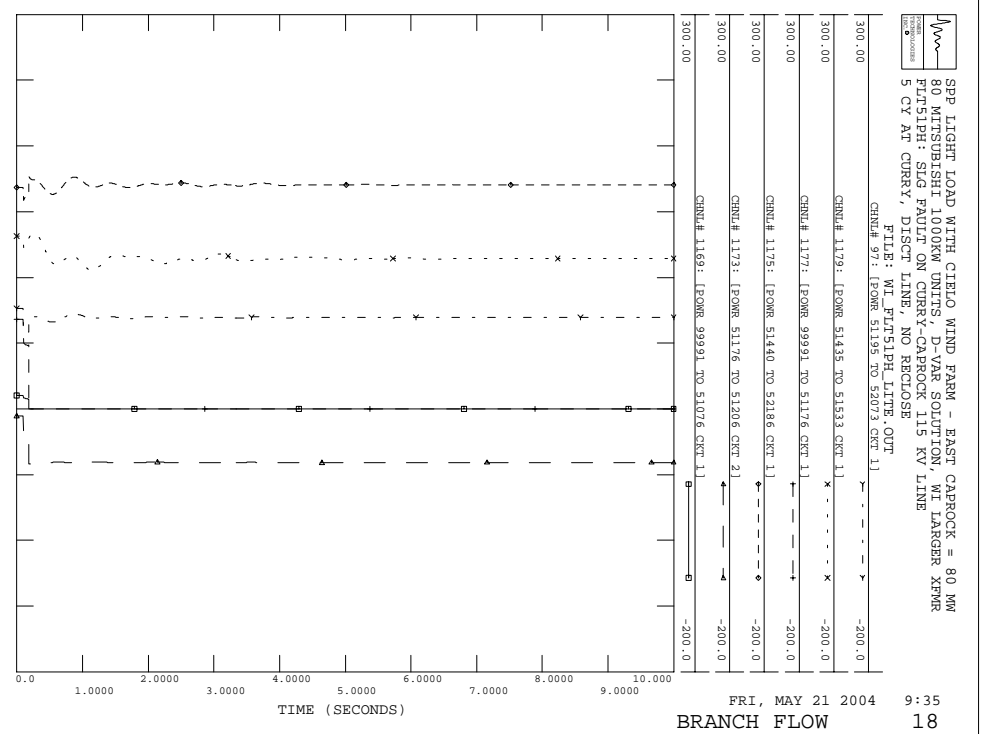
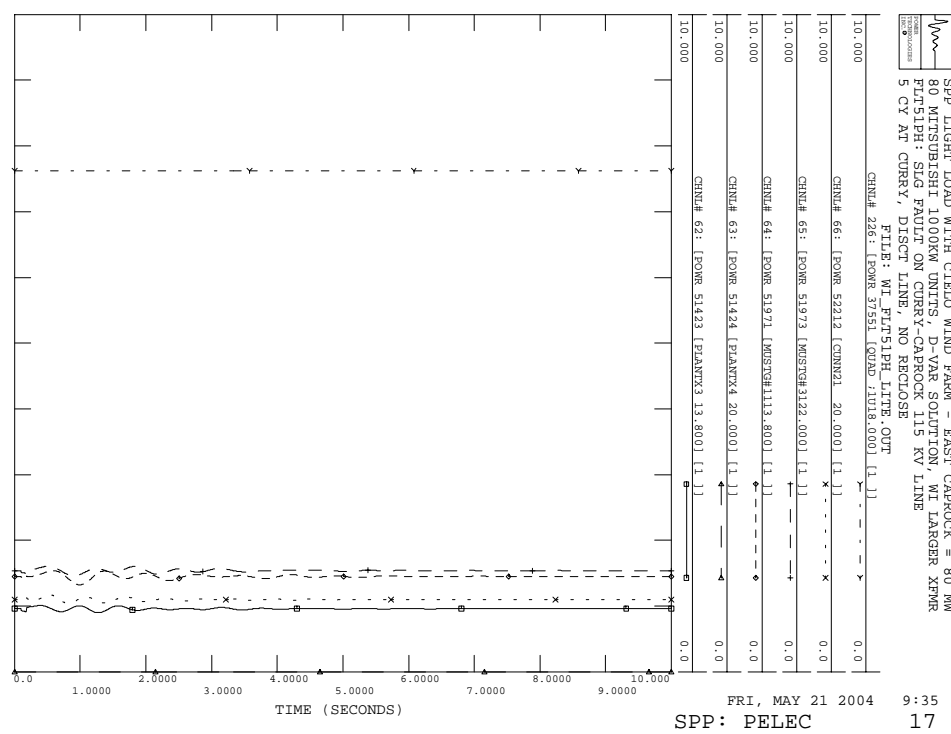
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CAPROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE
 FILE: WI_FLT51PH_LITE.OUT



FRI, MAY 21 2004 9:34
 CIELO VOLTAGE 7

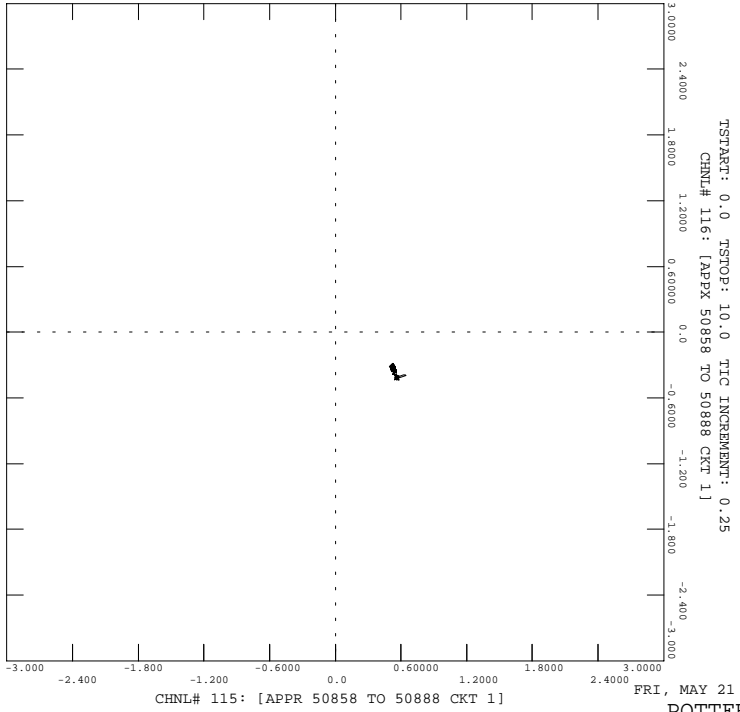






SPE LIGHT LOAD WITH CIELO WIND FARM - EAST CAROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CAROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE

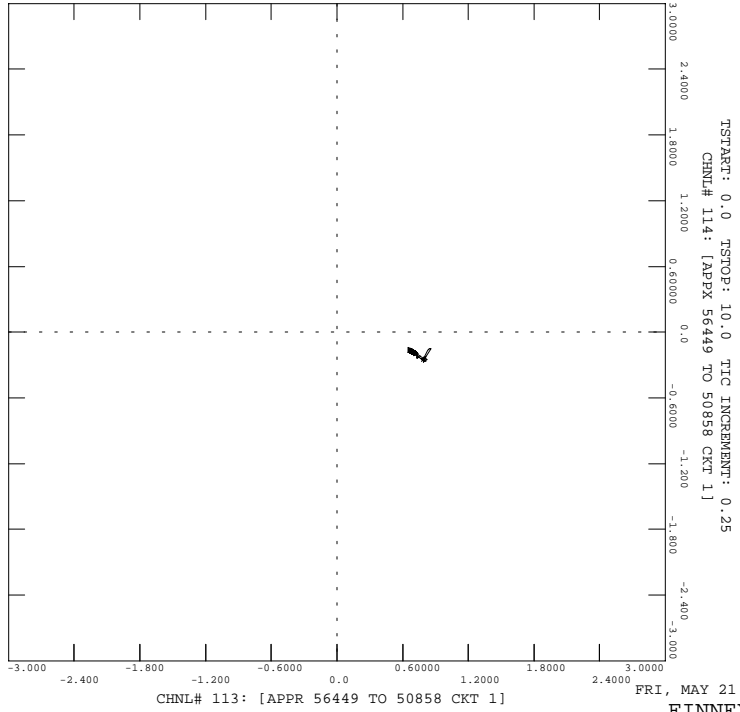
FILE: WI_FLT51PH_LITE.OUT



22

SPE LIGHT LOAD WITH CIELO WIND FARM - EAST CAROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CAROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE

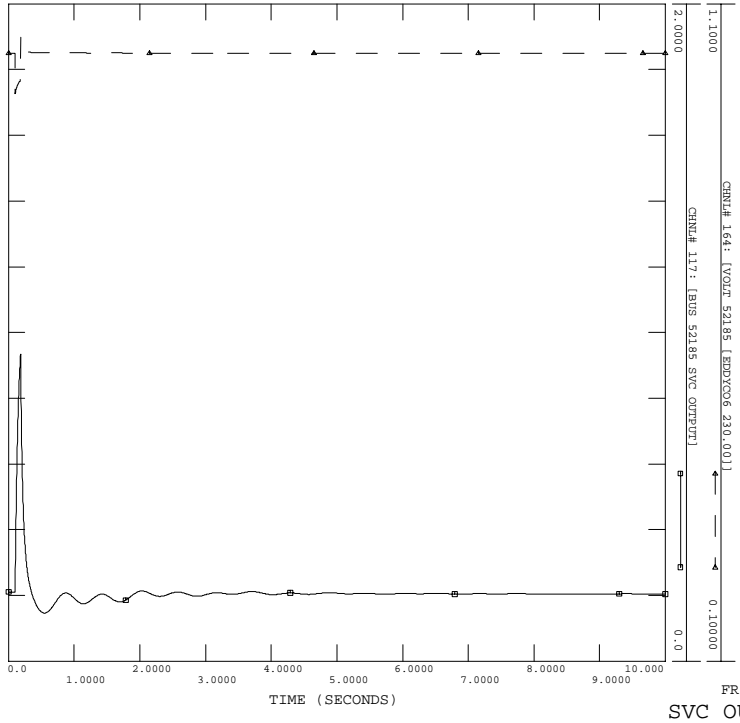
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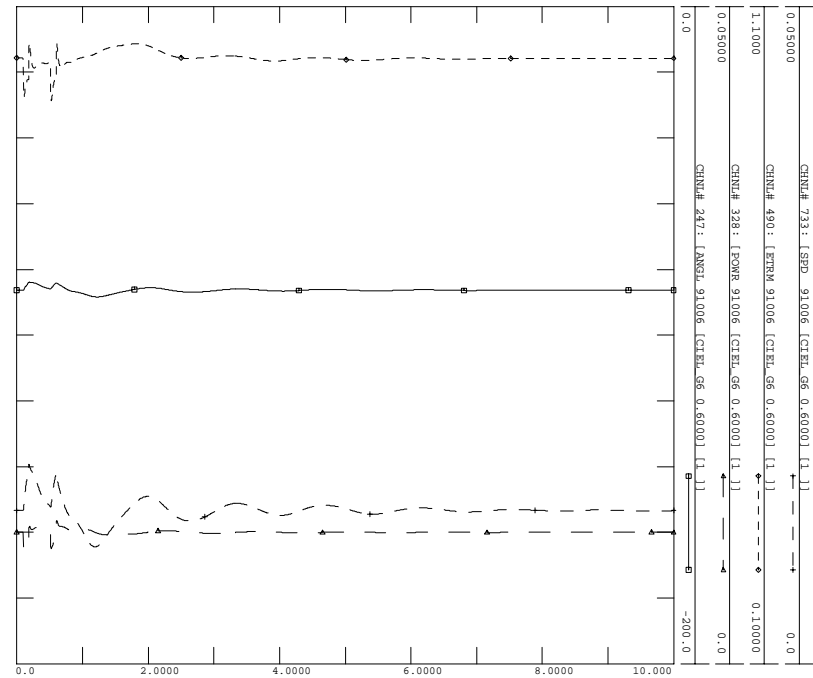
SPE LIGHT LOAD WITH CIELO WIND FARM - EAST CAROCK = 80 MW
 80 MITSUBISHI 1000K UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT51PH: SLG FAULT ON CURRY-CAROCK 115 KV LINE
 5 CY AT CURRY, DISCT LINE, NO RECLOSE

FILE: WI_FLT51PH_LITE.OUT



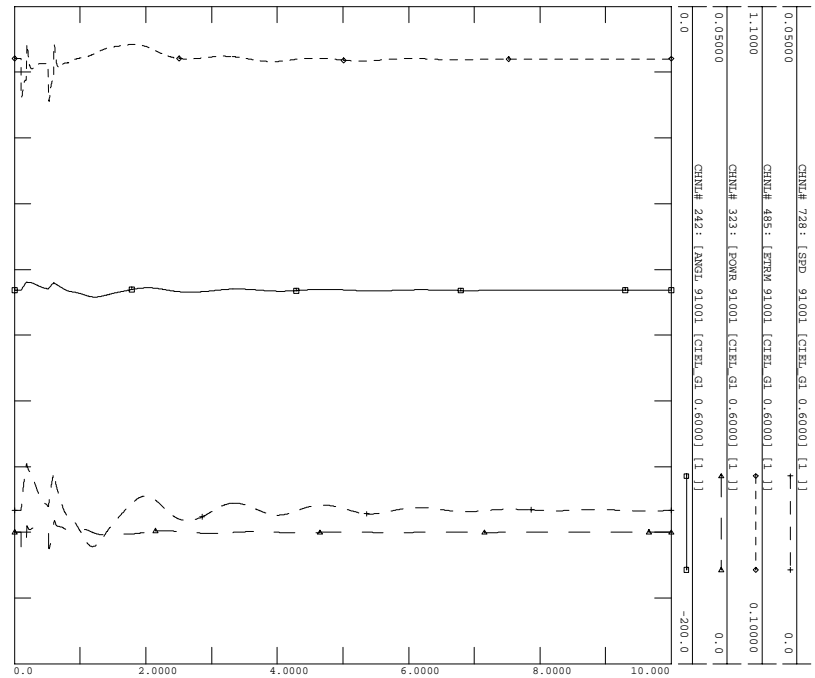
23

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUO 230 KV LINE
 5 CY AT TUO, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH_LITE.OUT



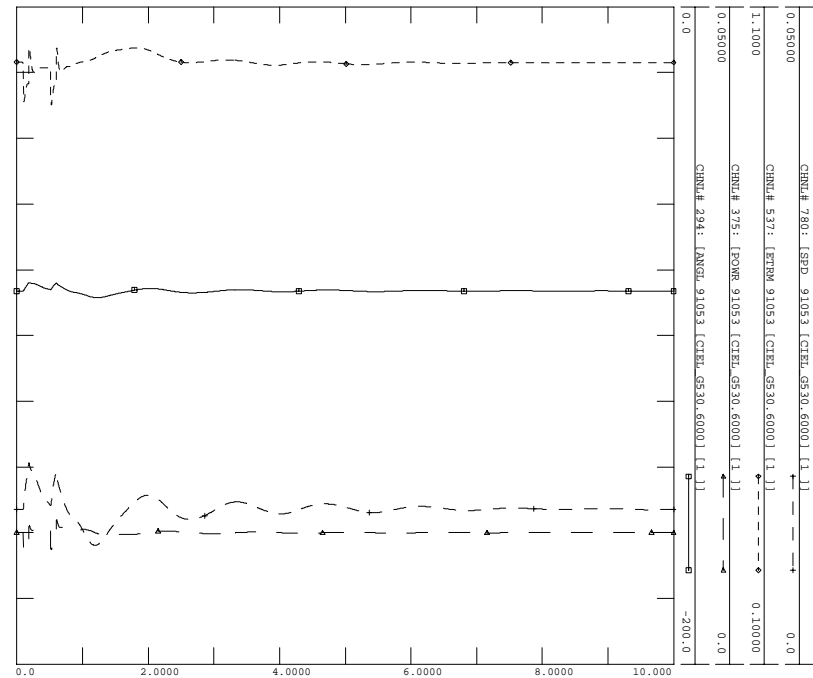
FRI, MAY 21 2004 9:35
 CIELO CABLE1 GEN6 2

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUO 230 KV LINE
 5 CY AT TUO, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH_LITE.OUT



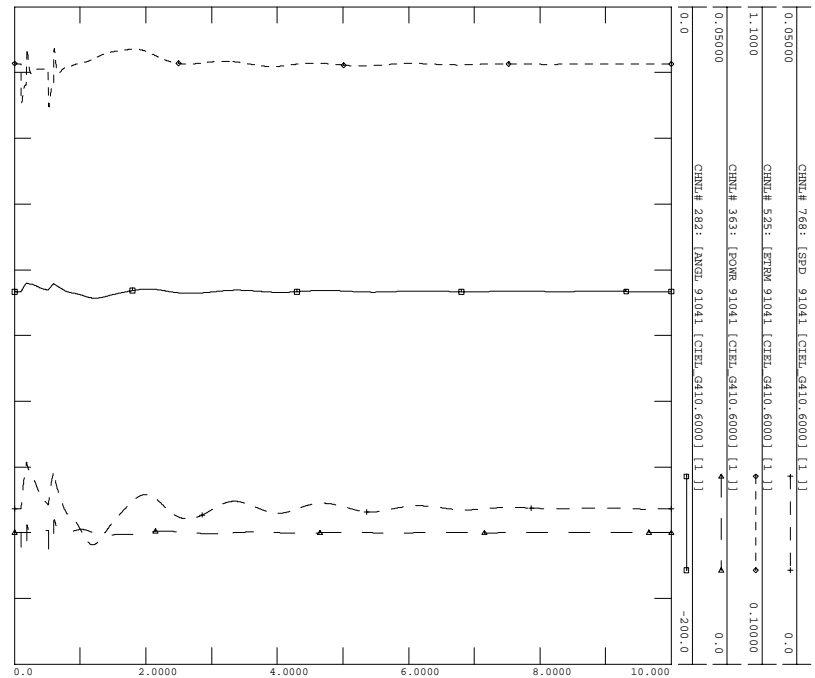
FRI, MAY 21 2004 9:35
 CIELO CABLE1 GEN1 1

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUO 230 KV LINE
 5 CY AT TUO, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH_LITE.OUT



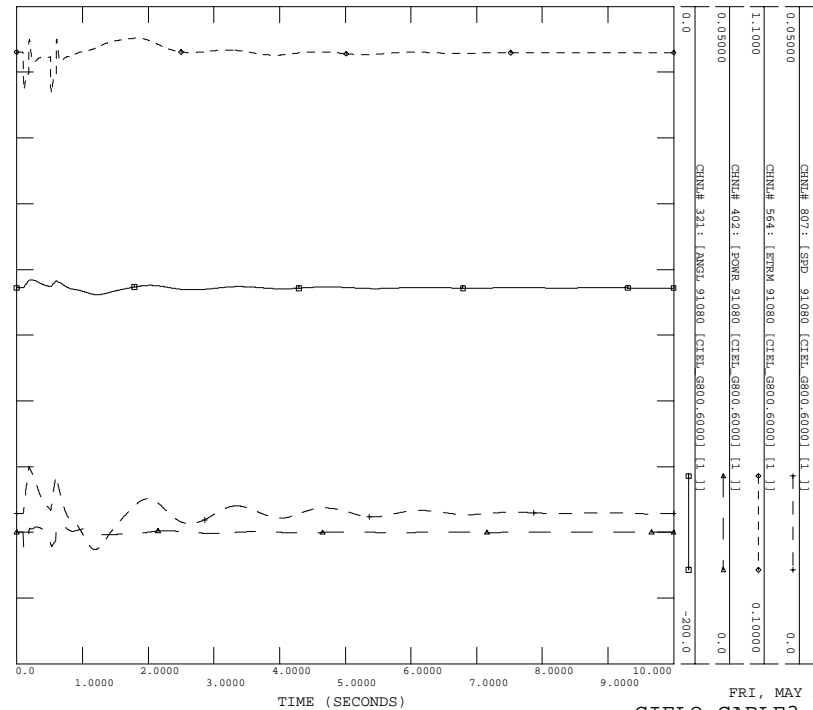
FRI, MAY 21 2004 9:35
 CIELO CABLE2 GEN53 4

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUO 230 KV LINE
 5 CY AT TUO, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH_LITE.OUT



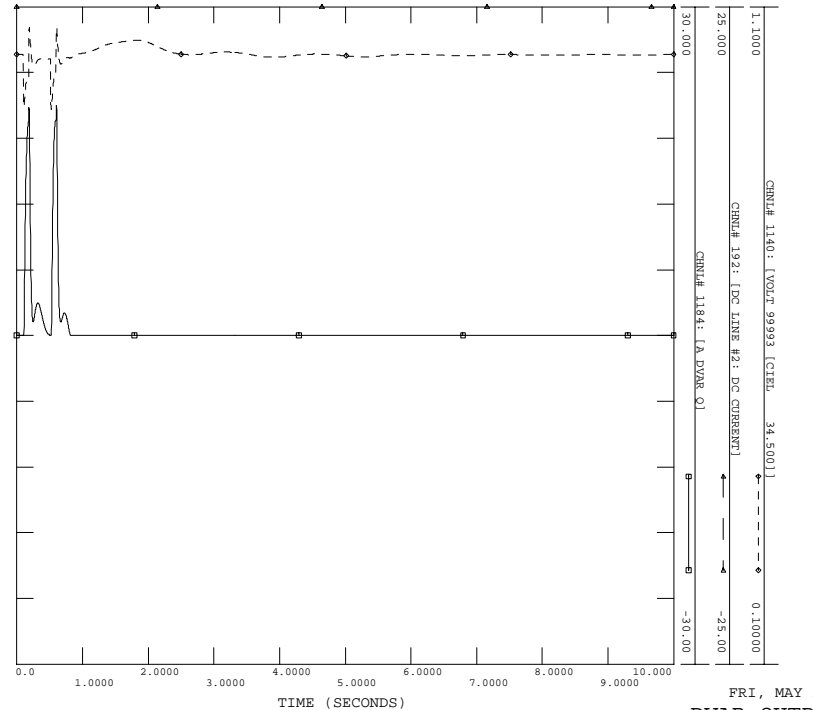
FRI, MAY 21 2004 9:35
 CIELO CABLE2 GEN41 3

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUO 230 KV LINE
 5 CY AT TUO, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH_LITE.OUT



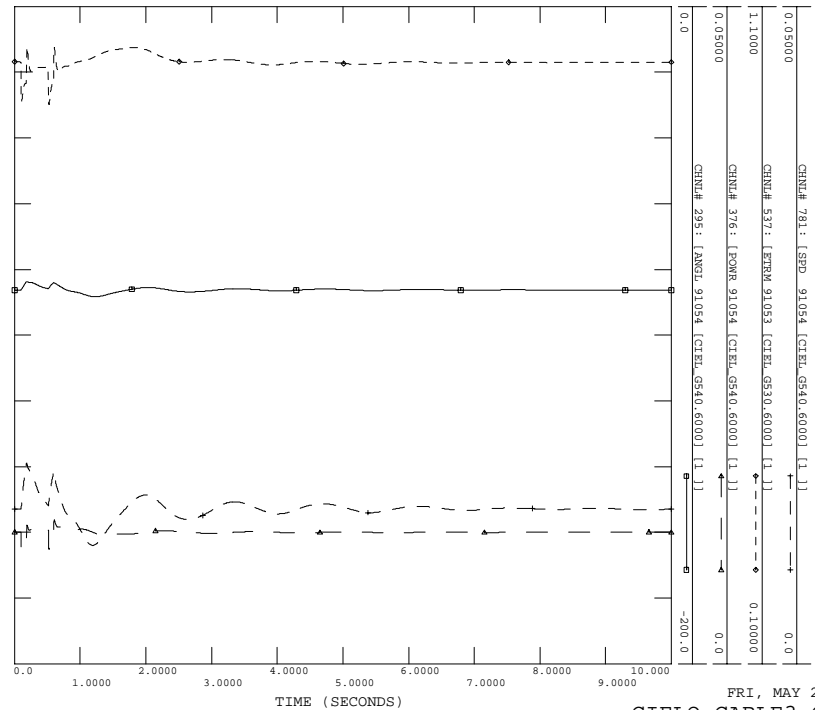
CIELO CABLE3 GEN80 6

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUO 230 KV LINE
 5 CY AT TUO, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH_LITE.OUT



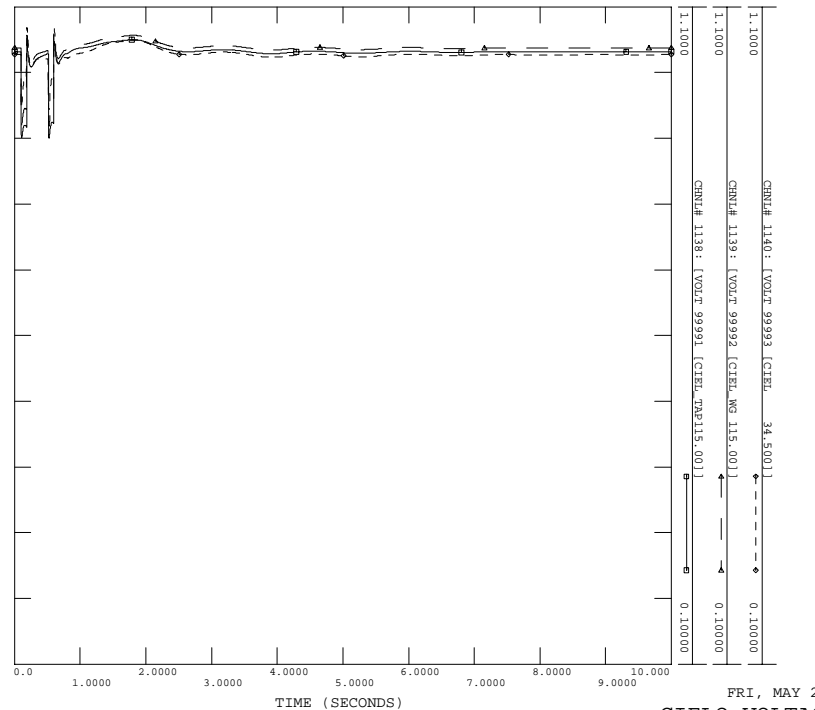
DVAR OUTPUT 8

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUO 230 KV LINE
 5 CY AT TUO, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH_LITE.OUT

