

APPENDIX A CONNECTION ASSESSMENT

Connection Engineering Study Report




Peace Butte Wind Connection

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Executive Summary

Pteragen Canada Inc. (the “Customer”) has applied to the Alberta Electric System Operator (AESO) for connection of the Peace Butte Wind Aggregate Generating Facility (WAGF) in the Medicine Hat planning area. The Supply Transmission Service (STS) capacity of Peace Butte WAGF is 116.4 MW. The expected In-service date (ISD) is July 31, 2013. Figure 1-1 shows the expected 2013 Medicine Hat and surrounding area transmission system.

The Peace Butte WAGF will consist of 60 Gamesa 2.0 MW double fed induction wind generators (DFIG) with a total maximum capacity of 120 MW. The proposed connection would involve development of a collector substation Tothill 219S to be located near the customer’s generating facilities, and approximately 300 meters of new 138kV transmission line. The Tothill collector substation 219S is proposed to connect to the Alberta Interconnected Electric System (AIES) through a T-Tap arrangement to the 138kV transmission line 600L from Bullshead 523S to Peace Butte 404S.

The purpose of this connection study is to identify any reliability concerns associated with the connection of Peace Butte WAGF to the AIES and explore possible mitigation options. In order to identify the reliability concerns only attributed with the interconnection of Peace Butte WAGF, the system is assessed with and without Peace Butte WAGF online. Steady state, transient stability and short circuit analyses are performed to compare the system response before and after the interconnection of Peace Butte WAGF.

Based on the study results, the connection of Peace Butte WAGF will not negatively impact the system under normal condition. A few thermal overloads are observed after single element contingency for the studied system conditions. These overloads will be resolved by part of the Alberta Utilities Commission (AUC) approved Southern Alberta Transmission Reinforcement (SATR) project which is planned to be in service by 2014. Until the SATR project is in service, Remedial Action Schemes (RAS) will have to be implemented to prevent the observed system overloads.

1. Introduction

This Connection Engineering Study Report presents the results of the study conducted to analyze the proposed connection of the Peace Butte wind connection Project to the AIES.

1.1. Project

1.1.1. Project Overview

Pteragen Canada Inc. (the “Customer”) has applied to Alberta Electric System Operator (AESO) for connection of the Peace Butte WAGF in Peace Butte area in Medicine Hat planning area. The Maximum Authorized Real Power (MARP) of the Peace Butte WAGF is 120MW. The expected ISD is July 31, 2013.

The proposed connection would involve development of a collector substation Tothill 219S to be located near the customer’s generating facilities, and approximately 300 meters of new 138kV transmission line. The Tothill collector substation 219S is proposed to connect to the Alberta Interconnected Electric System (AIES) through a T-Tap arrangement to the 138kV transmission line 600L from Bullshead 523S to Peace Butte 404S.

1.1.2. Generation Component

The proposed Peace Butte wind farm will consist of 60 Gamesa 2.0 MW DFIG with a total maximum capacity of 120 MW. The wind generators will have the maximum continuous reactive power capability of 39.442 MVar and minimum continuous reactive power capability of -39.442 MVar. To meet the requirement of reactive power capability of 0.9 power factor at maximum authorized real power, two 10 MVar capacitor banks will be installed on the 34.5kV buses in the Tothill collector substation 219S. Once the wind farm is built, the Customer will sign a Supply Transmission Service (STS) contract of 116.4MW and this is the maximum amount of generation that has been studied. There is no future expansion plan for this project.

1.2. Study Scope

1.2.1. Study Objectives

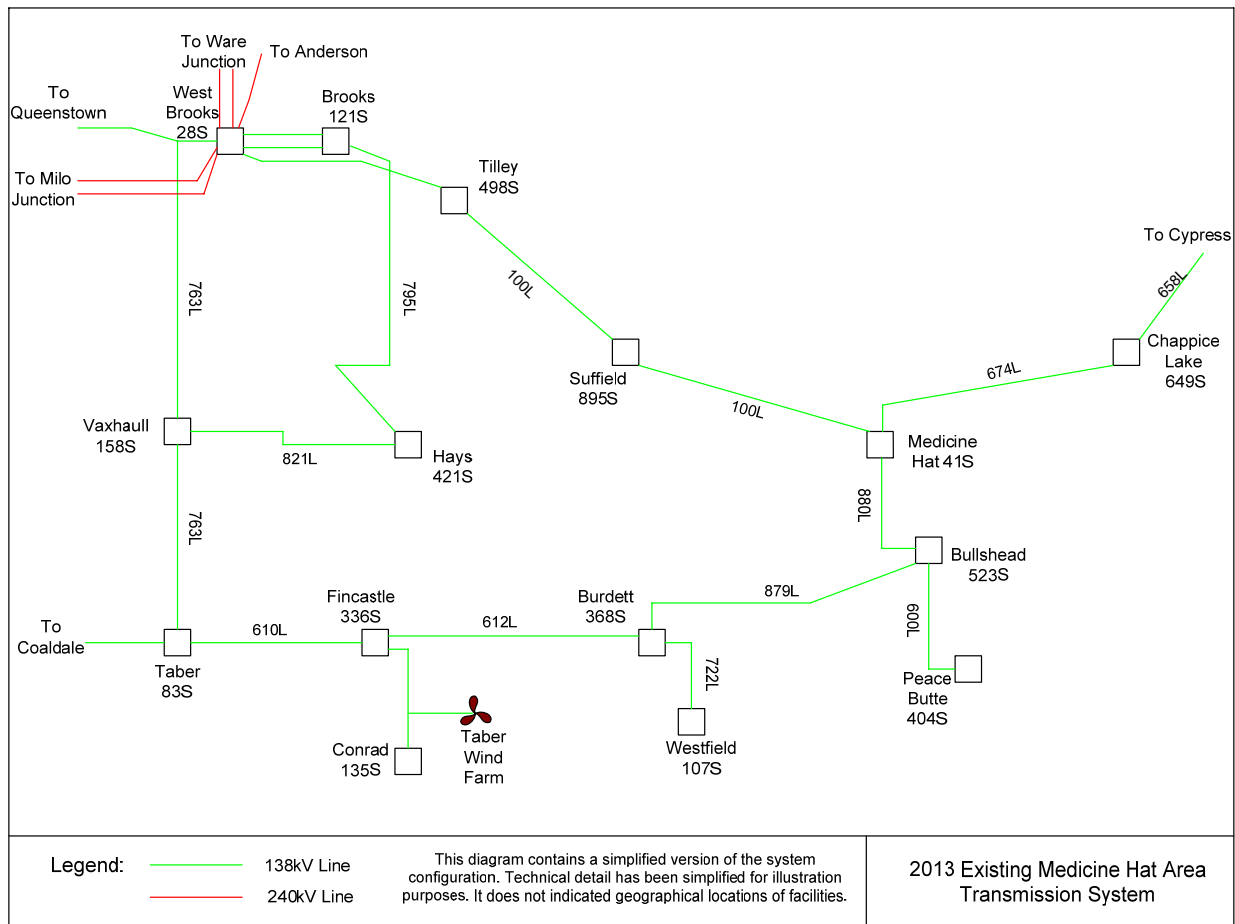
The purpose of this connection study is to identify any reliability concerns associated with the connection of Peace Butte WAGF to the Alberta Interconnected Electric System (AIES) and explore possible mitigation options.

1.2.2. Study Area

1.2.2.1. Study Area Description

The Medicine Hat planning area transmission system consists of 138kV transmission lines. It connects with the Empress planning area through 658L on the north, Brooks planning area through 100L on the northwest and Vauxhall planning area on the west. It also connects with the city of Medicine Hat at Medicine Hat substation 41S through two transformers. Figure 1-1 shows the transmission system in the Medicine Hat planning area and the adjacent areas.

Figure 1-1: Transmission System of the Planning Area



1.2.2.2. Existing Constraints

Currently there is no constraint in the study area.

1.2.2.3. AESO Long-Term Plans

Major transmission developments will be constructed in the study area as part of the approved Southern Alberta Transmission Reinforcement (SATR) project over the next five to ten years. As part of SATR project, the following developments are expected to be in service by 2014:

- New 240kV substations Elkwater 264S, Bowmanton 244S and Cassils 324S;
- Double circuit 240 kV line from Elkwater 264S to Bowmanton 244S;
- Double circuit 240kV line from Bowmanton 244S to Cassils 324S;
- Double circuit 240kV line from Cassils 324S to West Brook 28S;
- New single circuit 138kV line from Bowmanton 244S to Medicine Hat 41S, tie the new line to the existing 892L outside Medicine Hat 41S to form a direct connection between Bowmanton 244S and Suffield 895S;
- 138kV 674L in and out Bowmanton 244S. The section from Chappice Lake 649S to Bowmanton 244S remains 674L. Re-name the section from Bowmanton 244S to Medicine Hat 41S to 675L;
- New double circuit 138kV line from Bowmanton 244S to Bullshead 523S. Name one circuit 676L. Tie the other circuit with the existing 879L outside Bullshead 523S to form a direct connection between Bowmanton 244S and Burdett 368S.

In addition to the SATR project, a single circuit 240kV line from Bowmanton 244S to Cypress 562S will be built as part of the Wild Rose wind project. This line is projected to be in service in 2013.

1.2.3. Studies Performed

The following studies are performed for the pre-connection and post-connection analysis considering Category A and B contingencies:

- Power flow analysis
- Transient stability analysis
- Short-Circuit fault studies

1.3. Report Overview

The Executive Summary provides a high-level summary of the report and its conclusions. Section 1 provides an Introduction. Section 2 describes the Criteria, System Data, and Study Assumptions. Section 3 presents the Study Methodology. Section 4 discusses the Pre-Connection System Assessment. Section 5 presents the Connection Alternatives. Section 6 provides a Technical Analysis of the Connection Alternatives. Section 7 provides a Short-Circuit Analysis. Section 8 discusses Project Interdependencies. Section 9 presents a Summary and Conclusion.

2. Criteria, System Data, and Study Assumptions

2.1. Criteria, Standards, and Requirements

2.1.1. AESO Transmission Reliability Criteria

The AESO Transmission Reliability Criteria is the basis for connection studies in AIES. The transmission system will normally be designed to meet the Reliability Criteria under credible worst-case loading and generation conditions.

The AESO Reliability Criteria requires that system performance be evaluated under Category A (N-0 - system normal) conditions and Category B (N-1 - single element out-of-service) conditions. Category A represents a normal system with no contingencies and all facilities in service. Under Category A conditions, the system must be able to supply all firm load and firm transfers to other areas. All equipment must operate within its applicable rating, voltages must be within their applicable ratings, and the system must be stable with no cascading outages.

Category B events result in the loss of any single specified system element under specified fault conditions with normal clearing. The specified elements are a generator, a transmission circuit, a transformer or single pole of a DC line. The acceptable impact on the system is the same as Category A.

The thermal limits are assumed to be one hundred percent of the normal summer and winter ratings. Thermal overloads that increase by at least three percent with the addition of the Peace Butte WAGF are considered significant thermal impacts.

2.1.2. AESO Operating Policies and Procedures (OPPs) and Authoritative Documents (ADs)

The desired minimum and maximum voltage limits specified by AESO OPP-702 are used to identify Category A (N-0) system voltage violations. OPP-702 voltage violations are alleviated prior to Category B (N-1) contingency analysis. Table 2-1 summarizes the OPP-702 desired voltage range for substations in the study area.

Table 2-1: OPP-702 Desired Voltage Range

Substation Name and Number	Nominal Voltage (kV)	Desired Min (kV)	Desired Max (kV)
Medicine Hat T41S	138	138	144
Bullshead T523S	138	138	144
Taber T83S	138	138	144
West Brook T28S	240	245	260
	138	138	144

The extreme minimum and maximum voltage limits specified by AESO Transmission Reliability Criteria were used to identify Category B system voltage violations. Table 2-2 shows the acceptable steady state voltages for different transmission voltage classes. A voltage deviation greater than ten percent at transmission level bus in the study area caused by the connection of the Peace Butte WAGF would require mitigation. Table 2-3 shows the AESO's voltage deviation criteria for Point of Delivery (POD) low voltage buses.

Table 2-2: Acceptable Range of Steady State Voltage (kV)

Nominal	Extreme Minimum	Normal Minimum	Normal Maximum	Extreme Maximum
500	500	510	540	550
240	220	240	264	264
240*	220	250	269	275
144	130	137	151	155
138	124	135	145	150
72	65	71	75	78
69	62	65	72	74

*Acceptable range of steady state voltage for Ft. McMurray area

Table 2-3: Voltage Deviation Criteria

Parameter and Reference Point	Time Period		
	Post Transient (Up to 30s)	Post Auto Control (30 sec to 5 min)	Post Manual Control (Steady State)
Voltage Deviation from Steady State at POD Low Voltage Bus	± 10%	± 7%	± 5%

2.2. Load and Generation Assumptions

2.2.1. Load Assumptions

The summer light load scenario is the worst scenario in the southern Alberta as the line rating in the summer is lower than in the winter. This scenario is chosen to analyze in this study. AESO 2009 Corporate Load Forecast is applied. Table 2-4 provides the 2013 summer light load in the southern Alberta based on the 2009 corporate load forecast. The area totals also include motor loads.

Table 2-4: Load Forecast – 2013 Summer Light Scenario

Area	Load (MW)
4 Medicine Hat	103.0
45 Strathmore	61.3

46 High River	57.4
47 Brooks	75.7
48 Empress	157.8
49 Stavely	11.9
52 Vauxhall	119.0
53 Ft. MacLeod	8.8
54 Lethbridge	93.9
55 Glenwood	27.4
Total	716.2

2.2.2. Generation Assumptions

The pre-Peace Butte WAGF cases are defined with the existing wind generation and expected wind generation in the southern Alberta area which will be in service ahead of the Peace Butte wind project. Table 2-5 shows the generation dispatch defined for the pre and post Peace Butte project.

Table 2-5: Local Generators in the Study Cases

	Name	Max Capacity (MW)	Qmax (MVar)	Qmin (MVar)	Generation Level Modeled in the Study Case (MW)
Existing Wind Farm	Castle River Wind Farm	40	13.23	-19.71	40
	Cowley Ridge Wind Farm	41	13.72	-20.44	41
	McBride Lake Wind Farm	75	36.26	-54.02	75
	Summerview I Wind Farm	68	22.54	-33.58	68
	Chin Chute Wind Farm	30	9.8	-14.6	30
	Taylor Wind Farm	3.6	0.3	-0.3	3
	Taber Wind Farm	80	29.89	-44.53	80
	Soderglen Wind Farm	71	23.03	-34.31	71
	Kettles Hill Wind Farm	63	21.07	-31.39	63
	Magrath Wind Farm	30	9.8	-14.6	30
	Blue Trail Wind Farm	69	22.54	-33.58	68
	Summerview Phase 2 Wind Farm	66	20.58	-30.66	63
Ardenville Wind Farm	72.2	23.52	-35.04	71	
Proposed Wind Farm	Old Man River Wind Farm	46	15.68	-23.36	46
	Castle Rock Ridge Wind Farm	115	37.73	-56.21	115
	Total	869.8	299.69	-446.33	864

2.2.3. Intertie Flow Assumptions

The Alberta to British Columbia (BC) interchange was assumed to be zero. The Alberta to Saskatchewan interchange and the City of Medicine Hat interchange assumptions are shown in Table 2-6 below.

Table 2-6: Intertie Flow Assumptions

	Scenario 1	Scenario 2	Scenario 3
AB-SK (MW)	0	150	-60*
CMH - AIES (MW)	50	90	90

* – stands for AIES export

2.3. Facility Ratings and Shunt Elements

Table 2-7 provides the ratings of the transmission lines, Table 2-8 provides the ratings of the transformers and Table 2-9 provides the ratings of the switching shunts near the Peace Butte WAGF.

Table 2-7: Summary of Transmission Line Ratings

Transmission Line	Nominal Voltage (kV)	From Substation	To Substation	Summer Rate (MVA)	Winter Rate (MVA)
931L	240	Ware Junction 132S	West Brooks 28S	592	592
1060L	240	Ware Junction 132S	West Brooks 28S	1008	1275
814L	138	Brooks 121S	West Brooks 28S	167	191
827L	138	Brooks 121S	West Brooks 28S	167	172
795L	138	Brooks 121S	Hays 421S	119	119
831L	138	Brooks 121S	831A TAP	96	96
100L	138	Suffield 895S	Tilley 498S	69	115
666L	138	Tilley 498S	West Brooks 28S	96	96
923L	240	West Brooks 28S	Milo Junction	599	599
935L	240	West Brooks 28S	Milo Junction	489	499
9L933/933L	240	West Brooks 28S	Anderson 801S	519	592
945L	240	Jenner 275S	Cypress 562S	550	679
1011L	240	Amoco Empress 163S	Cypress 562S	550	679
697L	138	Empress 394S	Amoco Empress 163S	119	146
668L	138	Empress 394S	Cypress 562S	167	191
669L	138	Amoco Empress 163S	Cypress 562S	167	201
830L	138	Cypress 562S	McNeill 840S	177	191
612L	138	Fincastle 336S	Burdett 368S	85	90
610L	138	Fincastle 336S	Taber 83S	85	90
795L	138	Brooks 121S	Hays 421S	119	119

722L	138	Burdett 368S	West Field 107S	85	90
763L	138	Taber 83S	Vauxhall 158S	121	107
821L	138	Vauxhall 158S	Hays 421S	85	90
770L	138	Coaldale 254S	North Lethbridge 370S	120	148
172L	138	Coaldale 254S	North Lethbridge 370S	112	135
824L	138	Lakeview 593S	Riverbend 618S	96	96
879L	138	Burdett 368S	Bullshead 523S	85	90
892L	138	Suffield 895S	Medicine Hat 41S	67	96
600L	138	Bullshead 523S	Peace Butte 404S	115	145
880L	138	Bullshead 523S	Medicine Hat 41S	115	145
658L	138	Chappice Lake 649S	Cypress 562S	90	110
674L	138	Chappice Lake 649S	Medicine Hat 41S	90	96

Table 2-8: Summary of Transformer Ratings

Transformers			
Substation Name and Number	Transformer ID	Transformer Voltages (kV)	MVA Rating
Suffield 895S	T3	138/25	42
Suffield 895S	T2	138/25	25
Bullshead 523S	T1	138/25	28
Peace Butte 404S	T1	138/4.16	18.7
Peace Butte 404S	T2	138/25	25
Chappice Lake 649S	T1	138/25	18.7
Medicine Hat 41S	2T	138/69	100
Medicine Hat 41S	1T	138/13.8	56

Table 2-9: Summary of Shunt Elements in the Study Area

Substation Name and Number	Nominal Bus Voltage (kV)	Capacitors			Reactors		
		Number of Switched Shunt Blocks	Total at Nominal Voltage (MVA)	Status in Study	Number of Switched Shunt Blocks	Total at Nominal Voltage (MVA)	Status in Study (on or off)
Bullshead 523S	138	1	18.3	On			
Medicine Hat 41S	13.8	2	23.4	On			

2.4. Dynamic Data and Assumptions

The generators used in the Peace Butte project are Gamesa G8X-2.0 MW wind turbines which are variable pitch DFIG. Siemens PTI/PSSE type 3 library models for Gamesa DFIG wind turbines are submitted by the developer and used in the dynamic studies.

2.5. Protection Fault Clearing Times

Table 2-10 provides the fault clearing times used for the transient stability analysis.

Table 2-10: Summary of Protection Fault Clearing Times

Transmission Line	Fault Clearing Times (Cycles)		Assumed or Verified
	Near-End	Far-End	
240kV	5	7	Assumed
138kV	6	8	Assumed

3. Study Methodology

3.1. Study Objectives

The objectives of the study discussed in this report are to identify any reliability concerns associated with the connection of Peace Butte WAGF to the Alberta Interconnected Electric System (AIES) and explore possible mitigation options.

3.2. Study Scenarios

The Peace Butte project is proposed to be in service in 2013. The transmission system in southern Alberta is most stressed when the local load level is low and the wind generation output is high. The transmission lines have lower line ratings in the summer. The 2013 summer light load base case is chosen as the master base case. The system long-term plans listed in section 1.2.2.3 are planned to be in service after 2013 and so are not included in the base cases for studies performed for section 4.5.6.1 and 6.2.. All wind generators are dispatched to their maximum capacity. The study area is in the southeast Alberta, the AB-BC intertie has no impact on this project. The AB-BC intertie is set to neutral. The AB-SK intertie and the City of Medicine Hat potentially have a high impact to the Peace Butte project. Three study scenarios are developed based on the intertie scenarios shown in Table 2-6 and are listed as following.

Scenario 1:

- 2013 summer light (SL) load conditions
- Zero interchange with BC
- Zero interchange with SK
- City of Medicine Hat export 50 MW to AIES
- All wind generation dispatched at full capacity
- Economic dispatch of all other generators in the AIES

Scenario 2:

- 2013 summer light (SL) load conditions
- Zero interchange with BC
- 150 MW export to SK
- City of Medicine Hat export 90 MW to AIES
- All wind generation dispatched at full capacity
- Economic dispatch of all other generators in the AIES

Scenario 3:

- 2013 summer light (SL) load conditions
- Zero interchange with BC
- 90 MW import from SK
- City of Medicine Hat export 90 MW to AIES
- All wind generation dispatched at full capacity
- Economic dispatch of all other generators in the AIES

3.3. Connection Studies Carried Out

Following studies are carried out to assess the connection proposal.

- Power flow (Category A and B from the AESO Transmission Reliability Criteria and the Alberta Reliability Standards).
- Short-Circuit analysis
- Transient stability analysis (Category A and B)

3.4. Power Flow Analysis

Power flow analysis are performed for the pre-connection conditions and post-connection conditions for all three scenarios defined in section 3.2 to identify the reliability concerns only attributed with the interconnection of the Peace Butte WAGF. The system performance is evaluated under Category A (N-0 - system normal) conditions and Category B (N-1, single element out-of-service) conditions.

In the power flow analysis, the system must be able to supply all firm load and firm transfers to other areas. All equipment must operate within its applicable rating, voltages must be within their applicable ratings, and the system must be stable with no cascading outages.

All the transmission lines, transformers and buses above 69kV in the south region of Alberta are monitored. Thermal overload and voltage violations are checked to identify any reliability issues. 100% line rating and 5% voltage deviation when the transformer taps are allowed to change are applied as the checking criteria. In cases where the thermal overload on the same element

increased more than 3% before and after the connection, it is deemed as contribution from the connection project. PSSE version 30 is used to run the studies.

3.4.1. Contingencies Studied

Table 3-1 provides the list of category B contingencies tested in the power flow studies for all three scenarios.

Table 3-1: Contingency List – Transmission Lines

Outage	From	To
	Substation	Substation
763L	W. Brooks 28S	Vauxhall 158S
763L	Vauxhall 158S	Taber 83S
610L	Taber 83S	Fincastle 336S
612L	Fincastle 336S	Burdett 368S
879L	Burdett 368S	Bullshead 523S
880L	Bullshead 523S	Medicine Hat 41S
892L	Suffield 895S	Medicine Hat 41S
674L	Medicine Hat 41S	Chappice Lake 649S
100L	Suffield 895S	Tilley 496S
100L	Tilley 496S	W. Brooks 28S
814L	W. Brooks 28S	Brooks 121S
795L	Brooks 121S	Hays 421S
821L	Vauxhall 158S	Hays 421S

3.5. Short-Circuit Analysis

Short circuit studies are performed for both pre-connection and post-connection conditions. Pre-fault system conditions are applied for the short-circuit analysis. All local generators are dispatched. Three phase line-to-ground short circuit faults and single phase line-to-ground short circuit faults are applied on the buses which are within three buses away from the point of connection.

3.6. Transient Stability Analysis

The transient stability studies are performed prior to and following connection of the proposed generation addition for all three study scenarios described in section 3.2. The power flow cases used in the power flow analysis are also used for the transient stability analysis. Specific Category B (N-1) faults located in the vicinity of the Peace Butte wind farm are studied. The system load is modeled using the WECC default model of twenty percent induction motor load with the remaining load of one hundred percent constant current and one hundred percent constant impedance for real and reactive components respectively.

Bus voltages and frequencies, branch active and reactive power flows and wind generator active power and reactive power are monitored. For each dynamic contingency, the plots of bus voltages, frequencies, wind generator active power and reactive power output and line active

and reactive power flows are provided. In all the cases, the disturbance is simulated at 1 second and the case is run up to 30 seconds.

3.6.1. Contingencies Studied

Table 3-2 provides the list of category B contingencies tested in the transient stability analysis for all three scenarios.

Table 3-2: Contingency List

Scenario	Contingency	Fault Description
Scenario 1, 2 and 3	600L from Peace Butte to Bullshead	3 phase line-to-ground
	612L from Fincastle to Burdett	3 phase line-to-ground
	674L from Medicine Hat to Chappice Lake	3 phase line-to-ground
	879L from Burdett to Bullshead	3 phase line-to-ground
	880L from Medicine Hat to Bullshead	3 phase line-to-ground
	892L from Medicine Hat to Suffield	3 phase line-to-ground

4. Pre-Connection System Assessment

4.1. Pre-Connection Power Flow Analysis

The pre-connection system assessment is performed using a 2013 system configuration without Peace Butte WAGF. The steady-state performance of the existing system is assessed under the 2013 summer light load scenario. The study scenarios are detailed in sections 3.2.

System performances of the existing system under normal (N-0) conditions and under single element (N-1) contingencies are assessed. No thermal overloads and voltage violations are observed.

4.2. Pre-Connection Transient Stability Analysis

Transient stability analysis is performed to assess the stability of the pre-connection system without Peace Butte WAGF. The power flow cases used in the steady state analysis are also used for the transient stability analysis. Category B (N-1) faults listed in Table 3-2 are studied.

The system response and southern Alberta wind turbine generators are monitored during the simulations. The transient stability results are summarized from Table 4-1 to Table 4-3 for three scenarios respectively. The simulation plots for the system performance prior to the connection of Peace Butte WAGF are given in Attachment A.

In general, no existing wind turbine generators are tripped during the simulated fault scenarios. There is no load shedding and the system response is stable under all simulated faults.

Table 4-1: Pre-connection System Transient Stability Results – Scenario 1

Disturbance Criteria -Description	Observation		Figure Number
	System Response	Tripped Wind Generator	
3 Phase fault on the line 612L from Fincastle to Burdett	Stable	None	A-1-1 through
Fault was cleared at 8 cycles by removing the line 612L			A-1-8
3 Phase fault on the line 674L from Medicine Hat to Chappice Lake	Stable	None	A-1-9 through
Fault was cleared at 8 cycles by removing the line 674L			A-1-16
3 Phase fault on the line 879L from Burdett to Bullshead	Stable	None	A-1-17 through
Fault was cleared at 8 cycles by removing the line 879L			A-1-24
3 Phase fault on the line 880L from Medicine Hat to Bullshead	Stable	None	A-1-25 through
Fault was cleared at 8 cycles by removing the line 880L			A-1-32
3 Phase fault on the line 892L from Medicine Hat to Suffield	Stable	None	A-1-33 through
Fault was cleared at 8 cycles by removing the line 892L			A-1-40

Table 4-2: Pre-connection System Transient Stability Results – Scenario 2

Disturbance Criteria -Description	Observation		Figure Number
	System Response	Tripped Wind Generator	
3 Phase fault on the line 612L from Fincastle to Burdett	Stable	None	A-2-1 through
Fault was cleared at 8 cycles by removing the line 612L			A-2-8
3 Phase fault on the line 674L from Medicine Hat to Chappice Lake	Stable	None	A-2-9 through
Fault was cleared at 8 cycles by removing the line 674L			A-2-16
3 Phase fault on the line 879L from Burdett to Bullshead	Stable	None	A-2-17 through
Fault was cleared at 8 cycles by removing the line 879L			A-2-24
3 Phase fault on the line 880L from Medicine Hat to Bullshead	Stable	None	A-2-25 through
Fault was cleared at 8 cycles by removing the line 880L			A-2-32
3 Phase fault on the line 892L from Medicine Hat to Suffield	Stable	None	A-2-33 through
Fault was cleared at 8 cycles by removing the line 892L			A-2-40

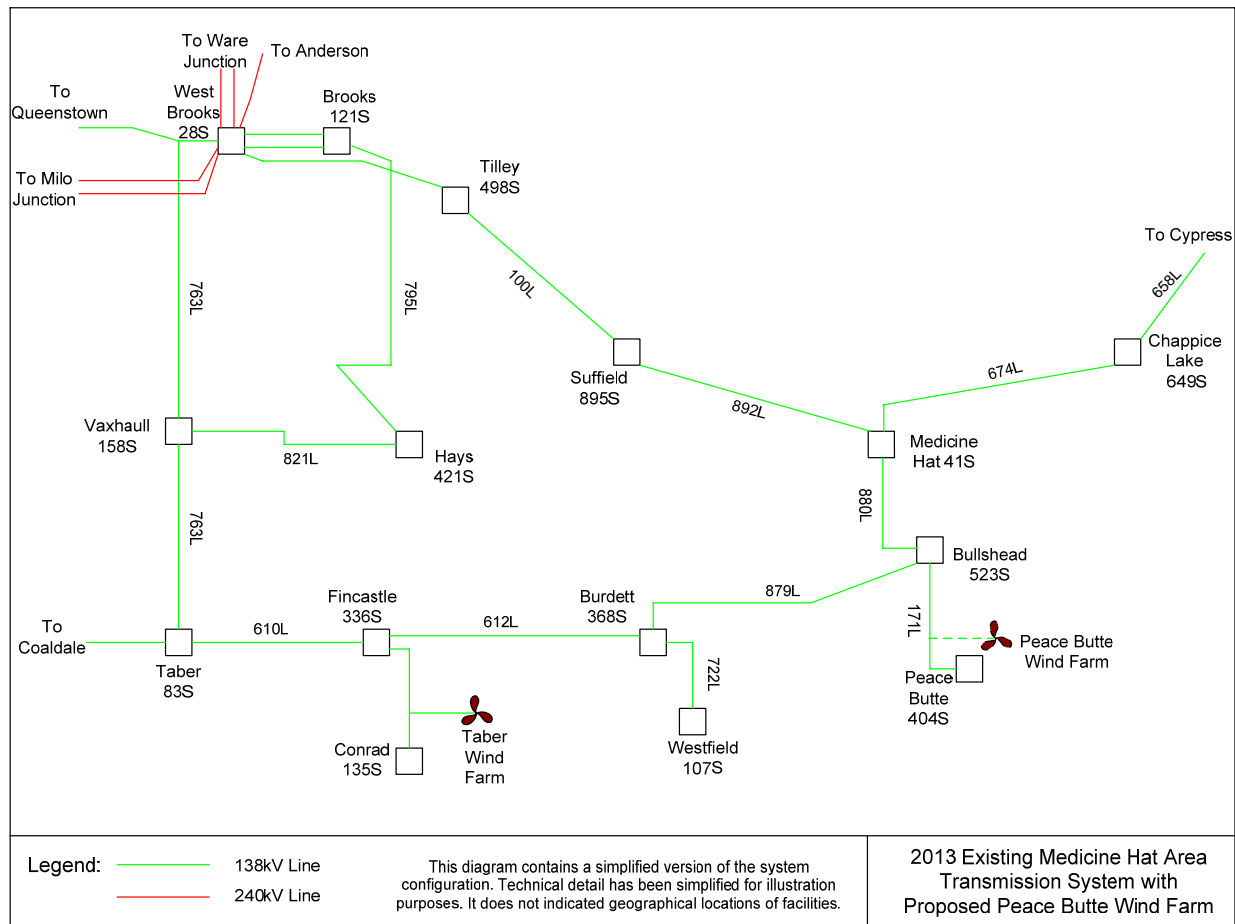
Table 4-3: Pre-connection System Transient Stability Results – Scenario 3

Disturbance Criteria -Description	Observation		Figure Number
	System Response	Tripped Wind Generator	
3 Phase fault on the line 612L from Fincastle to Burdett	Stable	None	A-3-1 through
Fault was cleared at 8 cycles by removing the line 612L			A-3-8
3 Phase fault on the line 674L from Medicine Hat to Chappice Lake	Stable	None	A-3-9 through
Fault was cleared at 8 cycles by removing the line 674L			A-3-16
3 Phase fault on the line 879L from Burdett to Bullshead	Stable	None	A-3-17 through
Fault was cleared at 8 cycles by removing the line 879L			A-3-24
3 Phase fault on the line 880L from Medicine Hat to Bullshead	Stable	None	A-3-25 through
Fault was cleared at 8 cycles by removing the line 880L			A-3-32
3 Phase fault on the line 892L from Medicine Hat to Suffield	Stable	None	A-3-33 through
Fault was cleared at 8 cycles by removing the line 892L			A-3-40

5. Connection Alternatives

Figure 5-1 illustrates the proposed alternative evaluated for connecting the Peace Butte WAGF to the AIES. This proposed connection alternative would connect Peace Butte WAGF to the AIES through a T-Tap arrangement to the 138kV transmission line 600L from Bullshead 523S to Peace Butte 404S.

Figure 5-1: Peace Butte WAGF Connection Alternative



6. Technical Analysis of the Connection Alternatives

The transmission system performance with the connection of the Peace Butte WAGF is assessed for all three scenarios. Load flow analysis and transient stability analysis are performed to evaluate the impact of the connection of the Peace Butte WAGF.

6.1. Power Flow Analysis

The steady state performance of the system is assessed under system normal (N-0) and single element (N-1) outage conditions with the proposed Peace Butte WAGF. The results of the contingency analysis are summarized in the following sections.

6.1.1. Scenario 1

Table 6-1 summarizes the overloads observed under system normal and N-1 contingency conditions for the scenario 1.

No overloads occurred when the system is under normal condition. Under N-1 contingencies, overloads are observed on line 892L, 100L, 880L, 658L, 674L, 879L, 612L and 610L. Overload less than 103% of rated line capacity are not listed. No voltage violations are observed. Plots of load flow are shown in Attachment B

Table 6-1: System Performance with Peace Butte WAGF – Scenario 1

Figure Number	Outage	Overloaded Element	MVA Rating	MVA Loading	% MVA Loading
B-1-0	All Elements in Service	None			
B-1-1	610L Fincastle 336S to Taber 83S	100L Suffield 895S to Tilley 498S	69	76.2	109.8%
		892L Medicine Hat 41S to Suffield 895S	67	97.2	141.6%
		880L Bullshead 523S to Medicine Hat 41S	115	153.0	129.1%
		658L Chappice Lake 649S to Cypress 562S	90	95.2	104.8%
		674L Medicine Hat 41S to Chappice Lake 649S	90	102.7	111.5%
B-1-2	879L Burdett 368S to Bullshead 523S	892L Medicine Hat 41S to Suffield 895S	67	75.8	110.0%
B-1-3	880L Bullshead 523S to Medicine Hat 41S	612L Fincastle 336S to Burdett 368S	85	90.4	105.0%
		610L Fincastle 336S to Taber 83S	85	145.8	168.6%
		879L Burdett 368S to Bullshead 523S	85	106.5	121.6%
B-1-4	892L Suffield 895S to Medicine Hat 41S	610L Fincastle 336S to Taber 83S	85	100.5	115.0%
		674L Medicine Hat 41S to Chappice Lake 649S	90	100.4	108.1%
B-1-5	674L Medicine Hat 41S to Chappice Lake 649S	610L Fincastle 336S to Taber 83S	85	102.7	117.6%
		100L Suffield 895S to Tilley 498S	69	76.3	109.4%
		892L Medicine Hat 41S to Suffield 895S	67	98.0	141.7%
B-1-6	100L Suffield 895S to Tilley 498S	610L Fincastle 336S to Taber 83S	85	91.3	104.3%

6.1.2. Scenario 2

Table 6-2 summarizes the overloads observed under system normal conditions and N-1 contingencies for scenario 2.

Overloads are observed on line 610L and 892L for system normal condition. Note that even though N-0 violations persist under the N-1 conditions, they are not repeated in the N-1 results tables.

Under N-1 contingency conditions, overloads are observed on line 100L, 880L, 658L, 674L, 612L and 879L. Overload less than 103% of rated line capacity are not listed. No voltage violations are observed. Plots of load flow are shown in Attachment B.

Table 6-2: System Performance with Peace Butte WAGF – Scenario 2

Figure Number	Outage	Overloaded Element	MVA Rating	MVA Loading	% MVA Loading
B-2-0	All Elements in Service	610L Fincastle 336S to Taber 83S	85	96.5	110.5%
		892L Medicine Hat 41S to Suffield 895S	67	85.9	124.3%
B-2-1	763L Vauxhall 158S to Taber 83S	100L Suffield 895S to Tilley 498S	69	72.1	103.4%
B-2-2	610L Fincastle 336S to Taber 83S	100L Suffield 895S to Tilley 498S	69	107.4	156.6%
		880L Bullshead 523S to Medicine Hat 41S	115	152.7	129.0%
		658L Chappice Lake 649S to Cypress 562S	90	101.0	111.6%
		674L Medicine Hat 41S to Chappice Lake 649S	90	108.8	118.3%
B-2-3	612L Fincastle 336S to Burdett 368S	100L Suffield 895S to Tilley 498S	69	81.1	116.5%
B-2-4	879L Burdett 368S to Bullshead 523S	100L Suffield 895S to Tilley 498S	69	87.5	126.2%
B-2-5	880L Bullshead 523S to Medicine Hat 41S	612L Fincastle 336S to Burdett 368S	85	90.2	104.9%
		879L Burdett 368S to Bullshead 523S	85	106.4	121.6%
B-2-6	892L Suffield 895S to Medicine Hat 41S	658L Chappice Lake 649S to Cypress 562S	90	101.1	110.7%
		674L Medicine Hat 41S to Chappice Lake 649S	90	109.3	117.4%
B-2-7	674L Medicine Hat 41S to Chappice Lake 649S	100L Suffield 895S to Tilley 498S	69	95.5	137.9%
B-2-8	100L Suffield 895S to Tilley 498S	674L Medicine Hat 41S to Chappice Lake 649S	90	95.8	103.4%

6.1.3. Scenario 3

Table 6-3 summarizes the overloads observed under system normal conditions and N-1 contingencies for the scenarios 3.

Overload is observed on line 892L for system normal condition. Note that even though N-0 violations persist under the N-1 conditions, they are not repeated in the N-1 results tables.

Under N-1 contingency conditions, overloads are observed on line 658L, 674L, 100L, 880L, 612L, 610L and 879L. Overload less than 103% of rated line capacity are not listed. No voltage violations are observed. Plots of load flow are shown in Attachment B.

Table 6-3: System performance with Peace Butte WAGF – Scenario 3

Figure Number	Outage	Overloaded Element	MVA Rating	MVA Loading	% MVA Loading
B-3-0	All Elements in Service	892L Medicine Hat 41S to Suffield 895S	67	71.5	104.2%
B-3-1	610L Fincastle 336S to Taber 83S	100L Suffield 895S to Tilley 498S	69	87.8	128.7%
		880L Bullshead 523S to Medicine Hat 41S	115	156.4	134.0%
		658L Chappice Lake 649S to Cypress 562S	90	121.9	136.1%
		674L Medicine Hat 41S to Chappice Lake 649S	90	130.0	142.9%
B-3-2	612L Fincastle 336S to Burdett 368S	674L Medicine Hat 41S to Chappice Lake 649S	90	99	108.3%
B-3-3	879L Burdett 368S to Bullshead 523S	658L Chappice Lake 649S to Cypress 562S	90	99.2	110.0%
		674L Medicine Hat 41S to Chappice Lake 649S	90	106.6	116.7%
B-3-4	880L Bullshead 523S to Medicine Hat 41S	612L Fincastle 336S to Burdett 368S	85	96.4	115.8%
		610L Fincastle 336S to Taber 83S	85	147.9	174.3%
		879L Burdett 368S to Bullshead 523S	85	109.4	132.2%
B-3-5	892L Suffield 895S to Medicine Hat 41S	610L Fincastle 336S to Taber 83S	85	111.1	127.7%
		658L Chappice Lake 649S to Cypress 562S	90	120.6	133.6%
		674L Medicine Hat 41S to Chappice Lake 649S	90	129.3	140.3%
B-3-6	674L Medicine Hat 41S to Chappice Lake 649S	610L Fincastle 336S to Taber 83S	85	119.3	137.4%
		100L Suffield 895S to Tilley 498S	69	96.8	141.3%
B-3-7	100L Suffield 895S to Tilley 498S	610L Fincastle 336S to Taber 83S	85	102.1	117.2%
		658L Chappice Lake 649S to Cypress 562S	90	107.8	119.6%
		674L Medicine Hat 41S to Chappice Lake 649S	90	115.6	126.3%
B-3-8	100L W.Brook 28S to Tilley 498S	610L Fincastle 336S to Taber 83S	85	92.2	105.0%
		674L Medicine Hat 41S to Chappice Lake 649S	90	101.0	108.5%

6.2. Transient Stability Analysis

Transient stability analysis is performed to assess the stability of the system after the connection of Peace Butte WAGF under various Category B (N-1) fault scenarios. The power flow cases used in the steady state analysis in section 6.1 are also used for the transient stability analysis. Specific Category B (N-1) faults located in the vicinity of Peace Butte project are studied.

The transient stability analysis is performed using the summer light load condition for all three scenarios with the Peace Butte WAGF connected. The system response and southern Alberta wind turbine generators are monitored during the simulations. The transient stability results are summarized from Table 6-4 to Table 6-6 for three scenarios respectively. The simulation plots for the system performance with the Peace Butte WAGF connected are given in Attachment C.

In general, no existing wind turbine generators are tripped during the simulated fault scenarios. Peace Butte WAGF is tripped under certain contingencies as shown in Table 6-4 to Table 6-6. There is no load shedding and the system response is stable under all simulated faults.

Table 6-4: Transient Stability Results with Peace Butte Online – Scenario 1

Disturbance Criteria -Description	Observation		Figure Number
	System Response	Tripped Wind Generator	
3 Phase fault on the line 600L from Peace Butte to Bullshead	Stable	Peace Butte Unit 1&2	C-1-1 through
Fault was cleared at 8 cycles by removing the line 600L			C-1-8
3 Phase fault on the line 612L from Fincastle to Burdett	Stable	None	C-1-9 through
Fault was cleared at 8 cycles by removing the line 612L			C-1-16
3 Phase fault on the line 674L from Medicine Hat to Chappice Lake	Stable	None	C-1-17 through
Fault was cleared at 8 cycles by removing the line 674L			C-1-24
3 Phase fault on the line 879L from Burdett to Bullshead	Stable	None	C-1-25 through
Fault was cleared at 8 cycles by removing the line 879L			C-1-32
3 Phase fault on the line 880L from Medicine Hat to Bullshead	Stable	Peace Butte Unit 1&2	C-1-33 through
Fault was cleared at 8 cycles by removing the line 880L			C-1-40
3 Phase fault on the line 892L from Medicine Hat to Suffield	Stable	None	C-1-41 through
Fault was cleared at 8 cycles by removing the line 892L			C-1-48

Table 6-5: Transient Stability Results with Peace Butte Online – Scenario 2

Disturbance Criteria -Description	Observation		Figure Number
	System Response	Tripped Wind Generator	
3 Phase fault on the line 600L from Peace Butte to Bullshead	Stable	Peace Butte Unit 1&2	C-2-1 through
Fault was cleared at 8 cycles by removing the line 600L			C-2-8

3 Phase fault on the line 612L from Fincastle to Burdett	Stable	None	C-2-9 through
Fault was cleared at 8 cycles by removing the line 612L			C-2-16
3 Phase fault on the line 674L from Medicine Hat to Chappice Lake	Stable	None	C-2-17 through
Fault was cleared at 8 cycles by removing the line 674L			C-2-24
3 Phase fault on the line 879L from Burdett to Bullshead	Stable	None	C-2-25 through
Fault was cleared at 8 cycles by removing the line 879L			C-2-32
3 Phase fault on the line 880L from Medicine Hat to Bullshead	Stable	Peace Butte Unit 1&2	C-2-33 through
Fault was cleared at 8 cycles by removing the line 880L			C-2-40
3 Phase fault on the line 892L from Medicine Hat to Suffield	Stable	None	C-2-41 through
Fault was cleared at 8 cycles by removing the line 892L			C-2-48

Table 6-6: Transient Stability Results with Peace Butte Online – Scenario 3

Disturbance Criteria -Description	Observation		Figure Number
	System Response	Tripped Wind Generator	
3 Phase fault on the line 600L from Peace Butte to Bullshead	Stable	Peace Butte Unit 1&2	C-3-1 through
Fault was cleared at 8 cycles by removing the line 600L			C-3-8
3 Phase fault on the line 612L from Fincastle to Burdett	Stable	None	C-3-9 through
Fault was cleared at 8 cycles by removing the line 612L			C-3-16
3 Phase fault on the line 674L from Medicine Hat to Chappice Lake	Stable	None	C-3-17 through
Fault was cleared at 8 cycles by removing the line 674L			C-3-24
3 Phase fault on the line 879L from Burdett to Bullshead	Stable	None	C-3-25 through
Fault was cleared at 8 cycles by removing the line 879L			C-3-32
3 Phase fault on the line 880L from Medicine Hat to Bullshead	Stable	Peace Butte Unit 1&2	C-3-33 through
Fault was cleared at 8 cycles by removing the line 880L			C-3-40
3 Phase fault on the line 892L from Medicine Hat to Suffield	Stable	None	C-3-41 through
Fault was cleared at 8 cycles by removing the line 892L			C-3-48

6.3. Sensitivity Studies

The system performance with the Peace Butte WAGF connected to the system shows that the Peace Butte project will cause a few heavy thermal overloads in the southeast transmission system. Transmission system developments are required to increase the transmission capability in this area. The planned transmission developments described in section 1.2.2.3 and expected to be in service in 2014 (SATR Developments) are expected to address the wind generation increase in southern Alberta. With the SATR Developments in service, the existing constraints

in the southern Alberta transmission system should be eliminated. To evaluate the system performance with the SATR Developments, 2014 summer light load condition is applied to all three scenarios described in section 3.2. The 2014 load profile in the southern Alberta is given in Table 6-7.

Table 6-7: Load Forecast – 2014 Summer Light Load Scenario

Area	Load(MW)
4 Medicine Hat	108.1
45 Strathmore	63.5
46 High River	60.4
47 Brooks	79.1
48 Empress	162.0
49 Stavely	12.3
52 Vauxhall	123.0
53 Ft. MacLeod	9.0
54 Lethbridge	99.3
55 Glenwood	28.3
Total	745.0

6.3.1. Steady State Analysis

A performance of the system with the SATR Developments in service under normal (N-0) conditions and single element (N-1) contingency conditions are assessed using 2014 summer light load condition for all three scenarios with the proposed Peace Butte WAGF. No thermal overloads and voltage violations are observed.

6.3.2. Transient Stability Analysis

Transient stability analysis is performed to assess the stability of the system with SATR in service after the connection of Peace Butte WAGF under various Category B (N-1) fault scenarios. Specific Category B (N-1) faults listed in Table 6-8 are studied.

Table 6-8: Contingency List

Scenario	Contingency	Fault Description
Scenario 1, 2 and 3	600L from Peace Butte to Bullshead	3 phase line-to-ground
	612L from Fincastle to Burdett	3 phase line-to-ground
	674L from Bowmanton to Chappice Lake	3 phase line-to-ground
	879L from Burdett to Bowmanton	3 phase line-to-ground
	880L from Medicine Hat to Bullshead	3 phase line-to-ground
	676L from Bullshead to Bowmanton	3 phase line-to-ground

The transient stability results are summarized from Table 6-9 to Table 6-11 for three scenarios respectively. The simulation plots for the system performance with the Peace Butte WAGF connected are given in Attachment C.

In general, no existing wind turbine generators are tripped during the simulated fault scenarios. Peace butte WAGF is tripped under certain contingencies as shown in Table 6-9 to Table 6-11. There is no load shedding and the system response is stable under all simulated faults.

Table 6-9: Transient Stability Results with Peace Butte and SATR – Scenario 1

Disturbance Criteria -Description	Observation		Figure Number
	System Response	Tripped Wind Generator	
3 Phase fault on the line 600L from Peace Butte to Bullshead	Stable	Peace Butte Unit 1&2	C-4-1 through
Fault was cleared at 8 cycles by removing the line 600L			C-4-8
3 Phase fault on the line 612L from Fincastle to Burdett	Stable	None	C-4-9 through
Fault was cleared at 8 cycles by removing the line 612L			C-4-16
3 Phase fault on the line 674L from Bowmanton to Chappice Lake	Stable	None	C-4-17 through
Fault was cleared at 8 cycles by removing the line 674L			C-4-24
3 Phase fault on the line 879L from Burdett to Bowmanton	Stable	None	C-4-25 through
Fault was cleared at 8 cycles by removing the line 879L			C-4-32
3 Phase fault on the line 880L from Medicine Hat to Bullshead	Stable	Peace Butte Unit 1&2	C-4-33 through
Fault was cleared at 8 cycles by removing the line 880L			C-4-40
3 Phase fault on the line 676L from Bullshead to Bowmanton	Stable	None	C-4-41 through
Fault was cleared at 8 cycles by removing the line 892L			C-4-48

Table 6-10: Transient Stability Results with Peace Butte and SATR – Scenario 2

Disturbance Criteria -Description	Observation		Figure Number
	System Response	Tripped Wind Generator	
3 Phase fault on the line 600L from Peace Butte to Bullshead	Stable	Peace Butte Unit 1&2	C-5-1 through
Fault was cleared at 8 cycles by removing the line 600L			C-5-8
3 Phase fault on the line 612L from Fincastle to Burdett	Stable	None	C-5-9 through
Fault was cleared at 8 cycles by removing the line 612L			C-5-16
3 Phase fault on the line 674L from Bowmanton to Chappice Lake	Stable	None	C-5-17 through
Fault was cleared at 8 cycles by removing the line 674L			C-5-24
3 Phase fault on the line 879L from Burdett to Bowmanton	Stable	None	C-5-25 through
Fault was cleared at 8 cycles by removing the line 879L			C-5-32
3 Phase fault on the line 880L from Medicine Hat to Bullshead	Stable	Peace Butte	C-5-33 through

Fault was cleared at 8 cycles by removing the line 880L		Unit 1&2	C-5-40
3 Phase fault on the line 676L from Bullshead to Bowmanton	Stable	None	C-5-41 through
Fault was cleared at 8 cycles by removing the line 892L			C-5-48

Table 6-11: Transient Stability Results with Peace Butte and SATR – Scenario 3

Disturbance Criteria -Description	Observation		Figure Number
	System Response	Tripped Wind Generator	
3 Phase fault on the line 600L from Peace Butte to Bullshead	Stable	Peace Butte Unit 1&2	C-6-1 through
Fault was cleared at 8 cycles by removing the line 600L			C-6-8
3 Phase fault on the line 612L from Fincastle to Burdett	Stable	None	C-6-9 through
Fault was cleared at 8 cycles by removing the line 612L			C-6-16
3 Phase fault on the line 674L from Bowmanton to Chappice Lake	Stable	None	C-6-17 through
Fault was cleared at 8 cycles by removing the line 674L			C-6-24
3 Phase fault on the line 879L from Burdett to Bowmanton	Stable	None	C-6-25 through
Fault was cleared at 8 cycles by removing the line 879L			C-6-32
3 Phase fault on the line 880L from Medicine Hat to Bullshead	Stable	Peace Butte Unit 1&2	C-6-33 through
Fault was cleared at 8 cycles by removing the line 880L			C-6-40
3 Phase fault on the line 676L from Bullshead to Bowmanton	Stable	None	C-6-41 through
Fault was cleared at 8 cycles by removing the line 892L			C-6-48

6.4. Mitigation Measures for Identified Issues

The power flow analysis identifies that the 2013 post-connection system without the SATR Developments has transmission line thermal overload under certain category B contingencies. Remedial action scheme (RAS) will be required to curtail the Peace Butte wind farm to prevent overloading of transmission elements during certain contingencies until the SATR Developments are in-service. Based on the results of the steady state analysis, the functionality of the RAS is summarized in Table 6-12.

Table 6-12: Remedial Action Schemes

Monitored Element	Action
610L Fincastle 336S to Taber 83S	Peace Butte WAGF run back or trip off
674L Medicine Hat 41S to Chappice Lake 649S	
880L Bullshead 523S to Medicine Hat 41S	
892L Medicine Hat 41S to Suffield 895S	

7. Short-Circuit Analysis

7.1. Pre-connection

Short circuits studies are performed for the 2013 summer light scenarios without the connection of Peace Butte WAGF. Both three phase and single-line-to-ground fault currents are calculated. The results of the short circuit analysis are presented in Table 7-1.

Table 7-1: Pre-connection System Fault Level at Key Substations near Proposed Peace Butte WAGF

Substation	Voltage Base (kV)	Pre-Fault Voltage (pu)	Positive Sequence (R+jX) (pu)	3-Phase Fault (kA)	Zero Sequence (R+jX) (pu)	Single-Phase Fault (kA)
Burdett 368S	138	1.036	0.04754+j0.11409	3.5	0.08336+j0.33405	2.2
Bullshead 523S	138	1.039	0.02739+j0.08696	4.8	0.02696+j0.15086	3.9
Medicine Hat 41S	138	1.041	0.01874+j0.07195	5.9	0.00656+j0.08078	5.7
Peace Butte 404S	138	1.037	0.05616+j0.14946	2.7	0.07989+j0.34909	1.9
Suffield 895S	138	1.037	0.04118+j0.10585	3.8	0.07247+j0.263650	2.6
Chappice Lake 649S	138	1.031	0.03040+j0.09327	4.4	0.05046+j0.22661	3.3

7.2. Post-Connection

Short circuit studies are performed to determine the fault levels for year 2013 in the system after the connection of Peace Butte WAGF. Both three phase and single-line-to-ground fault currents are calculated. The results of the short circuit analysis are given in the following Table 7-2.

Table 7-2: Post-connection System Fault Level at Key Substations near Peace Butte WAGF

Substation	Voltage Base (kV)	Pre-Fault Voltage (pu)	Positive Sequence (R+jX) (pu)	3-Phase Fault (kA)	Zero Sequence (R+jX) (pu)	Single-Phase Fault (kA)
Peace Butte WAGF	138	1.044	0.02310+j0.09204	4.6	0.06425+j0.29105	2.7
Burdett 368S	138	1.032	0.04492+j0.10850	3.7	0.08355+j0.33433	2.2
Bullshead 523S	138	1.037	0.01835+j0.06855	6.1	0.02691+j0.15053	4.4
Medicine Hat 41S	138	1.035	0.01450+j0.06056	7.0	0.00649+j0.08038	6.4
Peace Butte 404S	138	1.042	0.03215+j0.10966	3.8	0.07985+j0.34879	2.2
Suffield 895S	138	1.026	0.03900+j0.10008	4.0	0.07243+j0.2634	2.6
Chappice Lake 649S	138	1.019	0.02838+j0.08727	4.6	0.04766+j0.22171	3.1

8. Project Interdependencies

No project interdependency, other than the SATR Developments, is identified for connecting the Peace Butte WAGF.

9. Summary and Conclusion

Pteragen Canada Inc. proposes to connect 116.4 MW wind generation named Peace Butte WAGF in Medicine Hat planning area. The proposed ISD is July 31, 2013. The wind farm is proposed to connect to the AIES transmission system through a T-TAP arrangement to the 138kV line 600L. The system performance with this connection alternative is evaluated through power flow analysis, transient stability analysis and short circuit analysis to identify any reliability concerns associated with the connection of Peace Butte WAGF and explore possible mitigation options.

The power flow analysis show that the interconnection of Peace Butte WAGF will cause the thermal overloads on lines 100L, 610L, 612L, 658L, 674L, 879L, 880L and 892L under certain N-1 condition. These overloads will be resolved by the SATR Developments which are planned to be in service by 2014. Until these SATR Developments are in service, Remedial Action Schemes (RAS) will be implemented to prevent the observed system overloads.

No transient stability issues are identified with the Peace Butte WAGF interconnection under the studied fault scenarios.

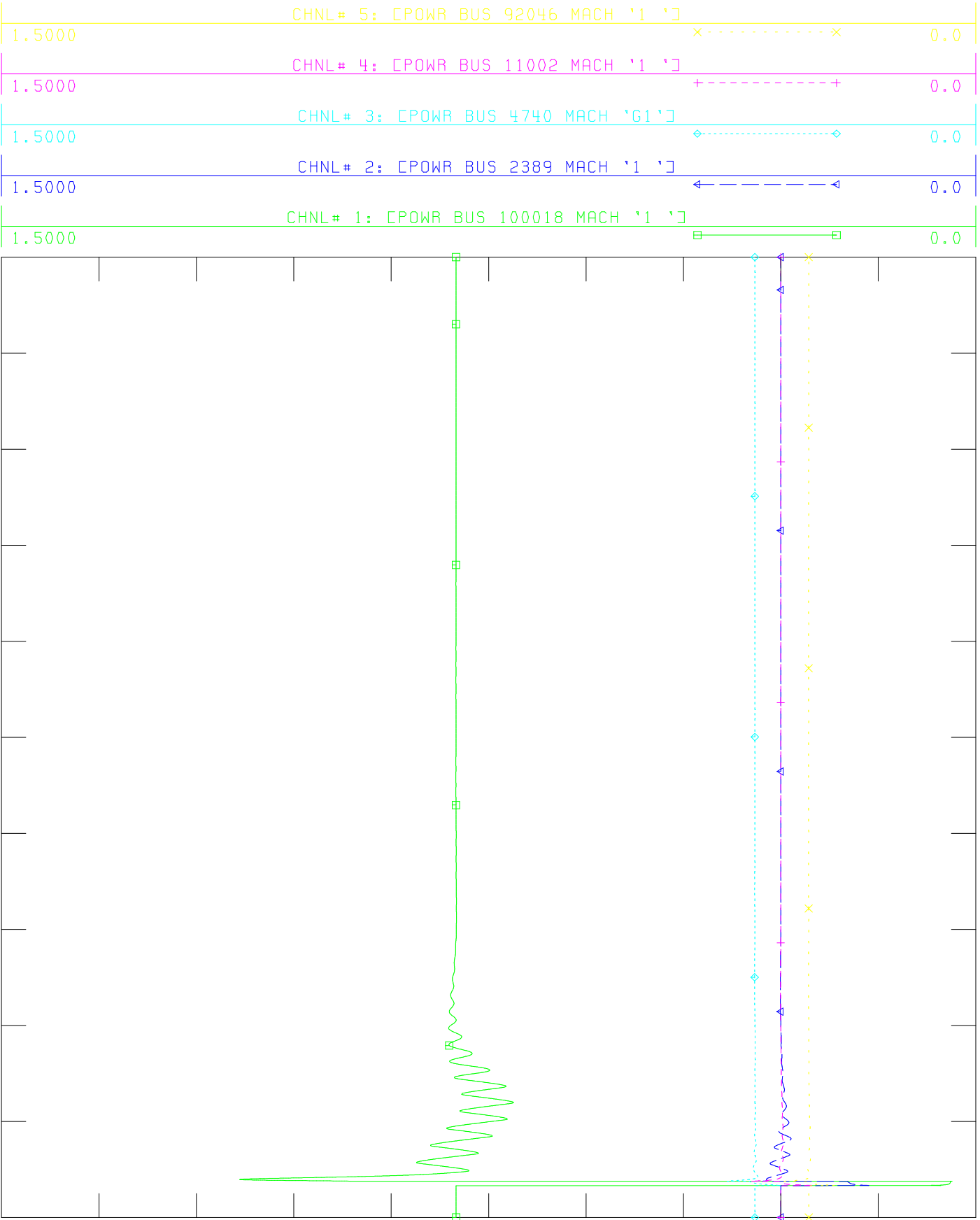
No significant change in the short circuit levels is observed at the substations near the Peace Butte WAGF.

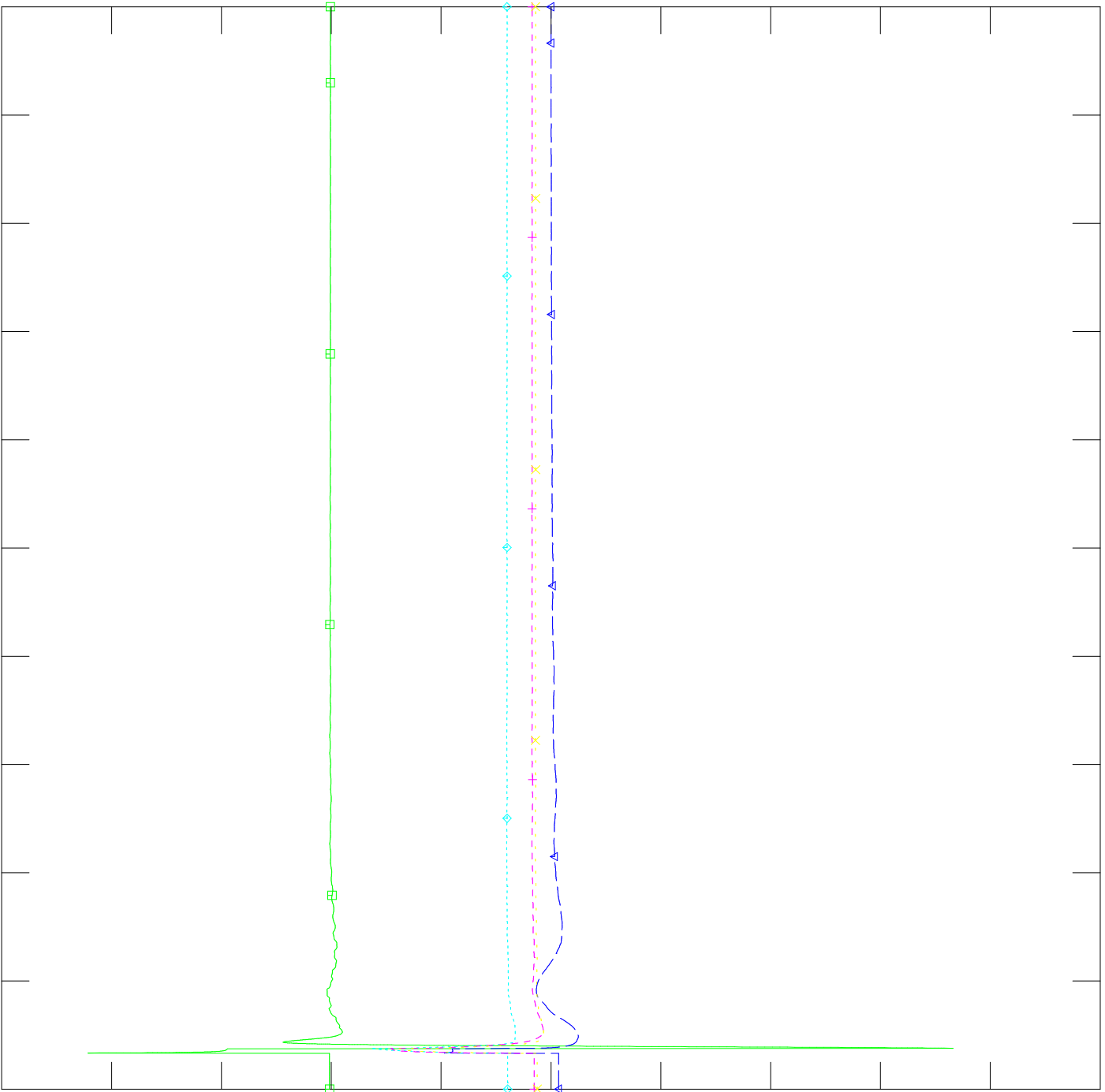
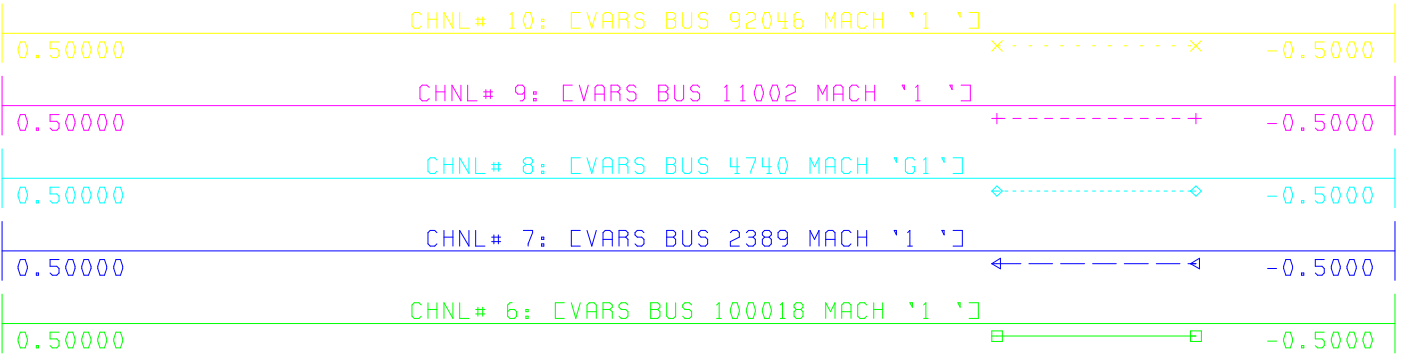
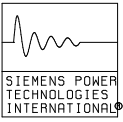
Attachment A

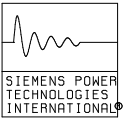
Pre-Connection Transient Stability Analysis Results (Scenarios 1 to 3)

Attachment A-1: Pre-connection Transient Stability Analysis

Results -- Scenario 1



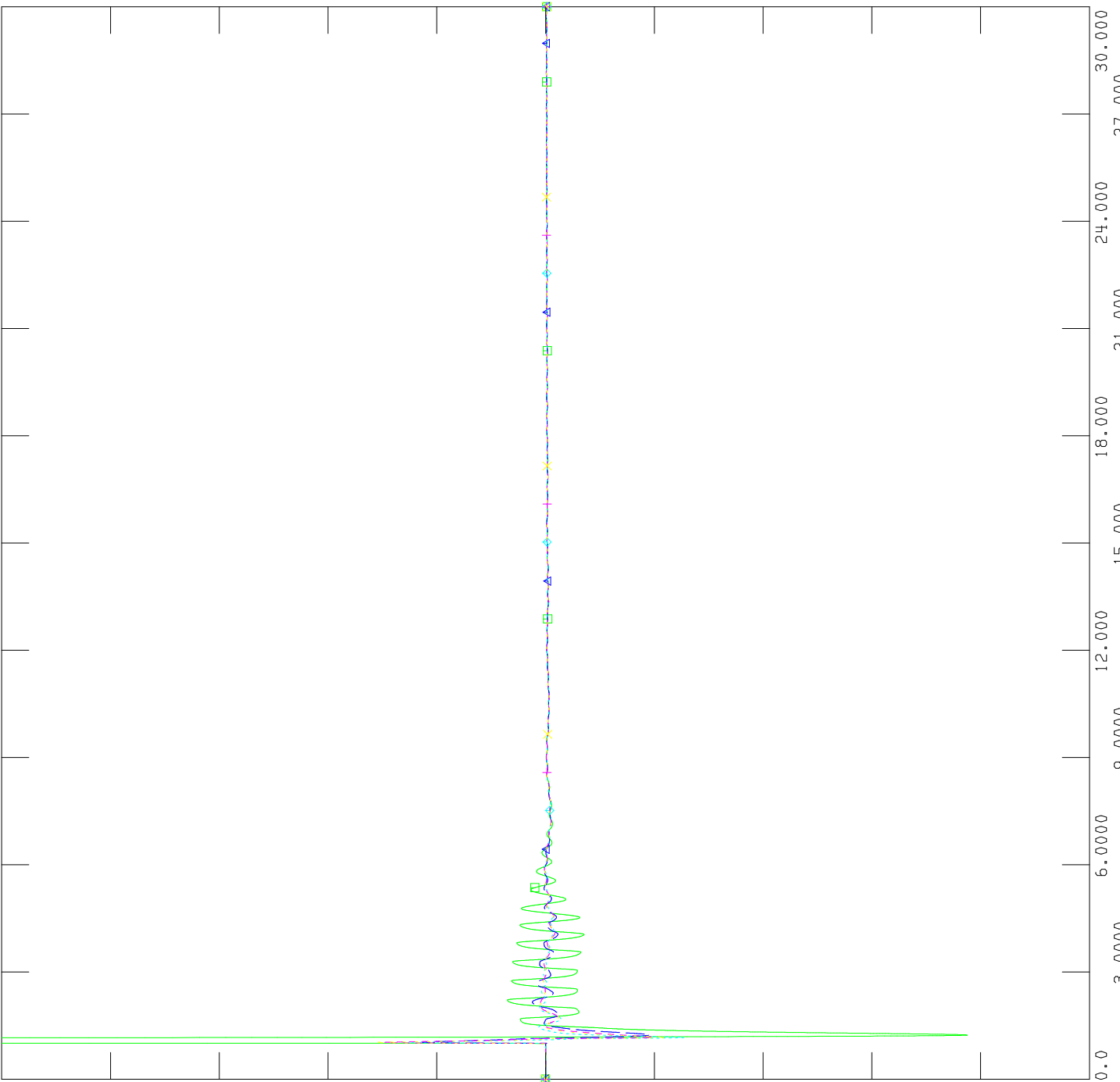




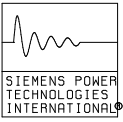
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_612L.out

MON, NOV 15 2010 10:00
BUS FREQUENCY

0.00670	CHNL# 15: CFREQ 92046 EMCBRIDE6 0.5750]]	x-----x	-0.0067
0.00670	CHNL# 14: CFREQ 11002 CGARDNG2 0.5750]]	+-----+	-0.0067
0.00670	CHNL# 13: CFREQ 4740 CARD_07 0.5750]]	◇-----◇	-0.0067
0.00670	CHNL# 12: CFREQ 2389 CHILLRIDG 0.5750]]	←-----←	-0.0067
0.00670	CHNL# 11: CFREQ 100018 CPURPLESP 0.5750]]	▣-----▣	-0.0067



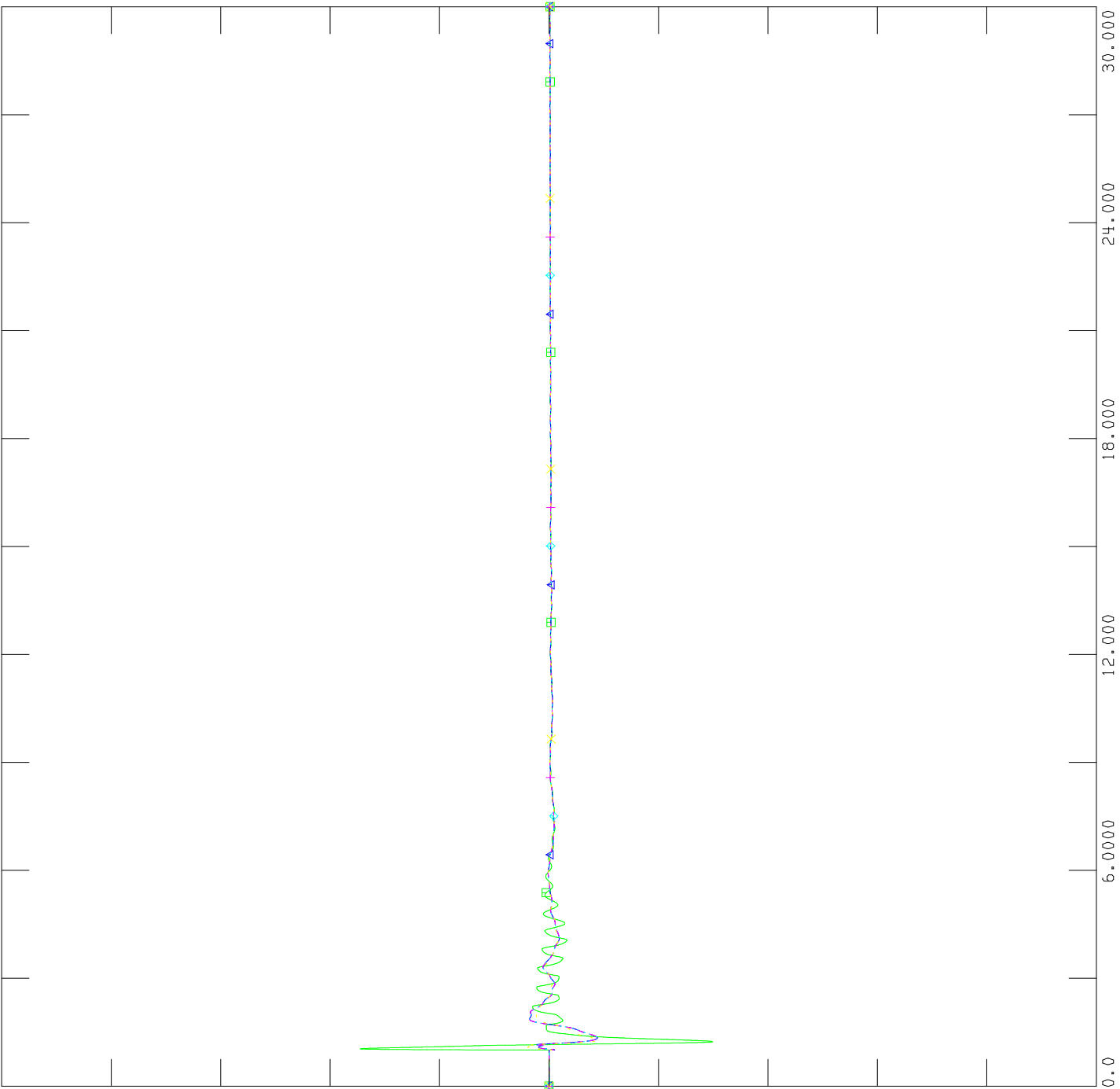
A-1-3



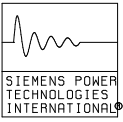
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_612L.out

MON, NOV 15 2010 10:00
BUS FREQUENCY

0.00670	CHNL# 20: CFREQ	270 CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 19: CFREQ	680 CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 18: CFREQ	271 CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 17: CFREQ	269 CBURDETT7	138.00]]	←-----←	-0.0067
0.00670	CHNL# 16: CFREQ	31 CFINCAST7	138.00]]	▣-----▣	-0.0067



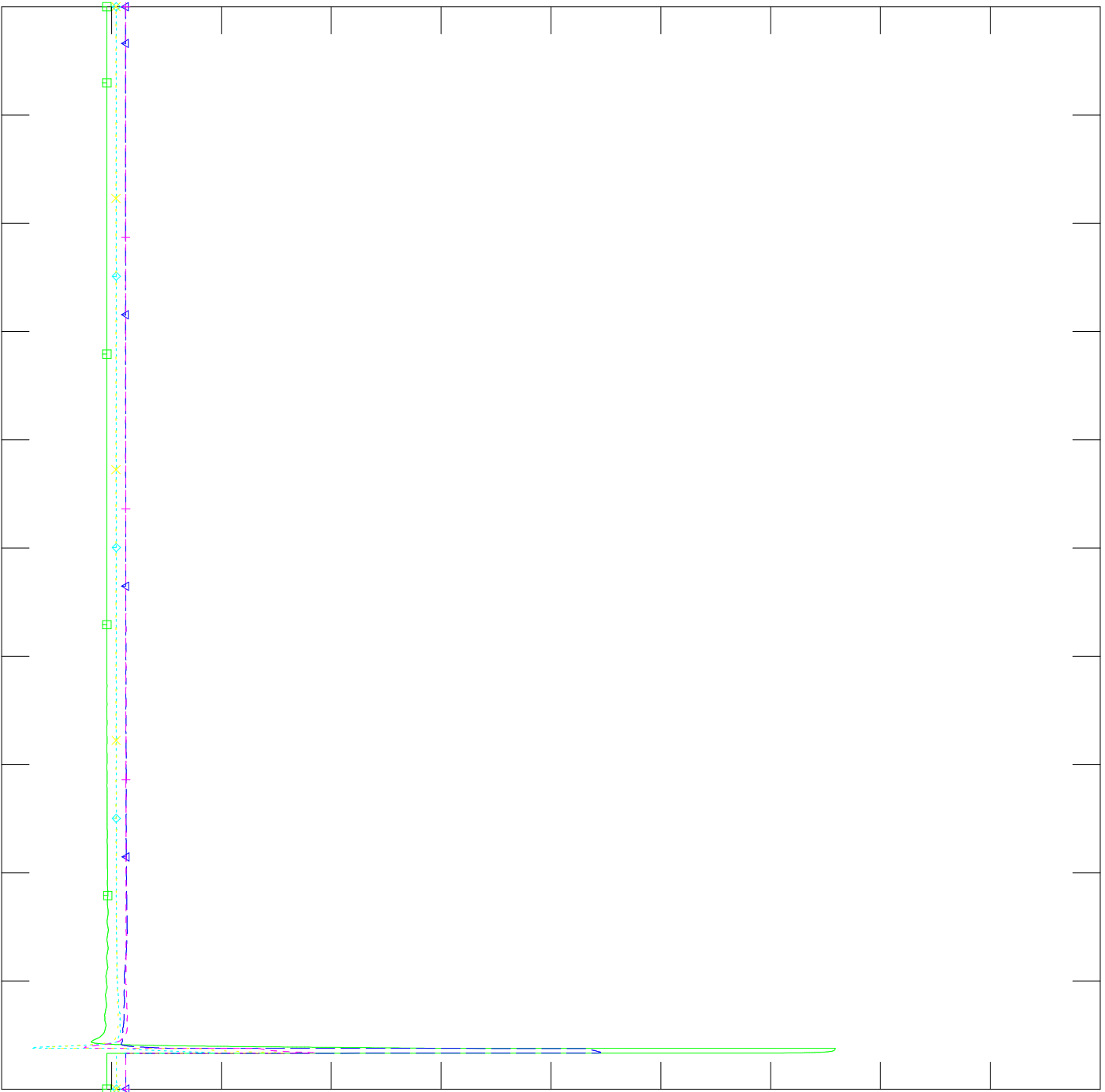
A-1-4



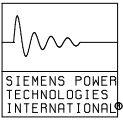
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_612L.out

MON, NOV 15 2010 10:01
BUS VOLTAGE

1.1500	CHNL# 25: EVOLT	92046	EMCBRIDE6	0.5750	0.0
1.1500	CHNL# 24: EVOLT	11002	EGARDNG2	0.5750	0.0
1.1500	CHNL# 23: EVOLT	4740	EARD_07	0.5750	0.0
1.1500	CHNL# 22: EVOLT	2389	CHILLRIDG	0.5750	0.0
1.1500	CHNL# 21: EVOLT	100018	CPURPLESP	0.5750	0.0



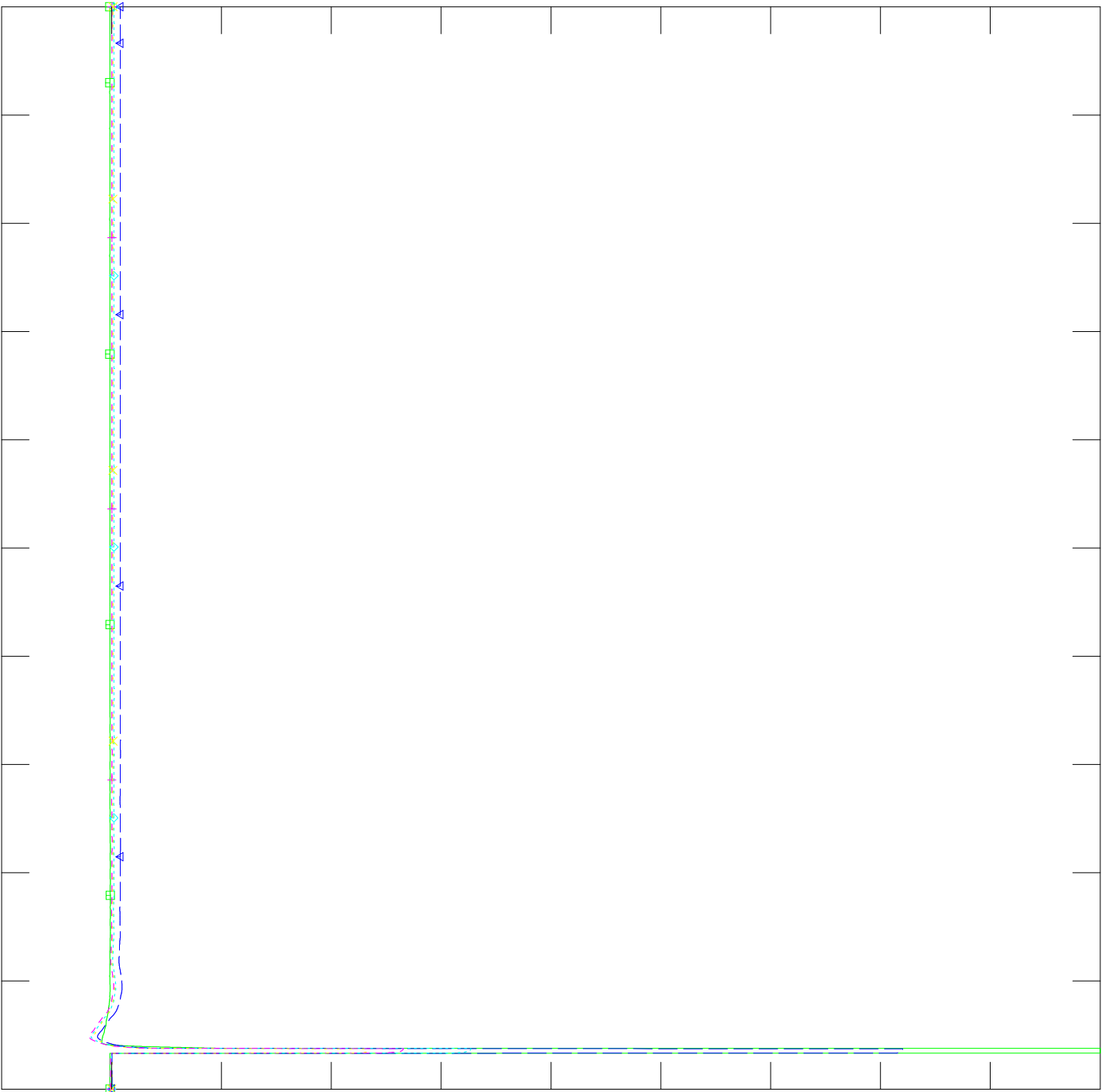
A-1-5



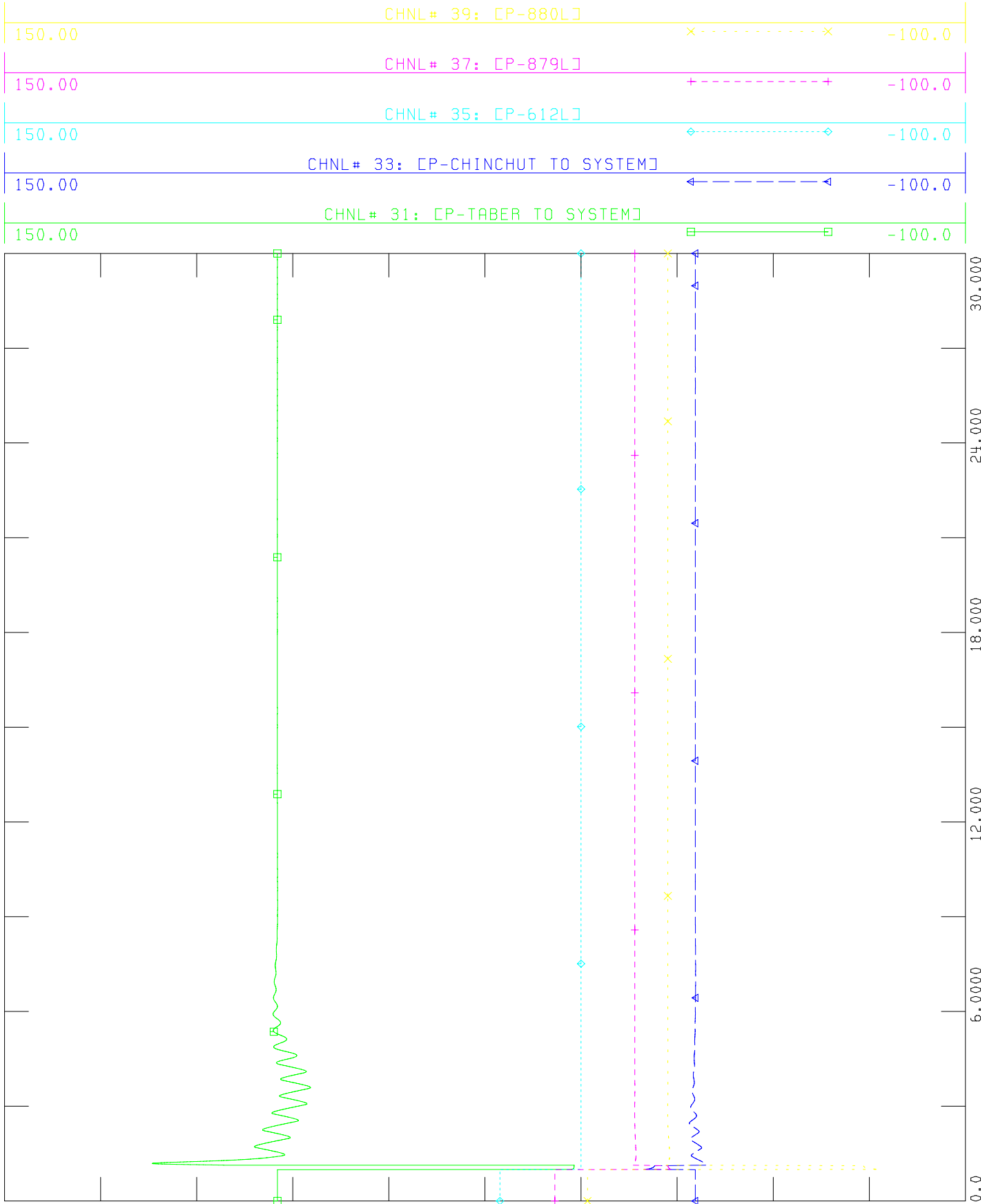
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_612L.out

MON, NOV 15 2010 10:02
BUS VOLTAGE

1.1500	CHNL# 30: EVOLT	270 CSUFFIEL7	138.00]]	x-----x	0.0
1.1500	CHNL# 29: EVOLT	680 CMEDICIN7	138.00]]	+-----+	0.0
1.1500	CHNL# 28: EVOLT	271 EBULLS H7	138.00]]	◇-----◇	0.0
1.1500	CHNL# 27: EVOLT	269 CBURDETT7	138.00]]	←-----←	0.0
1.1500	CHNL# 26: EVOLT	31 CFINCAST7	138.00]]	■-----■	0.0



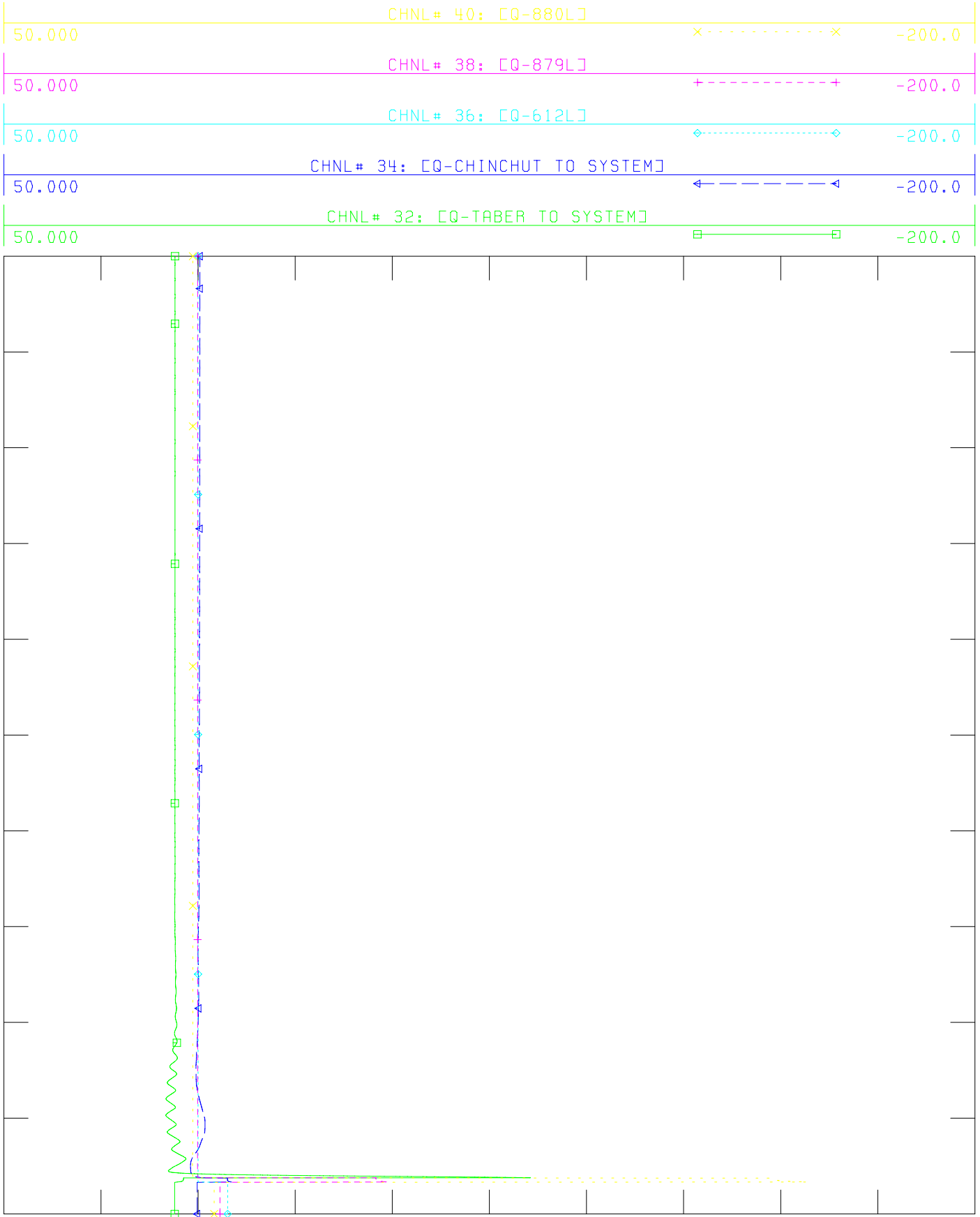
A-1-6



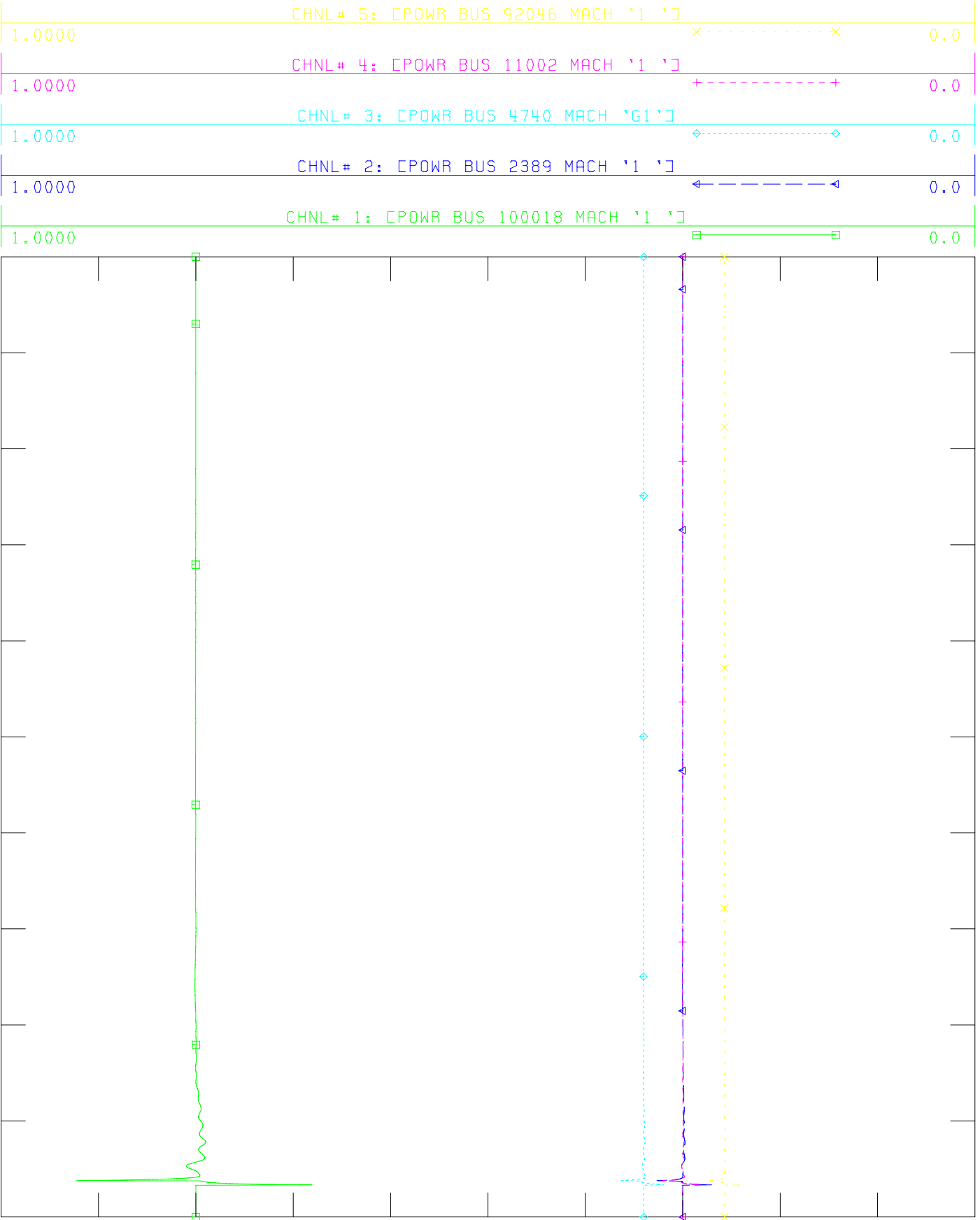
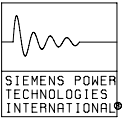


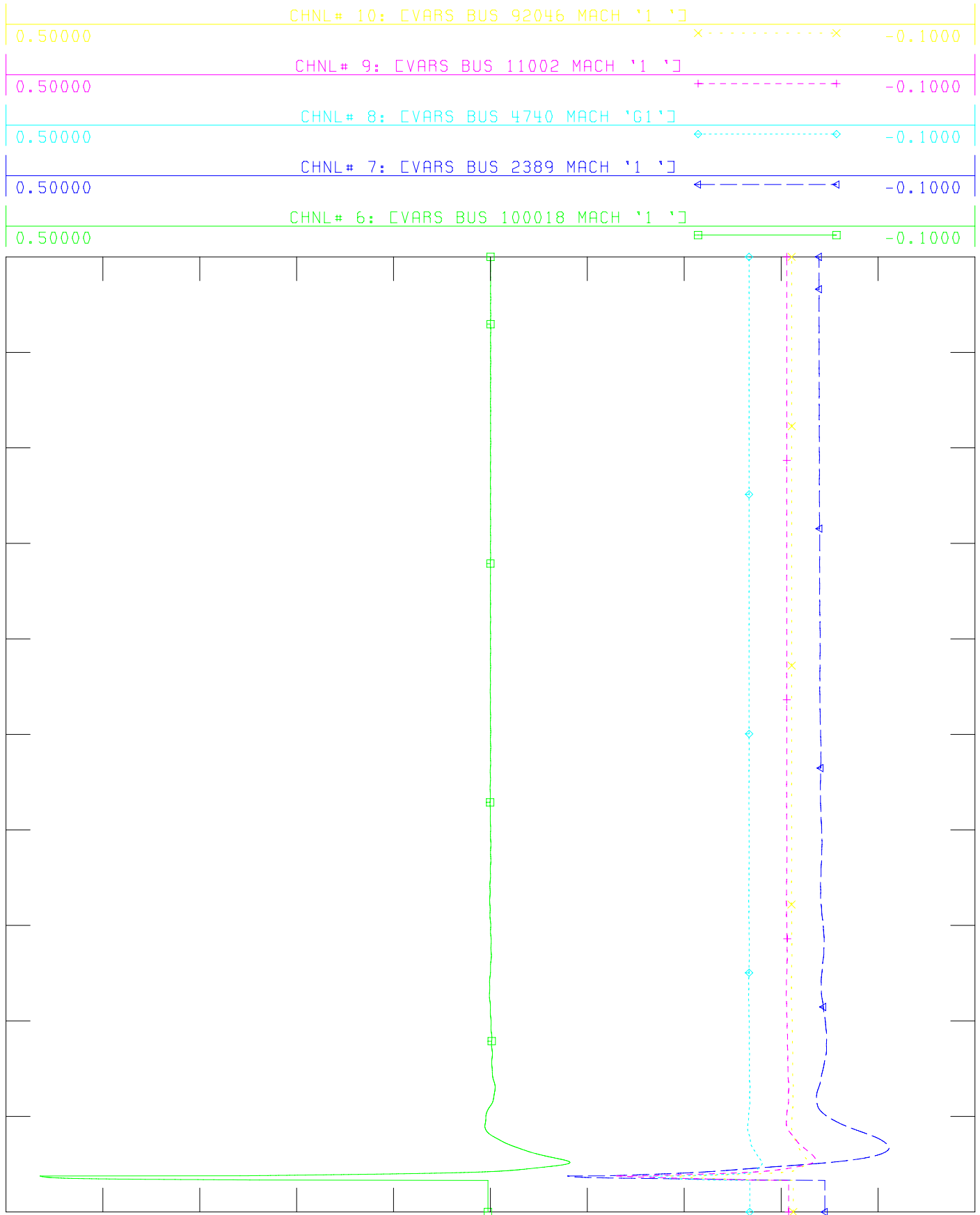
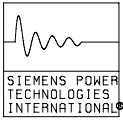
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_612L.out

MON, NOV 15 2010 10:15
BRANCH REACTIVE POWER



A-1-8





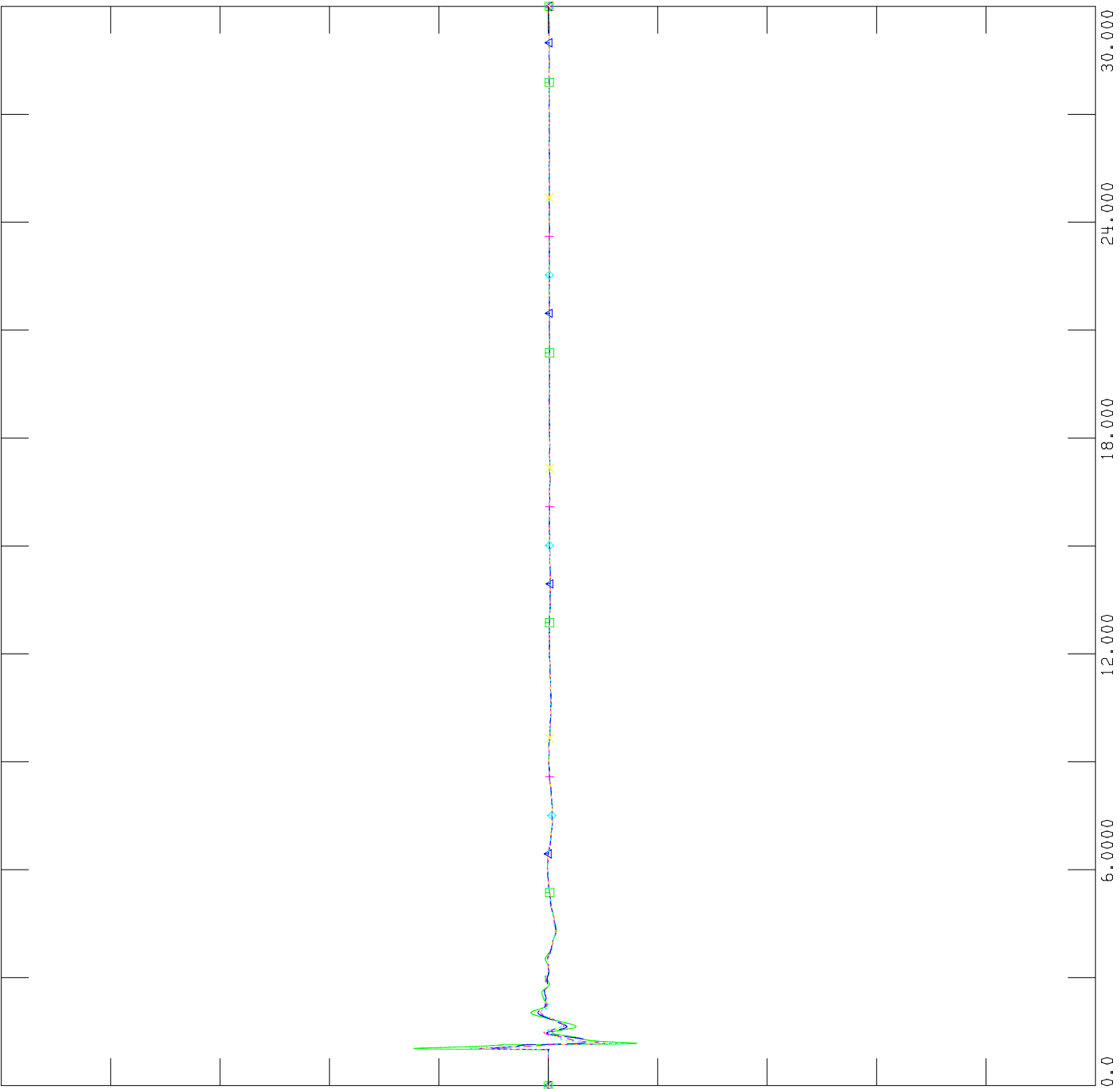
A-1-10



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_760L.out

MON, NOV 15 2010 10:21
BUS FREQUENCY

0.00670	CHNL# 15: CFREQ 92046 EMCBRIDE6 0.5750]]	x-----x	-0.0067
0.00670	CHNL# 14: CFREQ 11002 CGARDNG2 0.5750]]	+-----+	-0.0067
0.00670	CHNL# 13: CFREQ 4740 CARD_07 0.5750]]	◇-----◇	-0.0067
0.00670	CHNL# 12: CFREQ 2389 CHILLRIDG 0.5750]]	←-----←	-0.0067
0.00670	CHNL# 11: CFREQ 100018 CPURPLESP 0.5750]]	▣-----▣	-0.0067



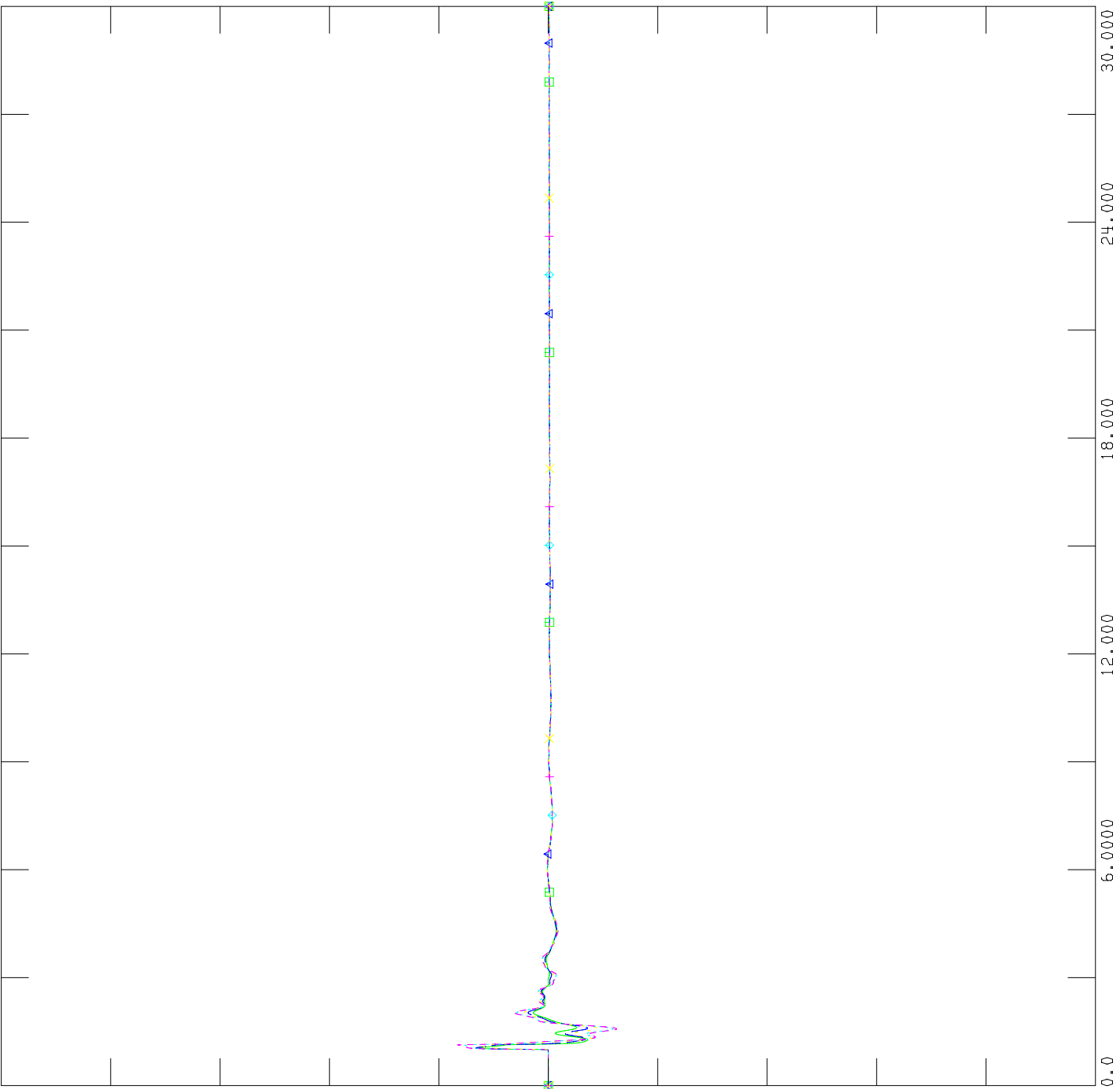
A-1-11



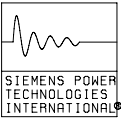
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_760L.out

MON, NOV 15 2010 10:22
BUS FREQUENCY

0.00670	CHNL# 20: CFREQ	270 CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 19: CFREQ	680 CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 18: CFREQ	271 CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 17: CFREQ	269 CBURDETT7	138.00]]	←-----△	-0.0067
0.00670	CHNL# 16: CFREQ	31 CFINCAST7	138.00]]	▣-----▣	-0.0067



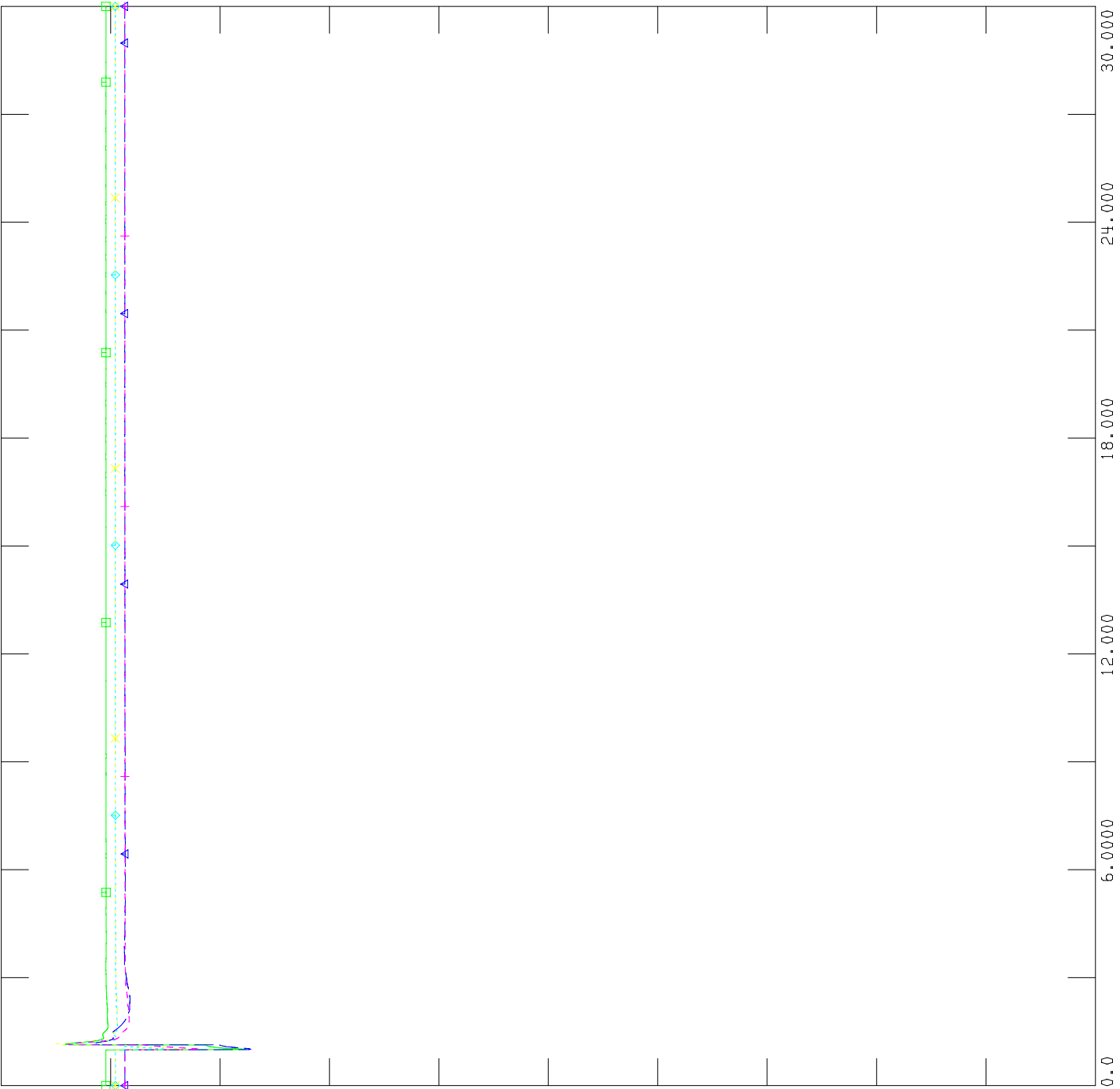
A-1-12



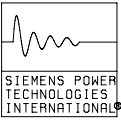
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_760L.out

MON, NOV 15 2010 10:23
BUS VOLTAGE

1.1500	CHNL# 25: EVOLT 92046 EMCBRIDE6	0.5750	0.0
1.1500	CHNL# 24: EVOLT 11002 EGARDNG2	0.5750	0.0
1.1500	CHNL# 23: EVOLT 4740 EARD_07	0.5750	0.0
1.1500	CHNL# 22: EVOLT 2389 CHILLRIDG	0.5750	0.0
1.1500	CHNL# 21: EVOLT 100018 CPURPLESP	0.5750	0.0



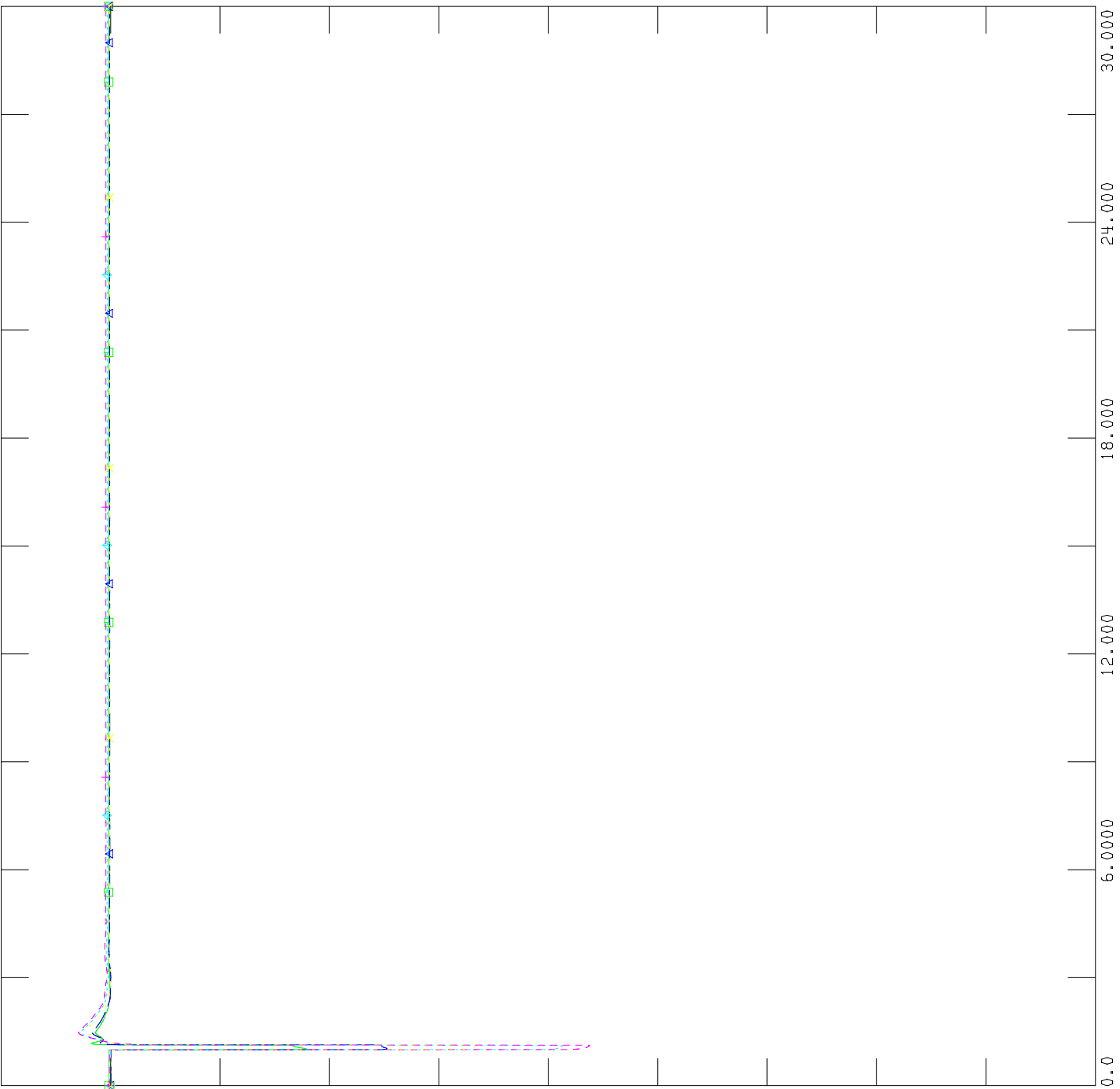
A-1-13



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_760L.out

MON, NOV 15 2010 10:24
BUS VOLTAGE

1.1500	CHNL# 30: EVOLT	270 ESUFFIEL7	138.00	0.0
1.1500	CHNL# 29: EVOLT	680 CMEDICIN7	138.00	0.0
1.1500	CHNL# 28: EVOLT	271 EBULLS H7	138.00	0.0
1.1500	CHNL# 27: EVOLT	269 CBURDETT7	138.00	0.0
1.1500	CHNL# 26: EVOLT	31 CFINCAST7	138.00	0.0

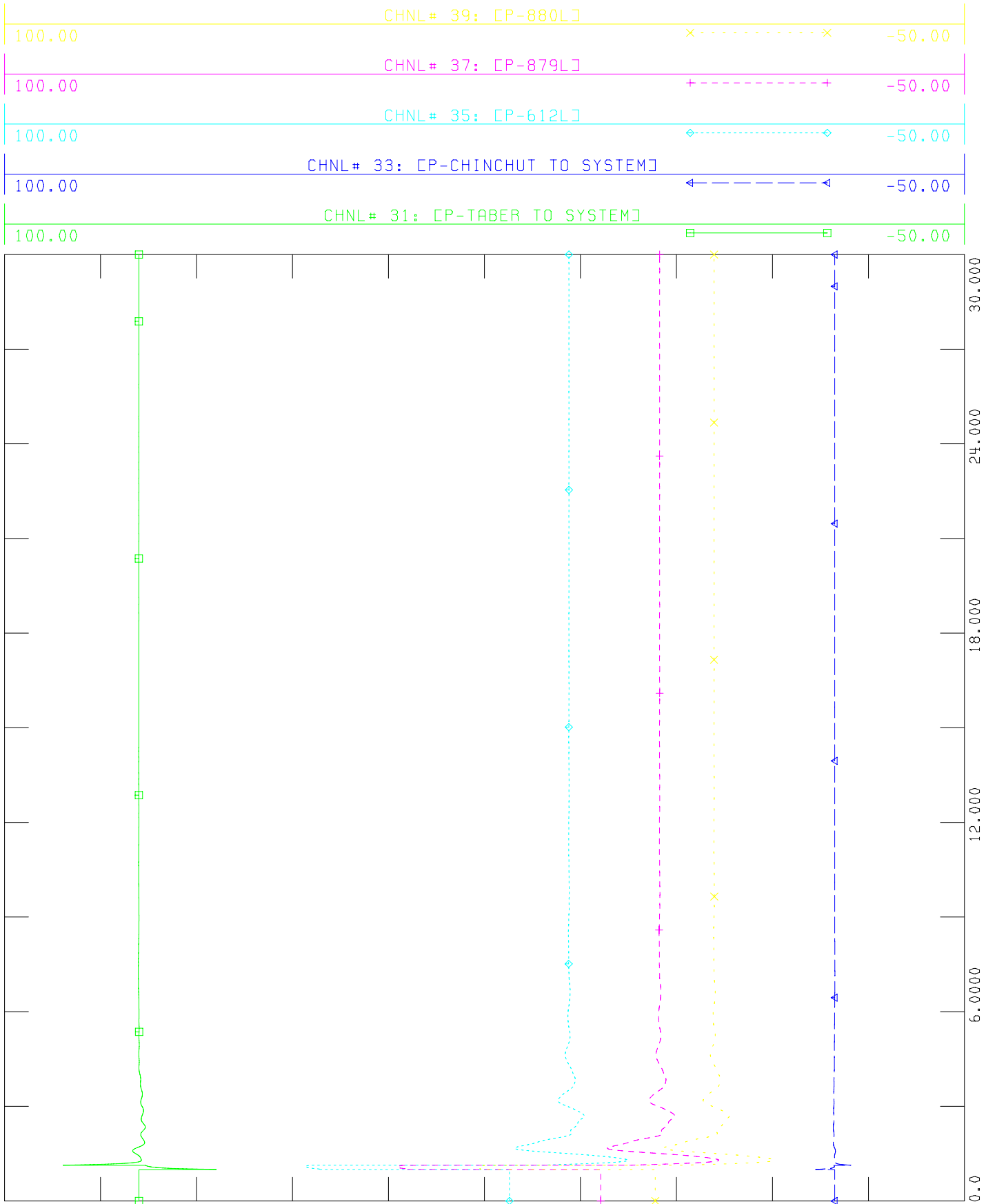


A-1-14

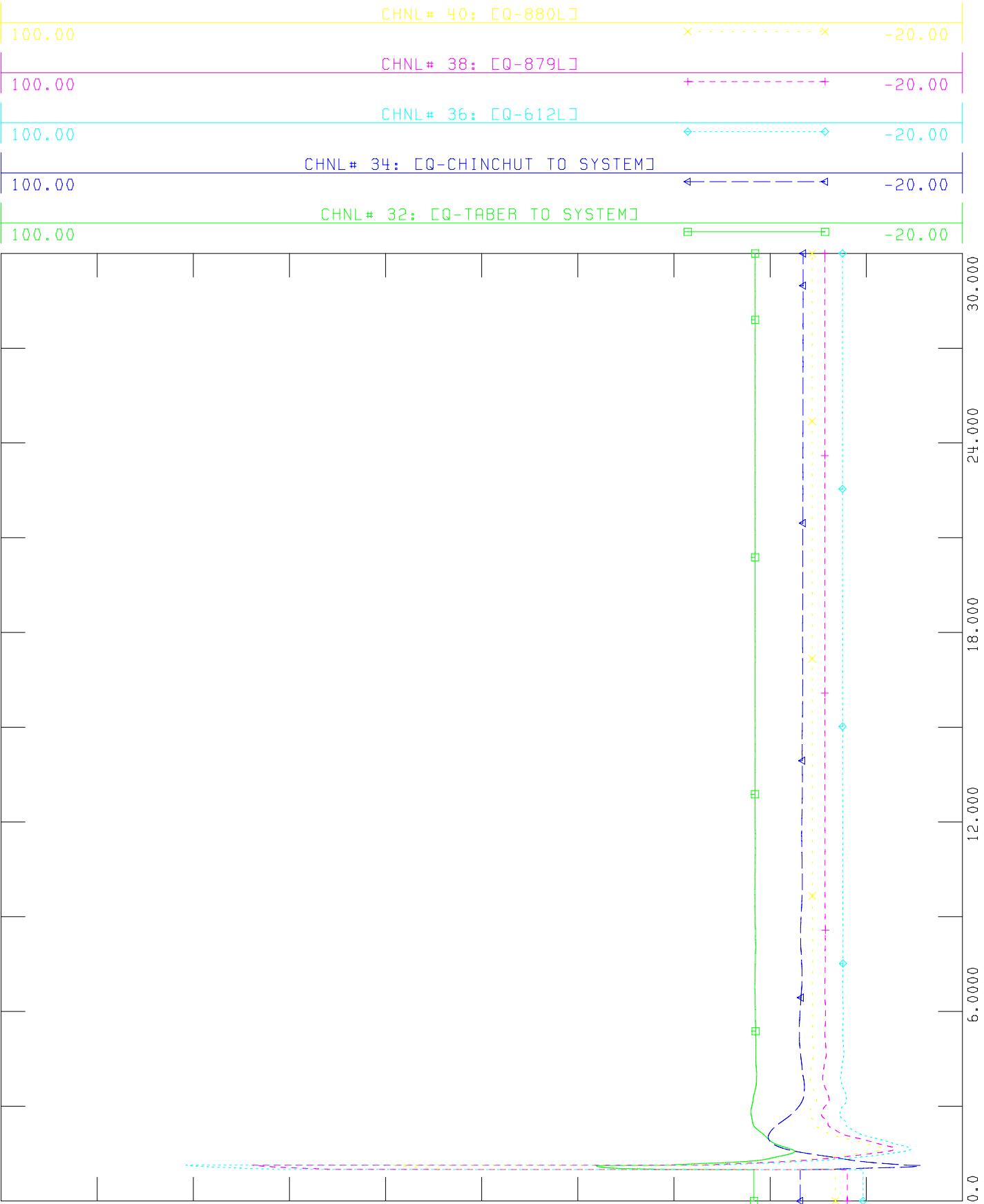


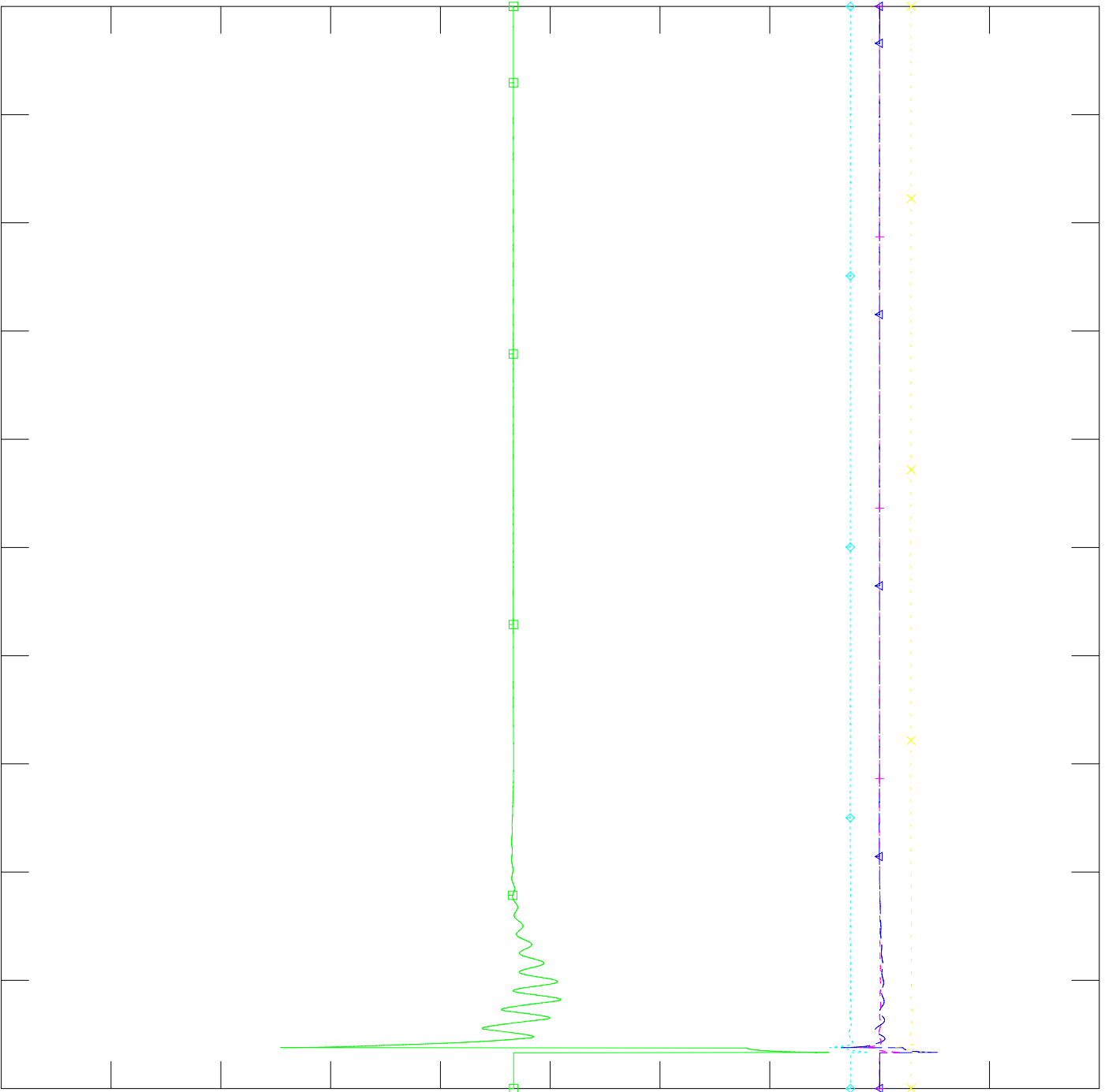
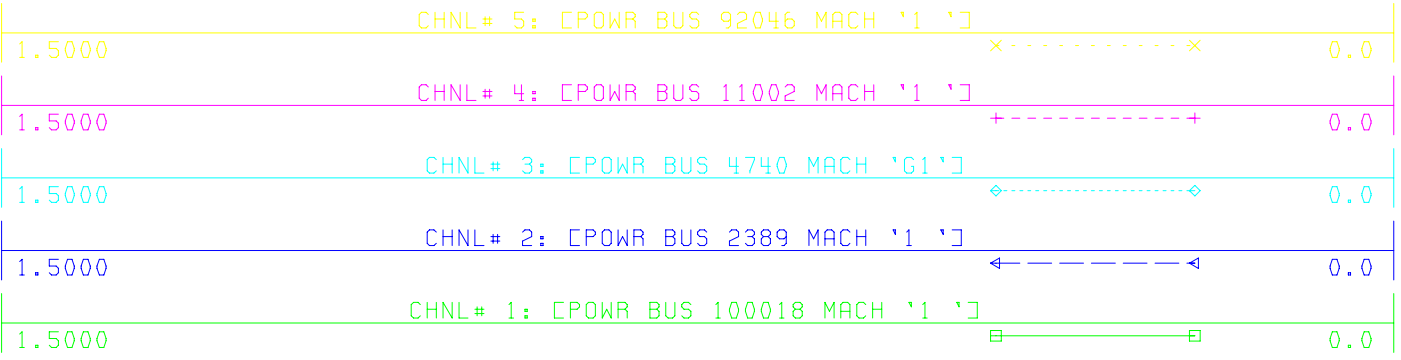
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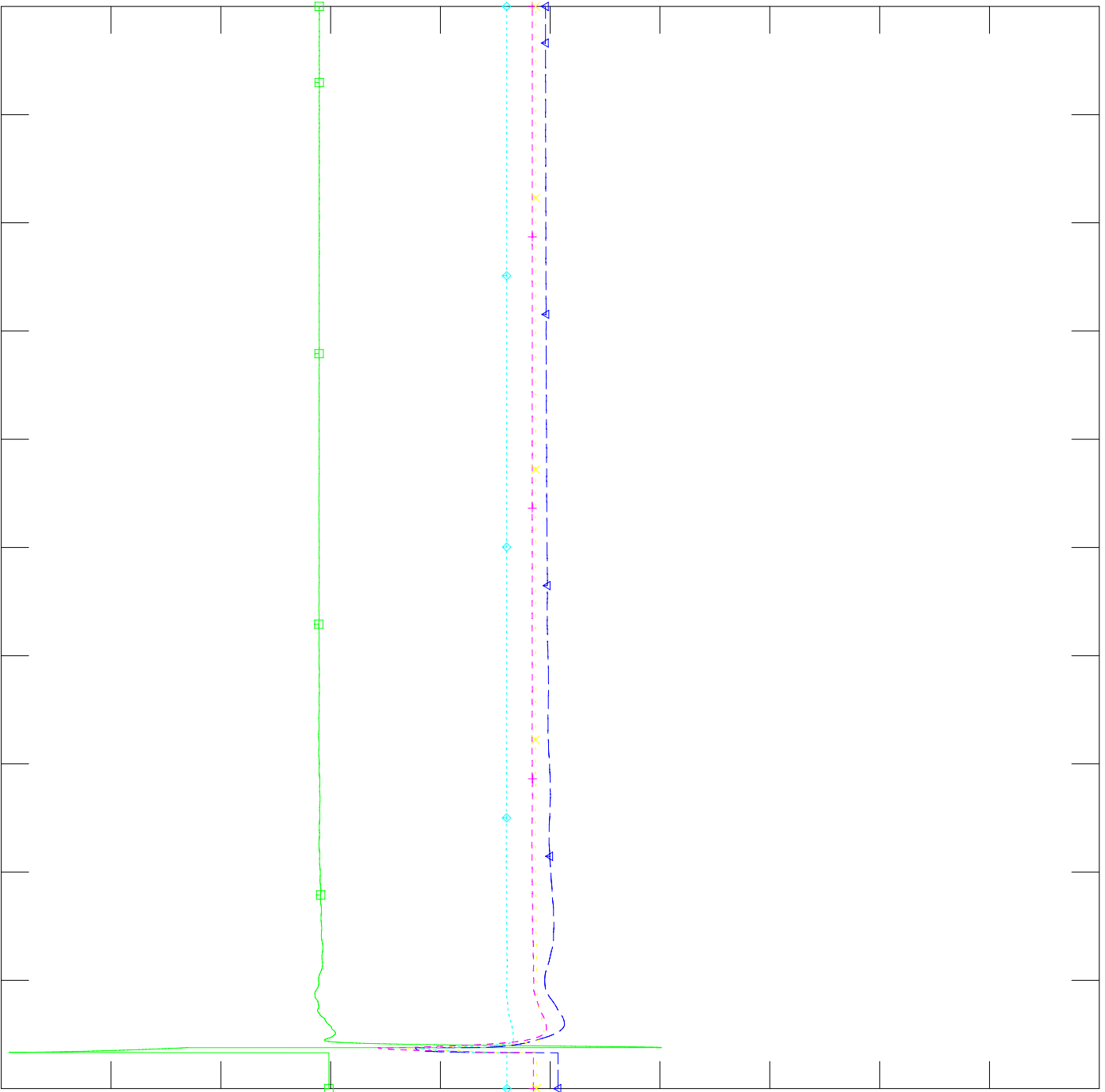
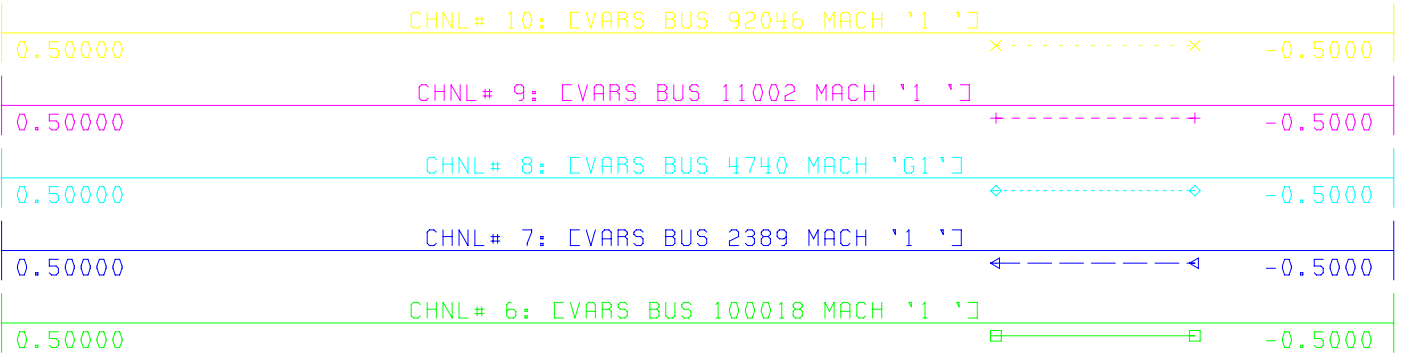
MON, NOV 15 2010 10:25
BRANCH ACTIVE POWER

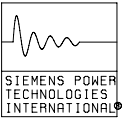


A-1-15





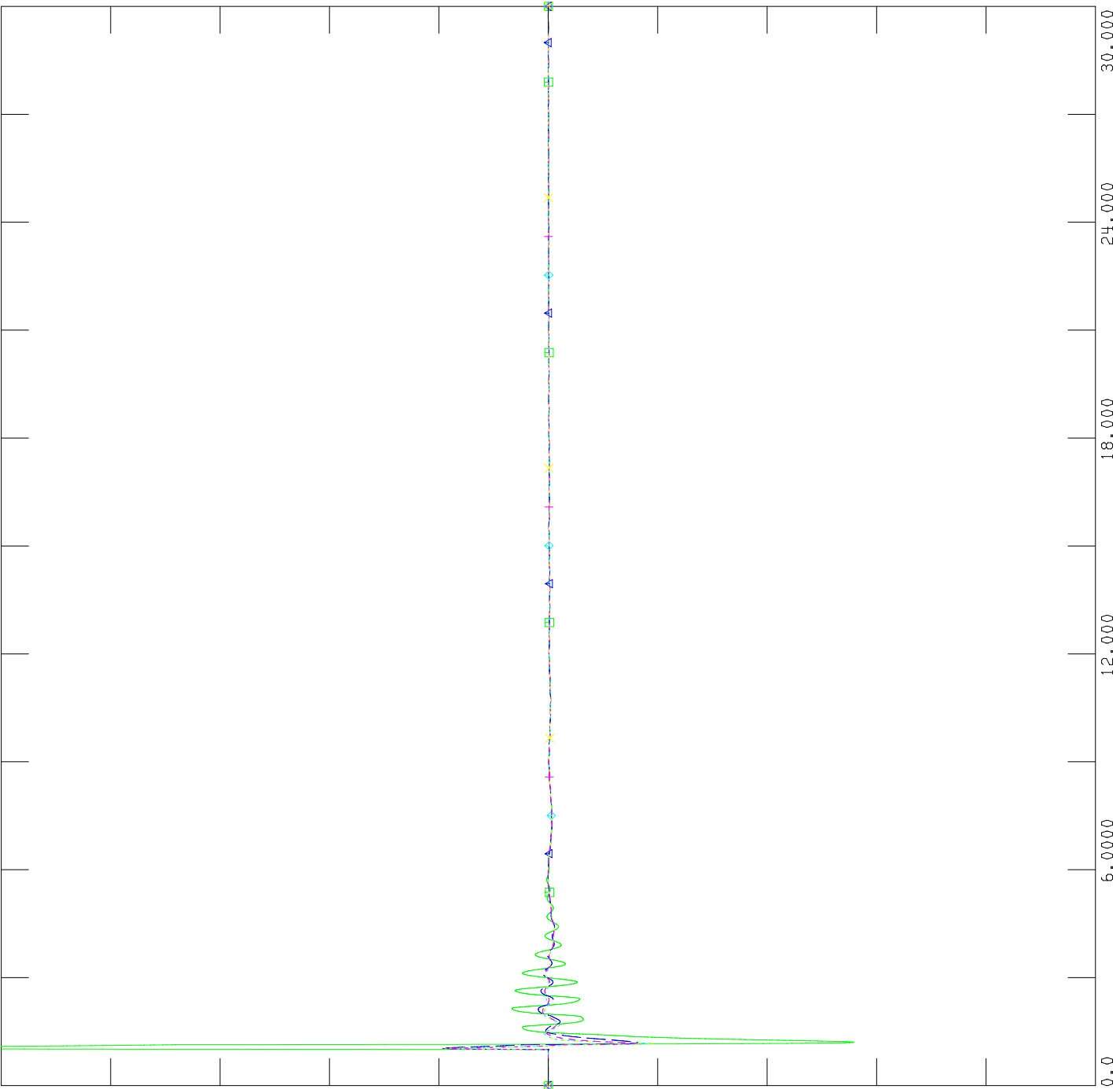




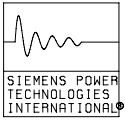
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_879L.out

MON, NOV 15 2010 10:32
BUS FREQUENCY

0.00670	CHNL# 15: CFREQ 92046 EMCBRIDE6 0.5750]]	x-----x	-0.0067
0.00670	CHNL# 14: CFREQ 11002 CGARDNG2 0.5750]]	+-----+	-0.0067
0.00670	CHNL# 13: CFREQ 4740 CARD_07 0.5750]]	◇-----◇	-0.0067
0.00670	CHNL# 12: CFREQ 2389 CHILLRIDG 0.5750]]	←-----←	-0.0067
0.00670	CHNL# 11: CFREQ 100018 CPURPLESP 0.5750]]	▣-----▣	-0.0067



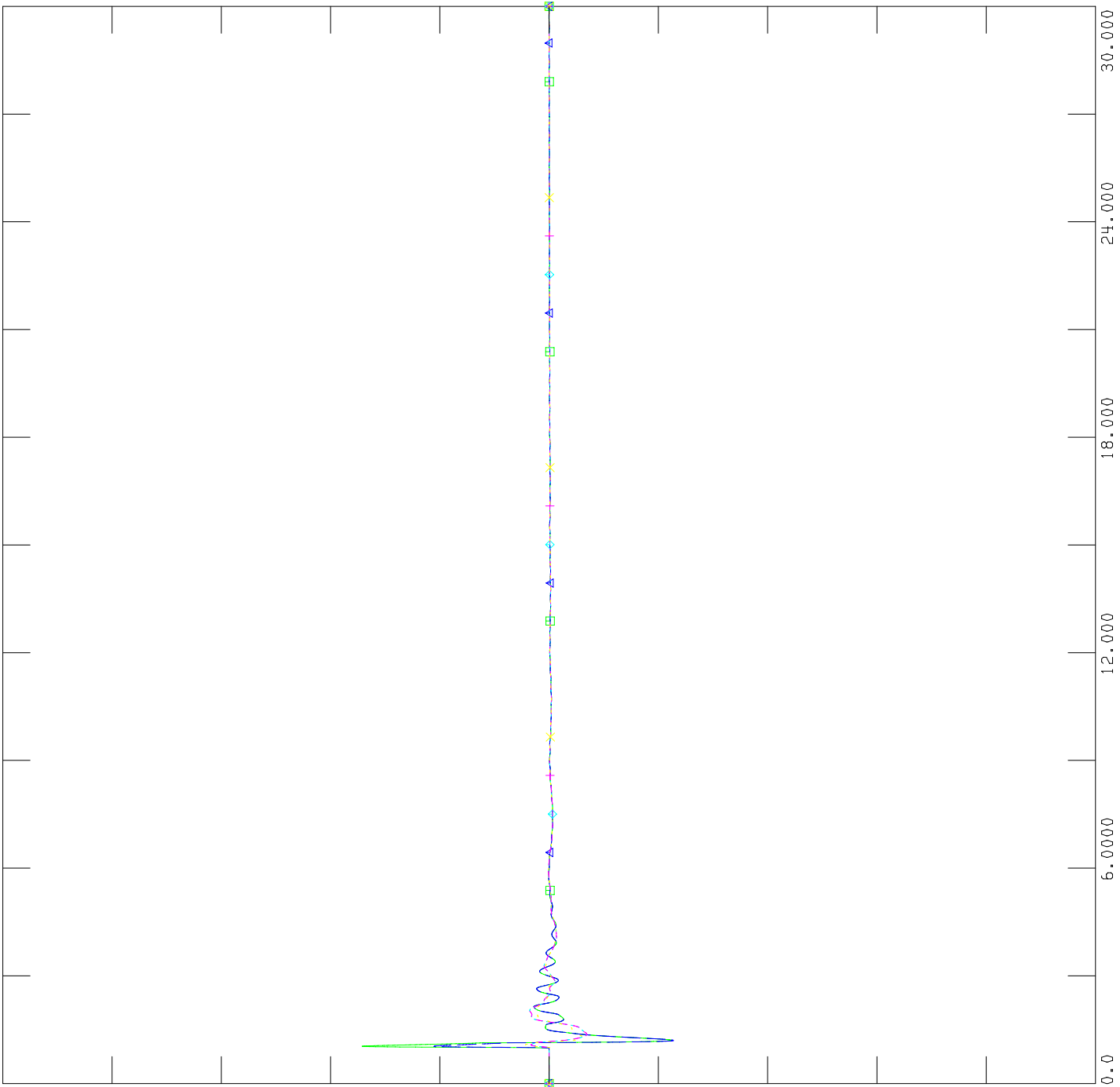
A-1-19



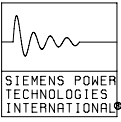
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_879L.out

MON, NOV 15 2010 10:33
BUS FREQUENCY

0.00670	CHNL# 20: CFREQ	270 ESUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 19: CFREQ	680 CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 18: CFREQ	271 CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 17: CFREQ	269 CBURDETT7	138.00]]	←-----△	-0.0067
0.00670	CHNL# 16: CFREQ	31 CFINCAST7	138.00]]	▣-----▣	-0.0067



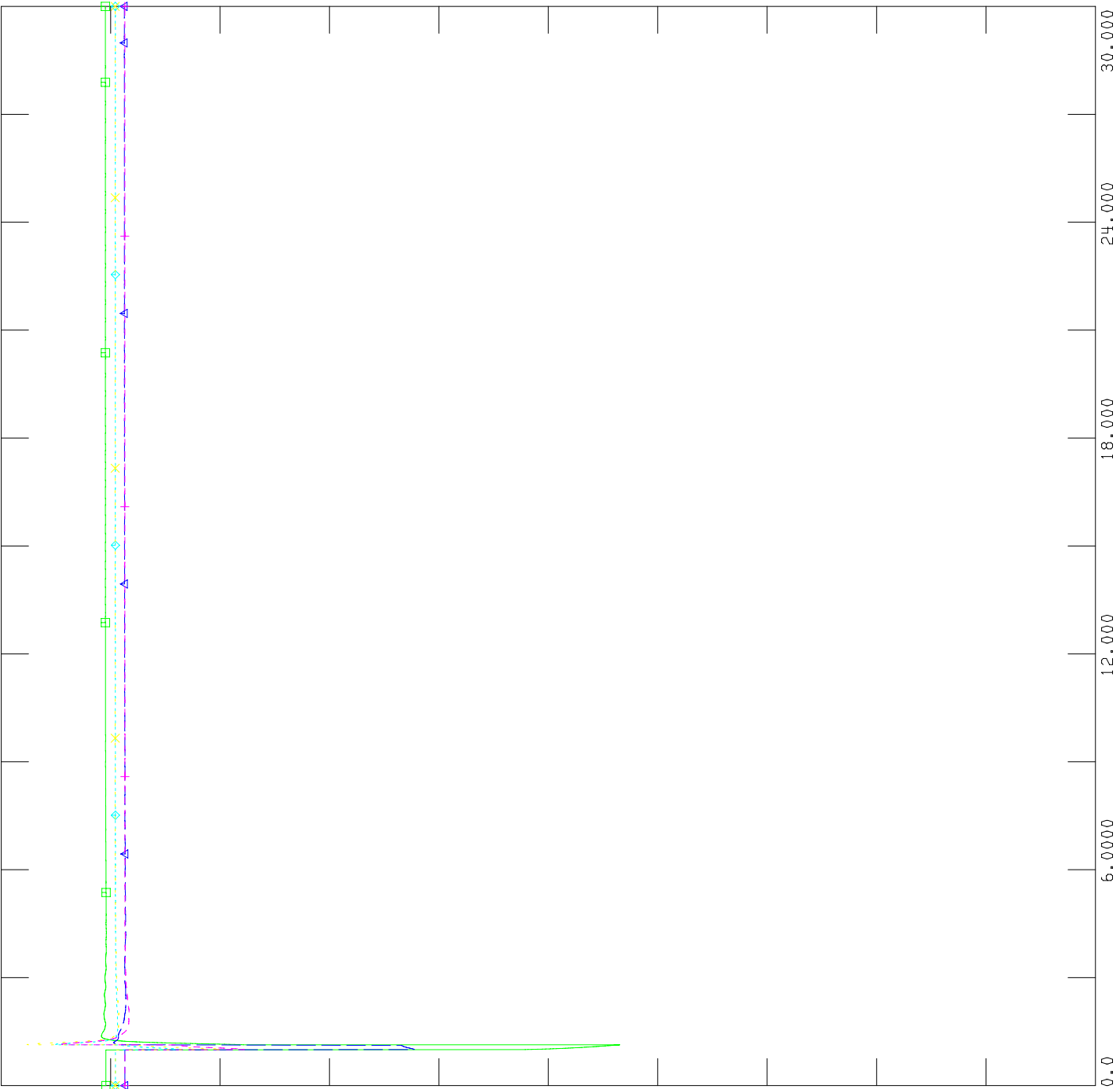
A-1-20



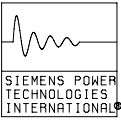
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_879L.out

MON, NOV 15 2010 10:33
BUS VOLTAGE

1.1500	CHNL# 25: EVOLT	92046	EMCBRIDE6	0.5750	0.0
1.1500	CHNL# 24: EVOLT	11002	EGARDNG2	0.5750	0.0
1.1500	CHNL# 23: EVOLT	4740	EARD_07	0.5750	0.0
1.1500	CHNL# 22: EVOLT	2389	CHILLRIDG	0.5750	0.0
1.1500	CHNL# 21: EVOLT	100018	CPURPLESP	0.5750	0.0



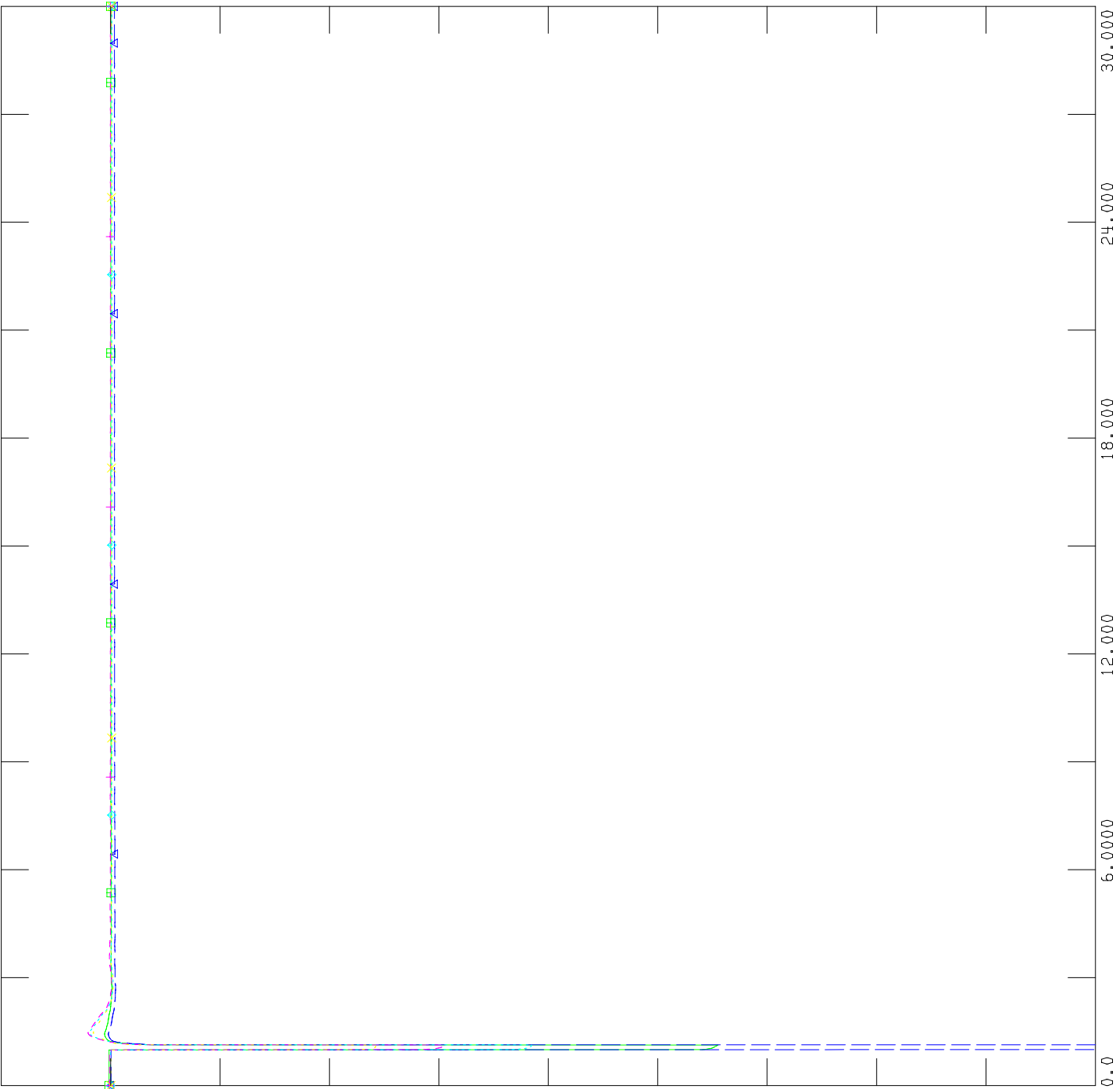
A-1-21



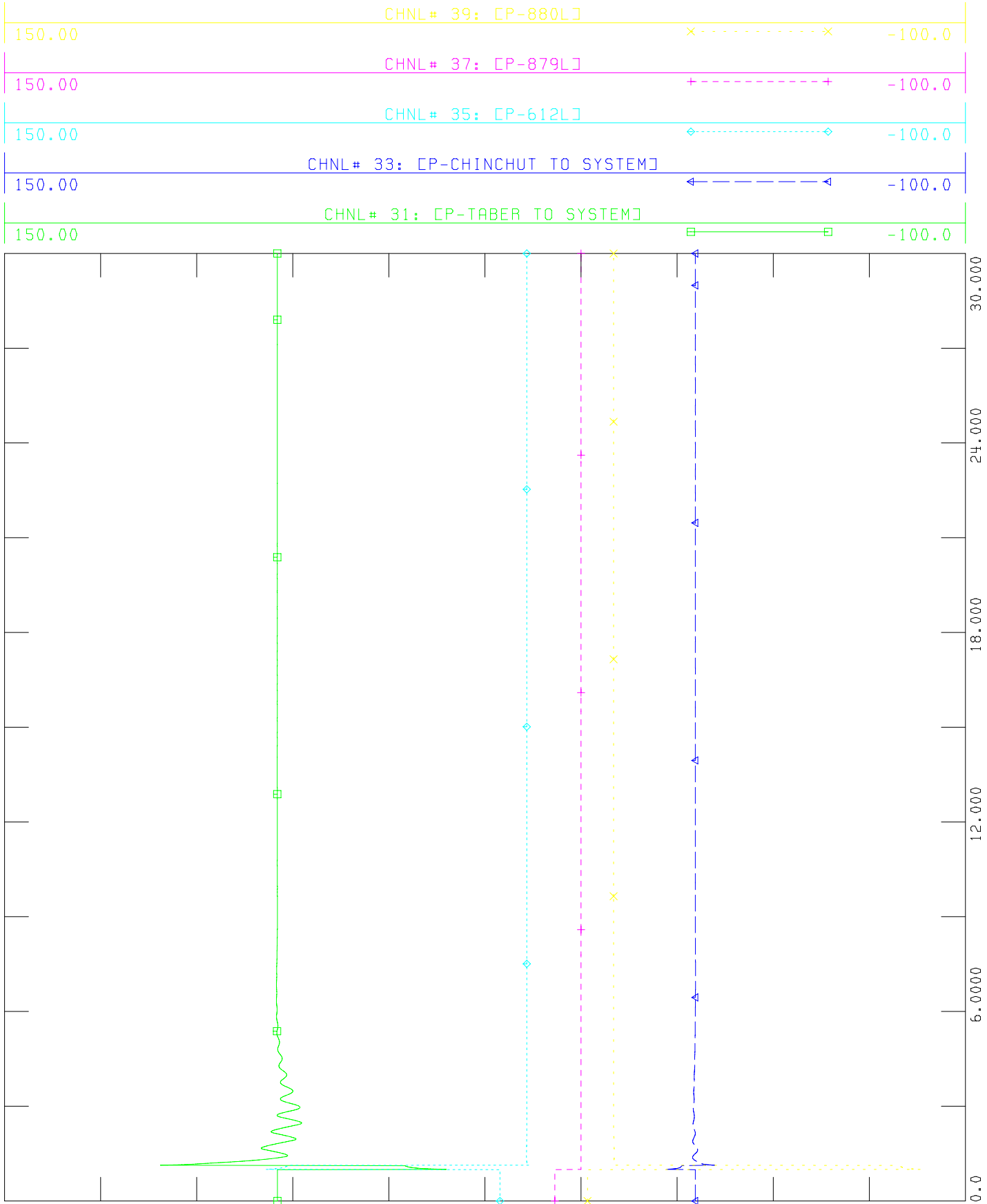
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_879L.out

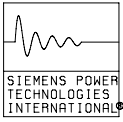
MON, NOV 15 2010 10:34
BUS VOLTAGE

1.1500	CHNL# 30: EVOLT	270 ESUFFIEL7	138.00	0.0
1.1500	CHNL# 29: EVOLT	680 CMEDICIN7	138.00	0.0
1.1500	CHNL# 28: EVOLT	271 EBULLS H7	138.00	0.0
1.1500	CHNL# 27: EVOLT	269 CBURDETT7	138.00	0.0
1.1500	CHNL# 26: EVOLT	31 CFINCAST7	138.00	0.0



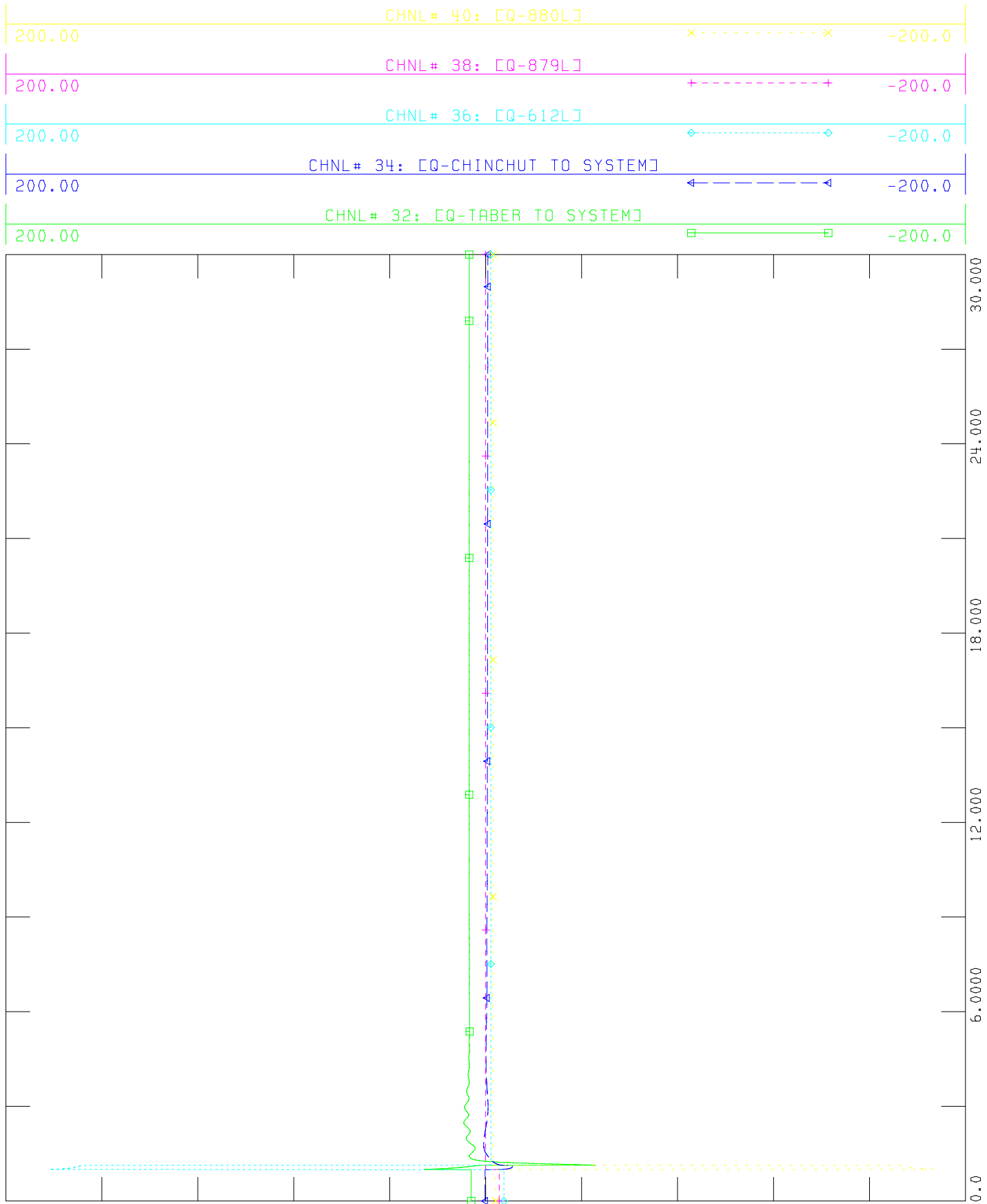
A-1-22



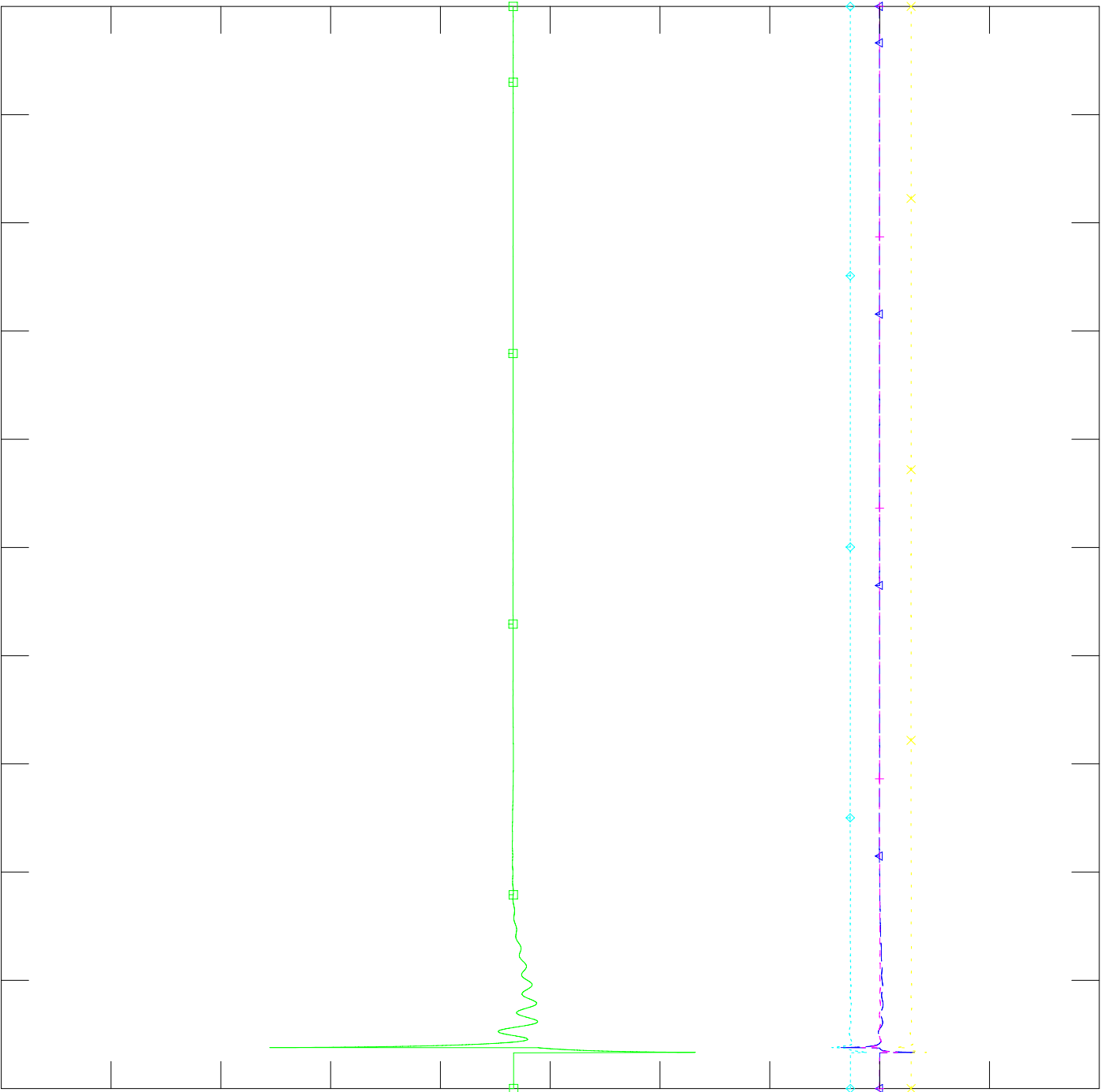
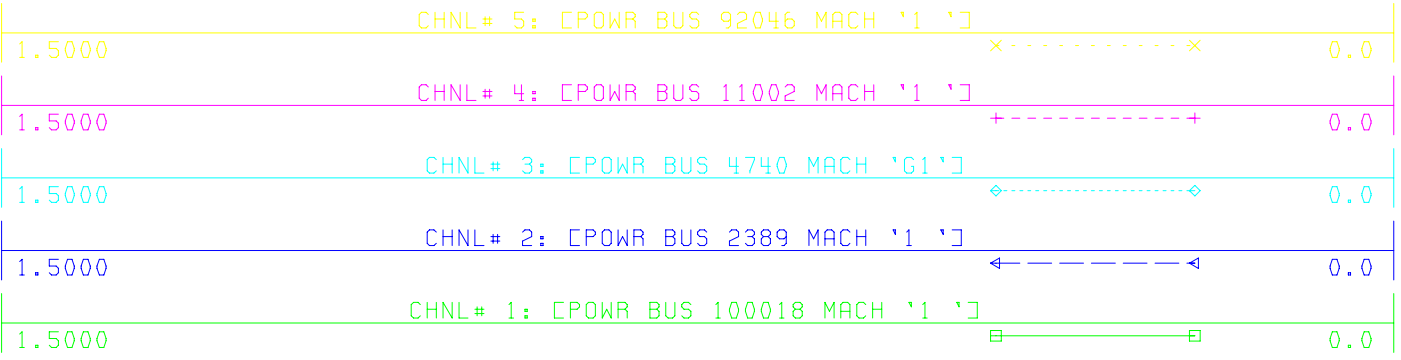


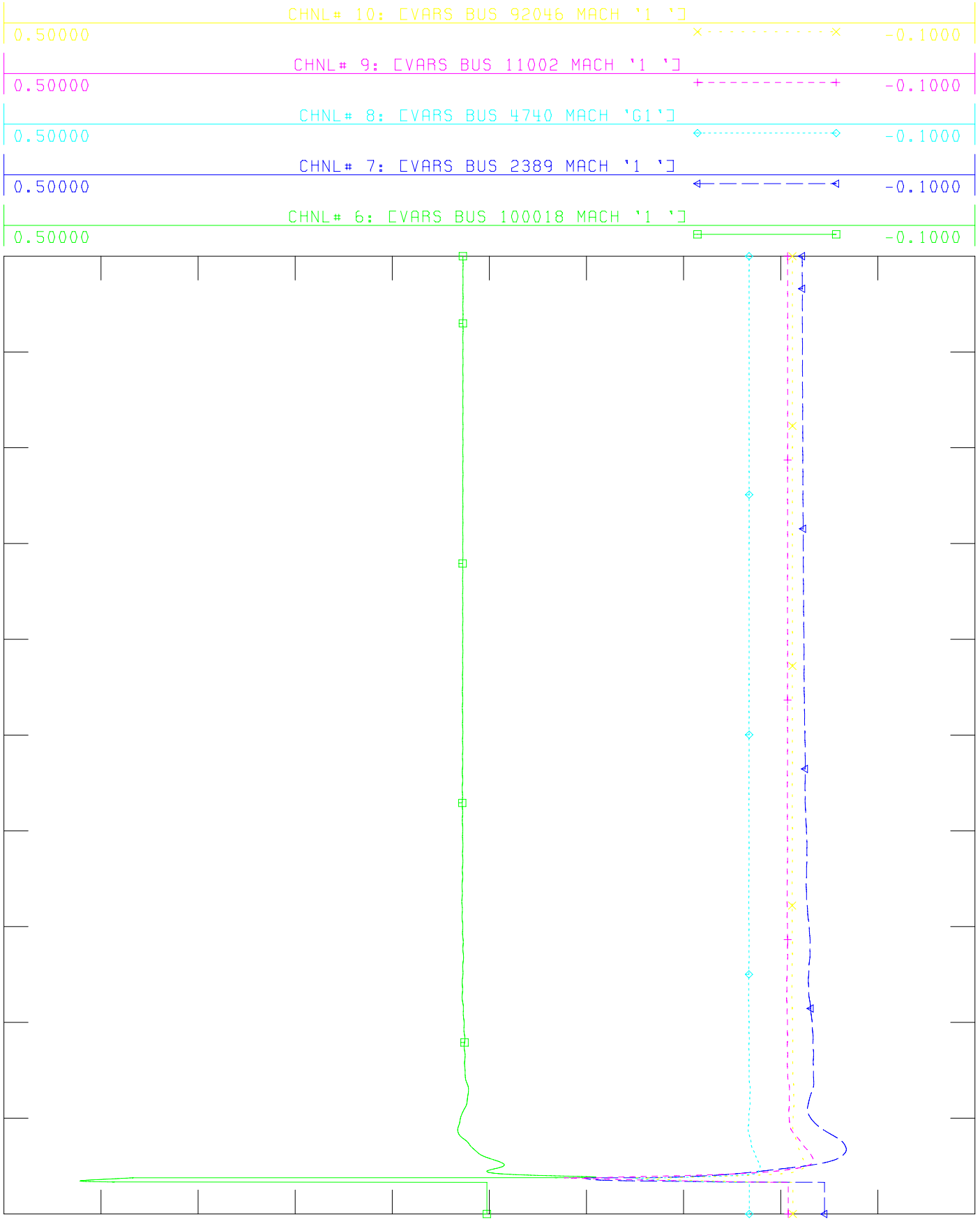
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_879L.out

MON, NOV 15 2010 10:37
BRANCH REACTIVE POWER



A-1-24



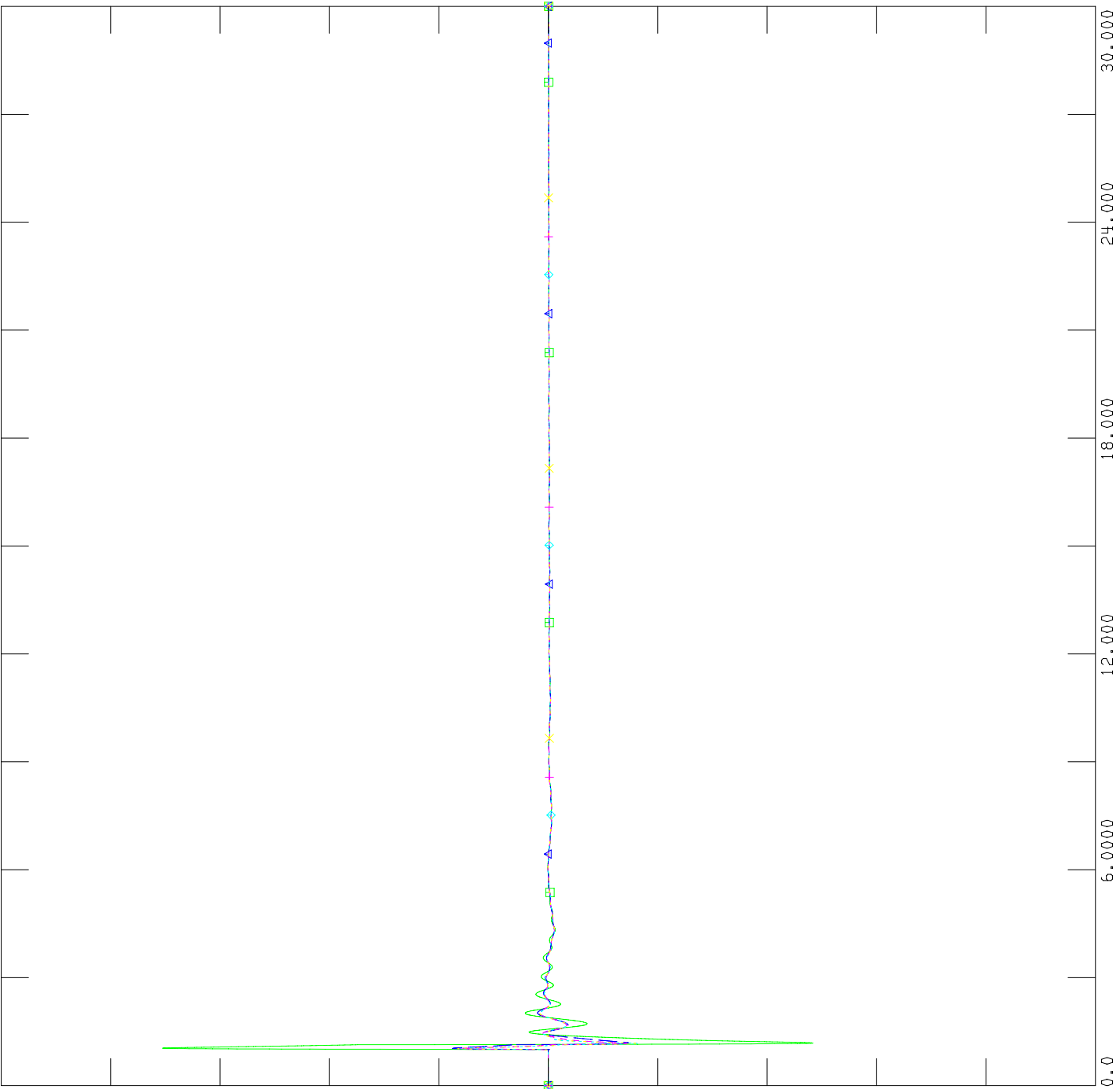




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_880L.out

MON, NOV 15 2010 10:41
BUS FREQUENCY

0.00670	CHNL# 15: CFREQ 92046 EMCBRIDE6 0.5750	x-----x	-0.0067
0.00670	CHNL# 14: CFREQ 11002 CGARDNG2 0.5750	+-----+	-0.0067
0.00670	CHNL# 13: CFREQ 4740 CARD_07 0.5750	◇-----◇	-0.0067
0.00670	CHNL# 12: CFREQ 2389 CHILLRIDG 0.5750	←-----←	-0.0067
0.00670	CHNL# 11: CFREQ 100018 CPURPLESP 0.5750	▣-----▣	-0.0067



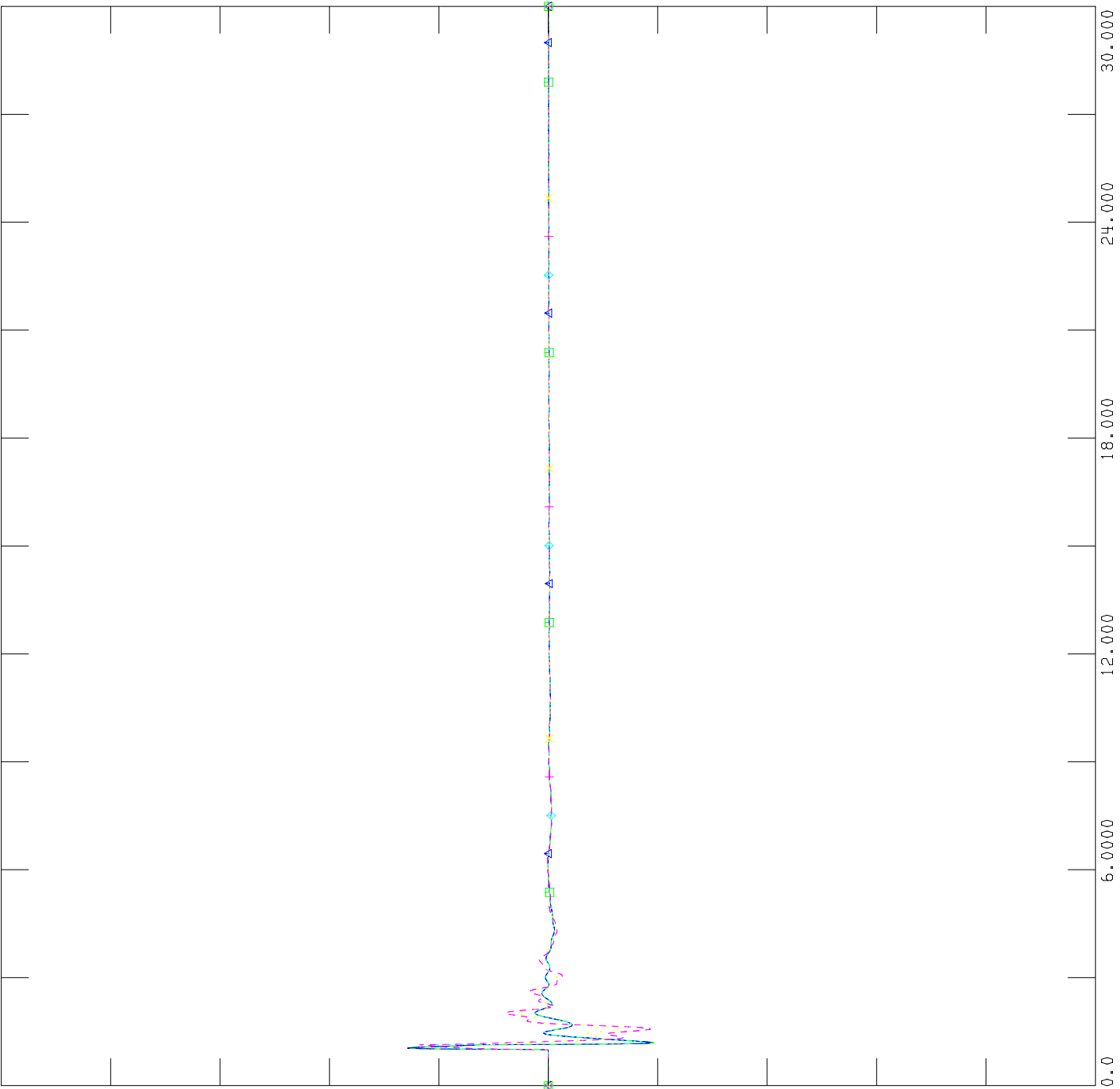
A-1-27



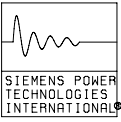
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_880L.out

MON, NOV 15 2010 10:41
BUS FREQUENCY

0.00670	CHNL# 20: CFREQ	270 ESUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 19: CFREQ	680 CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 18: CFREQ	271 CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 17: CFREQ	269 CBURDETT7	138.00]]	←-----△	-0.0067
0.00670	CHNL# 16: CFREQ	31 CFINCAST7	138.00]]	▣-----▣	-0.0067



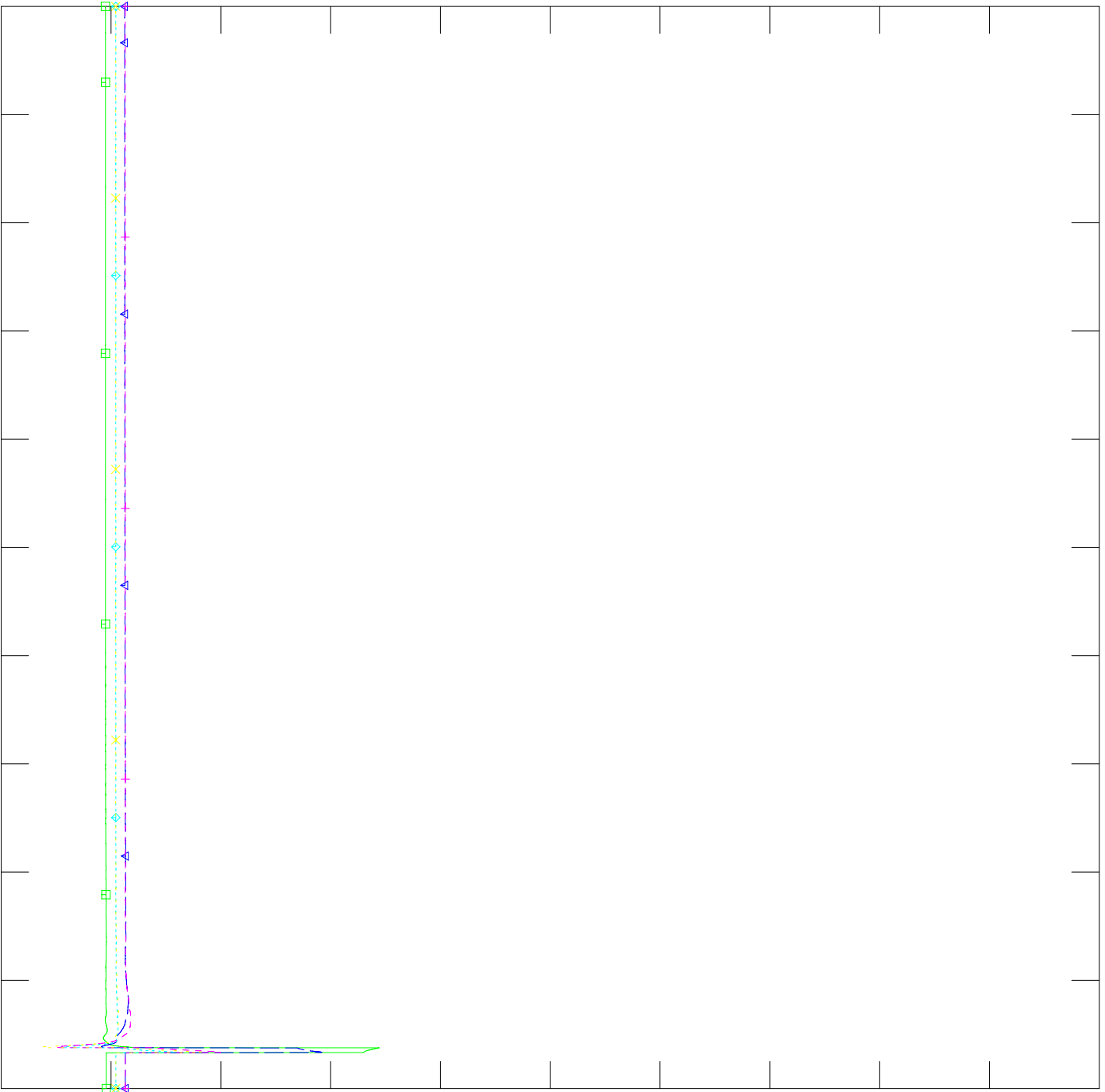
A-1-28



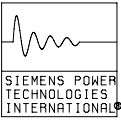
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_880L.out

MON, NOV 15 2010 10:42
BUS VOLTAGE

1.1500	CHNL# 25: EVOLT	92046 EMCBRIDE6	0.5750	0.0
1.1500	CHNL# 24: EVOLT	11002 EGARDNG2	0.5750	0.0
1.1500	CHNL# 23: EVOLT	4740 EARD_07	0.5750	0.0
1.1500	CHNL# 22: EVOLT	2389 CHILLRIDG	0.5750	0.0
1.1500	CHNL# 21: EVOLT	100018 CPURPLESP	0.5750	0.0



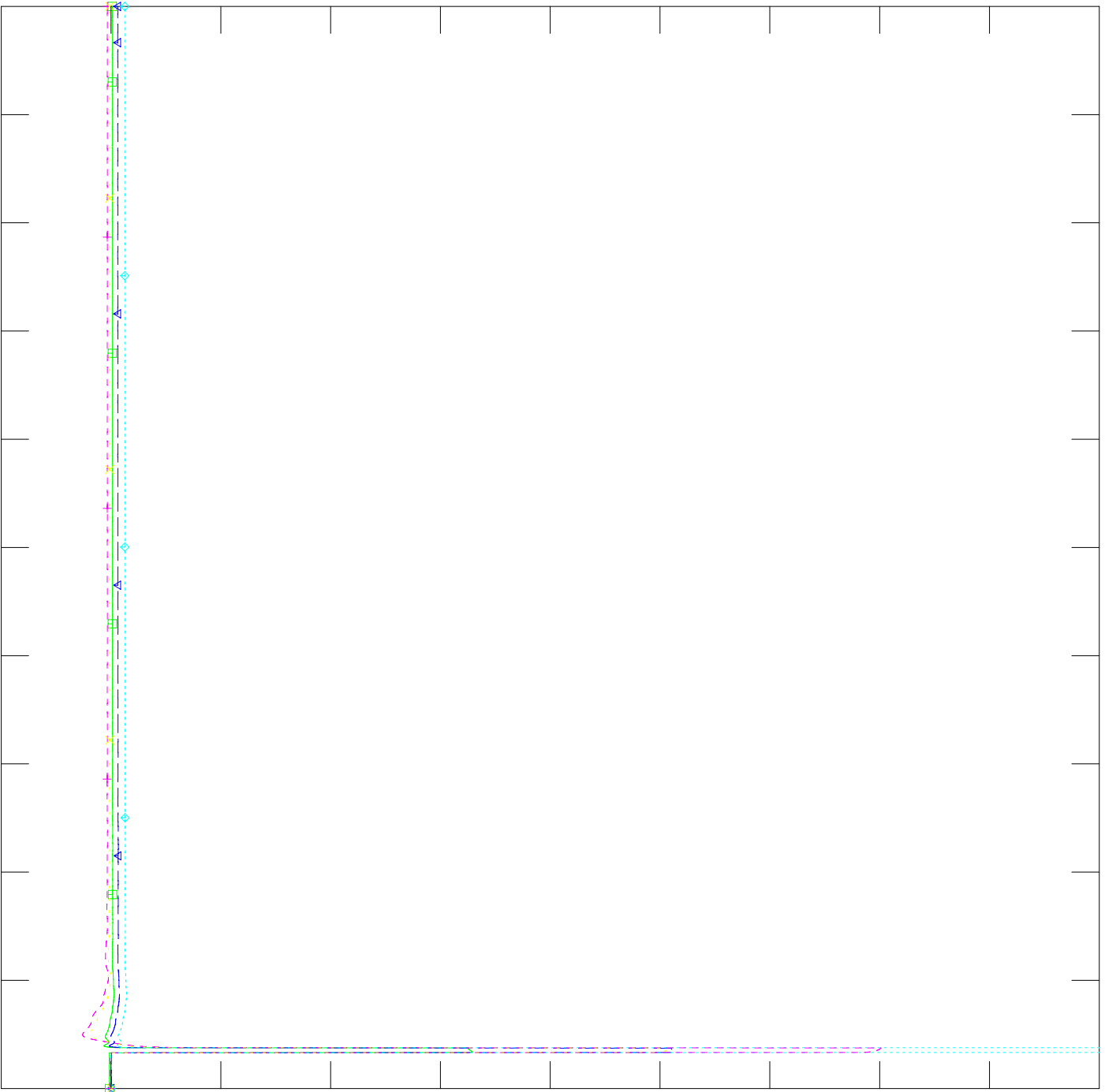
A-1-29



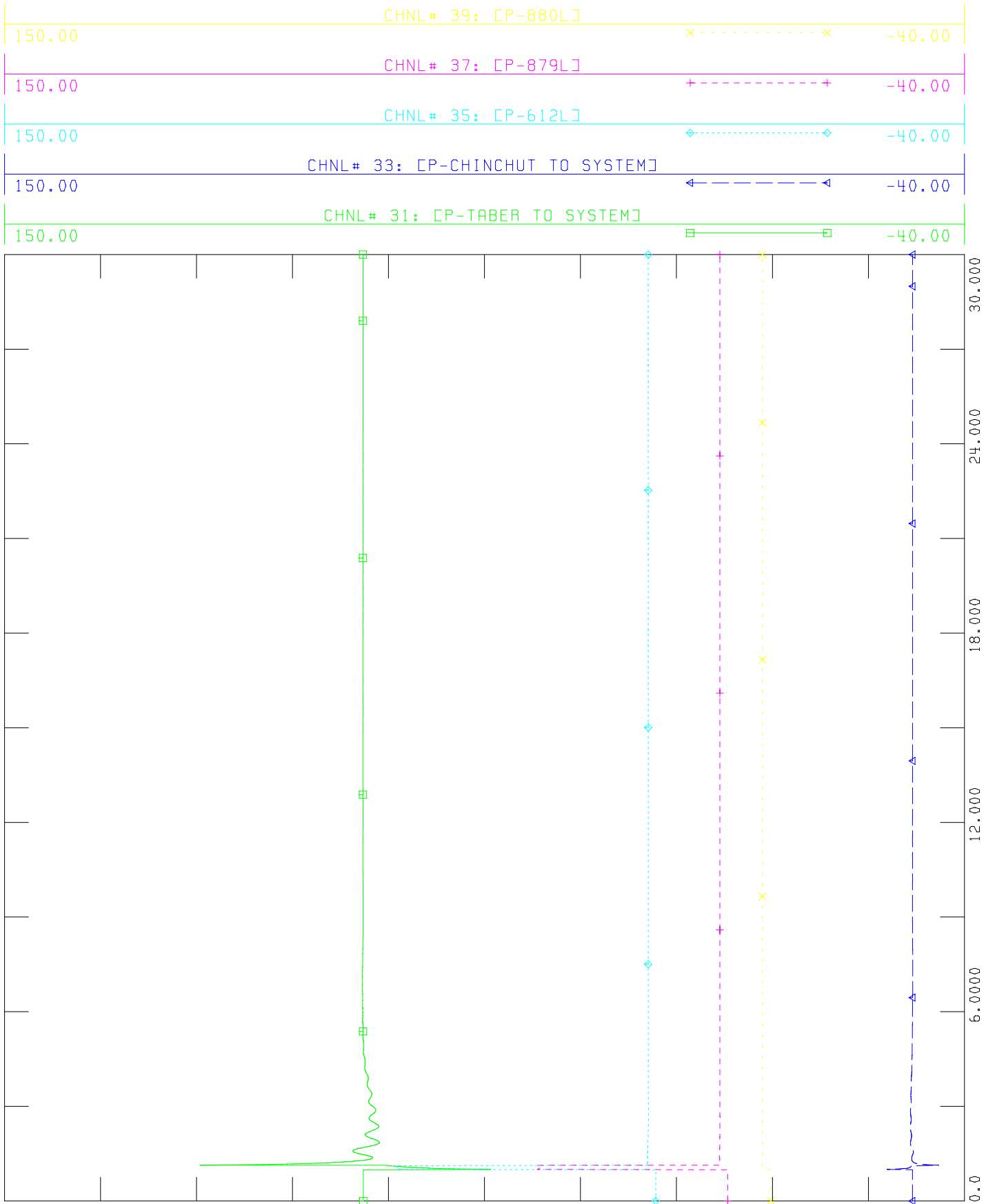
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_880L.out

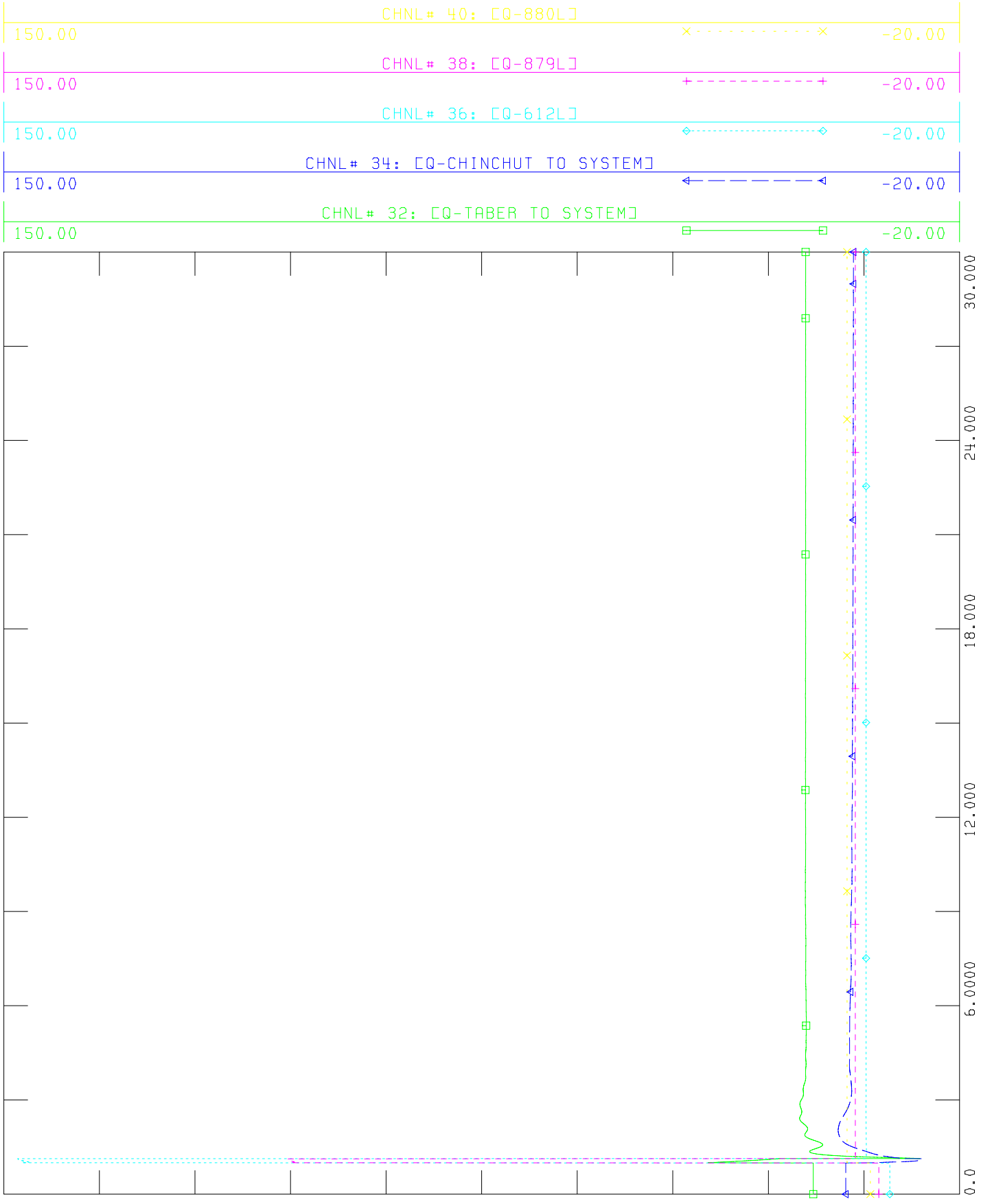
MON, NOV 15 2010 10:43
BUS VOLTAGE

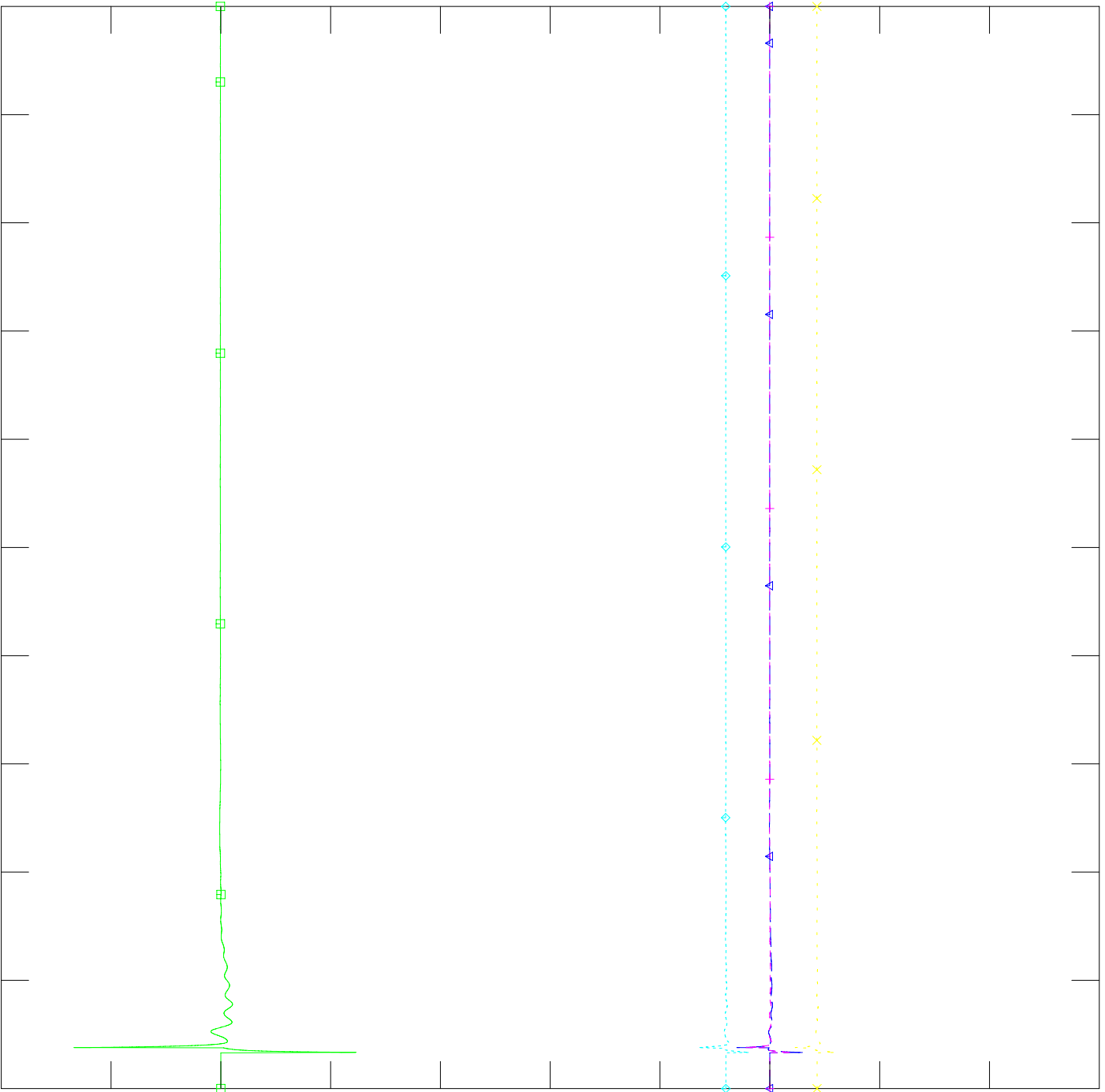
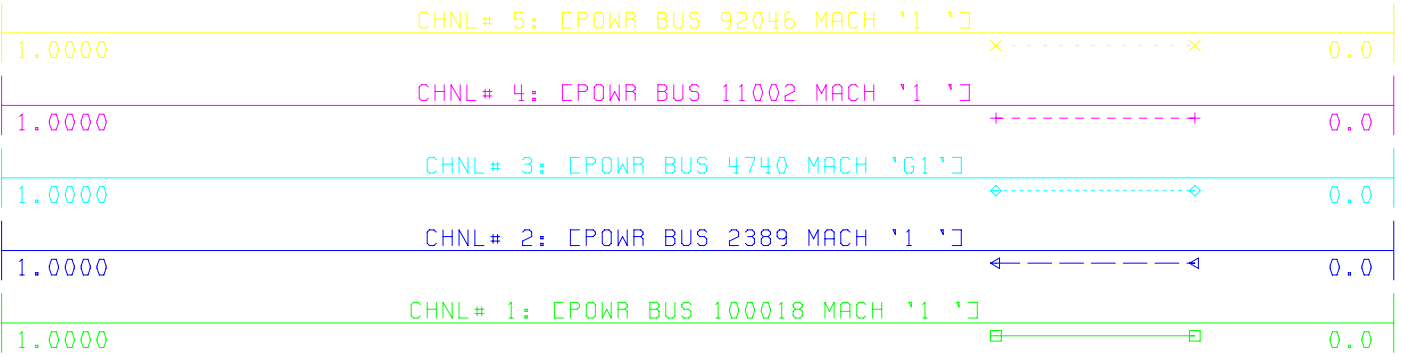
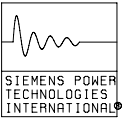
1.1500	CHNL# 30: EVOLT	270 ESUFFIEL7	138.00	0.0
1.1500	CHNL# 29: EVOLT	680 CMEDICIN7	138.00	0.0
1.1500	CHNL# 28: EVOLT	271 EBULLS H7	138.00	0.0
1.1500	CHNL# 27: EVOLT	269 CBURDETT7	138.00	0.0
1.1500	CHNL# 26: EVOLT	31 CFINCAST7	138.00	0.0

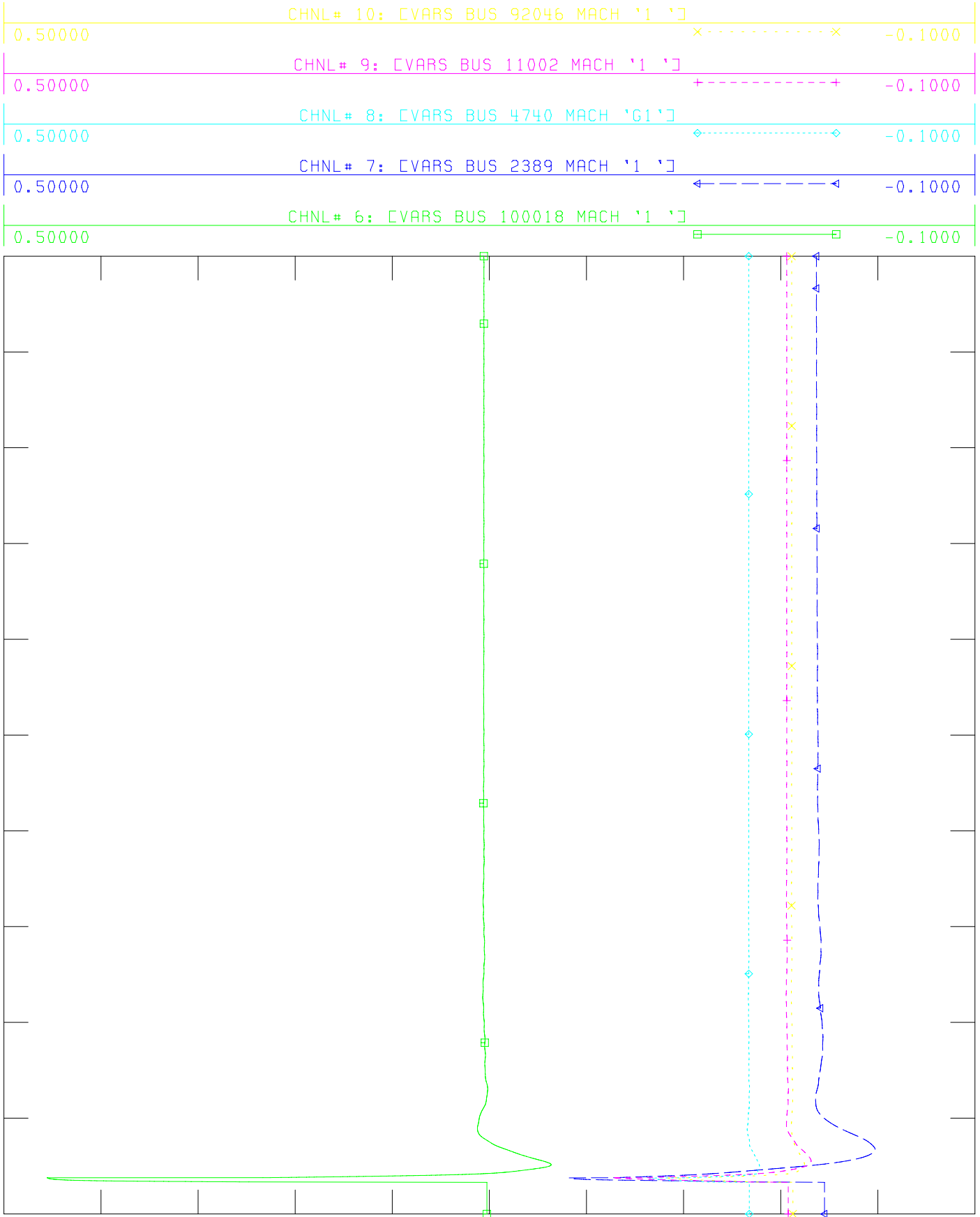
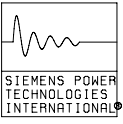


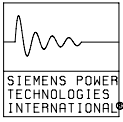
A-1-30







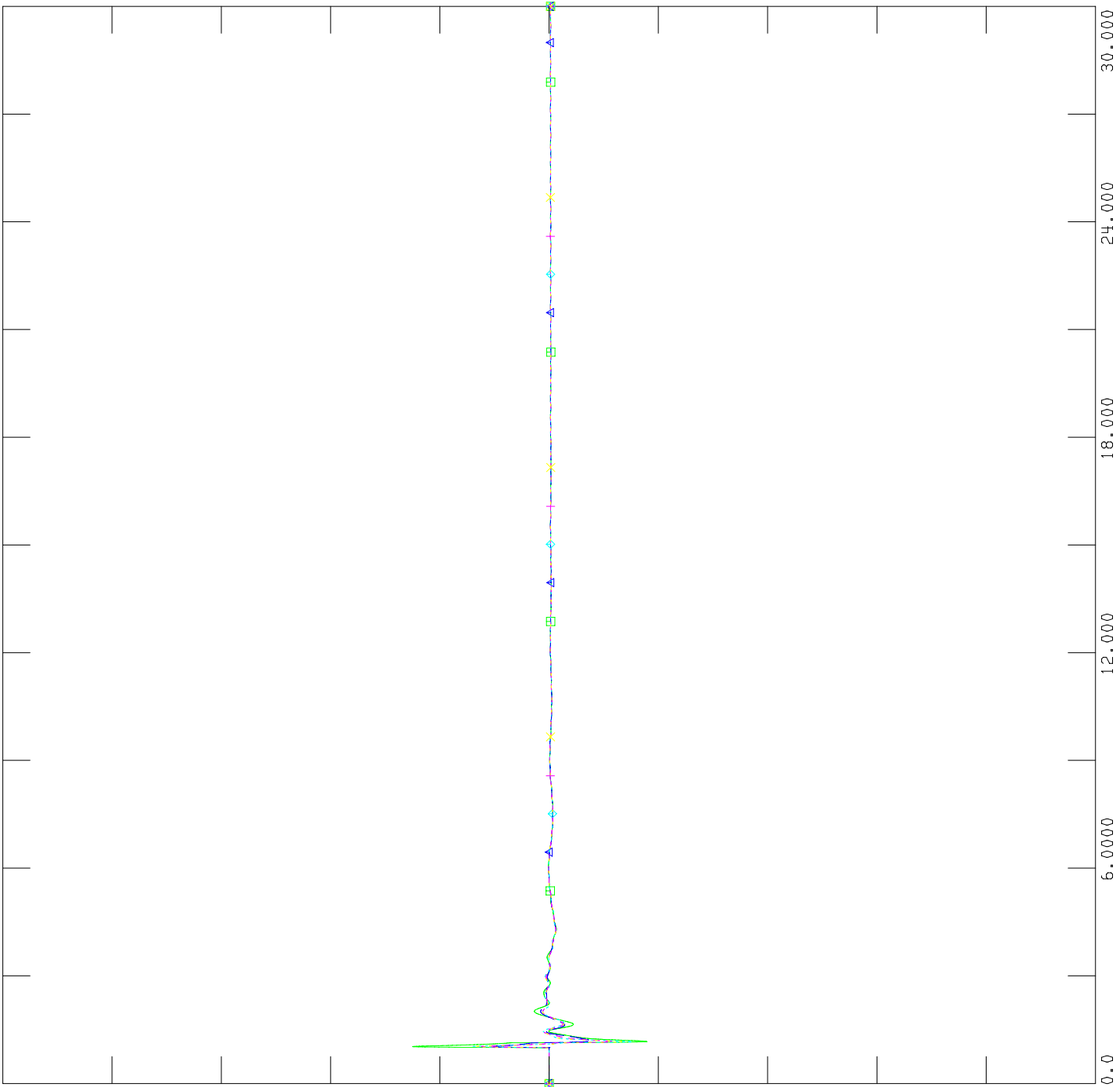




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_892L.out

MON, NOV 15 2010 10:48
BUS FREQUENCY

0.00670	CHNL# 15: CFREQ 92046 EMCBRIDE6 0.5750]]	x-----x	-0.0067
0.00670	CHNL# 14: CFREQ 11002 CGARDNG2 0.5750]]	+-----+	-0.0067
0.00670	CHNL# 13: CFREQ 4740 CARD_07 0.5750]]	◇-----◇	-0.0067
0.00670	CHNL# 12: CFREQ 2389 CHILLRIDG 0.5750]]	←-----←	-0.0067
0.00670	CHNL# 11: CFREQ 100018 CPURPLESP 0.5750]]	▣-----▣	-0.0067



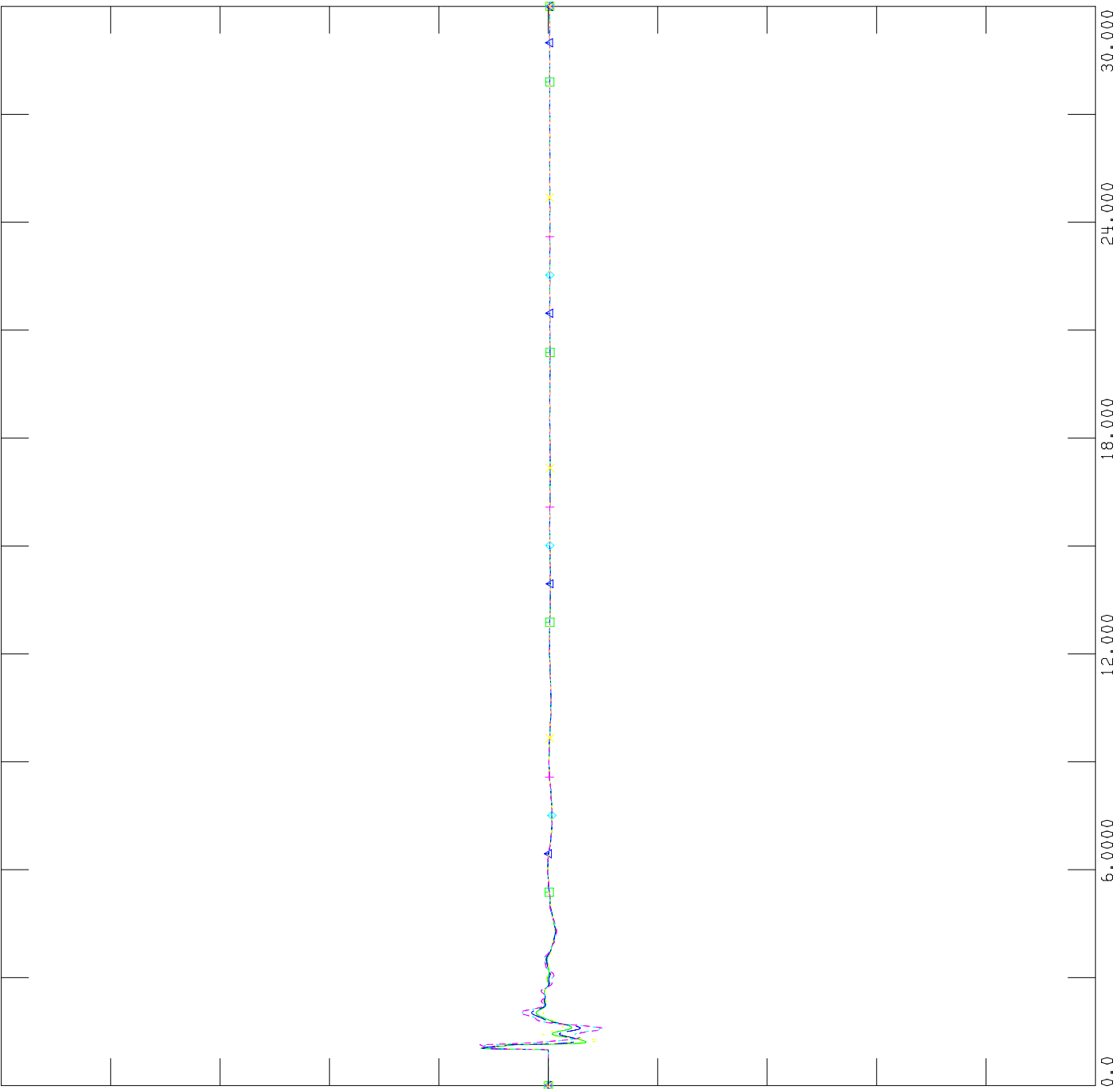
A-1-35



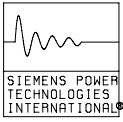
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_892L.out

MON, NOV 15 2010 10:48
BUS FREQUENCY

0.00670	CHNL# 20: CFREQ	270	ESUFFIEL7	138.00	x-----x	-0.0067
0.00670	CHNL# 19: CFREQ	680	EMEDICIN7	138.00	+-----+	-0.0067
0.00670	CHNL# 18: CFREQ	271	EBULLS H7	138.00	◇-----◇	-0.0067
0.00670	CHNL# 17: CFREQ	269	CBURDETT7	138.00	←-----△	-0.0067
0.00670	CHNL# 16: CFREQ	31	CFINCAST7	138.00	▣-----▣	-0.0067



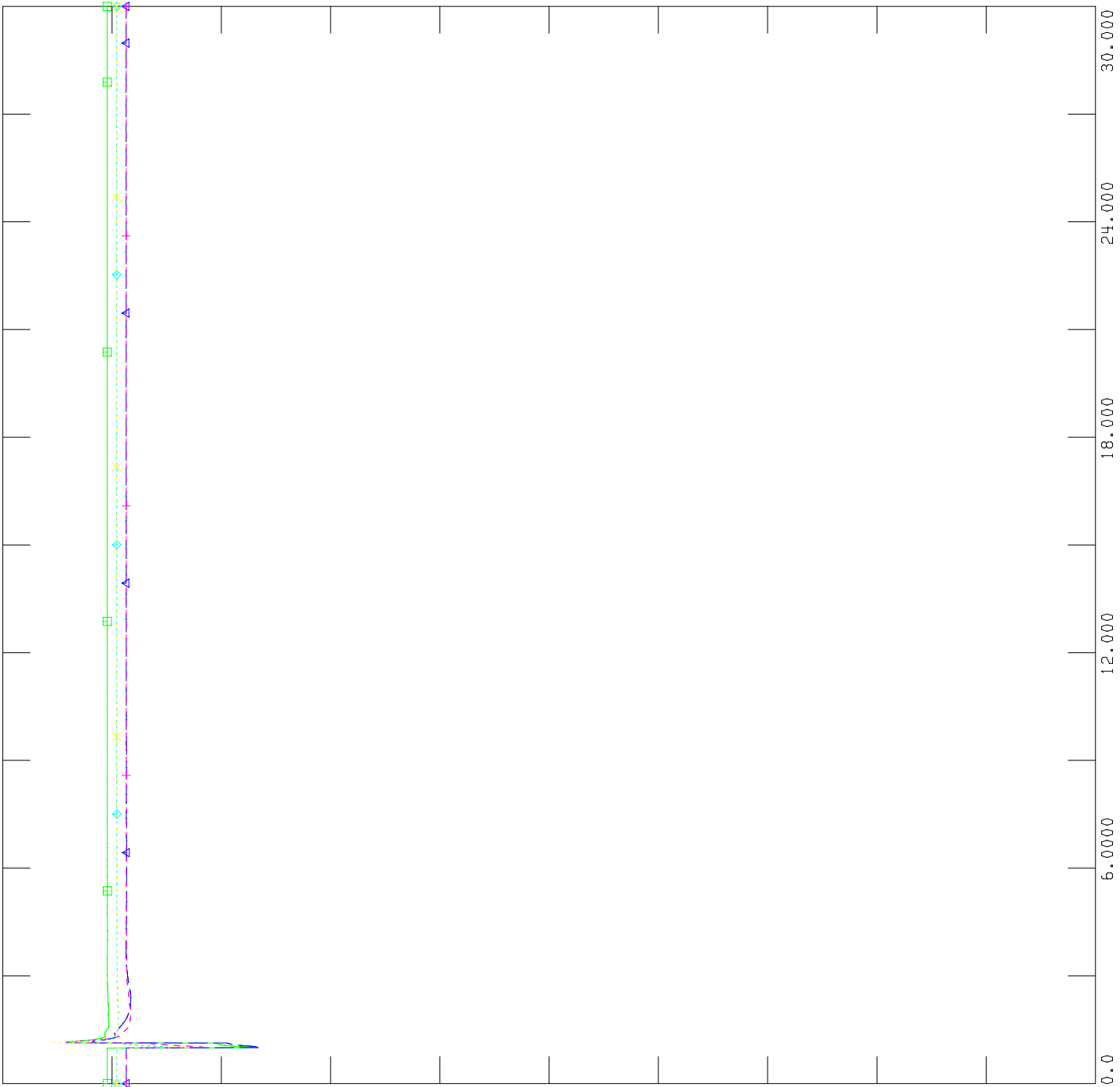
A-1-36



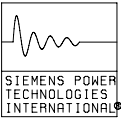
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_892L.out

MON, NOV 15 2010 10:49
BUS VOLTAGE

1.1500	CHNL# 25: EVOLT	92046 EMCBRIDE6	0.5750	0.0
1.1500	CHNL# 24: EVOLT	11002 EGARDNG2	0.5750	0.0
1.1500	CHNL# 23: EVOLT	4740 EARD_07	0.5750	0.0
1.1500	CHNL# 22: EVOLT	2389 CHILLRIDG	0.5750	0.0
1.1500	CHNL# 21: EVOLT	100018 CPURPLESP	0.5750	0.0



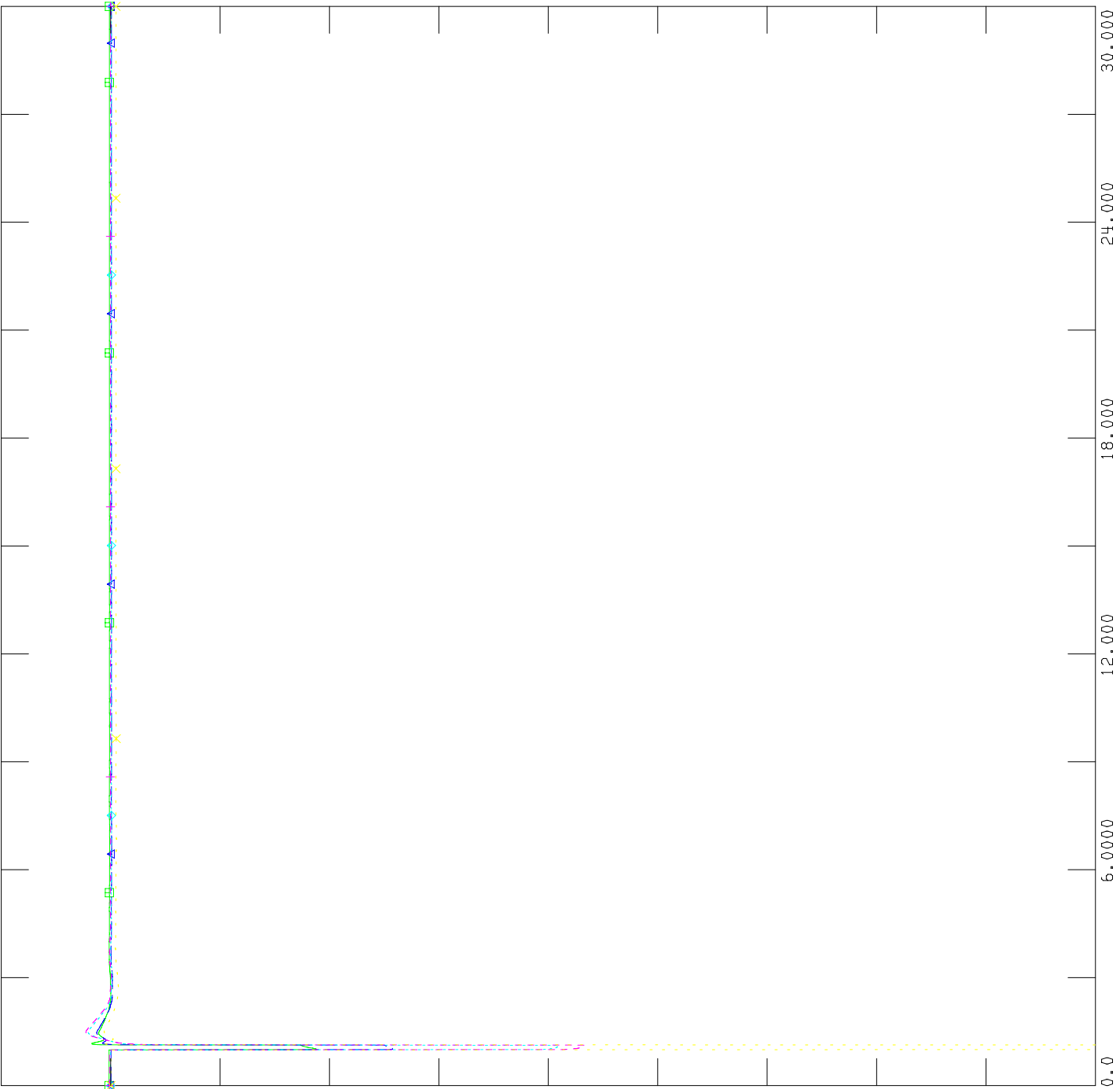
A-1-37



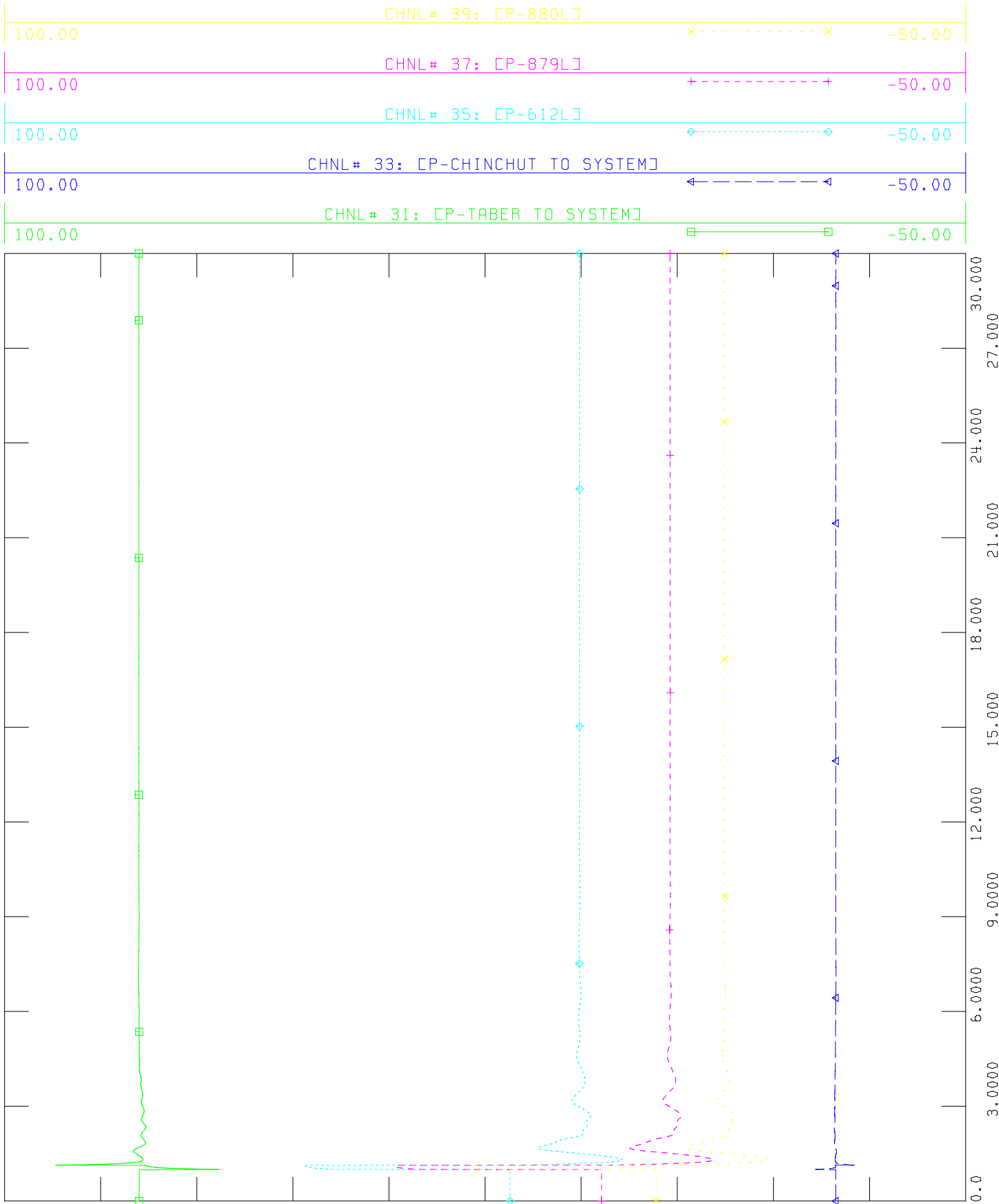
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_EXISTING_892L.out

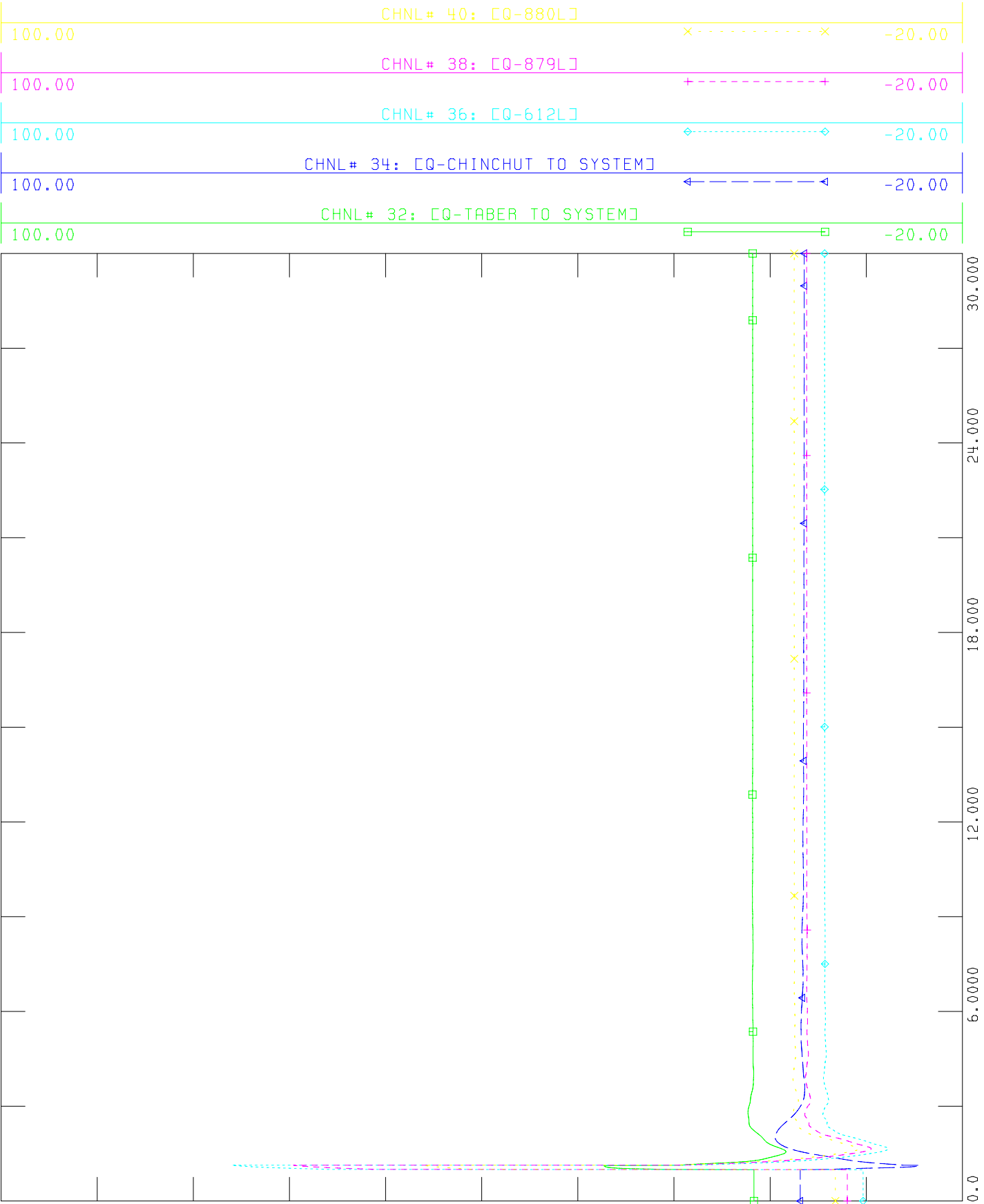
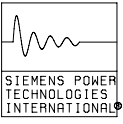
MON, NOV 15 2010 10:50
BUS VOLTAGE

1.1500	CHNL# 30: EVOLT	270 ESUFFIEL7	138.00	0.0
1.1500	CHNL# 29: EVOLT	680 CMEDICIN7	138.00	0.0
1.1500	CHNL# 28: EVOLT	271 EBULLS H7	138.00	0.0
1.1500	CHNL# 27: EVOLT	269 CBURDETT7	138.00	0.0
1.1500	CHNL# 26: EVOLT	31 CFINCAST7	138.00	0.0



A-1-38





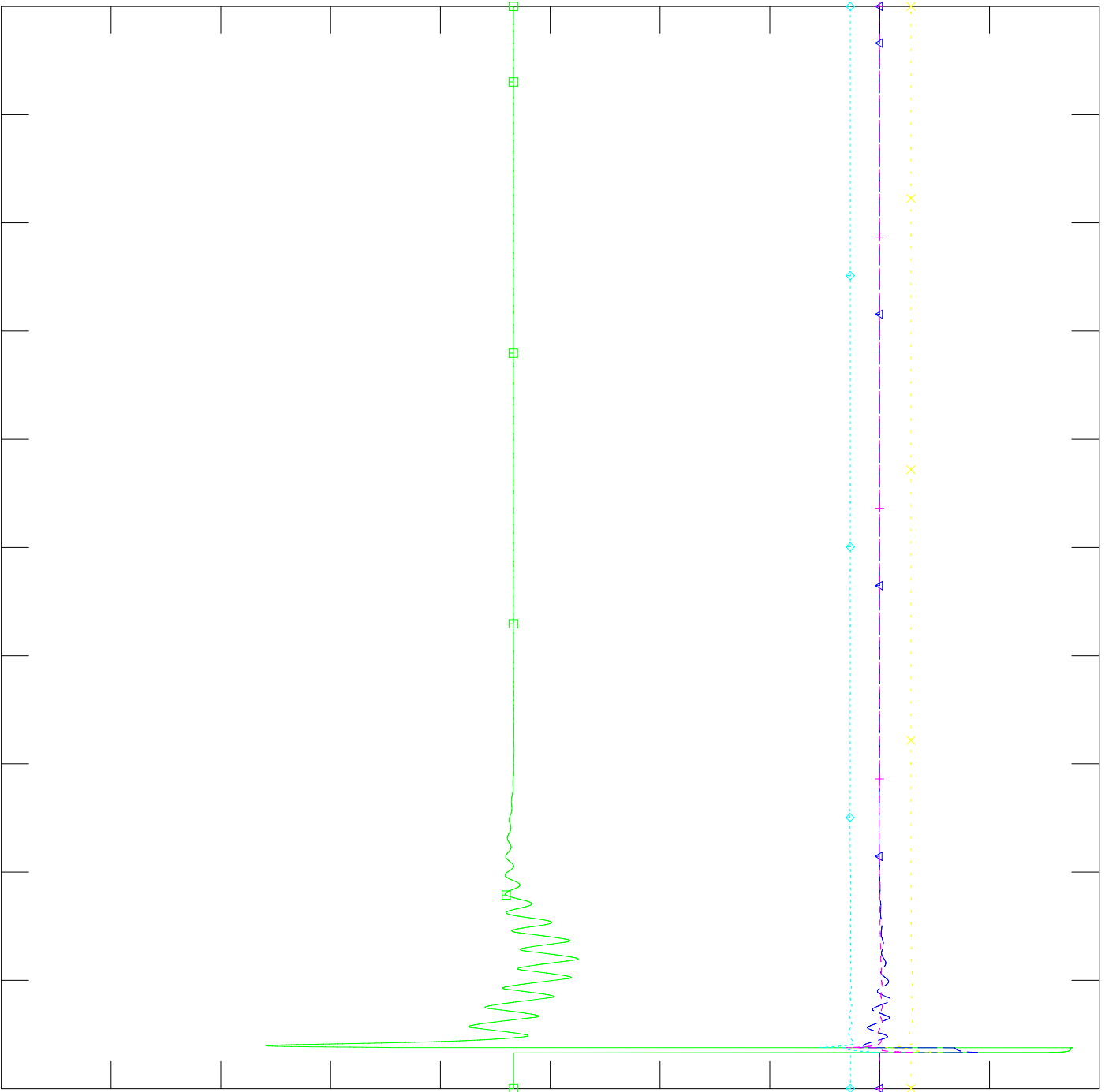
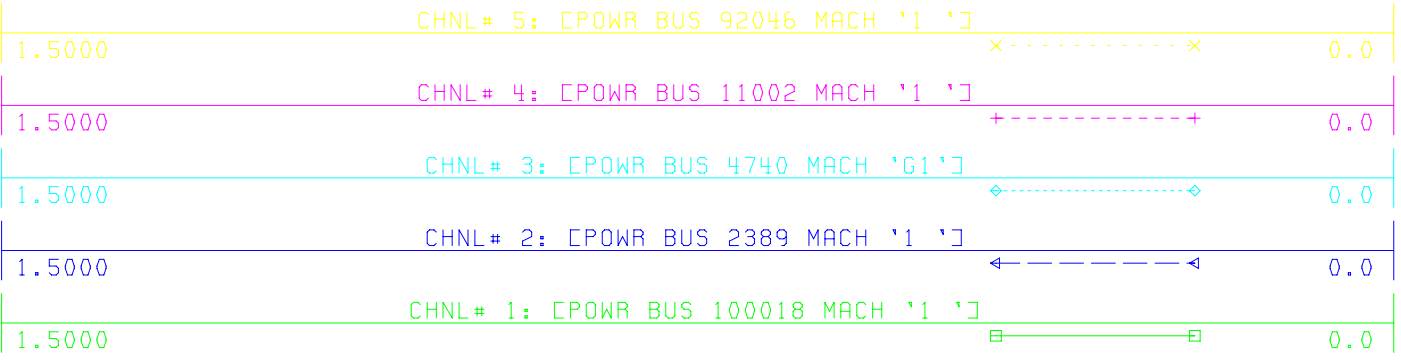
Attachment A-2: Pre-connection Transient Stability Analysis

Results -- Scenario 2

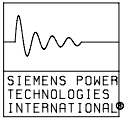


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_612L.out

MON, NOV 15 2010 11:01
PELEC

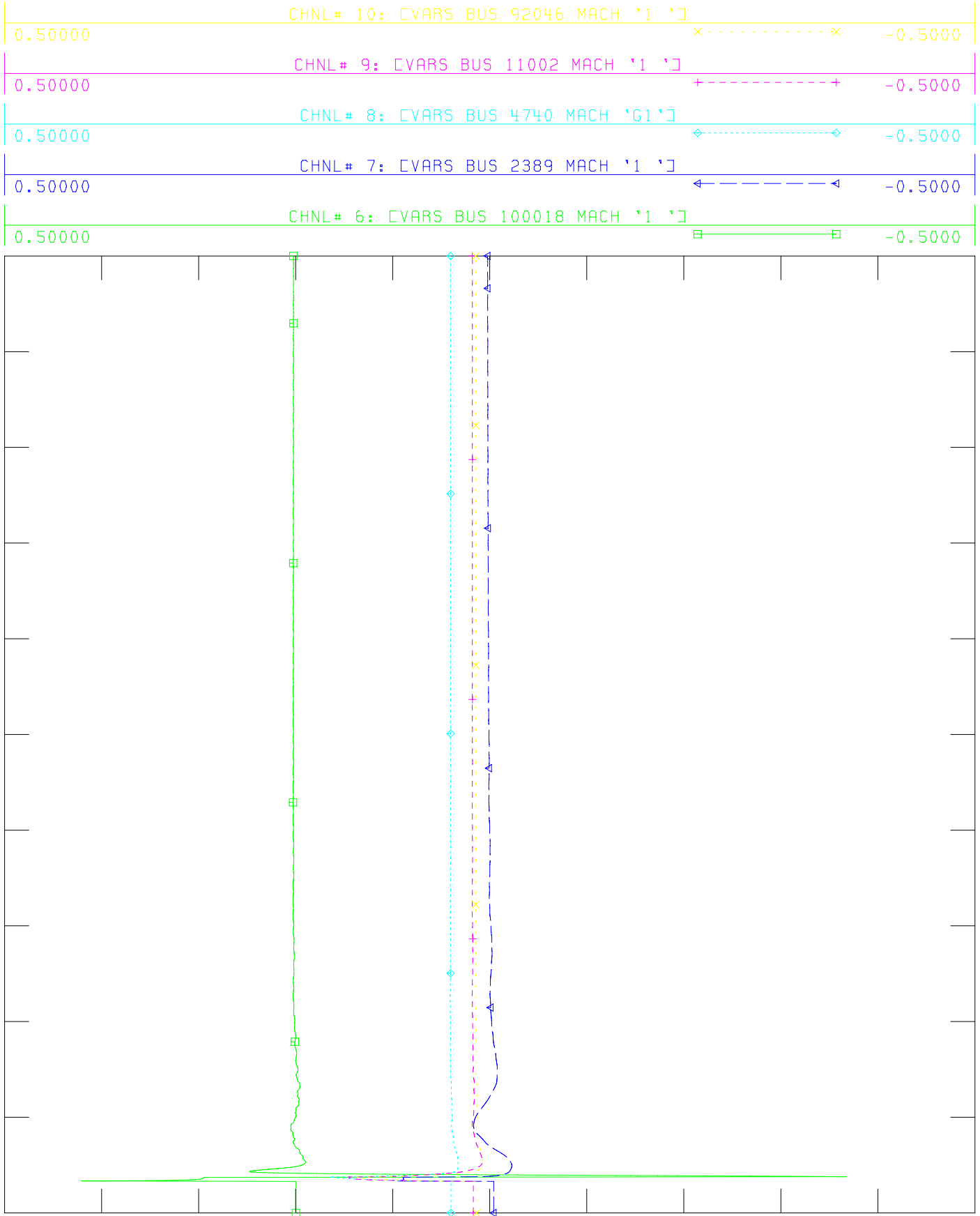


A-2-1



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_612L.out

MON, NOV 15 2010 11:02
OELEC



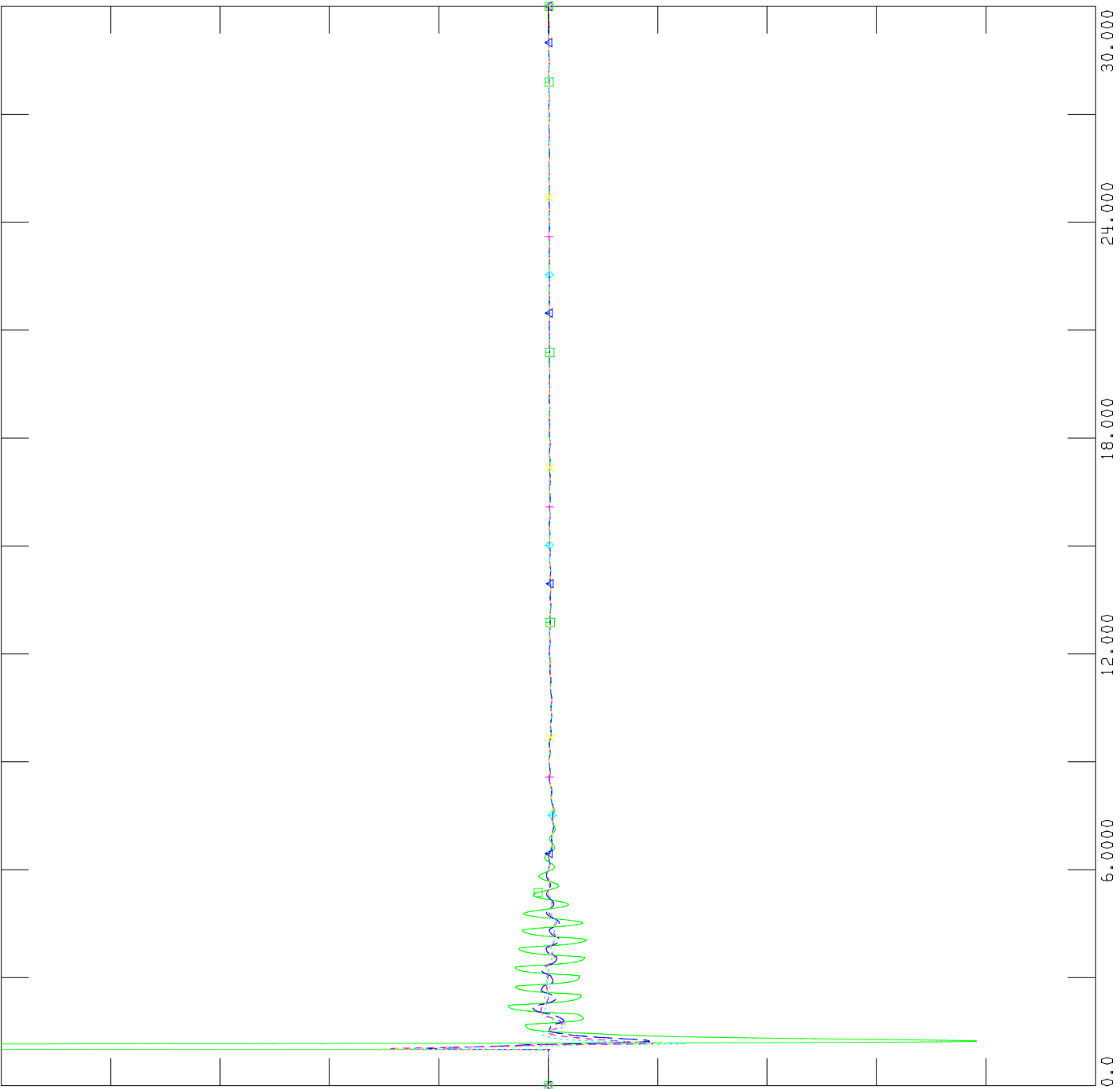
A-2-2



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_612L.out

MON, NOV 15 2010 11:02
BUS FREQUENCY

Channel	CFREQ	Channel Name	Value
CHNL# 15	92046	EMCBRIDE6	0.5750
CHNL# 14	11002	EGARDNG2	0.5750
CHNL# 13	4740	EARD_07	0.5750
CHNL# 12	2389	CHILLRIDG	0.5750
CHNL# 11	100018	CPURPLESP	0.5750

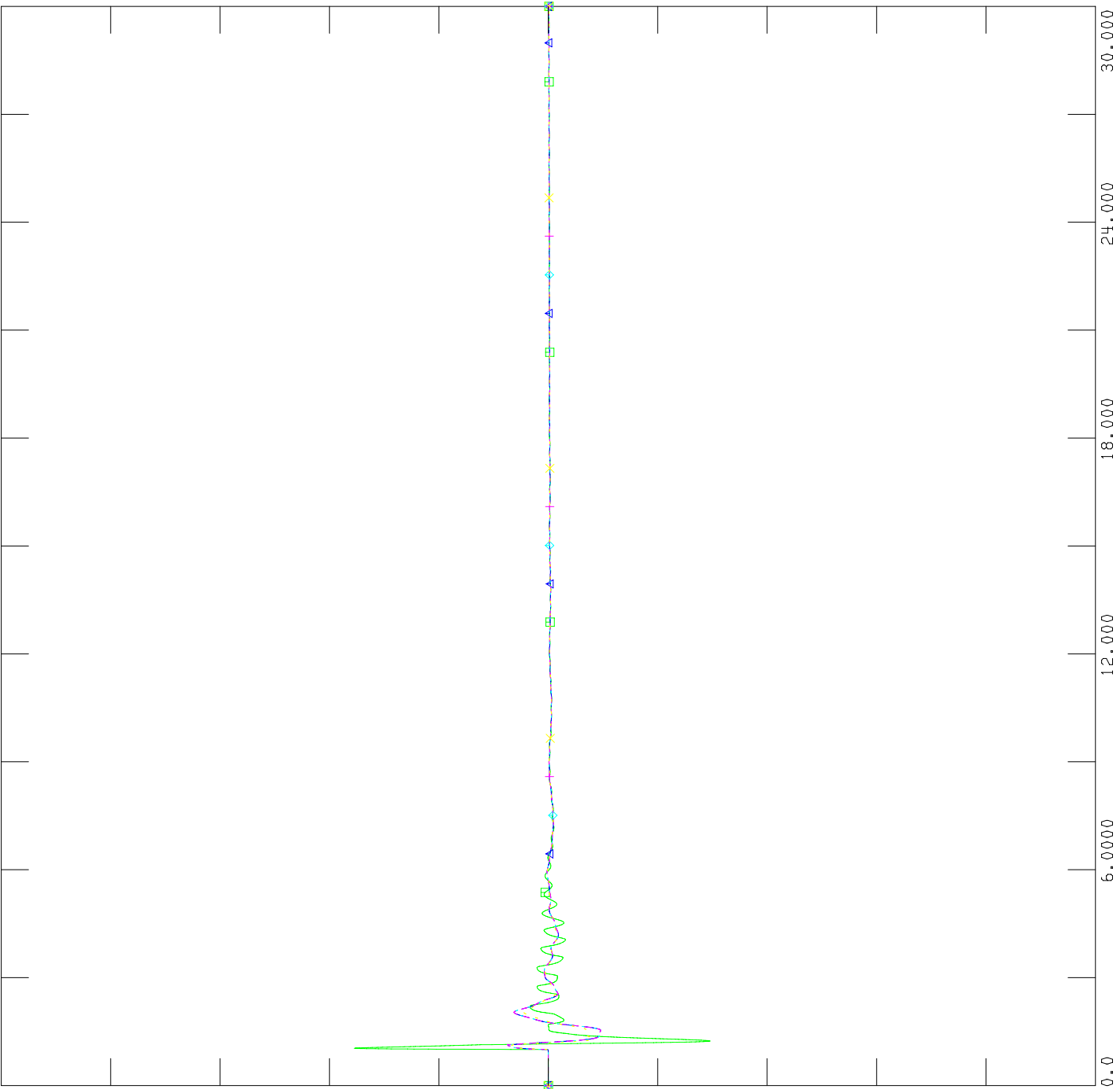




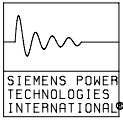
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_612L.out

MON, NOV 15 2010 11:03
 BUS FREQUENCY

0.00670	CHNL# 20: CFREQ	270	CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 19: CFREQ	680	CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 18: CFREQ	271	CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 17: CFREQ	269	CBURDETT7	138.00]]	←-----→	-0.0067
0.00670	CHNL# 16: CFREQ	31	CFINCAST7	138.00]]	□-----□	-0.0067



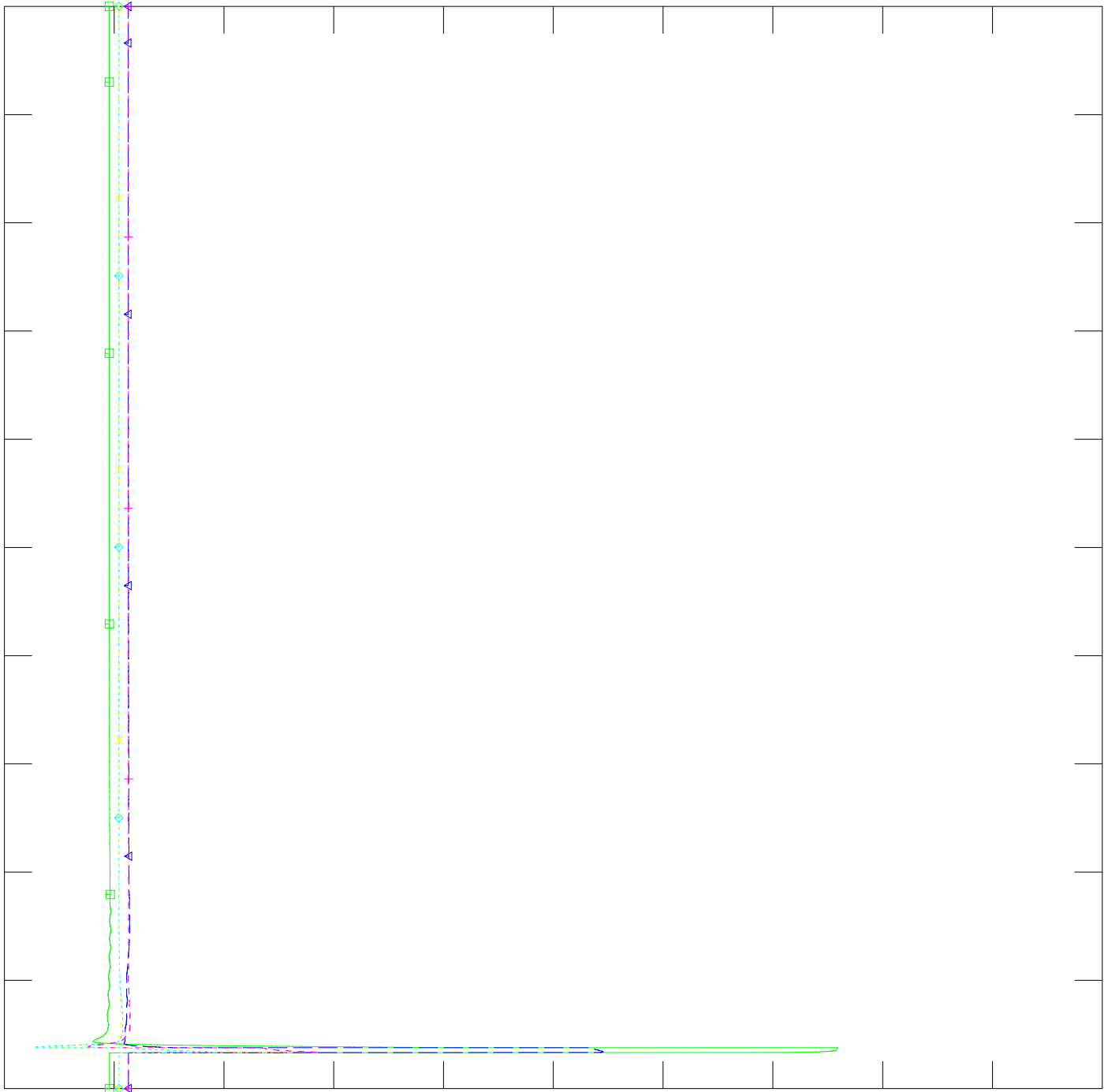
A-2-4



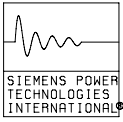
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_612L.out

MON, NOV 15 2010 11:04
BUS VOLTAGE

Channel	Label	Value	Marker
CHNL# 25	EVOLT 92046 EMCBRIDE6	0.5750	x
CHNL# 24	EVOLT 11002 EGARDNG2	0.5750	+
CHNL# 23	EVOLT 4740 EARD_07	0.5750	◇
CHNL# 22	EVOLT 2389 CHILLRIDG	0.5750	←
CHNL# 21	EVOLT 100018 CPURPLESP	0.5750	□



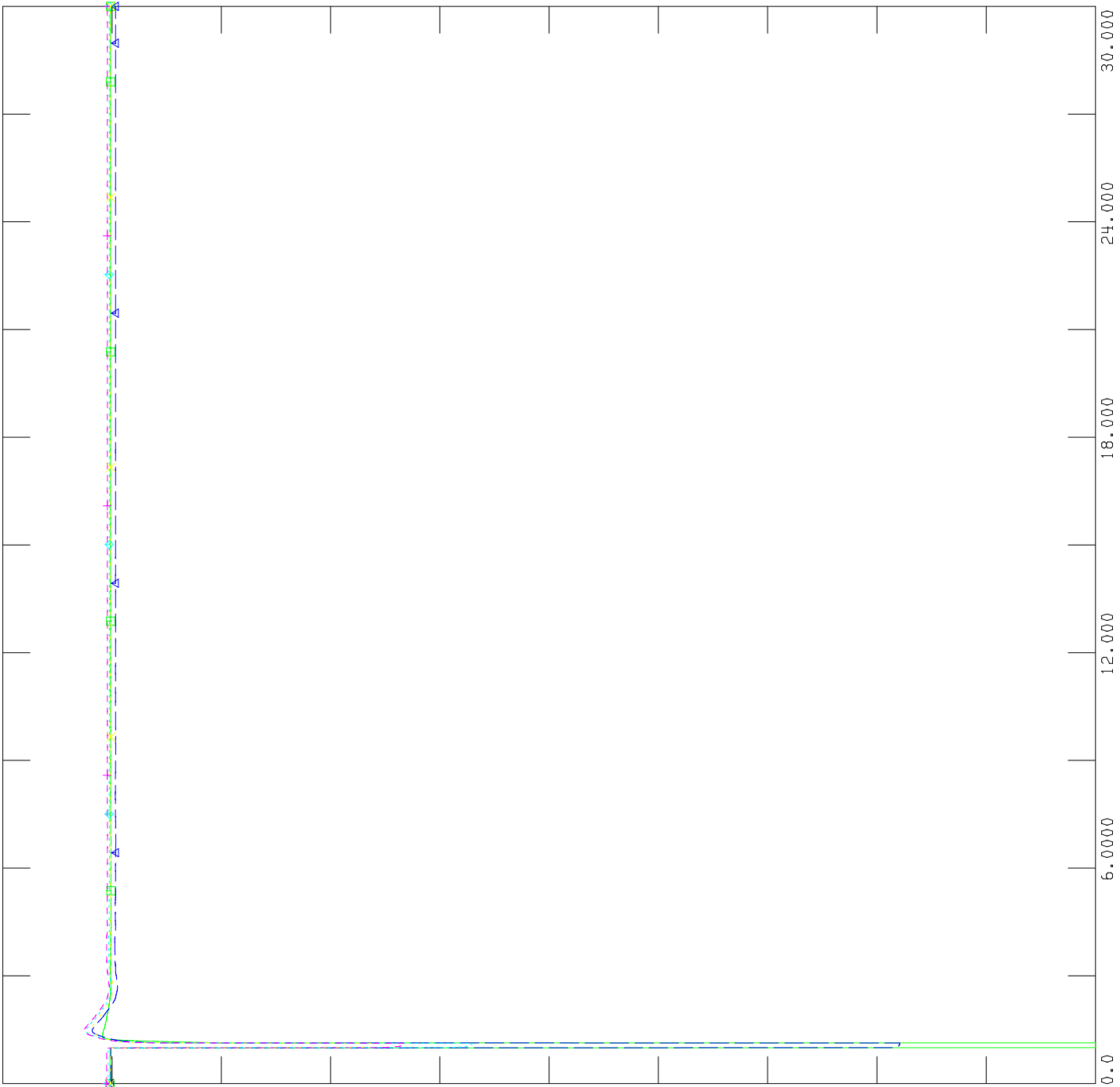
A-2-5



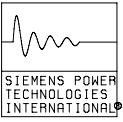
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_612L.out

MON, NOV 15 2010 11:06
BUS VOLTAGE

Channel	Label	Value	Marker
CHNL# 30: EVOLT	270 ESUFFIEL7	138.00	x
CHNL# 29: EVOLT	680 CMEDICIN7	138.00	+
CHNL# 28: EVOLT	271 EBULLS H7	138.00	◇
CHNL# 27: EVOLT	269 CBURDETT7	138.00	←
CHNL# 26: EVOLT	31 CFINCAST7	138.00	□

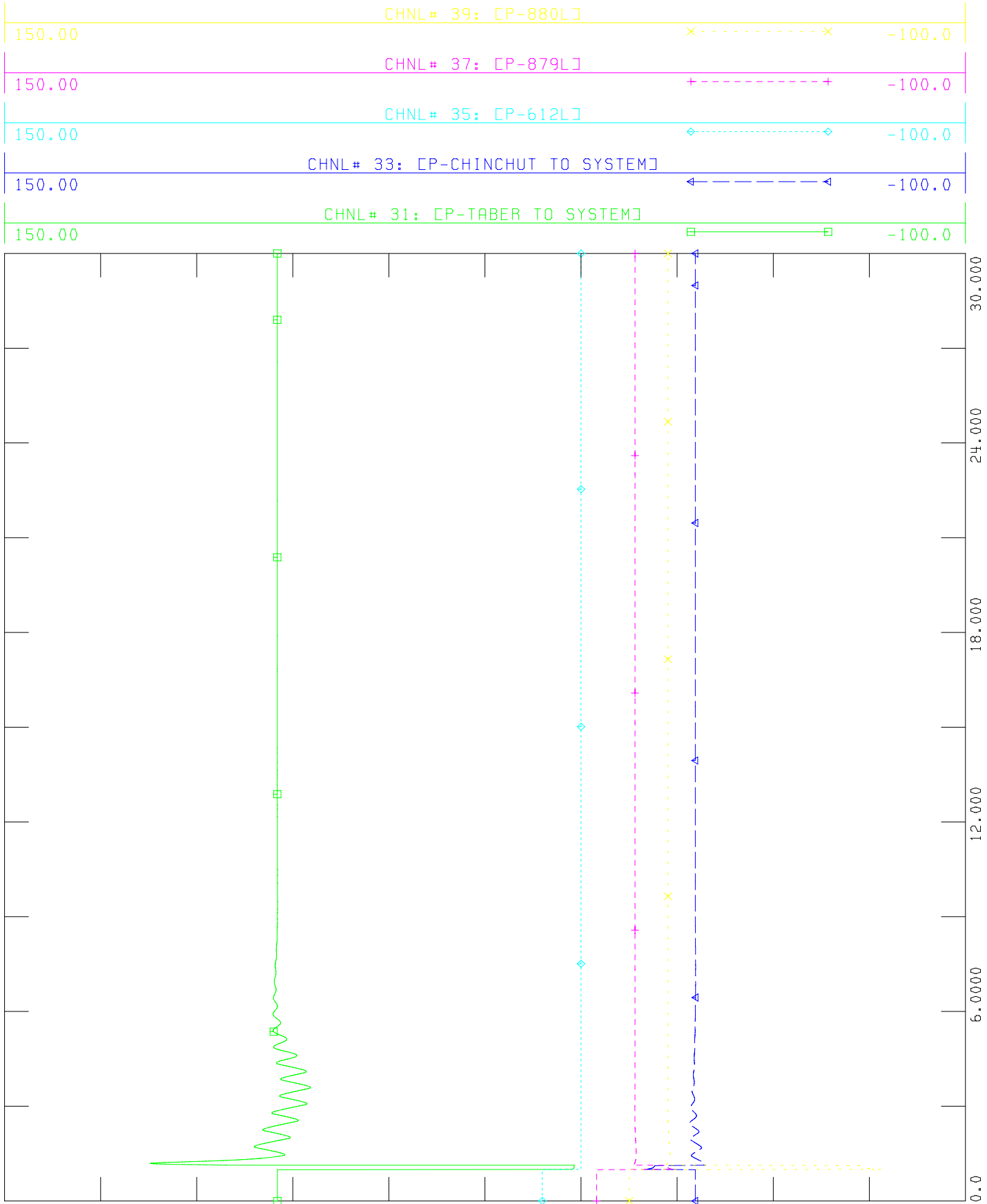


A-2-6

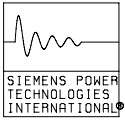


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_612L.out

MON, NOV 15 2010 11:07
BRANCH ACTIVE POWER

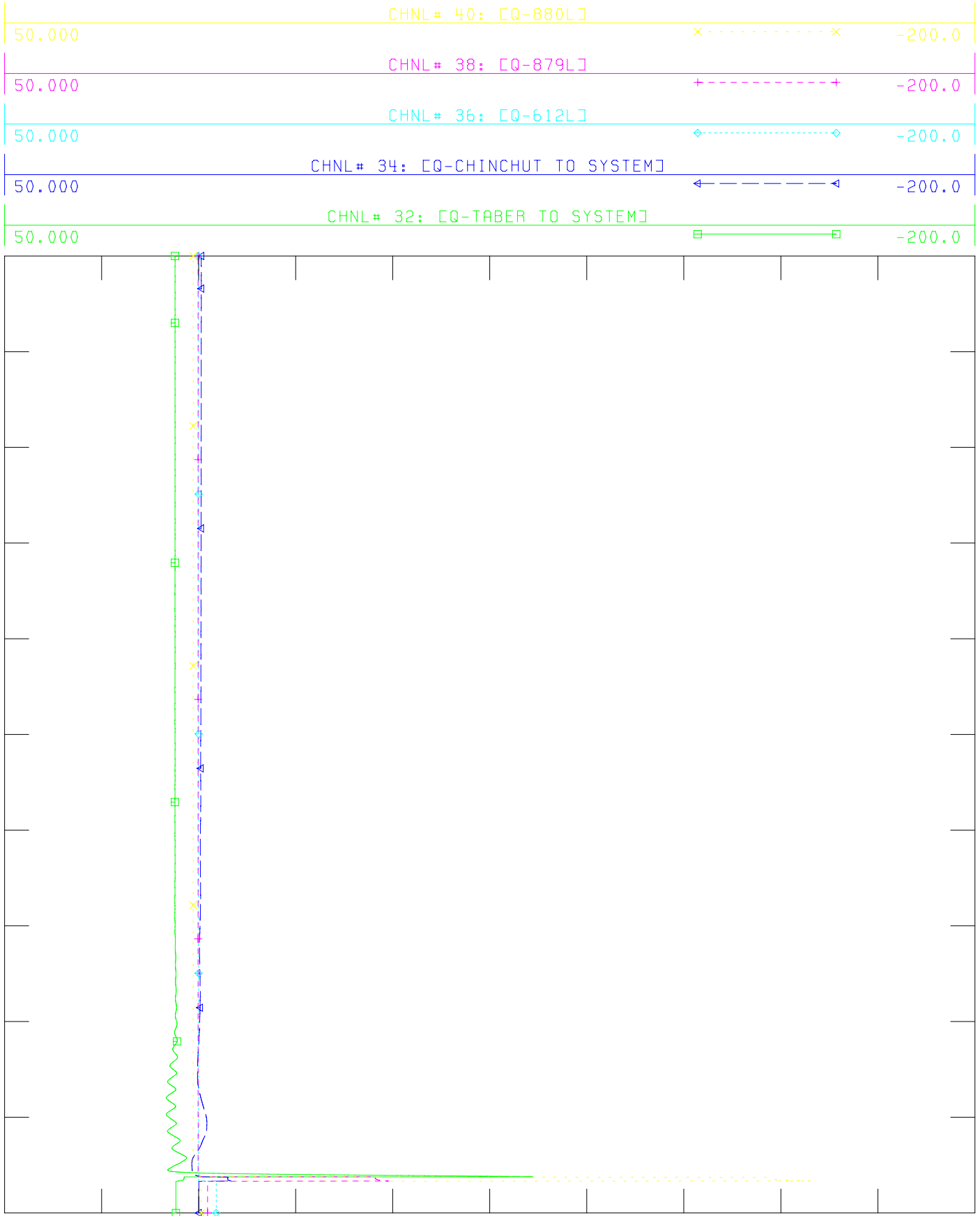


A-2-7

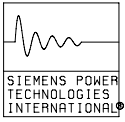


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_612L.out

MON, NOV 15 2010 11:08
BRANCH REACTIVE POWER

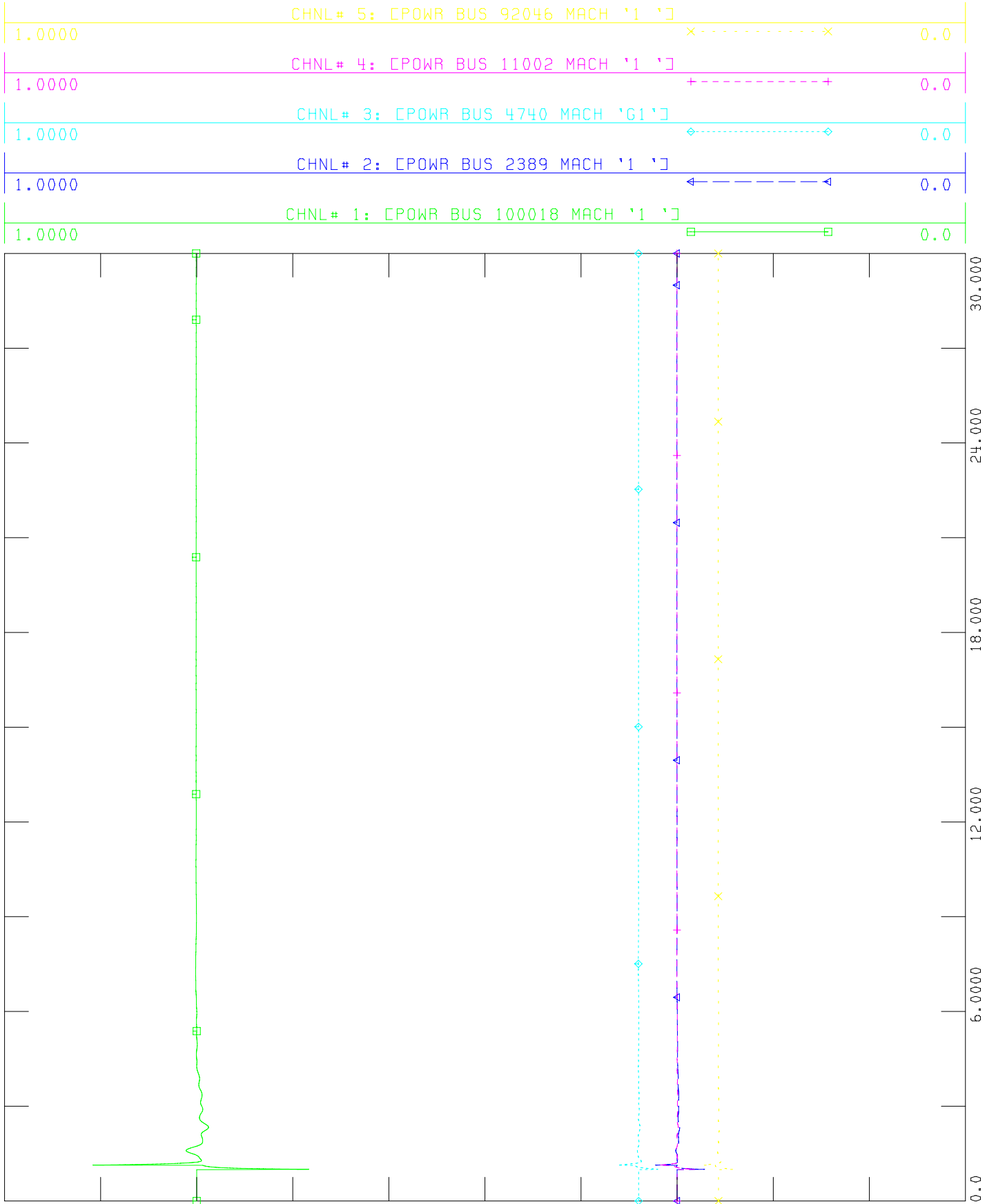


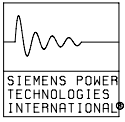
A-2-8



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_760L.out

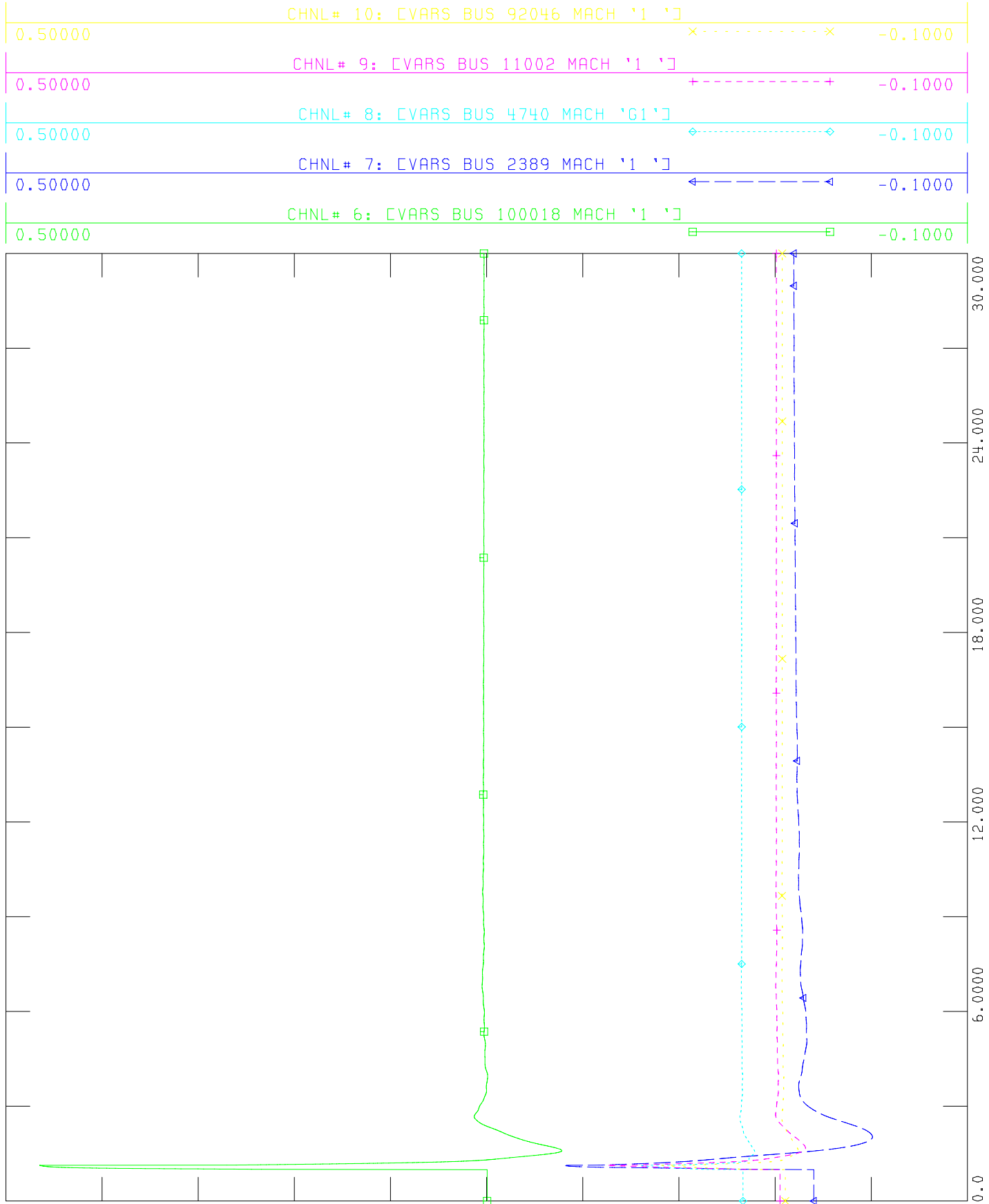
MON, NOV 15 2010 11:11
PELEC



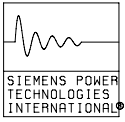


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_760L.out

MON, NOV 15 2010 11:12
QELEC



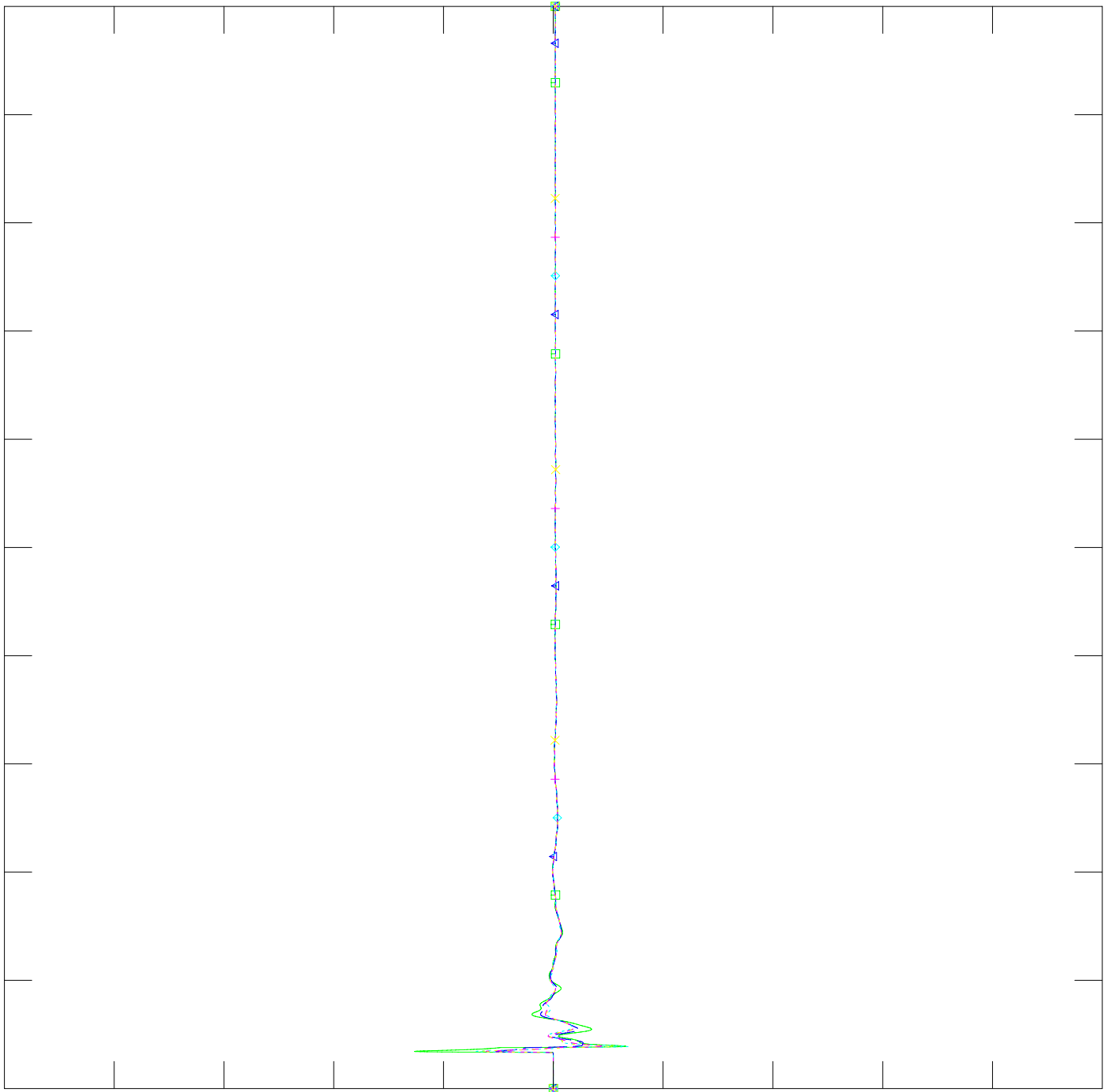
A-2-10



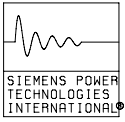
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_760L.out

MON, NOV 15 2010 11:13
BUS FREQUENCY

Channel	CFREQ	Device	Value
CHNL# 15	92046	EMCBRIDE6	0.5750
CHNL# 14	11002	EGARDNG2	0.5750
CHNL# 13	4740	EARD_07	0.5750
CHNL# 12	2389	CHILLRIDG	0.5750
CHNL# 11	100018	CPURPLESP	0.5750



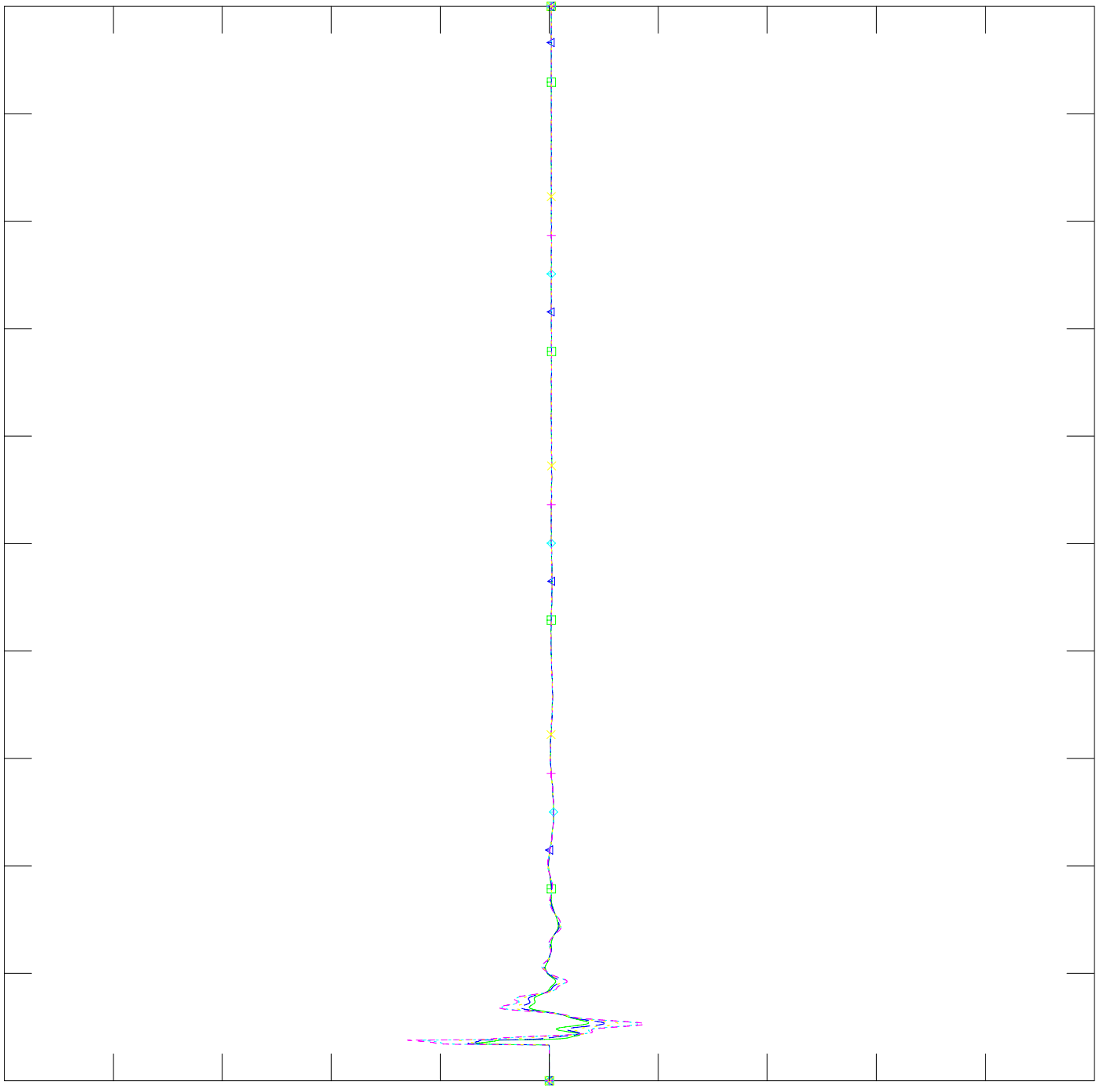
A-2-11



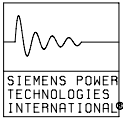
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_760L.out

MON, NOV 15 2010 11:13
BUS FREQUENCY

Channel	CFREQ	Location	Value
CHNL# 20	270	CSUFFIEL7	138.00
CHNL# 19	680	CMEDICIN7	138.00
CHNL# 18	271	CBULLS H7	138.00
CHNL# 17	269	CBURDETT7	138.00
CHNL# 16	31	CFINCAST7	138.00



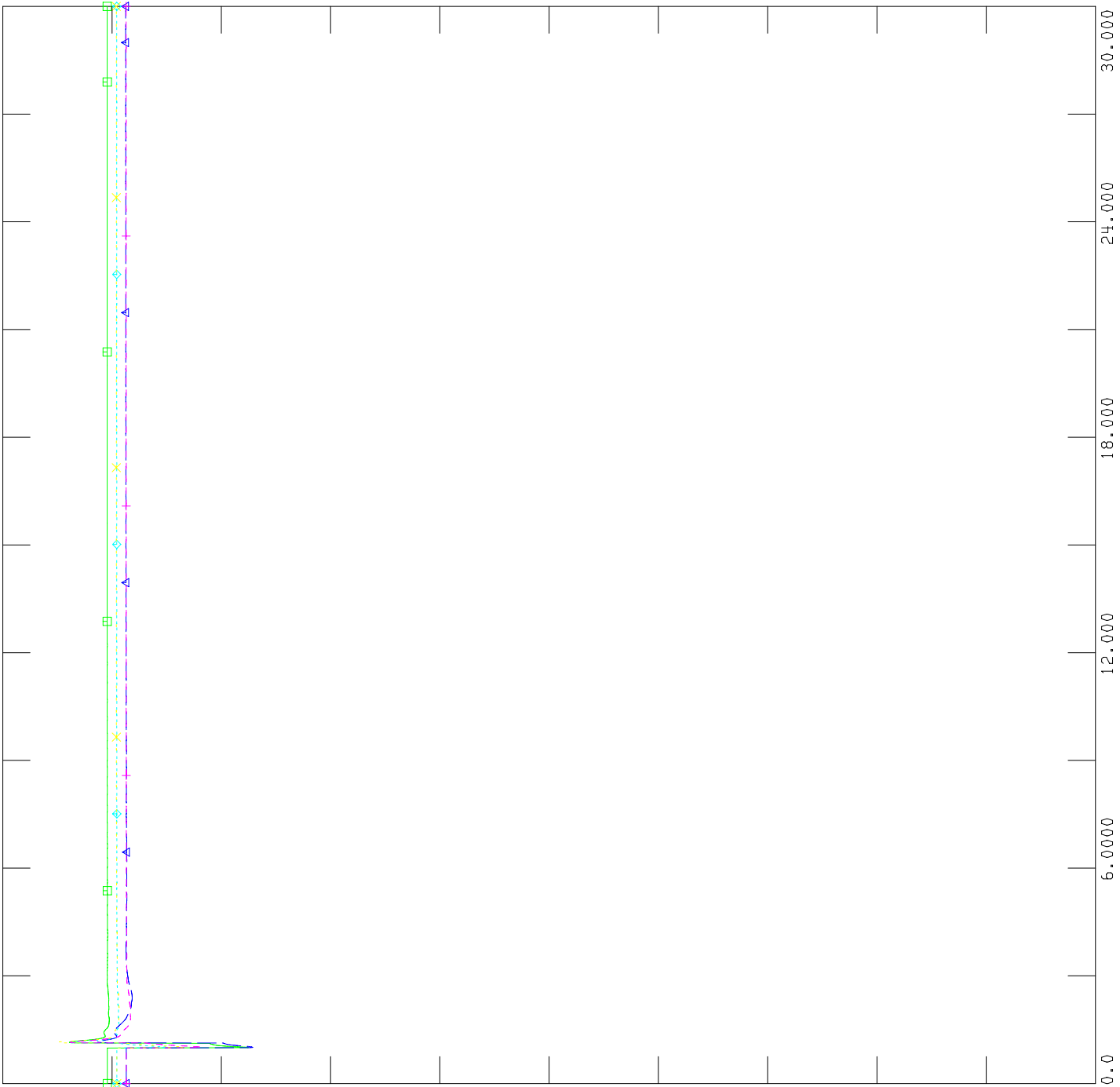
A-2-12



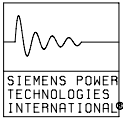
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_760L.out

MON, NOV 15 2010 11:14
BUS VOLTAGE

Channel	Label	Value	Unit
CHNL# 25	EVOLT 92046 EMCBRIDE6	0.5750	J
CHNL# 24	EVOLT 11002 EGARDNG2	0.5750	J
CHNL# 23	EVOLT 4740 EARD_07	0.5750	J
CHNL# 22	EVOLT 2389 CHILLRIDG	0.5750	J
CHNL# 21	EVOLT 100018 CPURPLESP	0.5750	J



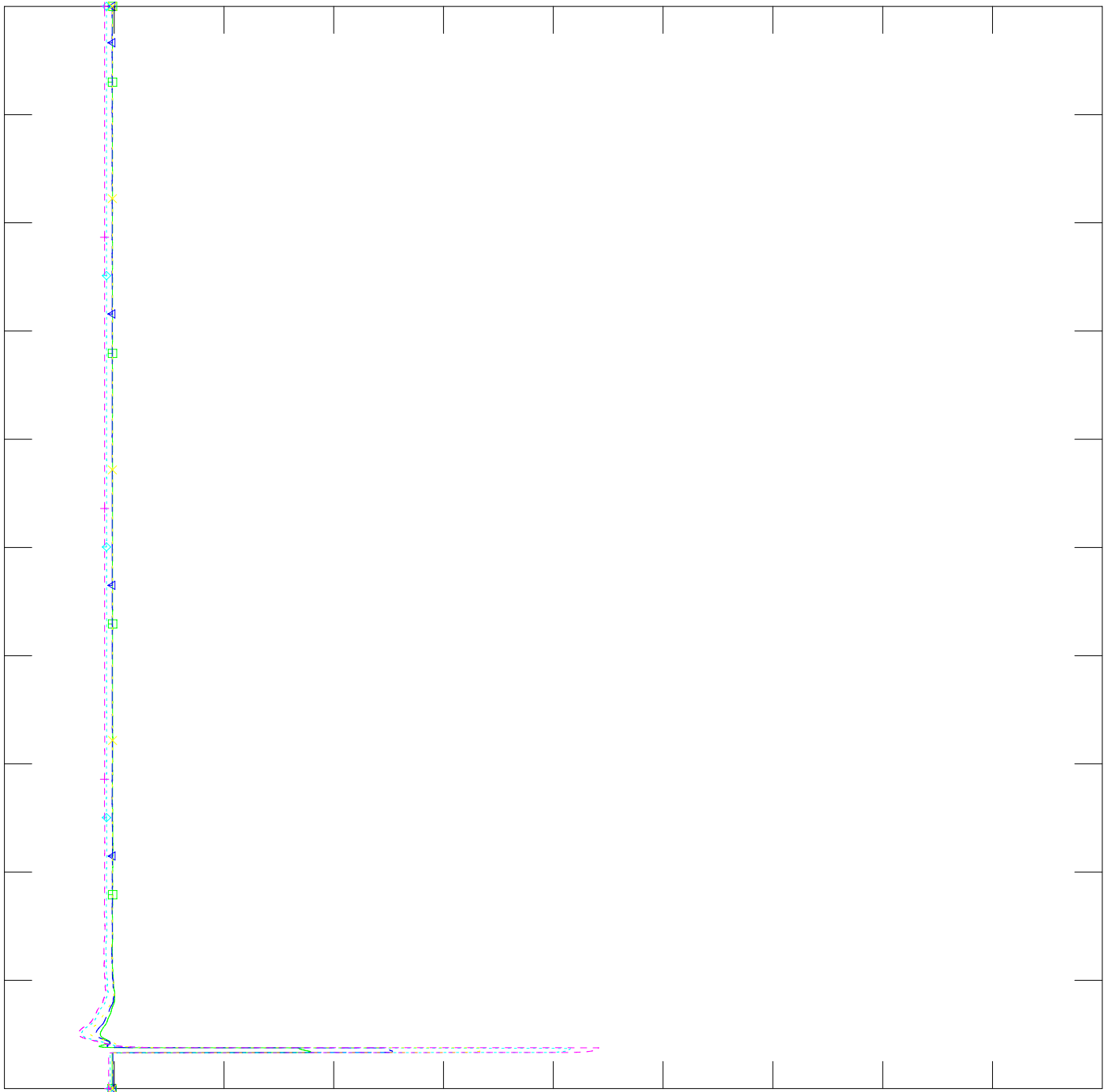
A-2-13



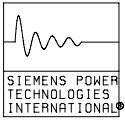
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_760L.out

MON, NOV 15 2010 11:14
 BUS VOLTAGE

1.1500	CHNL# 30: EVOLT	270 ESUFFIEL7	138.00	0.0
1.1500	CHNL# 29: EVOLT	680 CMEDICIN7	138.00	0.0
1.1500	CHNL# 28: EVOLT	271 EBULLS H7	138.00	0.0
1.1500	CHNL# 27: EVOLT	269 CBURDETT7	138.00	0.0
1.1500	CHNL# 26: EVOLT	31 CFINCAST7	138.00	0.0

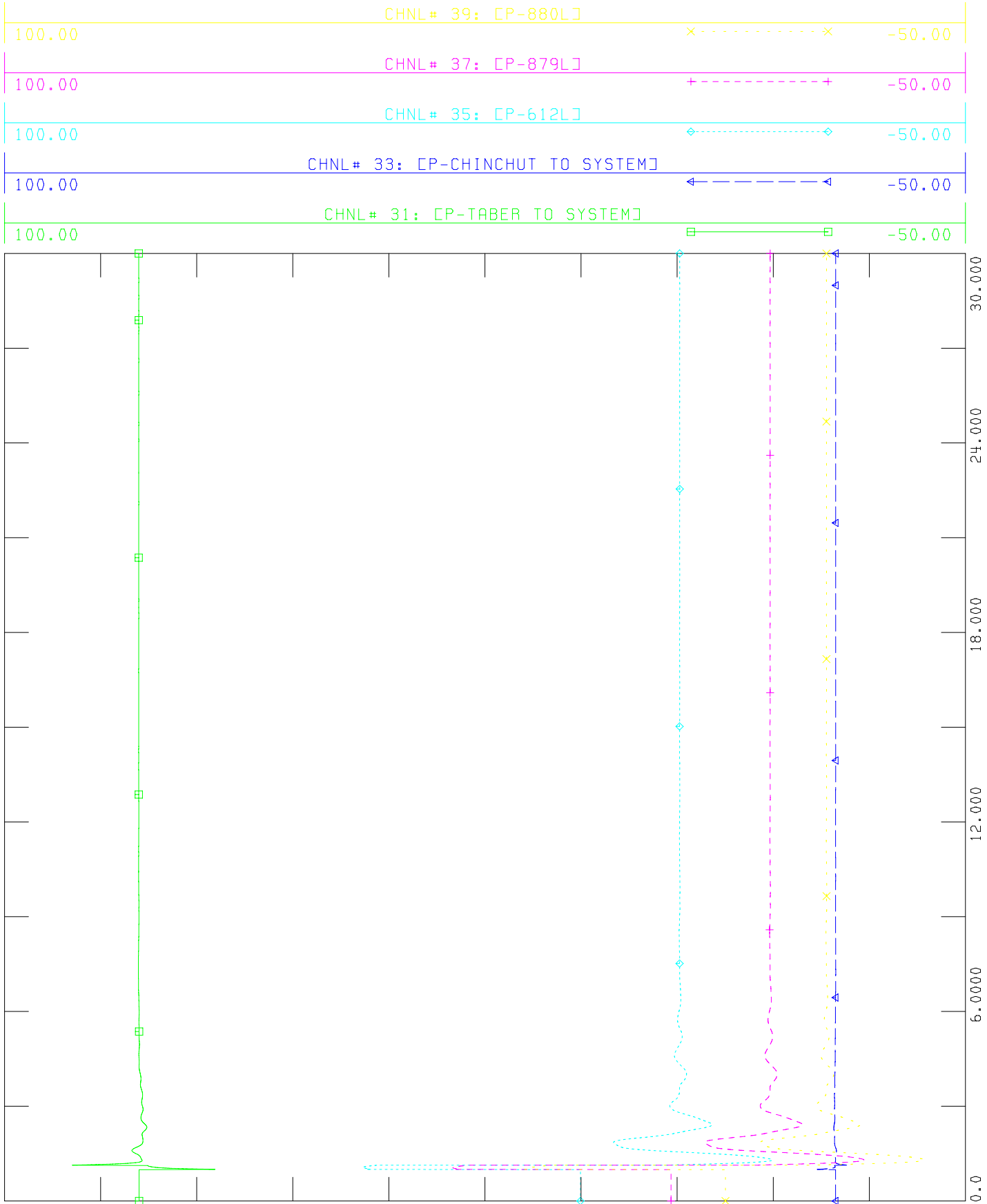


A-2-14

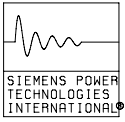


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_760L.out

MON, NOV 15 2010 11:15
BRANCH ACTIVE POWER

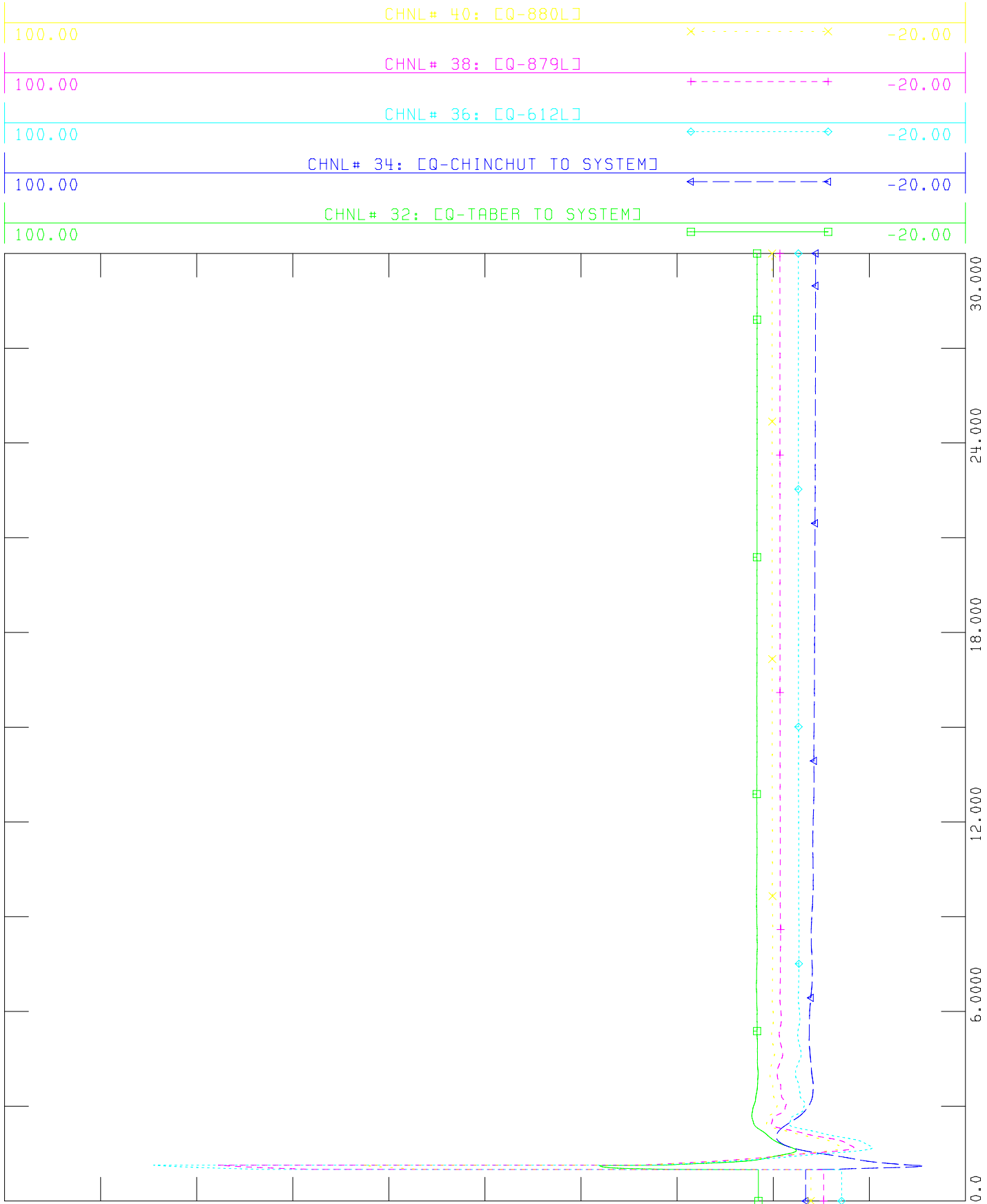


A-2-15



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_760L.out

MON, NOV 15 2010 11:16
BRANCH REACTIVE POWER

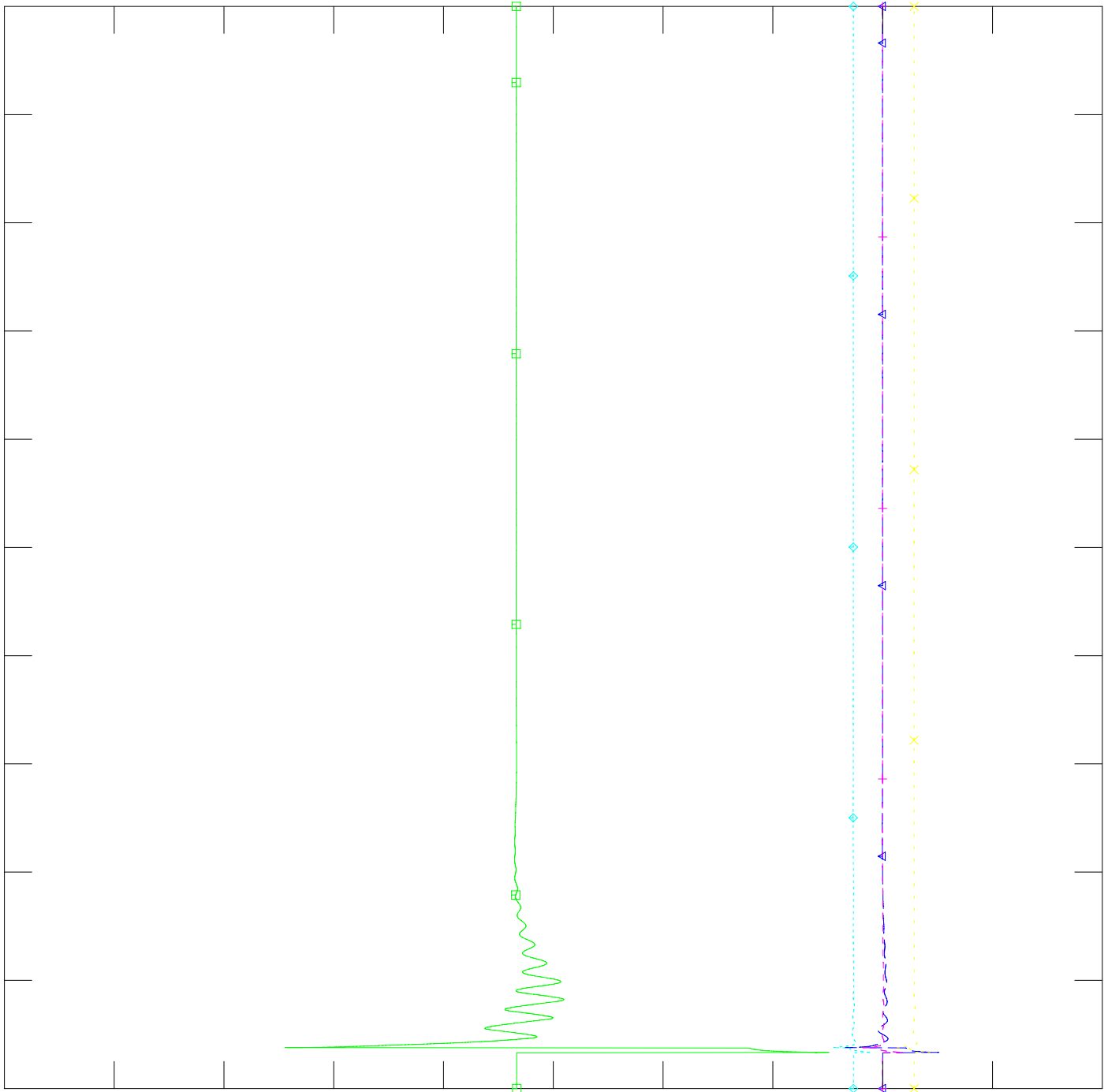
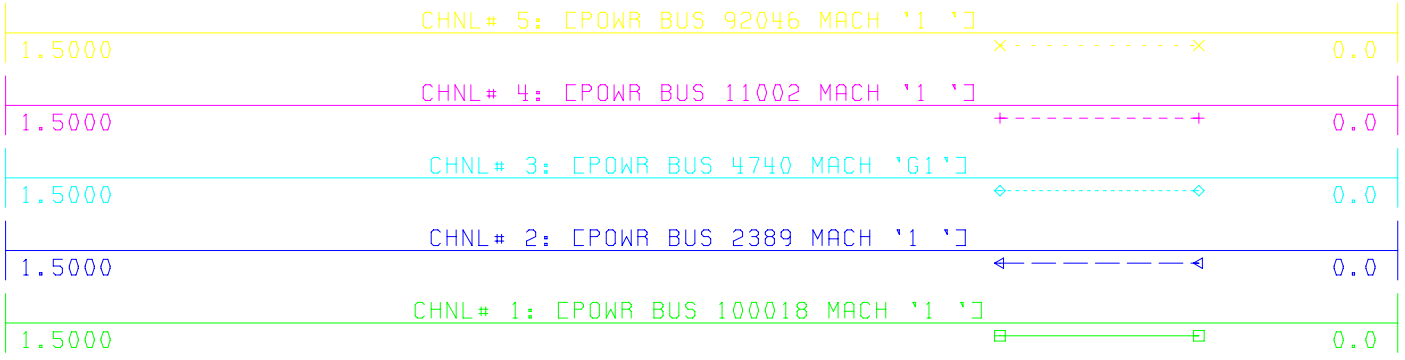


A-2-16



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_879L.out

MON, NOV 15 2010 11:17
PELEC

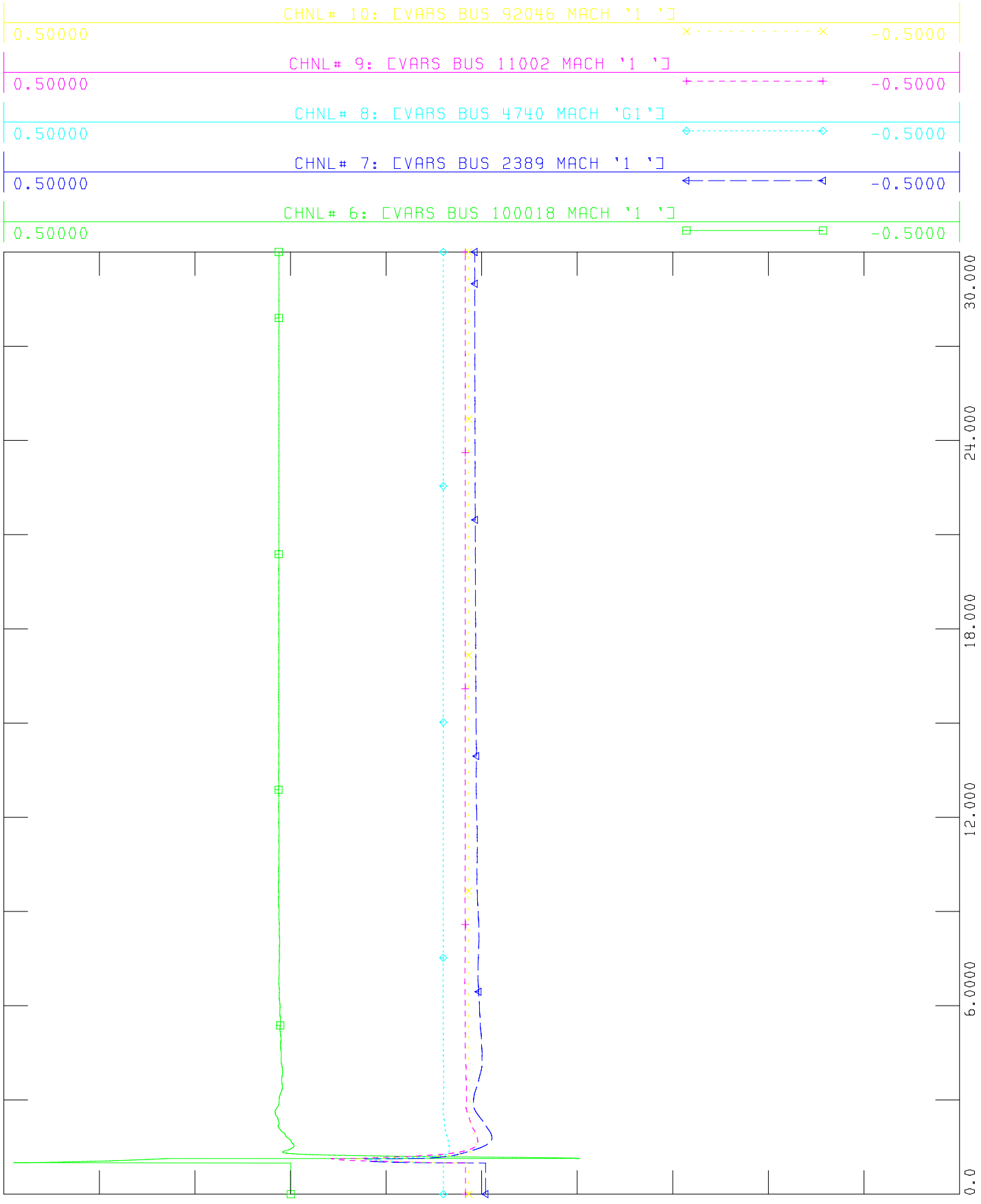


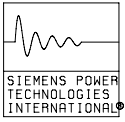
A-2-17



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_879L.out

MON, NOV 15 2010 11:18
OELEC

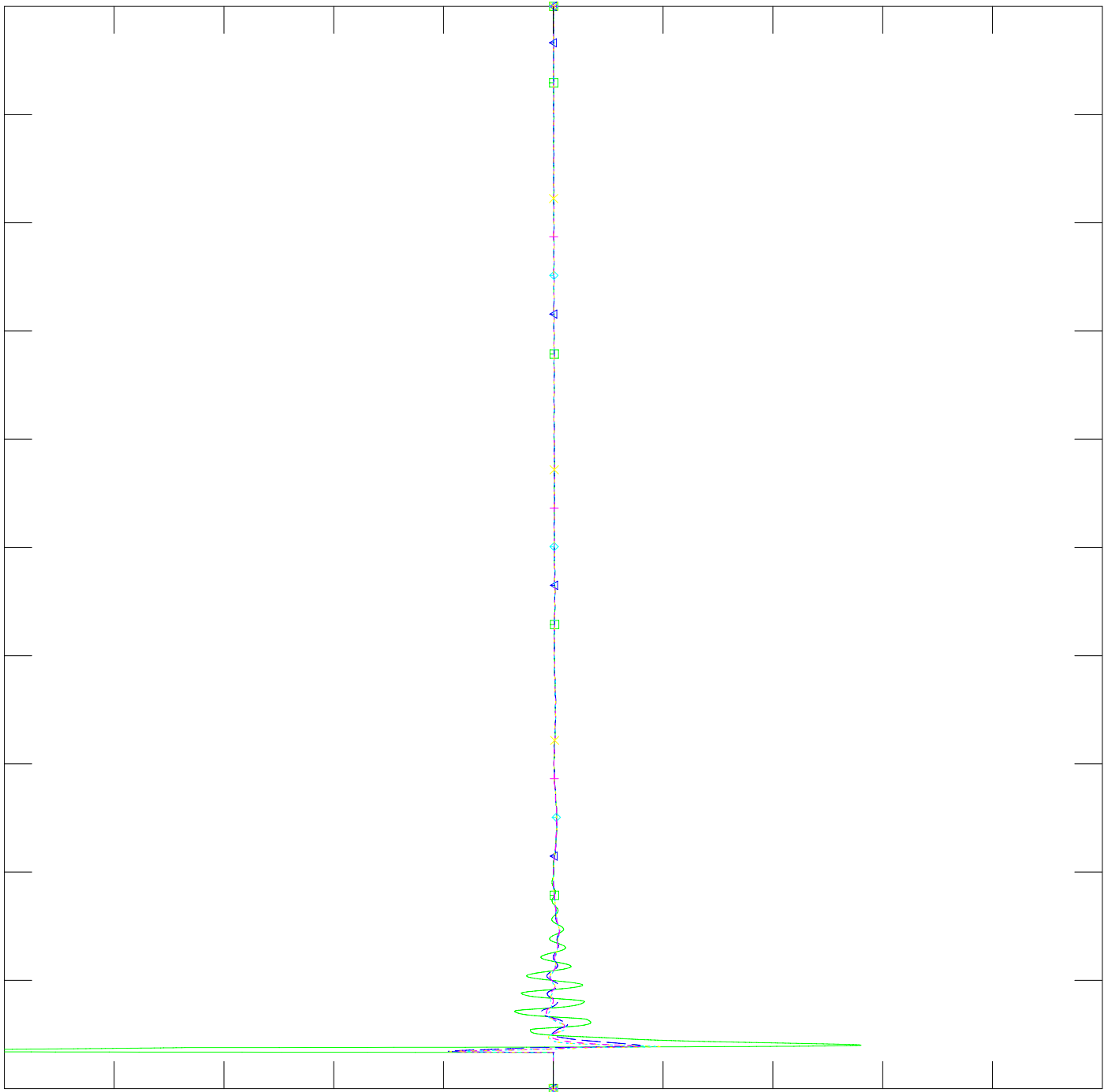




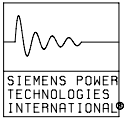
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_879L.out

MON, NOV 15 2010 11:25
BUS FREQUENCY

Channel	CFREQ	Marker	Value
CHNL# 15: EMCBRIDE6	92046	0.5750	0.5750
CHNL# 14: CGARDNG2	11002	0.5750	0.5750
CHNL# 13: CARD_07	4740	0.5750	0.5750
CHNL# 12: CHILLRIDG	2389	0.5750	0.5750
CHNL# 11: CPURPLESP	100018	0.5750	0.5750



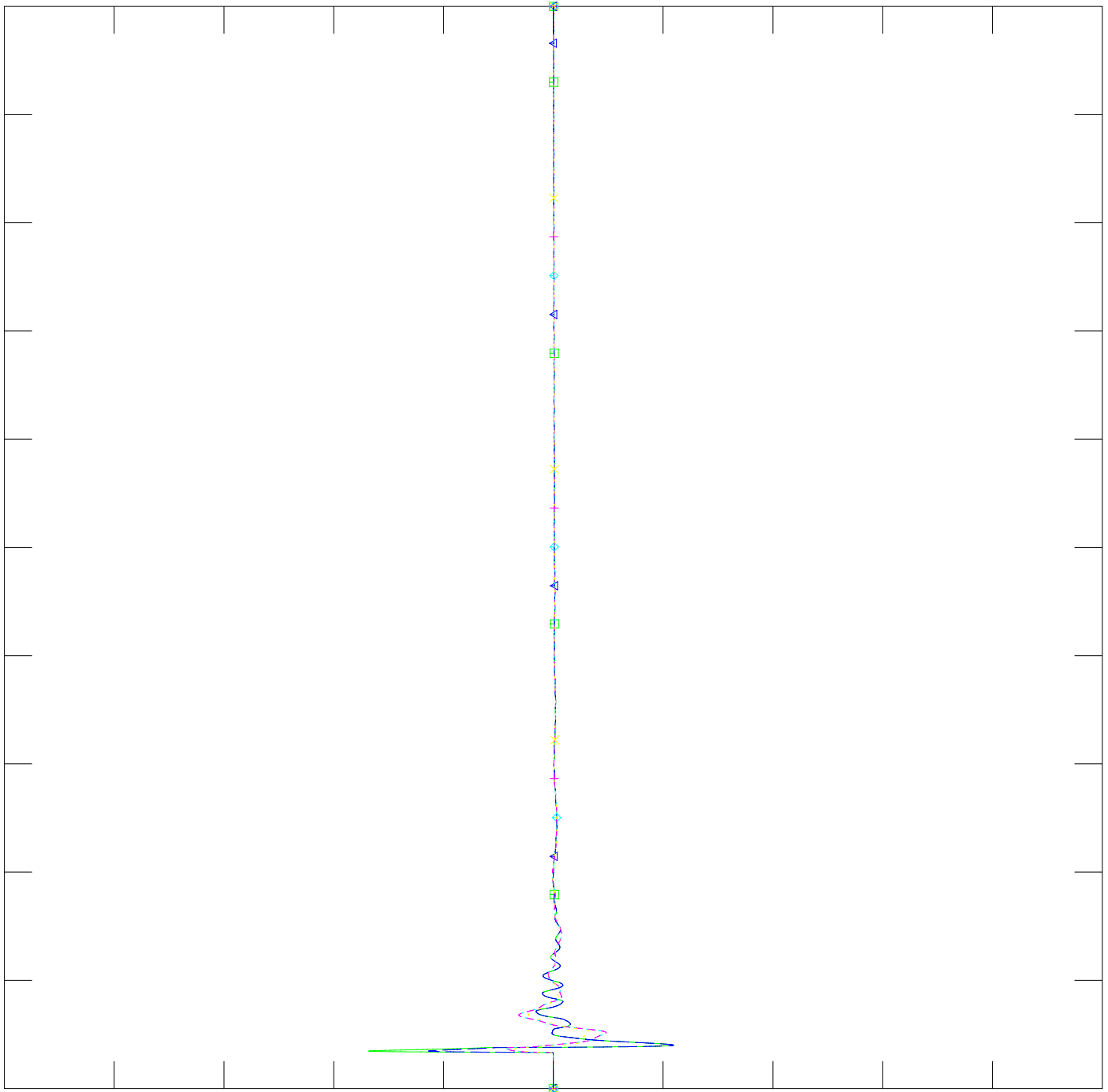
A-2-19

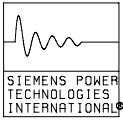


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_879L.out

MON, NOV 15 2010 11:26
BUS FREQUENCY

Channel	CFREQ	Location	Value
CHNL# 20	CFREQ	270 ESUFFIEL7	138.00
CHNL# 19	CFREQ	680 CMEDICIN7	138.00
CHNL# 18	CFREQ	271 CBULLS H7	138.00
CHNL# 17	CFREQ	269 CBURDETT7	138.00
CHNL# 16	CFREQ	31 CFINCAST7	138.00

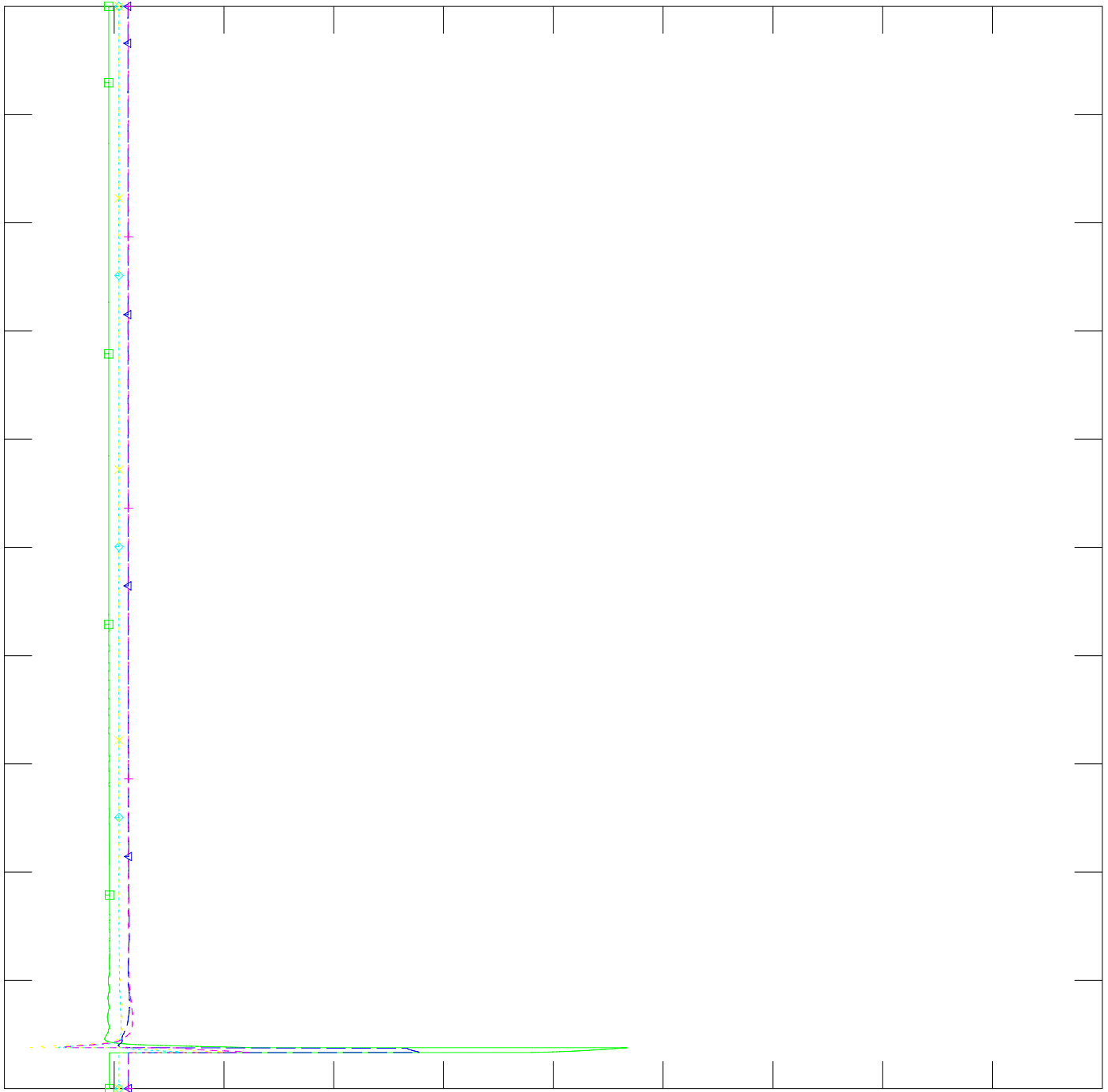


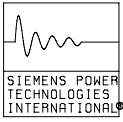


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_879L.out

MON, NOV 15 2010 11:27
BUS VOLTAGE

Channel	Label	Value	Marker
CHNL# 25	EVOLT 92046 EMCBRIDE6	0.5750	x
CHNL# 24	EVOLT 11002 EGARDNG2	0.5750	+
CHNL# 23	EVOLT 4740 EARD_07	0.5750	◇
CHNL# 22	EVOLT 2389 CHILLRIDG	0.5750	◀
CHNL# 21	EVOLT 100018 CPURPLESP	0.5750	■

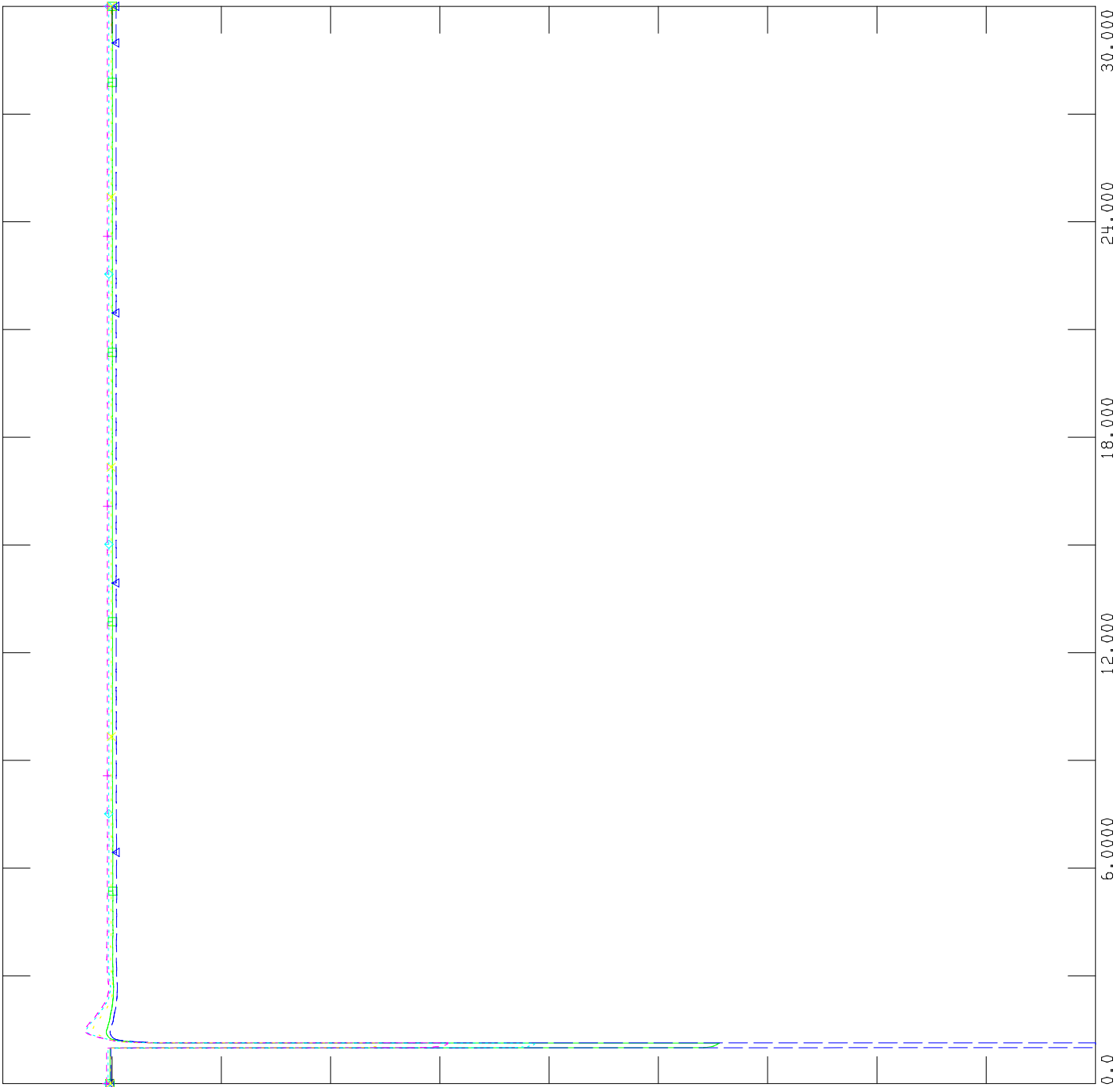




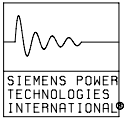
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_879L.out

MON, NOV 15 2010 11:27
BUS VOLTAGE

Channel	Location	Value
CHNL# 30: EVOLT	270 ESUFFIEL7	138.00
CHNL# 29: EVOLT	680 CMEDICIN7	138.00
CHNL# 28: EVOLT	271 EBULLS H7	138.00
CHNL# 27: EVOLT	269 CBURDETT7	138.00
CHNL# 26: EVOLT	31 CFINCAST7	138.00

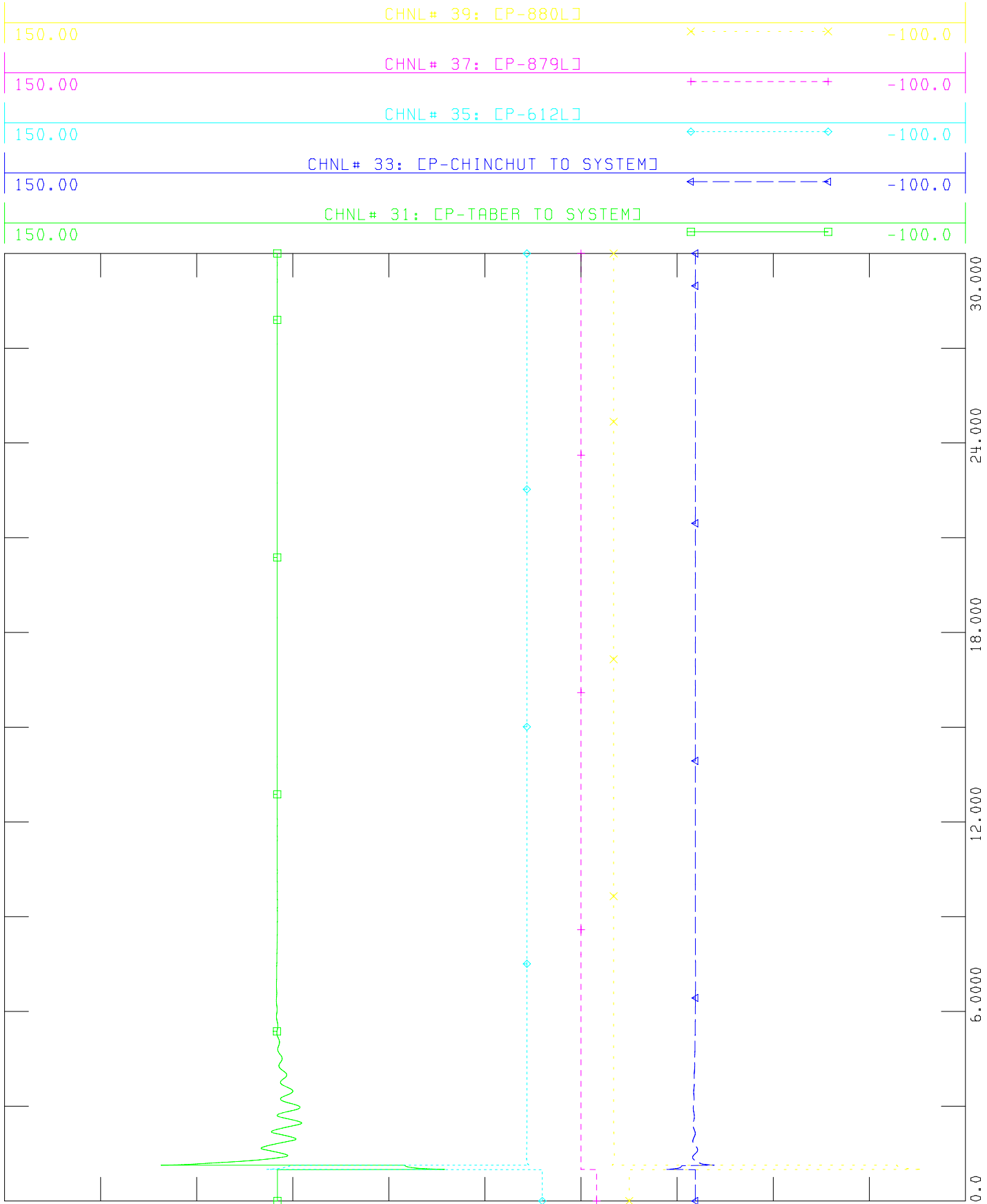


A-2-22



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_879L.out

MON, NOV 15 2010 11:28
BRANCH ACTIVE POWER

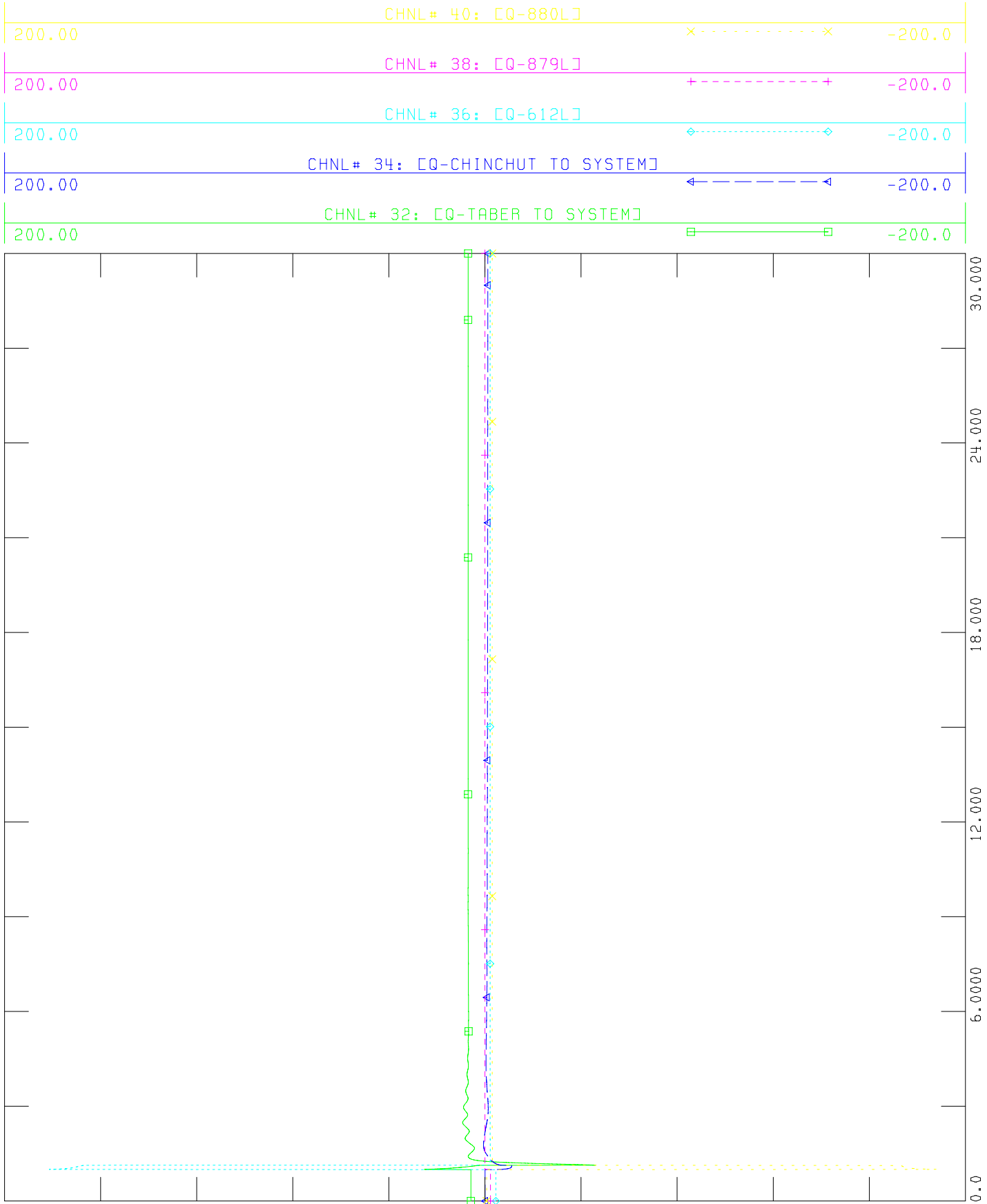


A-2-23



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_879L.out

MON, NOV 15 2010 11:29
BRANCH REACTIVE POWER

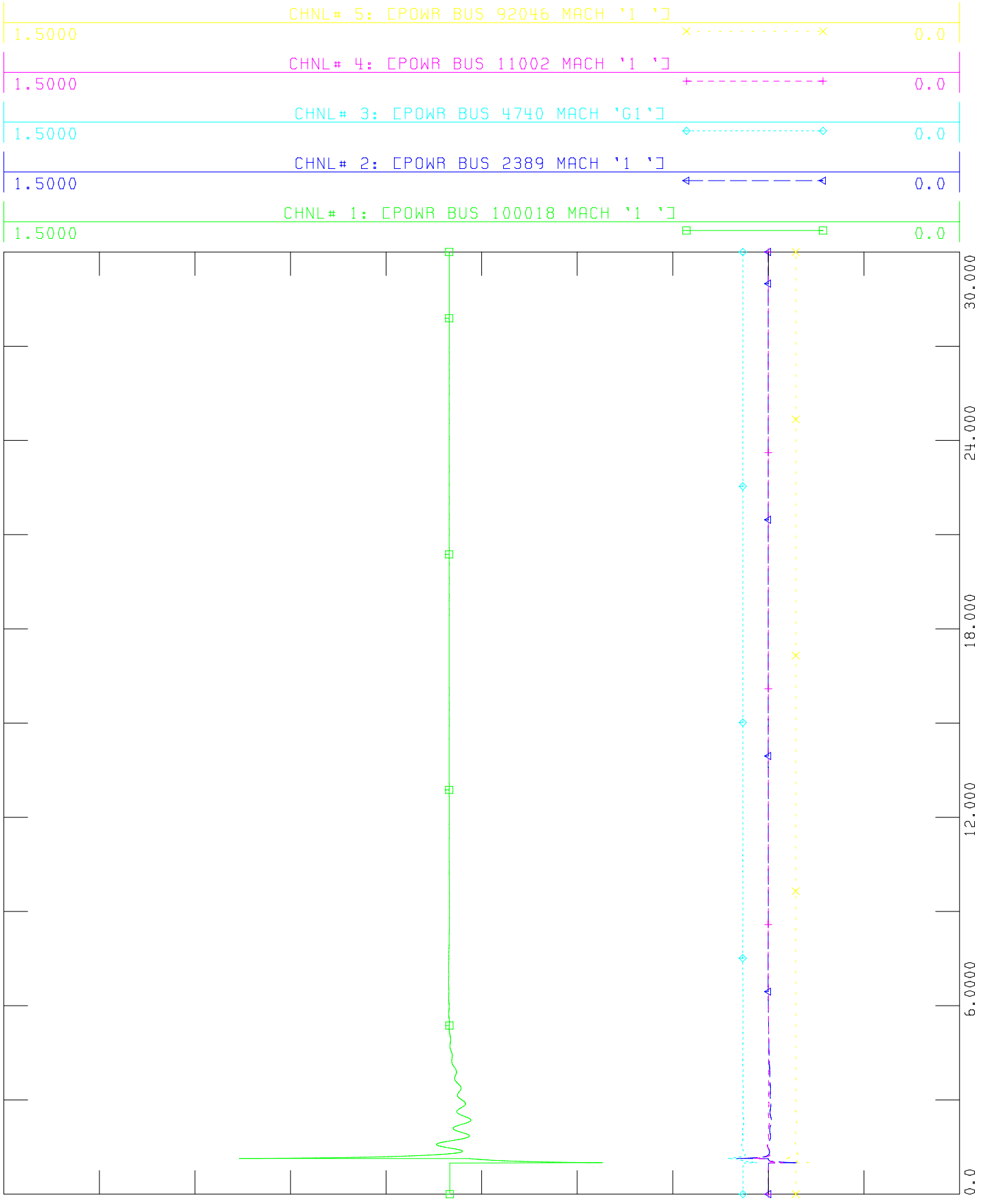


A-2-24

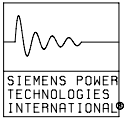


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_880L.out

MON, NOV 15 2010 11:30
PELEC

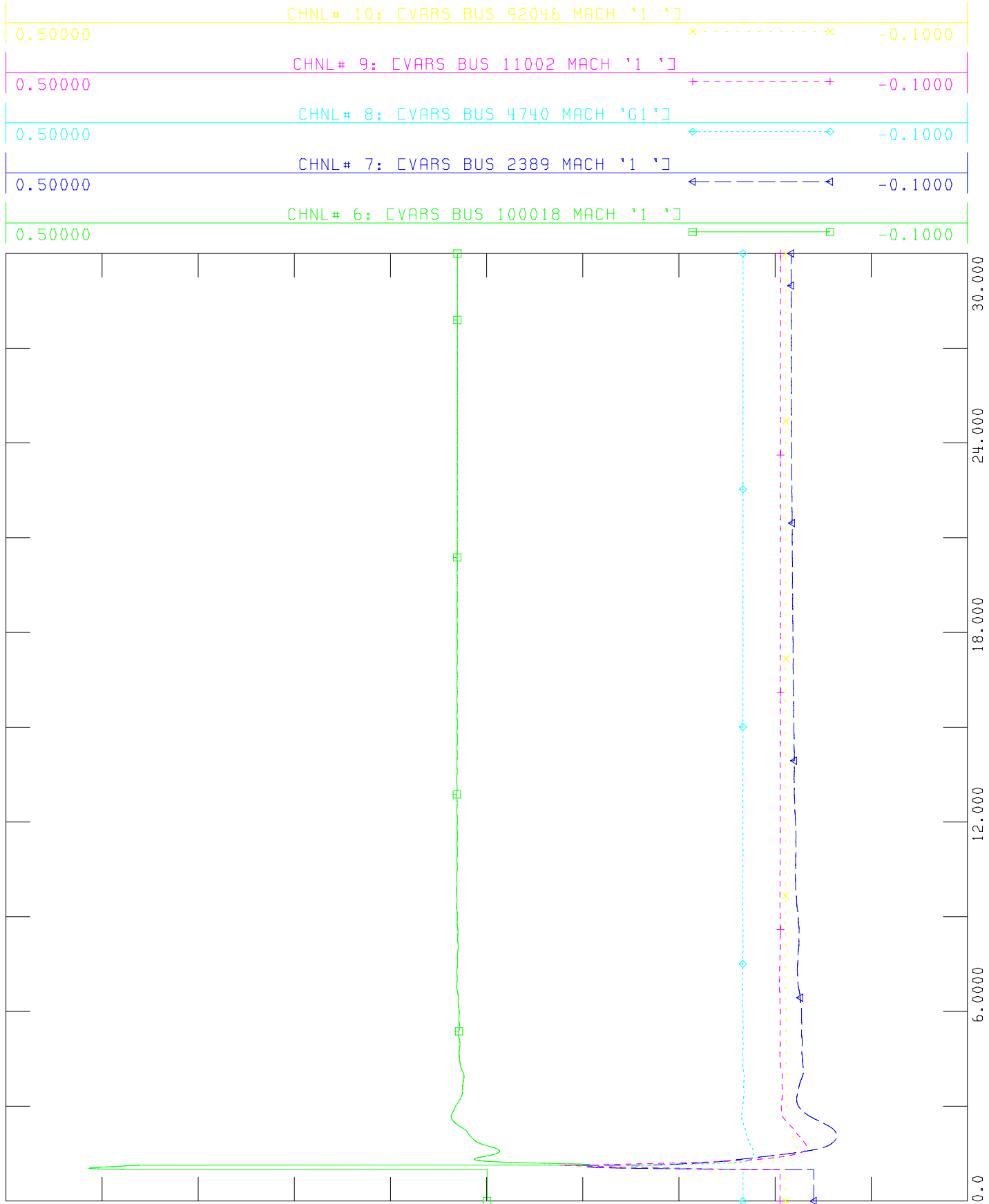


A-2-25

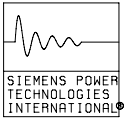


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_880L.out

MON, NOV 15 2010 11:31
QELEC



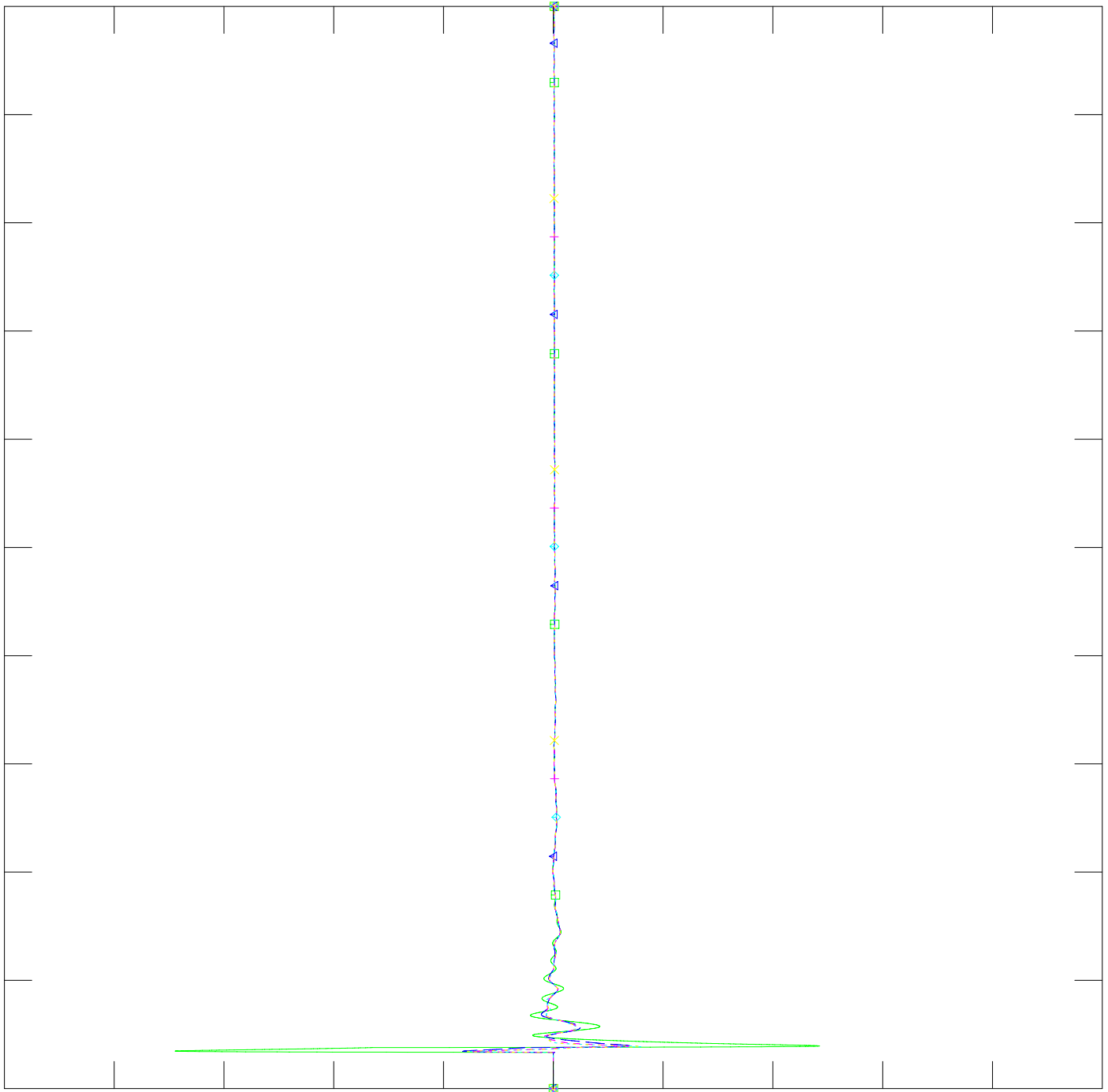
A-2-26

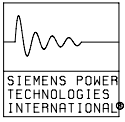


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_880L.out

MON, NOV 15 2010 11:32
BUS FREQUENCY

Channel	CFREQ	Marker	Value
CHNL# 15: EMCBRIDE6	92046	0.5750	0.00670
CHNL# 14: EGARDNG2	11002	0.5750	0.00670
CHNL# 13: EARD_07	4740	0.5750	0.00670
CHNL# 12: CHILLRIDG	2389	0.5750	0.00670
CHNL# 11: CPURPLESP	100018	0.5750	0.00670

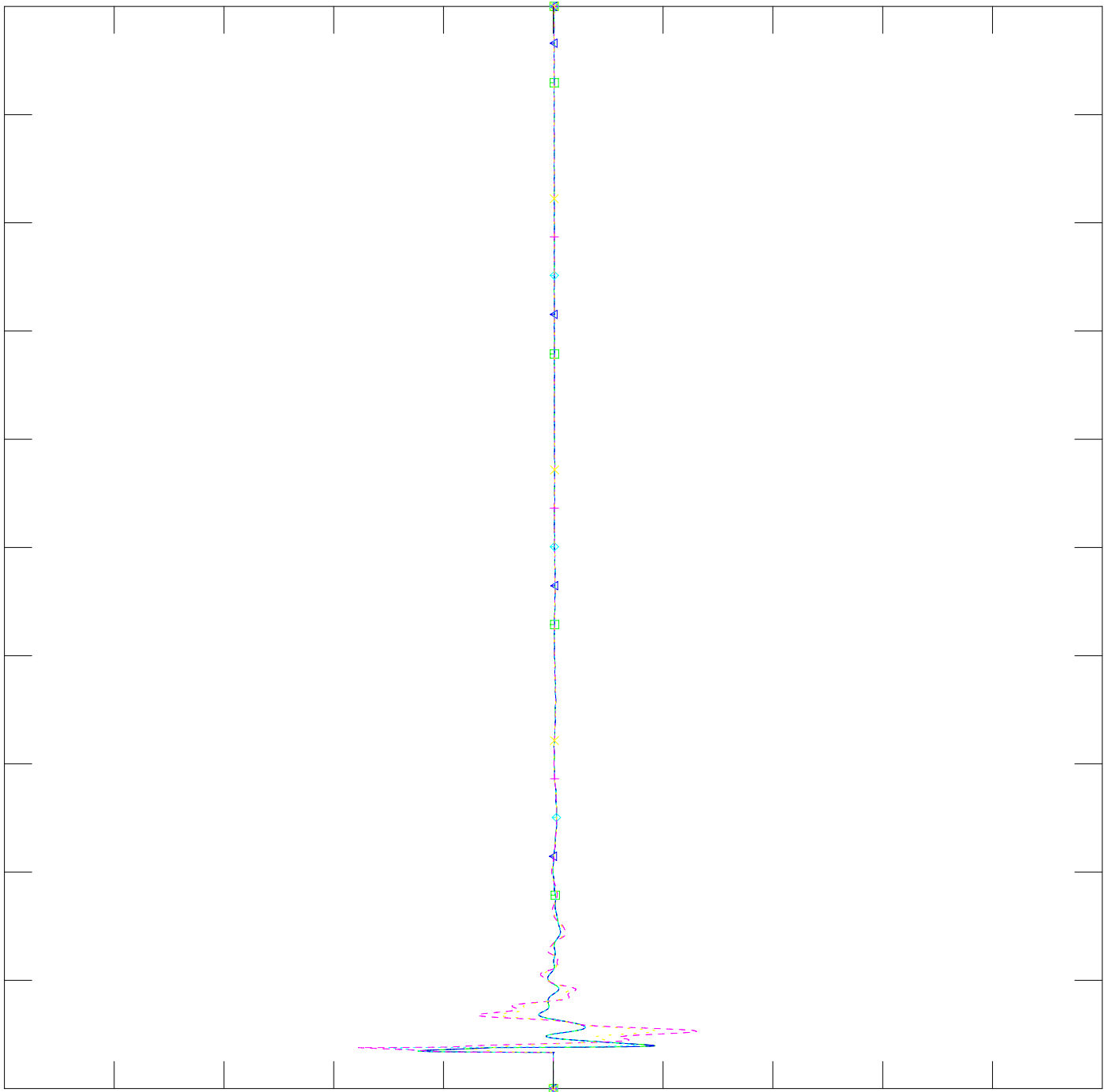




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_880L.out

MON, NOV 15 2010 11:32
 BUS FREQUENCY

0.00670	CHNL# 20: CFREQ	270	CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 19: CFREQ	680	CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 18: CFREQ	271	CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 17: CFREQ	269	CBURDETT7	138.00]]	←-----→	-0.0067
0.00670	CHNL# 16: CFREQ	31	CFINCAST7	138.00]]	▣-----▣	-0.0067



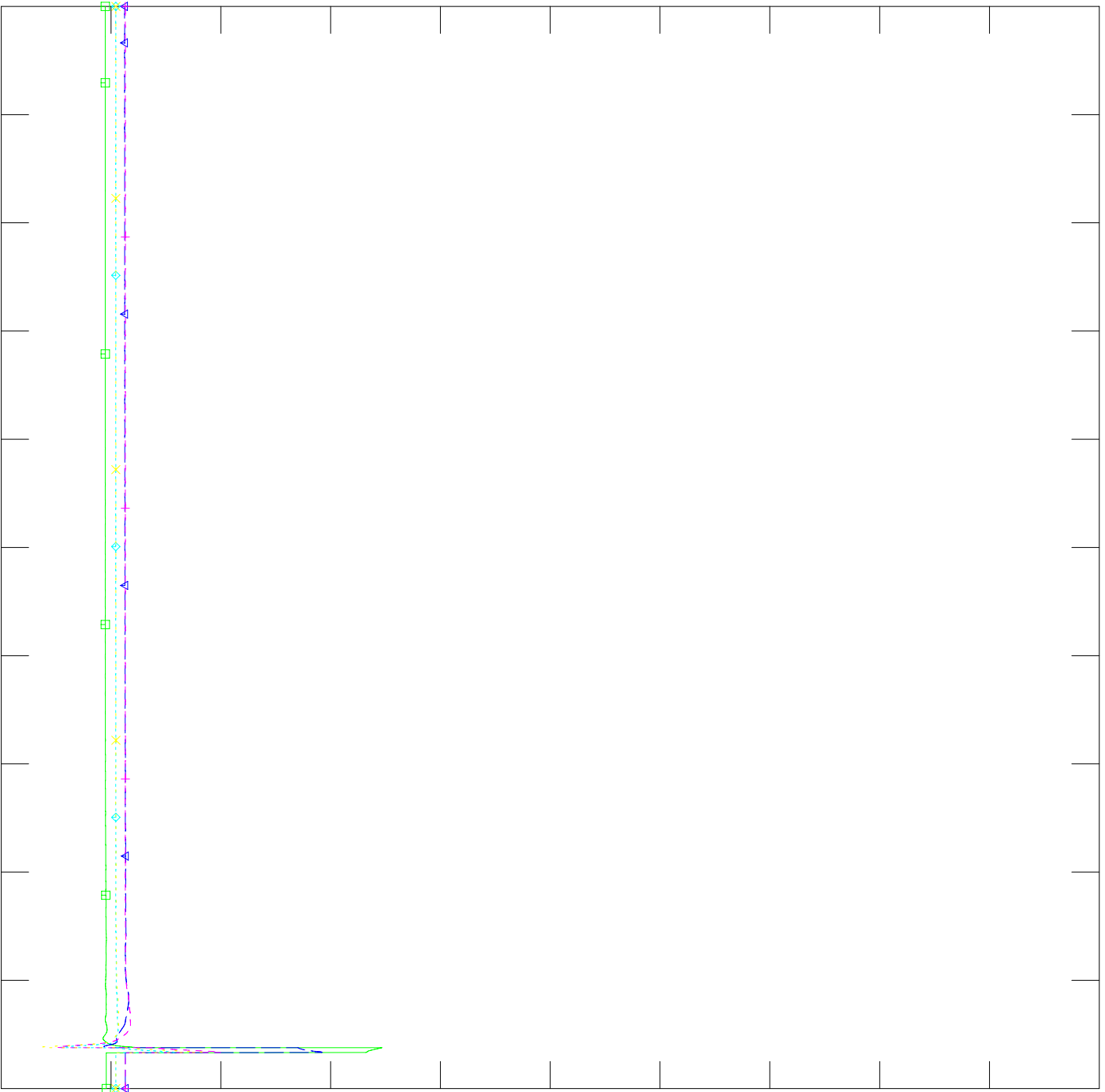
A-2-28
 TIME (SECONDS)



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_880L.out

MON, NOV 15 2010 11:33
BUS VOLTAGE

Channel	Label	Value	Marker
CHNL# 25	EVOLT 92046 EMCBRIDE6	0.5750	x
CHNL# 24	EVOLT 11002 EGARDNG2	0.5750	+
CHNL# 23	EVOLT 4740 EARD_07	0.5750	◇
CHNL# 22	EVOLT 2389 CHILLRIDG	0.5750	◀
CHNL# 21	EVOLT 100018 CPURPLESP	0.5750	■

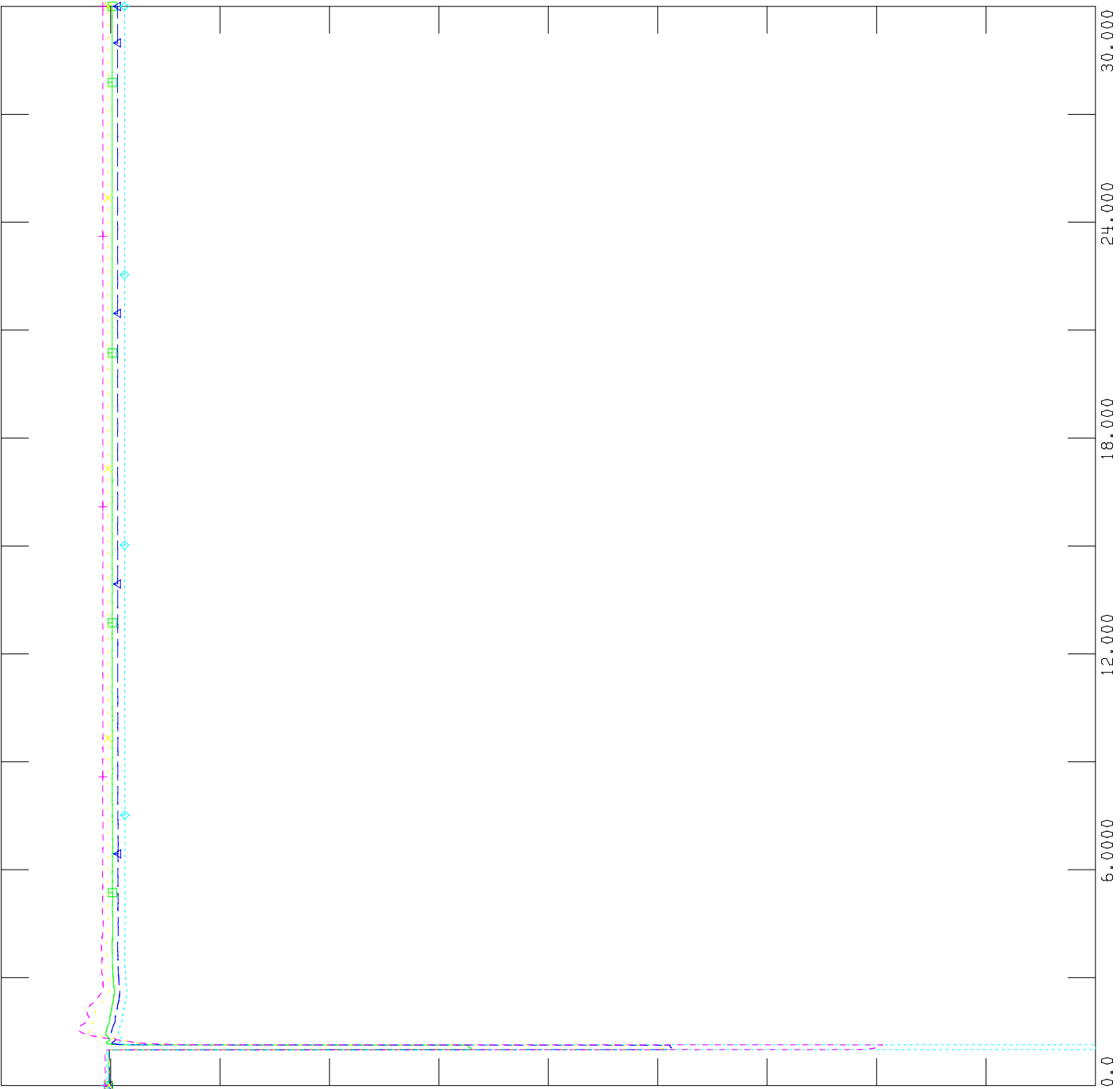




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_880L.out

MON, NOV 15 2010 11:34
 BUS VOLTAGE

1.1500	CHNL# 30: EVOLT	270 ESUFFIEL7	138.00	0.0
1.1500	CHNL# 29: EVOLT	680 CMEDICIN7	138.00	0.0
1.1500	CHNL# 28: EVOLT	271 CBULLS H7	138.00	0.0
1.1500	CHNL# 27: EVOLT	269 CBURDETT7	138.00	0.0
1.1500	CHNL# 26: EVOLT	31 CFINCAST7	138.00	0.0

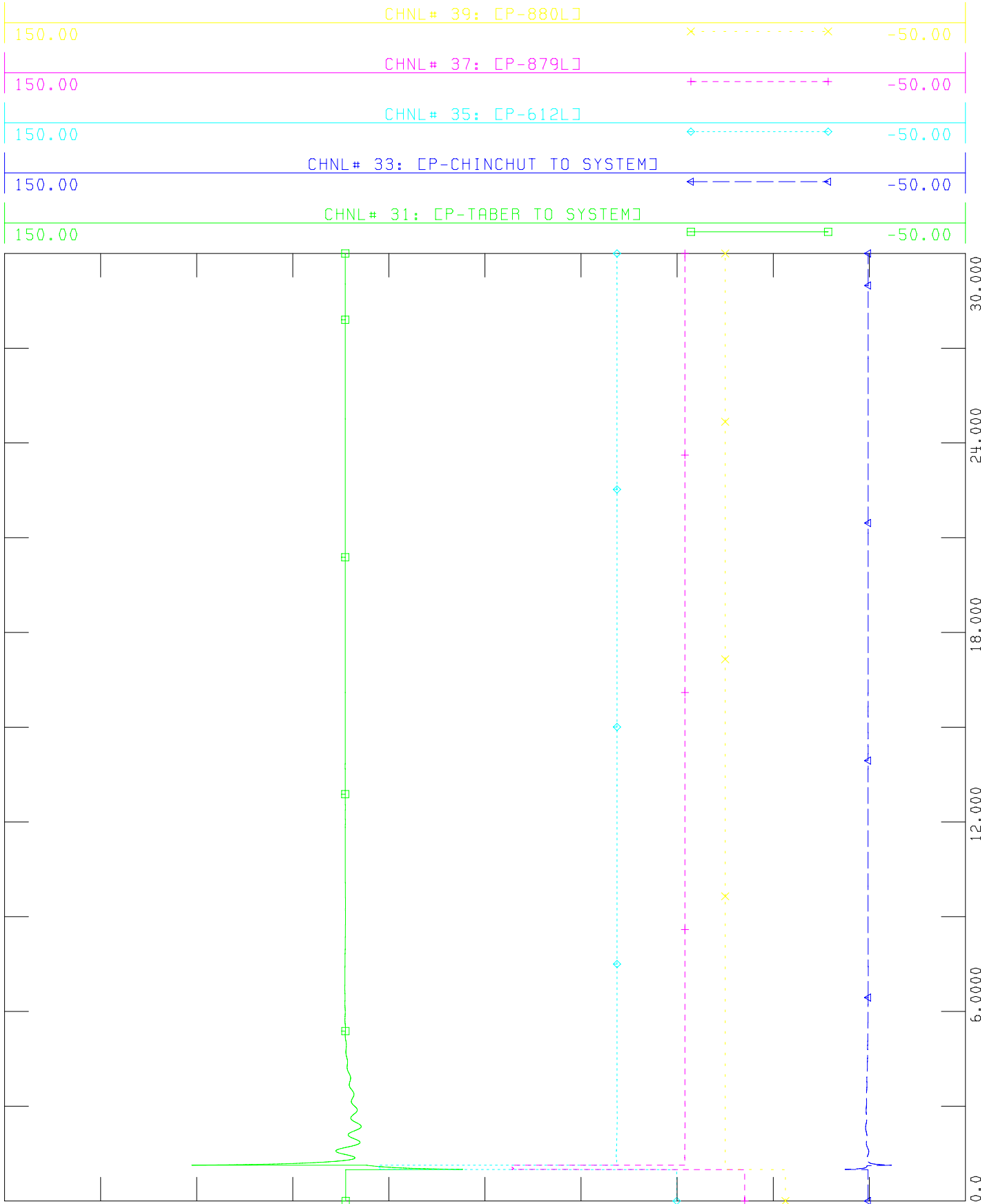


A-2-30

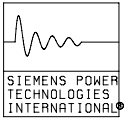


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_880L.out

MON, NOV 15 2010 11:34
BRANCH ACTIVE POWER

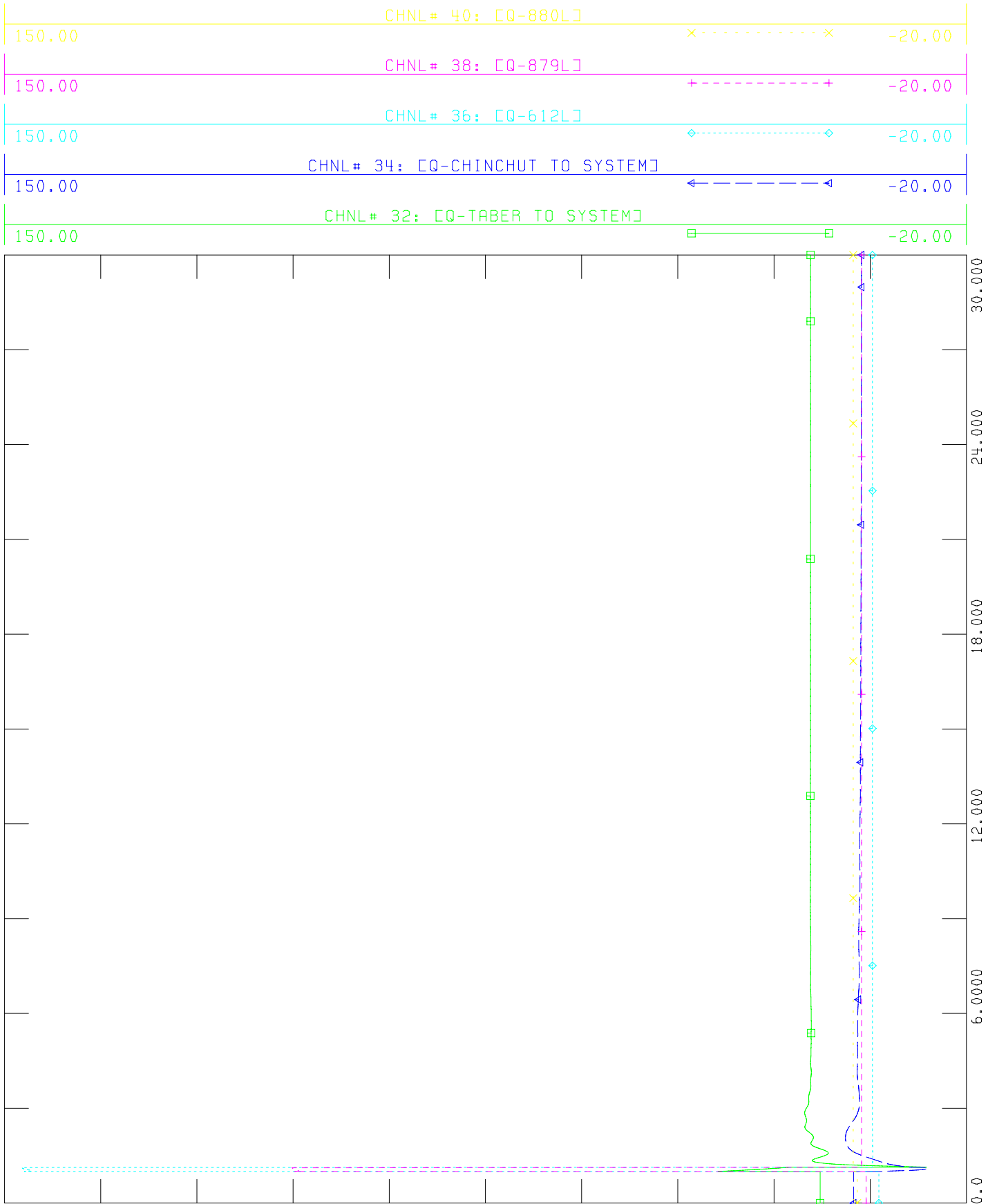


A-2-31



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_880L.out

MON, NOV 15 2010 11:35
BRANCH REACTIVE POWER

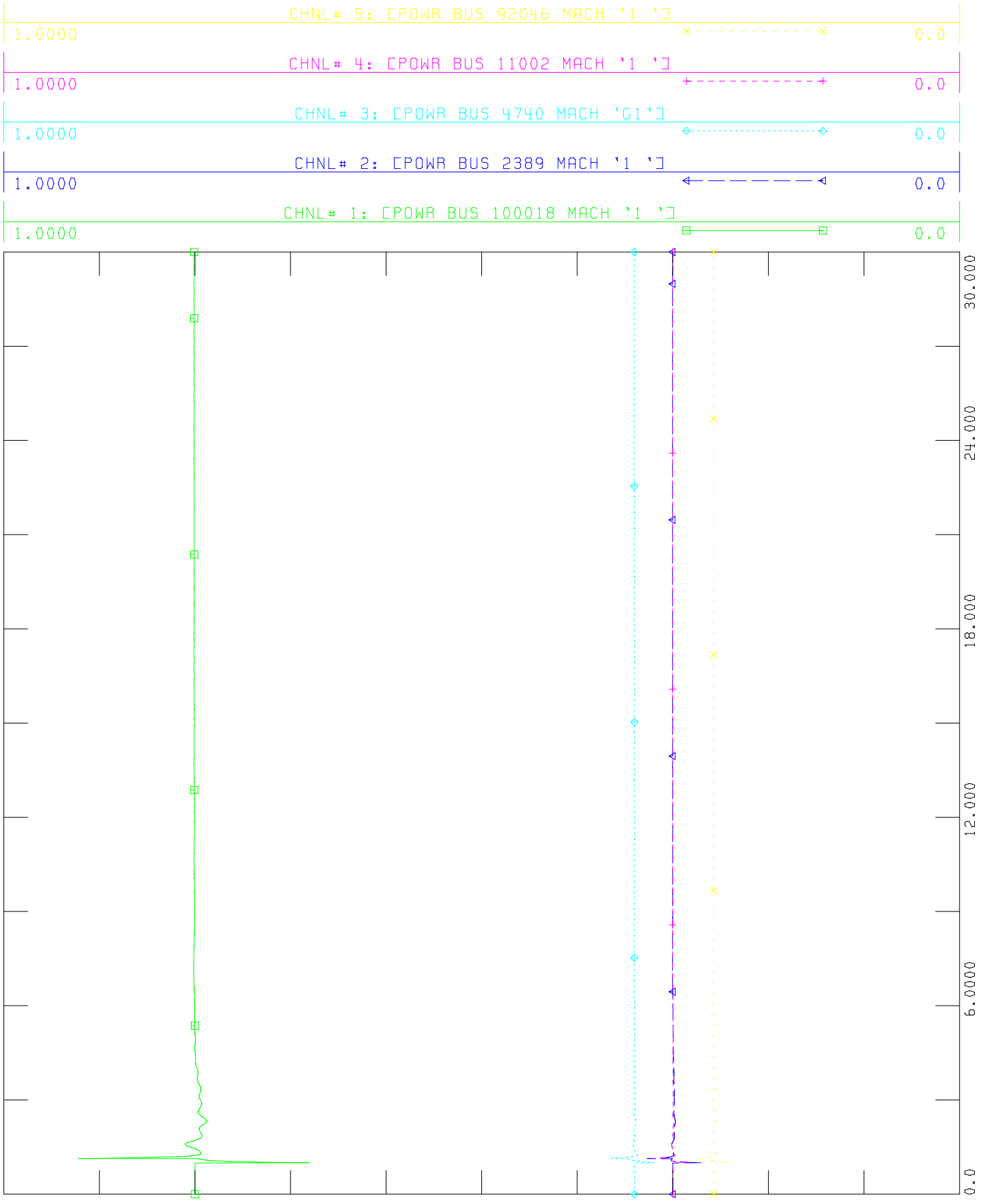


A-2-32

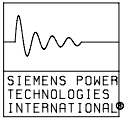


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_892L.out

MON, NOV 15 2010 11:36
PELEC

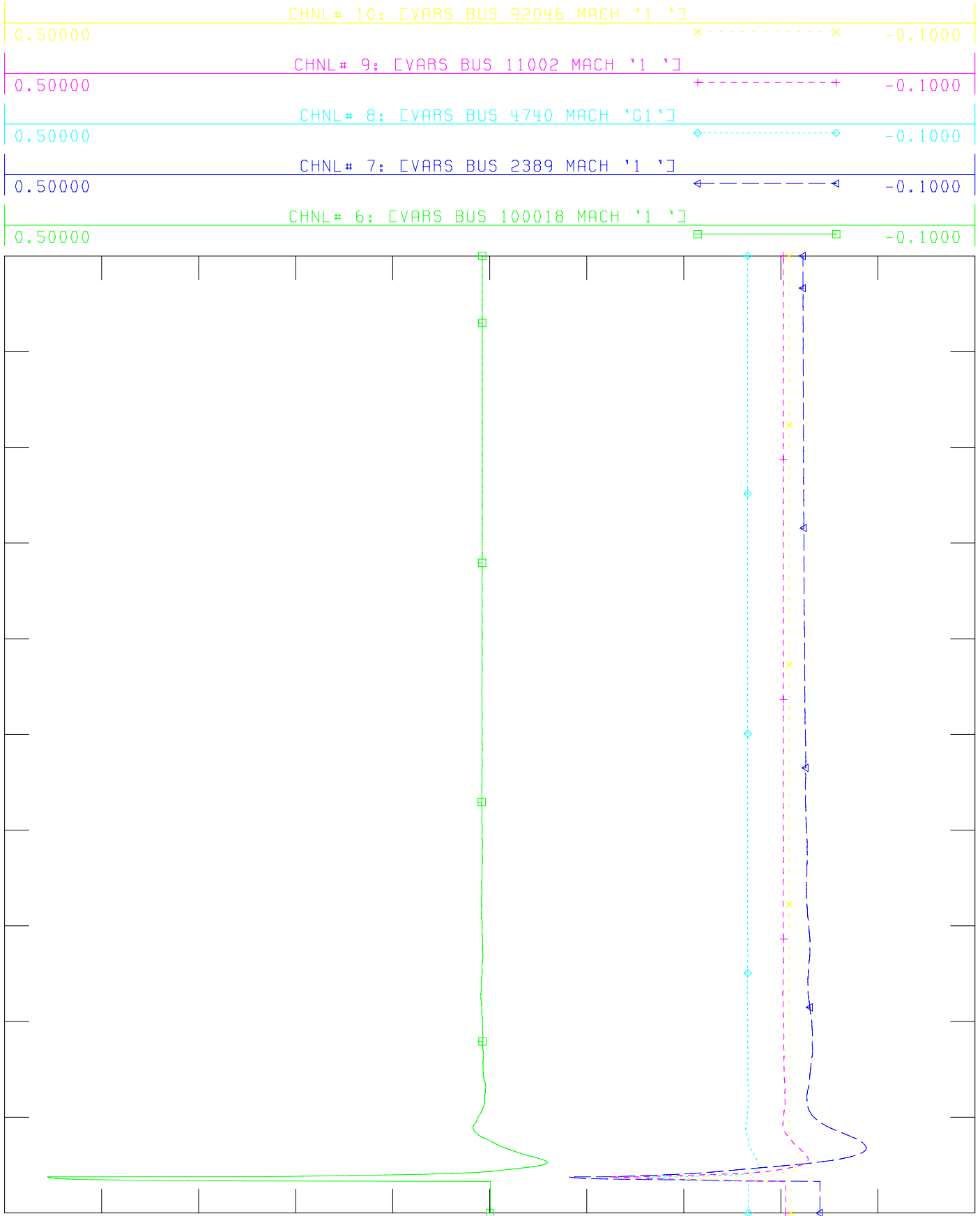


A-2-33

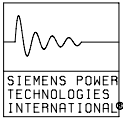


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_892L.out

MON, NOV 15 2010 11:37
OELEC



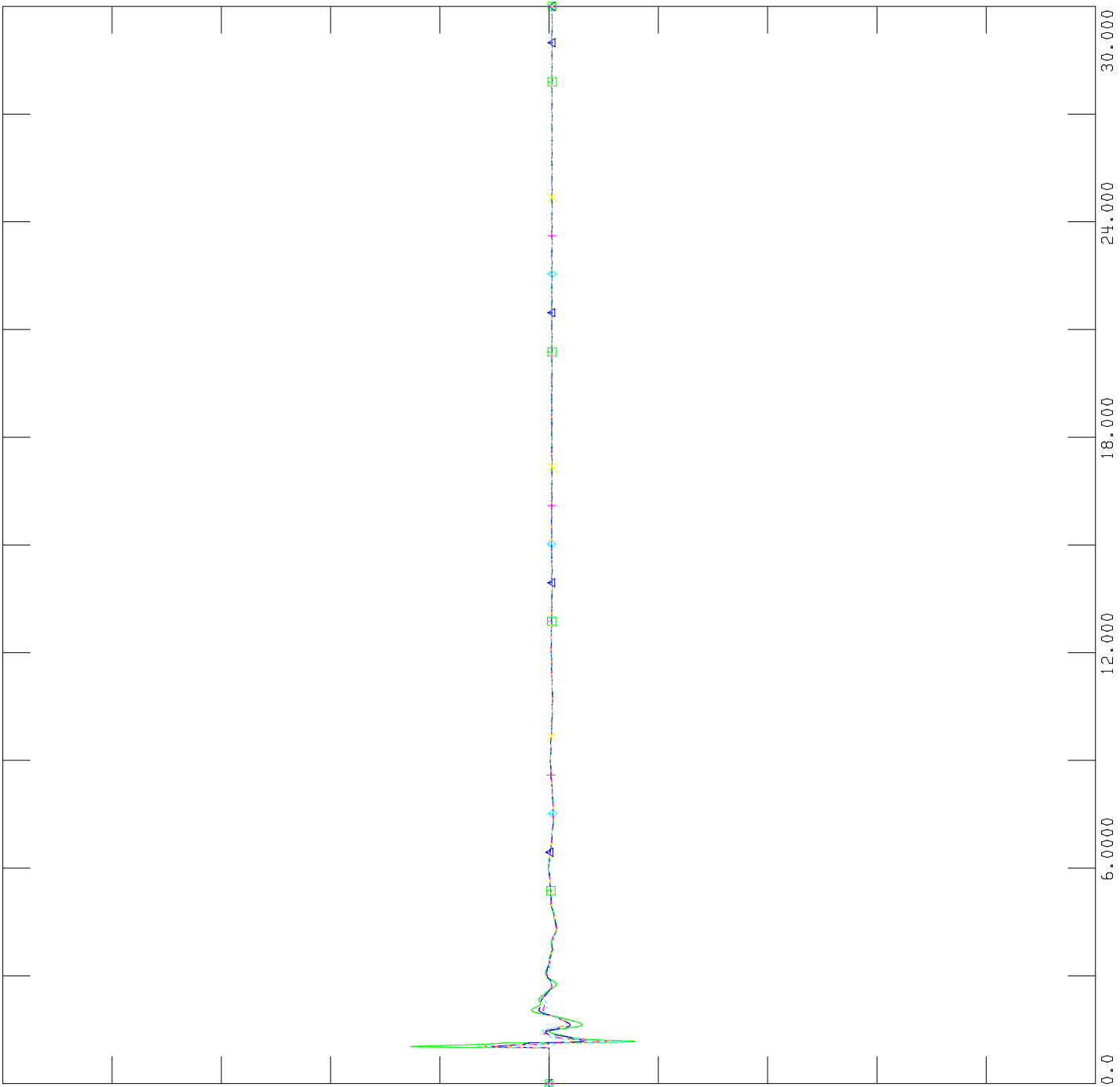
A-2-34



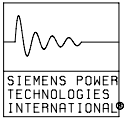
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_892L.out

MON, NOV 15 2010 11:41
BUS FREQUENCY

Channel	CFREQ	Device	Value
CHNL# 15	92046	EMCBRIDE6	0.5750
CHNL# 14	11002	EGARDNG2	0.5750
CHNL# 13	4740	EARD_07	0.5750
CHNL# 12	2389	CHILLRIDG	0.5750
CHNL# 11	100018	CPURPLESP	0.5750



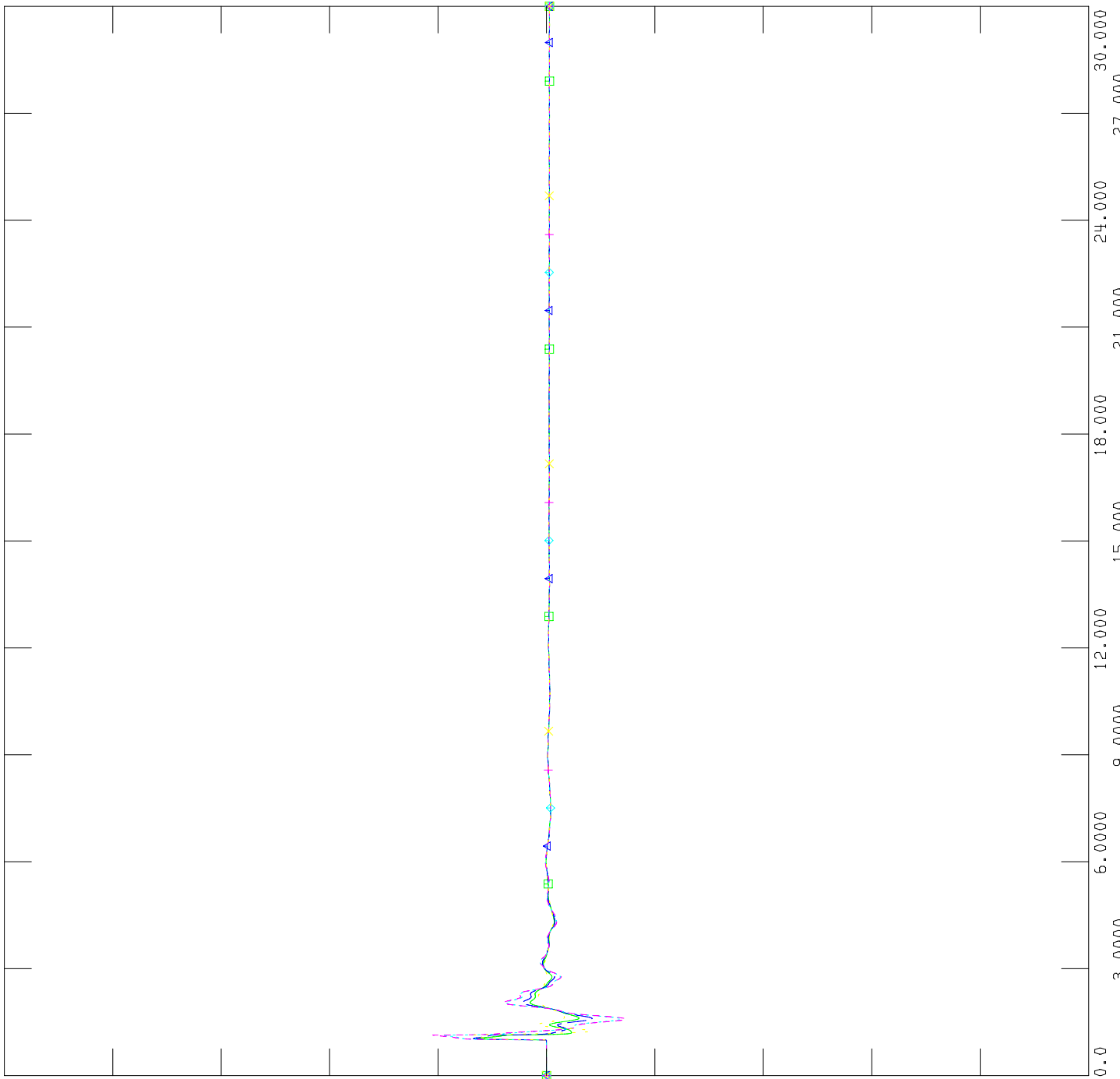
A-2-35



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_892L.out

MON, NOV 15 2010 11:42
 BUS FREQUENCY

0.00670	CHNL# 20: CFREQ	270	CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 19: CFREQ	680	CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 18: CFREQ	271	CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 17: CFREQ	269	CBURDETT7	138.00]]	←-----△	-0.0067
0.00670	CHNL# 16: CFREQ	31	CFINCAST7	138.00]]	▣-----▣	-0.0067



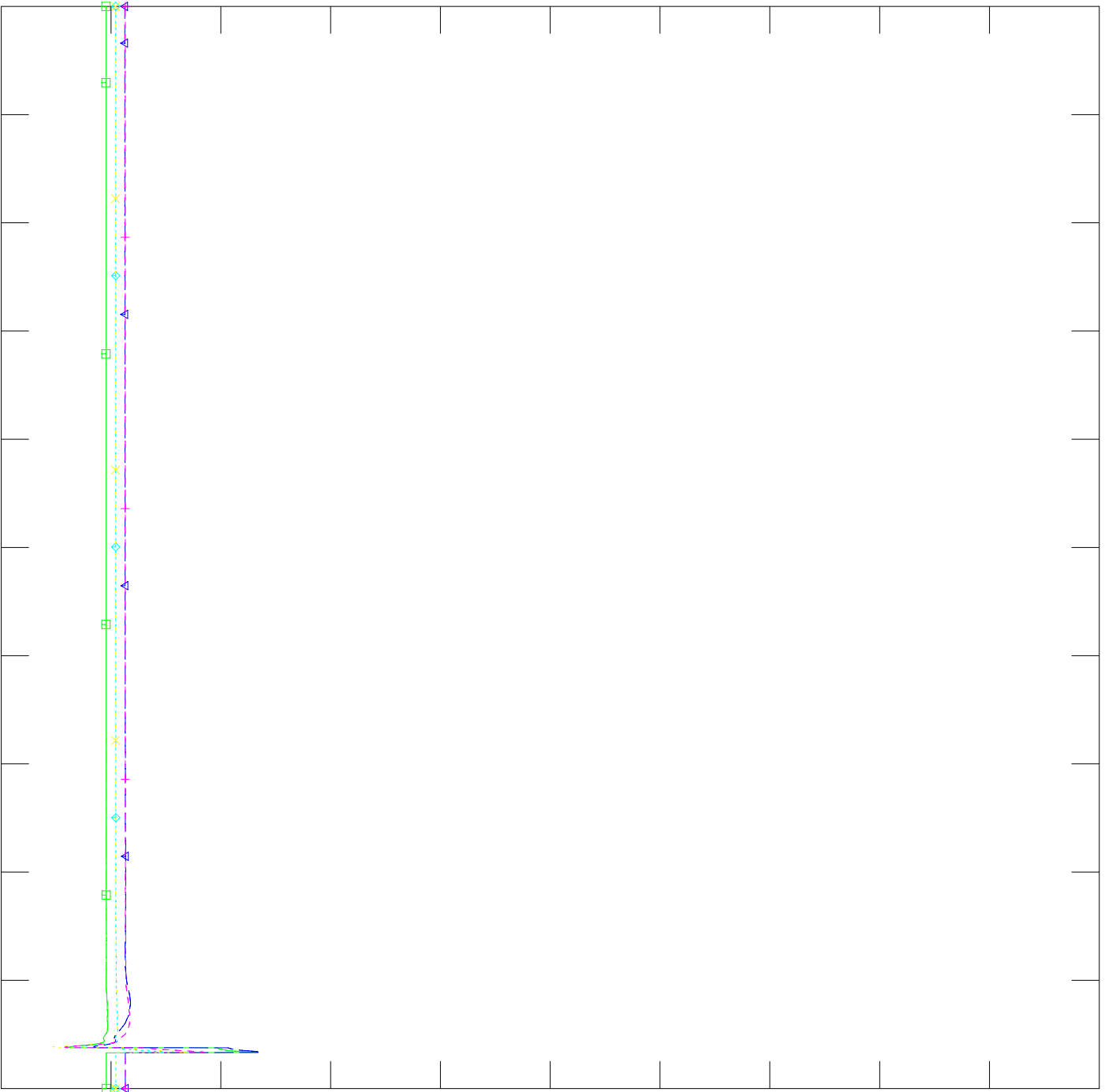
A-2-36



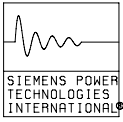
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_892L.out

MON, NOV 15 2010 11:42
BUS VOLTAGE

Channel	Label	Value	Marker
CHNL# 25	EVOLT 92046 EMCBRIDE6	0.5750	x
CHNL# 24	EVOLT 11002 EGARDNG2	0.5750	+
CHNL# 23	EVOLT 4740 EARD_07	0.5750	◇
CHNL# 22	EVOLT 2389 CHILLRIDG	0.5750	←
CHNL# 21	EVOLT 100018 CPURPLESP	0.5750	□



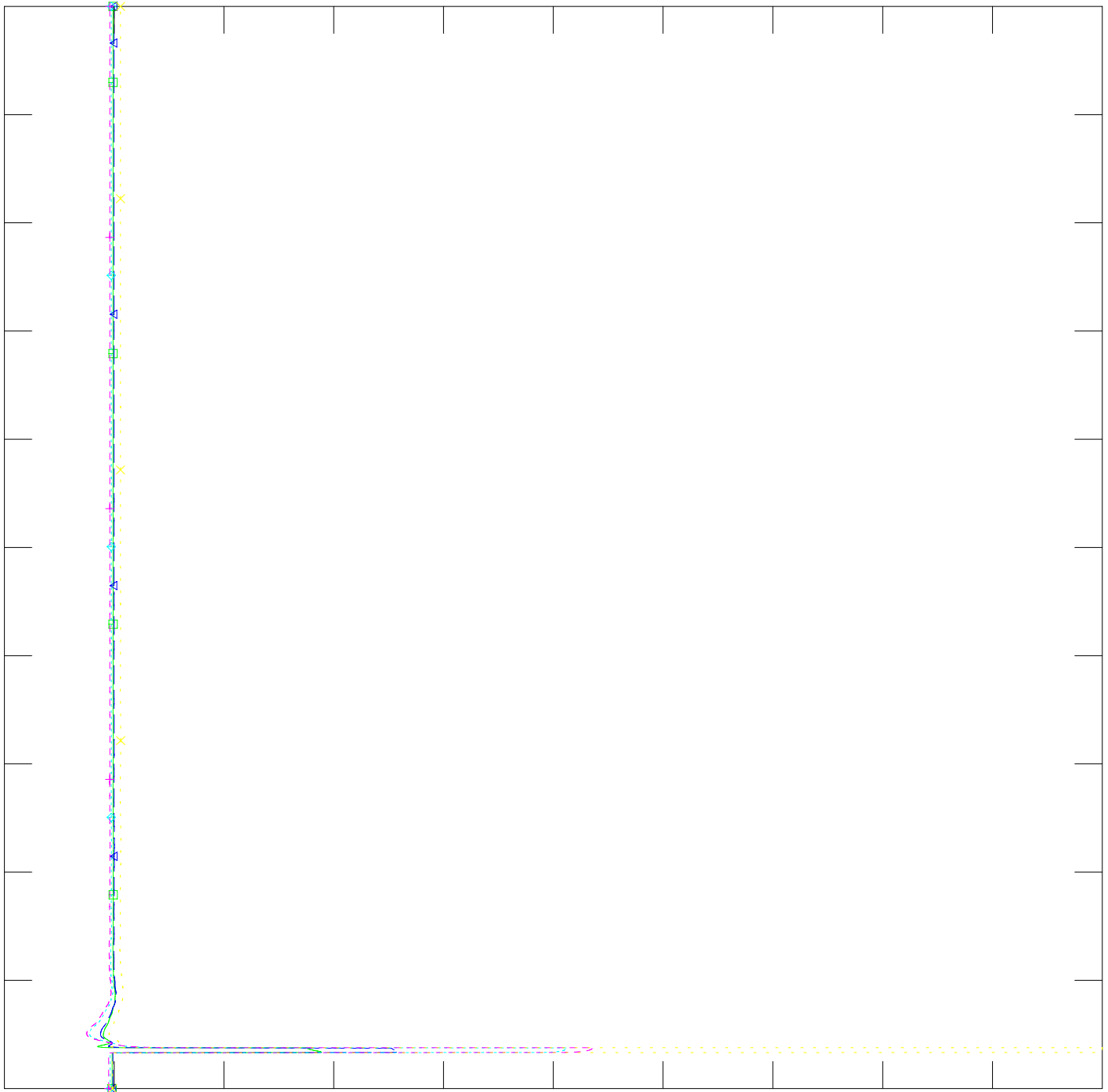
A-2-37



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_892L.out

MON, NOV 15 2010 11:43
BUS VOLTAGE

Channel	Location	Value
CHNL# 30: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 29: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 28: EVOLT	271 [BULLS H7	138.00]]
CHNL# 27: EVOLT	269 [BURDETT7	138.00]]
CHNL# 26: EVOLT	31 [FINCAST7	138.00]]