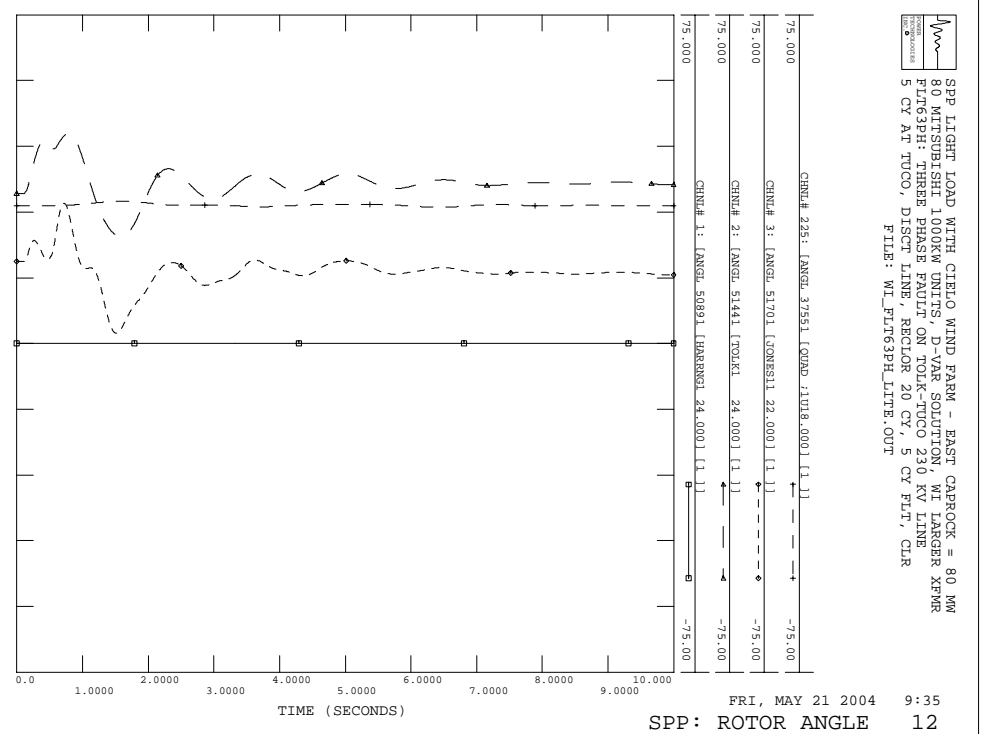
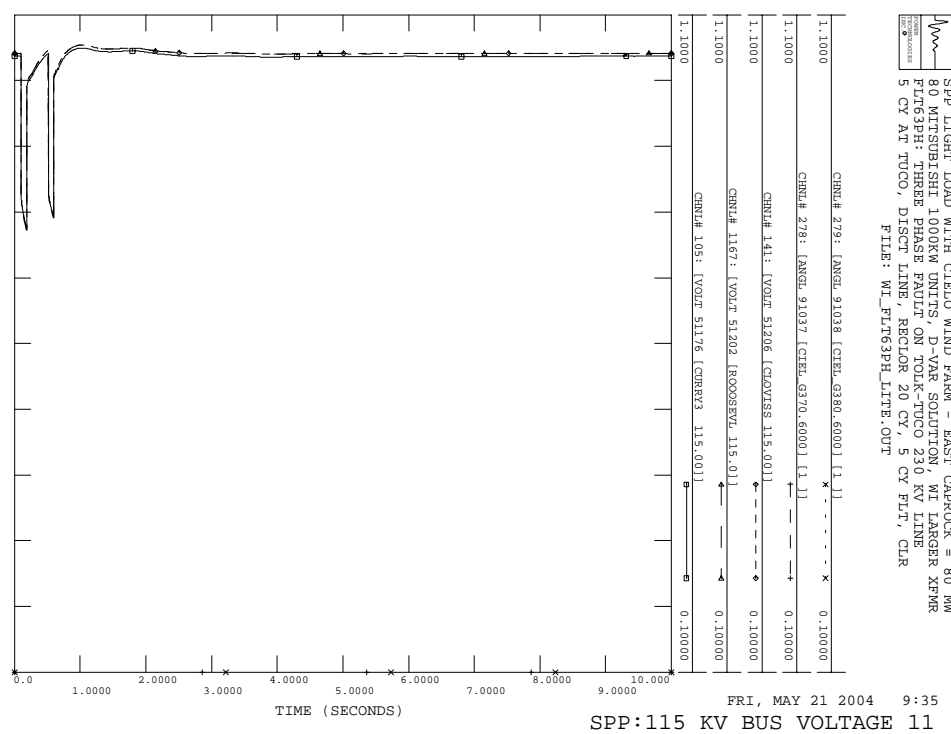
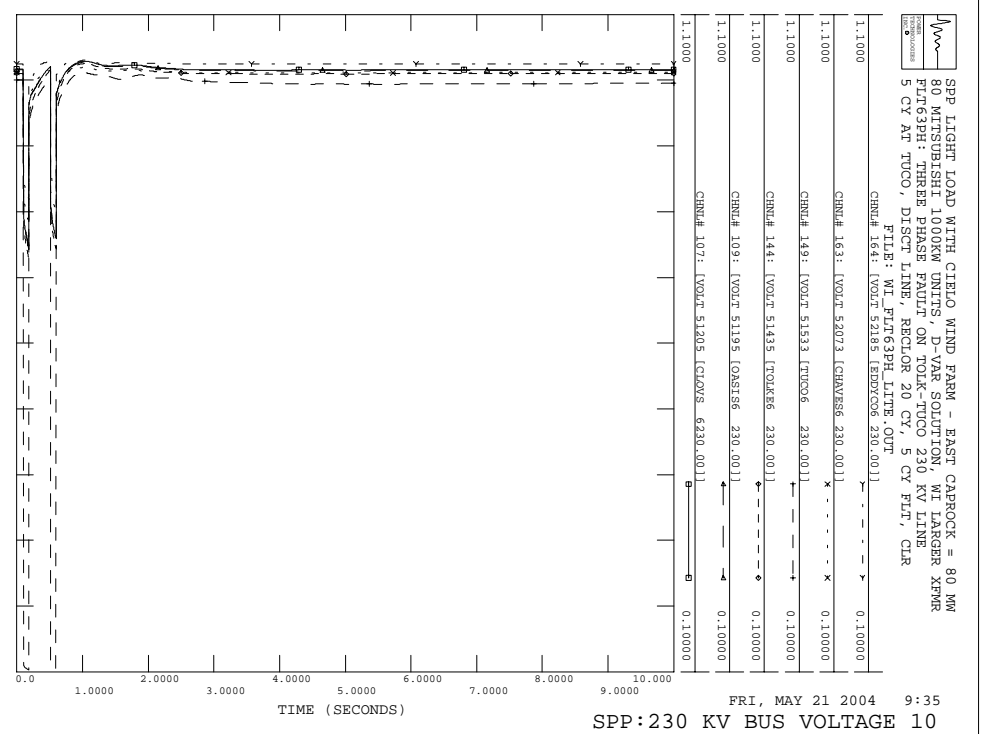
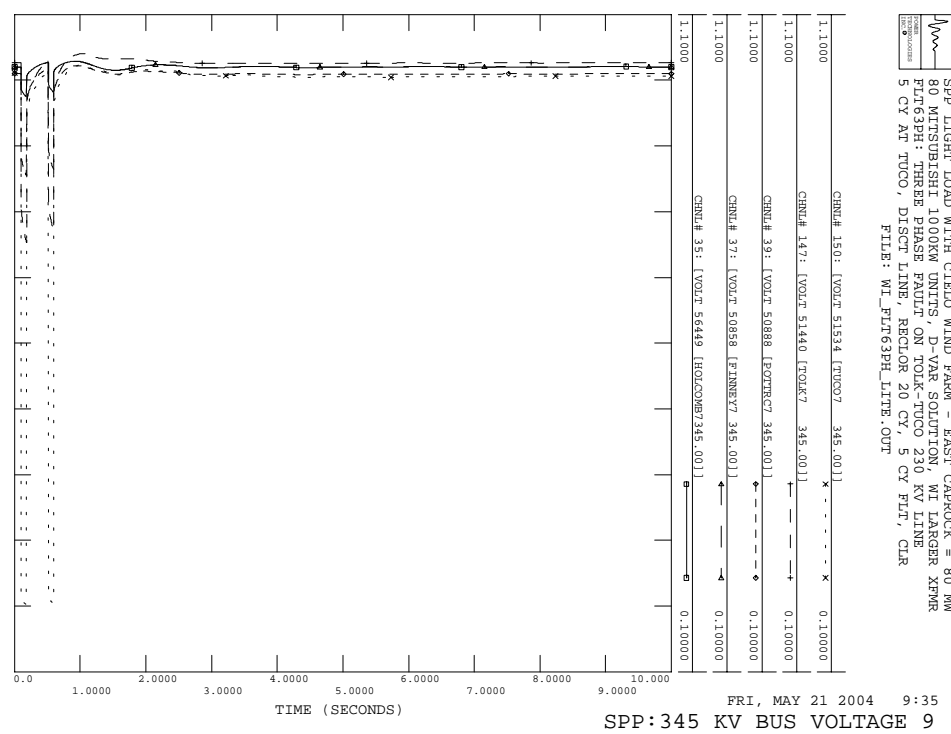


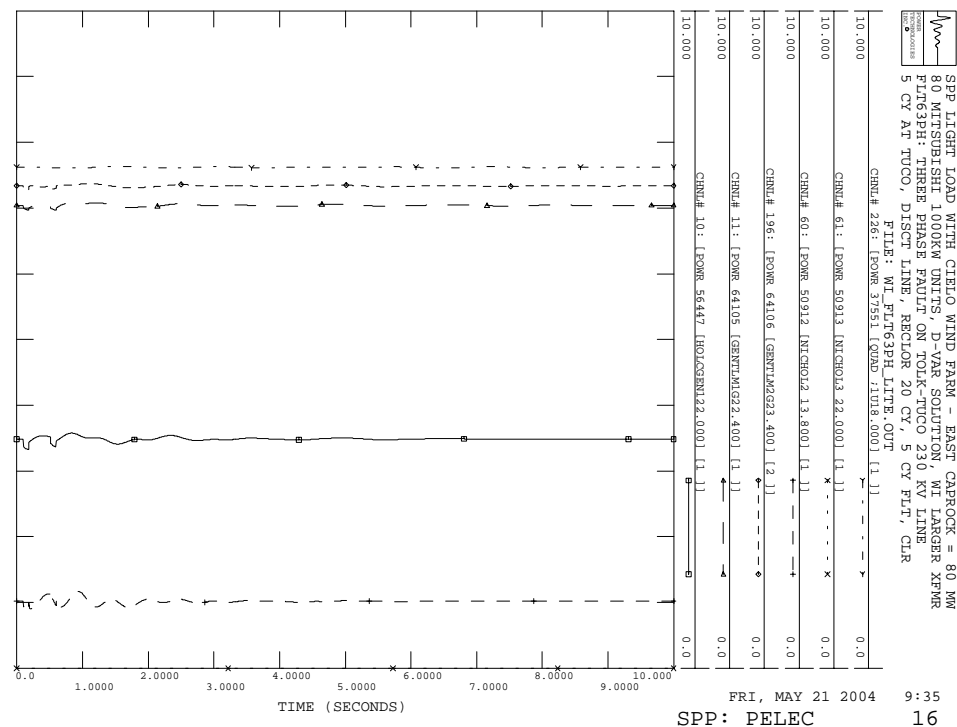
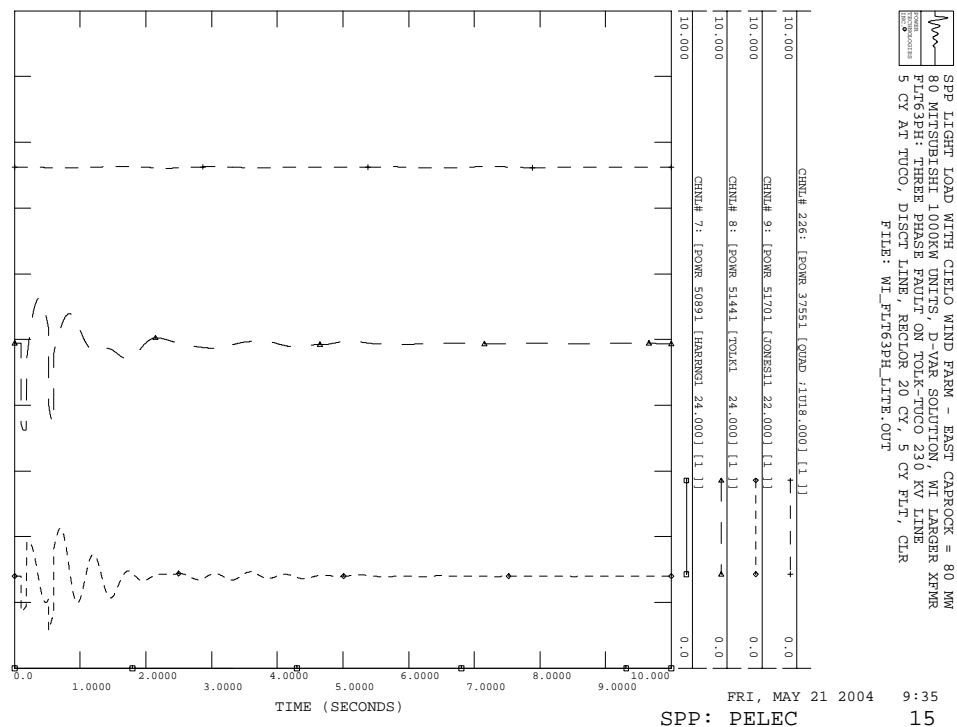
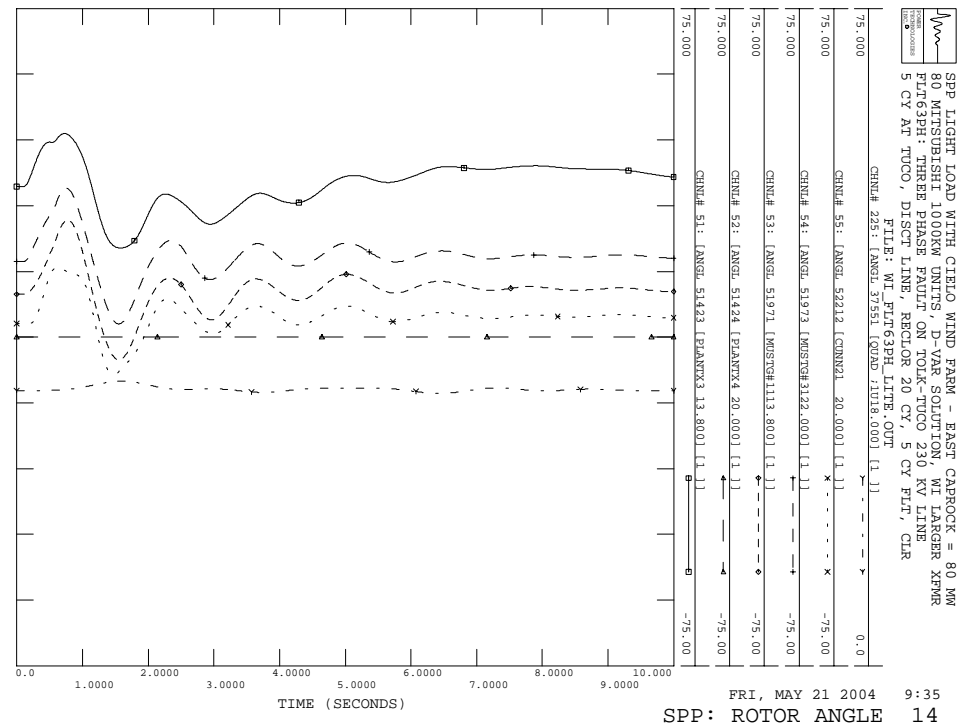
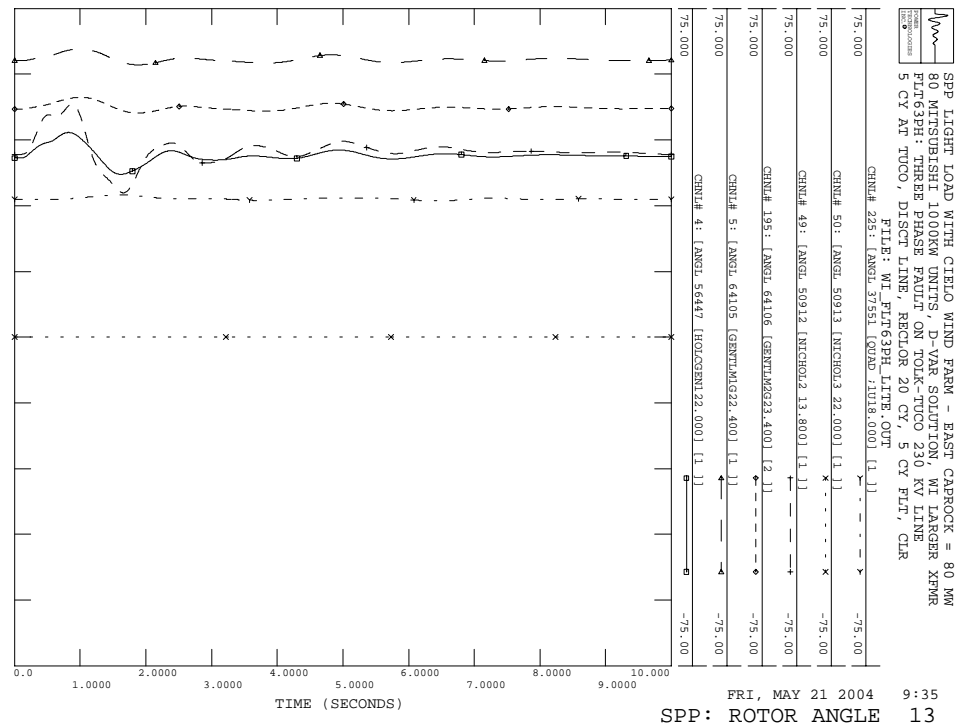
CIELO CABLE3 GEN54 5

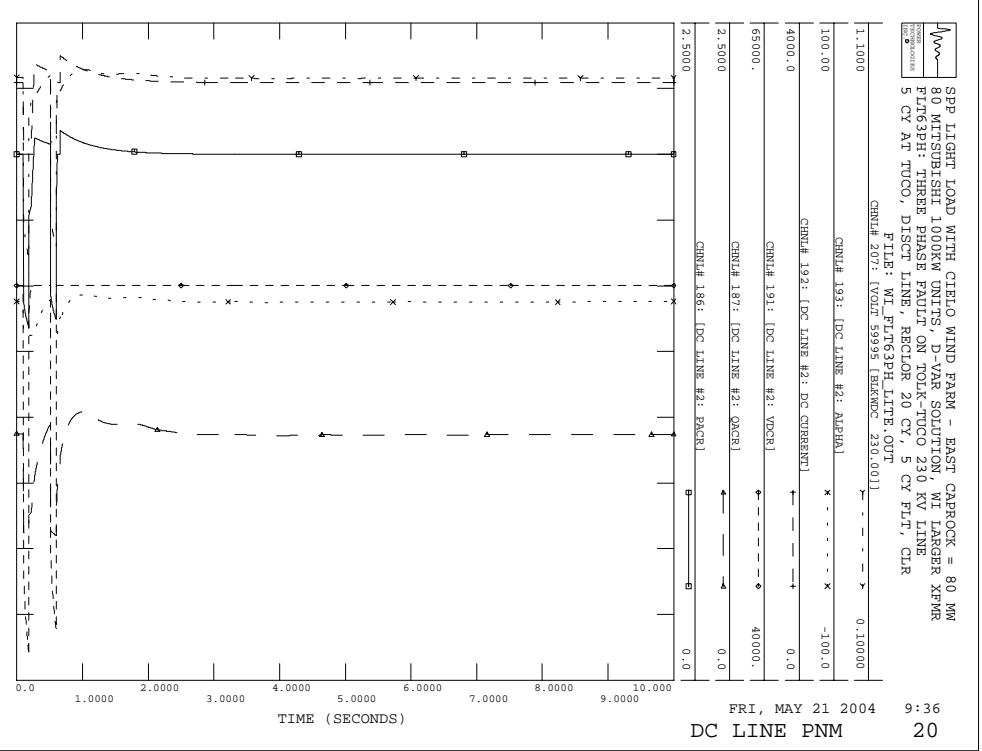
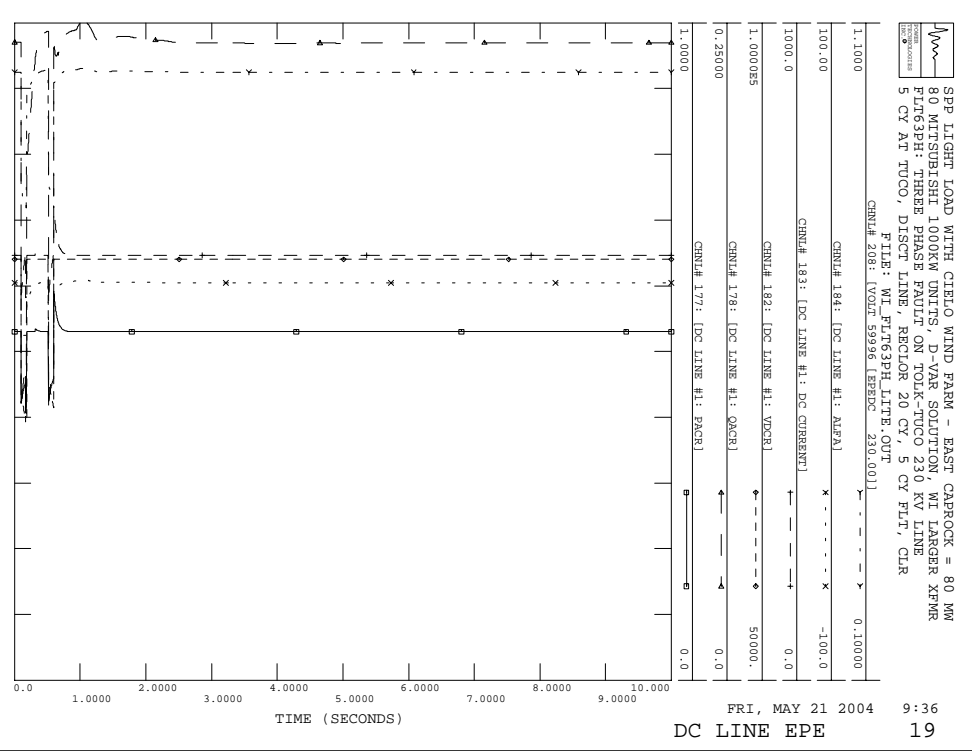
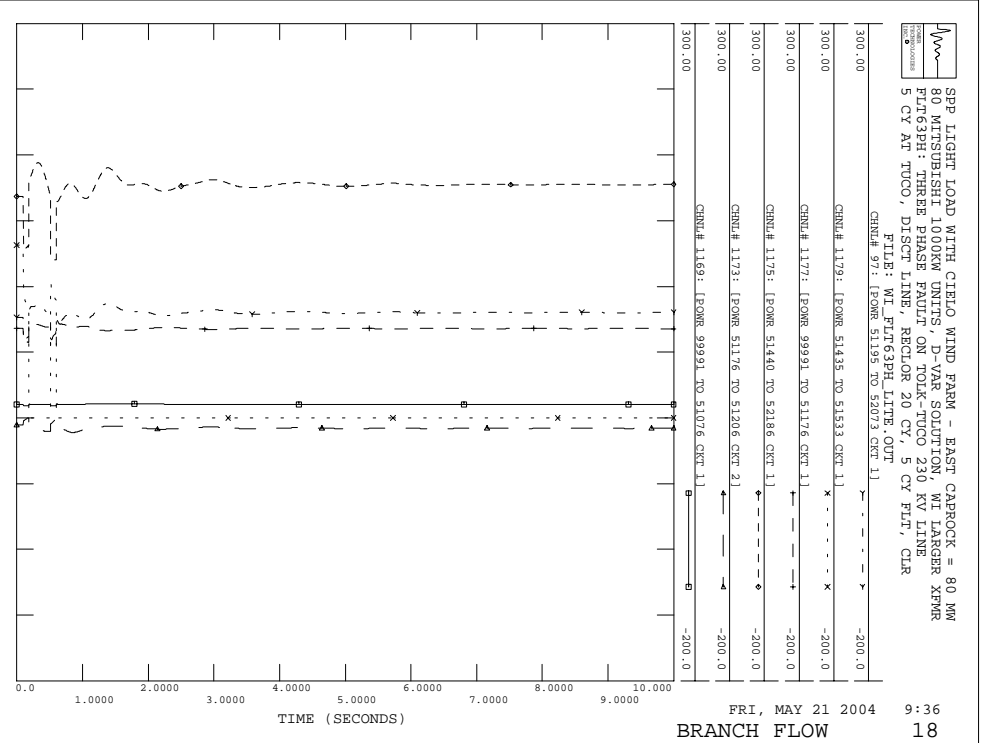
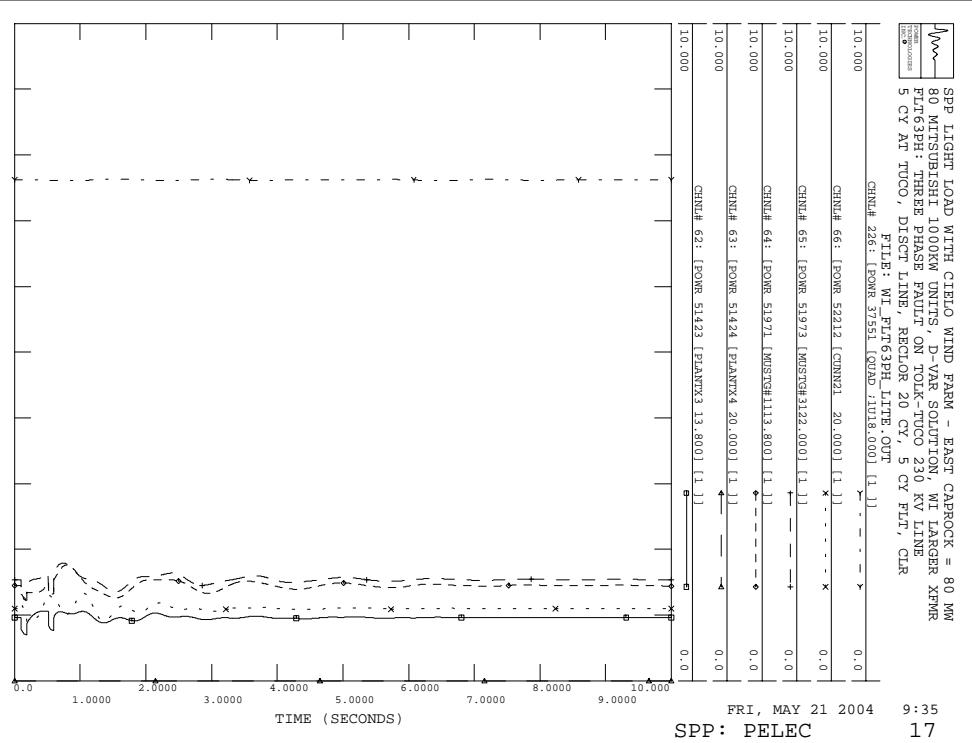
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CABROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT63PH: THREE PHASE FAULT ON TOLK-TUO 230 KV LINE
 5 CY AT TUO, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH_LITE.OUT