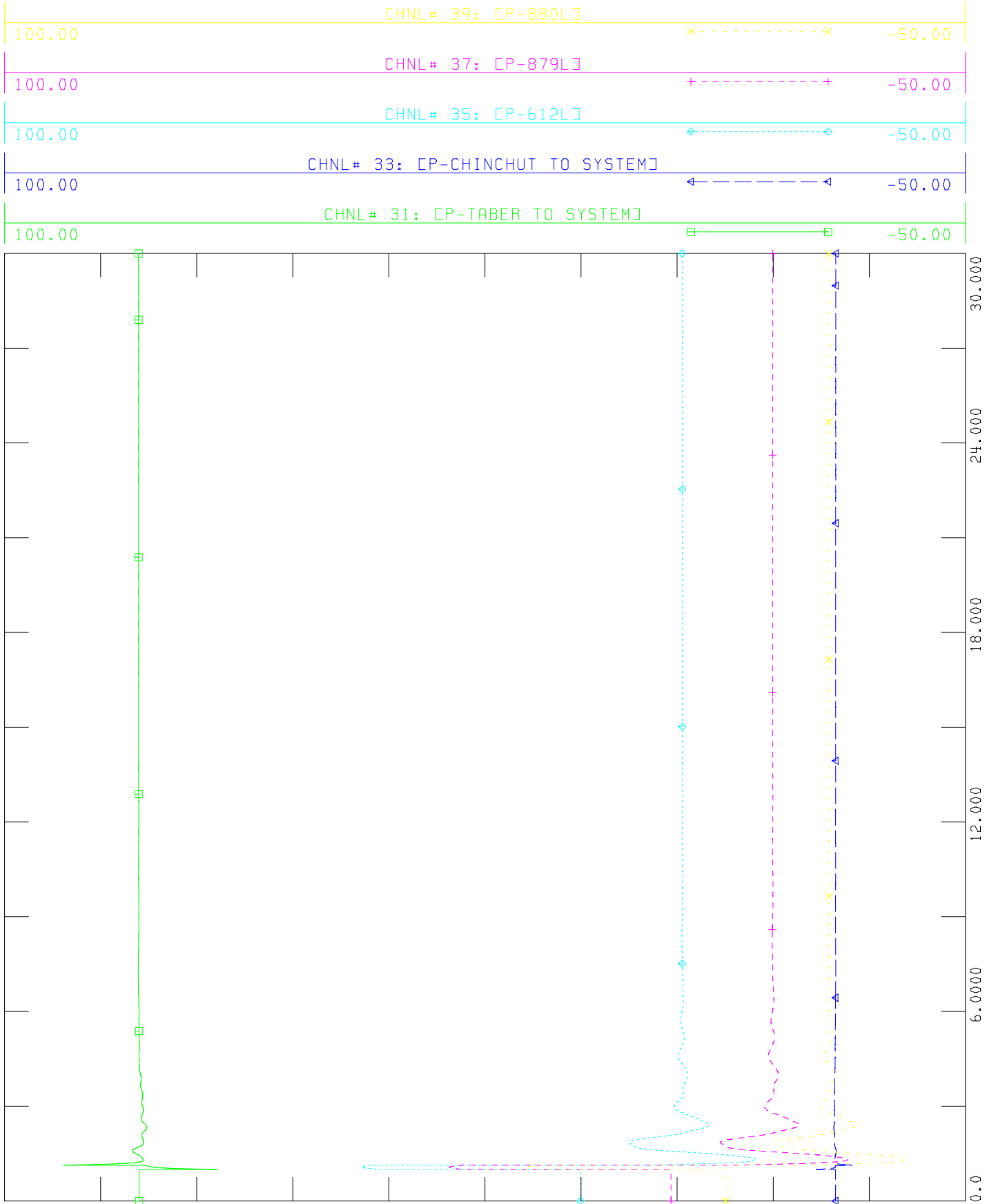


A-2-38



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_892L.out

MON, NOV 15 2010 11:44
BRANCH ACTIVE POWER

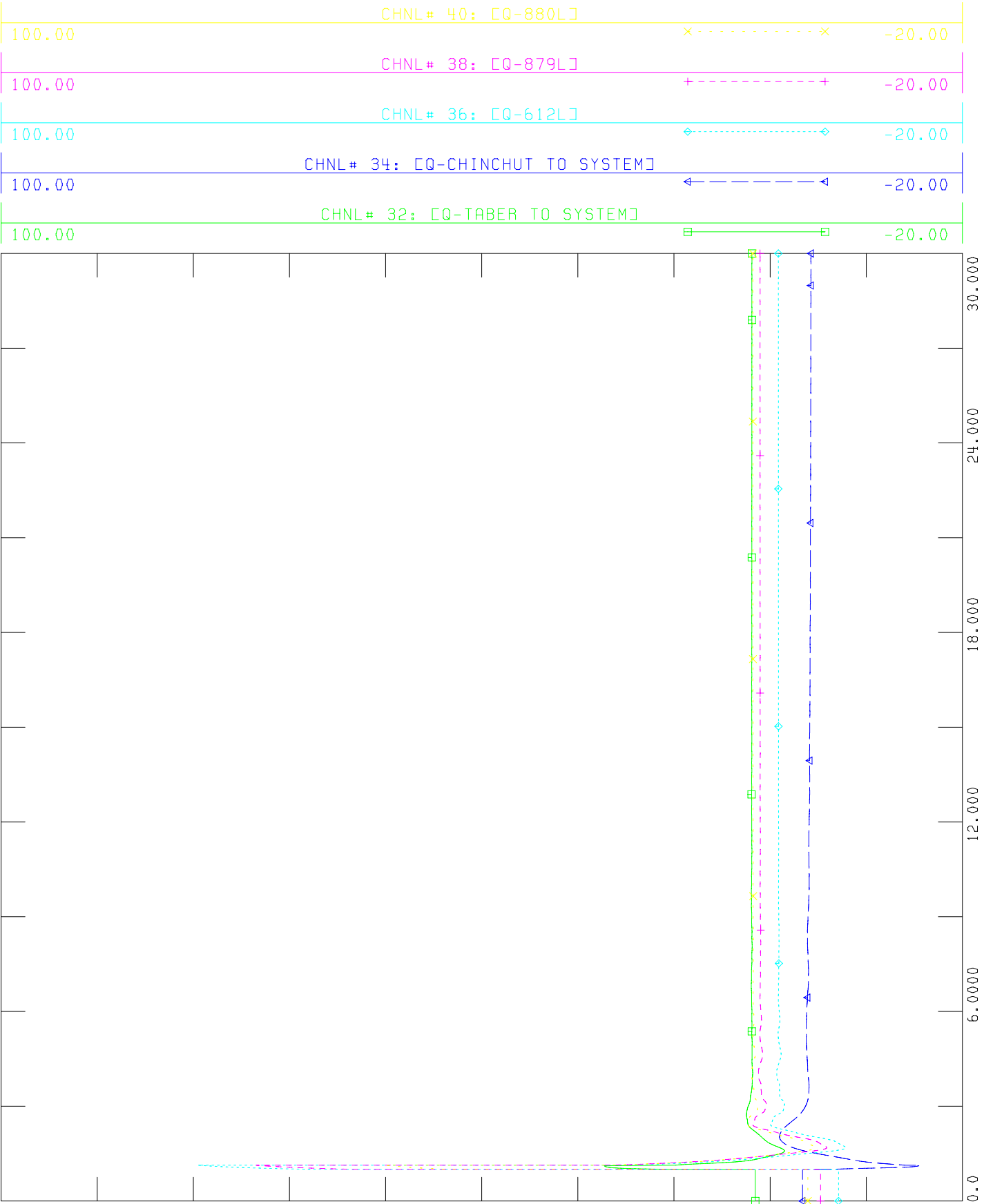


A-2-39



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_EXISTING_892L.out

MON, NOV 15 2010 11:45
BRANCH REACTIVE POWER



A-240

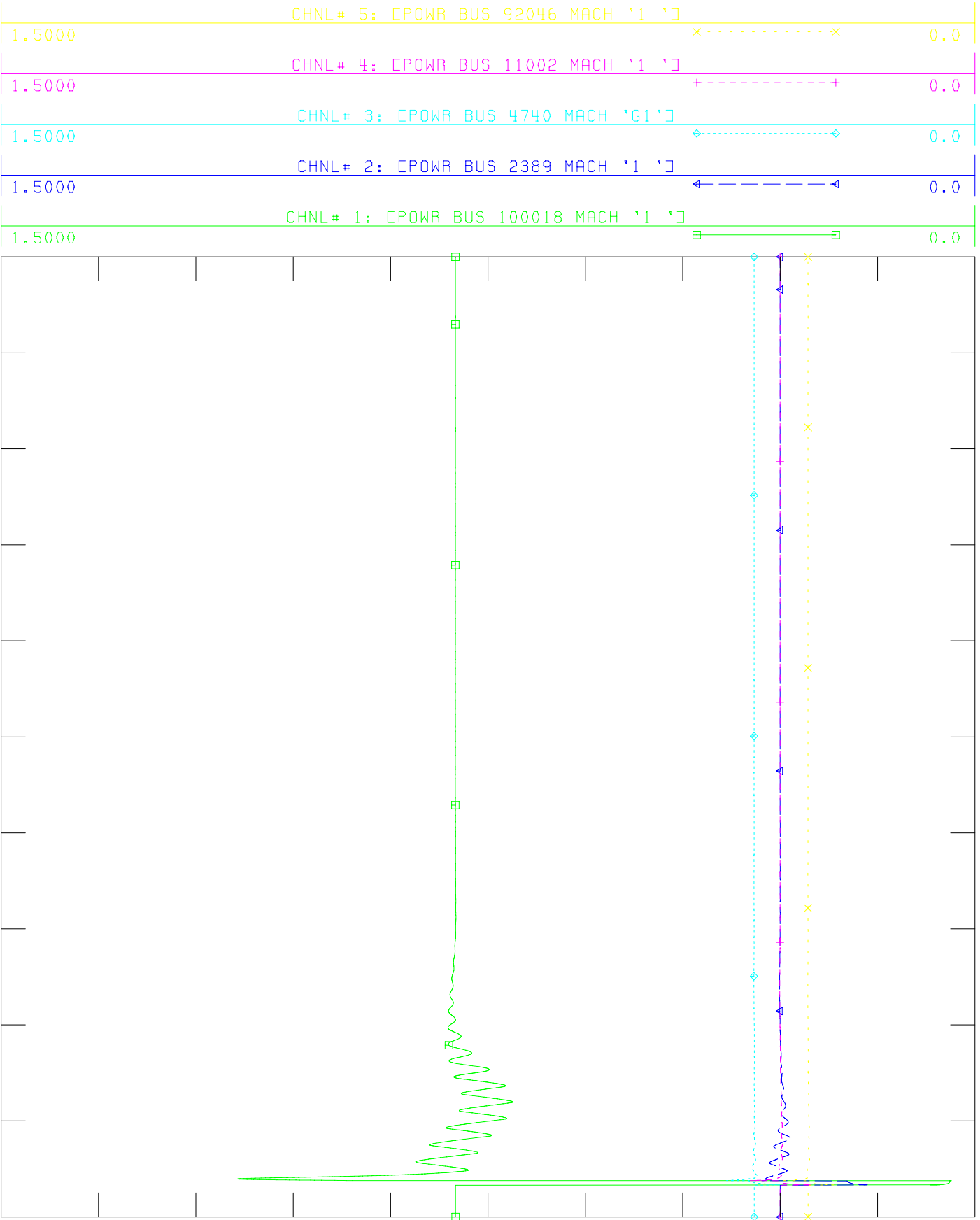
Attachment A-3: Pre-connection Transient Stability Analysis

Results -- Scenario 3



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_612L.out

MON, NOV 15 2010 13:41
PELEC

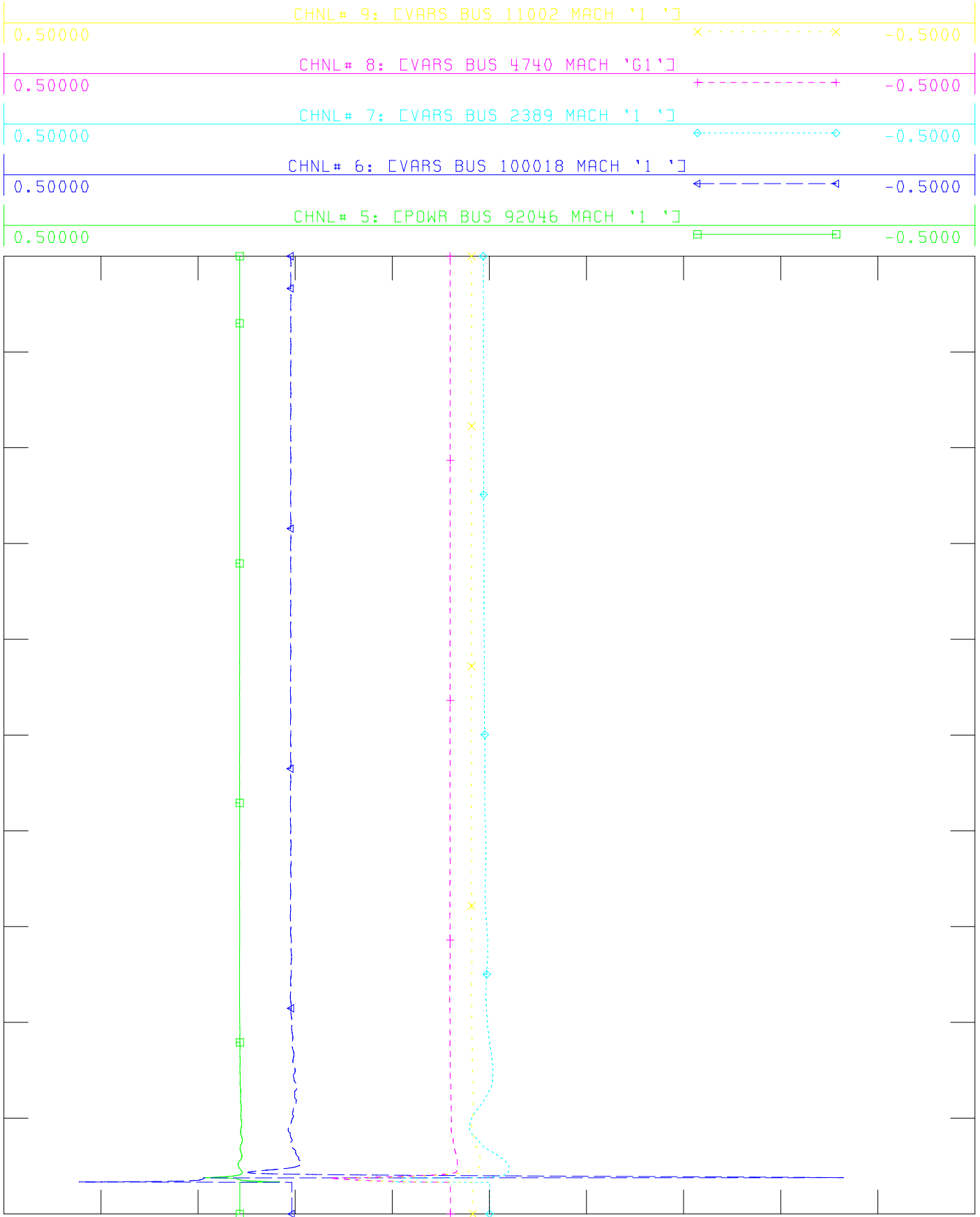


A-3-1

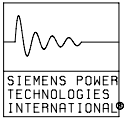


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_612L.out

MON, NOV 15 2010 13:42
OELEC



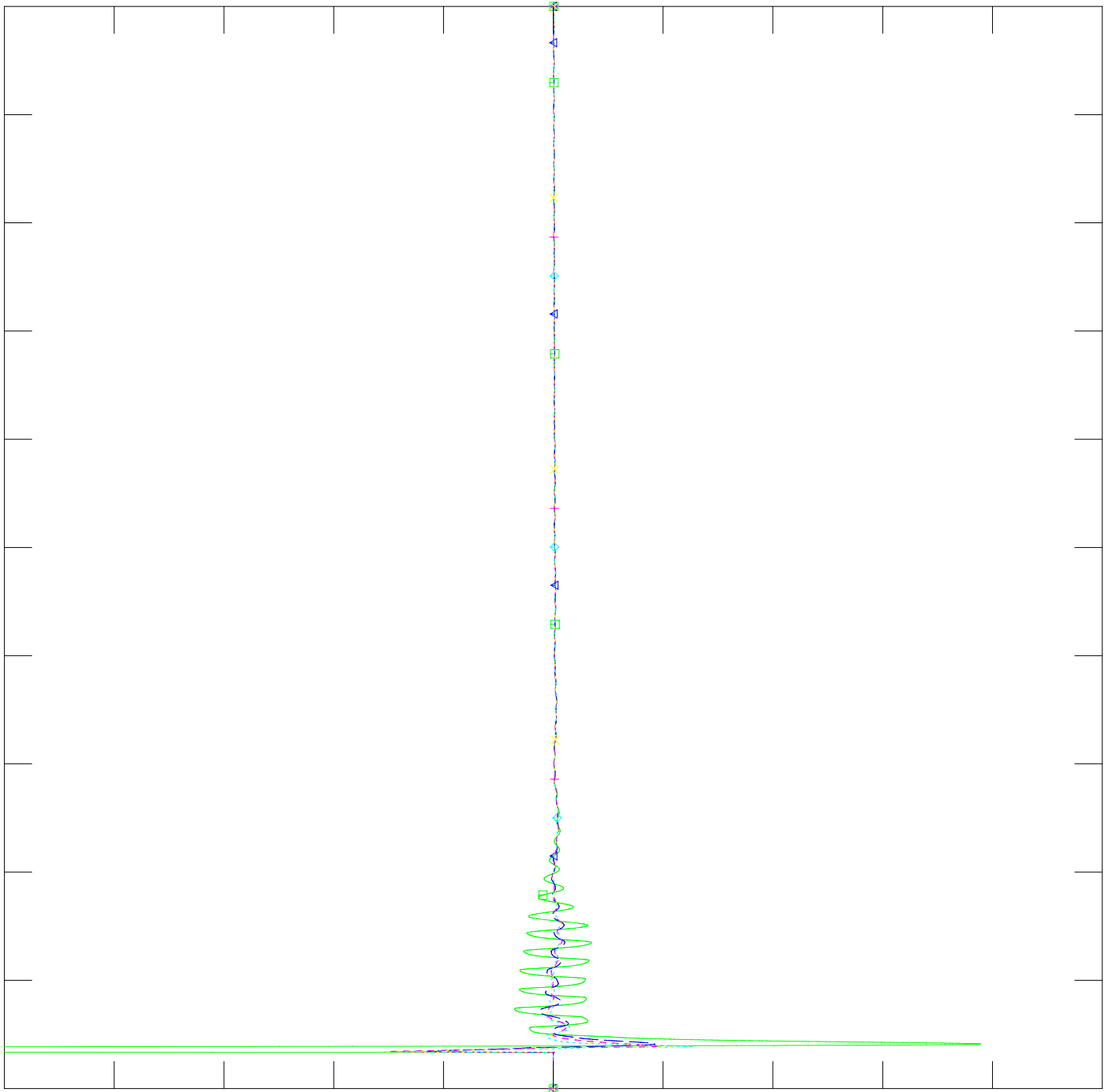
A-3-2



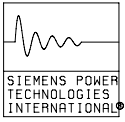
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_612L.out

MON, NOV 15 2010 13:42
BUS FREQUENCY

Channel	CFREQ	Channel Name	Value
CHNL# 15	92046	EMCBRIDE6	0.5750
CHNL# 14	11002	EGARDNG2	0.5750
CHNL# 13	4740	EARD_07	0.5750
CHNL# 12	2389	CHILLRIDG	0.5750
CHNL# 11	100018	CPURPLESP	0.5750



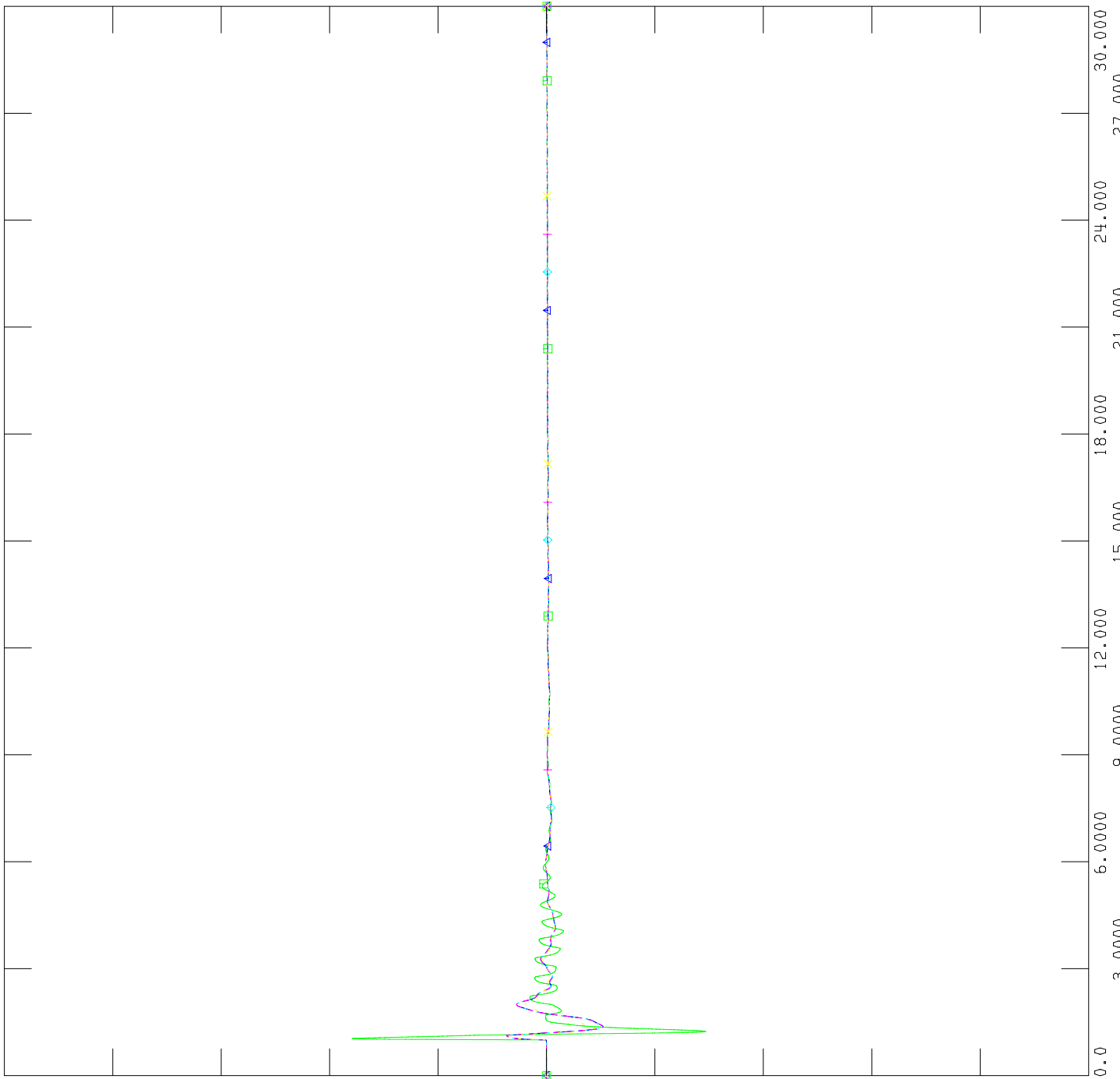
A-3-3



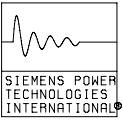
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_612L.out

MON, NOV 15 2010 13:43
 BUS FREQUENCY

0.00670	CHNL# 20: CFREQ	270	CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 19: CFREQ	680	CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 18: CFREQ	271	CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 17: CFREQ	269	CBURDETT7	138.00]]	←-----△	-0.0067
0.00670	CHNL# 16: CFREQ	31	CFINCAST7	138.00]]	▣-----▣	-0.0067



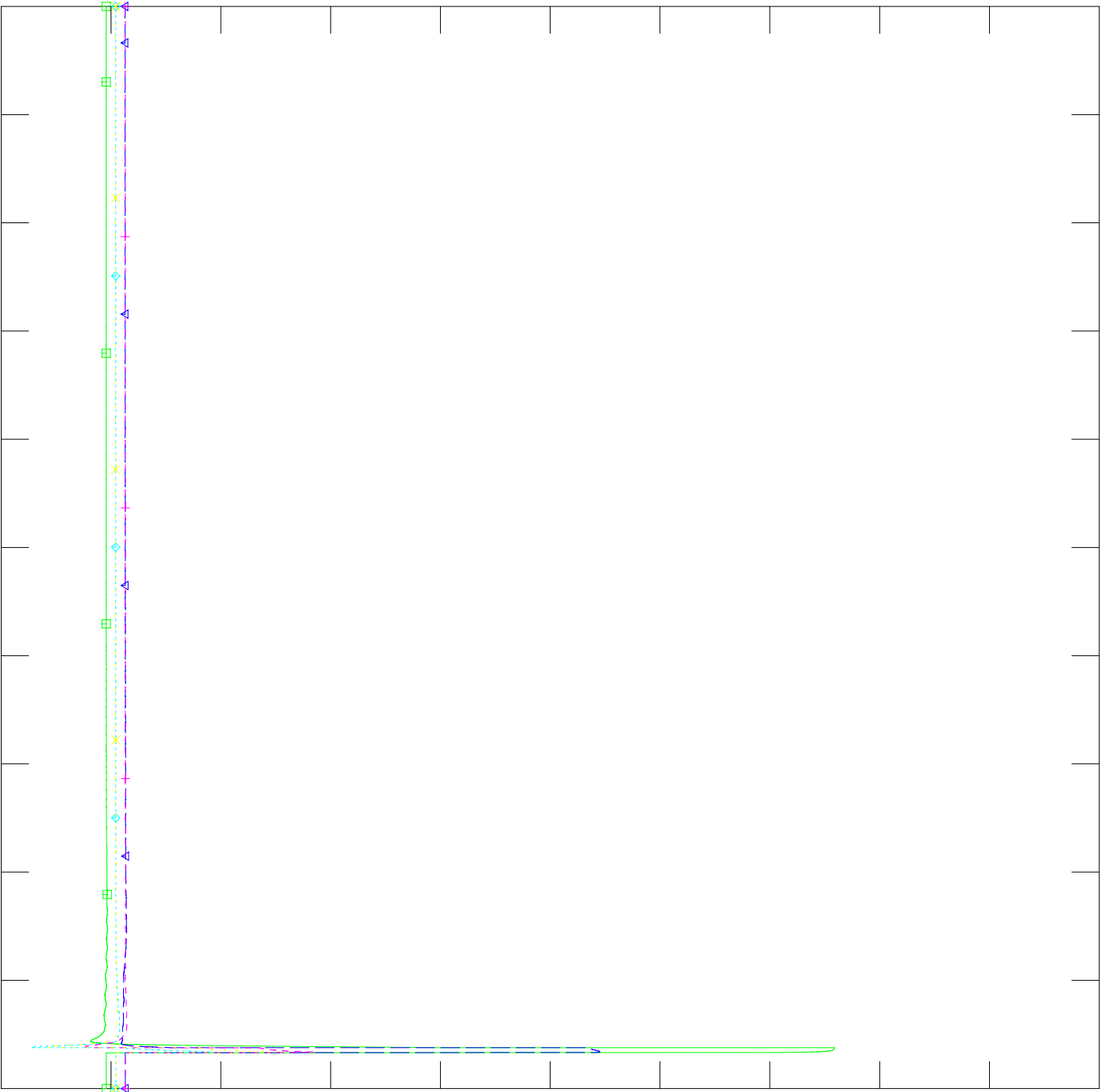
A-3-4



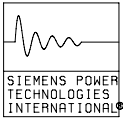
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_612L.out

MON, NOV 15 2010 13:44
BUS VOLTAGE

Channel	Label	Value	Marker
CHNL# 25	EVOLT 92046 EMCBRIDE6	0.5750	x
CHNL# 24	EVOLT 11002 EGARDNG2	0.5750	+
CHNL# 23	EVOLT 4740 EARD_07	0.5750	◇
CHNL# 22	EVOLT 2389 CHILLRIDG	0.5750	←
CHNL# 21	EVOLT 100018 CPURPLESP	0.5750	■



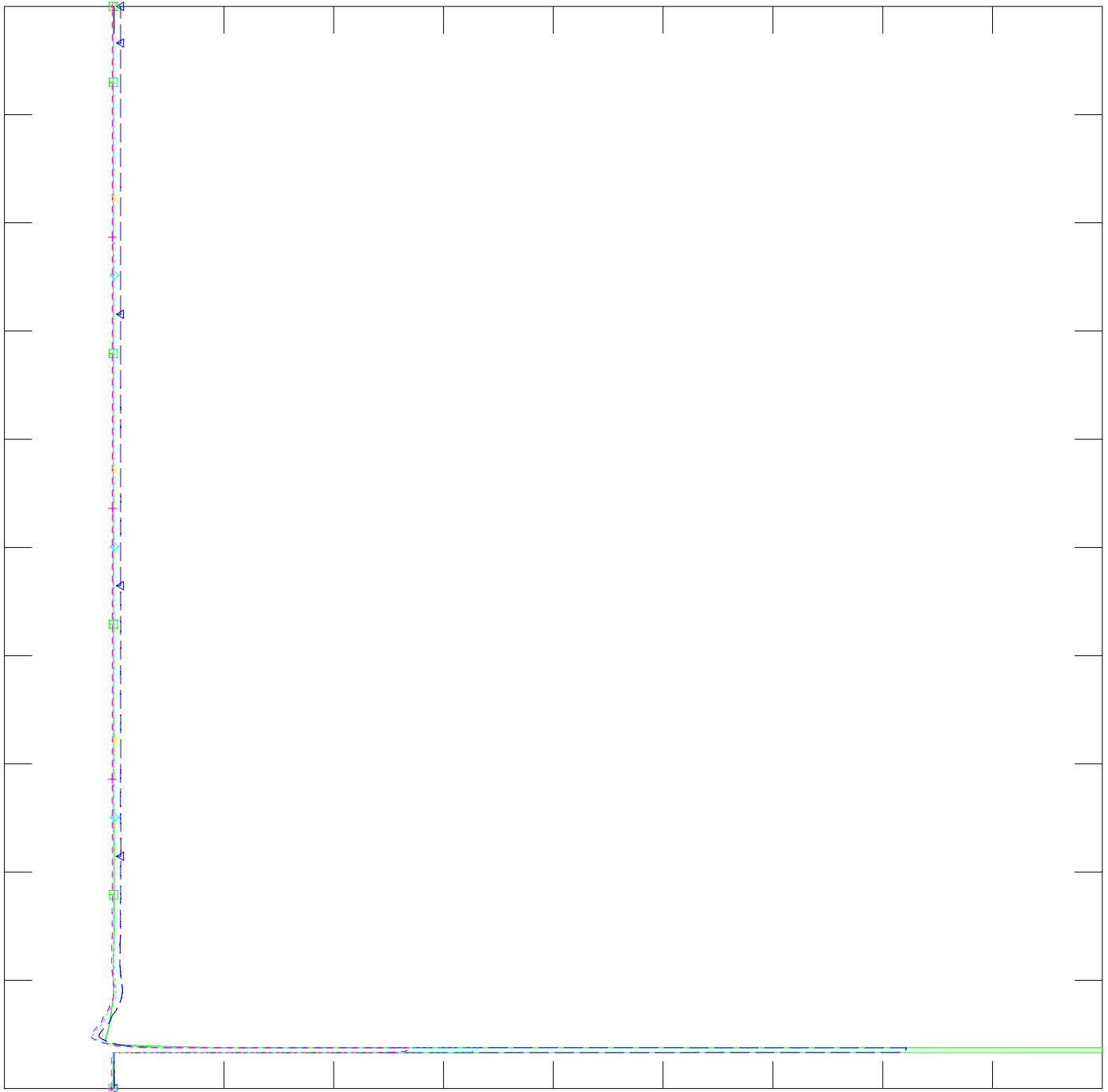
A-3-5



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_612L.out

MON, NOV 15 2010 13:44
BUS VOLTAGE

Channel	Location	Value
CHNL# 30: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 29: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 28: EVOLT	271 [BULLS H7	138.00]]
CHNL# 27: EVOLT	269 [BURDETT7	138.00]]
CHNL# 26: EVOLT	31 [FINCAST7	138.00]]

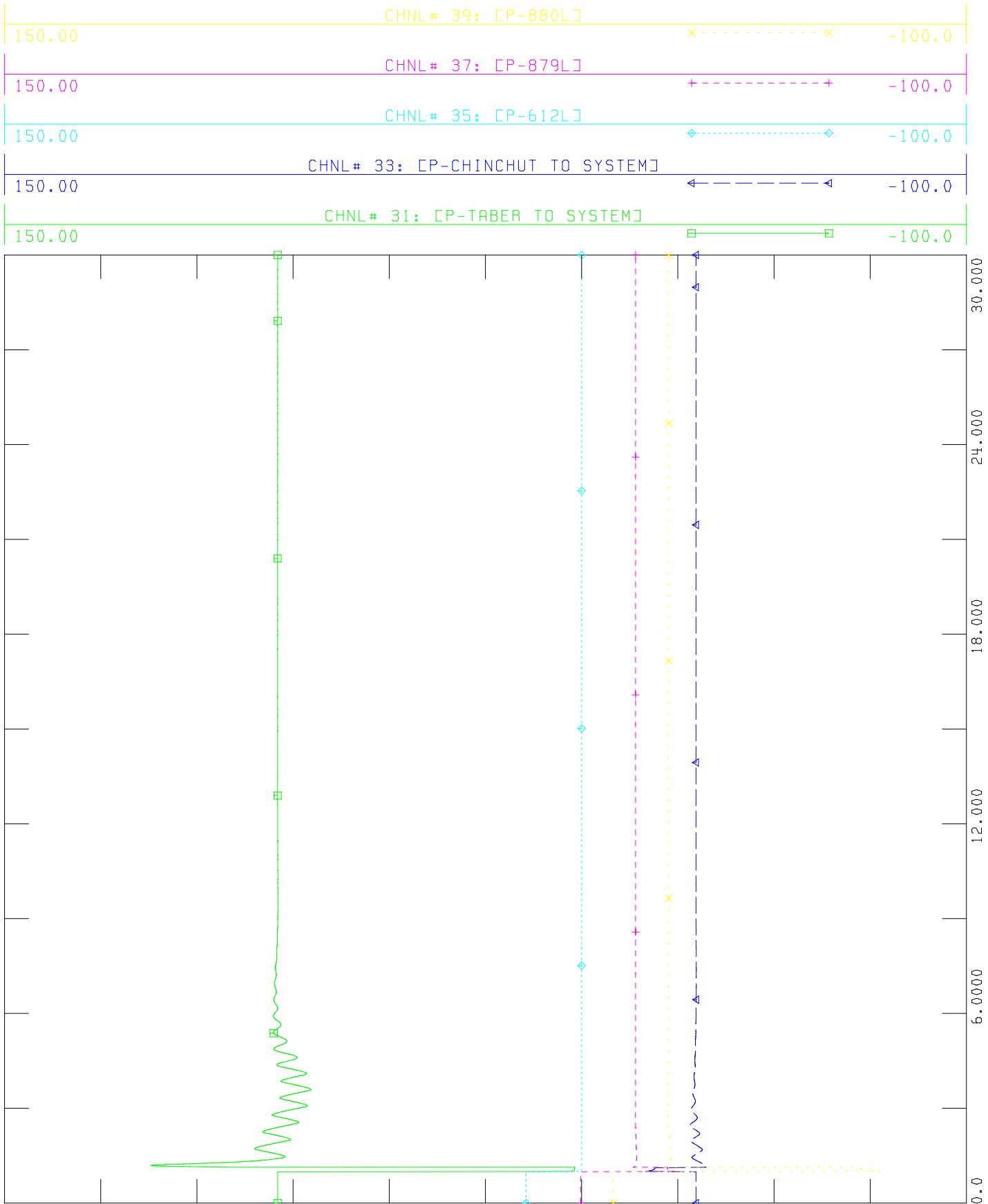


A-3-6

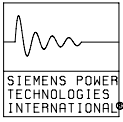


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_612L.out

MON, NOV 15 2010 13:46
BRANCH ACTIVE POWER

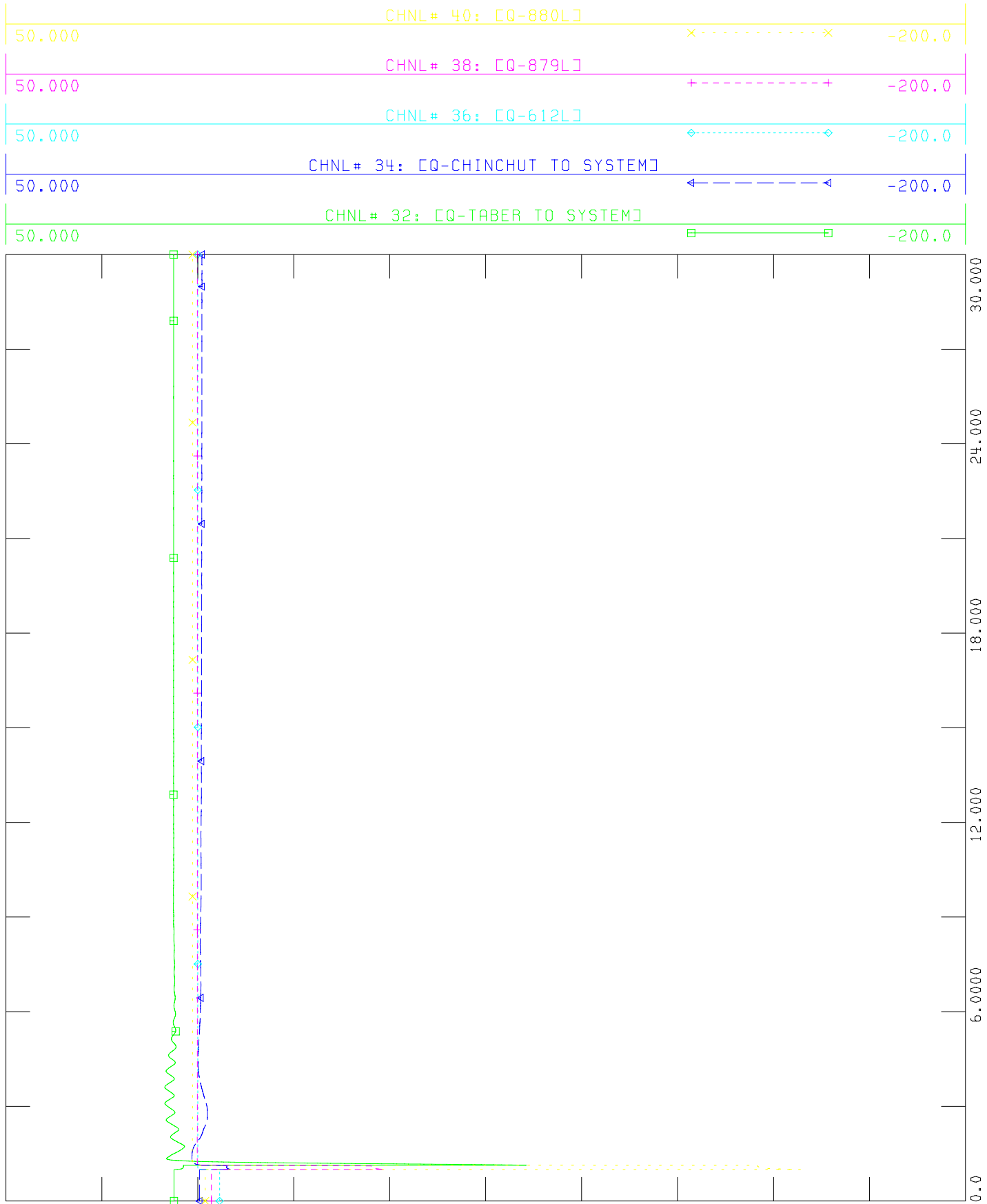


A-3-7



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_612L.out

MON, NOV 15 2010 13:46
BRANCH REACTIVE POWER

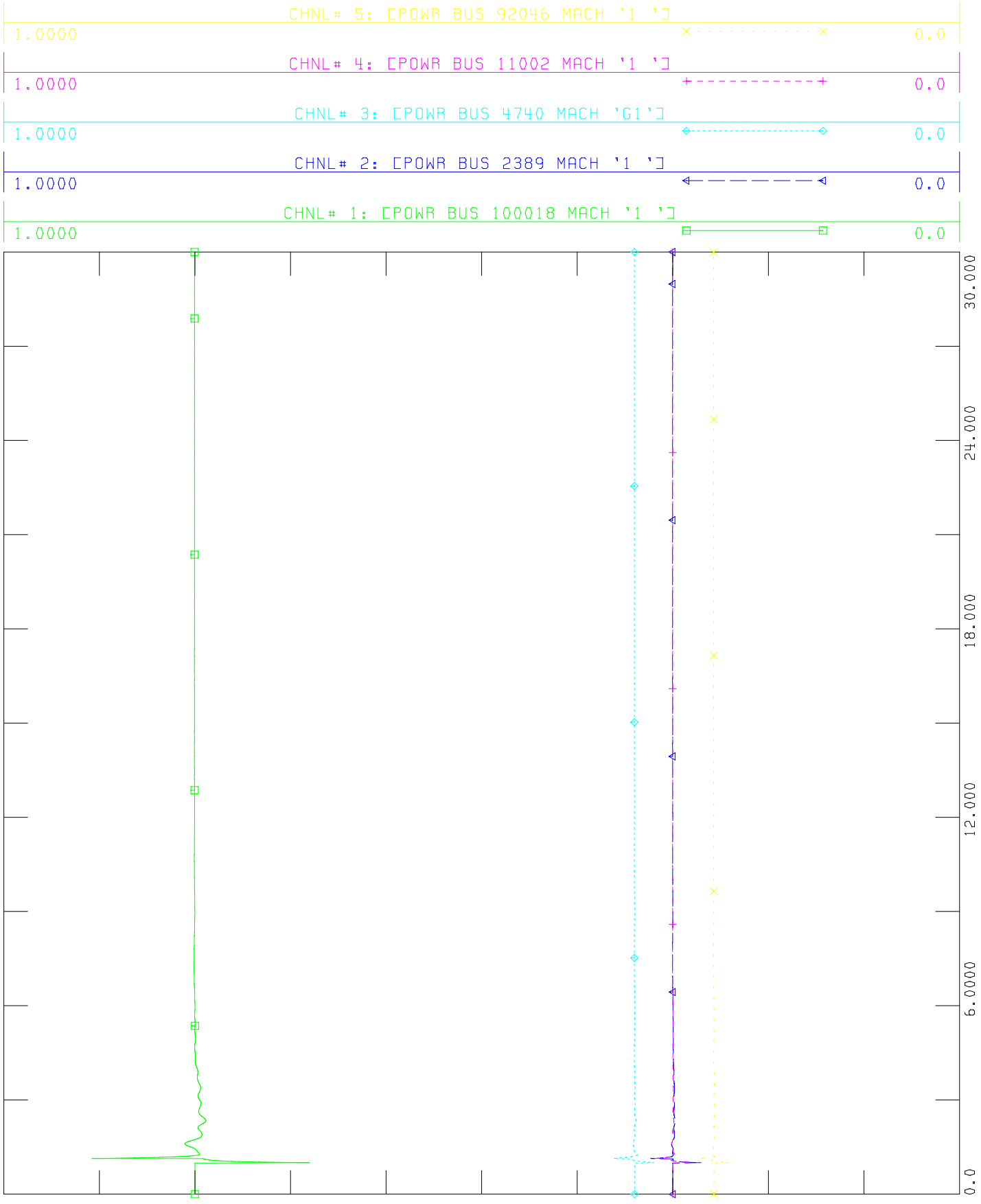


A-3-8



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_760L.out

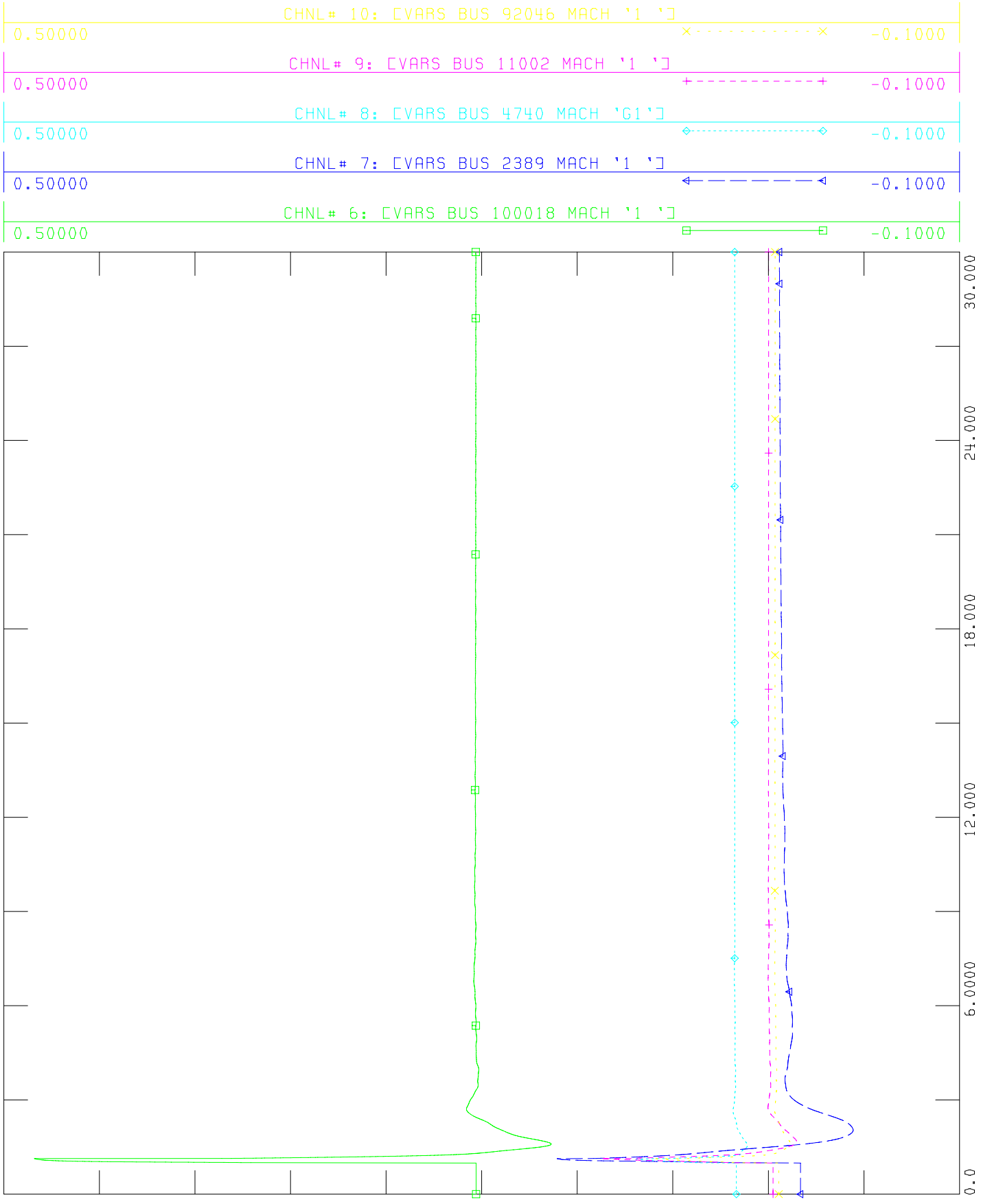
MON, NOV 15 2010 13:47
PELEC



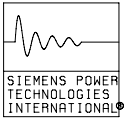


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_760L.out

MON, NOV 15 2010 13:48
QELEC



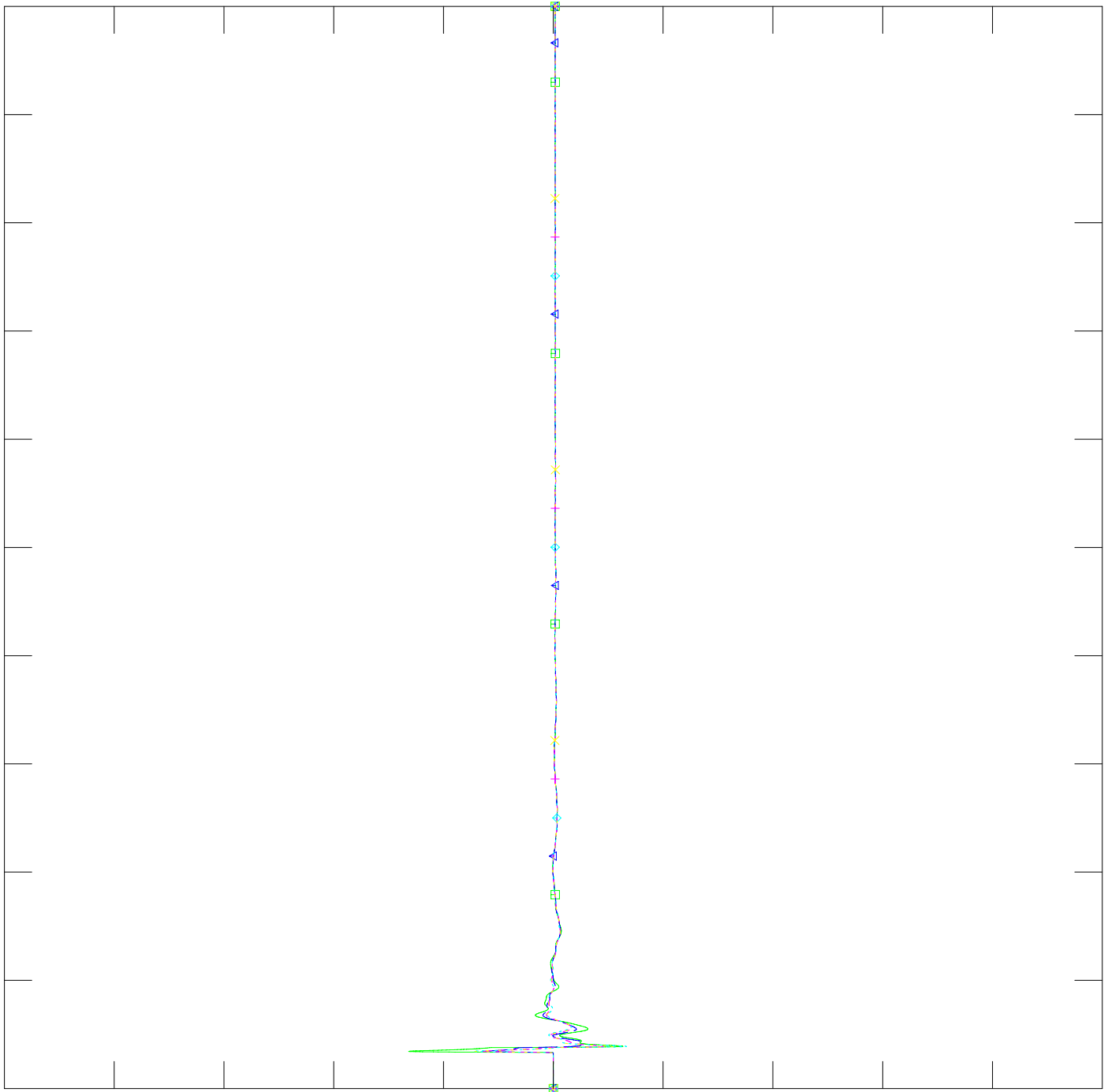
A-3-10



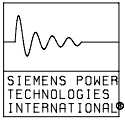
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_760L.out

MON, NOV 15 2010 13:50
BUS FREQUENCY

Channel	CFREQ	Channel Name	Value
CHNL# 15	92046	EMCBRIDE6	0.5750
CHNL# 14	11002	EGARDNG2	0.5750
CHNL# 13	4740	EARD_07	0.5750
CHNL# 12	2389	CHILLRIDG	0.5750
CHNL# 11	100018	CPURPLESP	0.5750



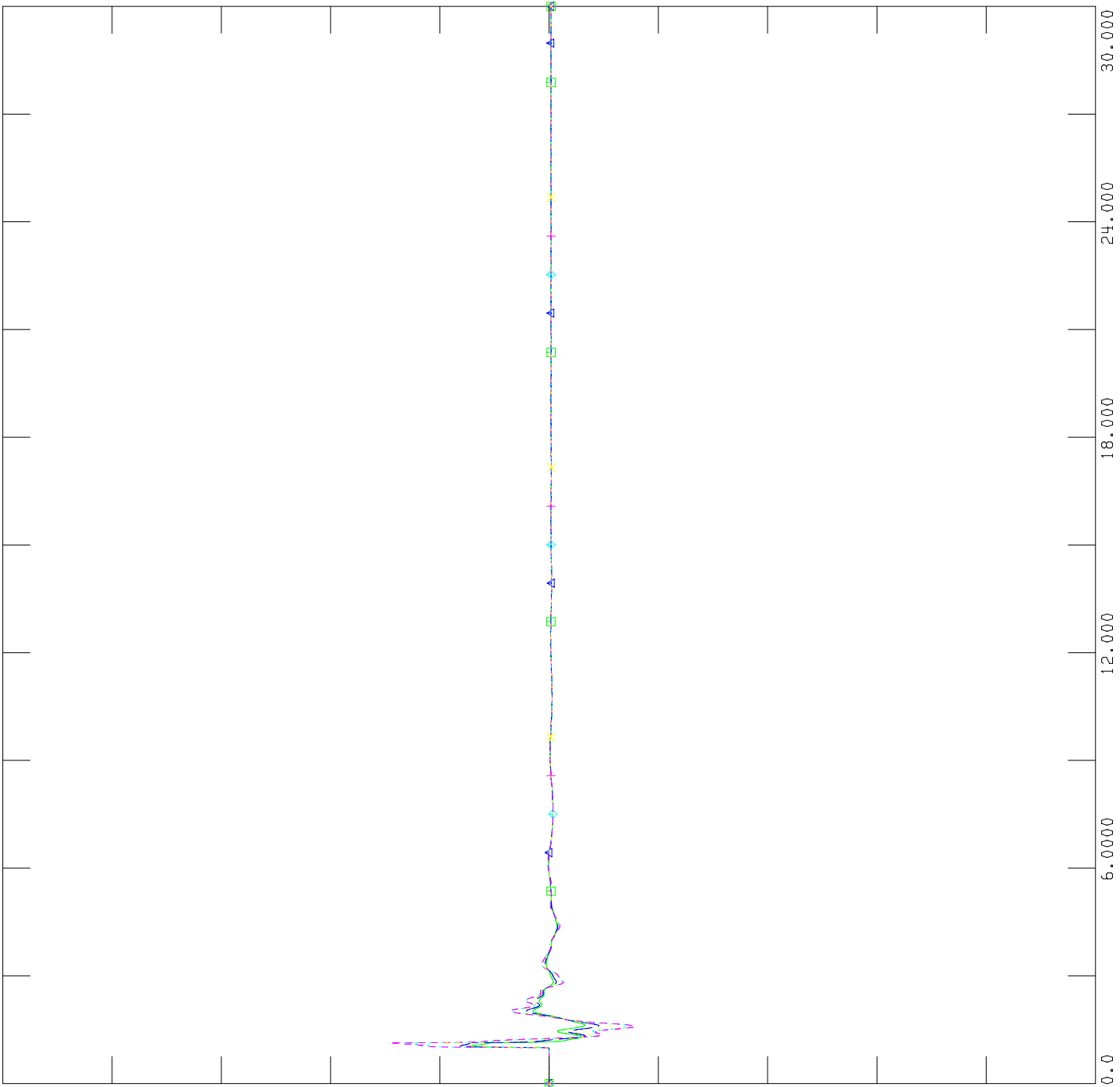
A-3-11



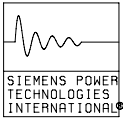
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_760L.out

MON, NOV 15 2010 13:51
BUS FREQUENCY

Channel	CFREQ	Location	Value
CHNL# 20	CFREQ	270 ESUFFIEL7	138.00
CHNL# 19	CFREQ	680 CMEDICIN7	138.00
CHNL# 18	CFREQ	271 CBULLS H7	138.00
CHNL# 17	CFREQ	269 CBURDETT7	138.00
CHNL# 16	CFREQ	31 CFINCAST7	138.00



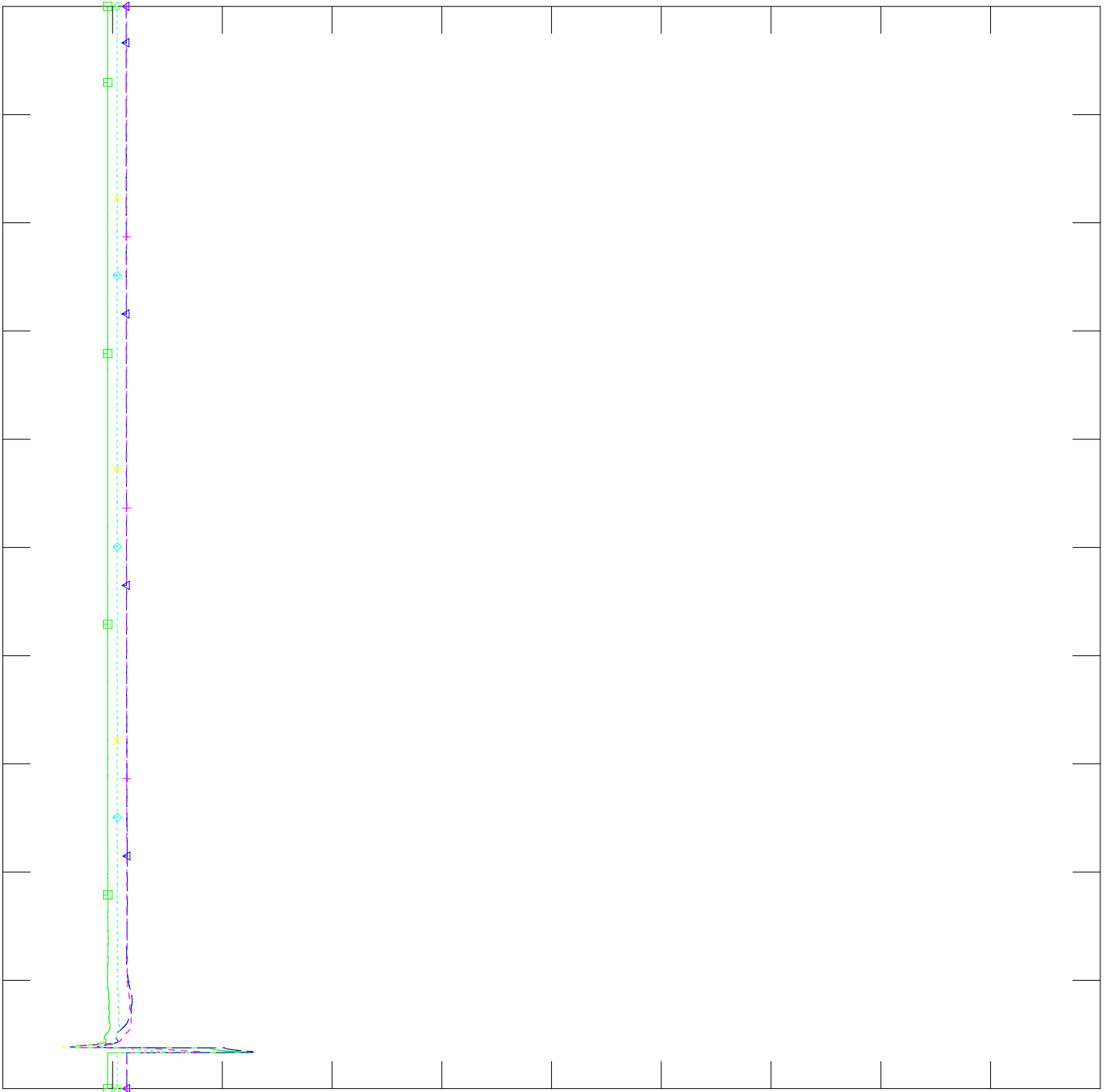
A-3-12



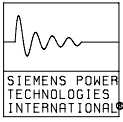
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_760L.out

MON, NOV 15 2010 13:51
BUS VOLTAGE

Channel	Label	Value	Marker
CHNL# 25	EVOLT 92046 EMCBRIDE6	0.5750	x
CHNL# 24	EVOLT 11002 EGARDNG2	0.5750	+
CHNL# 23	EVOLT 4740 EARD_07	0.5750	◇
CHNL# 22	EVOLT 2389 CHILLRIDG	0.5750	◀
CHNL# 21	EVOLT 100018 CPURPLESP	0.5750	■



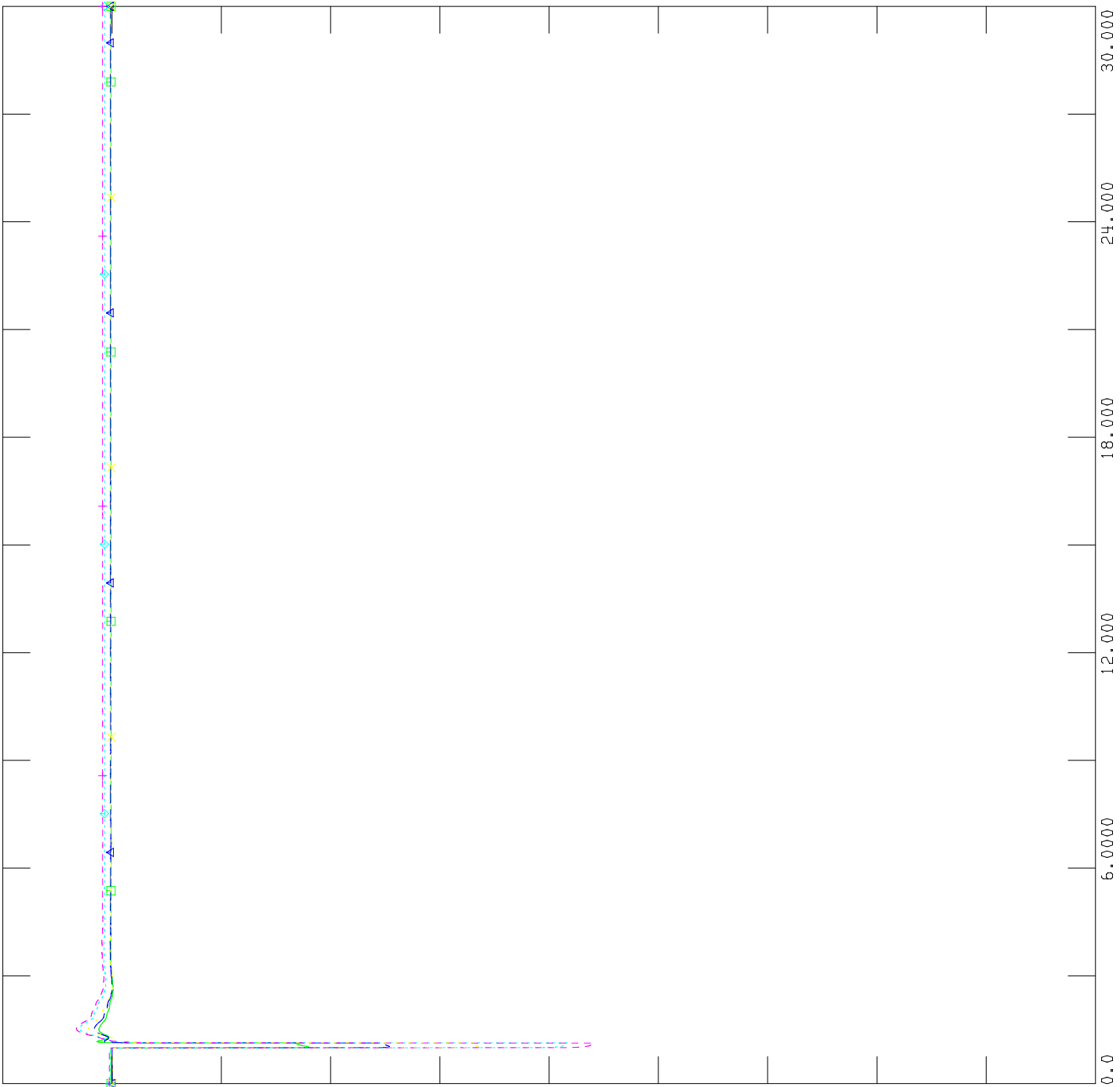
A-3-13



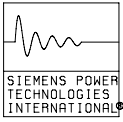
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_760L.out

MON, NOV 15 2010 13:52
BUS FREQUENCY

Channel	Bus Name	Value
CHNL# 30: EVOLT	270 ESUFFIEL7	138.00
CHNL# 29: EVOLT	680 CMEDICIN7	138.00
CHNL# 28: EVOLT	271 EBULLS H7	138.00
CHNL# 27: EVOLT	269 CBURDETT7	138.00
CHNL# 26: EVOLT	31 CFINCAST7	138.00

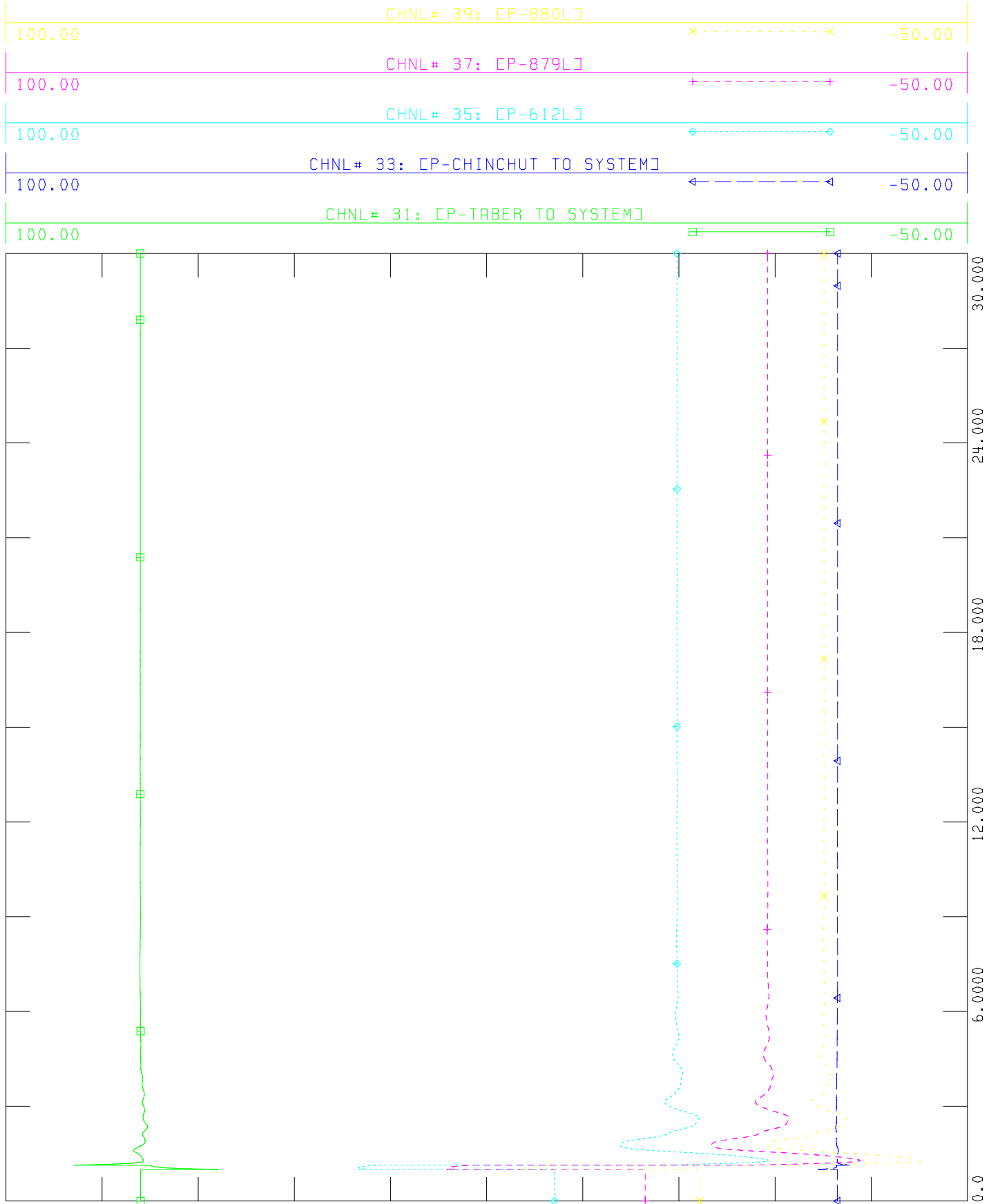


A-3-14



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_760L.out

MON, NOV 15 2010 13:53
BRANCH ACTIVE POWER

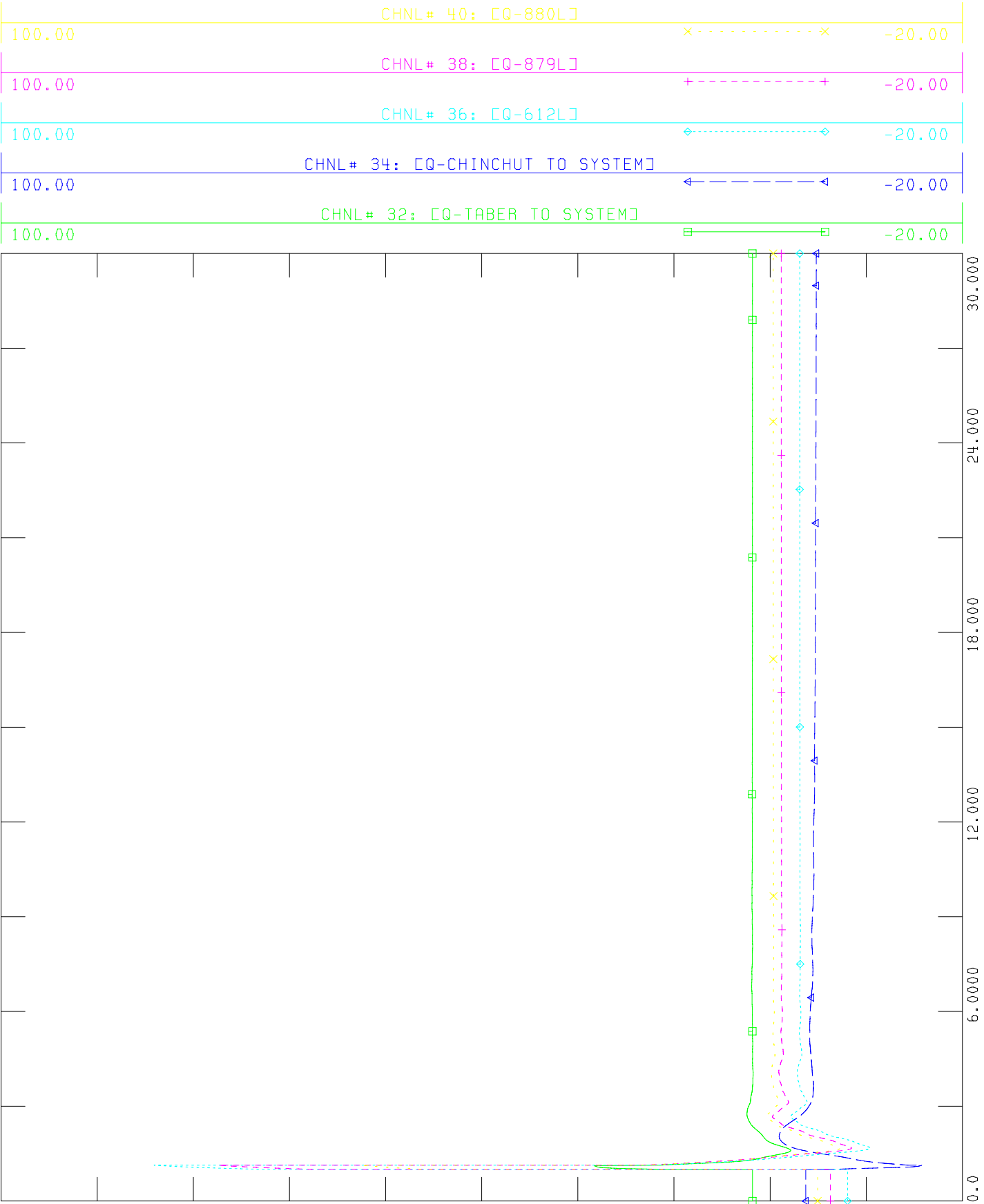


A-3-15

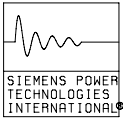


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_760L.out

MON, NOV 15 2010 13:54
BRANCH REACTIVE POWER

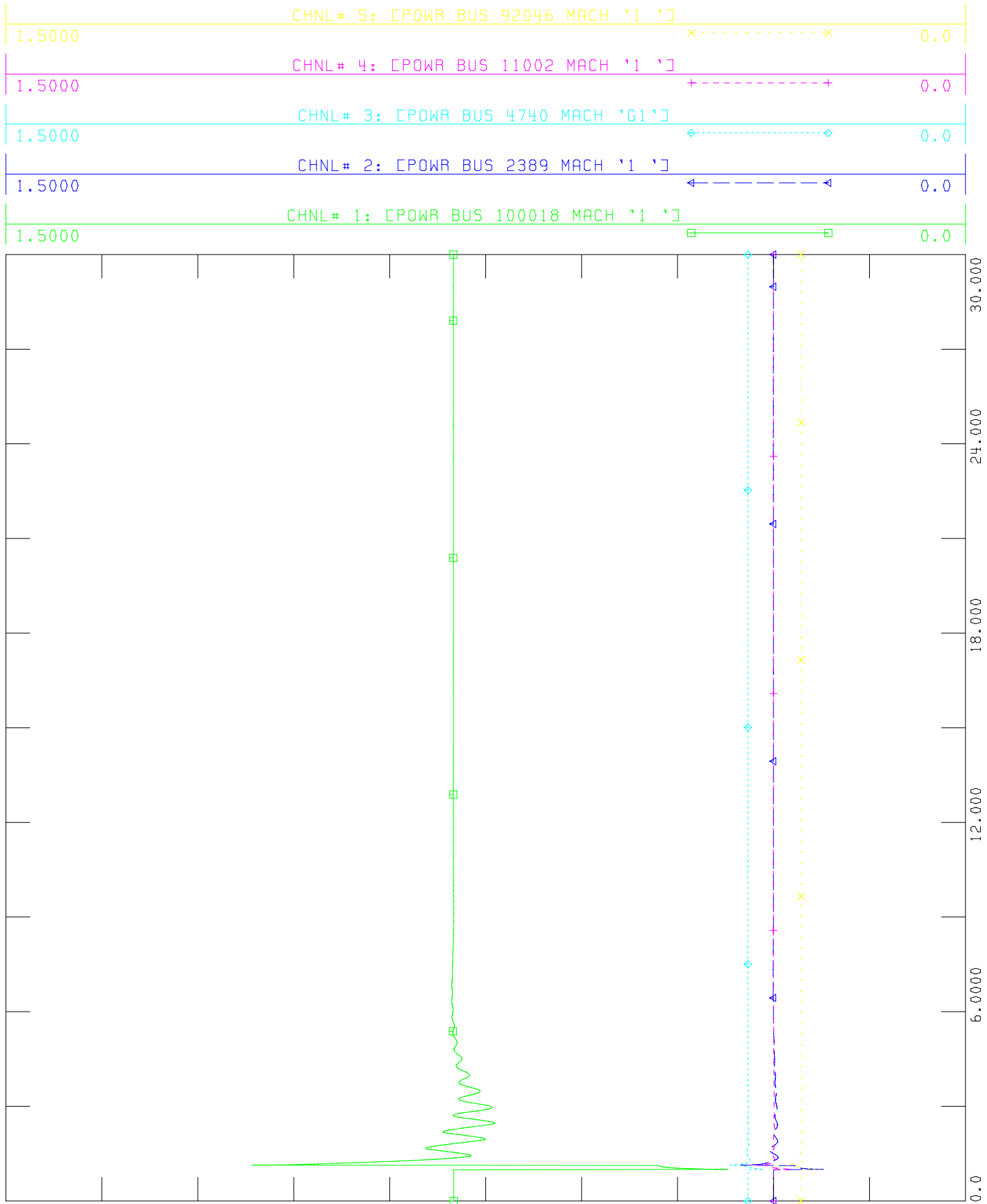


A-3-16



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_879L.out

MON, NOV 15 2010 13:56
PELEC

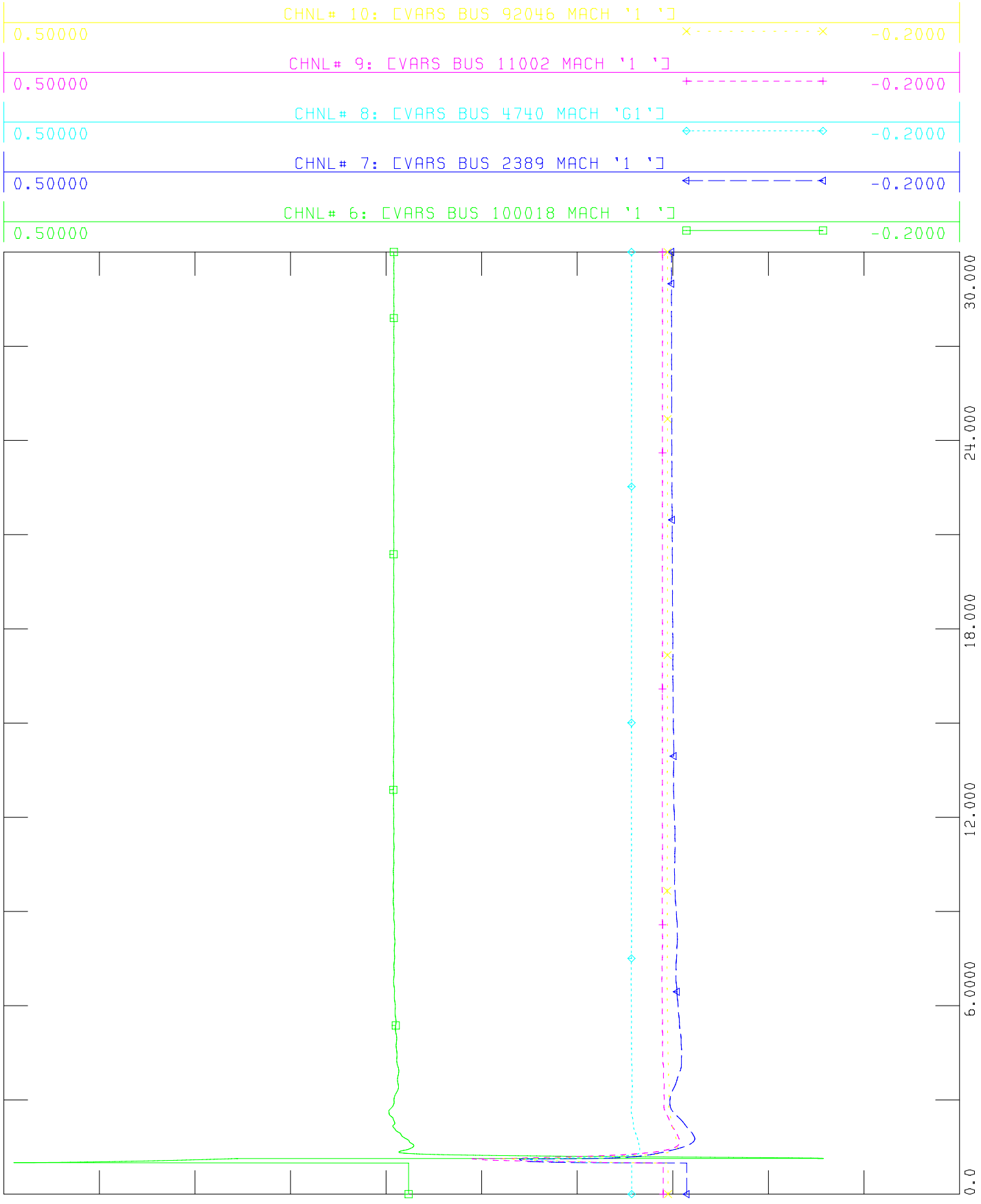


A-3-17

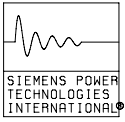


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_879L.out

MON, NOV 15 2010 13:57
OELEC



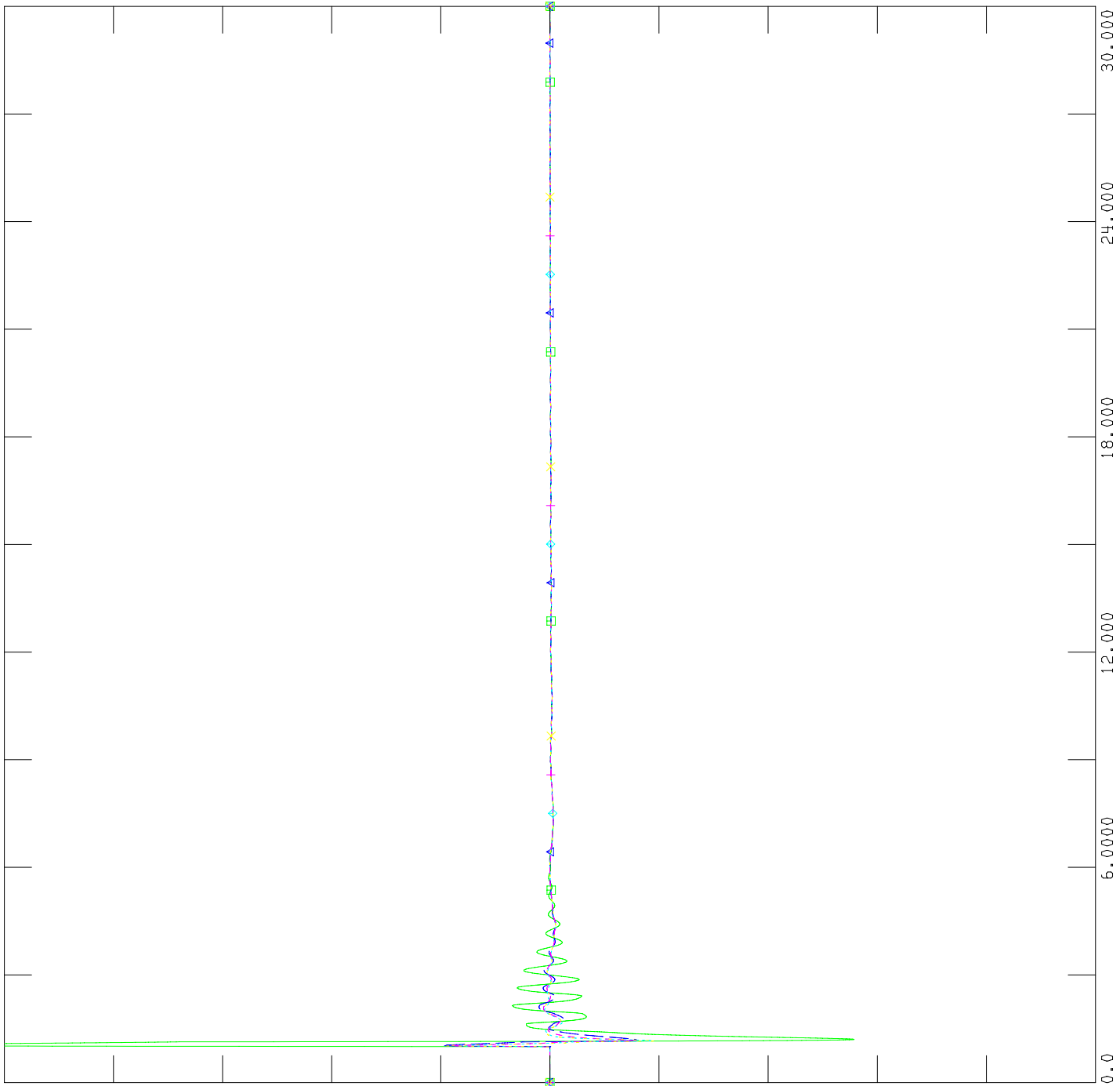
A-3-18



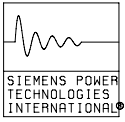
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_879L.out

MON, NOV 15 2010 13:58
 BUS FREQUENCY

0.00670	CHNL# 15: CFREQ 92046 EMCBRIDE6 0.5750	x-----x	-0.0067
0.00670	CHNL# 14: CFREQ 11002 CGARDNG2 0.5750	+-----+	-0.0067
0.00670	CHNL# 13: CFREQ 4740 CARD_07 0.5750	◇-----◇	-0.0067
0.00670	CHNL# 12: CFREQ 2389 CHILLRIDG 0.5750	←-----←	-0.0067
0.00670	CHNL# 11: CFREQ 100018 CPURPLESP 0.5750	▣-----▣	-0.0067



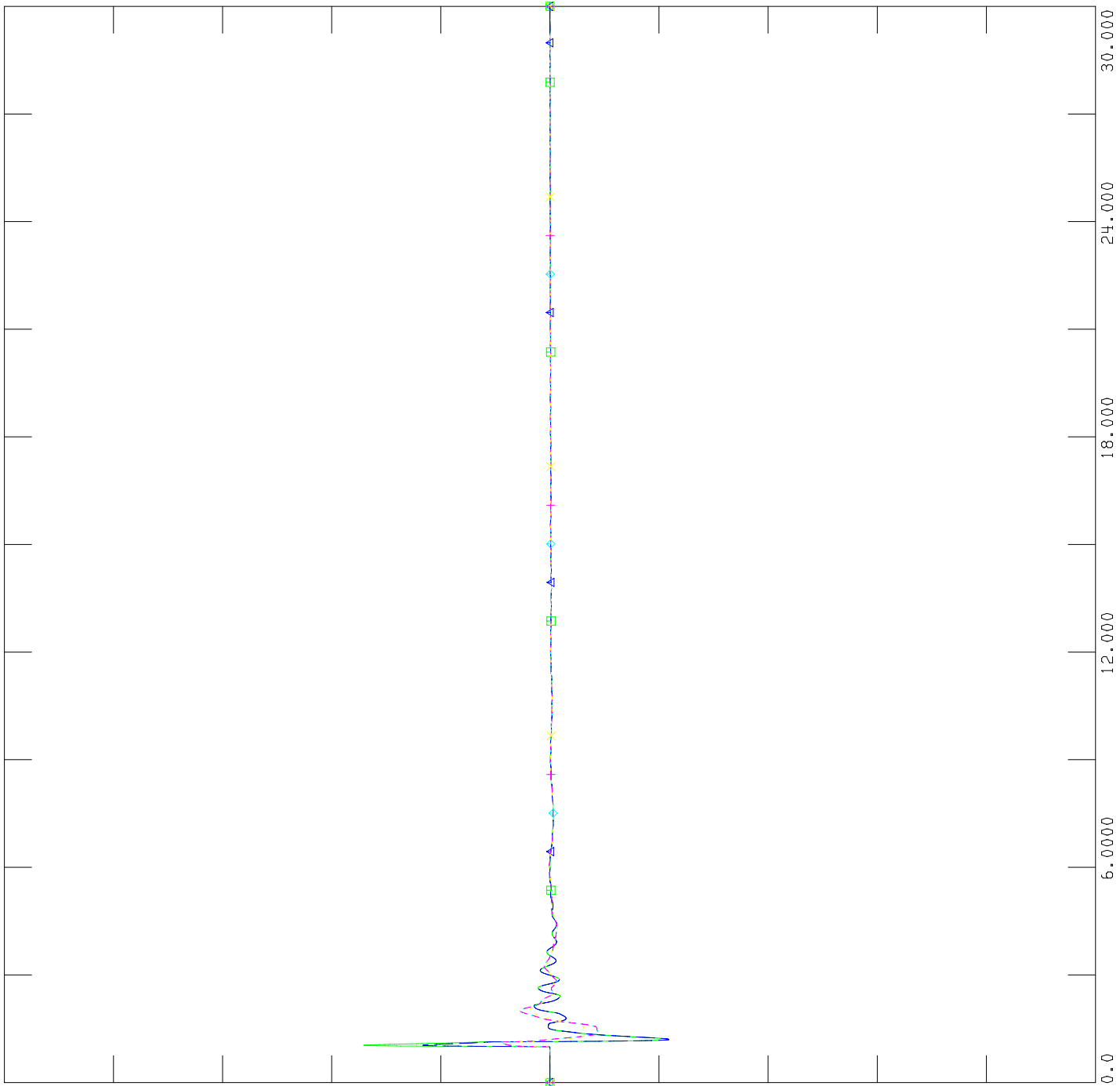
A-3-19



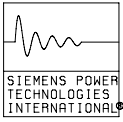
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_879L.out

MON, NOV 15 2010 13:58
 BUS FREQUENCY

0.00670	CHNL# 20: CFREQ	270	CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 19: CFREQ	680	CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 18: CFREQ	271	CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 17: CFREQ	269	CBURDETT7	138.00]]	←-----△	-0.0067
0.00670	CHNL# 16: CFREQ	31	CFINCAST7	138.00]]	▣-----▣	-0.0067



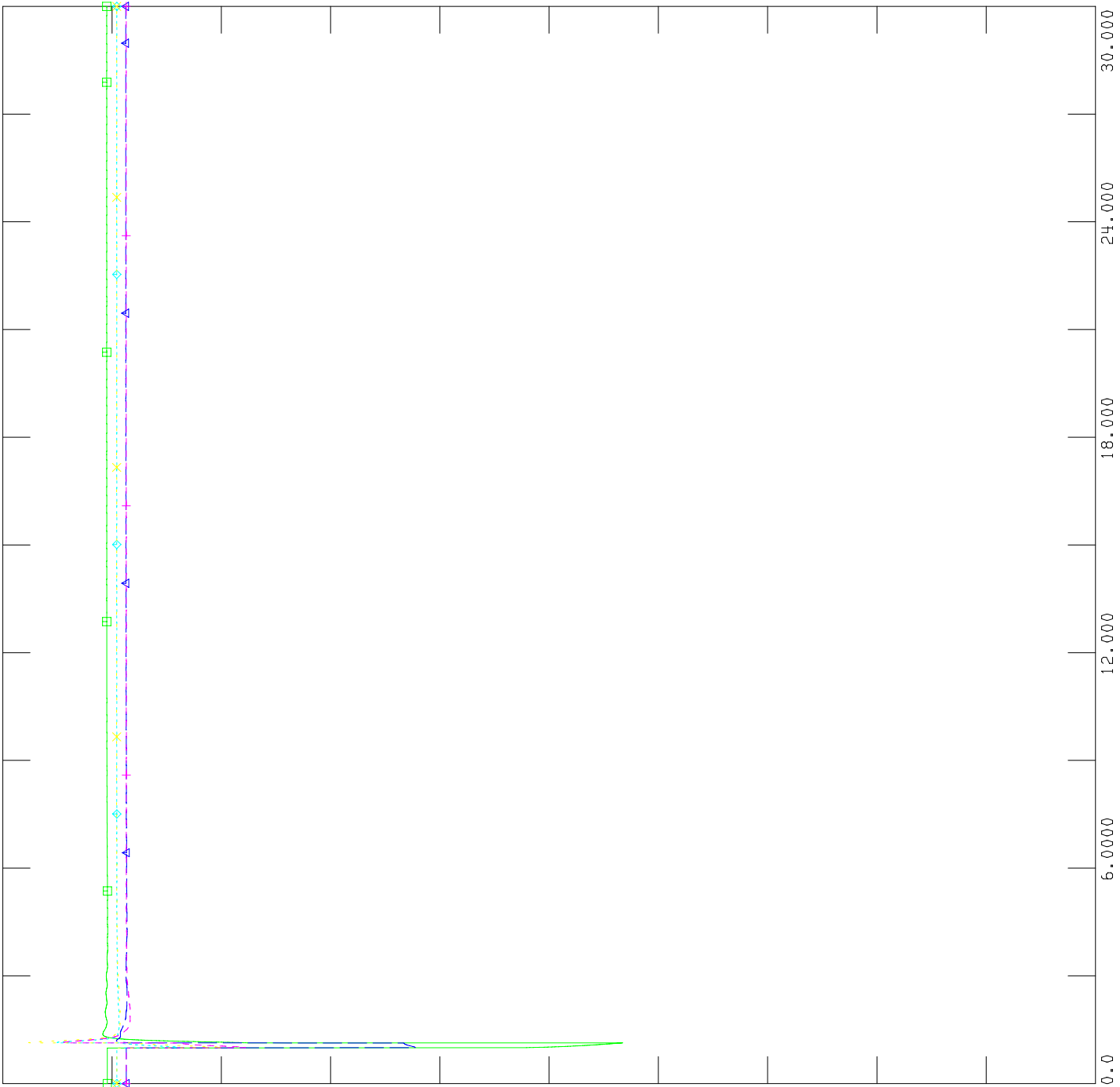
A-3-20



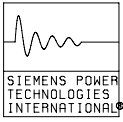
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_879L.out

MON, NOV 15 2010 13:59
BUS VOLTAGE

Channel	Label	Value	Unit
CHNL# 25	EVOLT 92046 EMCBRIDE6	0.5750	J
CHNL# 24	EVOLT 11002 EGARDNG2	0.5750	J
CHNL# 23	EVOLT 4740 EARD_07	0.5750	J
CHNL# 22	EVOLT 2389 CHILLRIDG	0.5750	J
CHNL# 21	EVOLT 100018 CPURPLESP	0.5750	J



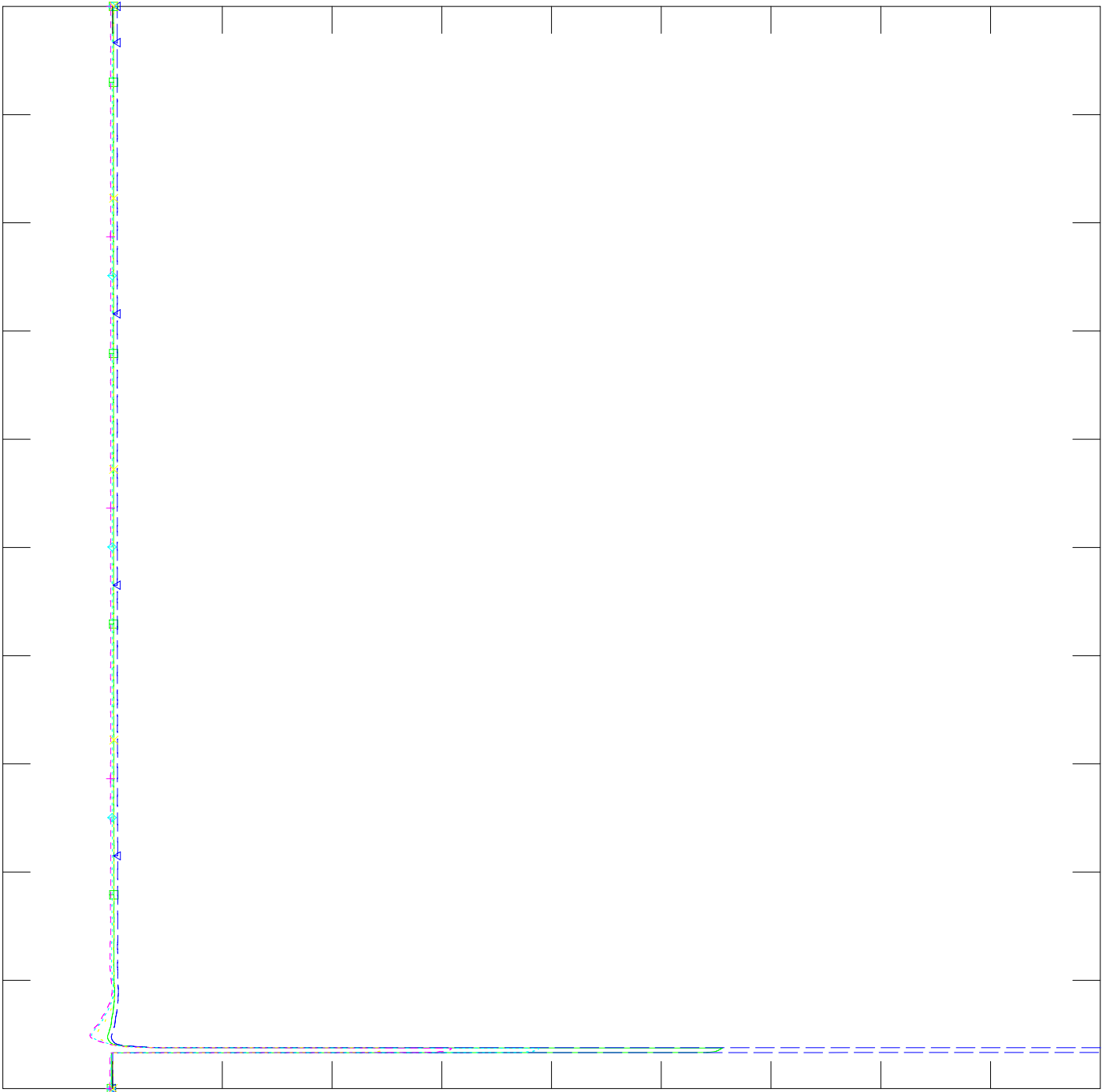
A-3-21



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_879L.out

MON, NOV 15 2010 14:00
BUS VOLTAGE

Channel	Location	Value
CHNL# 30: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 29: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 28: EVOLT	271 [BULLS H7	138.00]]
CHNL# 27: EVOLT	269 [BURDETT7	138.00]]
CHNL# 26: EVOLT	31 [FINCAST7	138.00]]

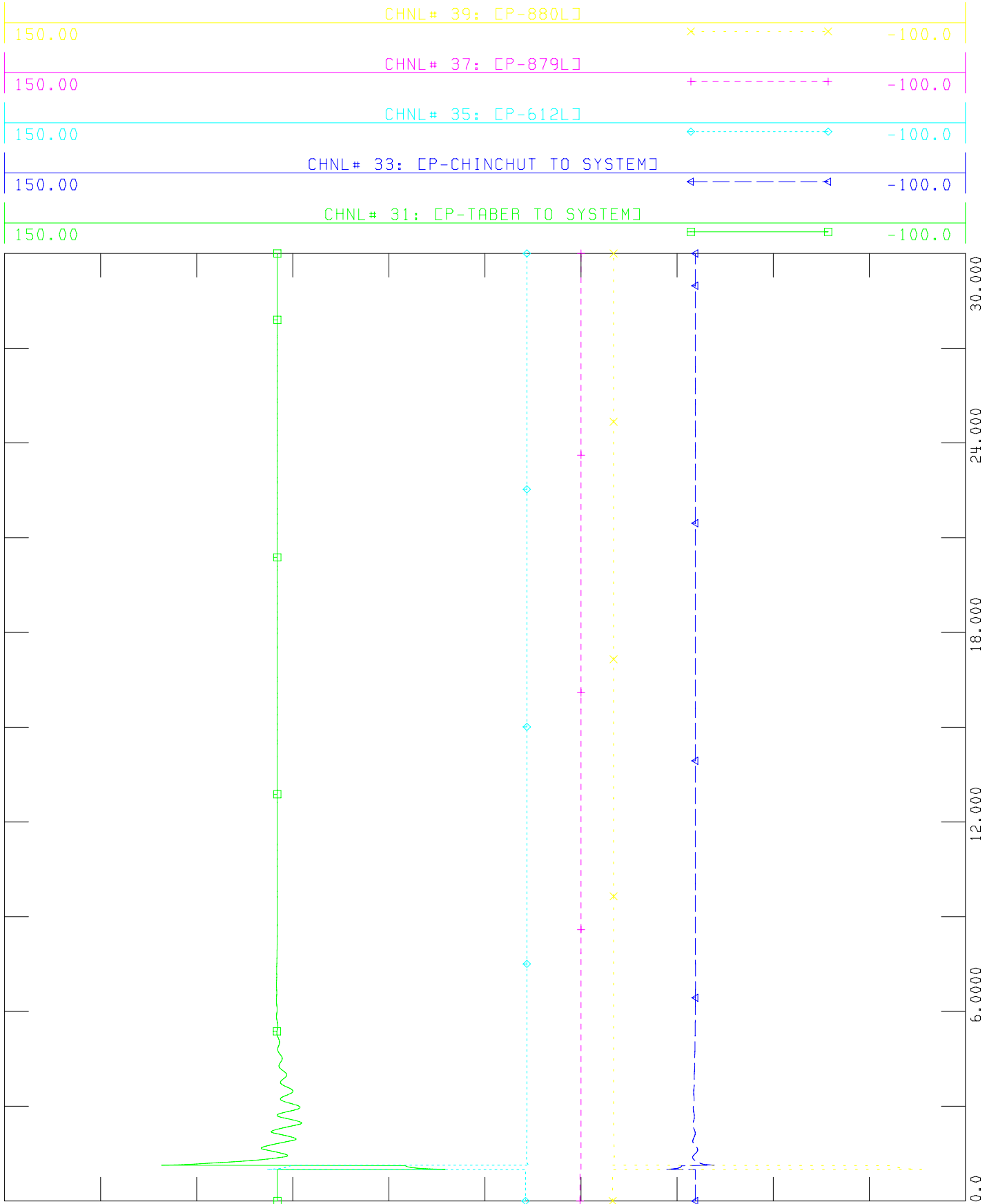


A-3-22



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_879L.out

MON, NOV 15 2010 14:01
BRANCH ACTIVE POWER

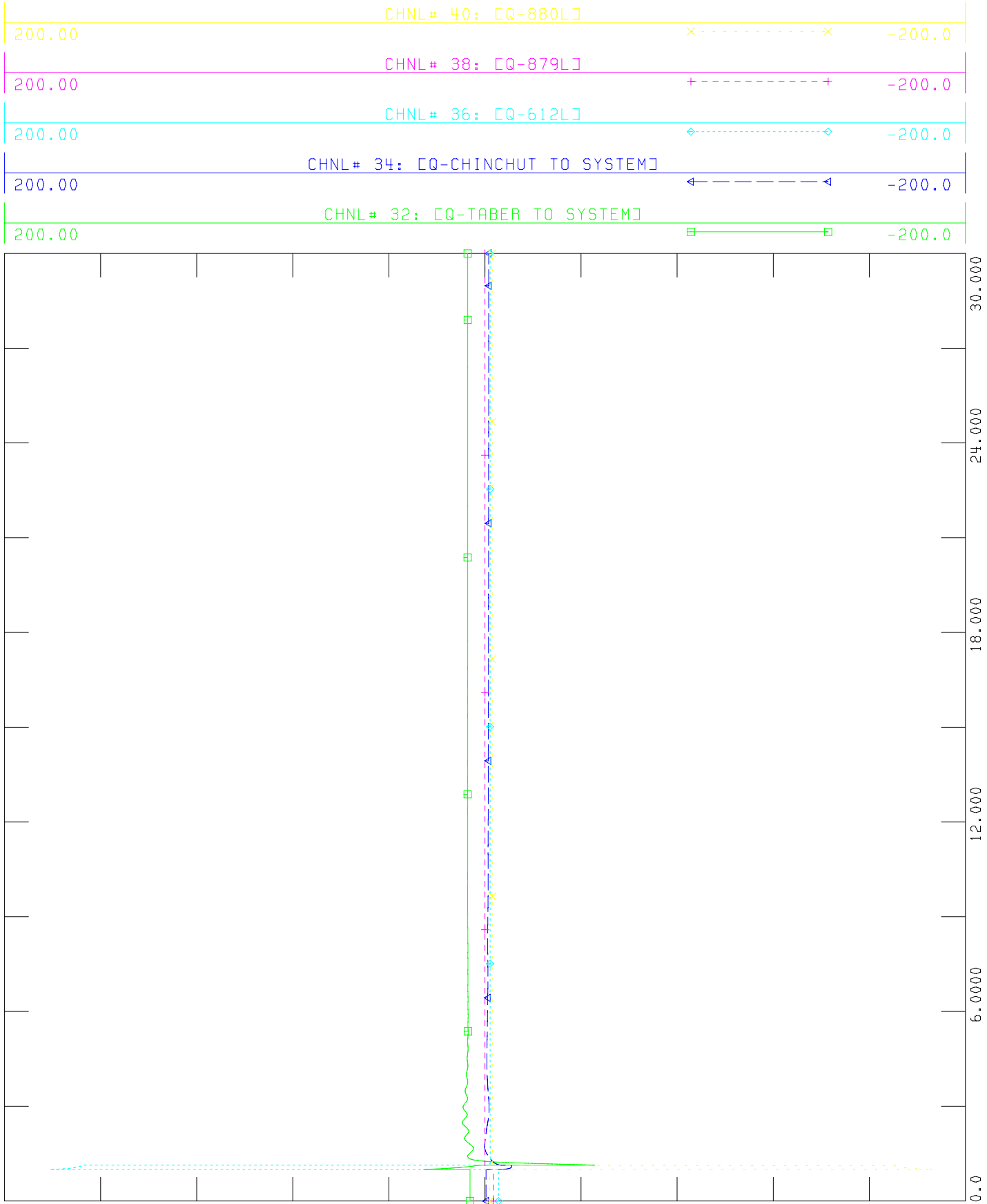


A-3-23



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_879L.out

MON, NOV 15 2010 14:01
BRANCH REACTIVE POWER

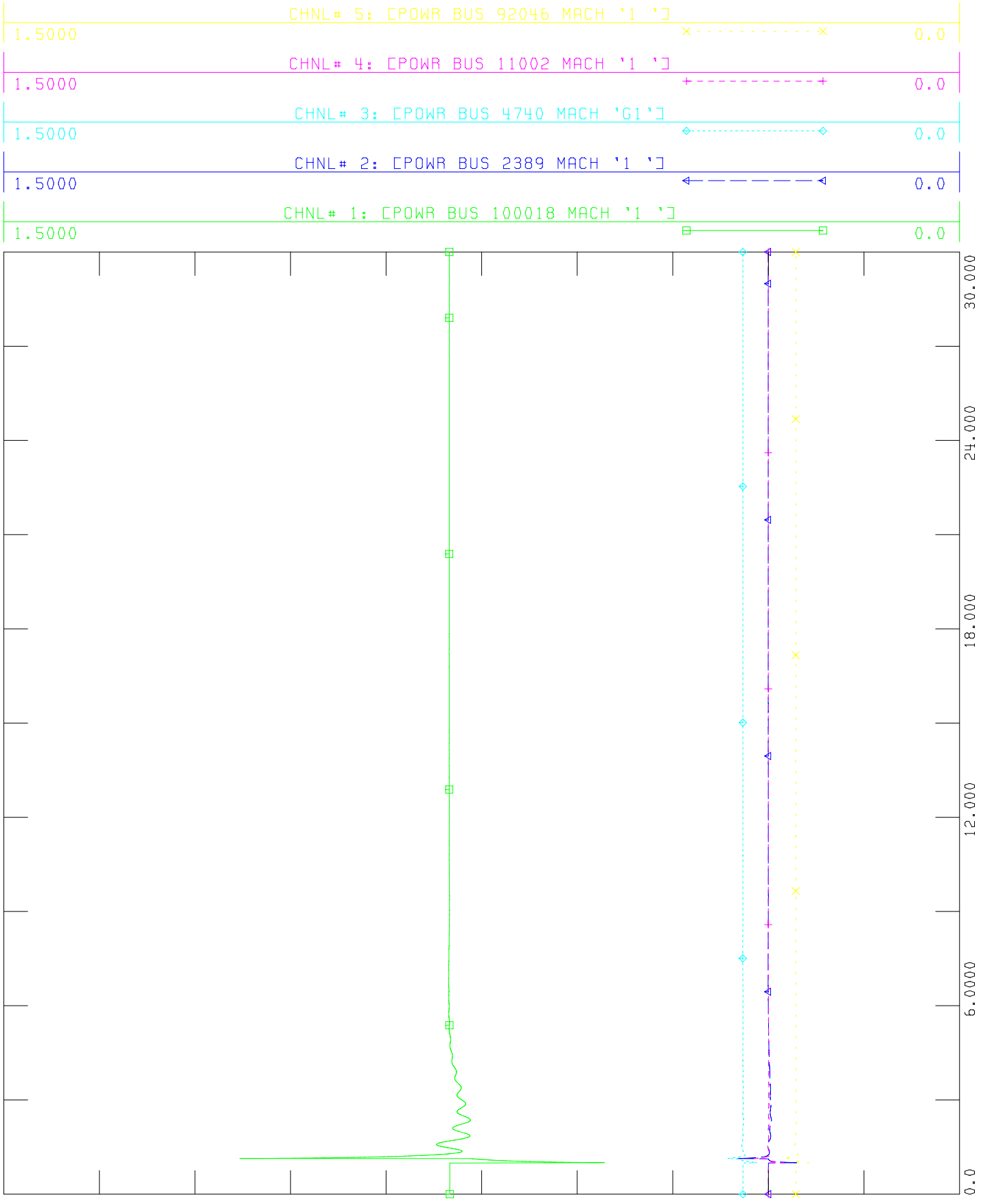


A-3-24

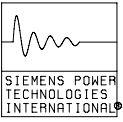


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_880L.out

MON, NOV 15 2010 14:03
PELEC

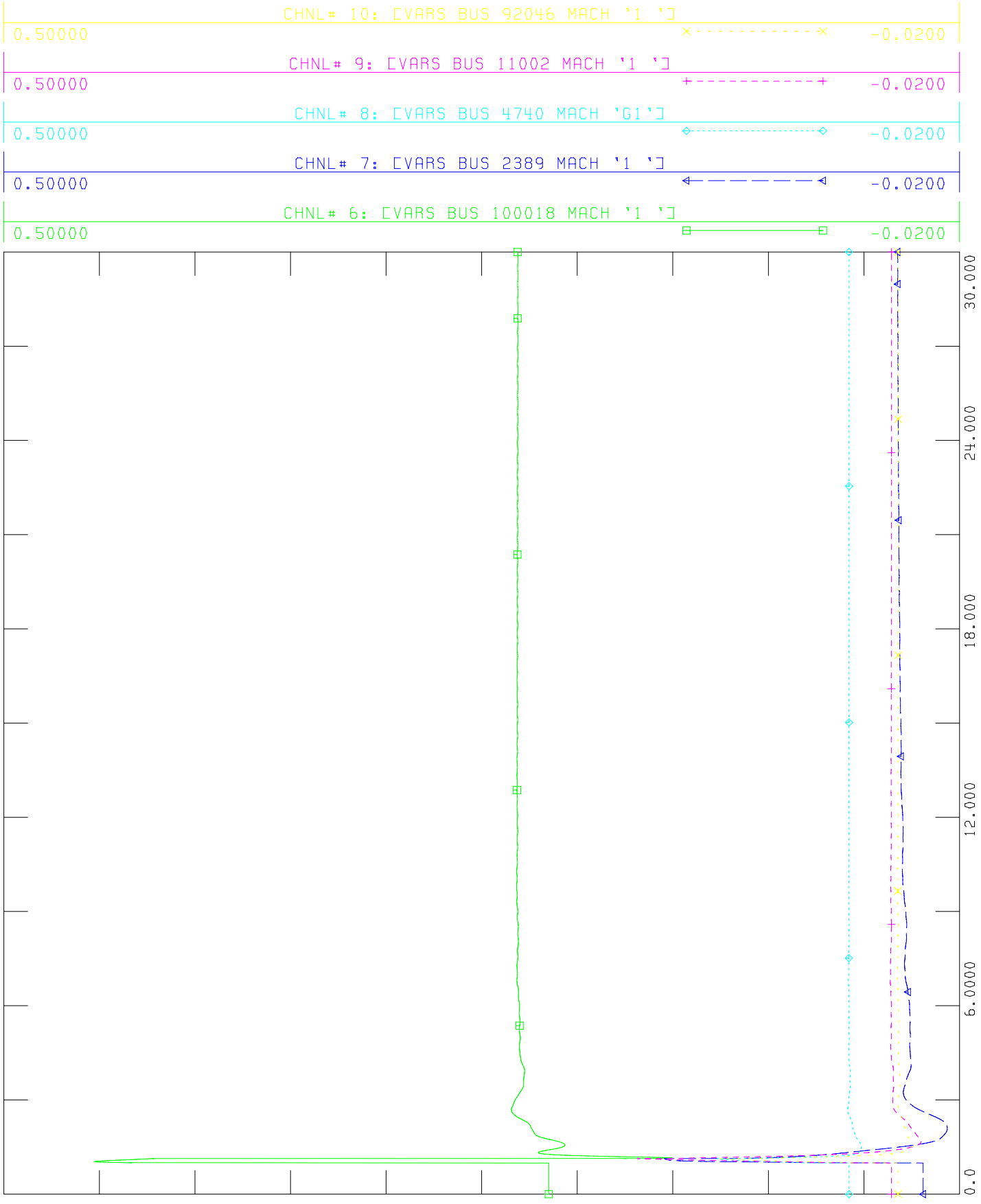


A-3-25

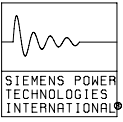


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_880L.out

MON, NOV 15 2010 14:04
QELEC



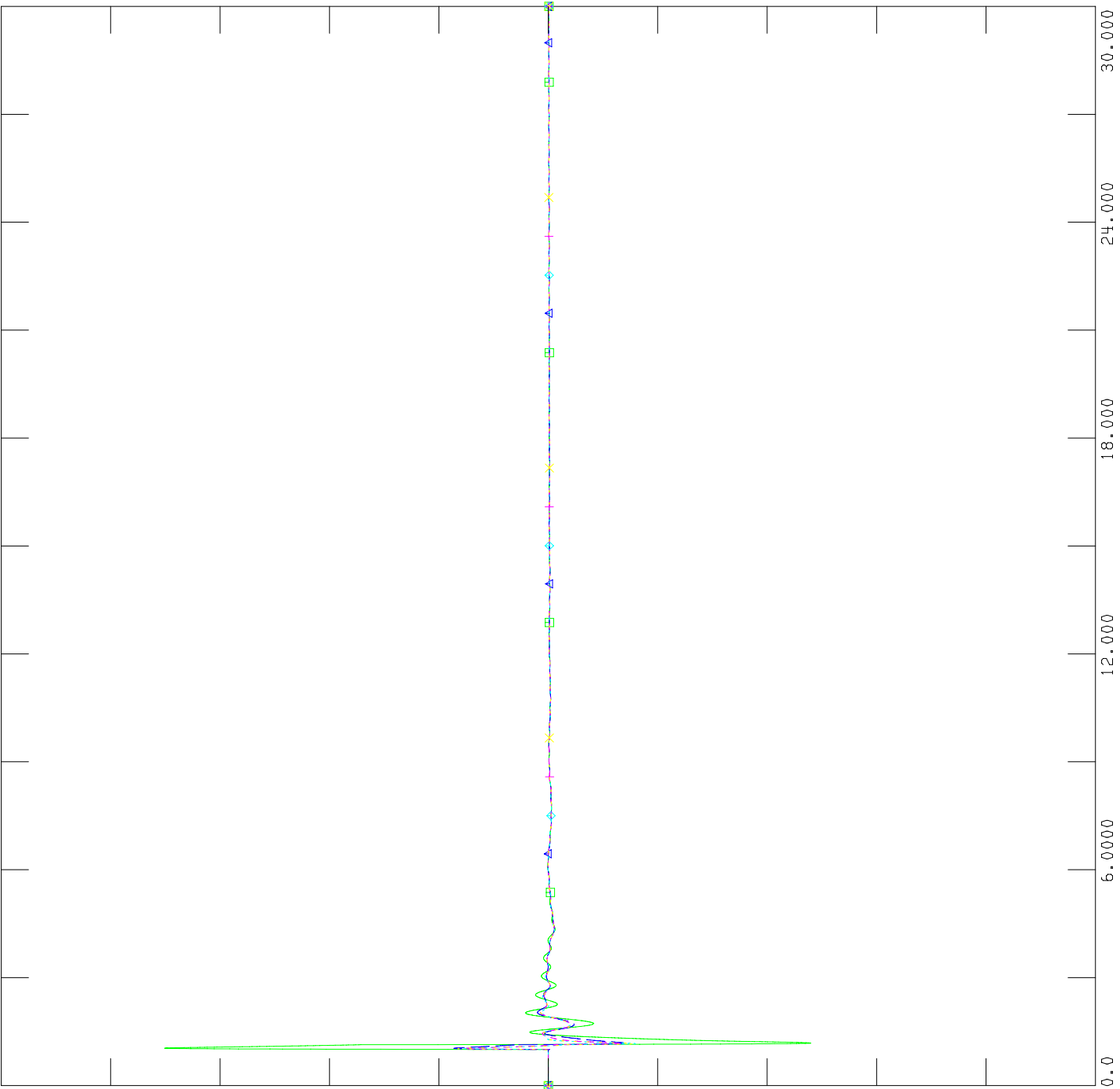
A-3-26



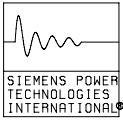
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_880L.out

MON, NOV 15 2010 14:05
 BUS FREQUENCY

0.00670	CHNL# 15: CFREQ 92046 EMCBRIDE6 0.5750	x-----x	-0.0067
0.00670	CHNL# 14: CFREQ 11002 CGARDNG2 0.5750	+-----+	-0.0067
0.00670	CHNL# 13: CFREQ 4740 CARD_07 0.5750	◇-----◇	-0.0067
0.00670	CHNL# 12: CFREQ 2389 CHILLRIDG 0.5750	←-----←	-0.0067
0.00670	CHNL# 11: CFREQ 100018 CPURPLESP 0.5750	▣-----▣	-0.0067



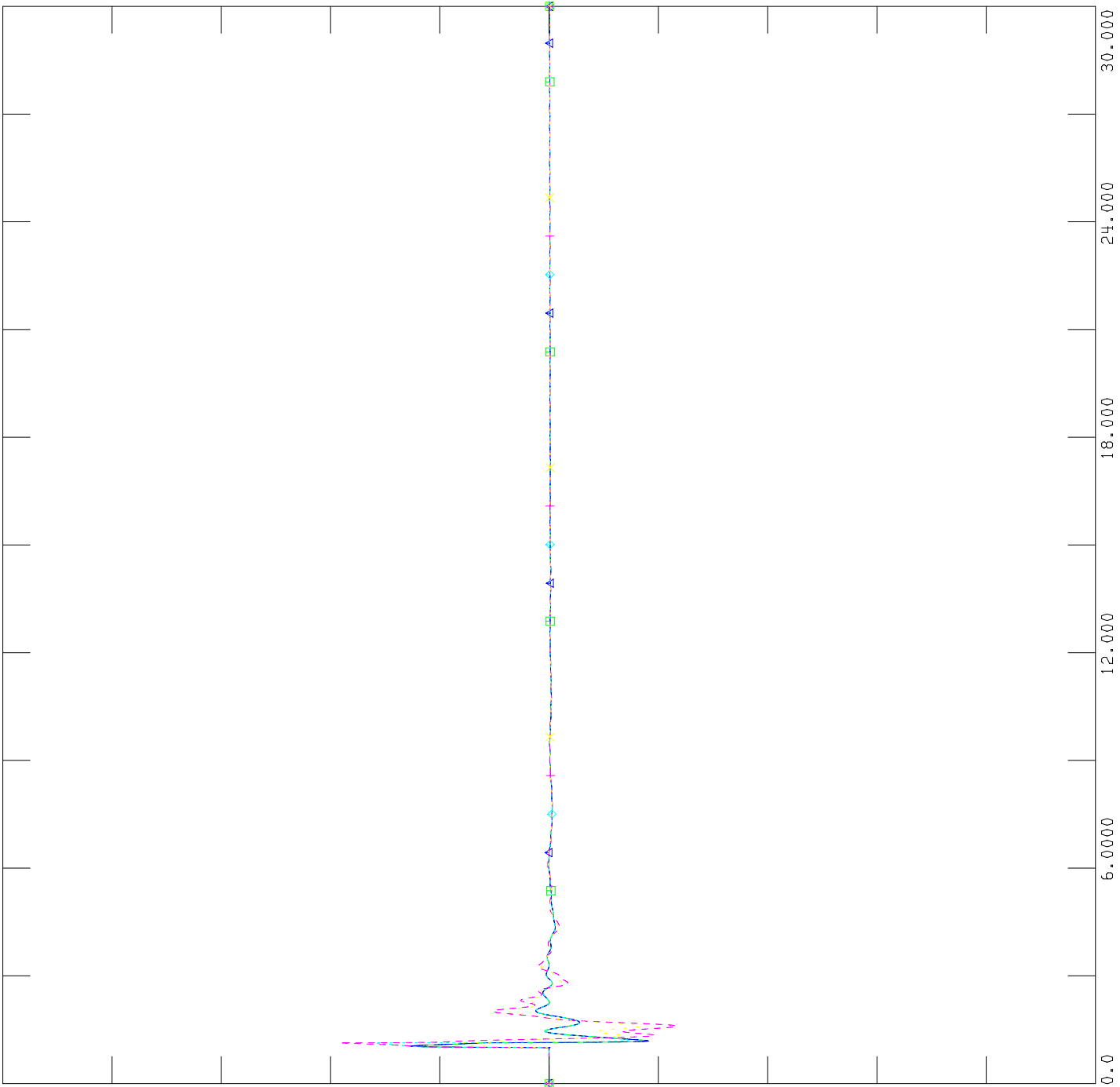
A-3-27



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_880L.out

MON, NOV 15 2010 14:06
 BUS FREQUENCY

0.00670	CHNL# 20: CFREQ	270	CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 19: CFREQ	680	CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 18: CFREQ	271	CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 17: CFREQ	269	CBURDETT7	138.00]]	←-----△	-0.0067
0.00670	CHNL# 16: CFREQ	31	CFINCAST7	138.00]]	▣-----▣	-0.0067



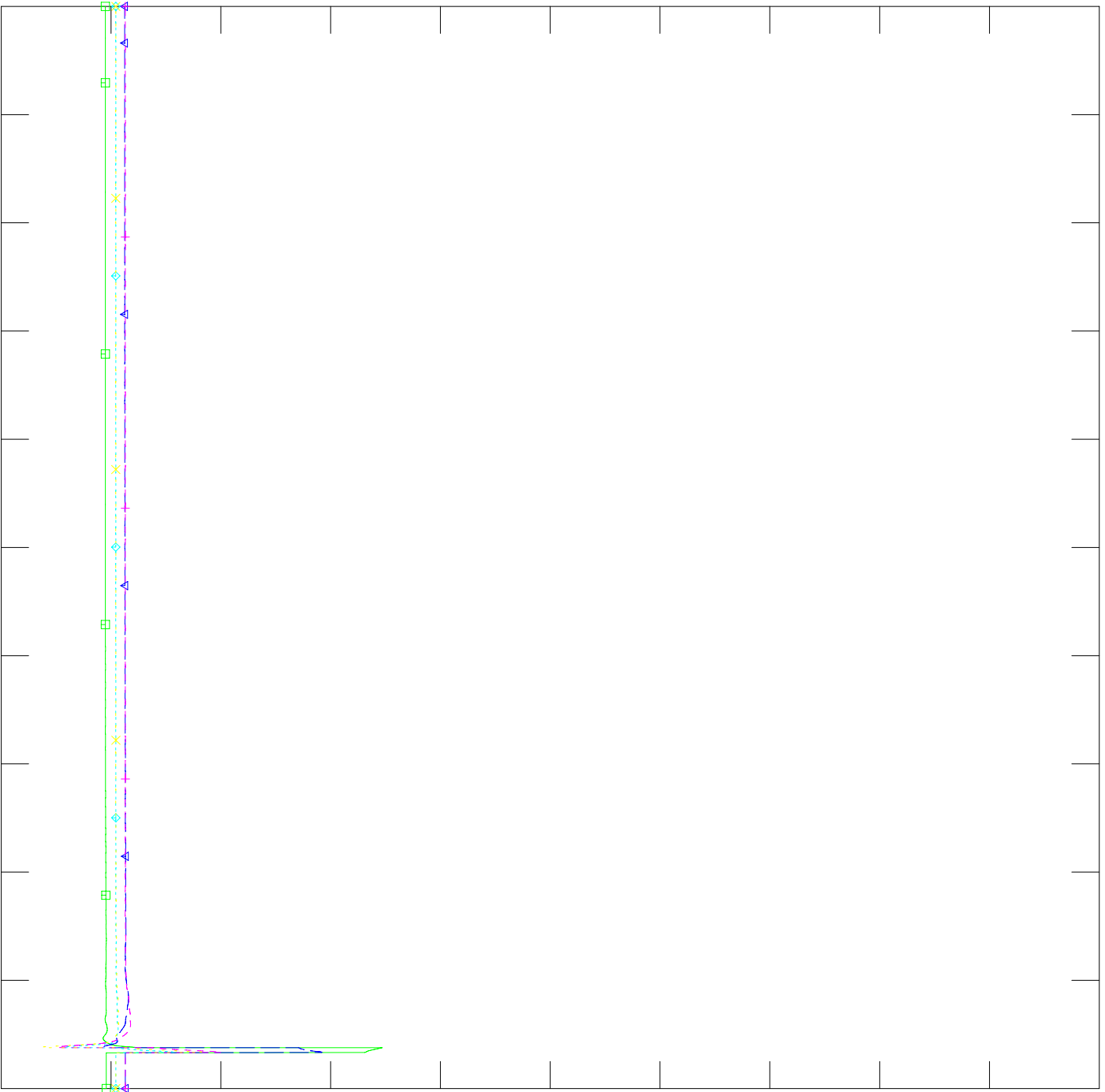
A-3-28

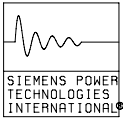


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_880L.out

MON, NOV 15 2010 14:07
BUS VOLTAGE

Channel	Label	Value	Marker
CHNL# 25	EVOLT 92046 EMCBRIDE6	0.5750	x
CHNL# 24	EVOLT 11002 EGARDNG2	0.5750	+
CHNL# 23	EVOLT 4740 EARD_07	0.5750	◇
CHNL# 22	EVOLT 2389 CHILLRIDG	0.5750	◀
CHNL# 21	EVOLT 100018 CPURPLESP	0.5750	■

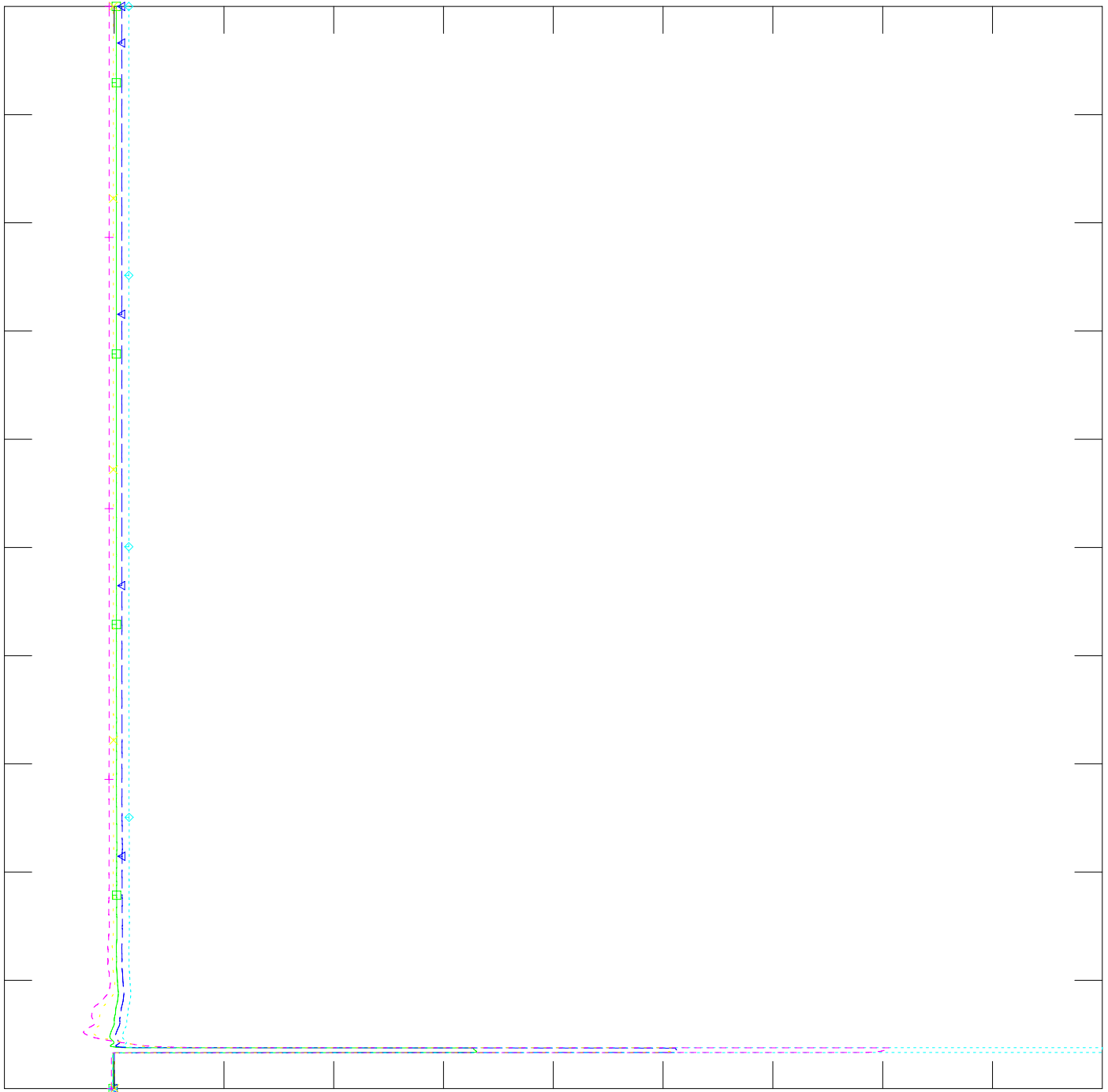




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_880L.out

MON, NOV 15 2010 14:08
BUS VOLTAGE

Channel	Location	Value
CHNL# 30: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 29: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 28: EVOLT	271 [BULLS H7	138.00]]
CHNL# 27: EVOLT	269 [BURDETT7	138.00]]
CHNL# 26: EVOLT	31 [FINCAST7	138.00]]

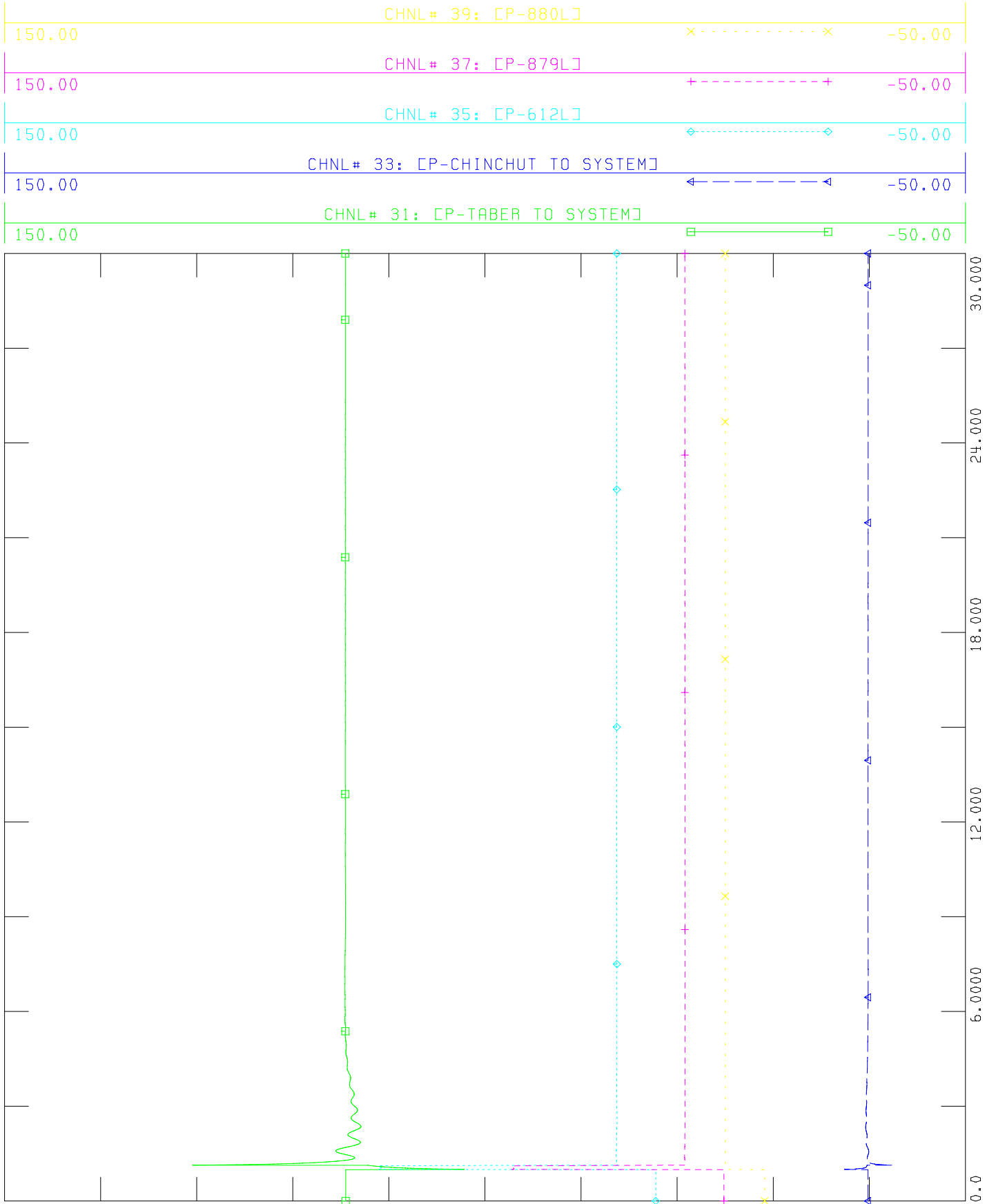


A-3-30



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_880L.out

MON, NOV 15 2010 14:09
BRANCH ACTIVE POWER

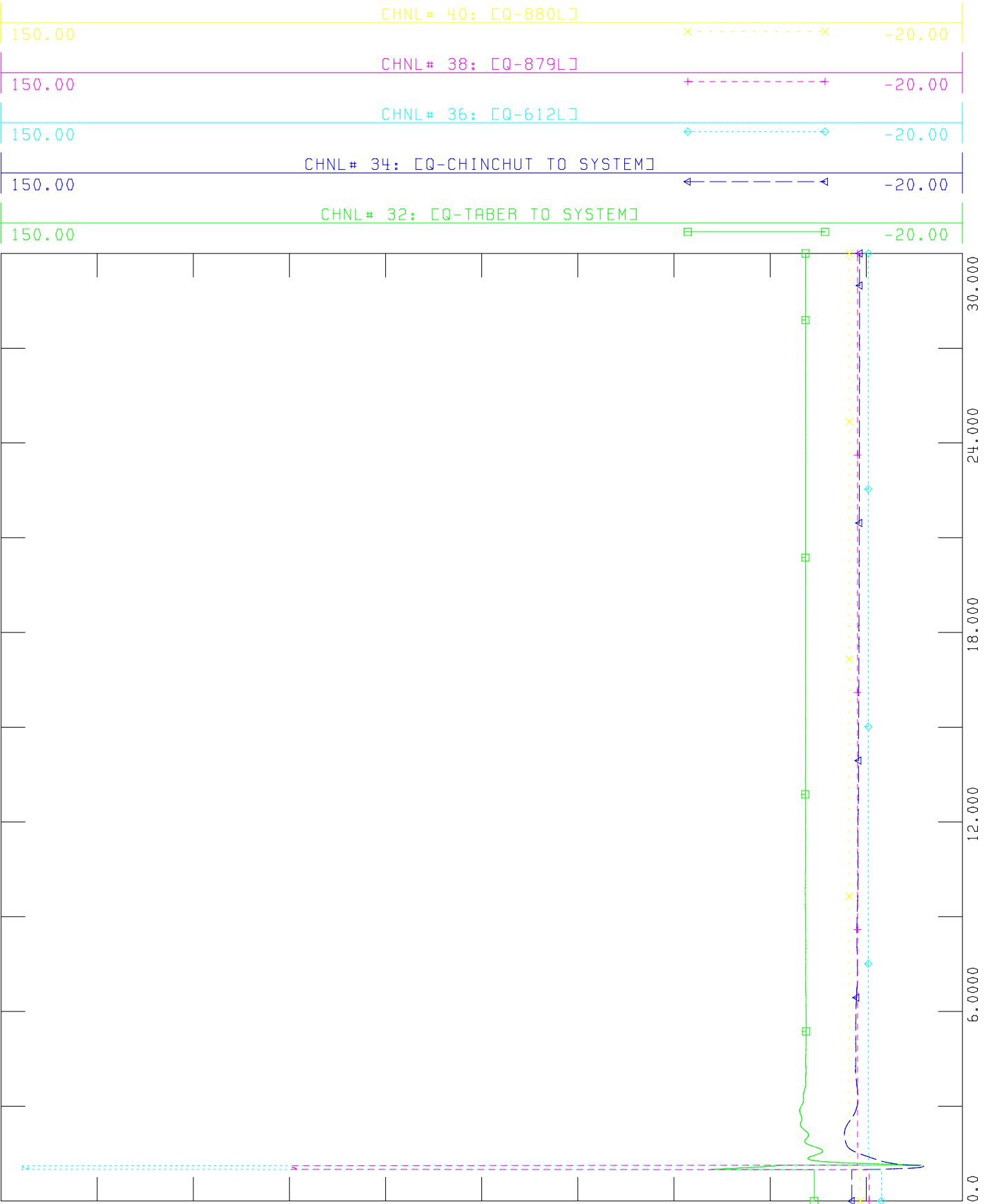


A-3-31

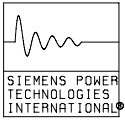


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_880L.out

MON, NOV 15 2010 14:10
BRANCH REACTIVE POWER

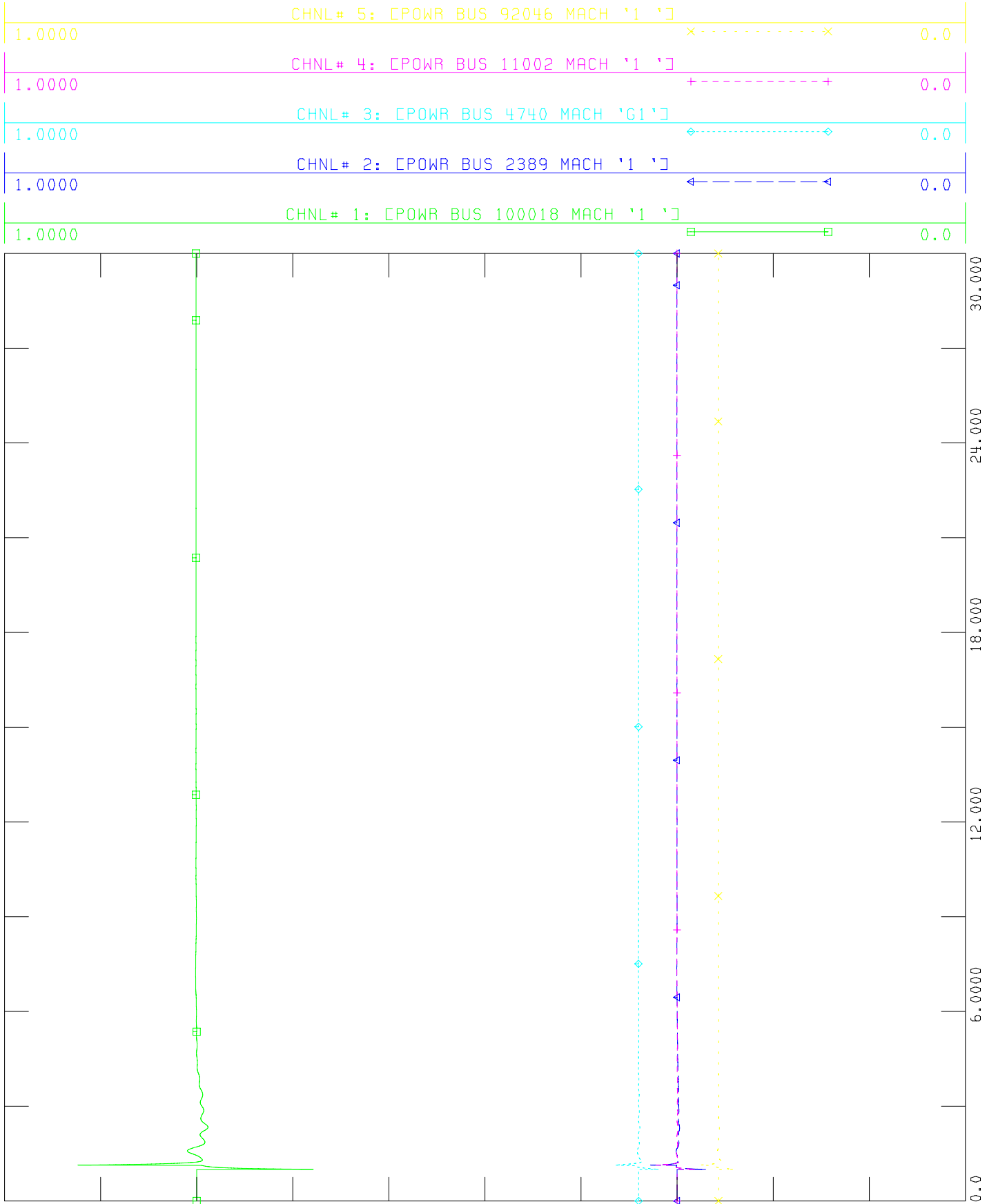


A-3-32



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_892L.out

MON, NOV 15 2010 14:11
PELEC

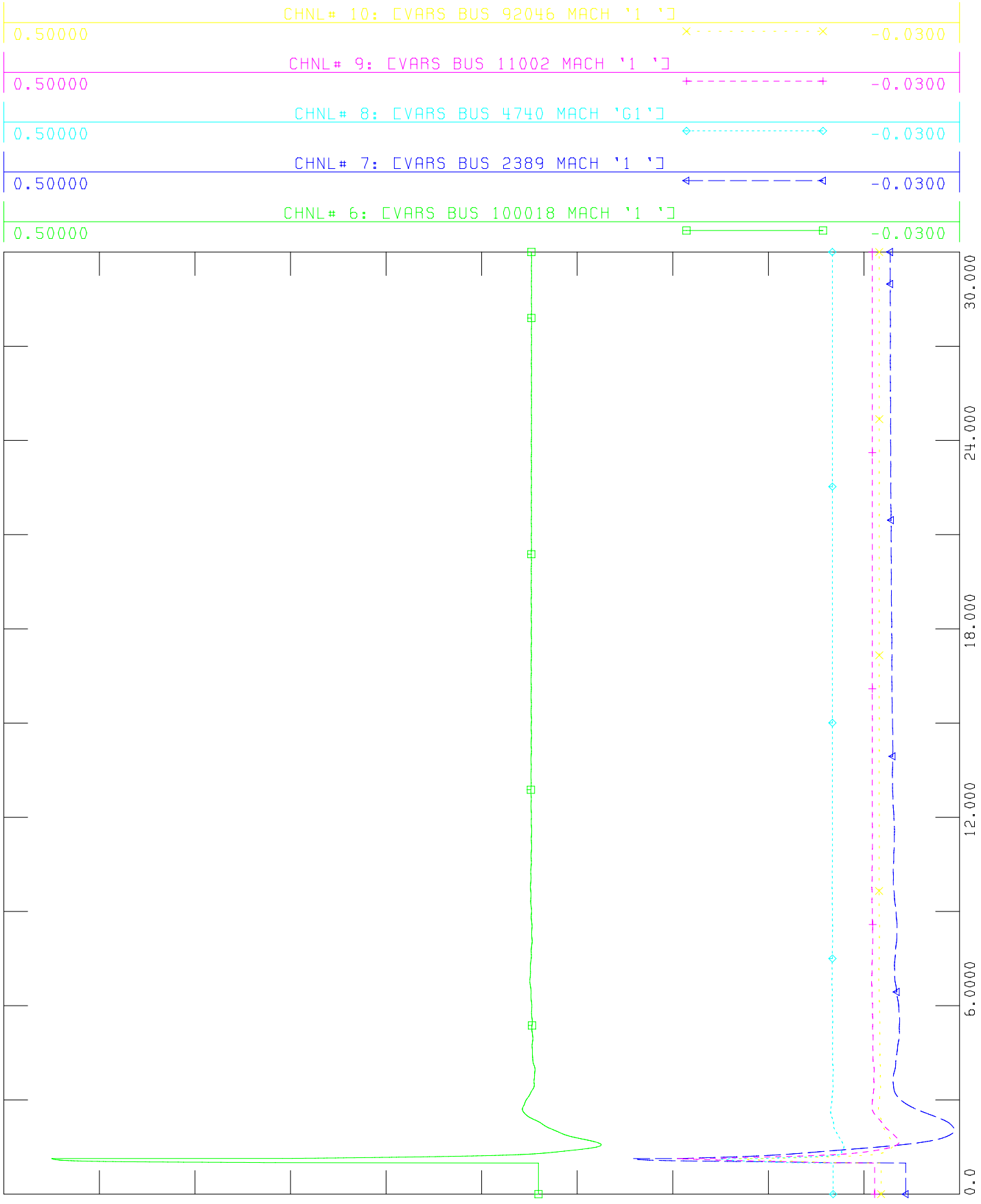


A-3-33

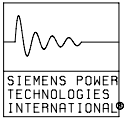


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_892L.out

MON, NOV 15 2010 14:12
OELEC



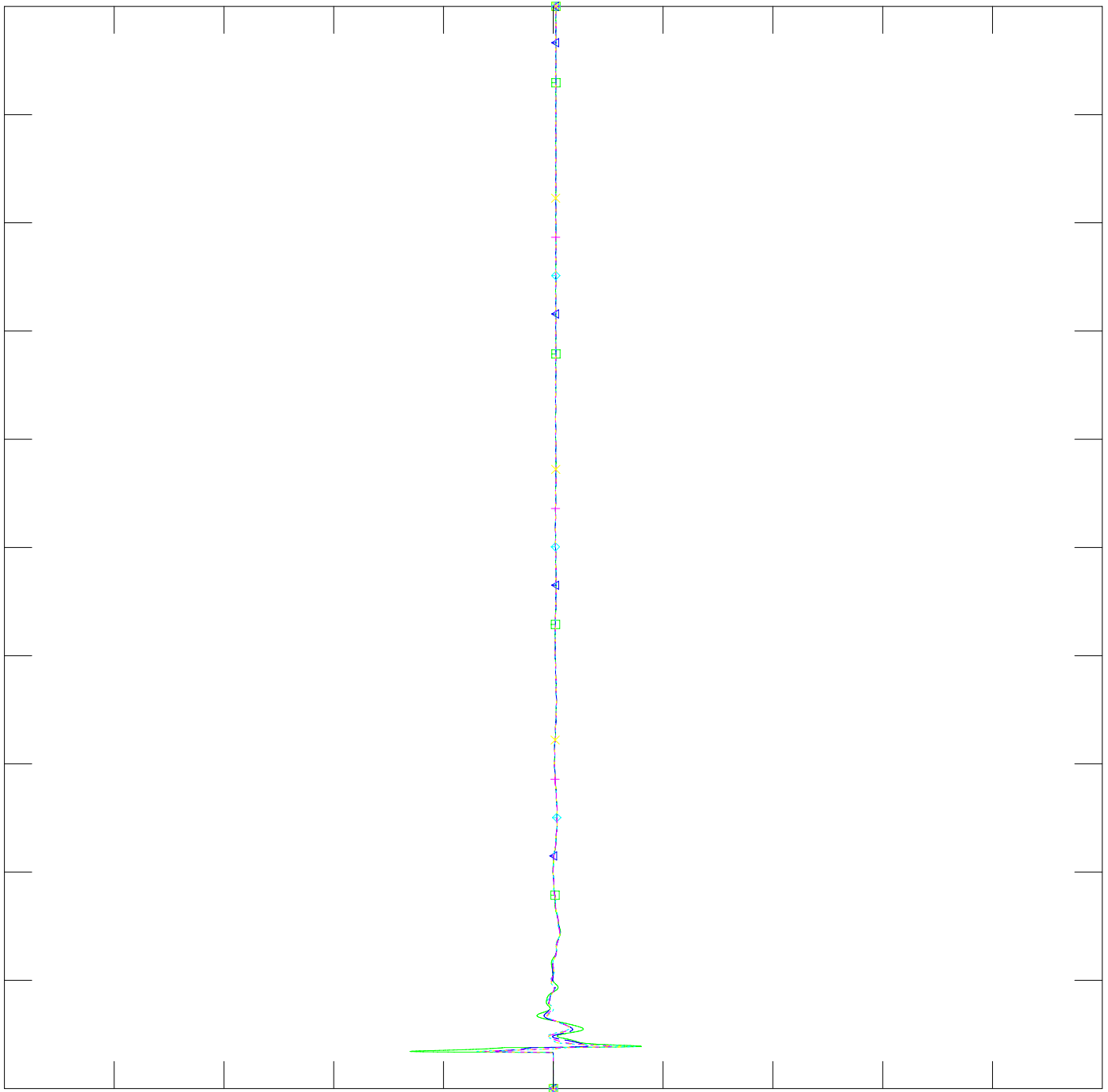
A-3-34



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_892L.out

MON, NOV 15 2010 14:13
BUS FREQUENCY

Channel	CFREQ	Channel Name	Value
CHNL# 15	92046	EMCBRIDE6	0.5750
CHNL# 14	11002	EGARDNG2	0.5750
CHNL# 13	4740	EARD_07	0.5750
CHNL# 12	2389	CHILLRIDG	0.5750
CHNL# 11	100018	CPURPLESP	0.5750



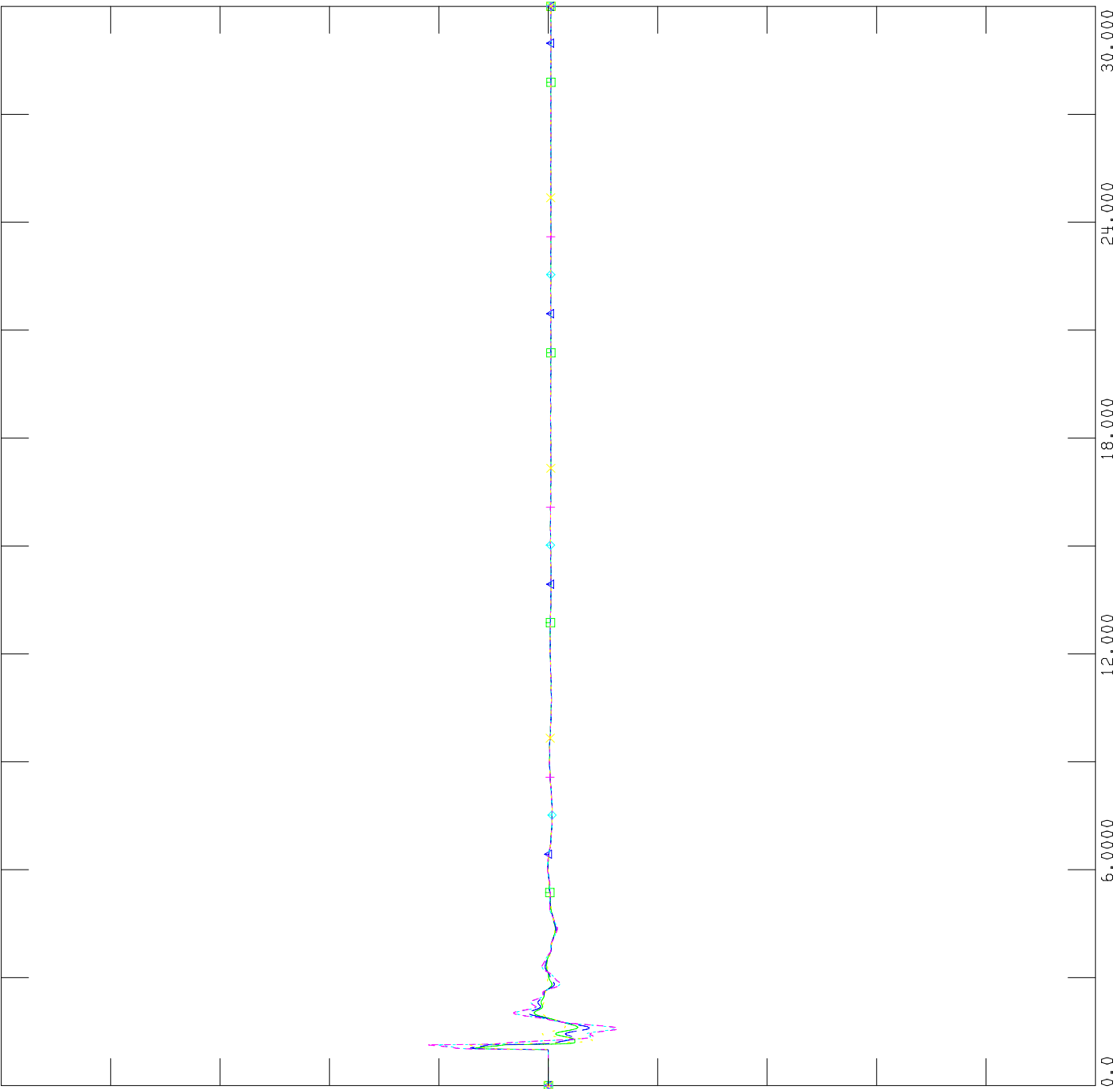
A-3-35



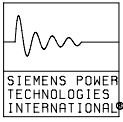
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_892L.out

MON, NOV 15 2010 14:13
BUS FREQUENCY

Channel	CFREQ	Location	Value
CHNL# 20	CFREQ	270 ESUFFIEL7	138.00
CHNL# 19	CFREQ	680 CMEDICIN7	138.00
CHNL# 18	CFREQ	271 CBULLS H7	138.00
CHNL# 17	CFREQ	269 CBURDETT7	138.00
CHNL# 16	CFREQ	31 CFINCAST7	138.00



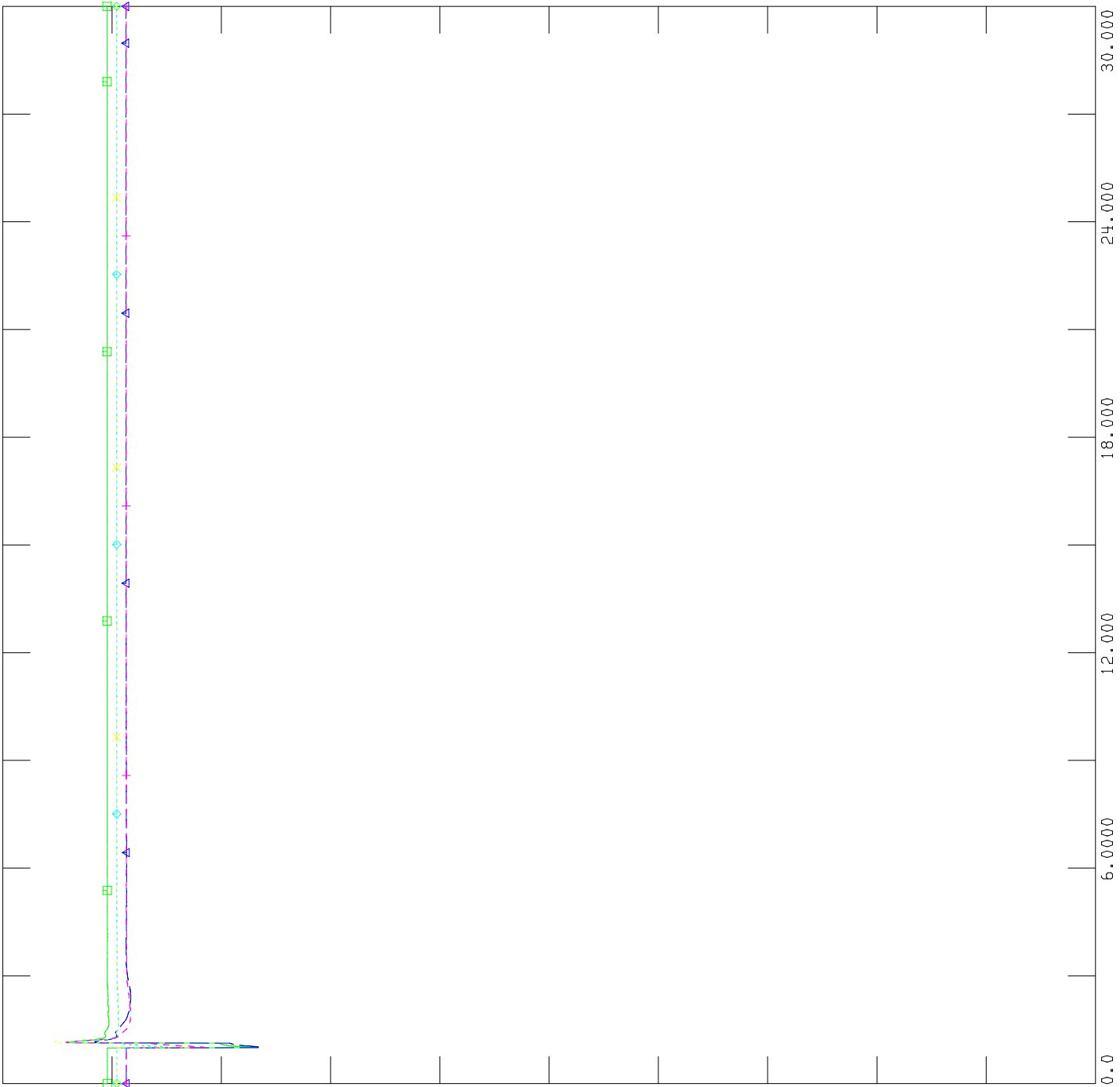
A-3-36



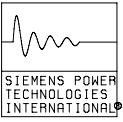
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_892L.out

MON, NOV 15 2010 14:14
BUS VOLTAGE

Channel	Label	Value	Marker
CHNL# 25	EVOLT 92046 EMCBRIDE6	0.5750	x
CHNL# 24	EVOLT 11002 EGARDNG2	0.5750	+
CHNL# 23	EVOLT 4740 EARD_07	0.5750	◇
CHNL# 22	EVOLT 2389 CHILLRIDG	0.5750	←
CHNL# 21	EVOLT 100018 CPURPLESP	0.5750	□



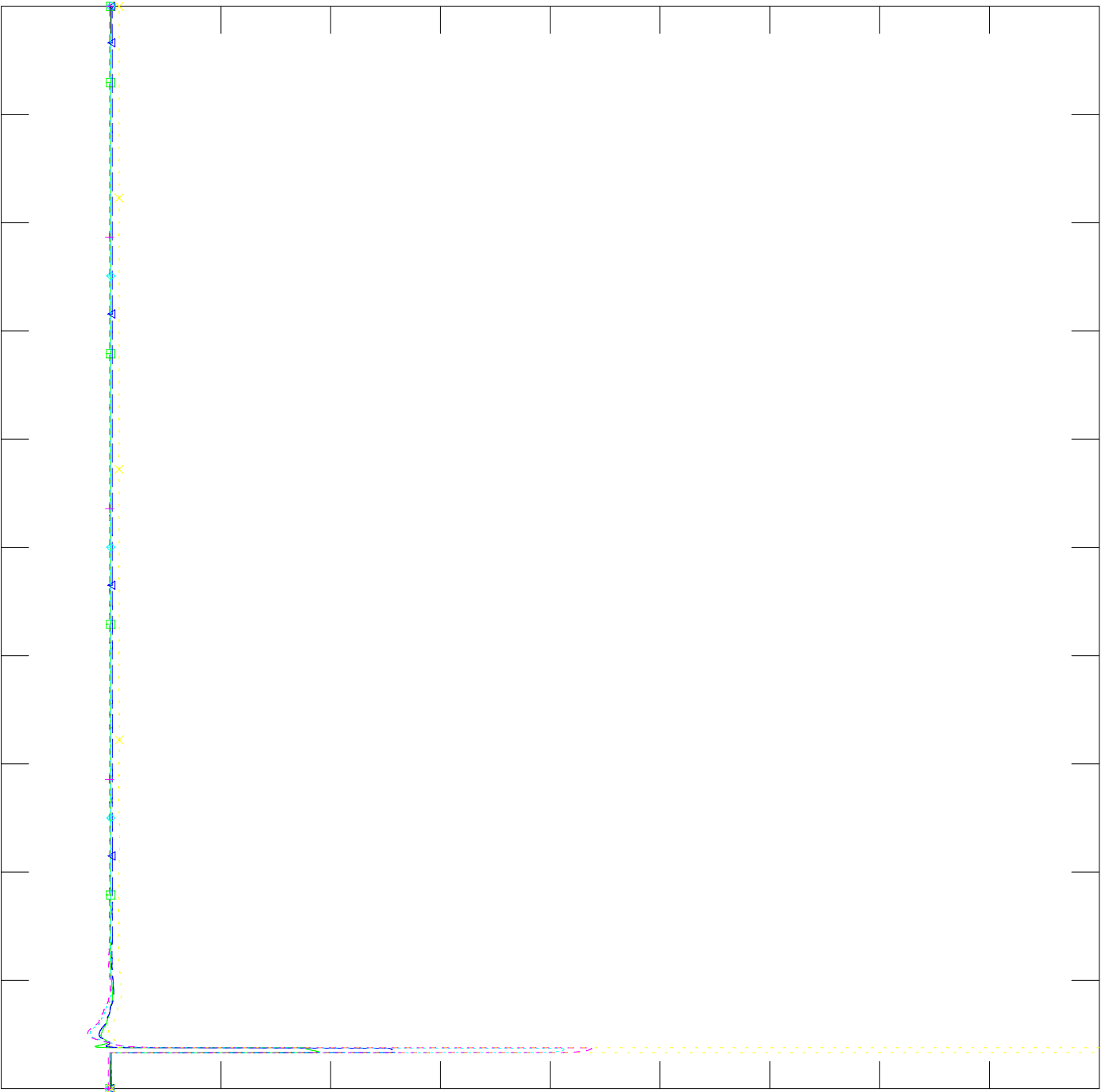
A-3-37



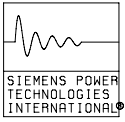
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_892L.out

MON, NOV 15 2010 14:15
BUS VOLTAGE

Channel	Location	Value
CHNL# 30: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 29: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 28: EVOLT	271 [BULLS H7	138.00]]
CHNL# 27: EVOLT	269 [BURDETT7	138.00]]
CHNL# 26: EVOLT	31 [FINCAST7	138.00]]

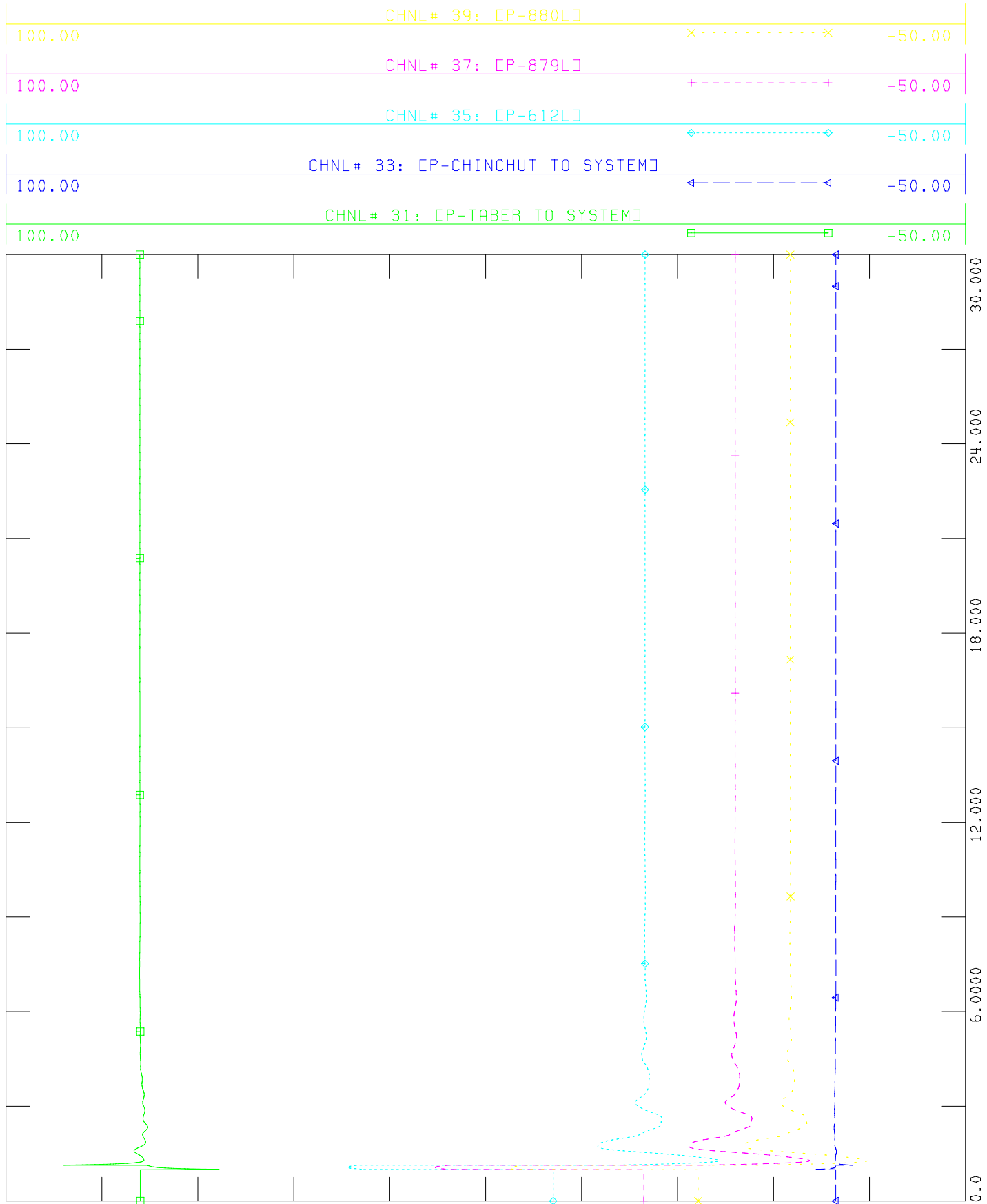


A-3-38



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_892L.out

MON, NOV 15 2010 14:16
BRANCH ACTIVE POWER

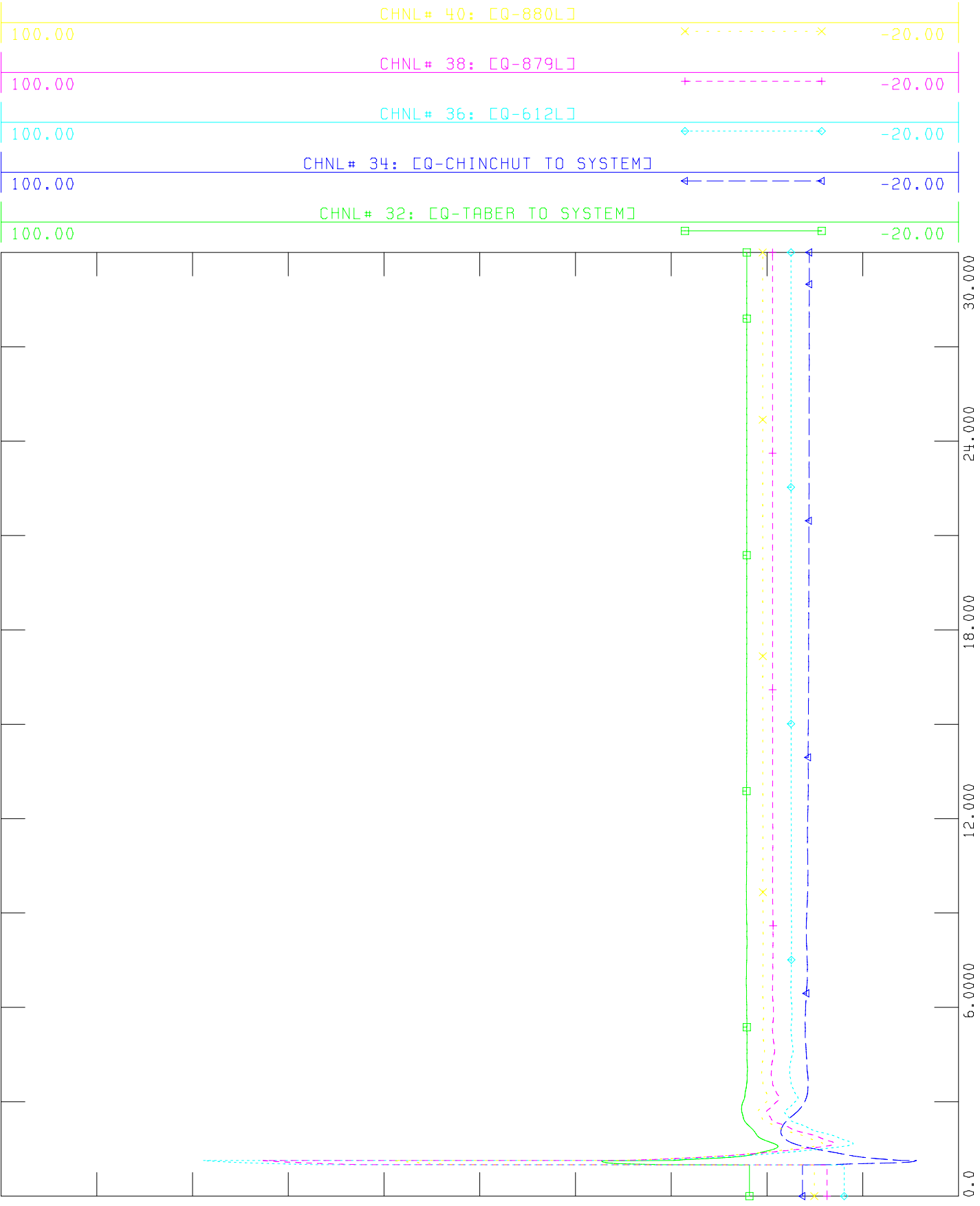


A-3-39



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_EXISTING_892L.out

MON, NOV 15 2010 14:17
BRANCH REACTIVE POWER



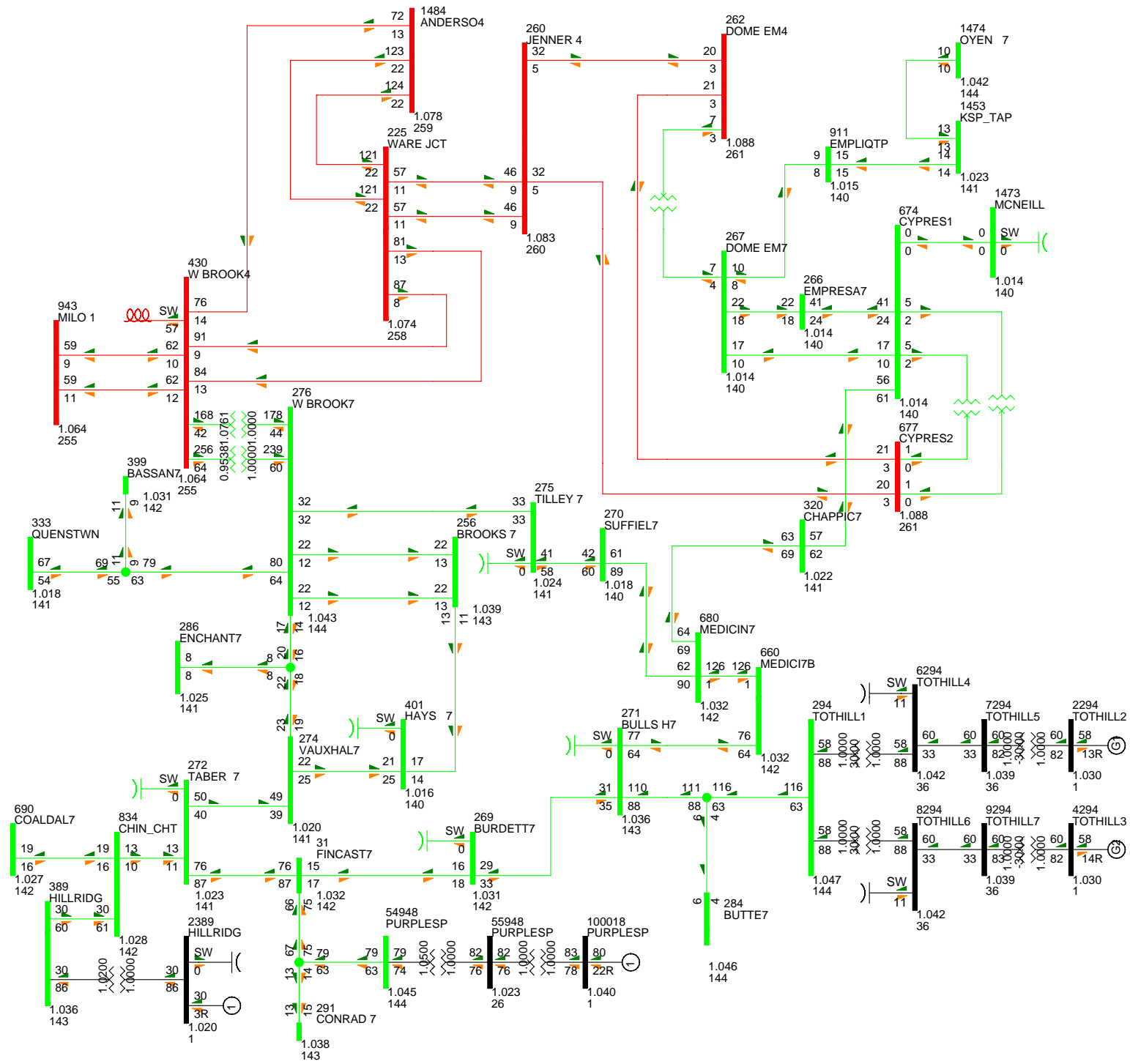
A-340

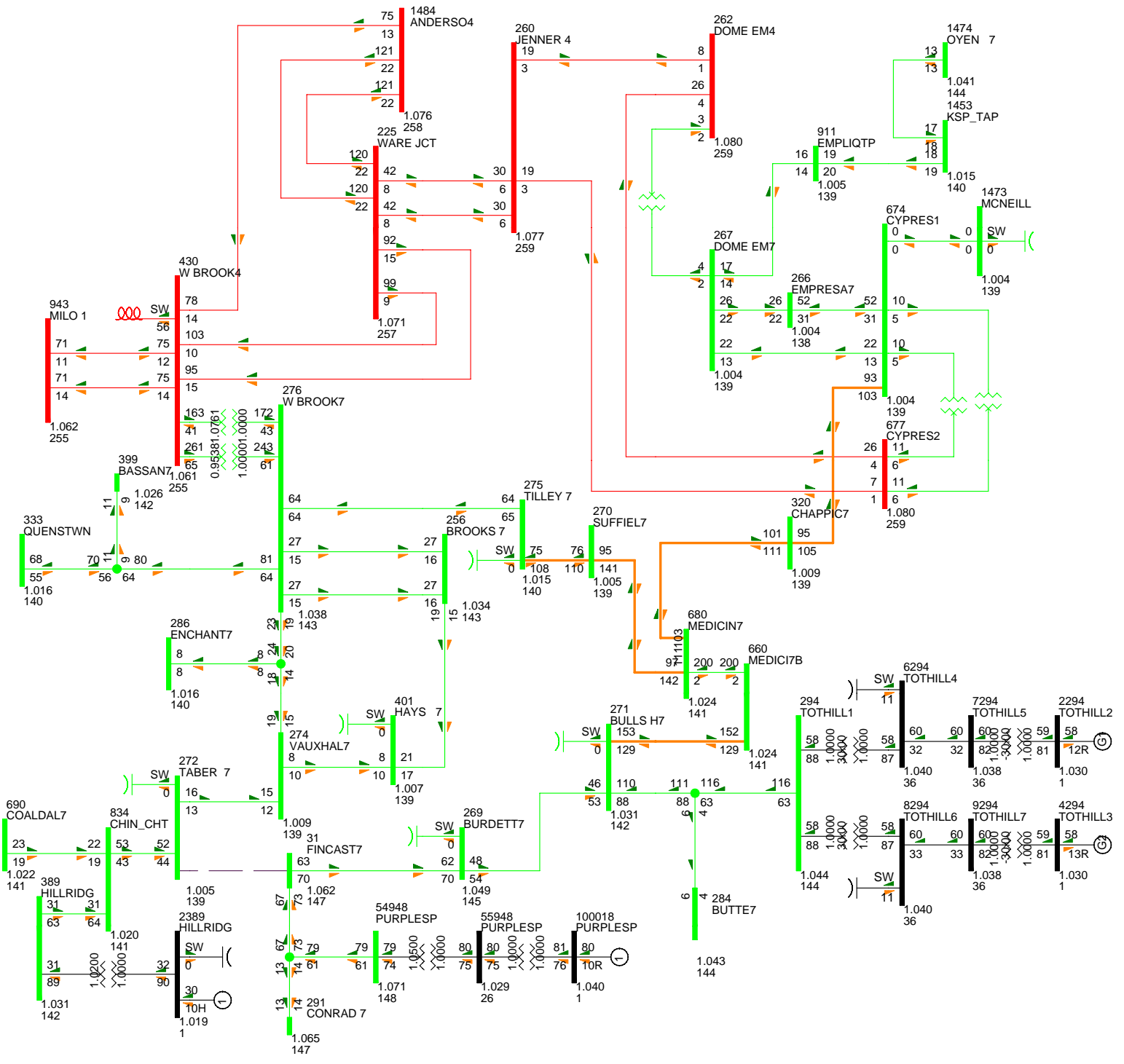
Attachment B

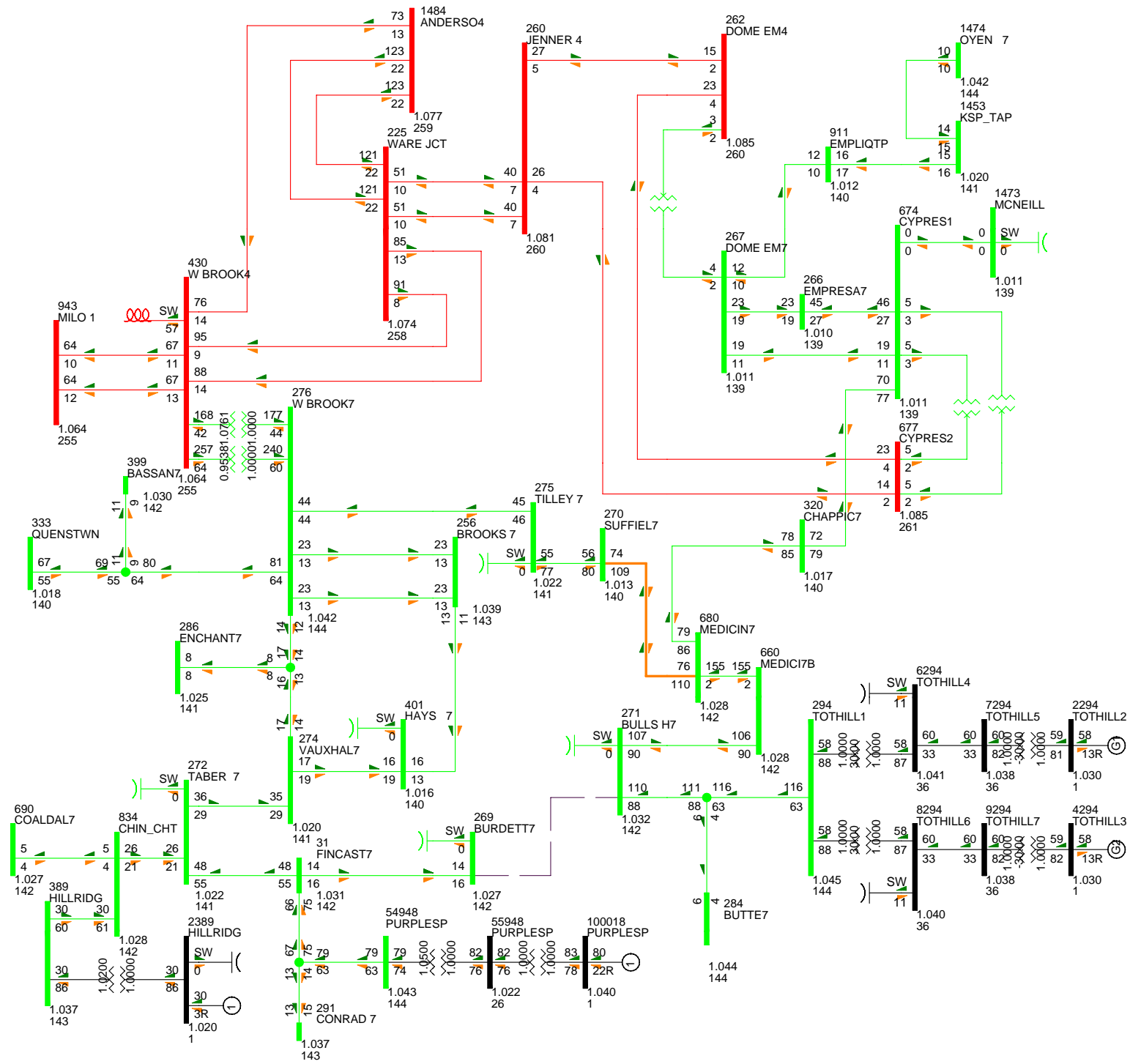
Post-connection Power Flow Analysis Results (Scenarios 1 to 3)

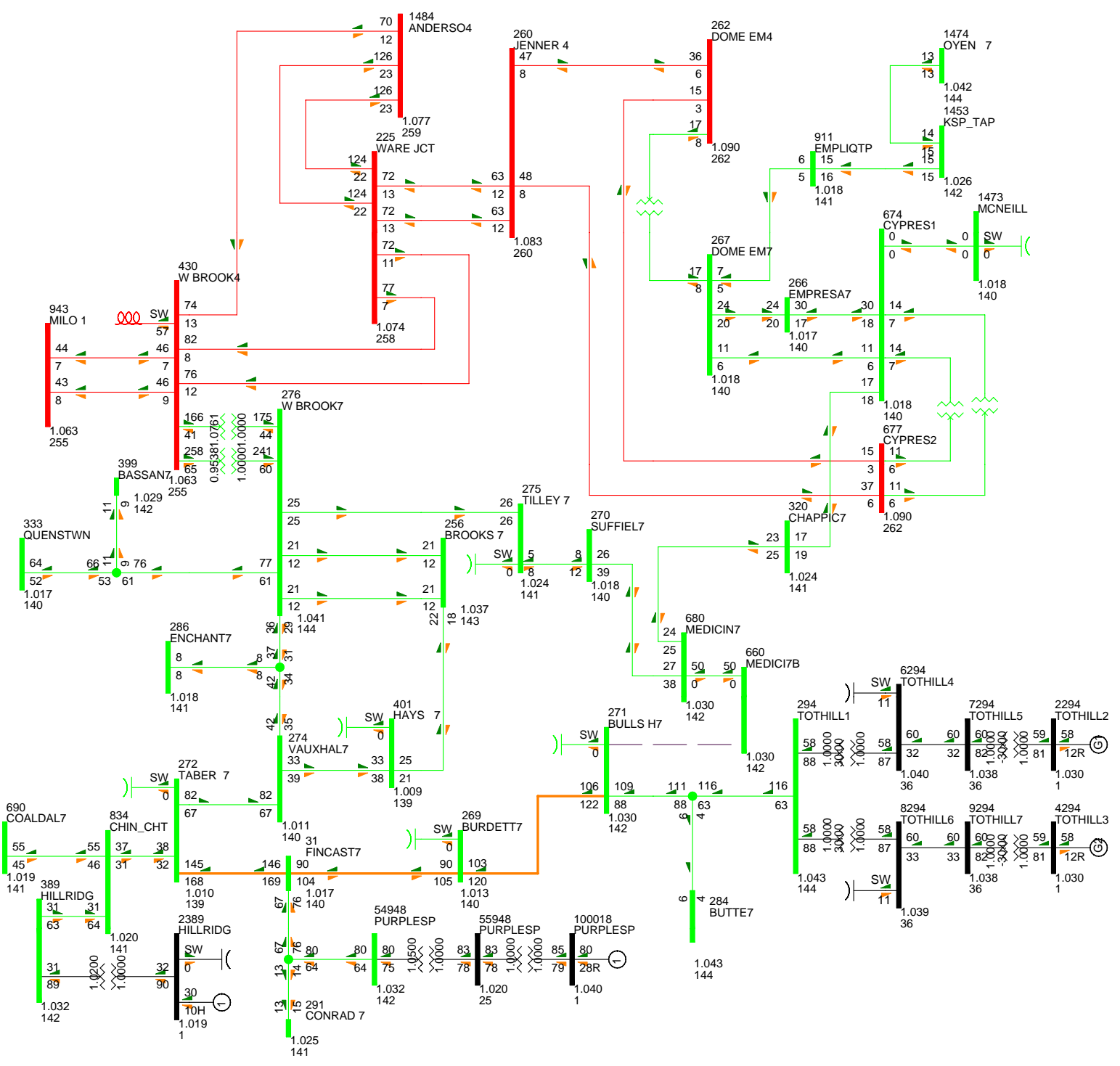
Attachment B-1: Post-connection Power Flow Analysis

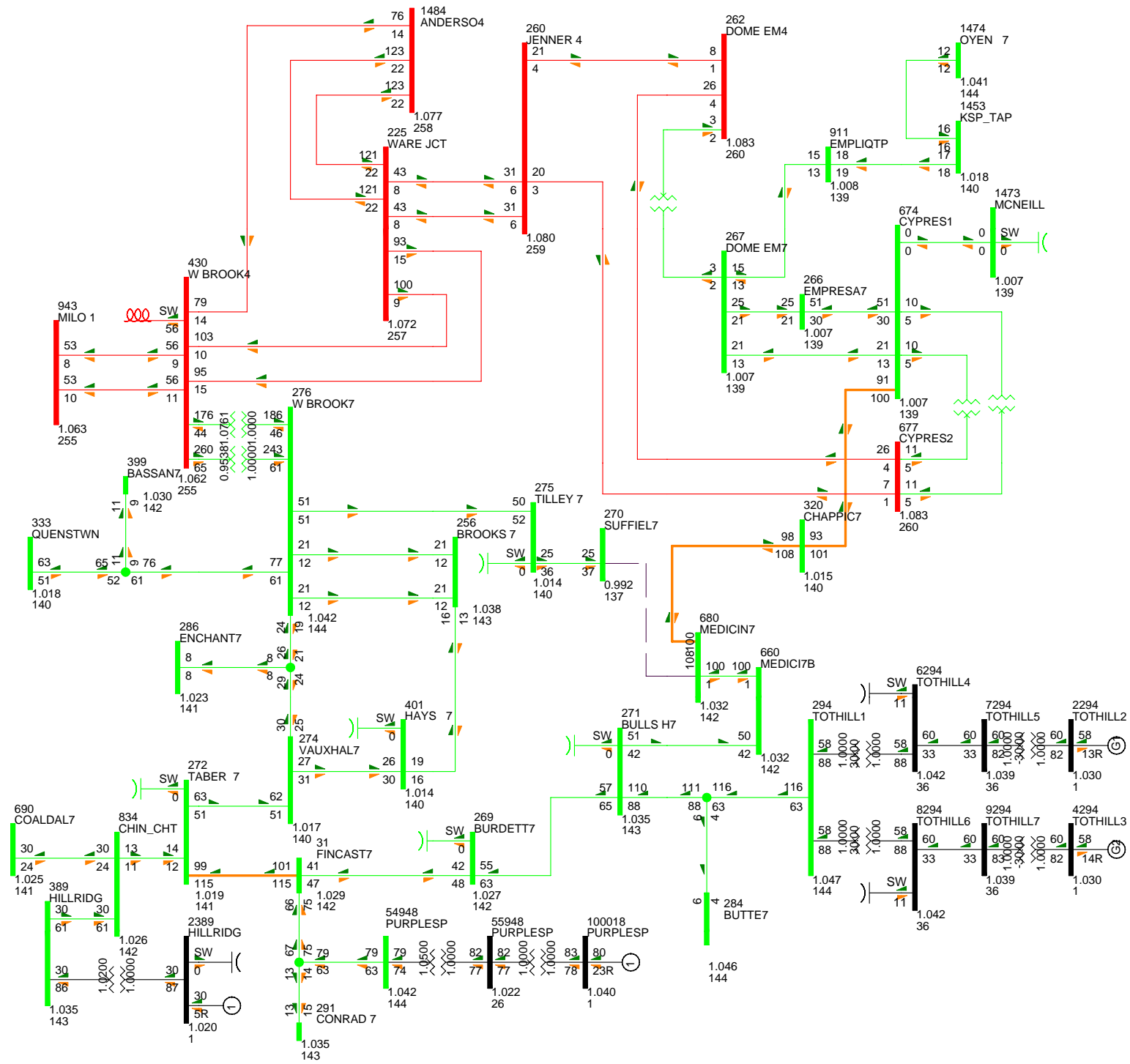
Results -- Scenario 1

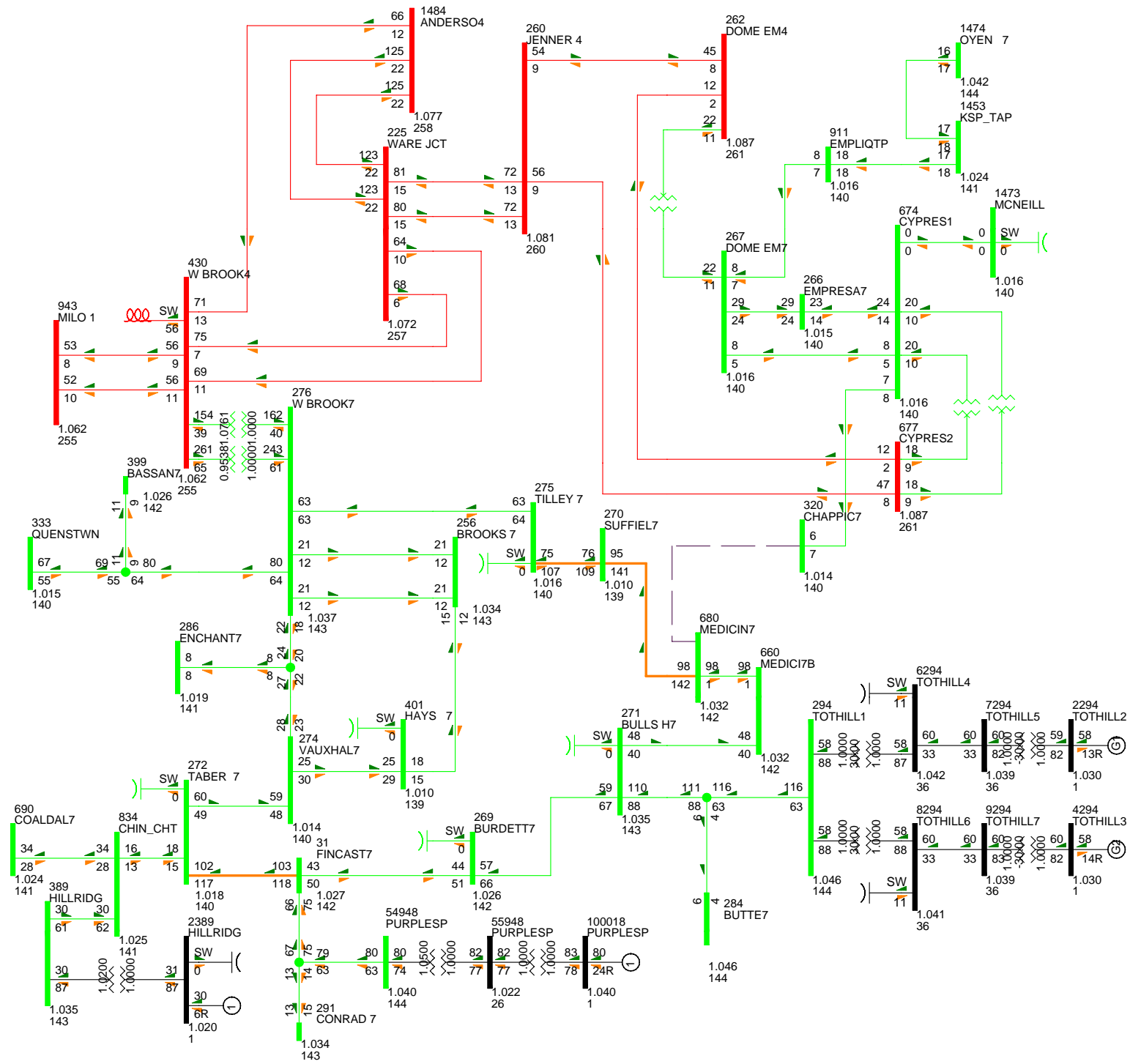


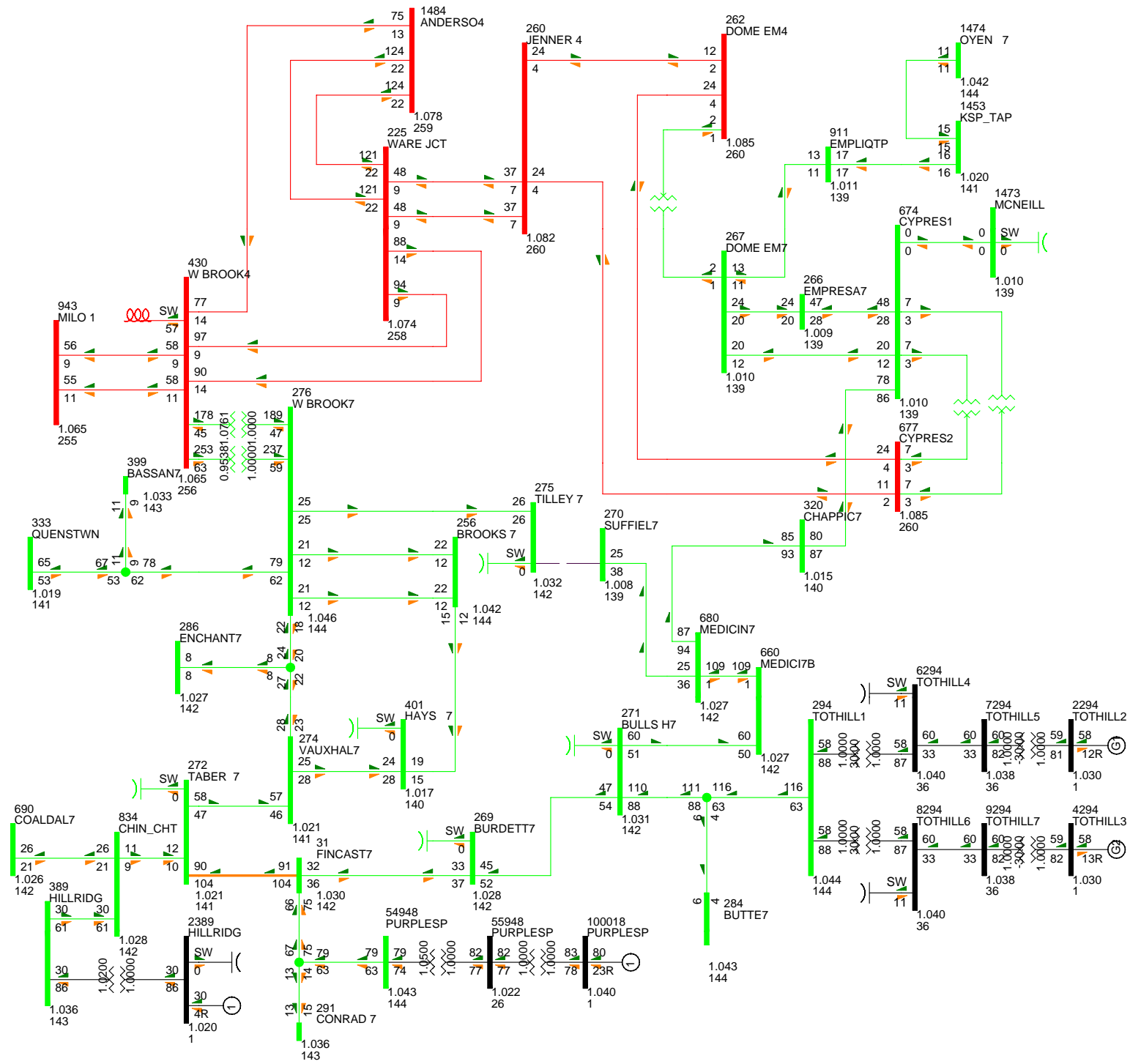






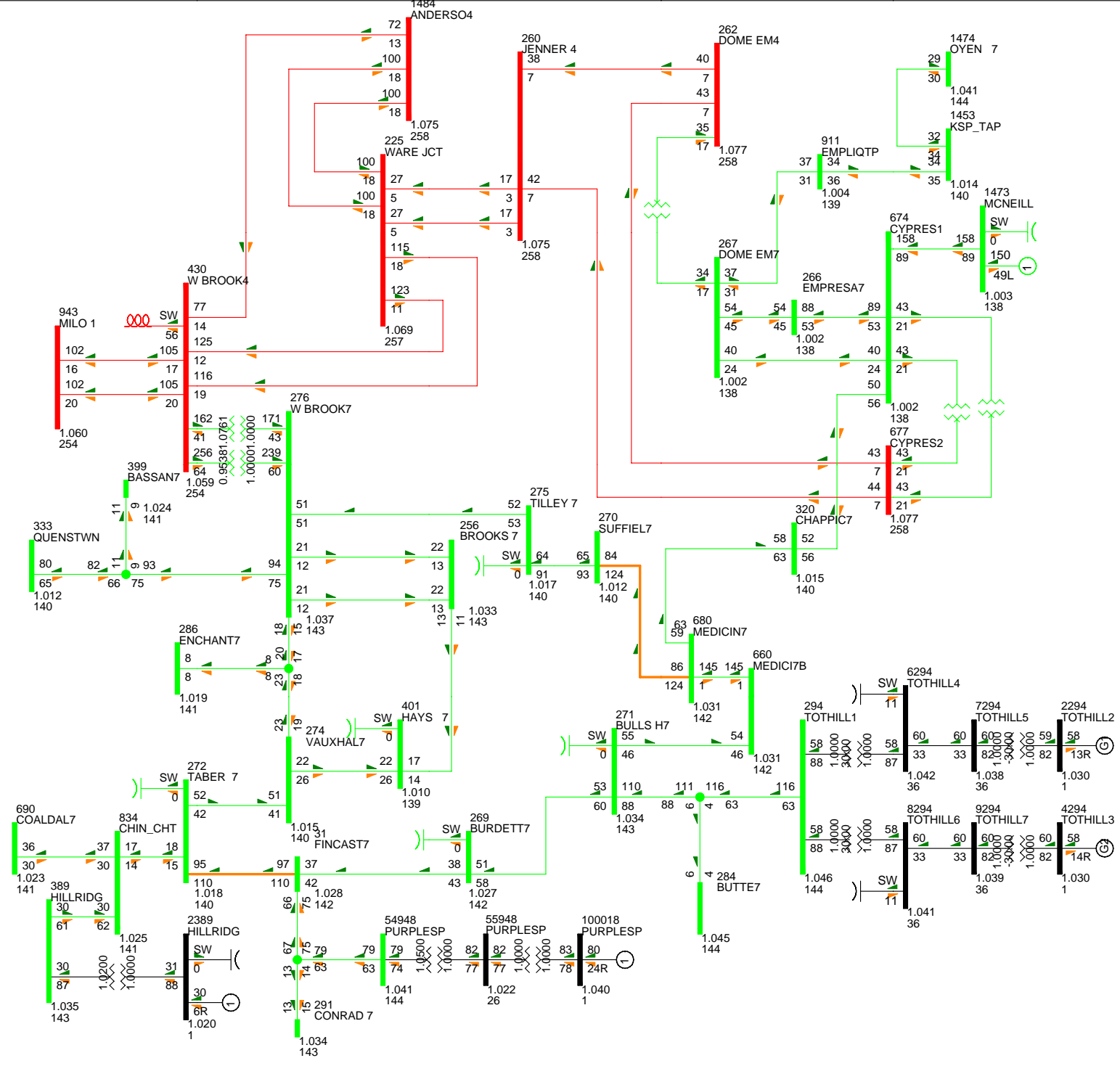


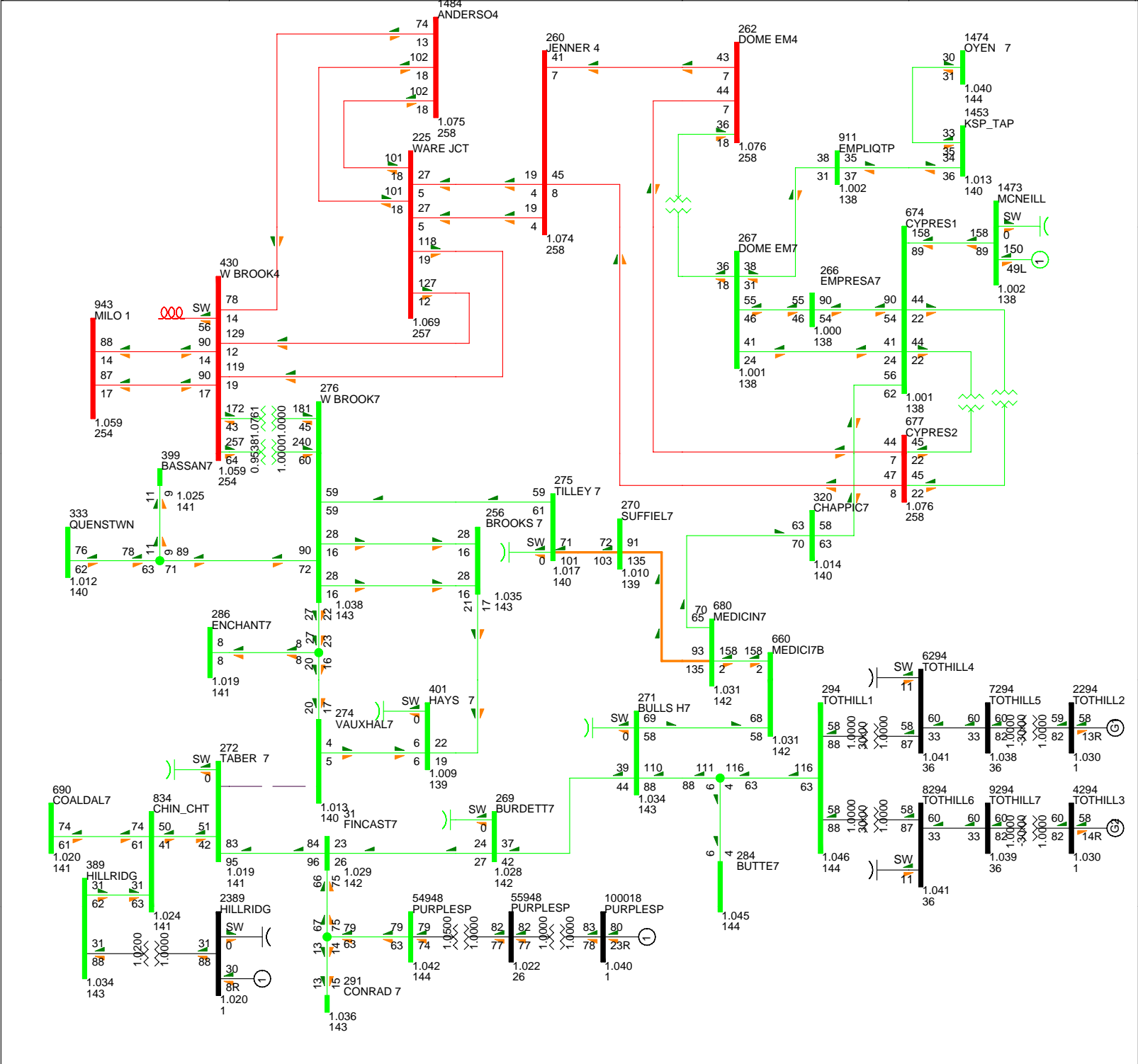


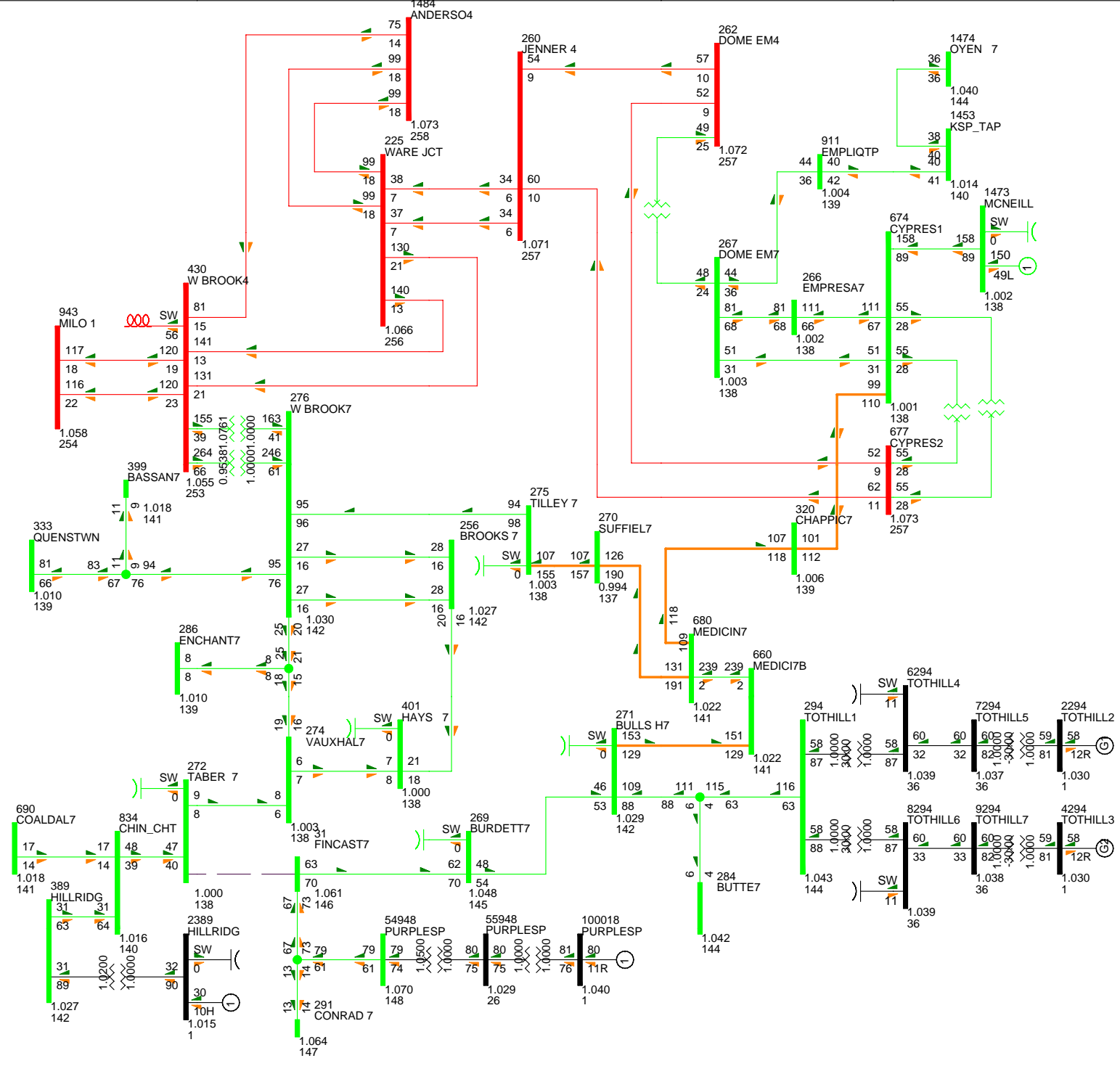


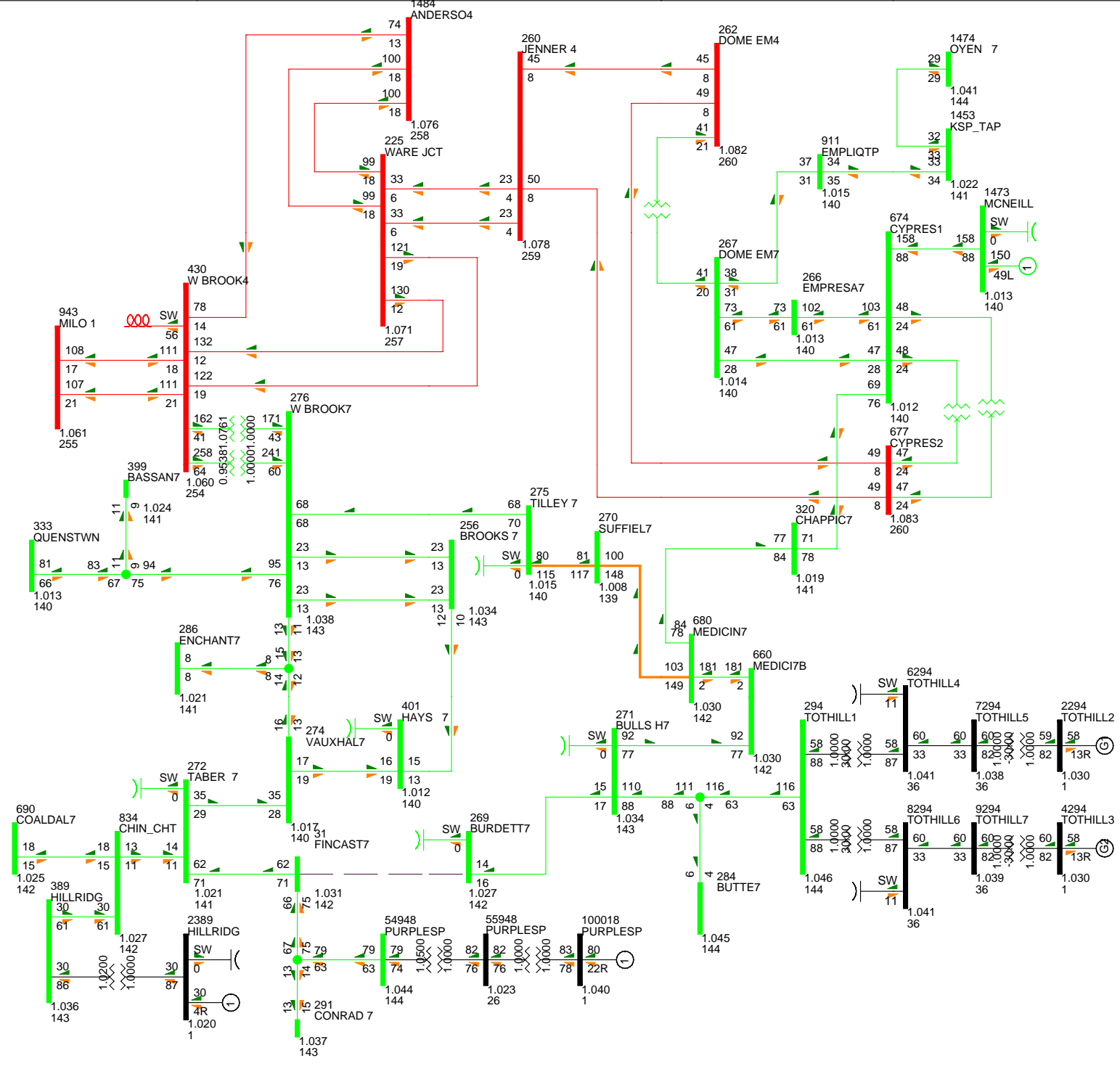
Attachment B-2: Post-connection Power Flow Analysis

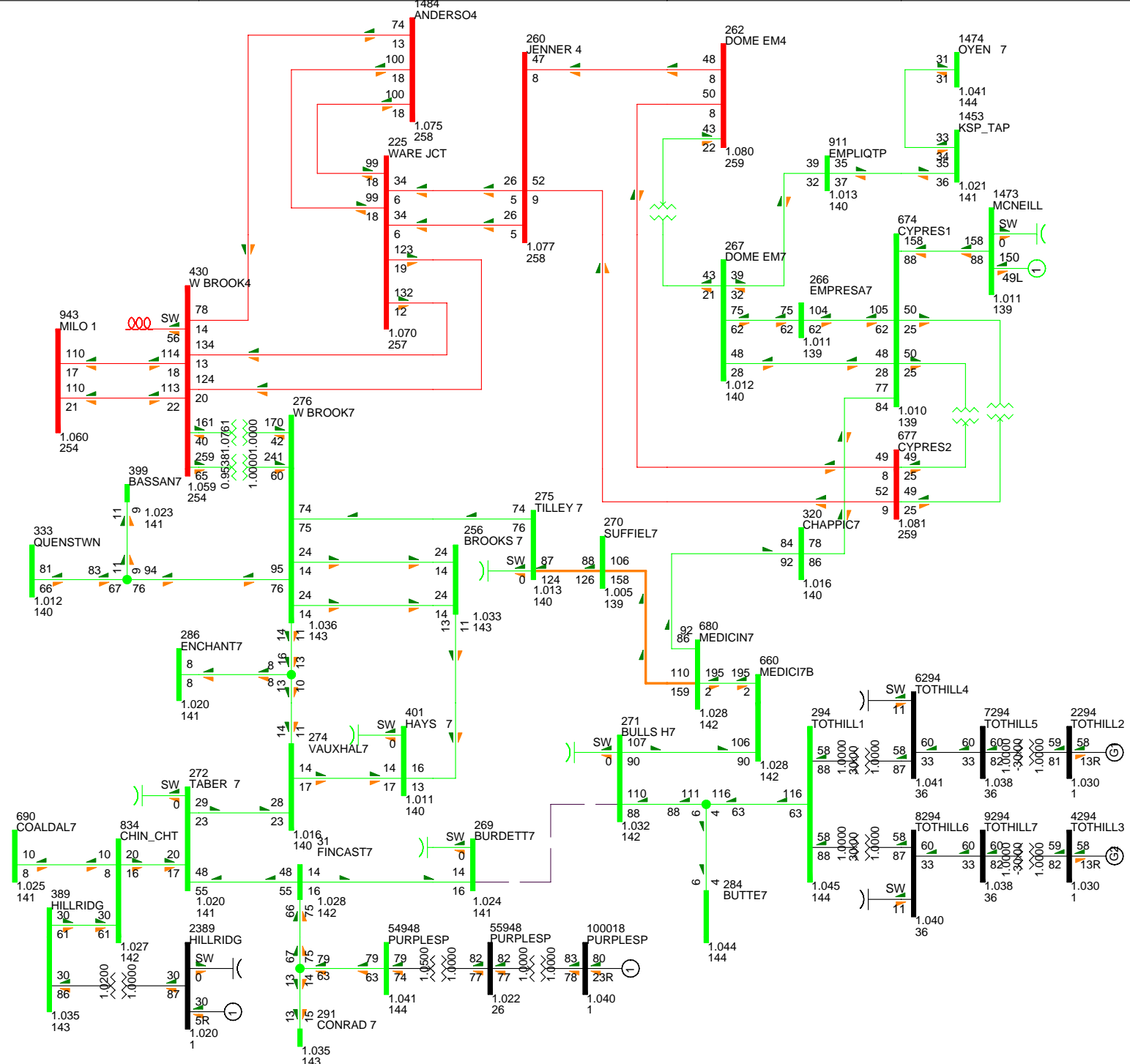
Results -- Scenario 2

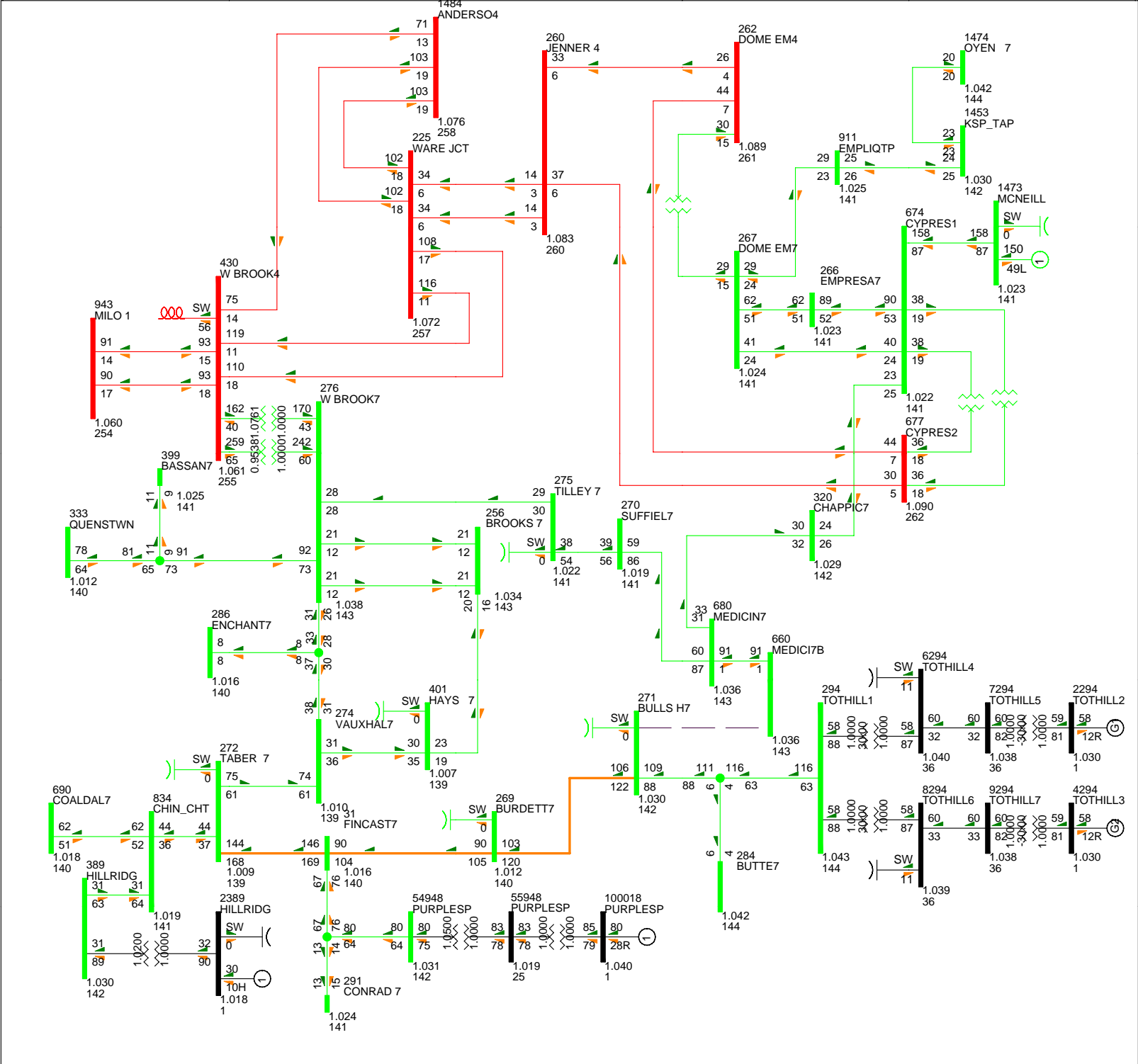


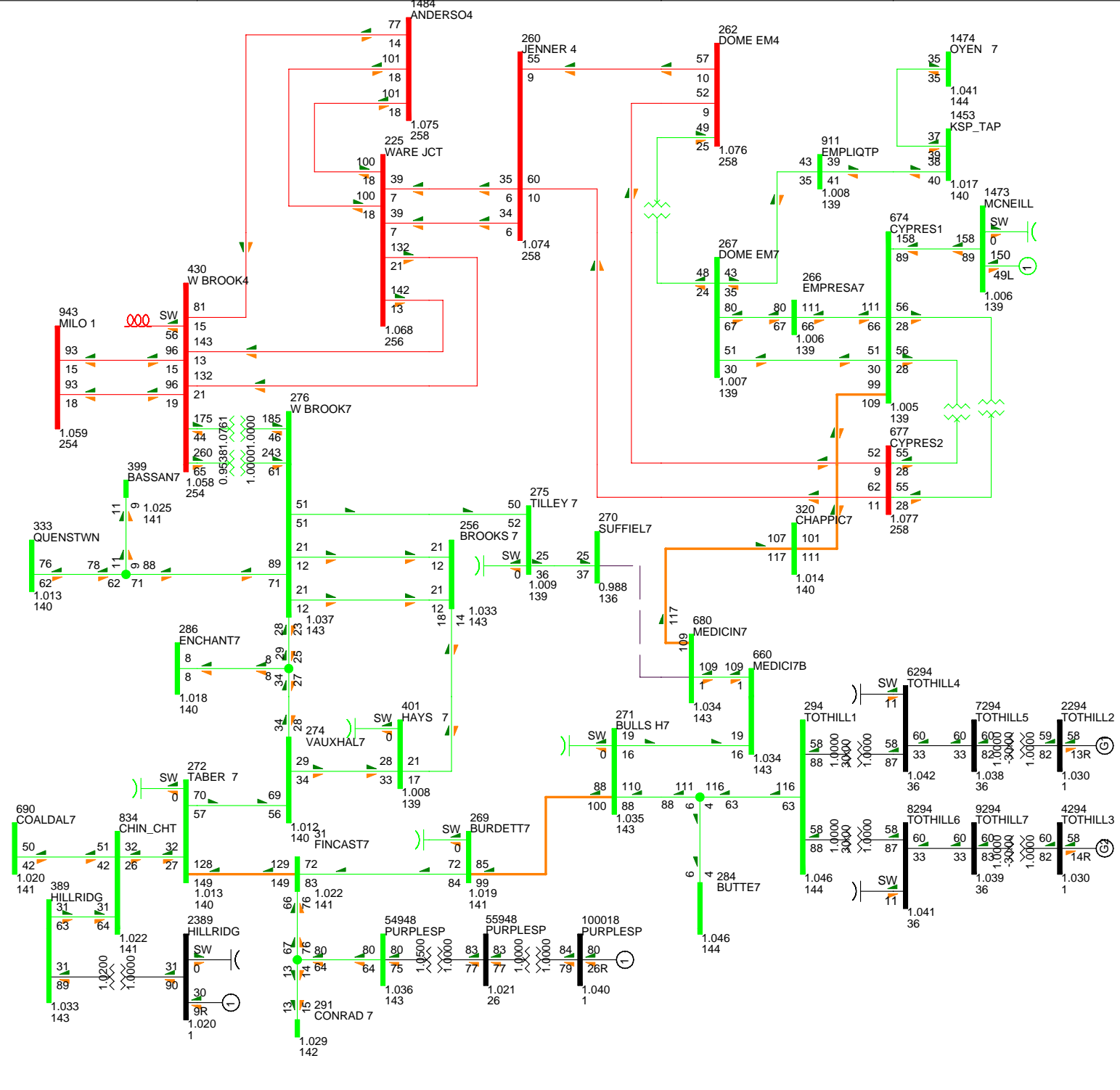


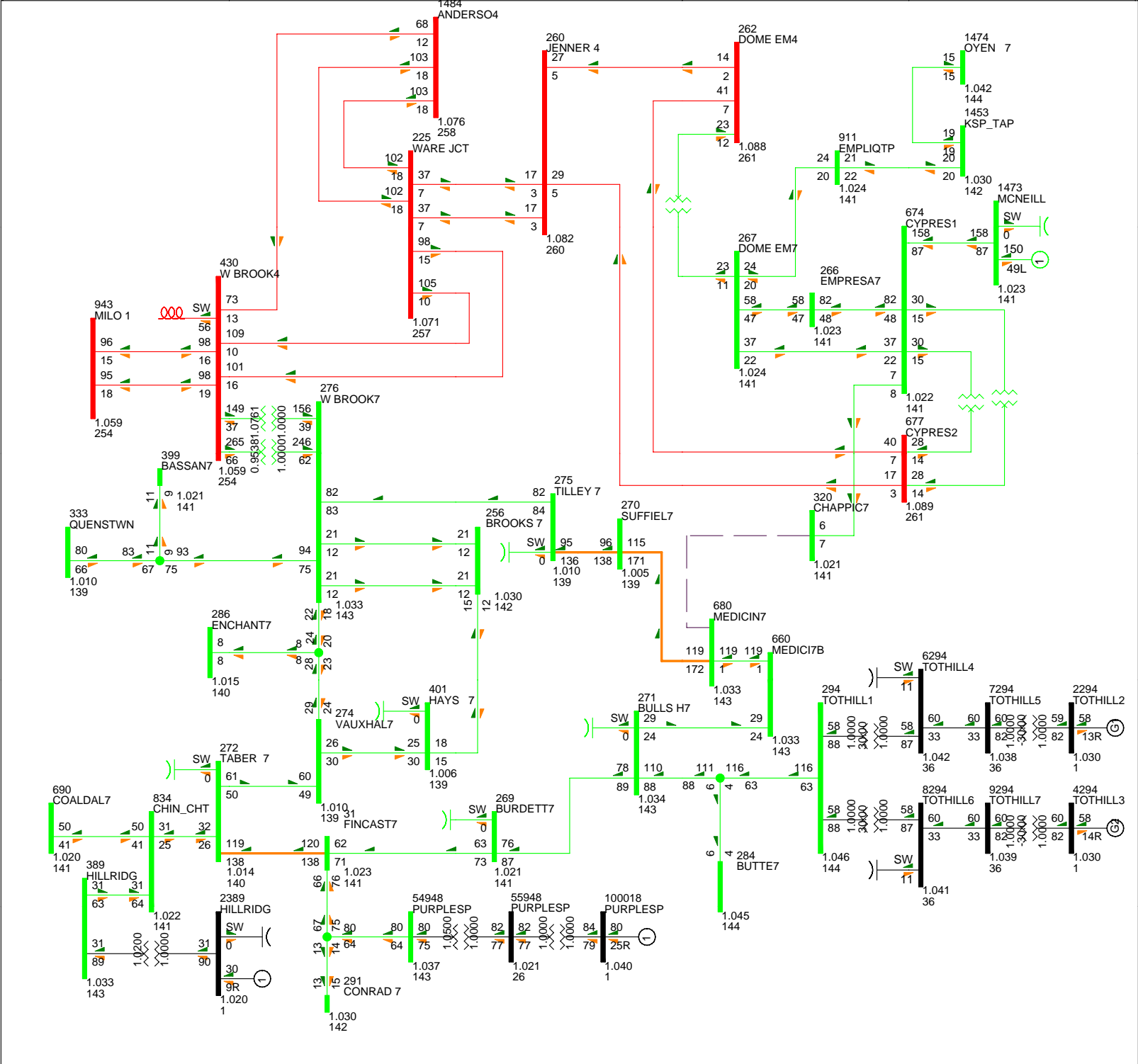


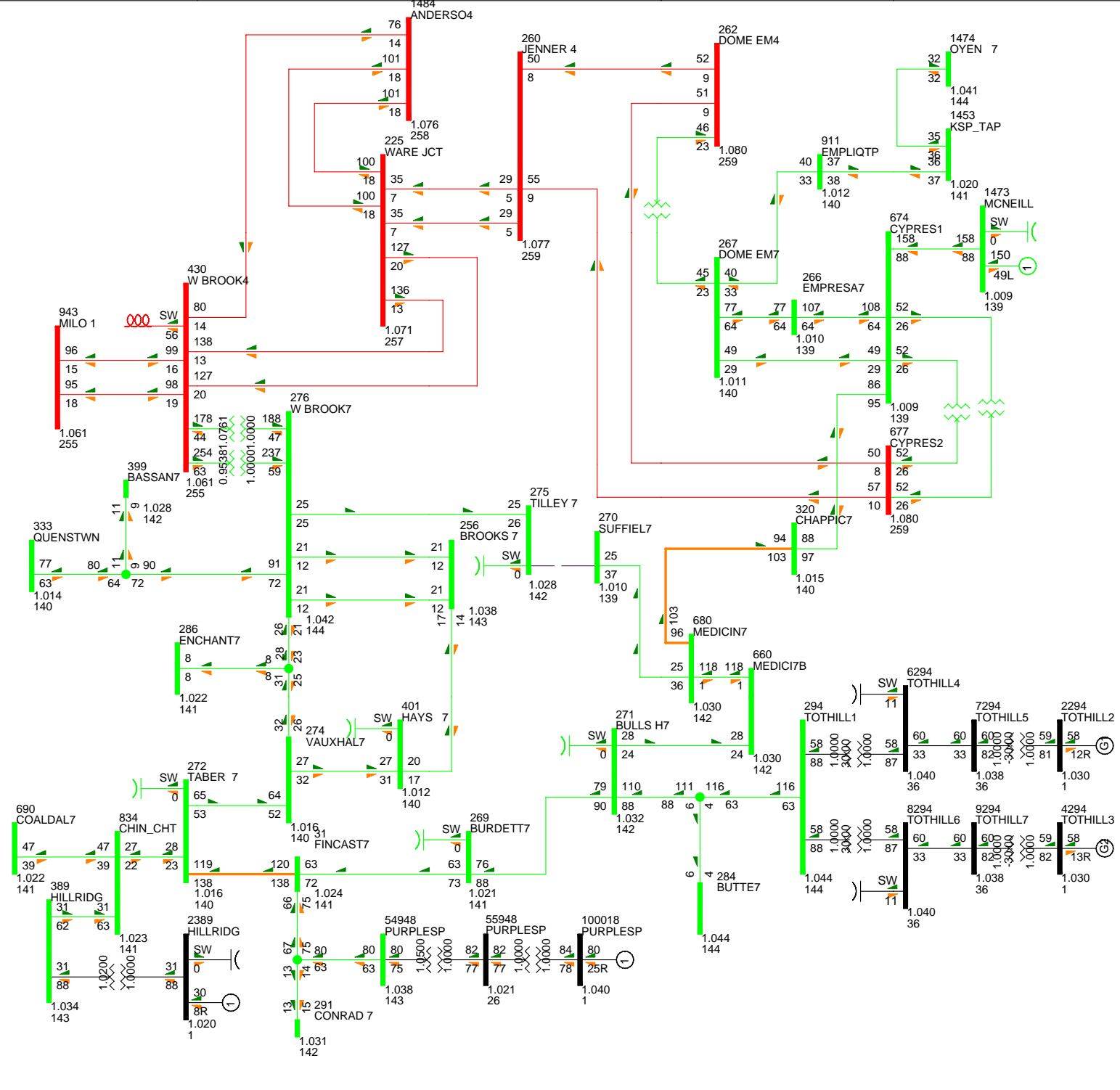






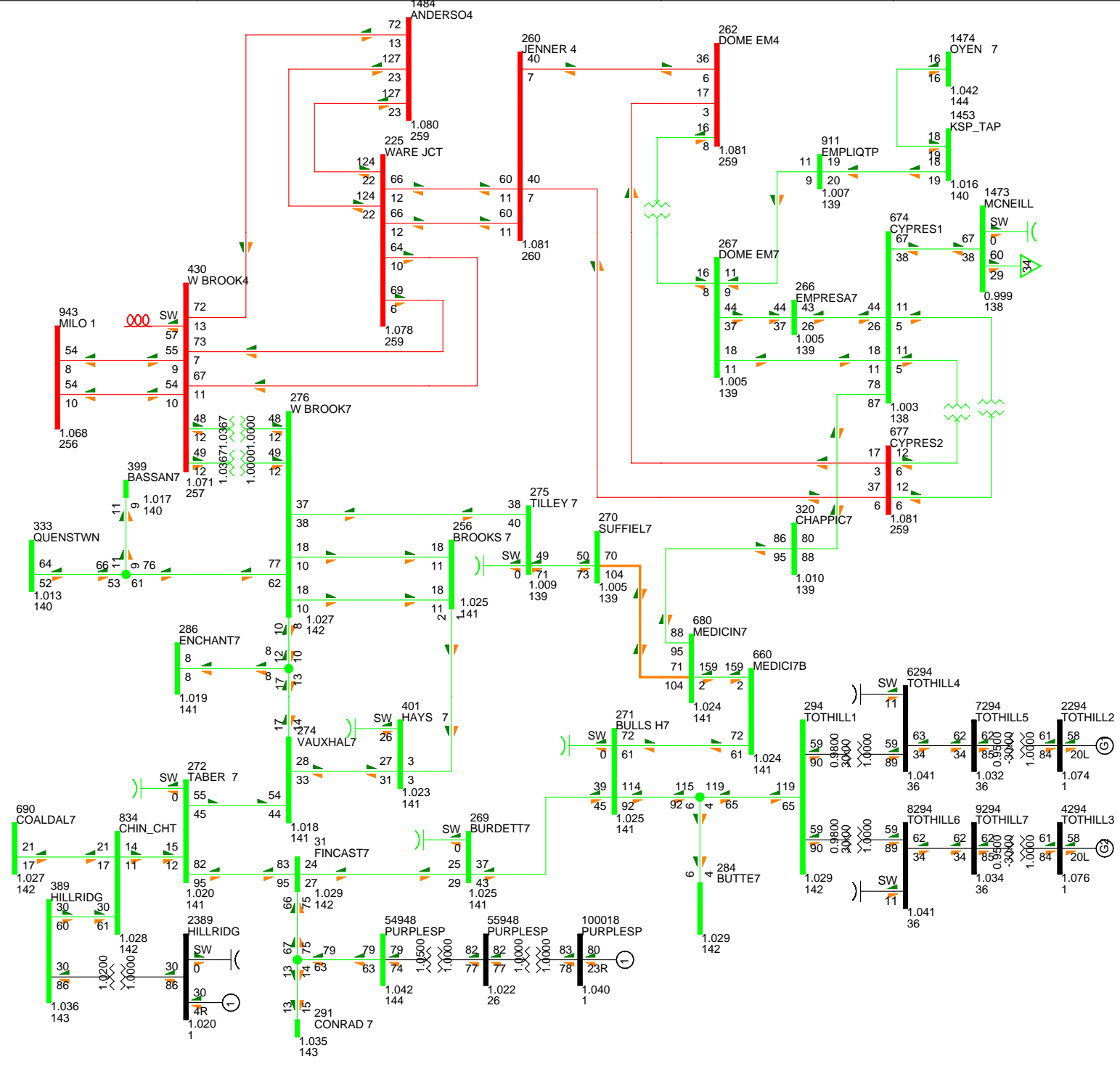


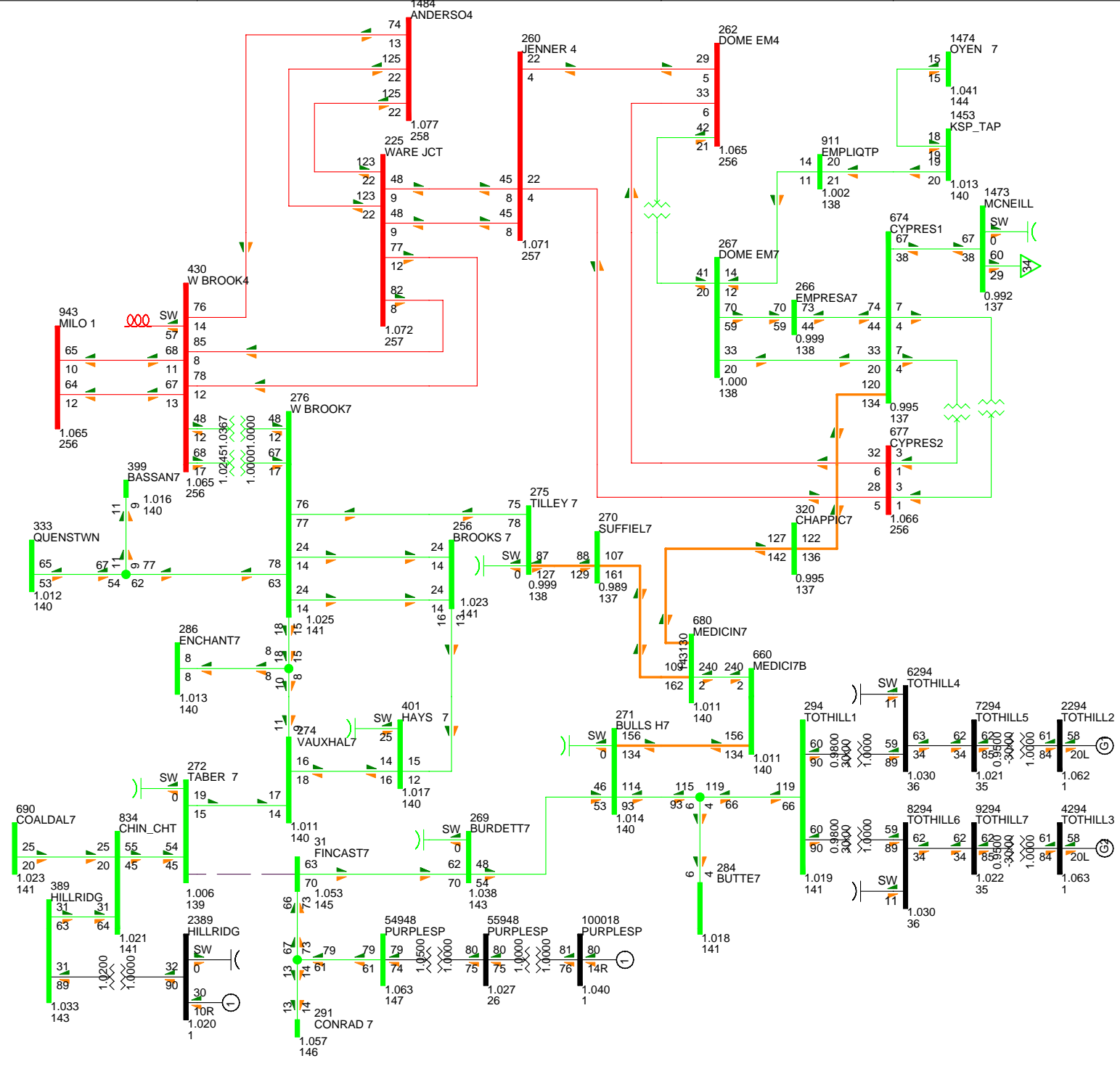


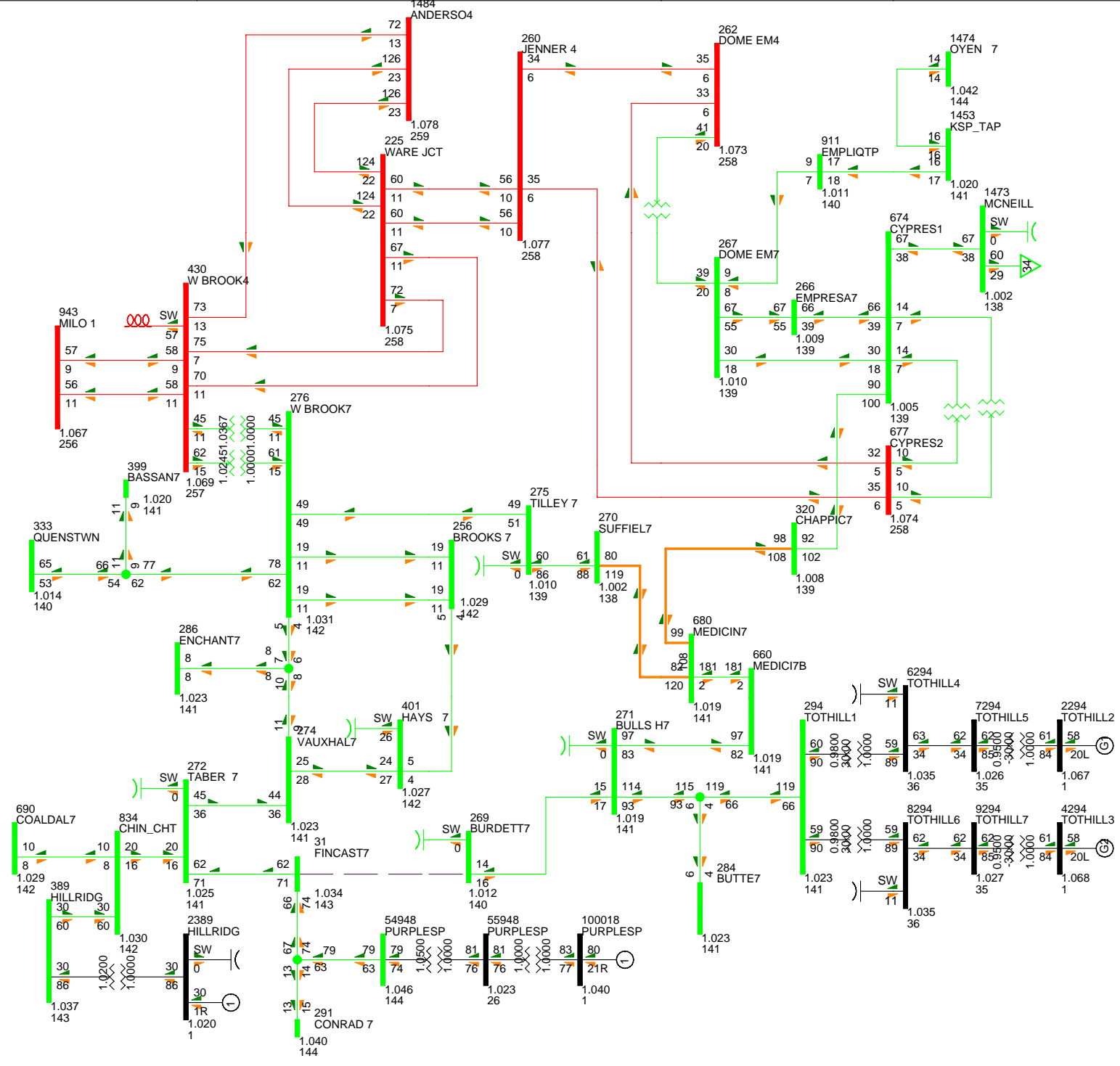


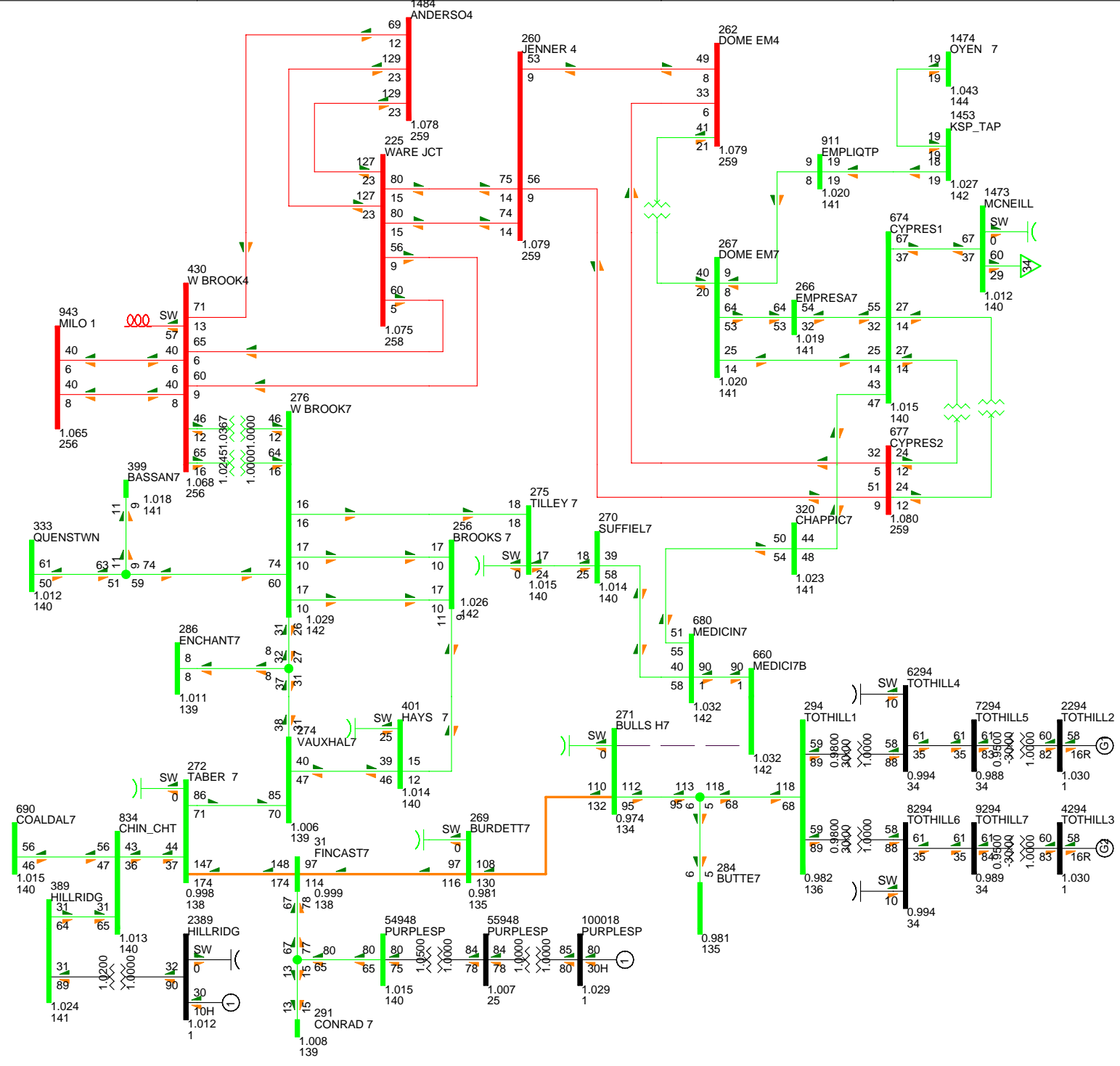
Attachment B-3: Post-connection Power Flow Analysis

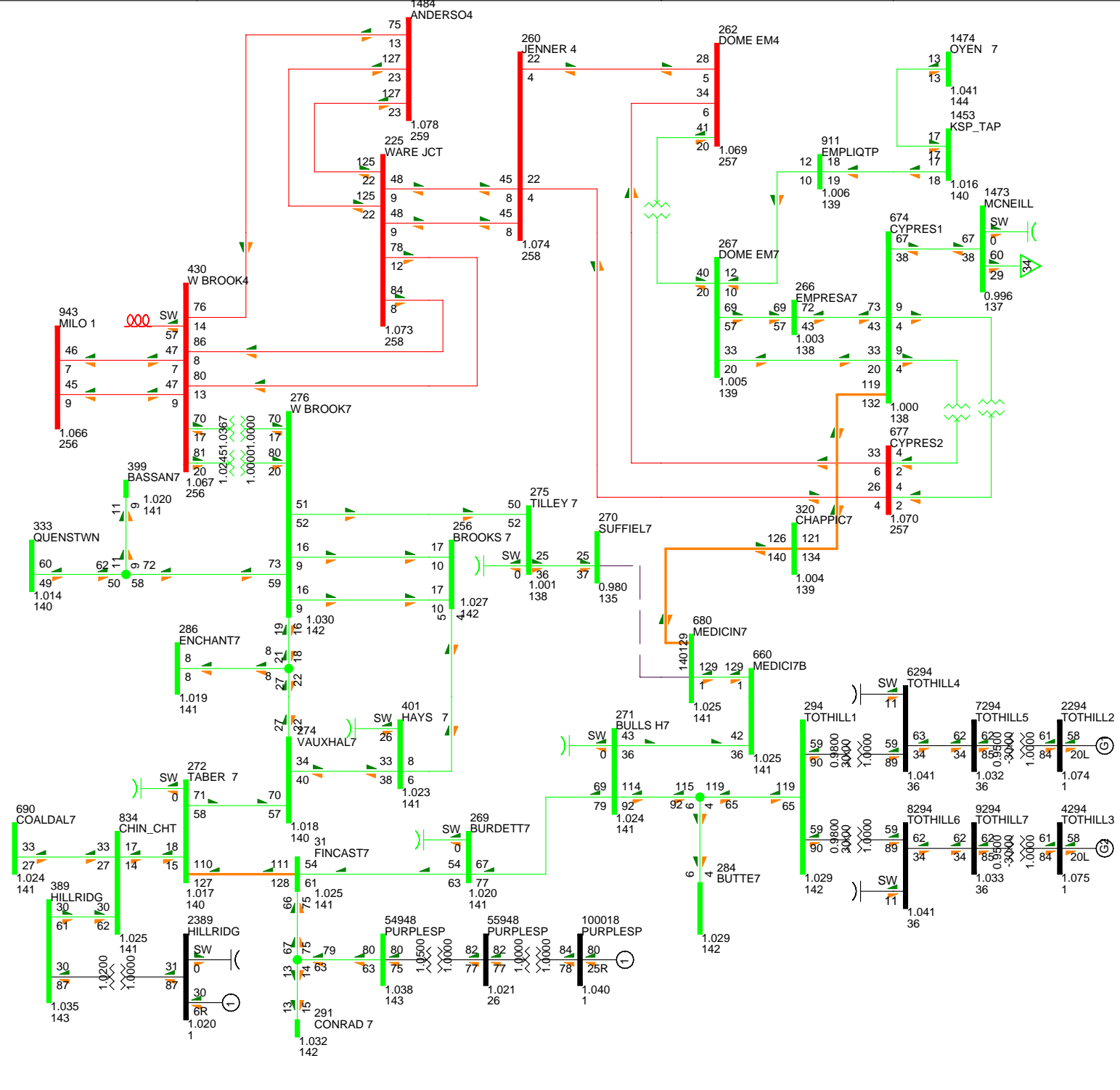
Results -- Scenario 3

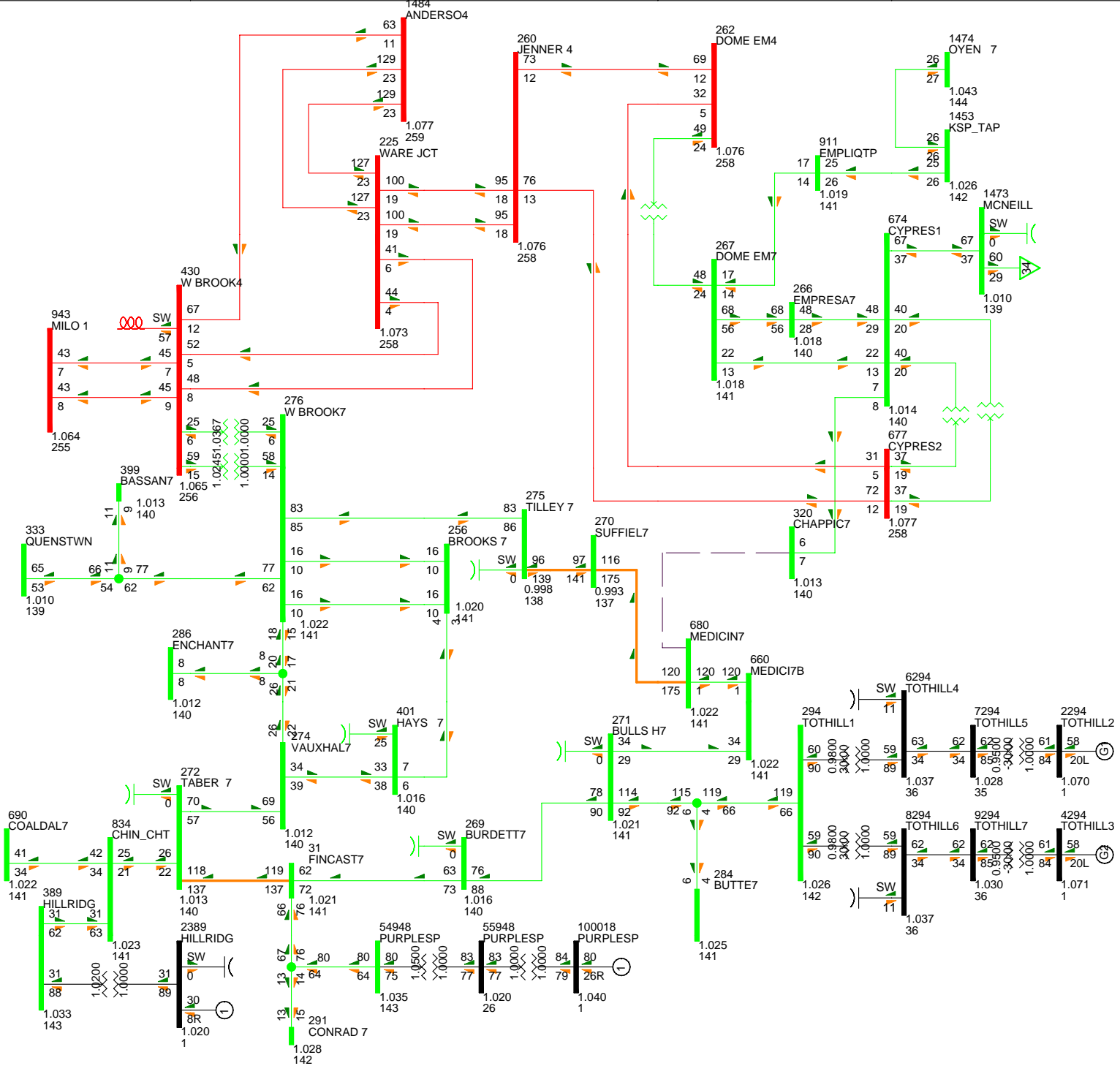


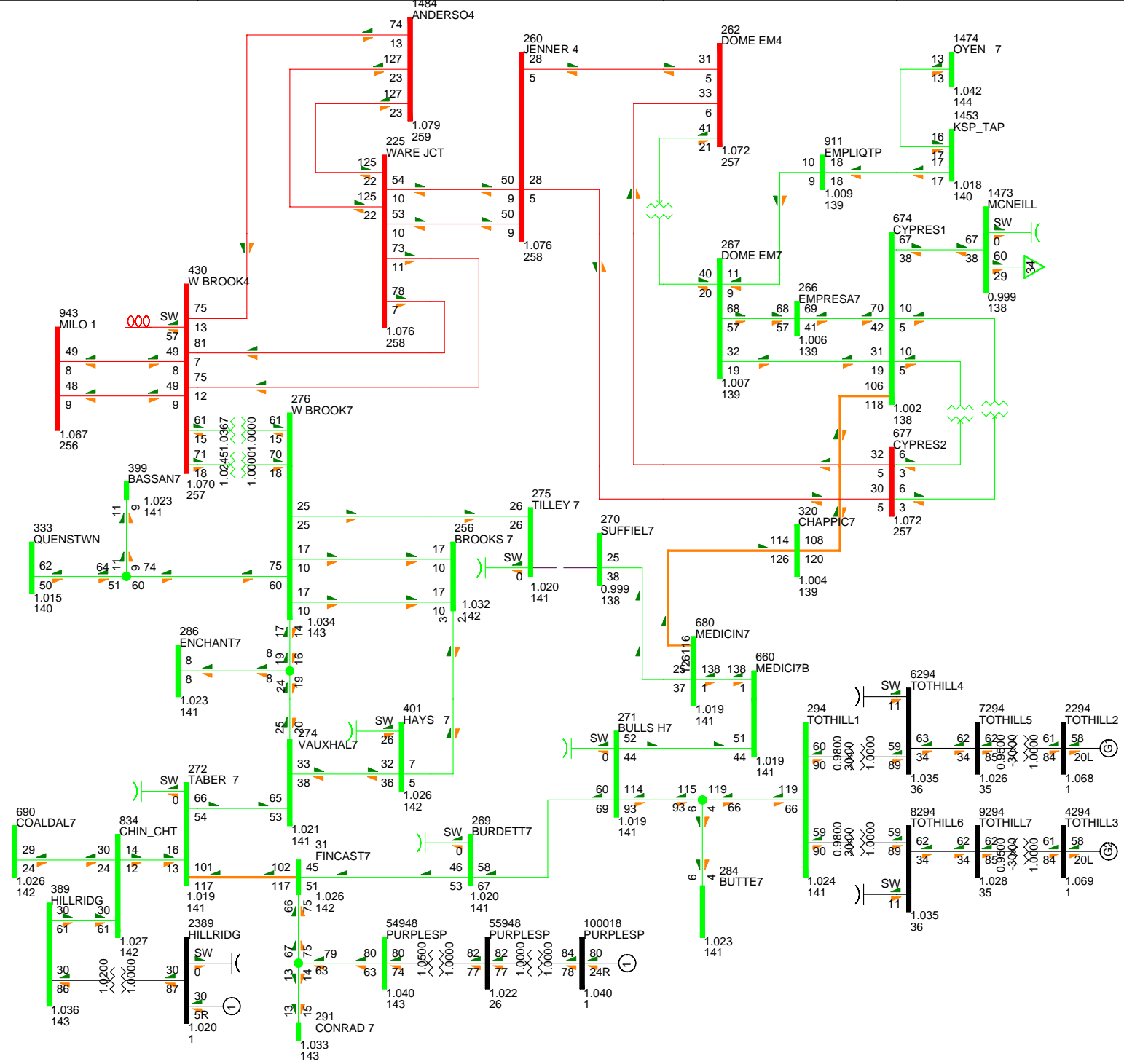


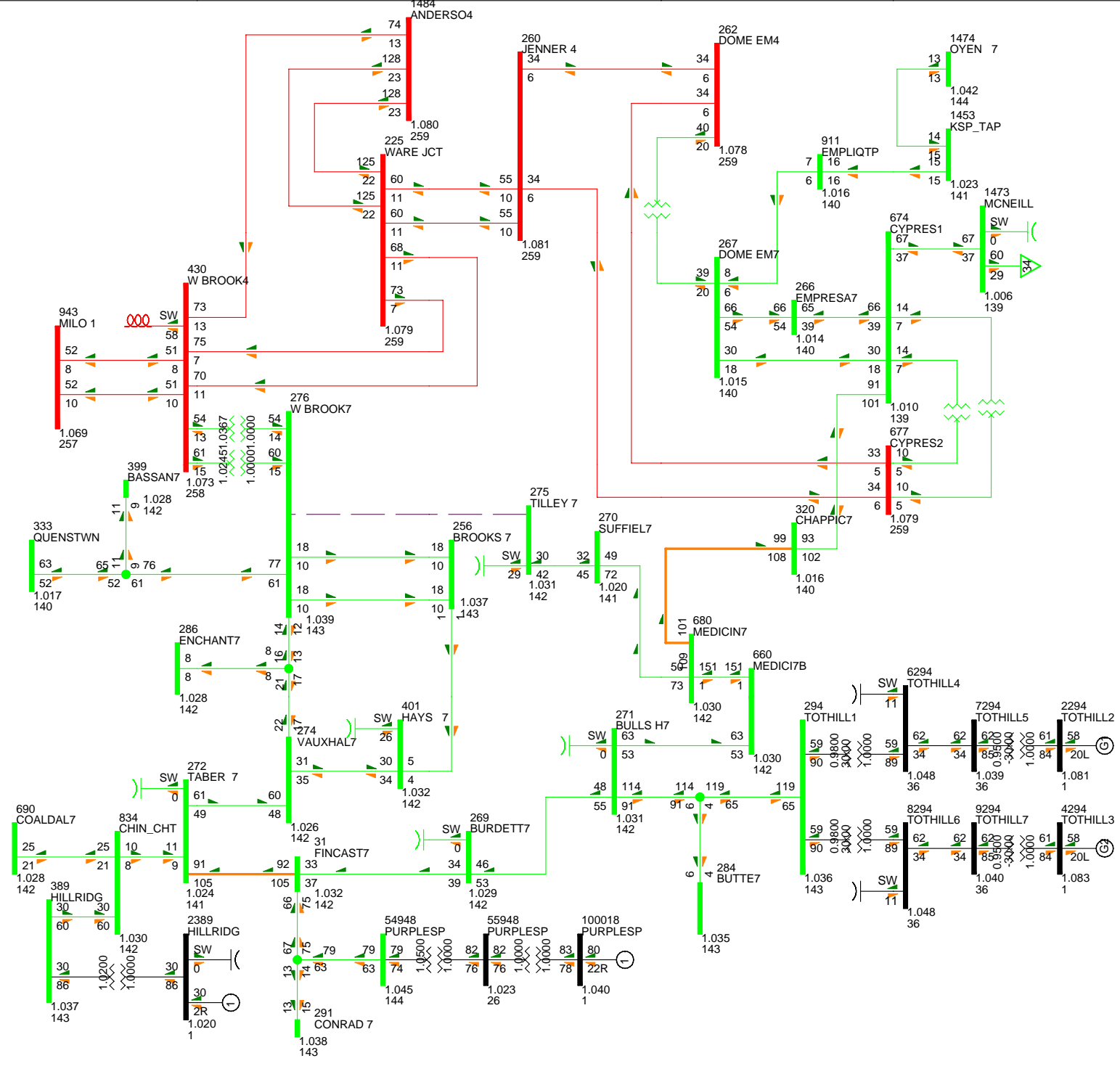












Attachment C

Post-connection Transient Stability Analysis Results (Scenarios 1 to 3)

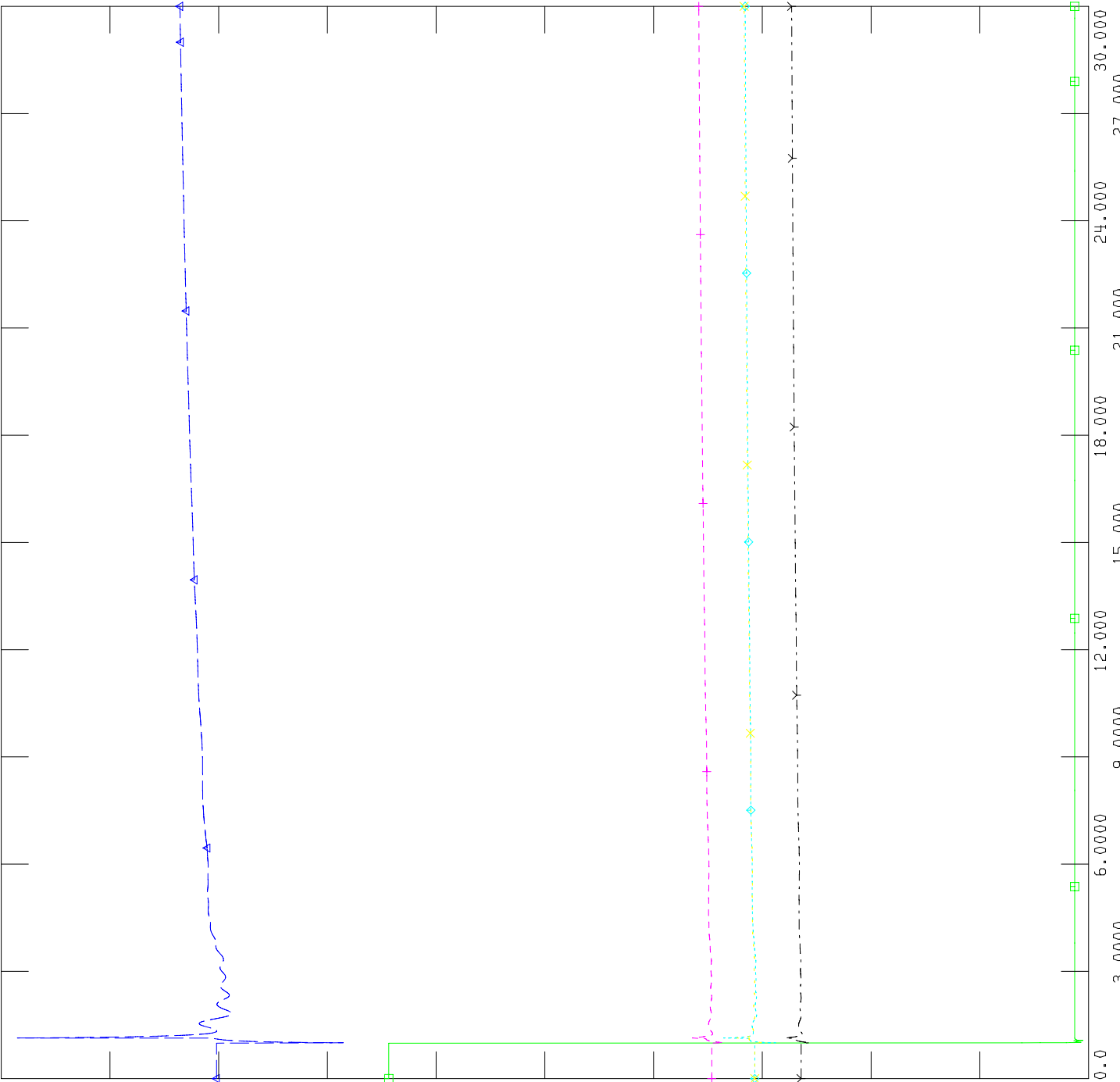
Attachment C-1: Post-connection Transient Stability Analysis

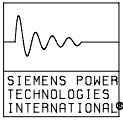
Results -- Scenario 1



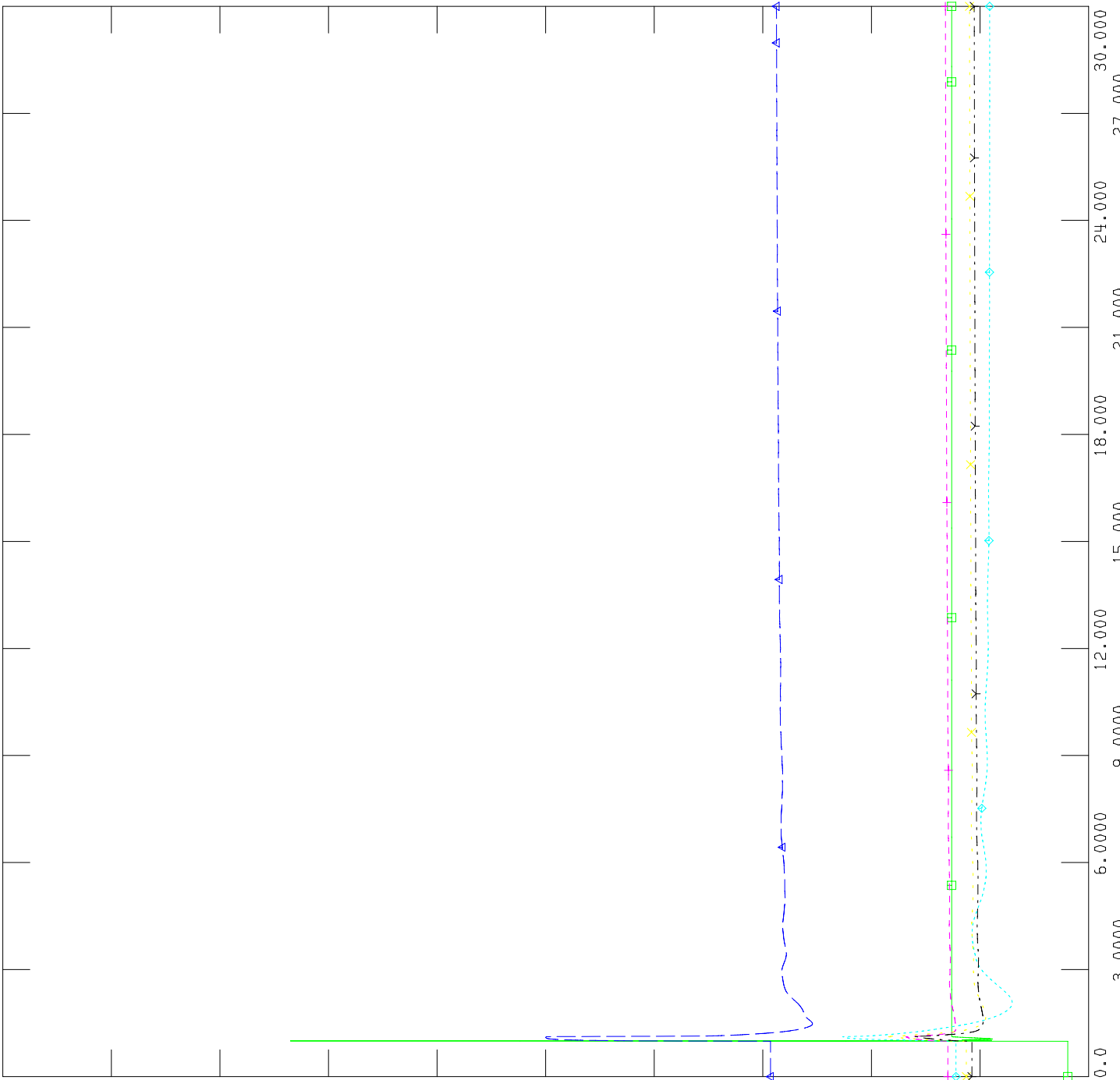
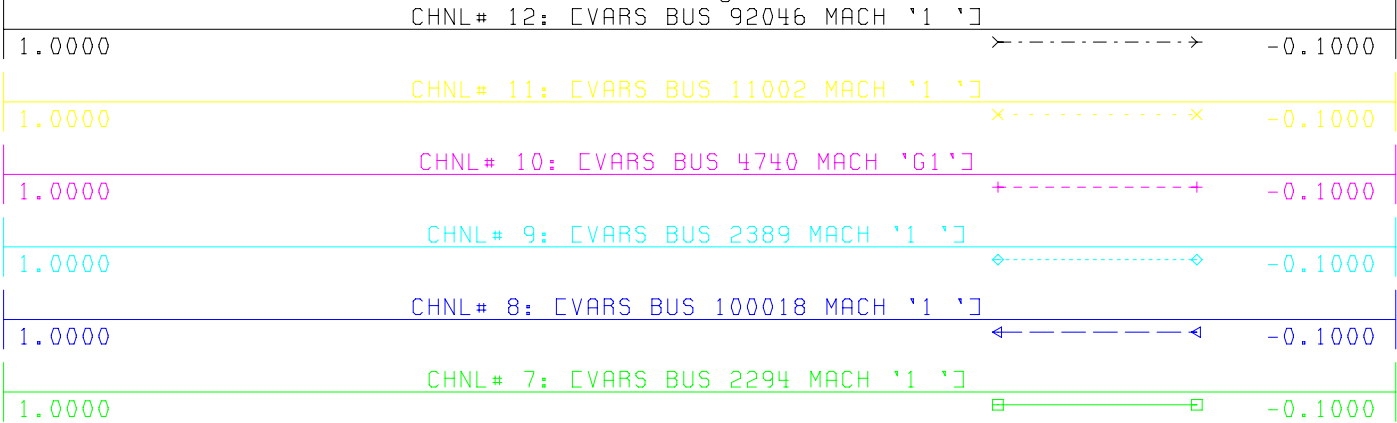
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_171L.out

Channel	Label	Value
6	CHNL# 6: [POWR BUS 92046 MACH '1 ']	-0.0100
5	CHNL# 5: [POWR BUS 11002 MACH '1 ']	-0.0100
4	CHNL# 4: [POWR BUS 4740 MACH 'G1 ']	-0.0100
3	CHNL# 3: [POWR BUS 2389 MACH '1 ']	-0.0100
2	CHNL# 2: [POWR BUS 100018 MACH '1 ']	-0.0100
1	CHNL# 1: [POWR BUS 2294 MACH '1 ']	-0.0100





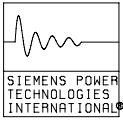
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_171L.out



TUE, NOV 16 2010 9:46
QELEC

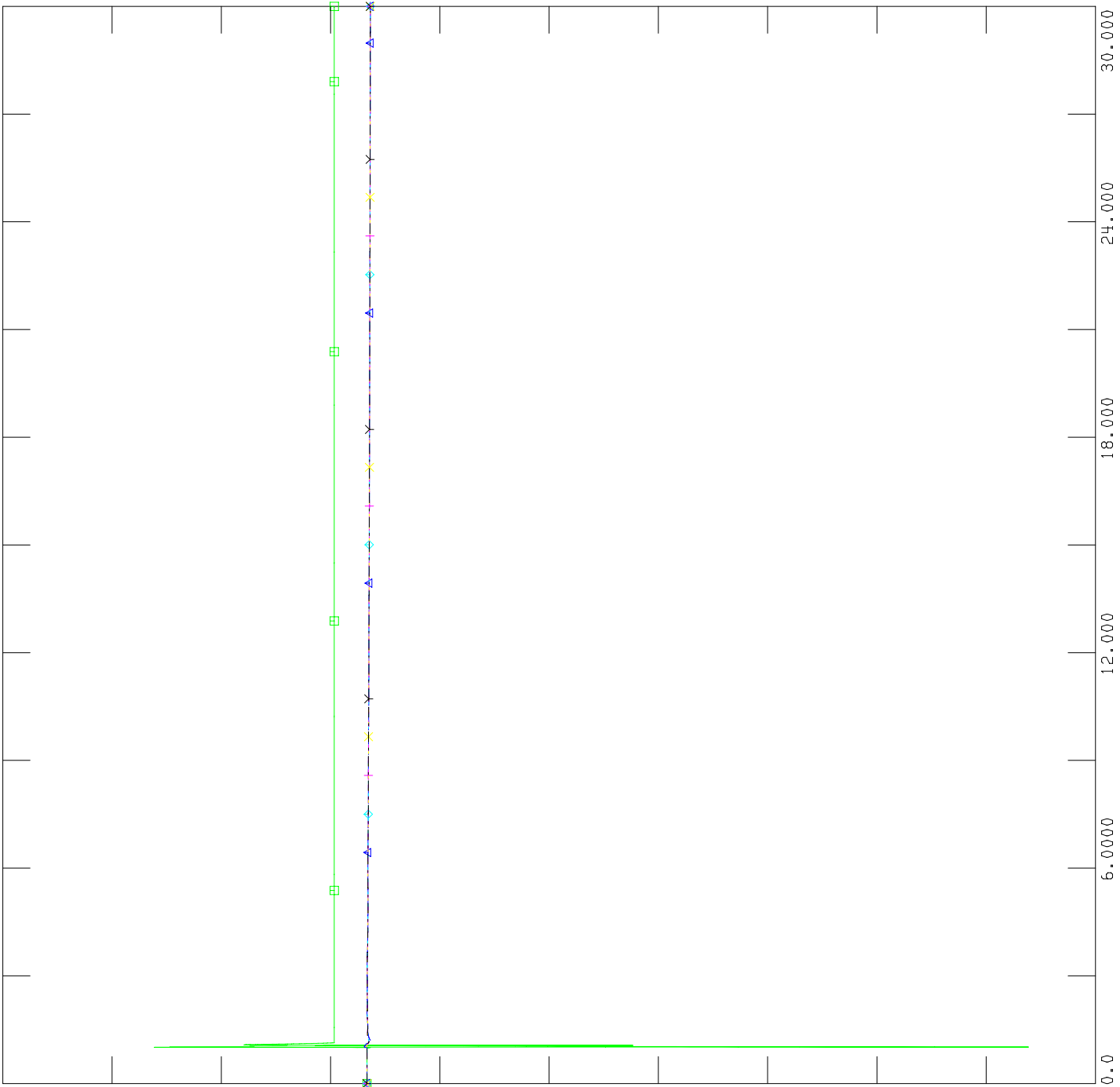
C-1-2

TIME (SECONDS)



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_171L.out

Channel	CFREQ	Component	Value
CHNL# 18	92046	CMCBRIDE6	0.5750
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	0.5750
CHNL# 15	2389	CHILLRIDG	0.5750
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900

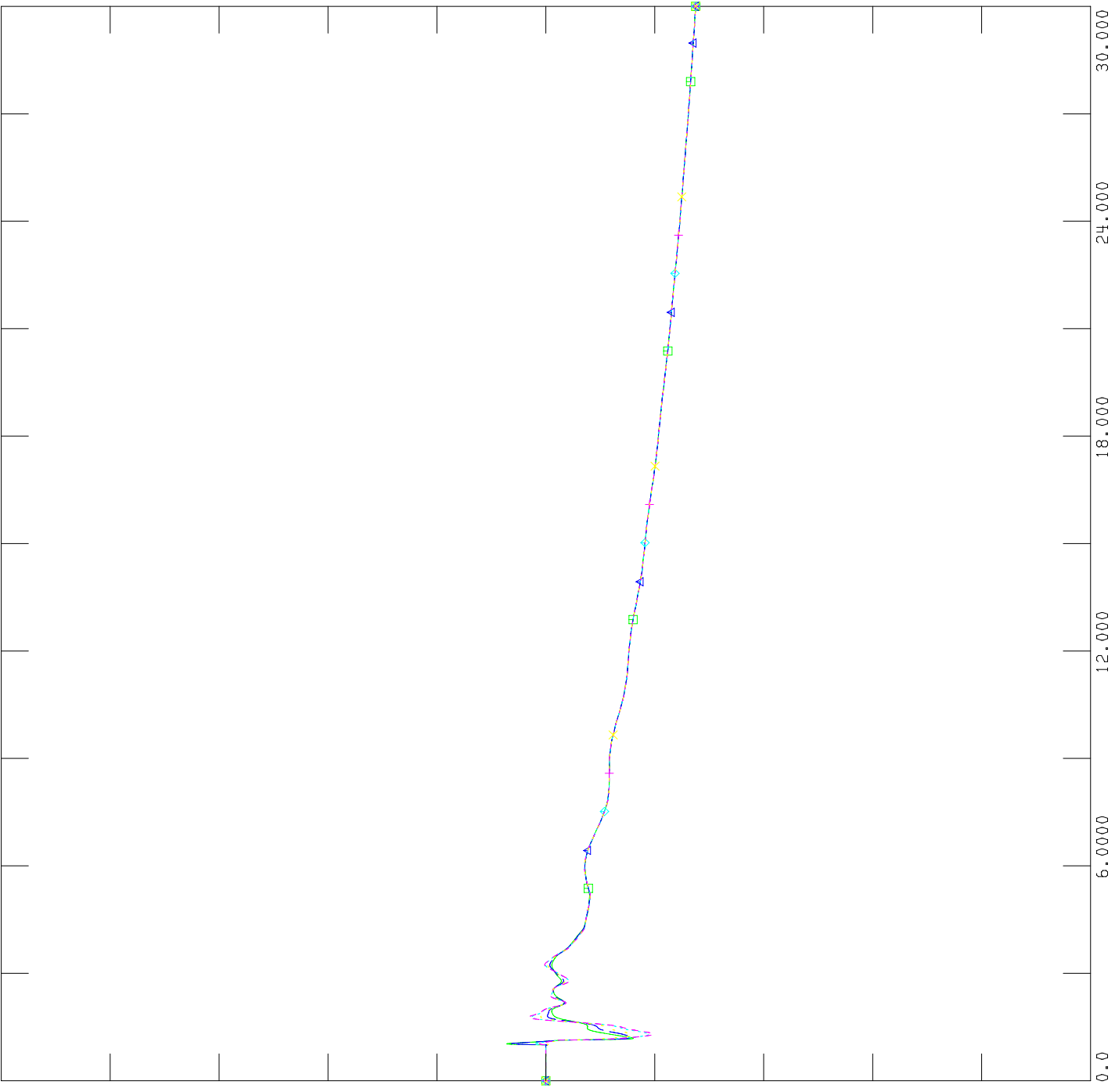




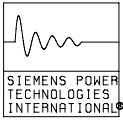
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_171L.out

TUE, NOV 16 2010 9:54
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270	CSUFFIEL7	138.0000	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680	CMEDICIN7	138.0000	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271	CBULLS H7	138.0000	◇-----◇	-0.0067
0.00670	CHNL# 20: CFREQ	269	CBURDETT7	138.0000	←-----△	-0.0067
0.00670	CHNL# 19: CFREQ	31	CFINCAST7	138.0000	▣-----▣	-0.0067

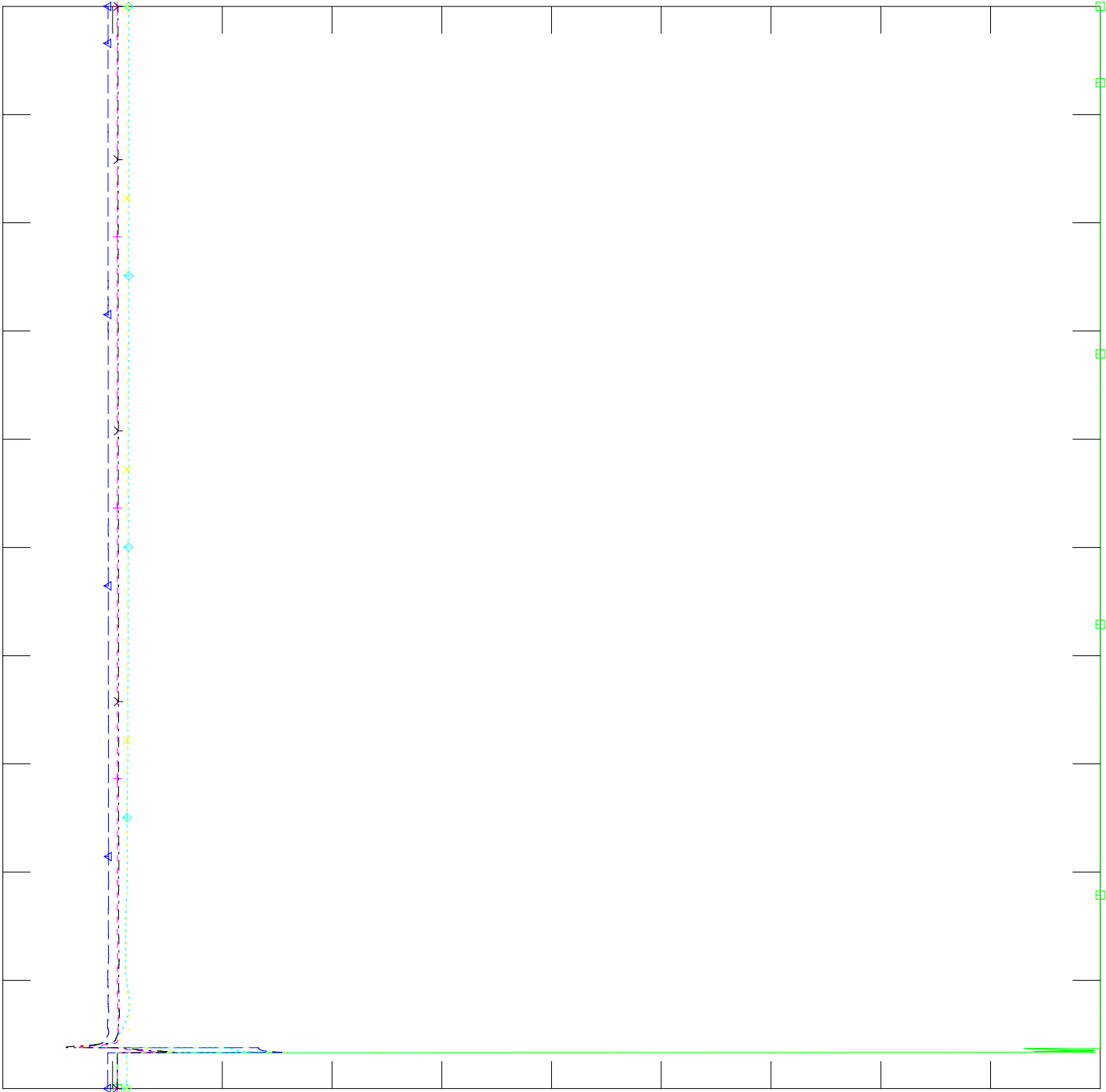


C-1-4



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_171L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 EMCBRIDE6	0.5750
CHNL# 28	EVOLT 11002 EGARDNG2	0.5750
CHNL# 27	EVOLT 4740 CARD_07	0.5750
CHNL# 26	EVOLT 2389 CHILLRIDG	0.5750
CHNL# 25	EVOLT 100018 CPURPLESP	0.5750
CHNL# 24	EVOLT 2294 CTOTHILL2	0.6900

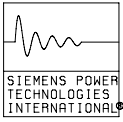


TUE, NOV 16 2010 9:55

C-1-5

TIME (SECONDS)

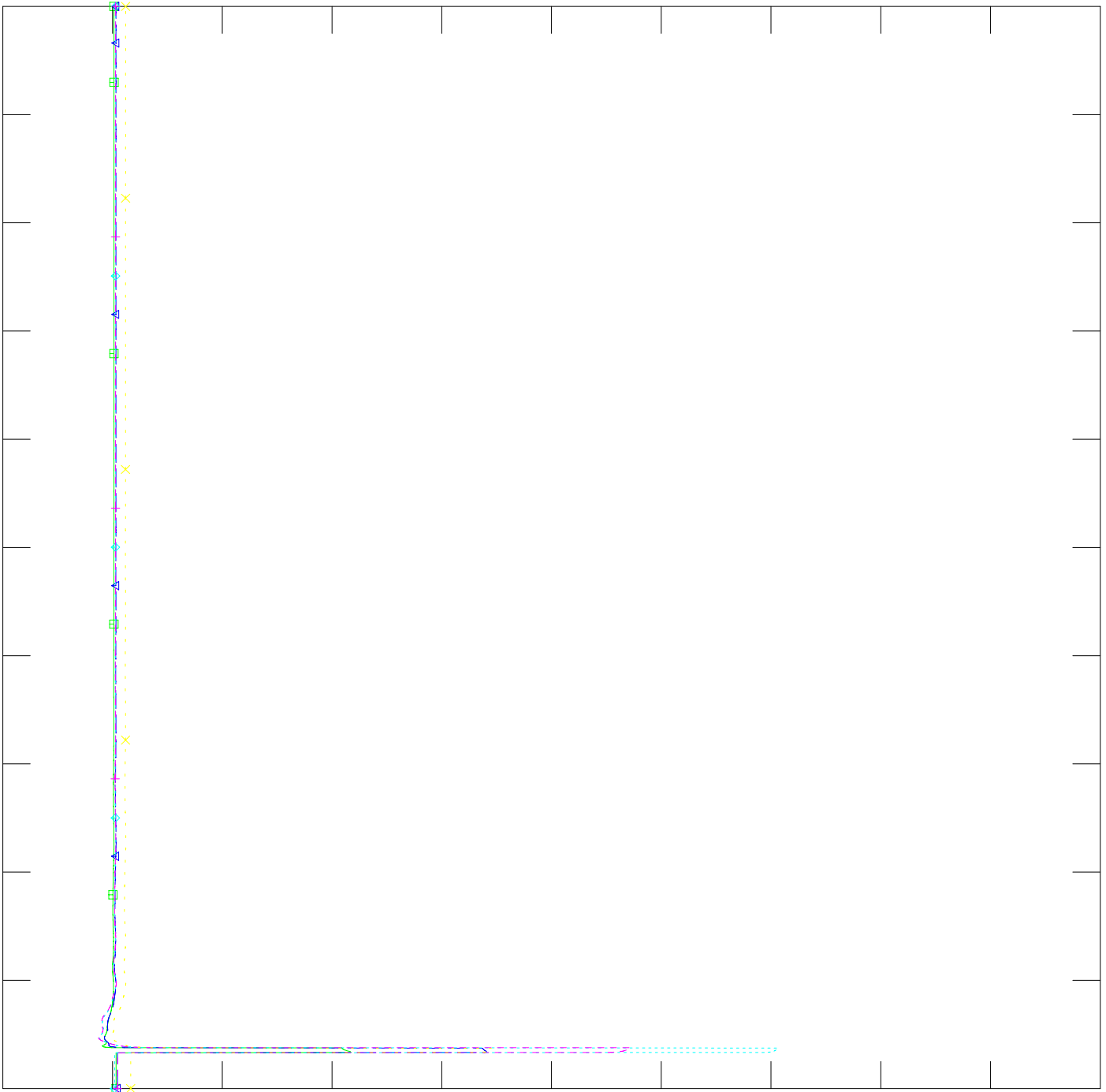
BUS VOLTAGE



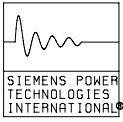
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_171L.out

TUE, NOV 16 2010 9:56
 BUS VOLTAGE

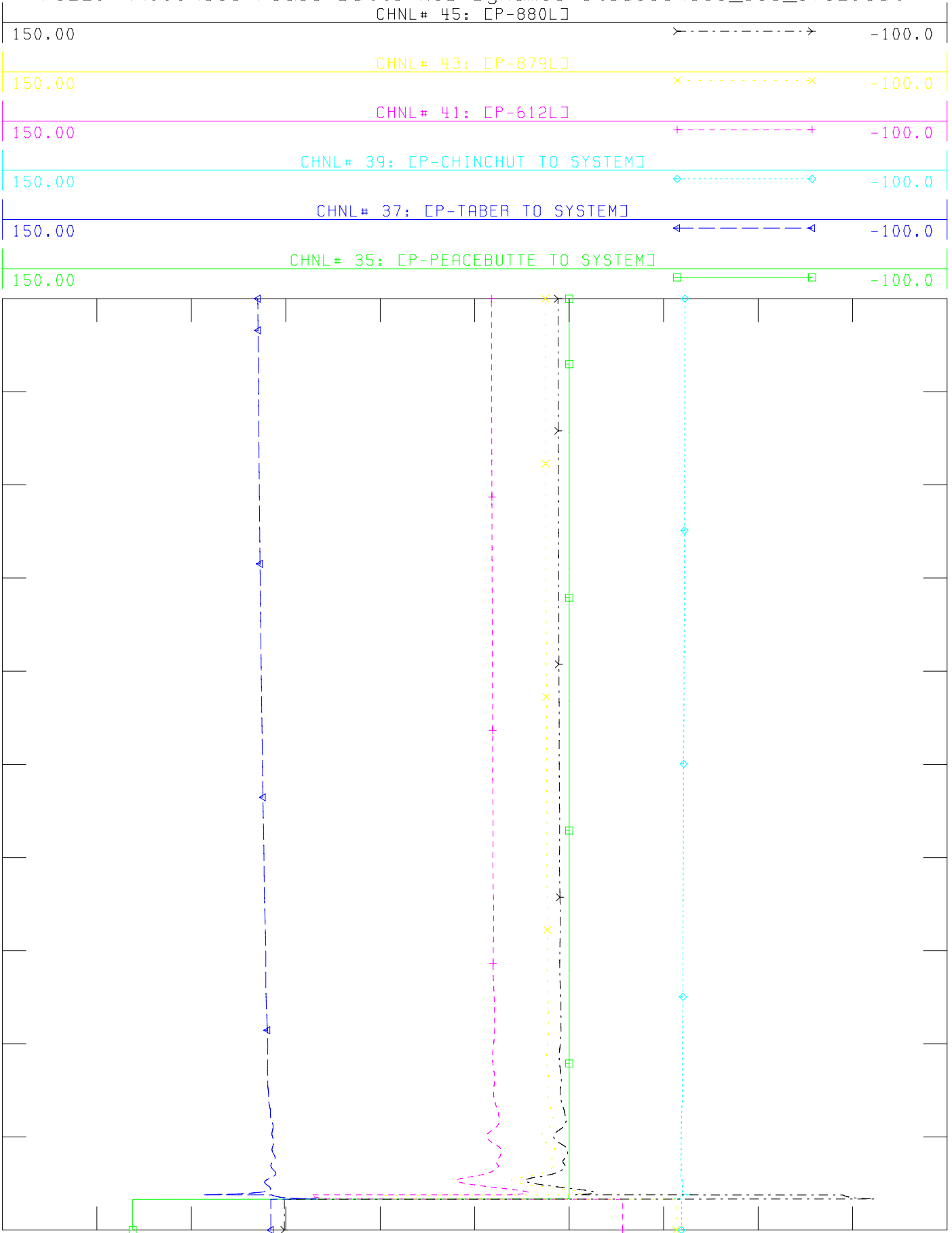
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



C-1-6



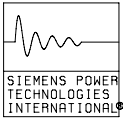
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_171L.out
CHNL# 45: [CP-880L]



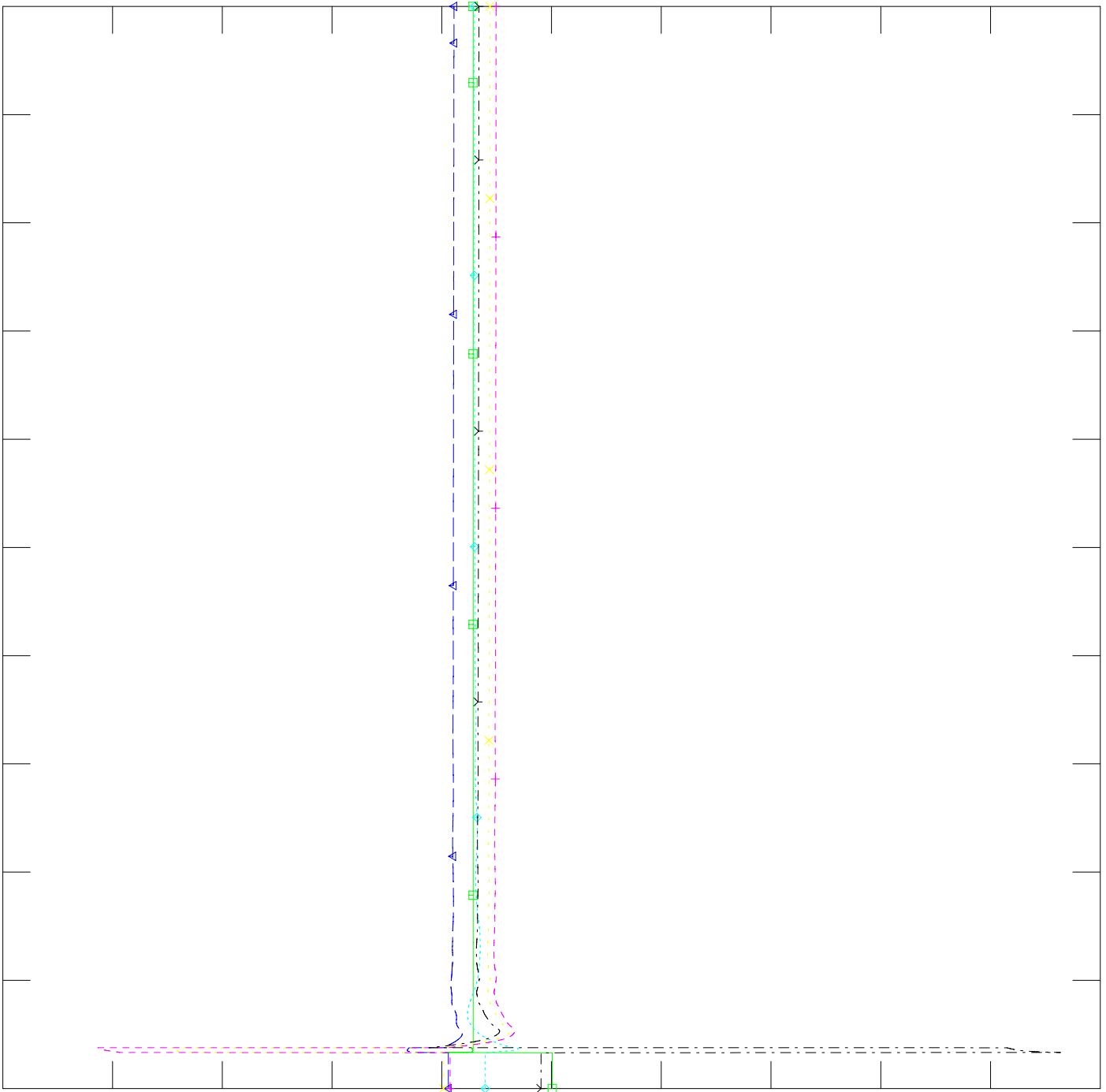
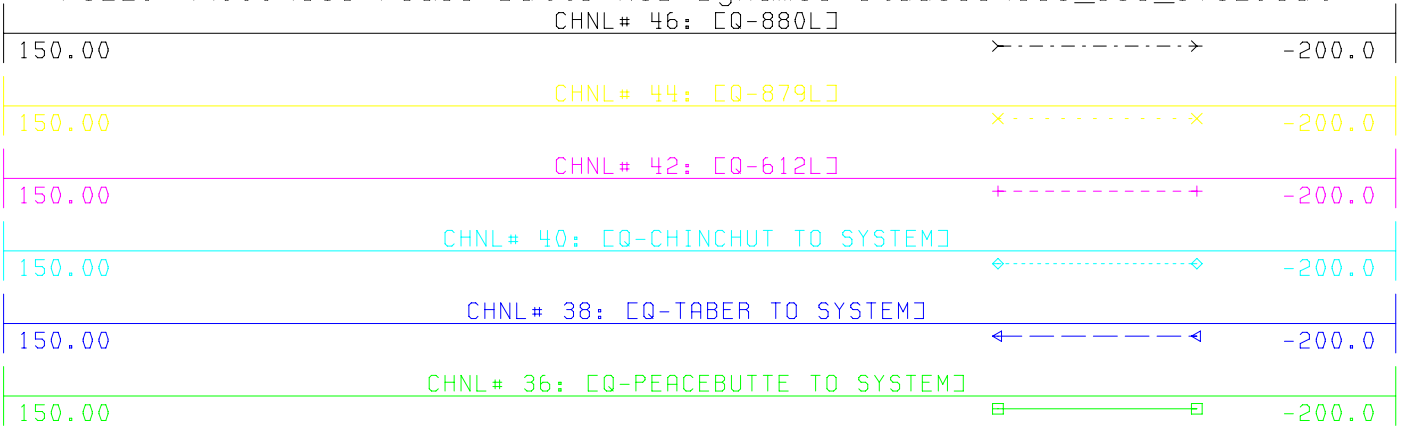
TUE, NOV 16 2010 10:08
BRANCH ACTIVE POWER

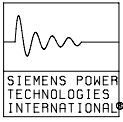
C-1-7

TIME (SECONDS)

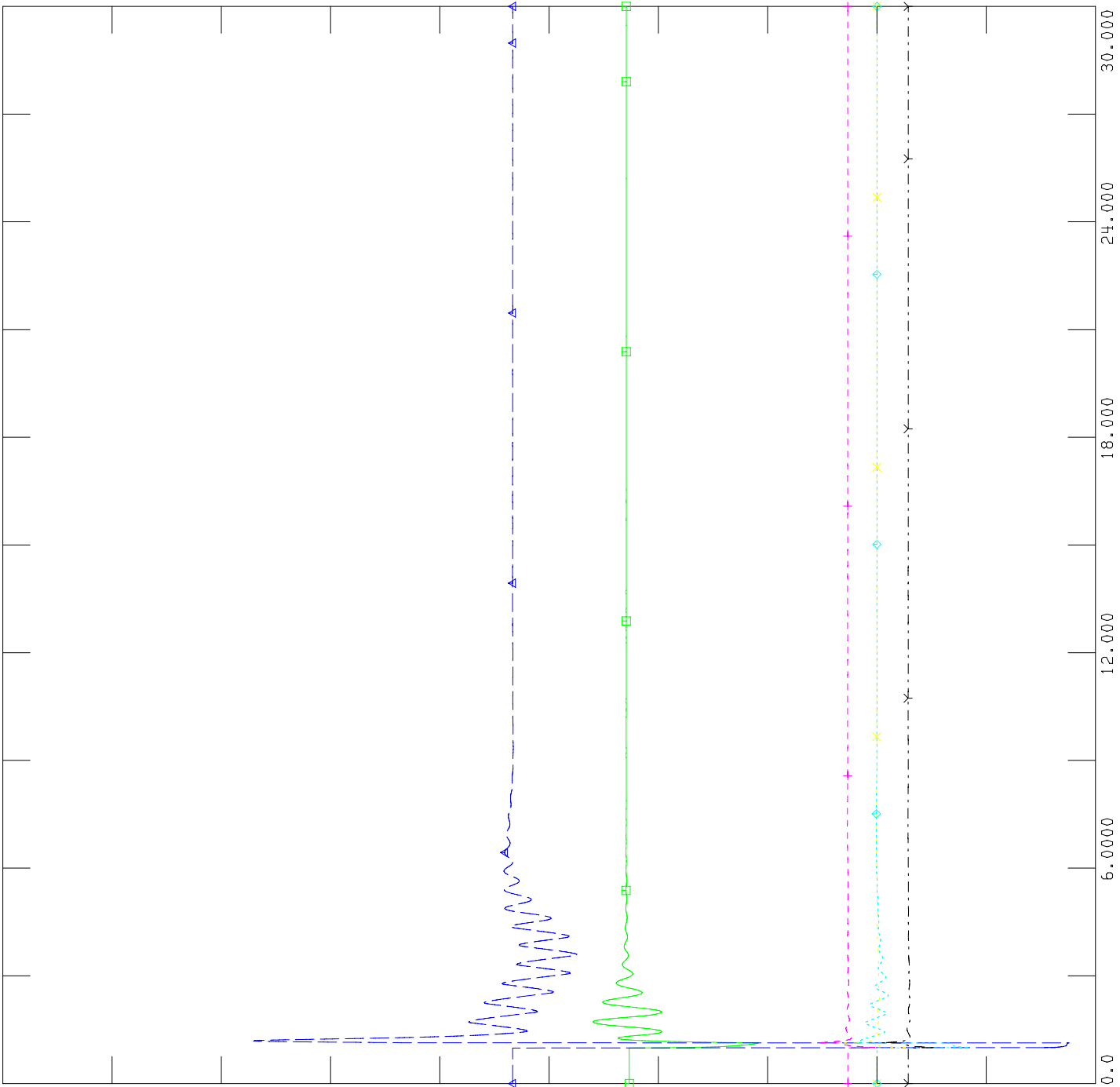
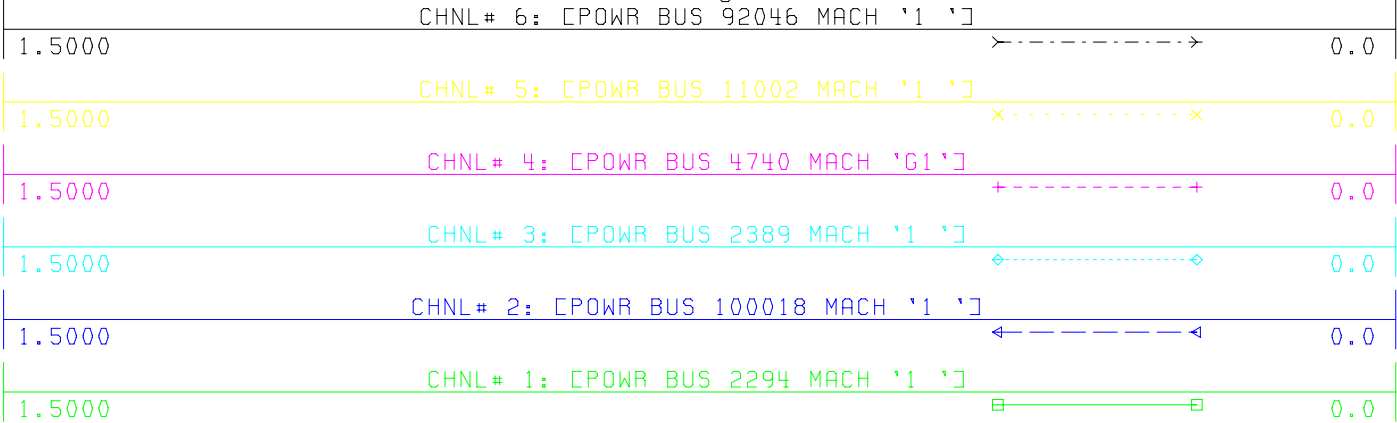


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_171L.out
CHNL# 46: [Q-880L]



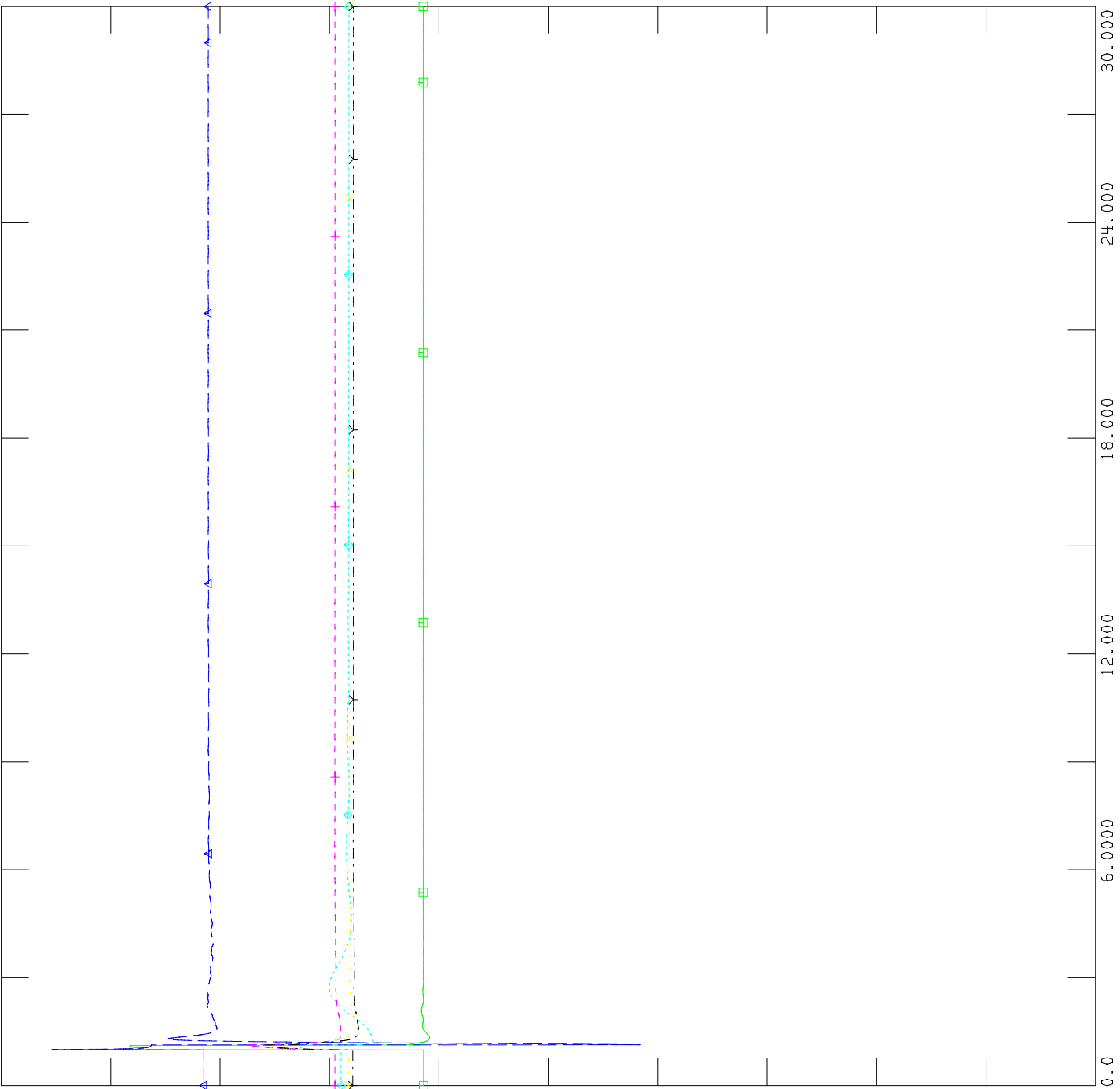
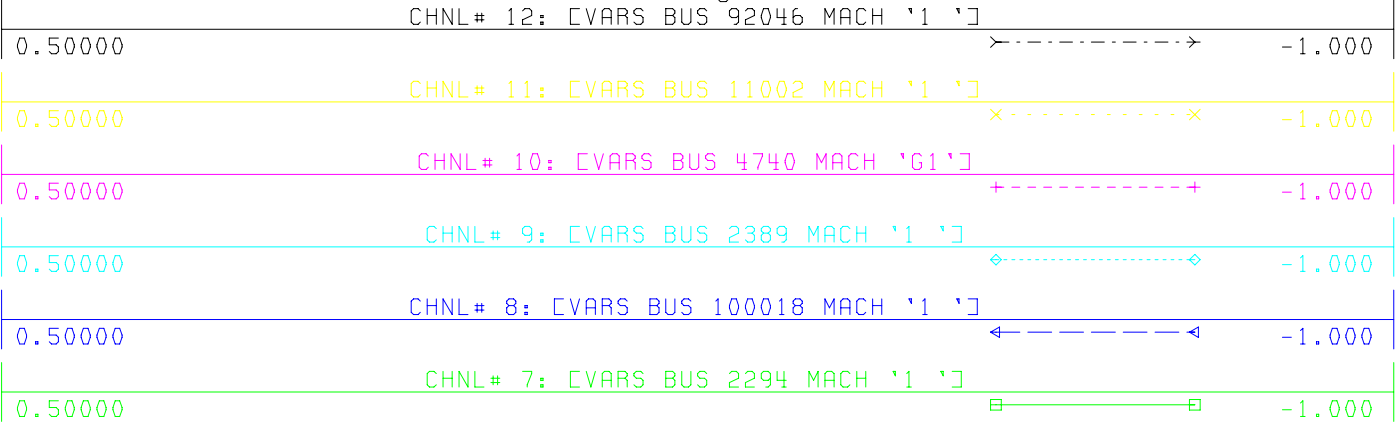


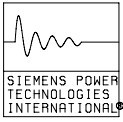
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_612L.out





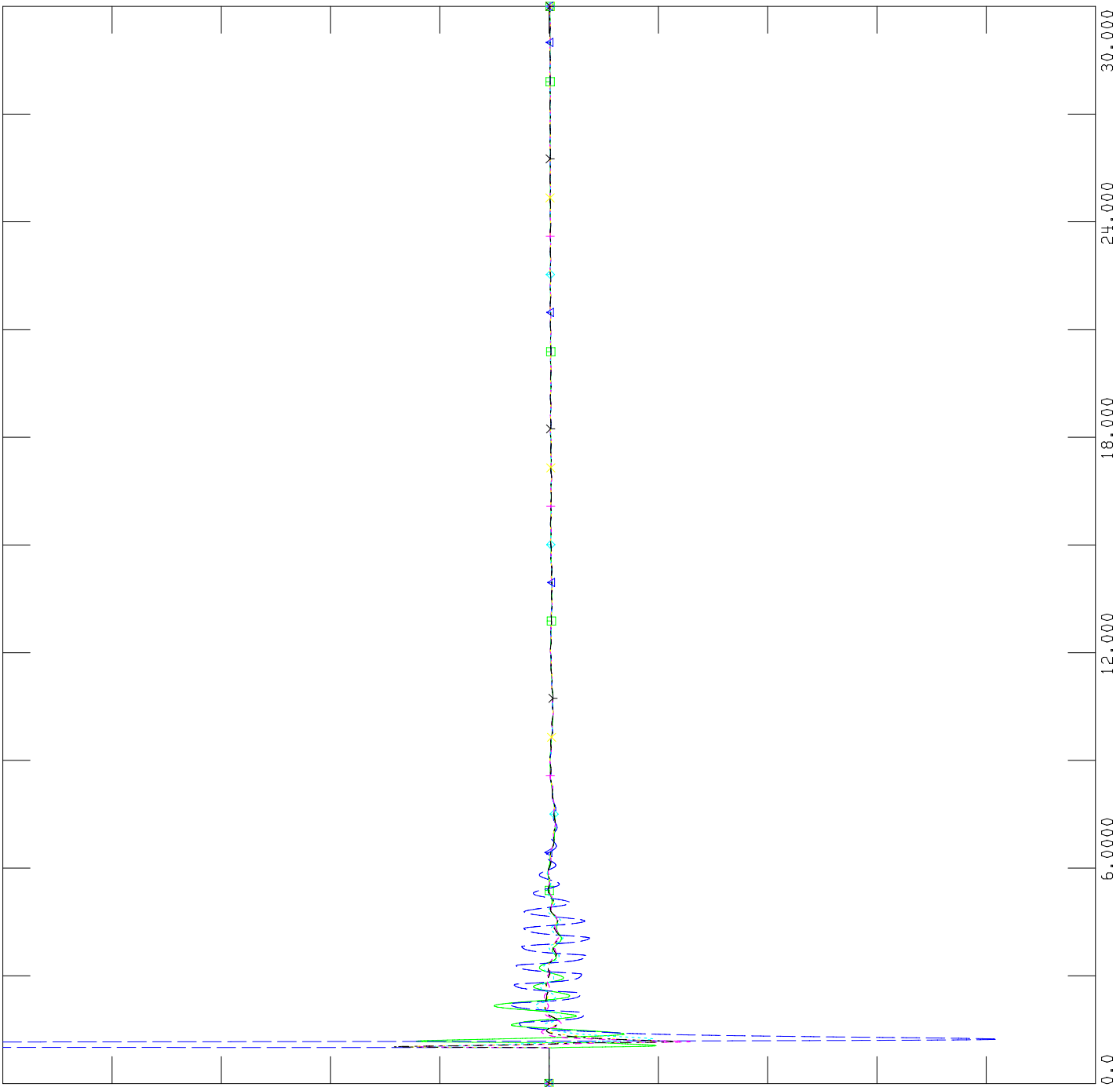
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_612L.out

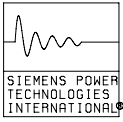




FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_612L.out

0.00670	CHNL# 18: CFREQ 92046 EMCBRIDE6 0.5750	-0.0067
0.00670	CHNL# 17: CFREQ 11002 EGARDNG2 0.5750	-0.0067
0.00670	CHNL# 16: CFREQ 4740 CARD_07 0.5750	-0.0067
0.00670	CHNL# 15: CFREQ 2389 CHILLRIDG 0.5750	-0.0067
0.00670	CHNL# 14: CFREQ 100018 CPURPLESP 0.5750	-0.0067
0.00670	CHNL# 13: CFREQ 2294 CTOHILL2 0.6900	-0.0067

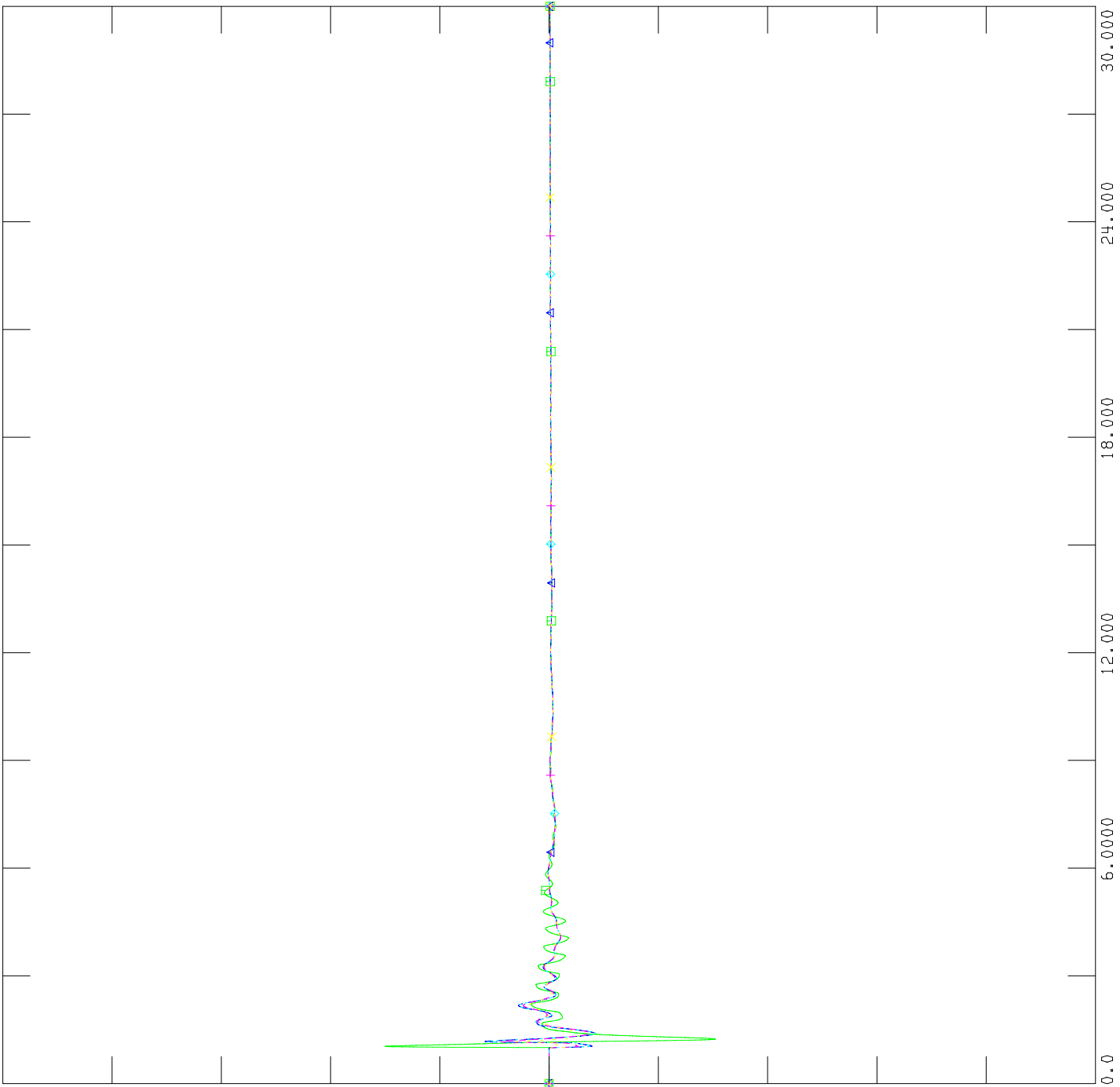




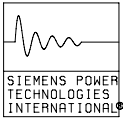
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_612L.out

TUE, NOV 16 2010 10:15
BUS FREQUENCY

Channel	CFREQ	Location	Value
CHNL# 23	270	CSUFFIEL7	138.00
CHNL# 22	680	CMEDICIN7	138.00
CHNL# 21	271	CBULLS H7	138.00
CHNL# 20	269	CBURDETT7	138.00
CHNL# 19	31	CFINCAST7	138.00

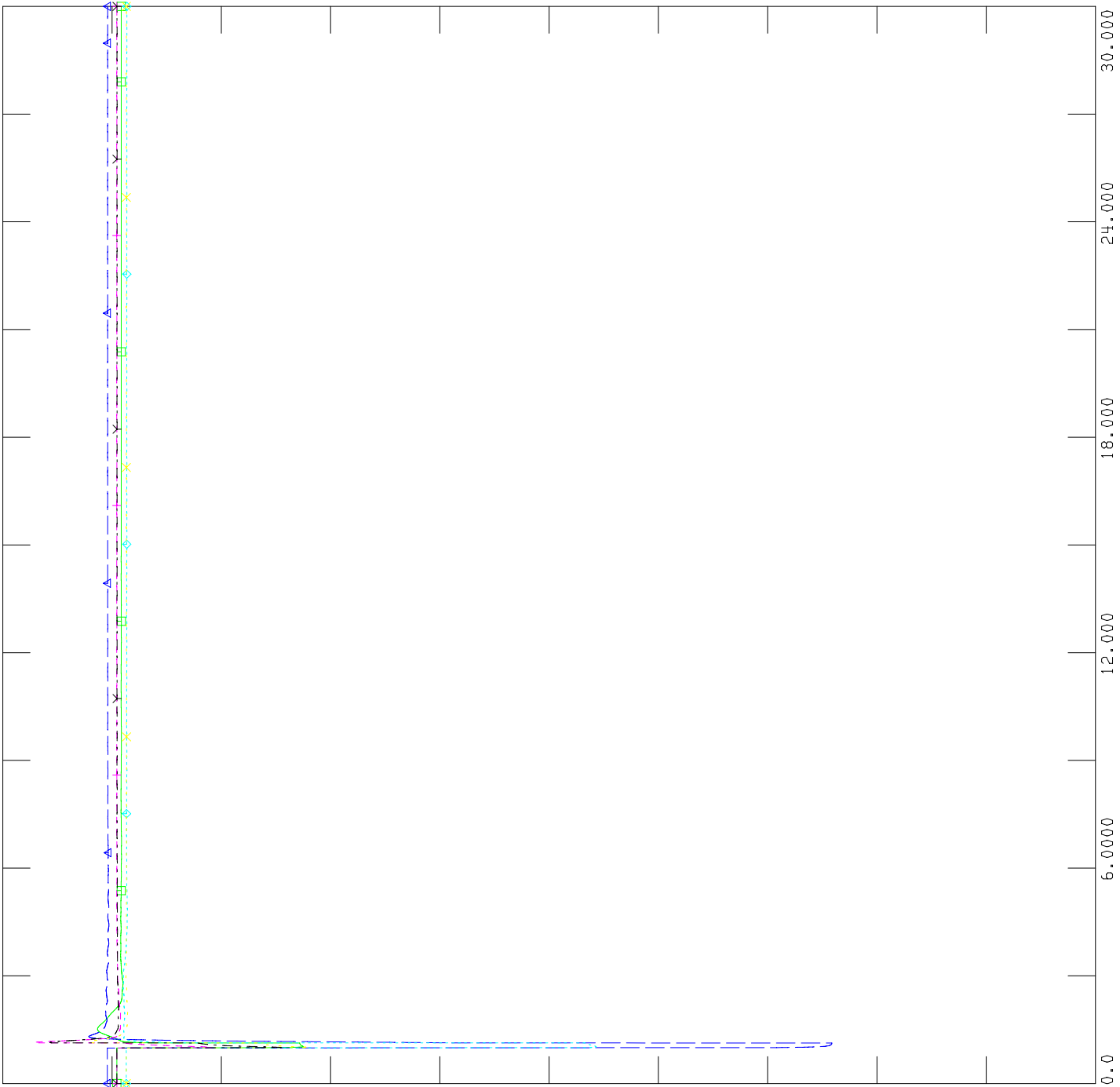


C-1-12



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_612L.out

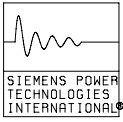
Channel	Label	Value
CHNL# 29	EVOLT 92046 EMCBRIDE6	0.5750
CHNL# 28	EVOLT 11002 EGARDNG2	0.5750
CHNL# 27	EVOLT 4740 CARD_07	0.5750
CHNL# 26	EVOLT 2389 CHILLRIDG	0.5750
CHNL# 25	EVOLT 100018 CPURPLESP	0.5750
CHNL# 24	EVOLT 2294 CTOTHILL2	0.6900



TUE, NOV 16 2010 10:16
BUS VOLTAGE

C-1-13

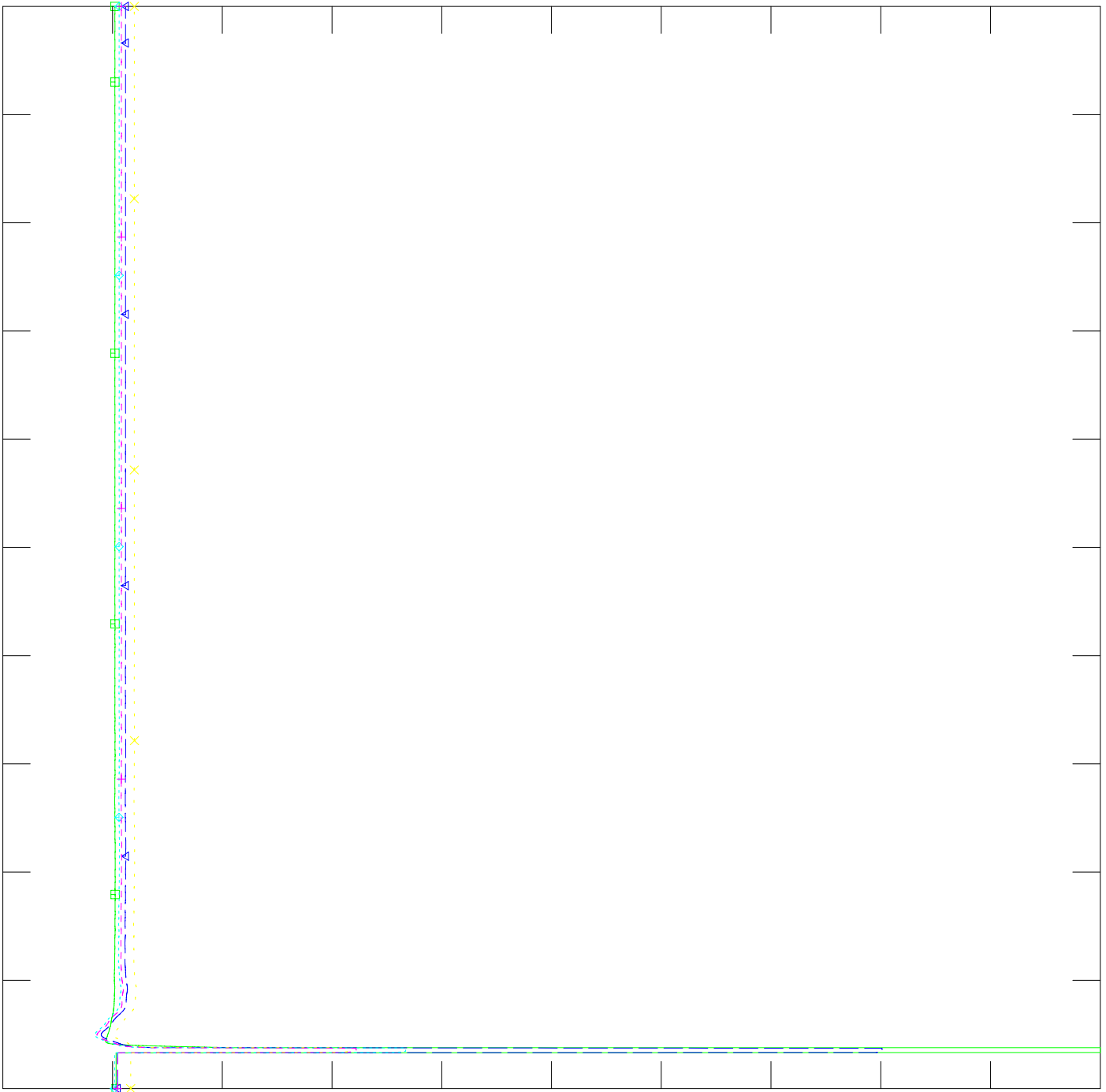
TIME (SECONDS)



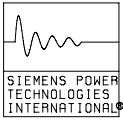
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_612L.out

TUE, NOV 16 2010 10:17
 BUS VOLTAGE

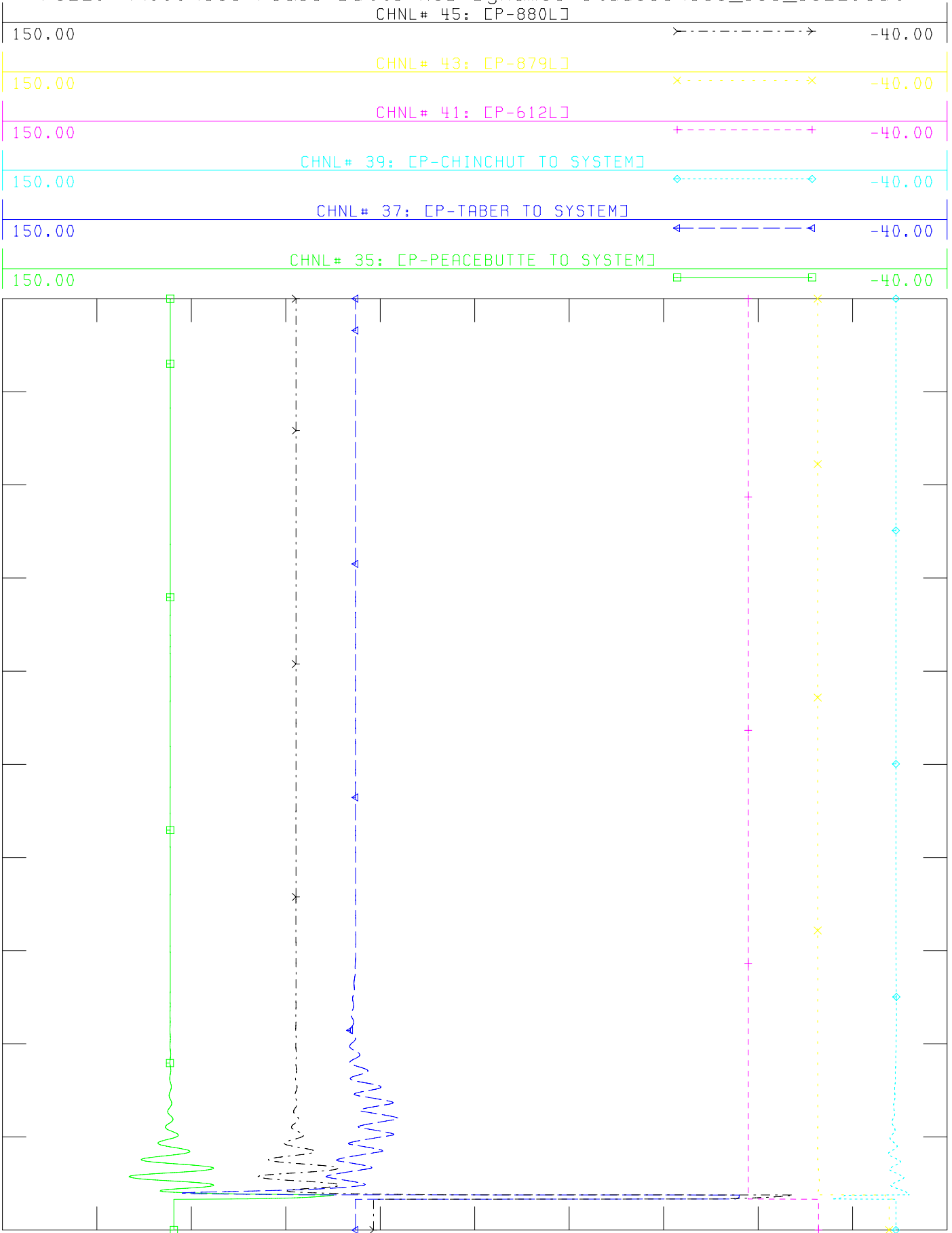
Channel	Location	Initial Value	Final Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00	0.0
CHNL# 33: EVOLT	680 [MEDICIN7	138.00	0.0
CHNL# 32: EVOLT	271 [BULLS H7	138.00	0.0
CHNL# 31: EVOLT	269 [BURDETT7	138.00	0.0
CHNL# 30: EVOLT	31 [FINCAST7	138.00	0.0

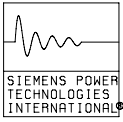


C-1-14

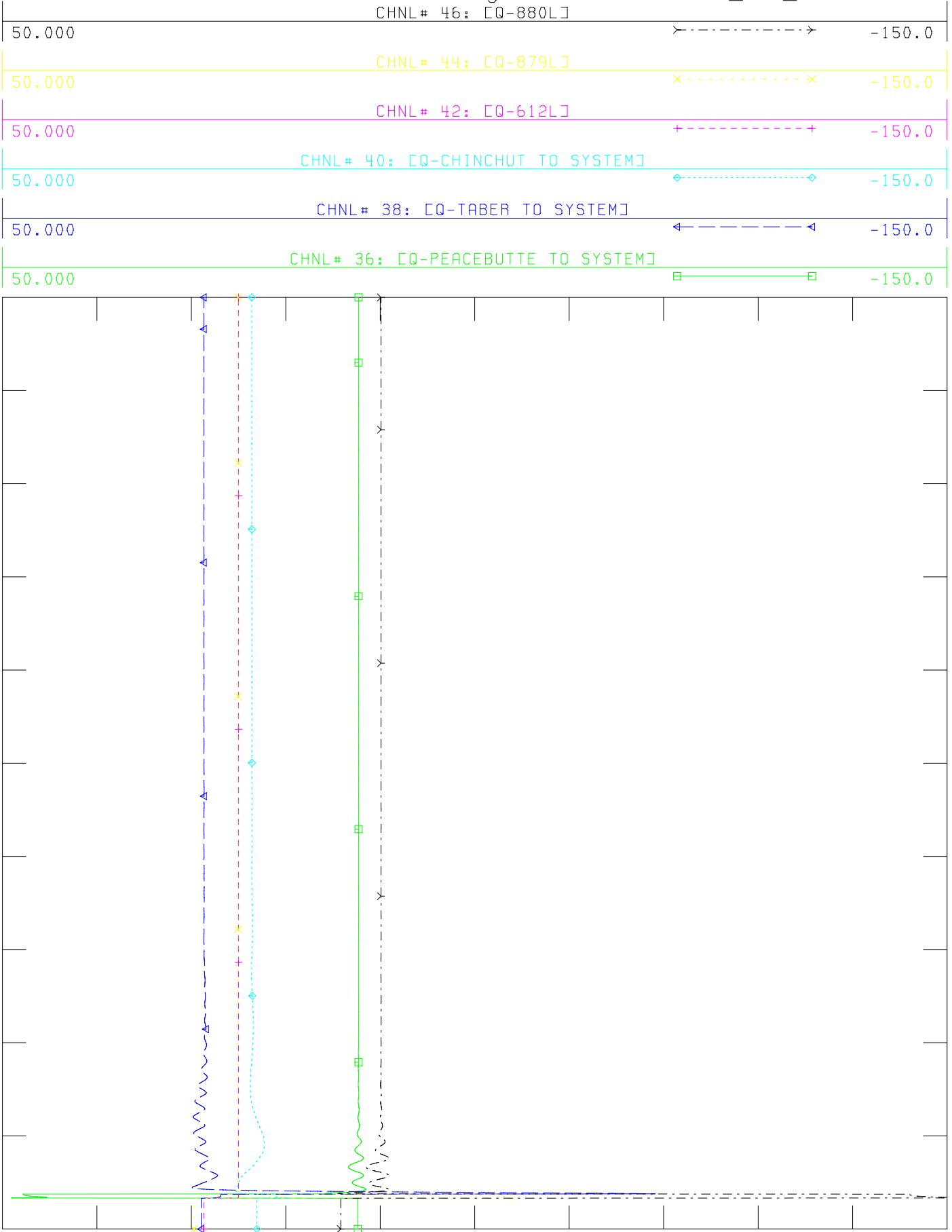


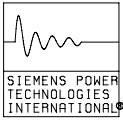
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_612L.out
CHNL# 45: [P-880L]



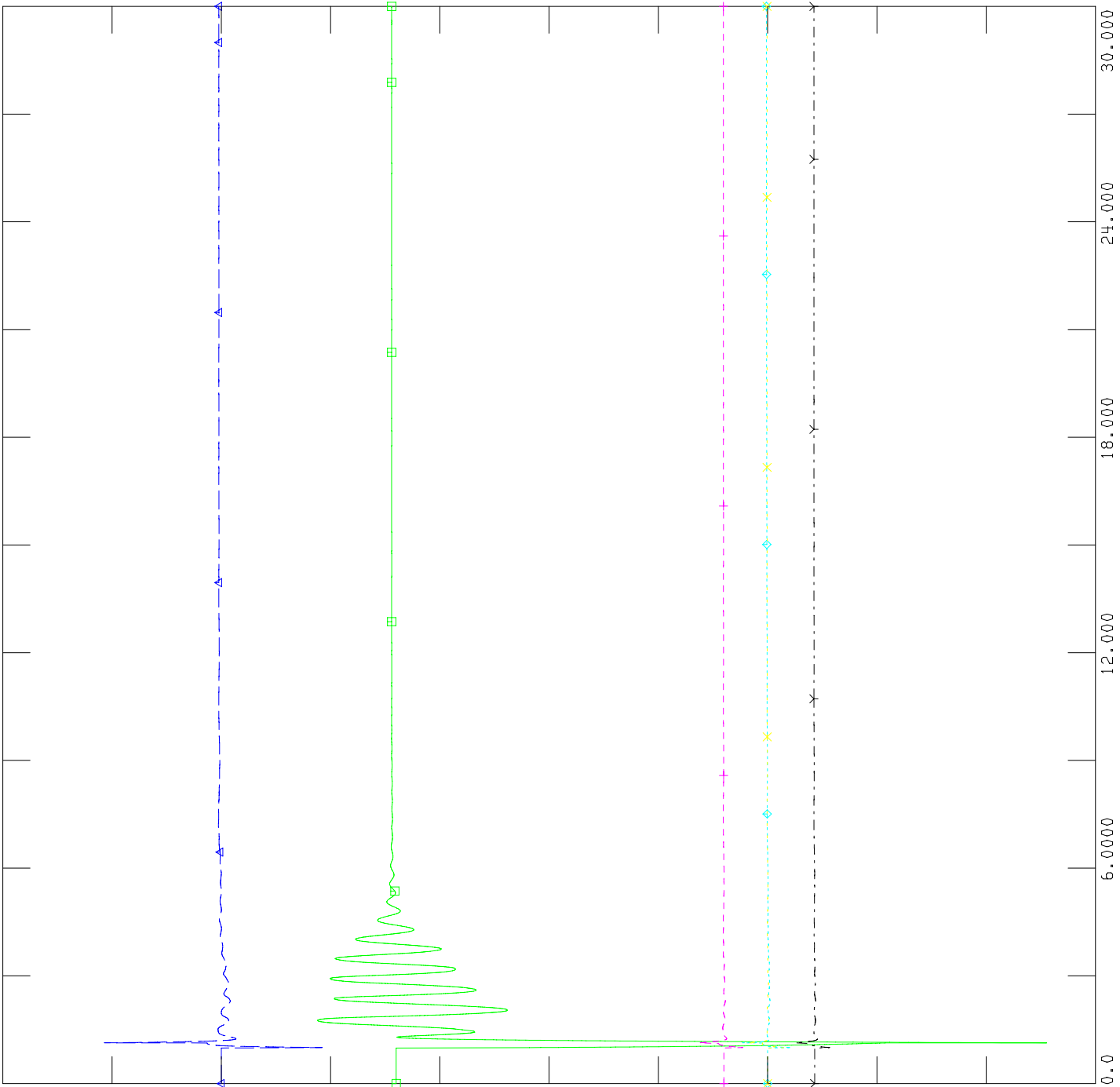
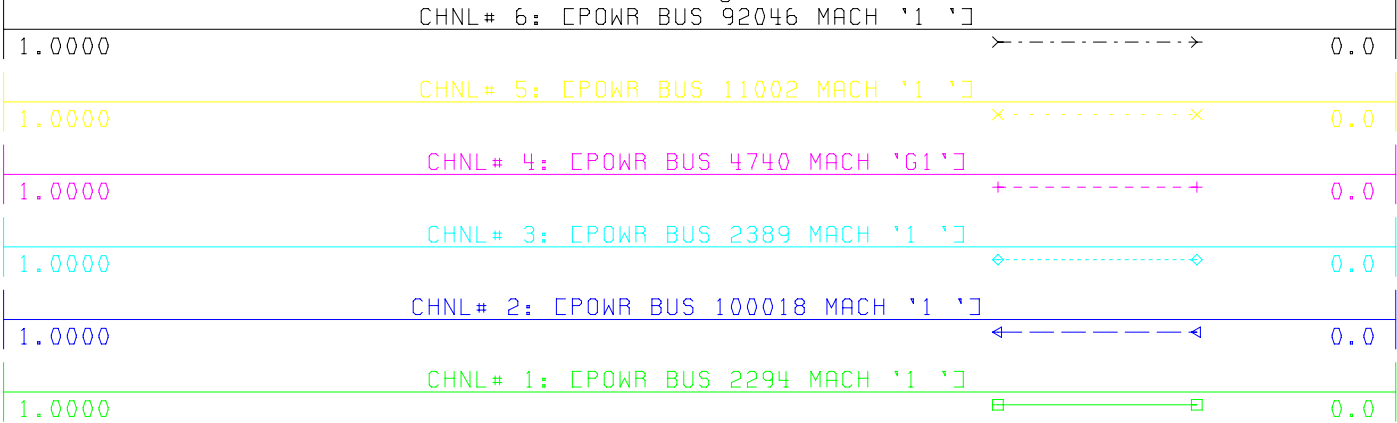


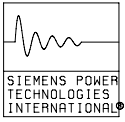
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_612L.out
CHNL# 46: [Q-880L]



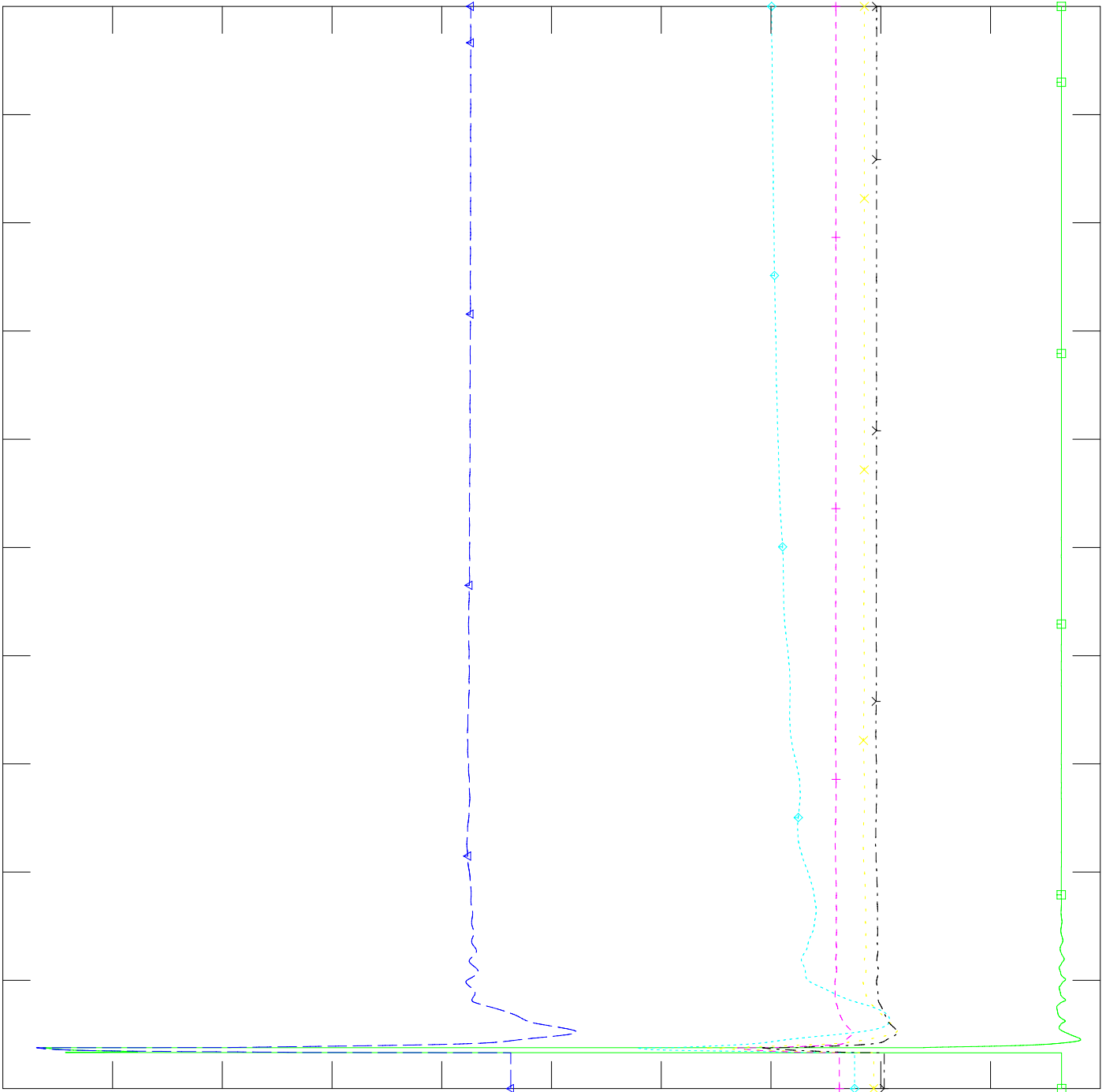
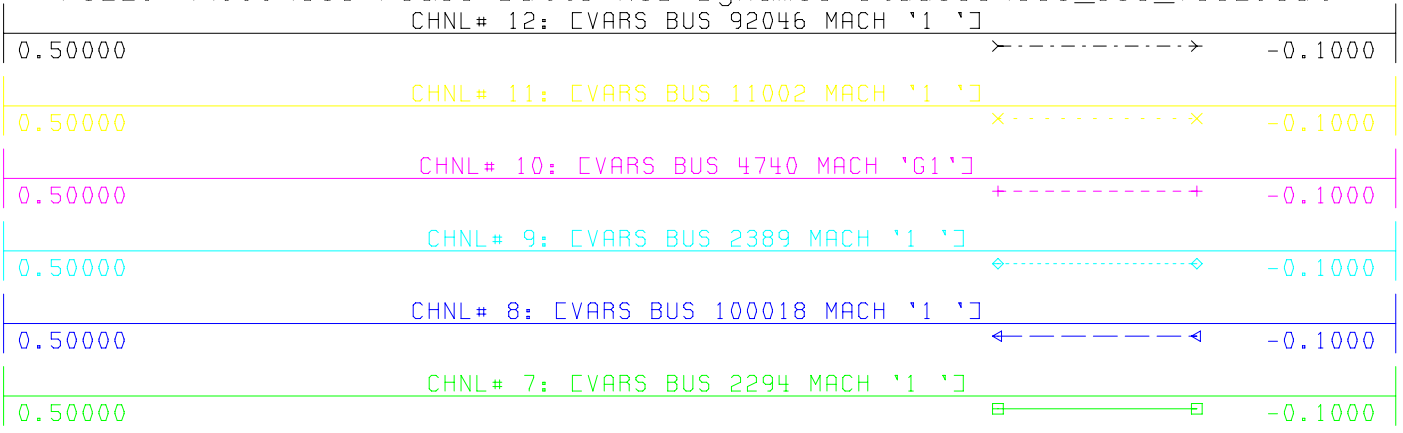


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_760L.out





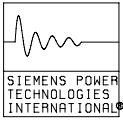
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_760L.out



TUE, NOV 16 2010 10:25
QELEC

C-1-18

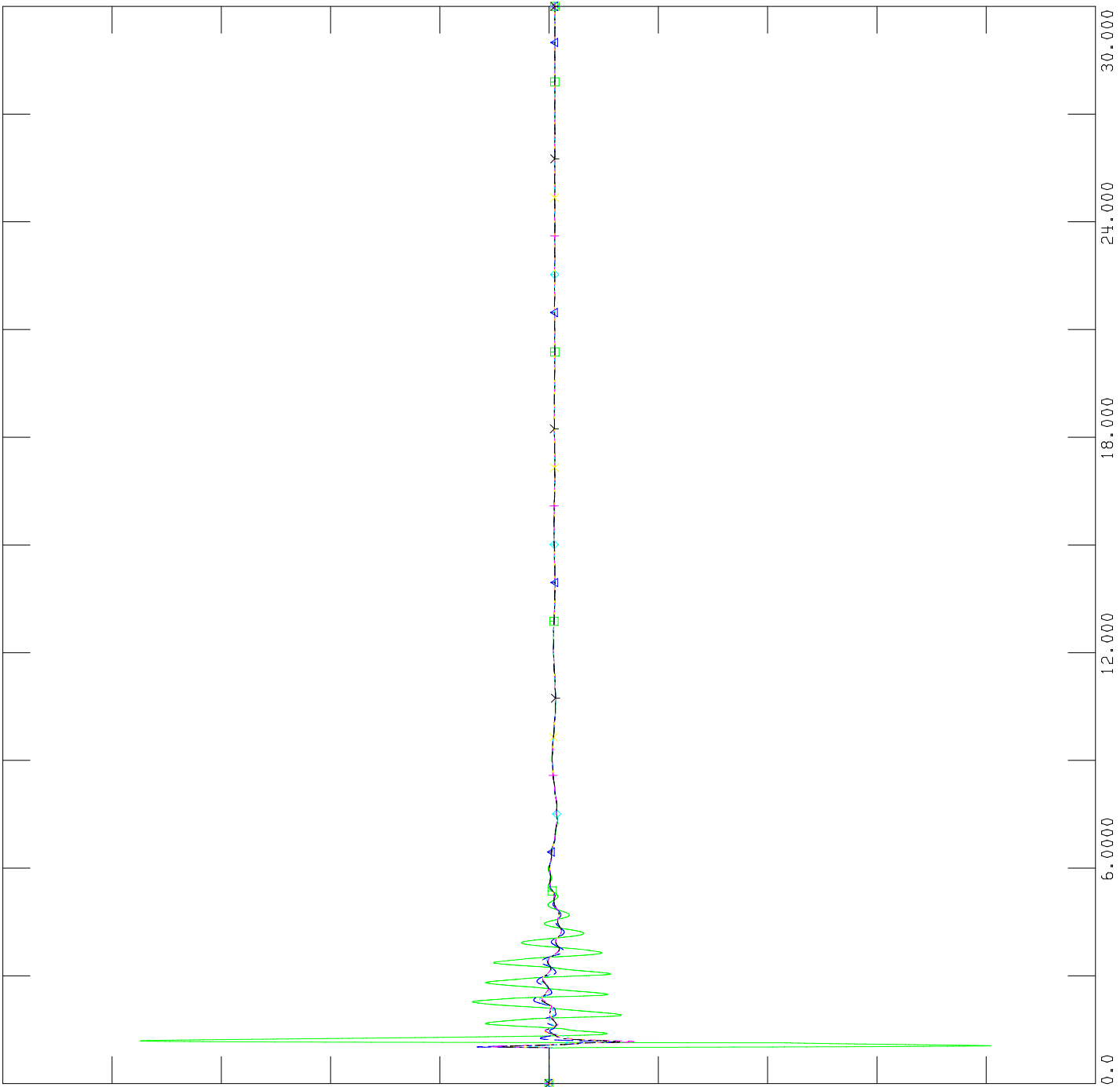
TIME (SECONDS)



TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
 SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_760L.out

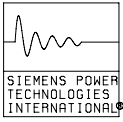
0.00670	CHNL# 18: CFREQ 92046 EMCBRIDE6 0.5750	-0.0067
0.00670	CHNL# 17: CFREQ 11002 EGARDNG2 0.5750	-0.0067
0.00670	CHNL# 16: CFREQ 4740 CARD_07 0.5750	-0.0067
0.00670	CHNL# 15: CFREQ 2389 CHILLRIDG 0.5750	-0.0067
0.00670	CHNL# 14: CFREQ 100018 CPURPLESP 0.5750	-0.0067
0.00670	CHNL# 13: CFREQ 2294 CTOHILL2 0.6900	-0.0067



TUE, NOV 16 2010 10:26
 BUS FREQUENCY

C-1-19

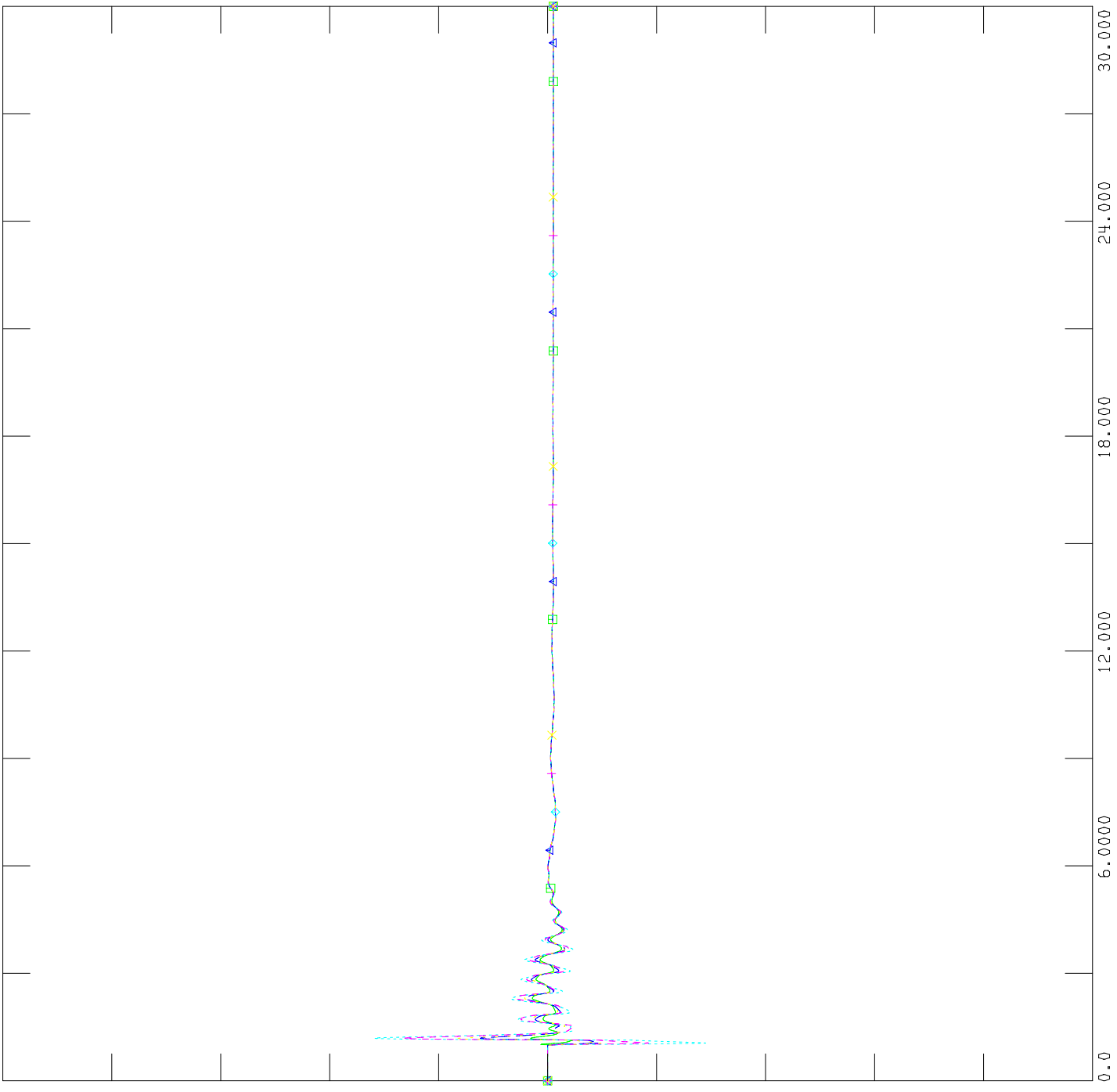
TIME (SECONDS)



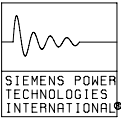
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_760L.out

TUE, NOV 16 2010 10:27
BUS FREQUENCY

Channel	CFREQ	Bus Name	Value
CHNL# 23	270	CSUFFIEL7	138.00
CHNL# 22	680	CMEDICIN7	138.00
CHNL# 21	271	CBULLS H7	138.00
CHNL# 20	269	CBURDETT7	138.00
CHNL# 19	31	CFINCAST7	138.00

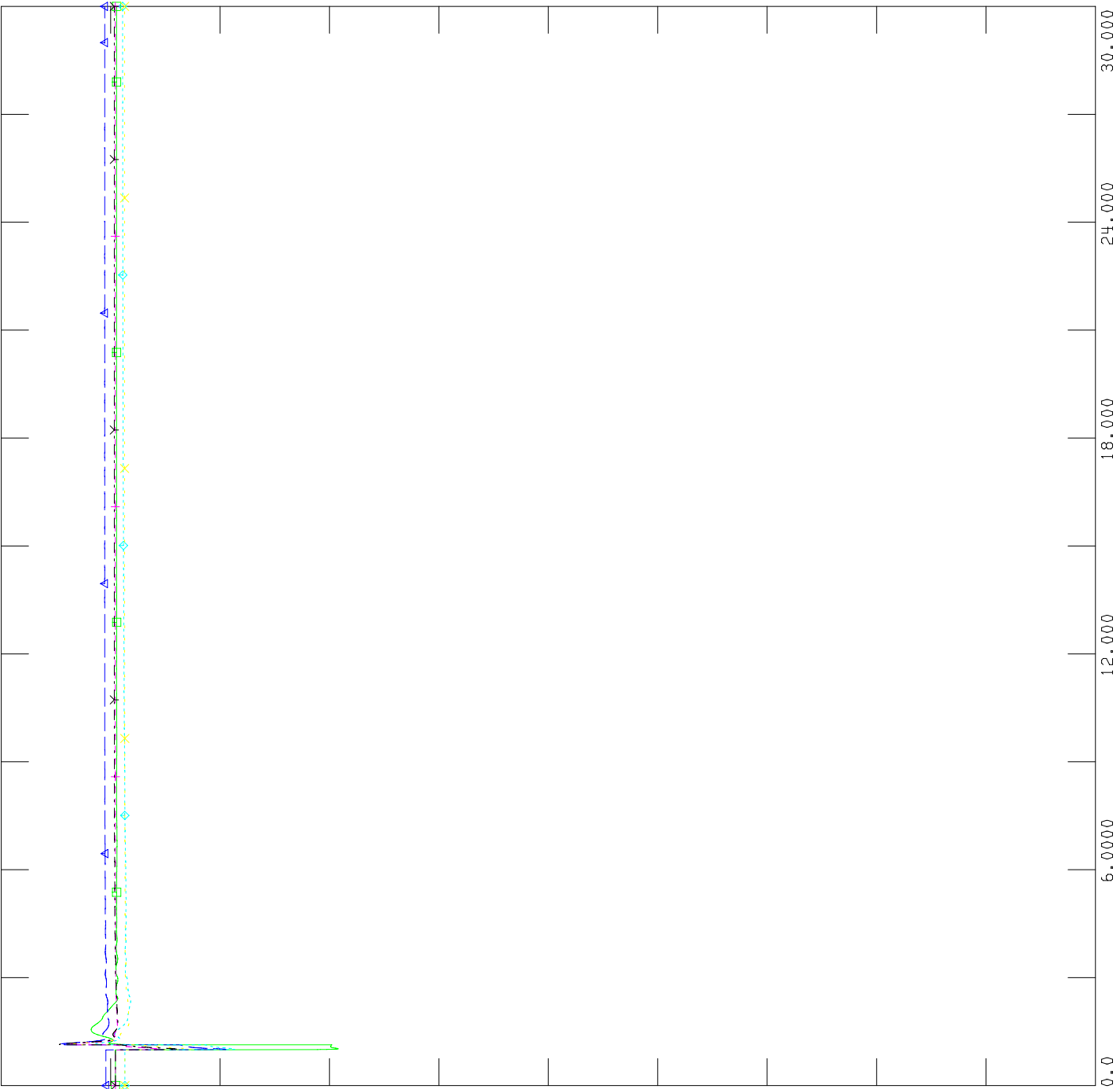


C-1-20



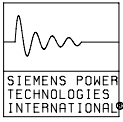
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_760L.out

1.1500	CHNL# 29: EVOLT	92046	EMCBRIDE6	0.5750	0.0
1.1500	CHNL# 28: EVOLT	11002	EGARDNG2	0.5750	0.0
1.1500	CHNL# 27: EVOLT	4740	CARD_07	0.5750	0.0
1.1500	CHNL# 26: EVOLT	2389	CHILLRIDG	0.5750	0.0
1.1500	CHNL# 25: EVOLT	100018	CPURPLESP	0.5750	0.0
1.1500	CHNL# 24: EVOLT	2294	CTOTHILL2	0.6900	0.0



TUE, NOV 16 2010 10:33
 BUS VOLTAGE

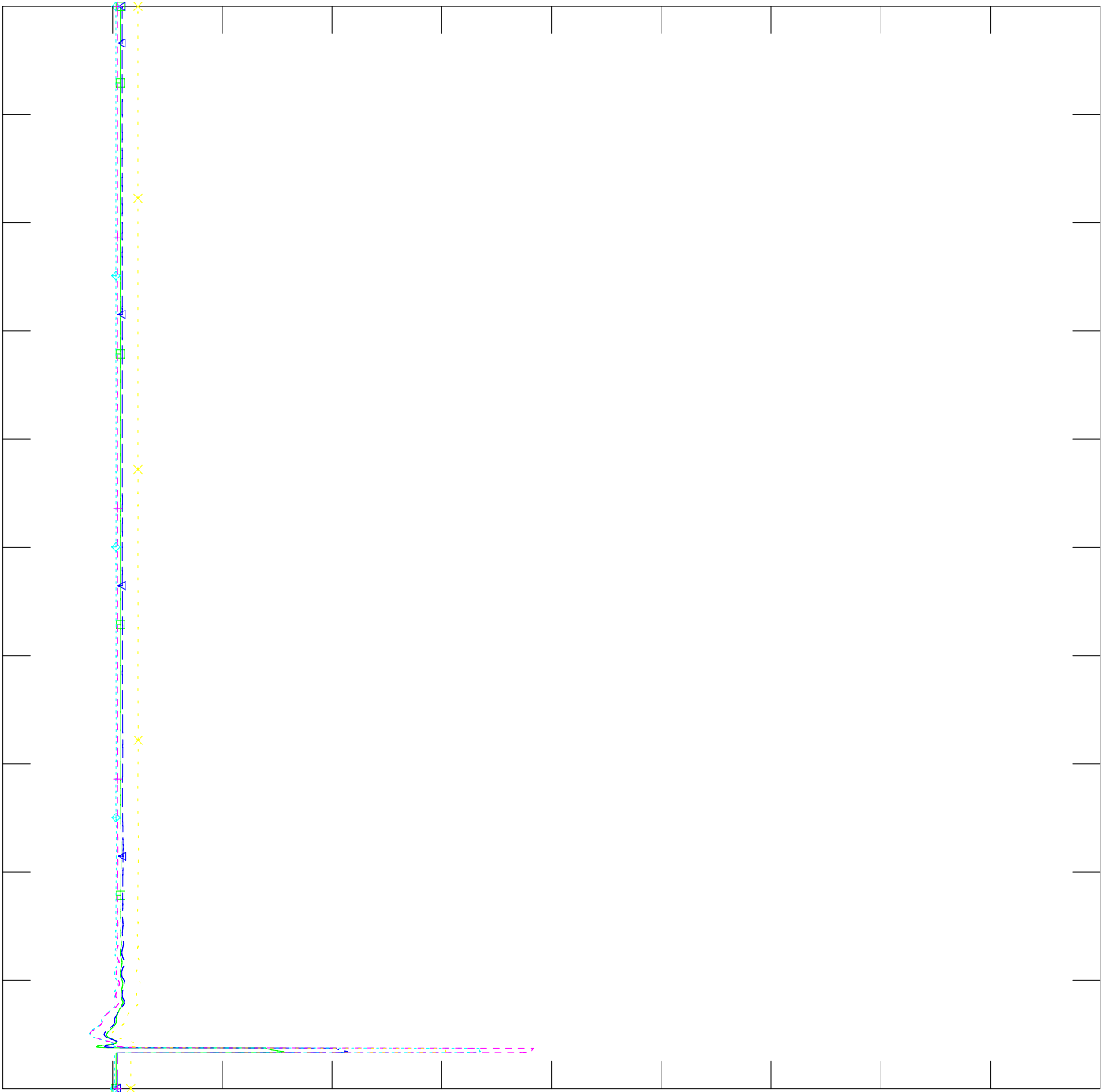
C-1-21



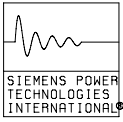
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_760L.out

TUE, NOV 16 2010 10:28
BUS VOLTAGE

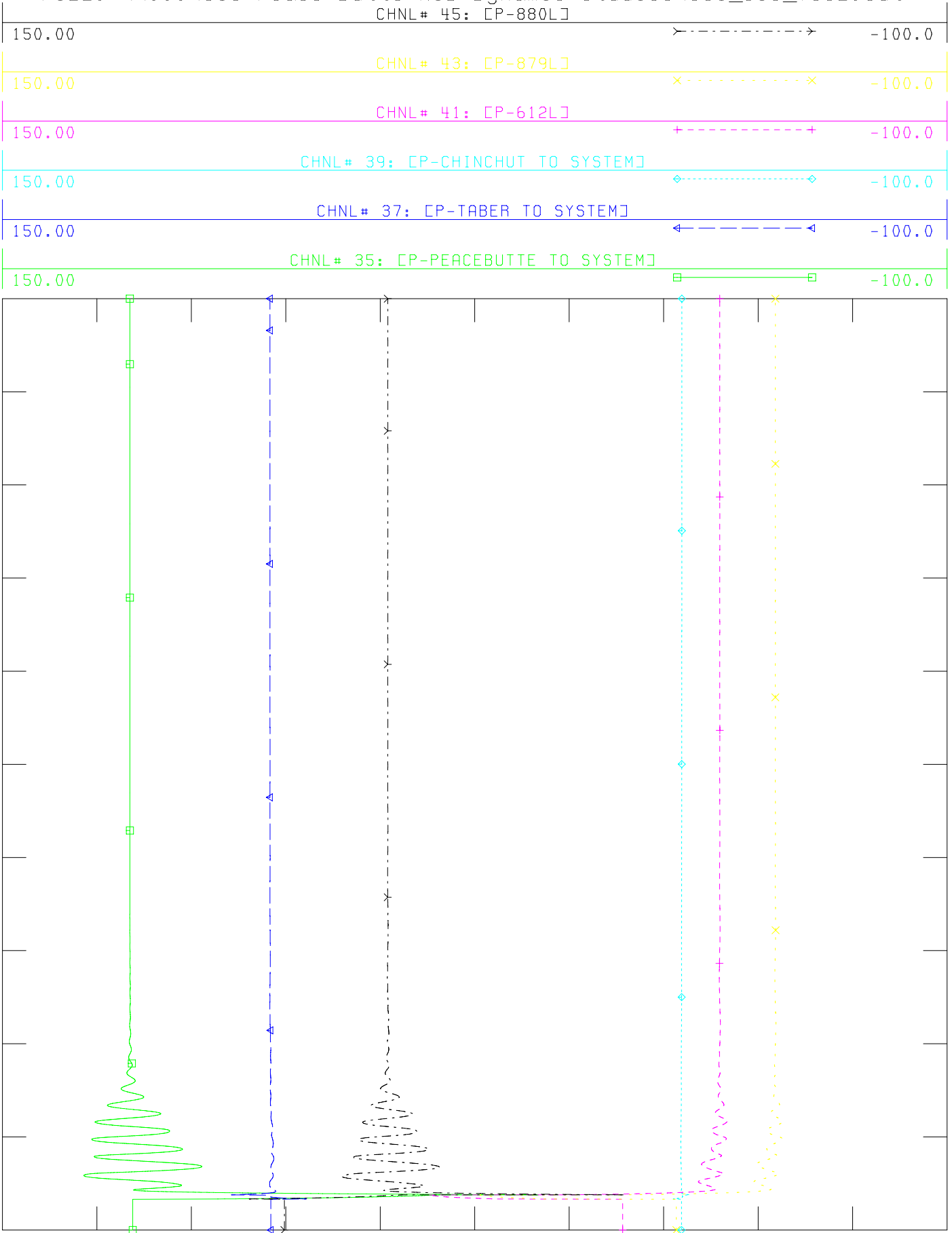
Channel	Label	Value	Unit
CHNL# 34	EVOLT 270 ESUFFIEL7	138.00	V
CHNL# 33	EVOLT 680 CMEDICIN7	138.00	V
CHNL# 32	EVOLT 271 EBULLS H7	138.00	V
CHNL# 31	EVOLT 269 CBURDETT7	138.00	V
CHNL# 30	EVOLT 31 CFINCAST7	138.00	V



C-1-22



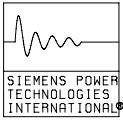
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_760L.out
CHNL# 45: [P-880L]



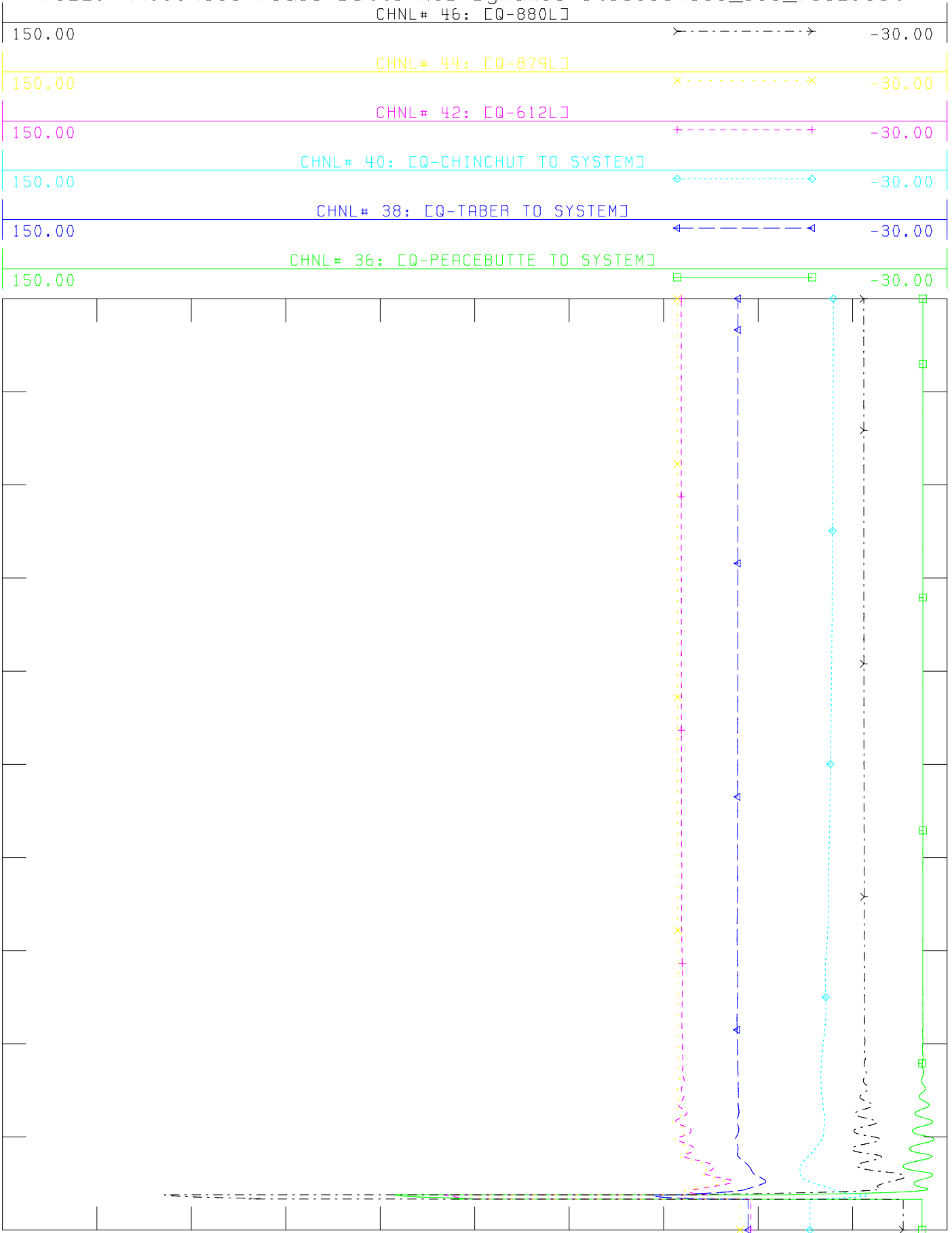
TUE, NOV 16 2010 10:29
BRANCH ACTIVE POWER

C-1-23

TIME (SECONDS)



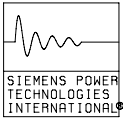
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_760L.out
CHNL# 46: [Q-880L]



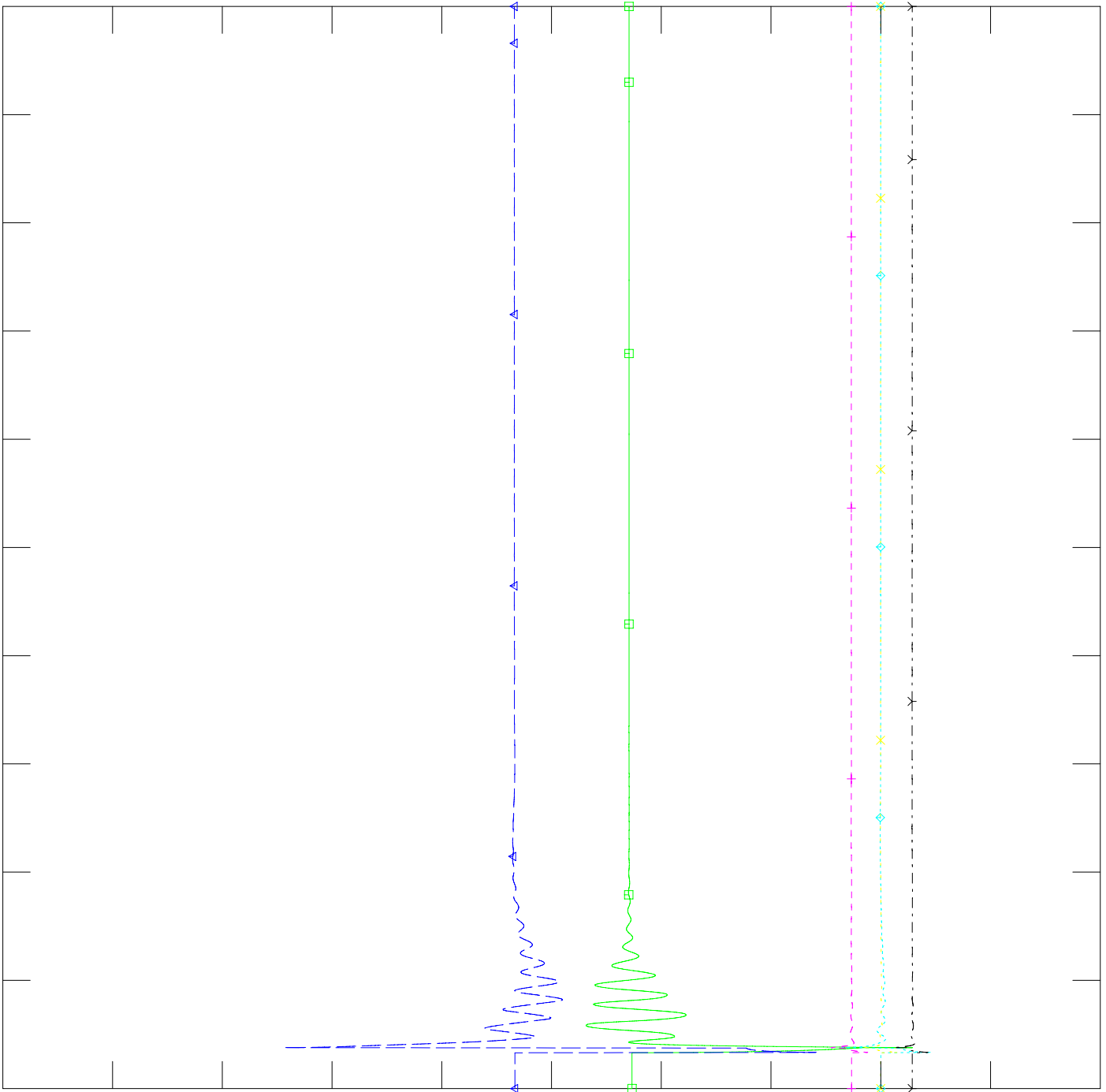
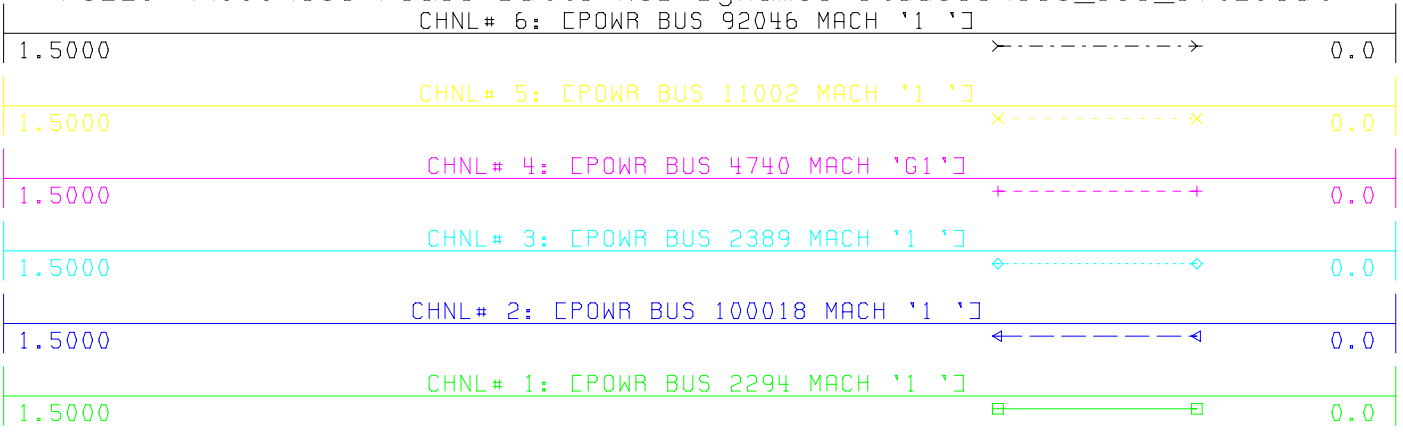
TUE, NOV 16 2010 10:30
BRANCH REACTIVE POWER

C-1-24

TIME (SECONDS)

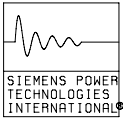


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_879L.out

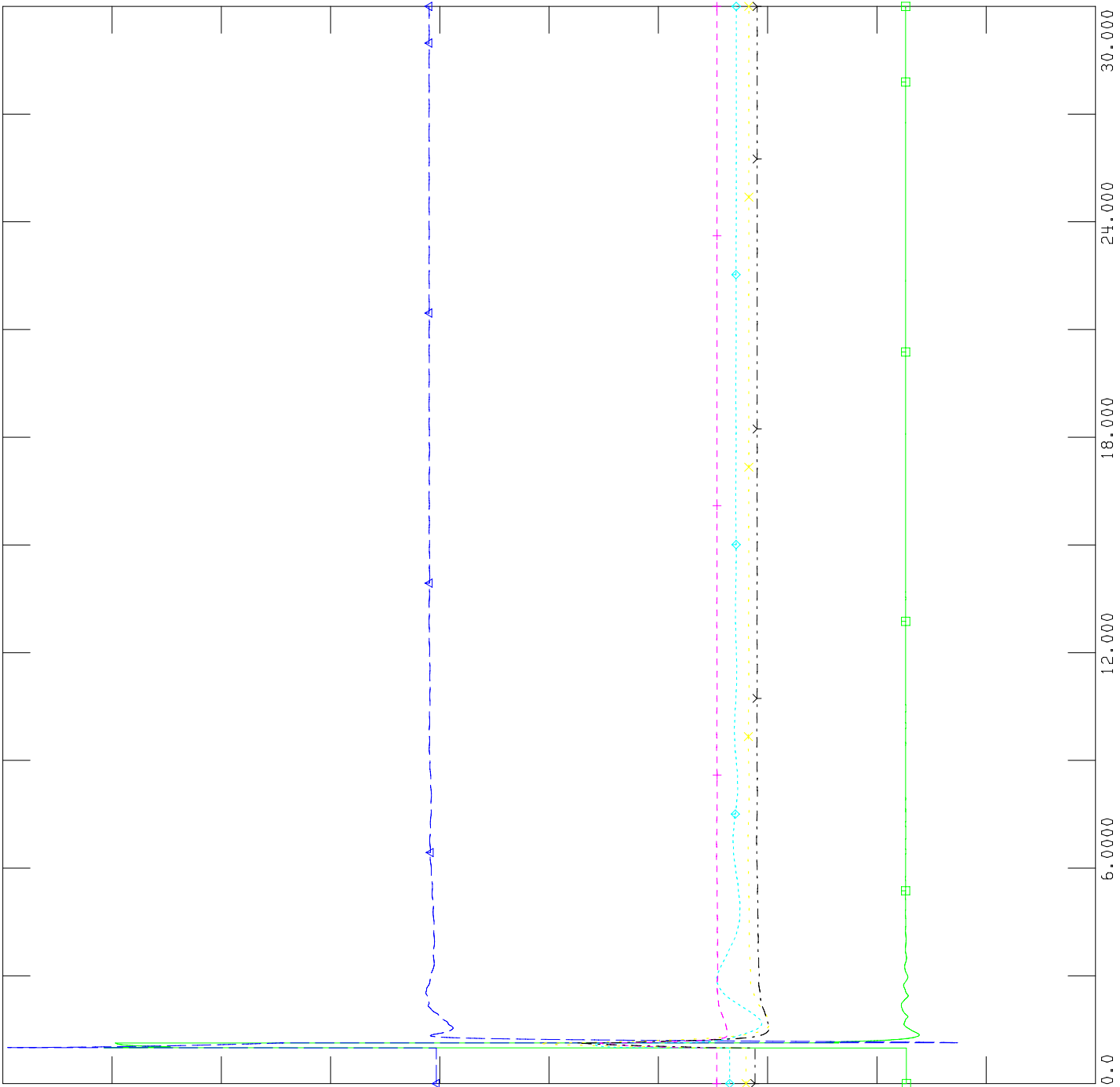
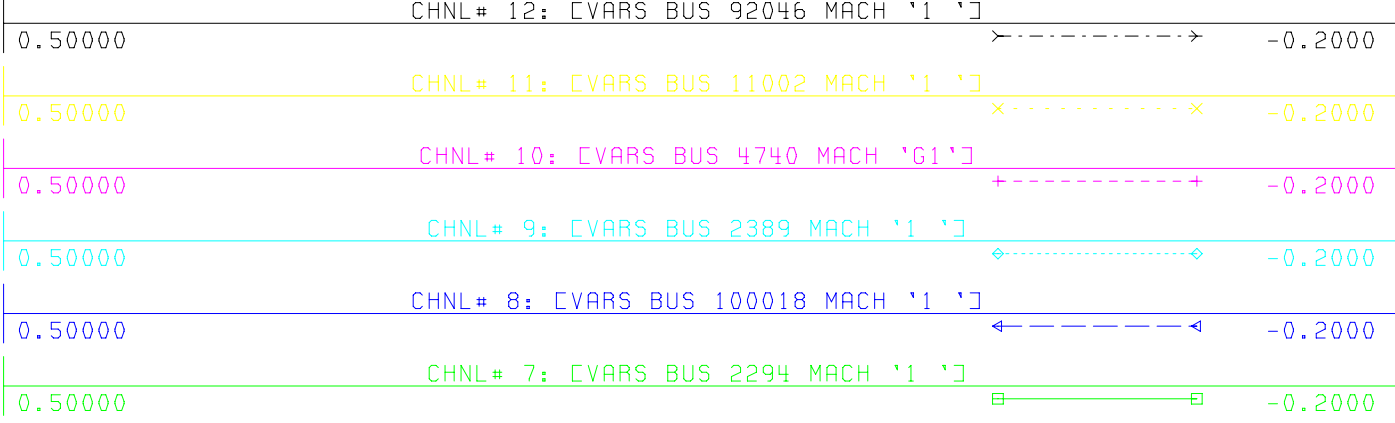


TUE, NOV 16 2010 10:41
PELEC

C-1-25

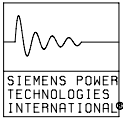


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_879L.out



TUE, NOV 16 2010 10:42
QELEC

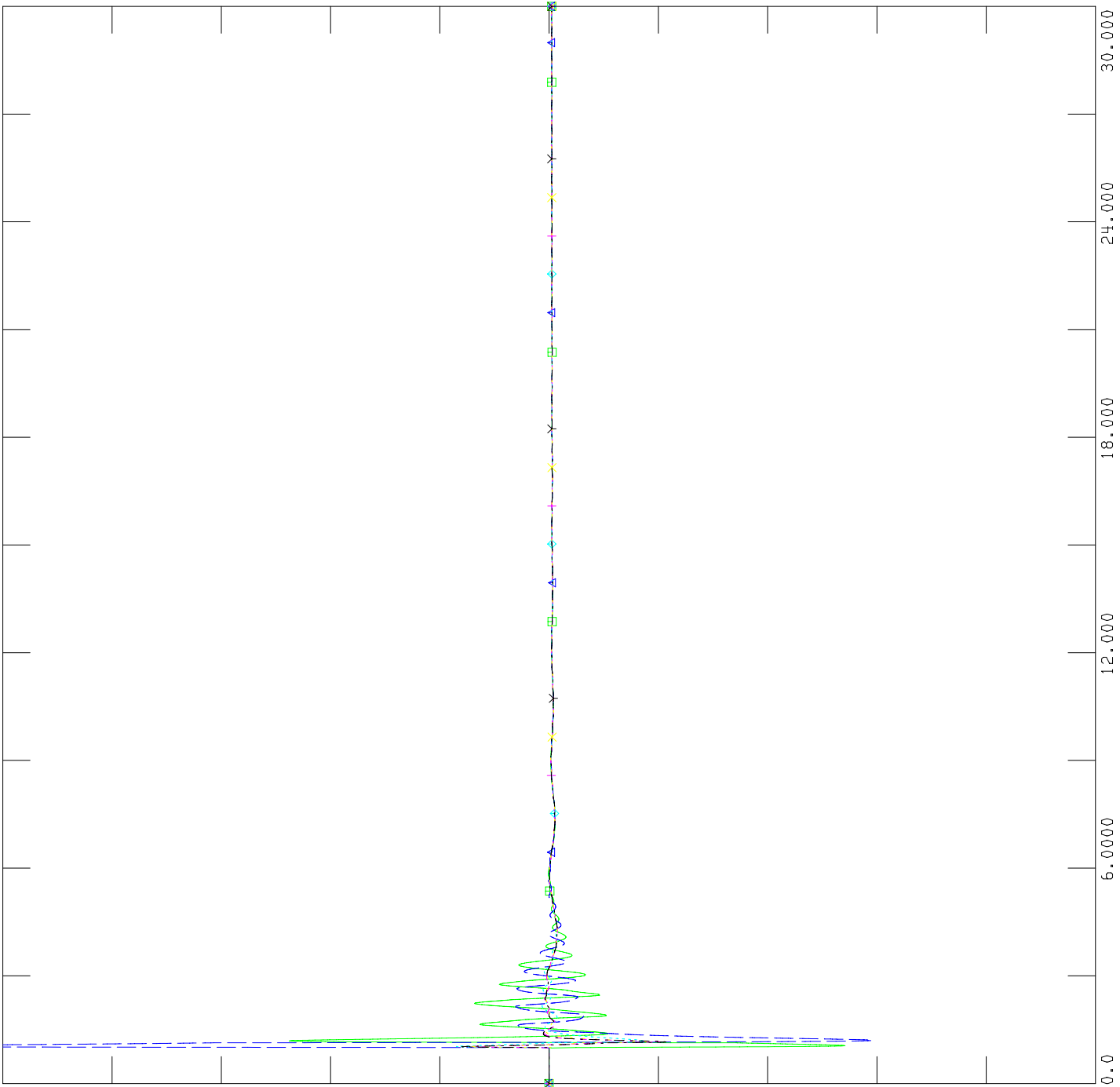
C-1-26



TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
 SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_879L.out