CIELO VOLTAGE 7



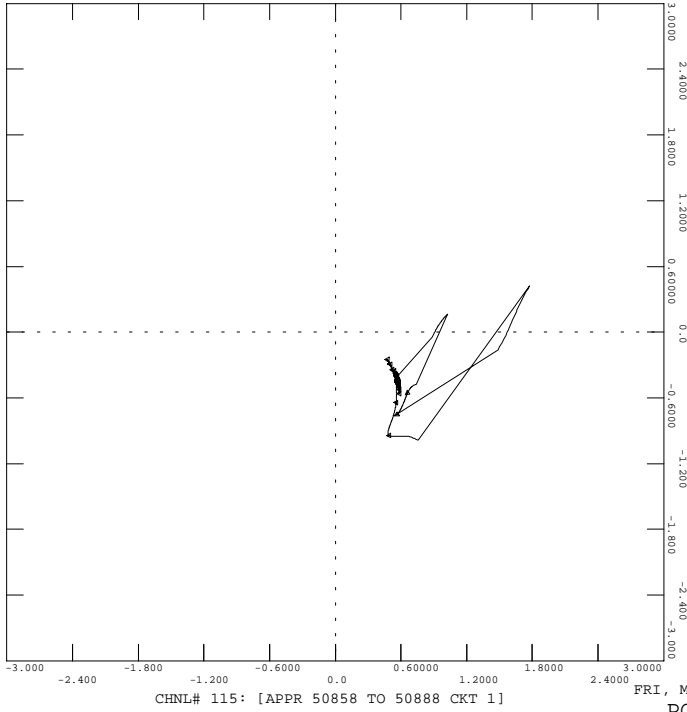




SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT63PH - THREE PHASE FAULT ON TOLK-TUCO 230 KV LINE
 5 CY AT TUCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

FILE: WI_FLT63PH_LITE.OUT

TSTART: 0.0 TSTOP: 10.0 TIC INCREMENT: 0.25
 CHNL# 116: [APPX 50858 TO 50888 CKT 1]



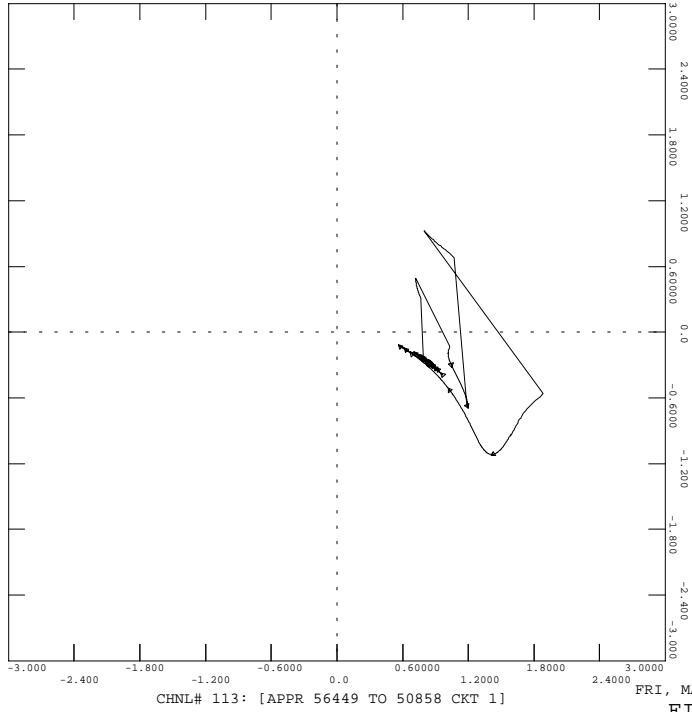
CHNL# 115: [APPR 50858 TO 50888 CKT 1]

FRI, MAY 21 2004 9:36
 POTTER-FINNEY

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT63PH - THREE PHASE FAULT ON TOLK-TUCO 230 KV LINE
 5 CY AT TUCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH_LITE.OUT

FILE: WI_FLT63PH_LITE.OUT

TSTART: 0.0 TSTOP: 10.0 TIC INCREMENT: 0.25
 CHNL# 114: [APPX 56449 TO 50858 CKT 1]



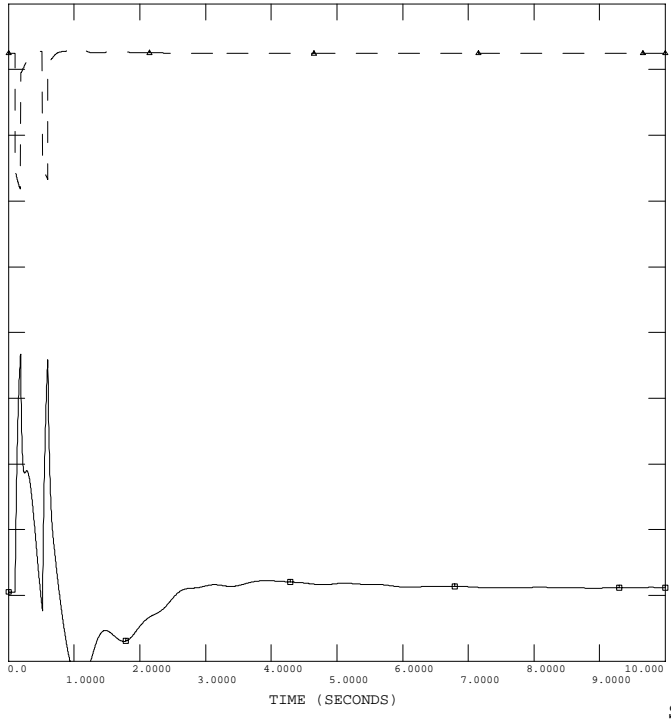
CHNL# 113: [APPR 56449 TO 50858 CKT 1]

FRI, MAY 21 2004 9:36
 FINNEY-HOLCOMB

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT63PH - THREE PHASE FAULT ON TOLK-TUCO 230 KV LINE
 5 CY AT TUCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT63PH_LITE.OUT

CHNL# 114: [VOLT 52185 [EMDXXC06.230.00]]

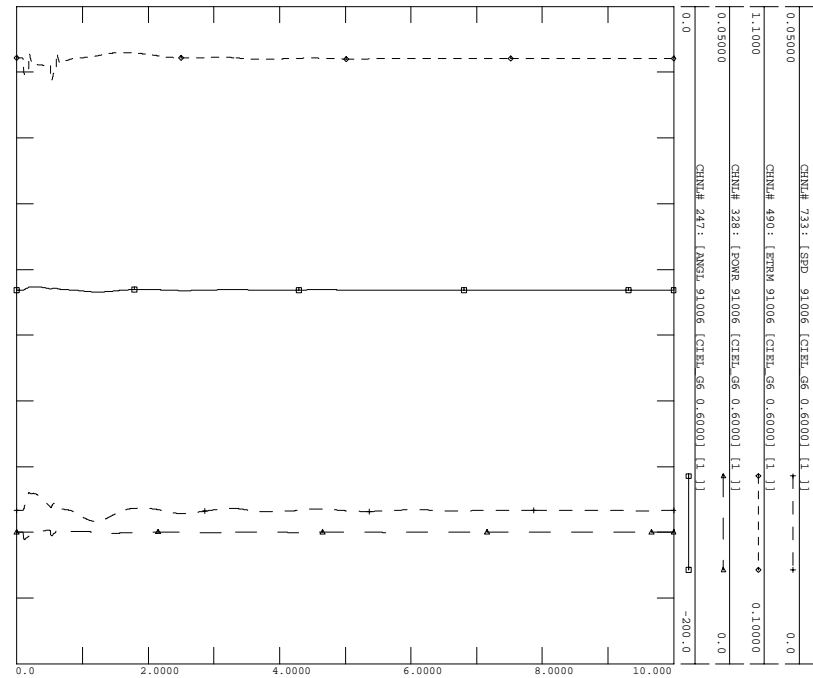
CHNL# 117: [BUS 52185 SVC OUTPUT]



SVC OUTPUT

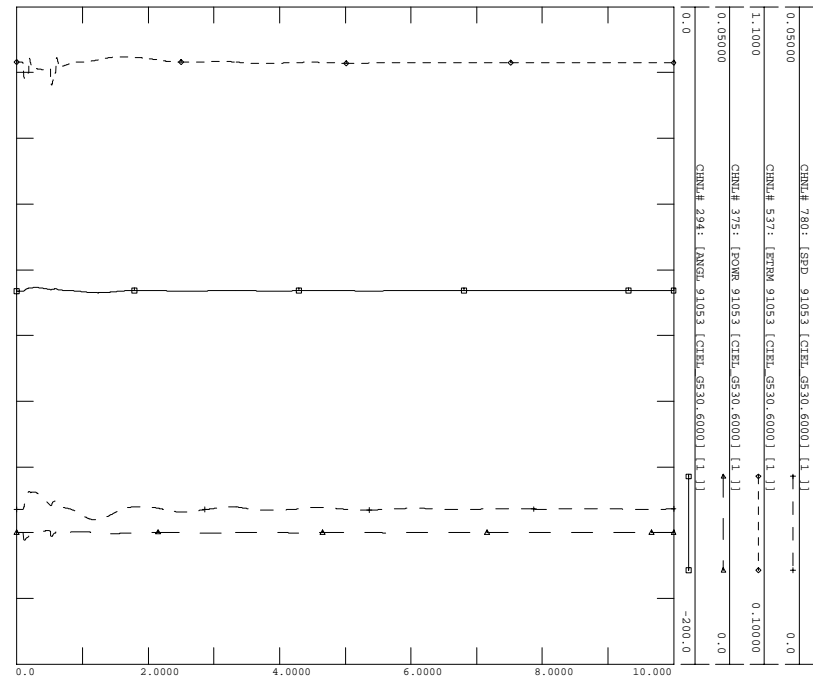
FRI, MAY 21 2004 9:36

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TUCO 230 KV LINE
 5 CY AT TUCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH_LITE.OUT



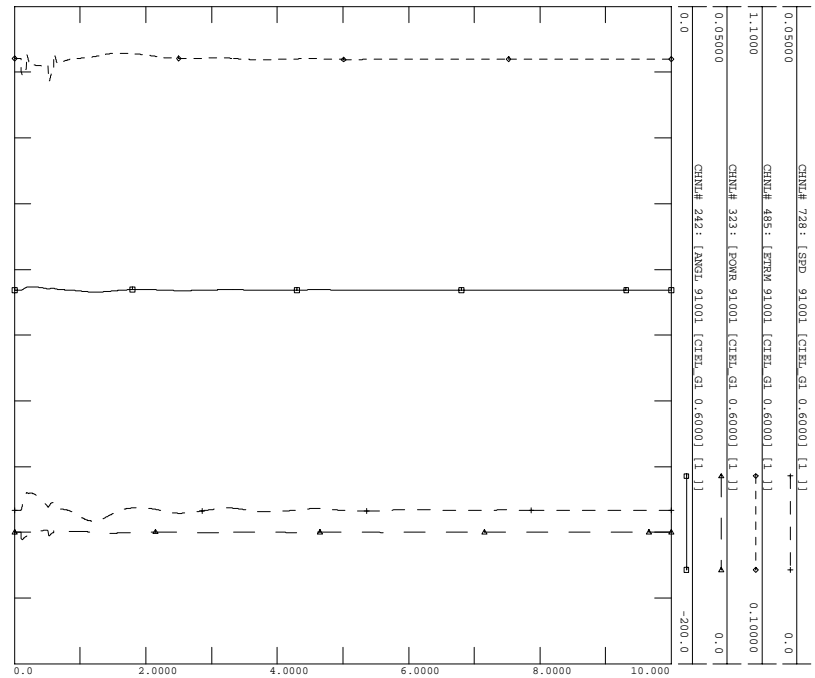
FRI, MAY 21 2004 9:35
 CIELO CABLE1 GEN6 2

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TUCO 230 KV LINE
 5 CY AT TUCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH_LITE.OUT



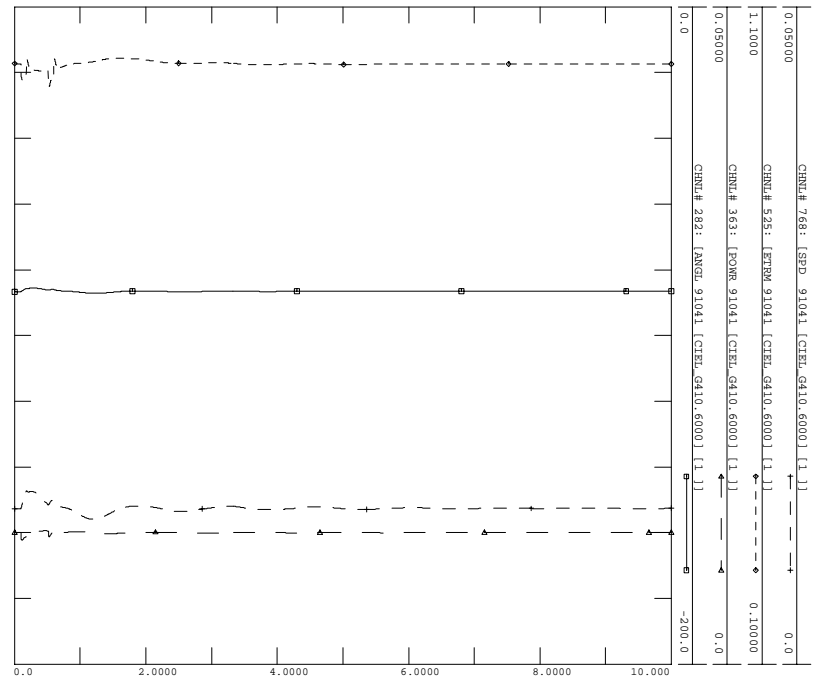
FRI, MAY 21 2004 9:35
 CIELO CABLE2 GEN53 4

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TUCO 230 KV LINE
 5 CY AT TUCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH_LITE.OUT



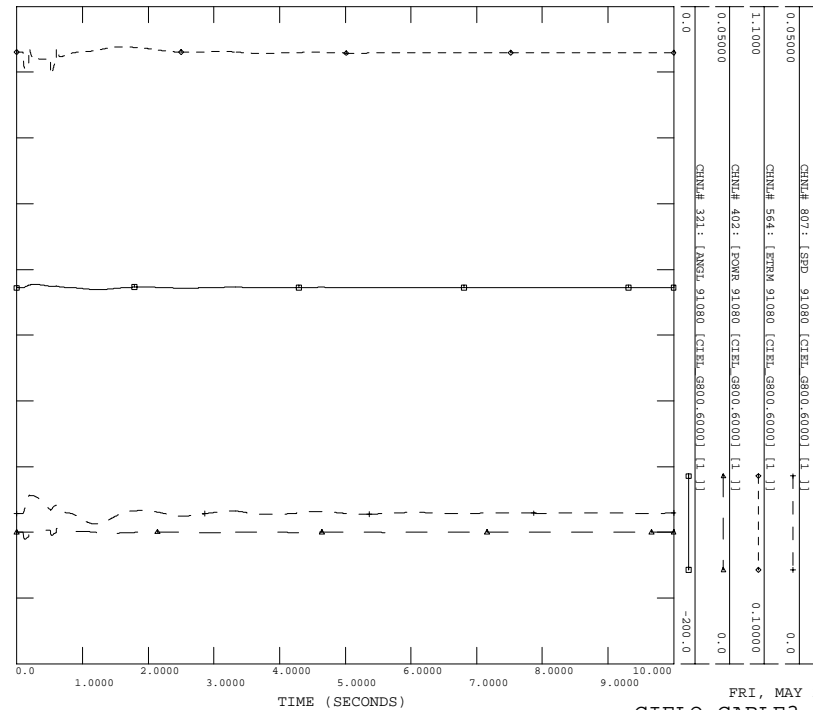
FRI, MAY 21 2004 9:35
 CIELO CABLE1 GEN1 1

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TUCO 230 KV LINE
 5 CY AT TUCO, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH_LITE.OUT



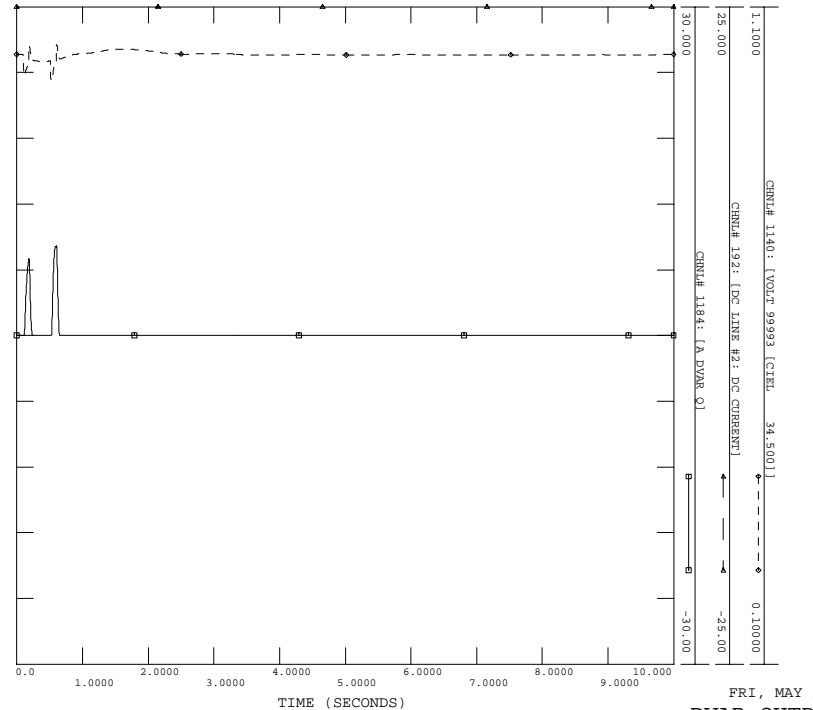
FRI, MAY 21 2004 9:35
 CIELO CABLE2 GEN41 3

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TUCC 230 KV LINE
 5 CY AT TUCC, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH_LITE.OUT



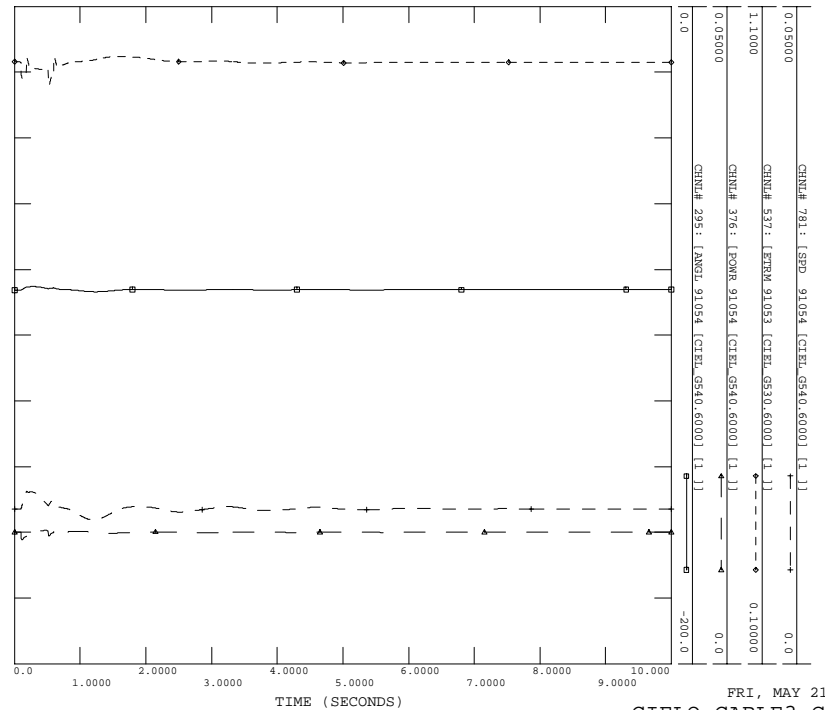
FRI, MAY 21 2004 9:35
 CIELO CABLE3 GEN80 6

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TUCC 230 KV LINE
 5 CY AT TUCC, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH_LITE.OUT



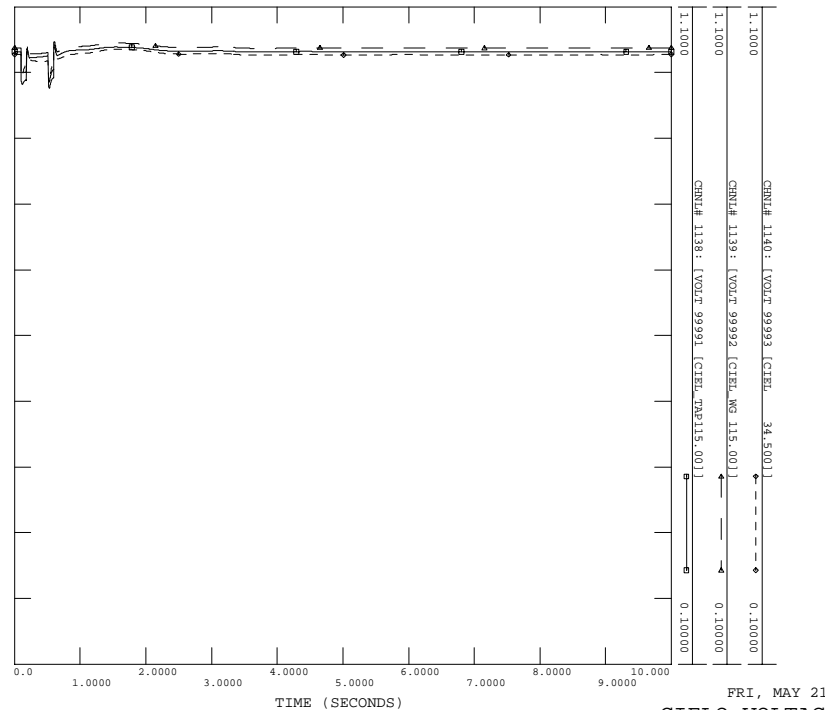
FRI, MAY 21 2004 9:35
 DVAR OUTPUT 8

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TUCC 230 KV LINE
 5 CY AT TUCC, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH_LITE.OUT

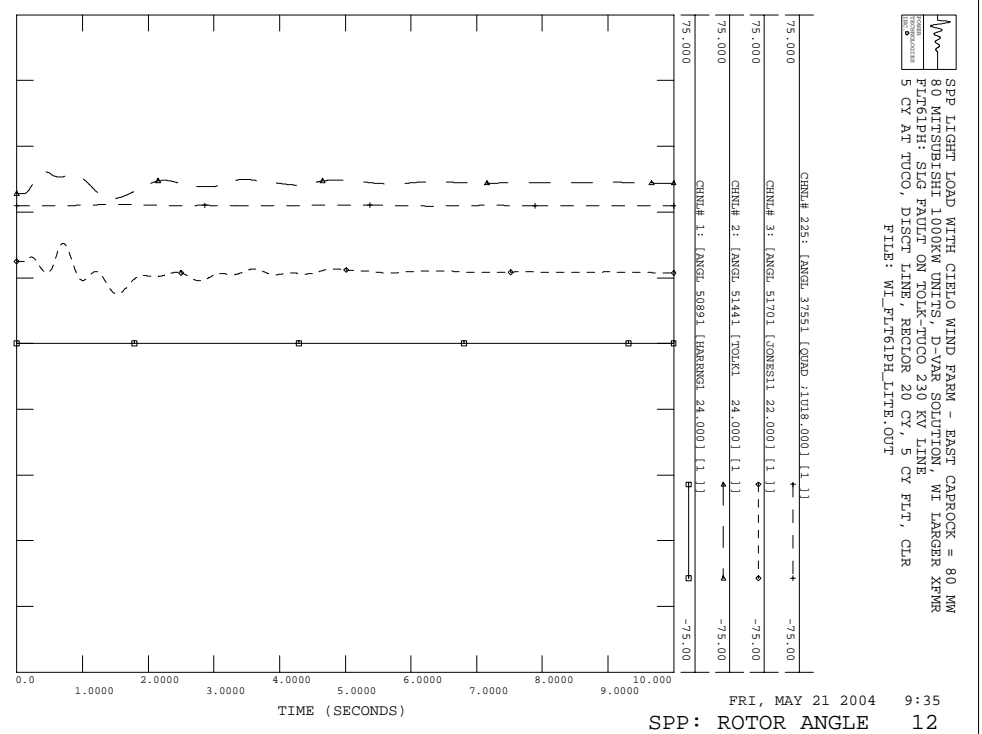
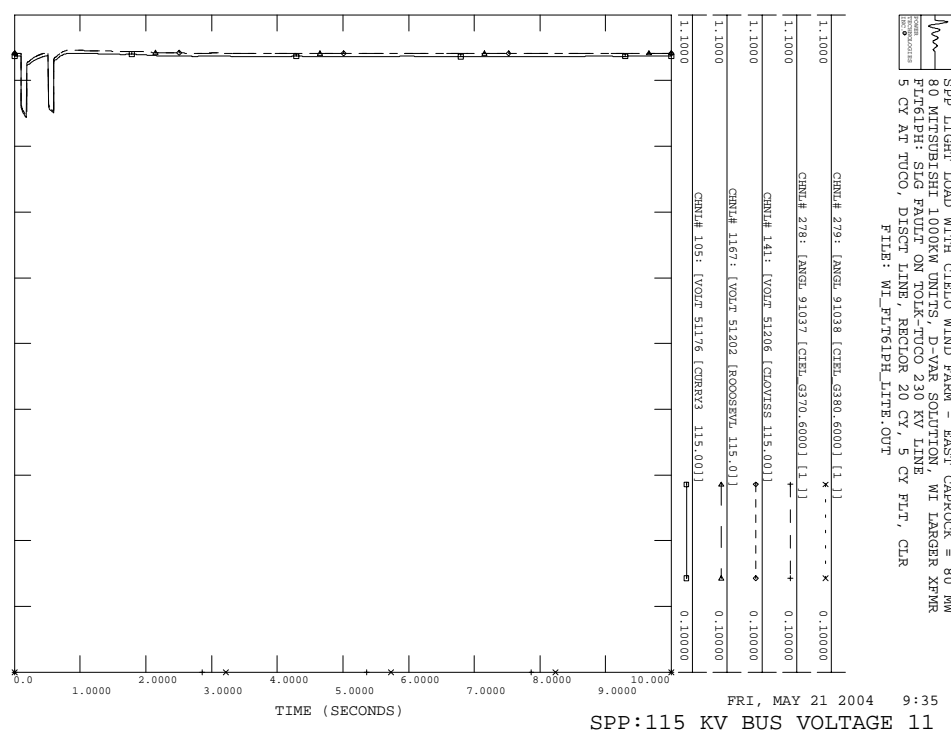
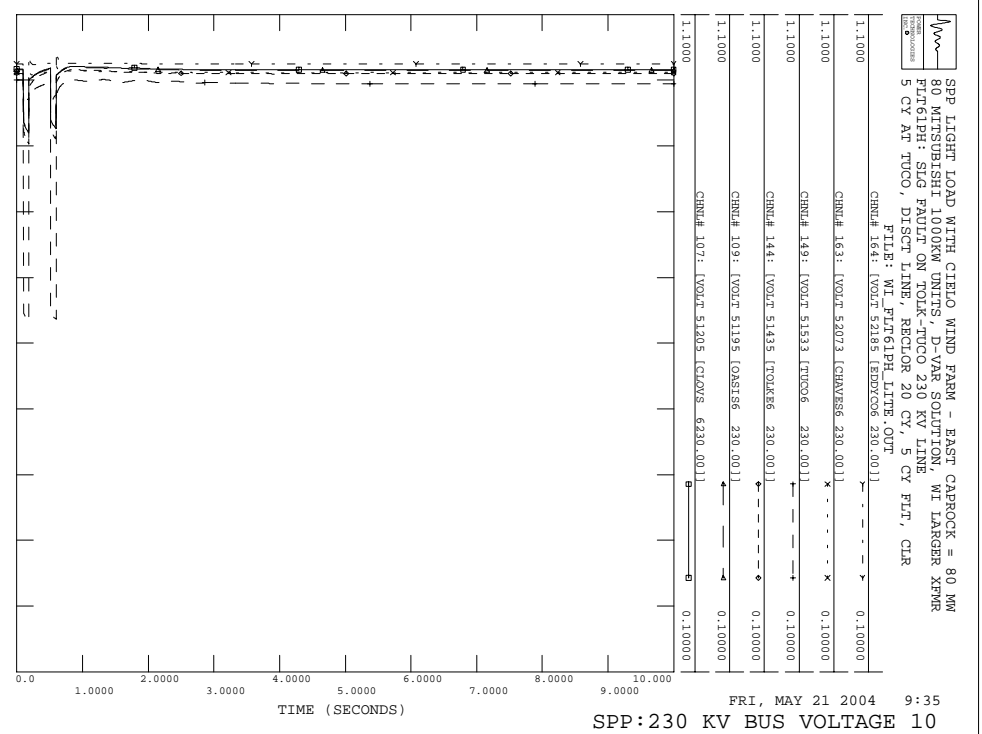
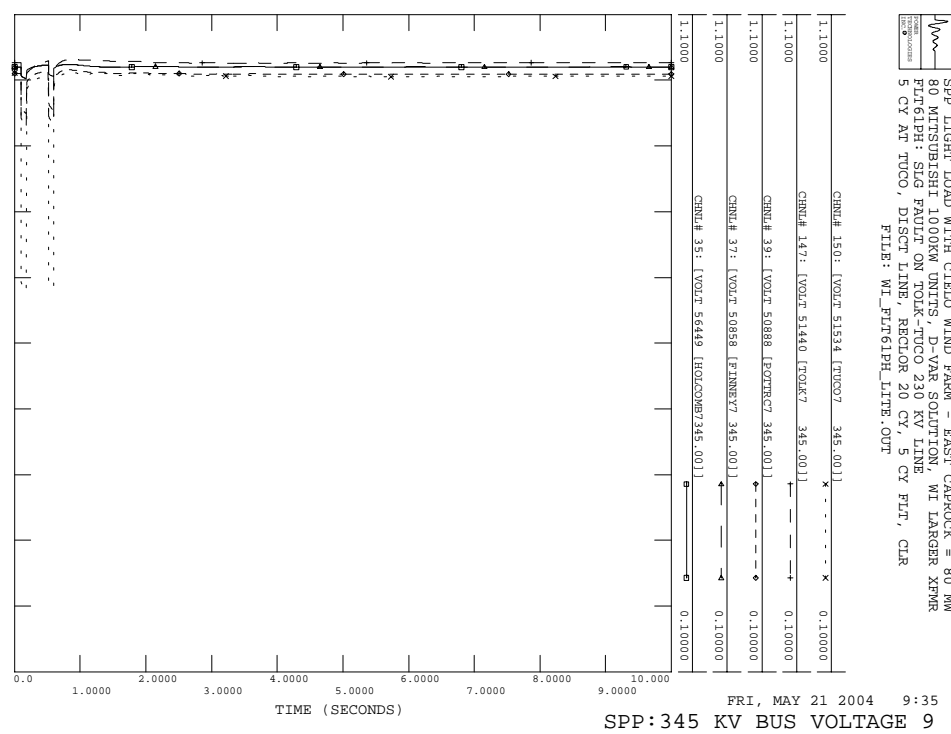


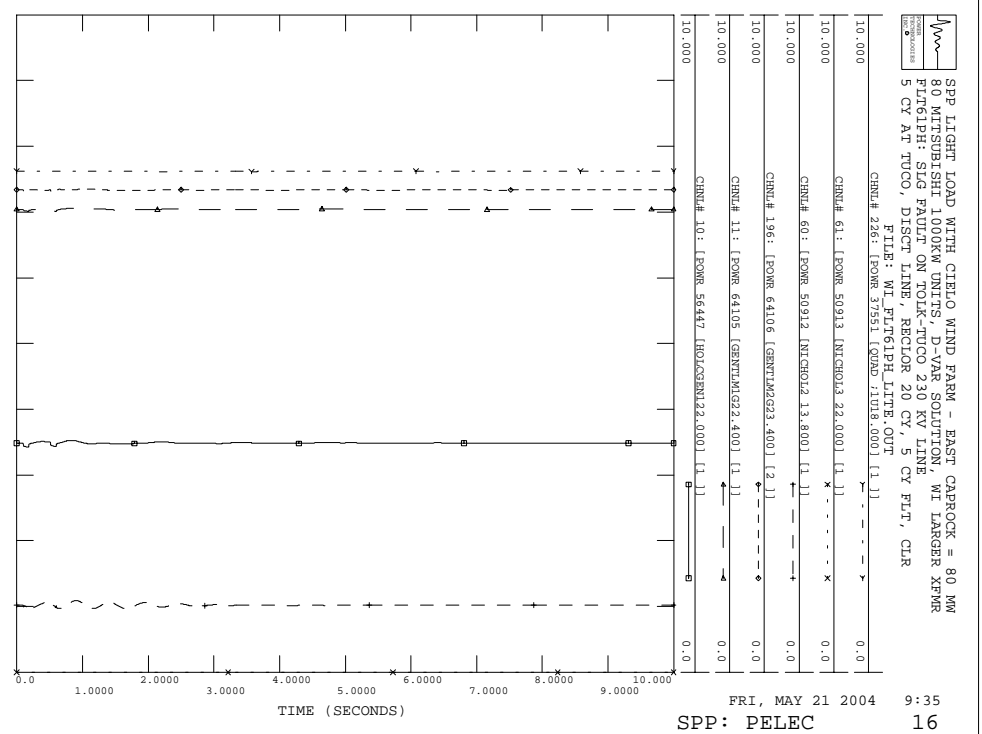
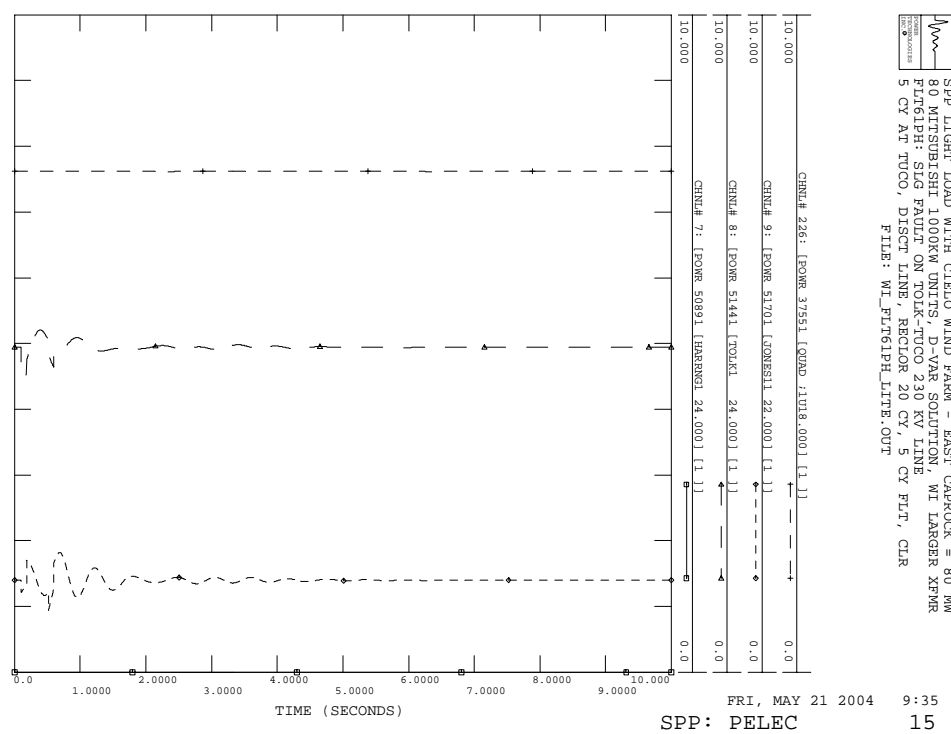
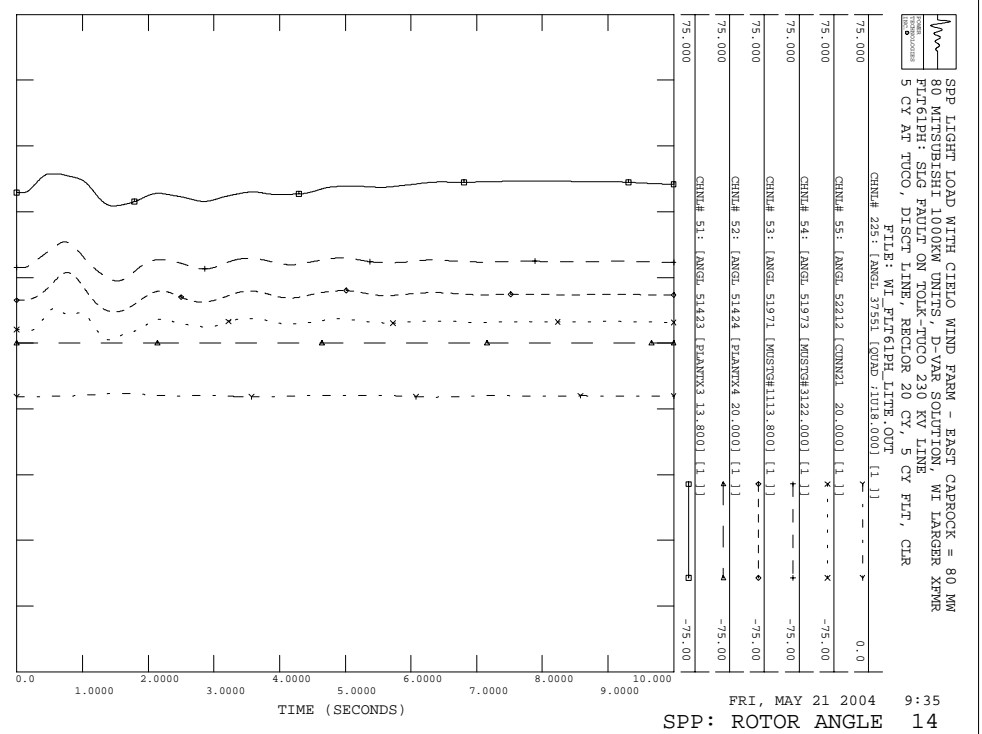
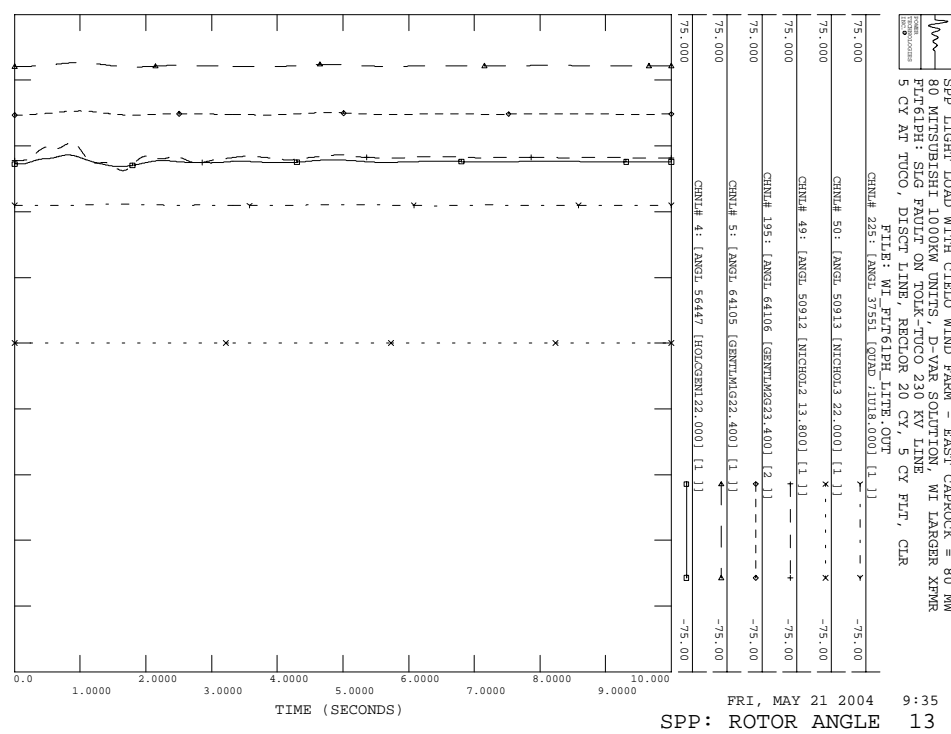
FRI, MAY 21 2004 9:35
 CIELO CABLE3 GEN54 5

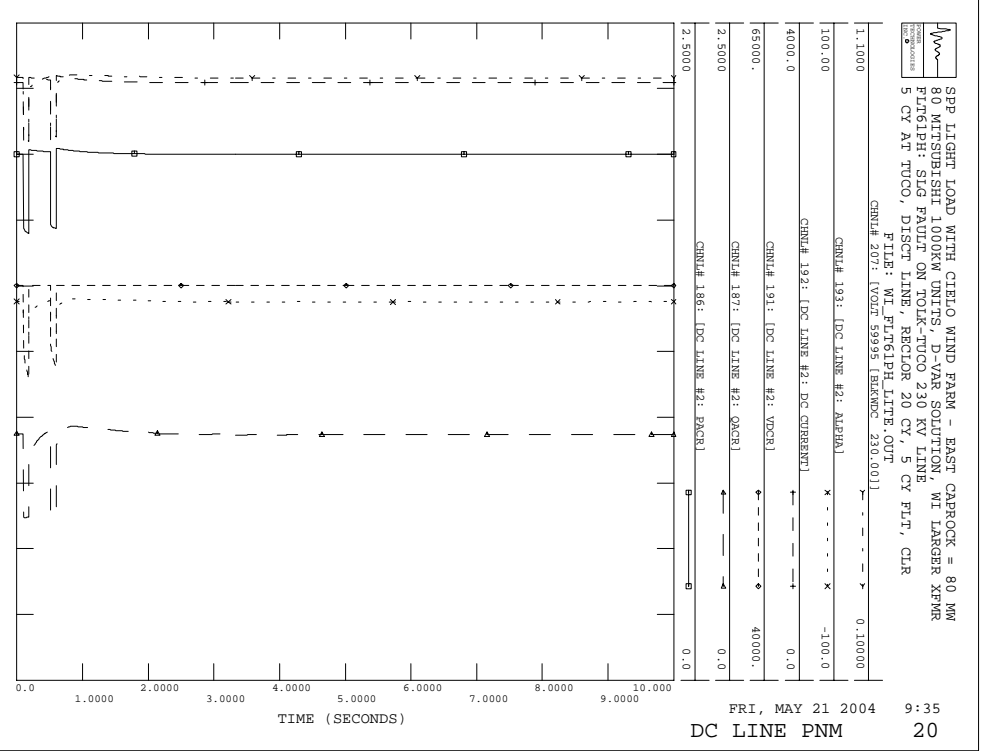
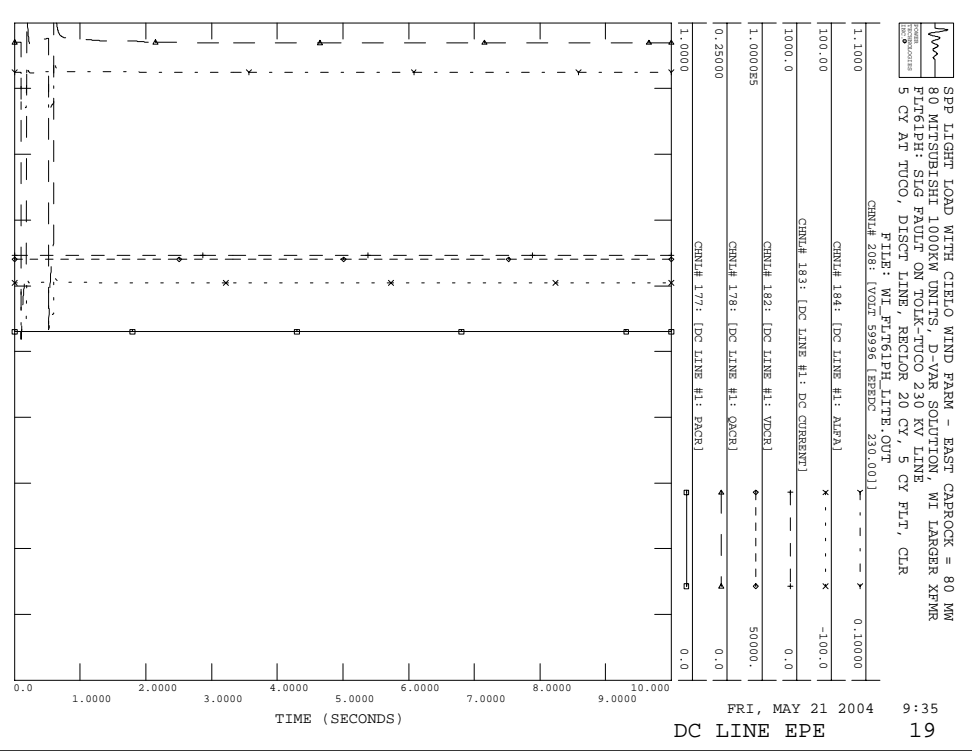
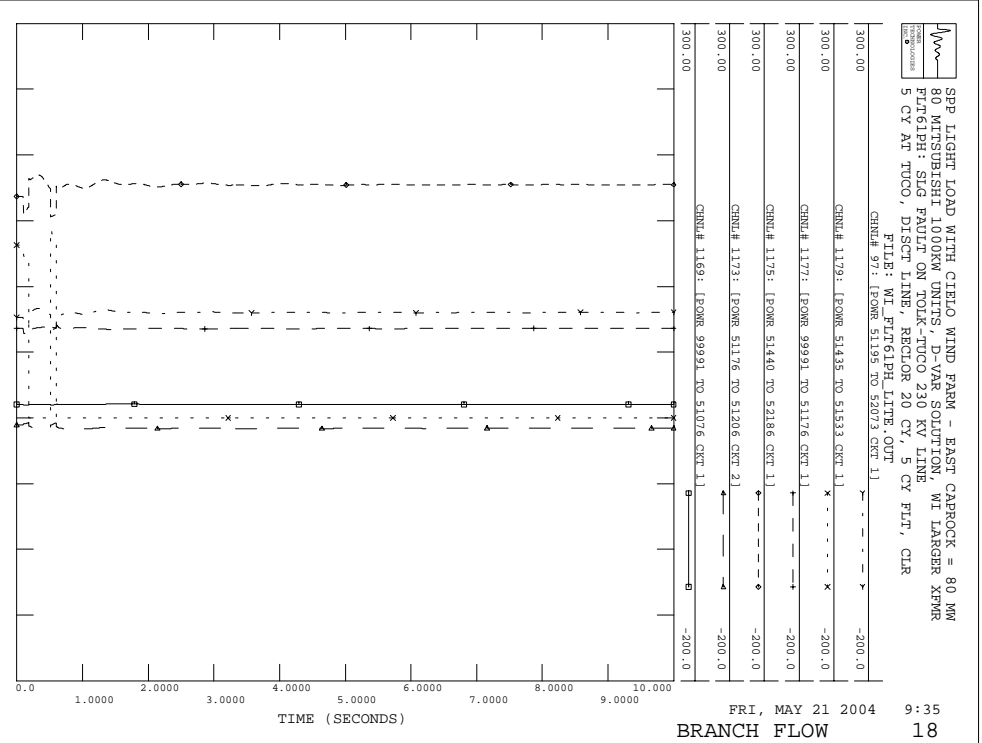
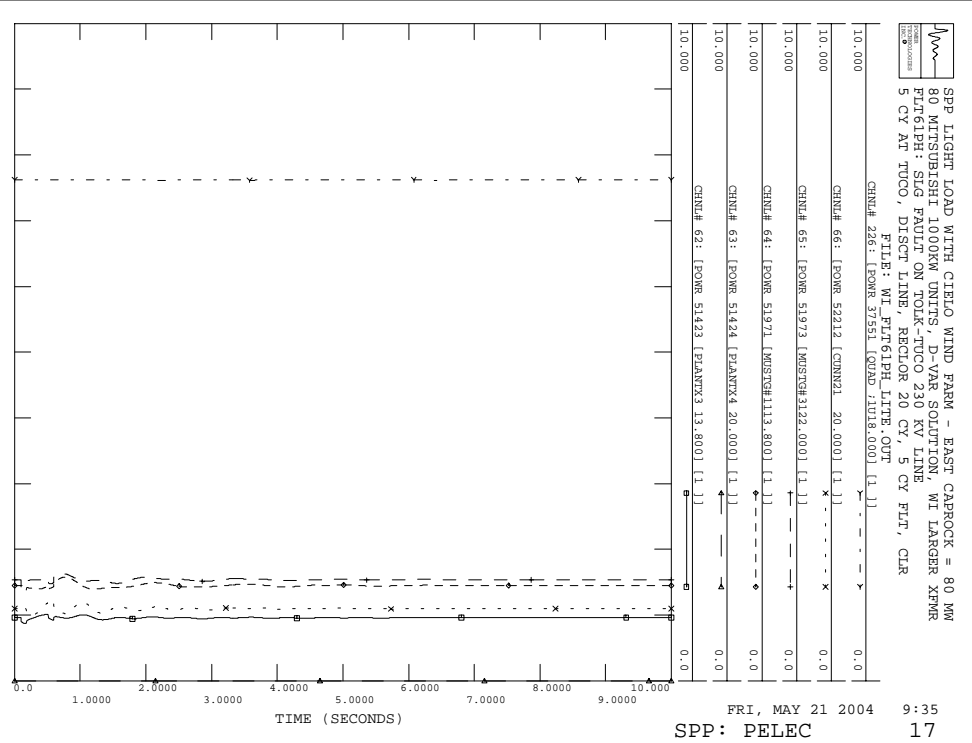
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT61PH: SLG FAULT ON TOLK-TUCC 230 KV LINE
 5 CY AT TUCC, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT61PH_LITE.OUT