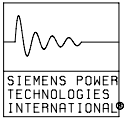
0.00670	CHNL# 18: CFREQ 92046 EMCBRIDE6 0.5750	-0.0067
0.00670	CHNL# 17: CFREQ 11002 EGARDNG2 0.5750	-0.0067
0.00670	CHNL# 16: CFREQ 4740 CARD_07 0.5750	-0.0067
0.00670	CHNL# 15: CFREQ 2389 CHILLRIDG 0.5750	-0.0067
0.00670	CHNL# 14: CFREQ 100018 CPURPLESP 0.5750	-0.0067
0.00670	CHNL# 13: CFREQ 2294 CTOTHILL2 0.6900	-0.0067



TUE, NOV 16 2010 10:43
 BUS FREQUENCY

C-1-27

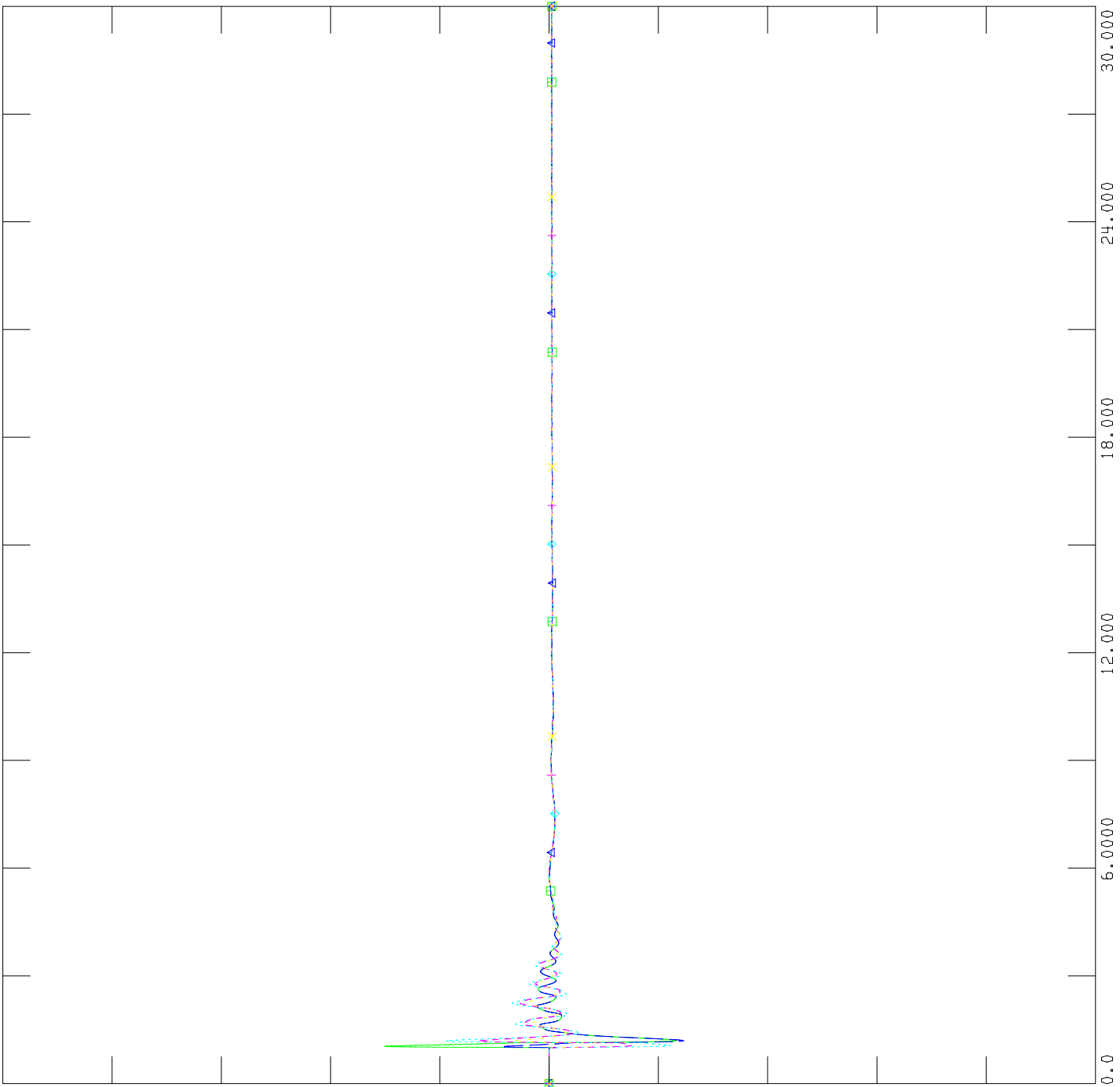
TIME (SECONDS)



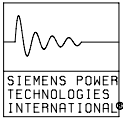
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_879L.out

TUE, NOV 16 2010 10:44
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270	CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680	CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271	CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 20: CFREQ	269	CBURDETT7	138.00]]	←-----△	-0.0067
0.00670	CHNL# 19: CFREQ	31	CFINCAST7	138.00]]	▣-----▣	-0.0067

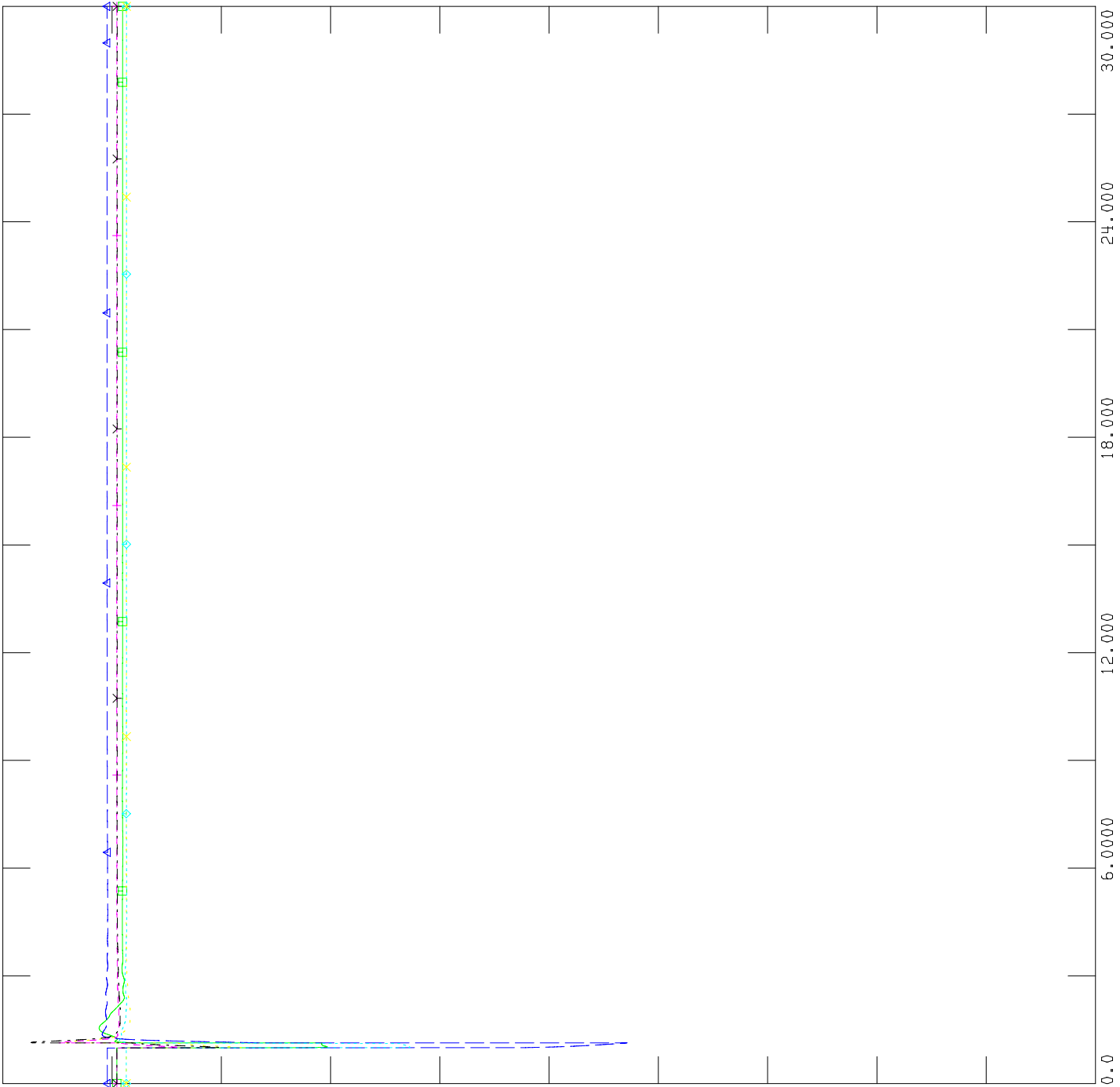


C-1-28



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_879L.out

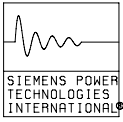
Channel	Label	Value
CHNL# 29	EVOLT 92046 EMCBRIDE6	0.5750
CHNL# 28	EVOLT 11002 EGARDNG2	0.5750
CHNL# 27	EVOLT 4740 CARD_07	0.5750
CHNL# 26	EVOLT 2389 CHILLRIDG	0.5750
CHNL# 25	EVOLT 100018 CPURPLESP	0.5750
CHNL# 24	EVOLT 2294 CTOTHILL2	0.6900



TUE, NOV 16 2010 10:45
BUS VOLTAGE

C-1-29

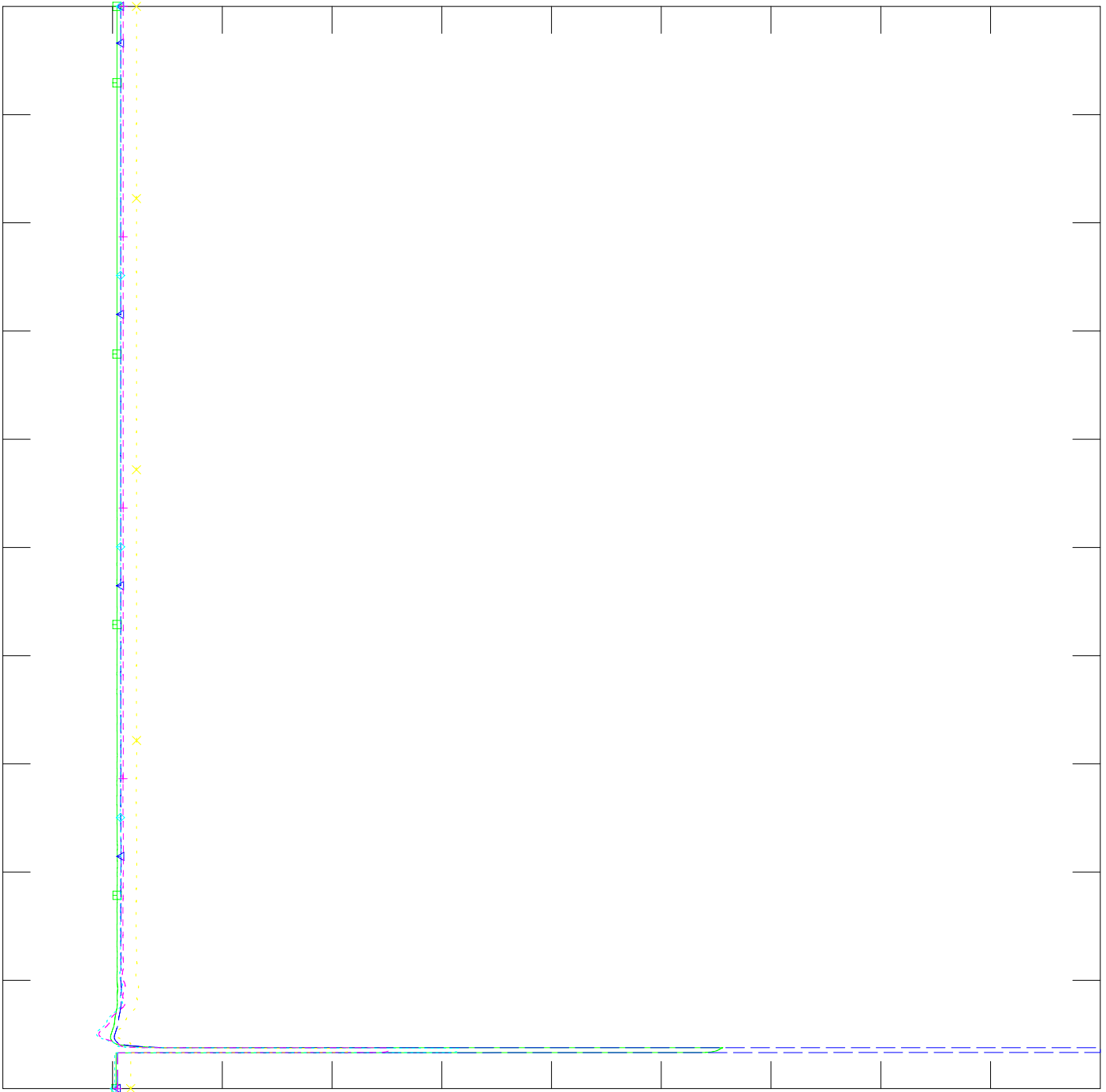
TIME (SECONDS)



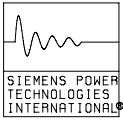
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_879L.out

TUE, NOV 16 2010 10:45
BUS VOLTAGE

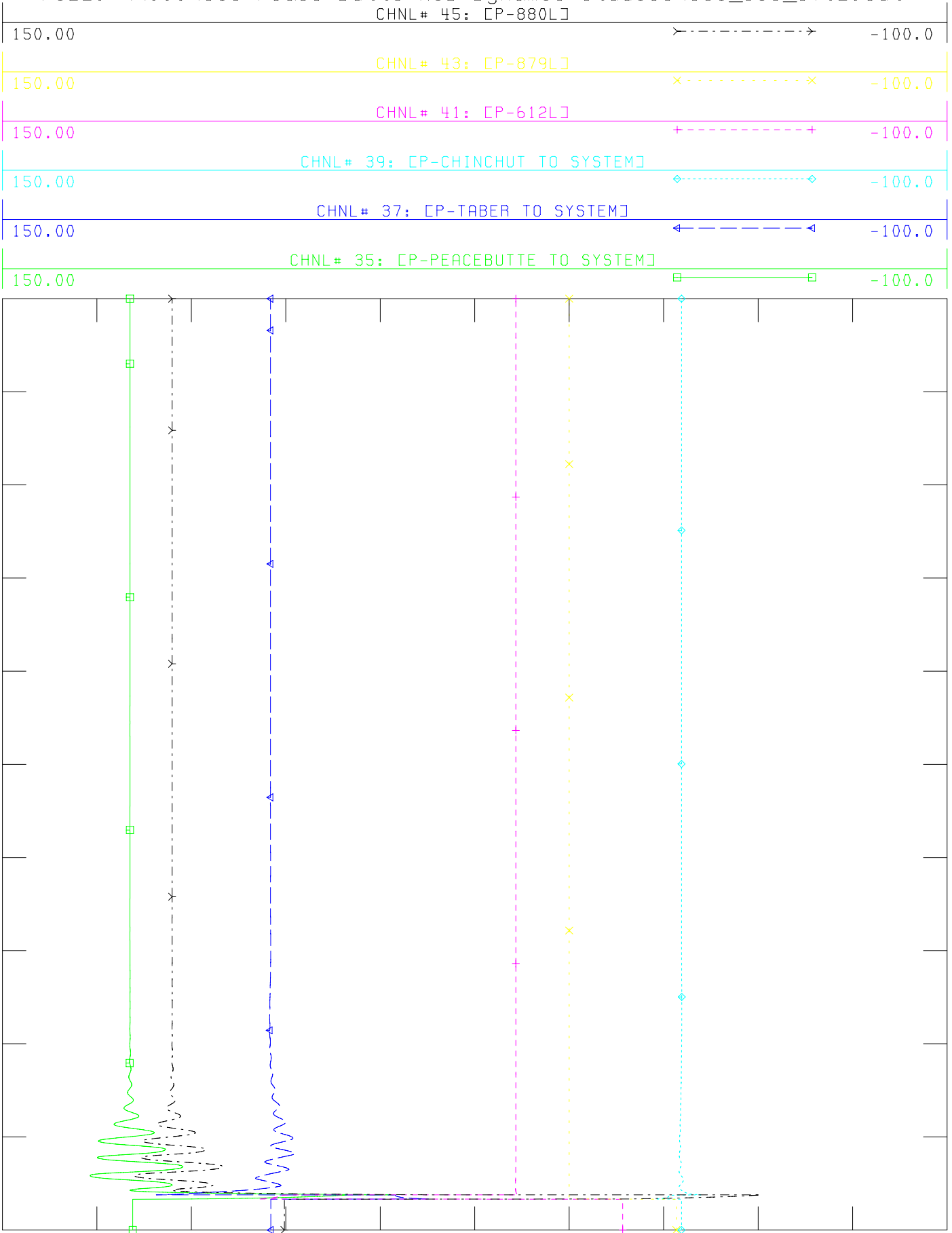
Channel	Label	Value	Unit
CHNL# 34	EVOLT 270 ESUFFIEL7	138.00	V
CHNL# 33	EVOLT 680 CMEDICIN7	138.00	V
CHNL# 32	EVOLT 271 EBULLS H7	138.00	V
CHNL# 31	EVOLT 269 CBURDETT7	138.00	V
CHNL# 30	EVOLT 31 CFINCAST7	138.00	V



C-1-30



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_879L.out
CHNL# 45: [P-880L]



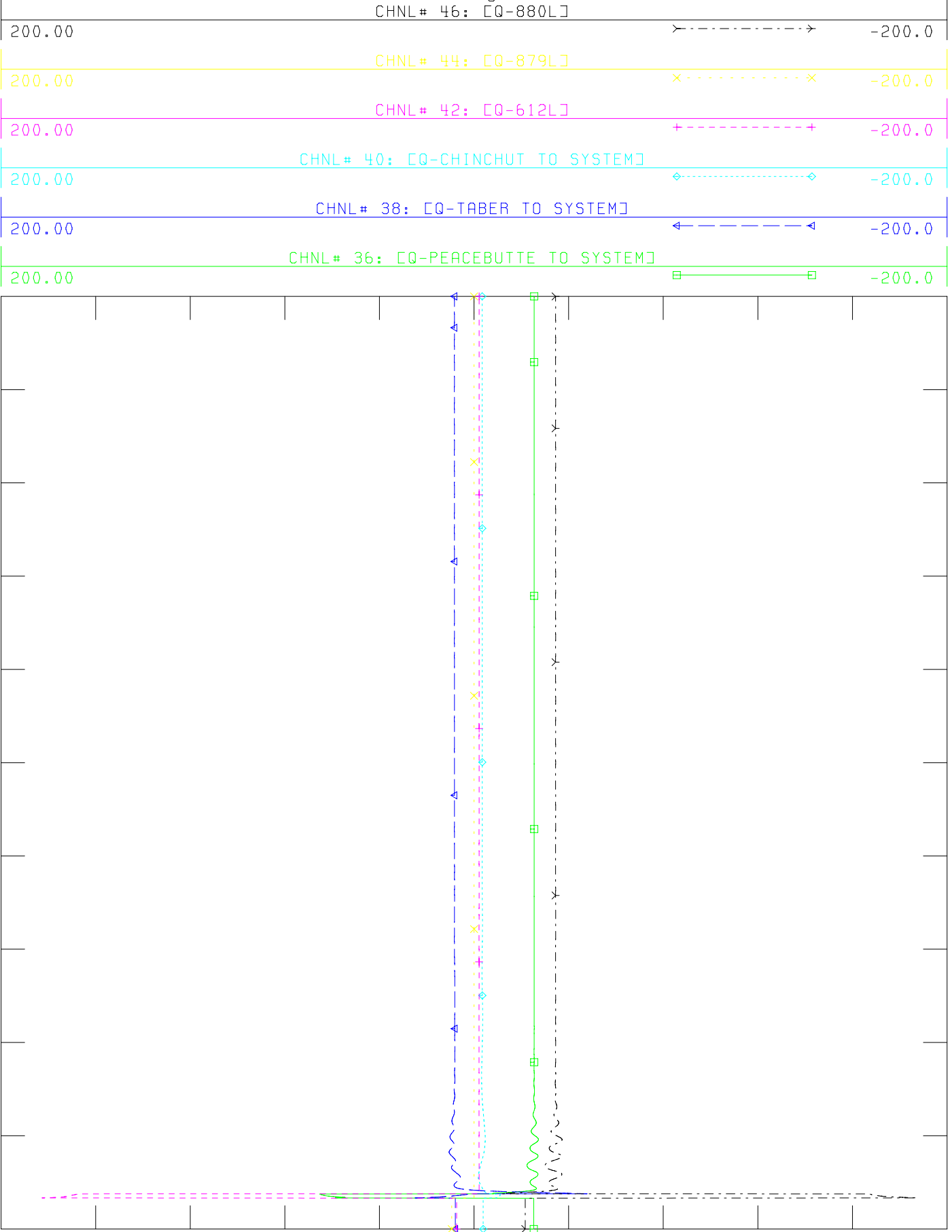
TUE, NOV 16 2010 10:48
BRANCH ACTIVE POWER

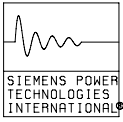
C-1-31

TIME (SECONDS)



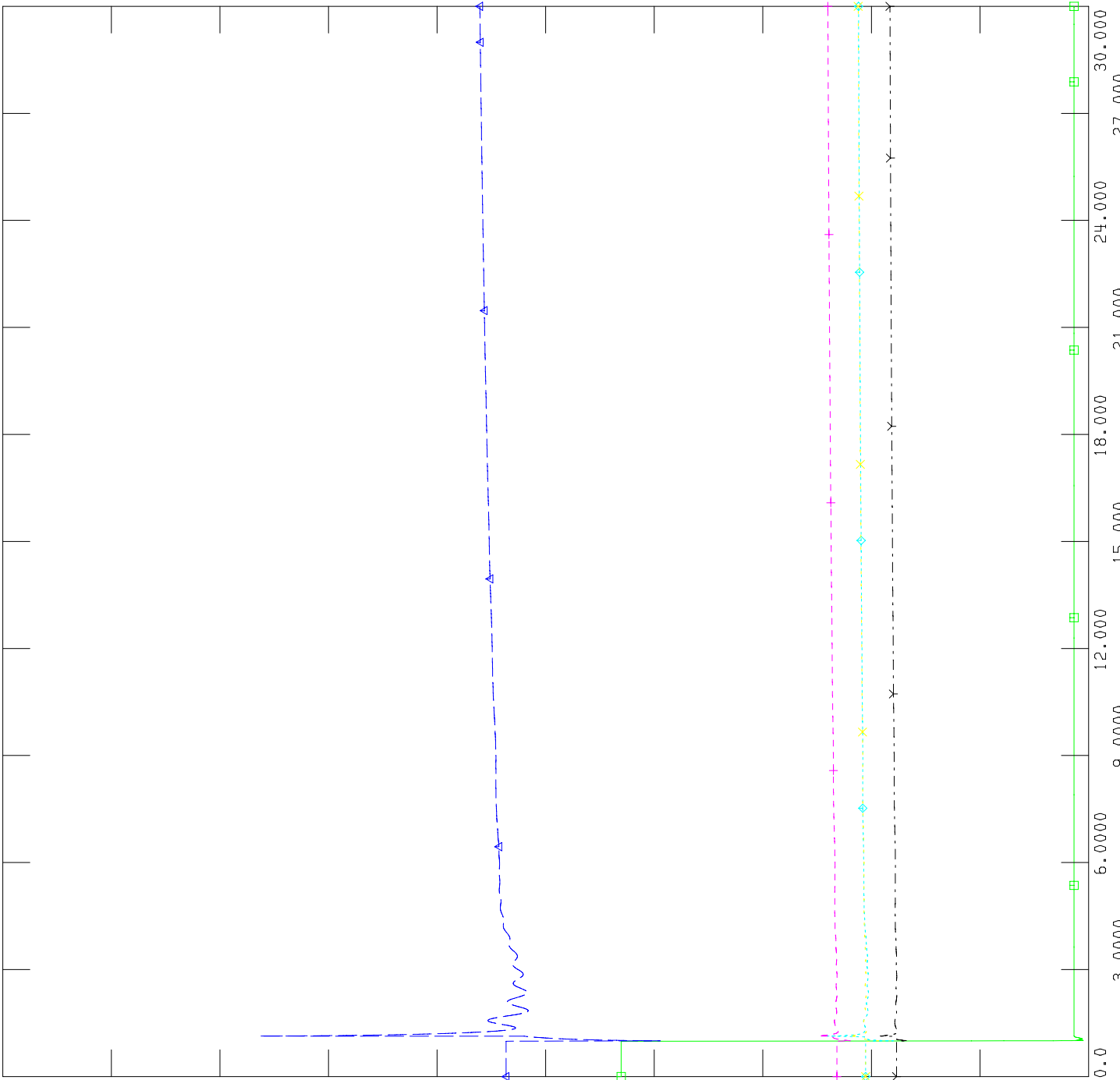
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_879L.out
CHNL# 46: [EQ-880L]





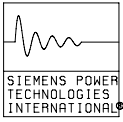
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_880L.out

Channel	Label	Value
6	CHNL# 6: [POWR BUS 92046 MACH '1 ']	-0.0100
5	CHNL# 5: [POWR BUS 11002 MACH '1 ']	-0.0100
4	CHNL# 4: [POWR BUS 4740 MACH 'G1']	-0.0100
3	CHNL# 3: [POWR BUS 2389 MACH '1 ']	-0.0100
2	CHNL# 2: [POWR BUS 100018 MACH '1 ']	-0.0100
1	CHNL# 1: [POWR BUS 2294 MACH '1 ']	-0.0100

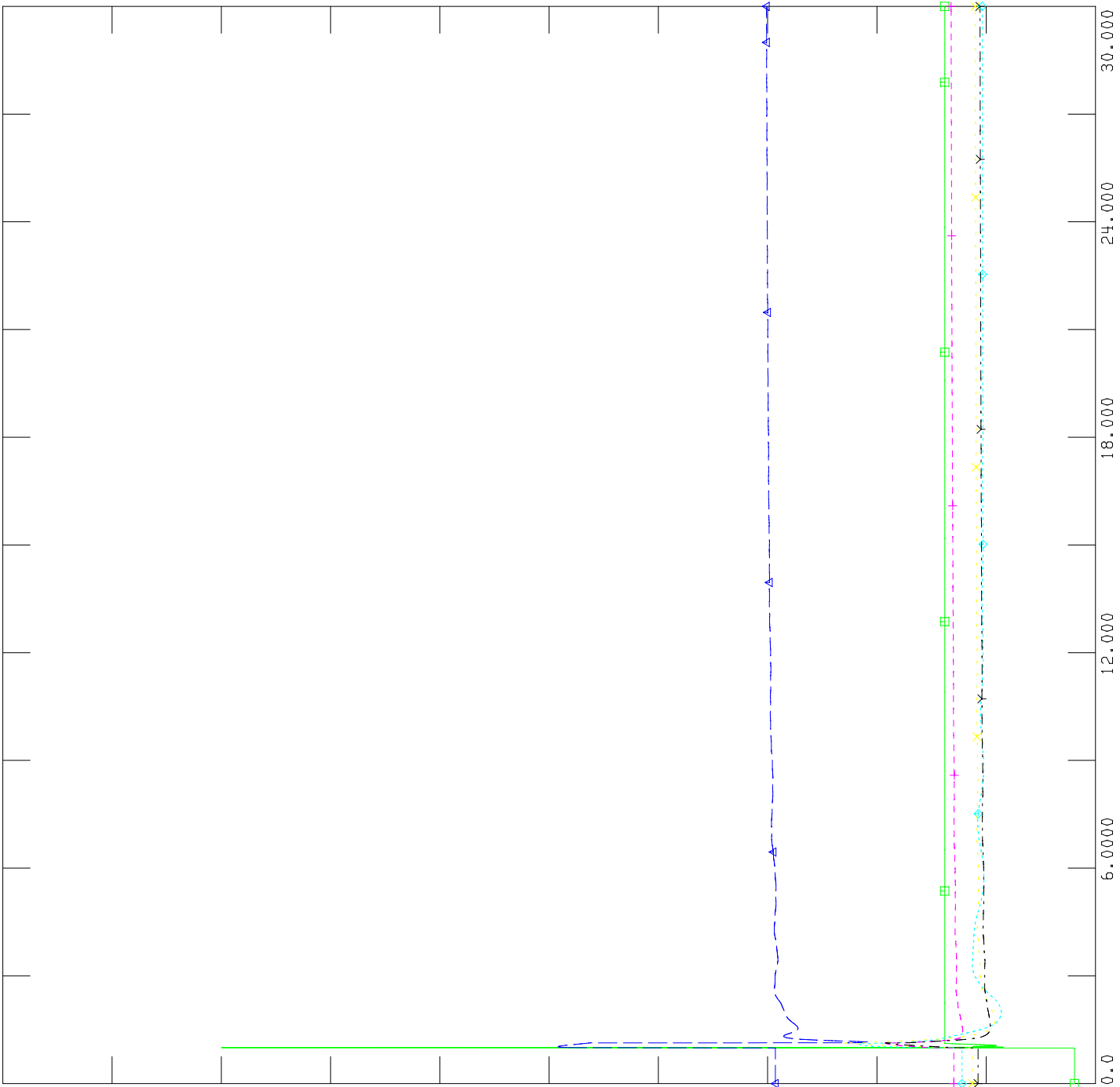
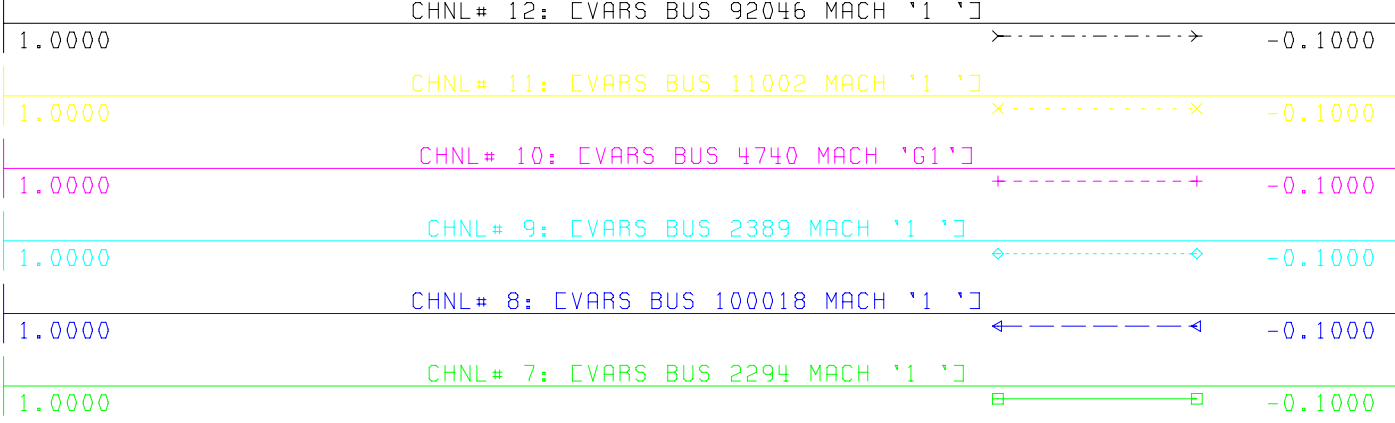


TUE, NOV 16 2010 10:51
PELEC

C-1-33

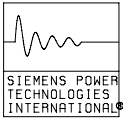


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_880L.out



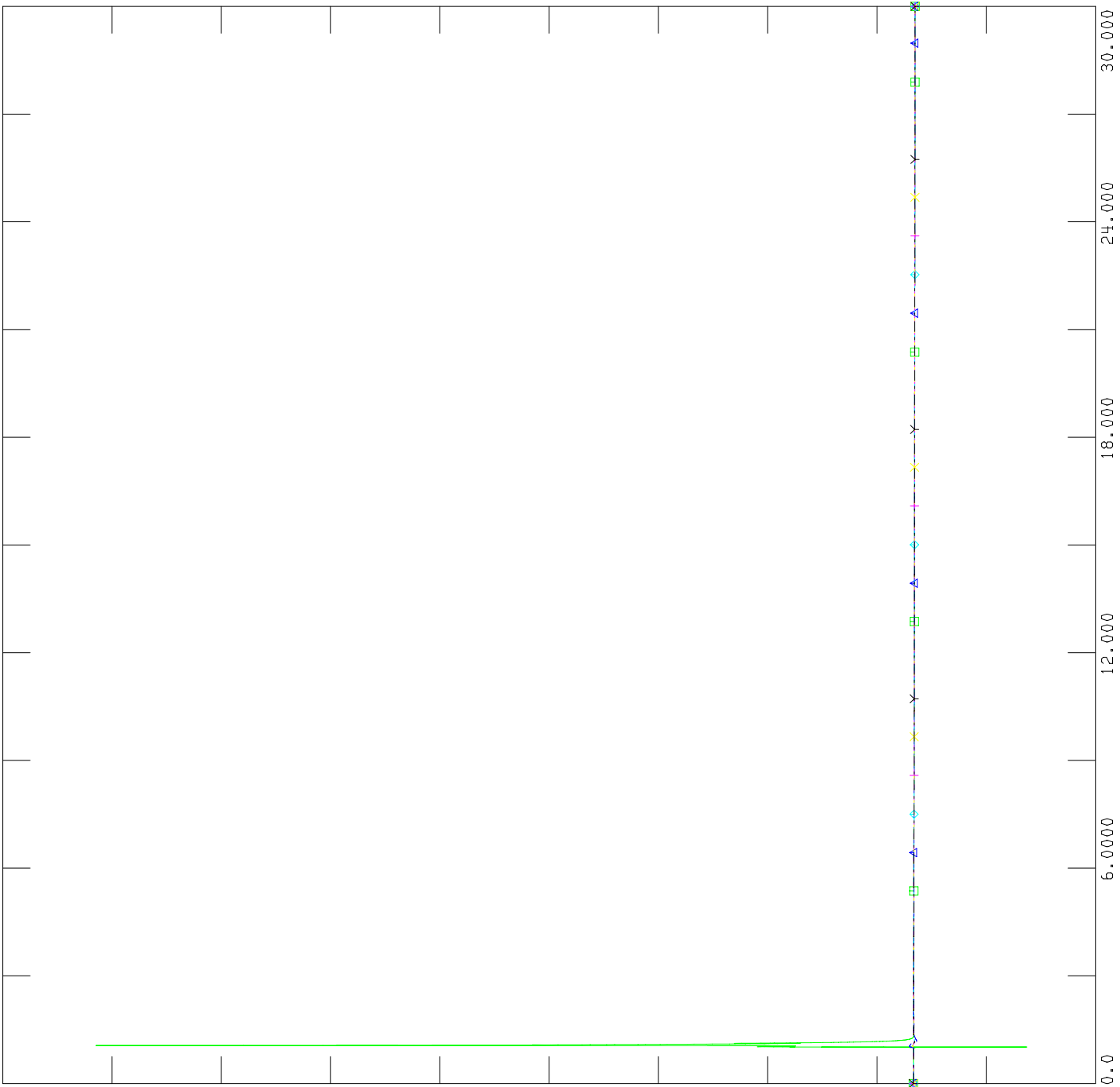
TUE, NOV 16 2010 10:51
QELEC

C-1-34



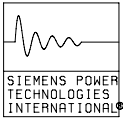
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_880L.out

Channel	CFREQ	Component	Value
CHNL# 18	92046	CMCBRIDE6	0.5750
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	0.5750
CHNL# 15	2389	CHILLRIDG	0.5750
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900



TUE, NOV 16 2010 10:52
BUS FREQUENCY

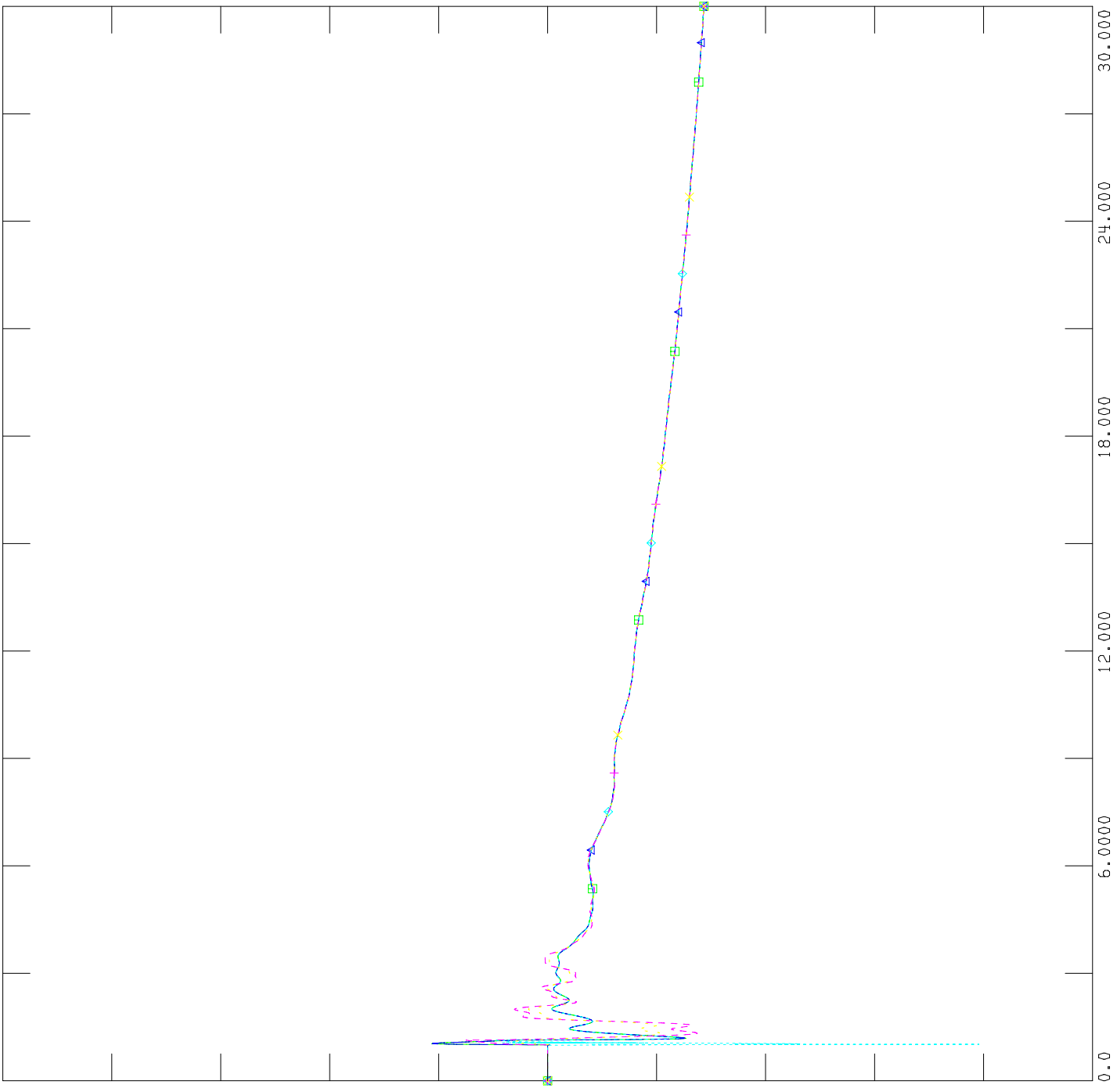
C-1-35



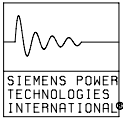
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_880L.out

TUE, NOV 16 2010 10:54
BUS FREQUENCY

Channel	CFREQ	Value	Marker
CHNL# 23	CFREQ 270	138.00	x
CHNL# 22	CFREQ 680	138.00	+
CHNL# 21	CFREQ 271	138.00	◇
CHNL# 20	CFREQ 269	138.00	←
CHNL# 19	CFREQ 31	138.00	□

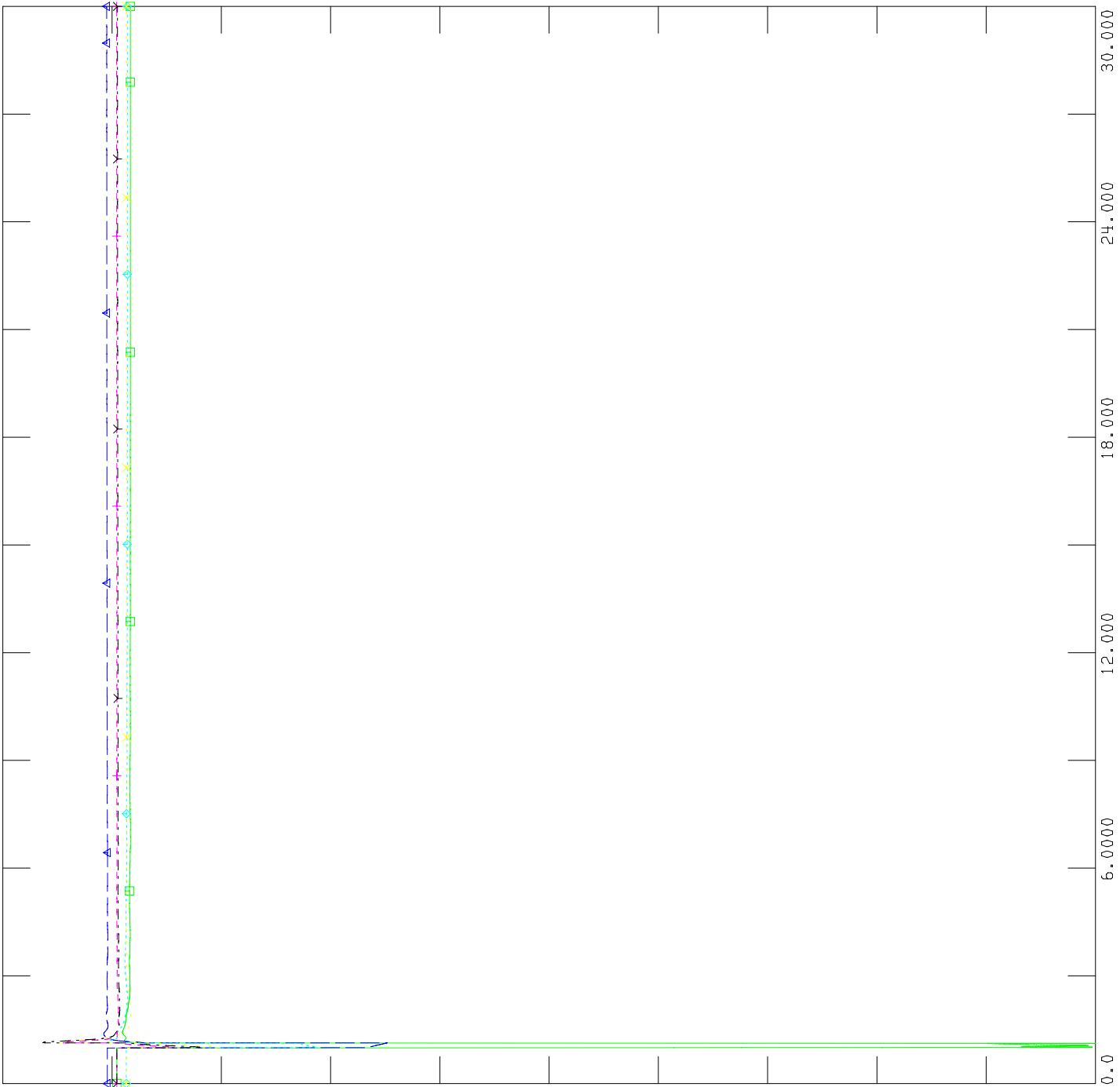


C-1-36



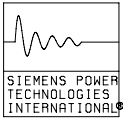
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_880L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 EMCBRIDE6	0.5750
CHNL# 28	EVOLT 11002 EGARDNG2	0.5750
CHNL# 27	EVOLT 4740 CARD_07	0.5750
CHNL# 26	EVOLT 2389 CHILLRIDG	0.5750
CHNL# 25	EVOLT 100018 CPURPLESP	0.5750
CHNL# 24	EVOLT 2294 CTOTHILL2	0.6900



TUE, NOV 16 2010 10:54
BUS VOLTAGE

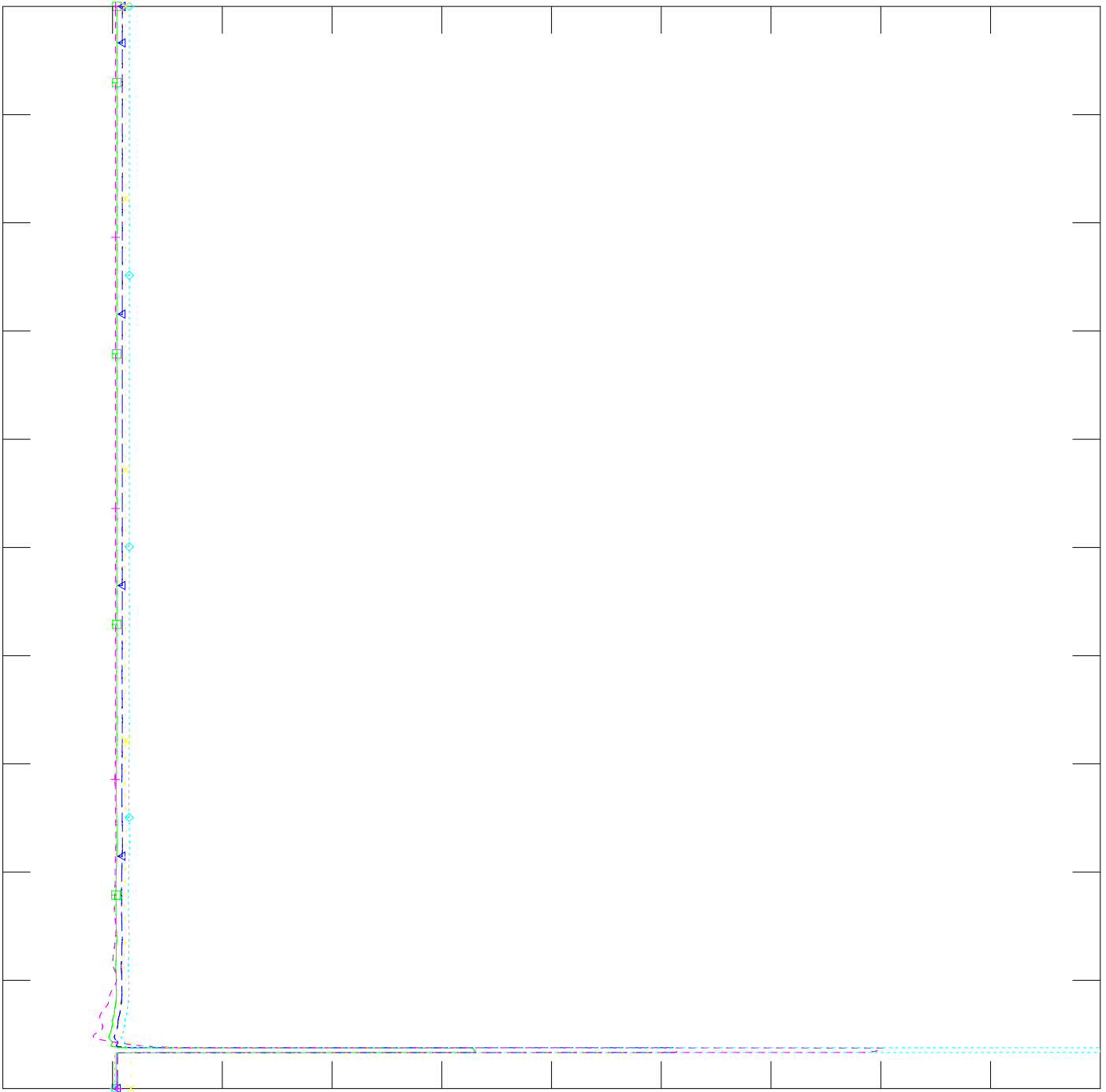
C-1-37



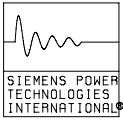
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_880L.out

TUE, NOV 16 2010 11:01
BUS VOLTAGE

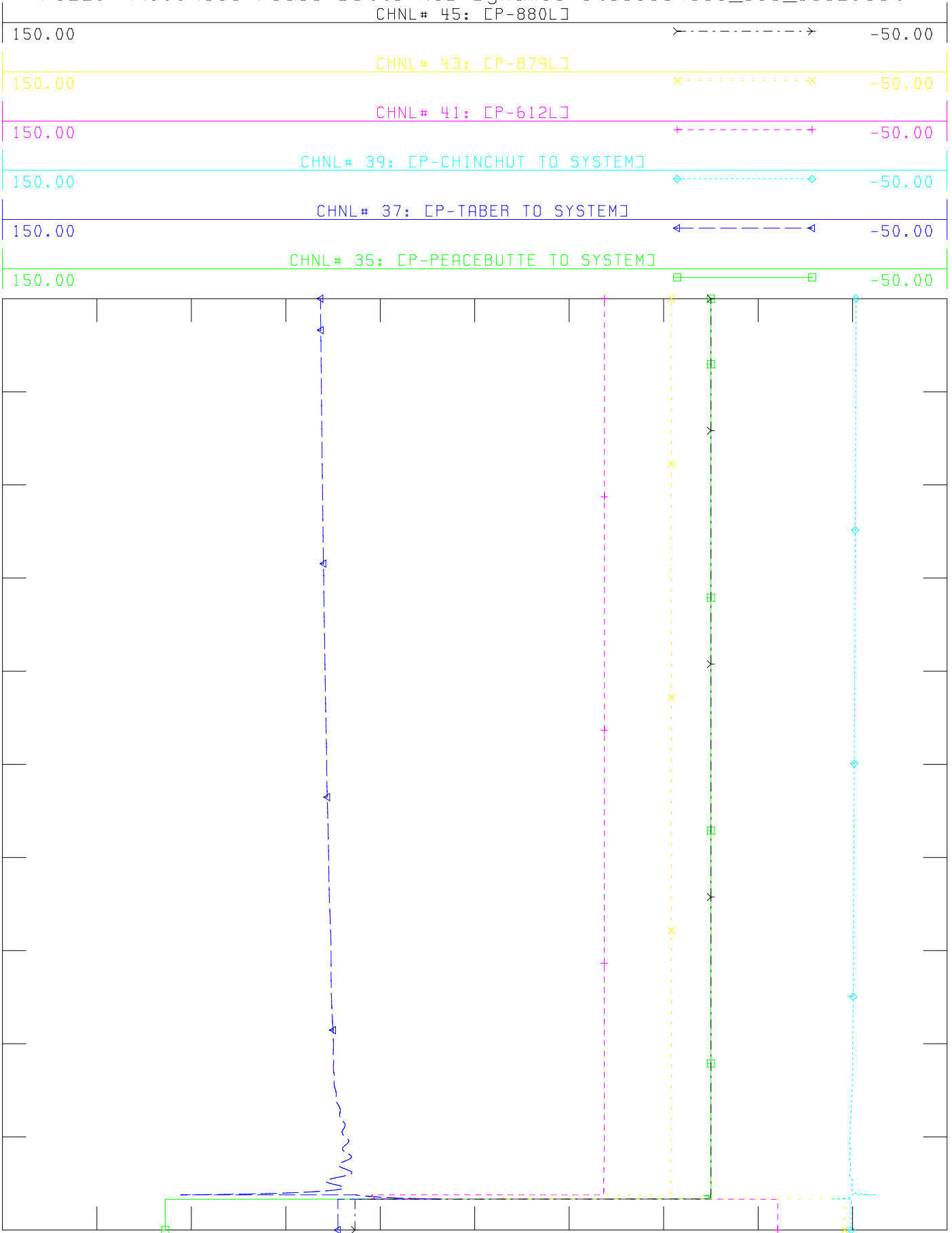
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]

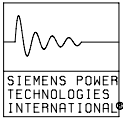


C-1-38

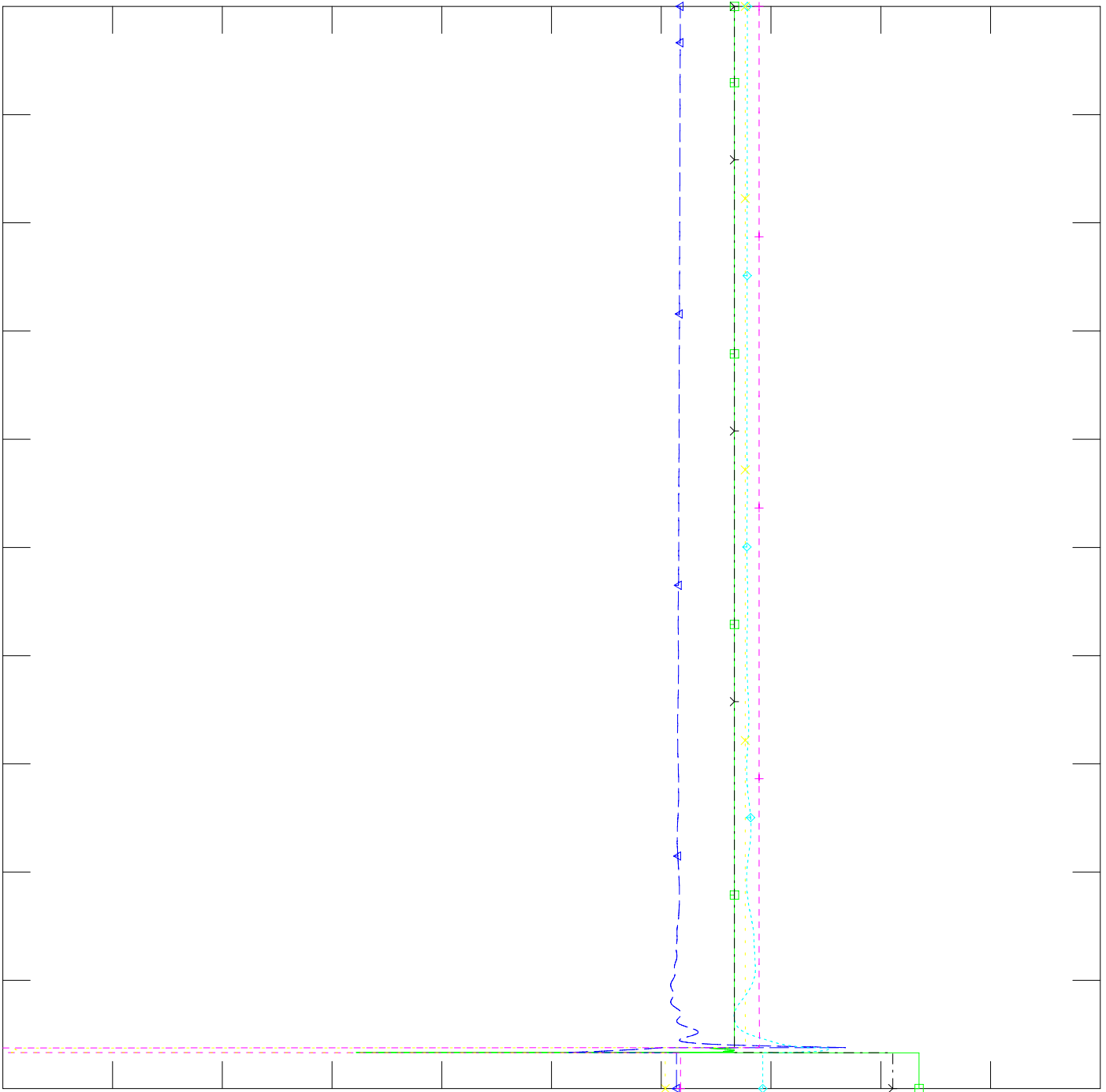
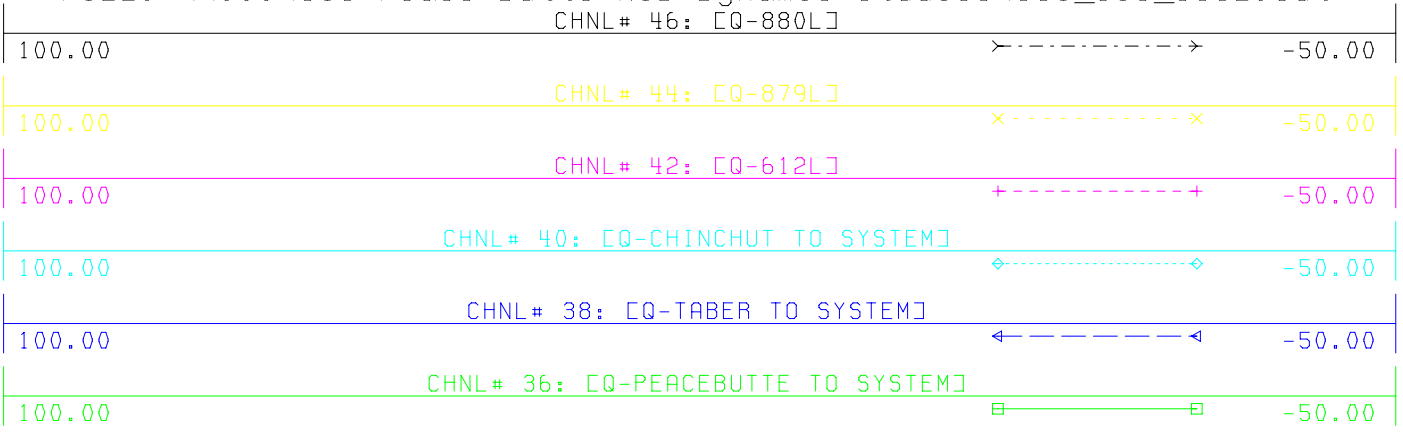


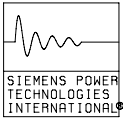
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_880L.out
CHNL# 45: [P-880L]



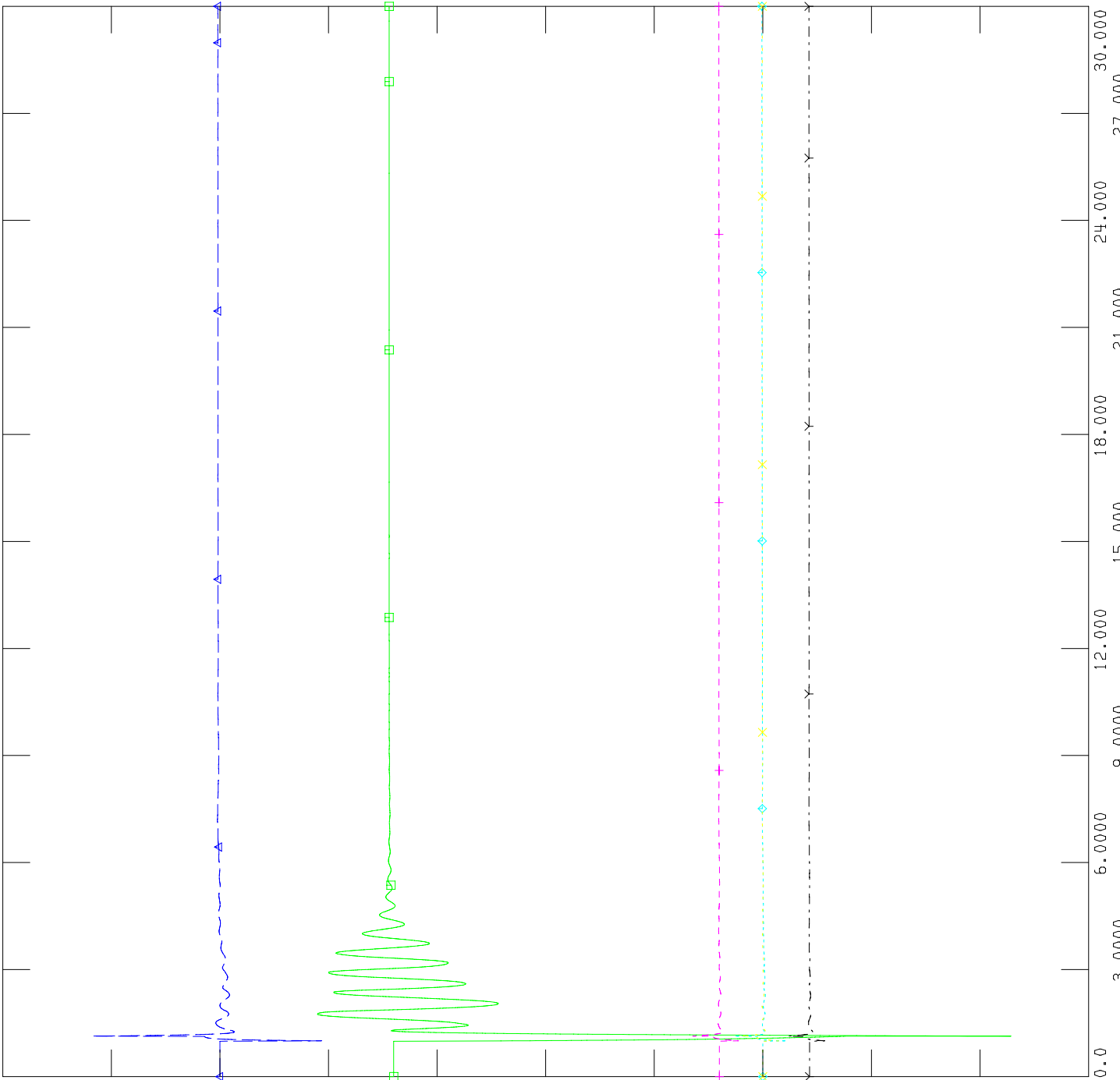
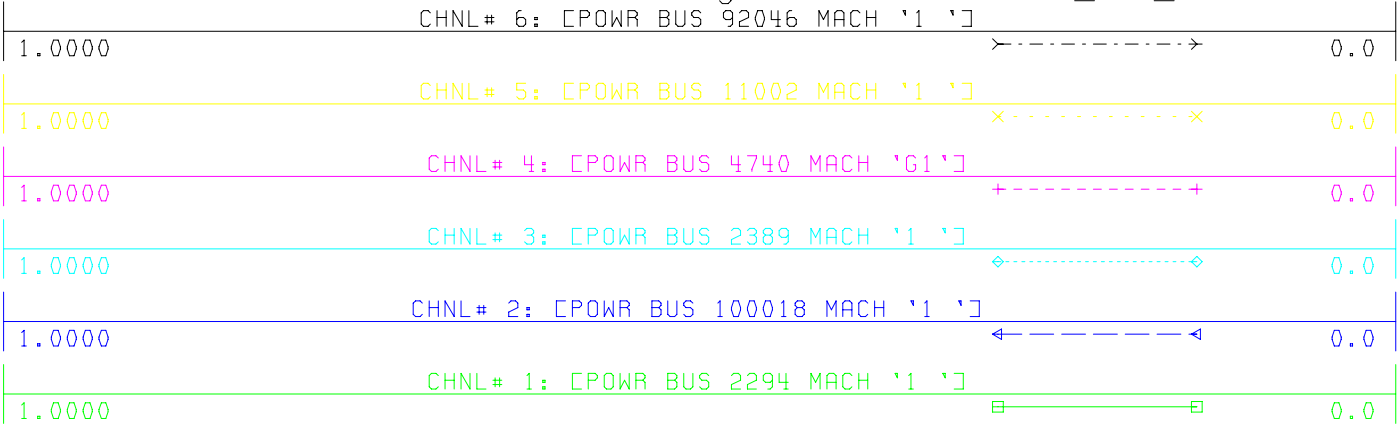


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_880L.out
CHNL# 46: [Q-880L]



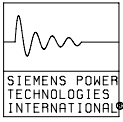


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_892L.out

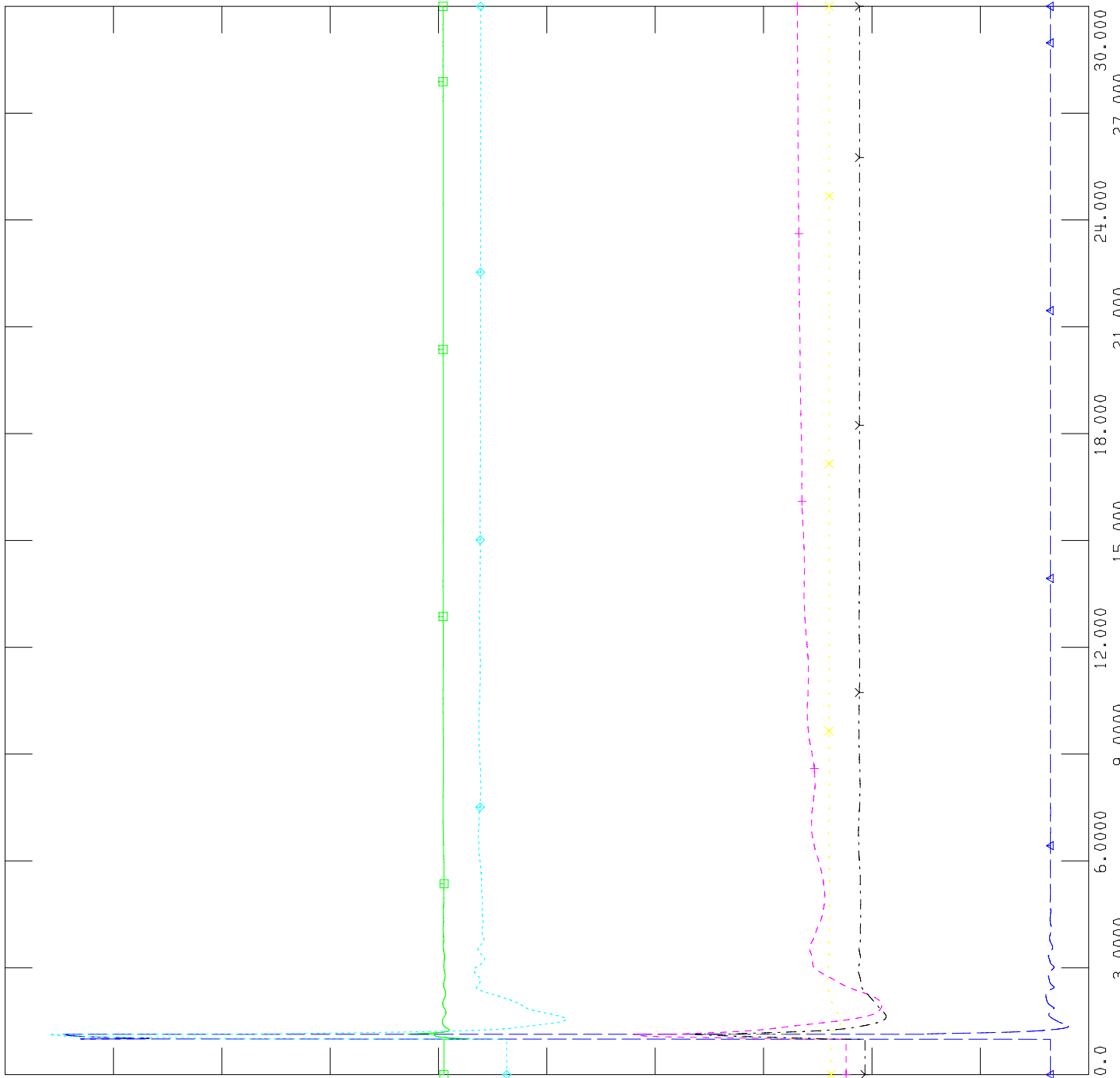
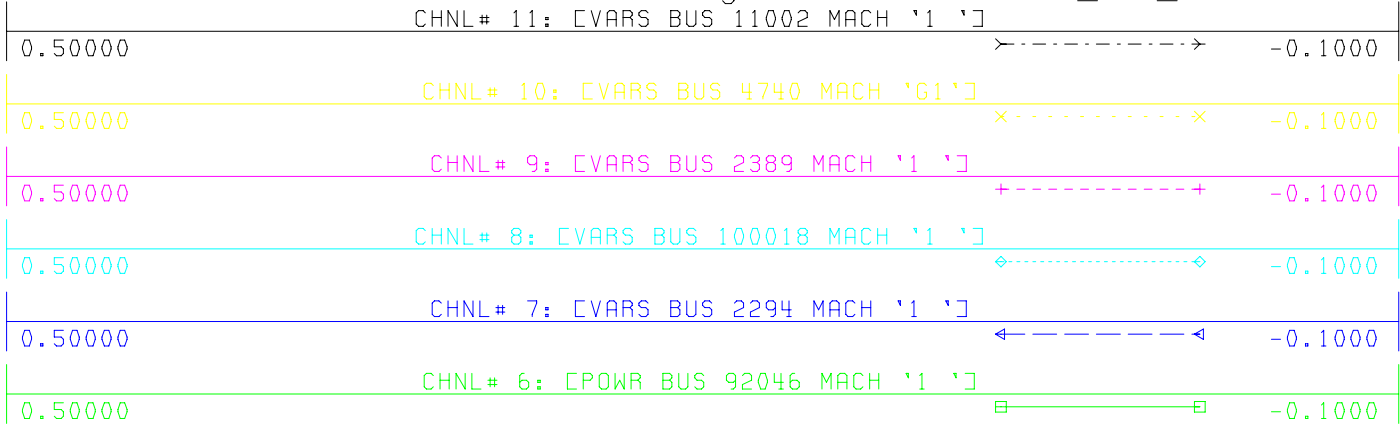


TUE, NOV 16 2010 11:07
PELEC

C-1-41

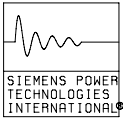


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_892L.out



TUE, NOV 16 2010 11:08
QELEC

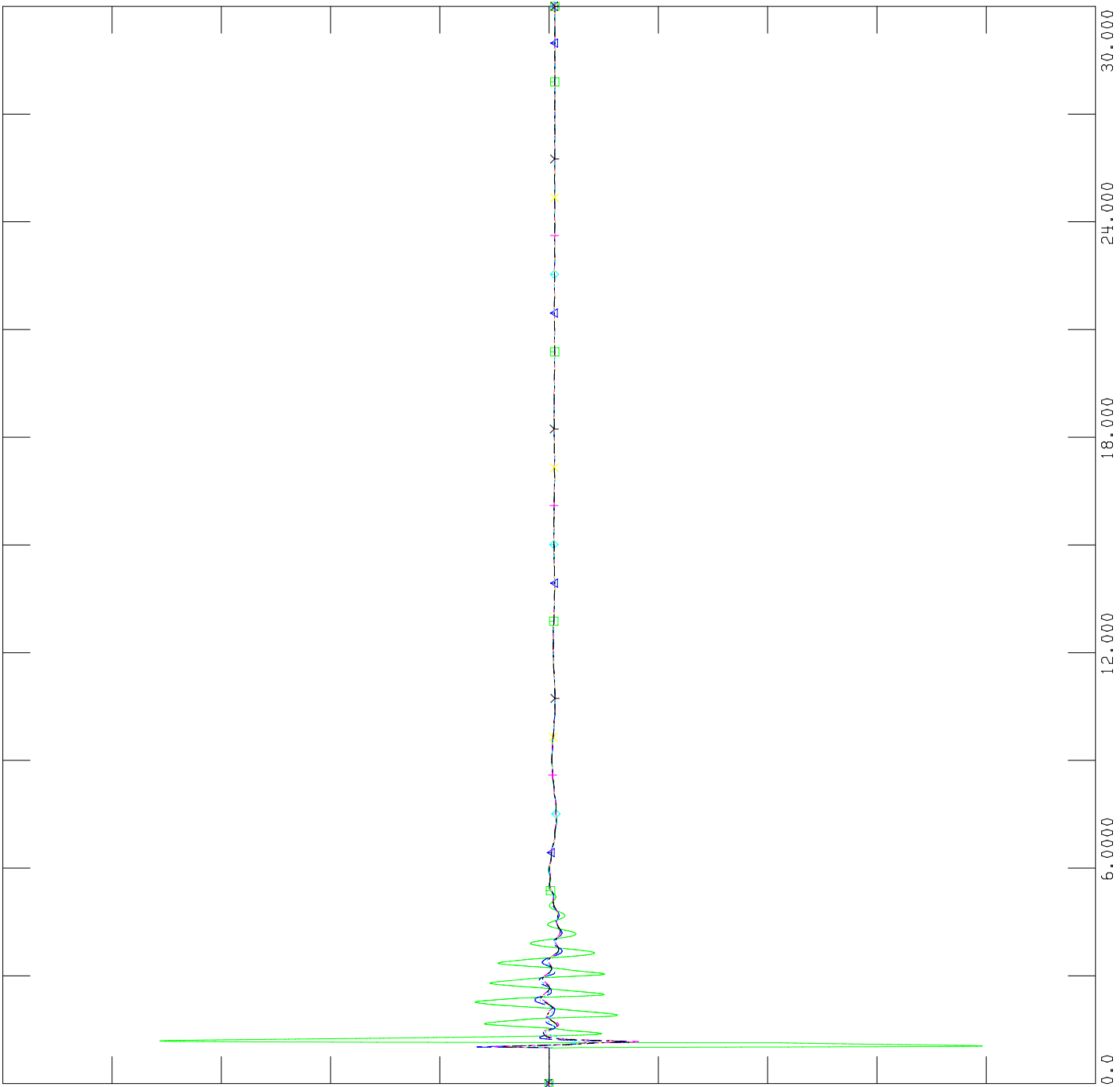
C-1-42



TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

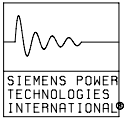
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_892L.out

Channel	CFREQ	Channel Name	CFREQ
CHNL# 18	92046	CMCBRIDE6	0.5750
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	0.5750
CHNL# 15	2389	CHILLRIDG	0.5750
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900



TUE, NOV 16 2010 11:09
BUS FREQUENCY

C-1-43

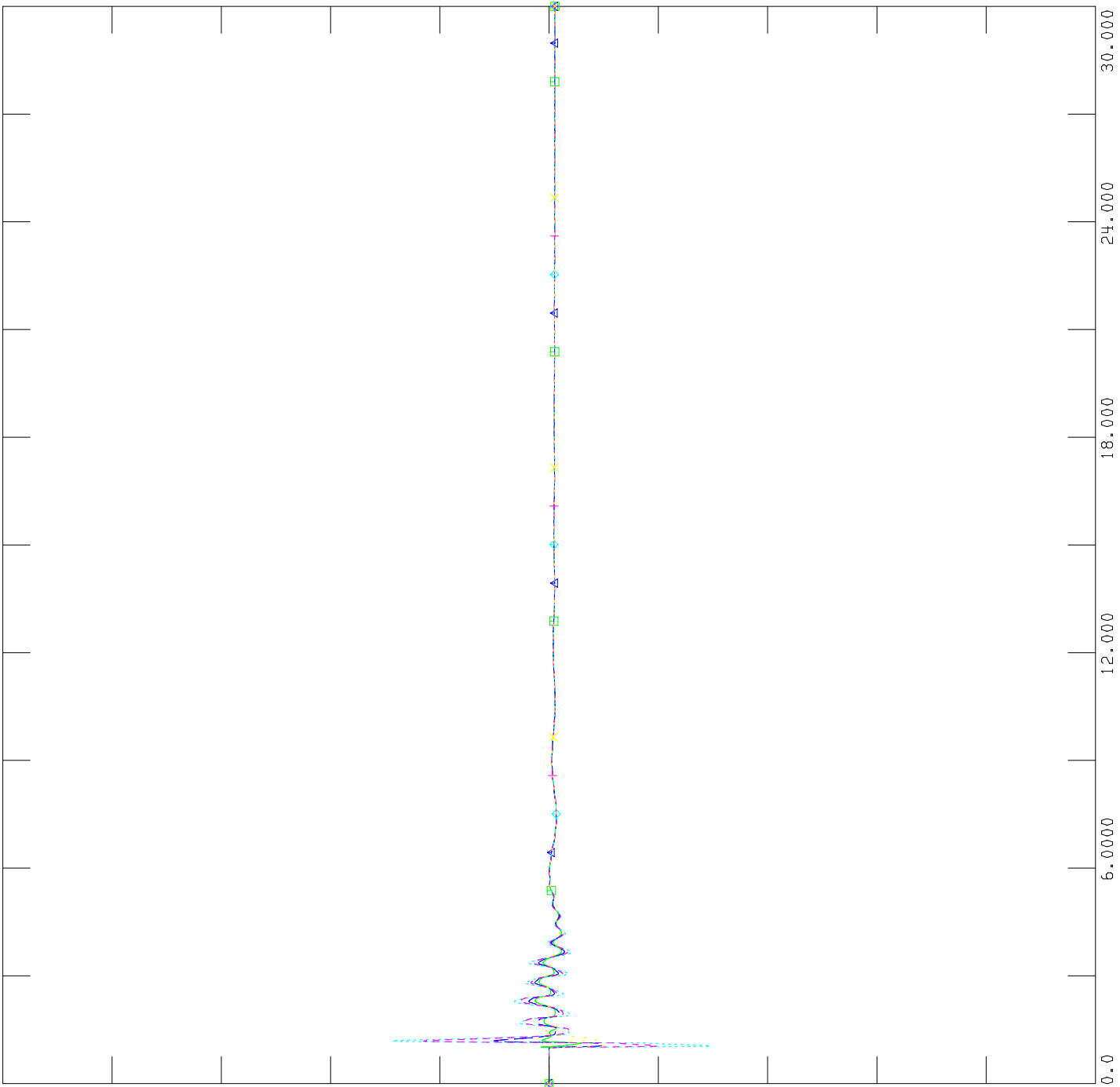


TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

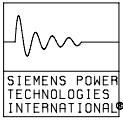
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_892L.out

TUE, NOV 16 2010 11:09
BUS FREQUENCY

Channel	CFREQ	Location	Value
CHNL# 23	270	CSUFFIEL7	138.00
CHNL# 22	680	CMEDICIN7	138.00
CHNL# 21	271	CBULLS H7	138.00
CHNL# 20	269	CBURDETT7	138.00
CHNL# 19	31	CFINCAST7	138.00

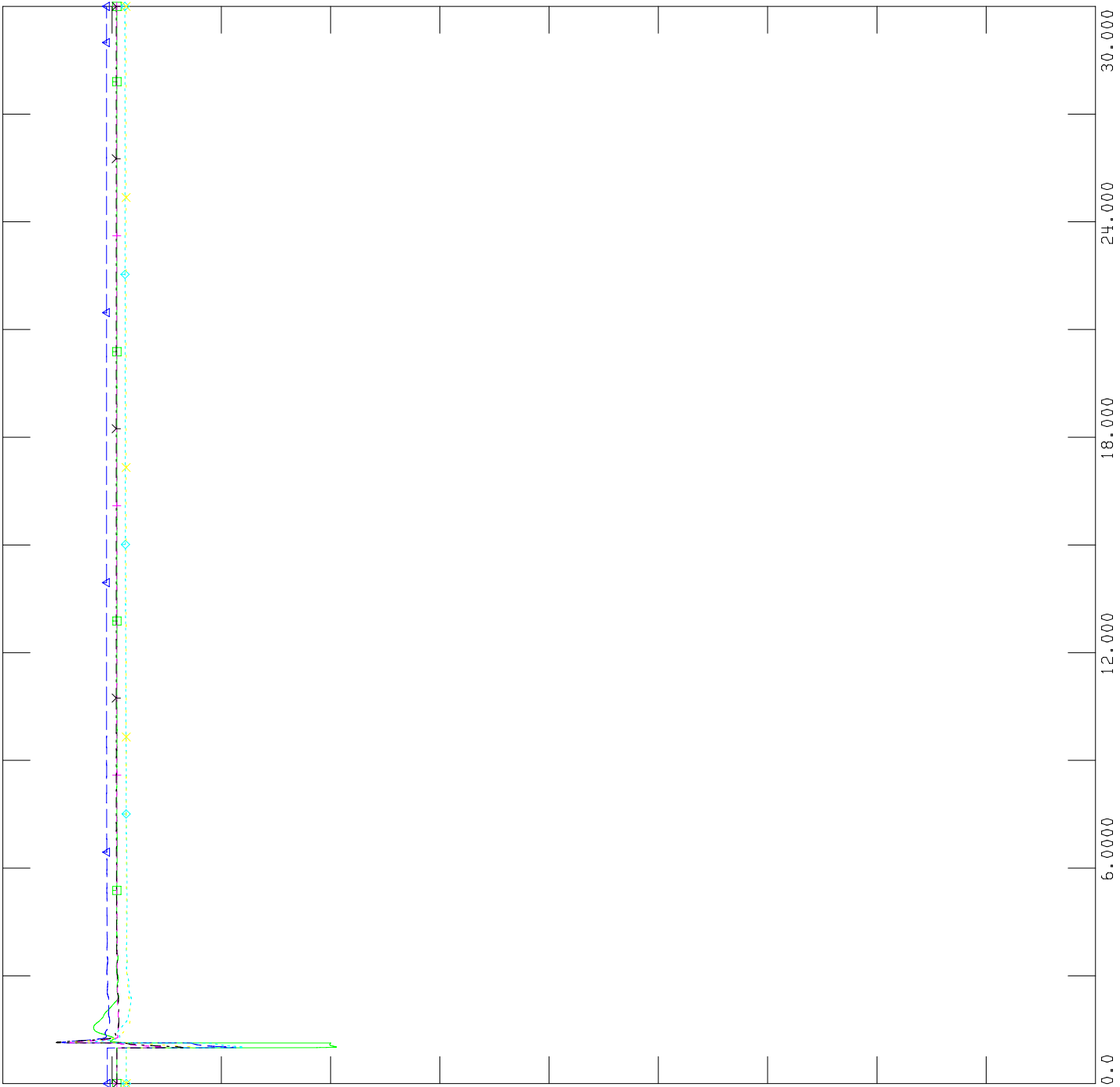


C-1-44



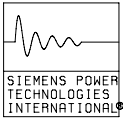
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_892L.out

1.1500	CHNL# 29: EVOLT	92046	CMCBRIDE6	0.5750	0.0
1.1500	CHNL# 28: EVOLT	11002	EGARDNG2	0.5750	0.0
1.1500	CHNL# 27: EVOLT	4740	CARD_07	0.5750	0.0
1.1500	CHNL# 26: EVOLT	2389	CHILLRIDG	0.5750	0.0
1.1500	CHNL# 25: EVOLT	100018	CPURPLESP	0.5750	0.0
1.1500	CHNL# 24: EVOLT	2294	CTOTHILL2	0.6900	0.0



TUE, NOV 16 2010 11:11
 BUS VOLTAGE

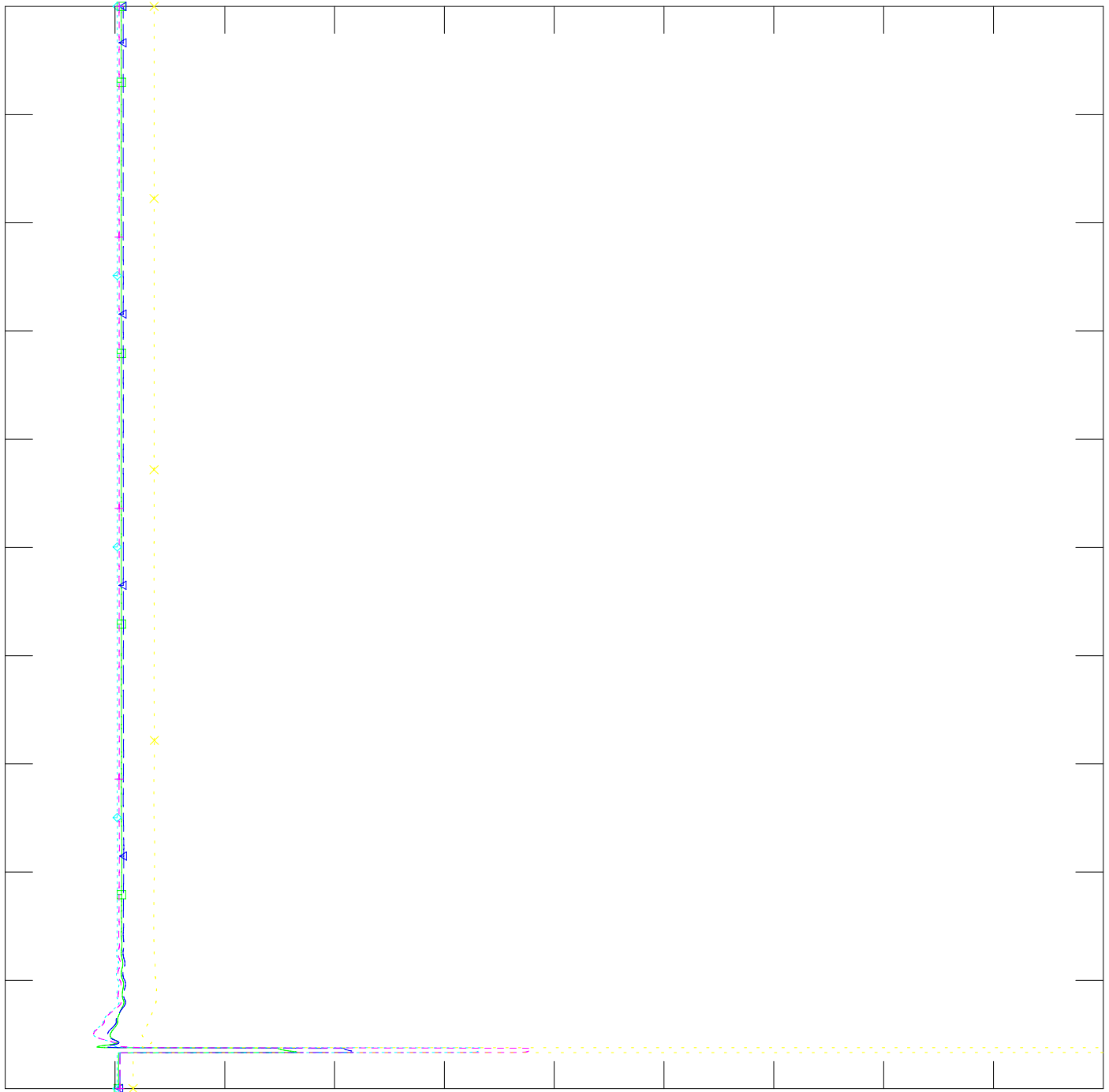
C-1-45

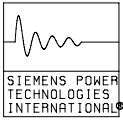


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513_892L.out

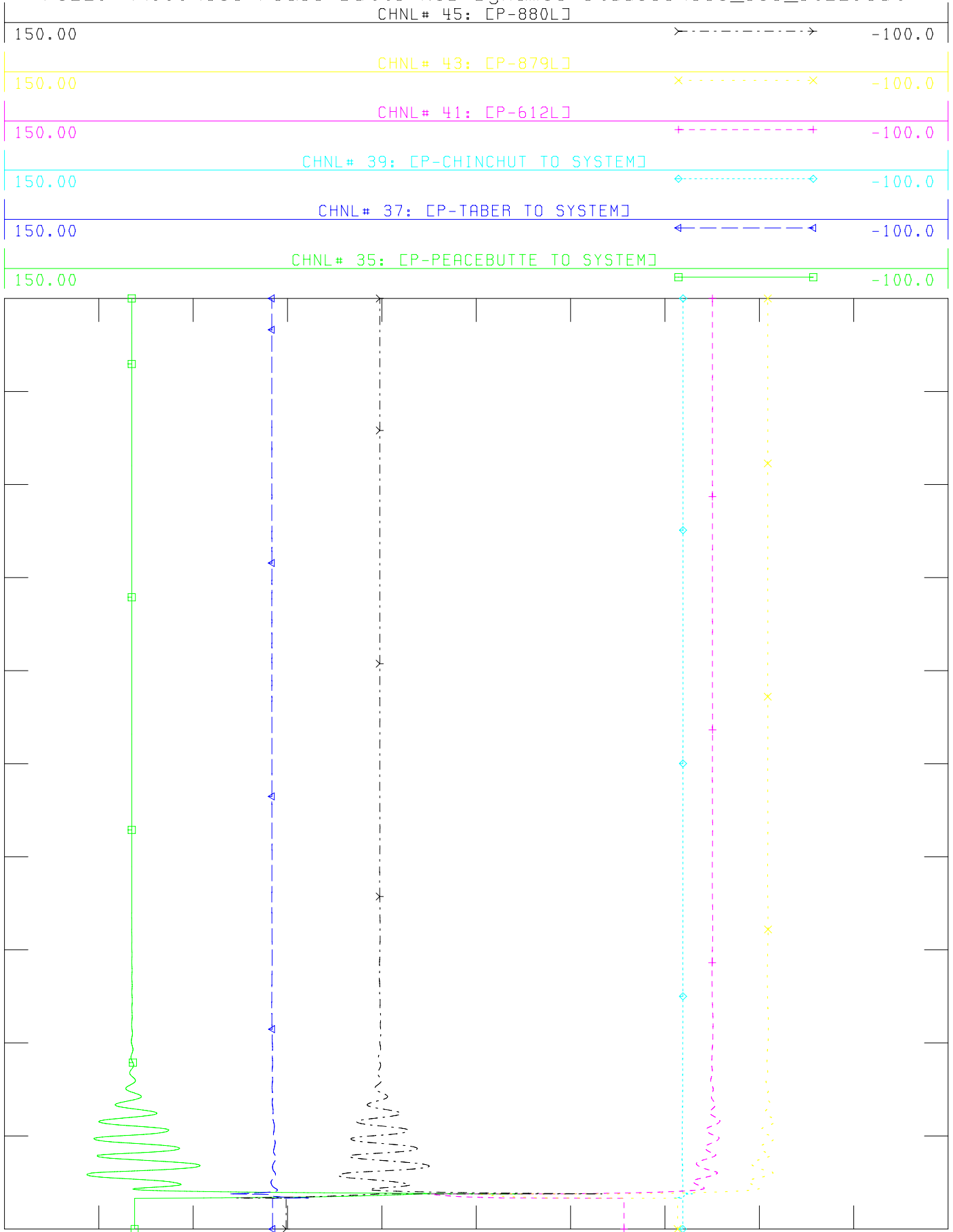
TUE, NOV 16 2010 11:11
BUS VOLTAGE

Channel	Label	Value	Unit
CHNL# 34	EVOLT 270 [SUFFIEL7	138.00	V
CHNL# 33	EVOLT 680 [MEDICIN7	138.00	V
CHNL# 32	EVOLT 271 [BULLS H7	138.00	V
CHNL# 31	EVOLT 269 [BURDETT7	138.00	V
CHNL# 30	EVOLT 31 [FINCAST7	138.00	V





FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_892L.out
CHNL# 45: [P-880L]

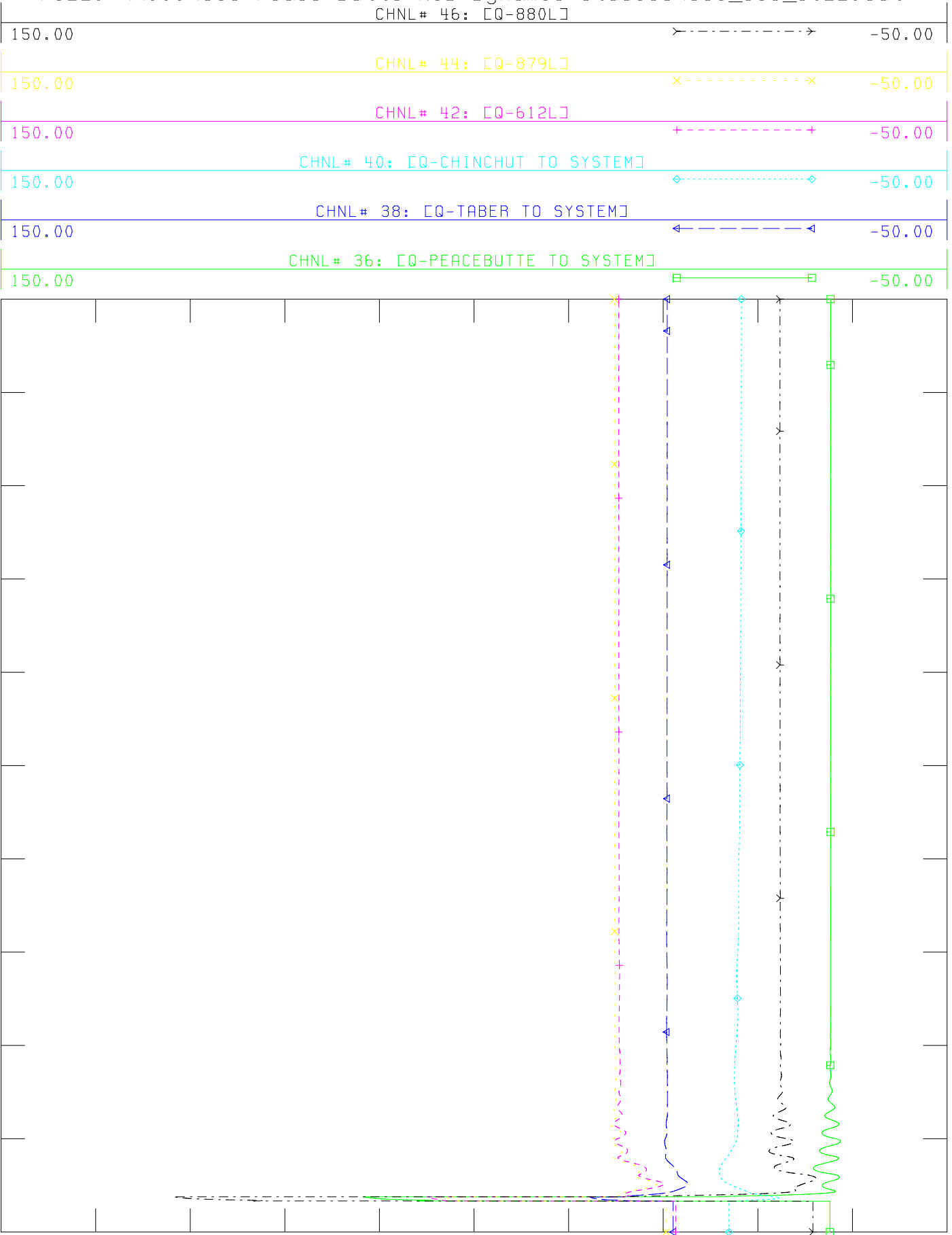


TUE, NOV 16 2010 11:14
BRANCH ACTIVE POWER

C-1-47

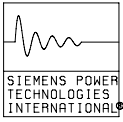


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513_892L.out
CHNL# 46: [Q-880L]



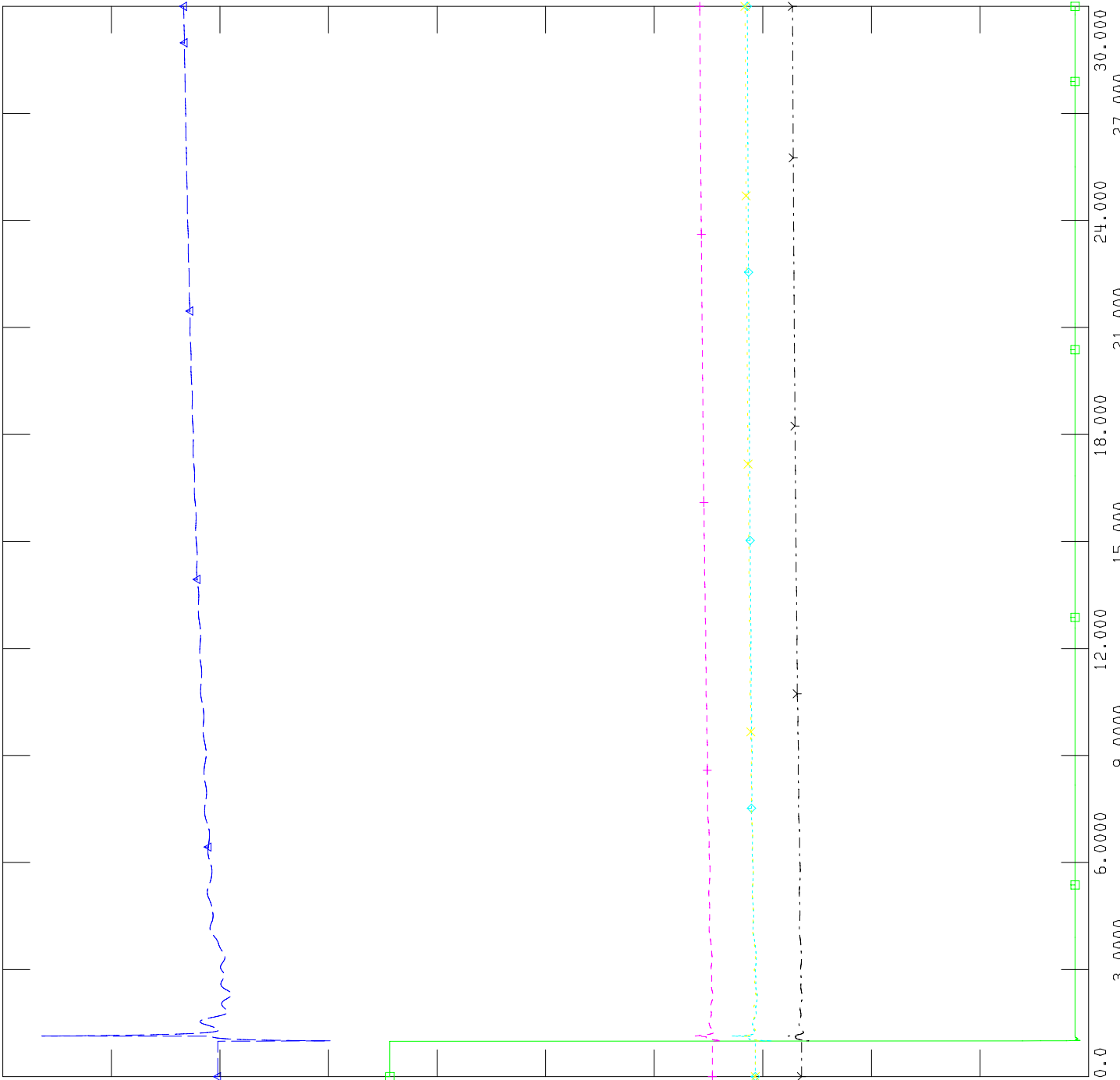
Attachment C-2: Post-connection Transient Stability Analysis

Results -- Scenario 2



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_171L.out

Channel	Label	Value
1.0000	CHNL# 6: [POWR BUS 92046 MACH '1 ']	-0.0100
1.0000	CHNL# 5: [POWR BUS 11002 MACH '1 ']	-0.0100
1.0000	CHNL# 4: [POWR BUS 4740 MACH 'G1 ']	-0.0100
1.0000	CHNL# 3: [POWR BUS 2389 MACH '1 ']	-0.0100
1.0000	CHNL# 2: [POWR BUS 100018 MACH '1 ']	-0.0100
1.0000	CHNL# 1: [POWR BUS 2294 MACH '1 ']	-0.0100



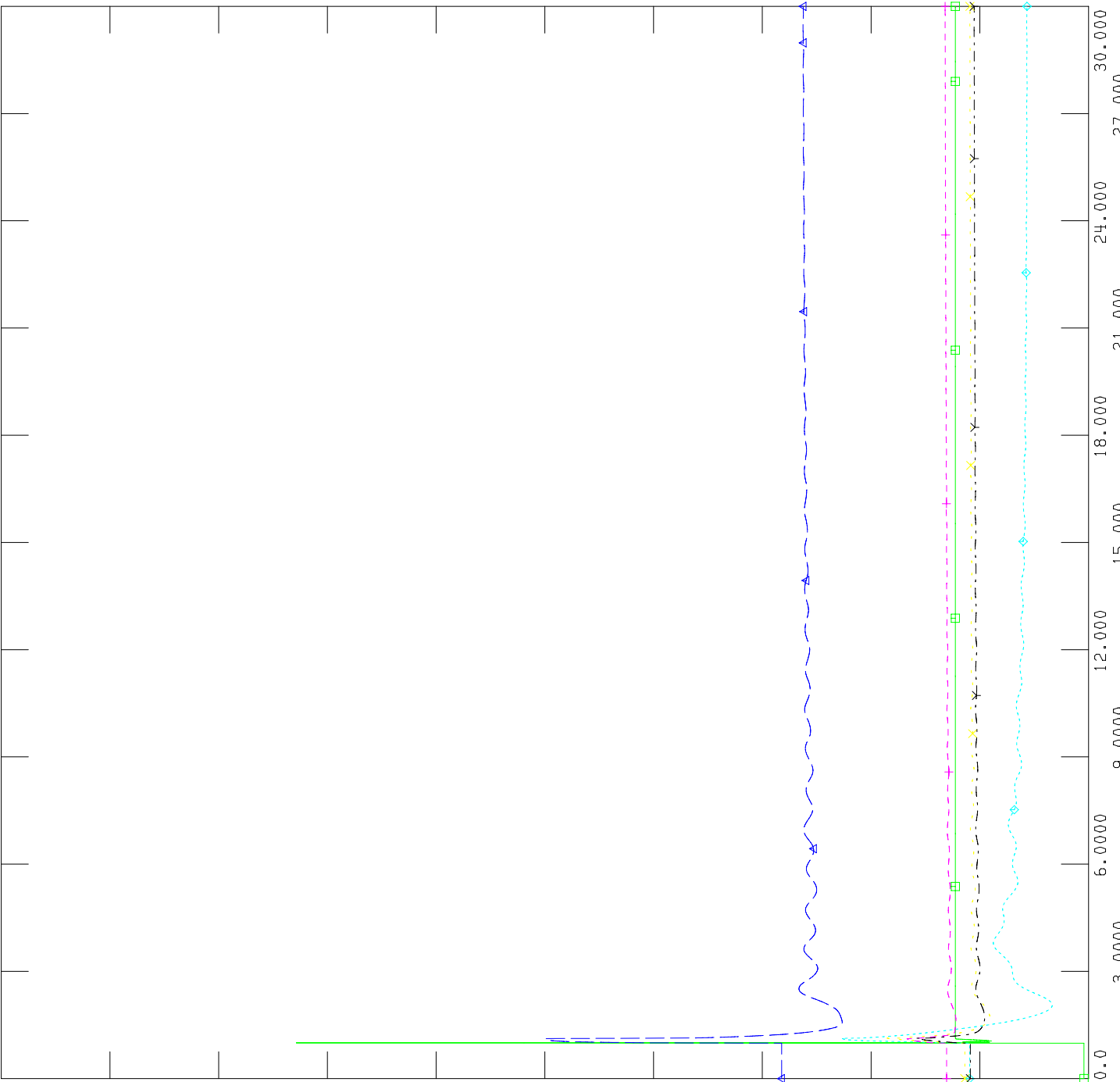
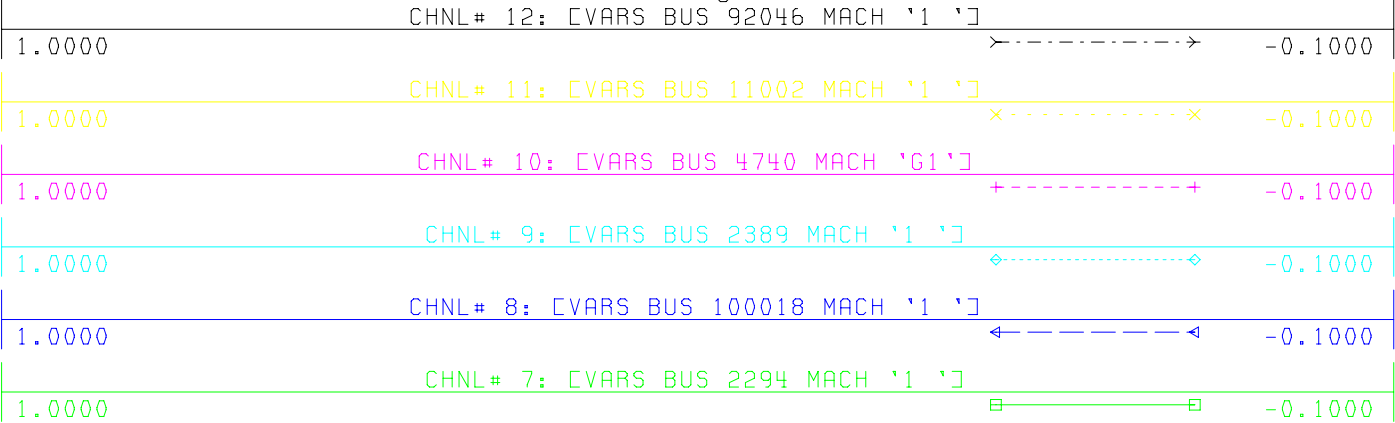
TUE, NOV 16 2010 11:31
PELEC

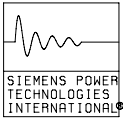
C-2-1

TIME (SECONDS)



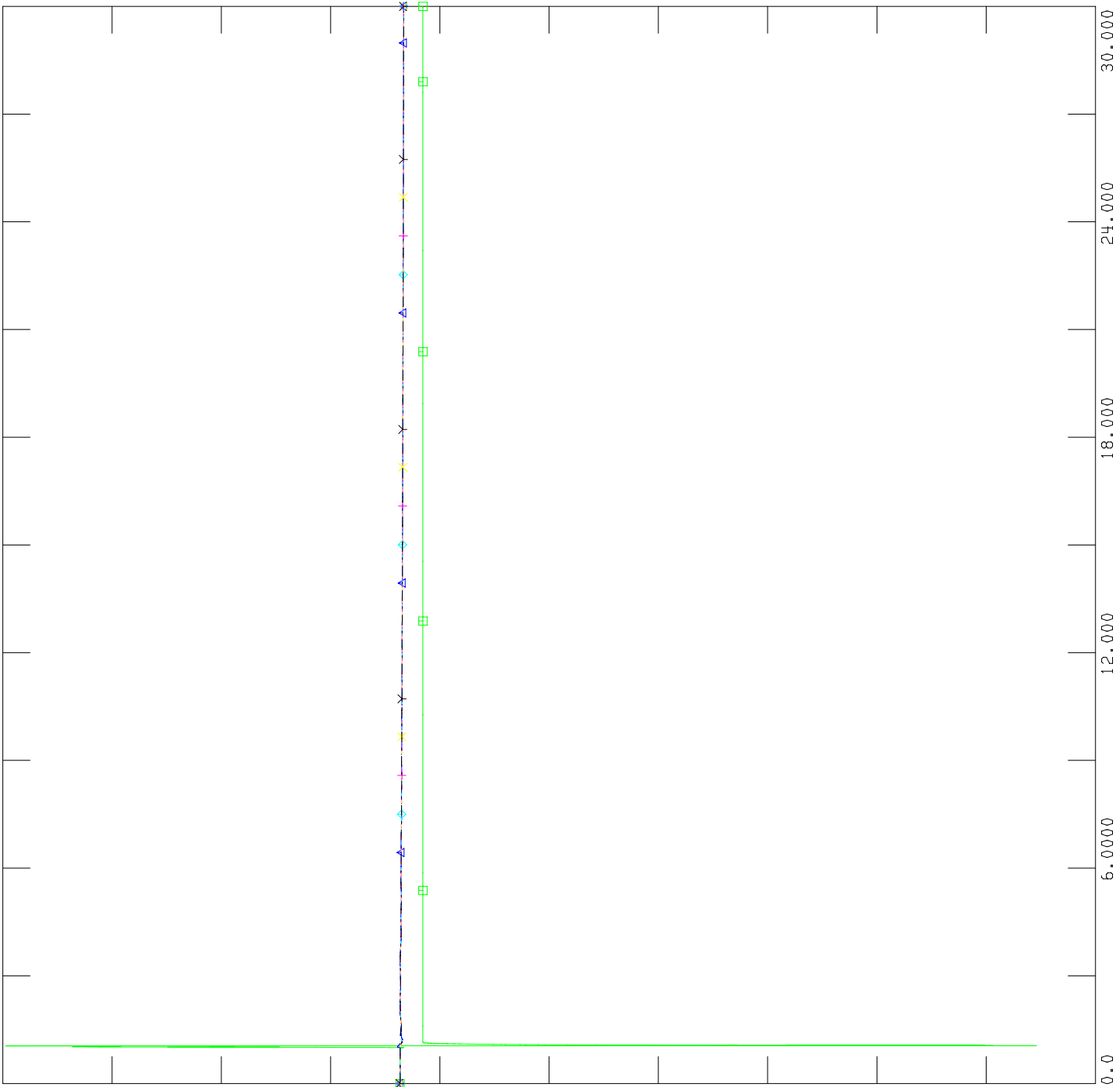
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_171L.out





FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_171L.out

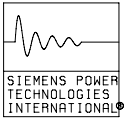
Channel	CFREQ	Component	Value
CHNL# 18	92046	CMCBRIDE6	0.5750
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	0.5750
CHNL# 15	2389	CHILLRIDG	0.5750
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900



TUE, NOV 16 2010 11:34
BUS FREQUENCY

C-2-3

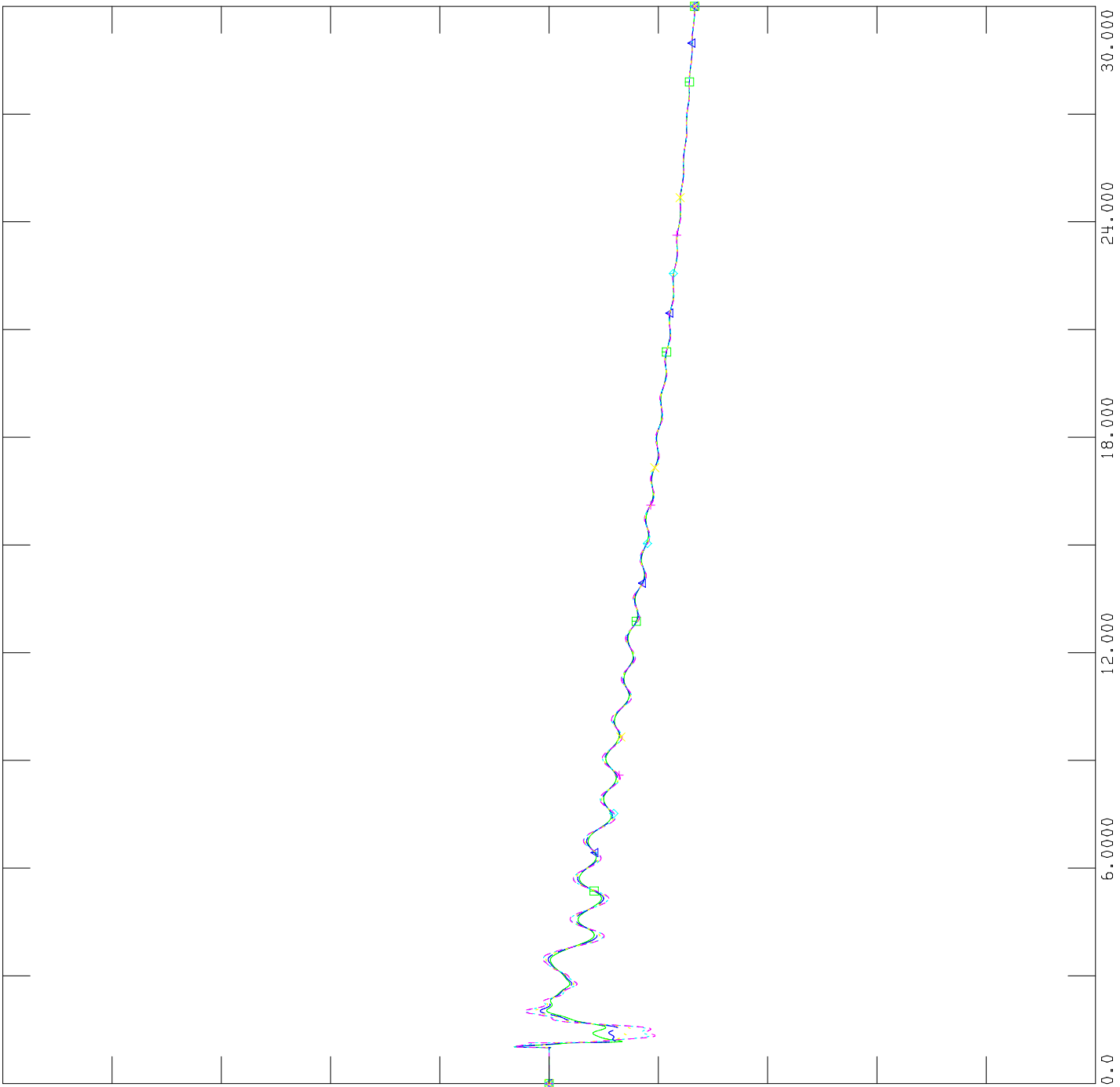
TIME (SECONDS)



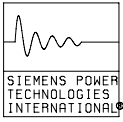
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_171L.out

TUE, NOV 16 2010 11:35
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270	CSUFFIEL7	138.0000	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680	CMEDICIN7	138.0000	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271	CBULLS H7	138.0000	◇-----◇	-0.0067
0.00670	CHNL# 20: CFREQ	269	CBURDETT7	138.0000	←-----△	-0.0067
0.00670	CHNL# 19: CFREQ	31	CFINCAST7	138.0000	□-----□	-0.0067

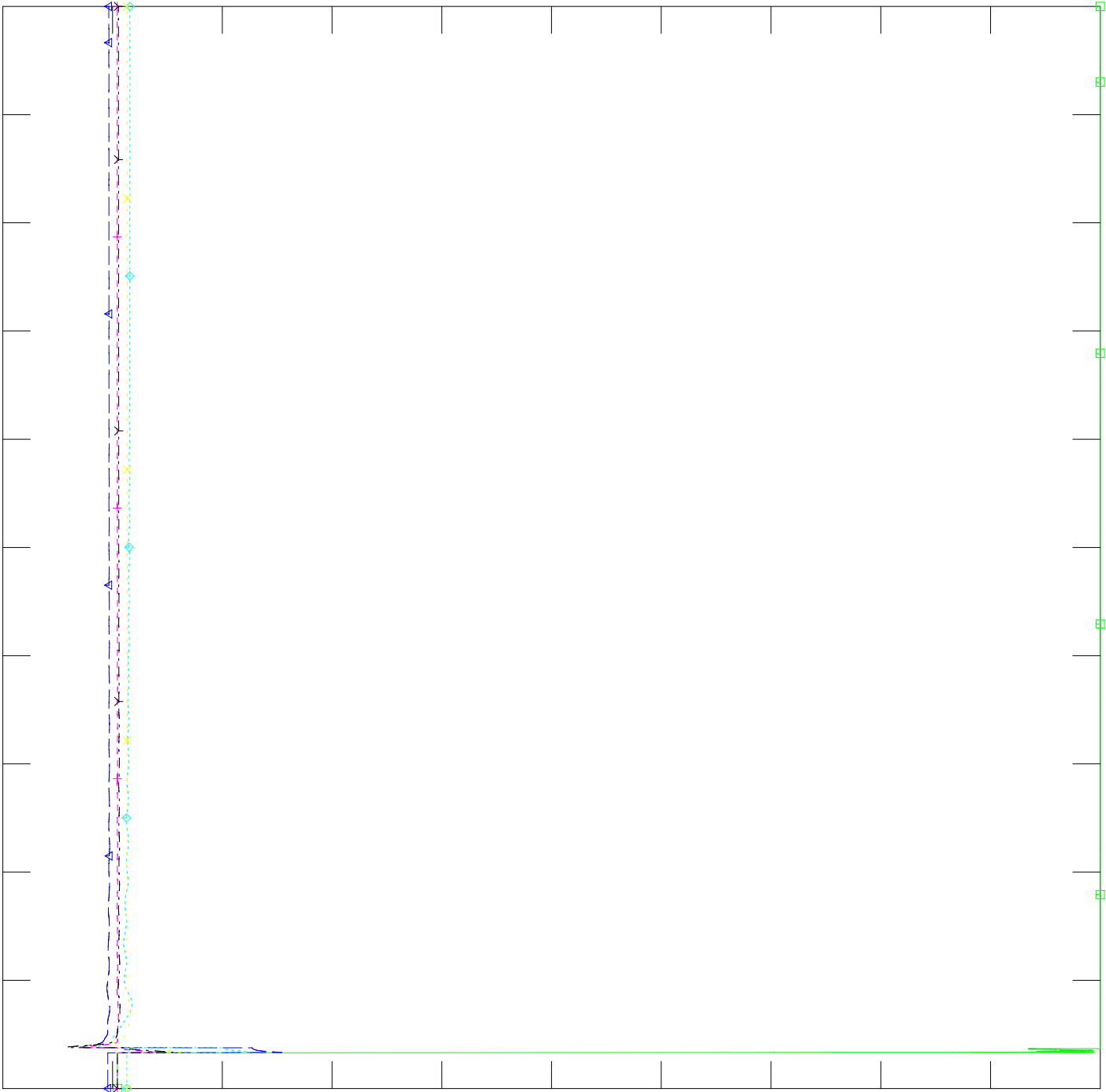


C-2-4



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_171L.out

Channel	Channel ID	Location	Value
CHNL# 29	EVOLT 92046	EMCBRIDE6	0.5750
CHNL# 28	EVOLT 11002	EGARDNG2	0.5750
CHNL# 27	EVOLT 4740	CARD_07	0.5750
CHNL# 26	EVOLT 2389	CHILLRIDG	0.5750
CHNL# 25	EVOLT 100018	CPURPLESP	0.5750
CHNL# 24	EVOLT 2294	CTOTHILL2	0.6900

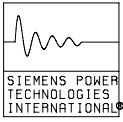


TUE, NOV 16 2010 11:35

C-2-5

TIME (SECONDS)

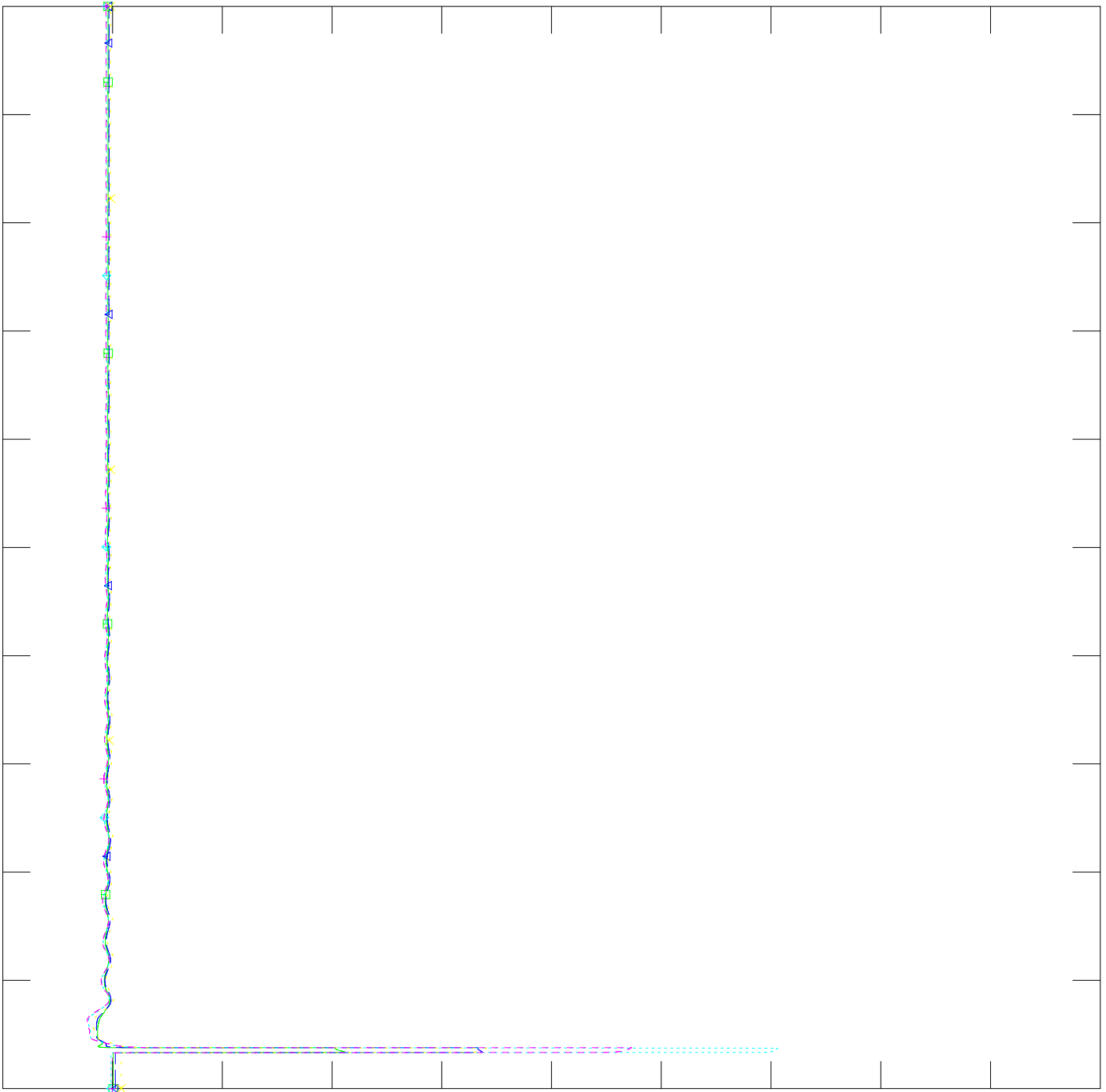
BUS VOLTAGE



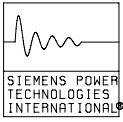
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TUE, NOV 16 2010 11:36
BUS VOLTAGE

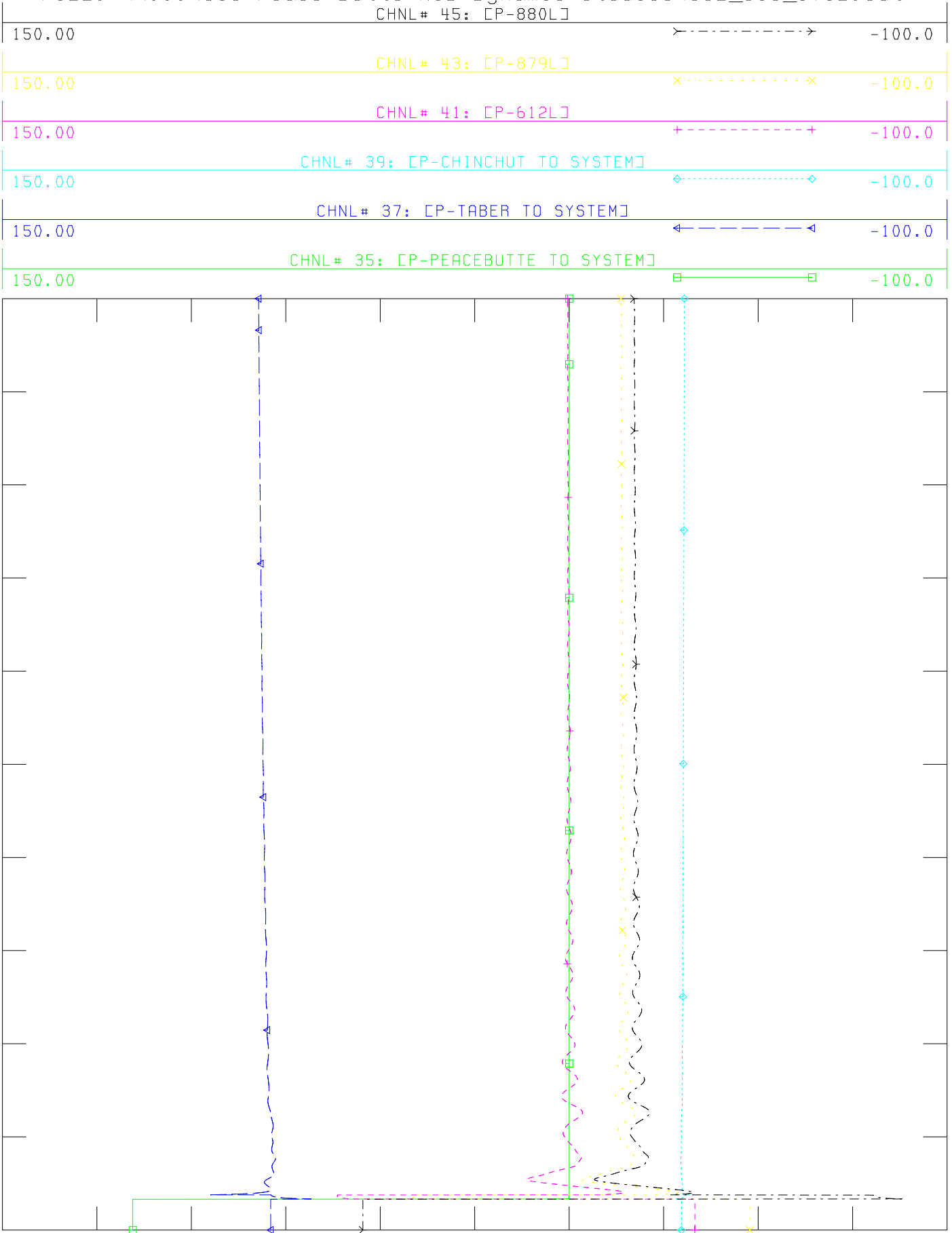
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



C-2-6



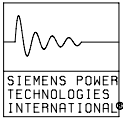
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_171L.out
CHNL# 45: CP-880L]



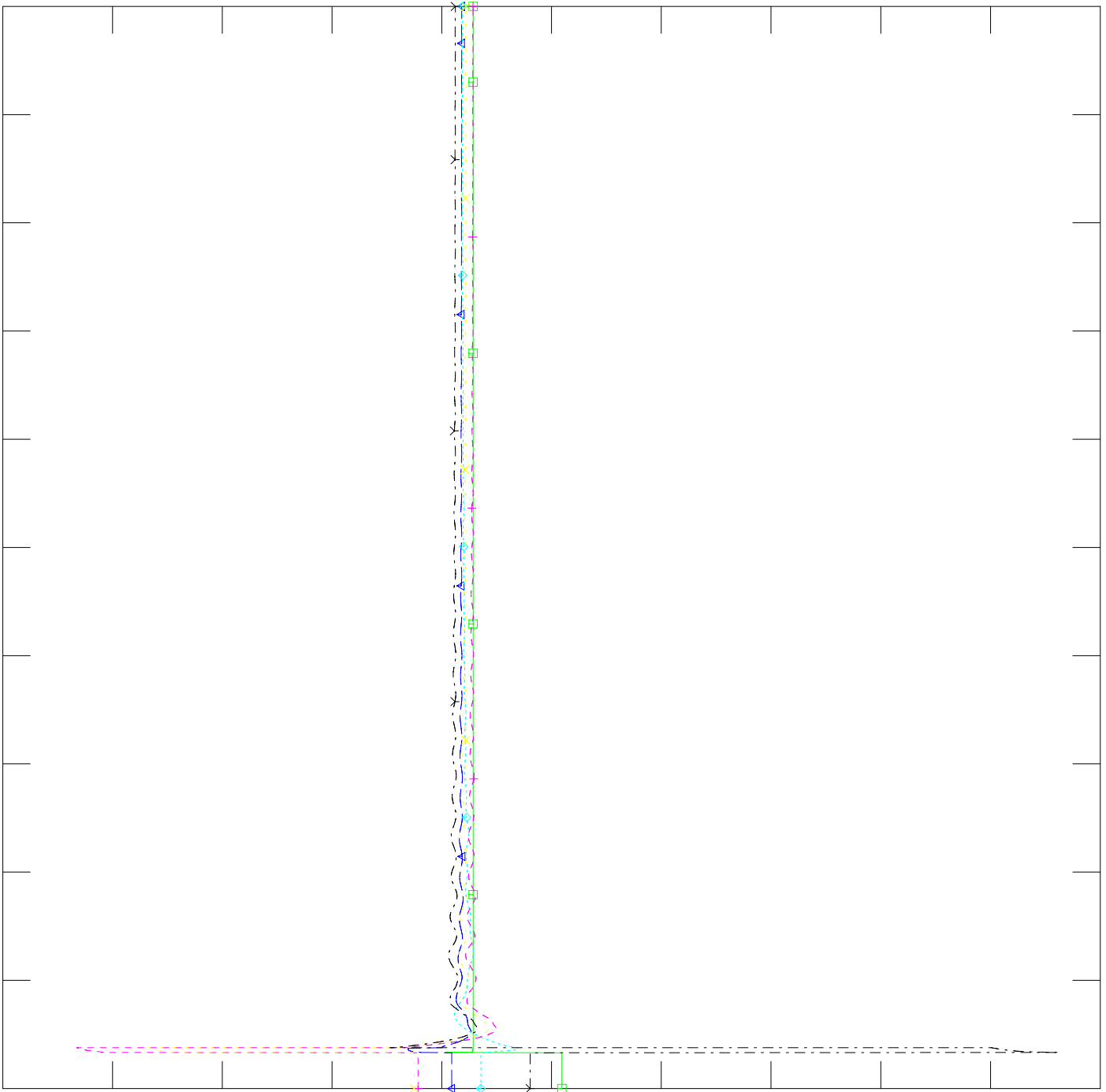
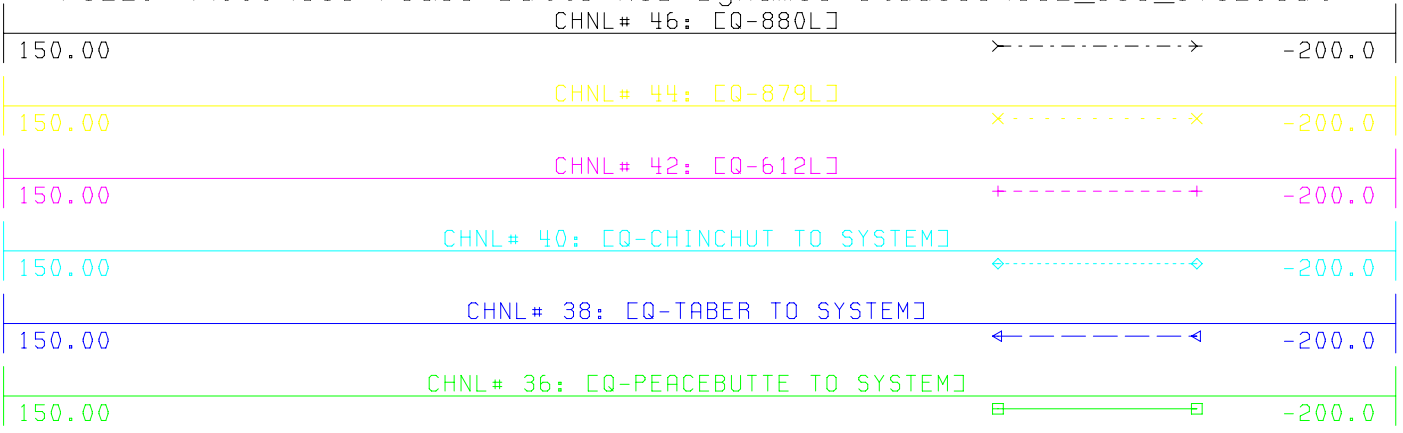
TUE, NOV 16 2010 11:37
BRANCH ACTIVE POWER

C-2-7

TIME (SECONDS)



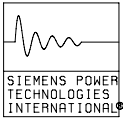
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_171L.out
CHNL# 46: [Q-880L]



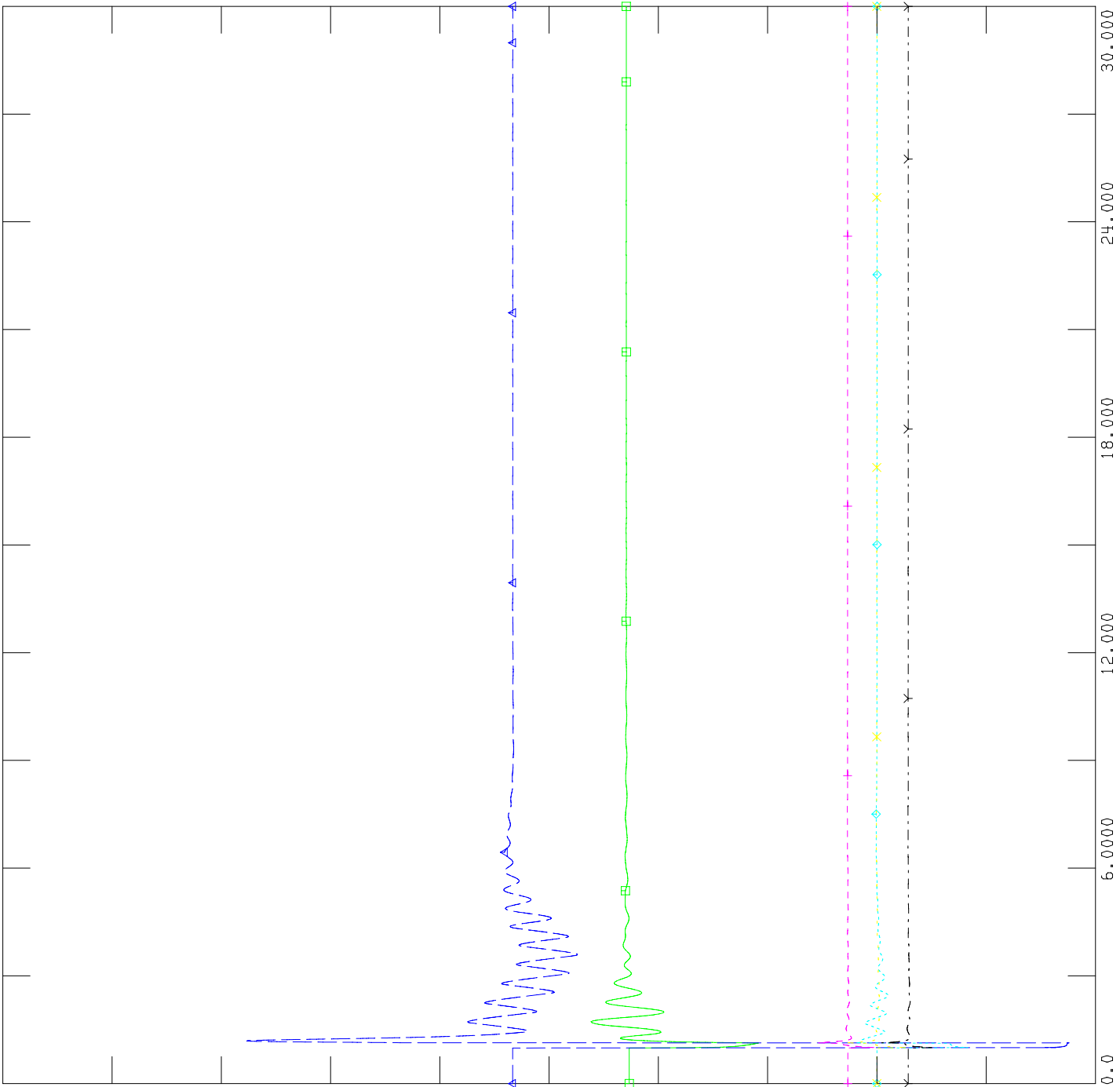
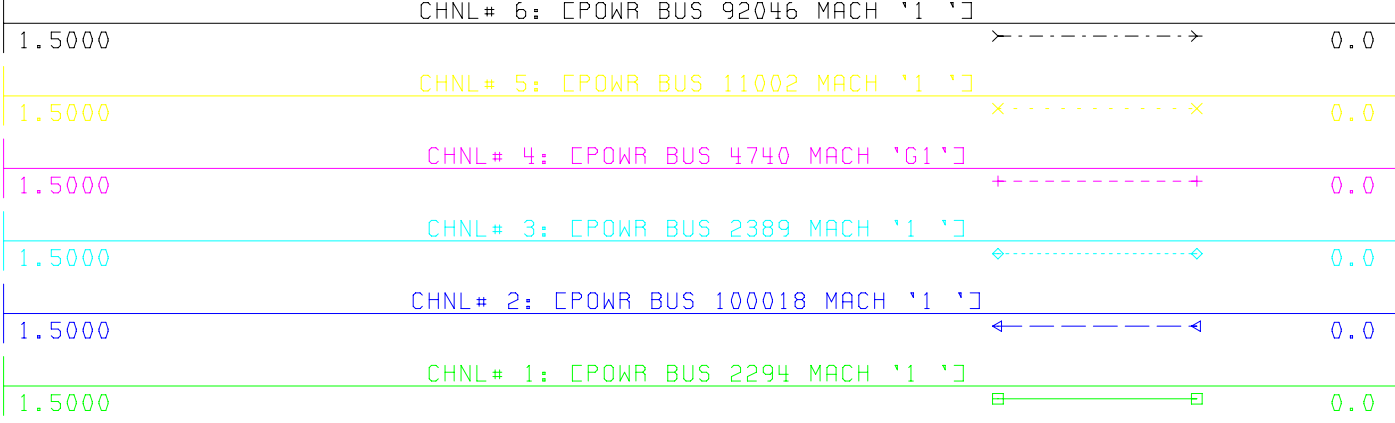
TUE, NOV 16 2010 11:38
BRANCH REACTIVE POWER

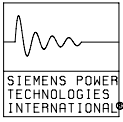
C-2-8

TIME (SECONDS)

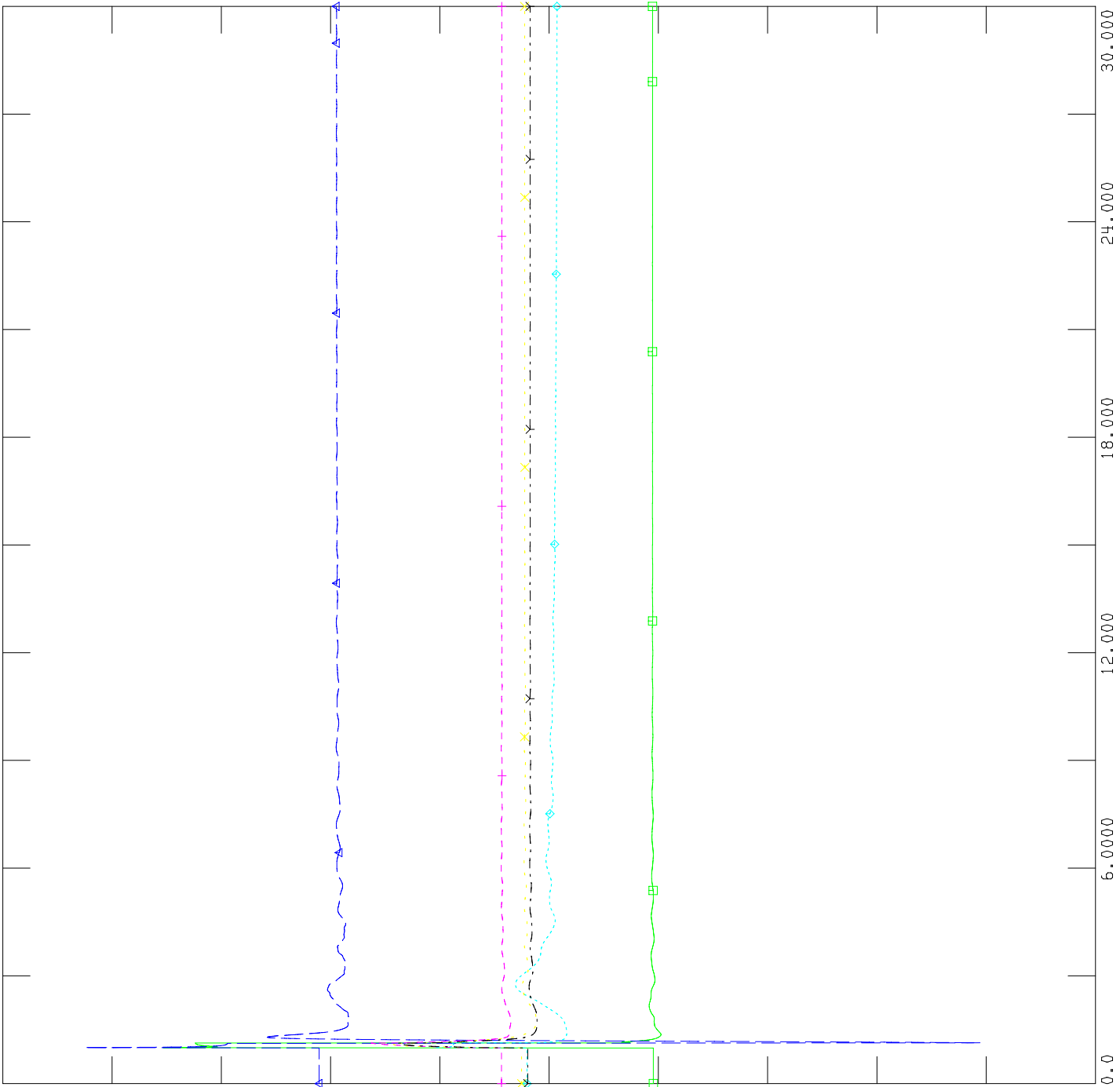
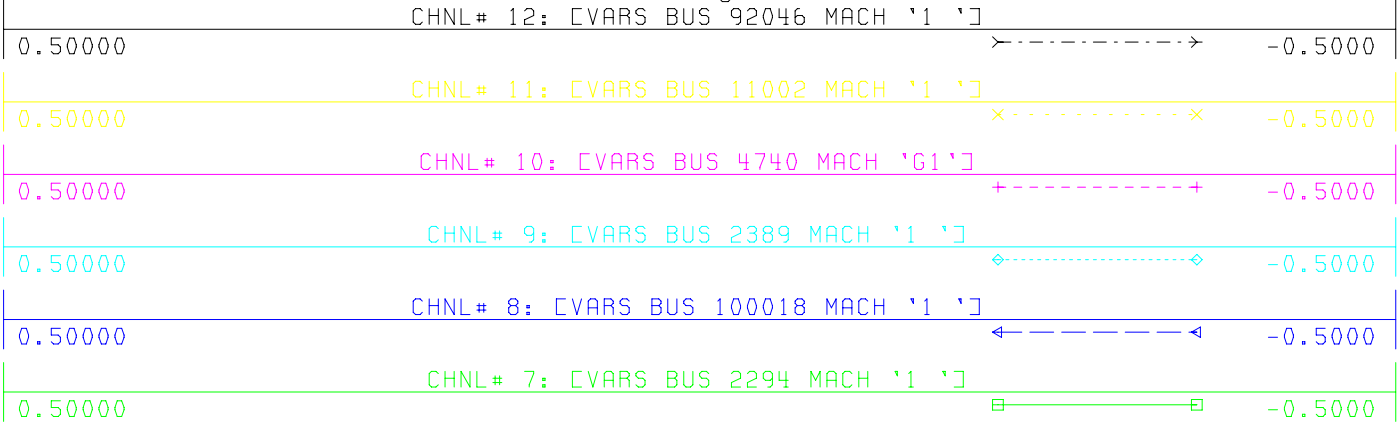


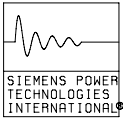
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_612L.out





FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_612L.out

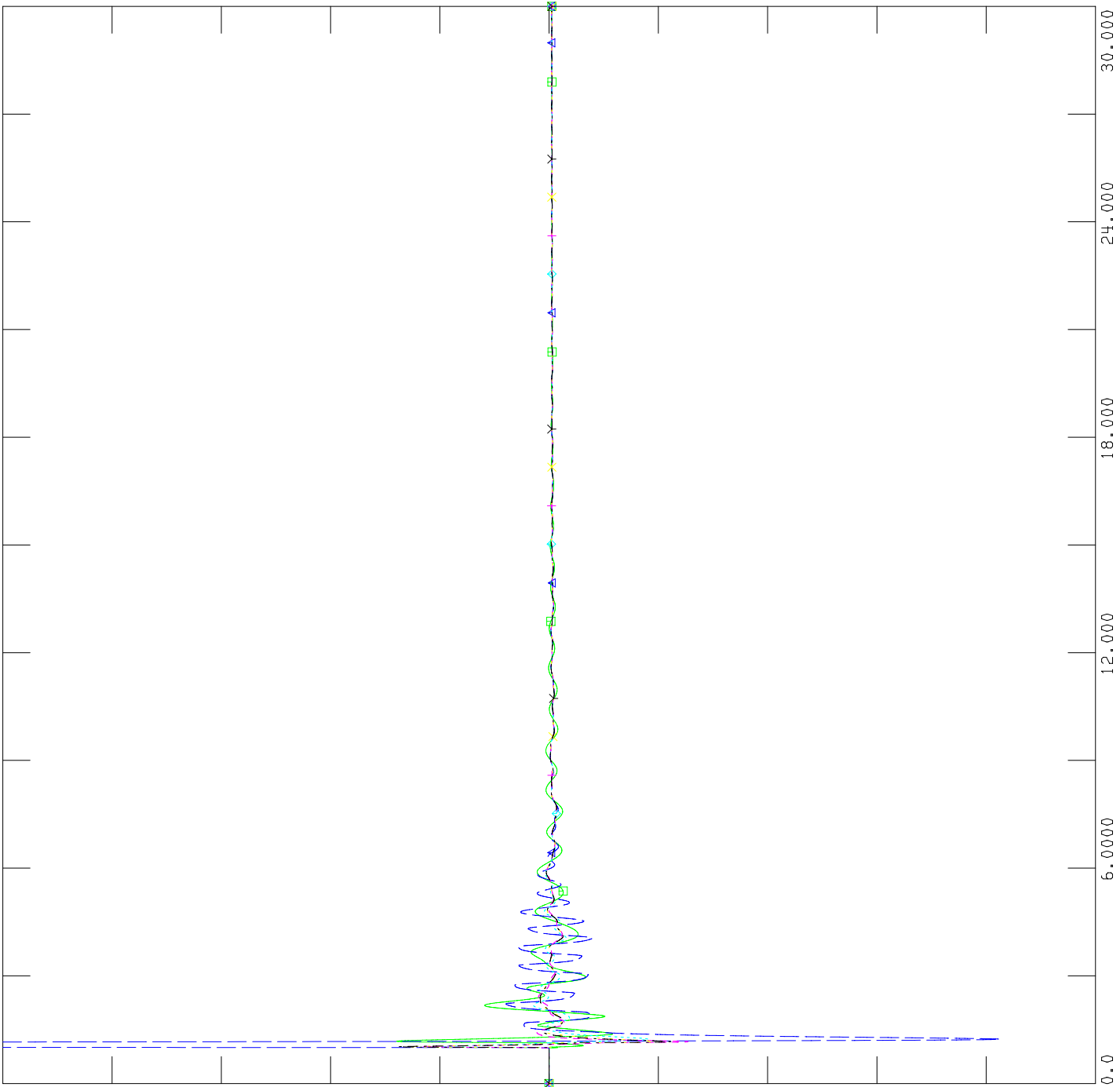




TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
 SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

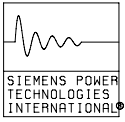
FILE: \\... \513 Peace Butte NID Dynamic Studies\SC2_513_612L.out

0.00670	CHNL# 18: CFREQ 92046 EMCBRIDE6 0.5750	-0.0067
0.00670	CHNL# 17: CFREQ 11002 EGARDNG2 0.5750	-0.0067
0.00670	CHNL# 16: CFREQ 4740 CARD_07 0.5750	-0.0067
0.00670	CHNL# 15: CFREQ 2389 CHILLRIDG 0.5750	-0.0067
0.00670	CHNL# 14: CFREQ 100018 CPURPLESP 0.5750	-0.0067
0.00670	CHNL# 13: CFREQ 2294 CTOHILL2 0.6900	-0.0067



TUE, NOV 16 2010 11:43
 BUS FREQUENCY

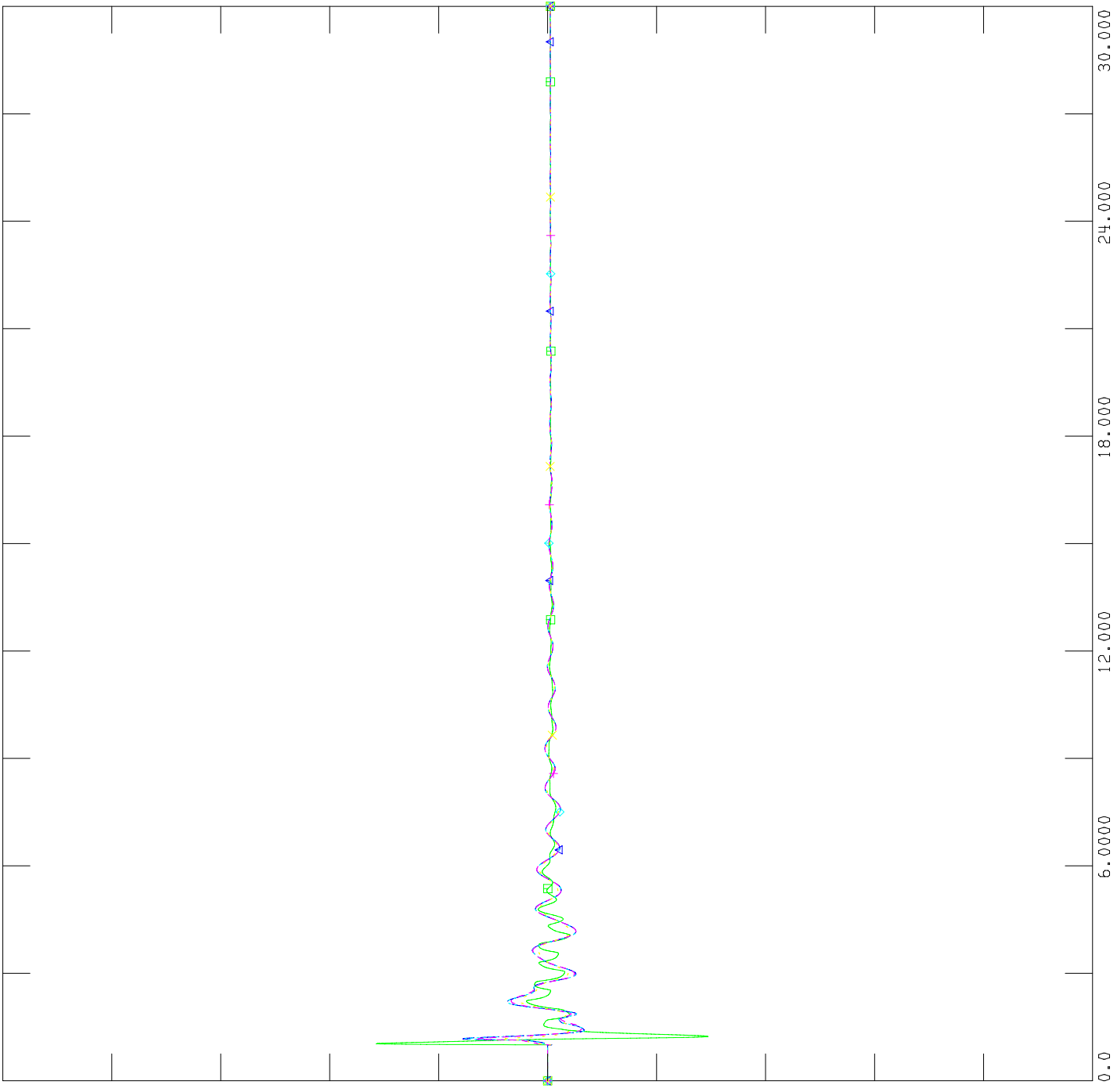
C-2-11



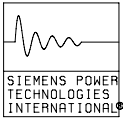
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_612L.out

TUE, NOV 16 2010 11:43
BUS FREQUENCY

Channel	CFREQ	Location	Value
CHNL# 23	CFREQ	270 ESUFFIEL7	138.00
CHNL# 22	CFREQ	680 CMEDICIN7	138.00
CHNL# 21	CFREQ	271 CBULLS H7	138.00
CHNL# 20	CFREQ	269 CBURDETT7	138.00
CHNL# 19	CFREQ	31 CFINCAST7	138.00

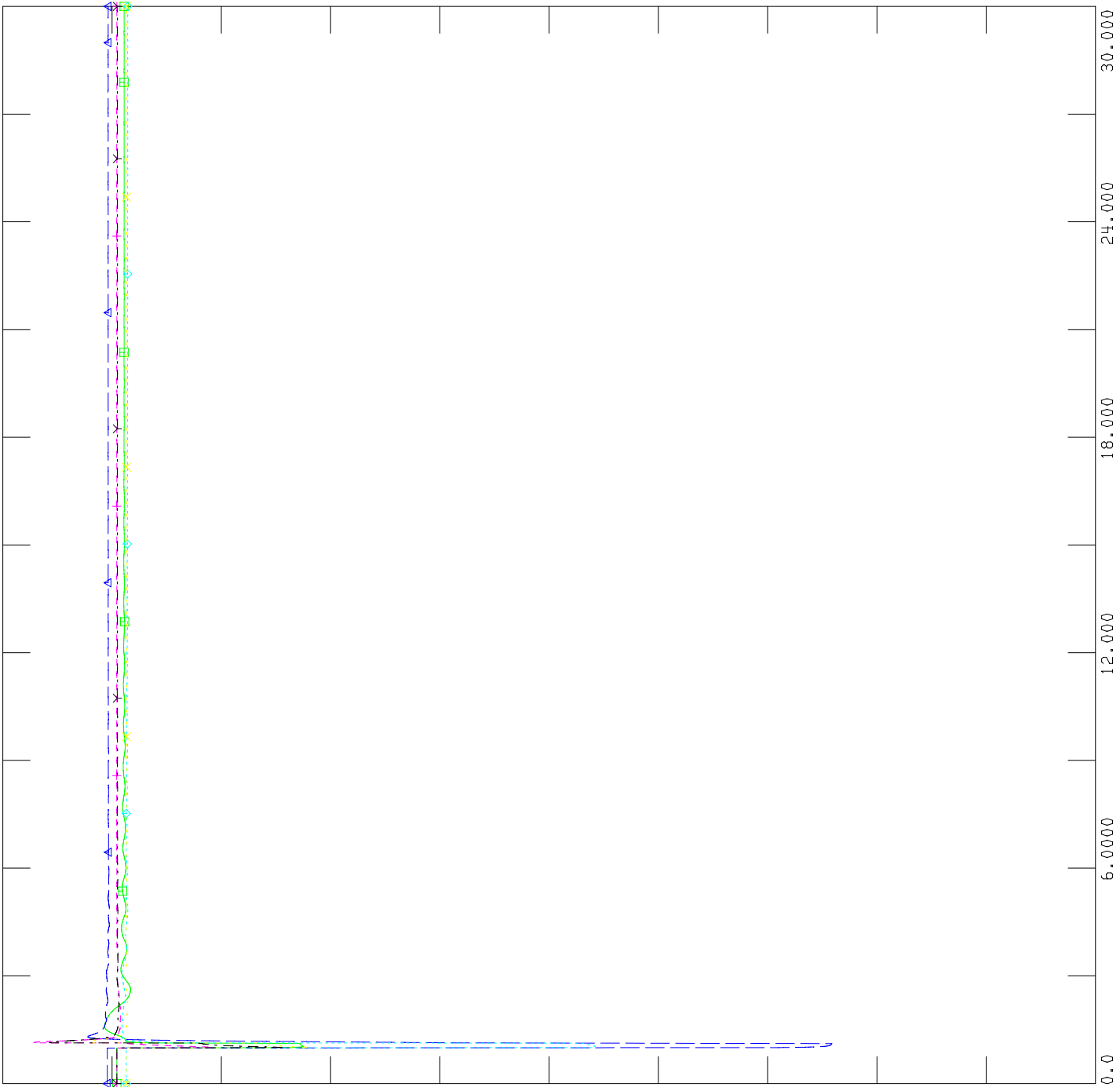


C-2-12



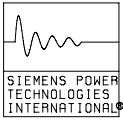
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_612L.out

1.1500	CHNL# 29: EVOLT	92046	EMCBRIDE6	0.5750	0.0
1.1500	CHNL# 28: EVOLT	11002	EGARDNG2	0.5750	0.0
1.1500	CHNL# 27: EVOLT	4740	CARD_07	0.5750	0.0
1.1500	CHNL# 26: EVOLT	2389	CHILLRIDG	0.5750	0.0
1.1500	CHNL# 25: EVOLT	100018	CPURPLESP	0.5750	0.0
1.1500	CHNL# 24: EVOLT	2294	CTOTHILL2	0.6900	0.0



TUE, NOV 16 2010 11:44
 BUS VOLTAGE

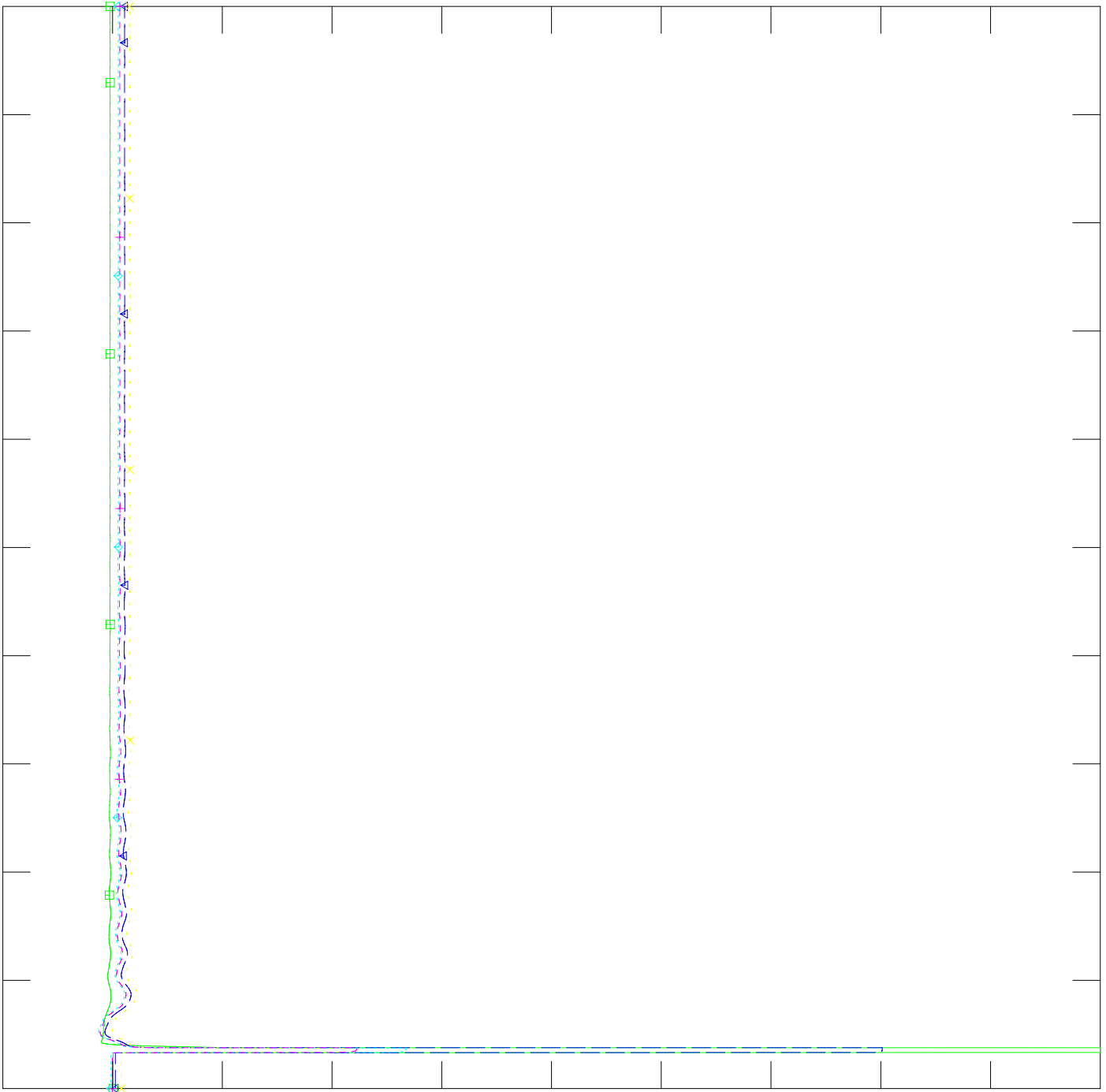
C-2-13



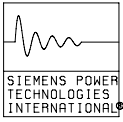
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_612L.out

TUE, NOV 16 2010 11:45
BUS VOLTAGE

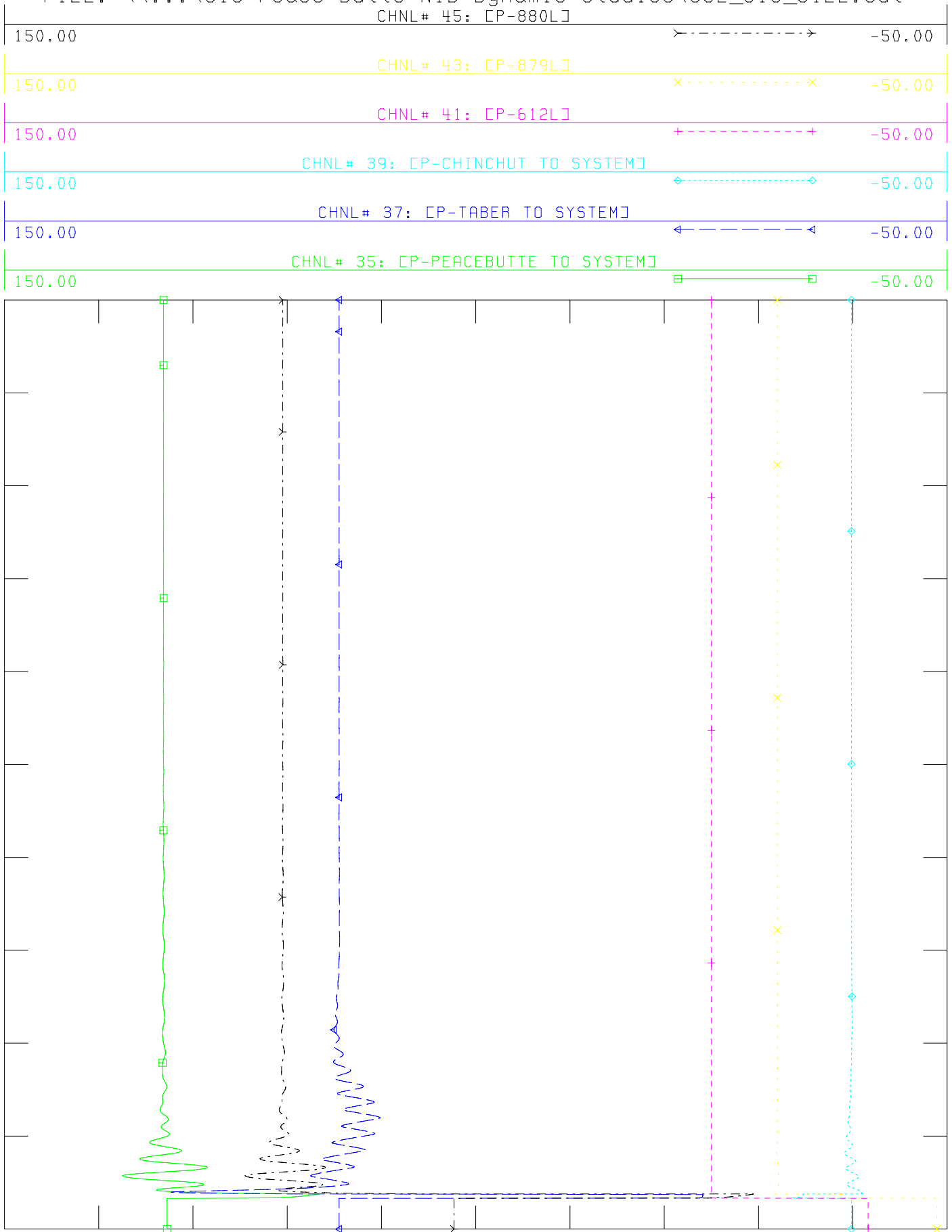
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]

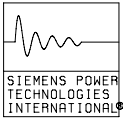


C-2-14

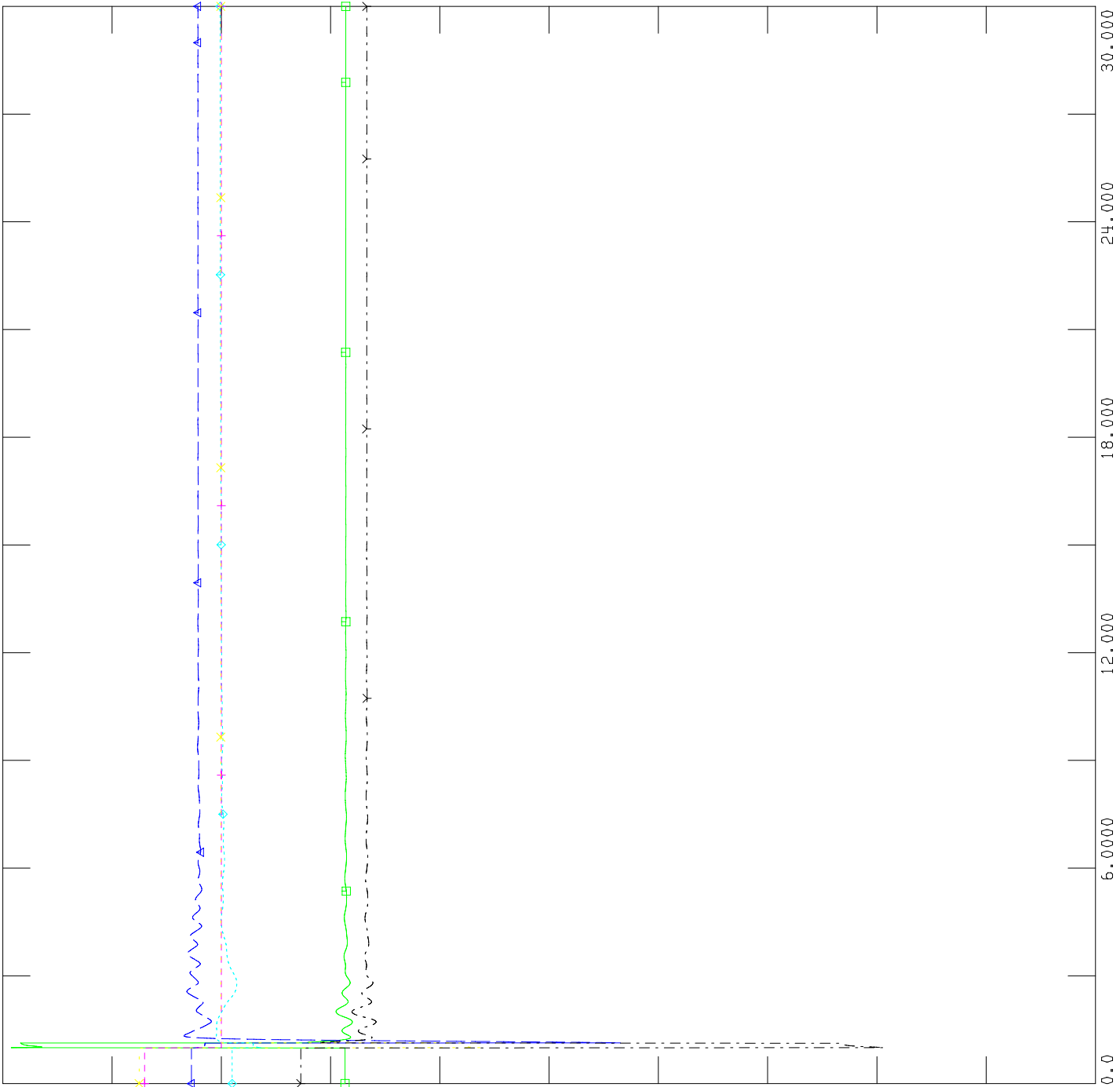
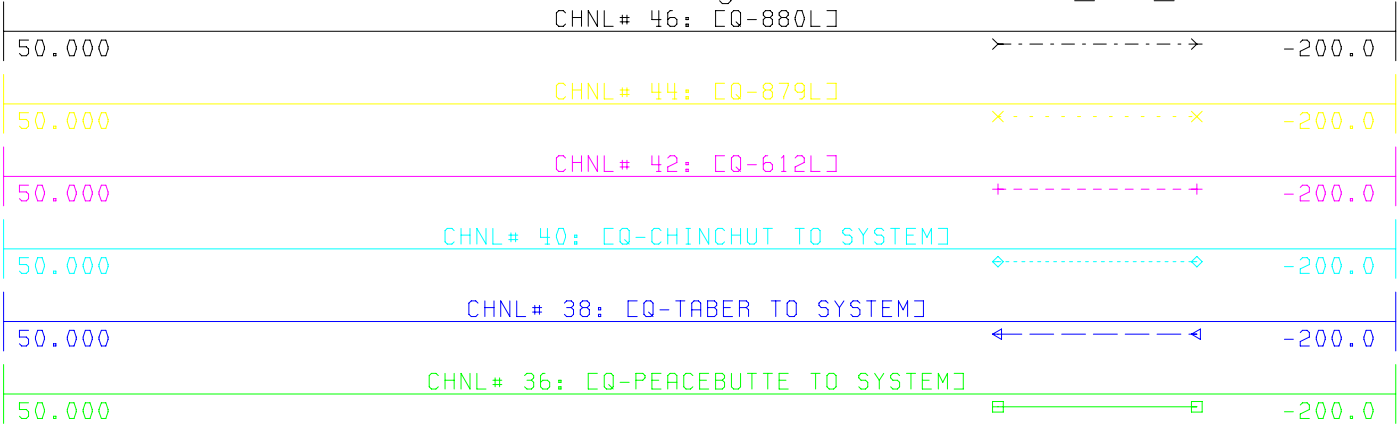


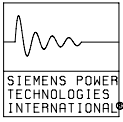
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_612L.out
CHNL# 45: [P-880L]



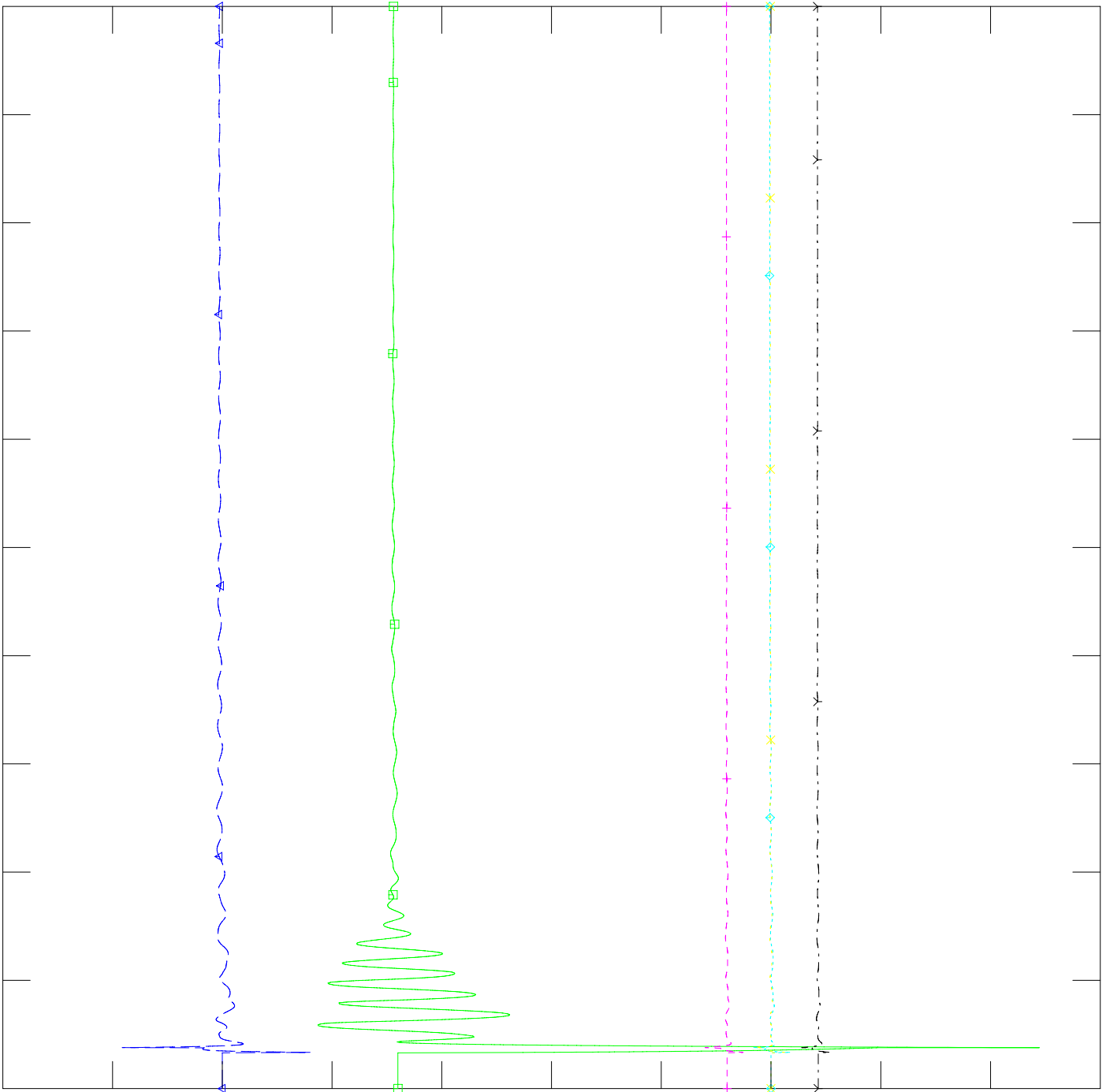
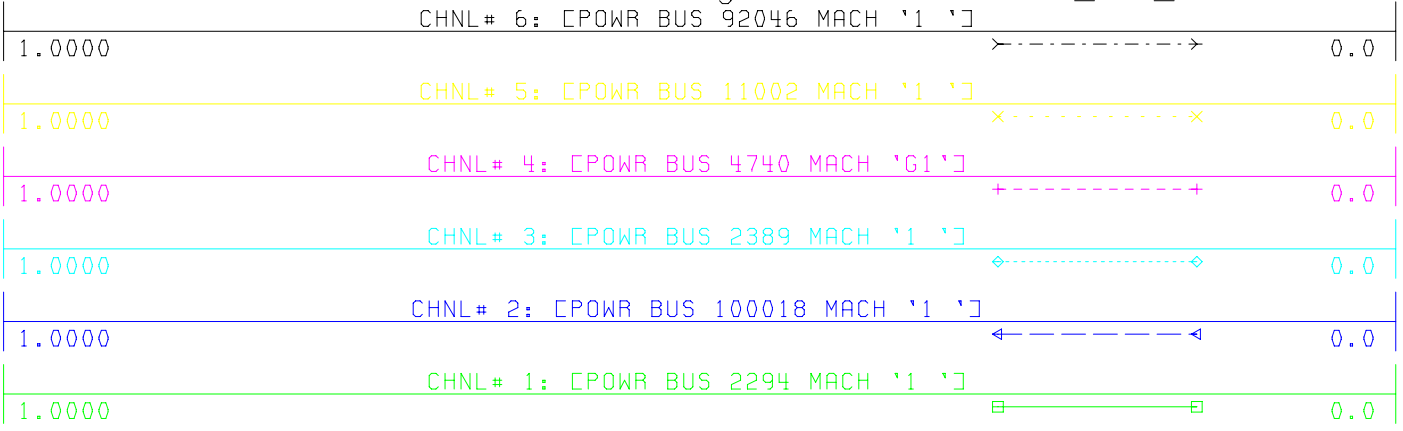


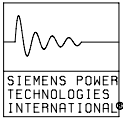
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CHNL# 46: [Q-880L]



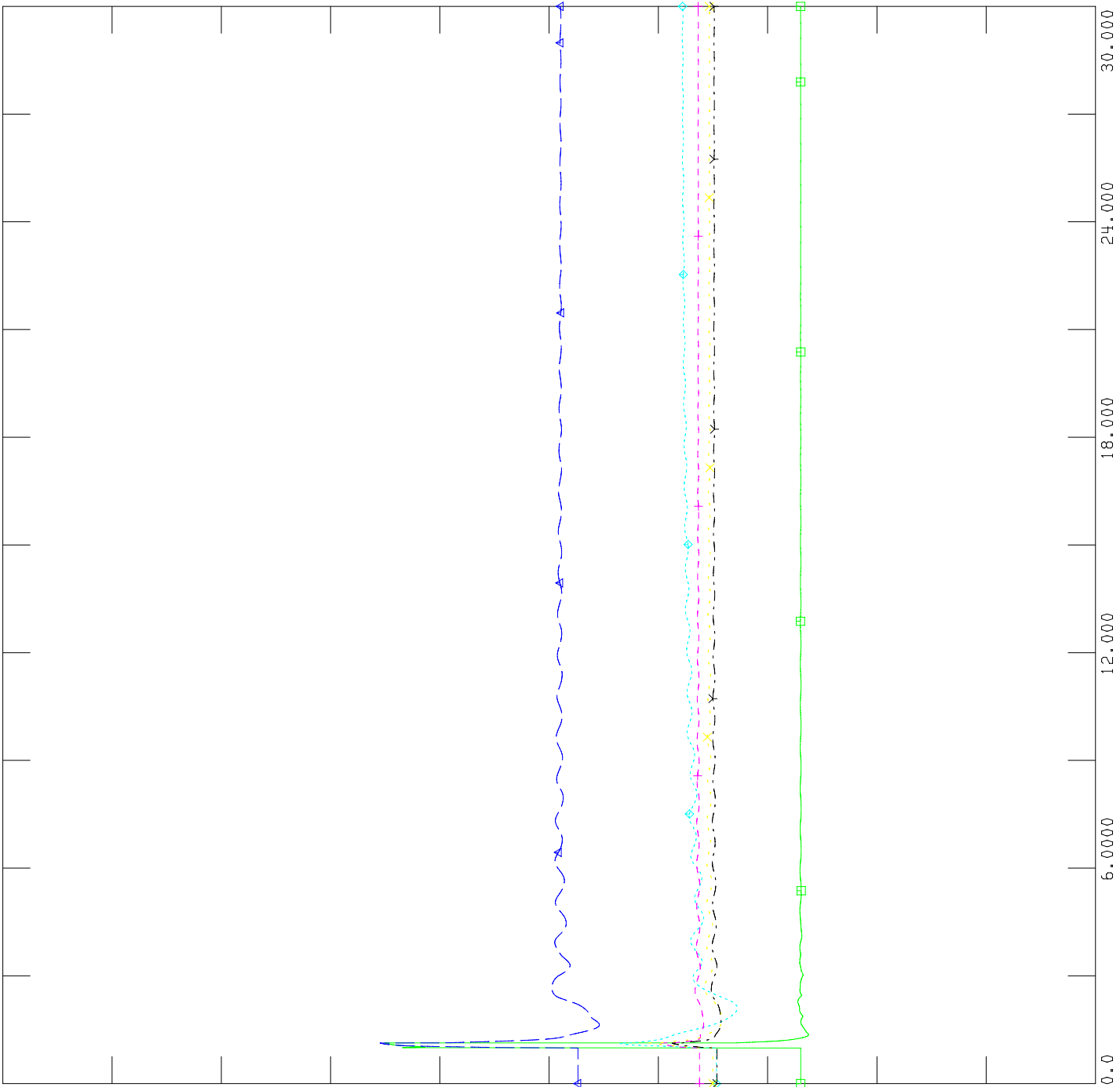
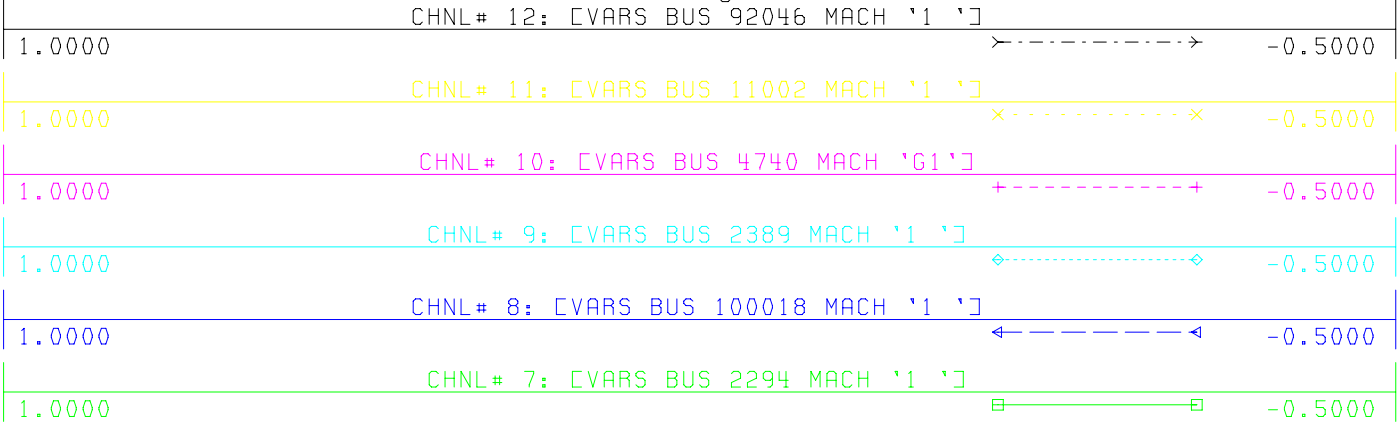


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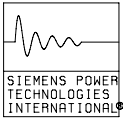


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_760L.out



TUE, NOV 16 2010 13:17
QELEC

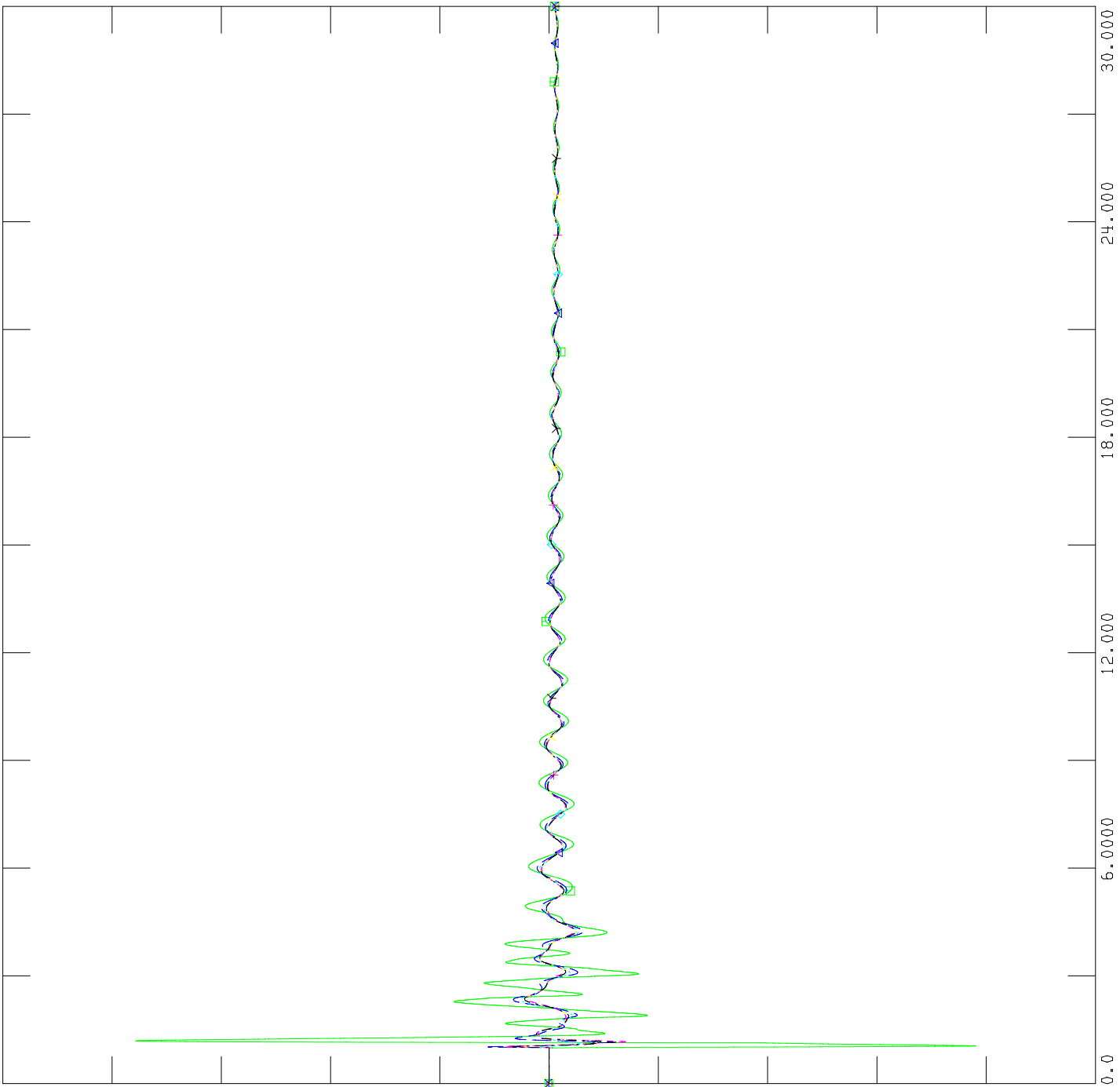
C-2-18



TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_760L.out

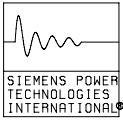
Channel	CFREQ	Component	Value
CHNL# 18	92046	EMCBRIDE6	0.5750
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	0.5750
CHNL# 15	2389	CHILLRIDG	0.5750
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900



TUE, NOV 16 2010 13:18
BUS FREQUENCY

C-2-19

TIME (SECONDS)

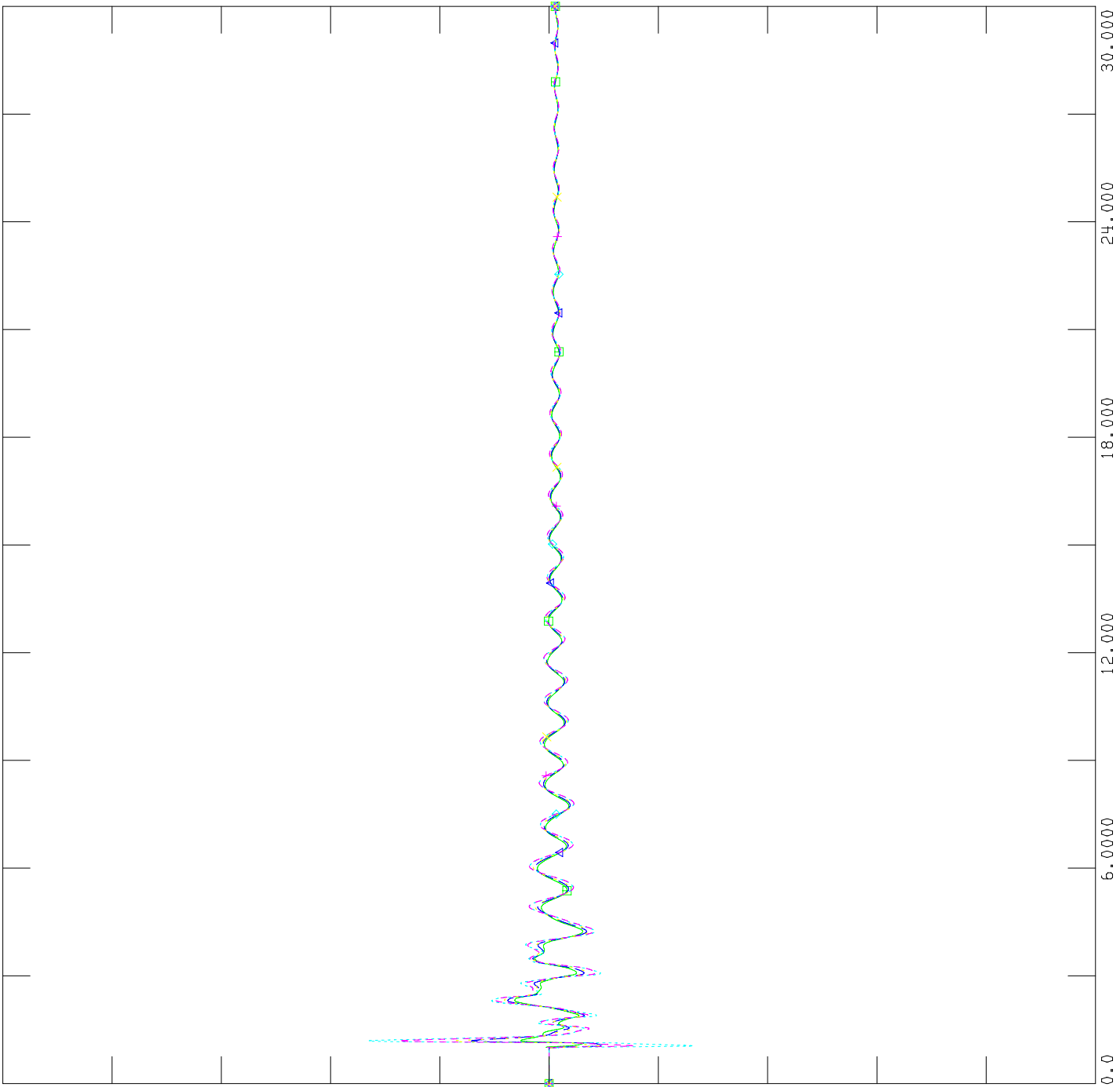


TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

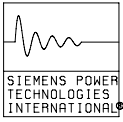
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_760L.out

TUE, NOV 16 2010 13:19
BUS FREQUENCY

CHNL#	CFREQ	Location	Value
23	270	ESUFFIEL7	138.00
22	680	EMEDICIN7	138.00
21	271	EBULLS H7	138.00
20	269	EBURDETT7	138.00
19	31	CFINCAST7	138.00

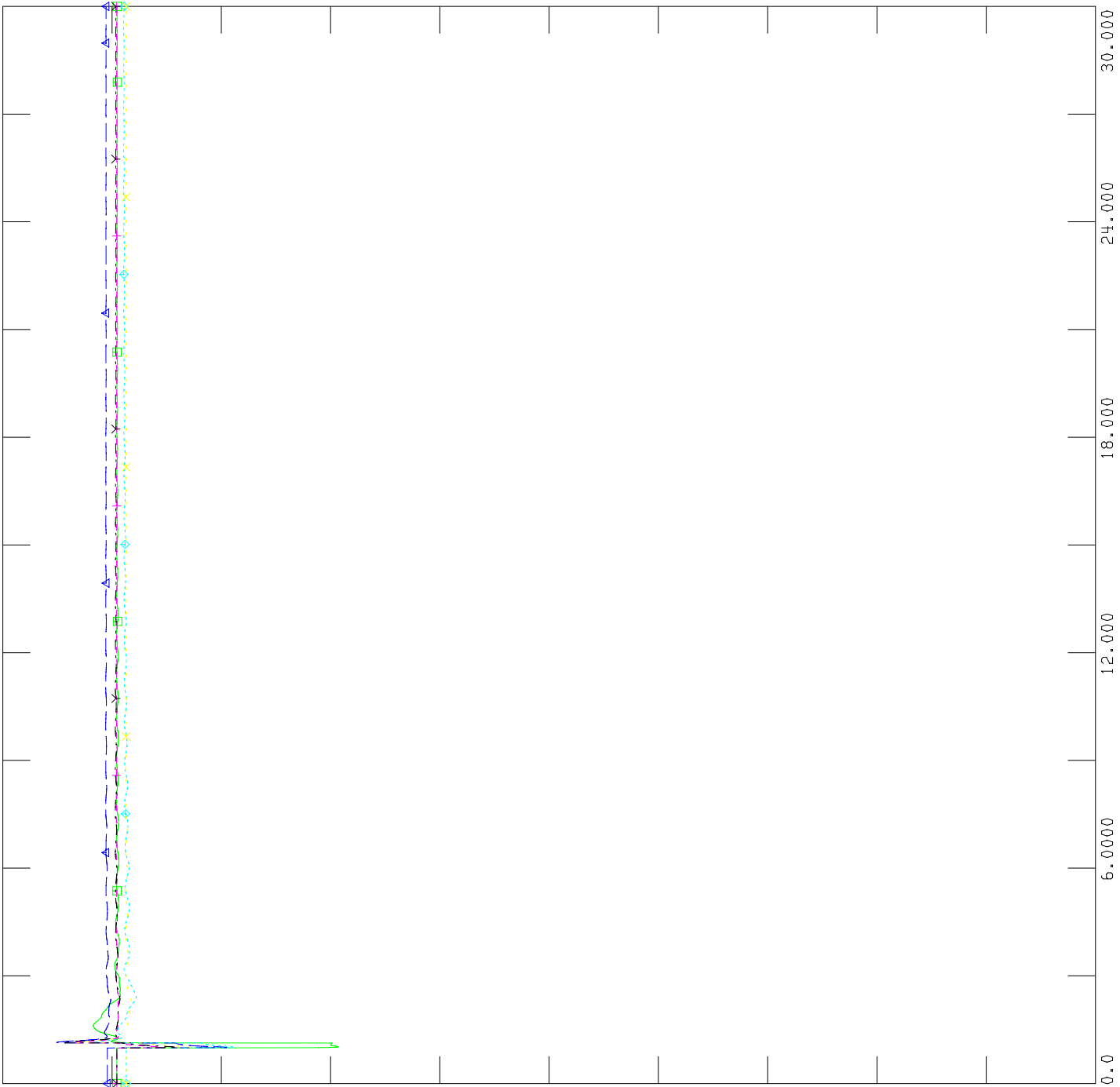


C-2-20



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_760L.out

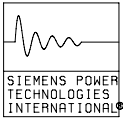
1.1500	CHNL# 29: EVOLT	92046	CMCBRIDE6	0.5750	0.0
1.1500	CHNL# 28: EVOLT	11002	EGARDNG2	0.5750	0.0
1.1500	CHNL# 27: EVOLT	4740	CARD_07	0.5750	0.0
1.1500	CHNL# 26: EVOLT	2389	CHILLRIDG	0.5750	0.0
1.1500	CHNL# 25: EVOLT	100018	CPURPLESP	0.5750	0.0
1.1500	CHNL# 24: EVOLT	2294	CTOTHILL2	0.6900	0.0



TUE, NOV 16 2010 13:20
 BUS VOLTAGE

C-2-21

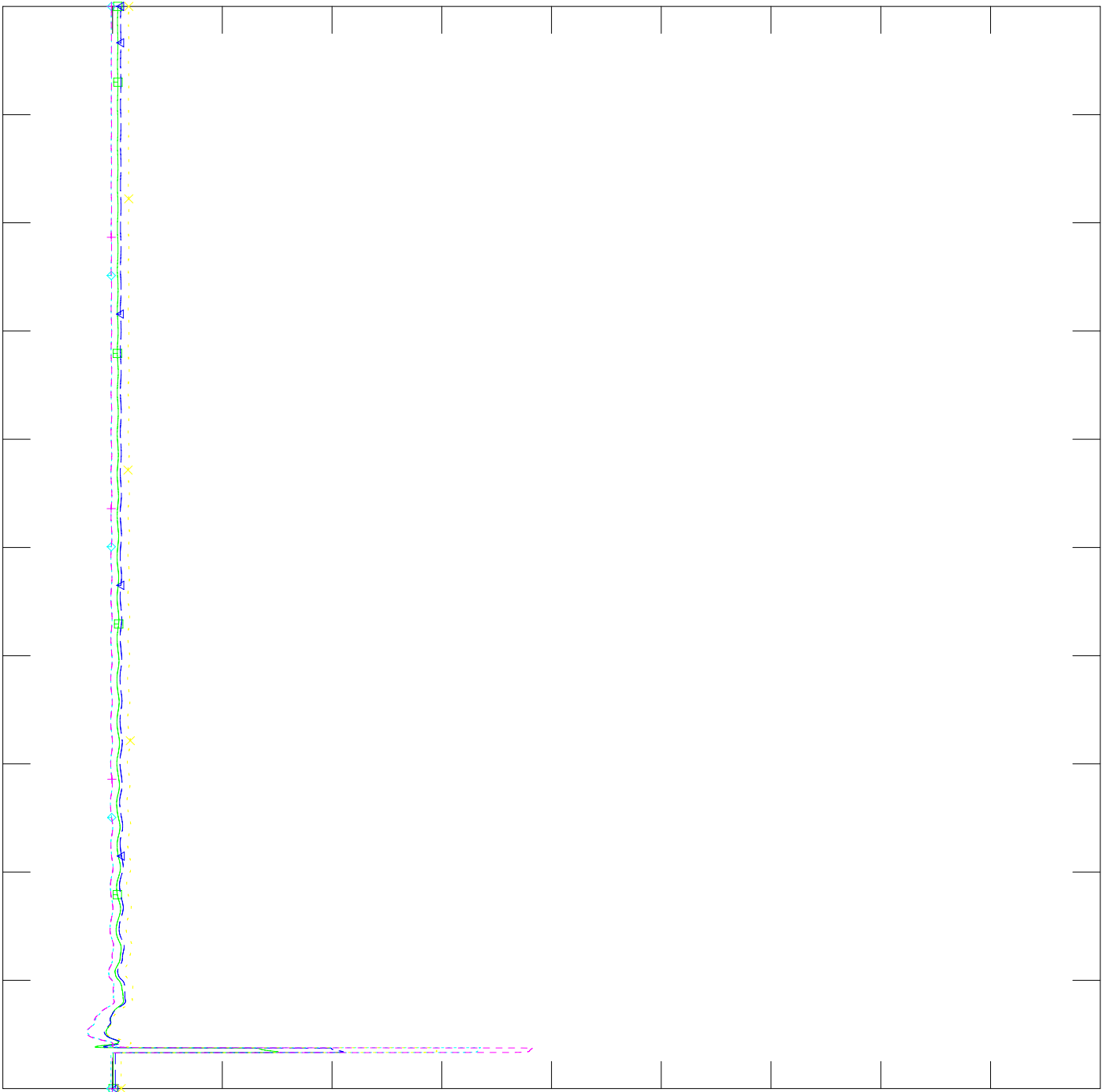
TIME (SECONDS)



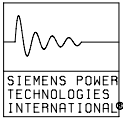
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_760L.out

TUE, NOV 16 2010 13:21
BUS VOLTAGE

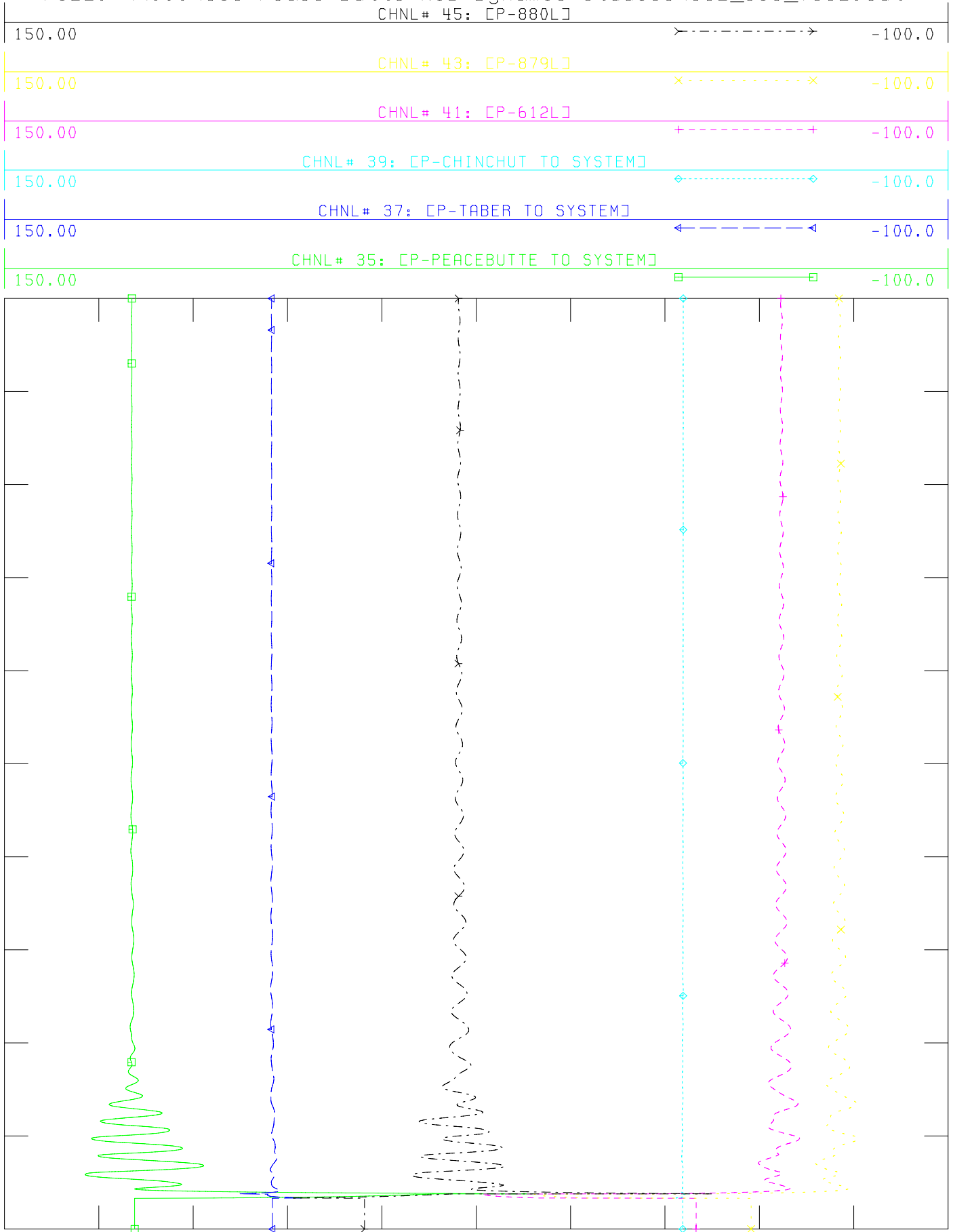
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



C-2-22



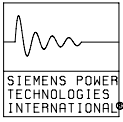
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_760L.out
CHNL# 45: [P-880L]



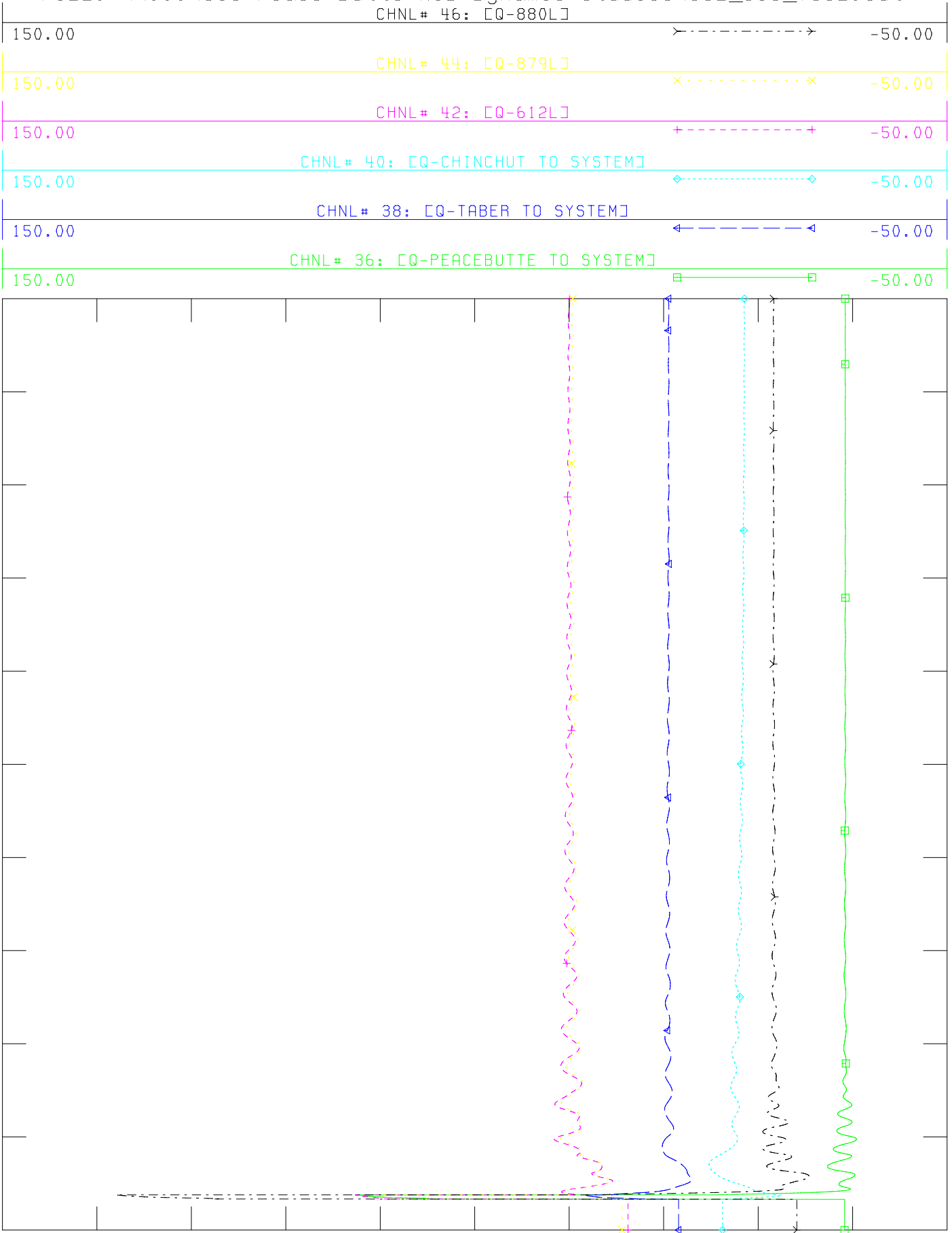
TUE, NOV 16 2010 13:22
BRANCH ACTIVE POWER

C-2-23

TIME (SECONDS)

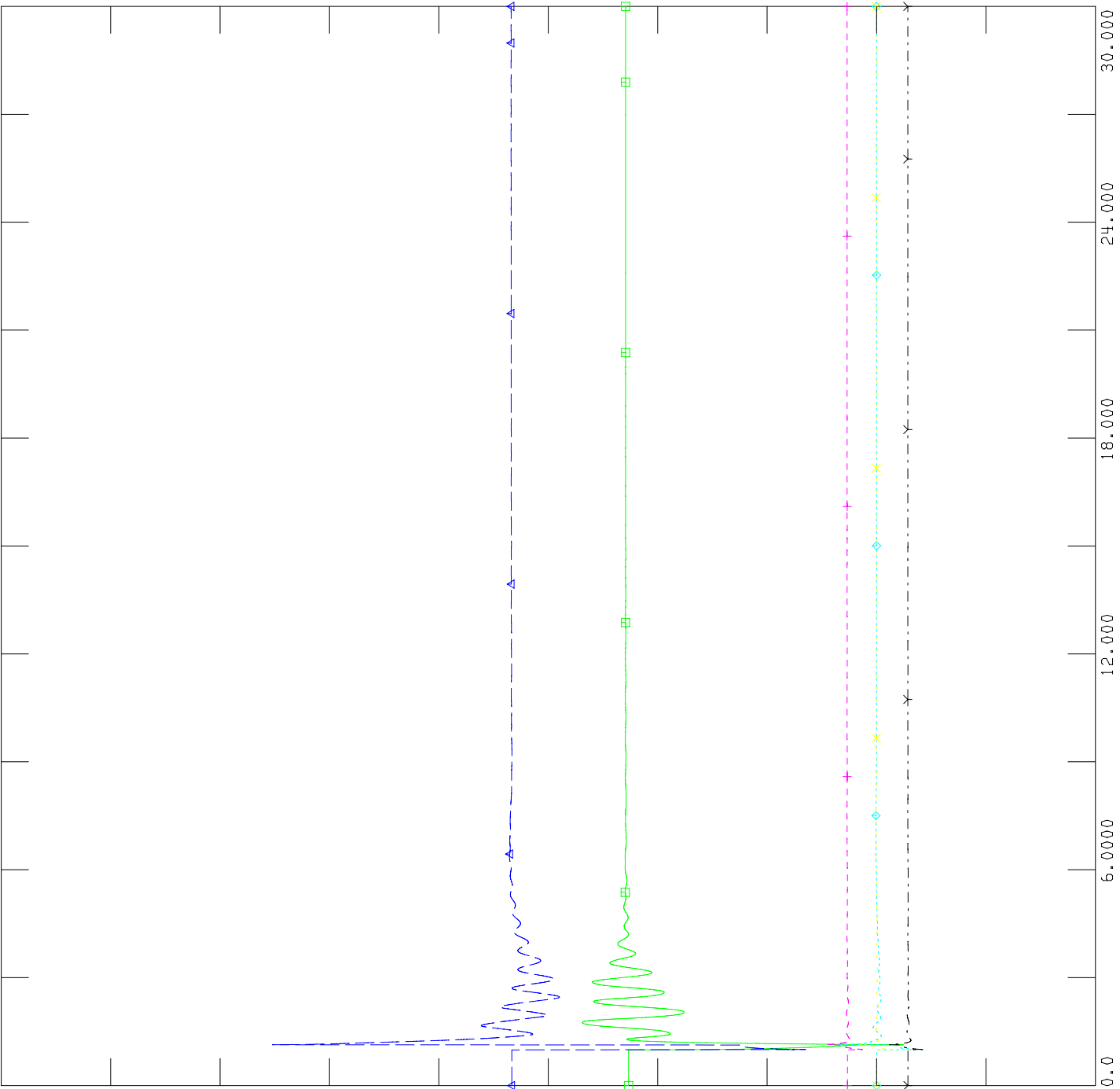
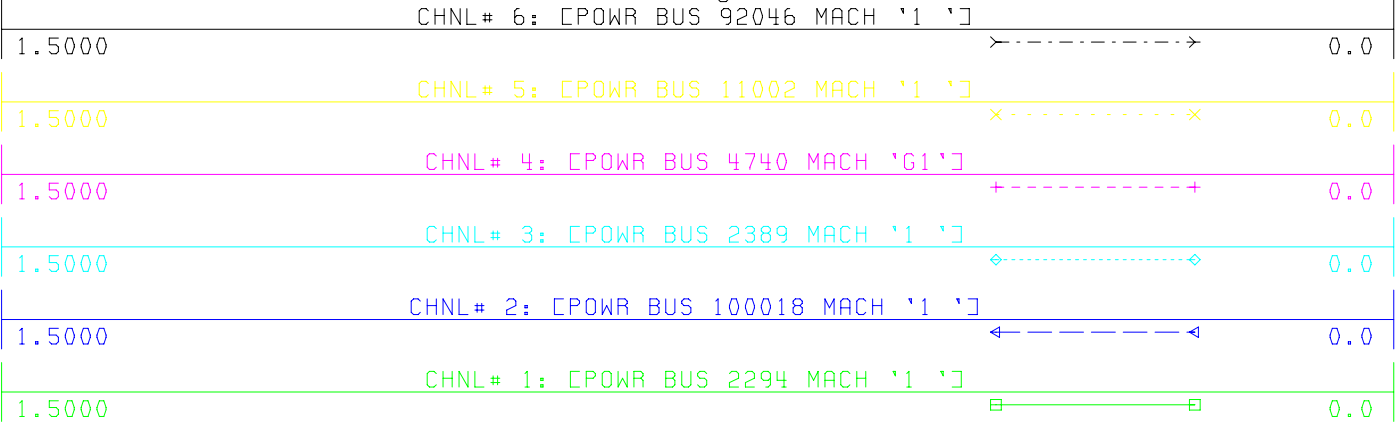


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_760L.out
CHNL# 46: [Q-880L]





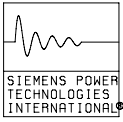
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_879L.out



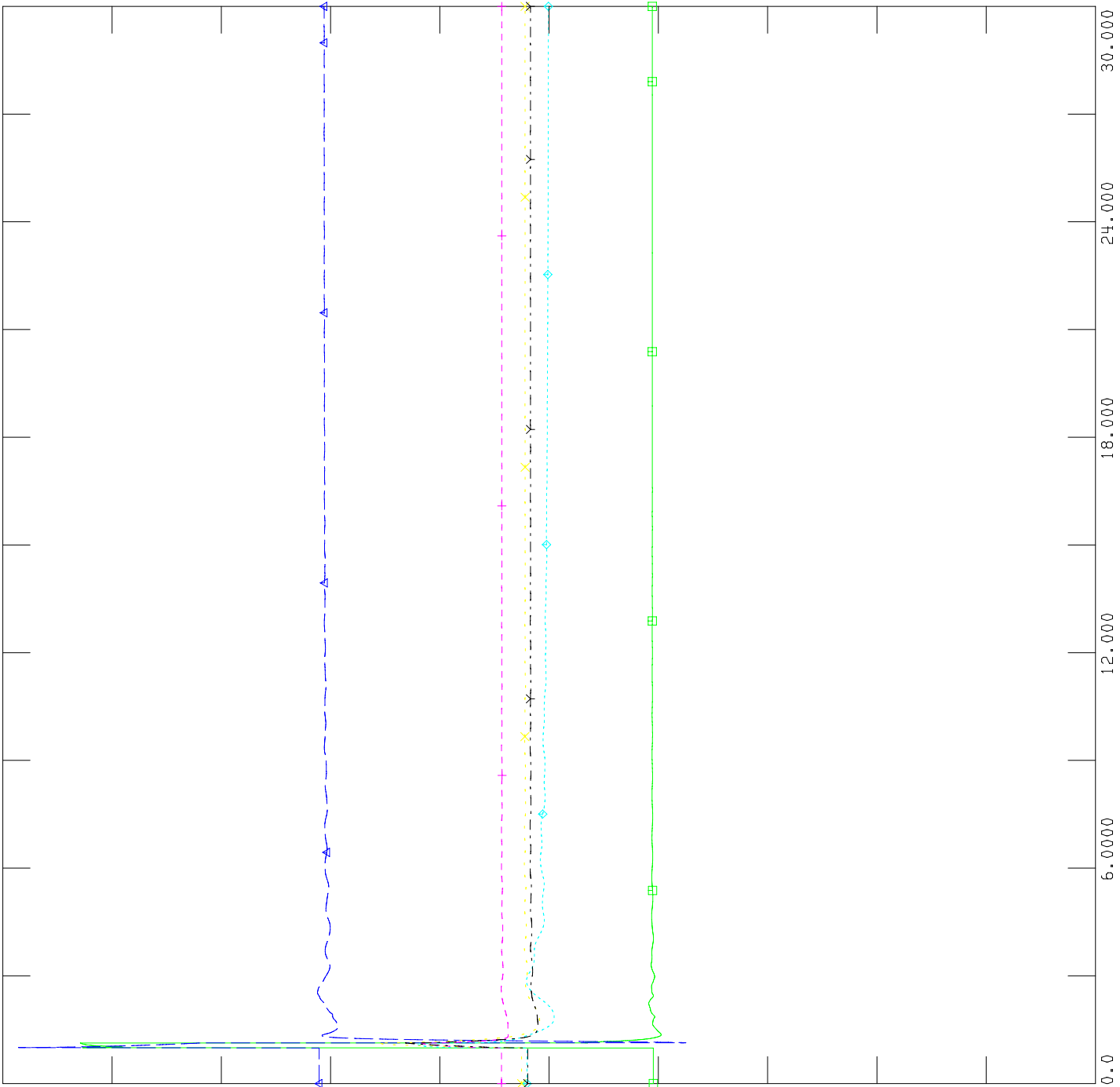
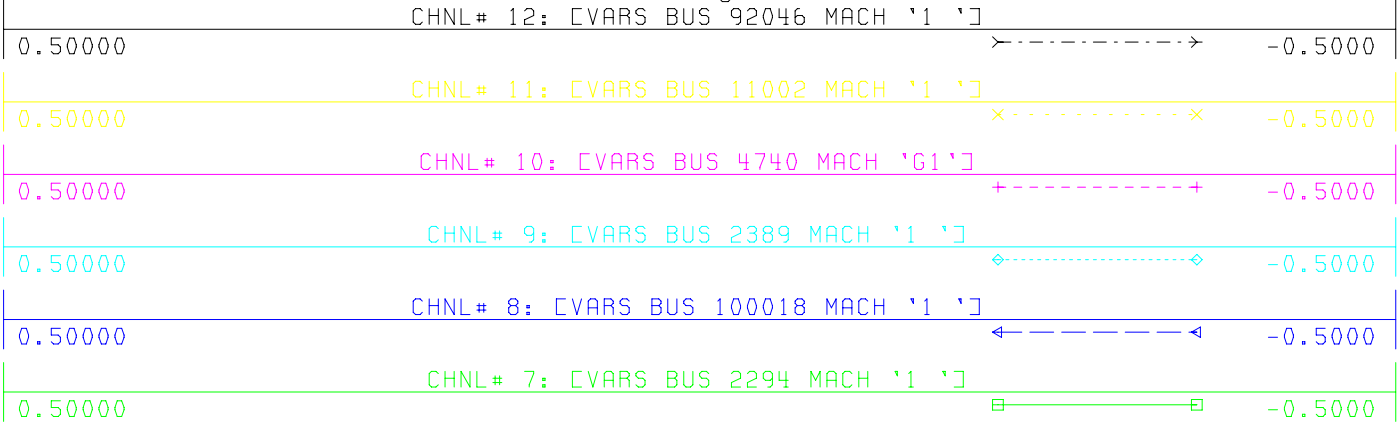
TUE, NOV 16 2010 13:25
PELEC

C-2-25

TIME (SECONDS)

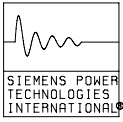


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_879L.out



TUE, NOV 16 2010 13:25
QELEC

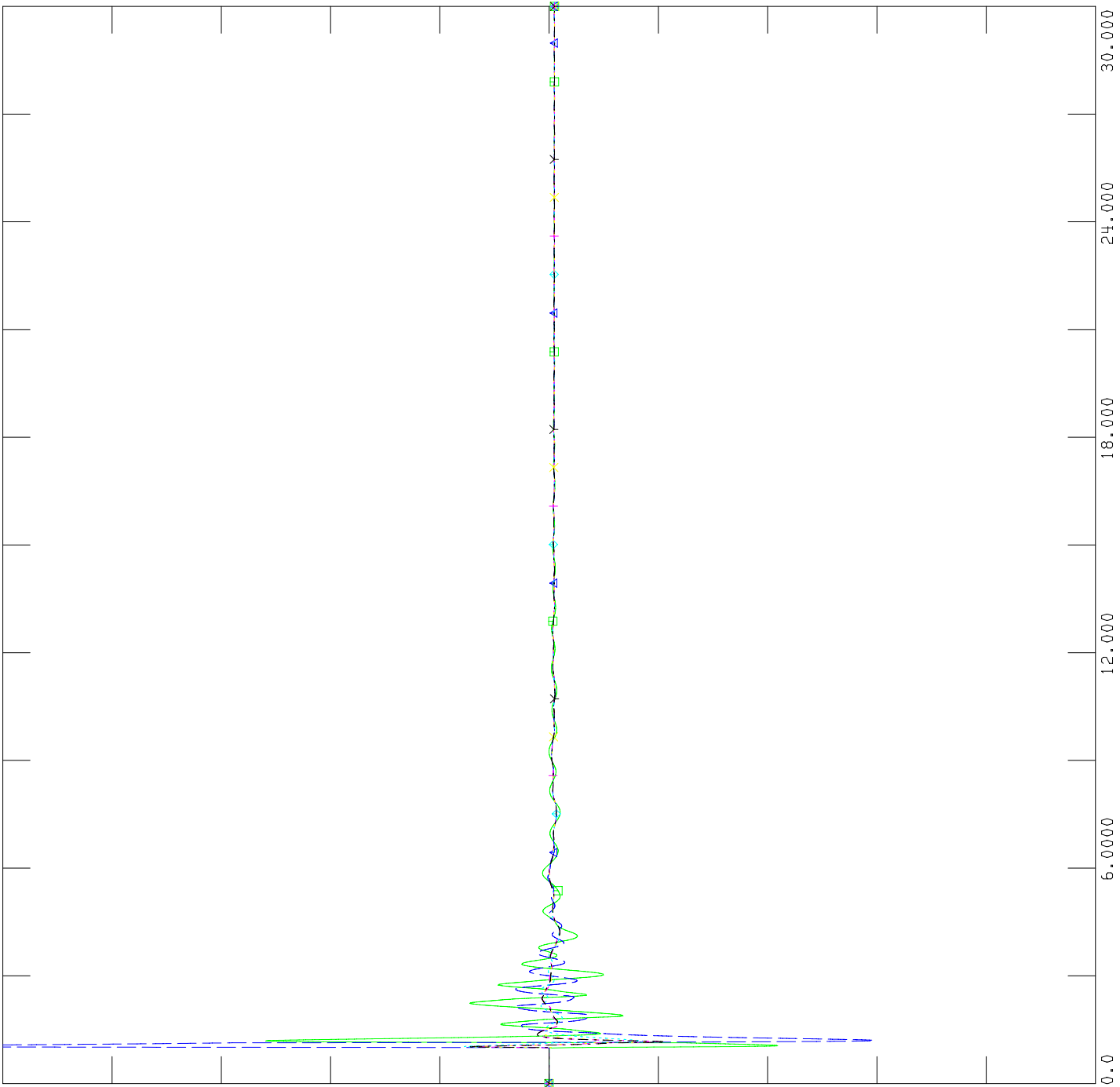
C-2-26



TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

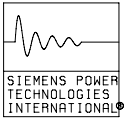
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_879L.out

Channel	CFREQ	Component	Value
CHNL# 18	92046	CMCBRIDE6	0.5750
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	0.5750
CHNL# 15	2389	CHILLRIDG	0.5750
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900



TUE, NOV 16 2010 13:26
BUS FREQUENCY

C-2-27

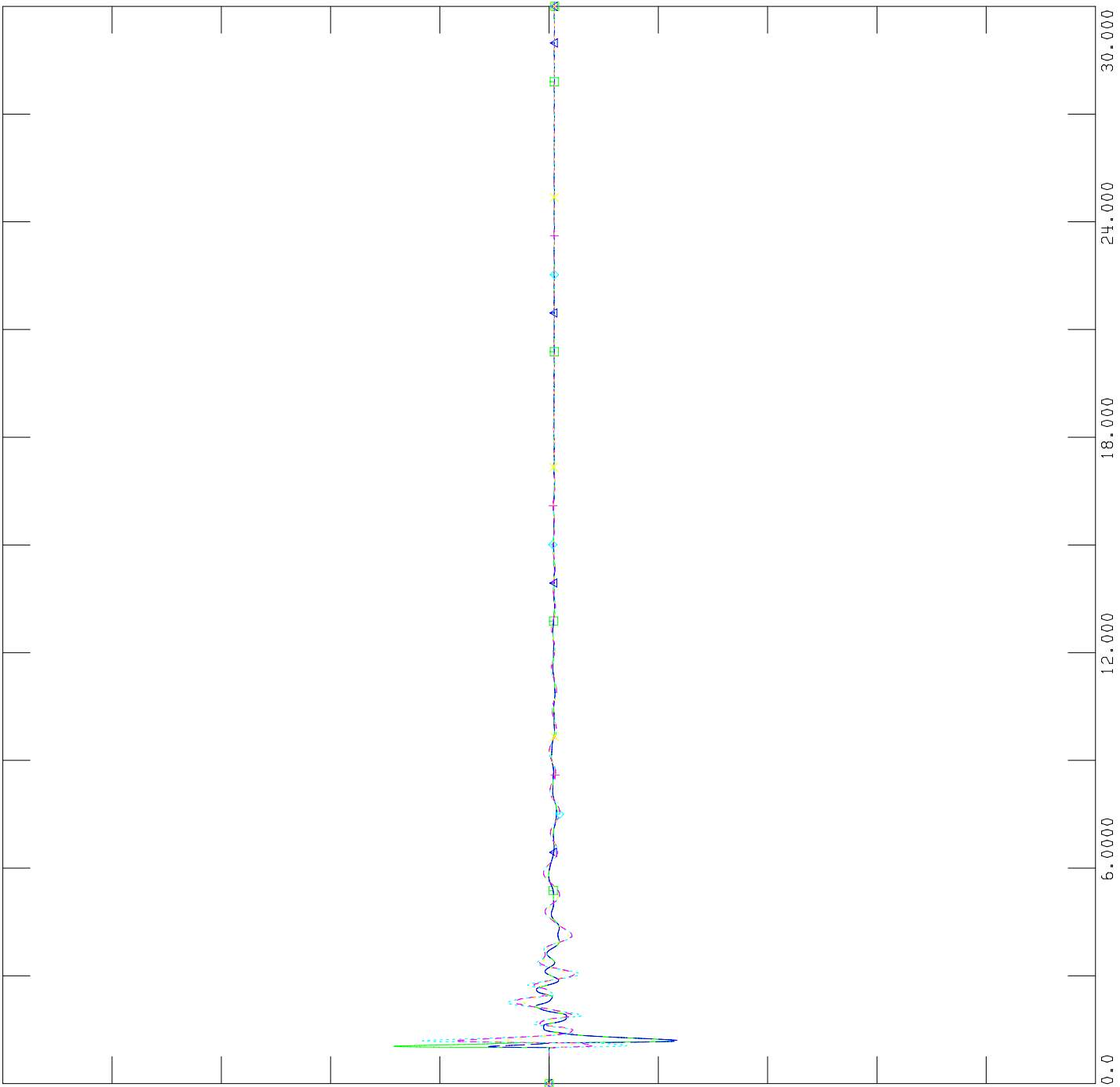


TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

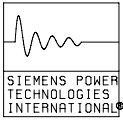
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_879L.out

TUE, NOV 16 2010 13:27
BUS FREQUENCY

Channel	CFREQ	Bus Name	Value
CHNL# 23	270	CSUFFIEL7	138.00
CHNL# 22	680	CMEDICIN7	138.00
CHNL# 21	271	CBULLS H7	138.00
CHNL# 20	269	CBURDETT7	138.00
CHNL# 19	31	CFINCAST7	138.00

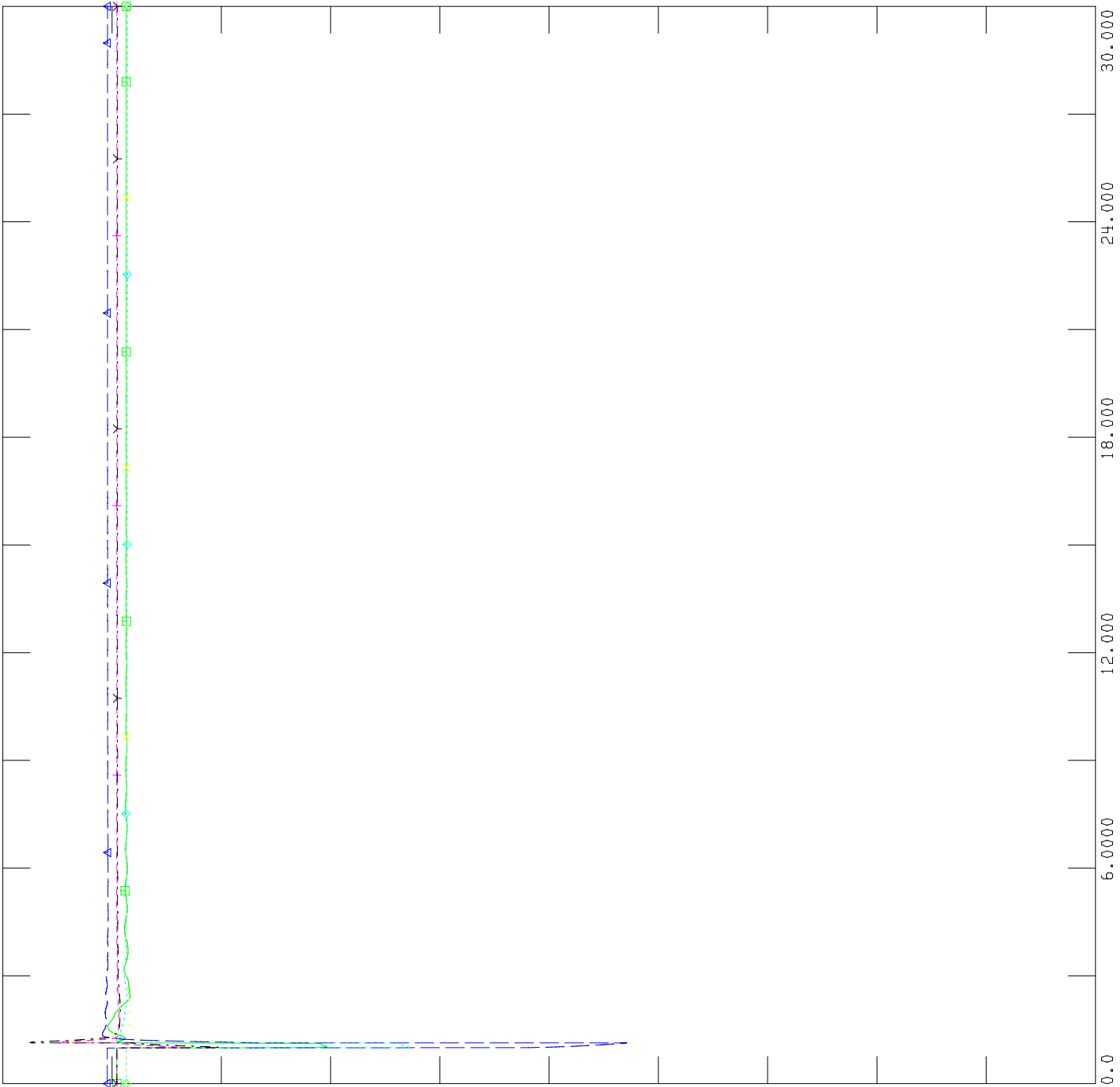


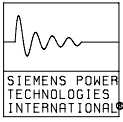
C-2-28



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_879L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 EMCBRIDE6	0.5750
CHNL# 28	EVOLT 11002 EGARDNG2	0.5750
CHNL# 27	EVOLT 4740 CARD_07	0.5750
CHNL# 26	EVOLT 2389 CHILLRIDG	0.5750
CHNL# 25	EVOLT 100018 CPURPLESP	0.5750
CHNL# 24	EVOLT 2294 CTOTHILL2	0.6900

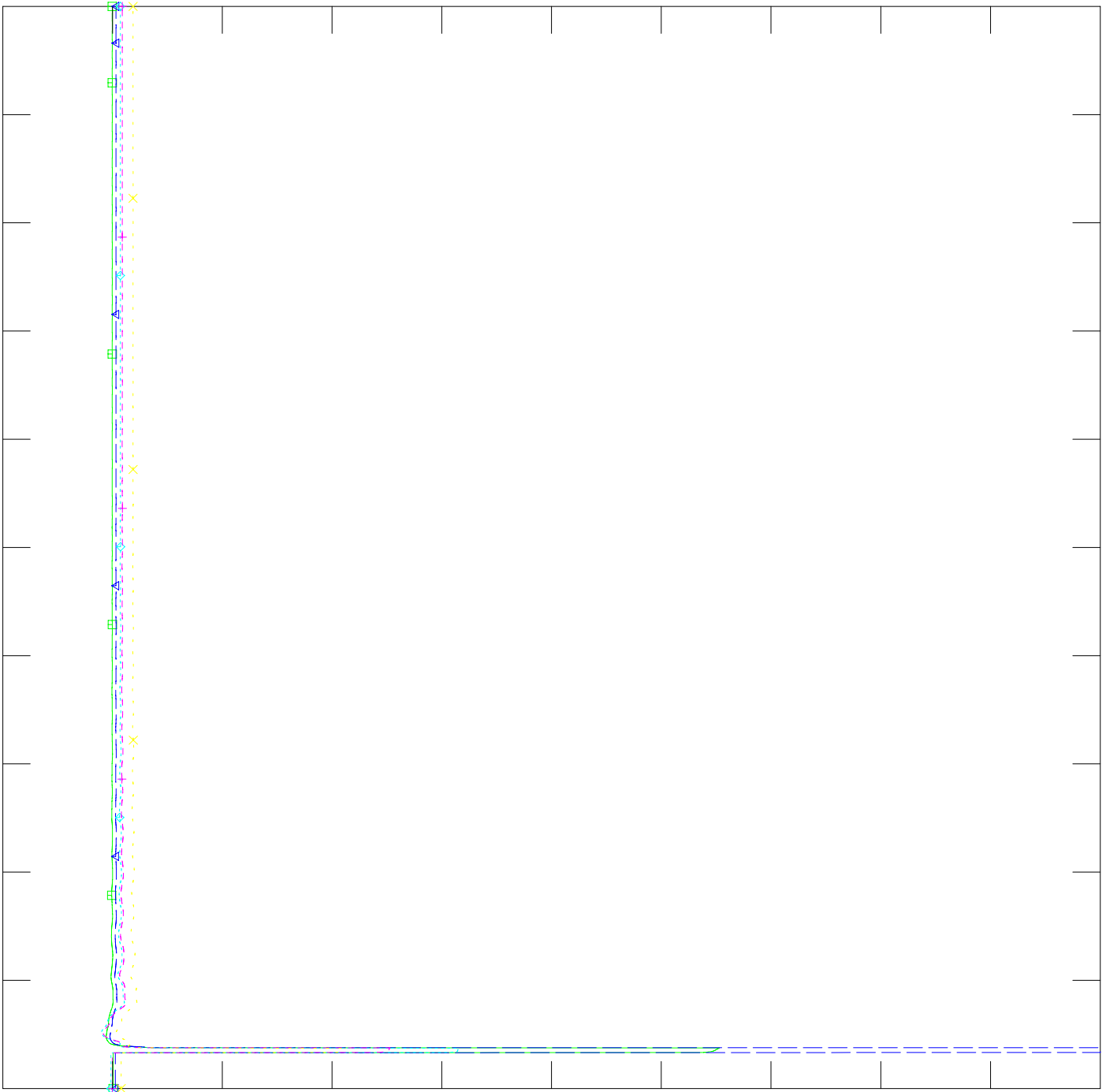


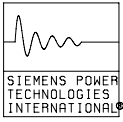


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_879L.out

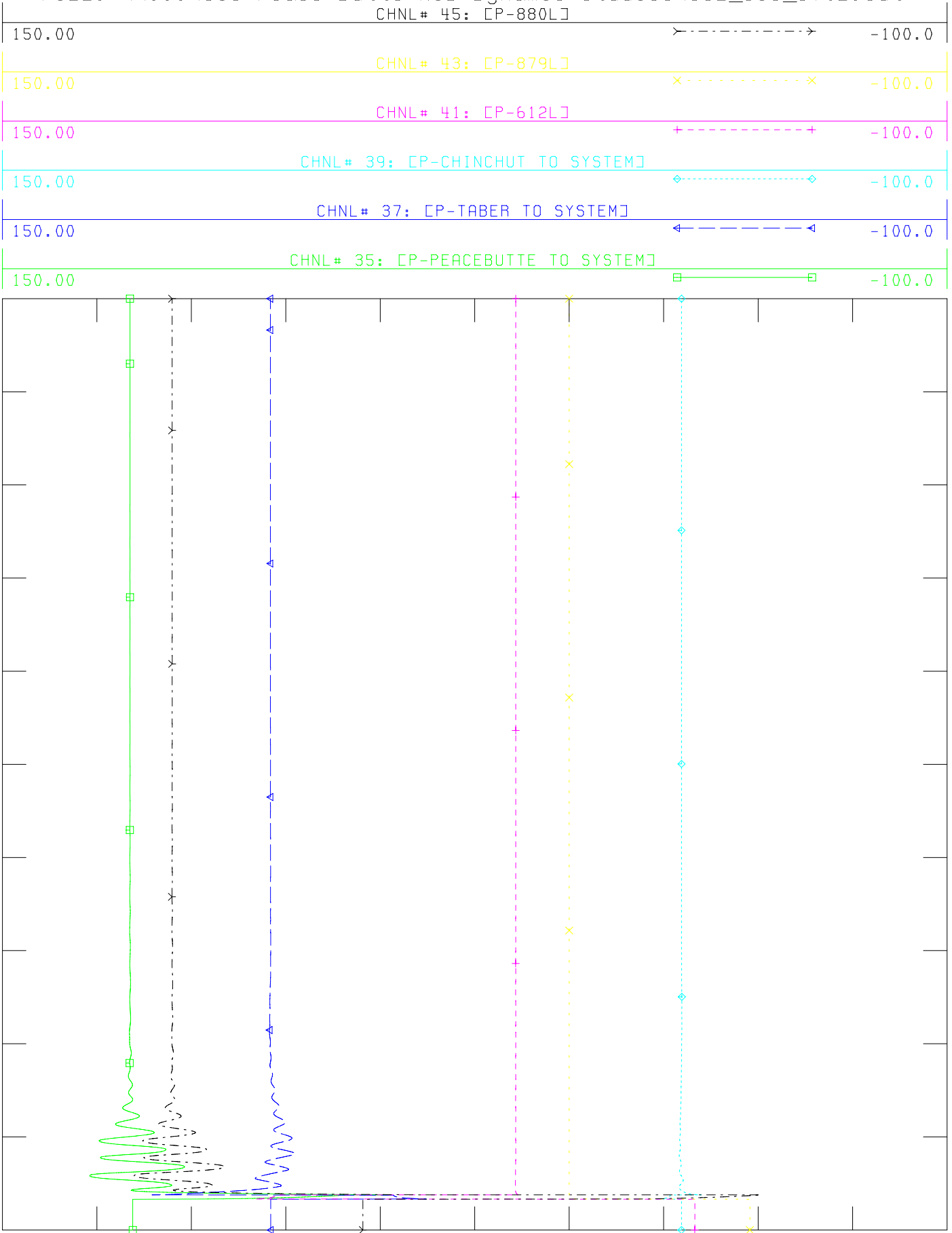
TUE, NOV 16 2010 13:29
BUS VOLTAGE

Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]





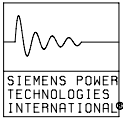
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_879L.out
CHNL# 45: [P-880L]



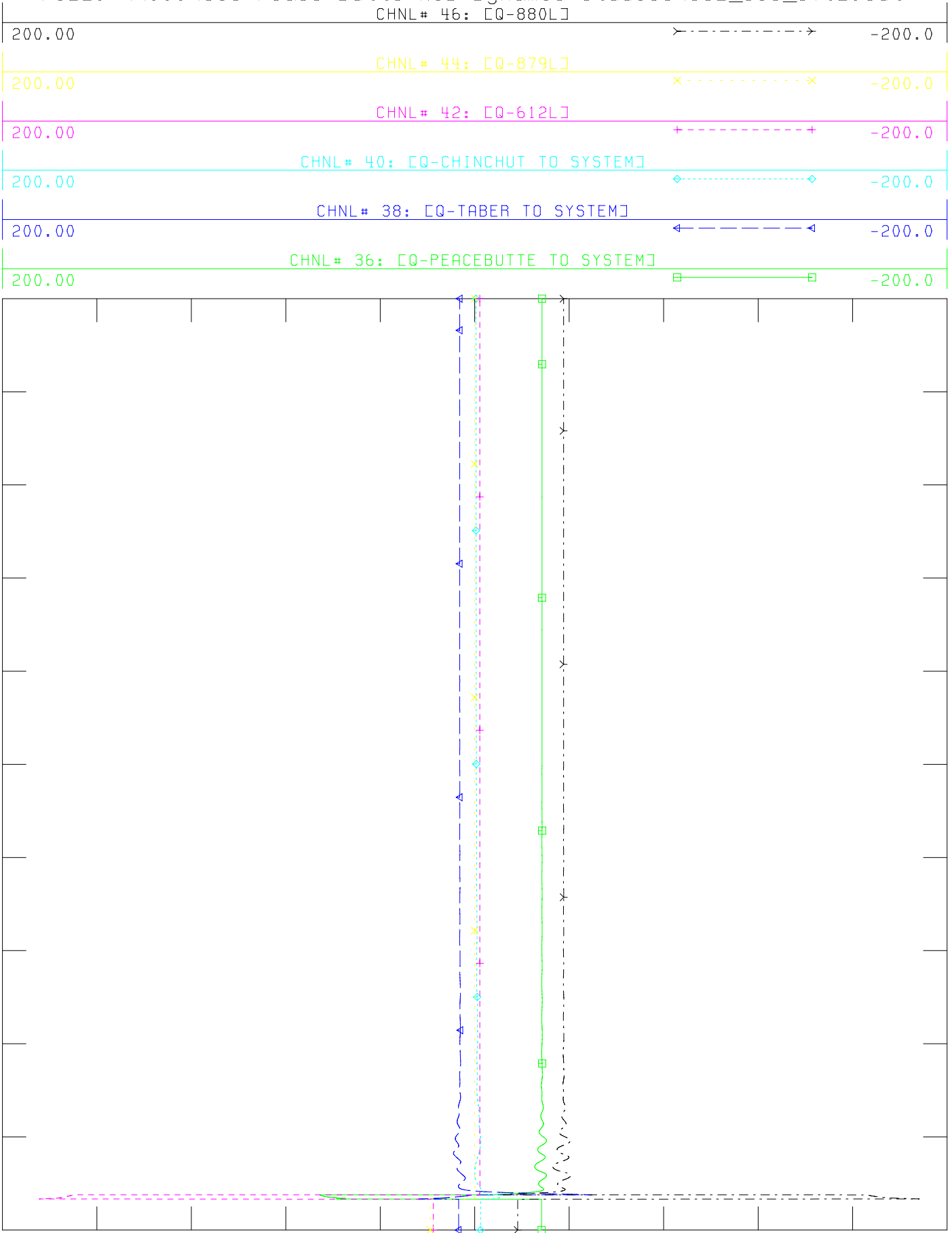
TUE, NOV 16 2010 13:29
BRANCH ACTIVE POWER

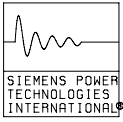
C-2-31

TIME (SECONDS)

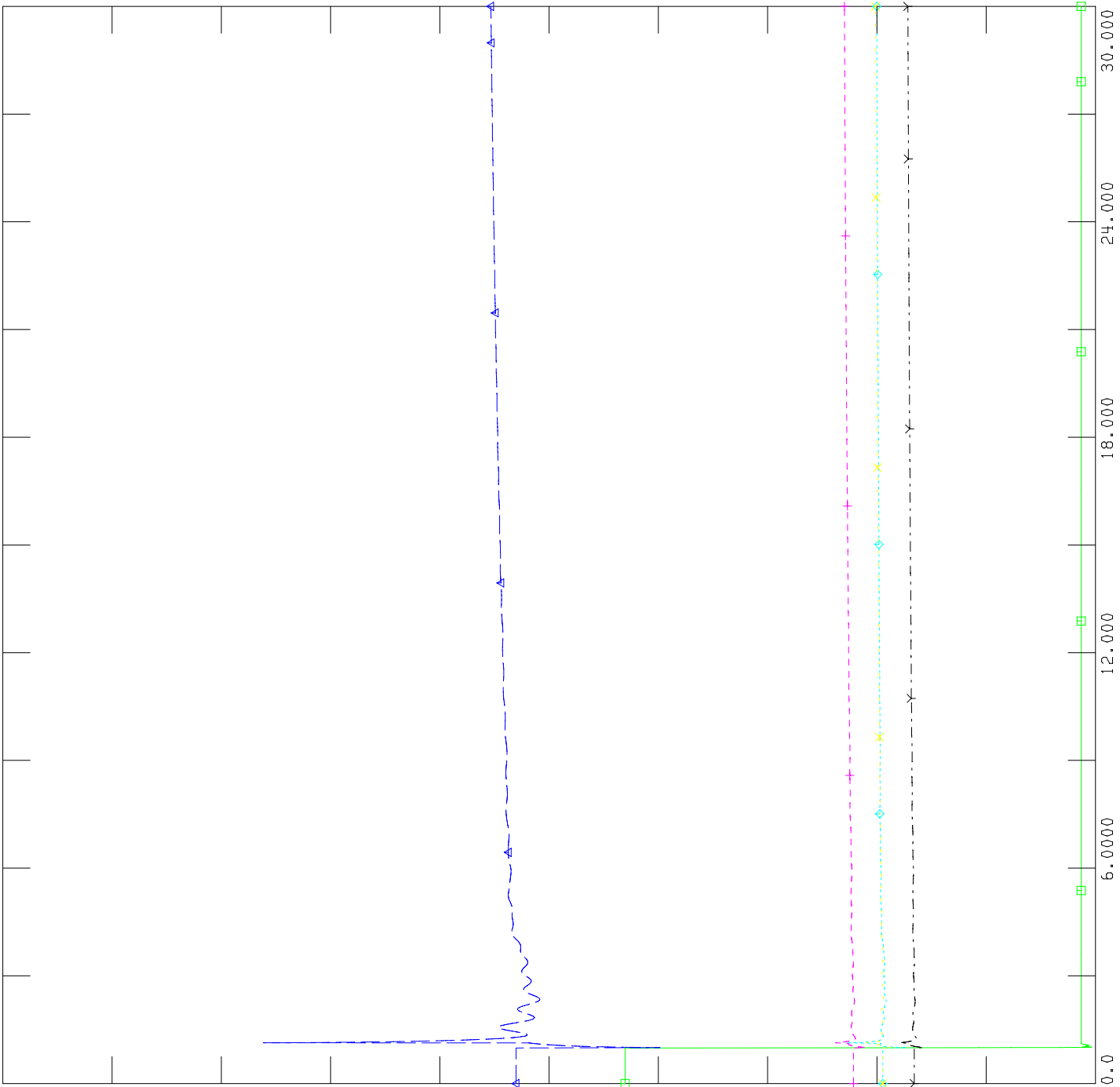
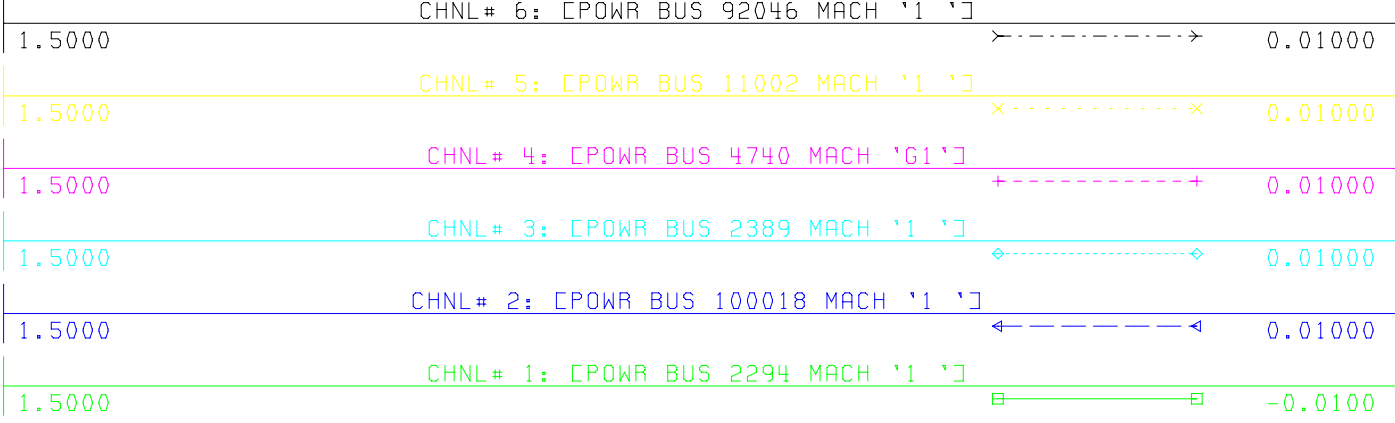


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_879L.out
CHNL# 46: [EQ-880L]





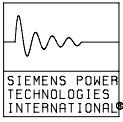
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_880L.out



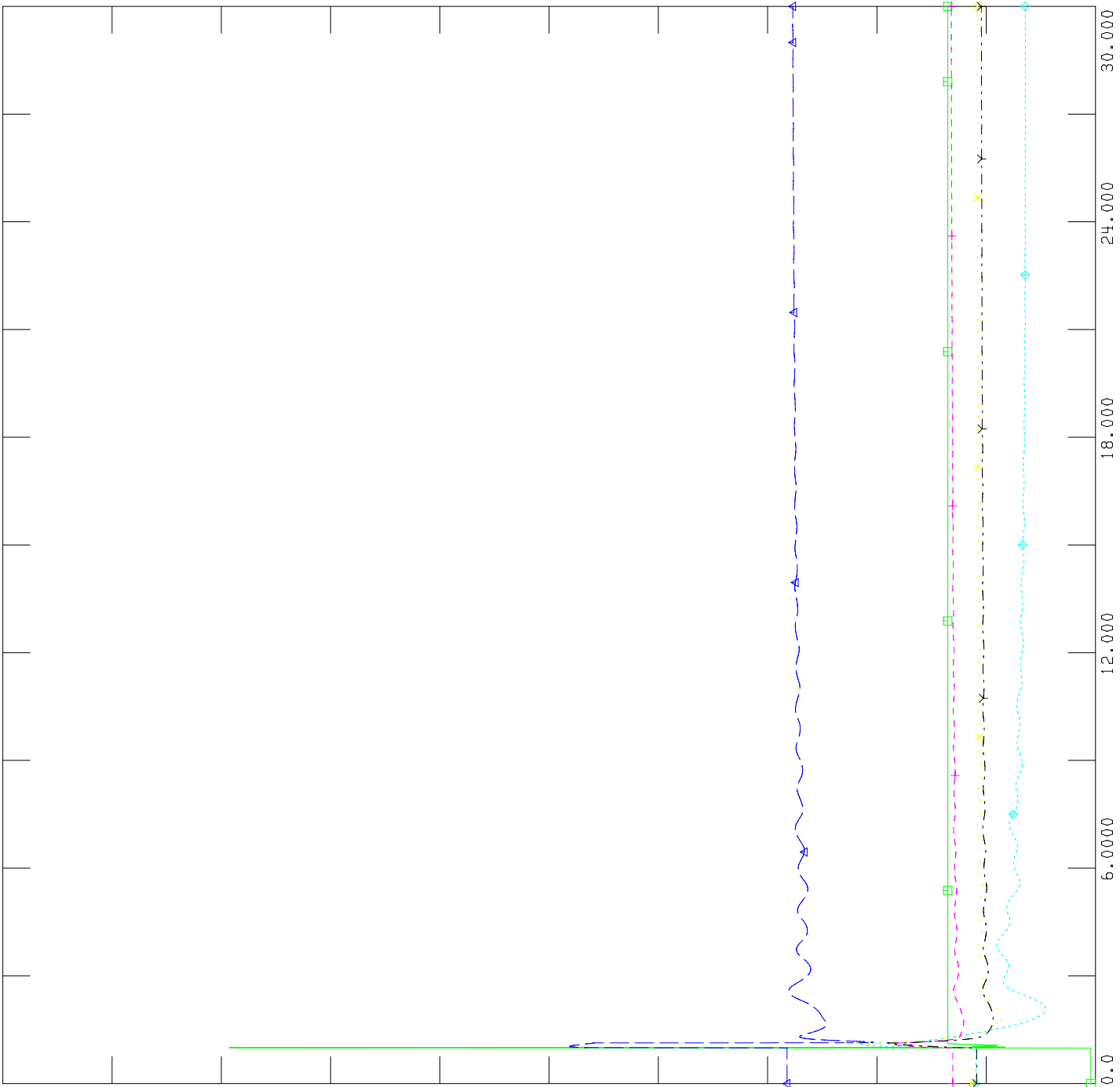
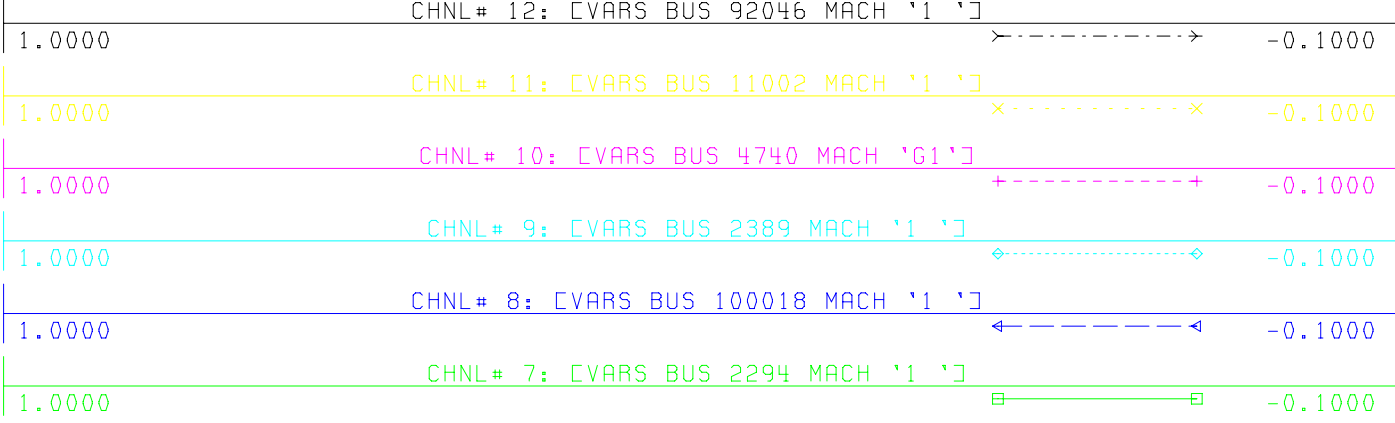
TUE, NOV 16 2010 13:32
PELEC

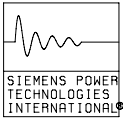
C-2-33

TIME (SECONDS)



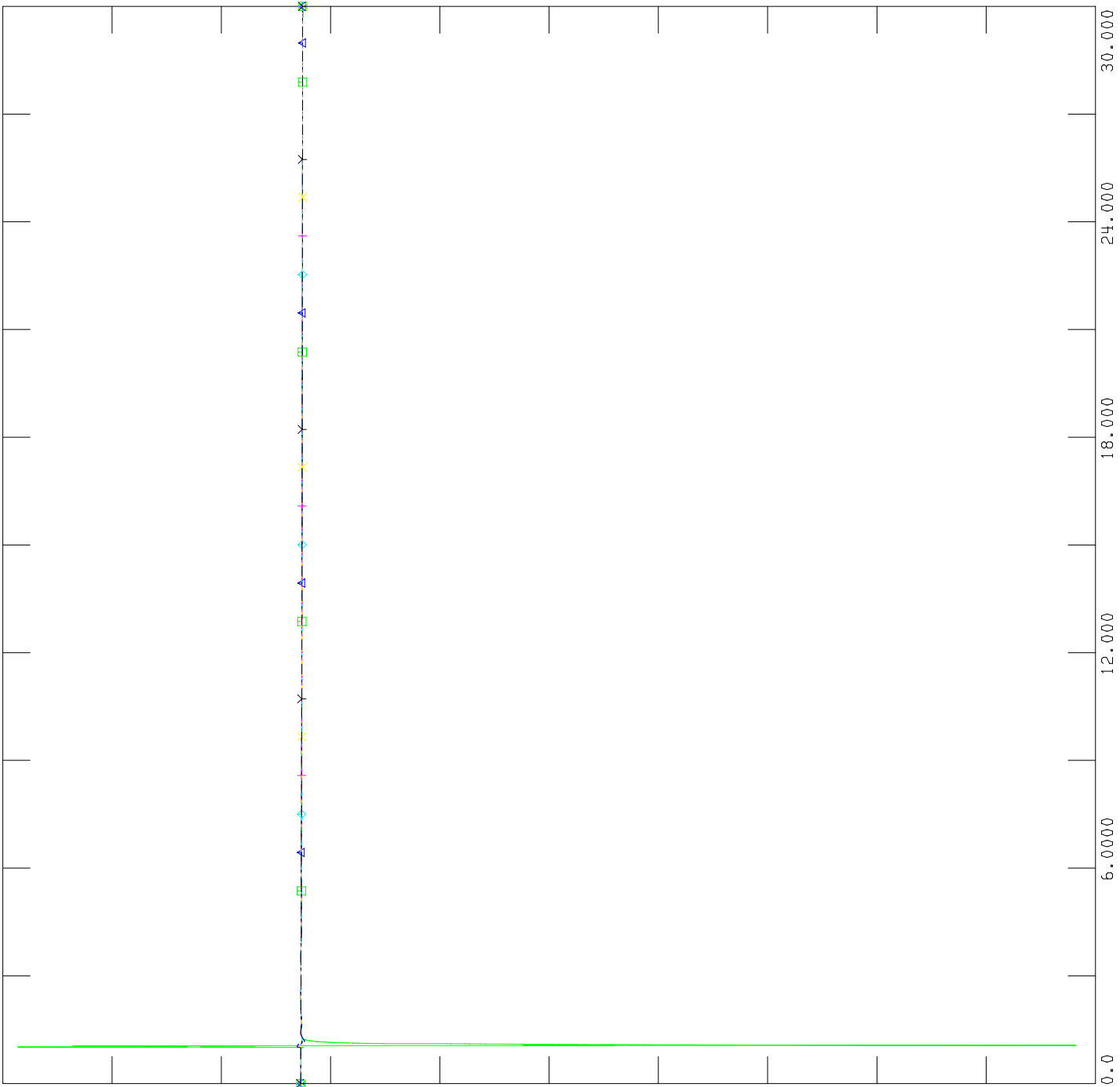
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_880L.out





FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_880L.out

Channel	CFREQ	Component	Value
CHNL# 18	92046	CMCBRIDE6	0.5750
CHNL# 17	11002	CGARDNG2	0.5750
CHNL# 16	4740	CARD_07	0.5750
CHNL# 15	2389	CHILLRIDG	0.5750
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900

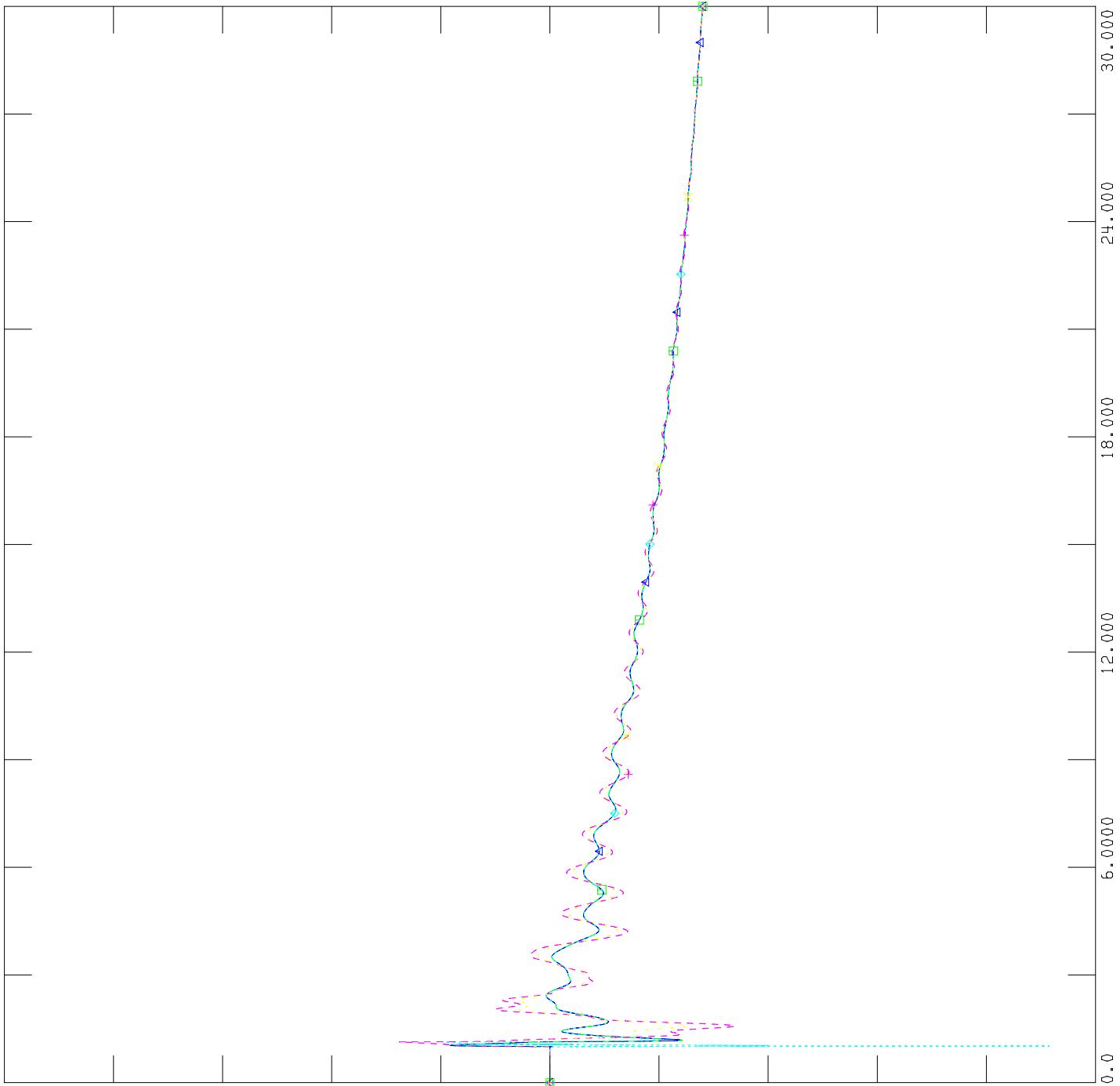




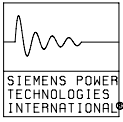
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_880L.out

TUE, NOV 16 2010 13:35
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270	CSUFFIEL7	138.0000	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680	CMEDICIN7	138.0000	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271	CBULLS H7	138.0000	◇-----◇	-0.0067
0.00670	CHNL# 20: CFREQ	269	CBURDETT7	138.0000	←-----△	-0.0067
0.00670	CHNL# 19: CFREQ	31	CFINCAST7	138.0000	□-----□	-0.0067

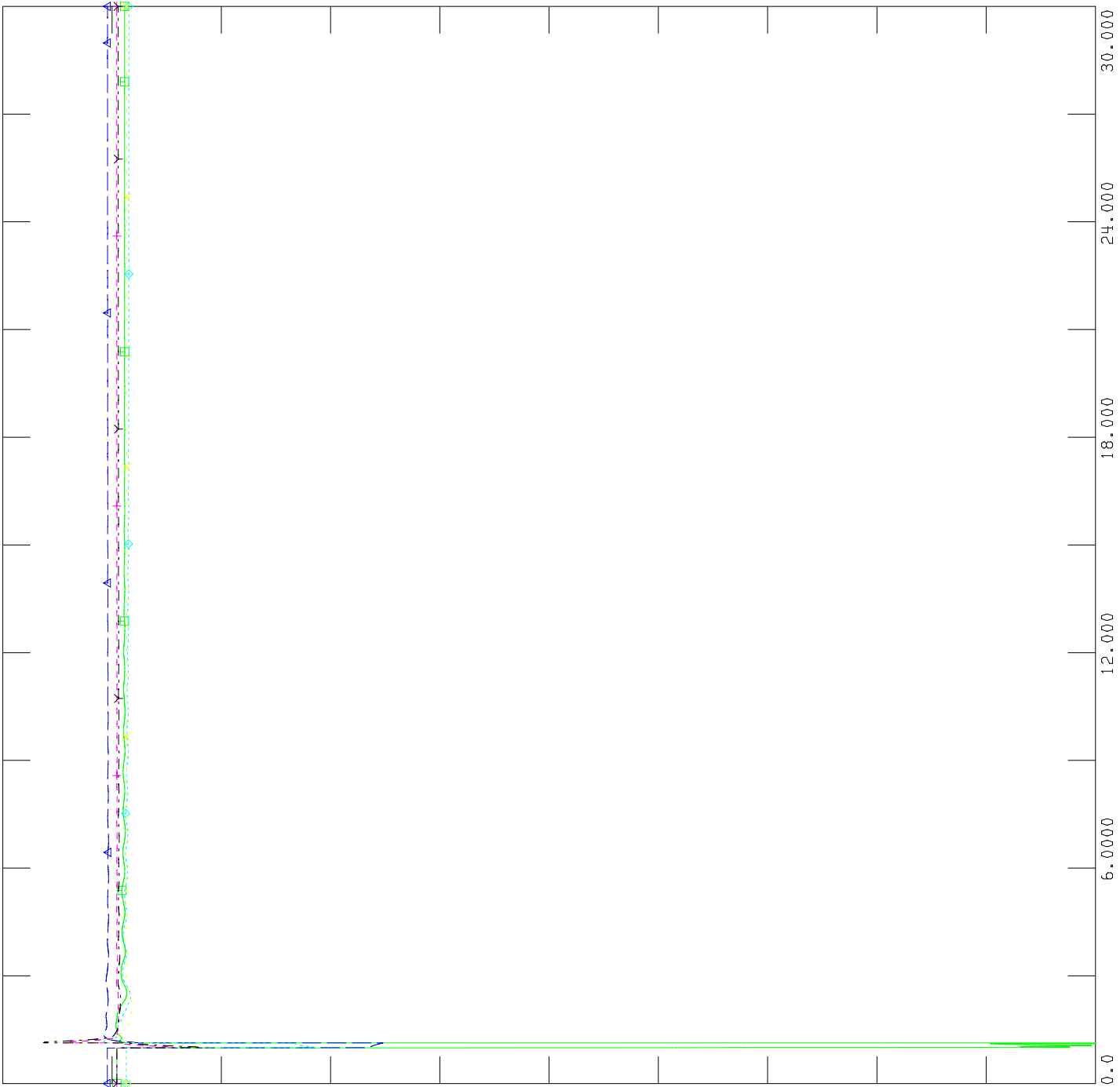


C-2-36



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_880L.out

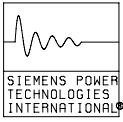
Channel	Label	Value
CHNL# 29	EVOLT 92046 EMCBRIDE6	0.5750
CHNL# 28	EVOLT 11002 EGARDNG2	0.5750
CHNL# 27	EVOLT 4740 CARD_07	0.5750
CHNL# 26	EVOLT 2389 CHILLRIDG	0.5750
CHNL# 25	EVOLT 100018 CPURPLESP	0.5750
CHNL# 24	EVOLT 2294 CTOTHILL2	0.6900



TUE, NOV 16 2010 13:36
BUS VOLTAGE

C-2-37

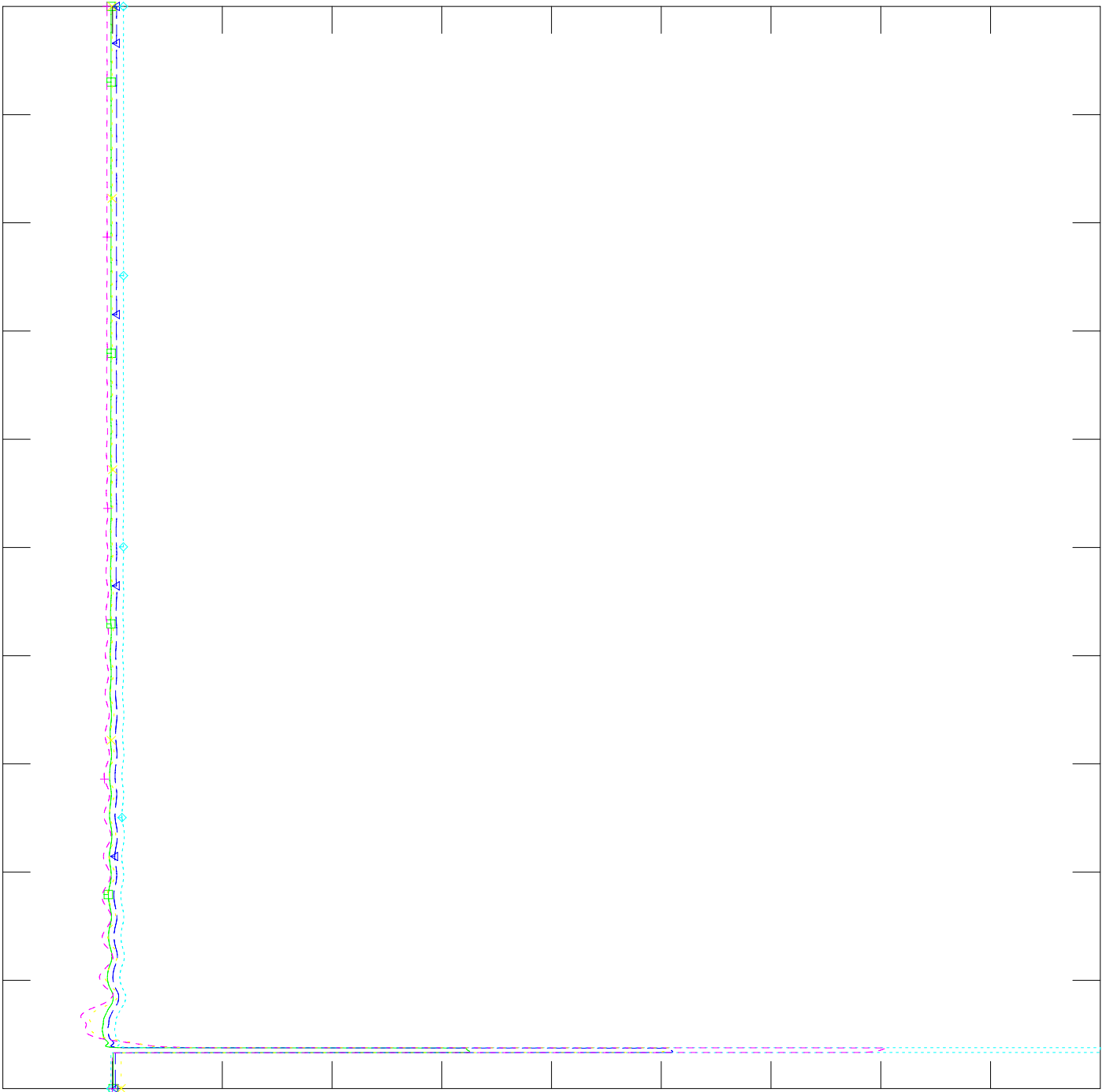
TIME (SECONDS)



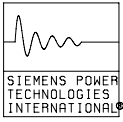
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_880L.out

TUE, NOV 16 2010 13:37
BUS VOLTAGE

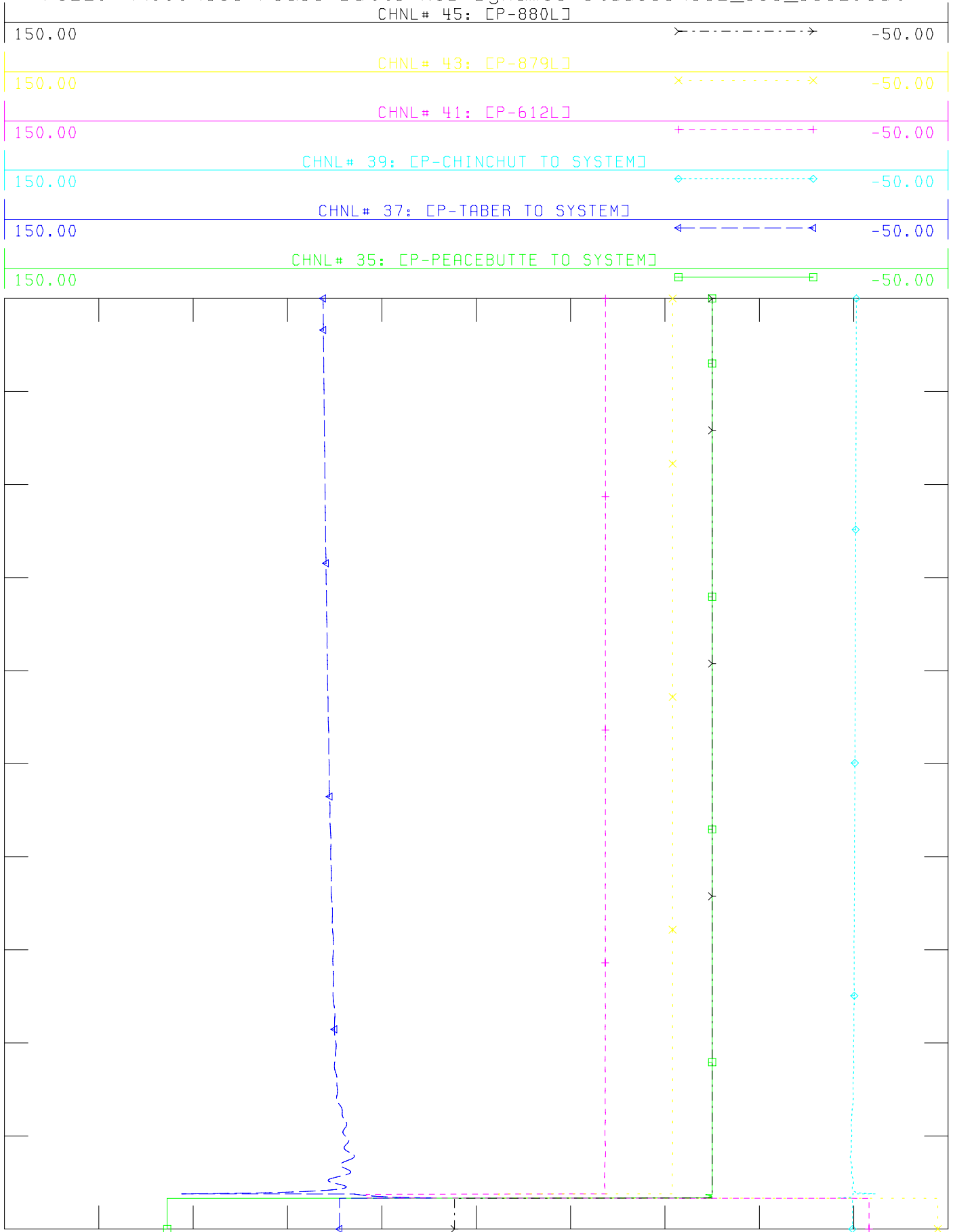
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]

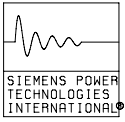


C-2-38

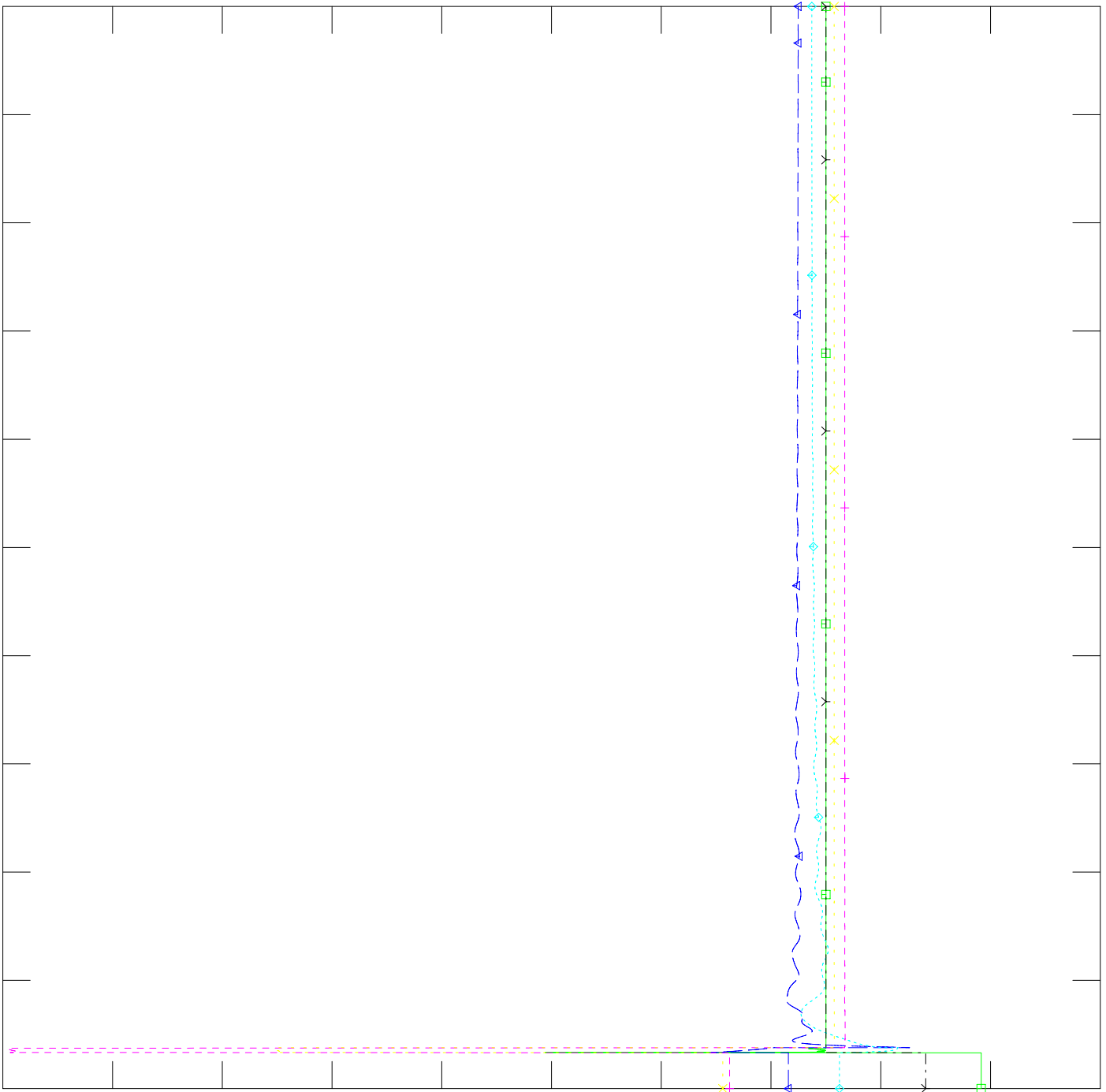
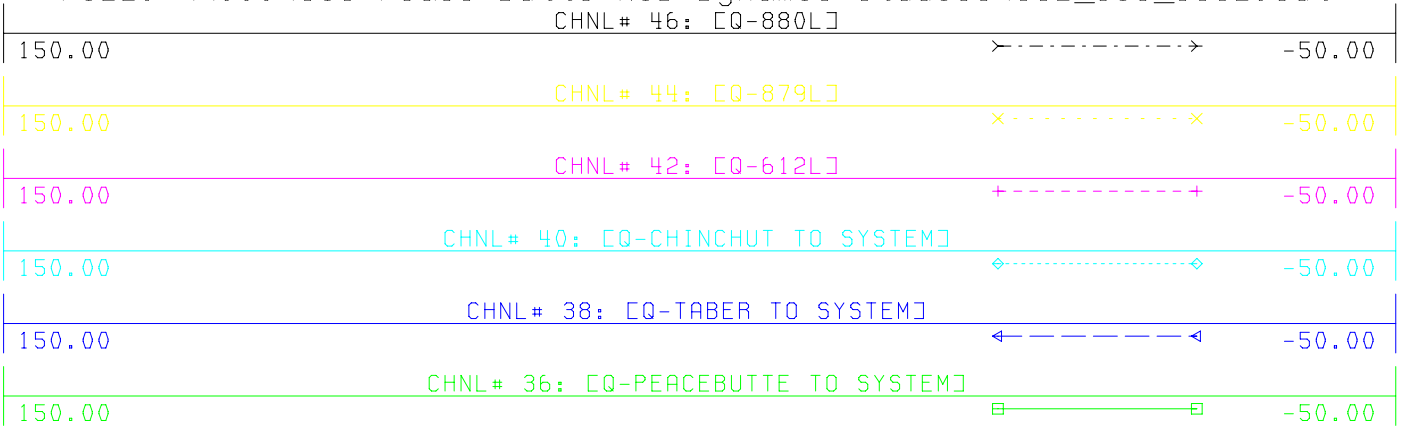


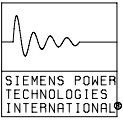
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_880L.out
CHNL# 45: [P-880L]



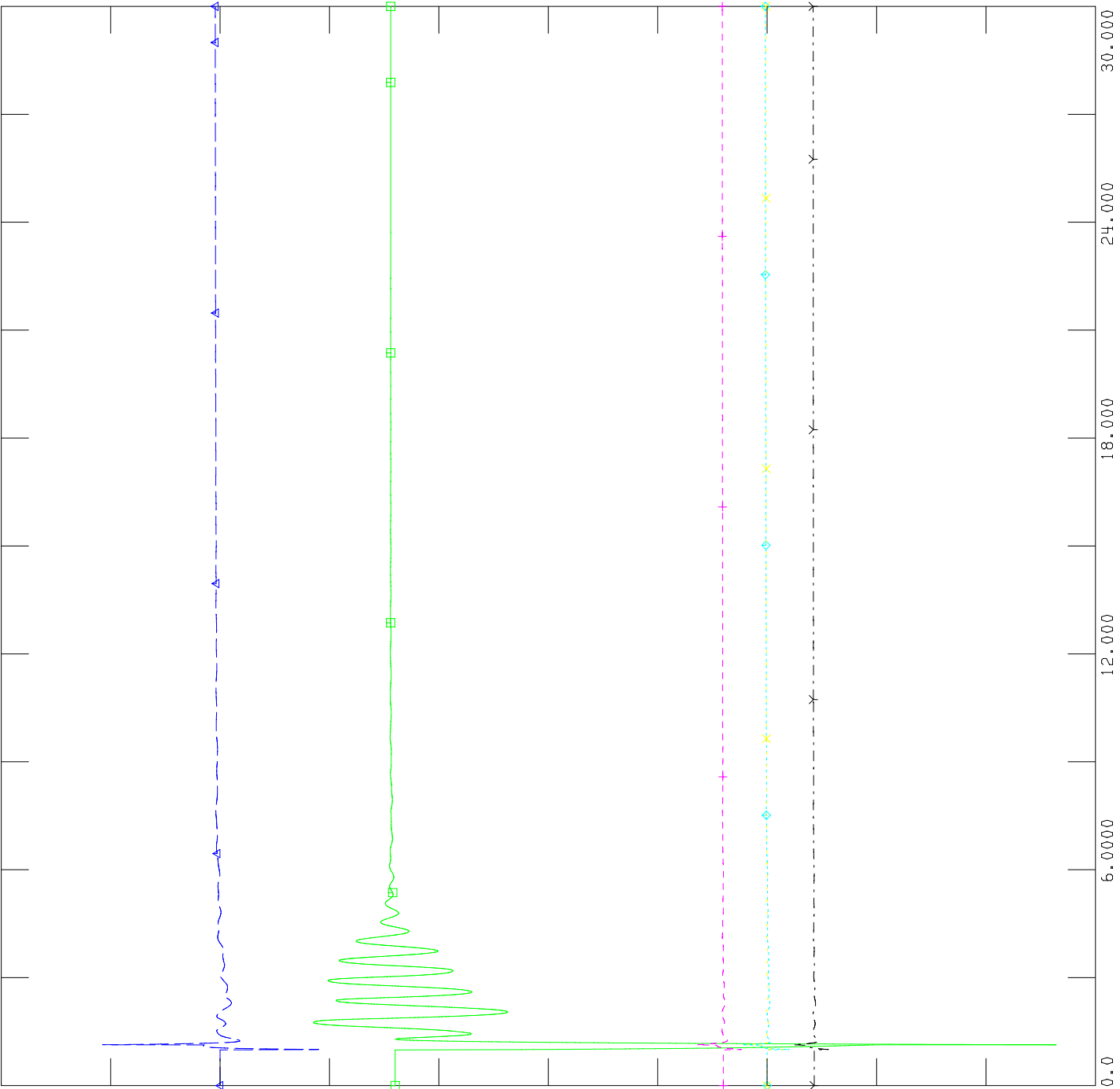
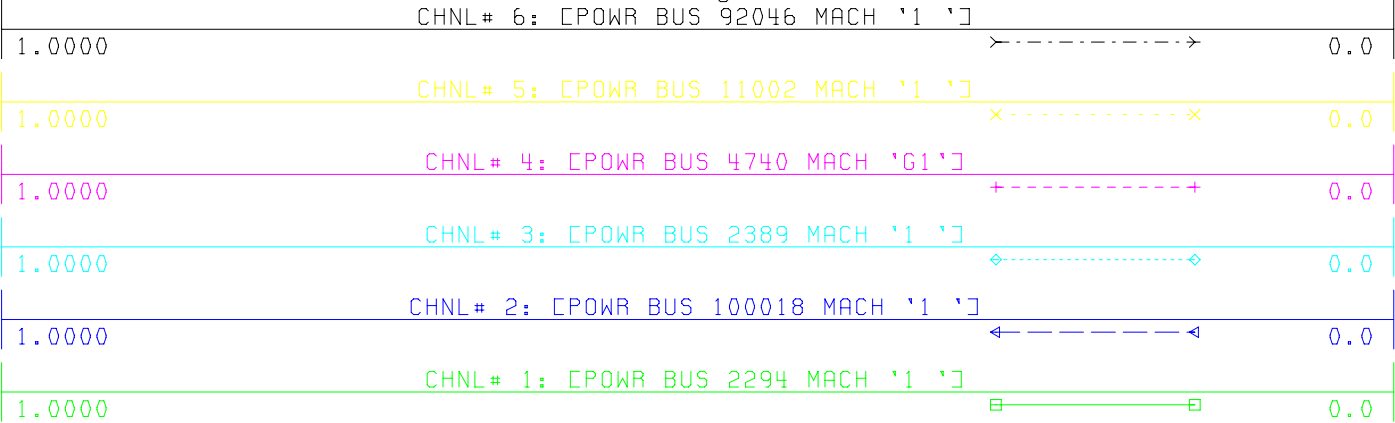


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_880L.out
CHNL# 46: [Q-880L]





FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_892L.out

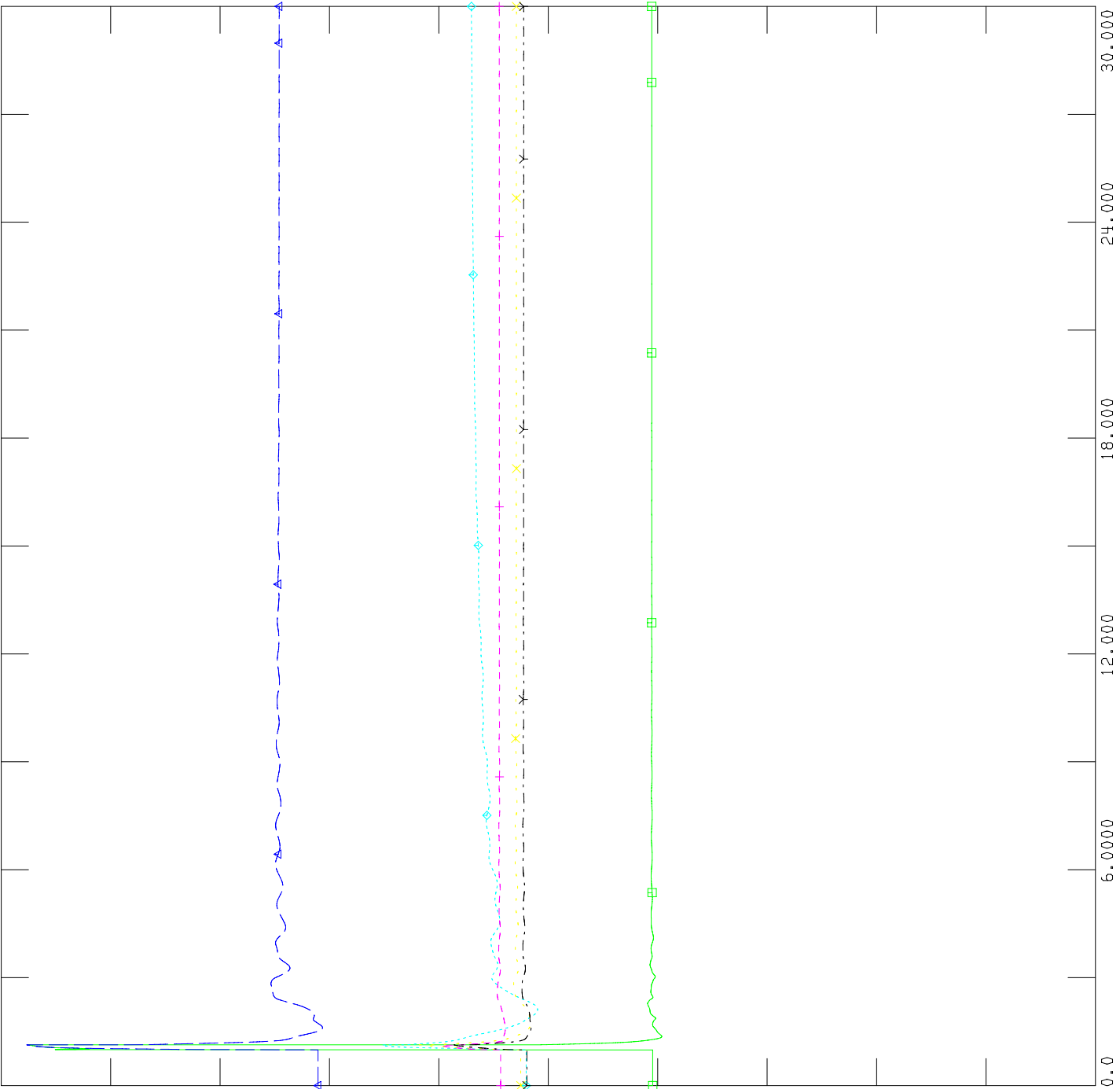
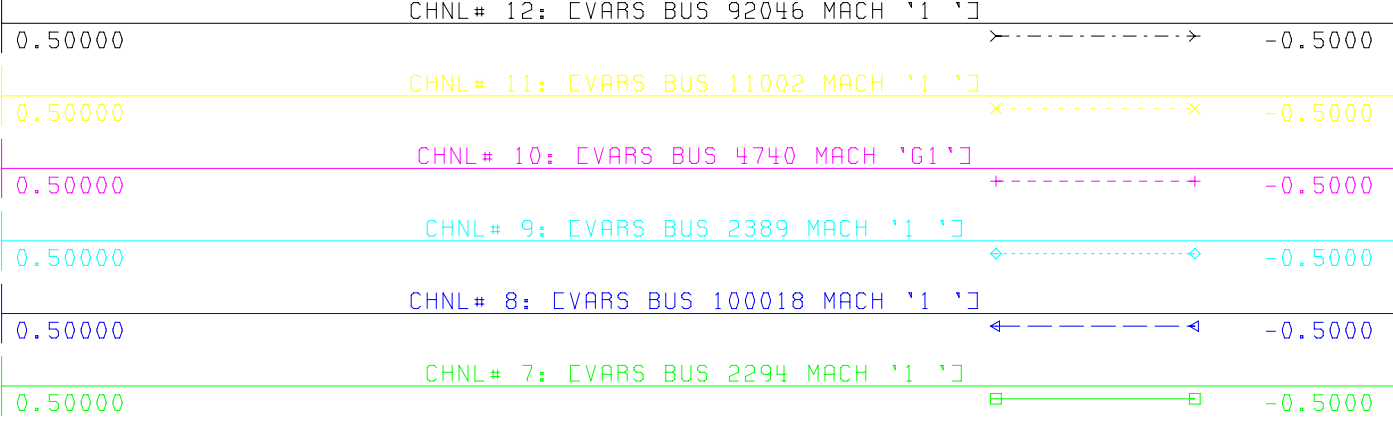


TUE, NOV 16 2010 13:46
 PELEC

C-2-41

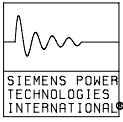


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_892L.out



TUE, NOV 16 2010 13:47
QELEC

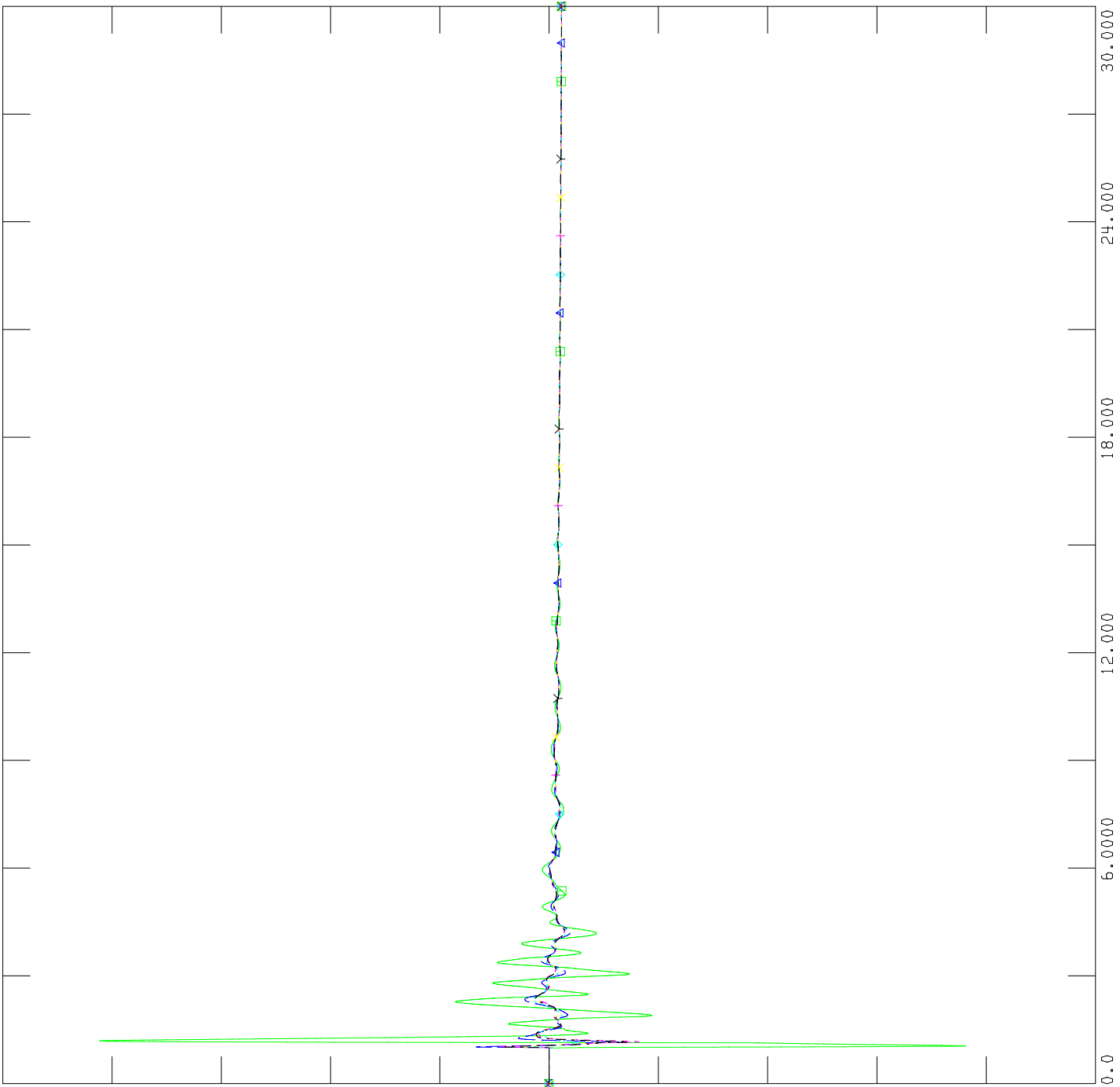
C-2-42



TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
 SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

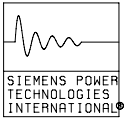
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_892L.out

0.00670	CHNL# 18: CFREQ 92046 EMCBRIDE6 0.5750	-0.0067
0.00670	CHNL# 17: CFREQ 11002 EGARDNG2 0.5750	-0.0067
0.00670	CHNL# 16: CFREQ 4740 CARD_07 0.5750	-0.0067
0.00670	CHNL# 15: CFREQ 2389 CHILLRIDG 0.5750	-0.0067
0.00670	CHNL# 14: CFREQ 100018 CPURPLESP 0.5750	-0.0067
0.00670	CHNL# 13: CFREQ 2294 CTOTHILL2 0.6900	-0.0067



TUE, NOV 16 2010 13:48
 BUS FREQUENCY

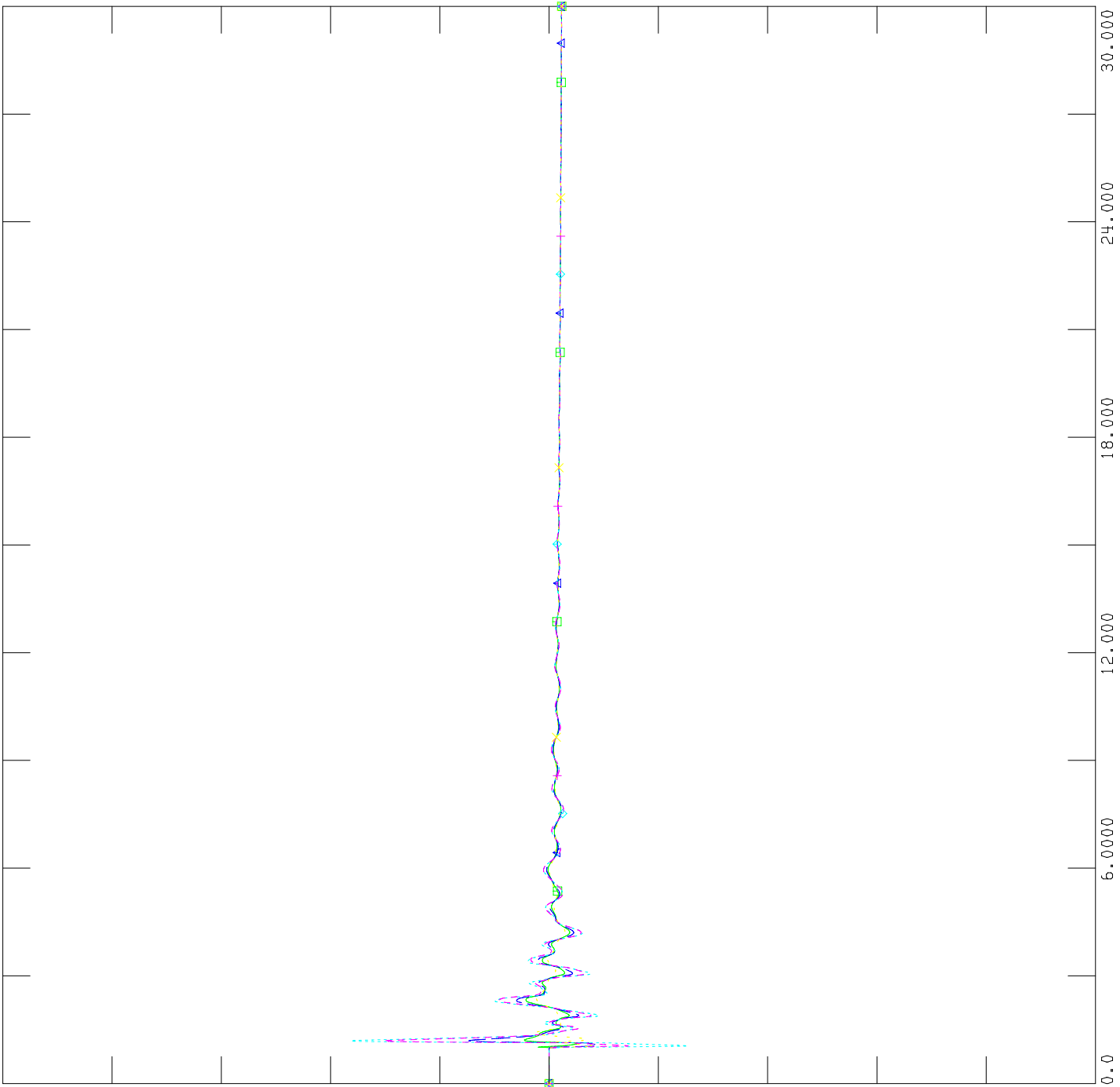
C-2-43



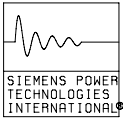
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_892L.out

TUE, NOV 16 2010 13:49
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270	CSUFFIEL7	138.0000	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680	CMEDICIN7	138.0000	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271	CBULLS H7	138.0000	o-----o	-0.0067
0.00670	CHNL# 20: CFREQ	269	CBURDETT7	138.0000	^-----^	-0.0067
0.00670	CHNL# 19: CFREQ	31	CFINCAST7	138.0000	o-----o	-0.0067

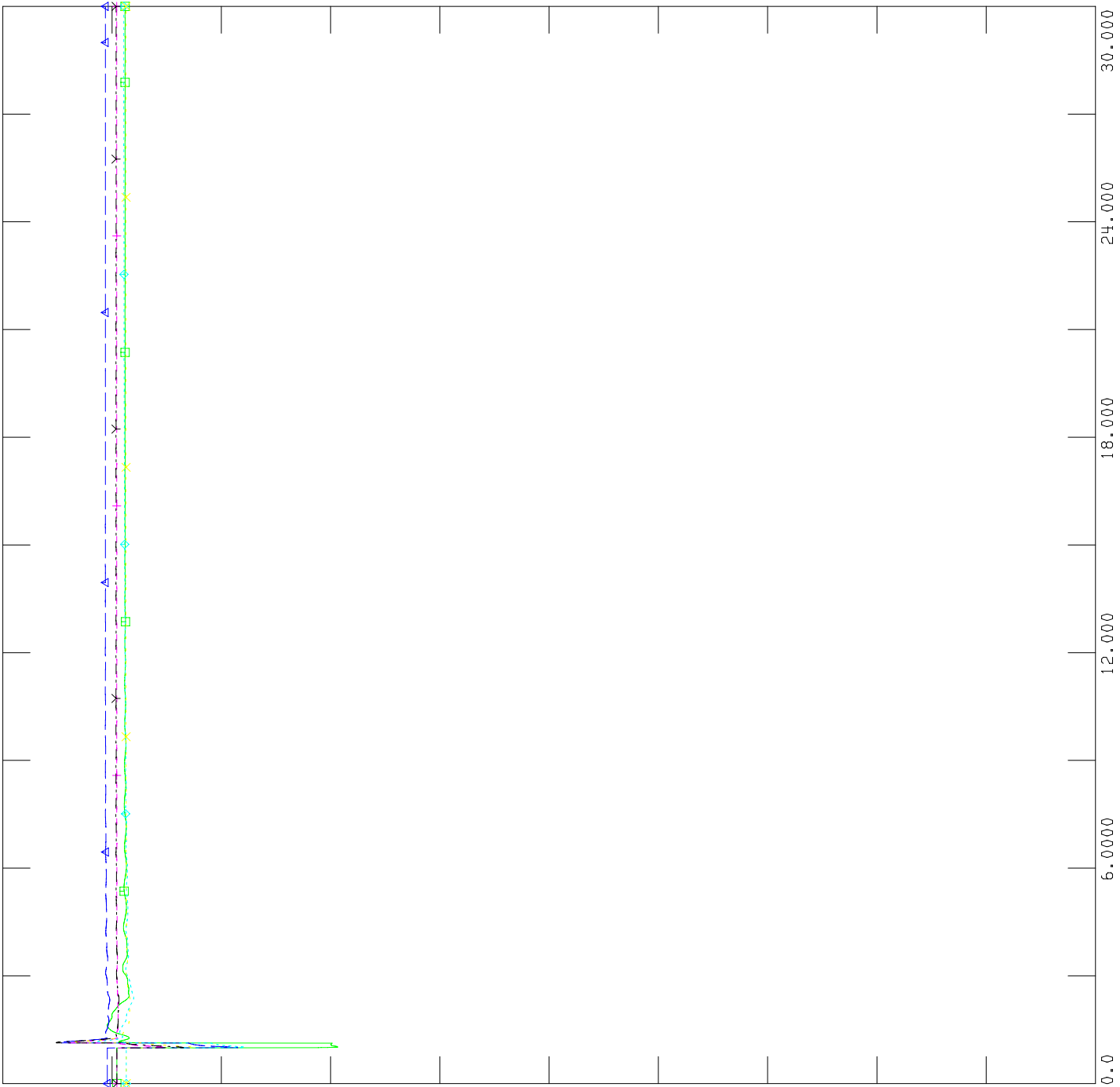


C-2-44



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_892L.out

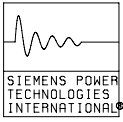
1.1500	CHNL# 29: EVOLT	92046	CMCBRIDE6	0.5750	0.0
1.1500	CHNL# 28: EVOLT	11002	EGARDNG2	0.5750	0.0
1.1500	CHNL# 27: EVOLT	4740	CARD_07	0.5750	0.0
1.1500	CHNL# 26: EVOLT	2389	CHILLRIDG	0.5750	0.0
1.1500	CHNL# 25: EVOLT	100018	CPURPLESP	0.5750	0.0
1.1500	CHNL# 24: EVOLT	2294	CTOTHILL2	0.6900	0.0



TUE, NOV 16 2010 13:50
 BUS VOLTAGE

C-2-45

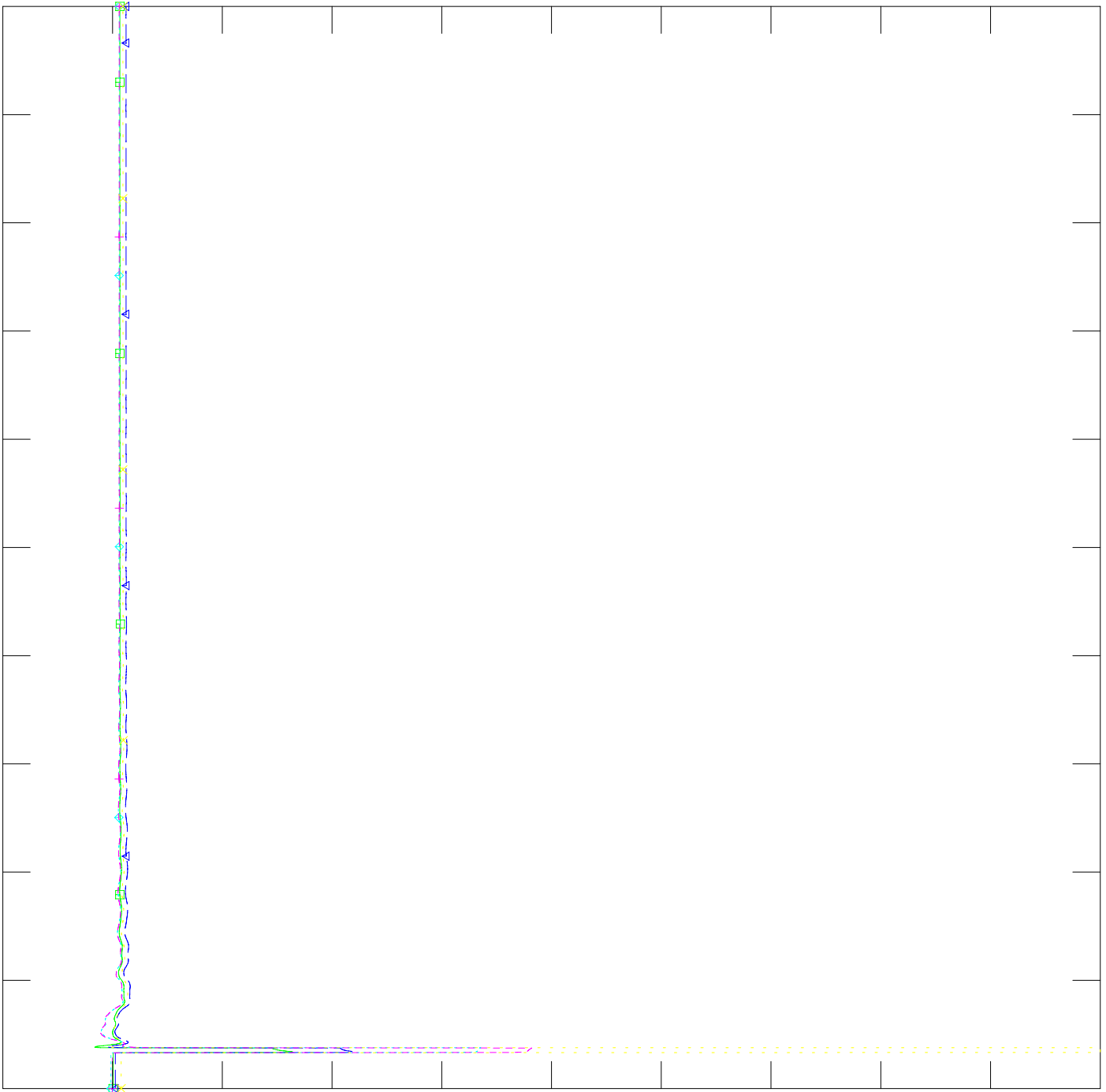
TIME (SECONDS)



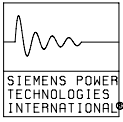
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_892L.out

TUE, NOV 16 2010 13:51
 BUS VOLTAGE

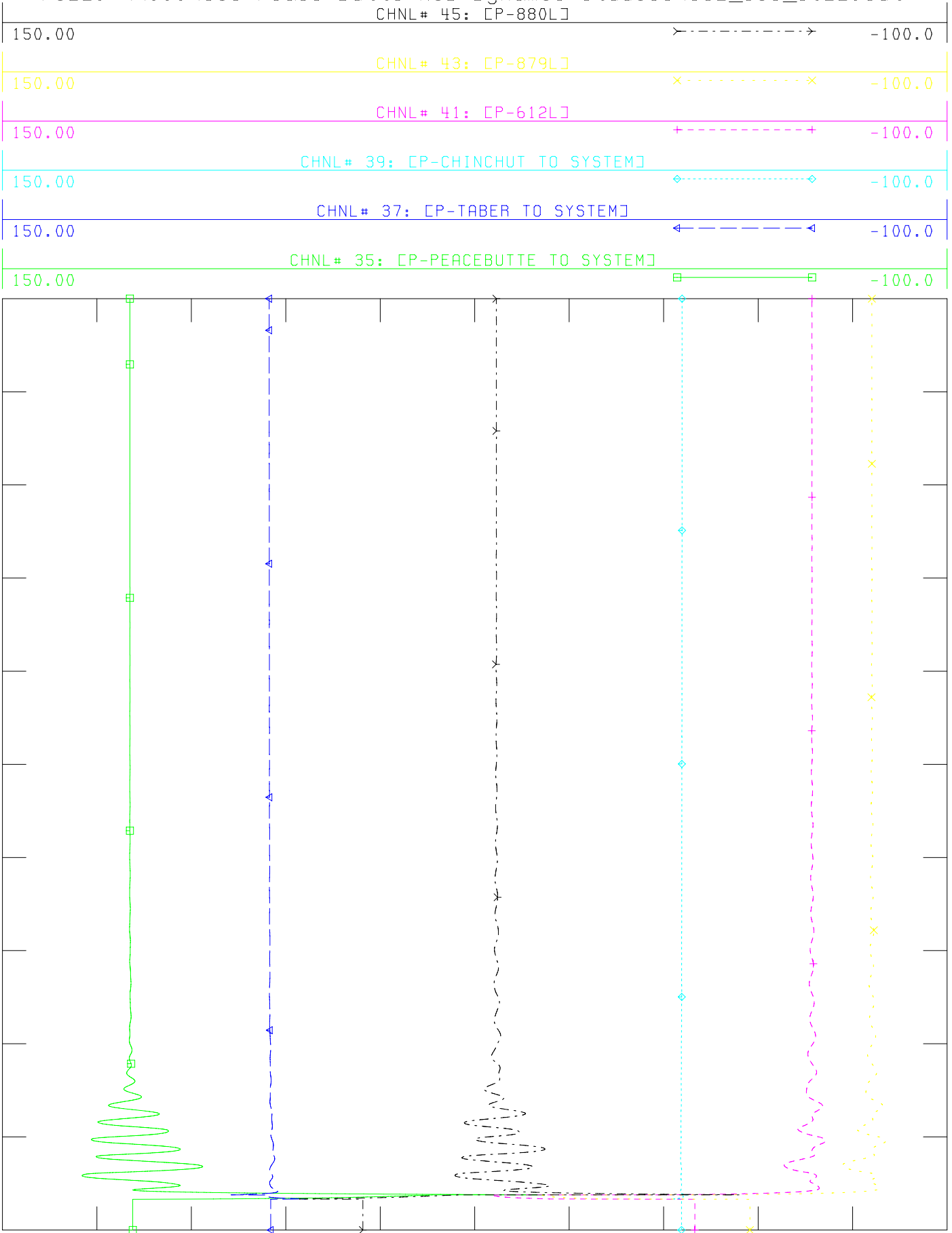
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]

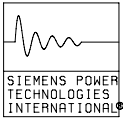


C-2-46

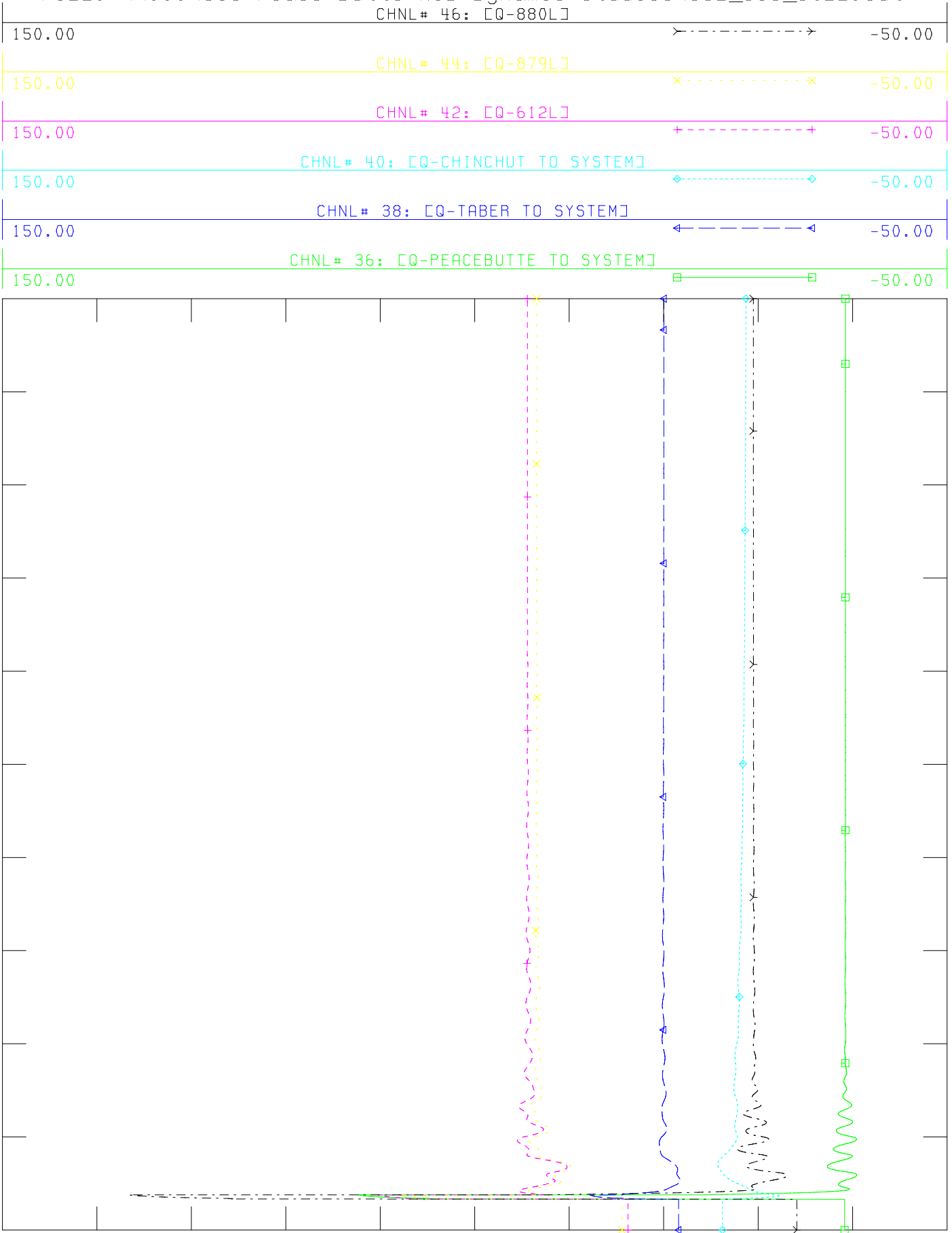


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513_892L.out
CHNL# 45: [P-880L]



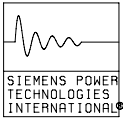


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513_892L.out
CHNL# 46: [Q-880L]



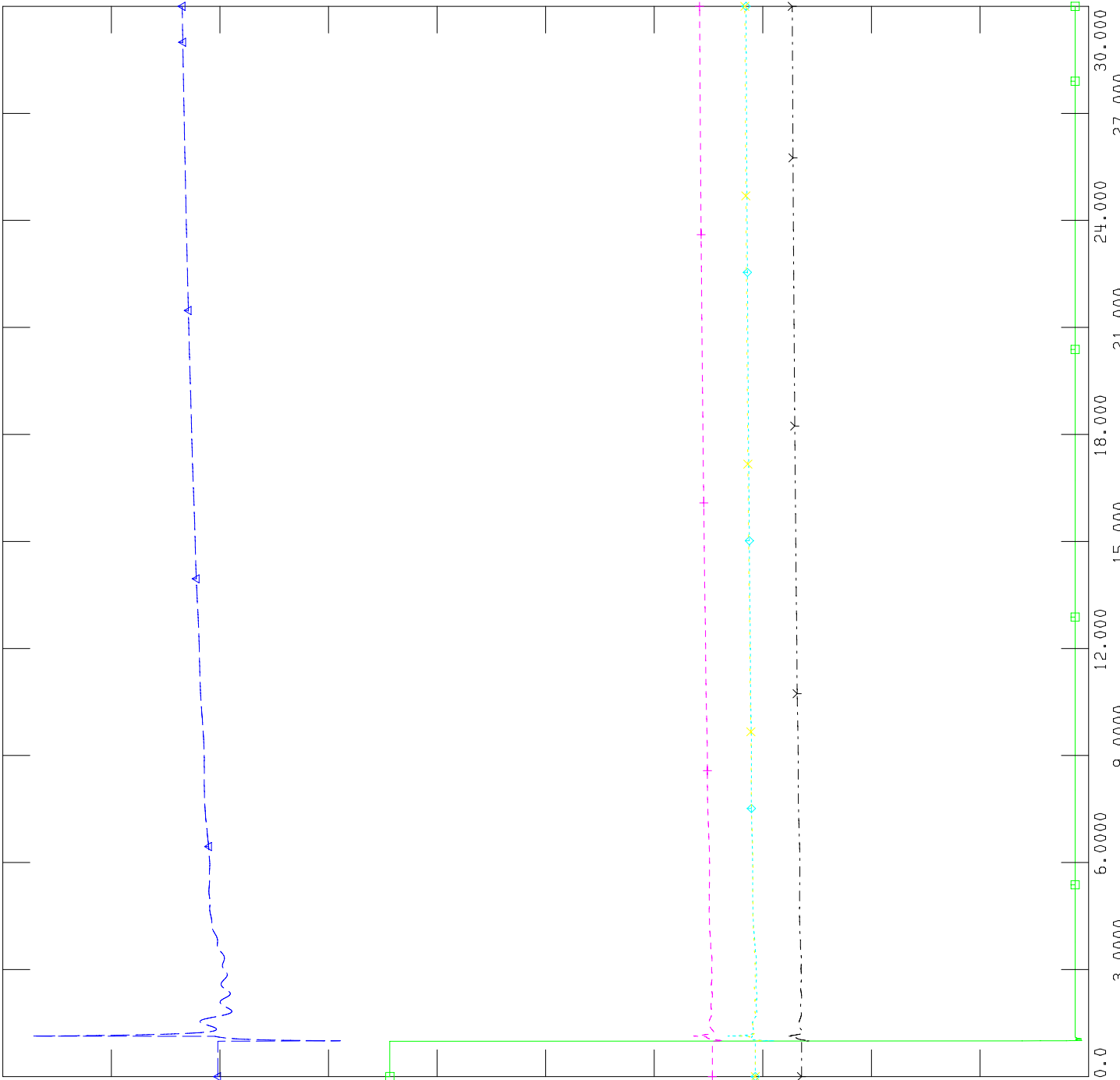
Attachment C-3: Post-connection Transient Stability Analysis

Results -- Scenario 3



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_171L.out

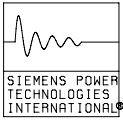
Channel	Label	Value
1.0000	CHNL# 6: [POWR BUS 92046 MACH '1 ']	-0.0100
1.0000	CHNL# 5: [POWR BUS 11002 MACH '1 ']	-0.0100
1.0000	CHNL# 4: [POWR BUS 4740 MACH 'G1 ']	-0.0100
1.0000	CHNL# 3: [POWR BUS 2389 MACH '1 ']	-0.0100
1.0000	CHNL# 2: [POWR BUS 100018 MACH '1 ']	-0.0100
1.0000	CHNL# 1: [POWR BUS 2294 MACH '1 ']	-0.0100



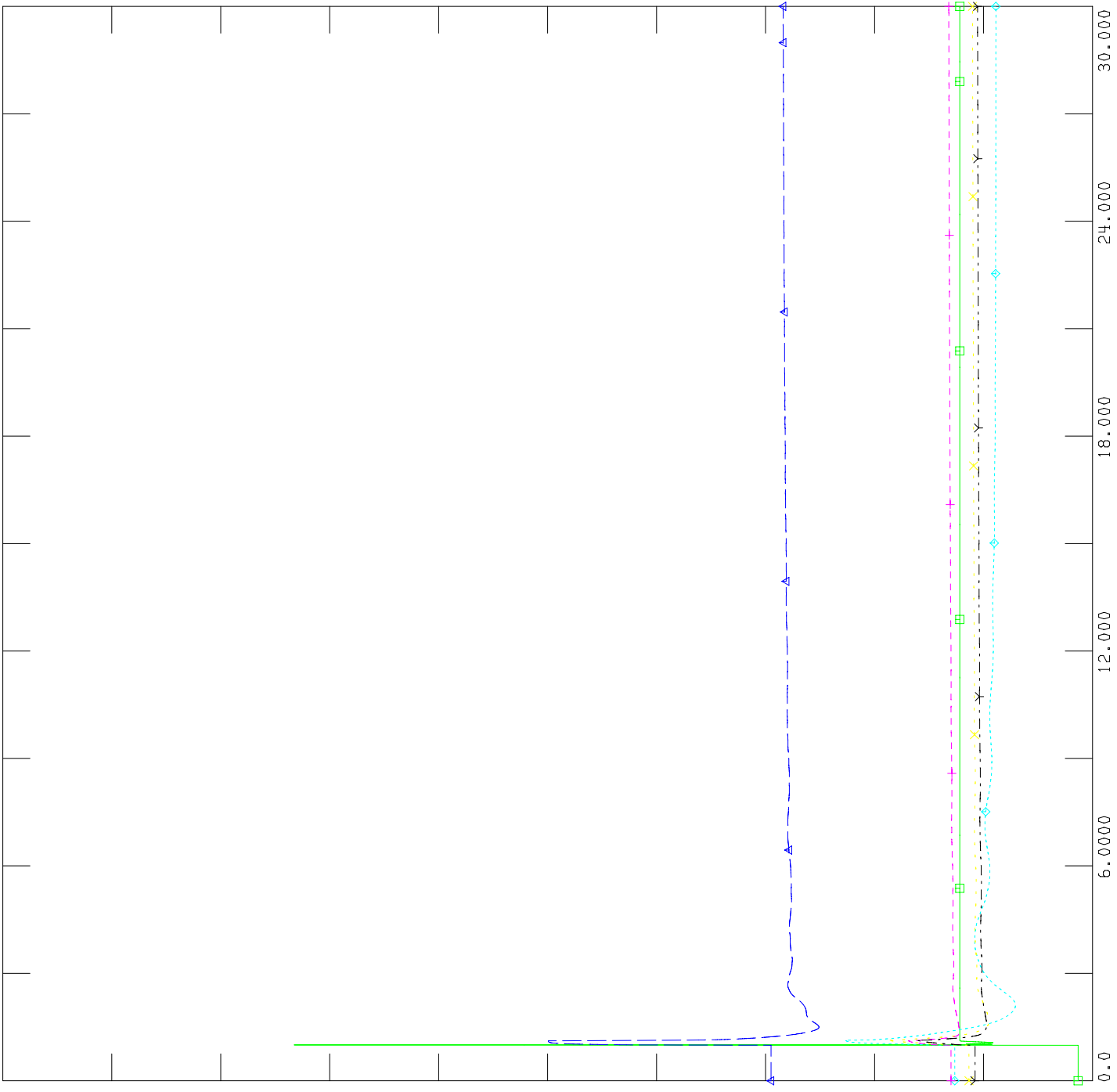
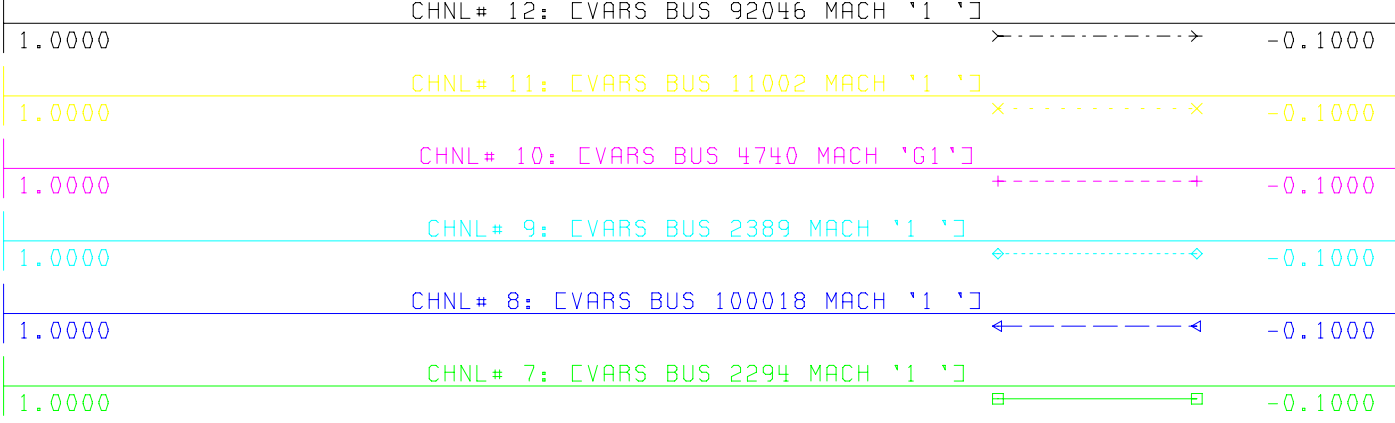
TUE, NOV 16 2010 14:04
PELEC

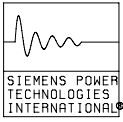
C-3-1

TIME (SECONDS)



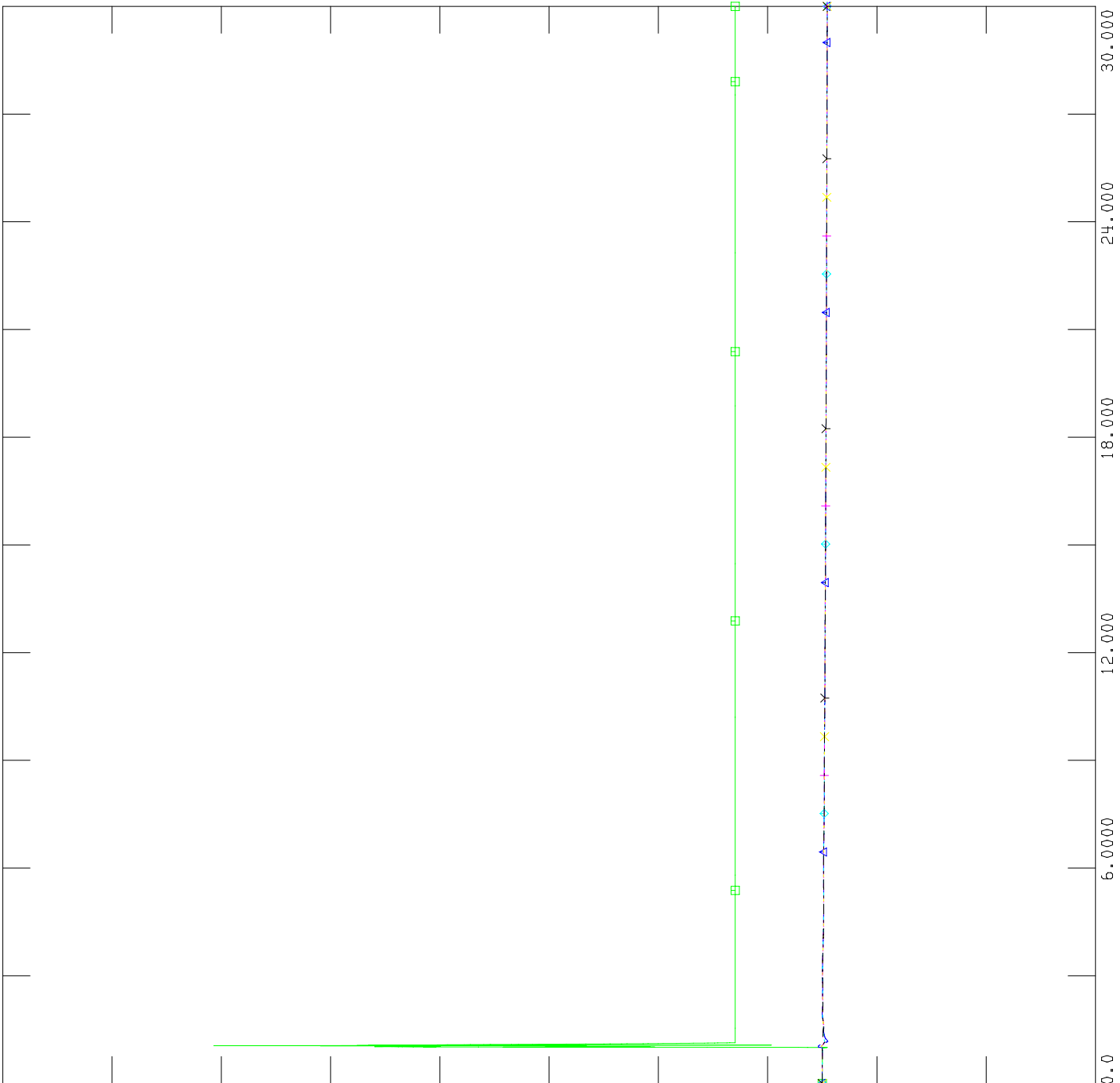
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_171L.out

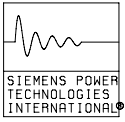




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_171L.out

Channel	CFREQ	Component	Value
CHNL# 18	92046	CMCBRIDE6	0.5750
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	0.5750
CHNL# 15	2389	CHILLRIDG	0.5750
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900

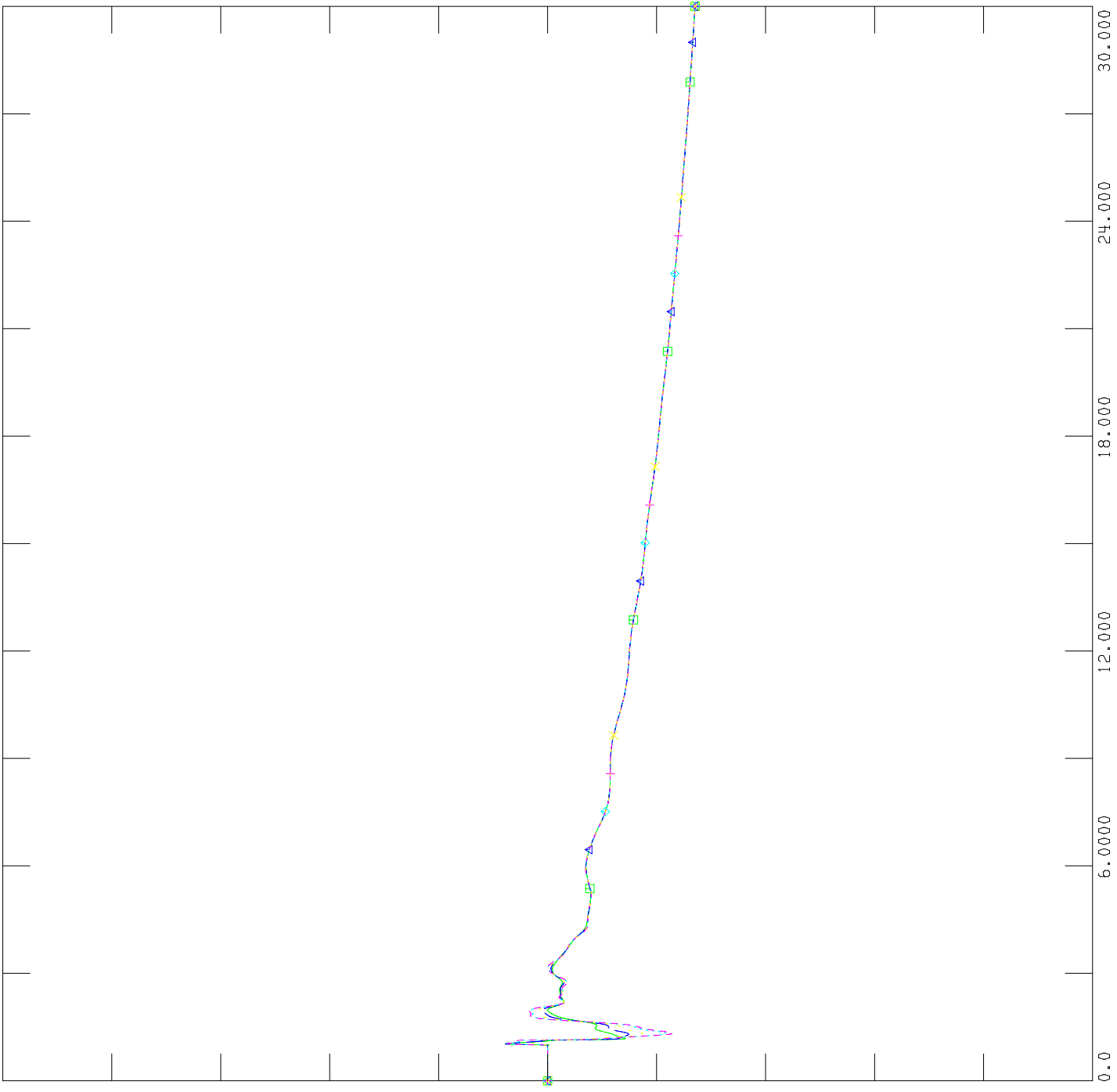




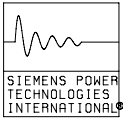
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_171L.out

TUE, NOV 16 2010 14:09
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270	ESUFFIEL7	138.00	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680	CMEDICIN7	138.00	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271	CBULLS H7	138.00	◇-----◇	-0.0067
0.00670	CHNL# 20: CFREQ	269	CBURDETT7	138.00	←-----△	-0.0067
0.00670	CHNL# 19: CFREQ	31	CFINCAST7	138.00	□-----□	-0.0067

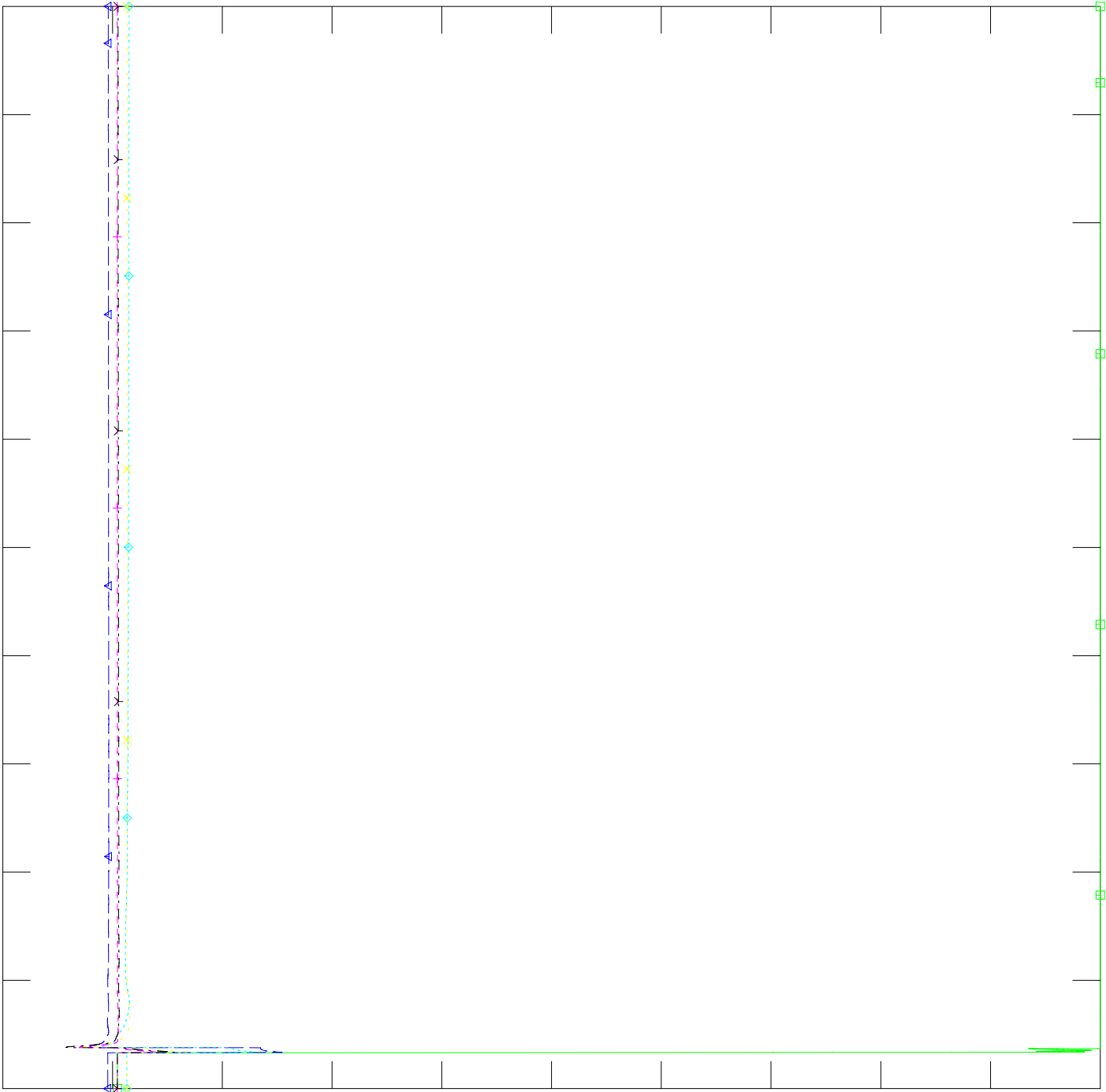


C-3-4



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_171L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 EMCBRIDE6	0.5750
CHNL# 28	EVOLT 11002 EGARDNG2	0.5750
CHNL# 27	EVOLT 4740 CARD_07	0.5750
CHNL# 26	EVOLT 2389 CHILLRIDG	0.5750
CHNL# 25	EVOLT 100018 CPURPLESP	0.5750
CHNL# 24	EVOLT 2294 CTOTHILL2	0.6900

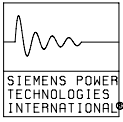


TUE, NOV 16 2010 14:10

C-3-5

TIME (SECONDS)

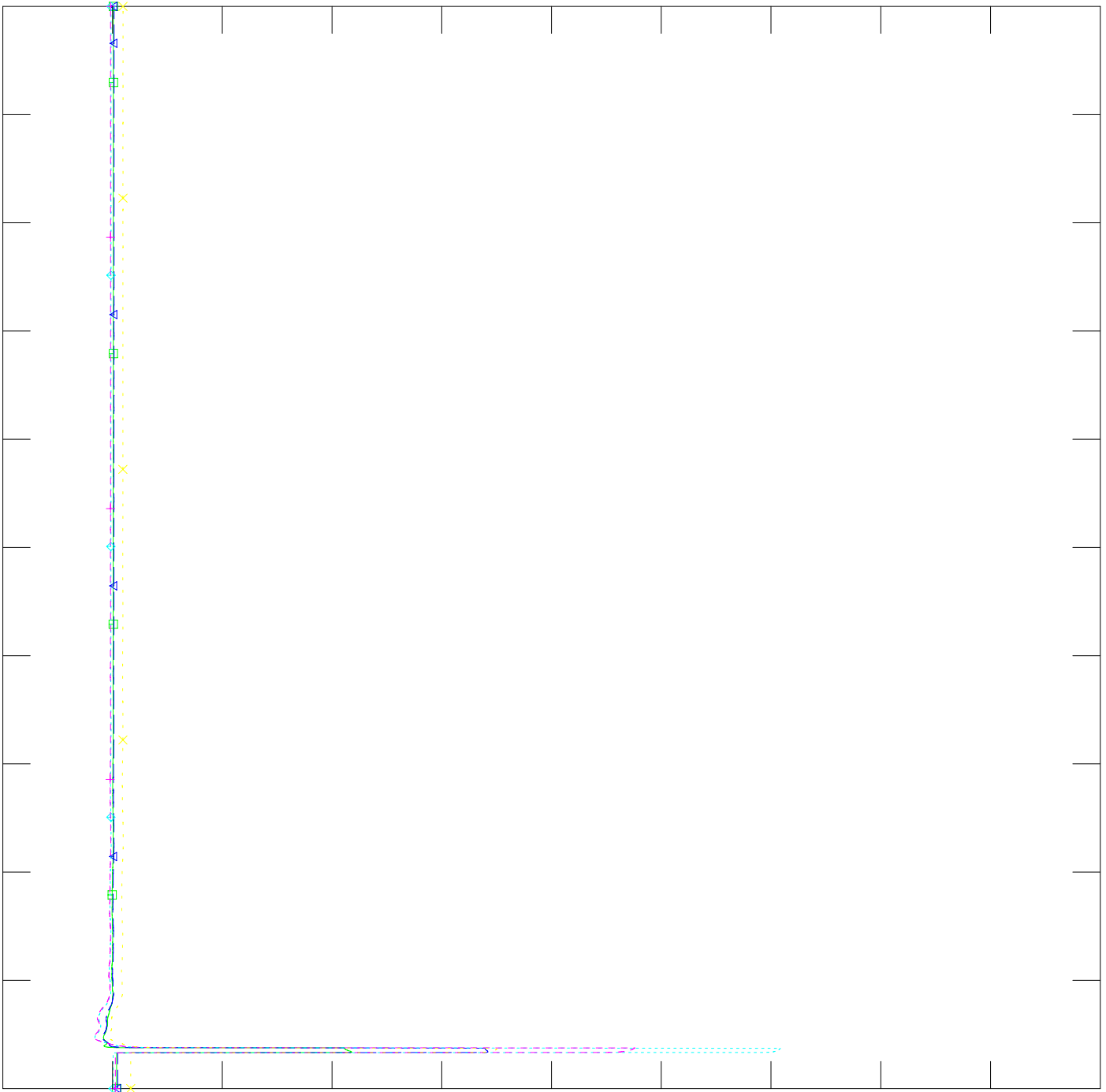
BUS VOLTAGE



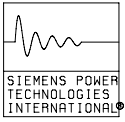
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_171L.out

TUE, NOV 16 2010 14:12
BUS VOLTAGE

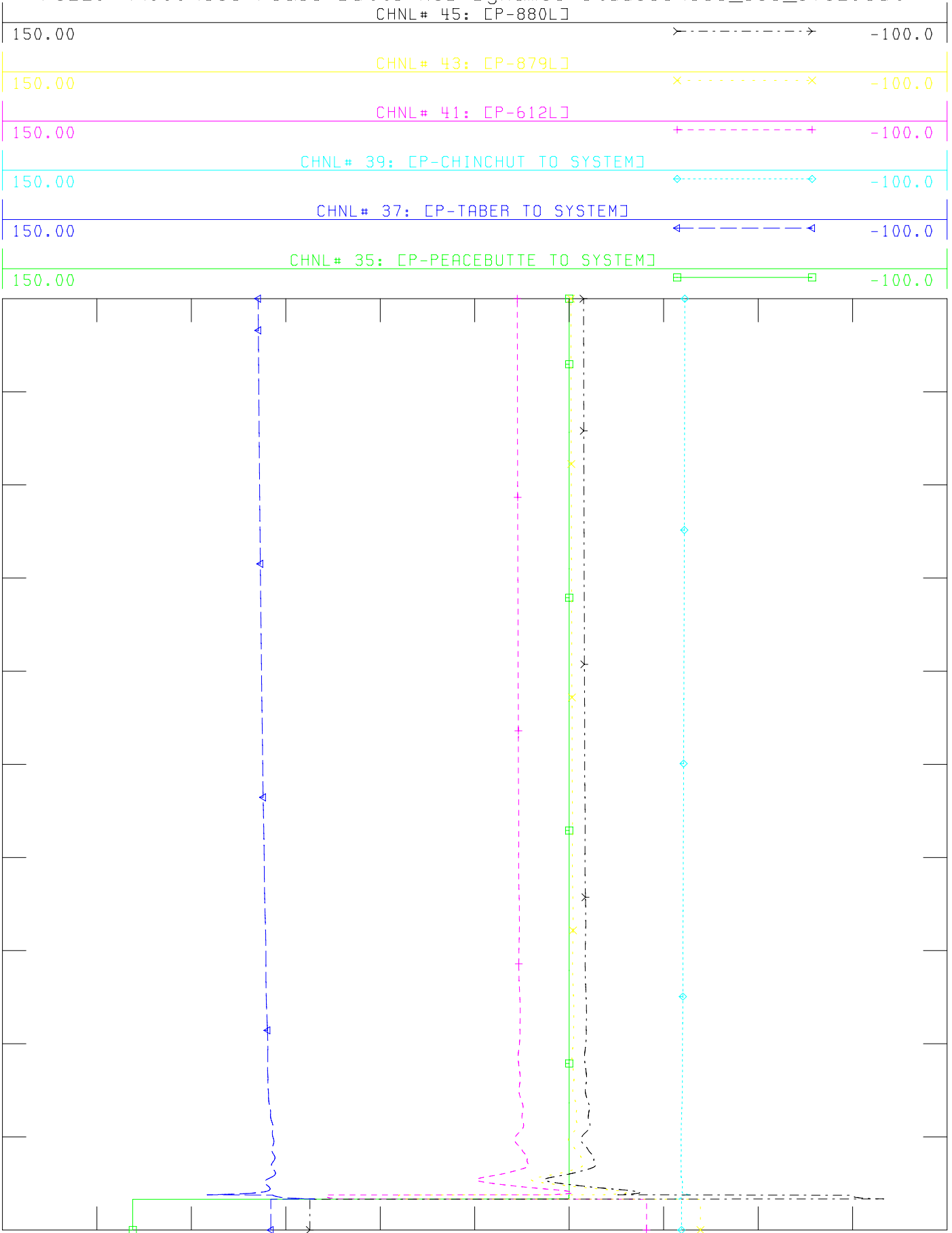
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]

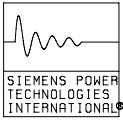


C-3-6

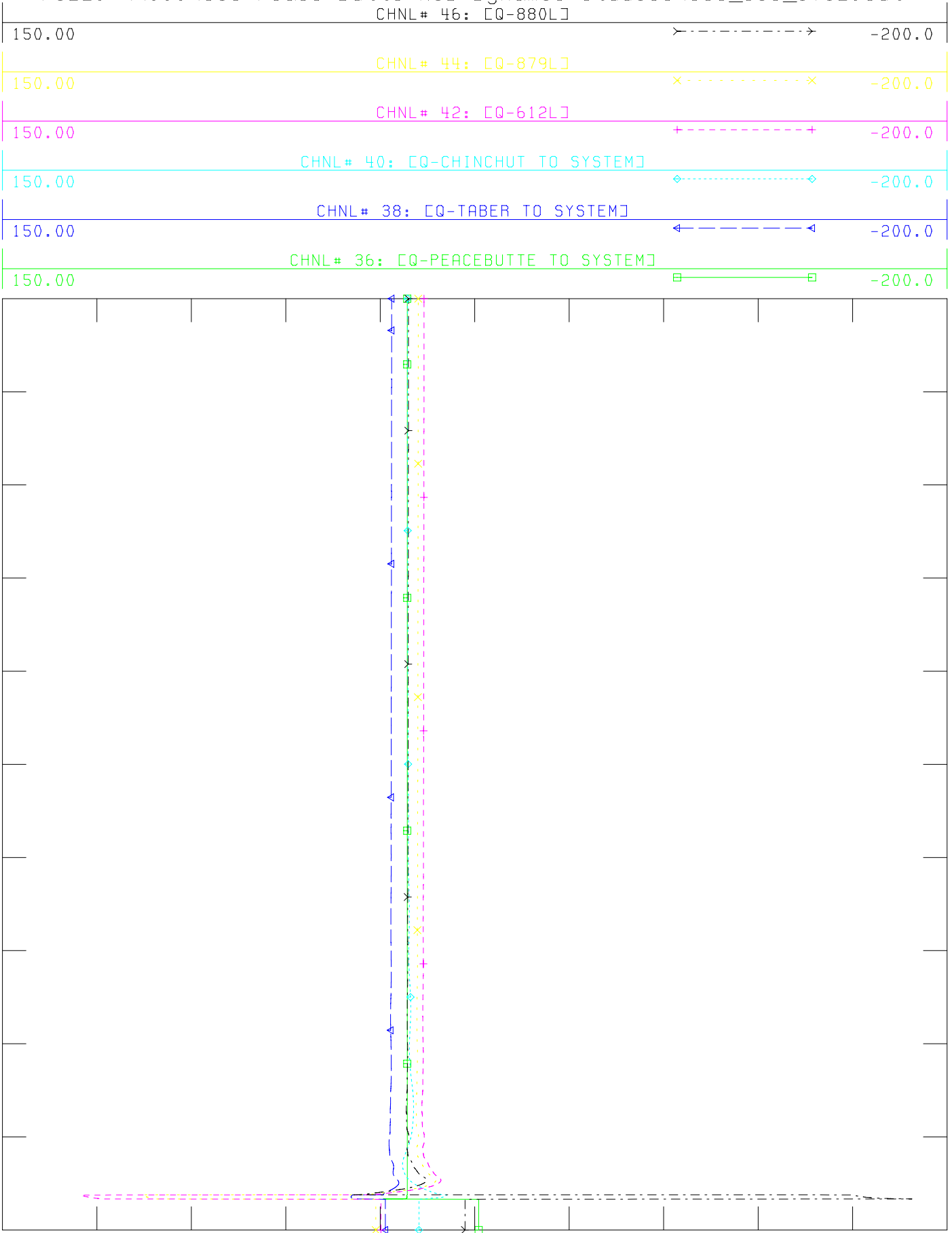


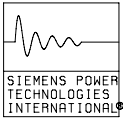
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_171L.out
CHNL# 45: CP-880L]



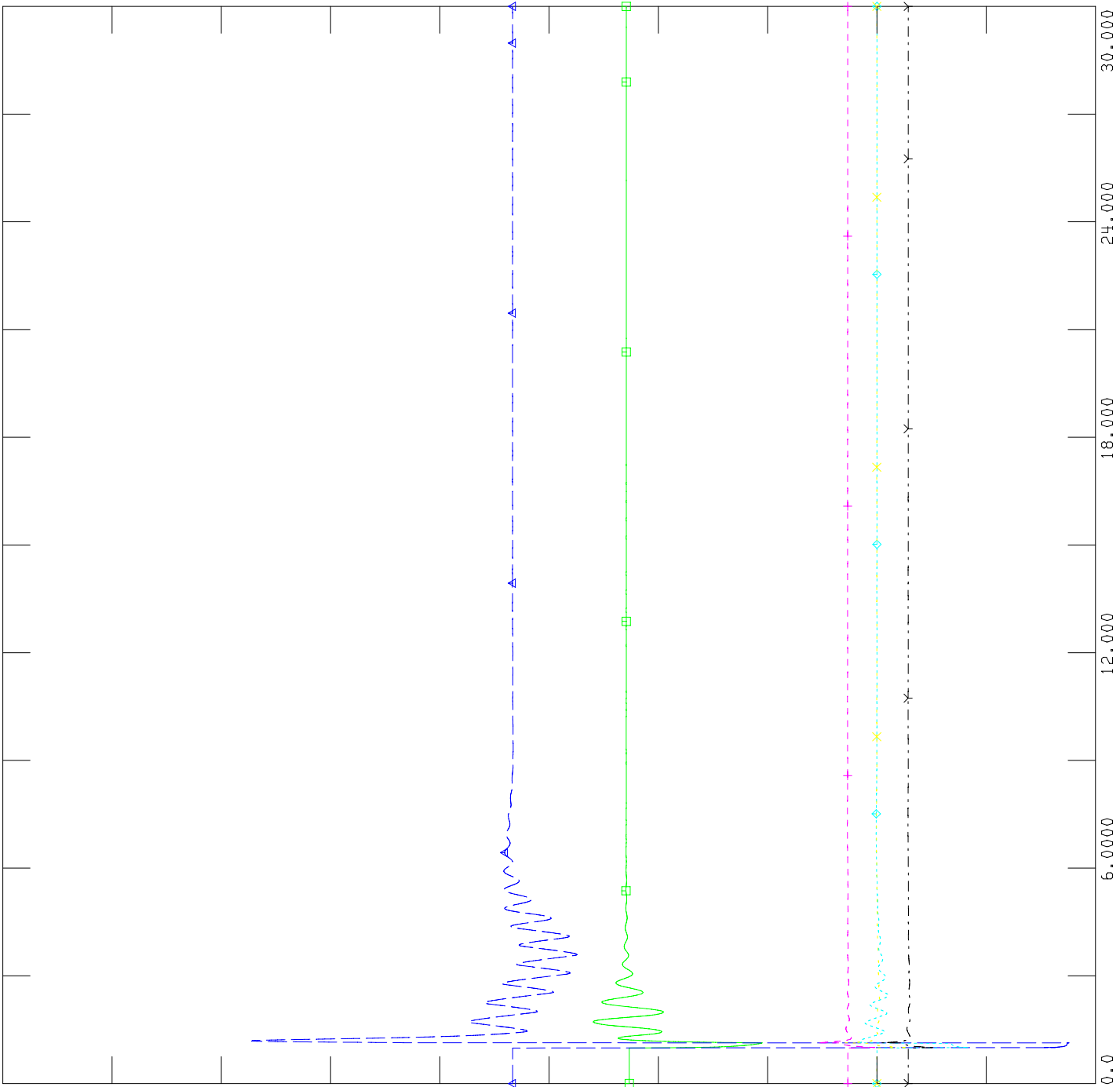
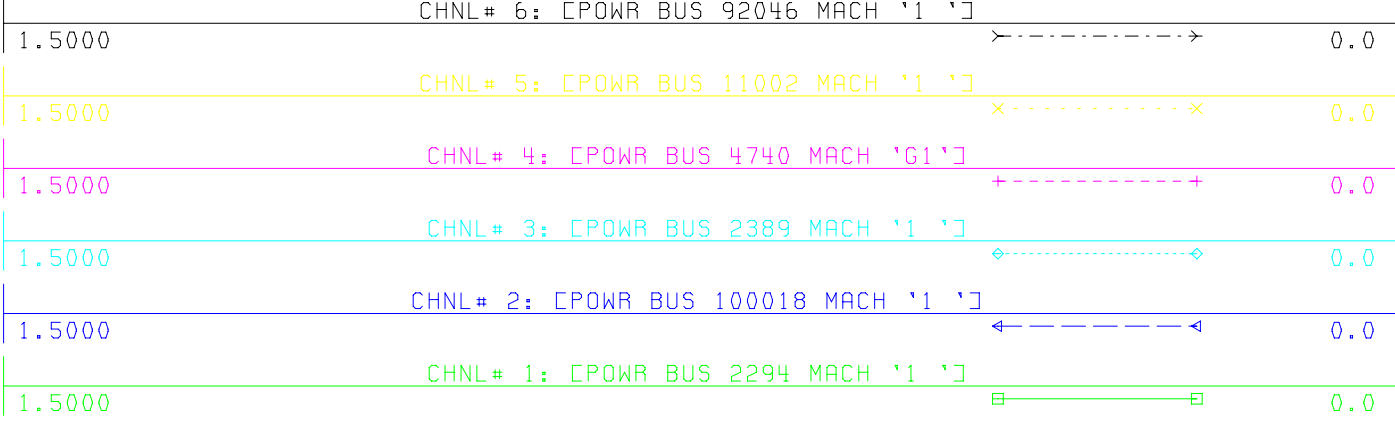


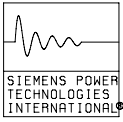
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_171L.out
CHNL# 46: [EQ-880L]



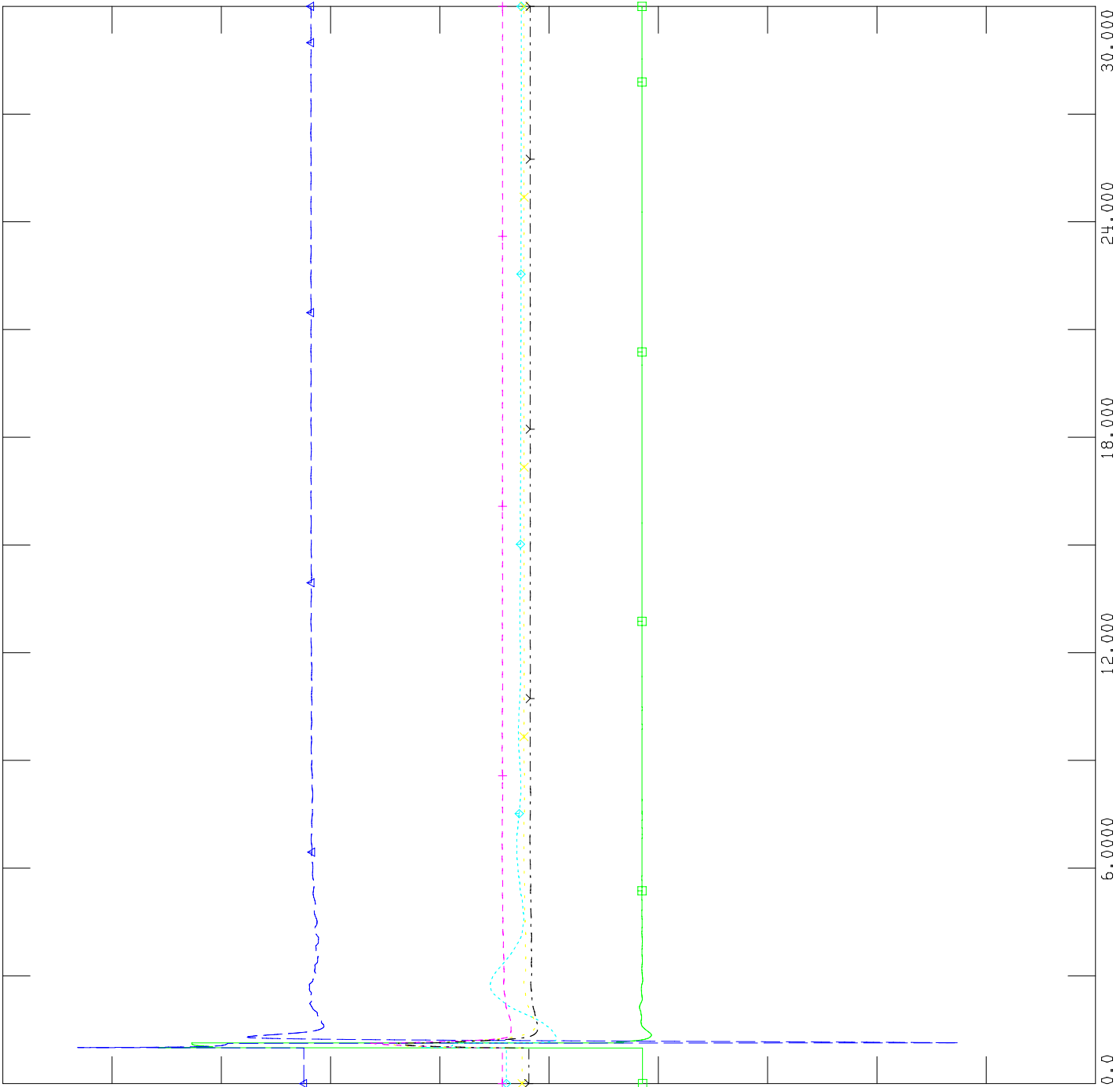
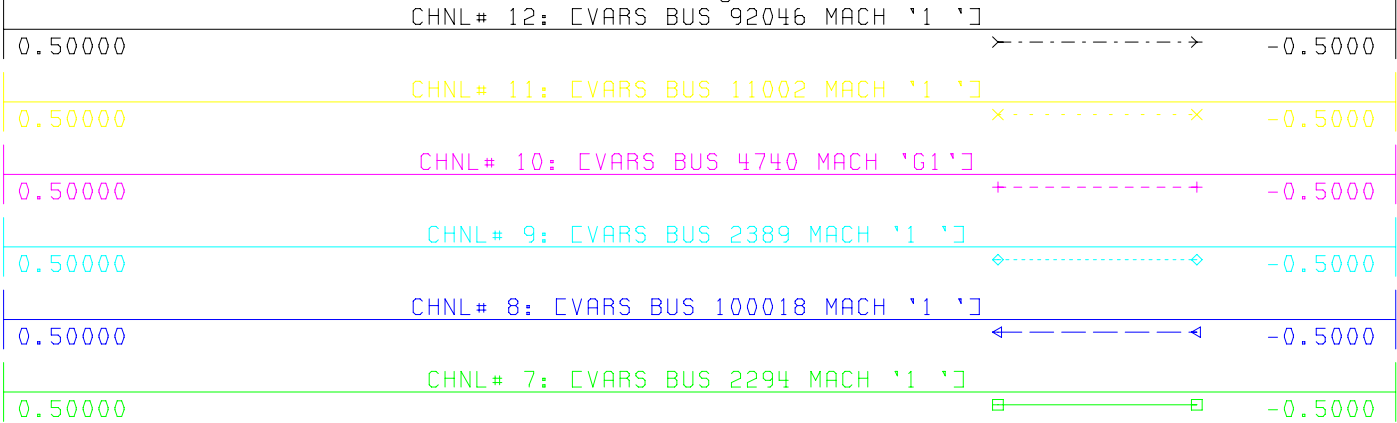


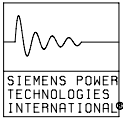
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_612L.out





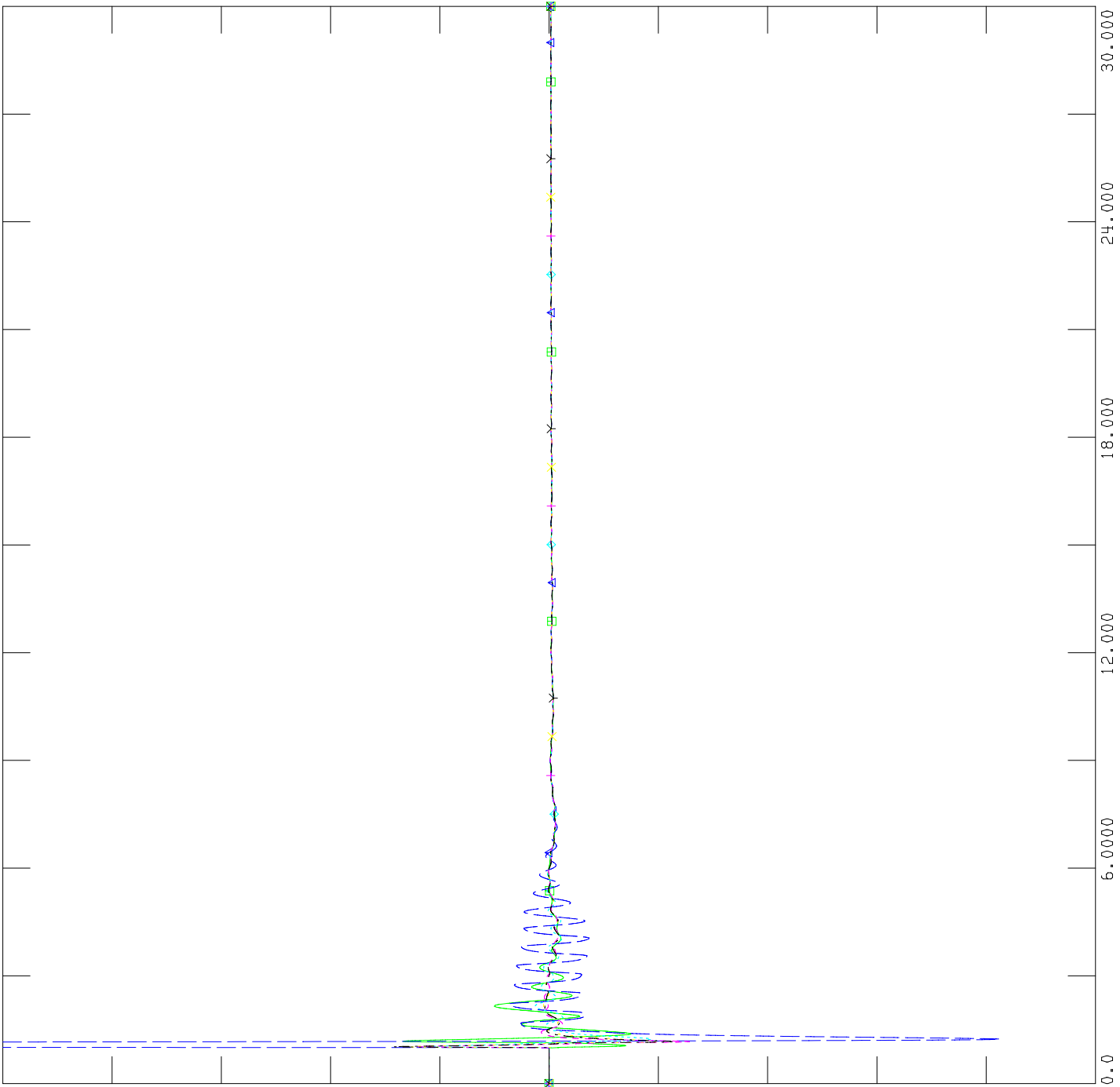
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_612L.out

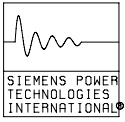




FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_612L.out

Channel	CFREQ	Component	Value
CHNL# 18	92046	EMCBRIDE6	0.5750
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	0.5750
CHNL# 15	2389	CHILLRIDG	0.5750
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900

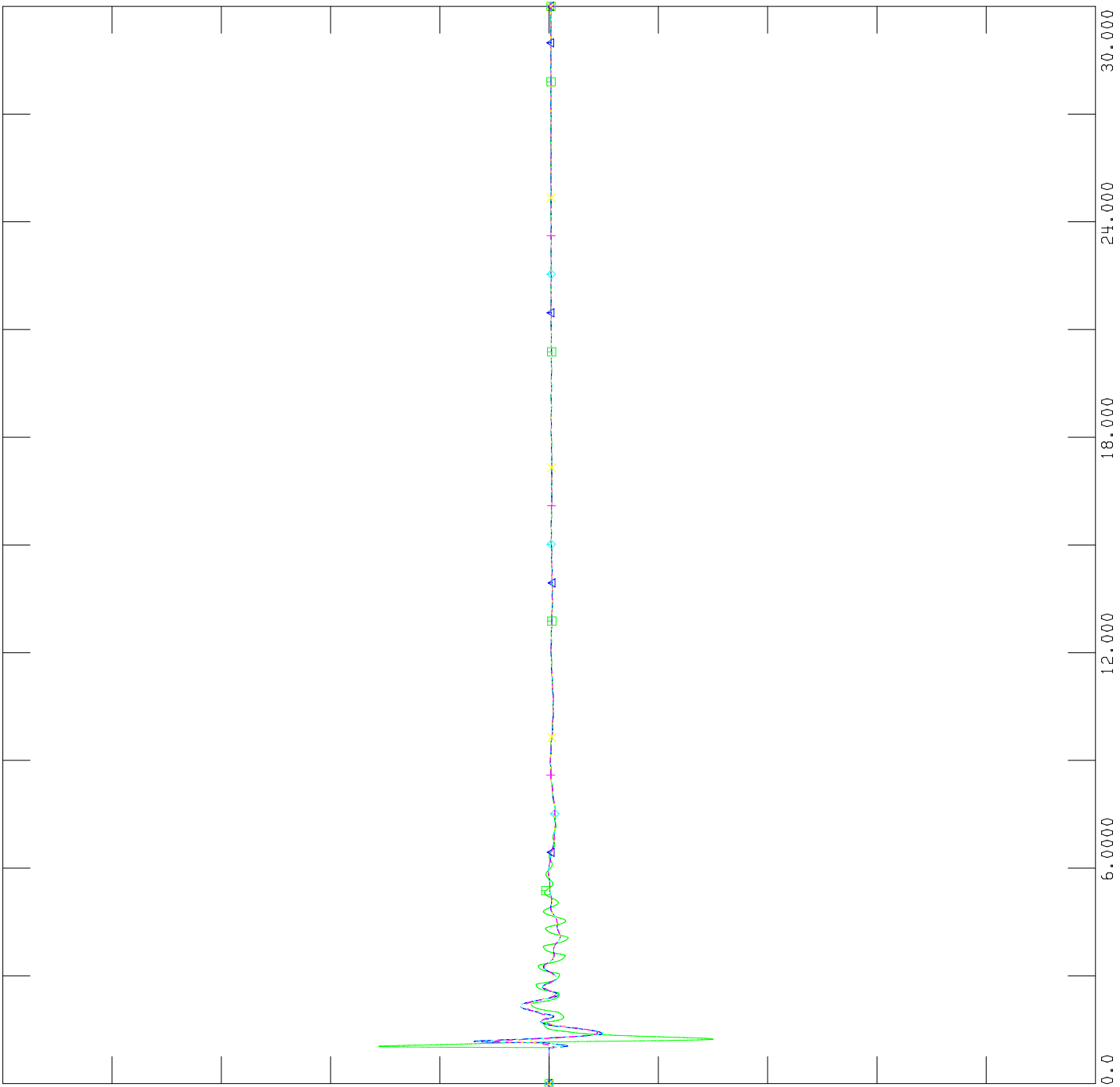


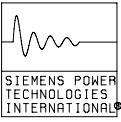


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_612L.out

TUE, NOV 16 2010 14:19
BUS FREQUENCY

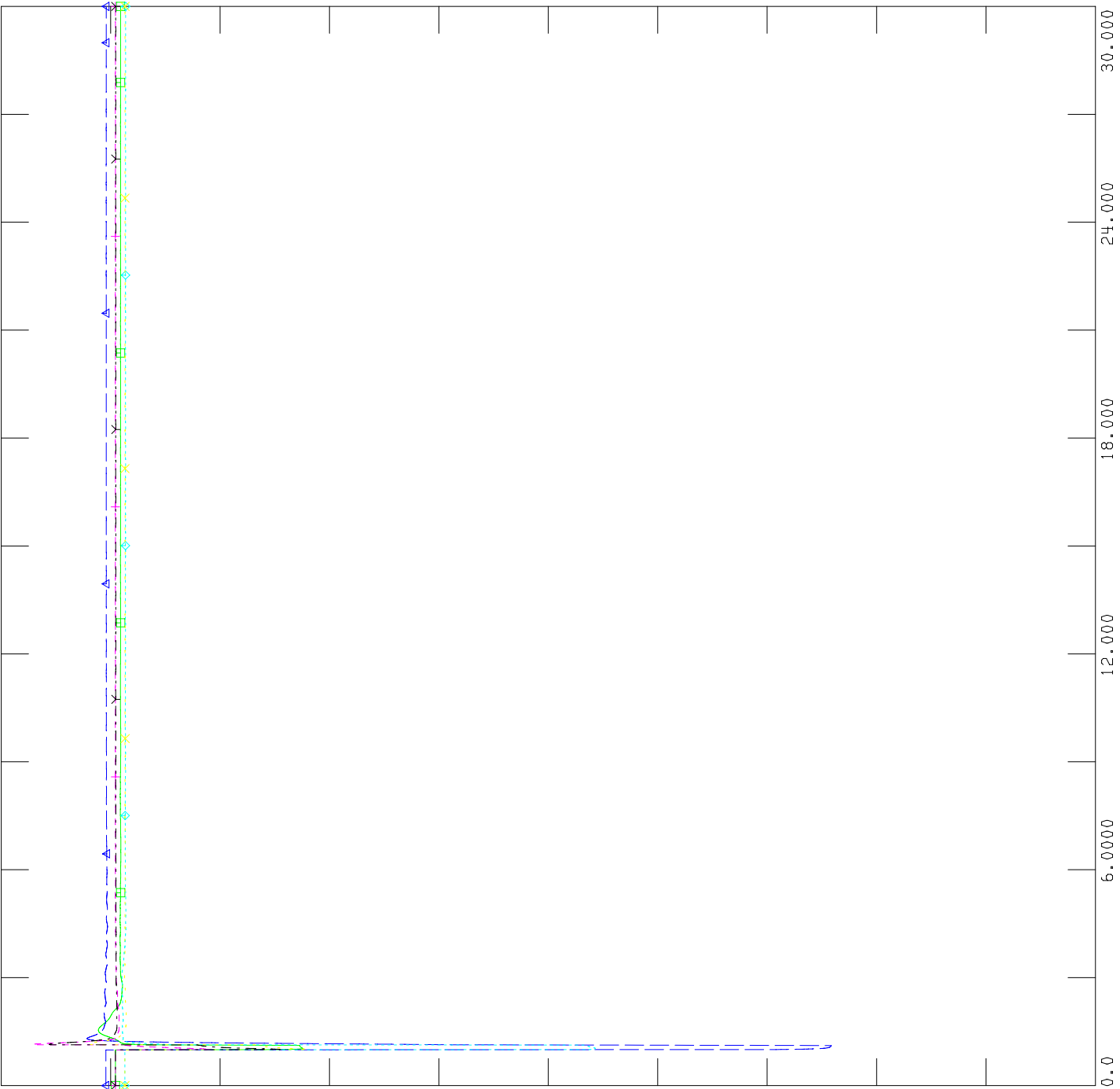
CHNL#	CFREQ	Location	Value
23	270	CSUFFIEL7	138.00
22	680	CMEDICIN7	138.00
21	271	CBULLS H7	138.00
20	269	CBURDETT7	138.00
19	31	CFINCAST7	138.00





FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_612L.out

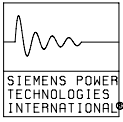
Channel	Label	Value
CHNL# 29	EVOLT 92046 EMCBRIDE6	0.5750
CHNL# 28	EVOLT 11002 EGARDNG2	0.5750
CHNL# 27	EVOLT 4740 CARD_07	0.5750
CHNL# 26	EVOLT 2389 CHILLRIDG	0.5750
CHNL# 25	EVOLT 100018 CPURPLESP	0.5750
CHNL# 24	EVOLT 2294 CTOTHILL2	0.6900



TUE, NOV 16 2010 14:20
BUS VOLTAGE

C-3-13

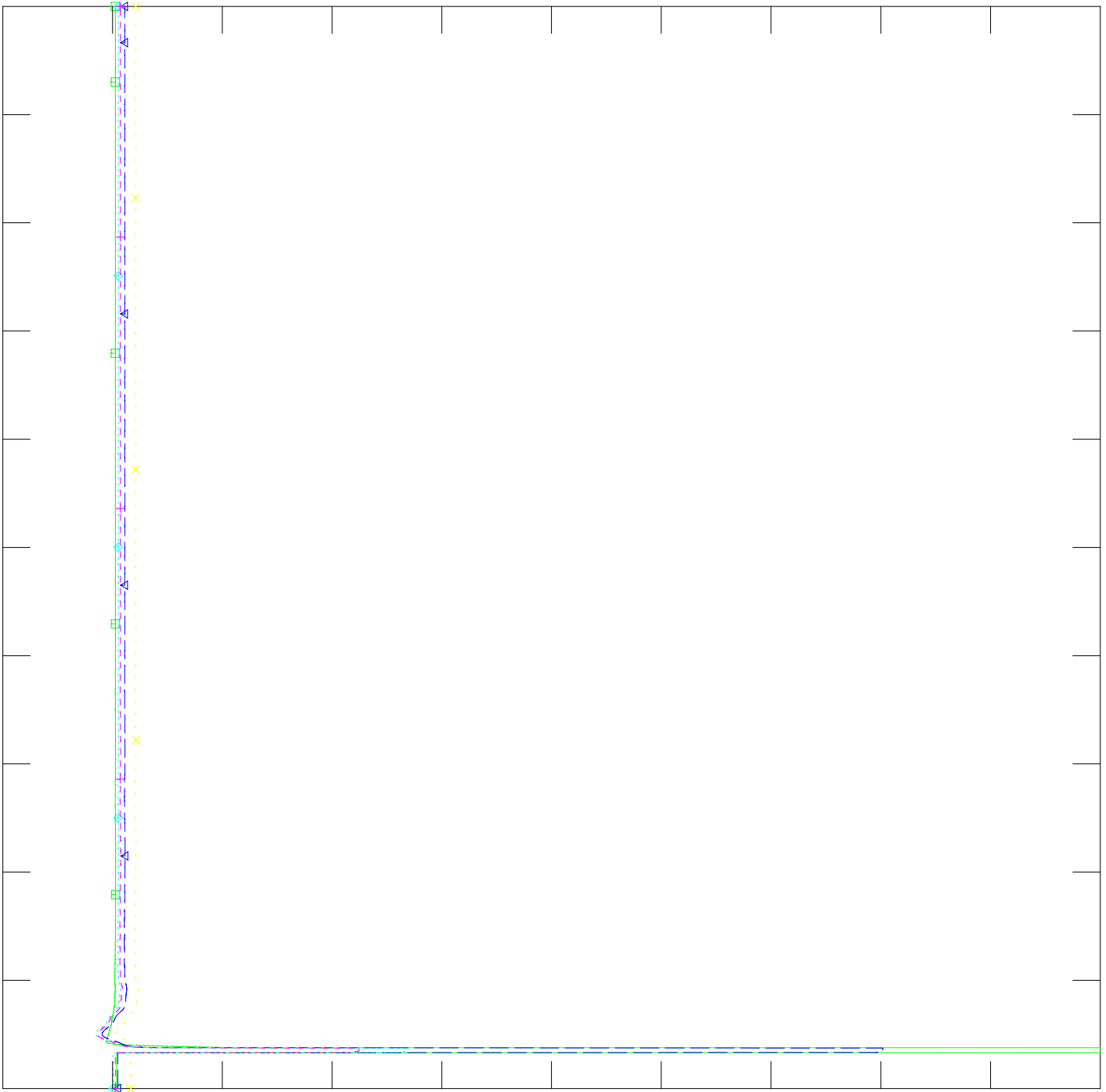
TIME (SECONDS)



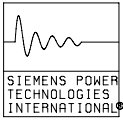
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_612L.out

TUE, NOV 16 2010 14:21
BUS VOLTAGE

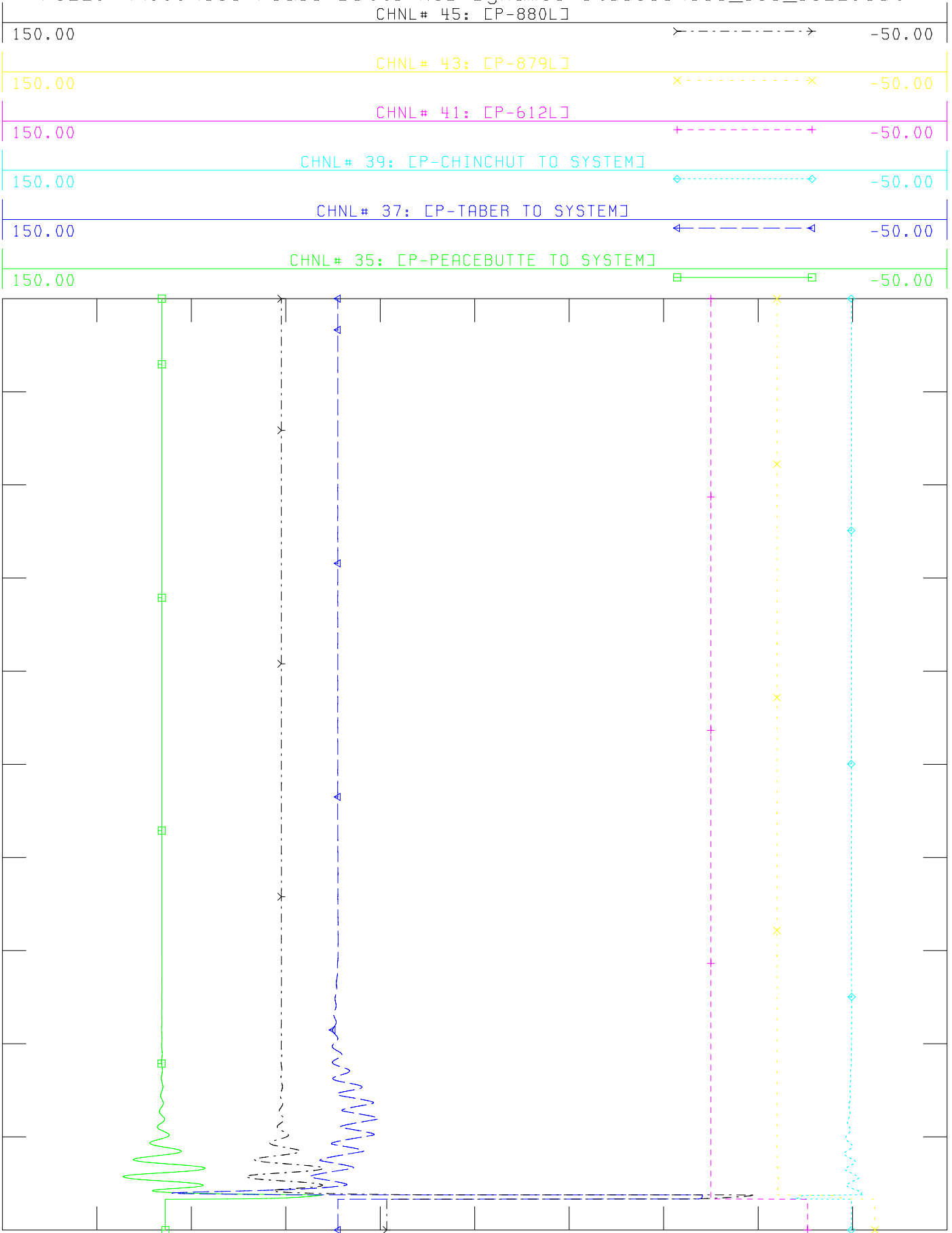
Channel	Bus Name	Value
CHNL# 34: EVOLT	270 ESUFFIEL7	138.00
CHNL# 33: EVOLT	680 CMEDICIN7	138.00
CHNL# 32: EVOLT	271 EBULLS H7	138.00
CHNL# 31: EVOLT	269 CBURDETT7	138.00
CHNL# 30: EVOLT	31 CFINCAST7	138.00