FRI, MAY 21 2004 9:35
 CIELO VOLTAGE 7

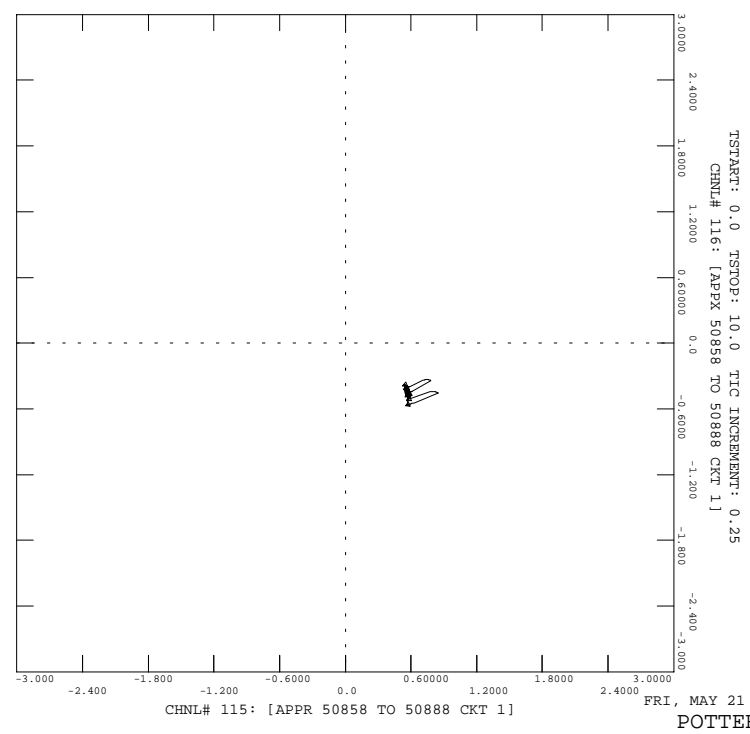






SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT61PH-SLG FAULT ON TOLK-TOCO 230 KV LINE
 5 CY AT TOCO, DISCI LINE, RECTOR 20 CY, 5 CY FLT, CLR

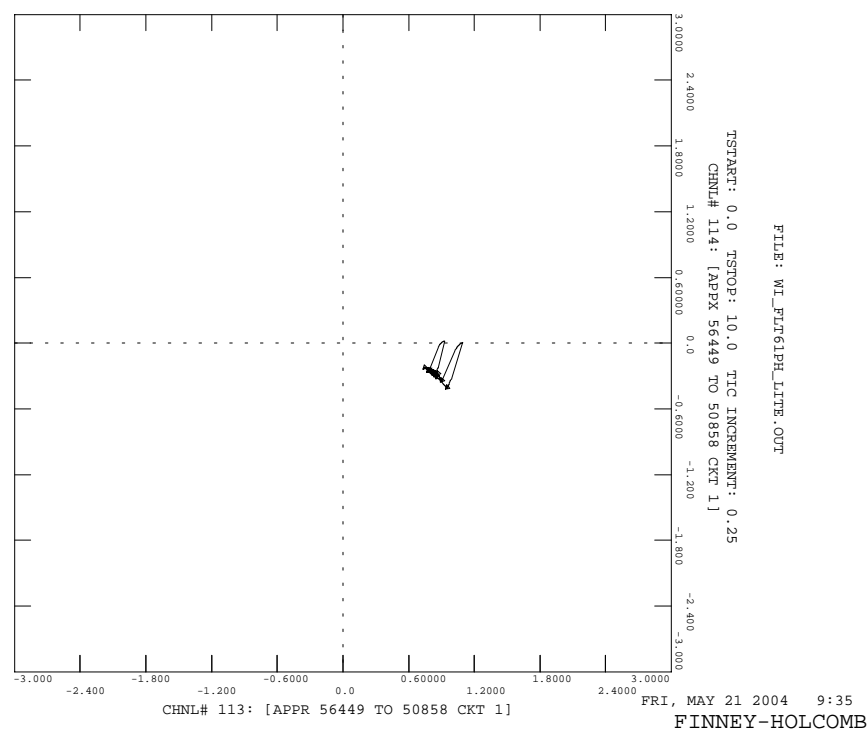
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 CHNL# 115: [APPR 50858 TO 50888 CKT 1]
 POTTER-FINNEY 22

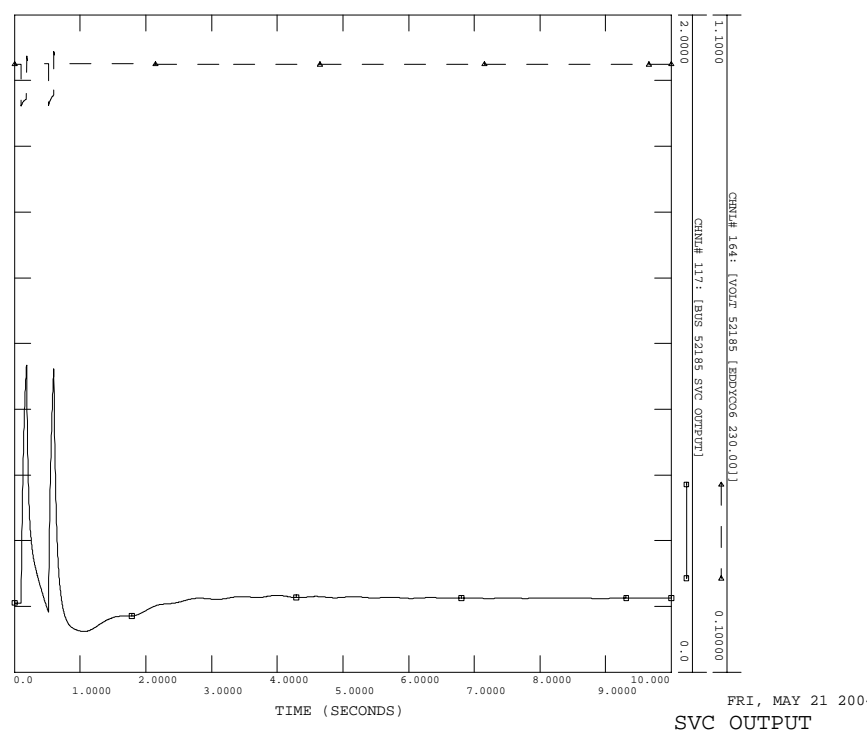
SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT61PH-SLG FAULT ON TOLK-TOCO 230 KV LINE
 5 CY AT TOCO, DISCI LINE, RECTOR 20 CY, 5 CY FLT, CLR

FILE: WI_FLT61PH_LITE.OUT




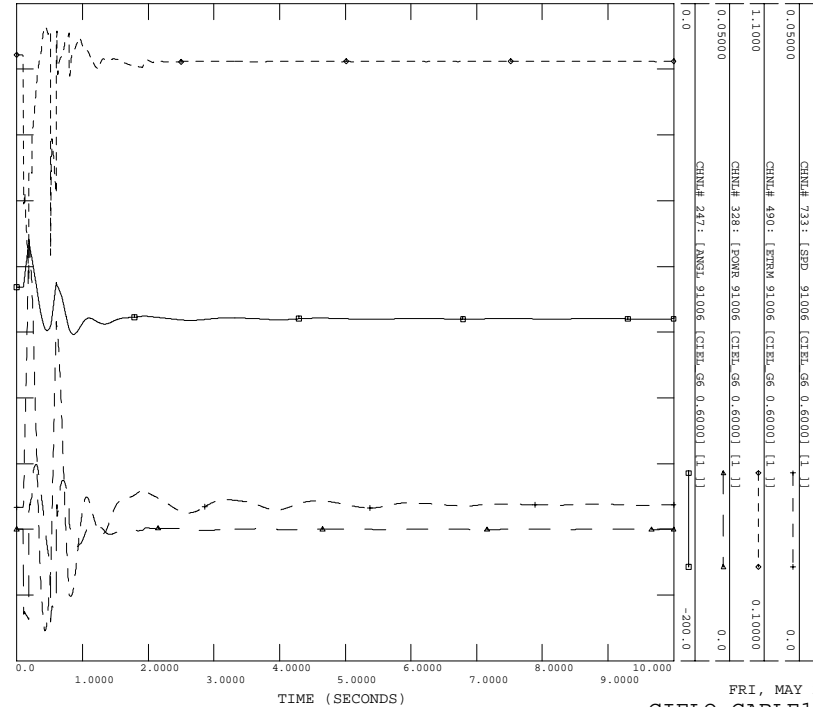
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 CHNL# 113: [APPR 56449 TO 50858 CKT 1]
 FINNEY-HOLCOMB 21

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT61PH-SLG FAULT ON TOLK-TOCO 230 KV LINE
 5 CY AT TOCO, DISCI LINE, RECTOR 20 CY, 5 CY FLT, CLR




FRI, MAY 21 2004 9:35
 CHNL# 114: [VOLT 52185 [BPOXC06.230.00]]
 SVC OUTPUT 23

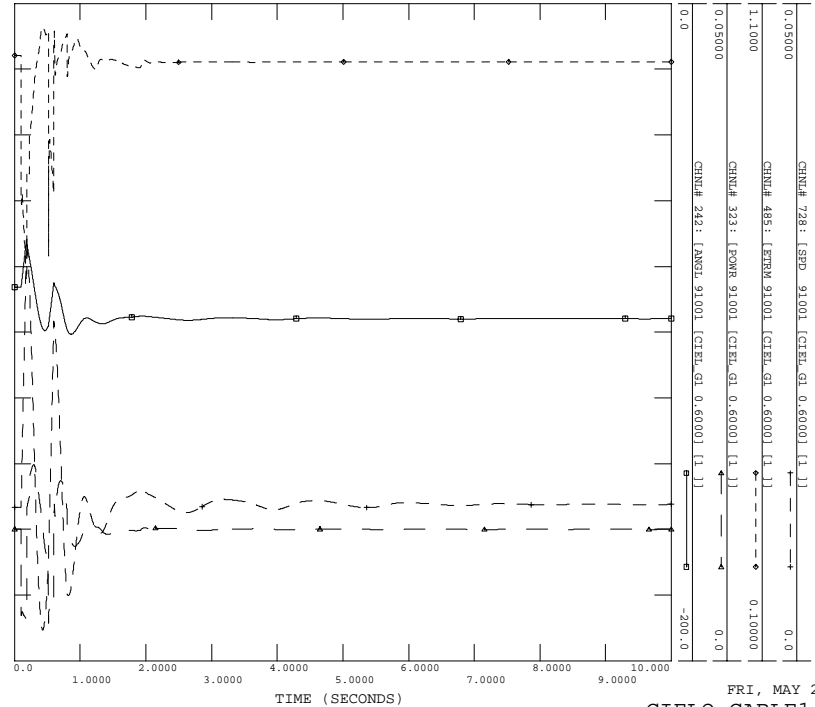

 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH_LITE.OUT



FRI, MAY 21 2004 9:36


CIELO CABLE1 GEN6 2

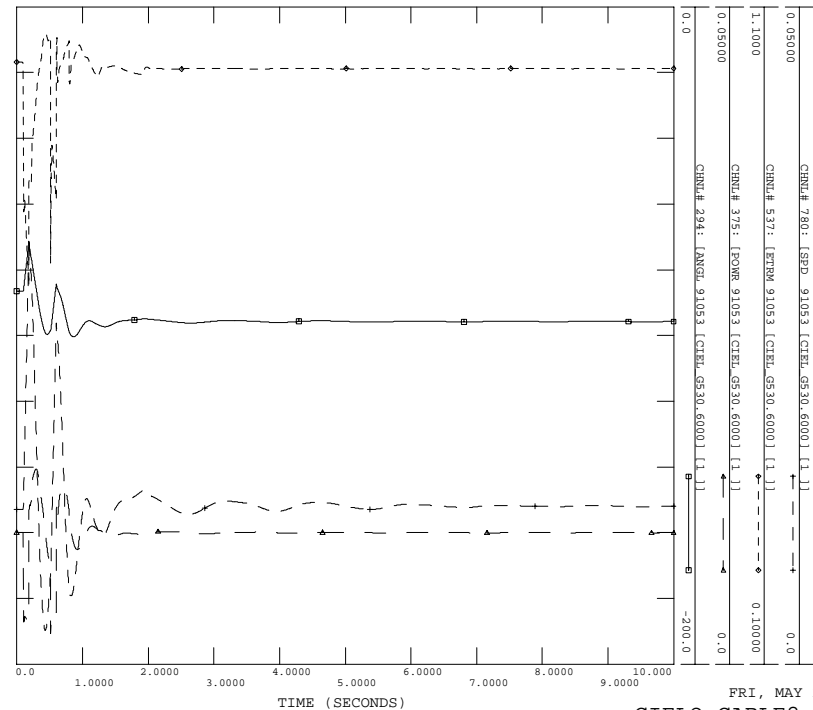

 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
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FRI, MAY 21 2004 9:36


CIELO CABLE1 GEN1 1

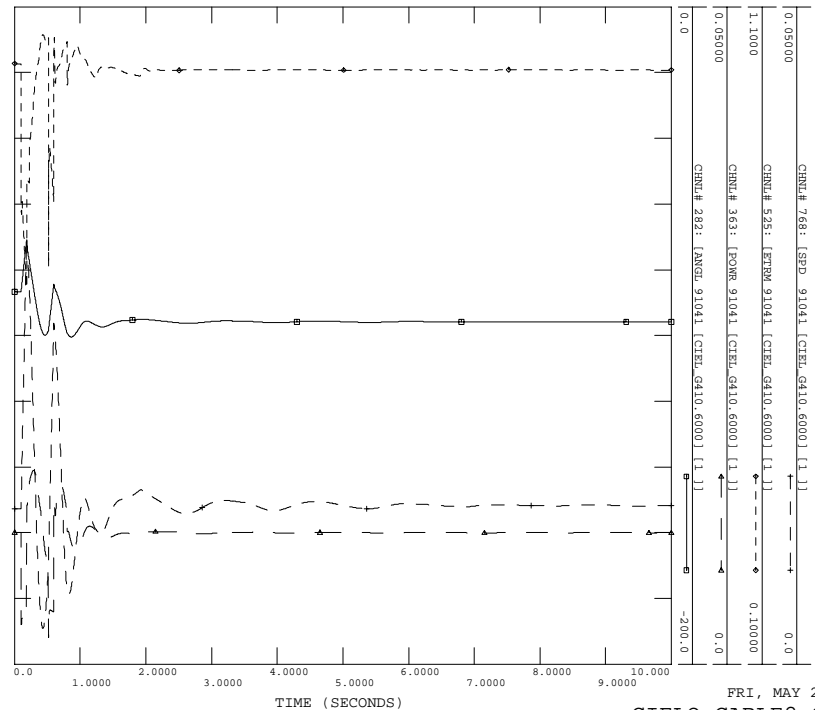

 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH_LITE.OUT



FRI, MAY 21 2004 9:36

CIELO CABLE2 GEN53 4

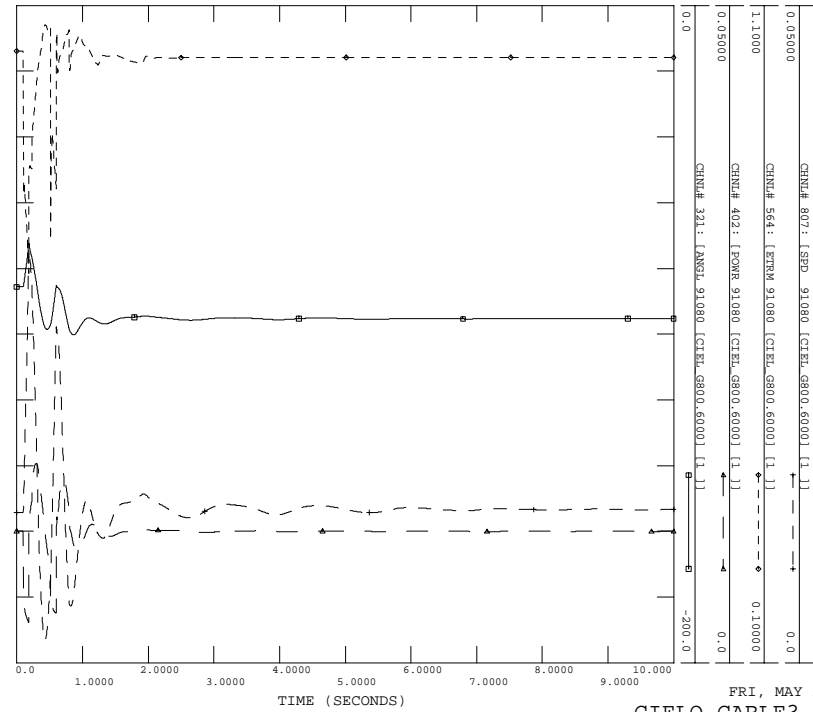

 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH_LITE.OUT



FRI, MAY 21 2004 9:36

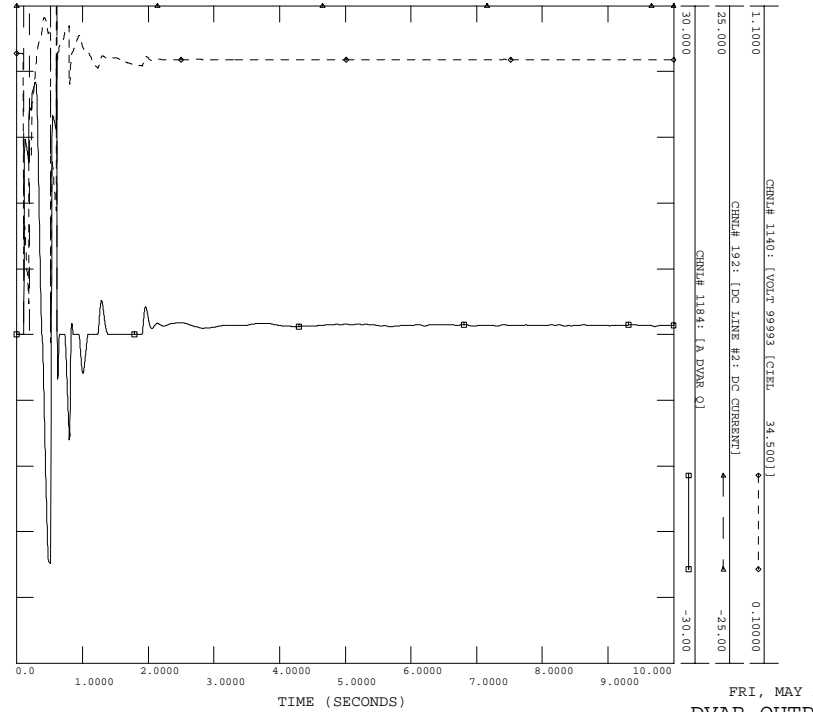
CIELO CABLE2 GEN41 3

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH_LITE.OUT



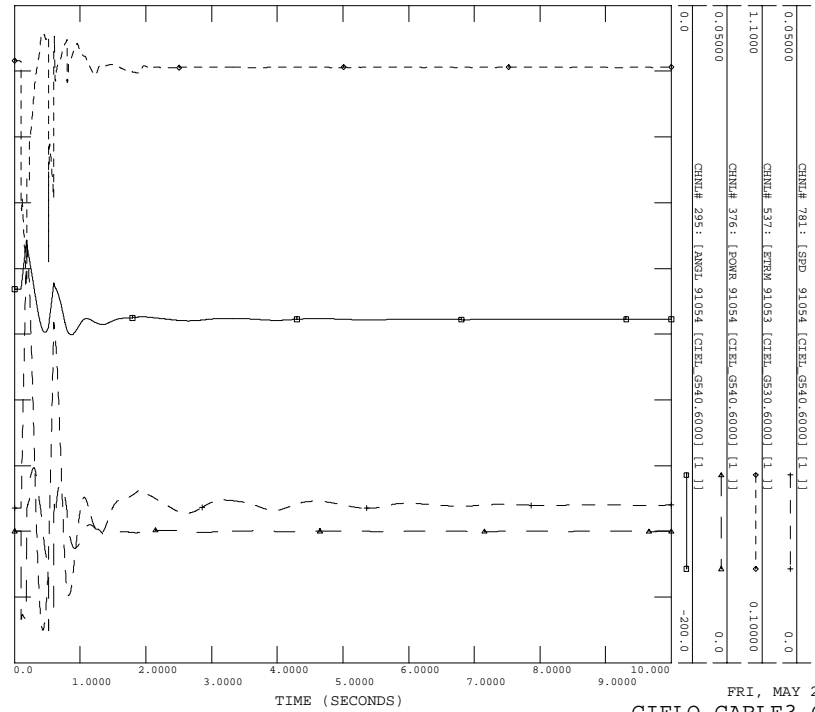
FRI, MAY 21 2004 9:36
 CIELO CABLE3 GEN80 6

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH_LITE.OUT



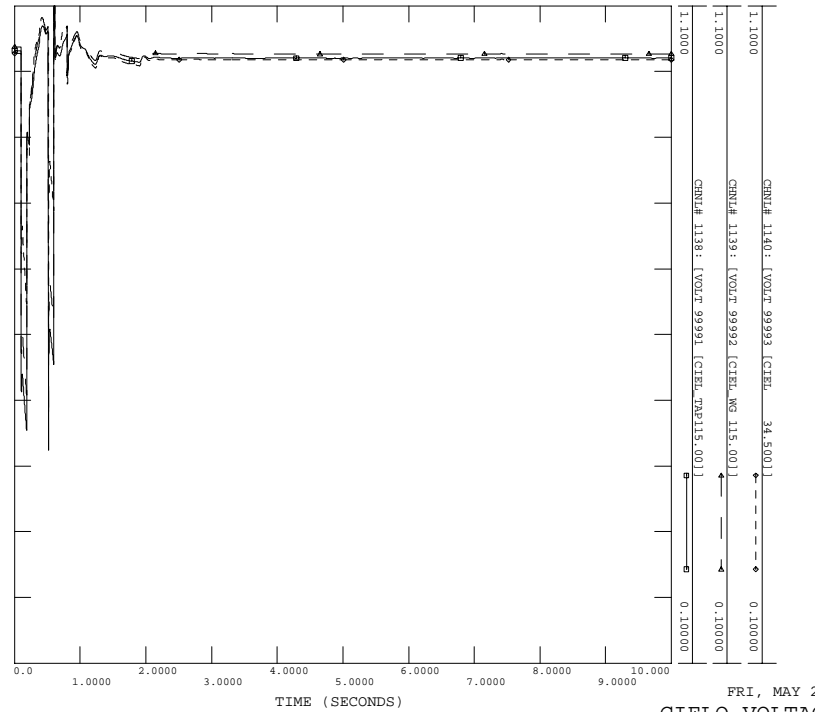
FRI, MAY 21 2004 9:36
 DVAR OUTPUT 8

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH_LITE.OUT

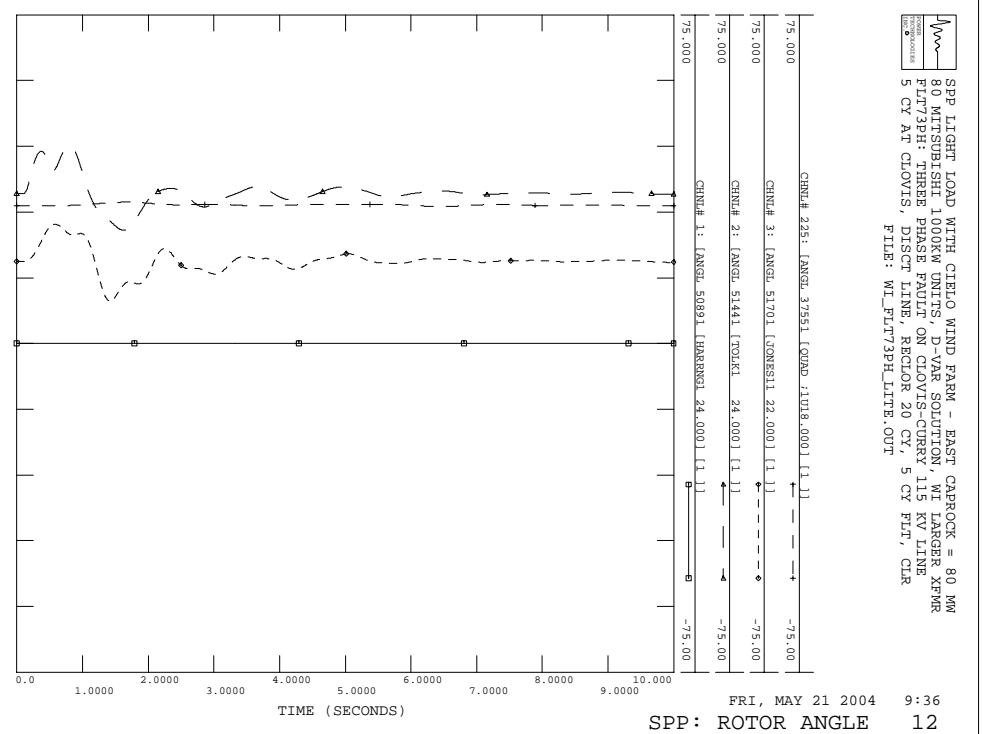
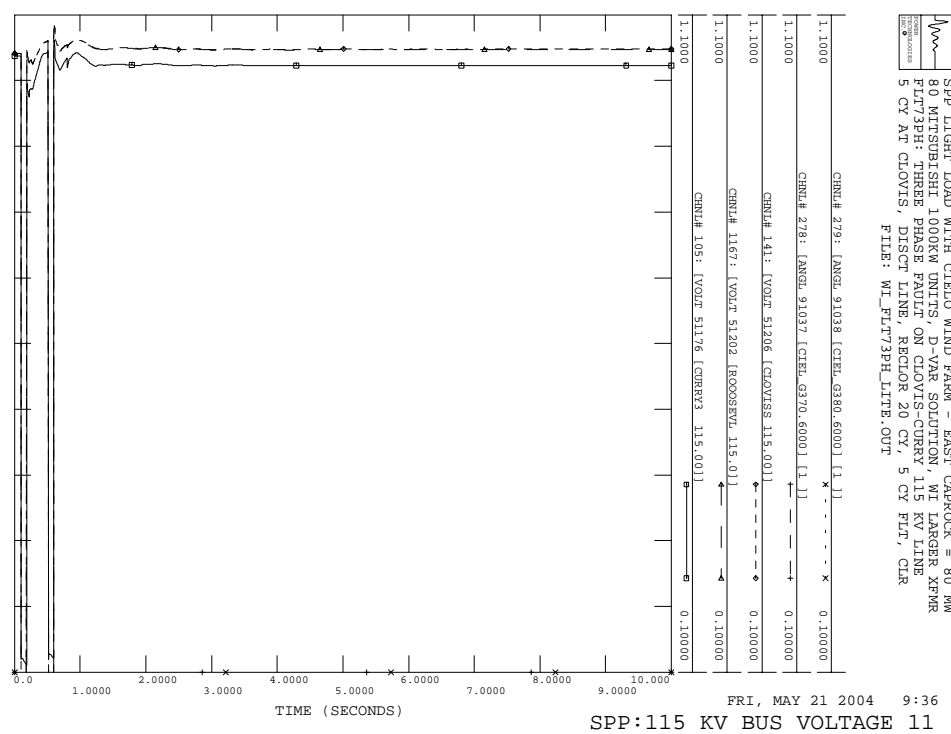
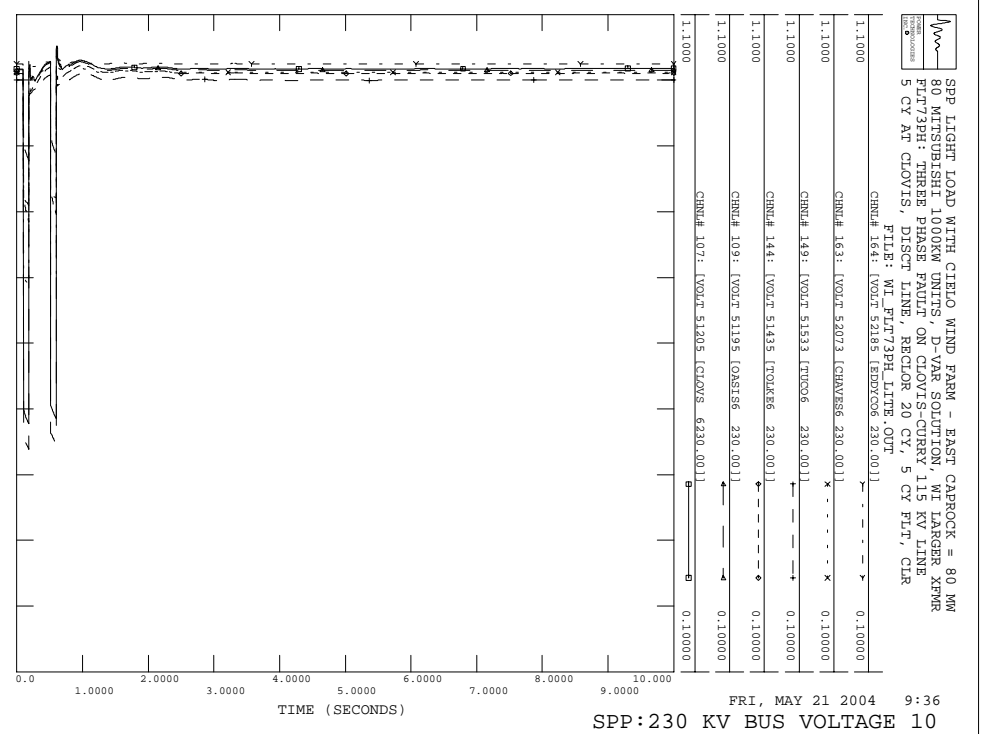
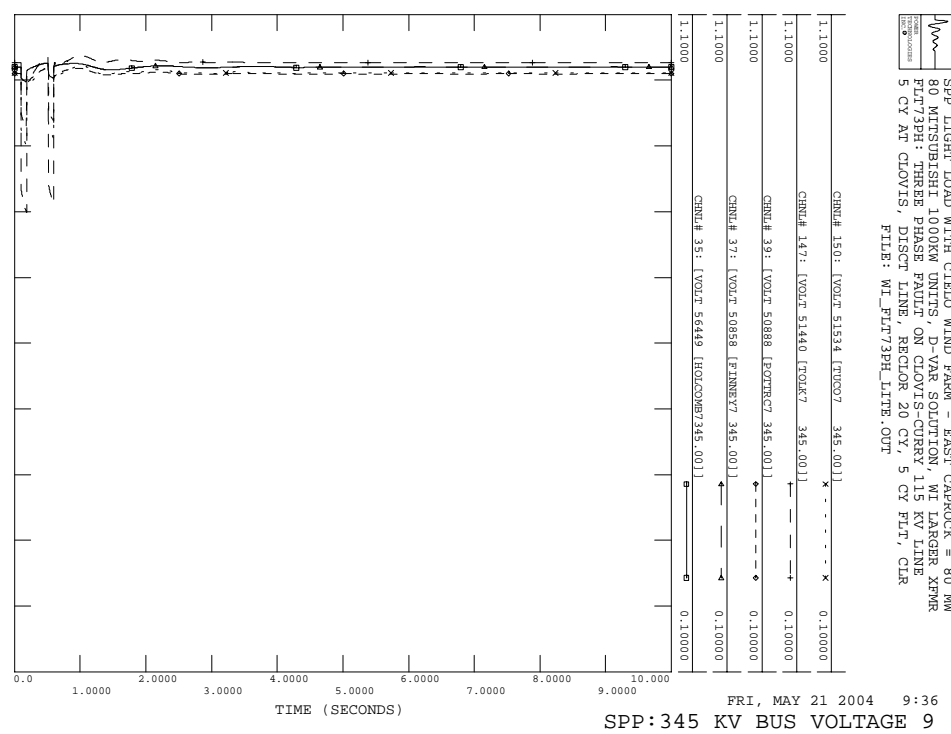


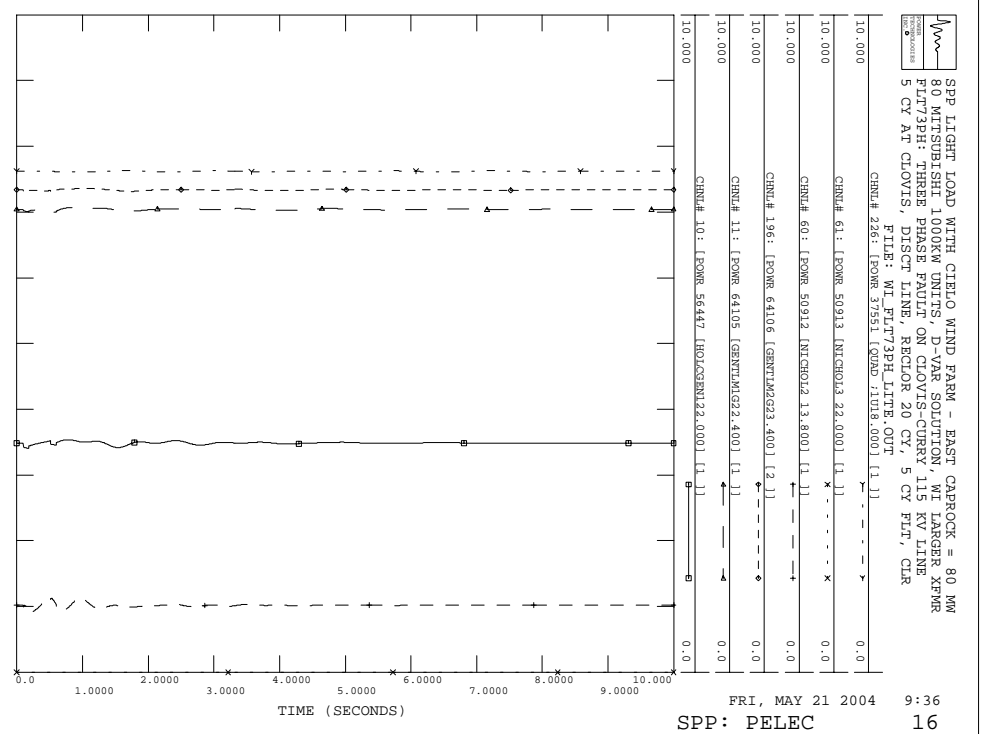
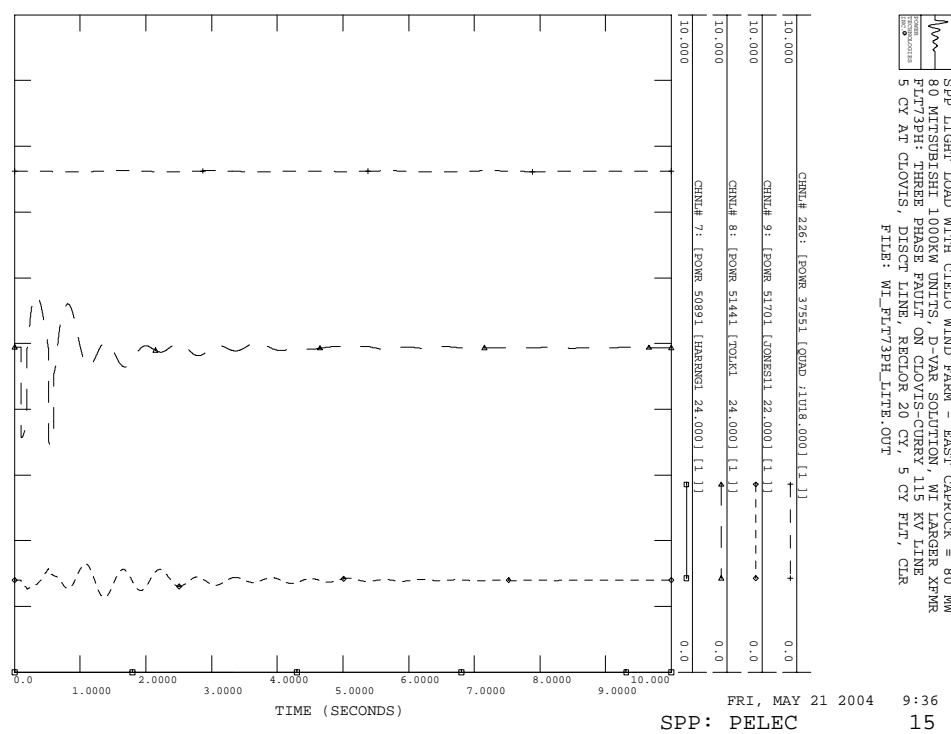
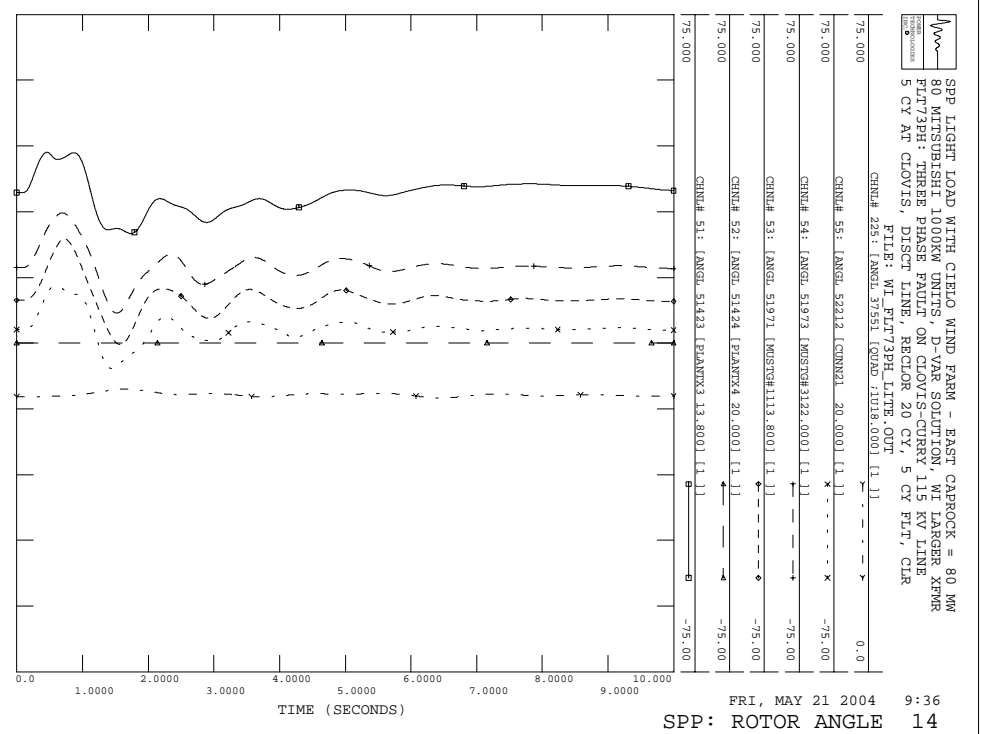
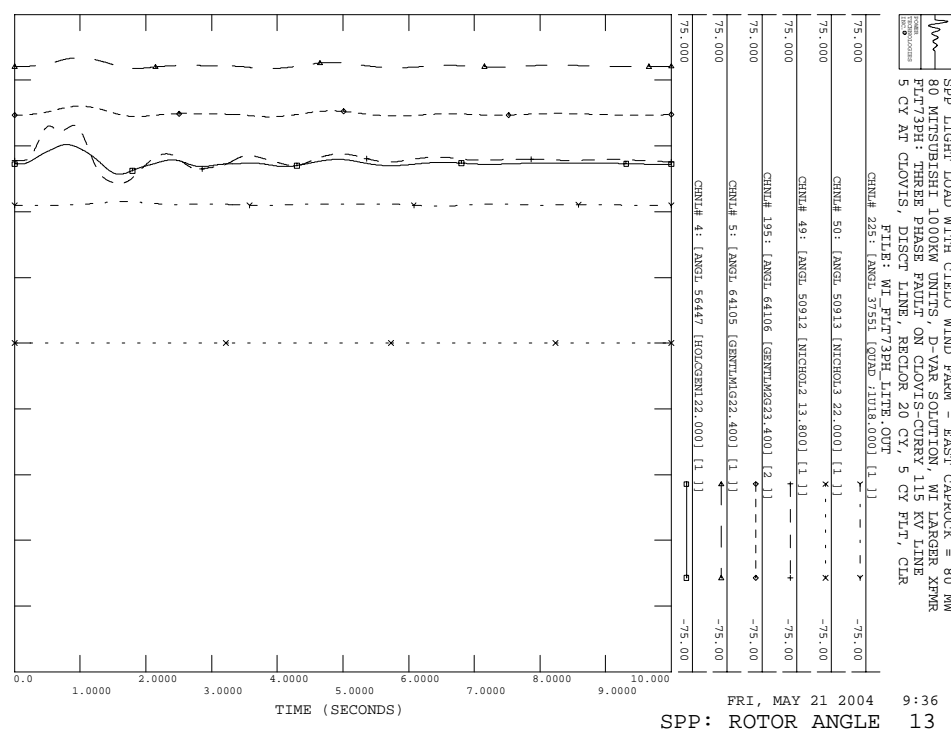
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 CIELO CABLE3 GEN54 5

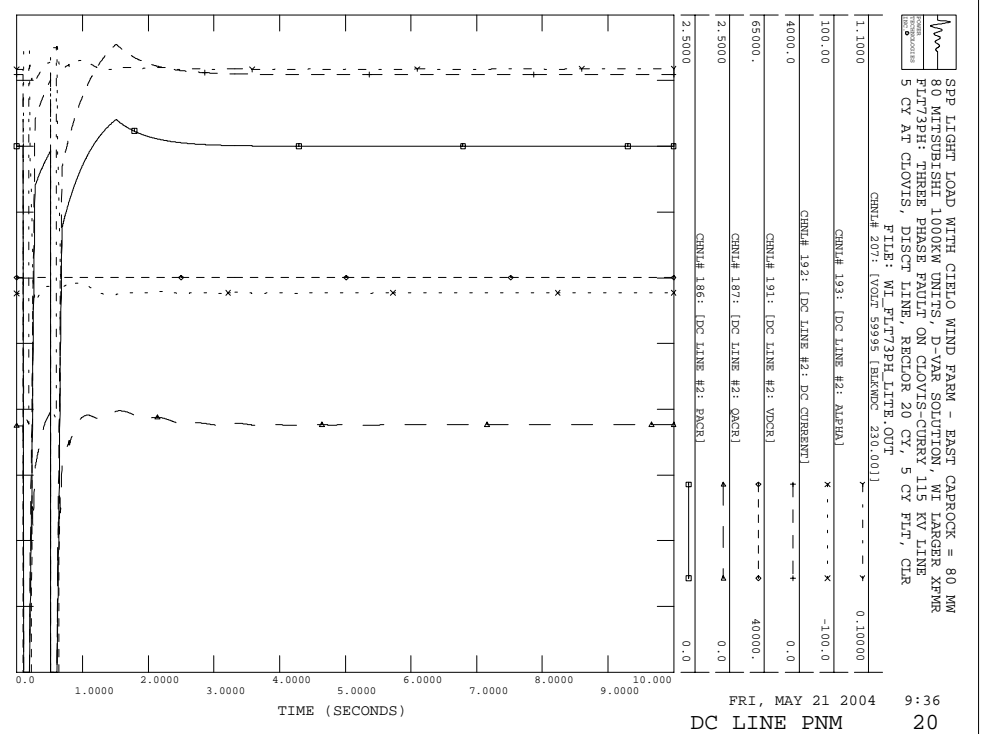
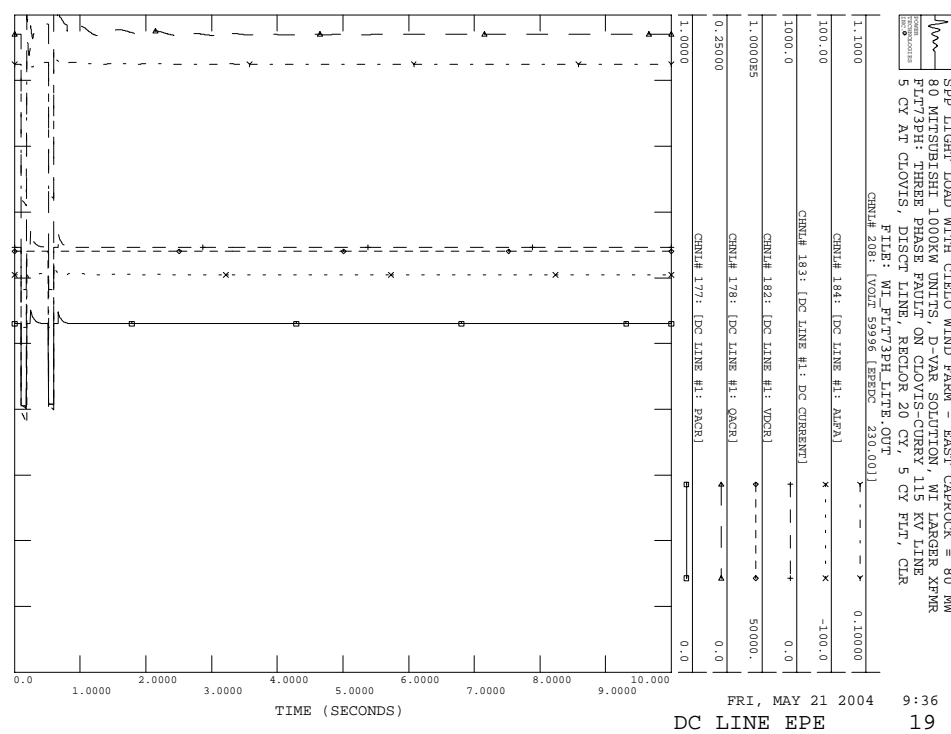
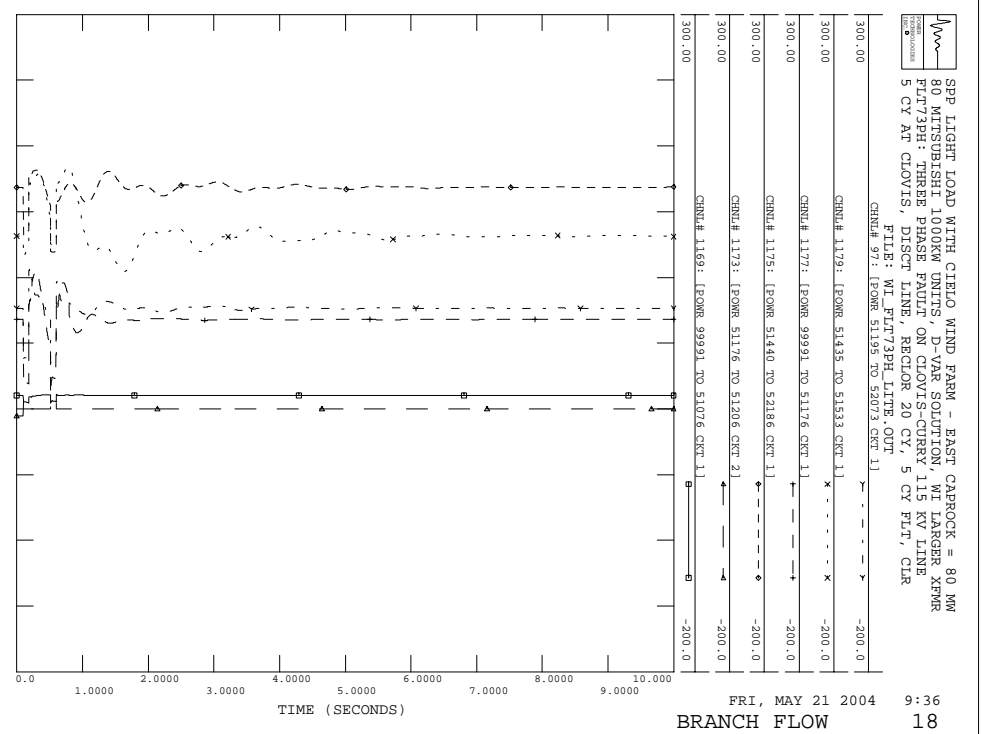
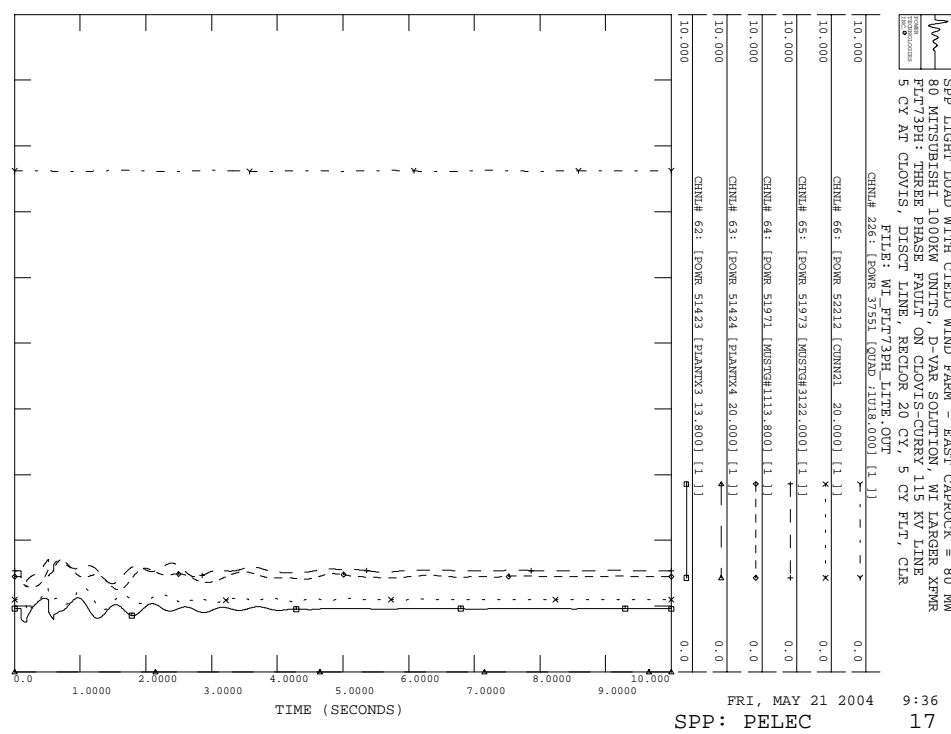
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT73PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT73PH_LITE.OUT



FRI, MAY 21 2004 9:36
 CIELO VOLTAGE 7

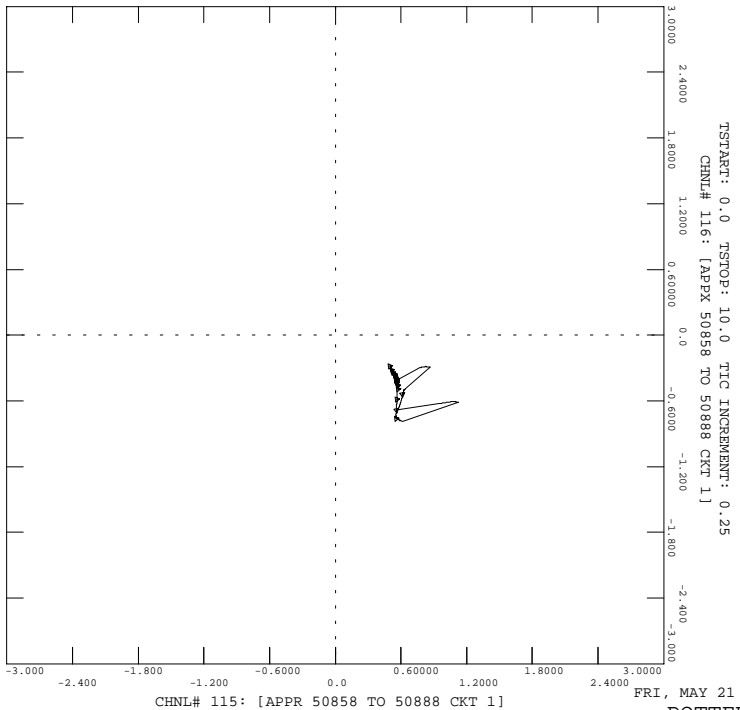






SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER AFMR
 FLT/3PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

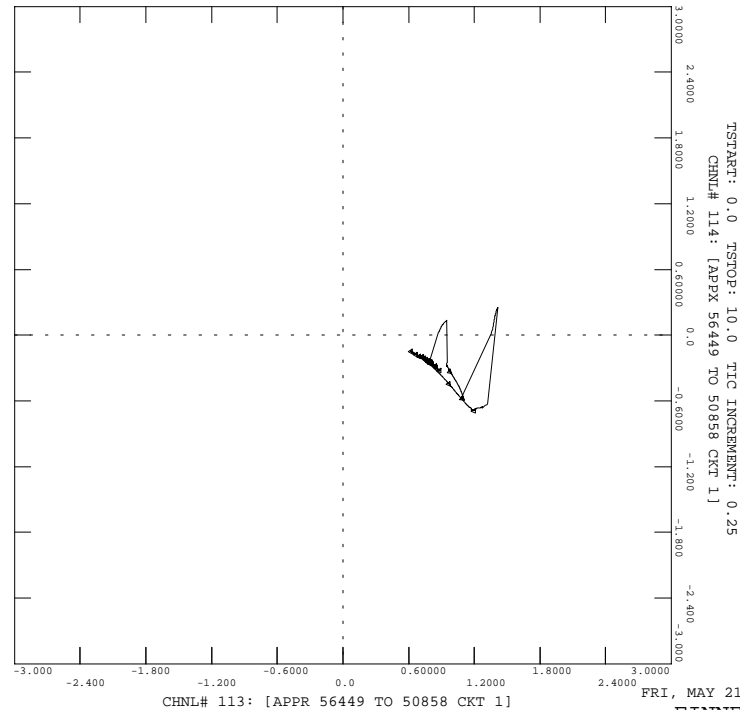
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22