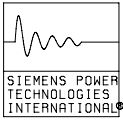


C-3-14

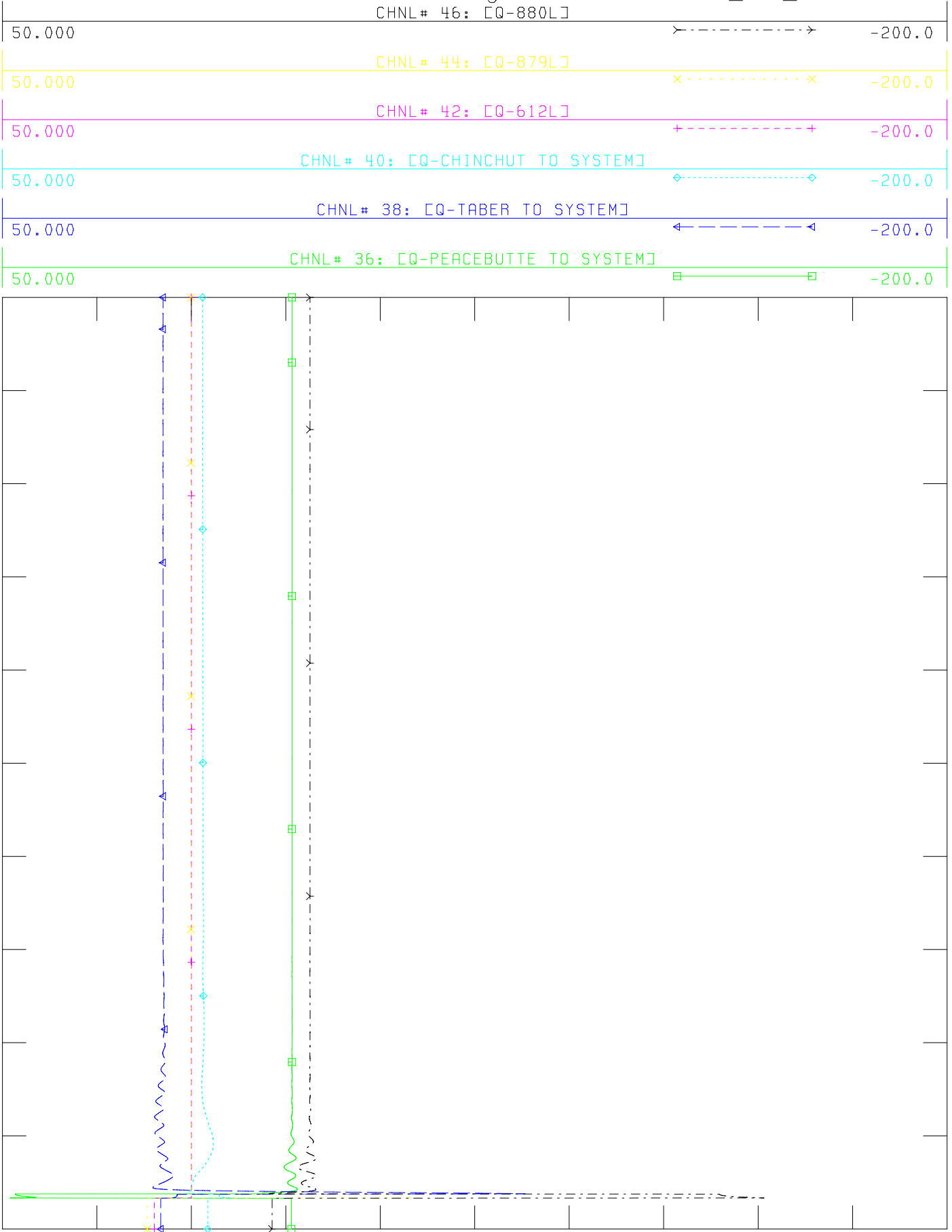


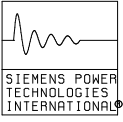
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_612L.out
CHNL# 45: [P-880L]



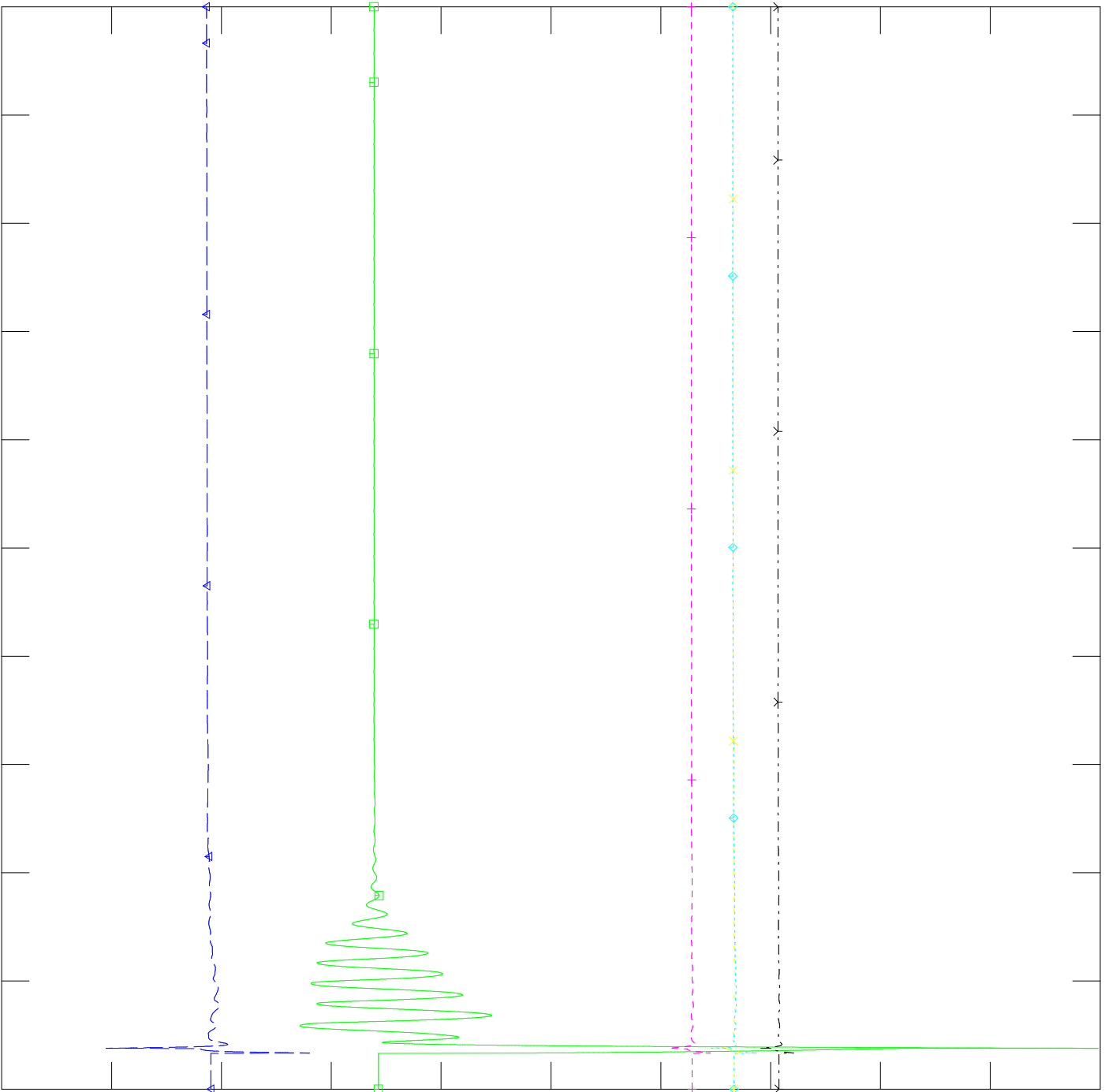
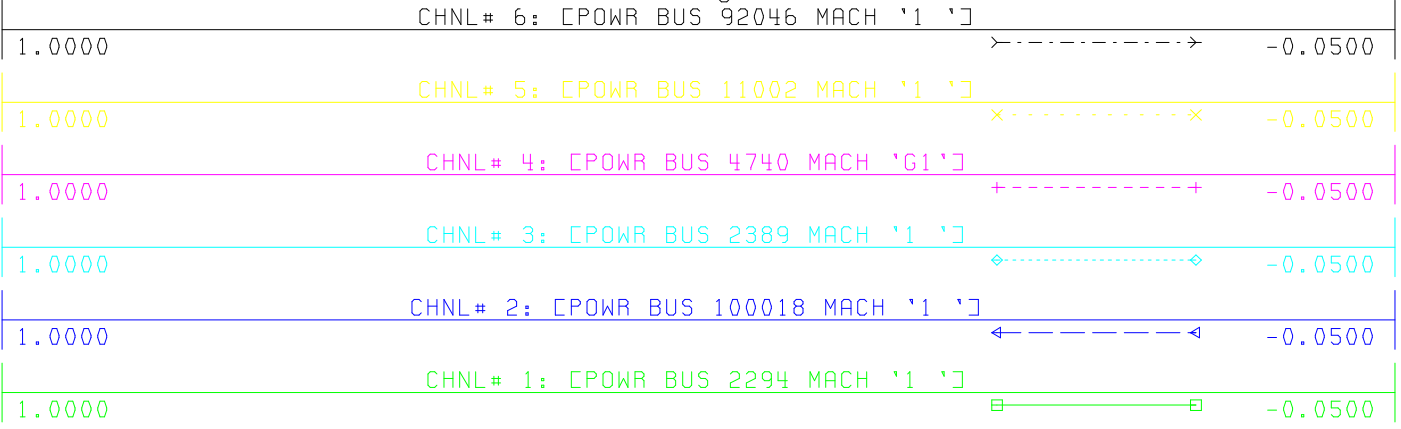


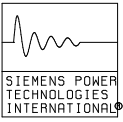
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_612L.out
CHNL# 46: [Q-880L]



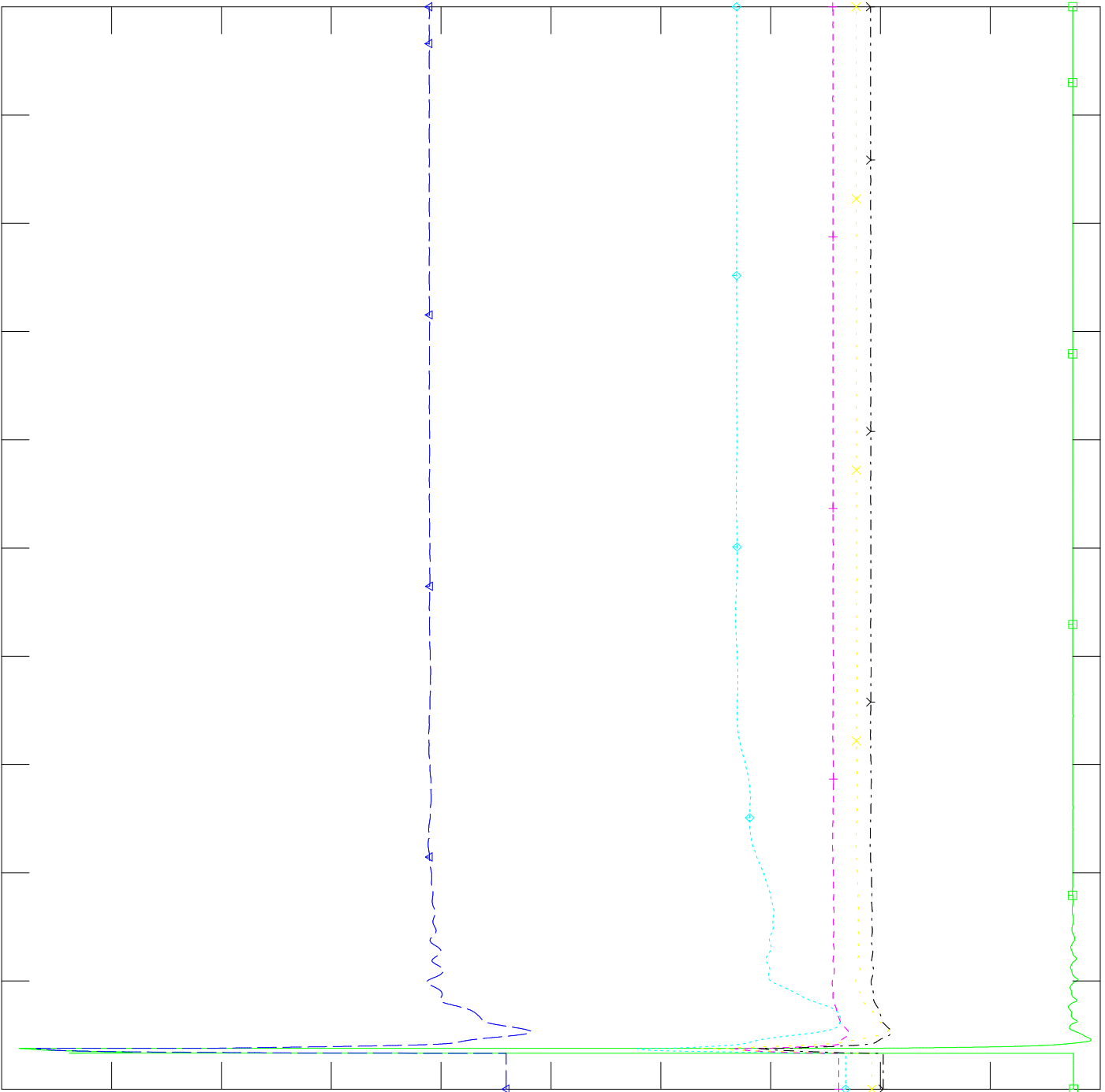
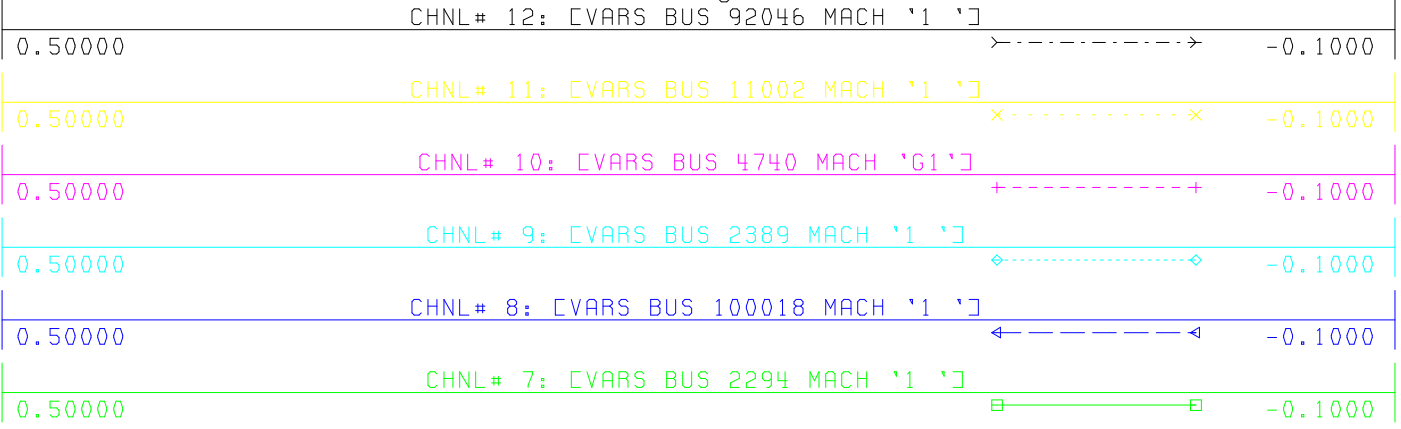


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_760L.out





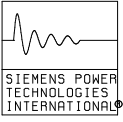
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_760L.out



TUE, NOV 16 2010 14:27
QELEC

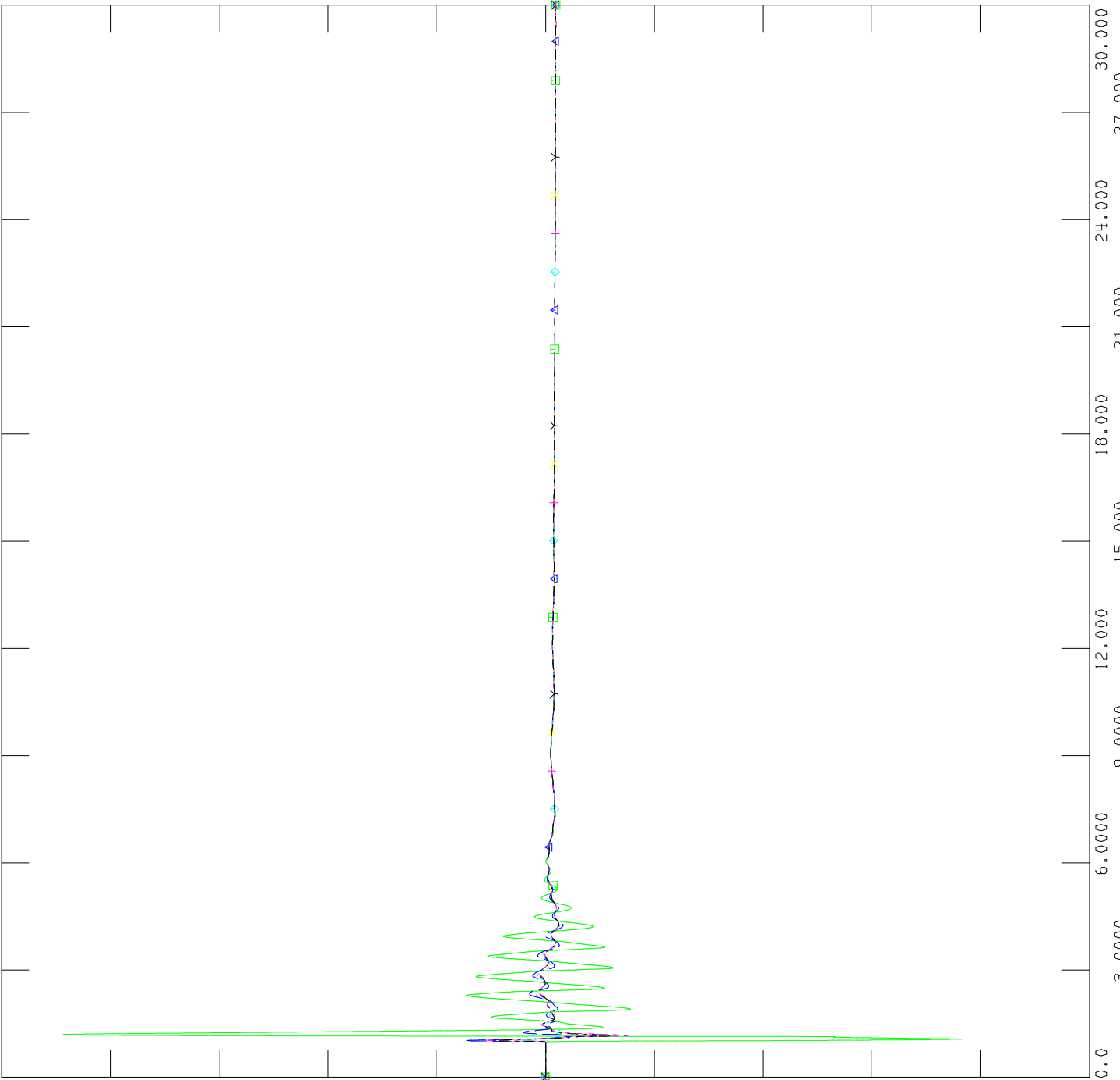
C-3-18

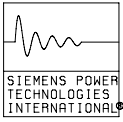
TIME (SECONDS)



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_760L.out

0.00670	CHNL# 18: CFREQ 92046 CMCBRIDE6 0.5750]]	-0.0067
0.00670	CHNL# 17: CFREQ 11002 EGARDNG2 0.5750]]	-0.0067
0.00670	CHNL# 16: CFREQ 4740 CARD_07 0.5750]]	-0.0067
0.00670	CHNL# 15: CFREQ 2389 CHILLRIDG 0.5750]]	-0.0067
0.00670	CHNL# 14: CFREQ 100018 CPURPLESP 0.5750]]	-0.0067
0.00670	CHNL# 13: CFREQ 2294 CTOHILL2 0.6900]]	-0.0067



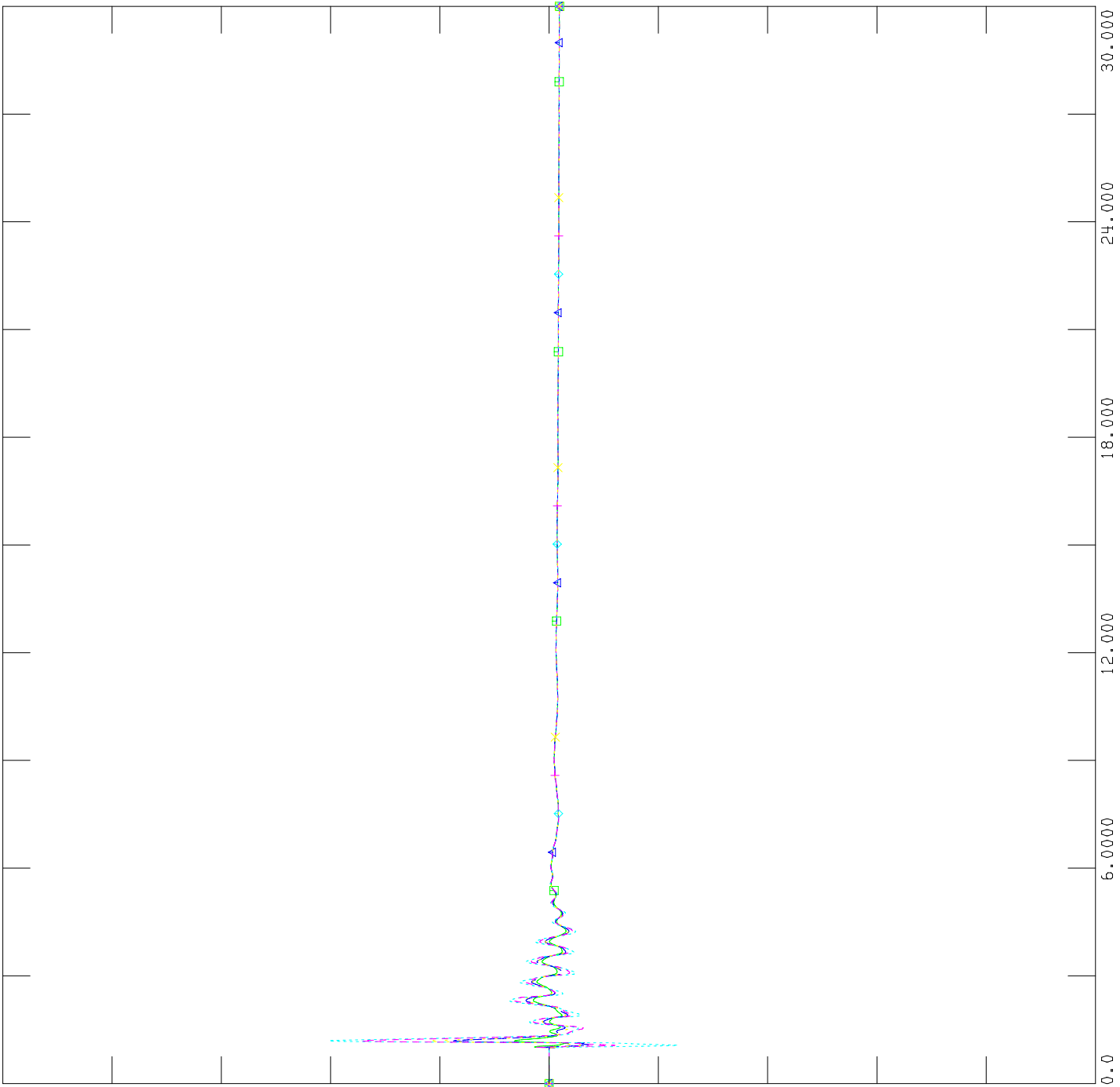


TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
 SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

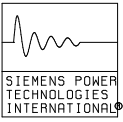
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_760L.out

TUE, NOV 16 2010 14:30
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270	CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680	CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271	CBULLS H7	138.00]]	o-----o	-0.0067
0.00670	CHNL# 20: CFREQ	269	CBURDETT7	138.00]]	^-----^	-0.0067
0.00670	CHNL# 19: CFREQ	31	CFINCAST7	138.00]]	□-----□	-0.0067

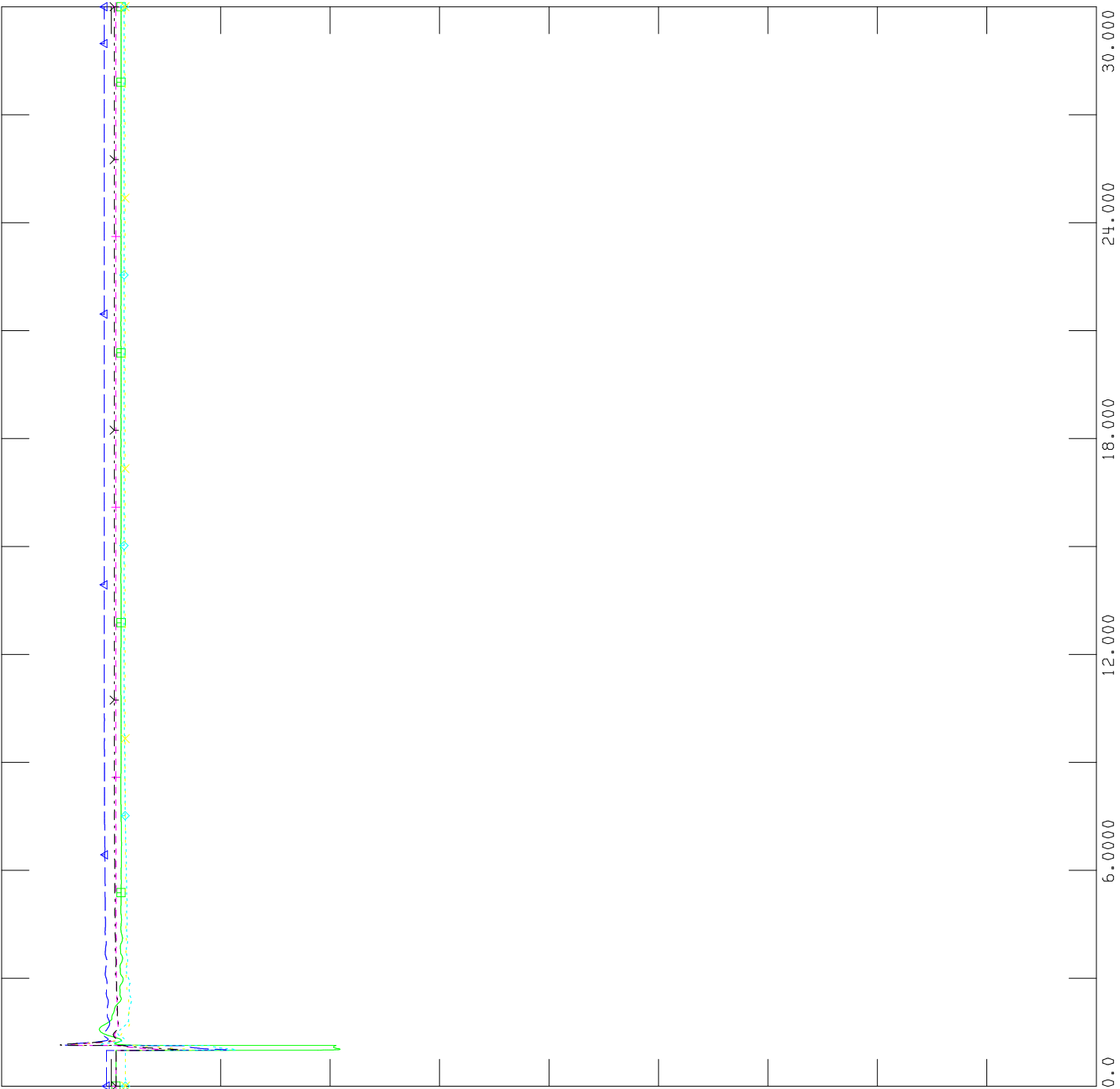


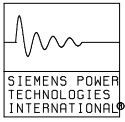
C-3-20



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_760L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [M]CBRIDE6	0.5750
CHNL# 28	EVOLT 11002 [E]GARDNG2	0.5750
CHNL# 27	EVOLT 4740 [C]ARD_07	0.5750
CHNL# 26	EVOLT 2389 [C]HILLRIDG	0.5750
CHNL# 25	EVOLT 100018 [P]URPLESP	0.5750
CHNL# 24	EVOLT 2294 [T]OTHILL2	0.6900

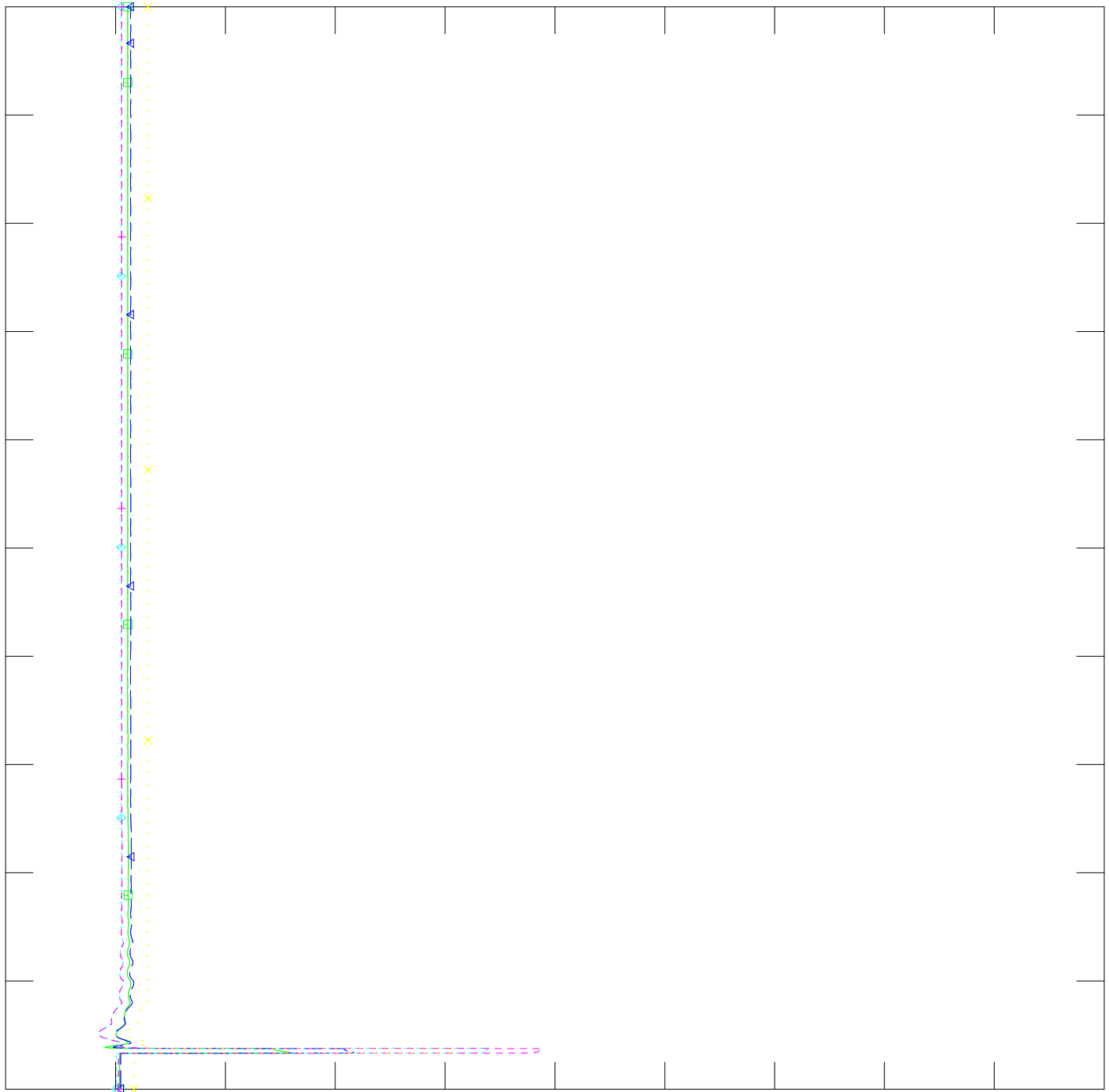




FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_760L.out

TUE, NOV 16 2010 14:33
BUS VOLTAGE

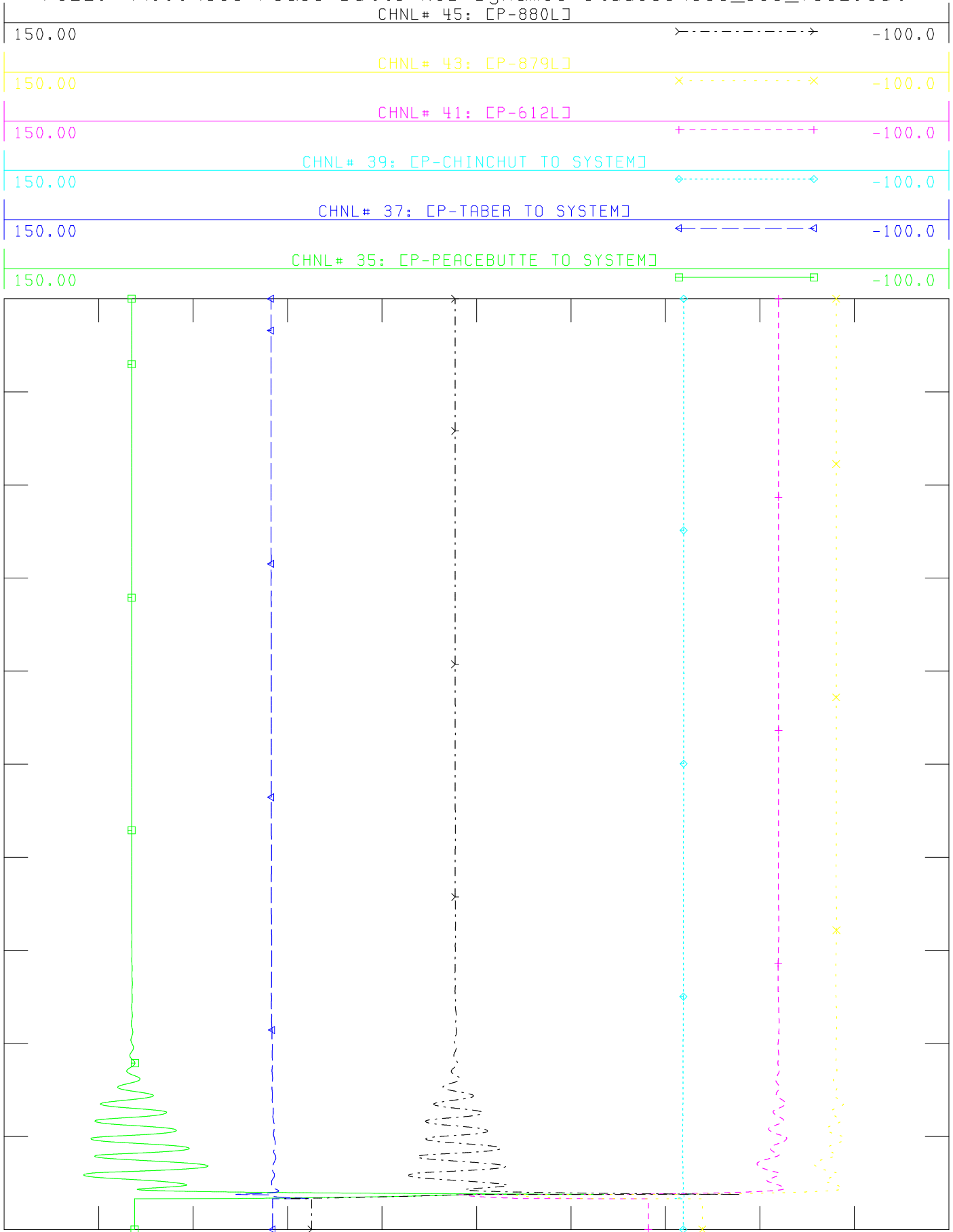
Channel	Label	Value	Scale
CHNL# 34	EVOLT 270 [SUFFIEL7	138.00]]
CHNL# 33	EVOLT 680 [MEDICIN7	138.00]]
CHNL# 32	EVOLT 271 [BULLS H7	138.00]]
CHNL# 31	EVOLT 269 [BURDETT7	138.00]]
CHNL# 30	EVOLT 31 [FINCAST7	138.00]]

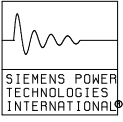


C-3-22

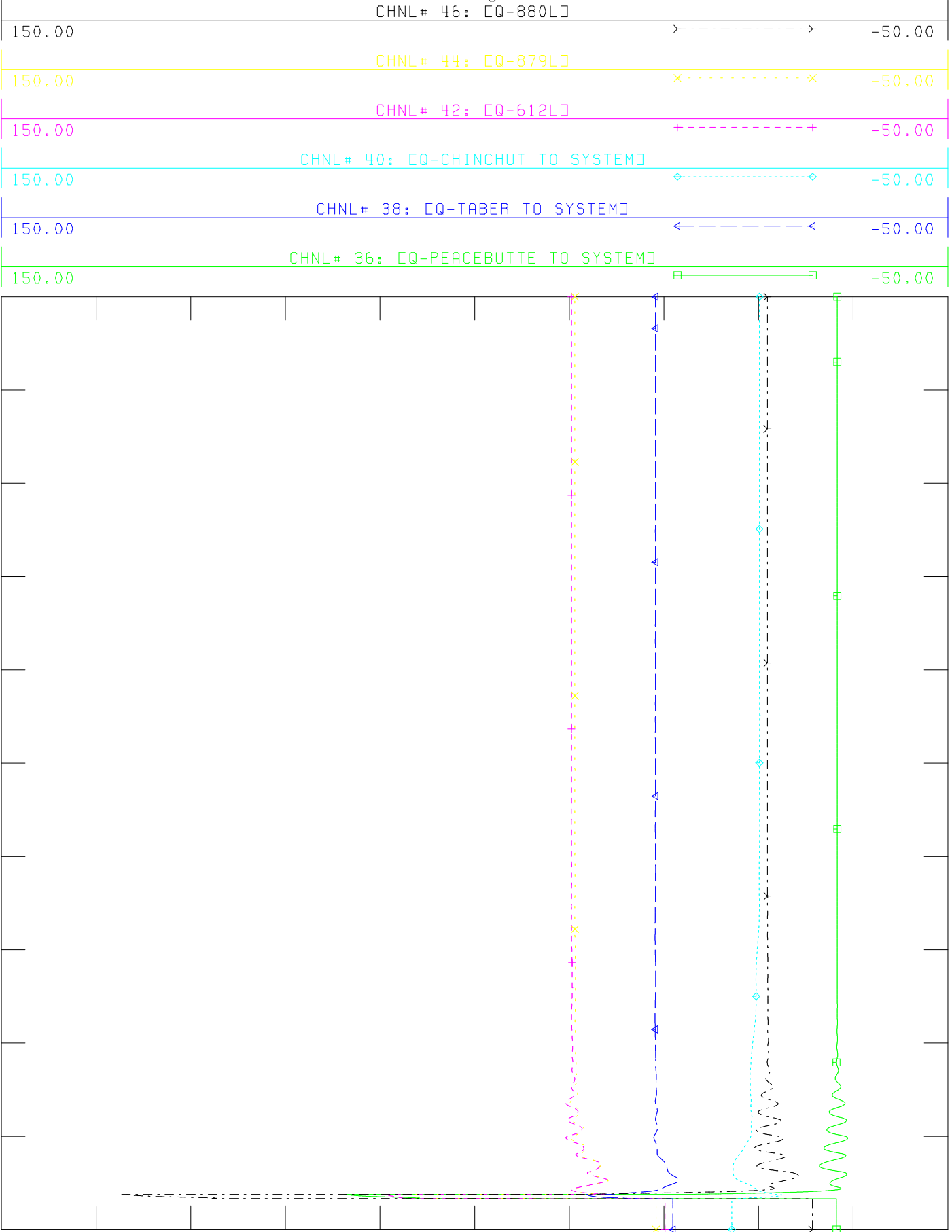


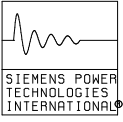
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_760L.out
CHNL# 45: [P-880L]



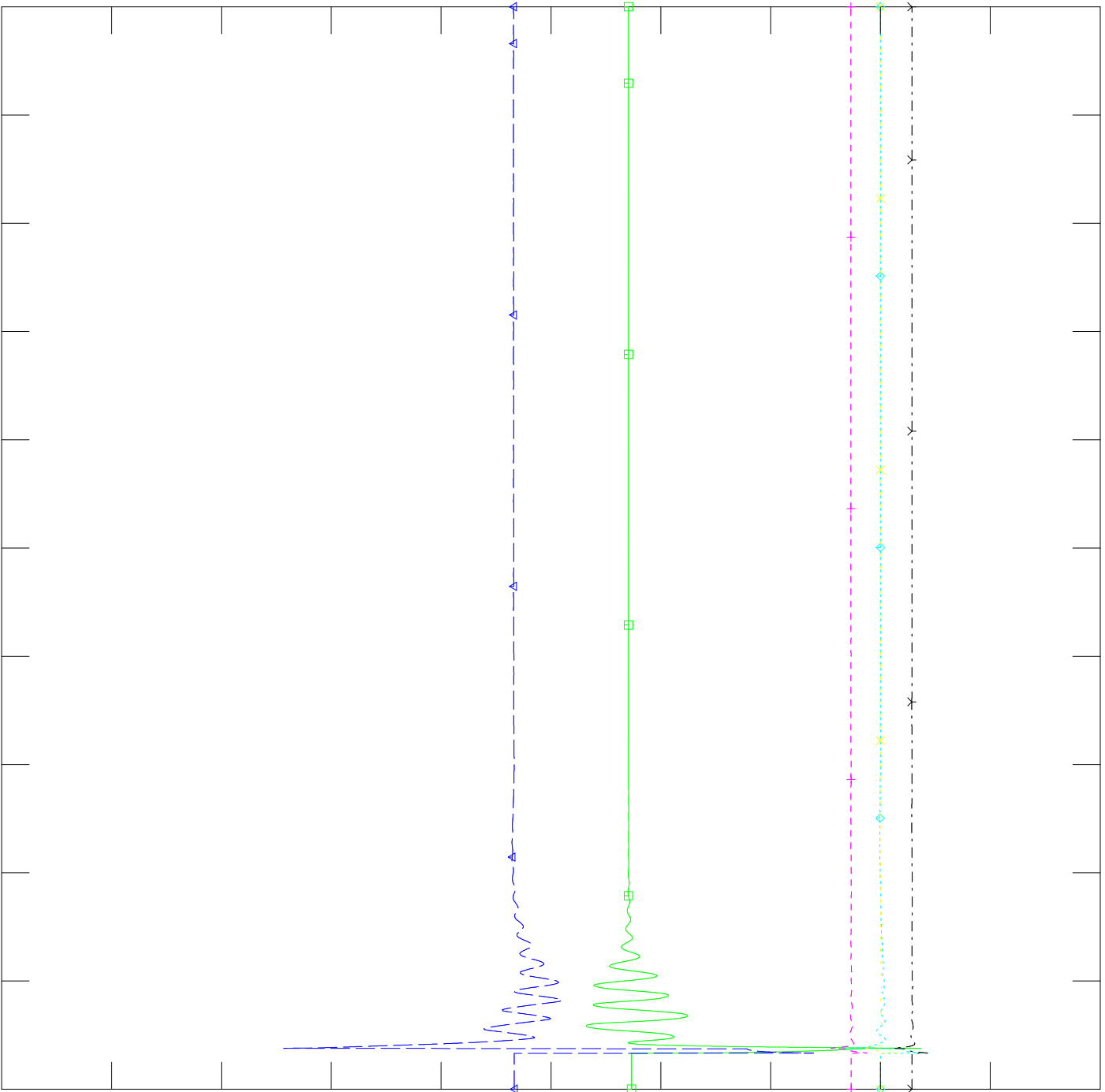
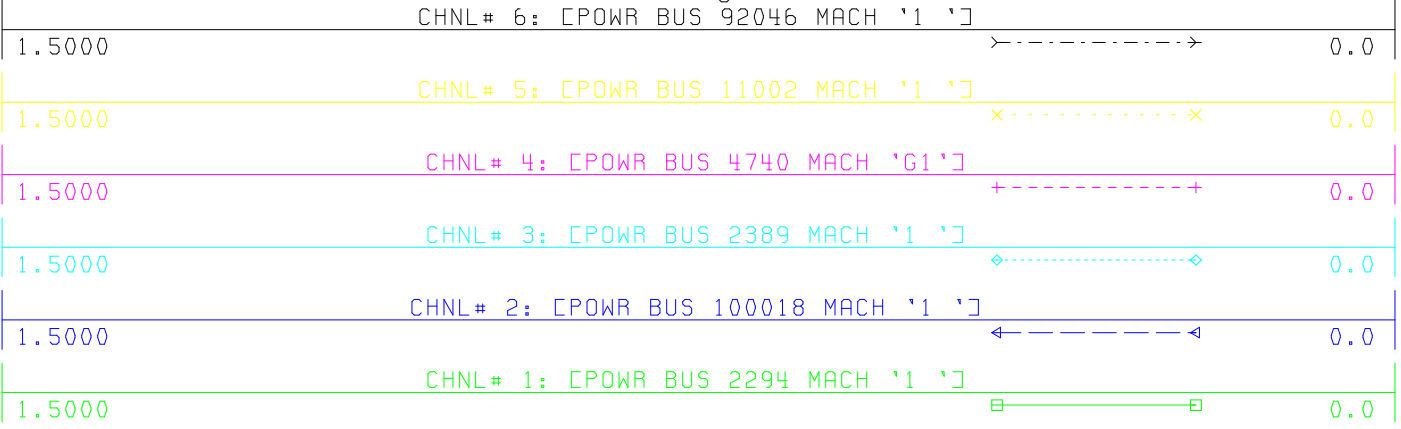


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_760L.out
CHNL# 46: [Q-880L]



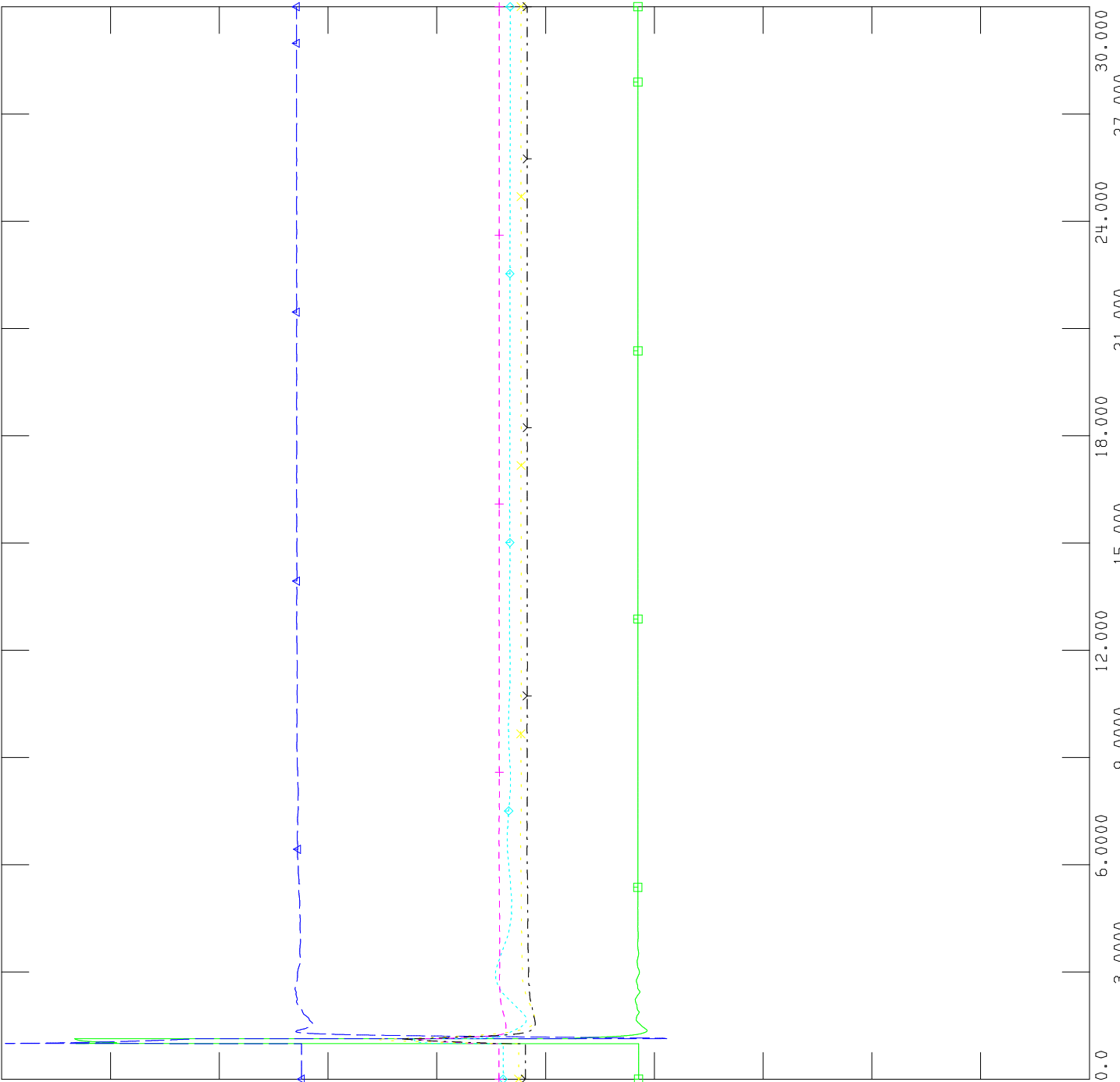
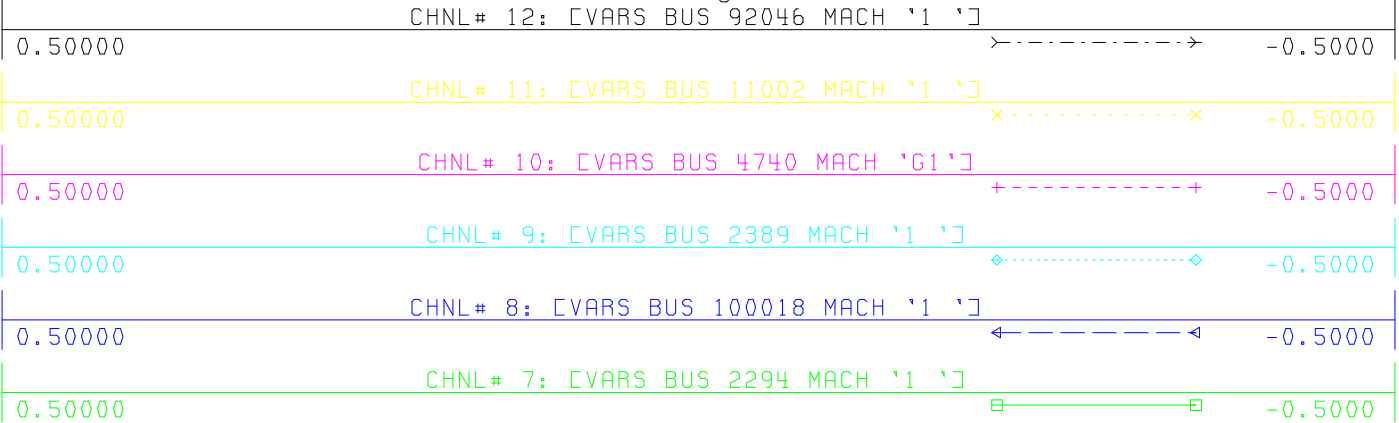


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_879L.out



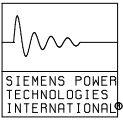


FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_879L.out



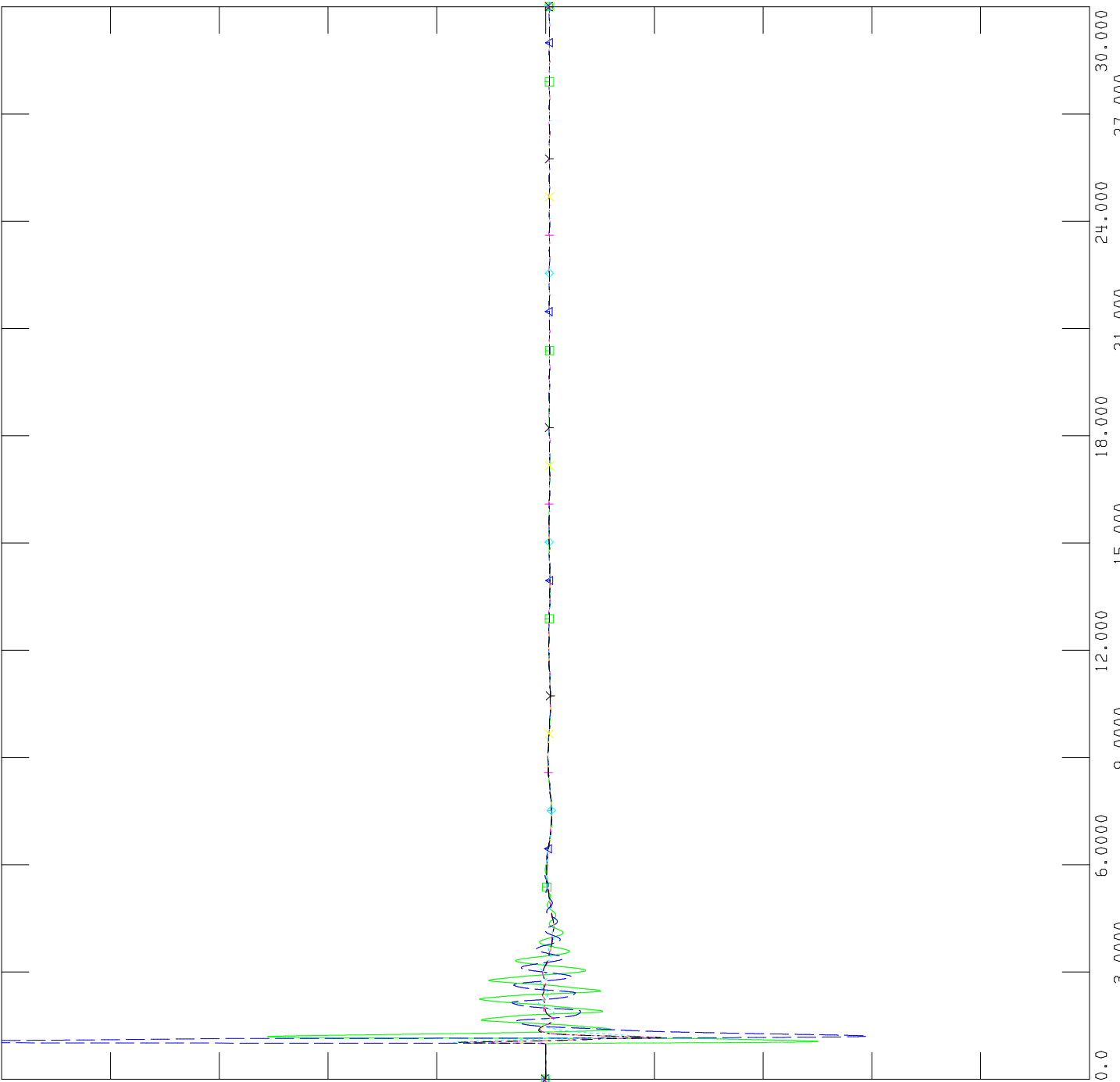
TUE, NOV 16 2010 14:37
QELEC

C-3-26



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_879L.out

0.00670	CHNL# 18: CFREQ 92046 CMCBRIDE6 0.5750]]	-0.0067
0.00670	CHNL# 17: CFREQ 11002 EGARDNG2 0.5750]]	-0.0067
0.00670	CHNL# 16: CFREQ 4740 CARD_07 0.5750]]	-0.0067
0.00670	CHNL# 15: CFREQ 2389 CHILLRIDG 0.5750]]	-0.0067
0.00670	CHNL# 14: CFREQ 100018 CPURPLESP 0.5750]]	-0.0067
0.00670	CHNL# 13: CFREQ 2294 CTOHILL2 0.6900]]	-0.0067



TUE, NOV 16 2010 14:38
 BUS FREQUENCY

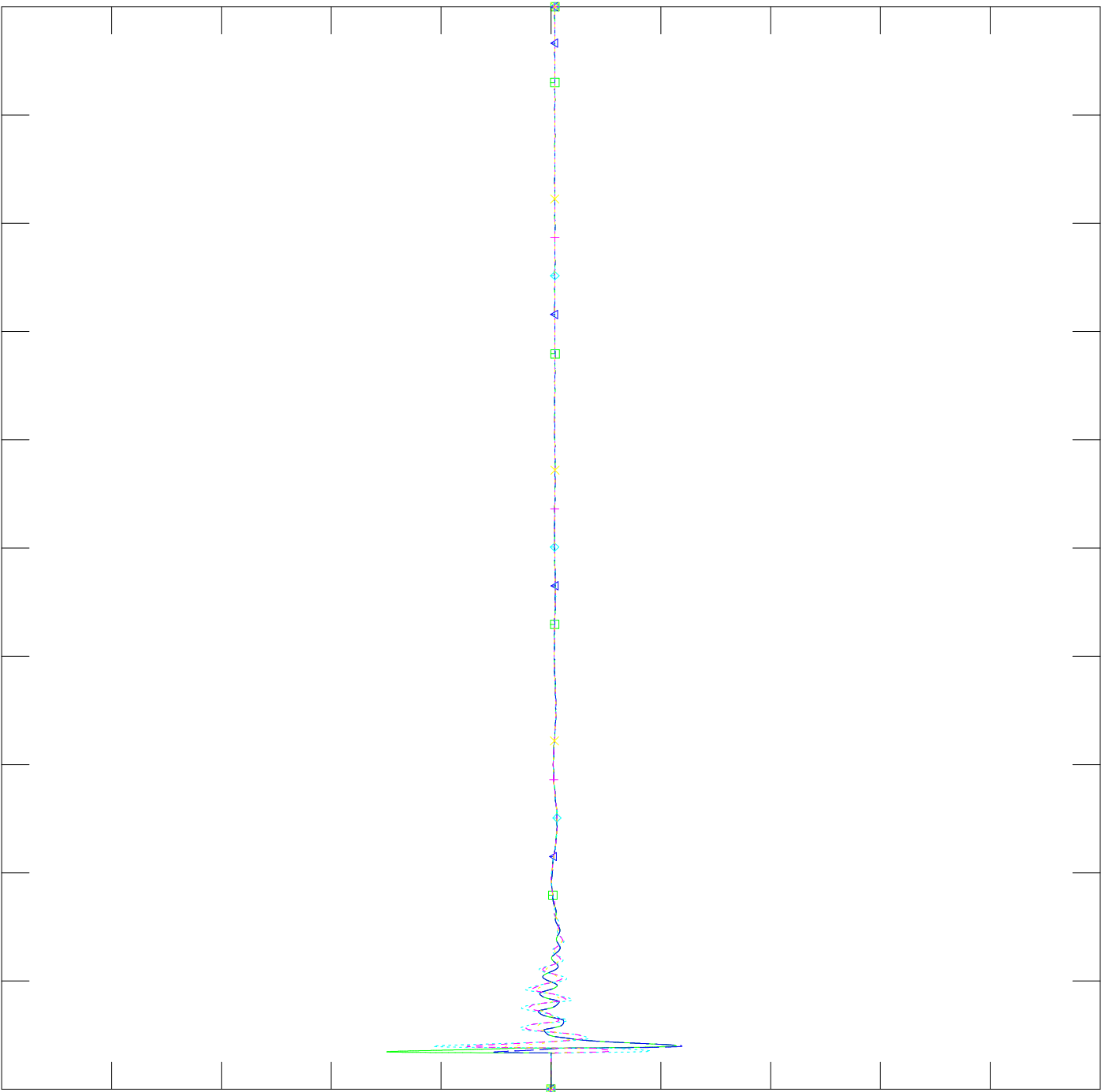
C-3-27



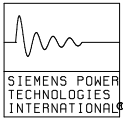
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_879L.out

TUE, NOV 16 2010 14:39
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270 CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680 CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271 CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 20: CFREQ	269 CBURDETT7	138.00]]	←-----←	-0.0067
0.00670	CHNL# 19: CFREQ	31 CFINCAST7	138.00]]	▣-----▣	-0.0067

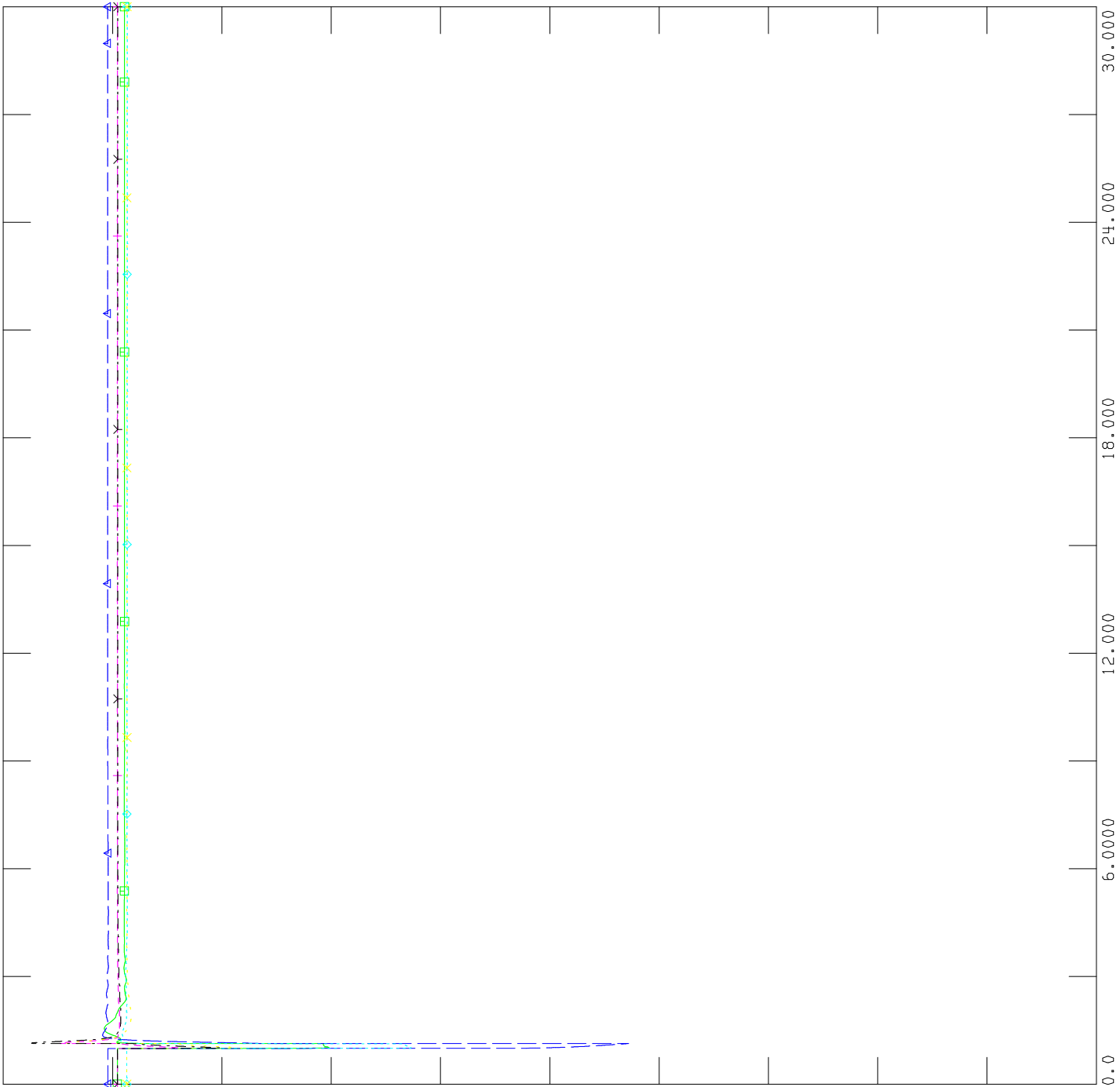


C-3-28



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_879L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [MCBRIDE6]	0.5750
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750
CHNL# 27	EVOLT 4740 [CARD_07]	0.5750
CHNL# 26	EVOLT 2389 [CHILLRIDG]	0.5750
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900

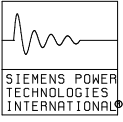


TUE, NOV 16 2010 14:39

C-3-29

TIME (SECONDS)

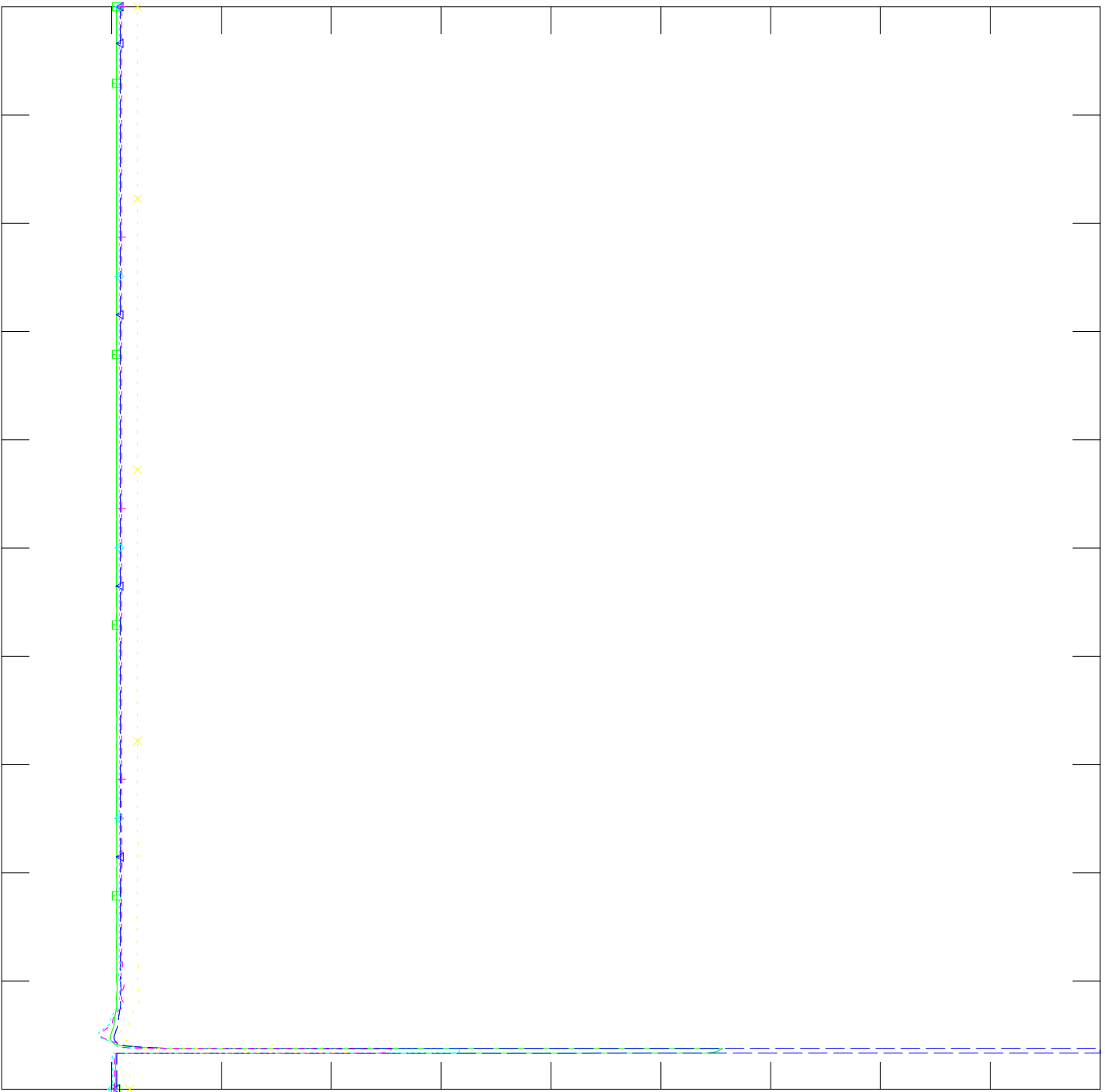
BUS VOLTAGE

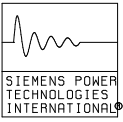


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_879L.out

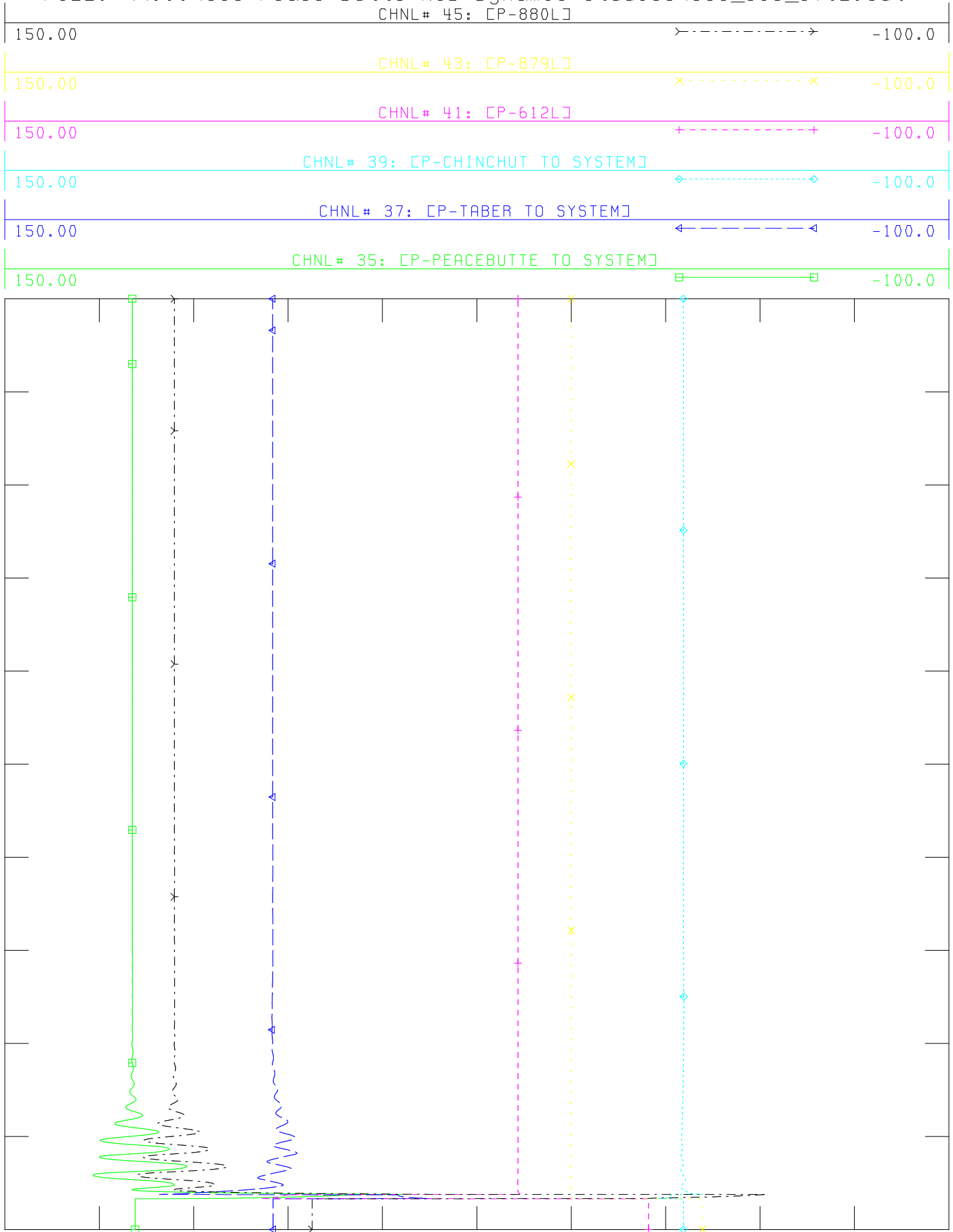
TUE, NOV 16 2010 14:40
BUS VOLTAGE

Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]





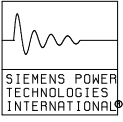
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_879L.out
 CHNL# 45: [CP-880L]



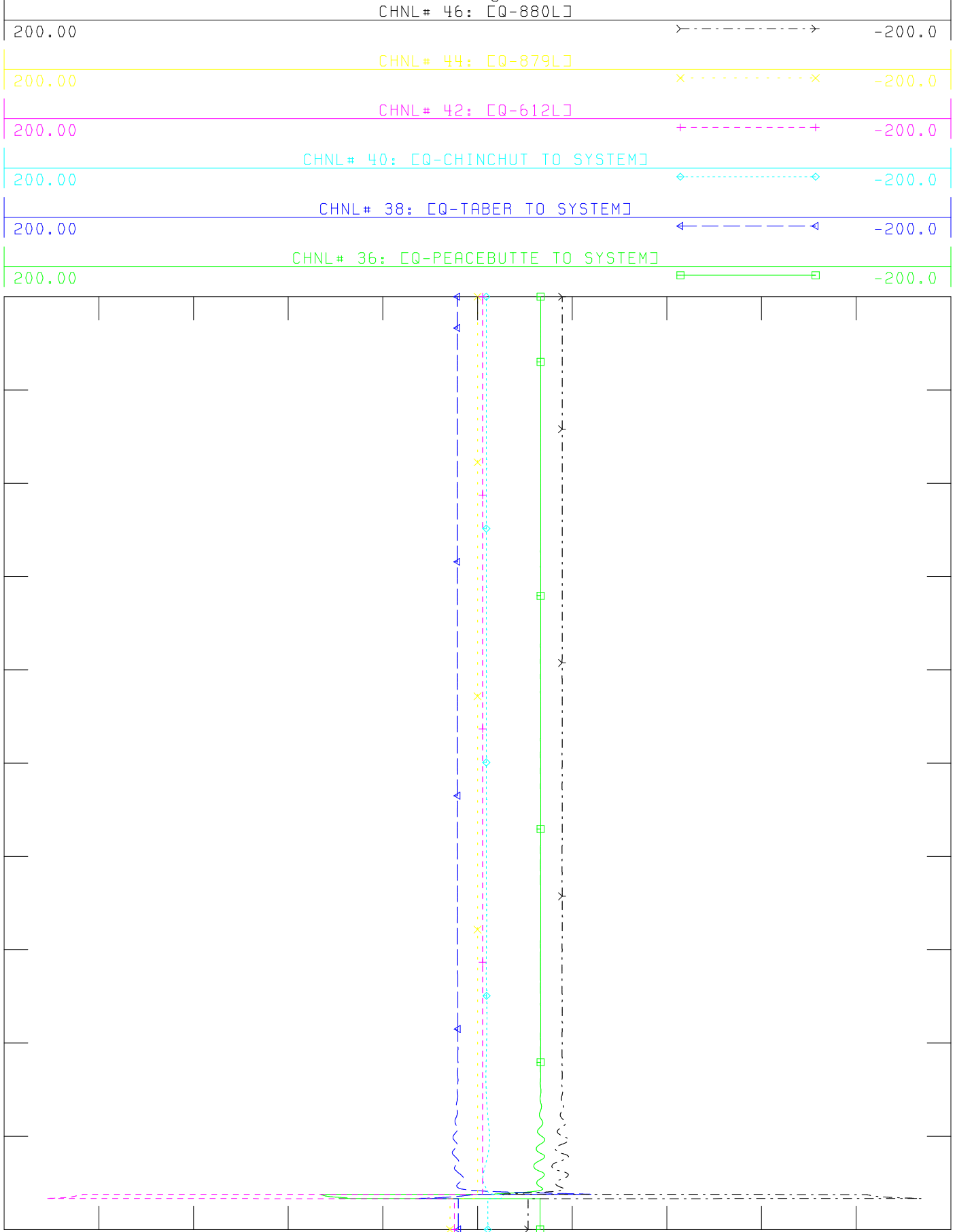
TUE, NOV 16 2010 14:41
 BRANCH ACTIVE POWER

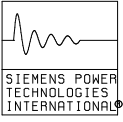
C-3-31

TIME (SECONDS)

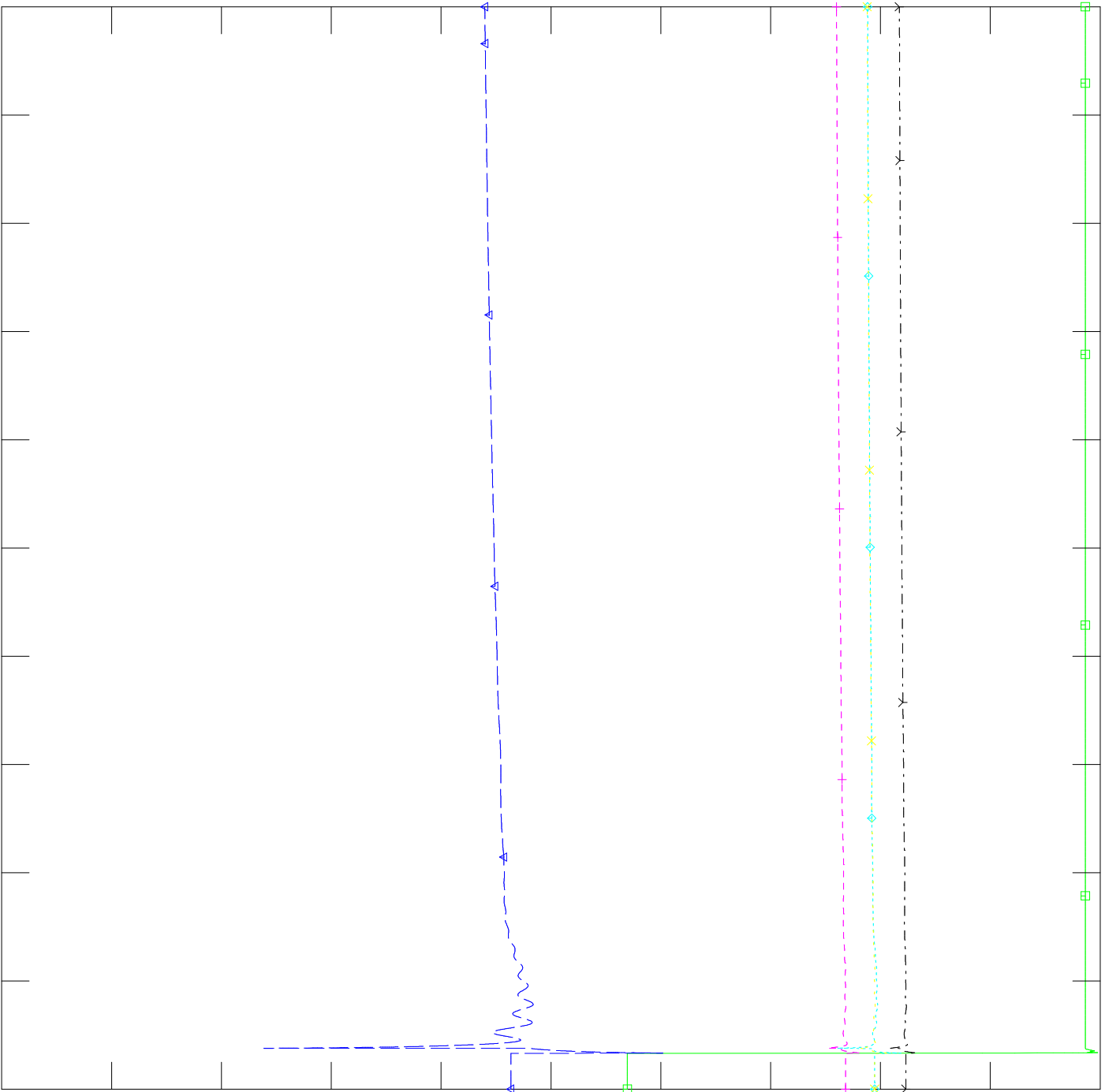
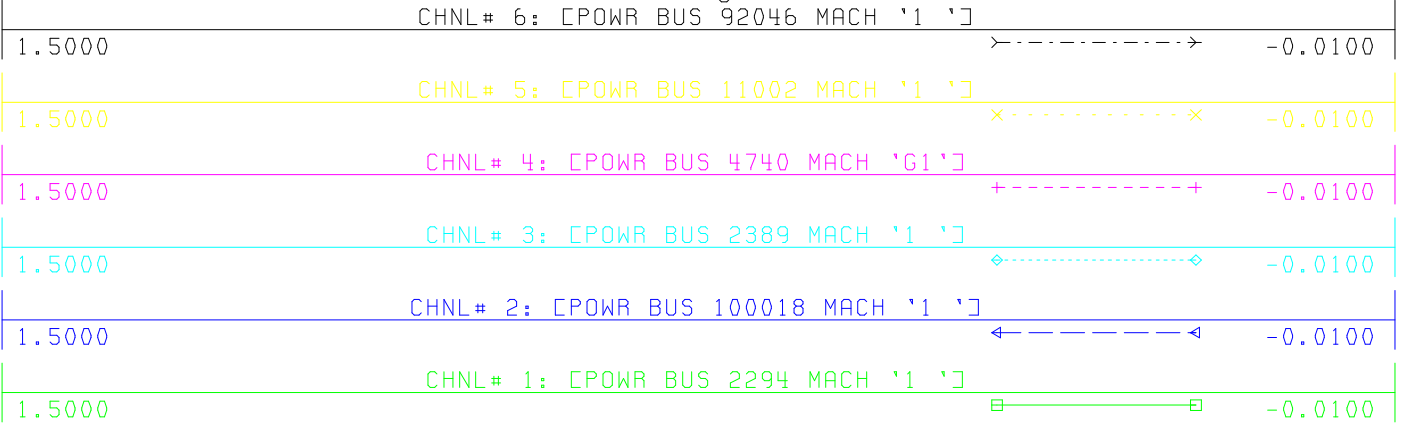


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_879L.out
CHNL# 46: [EQ-880L]





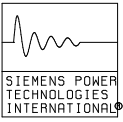
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_880L.out



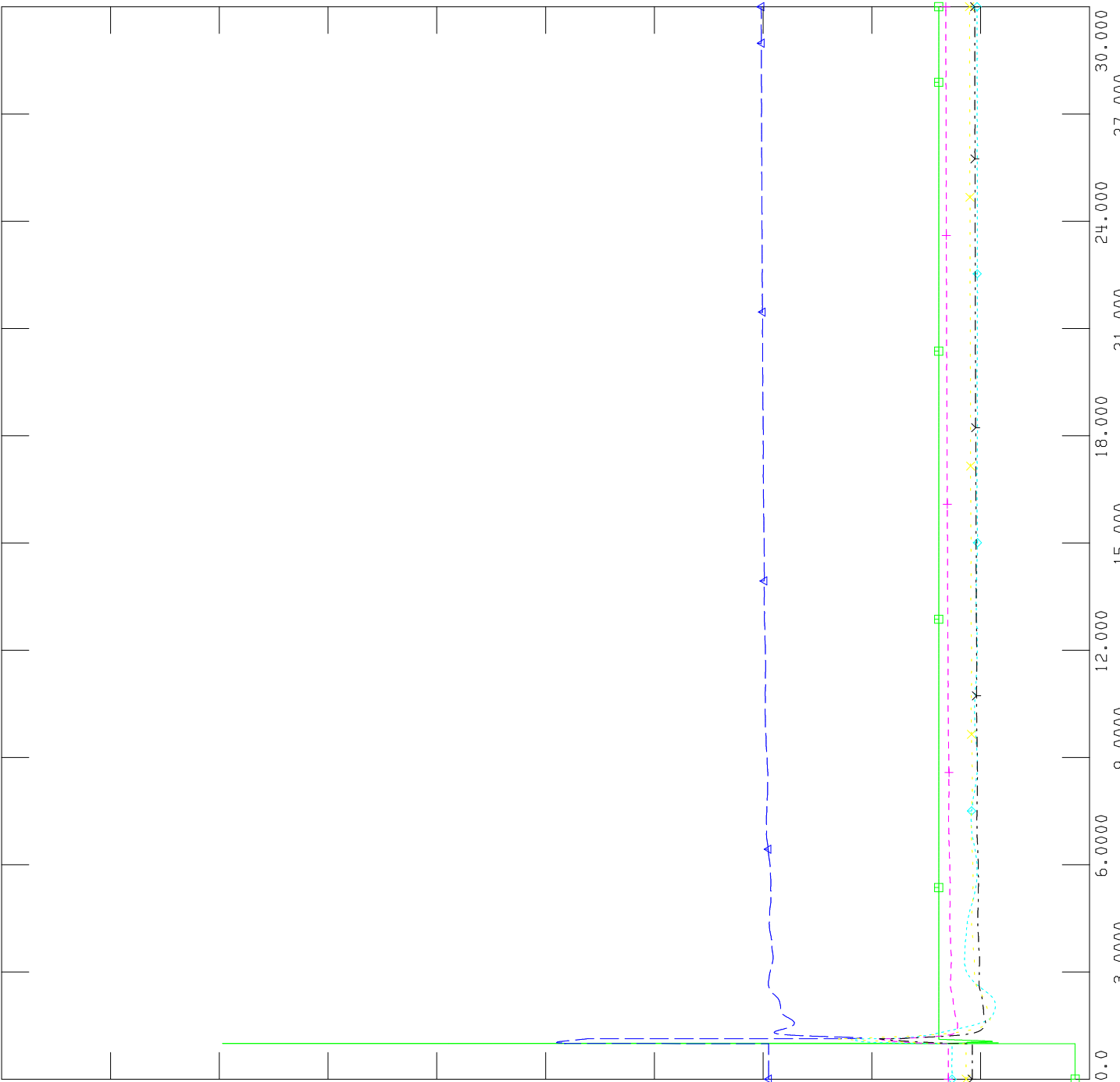
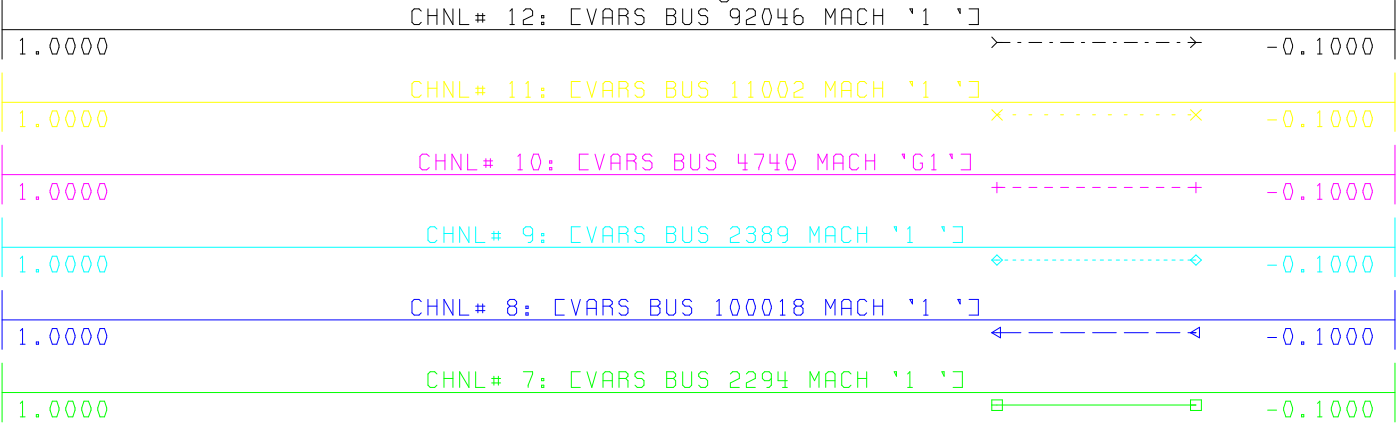
TUE, NOV 16 2010 14:45
PELEC

C-3-33

TIME (SECONDS)

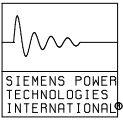


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_880L.out



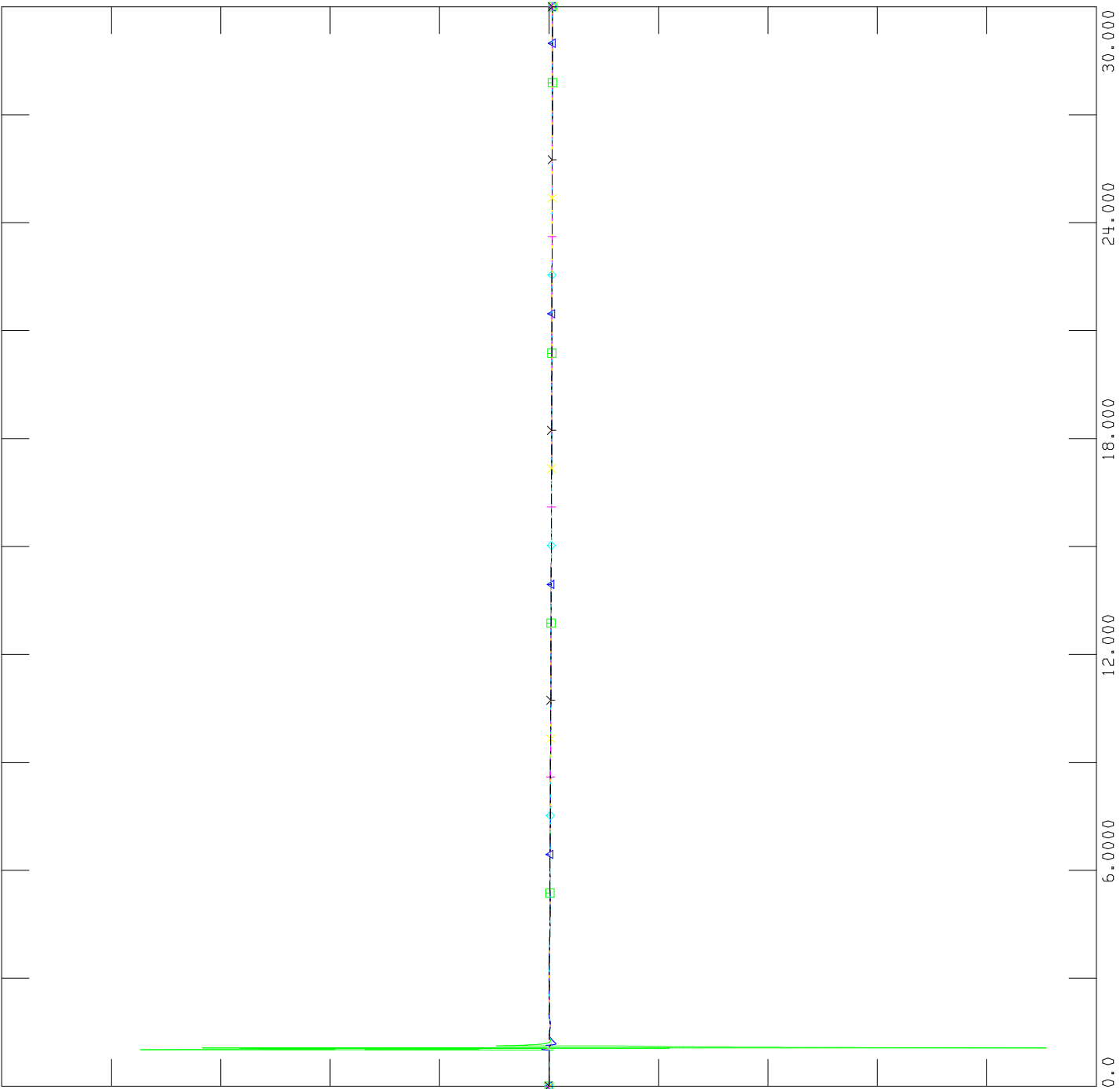
TUE, NOV 16 2010 14:46
QELEC

C-3-34



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_880L.out

Channel	CFREQ	Component	CFREQ
CHNL# 18	92046	CMCBRIDE6	0.5750
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	0.5750
CHNL# 15	2389	CHILLRIDG	0.5750
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900

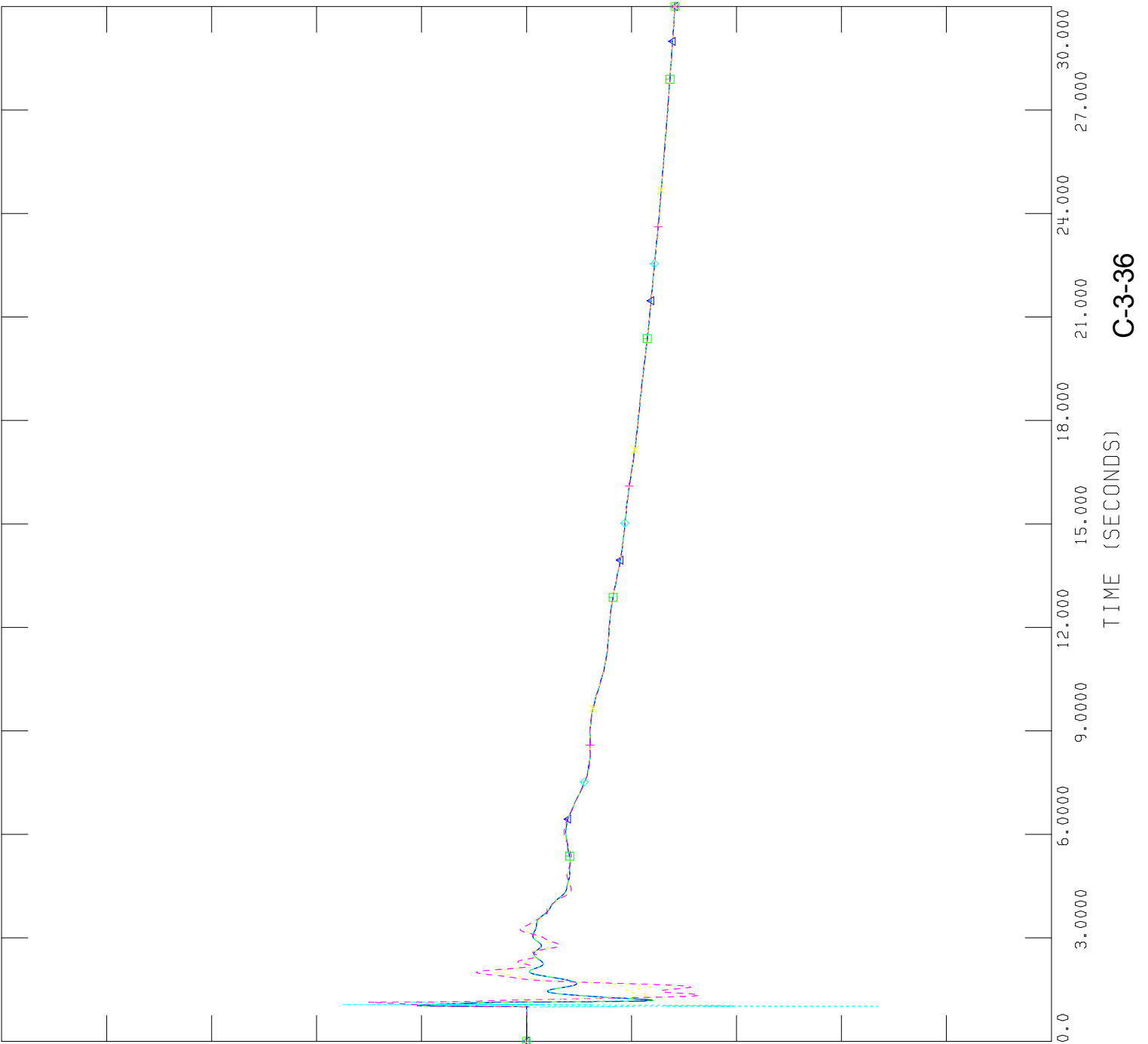


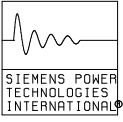


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_880L.out

TUE, NOV 16 2010 14:47
BUS FREQUENCY

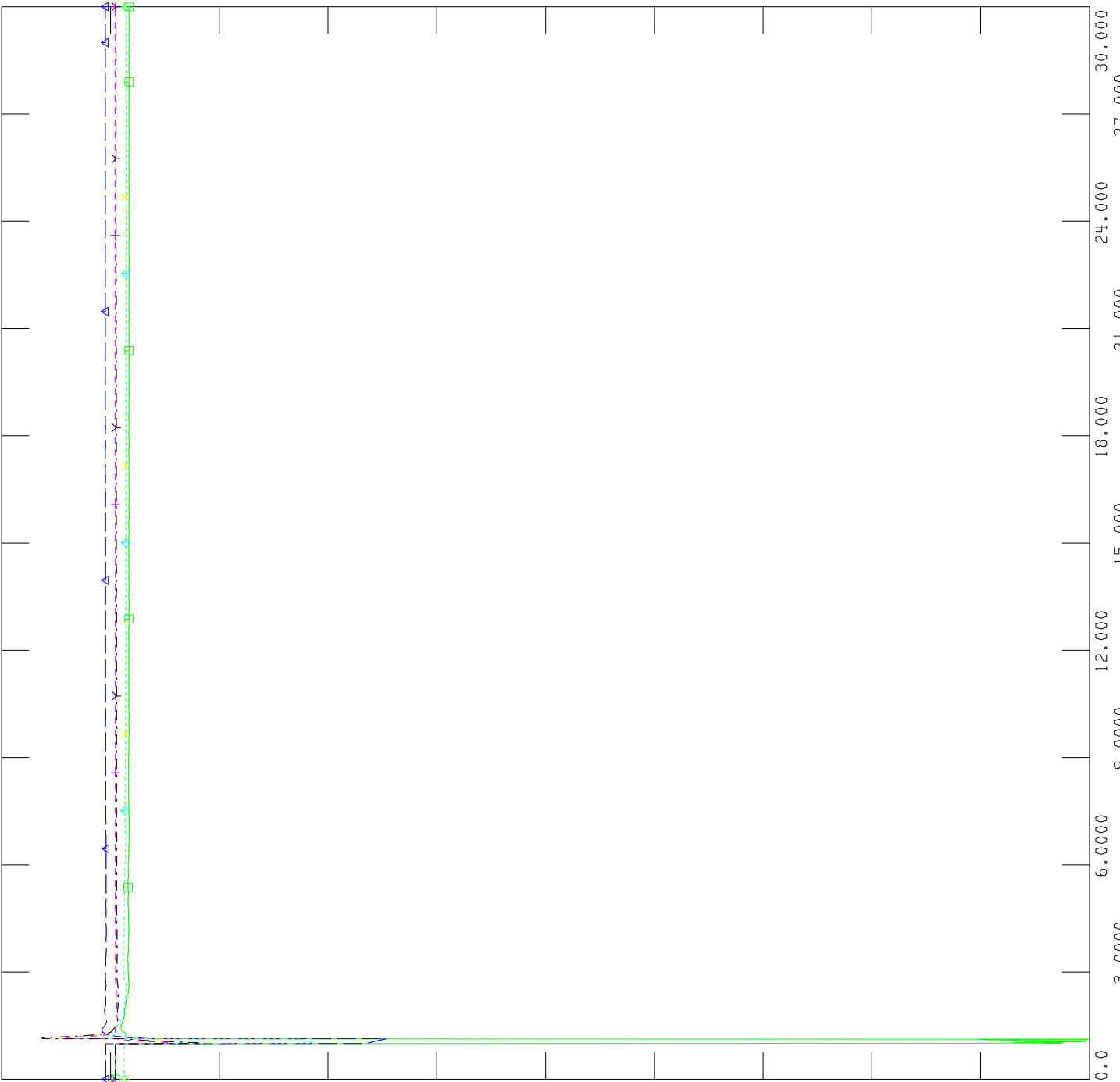
Channel	Frequency	Value
CHNL# 23: CFREQ	270 [SUFFIEL7	138.00]]
0.00670		x-----x -0.0067
CHNL# 22: CFREQ	680 [MEDICIN7	138.00]]
0.00670		+-----+ -0.0067
CHNL# 21: CFREQ	271 [BULLS H7	138.00]]
0.00670		◇-----◇ -0.0067
CHNL# 20: CFREQ	269 [BURDETT7	138.00]]
0.00670		←-----← -0.0067
CHNL# 19: CFREQ	31 [FINCAST7	138.00]]
0.00670		□-----□ -0.0067

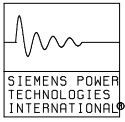




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_880L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [MCRBRIDE6]	0.5750
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750
CHNL# 27	EVOLT 4740 [CARD_07]	0.5750
CHNL# 26	EVOLT 2389 [CHILLRIDG]	0.5750
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900

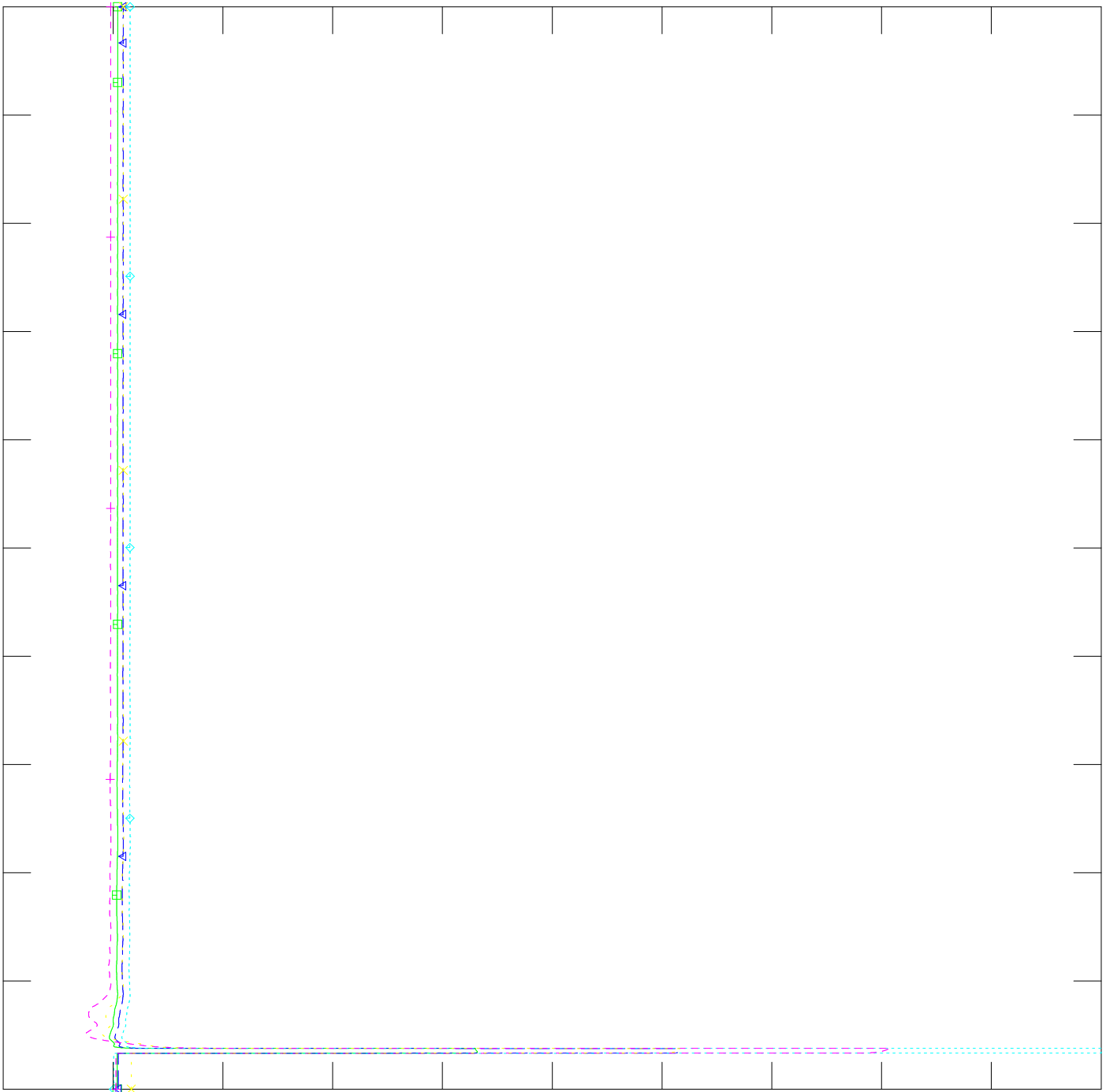




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_880L.out

TUE, NOV 16 2010 14:49
 BUS VOLTAGE

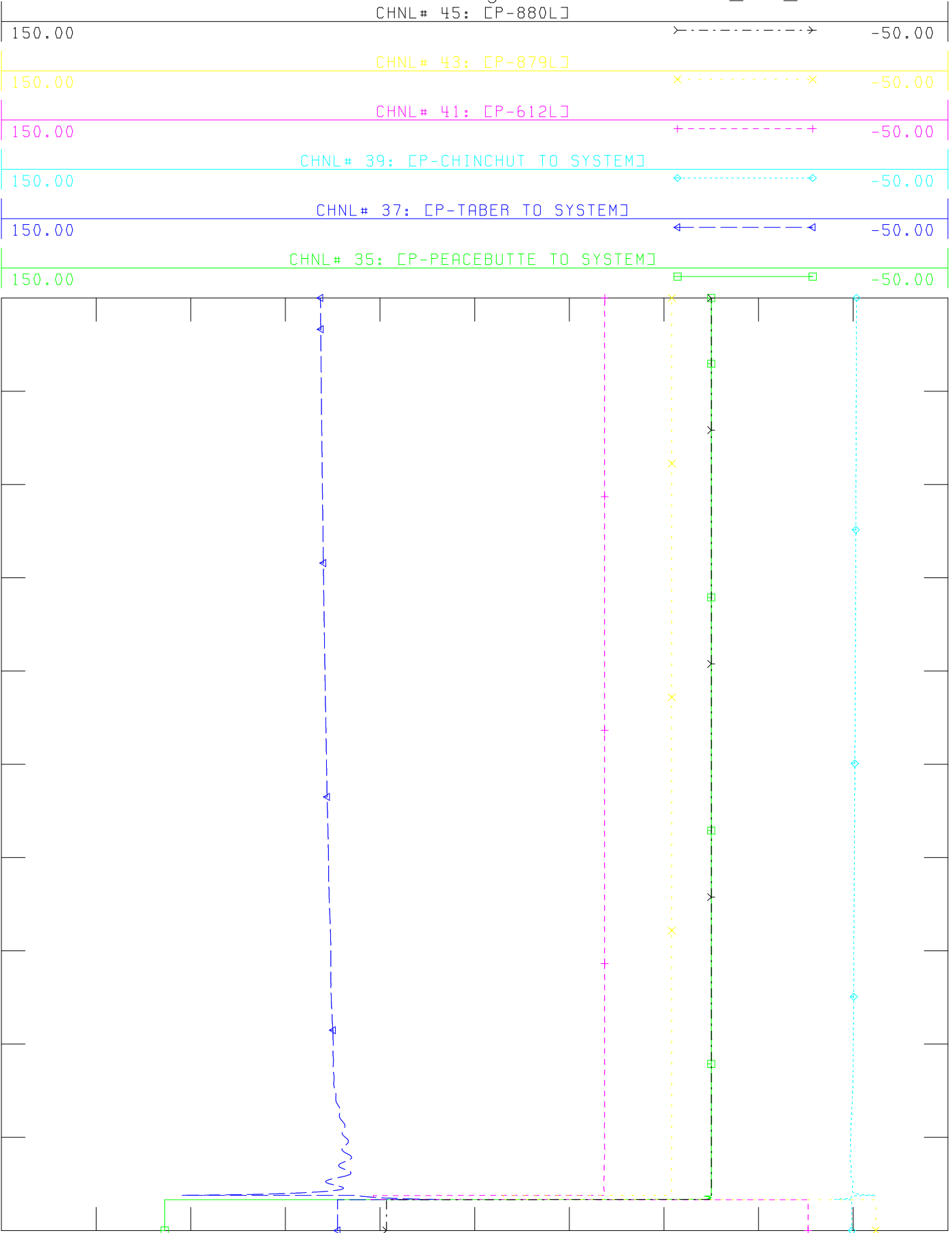
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]

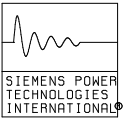


C-3-38

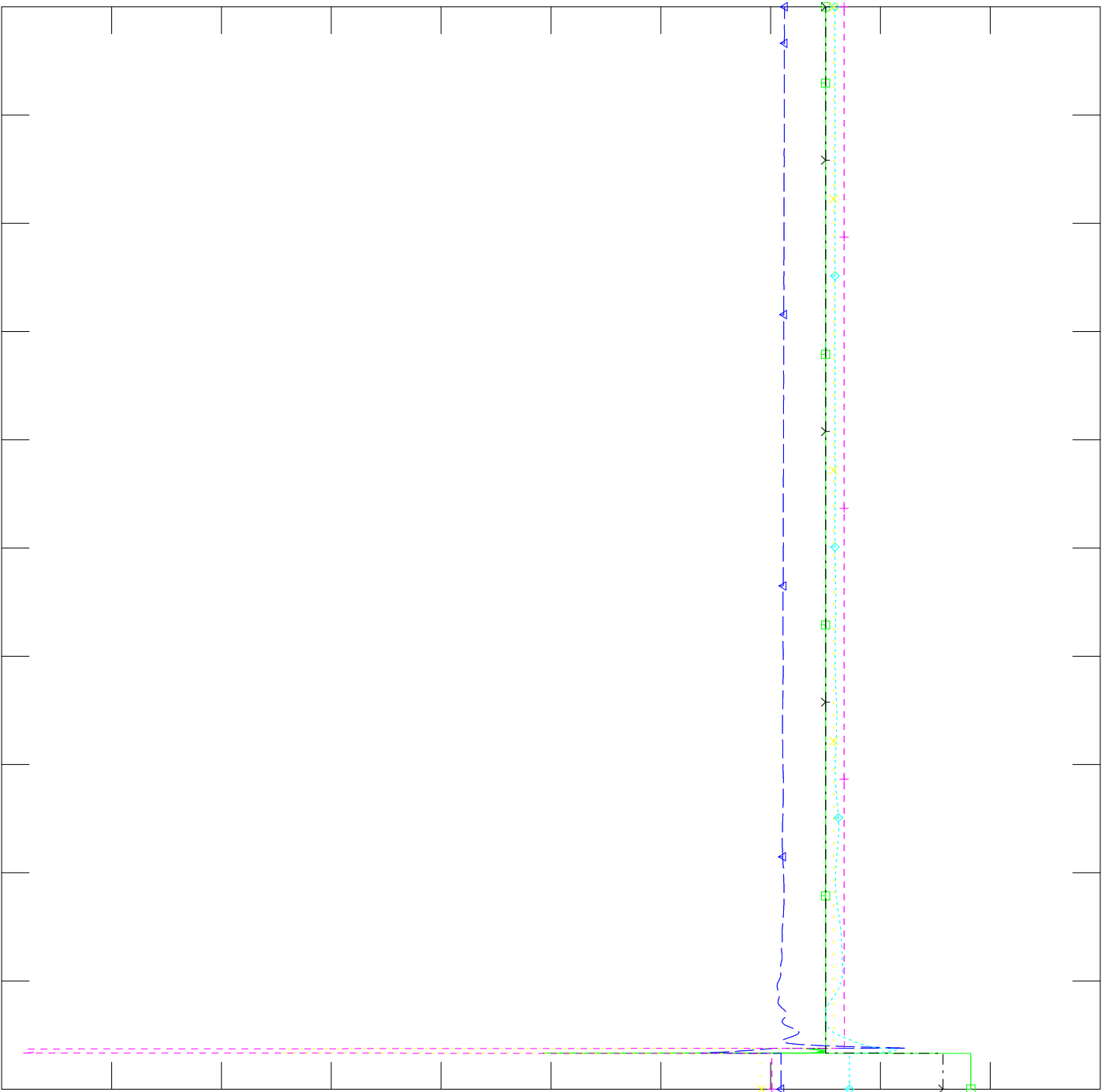
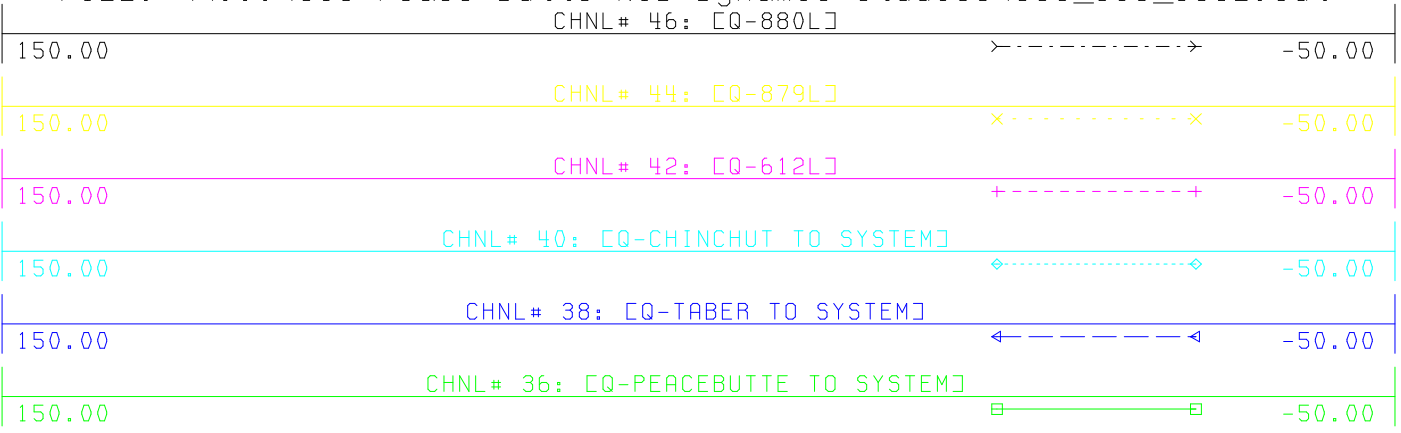


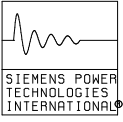
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_880L.out
CHNL# 45: [P-880L]



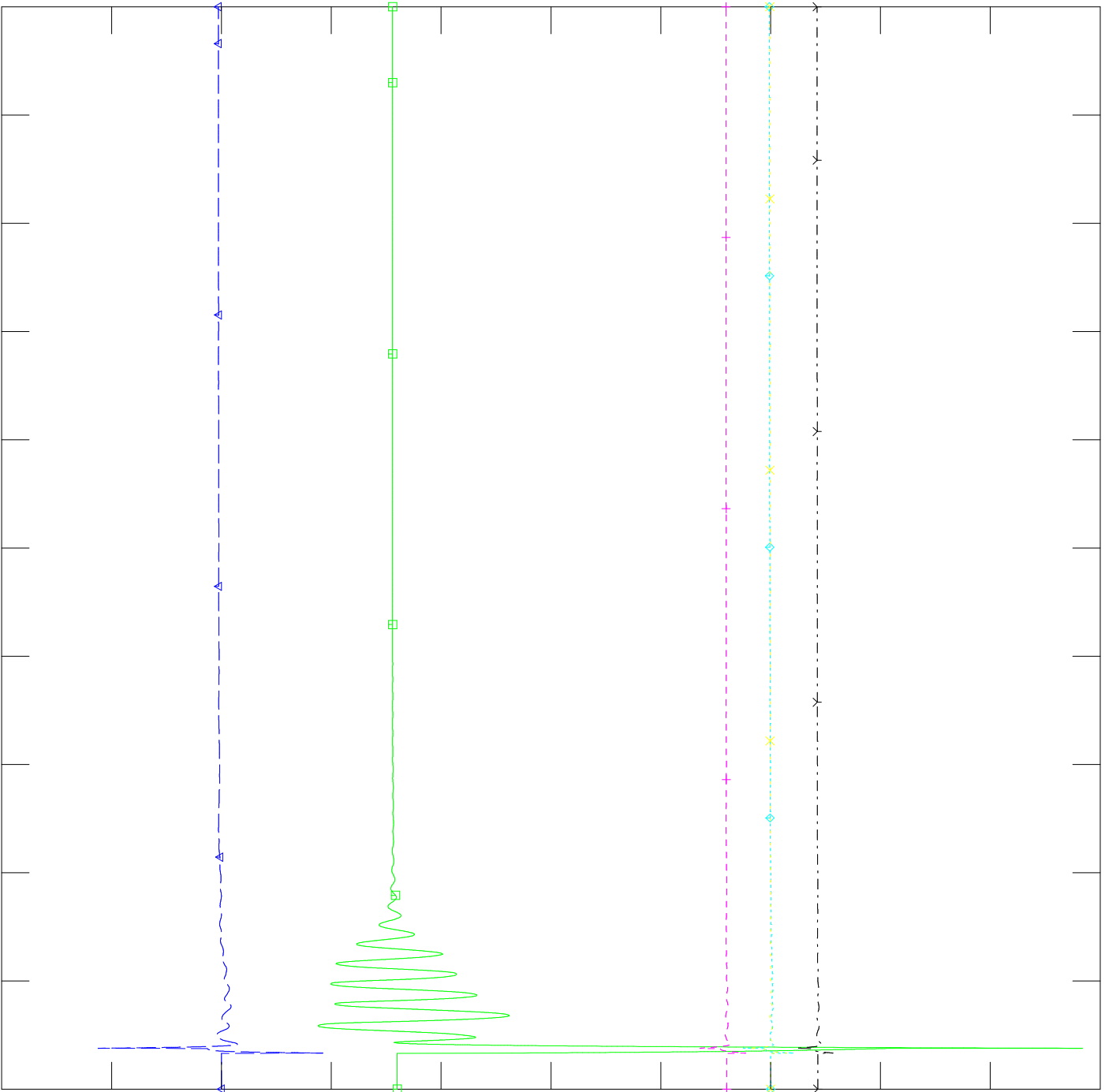
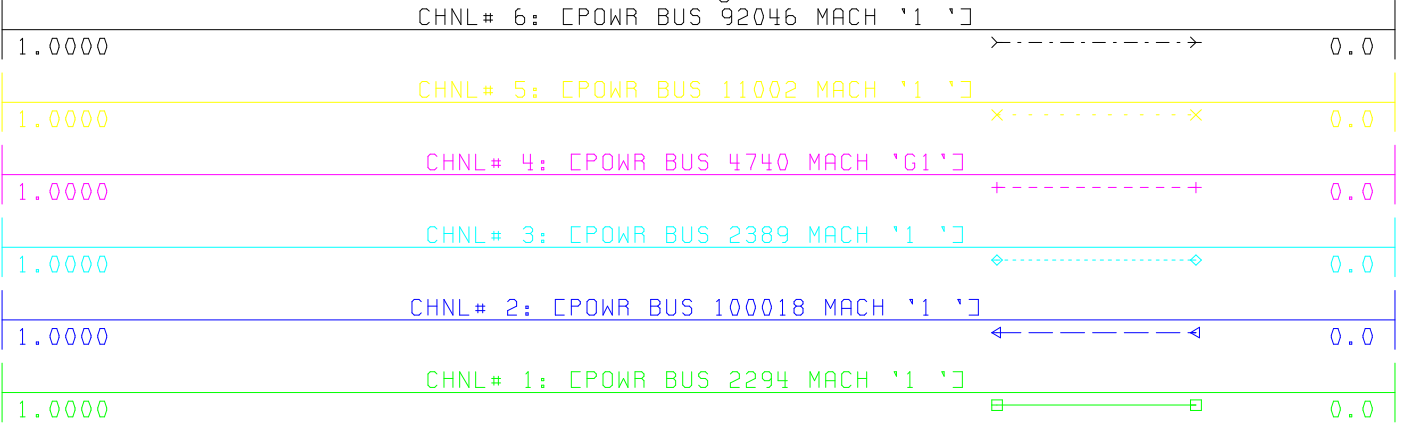


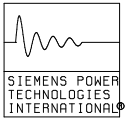
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_880L.out
CHNL# 46: [Q-880L]



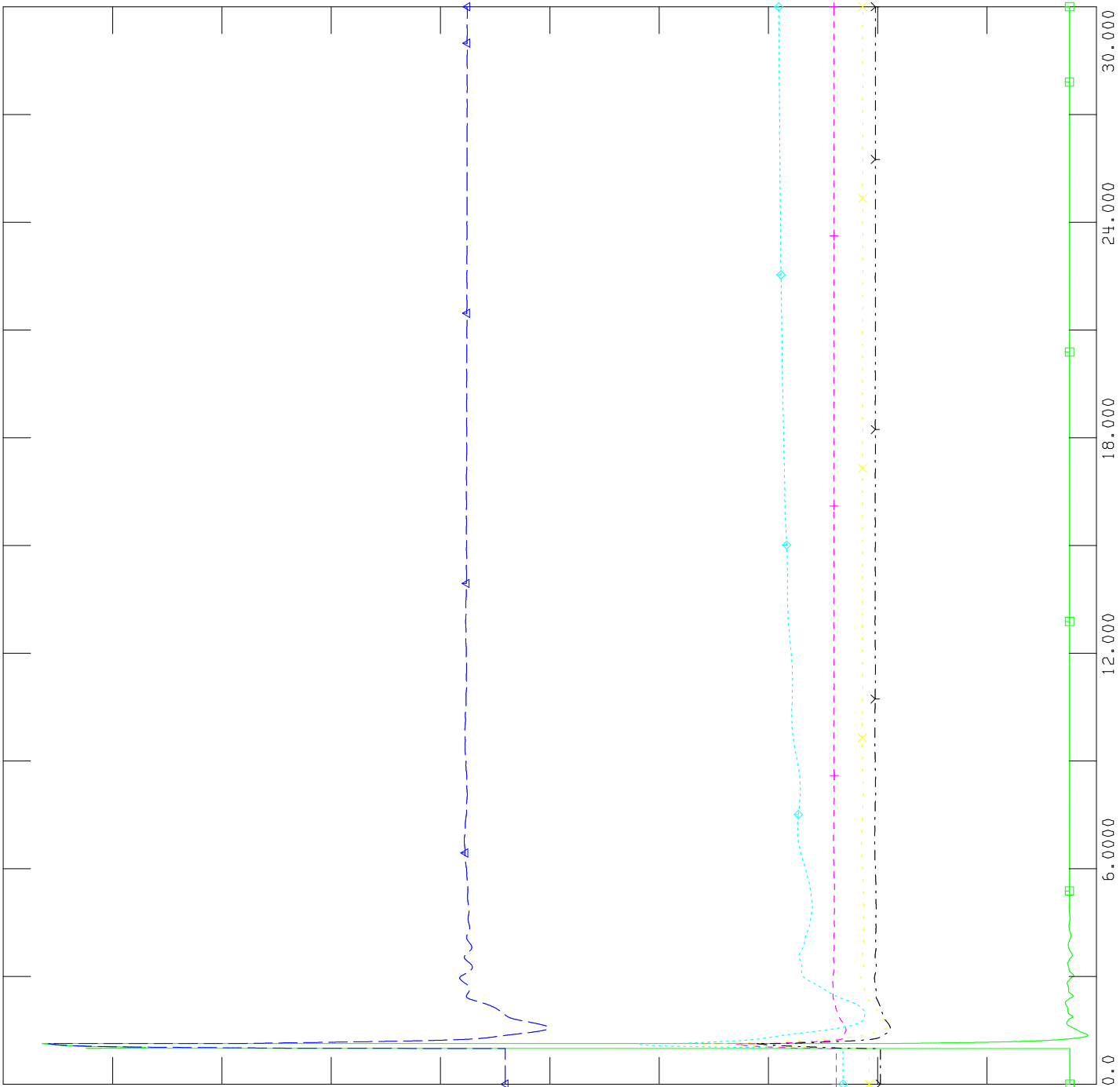
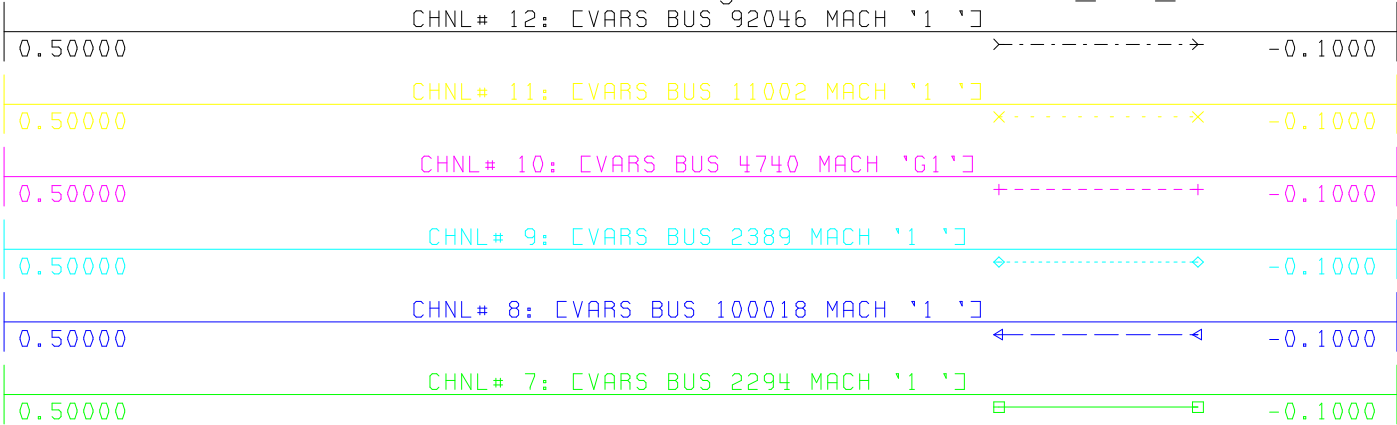


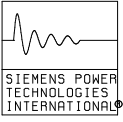
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513_892L.out





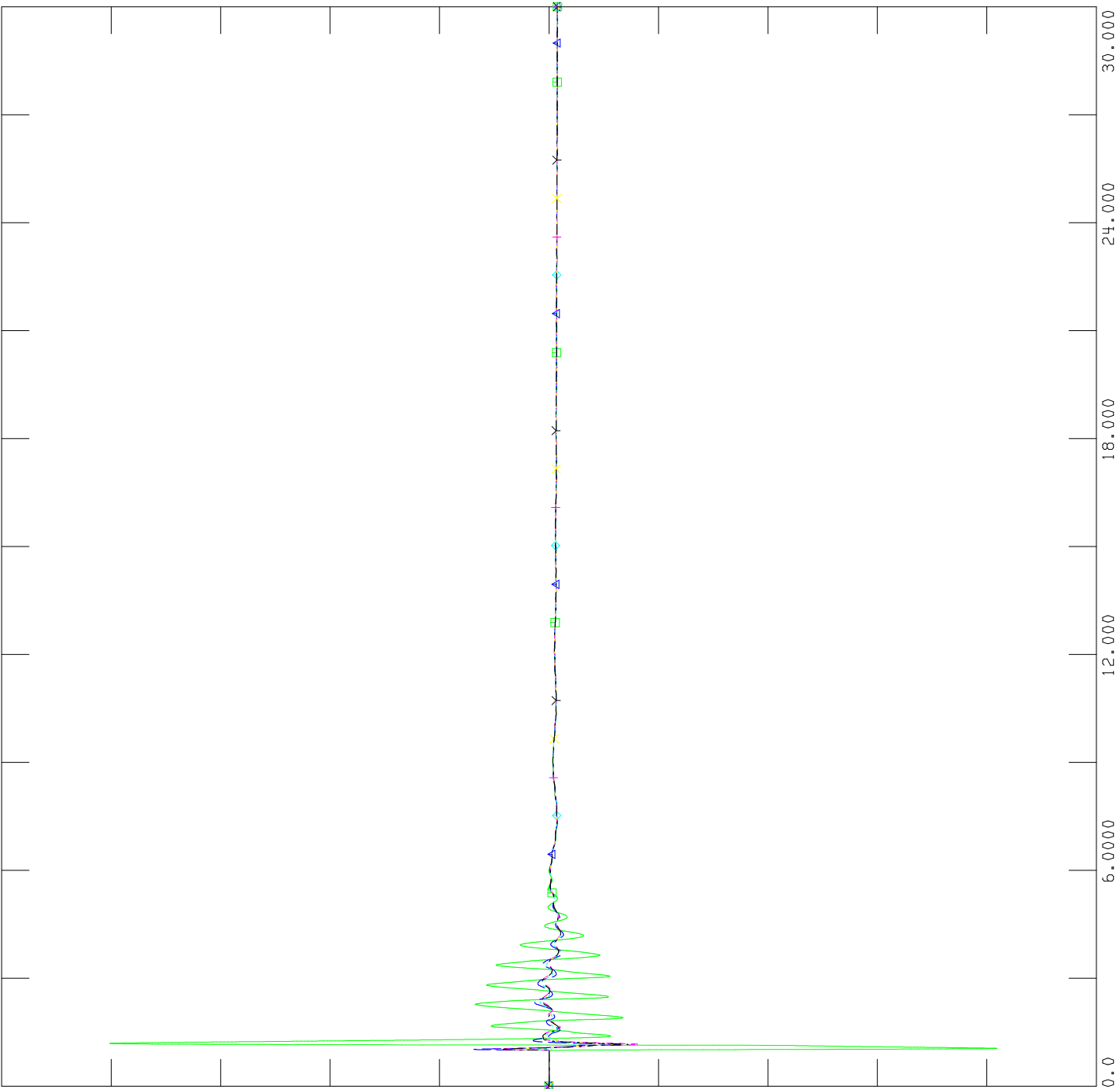
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_892L.out

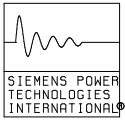




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_892L.out

0.00670	CHNL# 18: CFREQ 92046 CMCBRIDE6 0.5750]]	-0.0067
0.00670	CHNL# 17: CFREQ 11002 EGARDNG2 0.5750]]	-0.0067
0.00670	CHNL# 16: CFREQ 4740 CARD_07 0.5750]]	-0.0067
0.00670	CHNL# 15: CFREQ 2389 CHILLRIDG 0.5750]]	-0.0067
0.00670	CHNL# 14: CFREQ 100018 CPURPLESP 0.5750]]	-0.0067
0.00670	CHNL# 13: CFREQ 2294 CTOTHILL2 0.6900]]	-0.0067

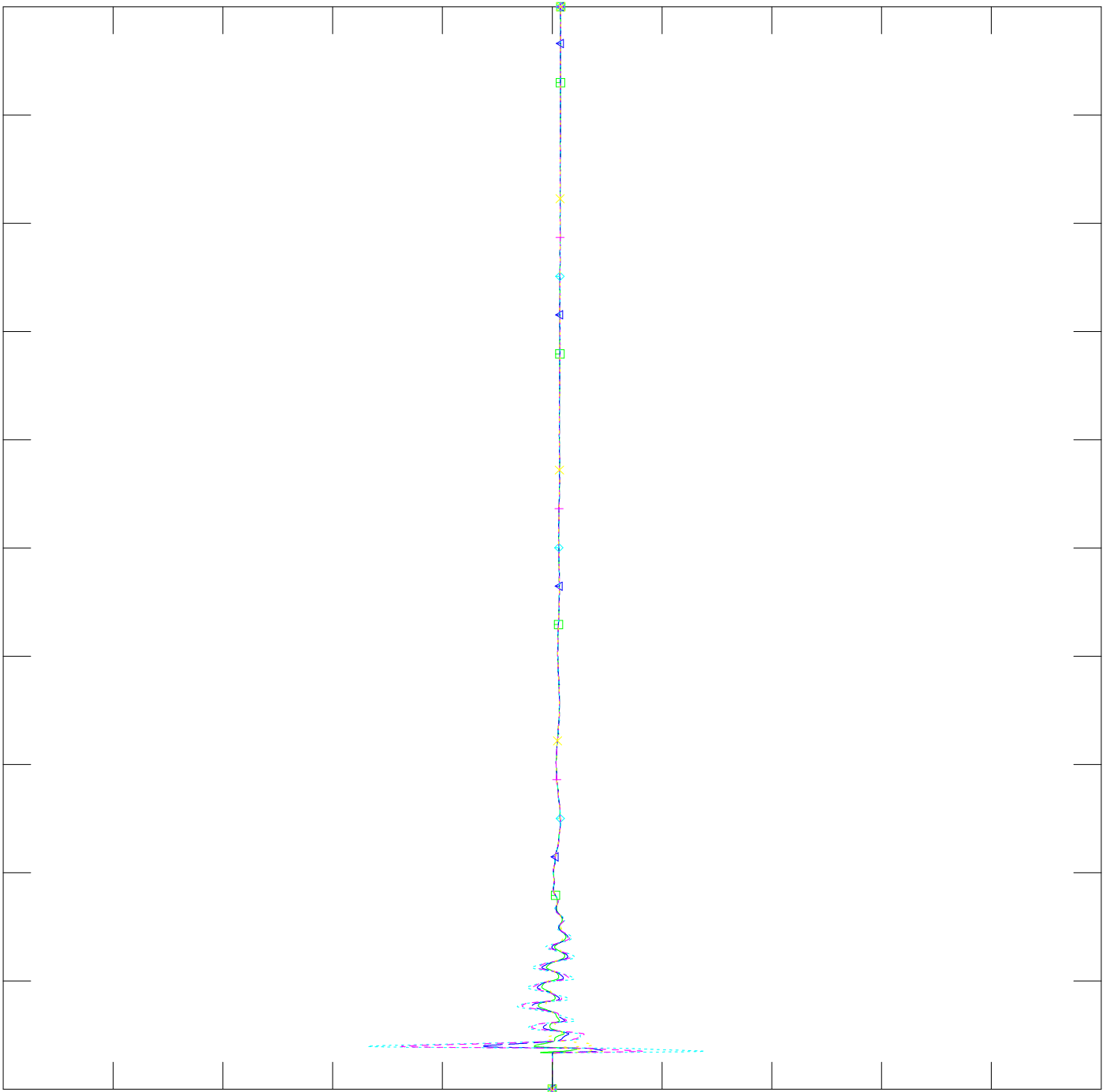




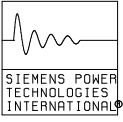
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_892L.out

TUE, NOV 16 2010 14:56
BUS FREQUENCY

Channel	Frequency	Value
CHNL# 23: CFREQ	270 [SUFFIEL7	138.00]]
0.00670		x-----x -0.0067
CHNL# 22: CFREQ	680 [MEDICIN7	138.00]]
0.00670		+-----+ -0.0067
CHNL# 21: CFREQ	271 [BULLS H7	138.00]]
0.00670		◇-----◇ -0.0067
CHNL# 20: CFREQ	269 [BURDETT7	138.00]]
0.00670		←-----← -0.0067
CHNL# 19: CFREQ	31 [FINCAST7	138.00]]
0.00670		□-----□ -0.0067

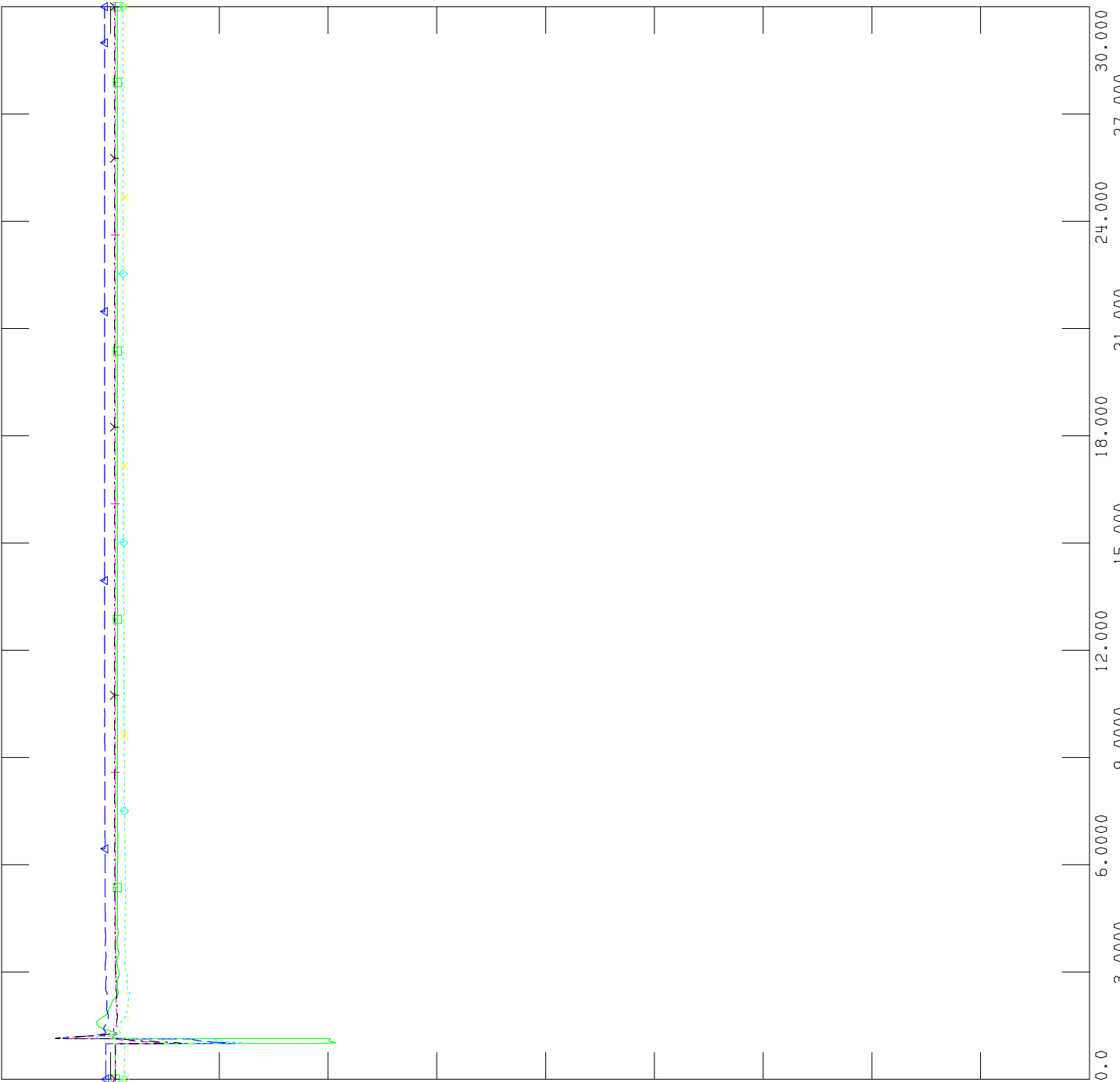


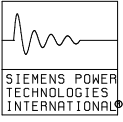
C-3-44



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_892L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [MCRBRIDE6]	0.5750
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750
CHNL# 27	EVOLT 4740 [CARD_07]	0.5750
CHNL# 26	EVOLT 2389 [CHILLRIDG]	0.5750
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900

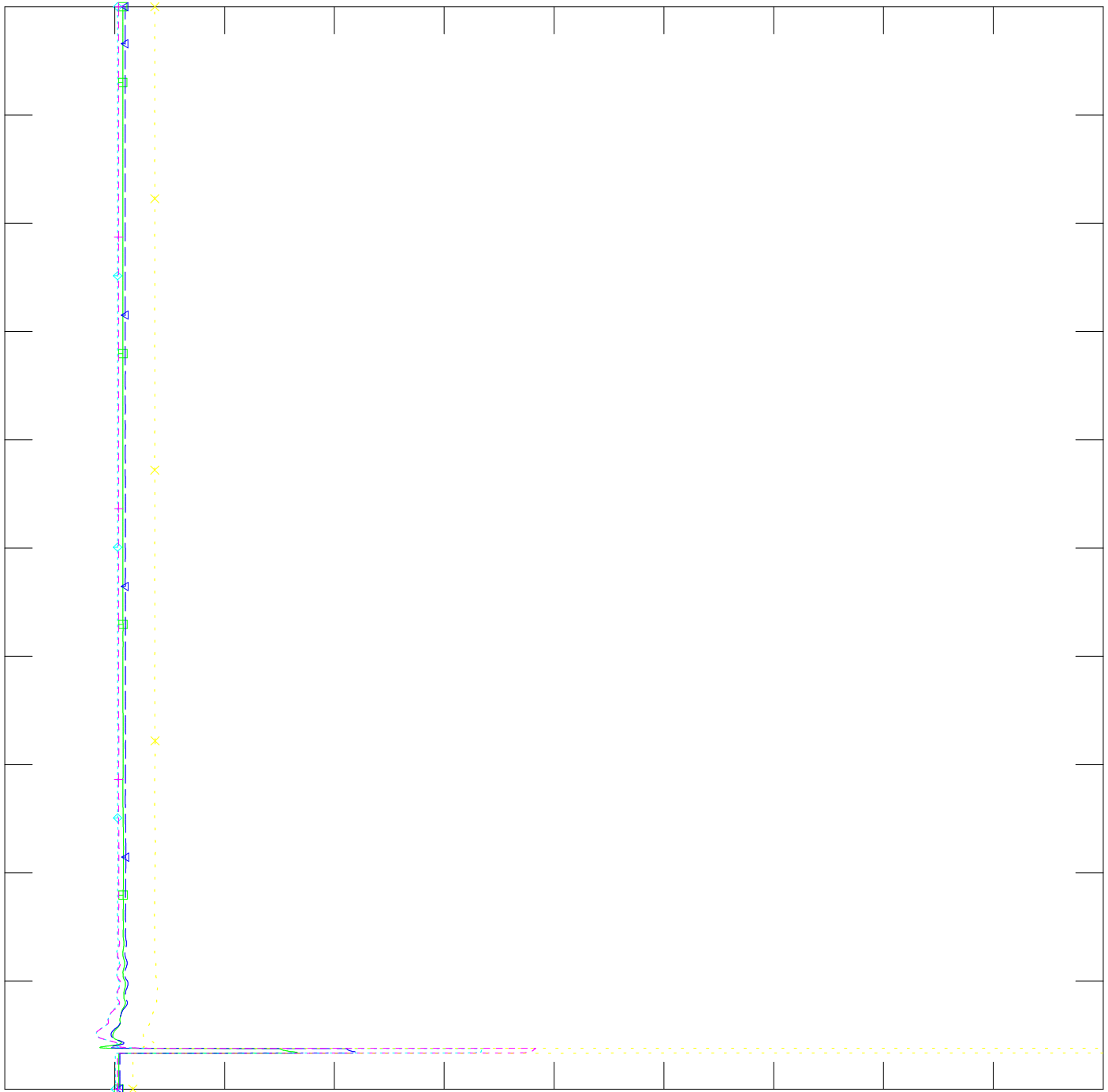




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_892L.out

TUE, NOV 16 2010 14:58
BUS VOLTAGE

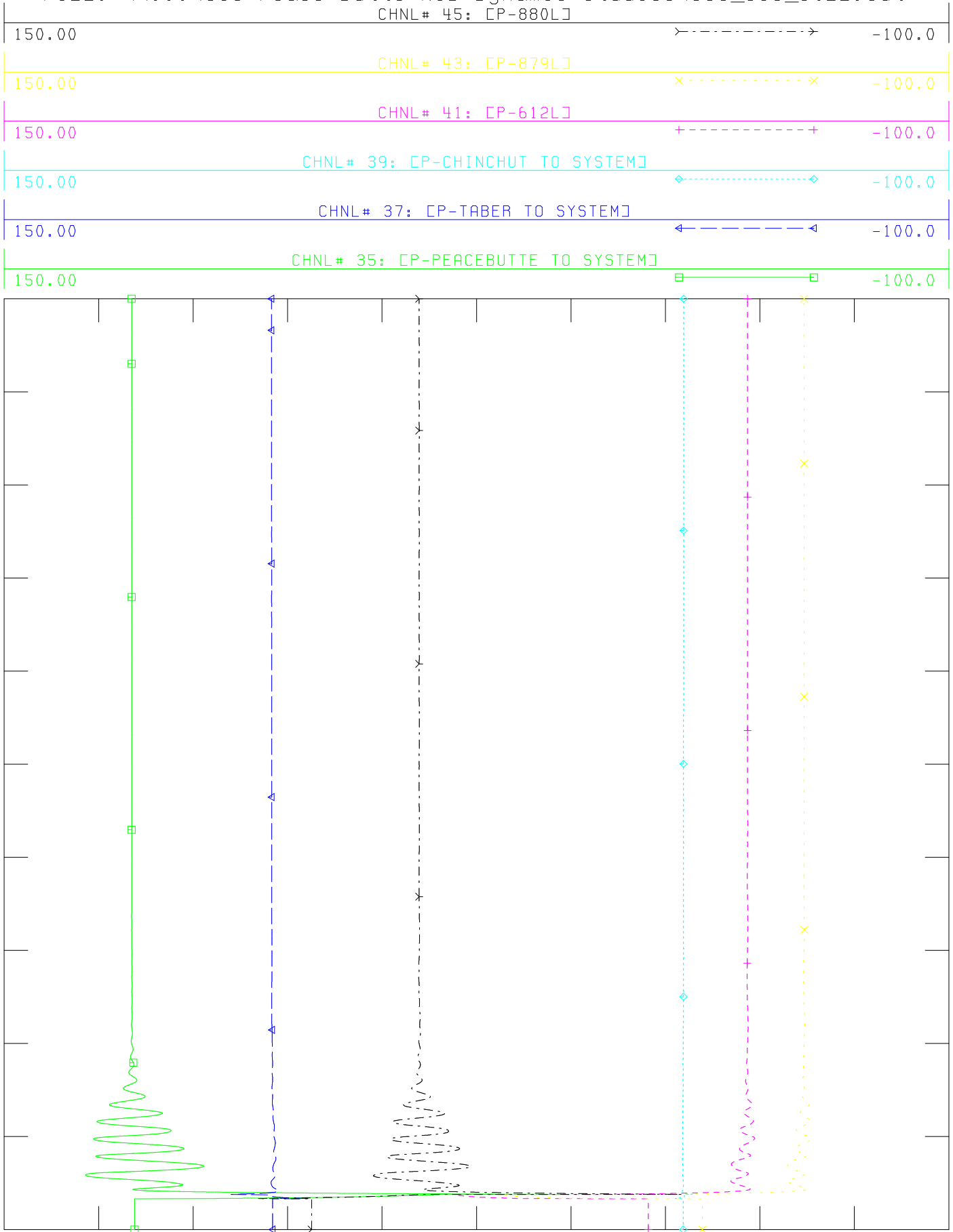
Channel	Label	Value	Reference
CHNL# 34	EVOLT	270	CSUFFIEL7 138.00
CHNL# 33	EVOLT	680	CMEDICIN7 138.00
CHNL# 32	EVOLT	271	EBULLS H7 138.00
CHNL# 31	EVOLT	269	EBURDETT7 138.00
CHNL# 30	EVOLT	31	CFINCAST7 138.00

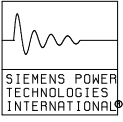


C-3-46

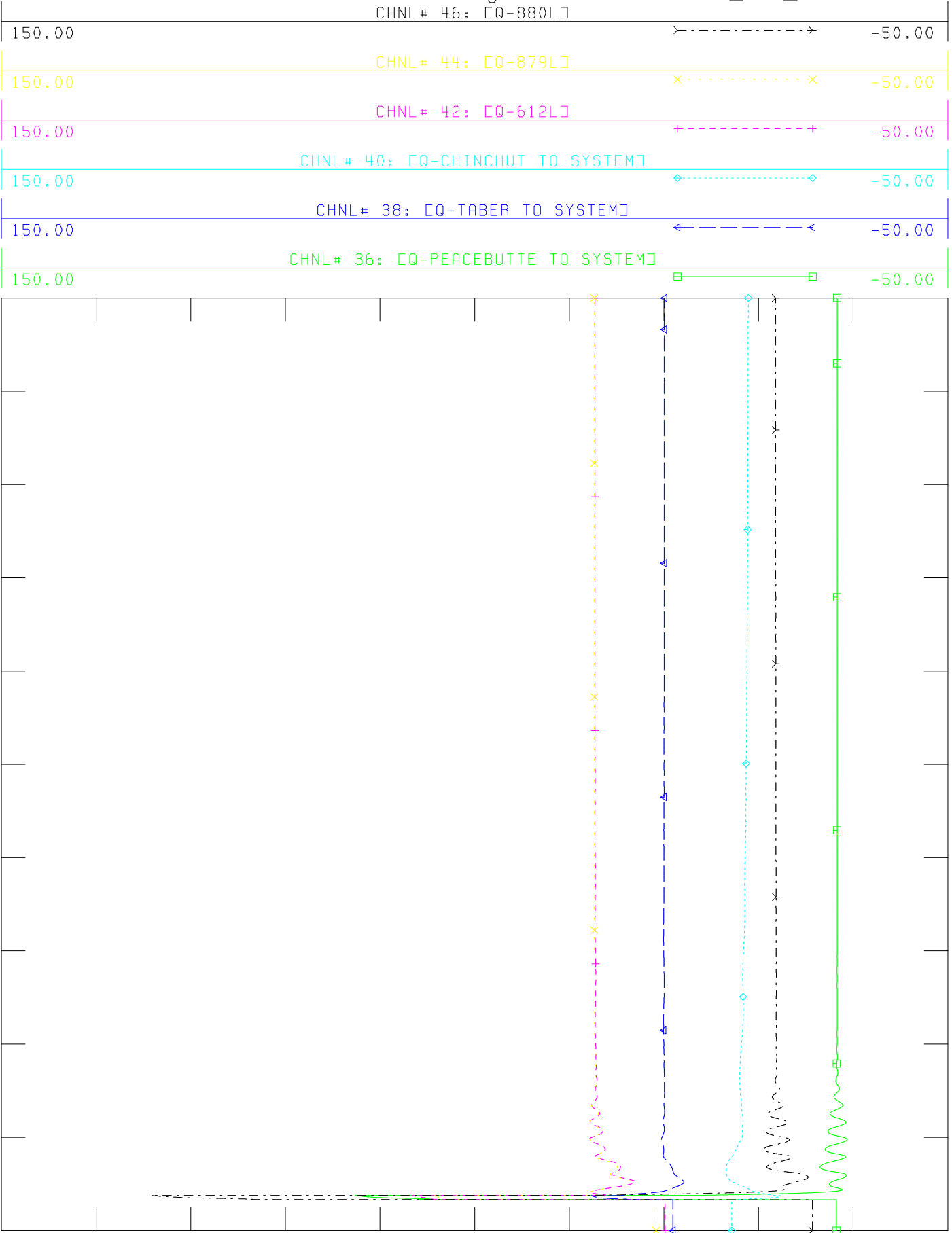


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_892L.out
CHNL# 45: [P-880L]





FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513_892L.out
CHNL# 46: [Q-880L]



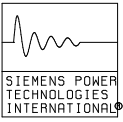
TUE, NOV 16 2010 15:00
BRANCH REACTIVE POWER

C-3-48

TIME (SECONDS)

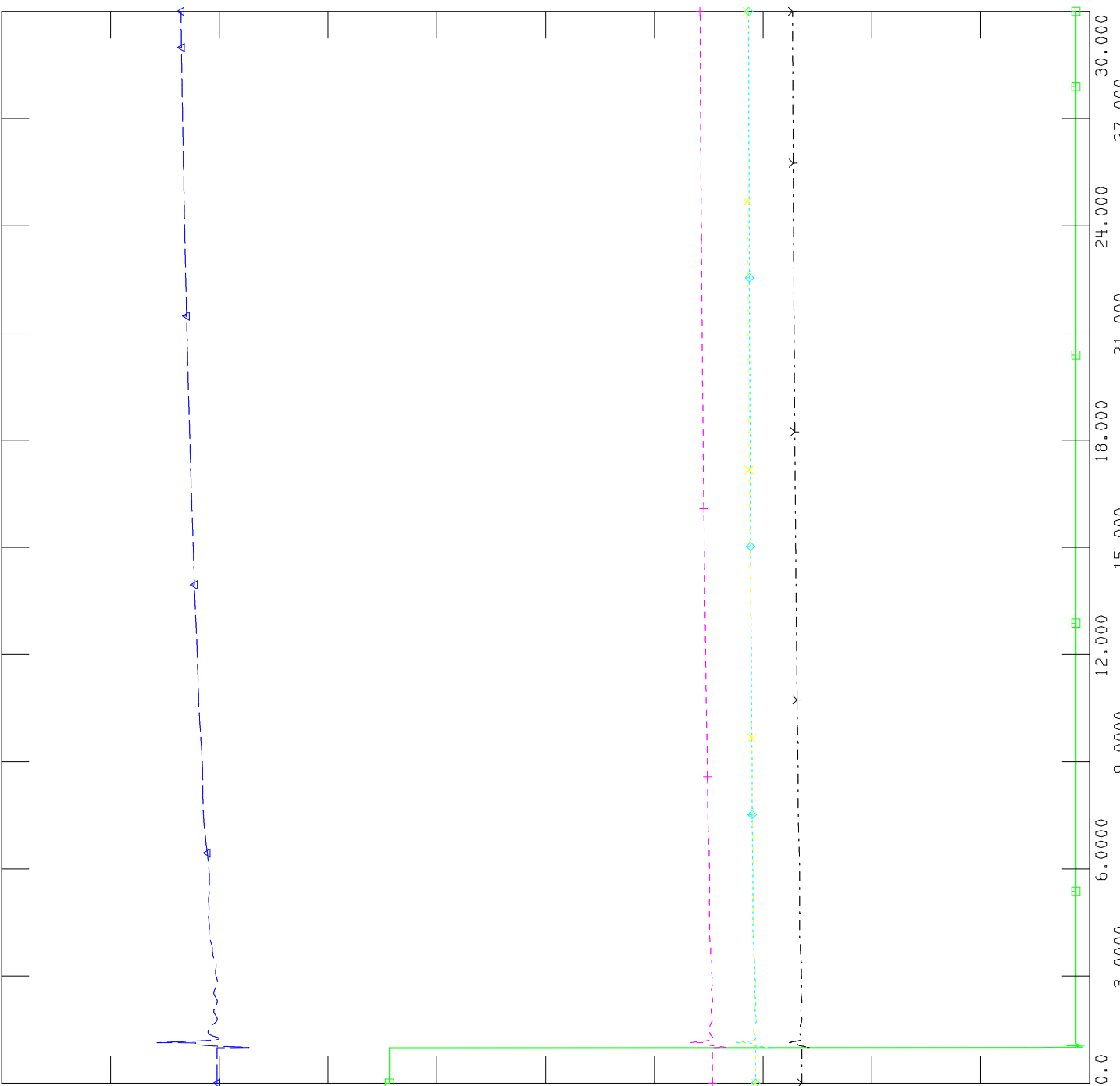
Attachment C-4: Proposed Connection with SATR Transient

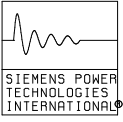
Stability Analysis Results -- Scenario 1



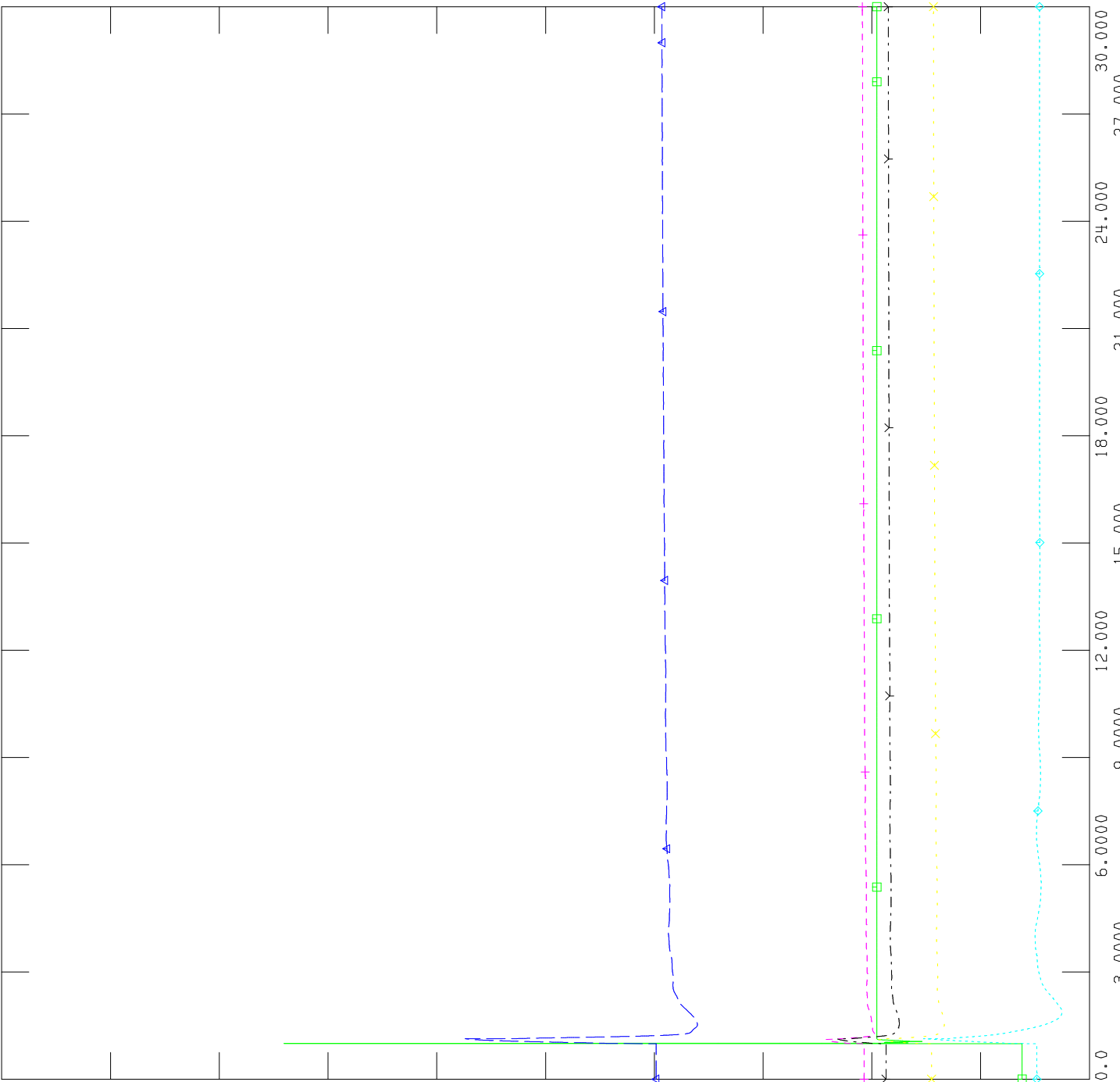
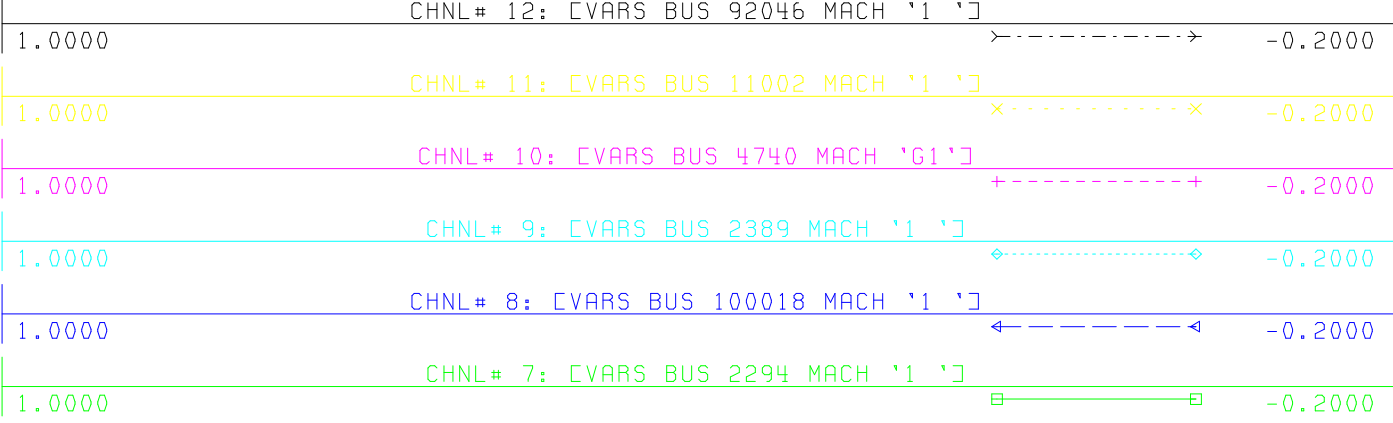
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_171L.out

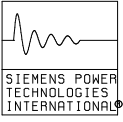
Channel	Label	Value
1.0000	CHNL# 6: [POWR BUS 92046 MACH '1 ']	-0.0100
1.0000	CHNL# 5: [POWR BUS 11002 MACH '1 ']	-0.0100
1.0000	CHNL# 4: [POWR BUS 4740 MACH 'G1']	-0.0100
1.0000	CHNL# 3: [POWR BUS 2389 MACH '1 ']	-0.0100
1.0000	CHNL# 2: [POWR BUS 10018 MACH '1 ']	-0.0100
1.0000	CHNL# 1: [POWR BUS 2294 MACH '1 ']	-0.0100





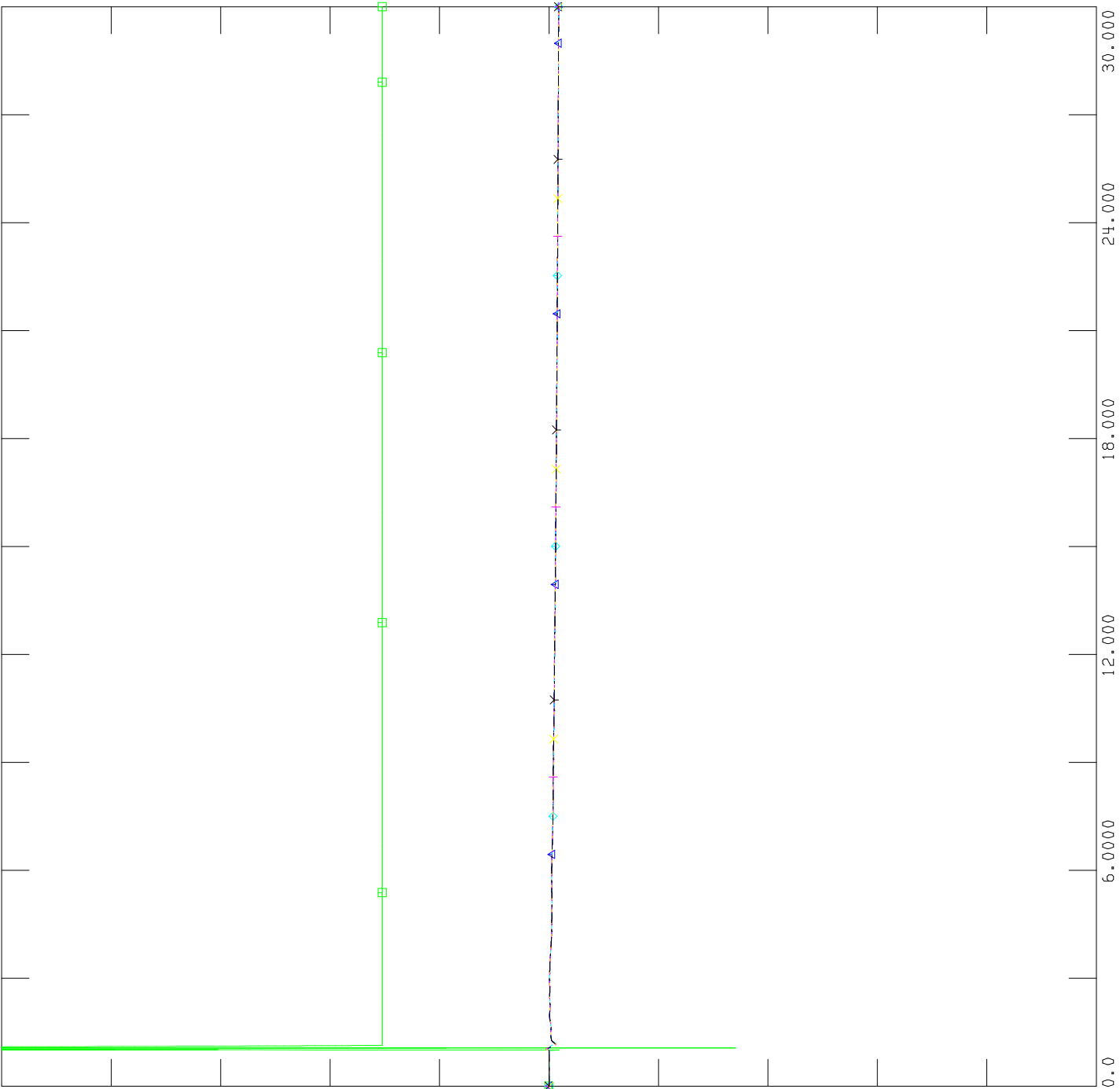
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_171L.out

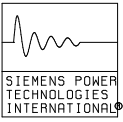




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_171L.out

Channel	CFREQ	Component	Value
CHNL# 18	92046	CMCBRIDE6	0.6900
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	1.0000
CHNL# 15	2389	CHILLRIDG	25.0000
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900

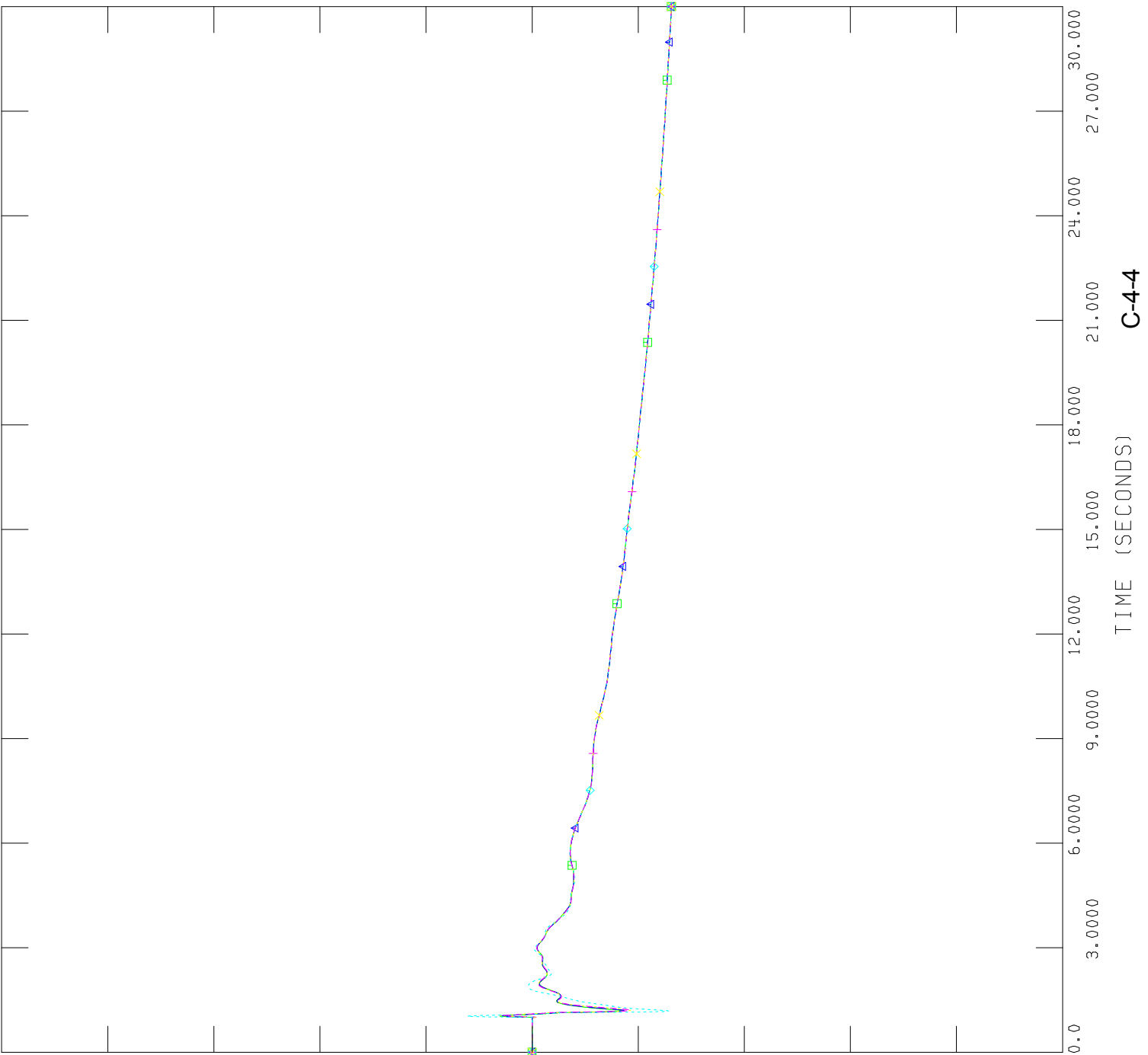


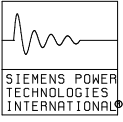


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_171L.out

WED, NOV 17 2010 14:23
BUS FREQUENCY

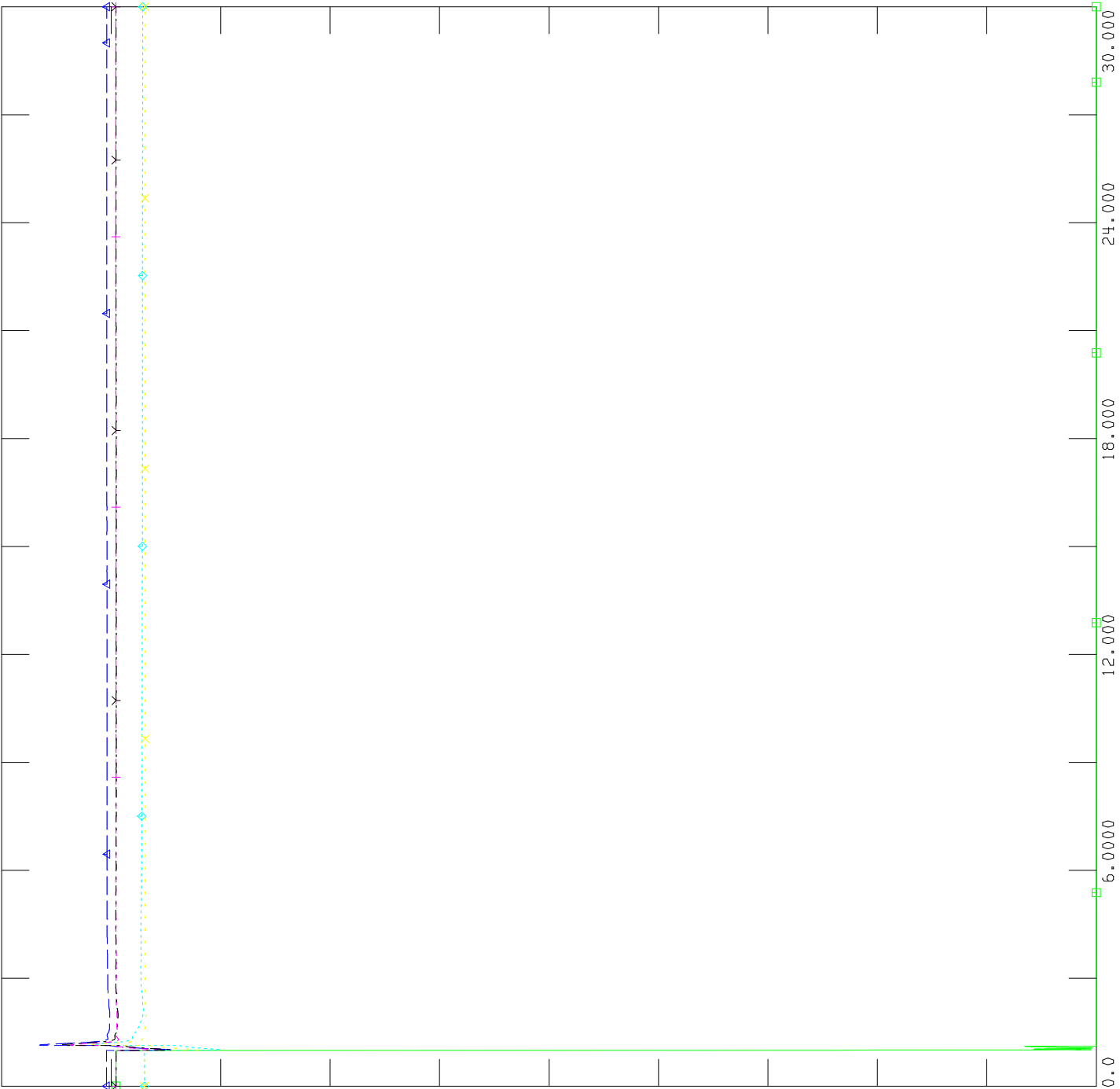
Channel	CFREQ	Location	Value
CHNL# 23	270	CSUFFIEL7	138.00
CHNL# 22	680	CMEDICIN7	138.00
CHNL# 21	271	CBULLS H7	138.00
CHNL# 20	269	CBURDETT7	138.00
CHNL# 19	31	CFINCAST7	138.00





FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513&SATR_171L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [MCCBRIDE6]	0.6900
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750
CHNL# 27	EVOLT 4740 [CARD_07]	1.0000
CHNL# 26	EVOLT 2389 [CHILLRIDG]	25.0000
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900

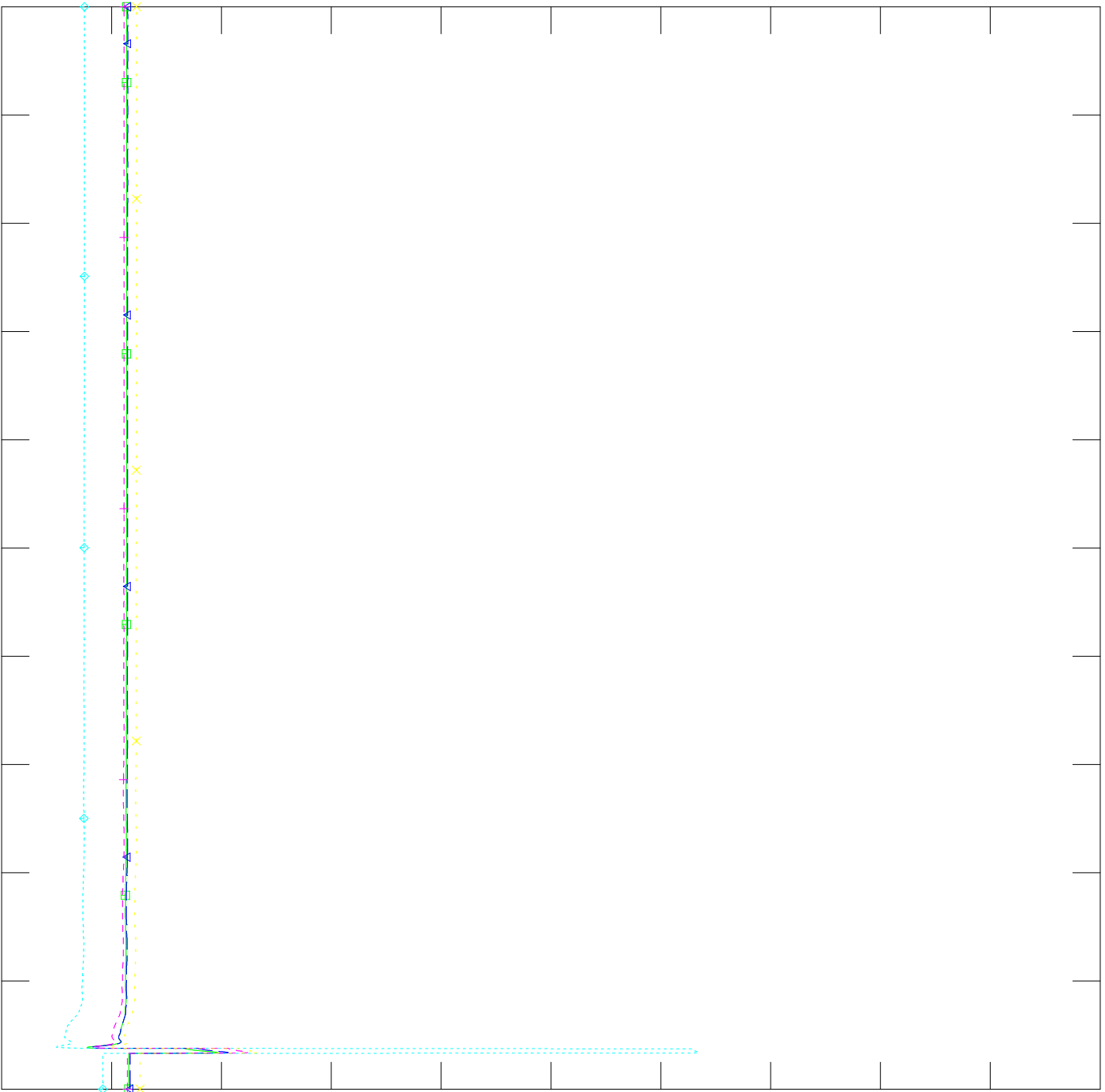




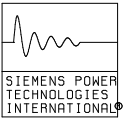
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_171L.out

WED, NOV 17 2010 14:25
BUS VOLTAGE

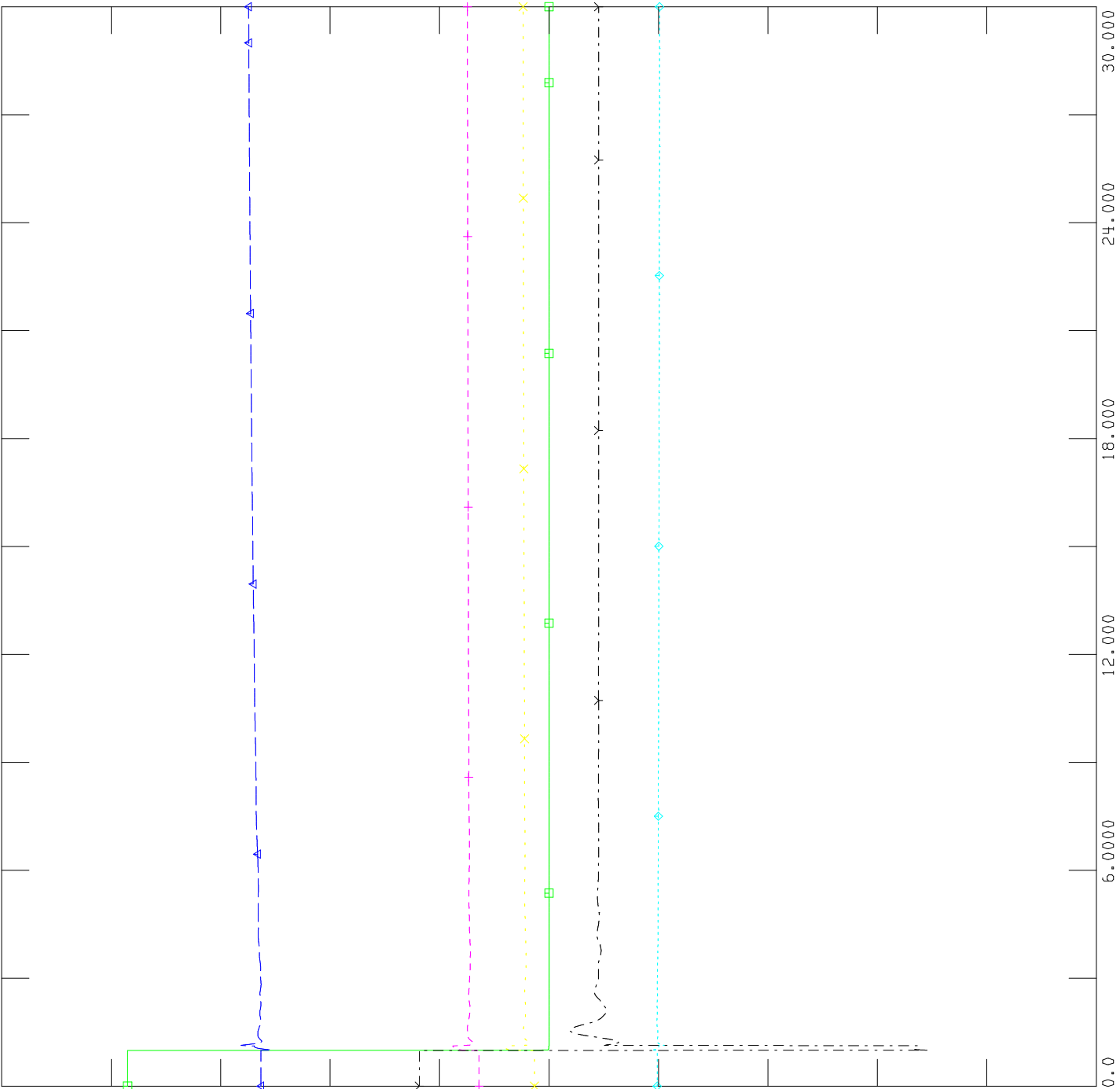
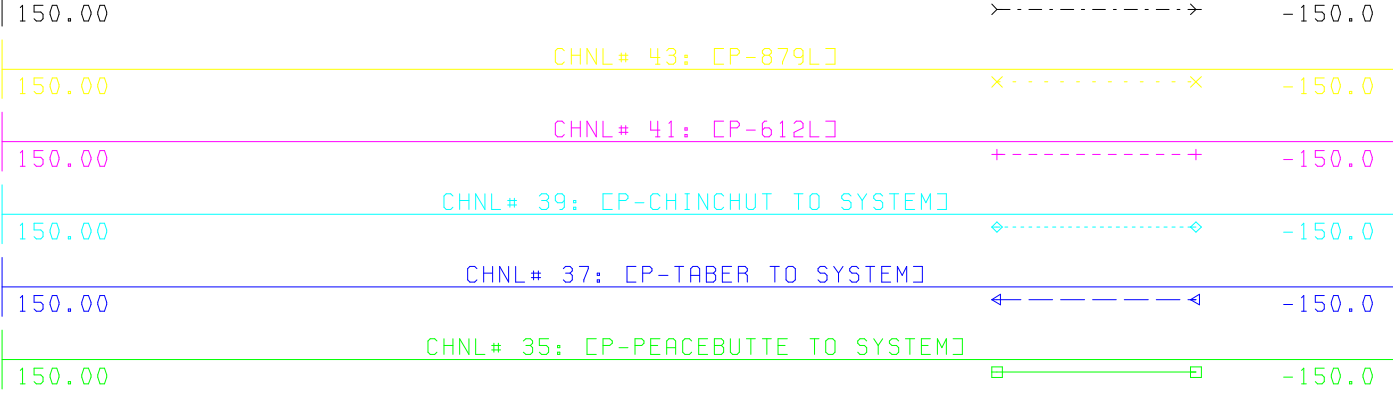
Channel	Label	Value	Unit
CHNL# 34	EVOLT 270 [SUFFIEL7]	138.00	V
CHNL# 33	EVOLT 680 [MEDICIN7]	138.00	V
CHNL# 32	EVOLT 271 [BULLS H7]	138.00	V
CHNL# 31	EVOLT 269 [BURDETT7]	138.00	V
CHNL# 30	EVOLT 31 [FINCAST7]	138.00	V



C-4-6

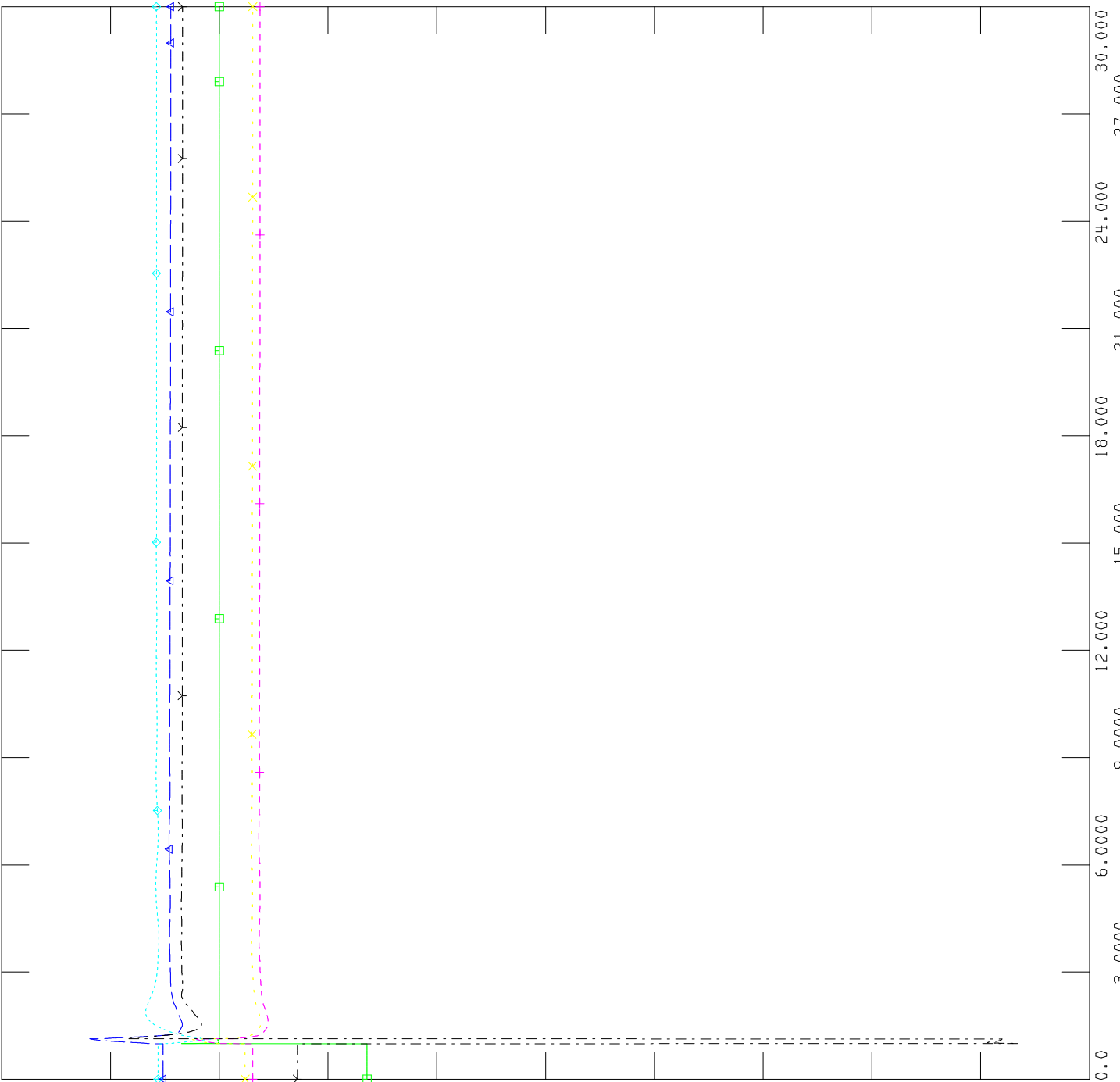
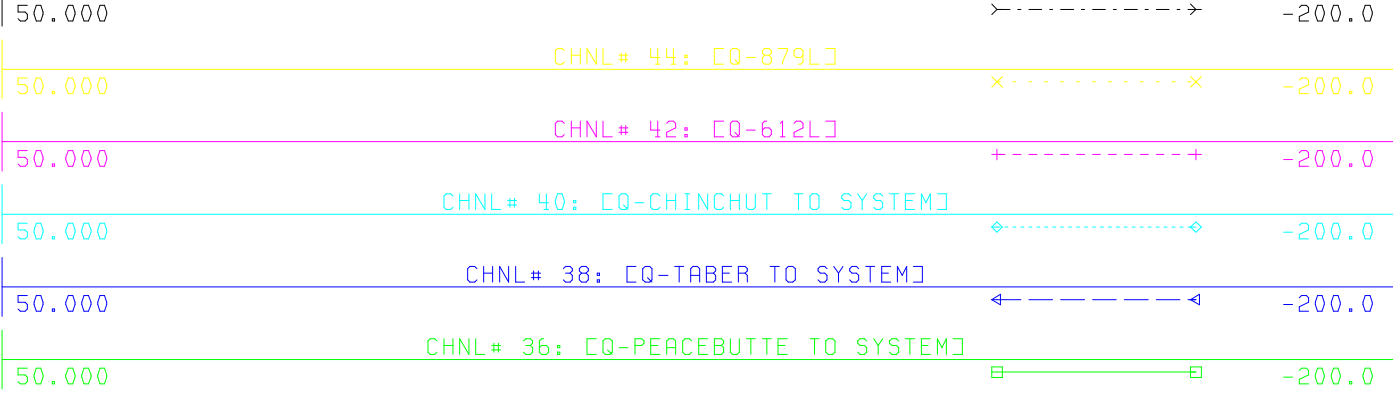


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_171L.out
CHNL# 45: [CP-880L]



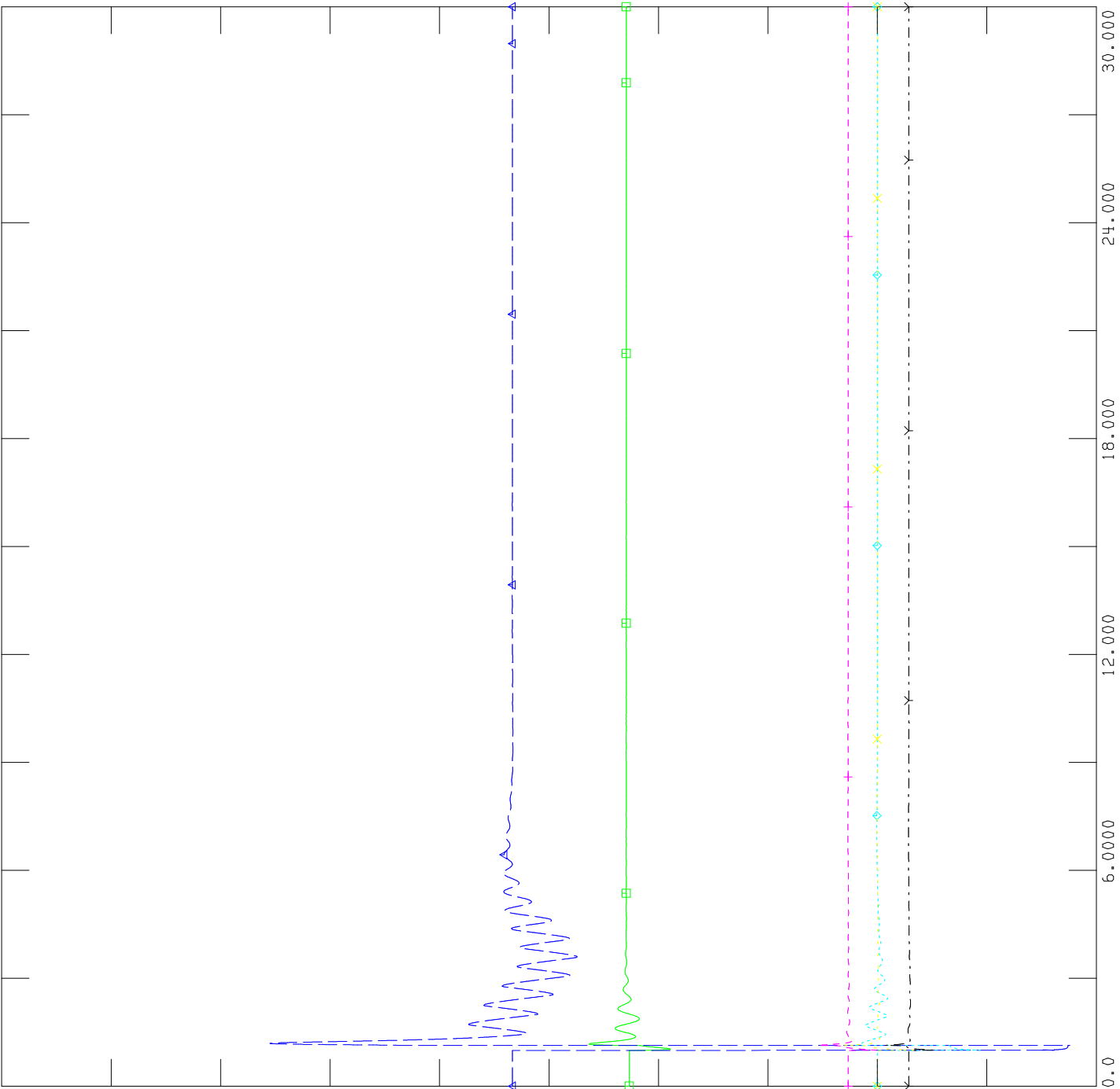
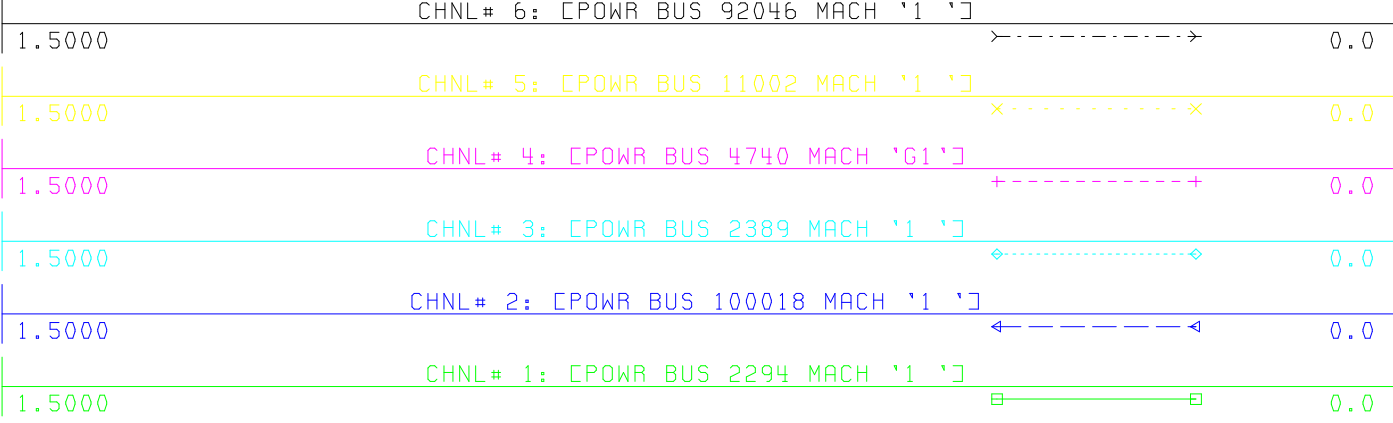