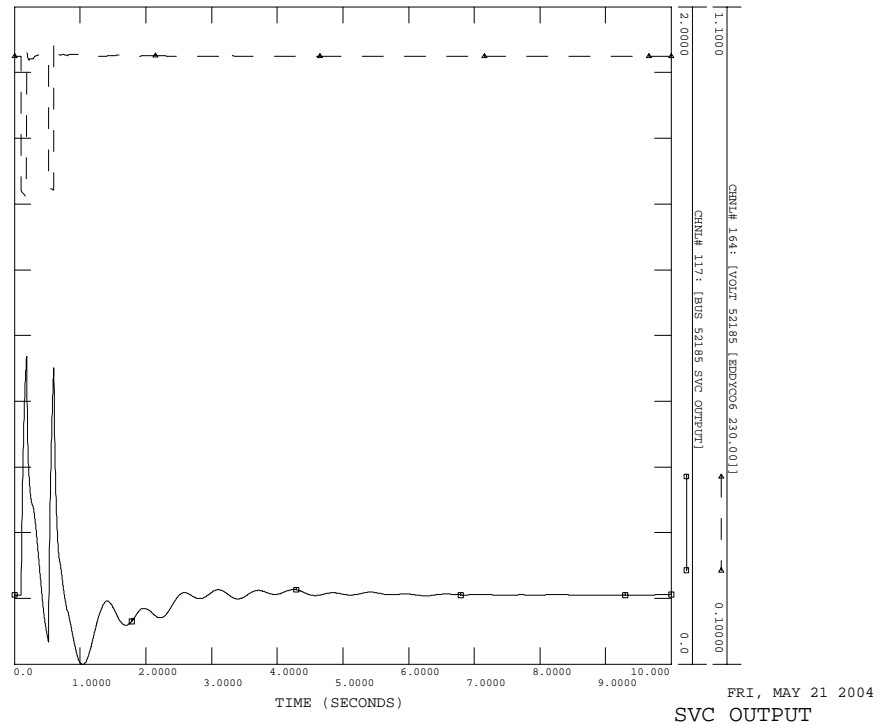
SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER AFMR
 FLT/3PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

FILE: WI_FLT73PH_LITE.OUT




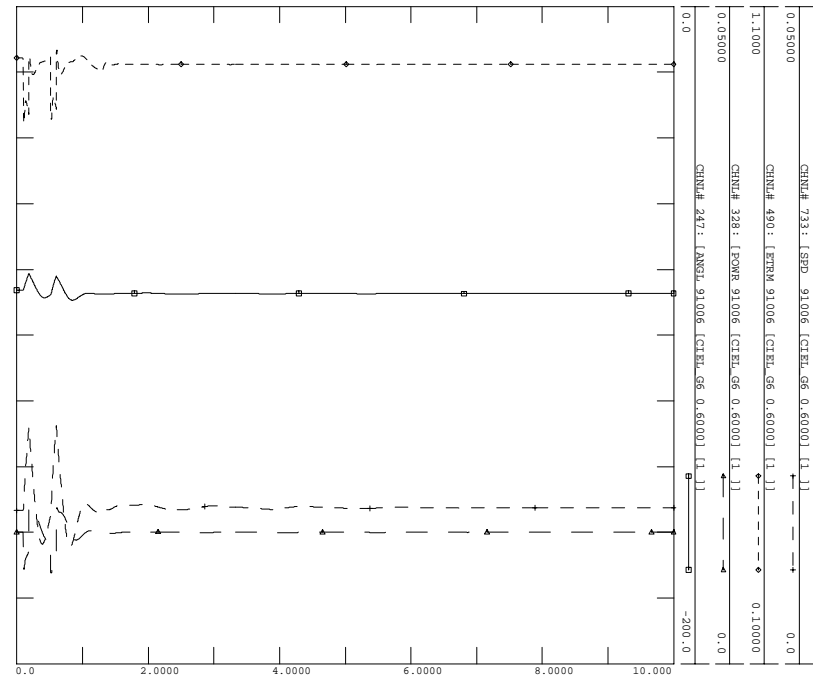
21

SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CARROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER AFMR
 FLT/3PH: THREE PHASE FAULT ON CLOVIS-CURRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR




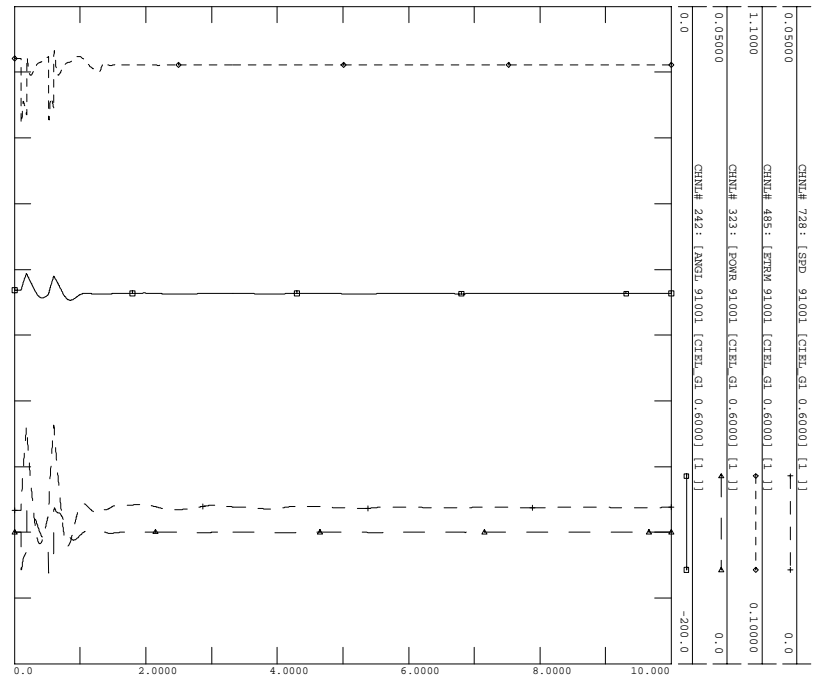
23


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT/1PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT1PH_LITE.OUT




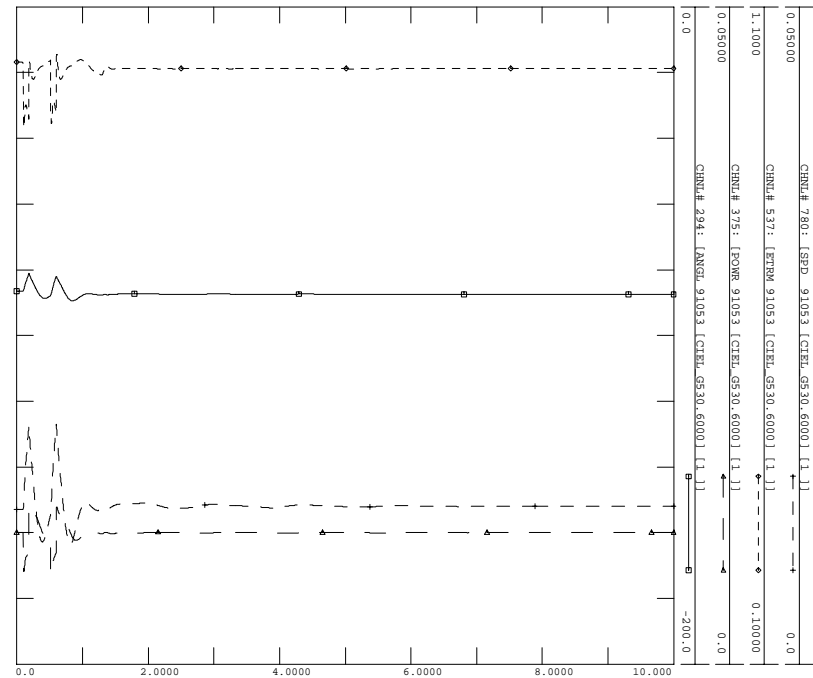
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CIELO CABLE1 GEN6 2


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT/1PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT1PH_LITE.OUT




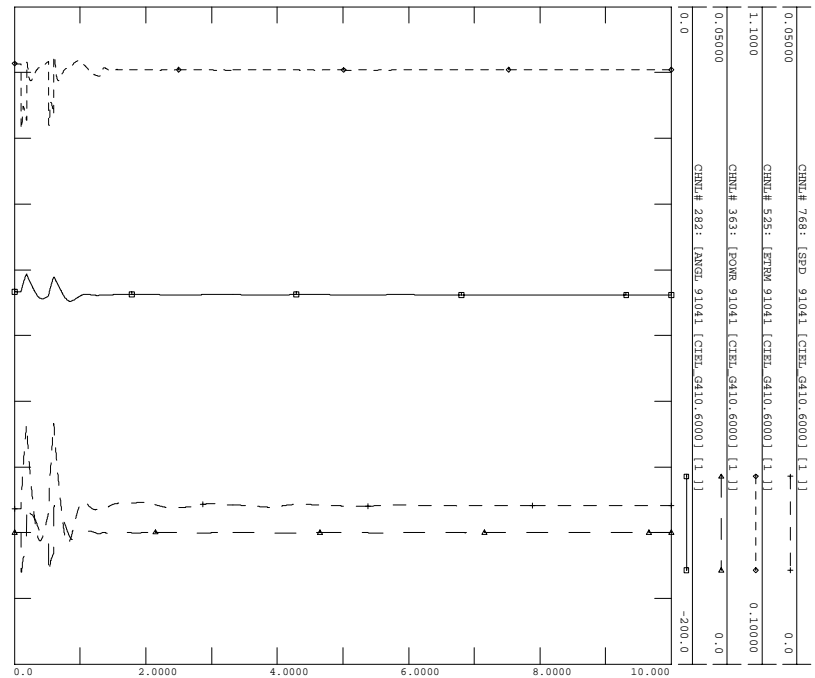
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CIELO CABLE1 GEN1 1


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT/1PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT1PH_LITE.OUT



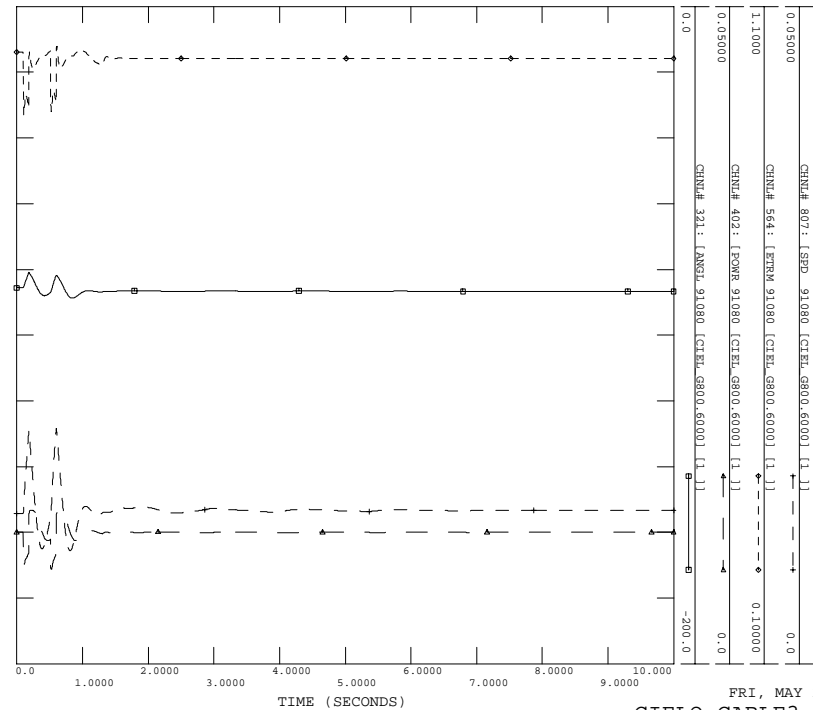
FRI, MAY 21 2004 9:36
CIELO CABLE2 GEN5 4


 SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT/1PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT1PH_LITE.OUT



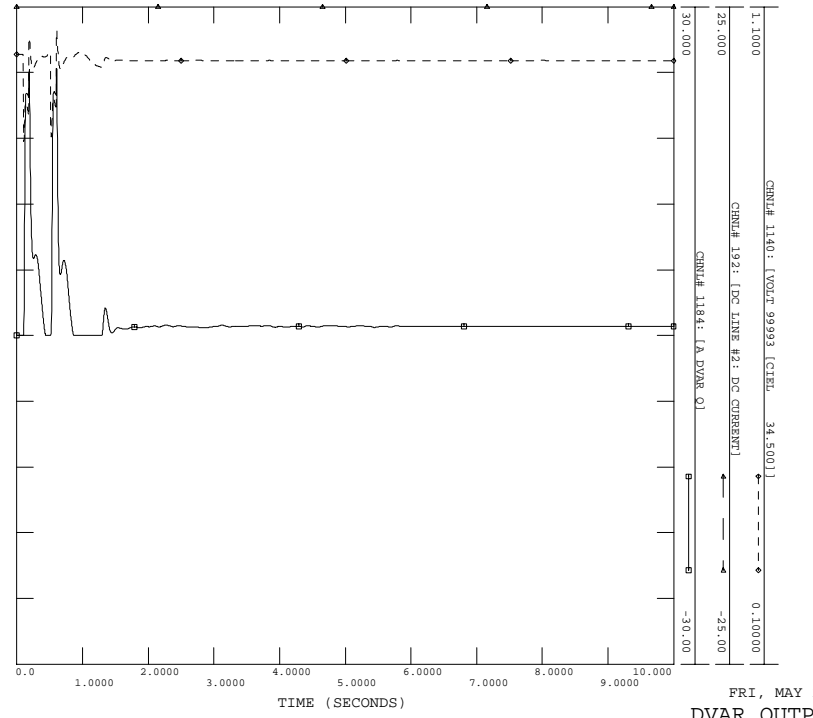
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CIELO CABLE2 GEN4 3

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT/1PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT1PH_LITE.OUT



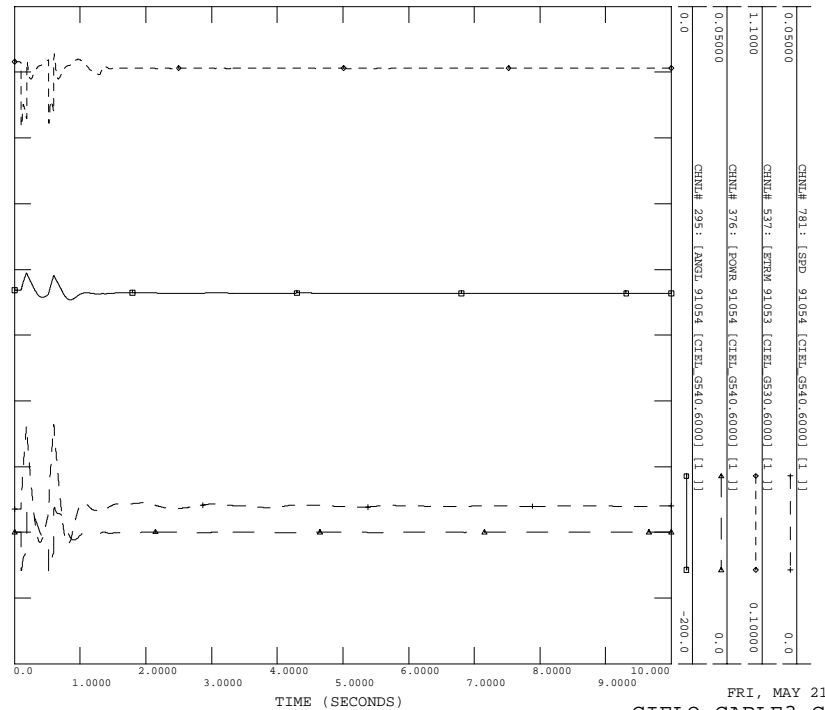
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 CIELO CABLE3 GEN80 6

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT/1PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT1PH_LITE.OUT



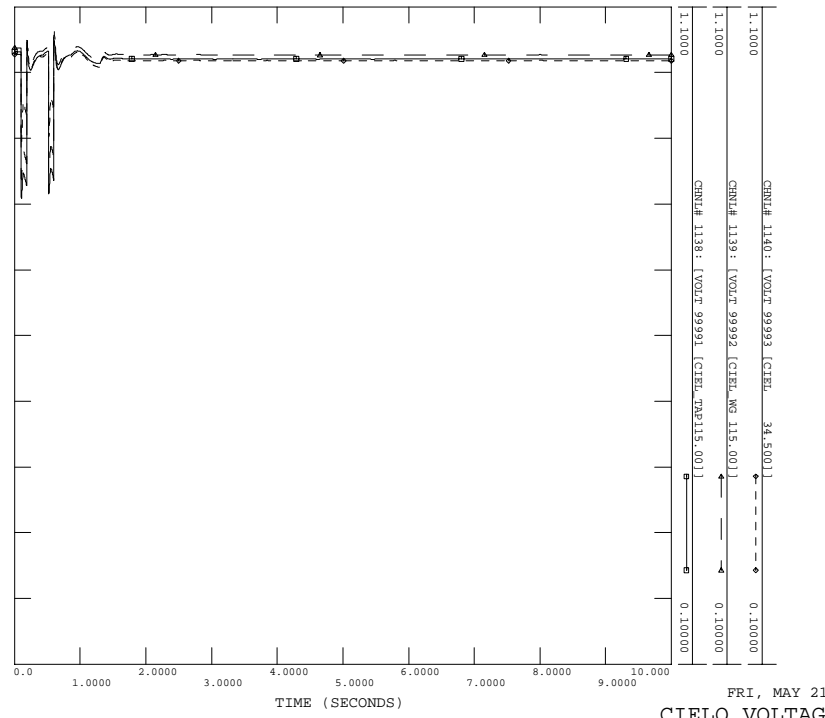
FRI, MAY 21 2004 9:36
 DVAR OUTPUT 8

SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT/1PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT1PH_LITE.OUT

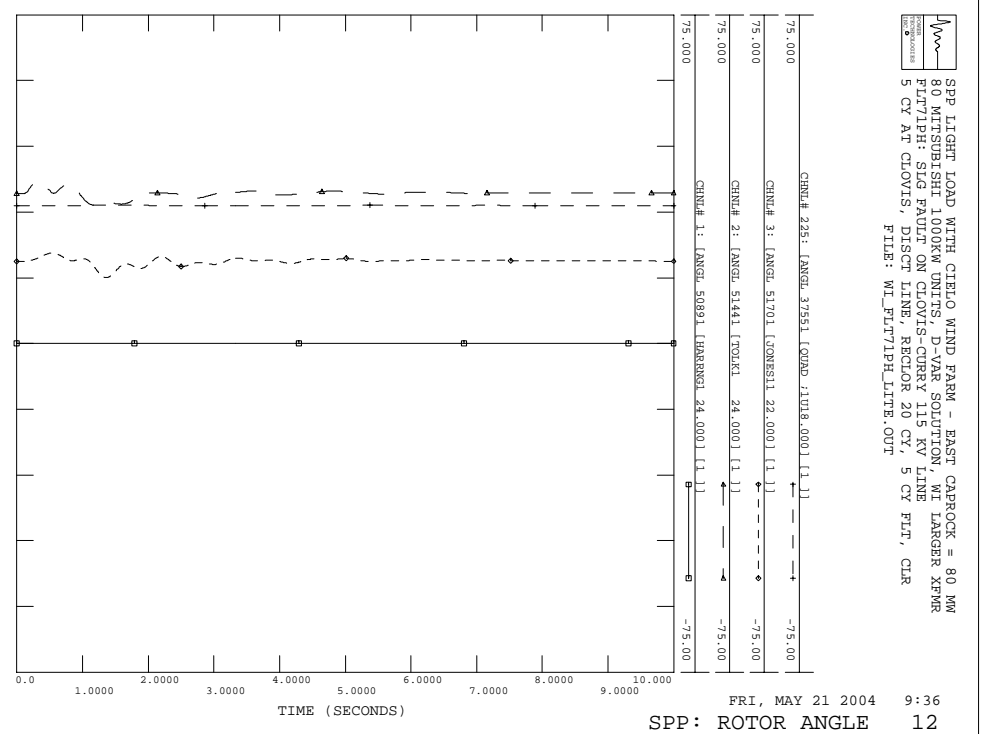
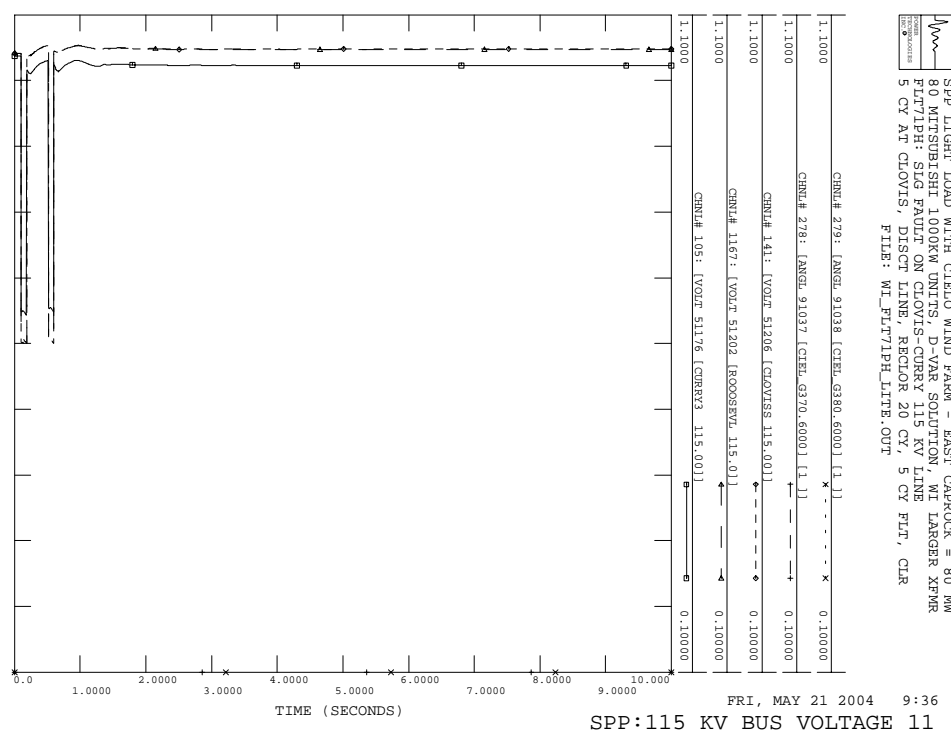
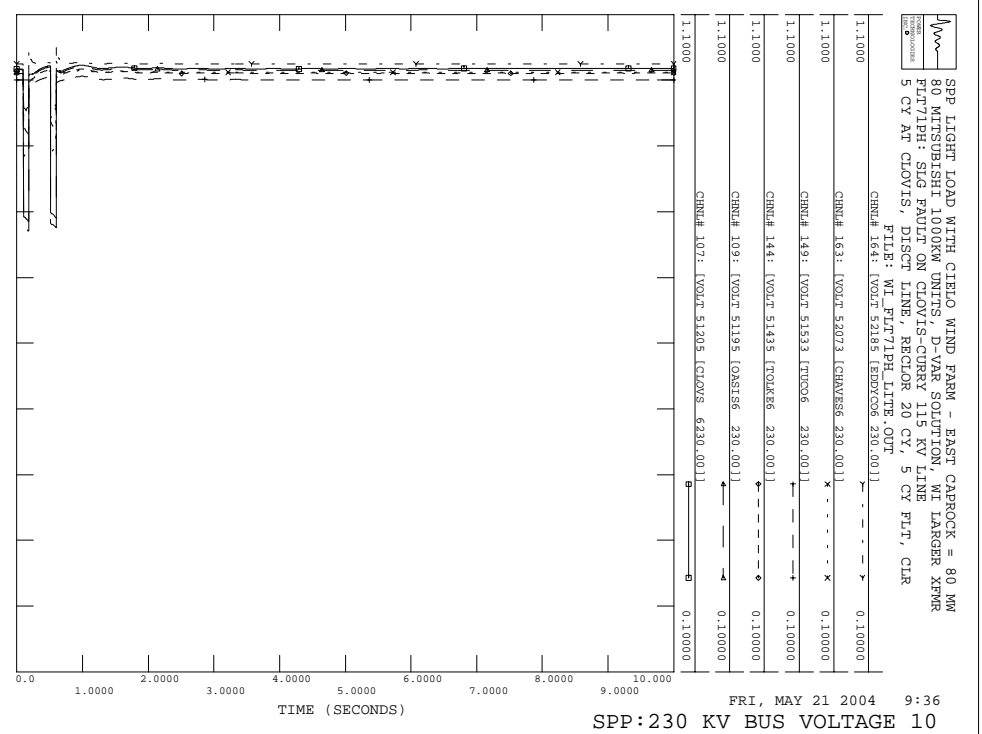
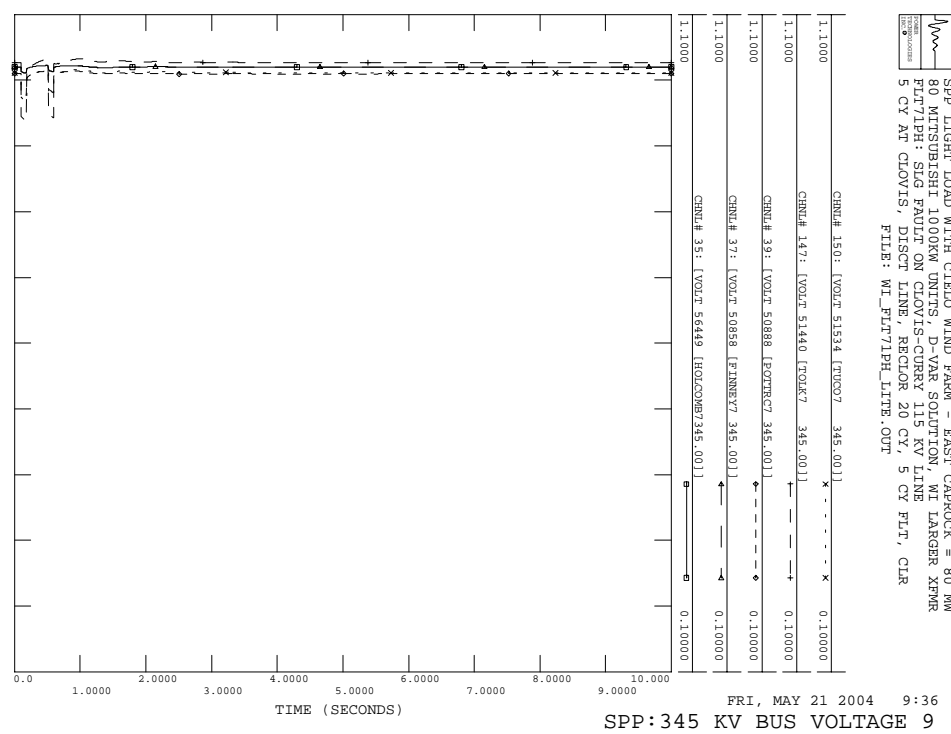


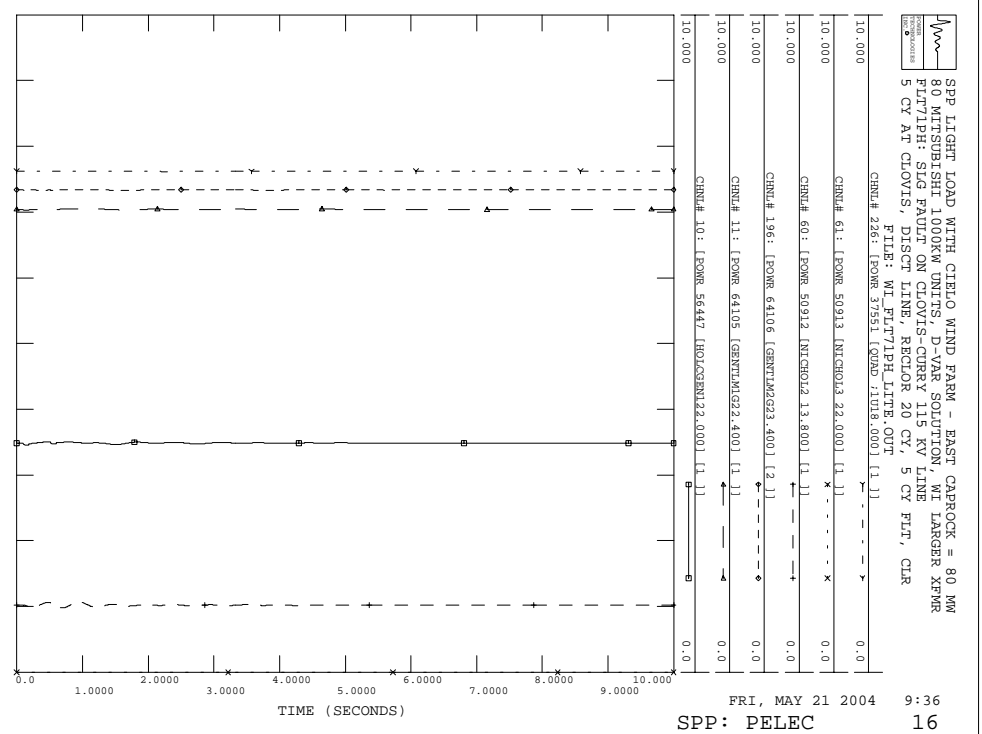
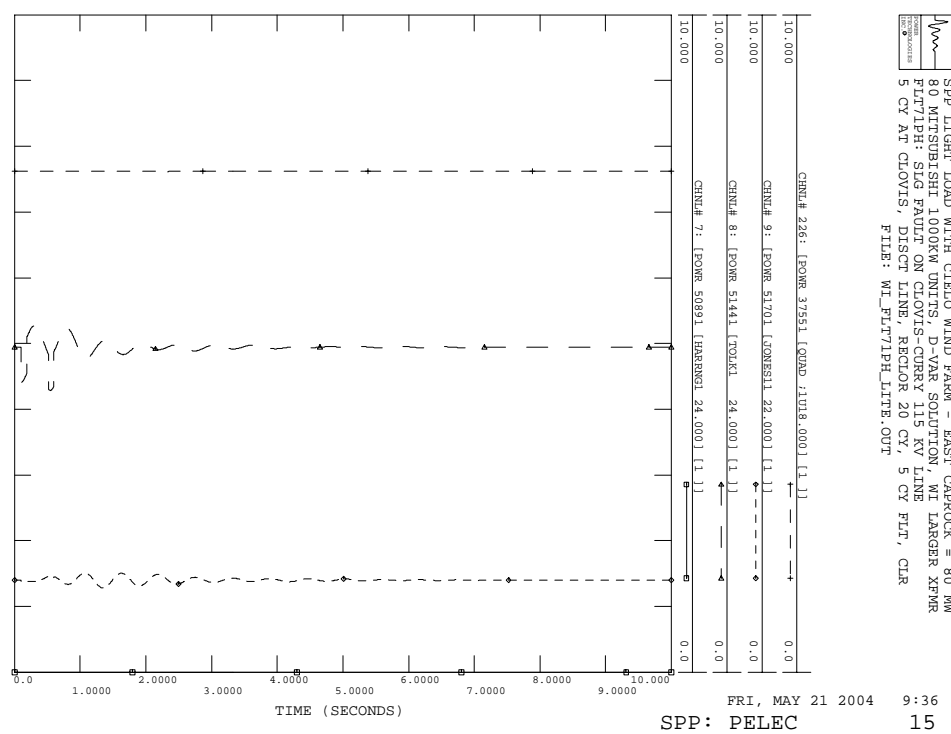
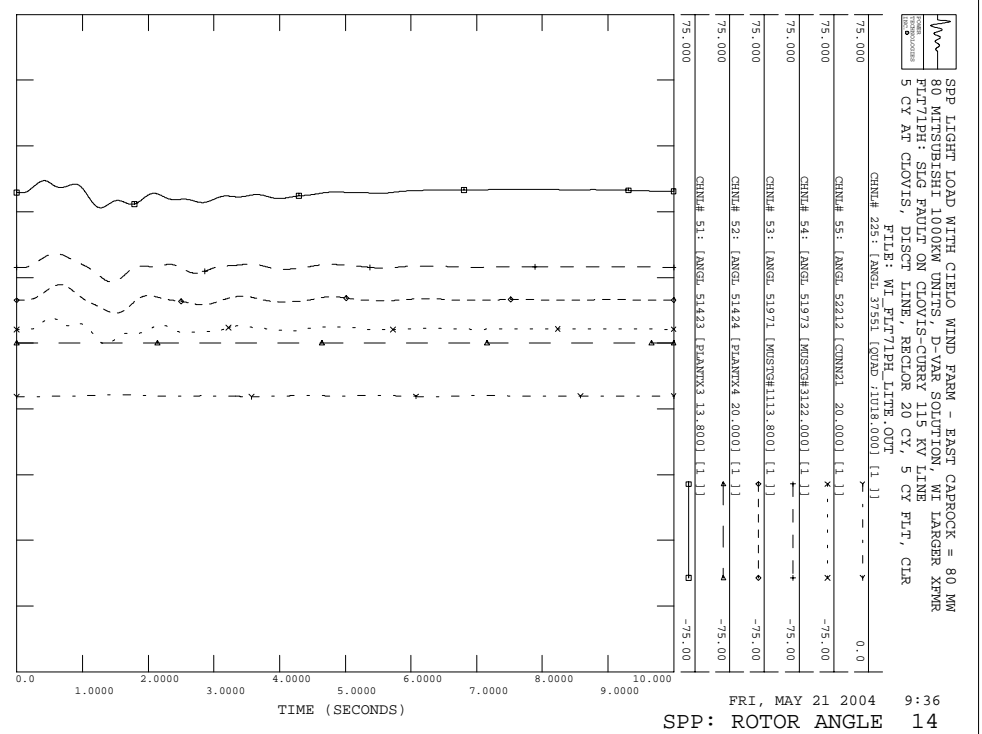
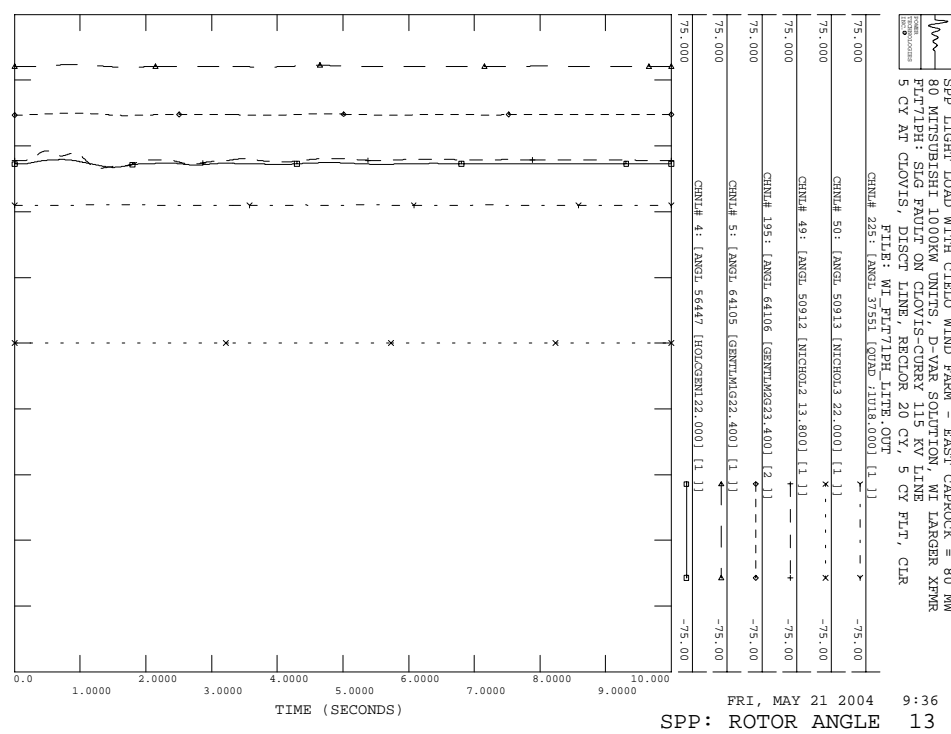
FRI, MAY 21 2004 9:36
 CIELO CABLE3 GEN54 5

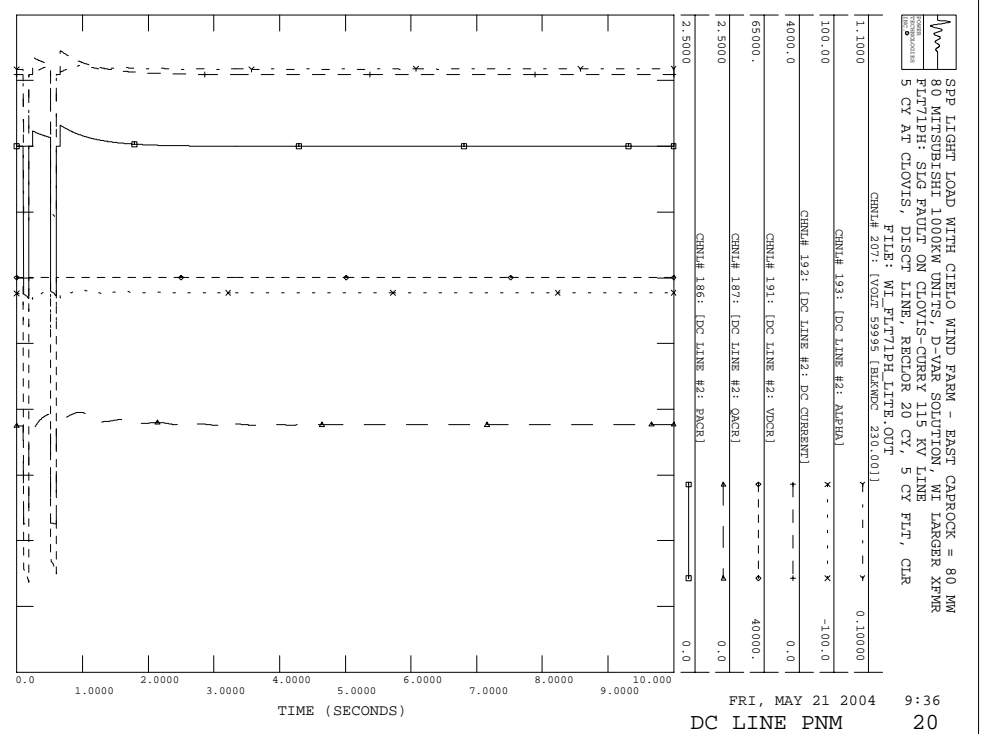
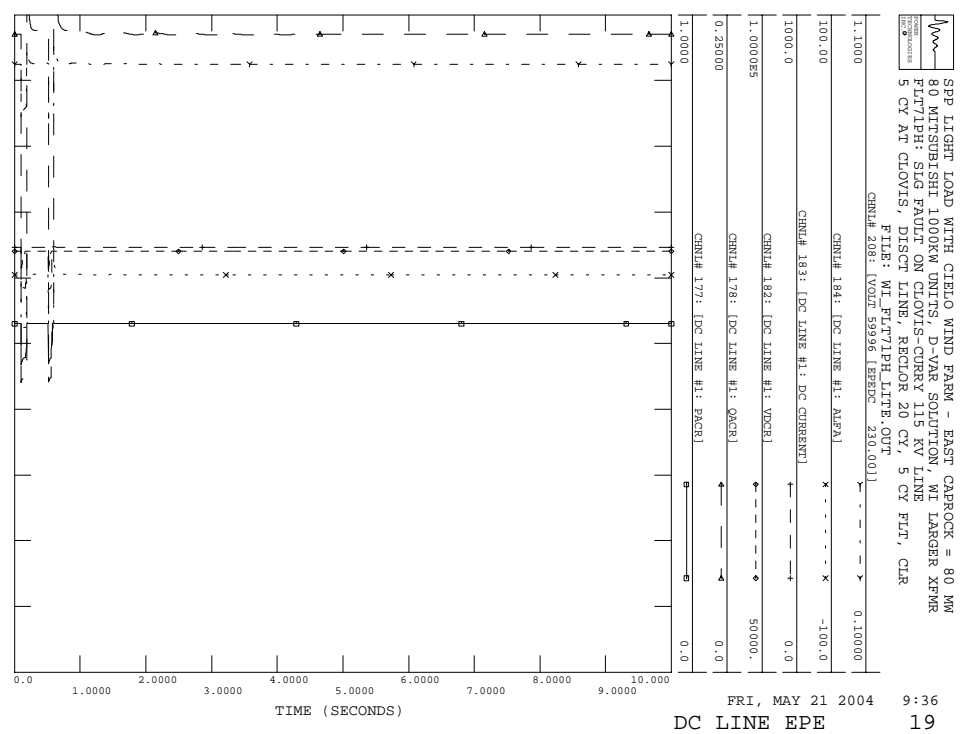
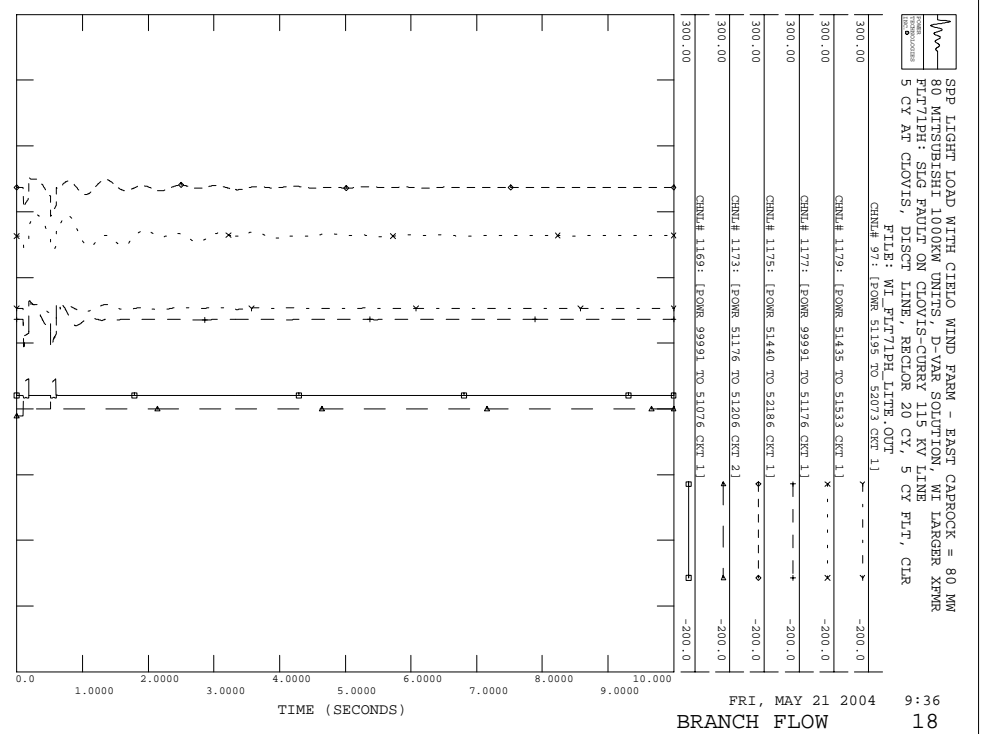
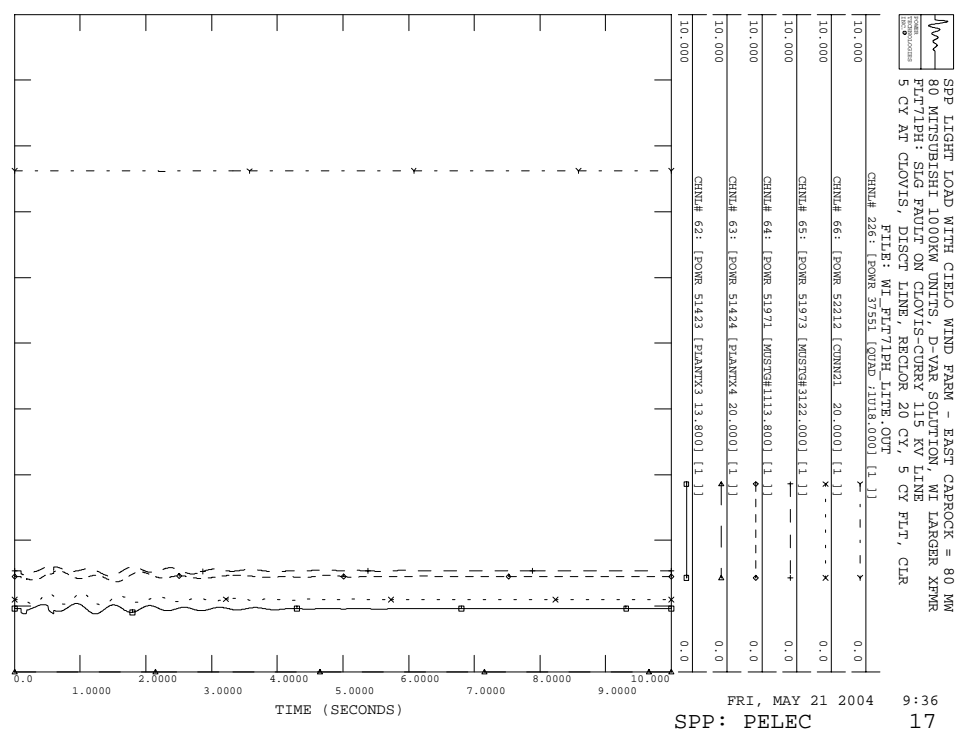
SPP LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, WI LARGER XFMR
 FLT/1PH: SLG FAULT ON CLOVIS-CORRY 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECLOR 20 CY, 5 CY FLT, CLR
 FILE: WI_FLT1PH_LITE.OUT



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 CIELO VOLTAGE 7

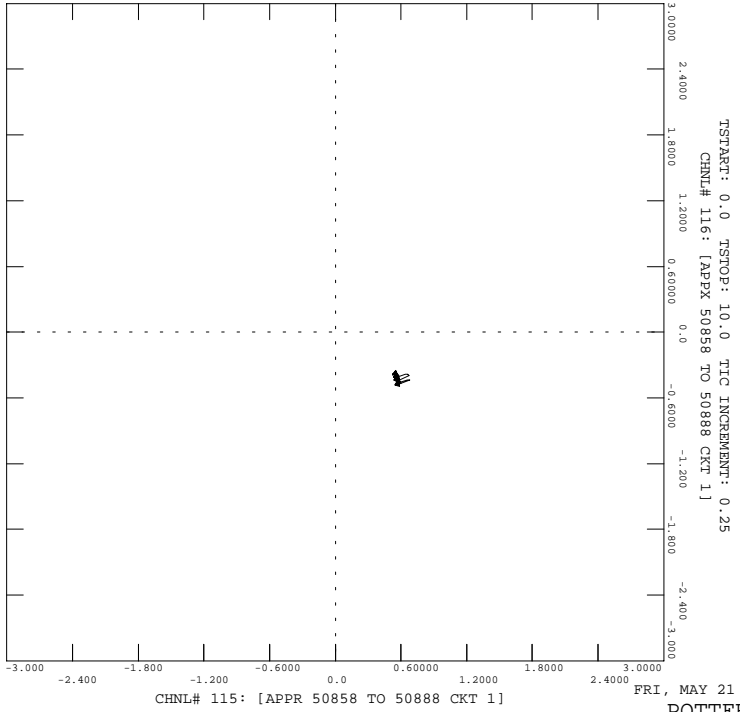






SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT/1PH- SLG PROBL ON CLOVIS-CORR 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

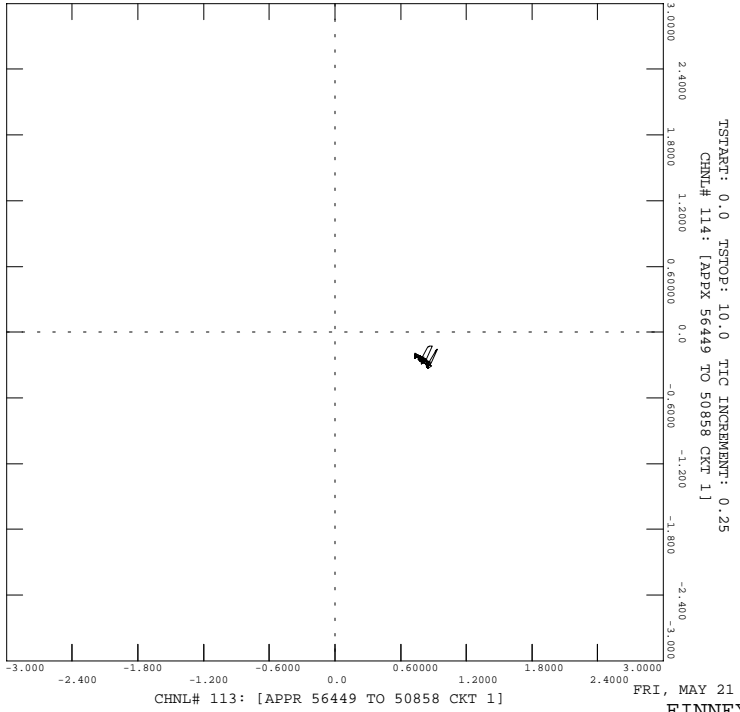
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SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT/1PH- SLG PROBL ON CLOVIS-CORR 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

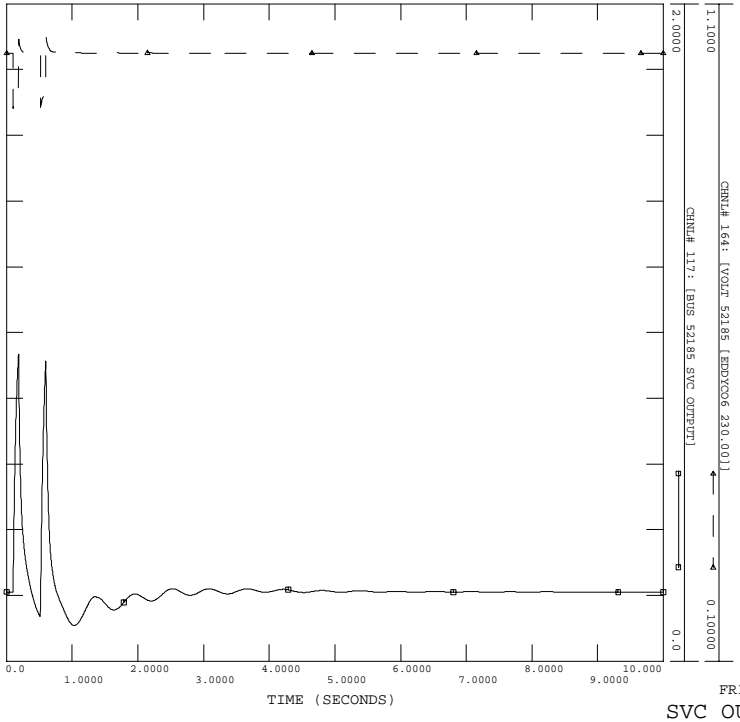
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SPF LIGHT LOAD WITH CIELO WIND FARM - EAST CAPROCK = 80 MW
 80 MITSUBISHI 1000KW UNITS, D-VAR SOLUTION, MI LARGER XFMR
 FLT/1PH- SLG PROBL ON CLOVIS-CORR 115 KV LINE
 5 CY AT CLOVIS, DISCT LINE, RECTOR 20 CY, 5 CY FLT, CLR

FILE: MI_FLT71PH_LITE.OUT



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