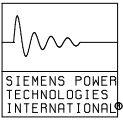
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_171L.out
CHNL# 46: [Q-880L]



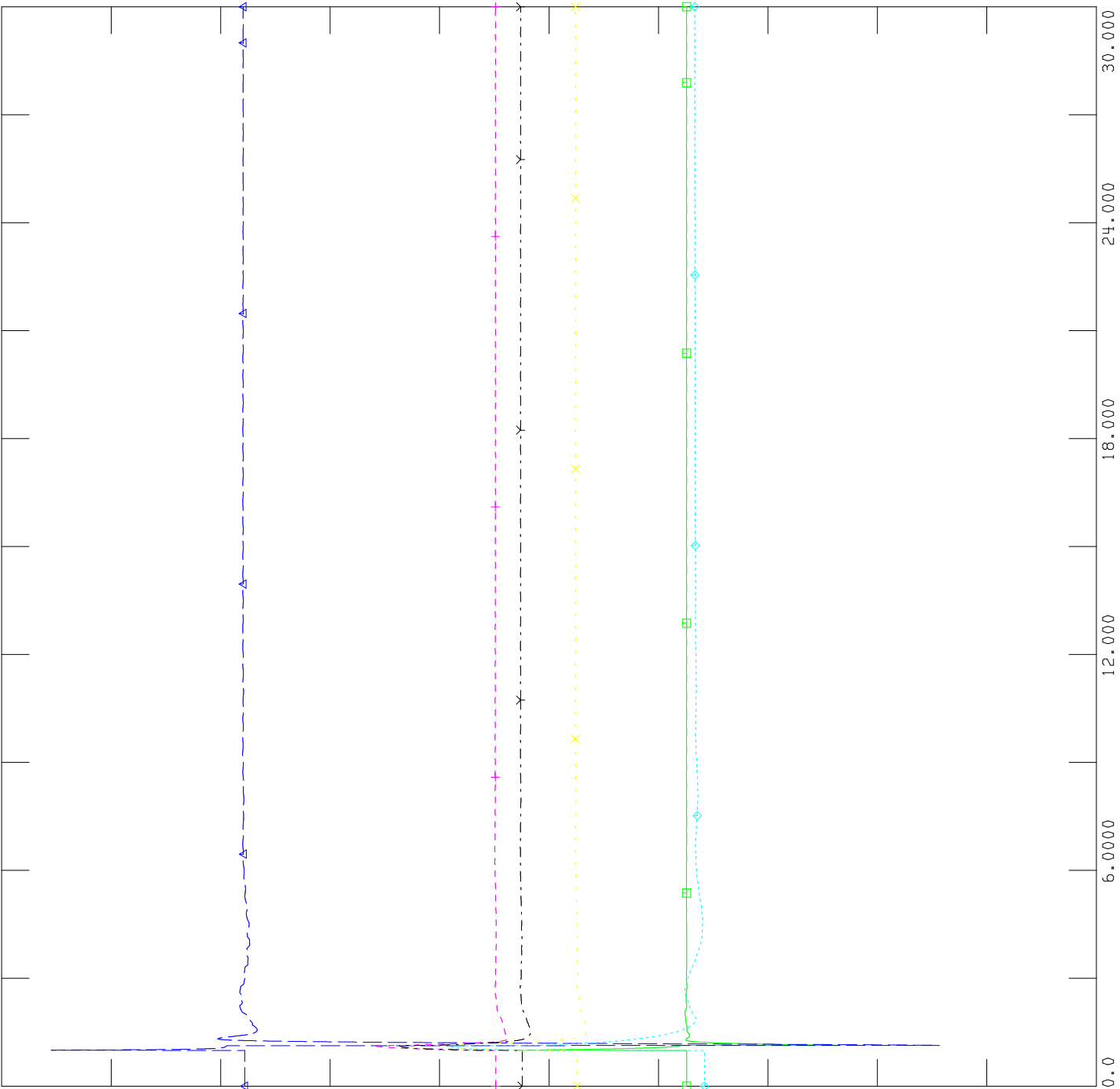
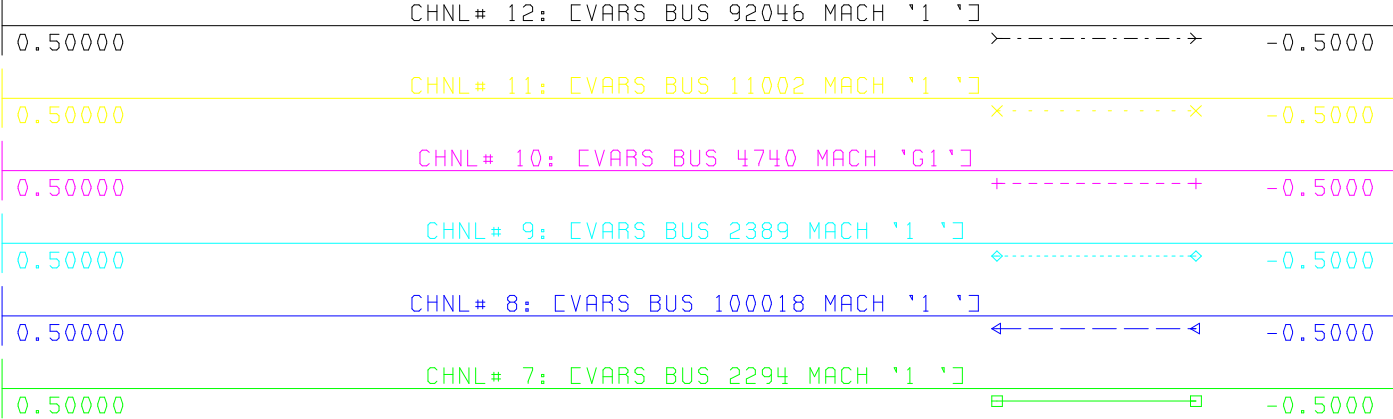


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_612L.out





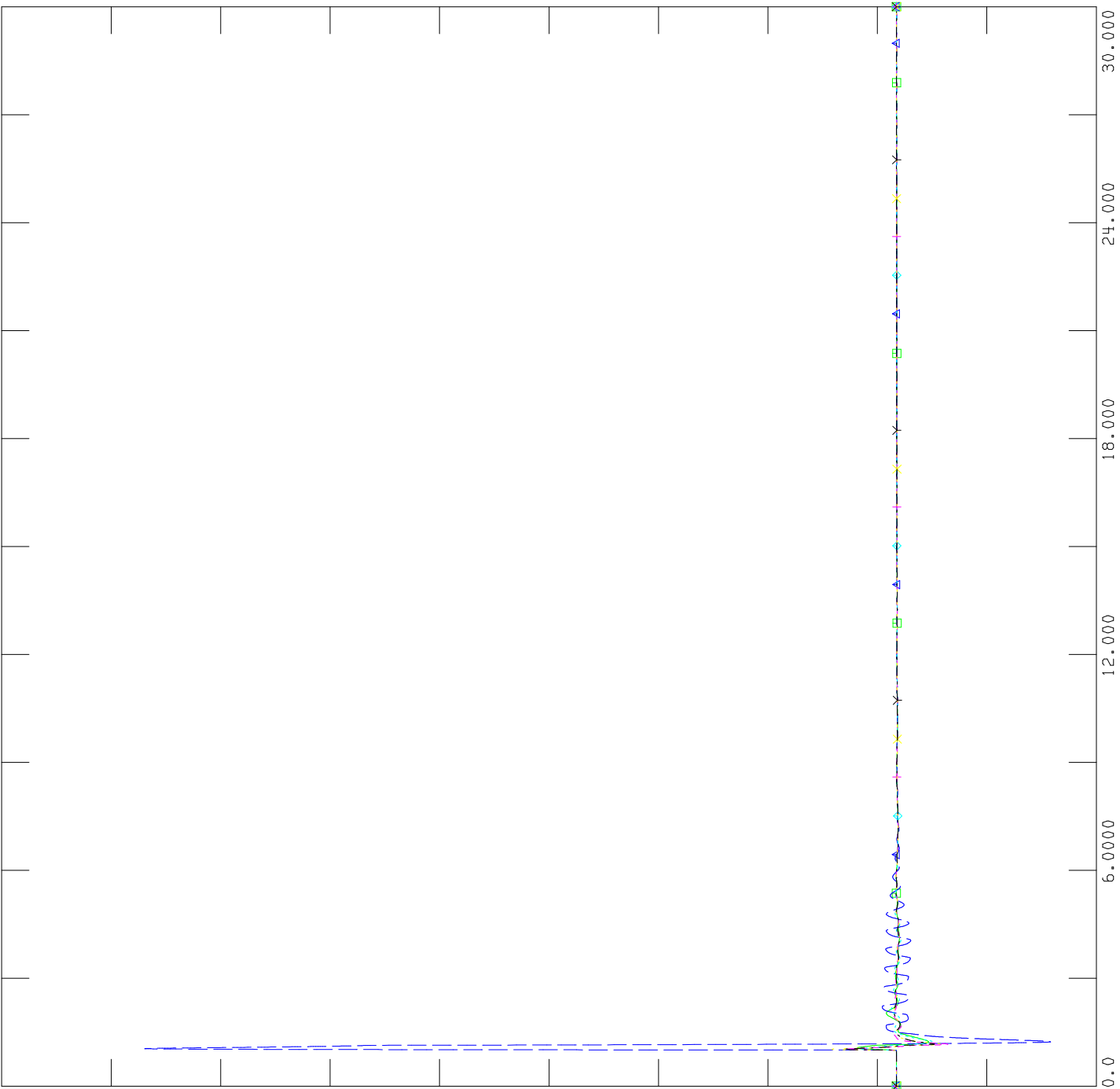
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_612L.out

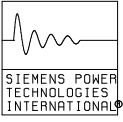




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_612L.out

Channel	CFREQ	Component	Value
CHNL# 18	92046	CMCBRIDE6	0.6900
CHNL# 17	11002	CGARDNG2	0.5750
CHNL# 16	4740	CARD_07	1.0000
CHNL# 15	2389	CHILLRIDG	25.0000
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900

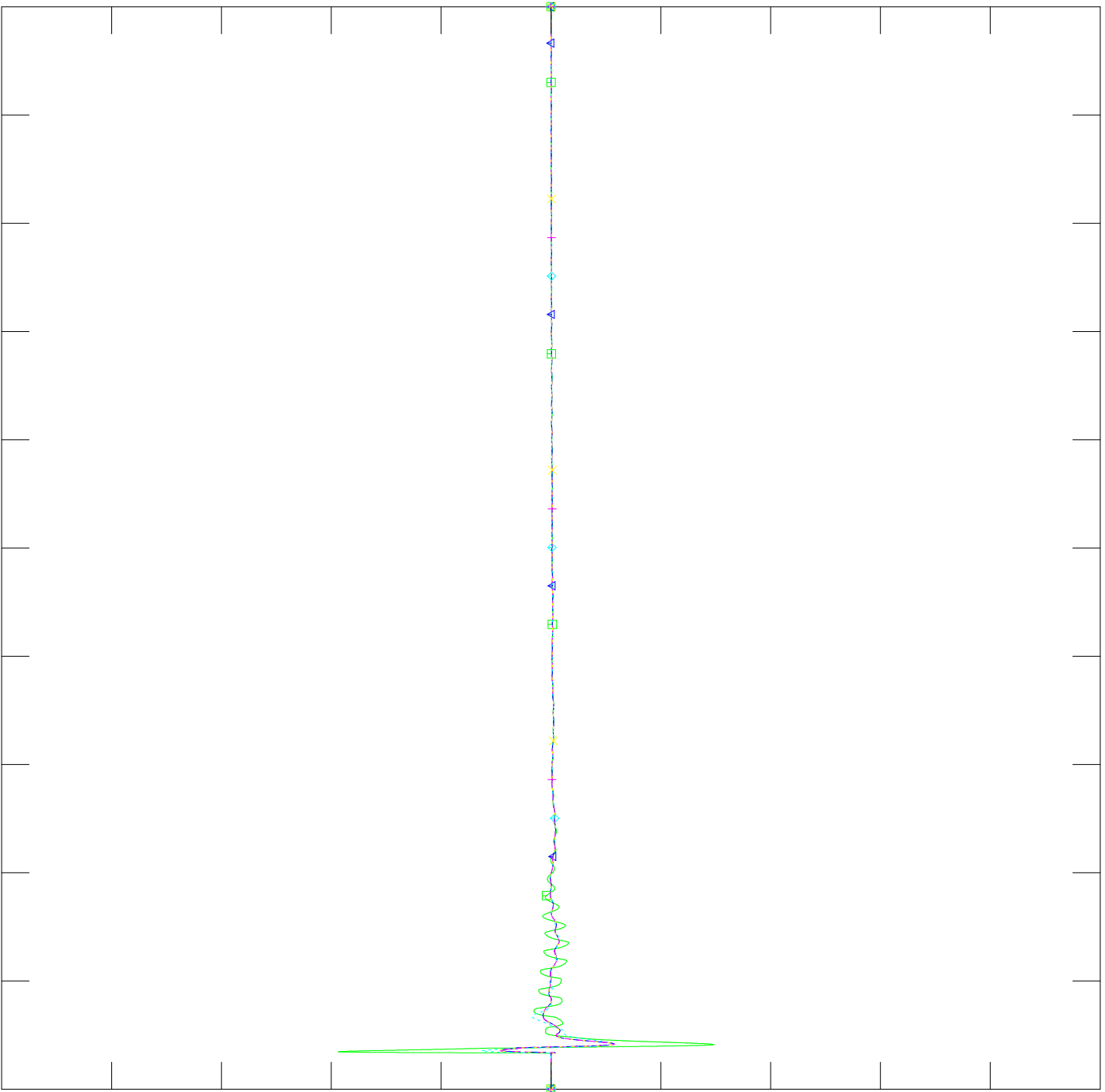




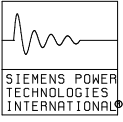
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_612L.out

WED, NOV 17 2010 15:09
BUS FREQUENCY

Channel	Frequency (Hz)	Value
CHNL# 23: CFREQ	270 [SUFFIEL7	138.00]]
CHNL# 22: CFREQ	680 [MEDICIN7	138.00]]
CHNL# 21: CFREQ	271 [BULLS H7	138.00]]
CHNL# 20: CFREQ	269 [BURDETT7	138.00]]
CHNL# 19: CFREQ	31 [FINCAST7	138.00]]

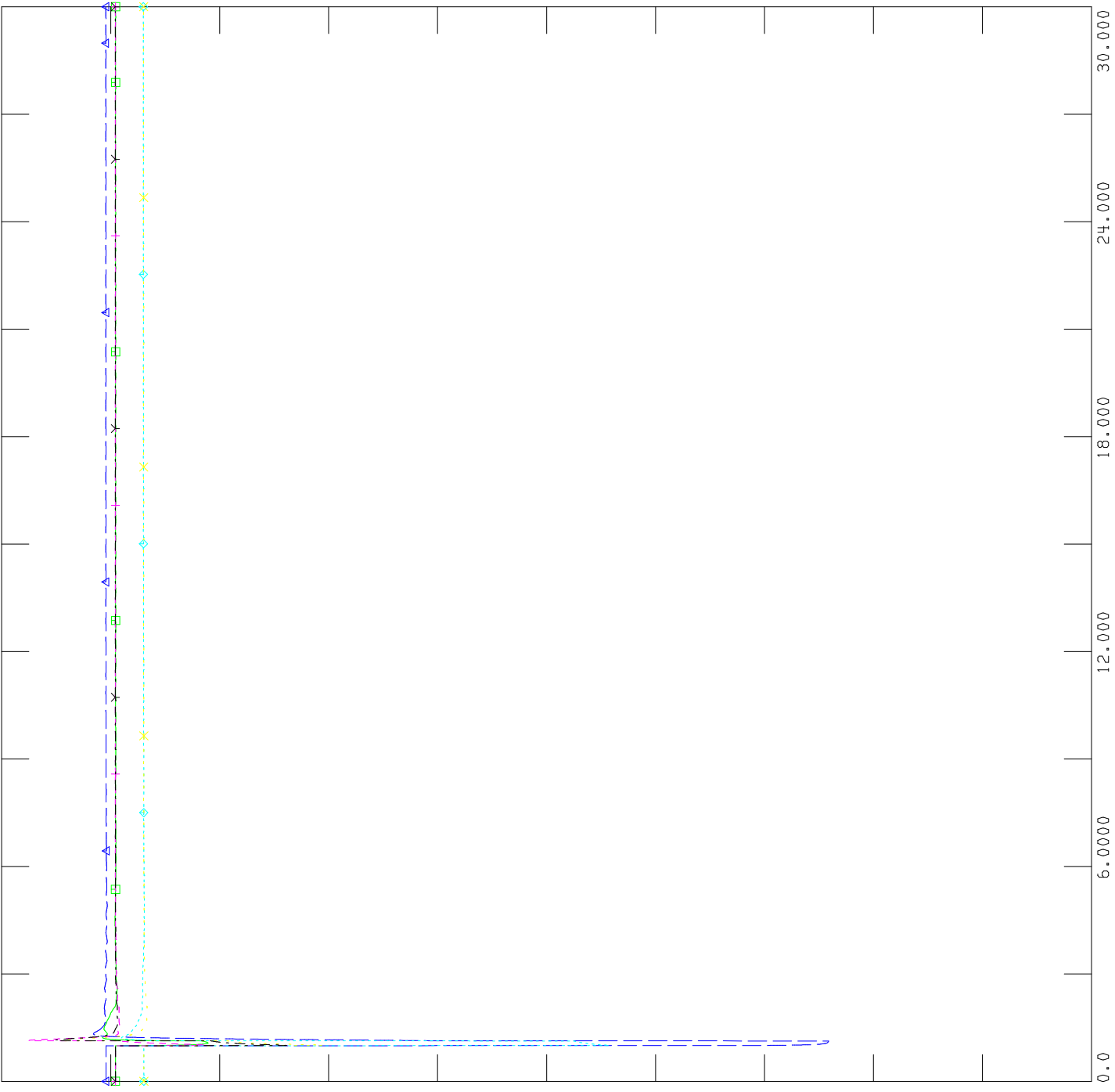


C-4-12



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513&SATR_612L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 EMCBRIDE6	0.6900
CHNL# 28	EVOLT 11002 EGARDNG2	0.5750
CHNL# 27	EVOLT 4740 CARD_07	1.0000
CHNL# 26	EVOLT 2389 CHILLRIDG	25.0000
CHNL# 25	EVOLT 100018 CPURPLESP	0.5750
CHNL# 24	EVOLT 2294 CTOTHILL2	0.6900

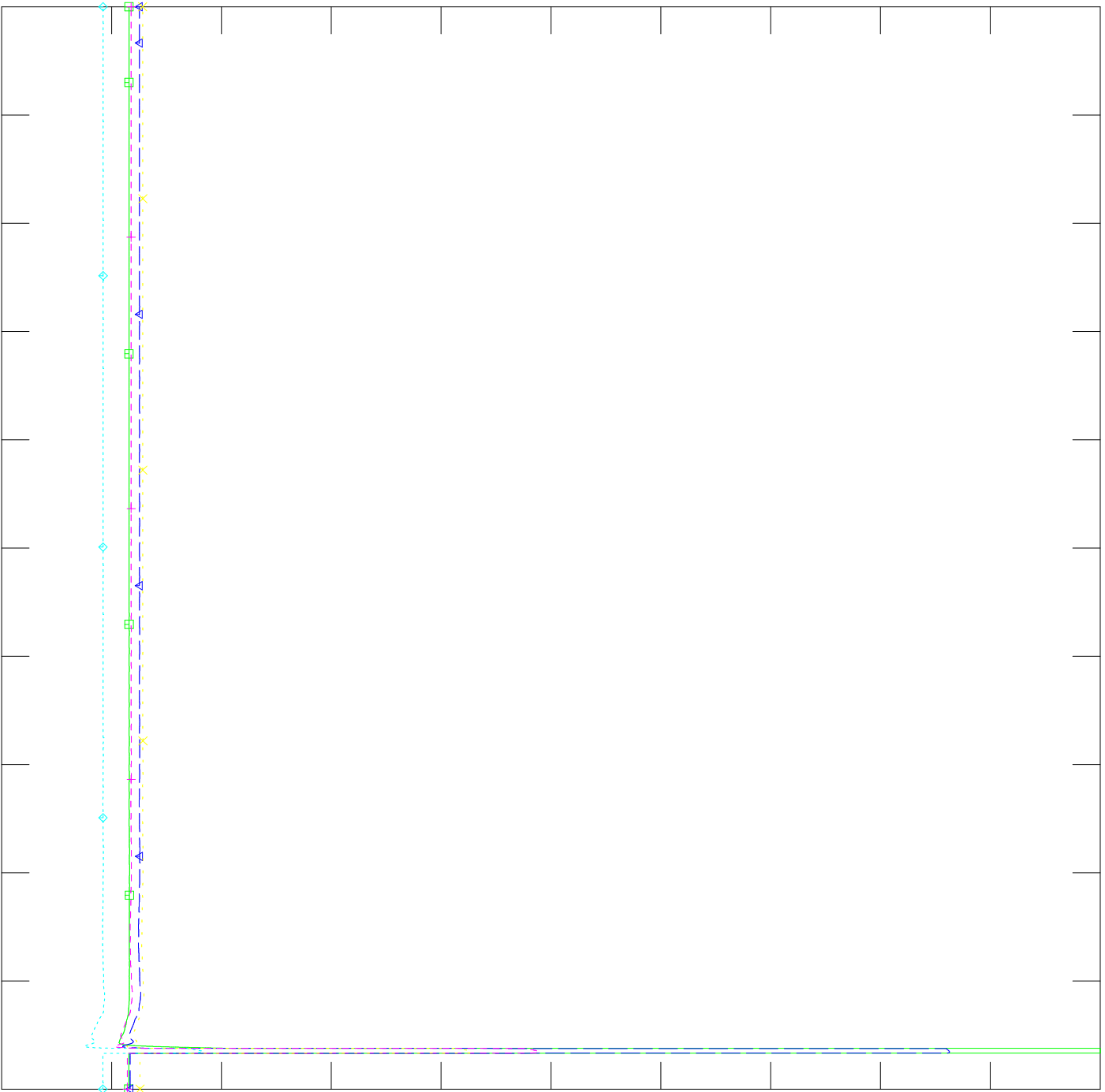




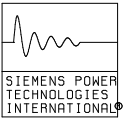
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_612L.out

WED, NOV 17 2010 15:11
BUS VOLTAGE

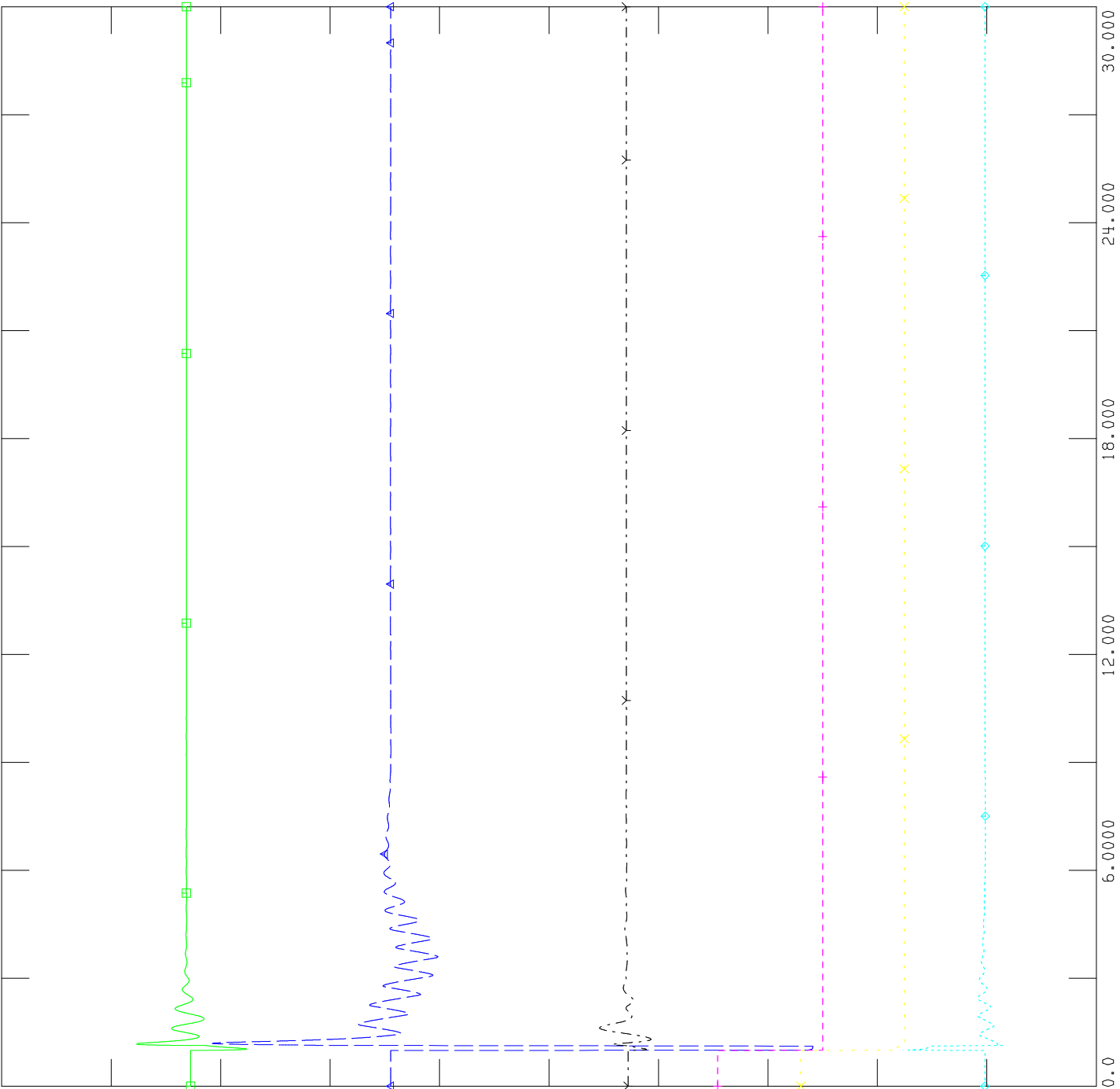
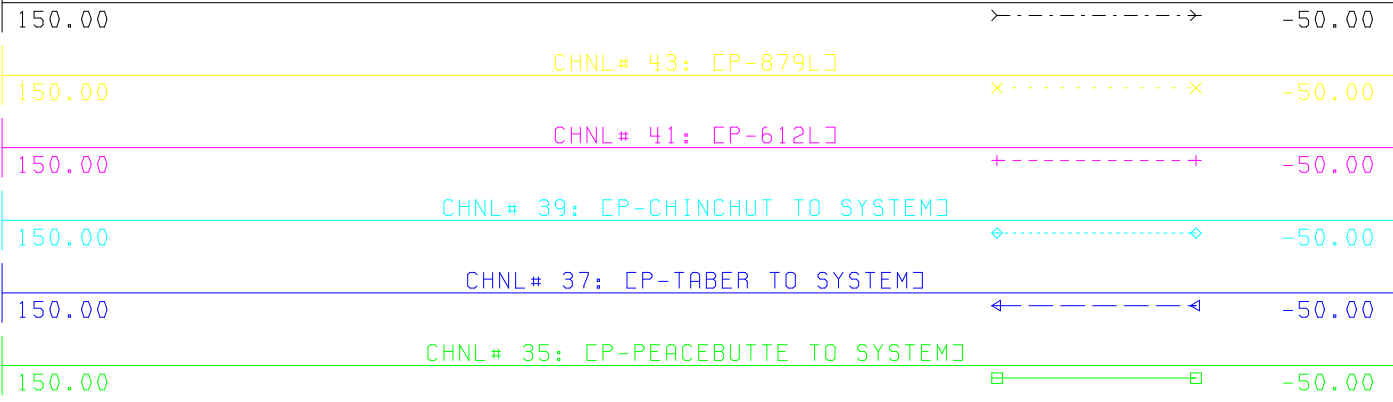
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]

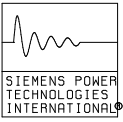


C-4-14

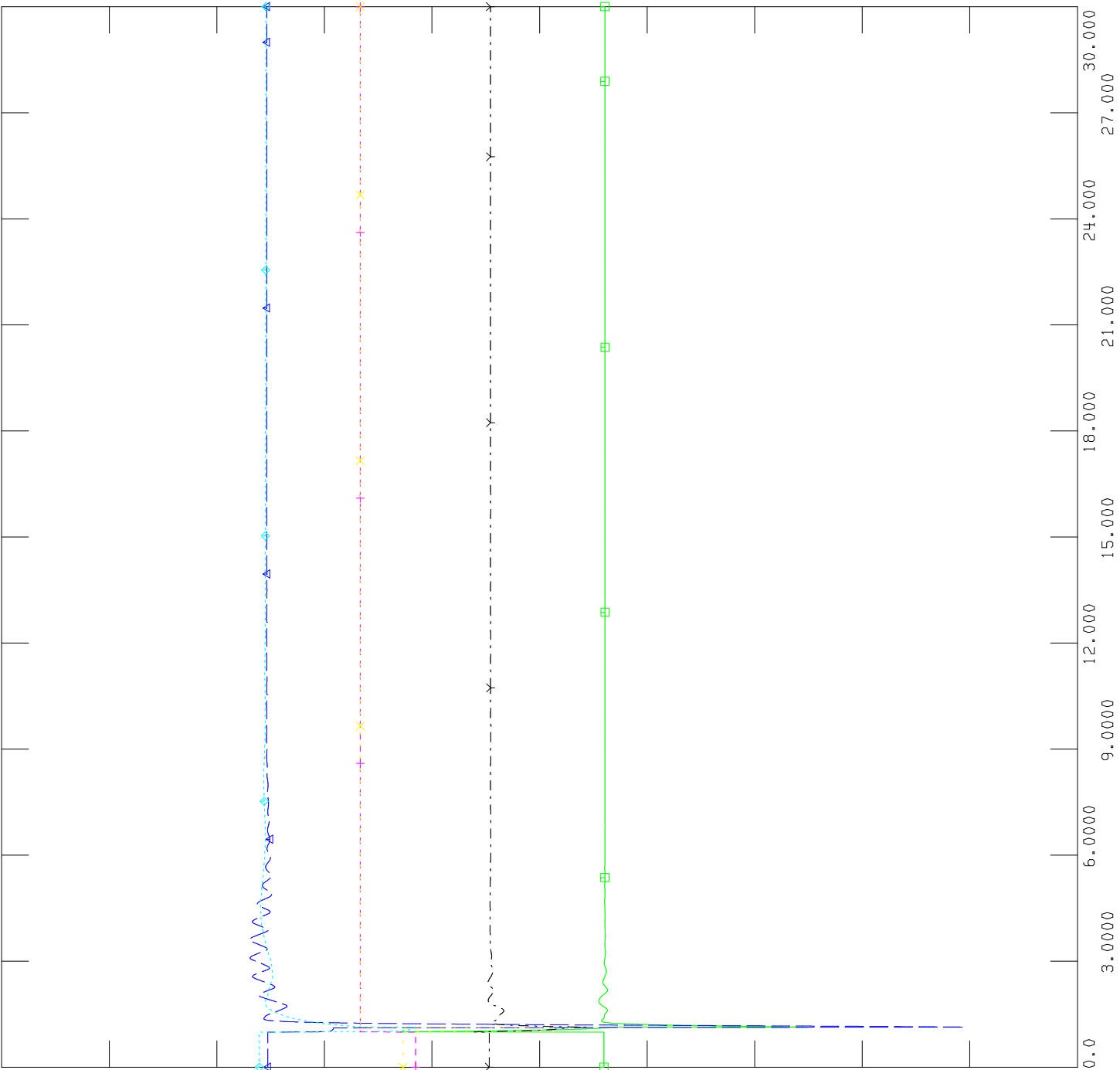
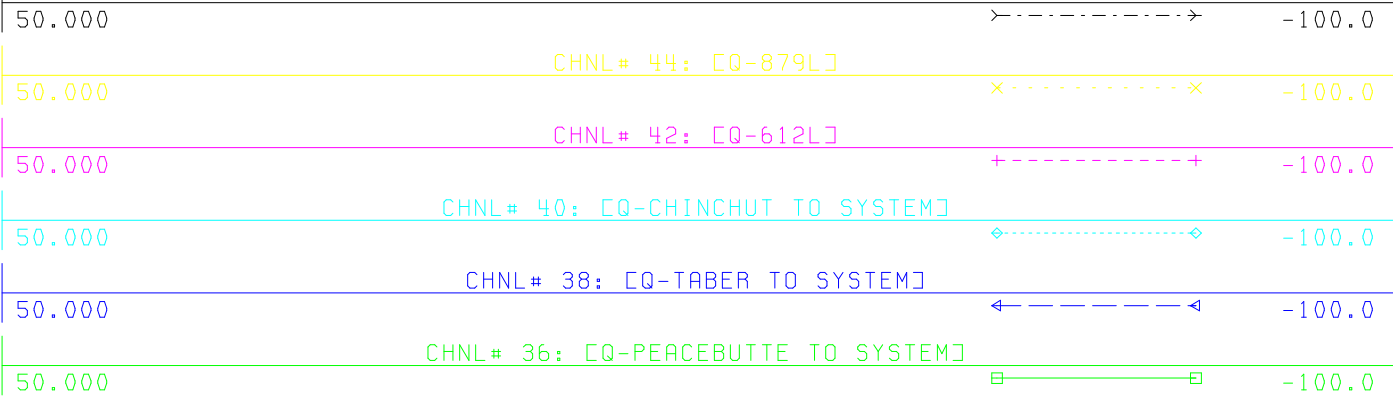


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_612L.out
CHNL# 45: [CP-880L]





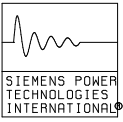
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_612L.out
CHNL# 46: [Q-880L]



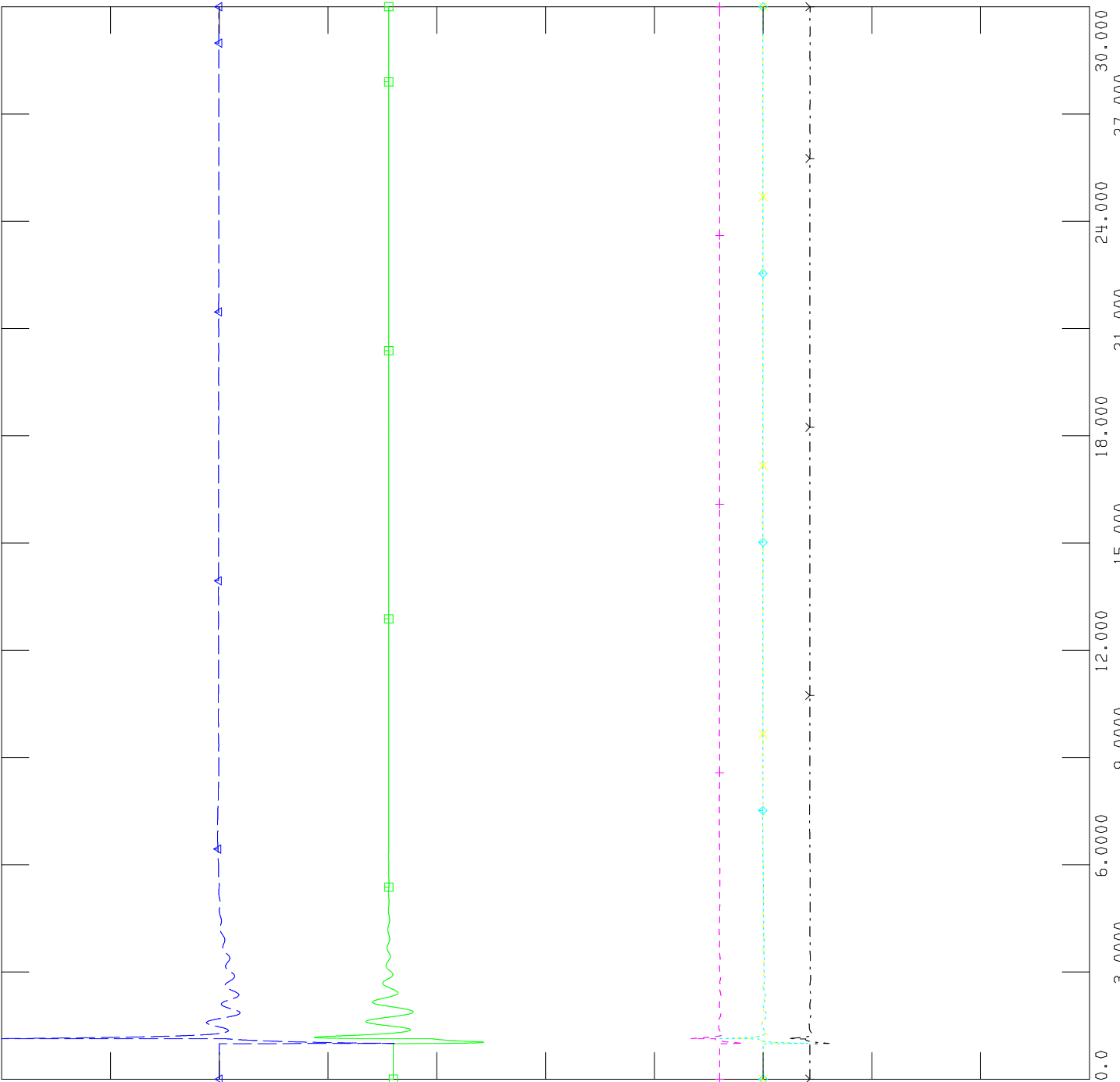
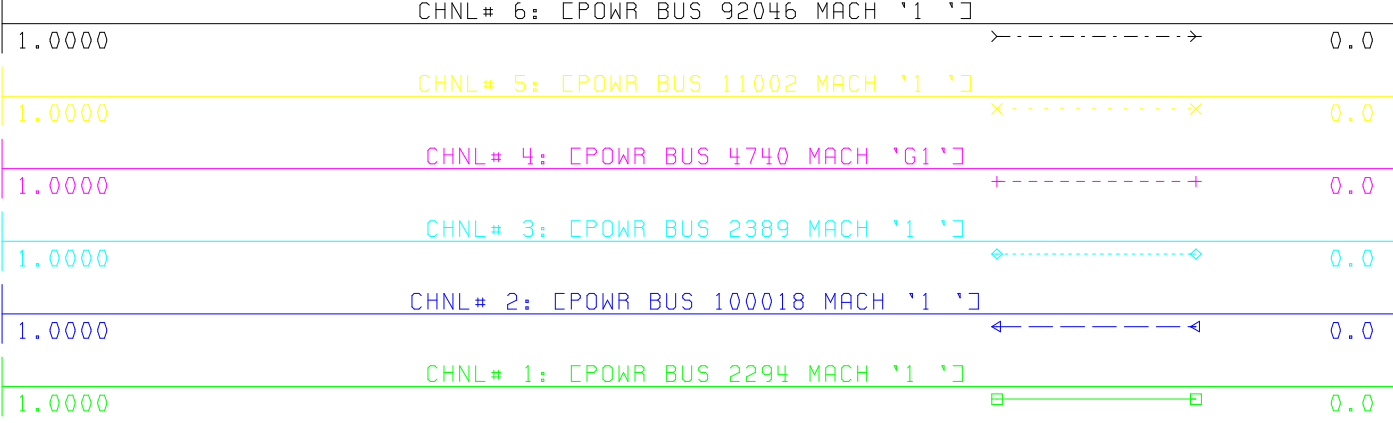
WED, NOV 17 2010 15:13
BRANCH REACTIVE POWER

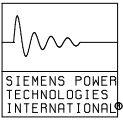
C-4-16

TIME (SECONDS)

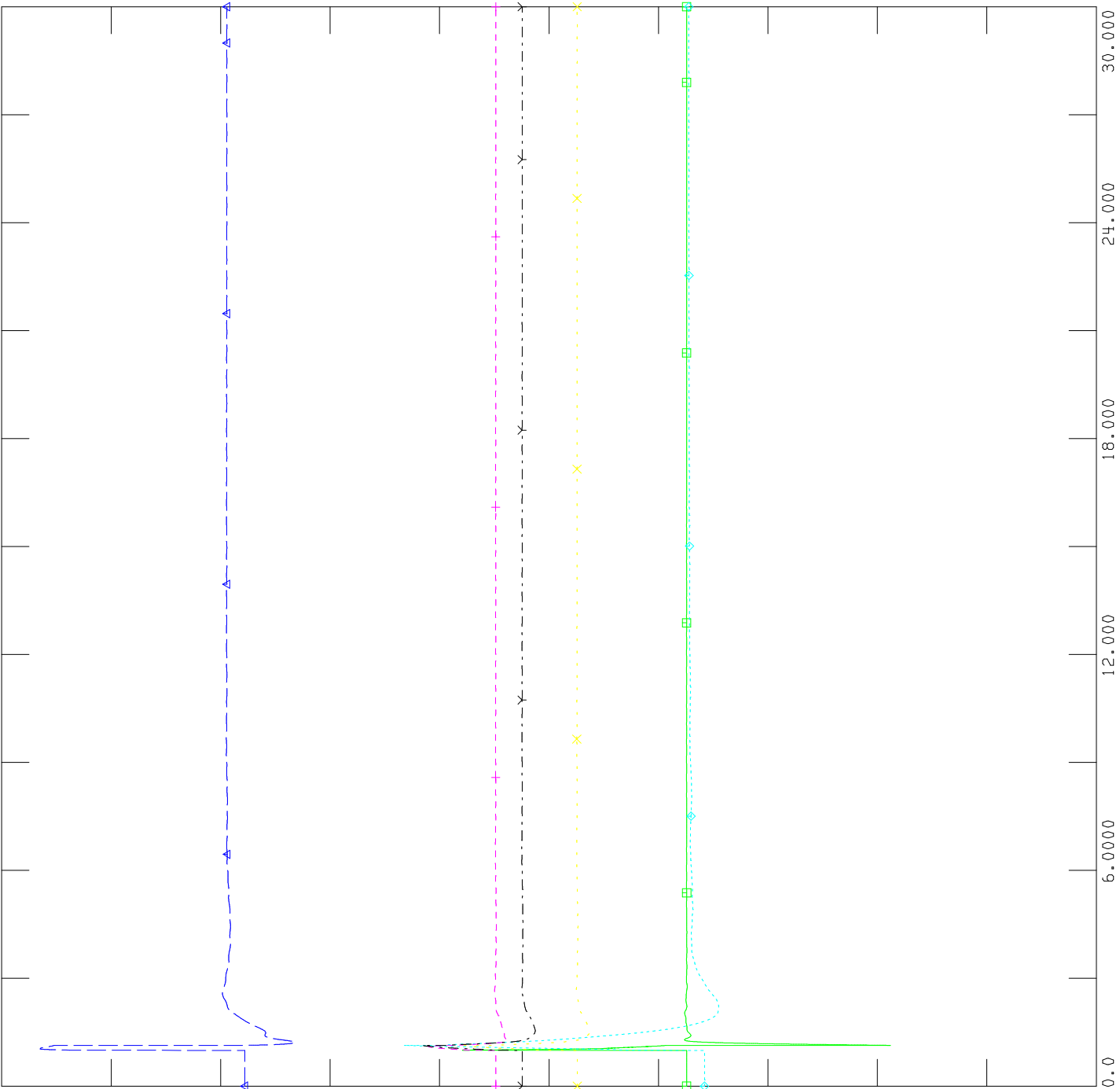
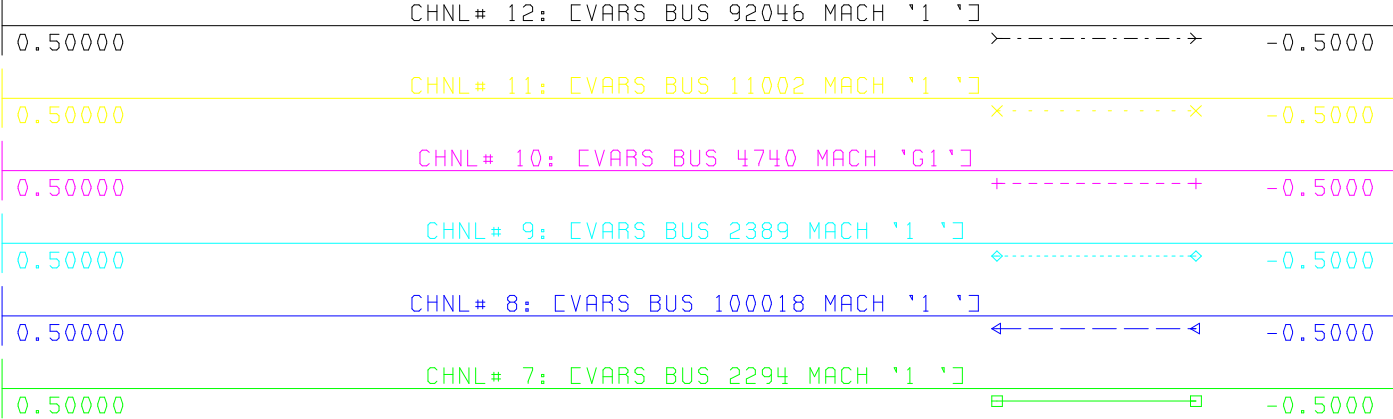


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_760L.out





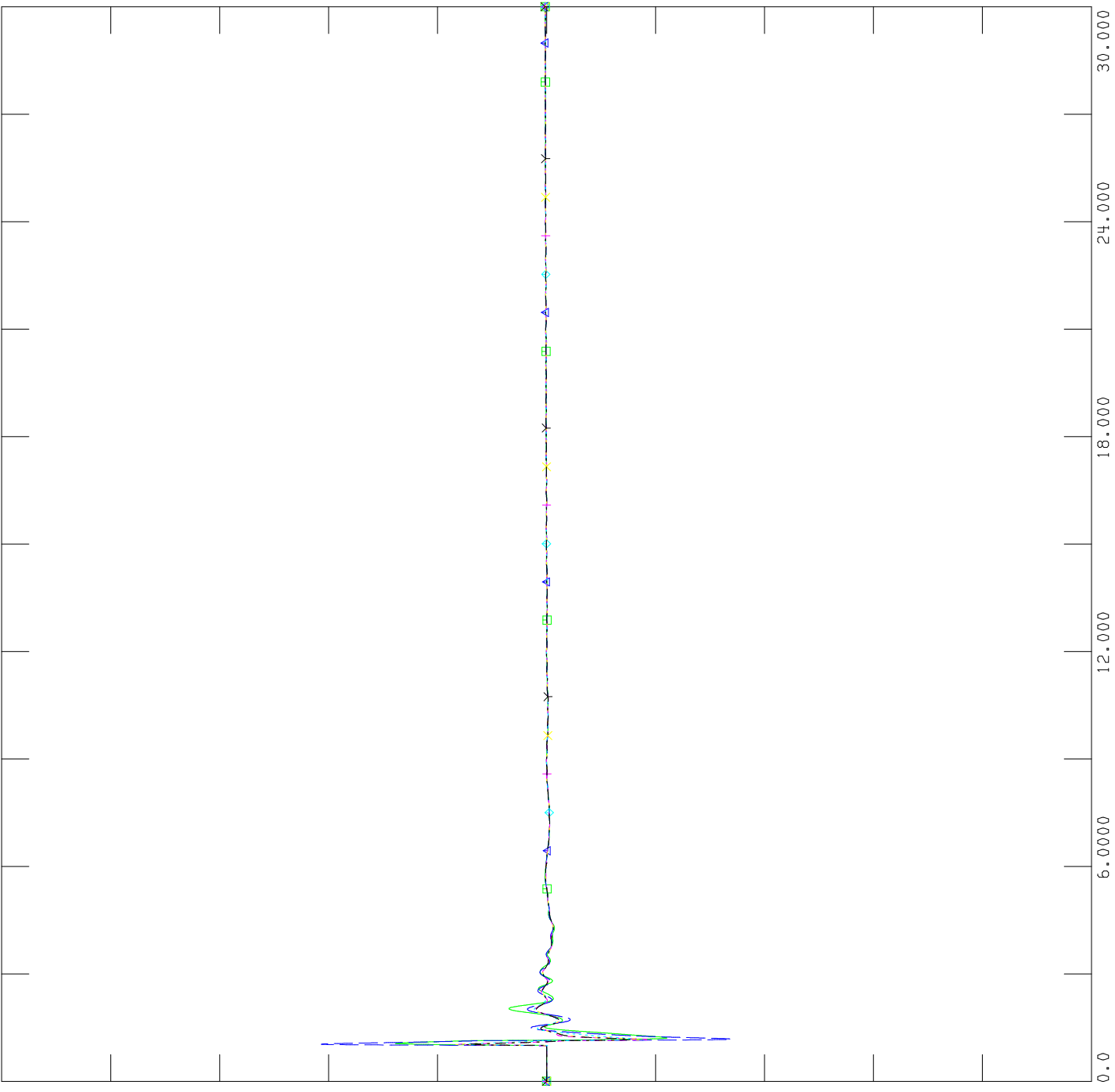
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_760L.out

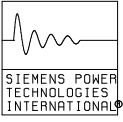




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_760L.out

Channel	CFREQ	Channel Name	Value
CHNL# 18	92046	CMCBRIDE6	0.6900
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	1.0000
CHNL# 15	2389	CHILLRIDG	25.0000
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900

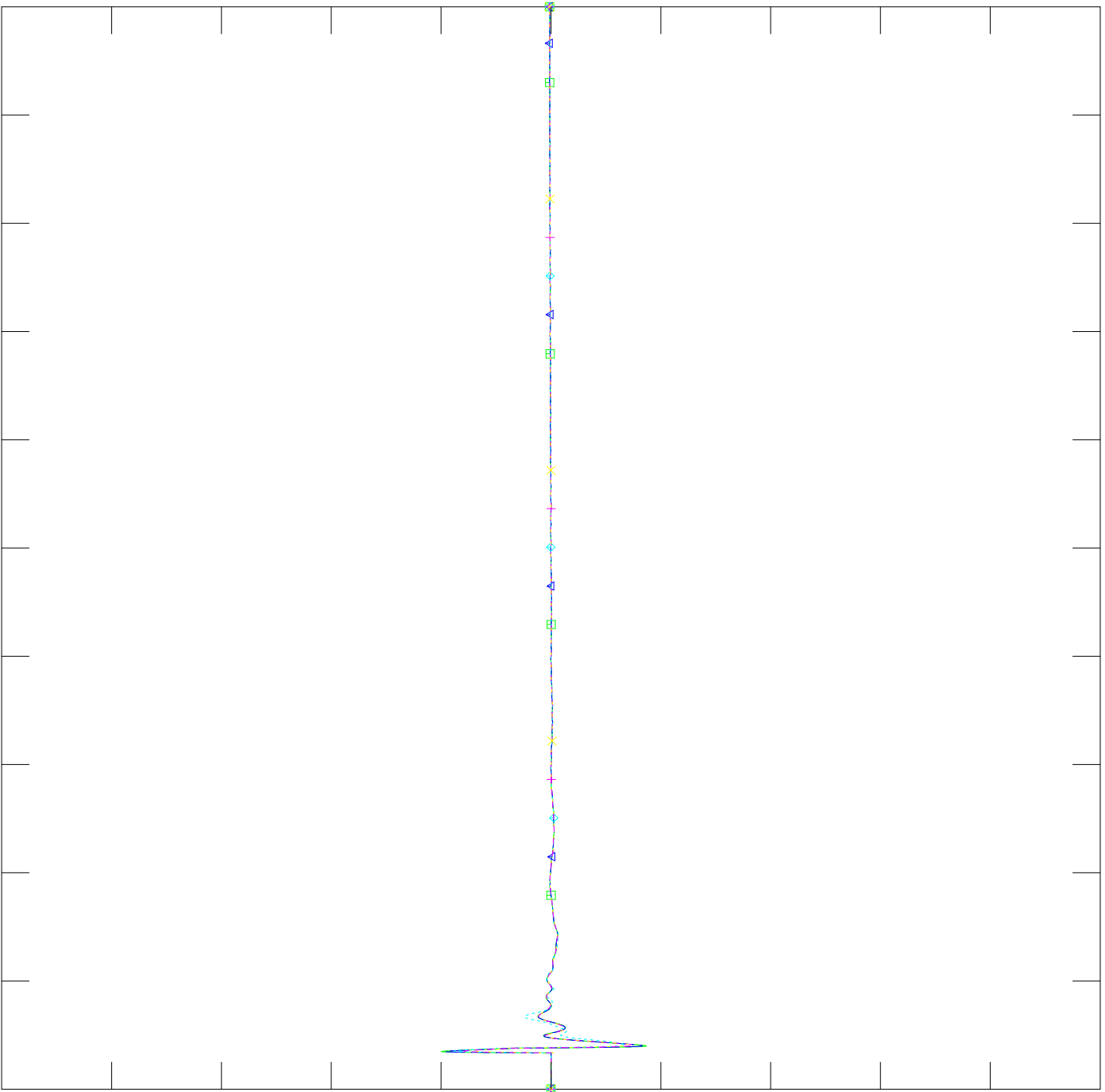




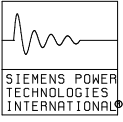
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_760L.out

WED, NOV 17 2010 15:18
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270 CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680 CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271 CBULLS H7	138.00]]	o-----o	-0.0067
0.00670	CHNL# 20: CFREQ	269 CBURDETT7	138.00]]	^-----^	-0.0067
0.00670	CHNL# 19: CFREQ	31 CFINCAST7	138.00]]	□-----□	-0.0067

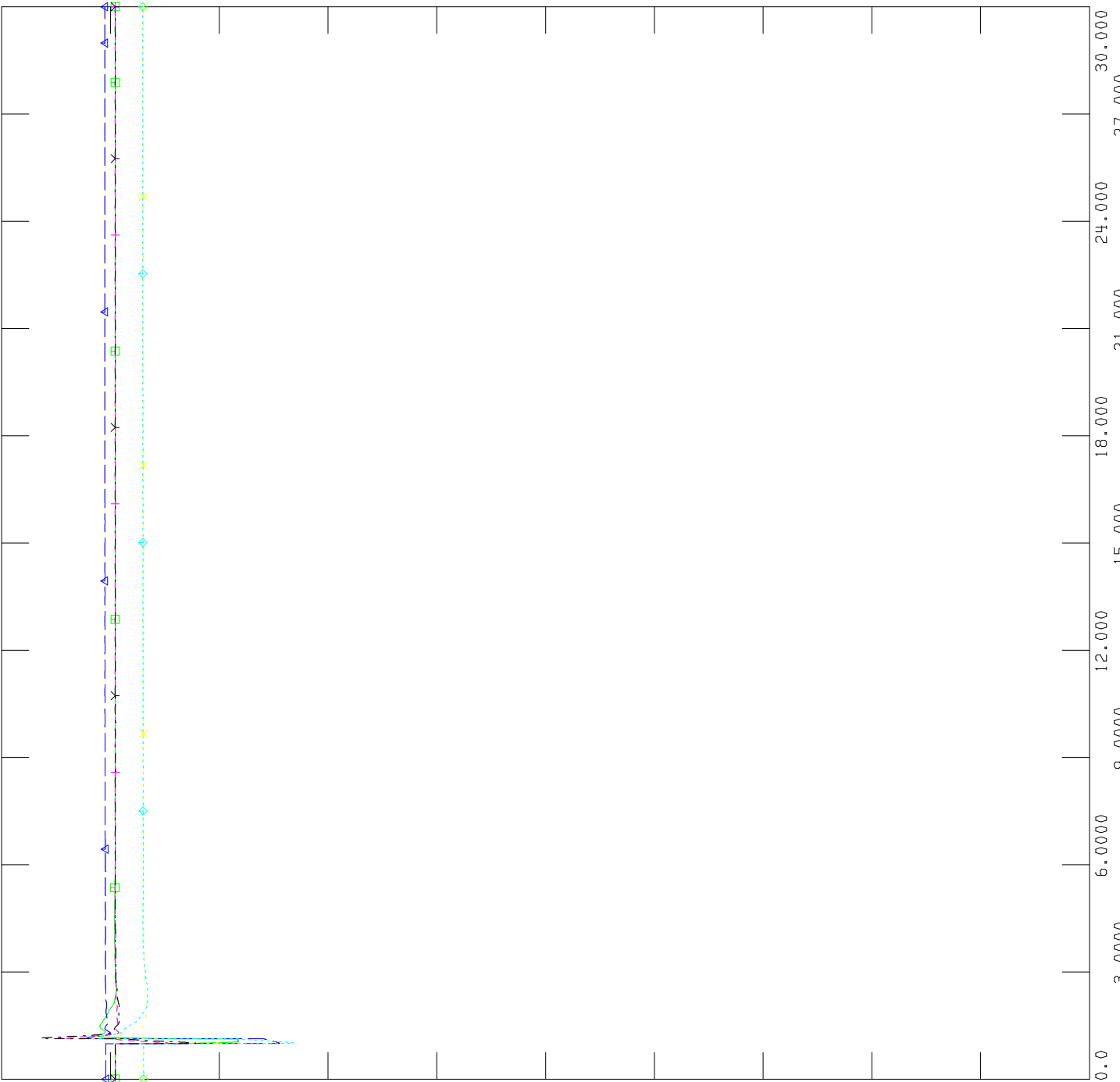


C-4-20



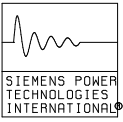
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513&SATR_760L.out

Channel	Label	Value
CHNL# 29	CVOLT 92046 [M]C[BRIDE6	0.6900]]
CHNL# 28	CVOLT 11002 [E]G[ARDNG2	0.5750]]
CHNL# 27	CVOLT 4740 [C]A[R]D_07	1.0000]]
CHNL# 26	CVOLT 2389 [C]H[I]LL[R]IDG	25.000]]
CHNL# 25	CVOLT 100018 [P]U[R]PLE[S]P	0.5750]]
CHNL# 24	CVOLT 2294 [C]T[O]THILL2	0.6900]]



WED, NOV 17 2010 15:19
BUS VOLTAGE

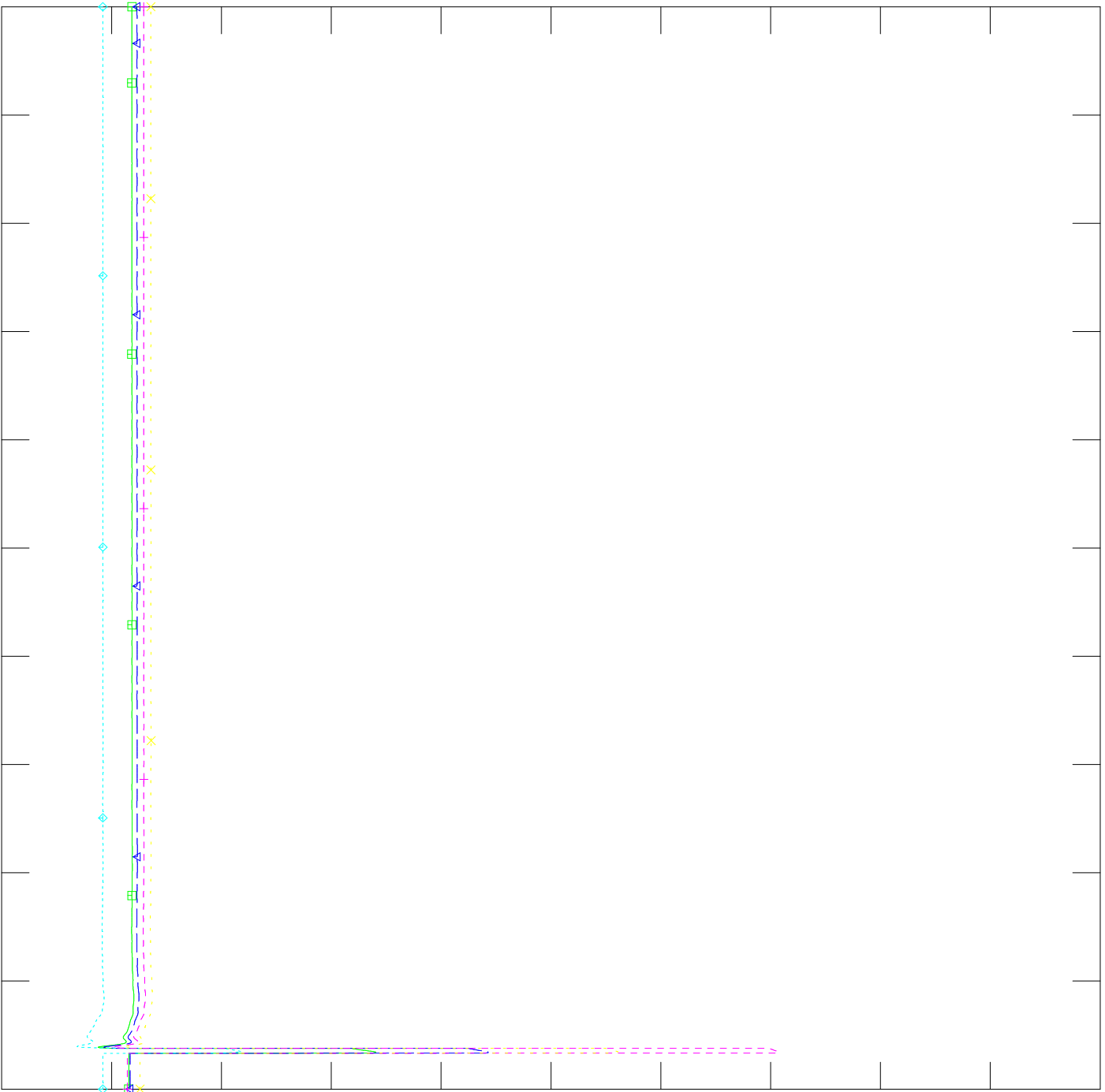
TIME (SECONDS) C-4-21



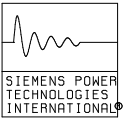
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_760L.out

WED, NOV 17 2010 15:20
BUS VOLTAGE

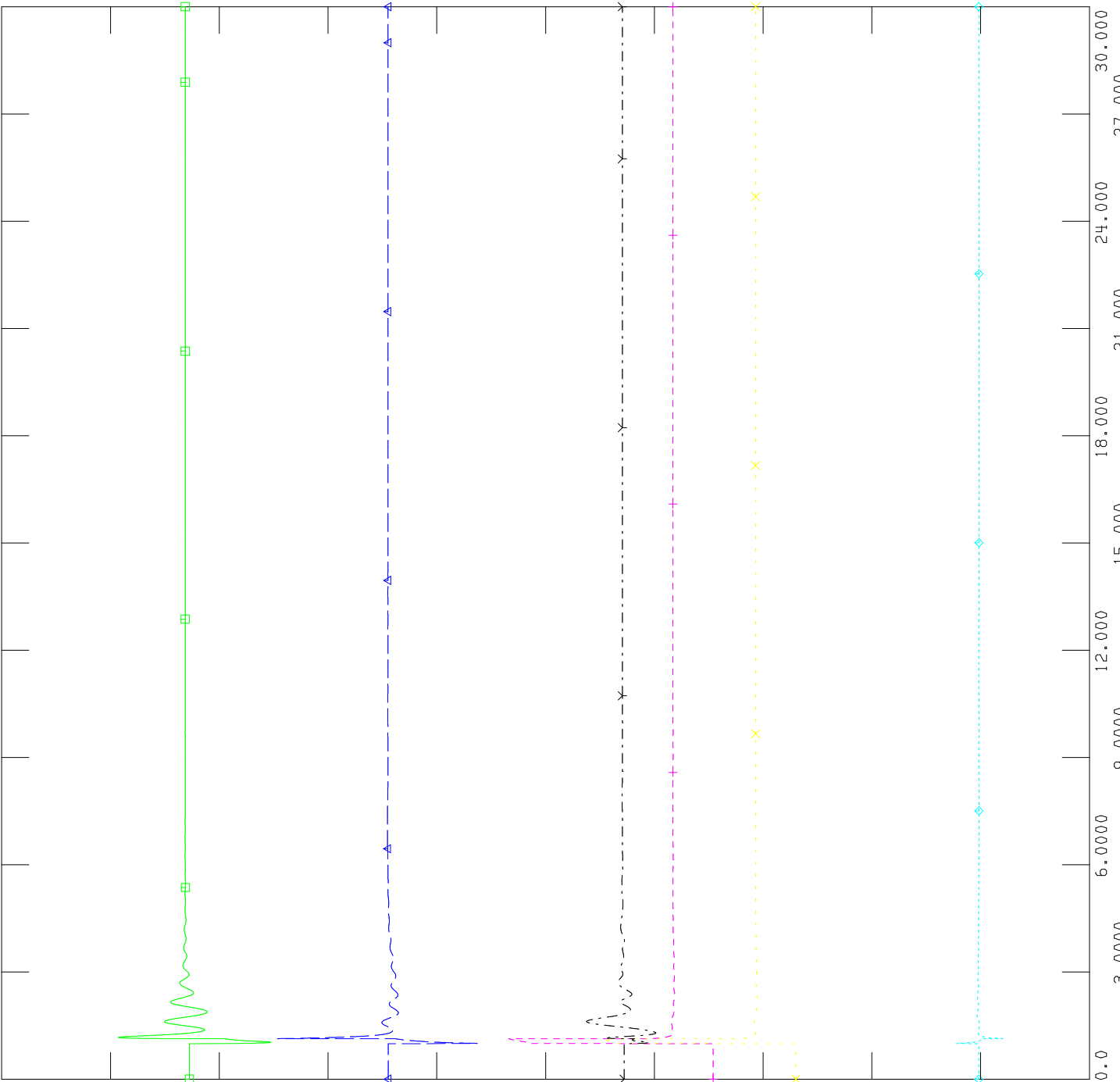
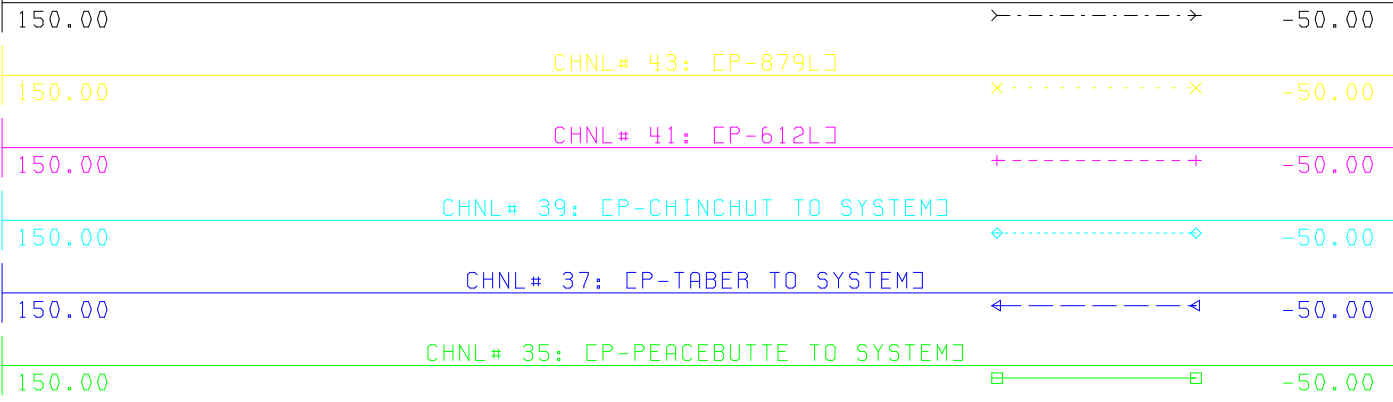
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]

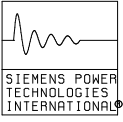


C-4-22

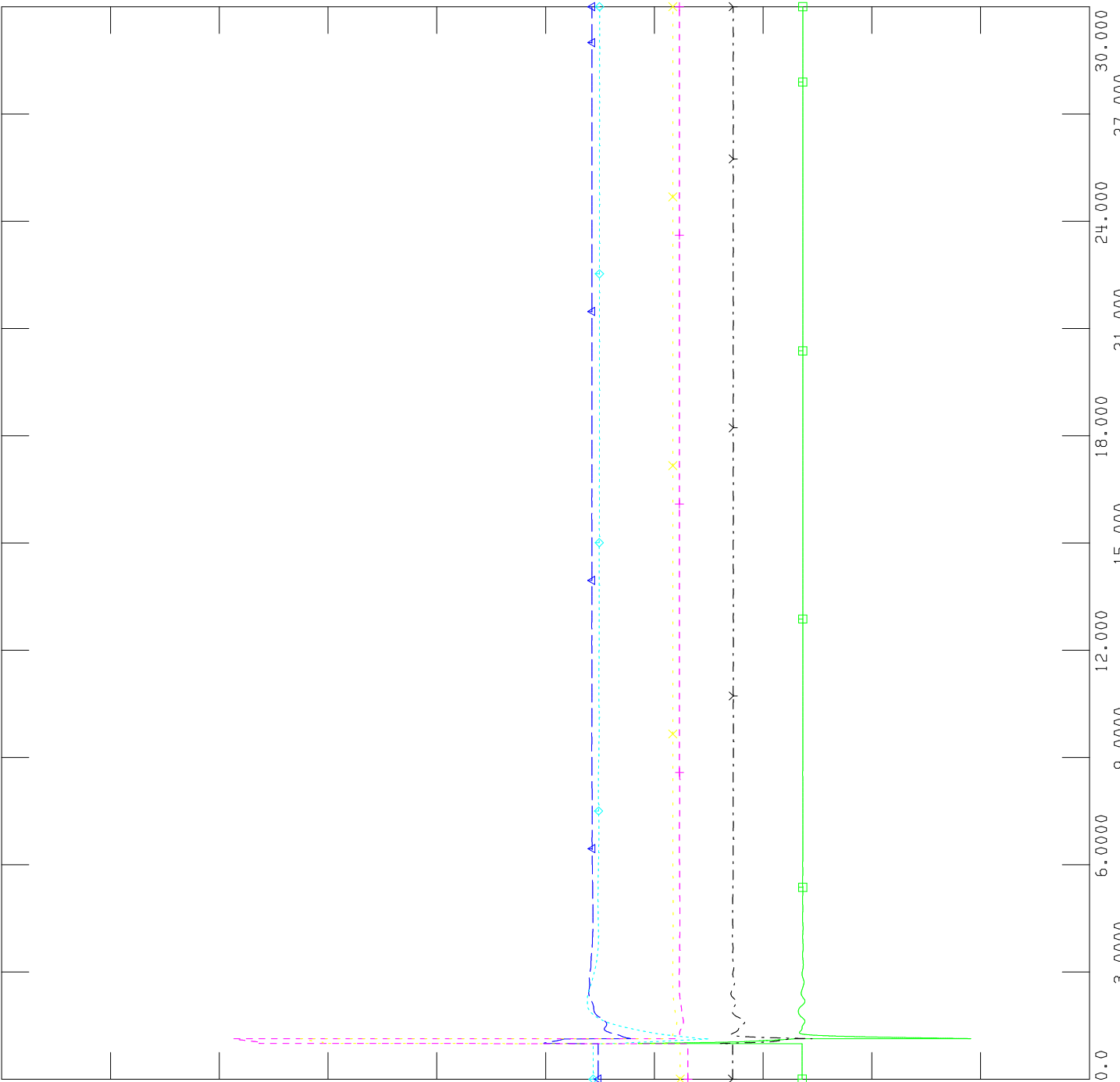
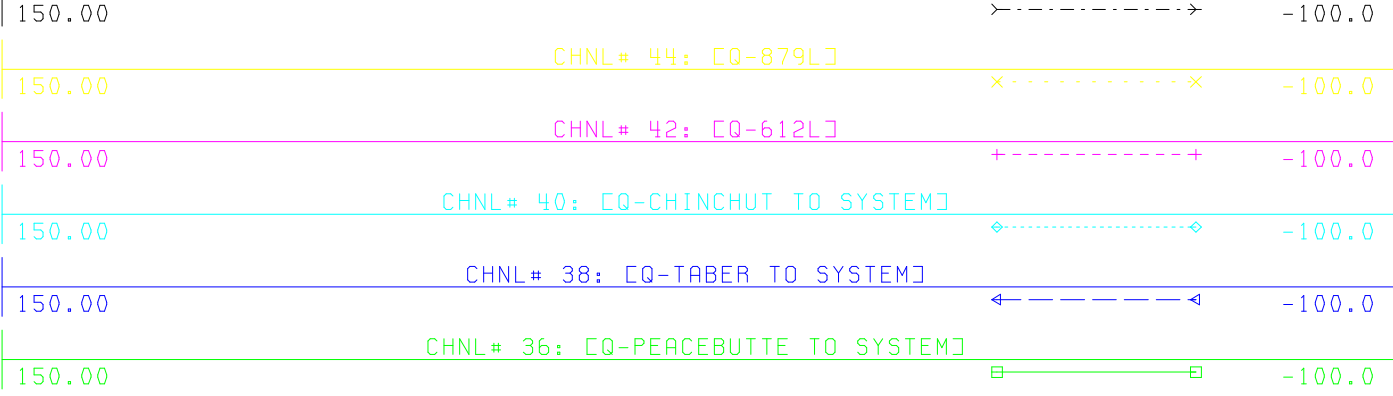


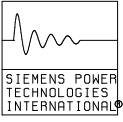
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_760L.out
CHNL# 45: [CP-880L]



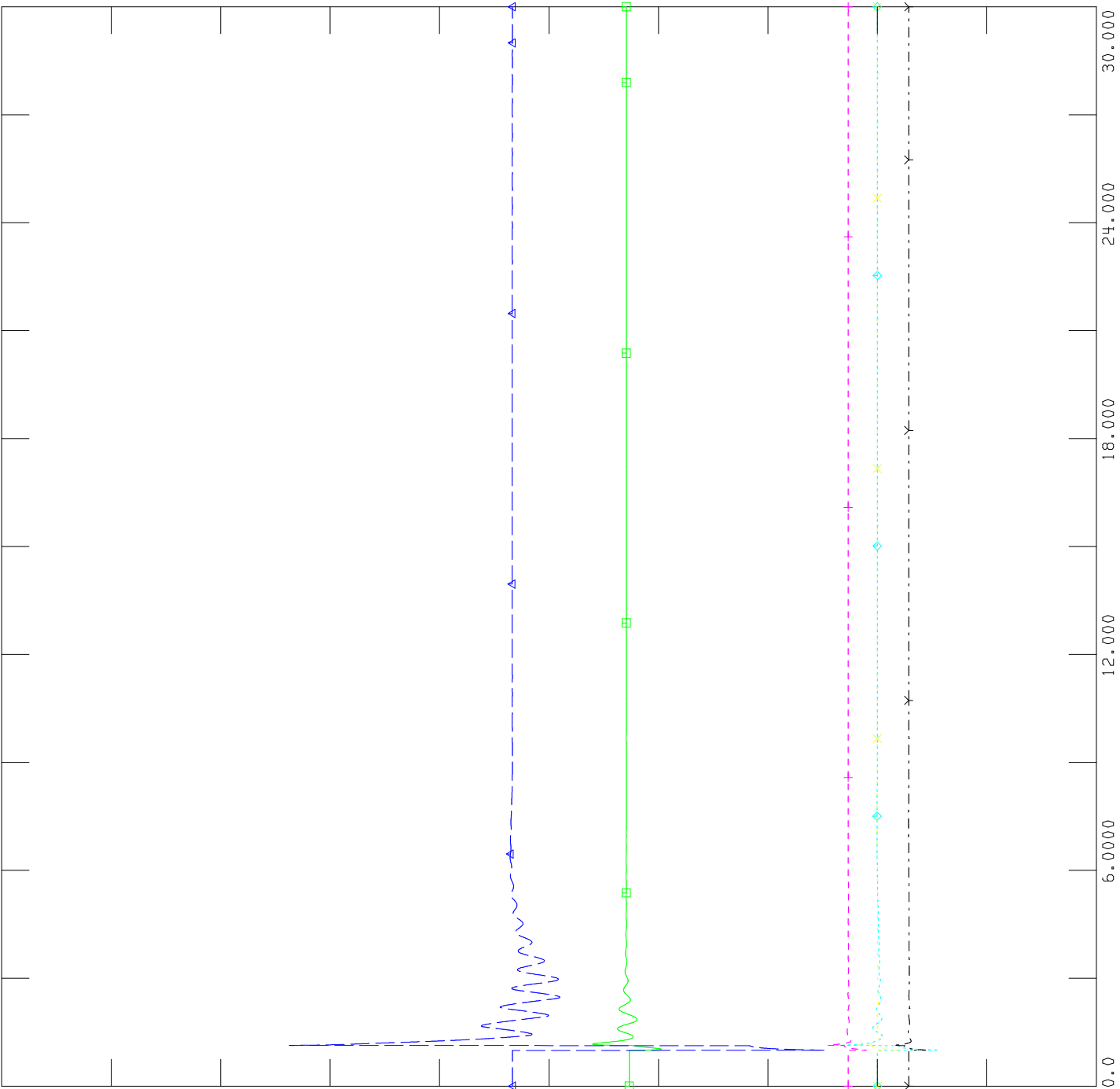
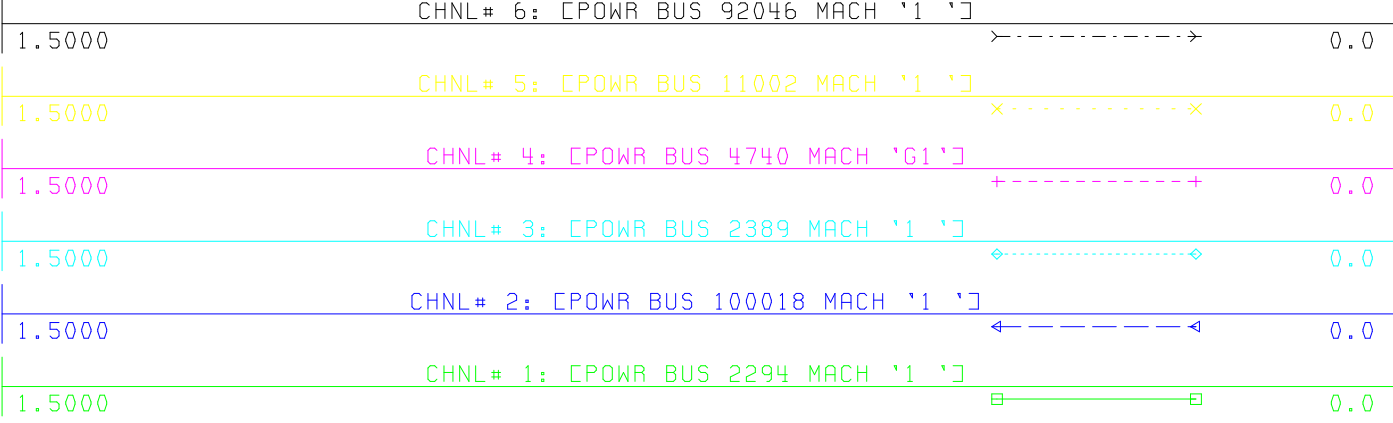


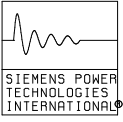
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_760L.out
CHNL# 46: [EQ-880L]



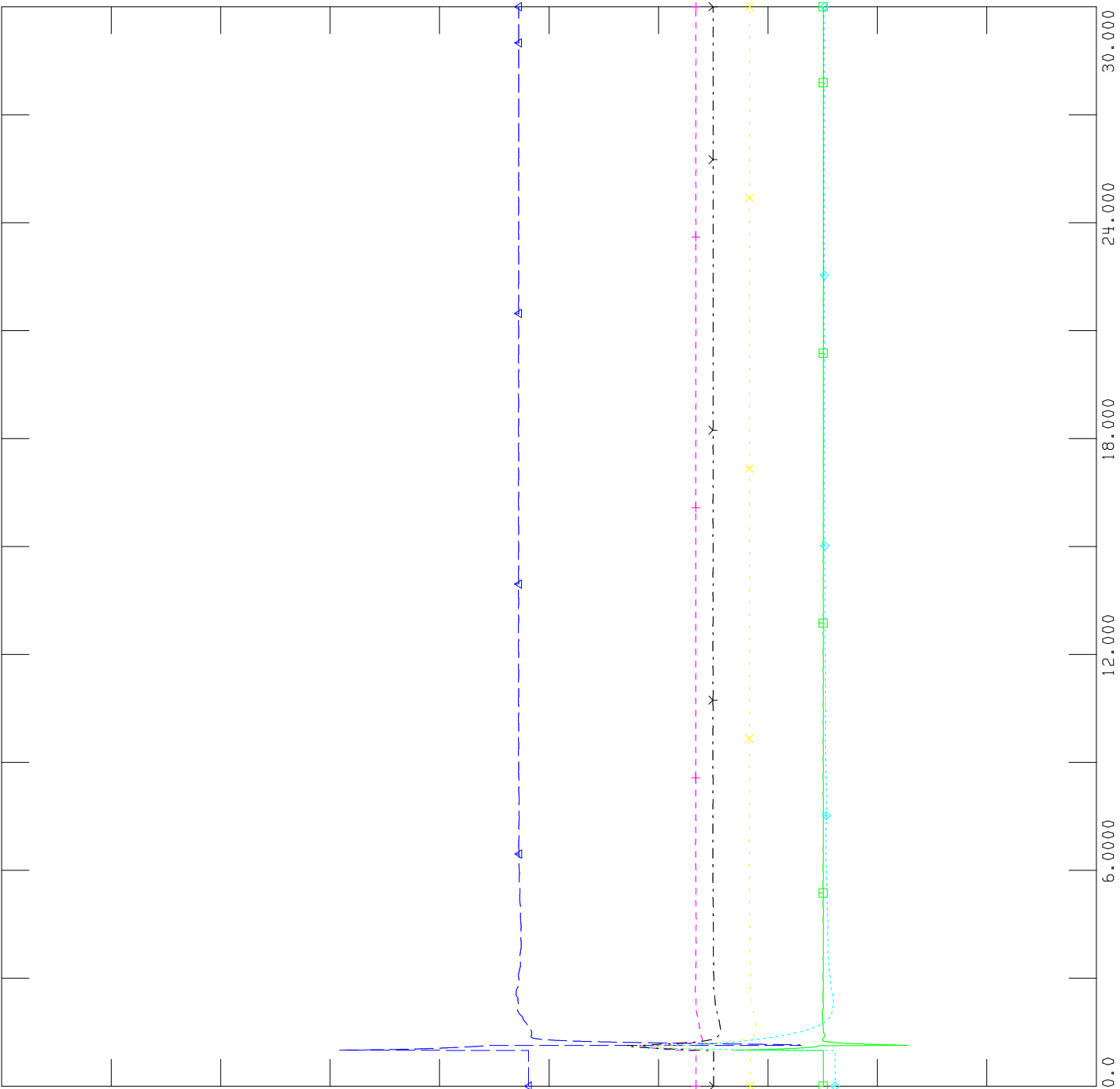
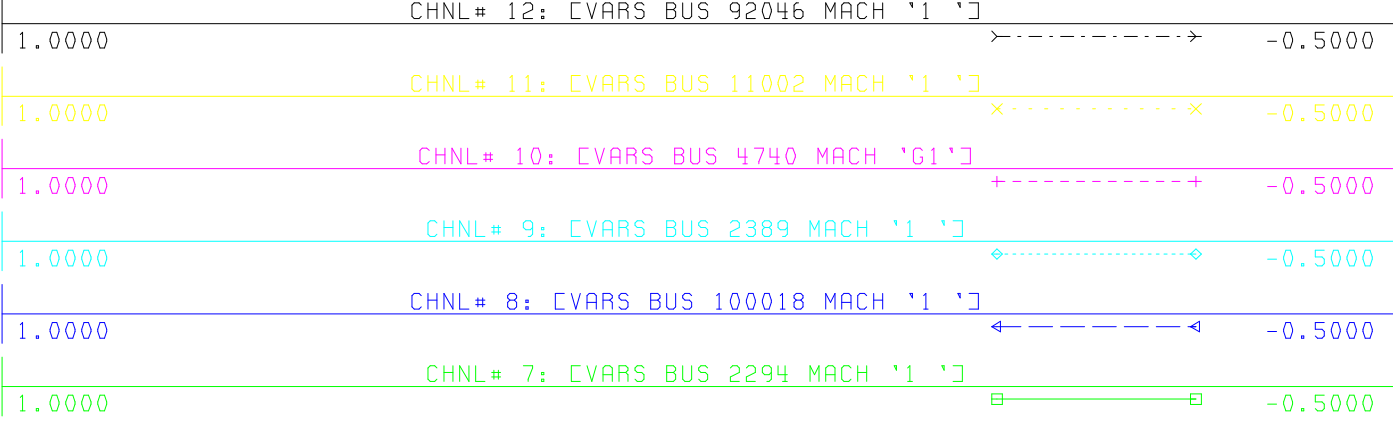


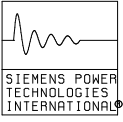
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_879L.out





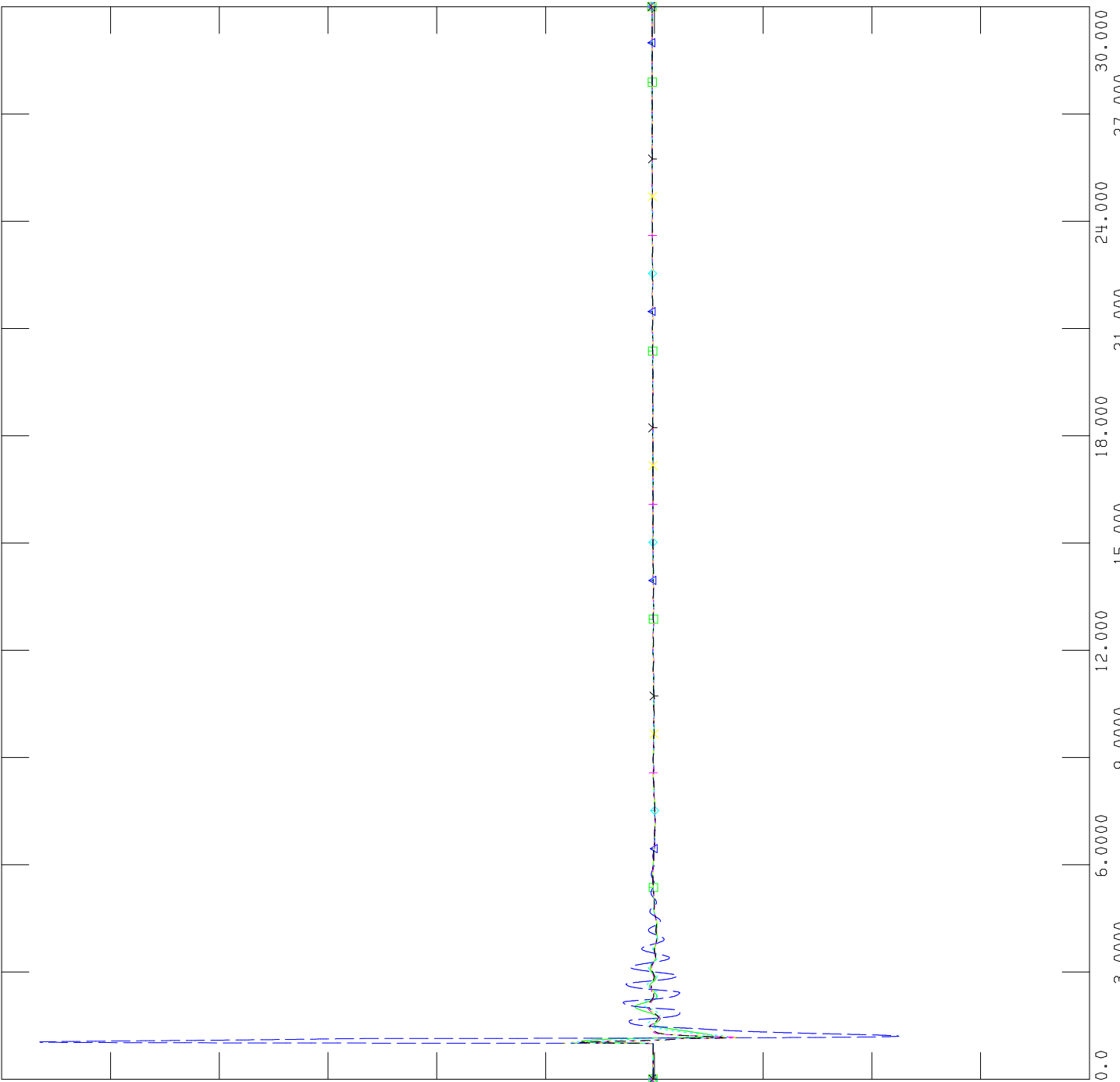
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_879L.out

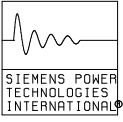




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_879L.out

0.01000	CHNL# 18: CFREQ 92046 [MCMBRIDE6 0.6900]]	-0.0067
0.01000	CHNL# 17: CFREQ 11002 [EGARDNG2 0.5750]]	-0.0067
0.01000	CHNL# 16: CFREQ 4740 [CARD_07 1.0000]]	-0.0067
0.01000	CHNL# 15: CFREQ 2389 [CHILLRIDG 25.000]]	-0.0067
0.01000	CHNL# 14: CFREQ 100018 [CPURPLESP 0.5750]]	-0.0067
0.01000	CHNL# 13: CFREQ 2294 [CTOTHILL2 0.6900]]	-0.0067

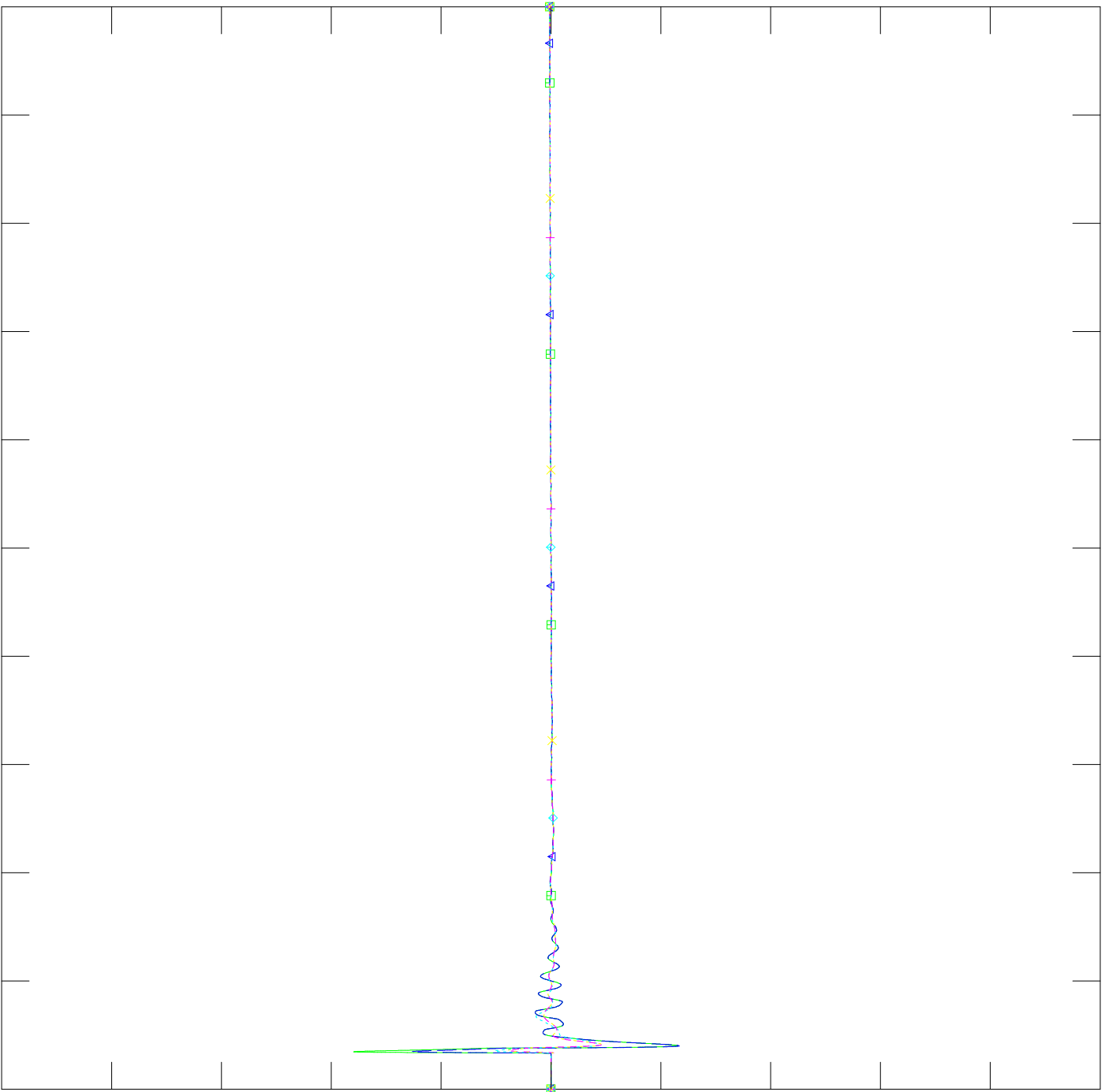


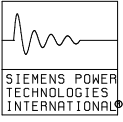


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_879L.out

WED, NOV 17 2010 15:26
BUS FREQUENCY

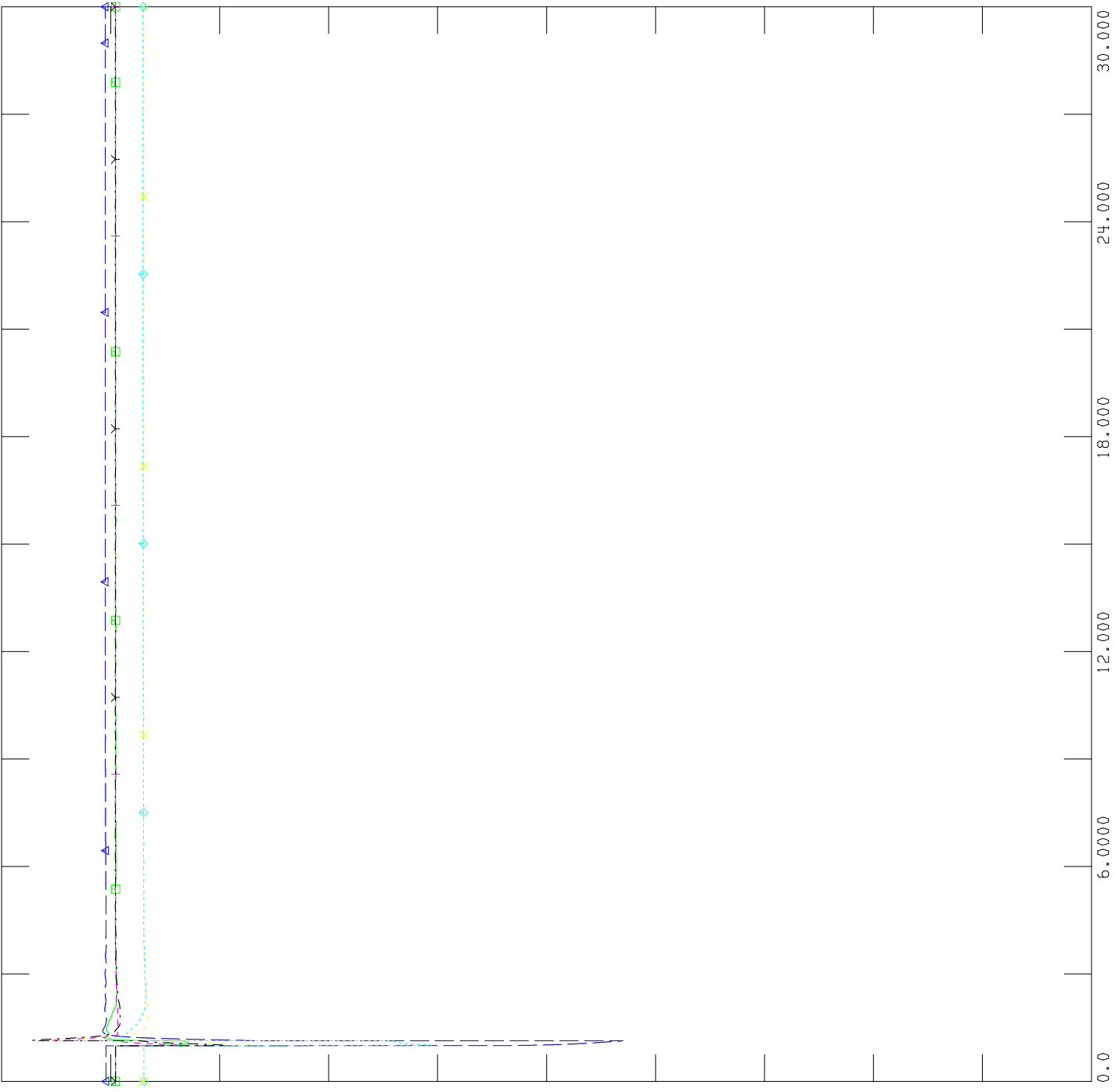
Channel	CFREQ	Bus Name	Value
CHNL# 23	270	CSUFFIEL7	138.00
CHNL# 22	680	CMEDICIN7	138.00
CHNL# 21	271	CBULLS H7	138.00
CHNL# 20	269	CBURDETT7	138.00
CHNL# 19	31	CFINCAST7	138.00





FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513&SATR_879L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [M]C[BRIDE6	0.6900]]
CHNL# 28	EVOLT 11002 [G]A[RDN]G2	0.5750]]
CHNL# 27	EVOLT 4740 [C]A[R]D_07	1.0000]]
CHNL# 26	EVOLT 2389 [C]HILLRIDG	25.000]]
CHNL# 25	EVOLT 100018 [P]U[R]PLESP	0.5750]]
CHNL# 24	EVOLT 2294 [T]O[HILL2	0.6900]]

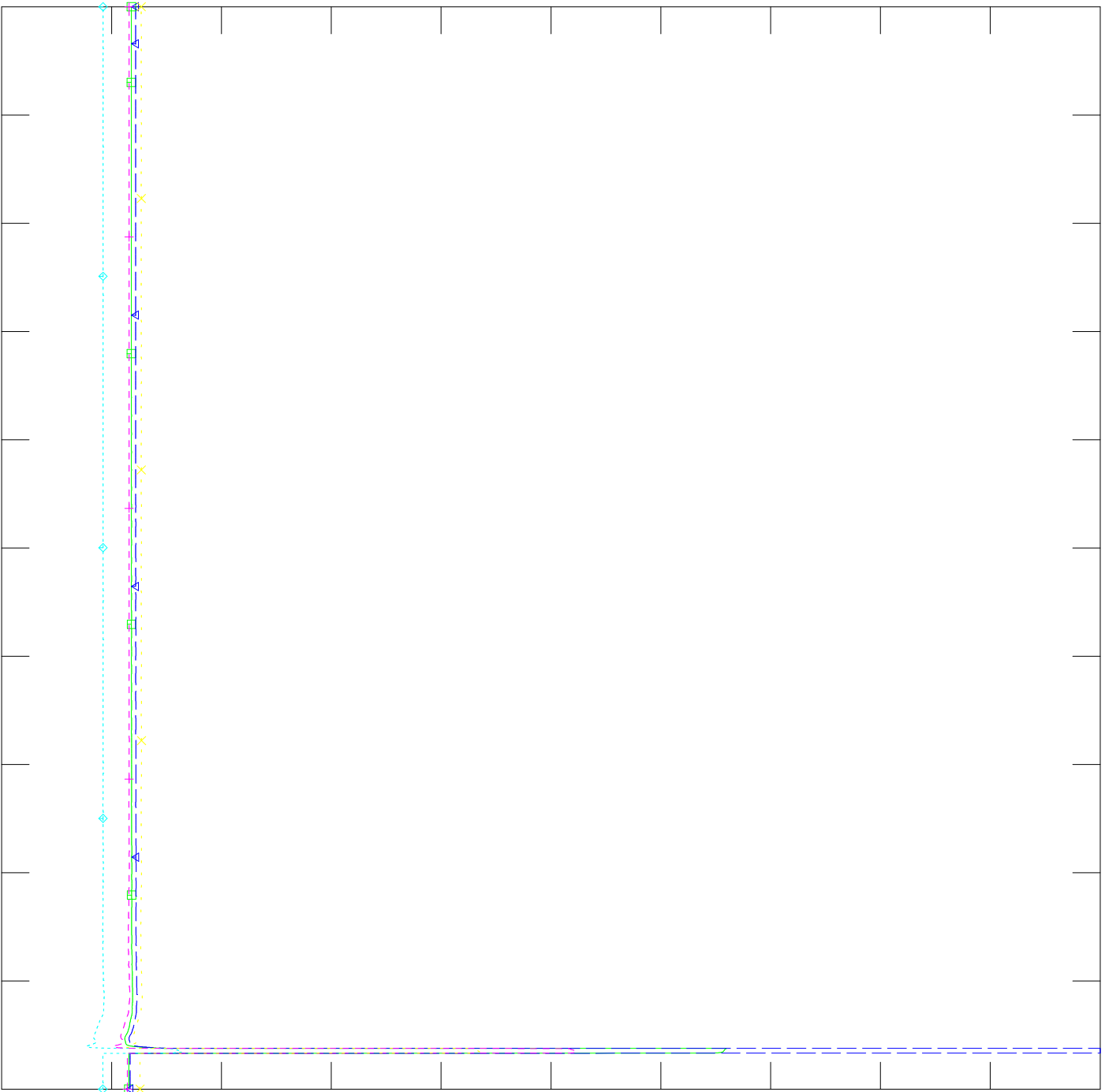




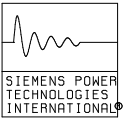
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_879L.out

WED, NOV 17 2010 15:29
BUS VOLTAGE

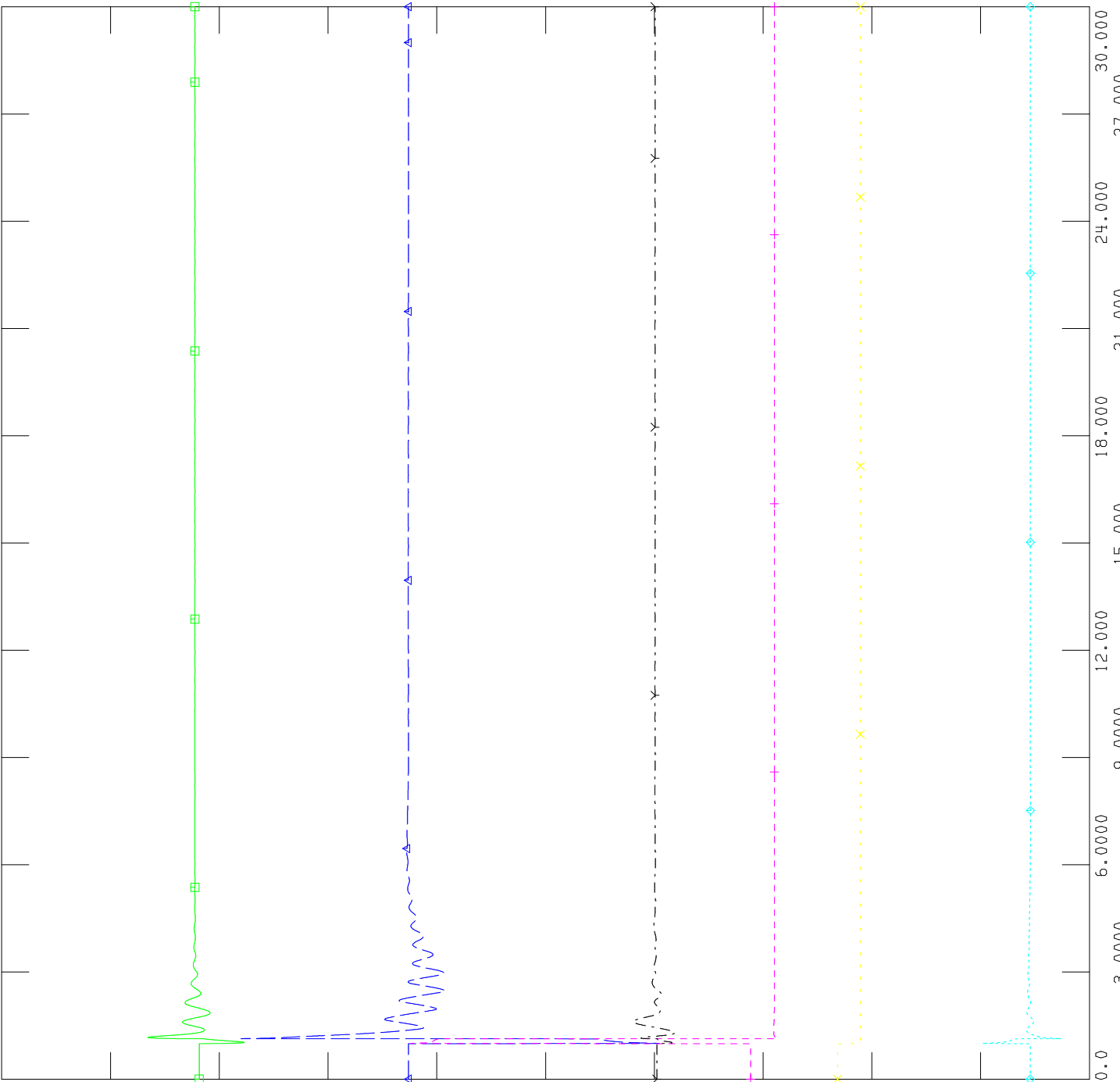
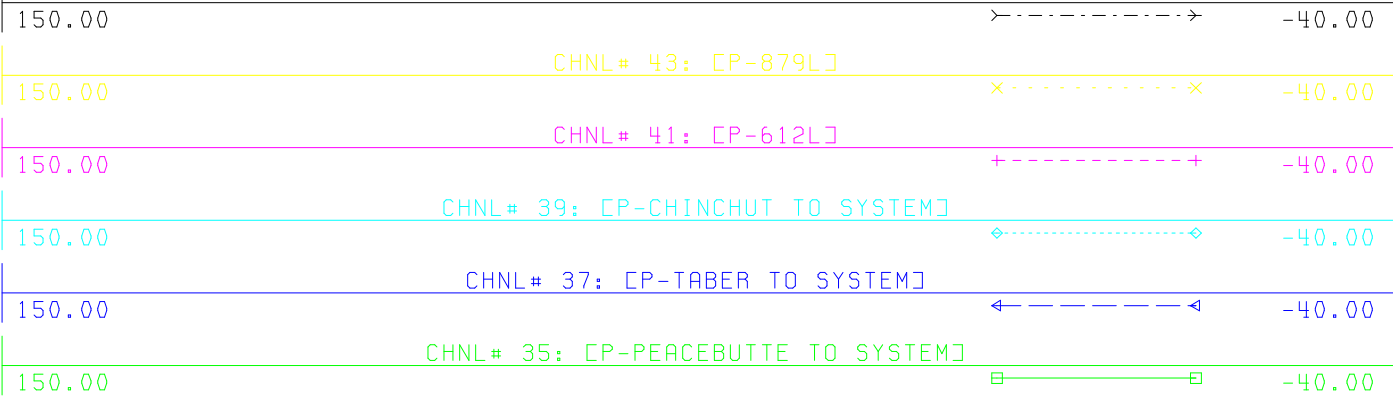
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



C-4-30



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_879L.out
CHNL# 45: [P-880L]



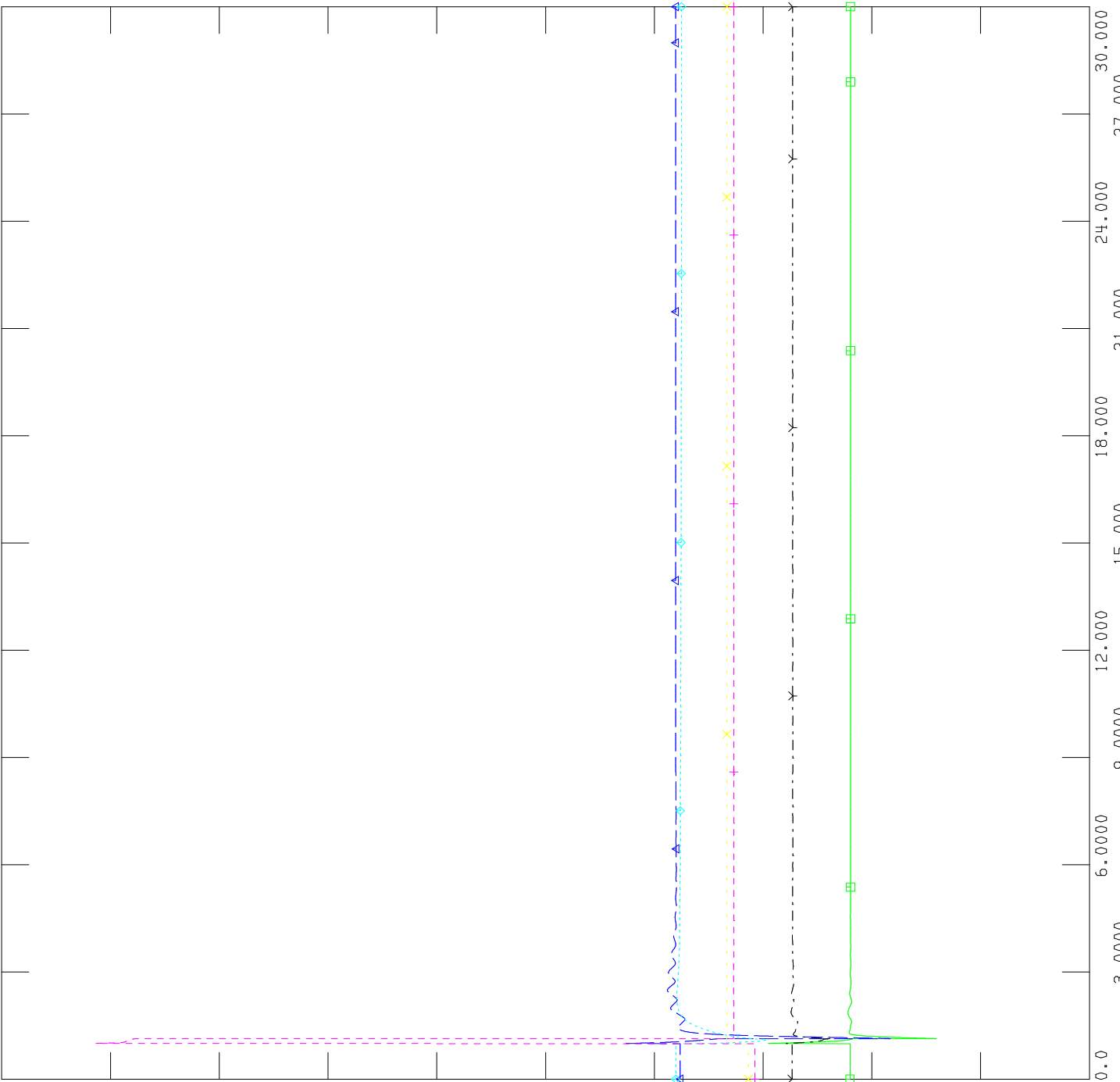
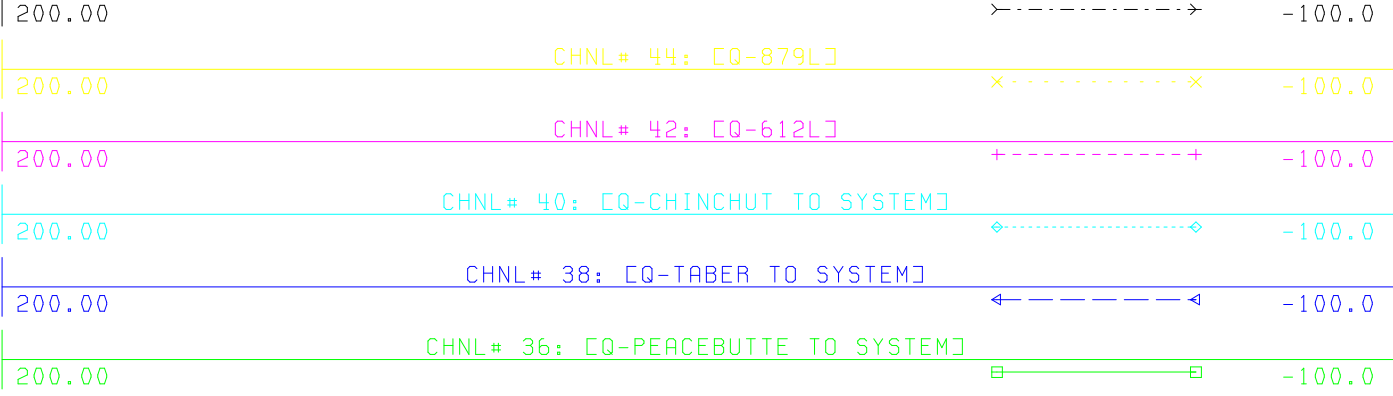
WED, NOV 17 2010 15:30
BRANCH ACTIVE POWER

C-4-31

TIME (SECONDS)



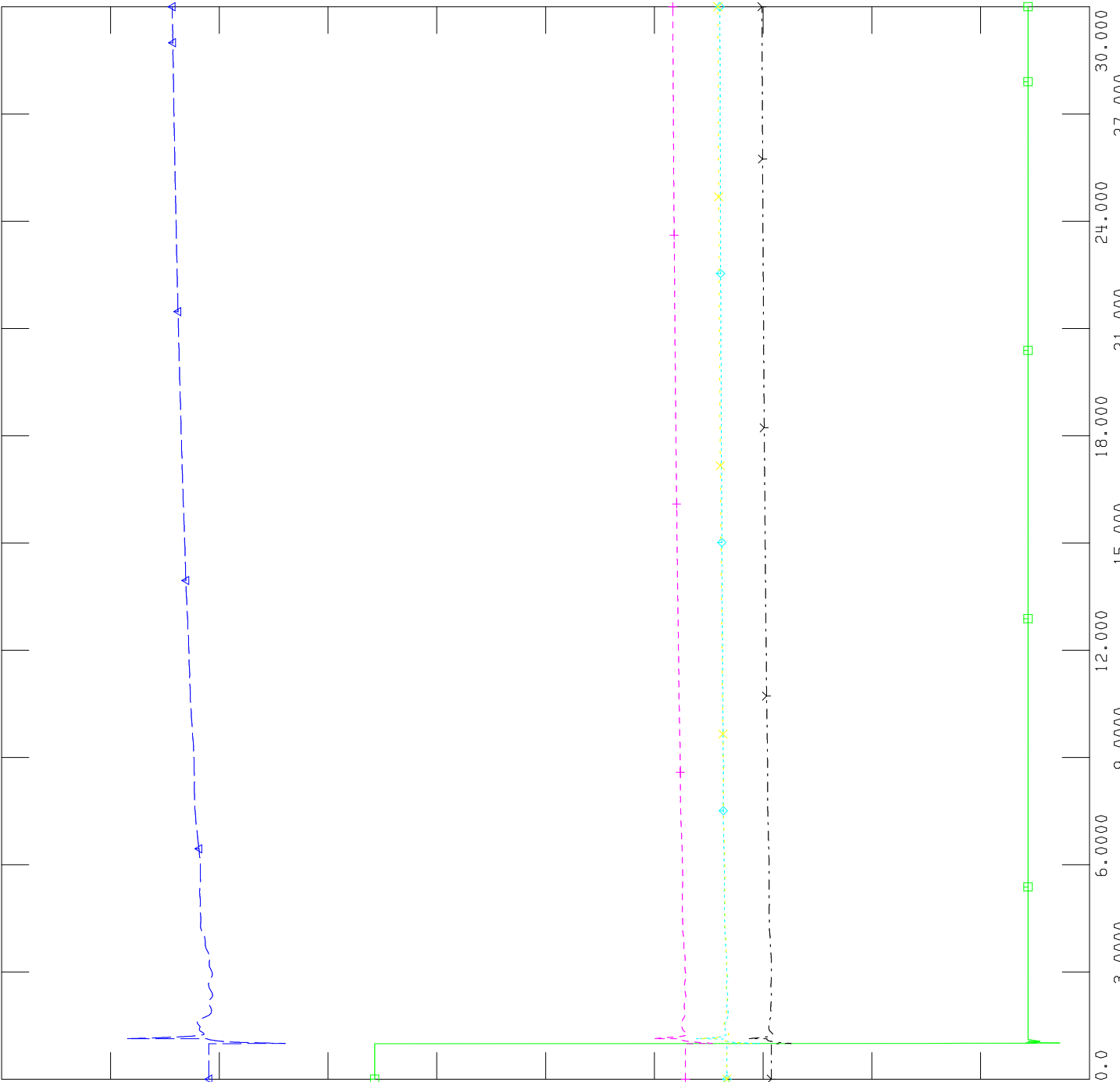
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_879L.out
CHNL# 46: [Q-880L]





FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_880L.out

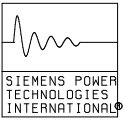
Channel	Label	Value
1.0000	CHNL# 6: [POWR BUS 92046 MACH '1 ']	-0.0500
1.0000	CHNL# 5: [POWR BUS 11002 MACH '1 ']	-0.0500
1.0000	CHNL# 4: [POWR BUS 4740 MACH 'G1']	-0.0500
1.0000	CHNL# 3: [POWR BUS 2389 MACH '1 ']	-0.0500
1.0000	CHNL# 2: [POWR BUS 10018 MACH '1 ']	-0.0500
1.0000	CHNL# 1: [POWR BUS 2294 MACH '1 ']	-0.0500



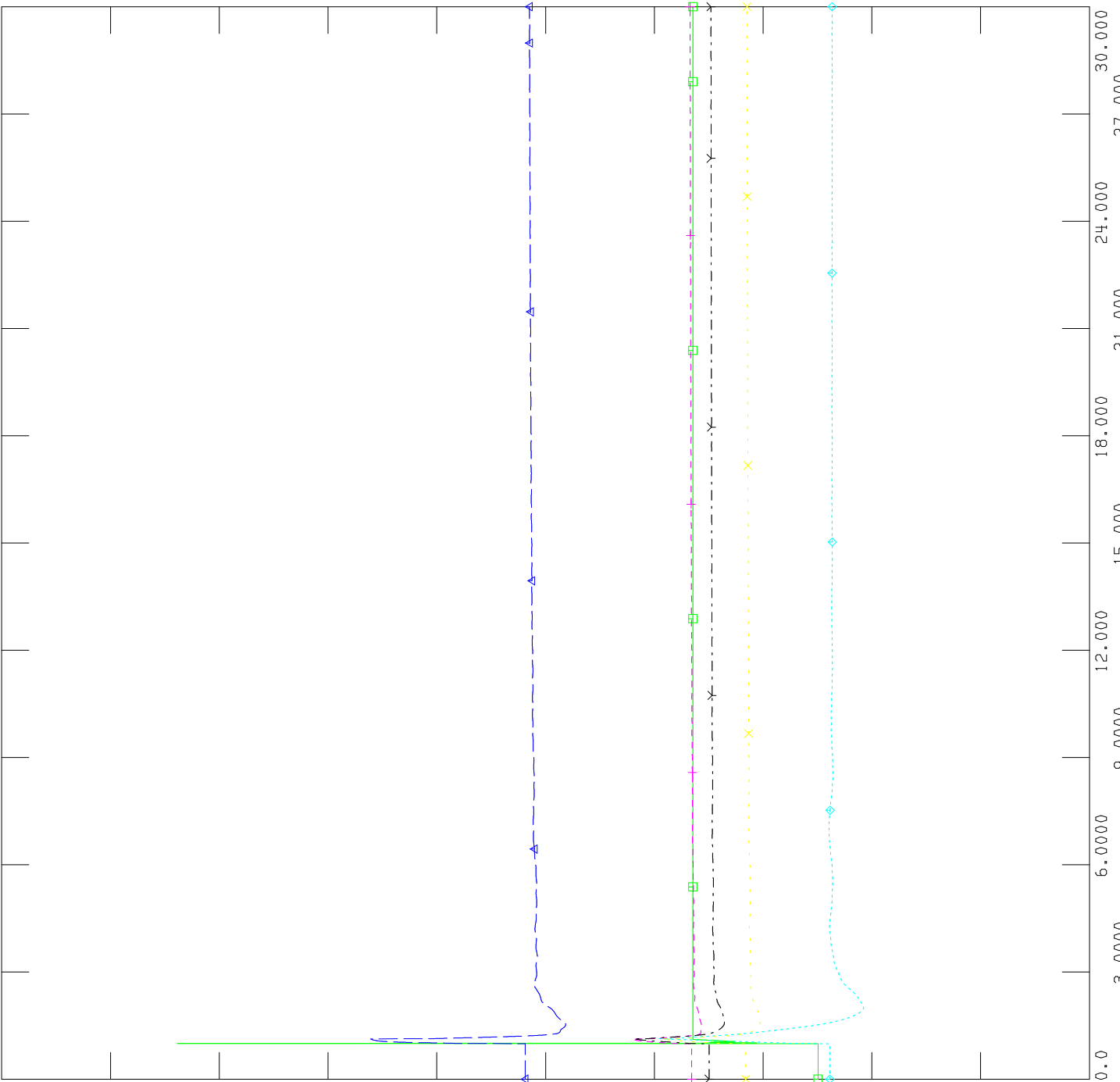
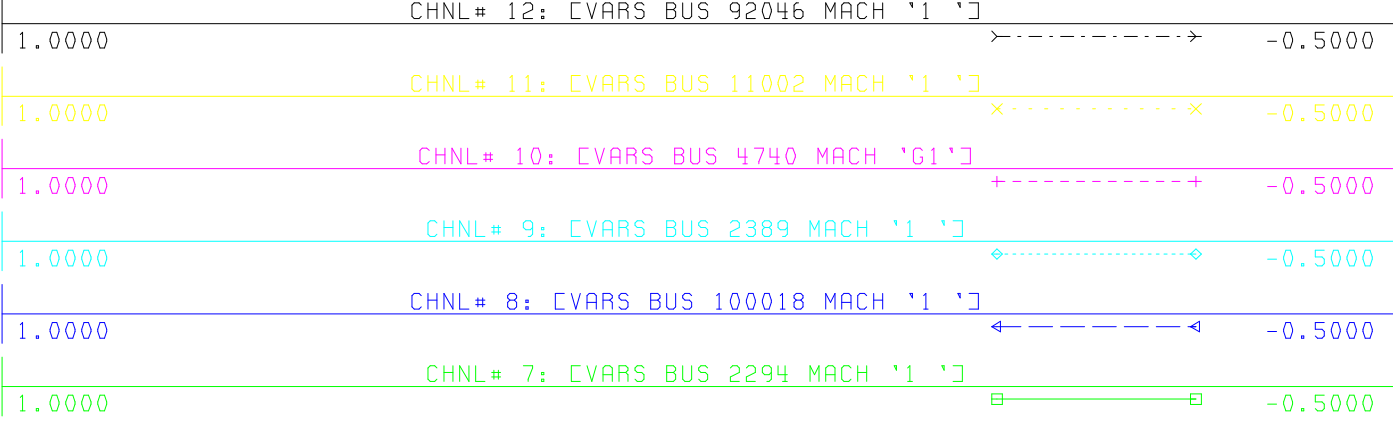
WED, NOV 17 2010 15:32
PELEC

C-4-33

TIME (SECONDS)



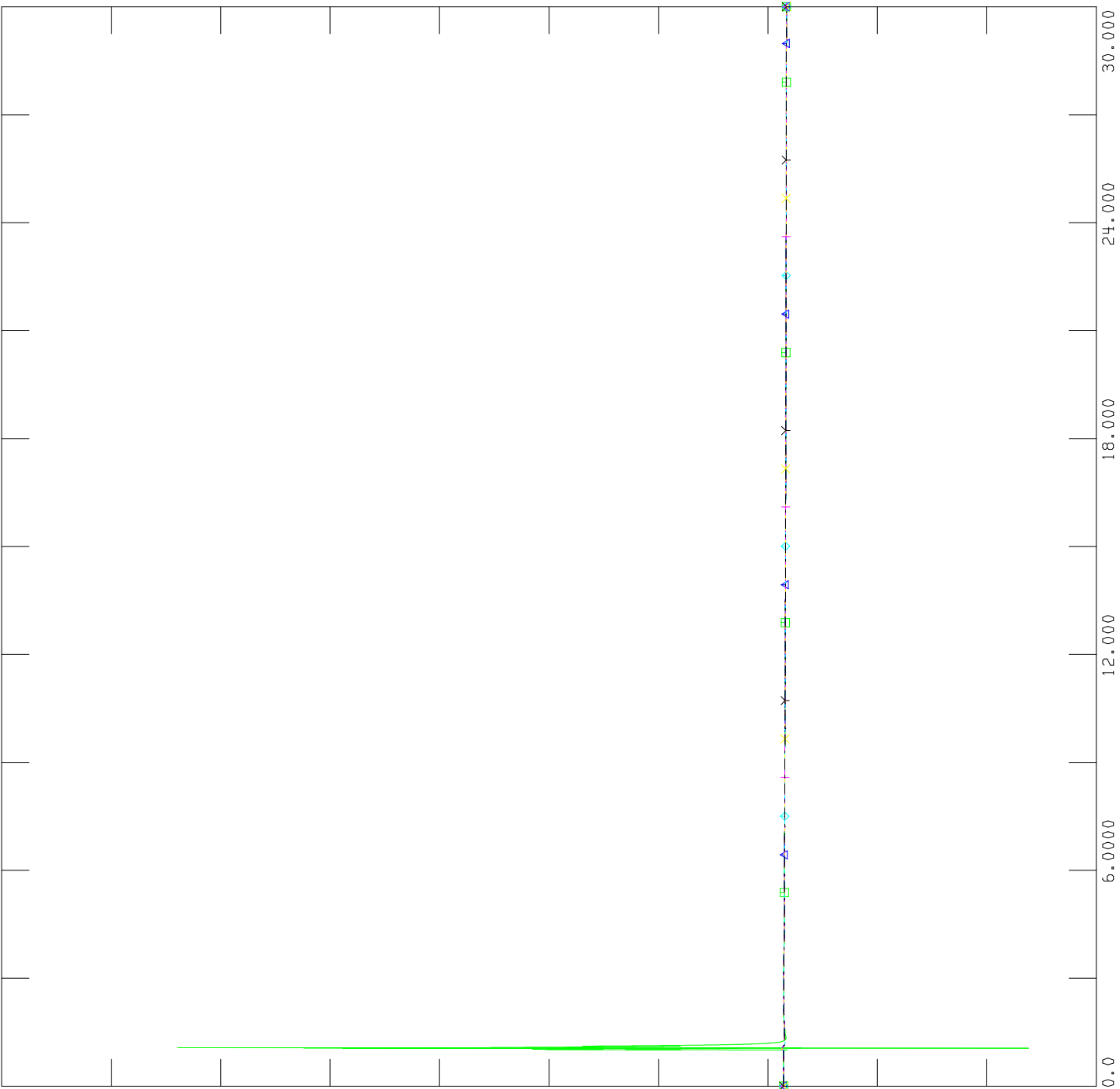
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_880L.out





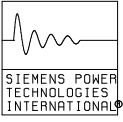
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_880L.out

Channel	CFREQ	Channel Name	Value
CHNL# 18	92046	CMCBRIDE6	0.6900
CHNL# 17	11002	CGARDNG2	0.5750
CHNL# 16	4740	CARD_07	1.0000
CHNL# 15	2389	CHILLRIDG	25.0000
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900



WED, NOV 17 2010 15:34
BUS FREQUENCY

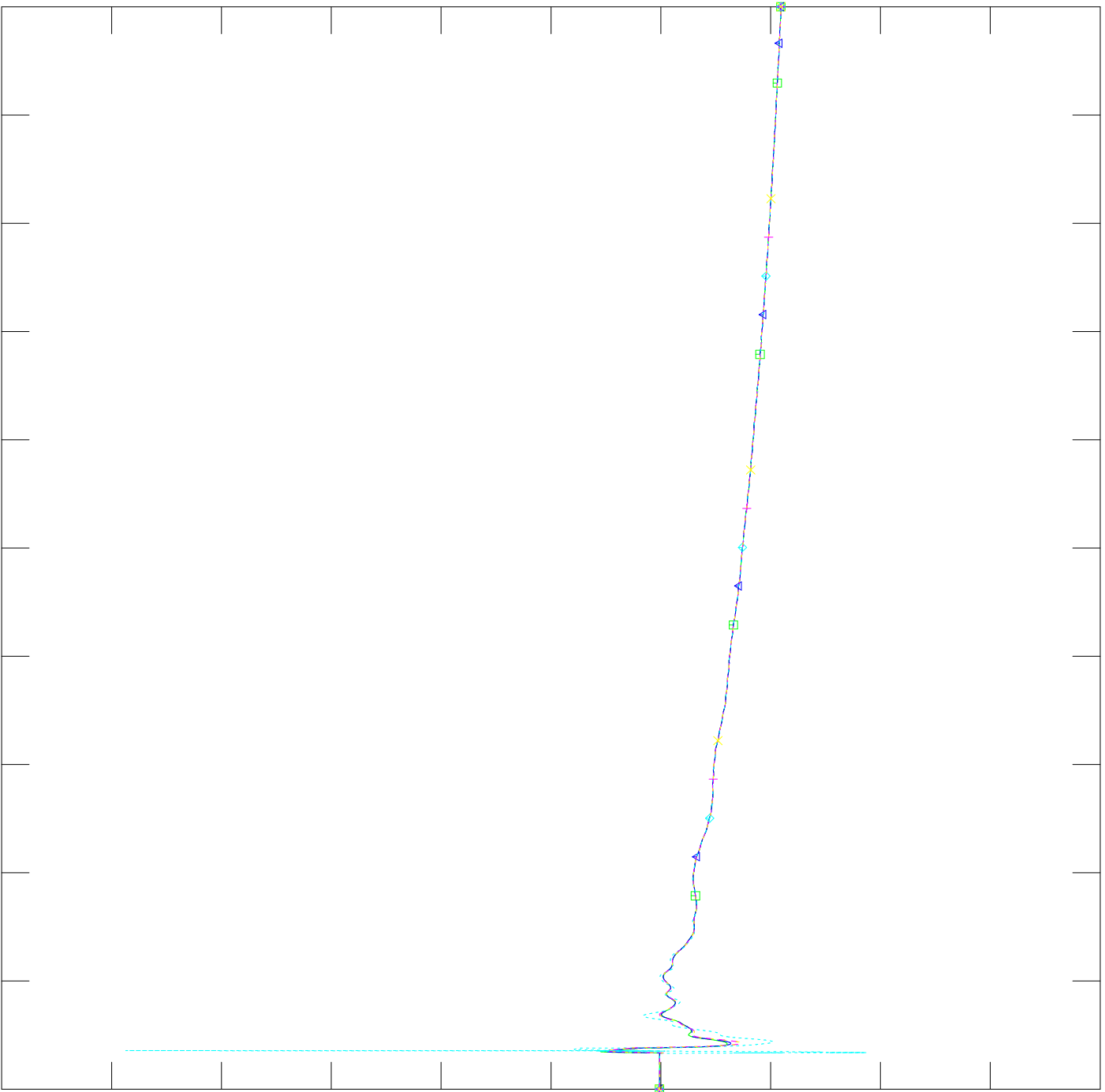
C-4-35
TIME (SECONDS)



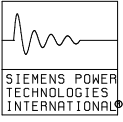
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_880L.out

WED, NOV 17 2010 15:37
BUS FREQUENCY

Channel	CFREQ	Location	Value
CHNL# 23	270	CSUFFIEL7	138.00
CHNL# 22	680	CMEDICIN7	138.00
CHNL# 21	271	CBULLS H7	138.00
CHNL# 20	269	CBURDETT7	138.00
CHNL# 19	31	CFINCAST7	138.00

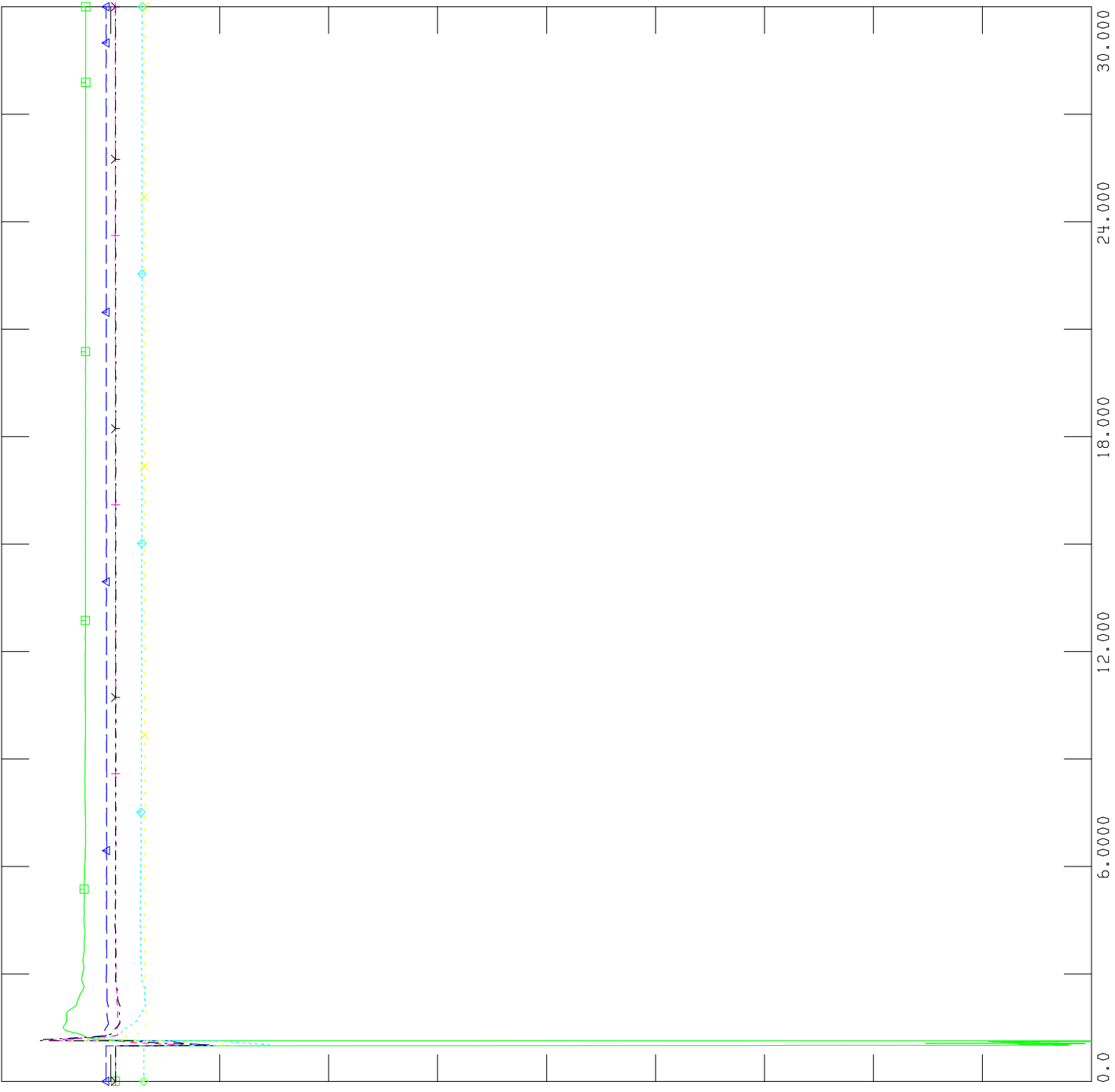


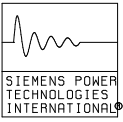
C-4-36



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513&SATR_880L.out

Channel	Label	Value	Marker
CHNL# 29	EVOLT 92046 [MCBRIDE6]	0.6900	→
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750	×
CHNL# 27	EVOLT 4740 [CARD_07]	1.0000	+
CHNL# 26	EVOLT 2389 [CHILLRIDG]	25.000	◇
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750	←
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900	■

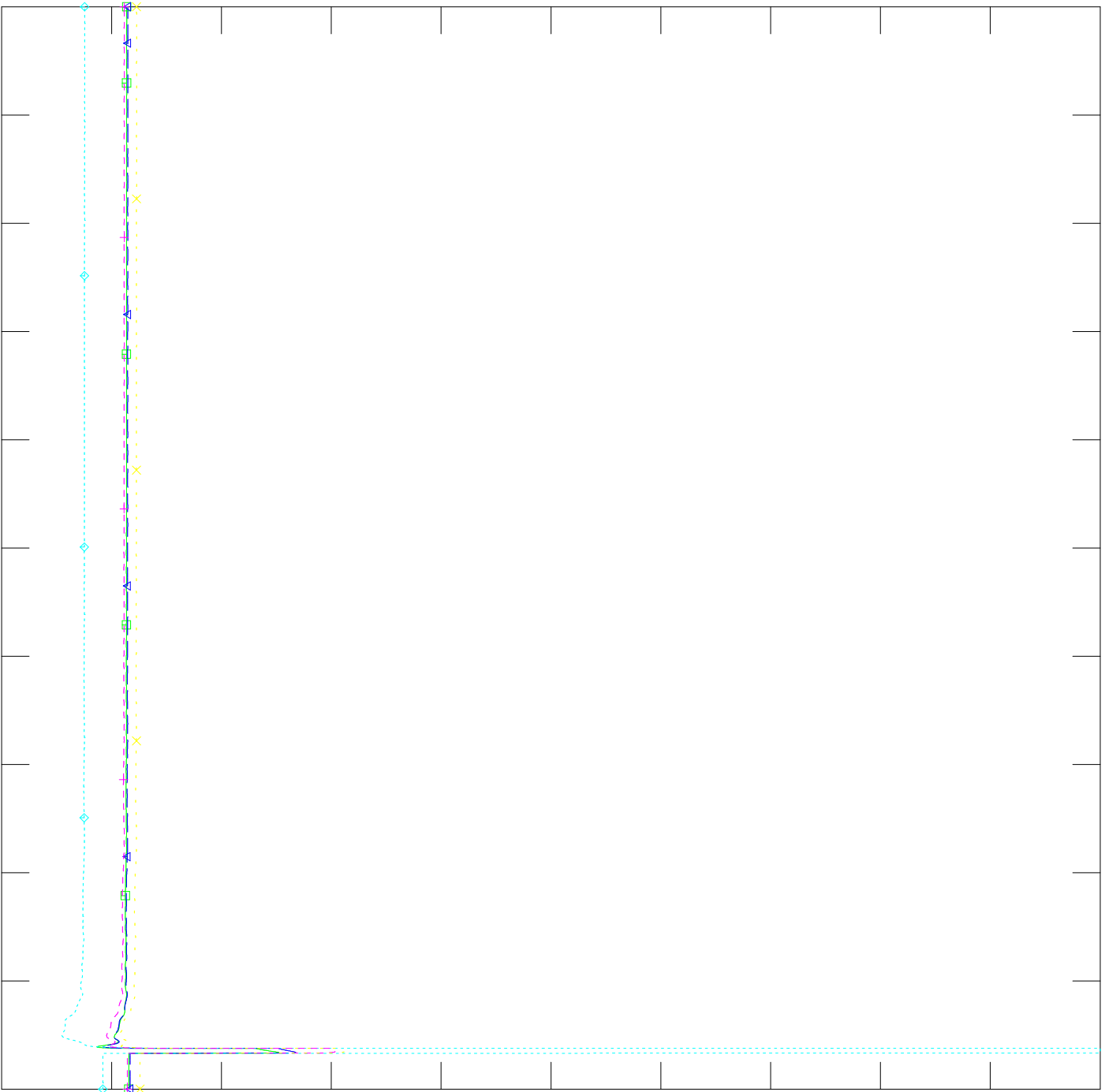




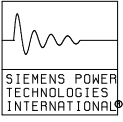
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_880L.out

WED, NOV 17 2010 15:38
BUS VOLTAGE

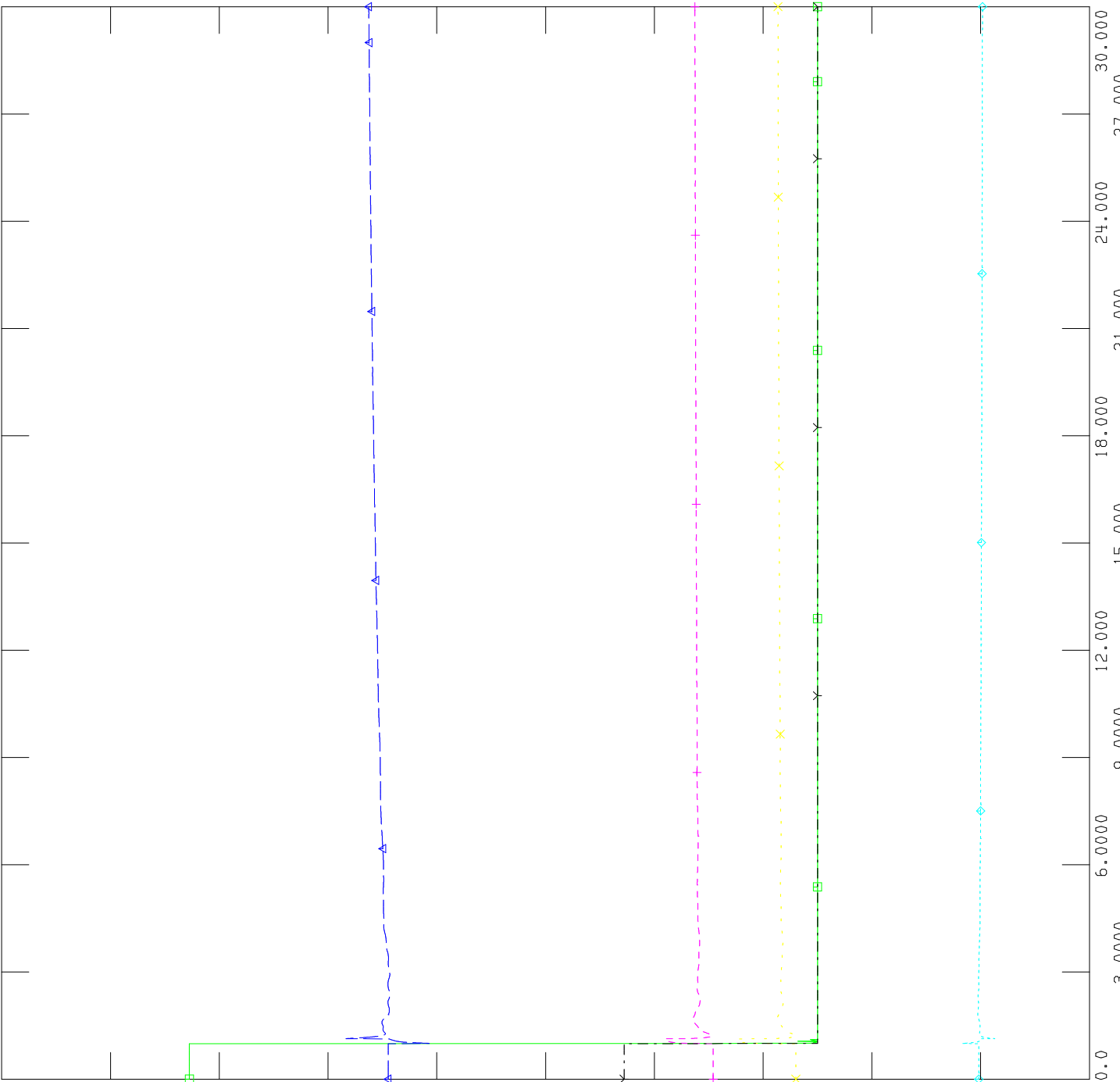
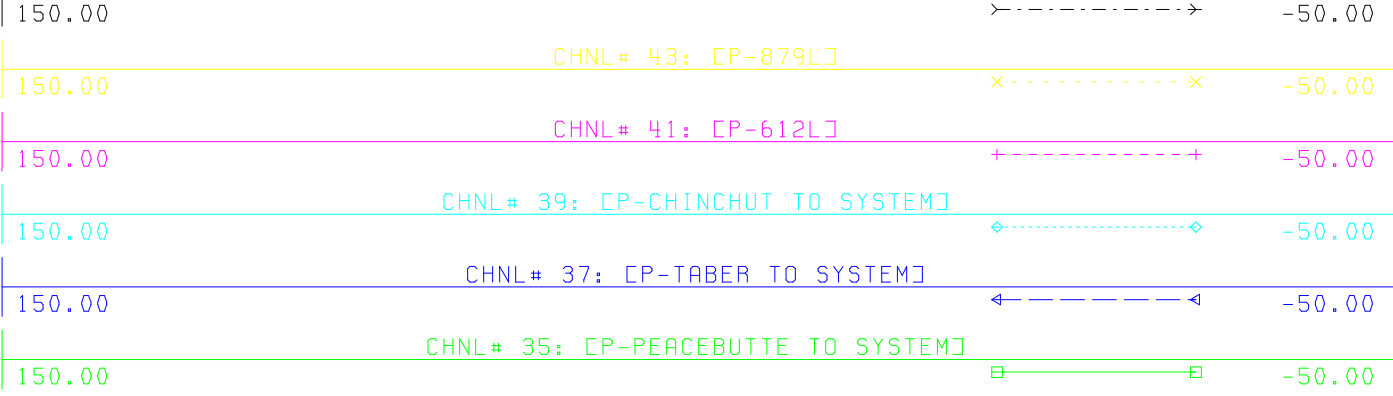
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



C-4-38



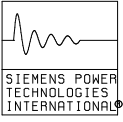
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_880L.out
CHNL# 45: [P-880L]



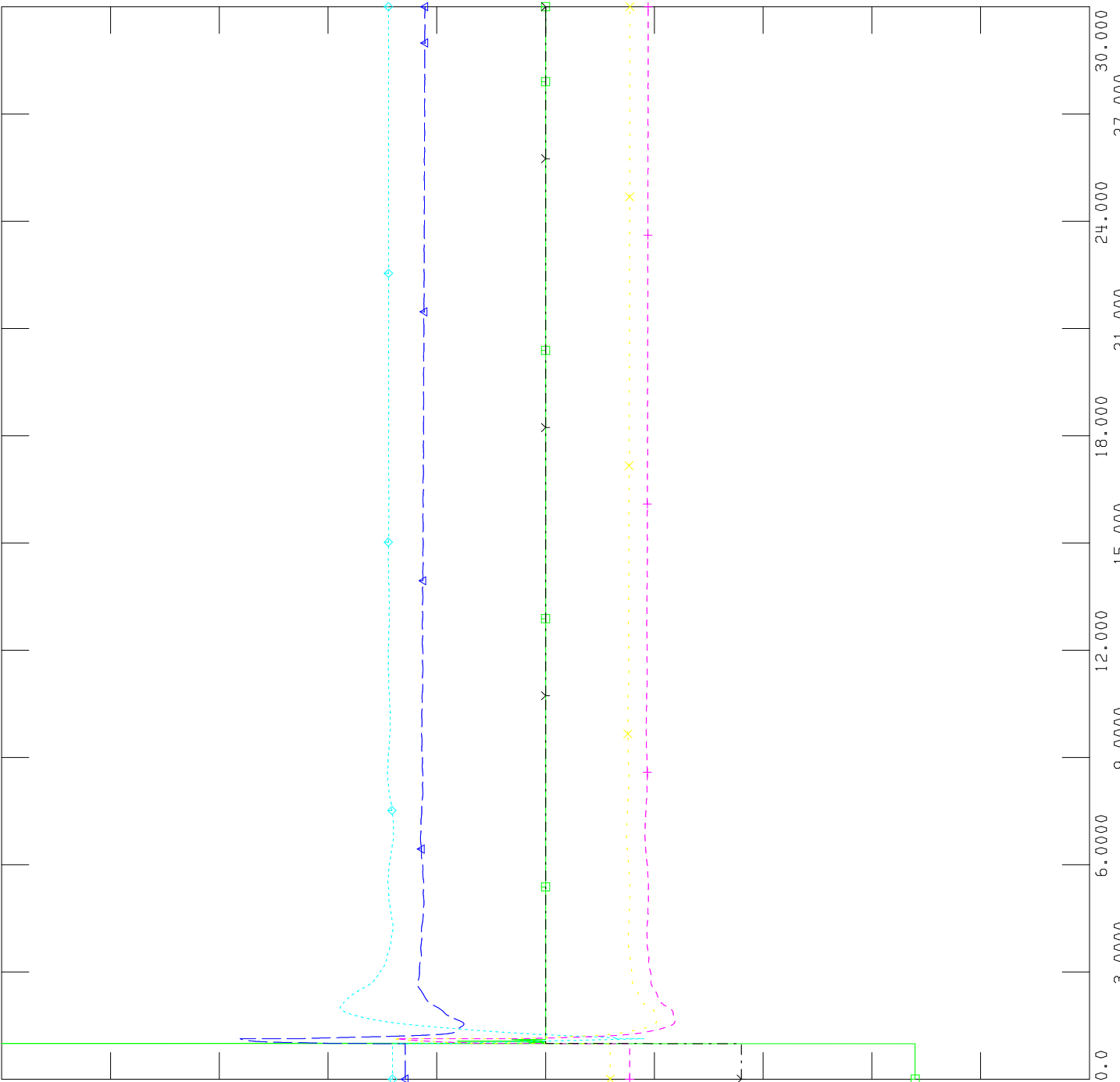
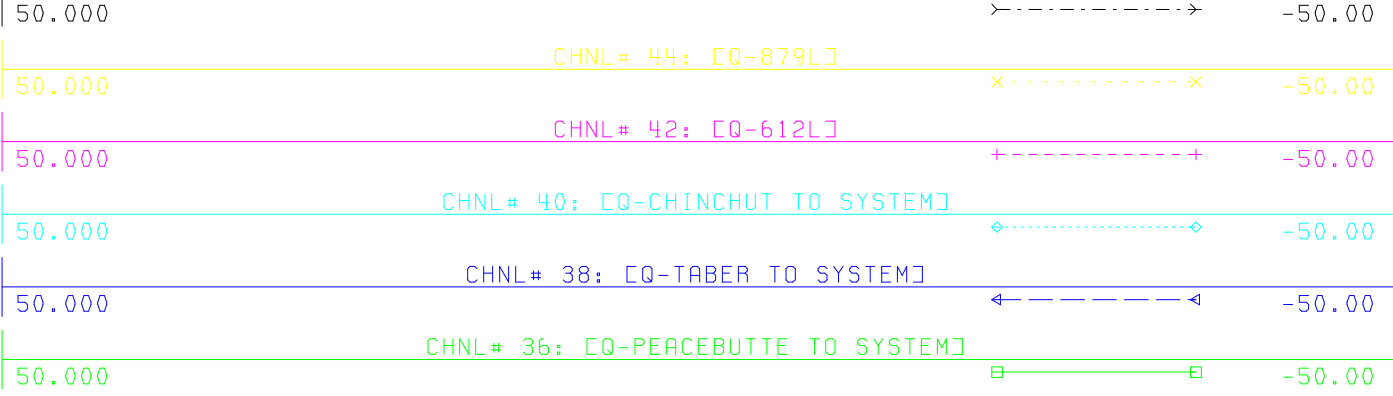
WED, NOV 17 2010 15:40
BRANCH ACTIVE POWER

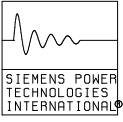
C-4-39

TIME (SECONDS)

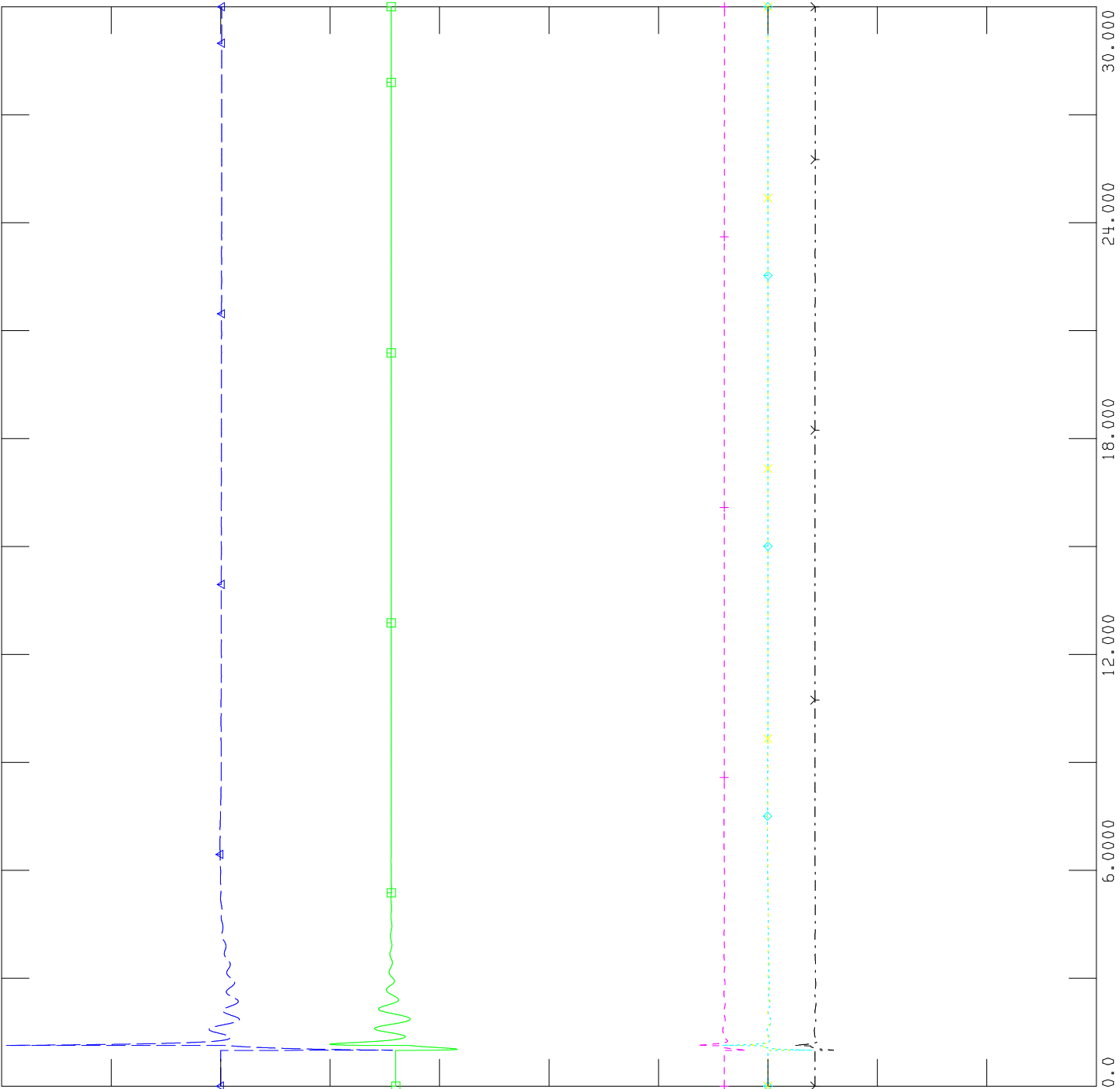
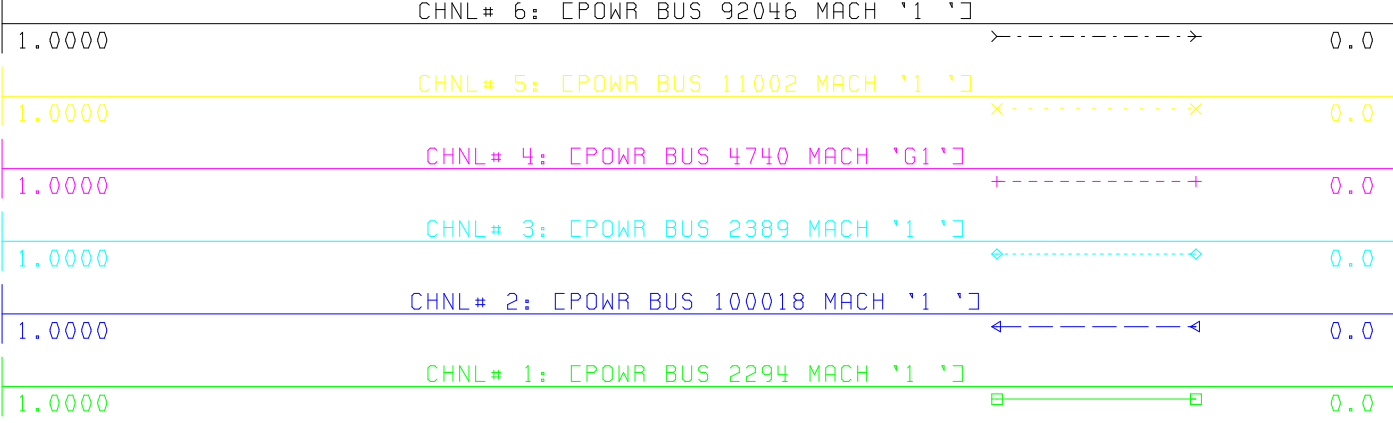


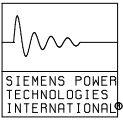
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_880L.out
CHNL# 46: [Q-880L]



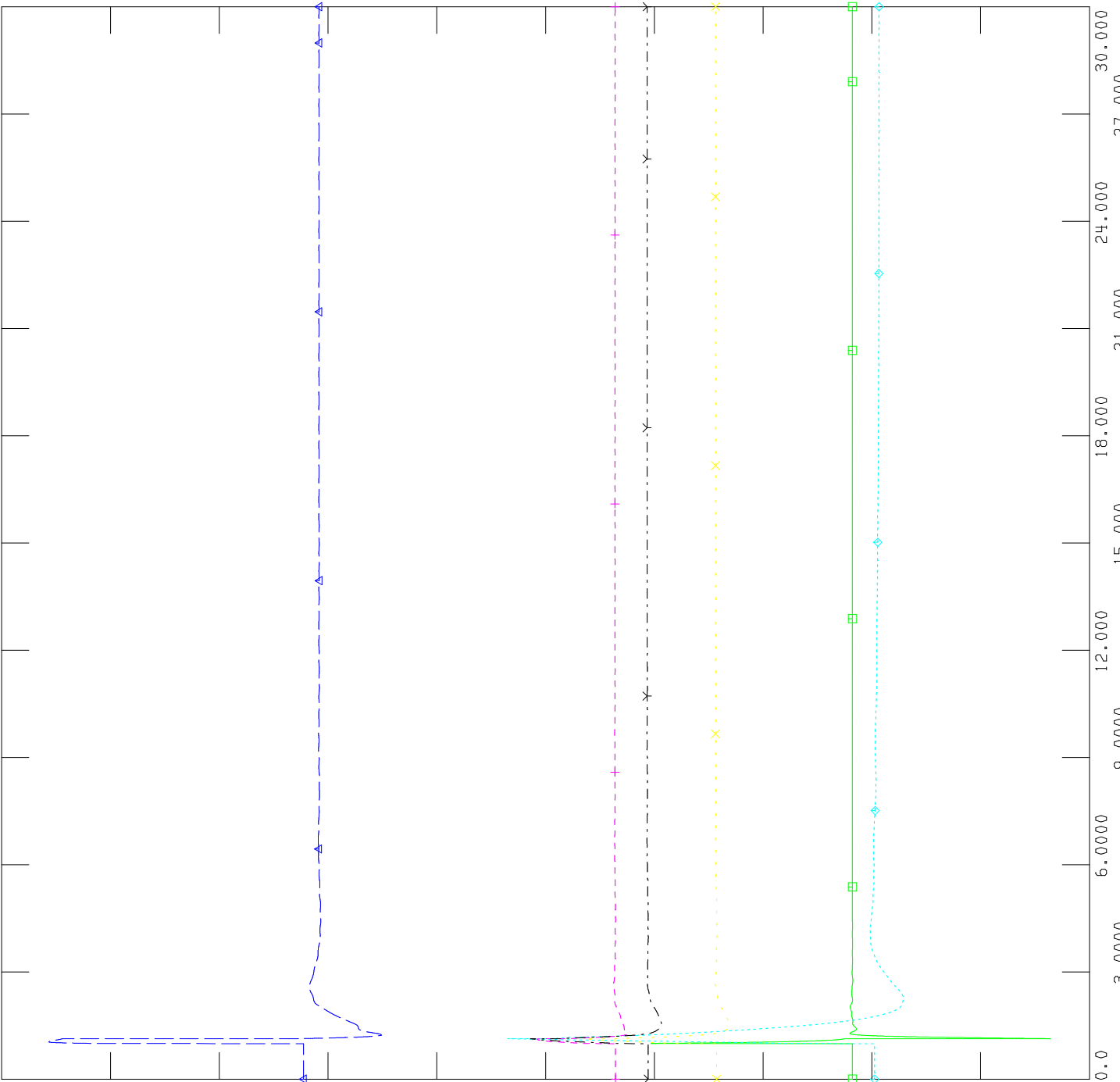
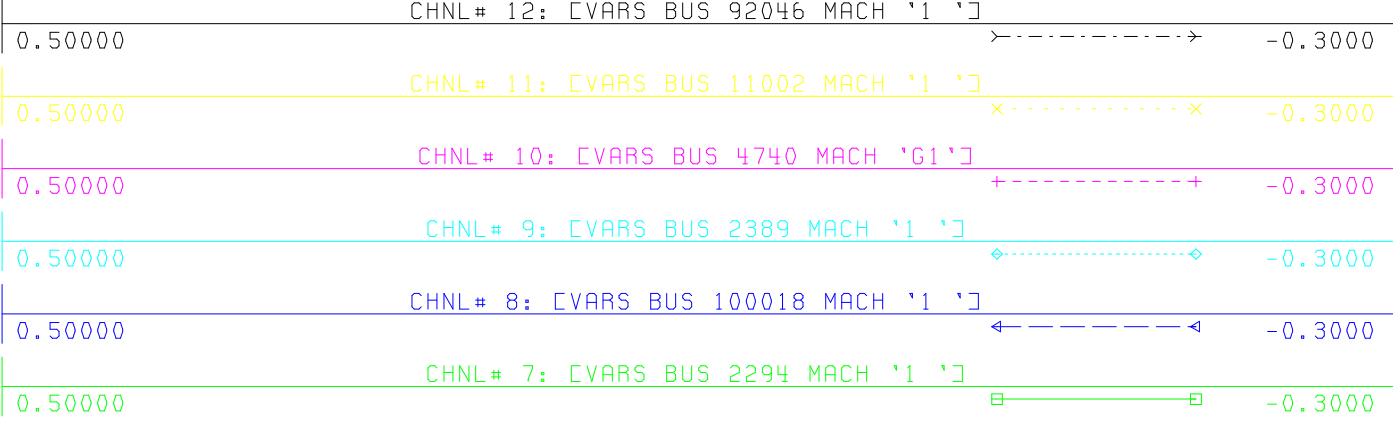


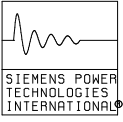
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_892L.out





FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_892L.out

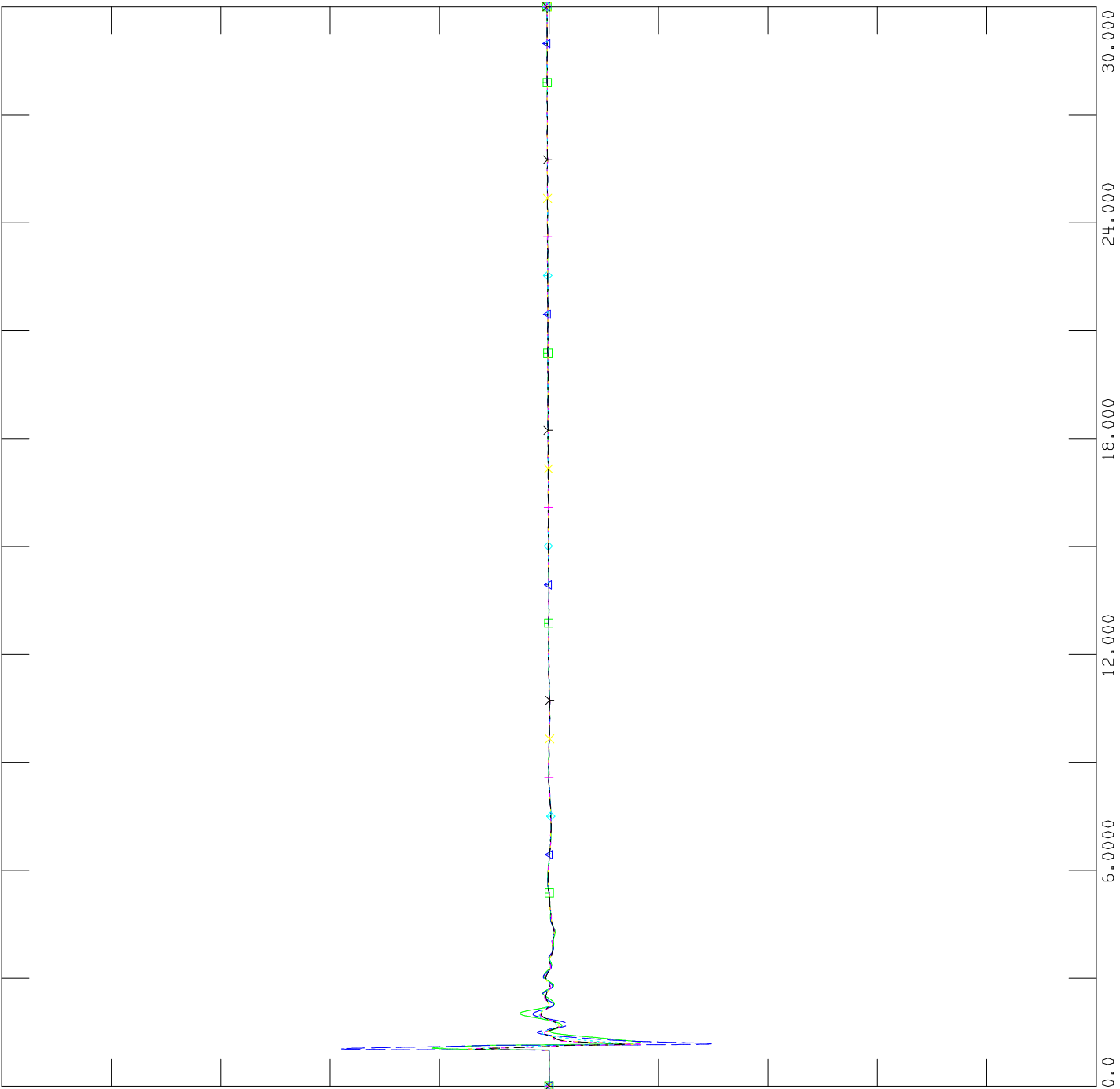




TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

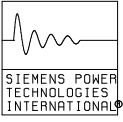
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_892L.out

Channel	CFREQ	Channel Name	Value
CHNL# 18	92046	CMCBRIDE6	0.6900
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	1.0000
CHNL# 15	2389	CHILLRIDG	25.0000
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900



WED, NOV 17 2010 15:46
BUS FREQUENCY

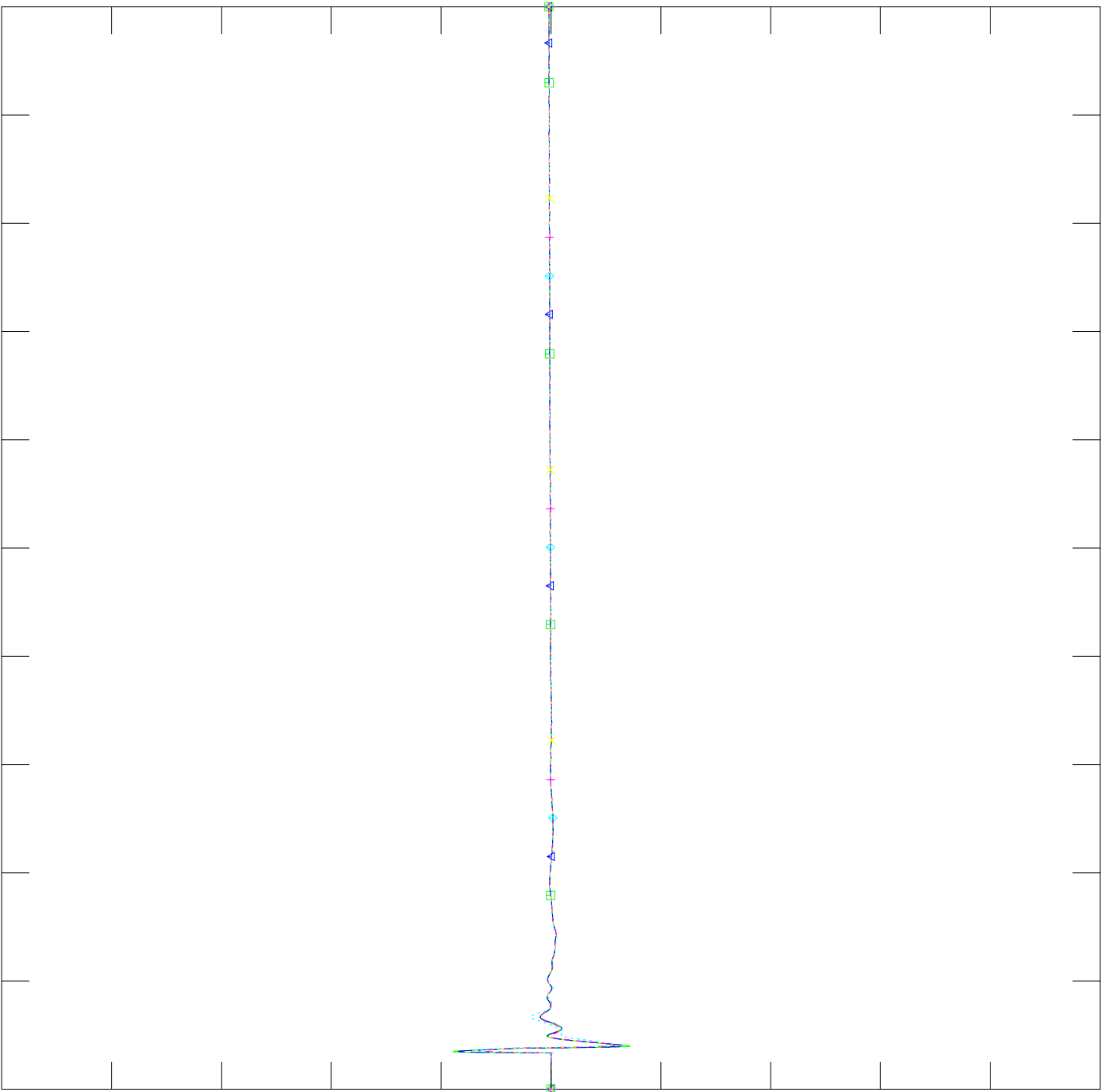
C-4-43



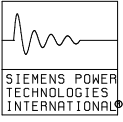
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_892L.out

WED, NOV 17 2010 15:46
BUS FREQUENCY

Channel	Frequency	Value
CHNL# 23: CFREQ	270 [SUFFIEL7	138.00]]
0.00670		x-----x -0.0067
CHNL# 22: CFREQ	680 [MEDICIN7	138.00]]
0.00670		+-----+ -0.0067
CHNL# 21: CFREQ	271 [BULLS H7	138.00]]
0.00670		◇-----◇ -0.0067
CHNL# 20: CFREQ	269 [BURDETT7	138.00]]
0.00670		←-----← -0.0067
CHNL# 19: CFREQ	31 [FINCAST7	138.00]]
0.00670		▣-----▣ -0.0067

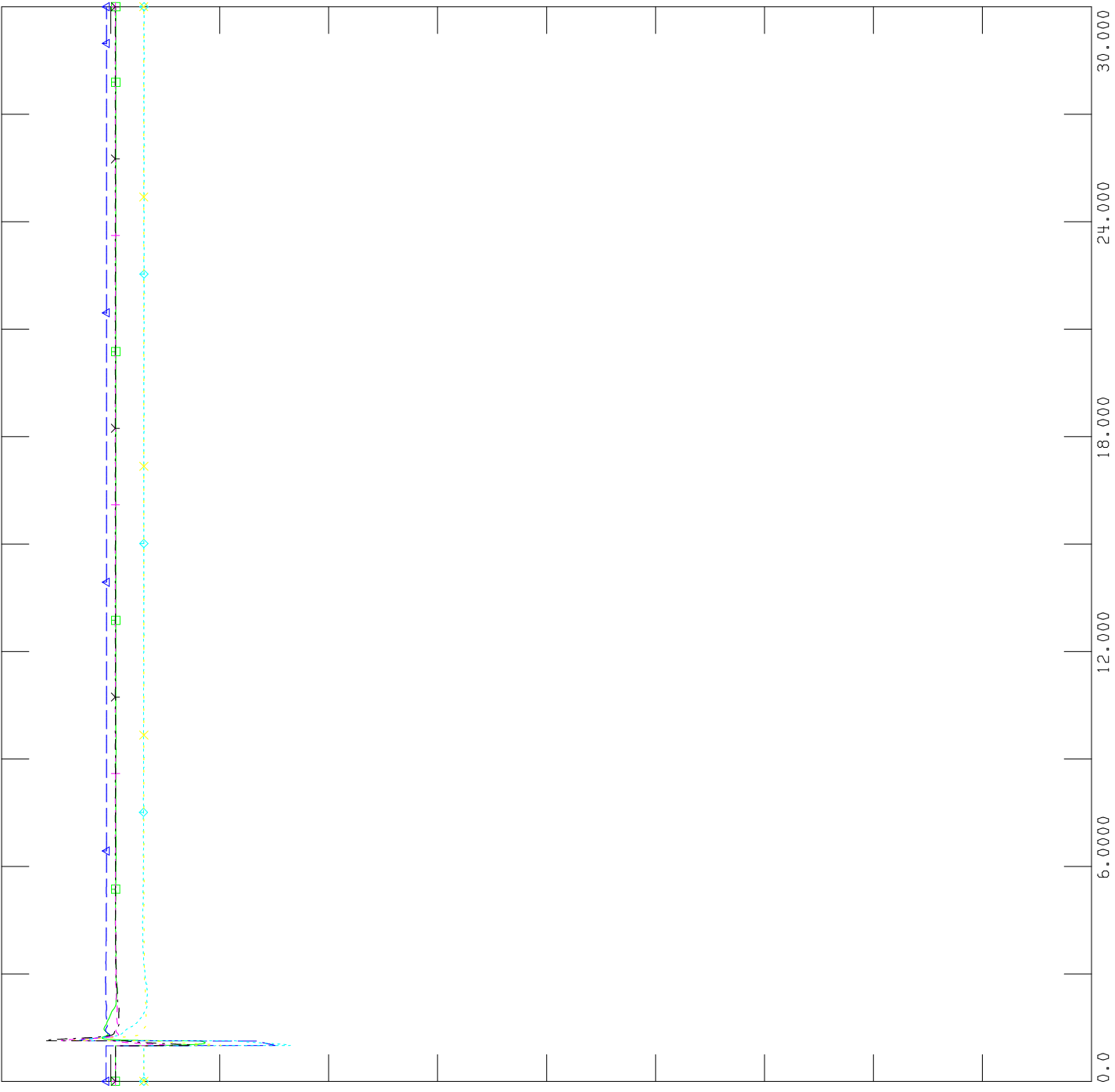


C-4-44



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC1_513&SATR_892L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [MCBRIDE6]	0.6900
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750
CHNL# 27	EVOLT 4740 [CARD_07]	1.0000
CHNL# 26	EVOLT 2389 [CHILLRIDG]	25.0000
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900

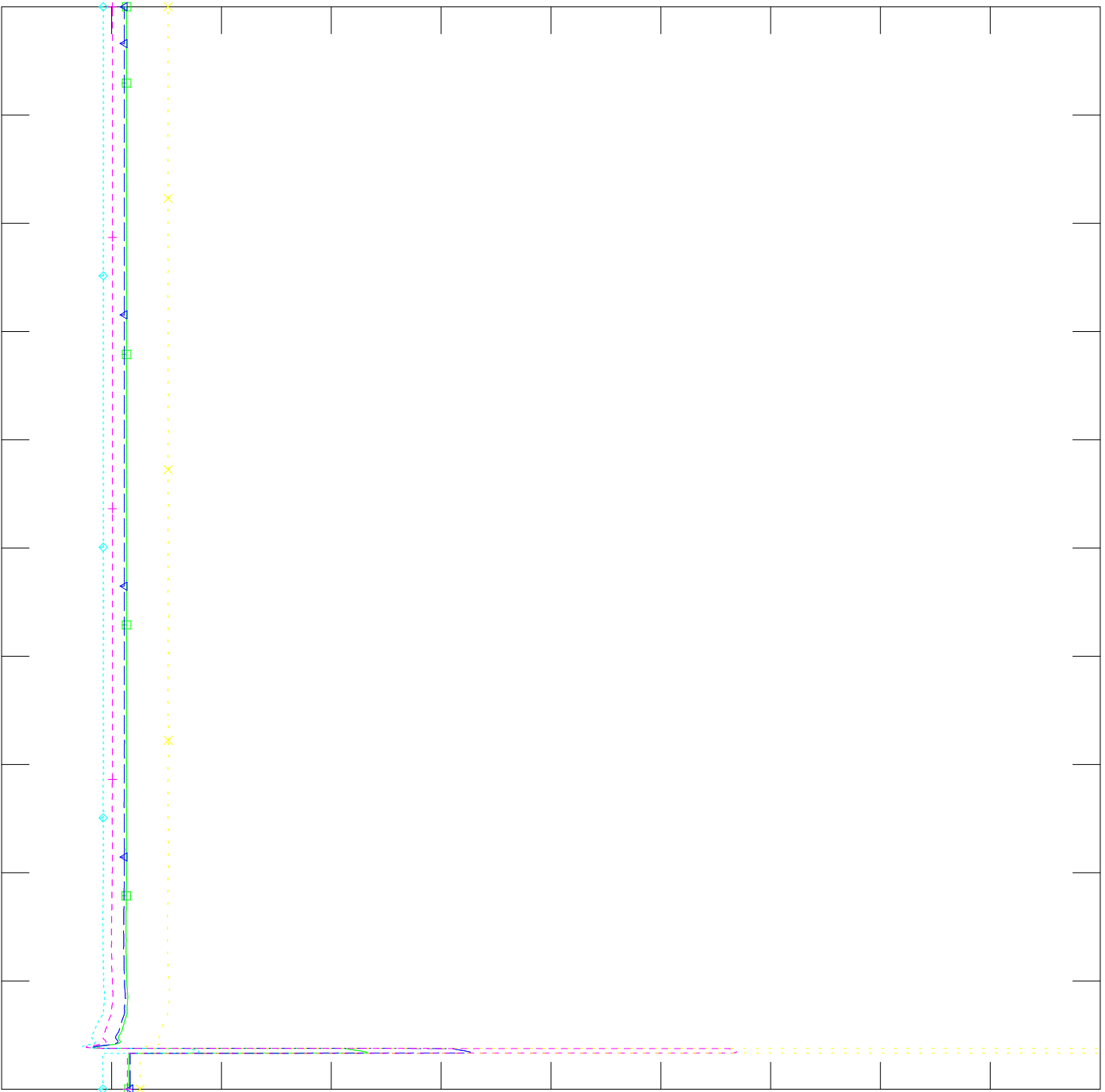




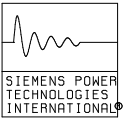
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_892L.out

WED, NOV 17 2010 15:48
BUS VOLTAGE

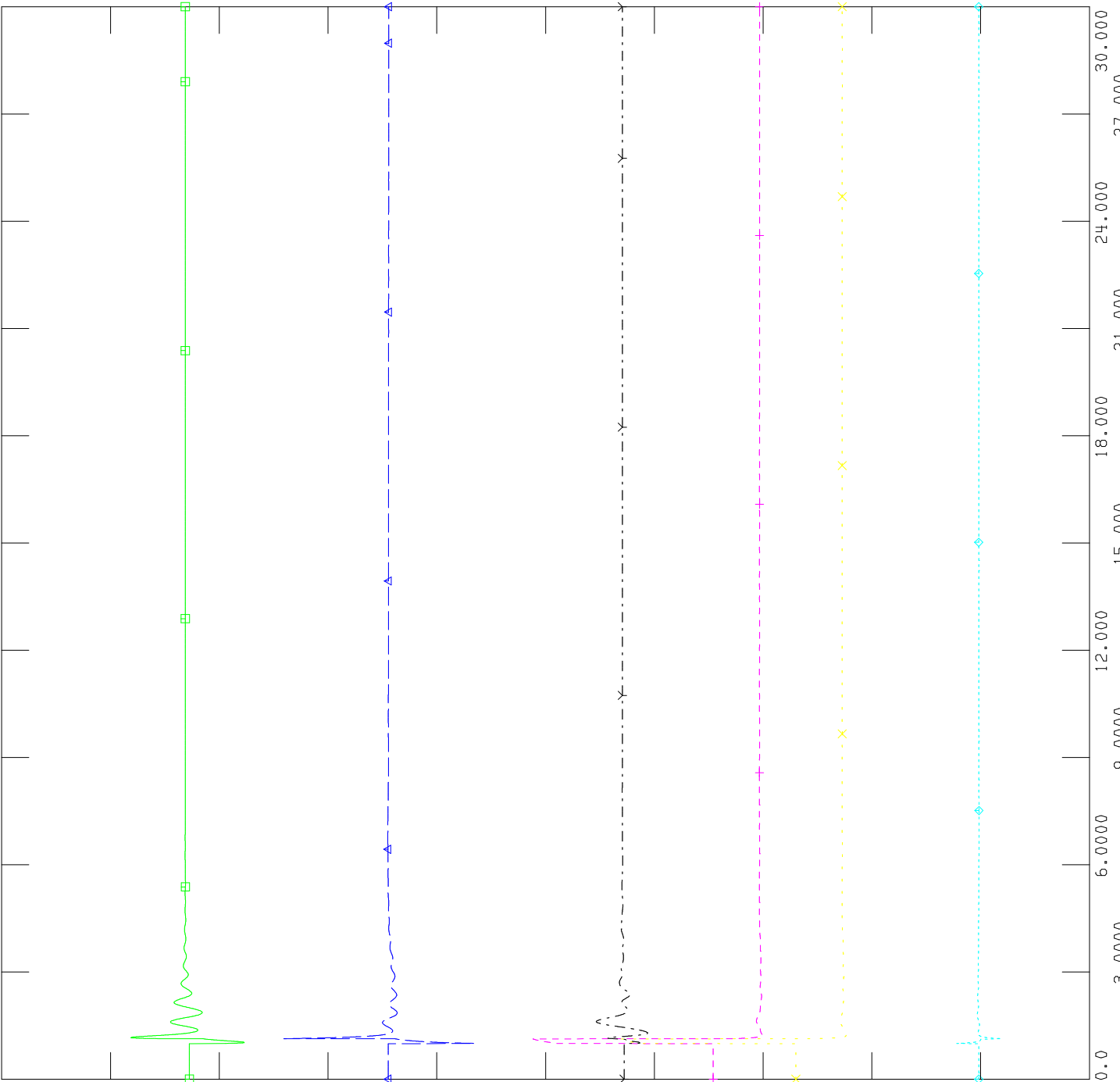
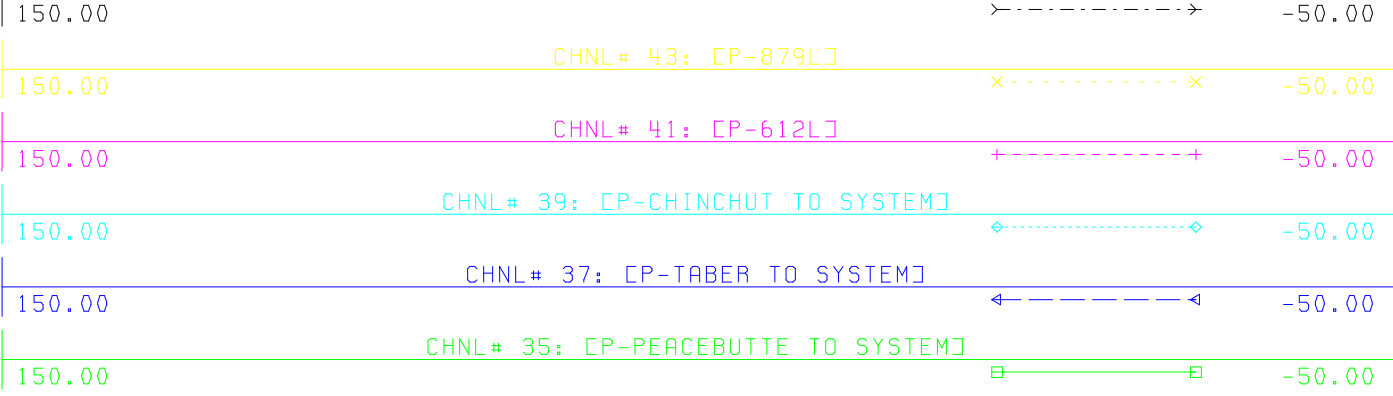
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



C-4-46



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_892L.out
CHNL# 45: [CP-880L]



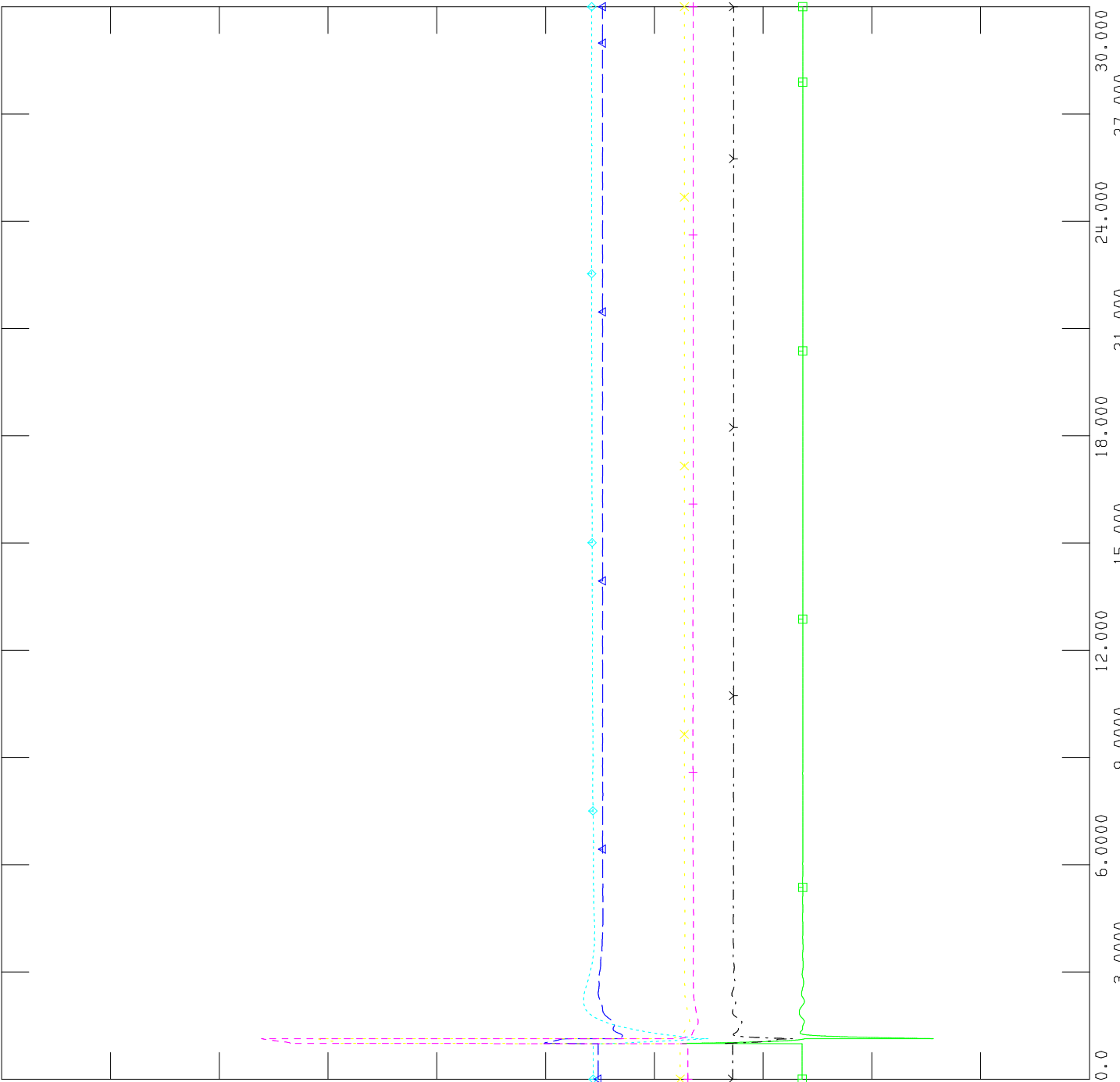
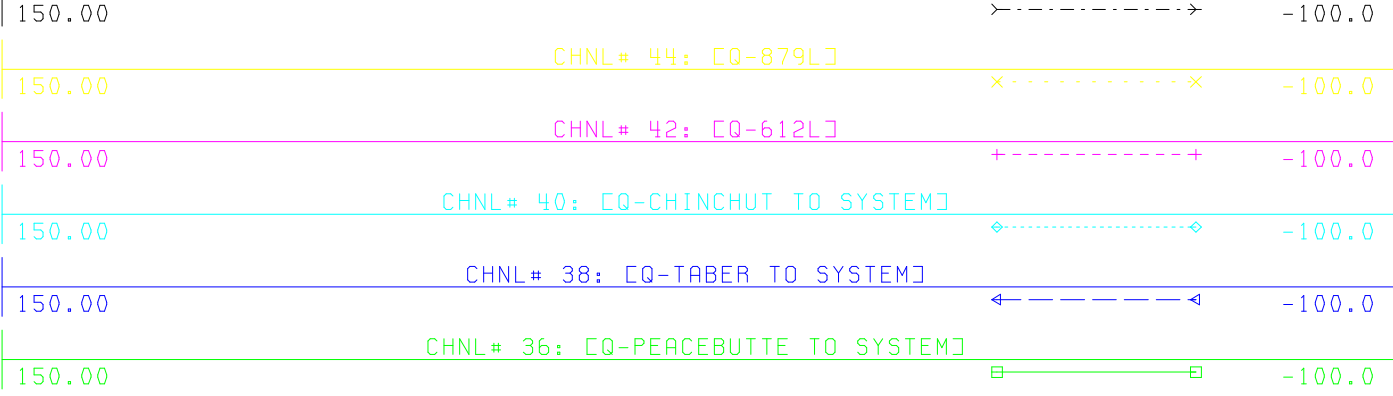
WED, NOV 17 2010 15:49
BRANCH ACTIVE POWER

C-4-47

TIME (SECONDS)



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC1_513&SATR_892L.out
CHNL# 46: [EQ-880L]



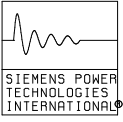
WED, NOV 17 2010 15:50
BRANCH REACTIVE POWER

C-4-48

TIME (SECONDS)

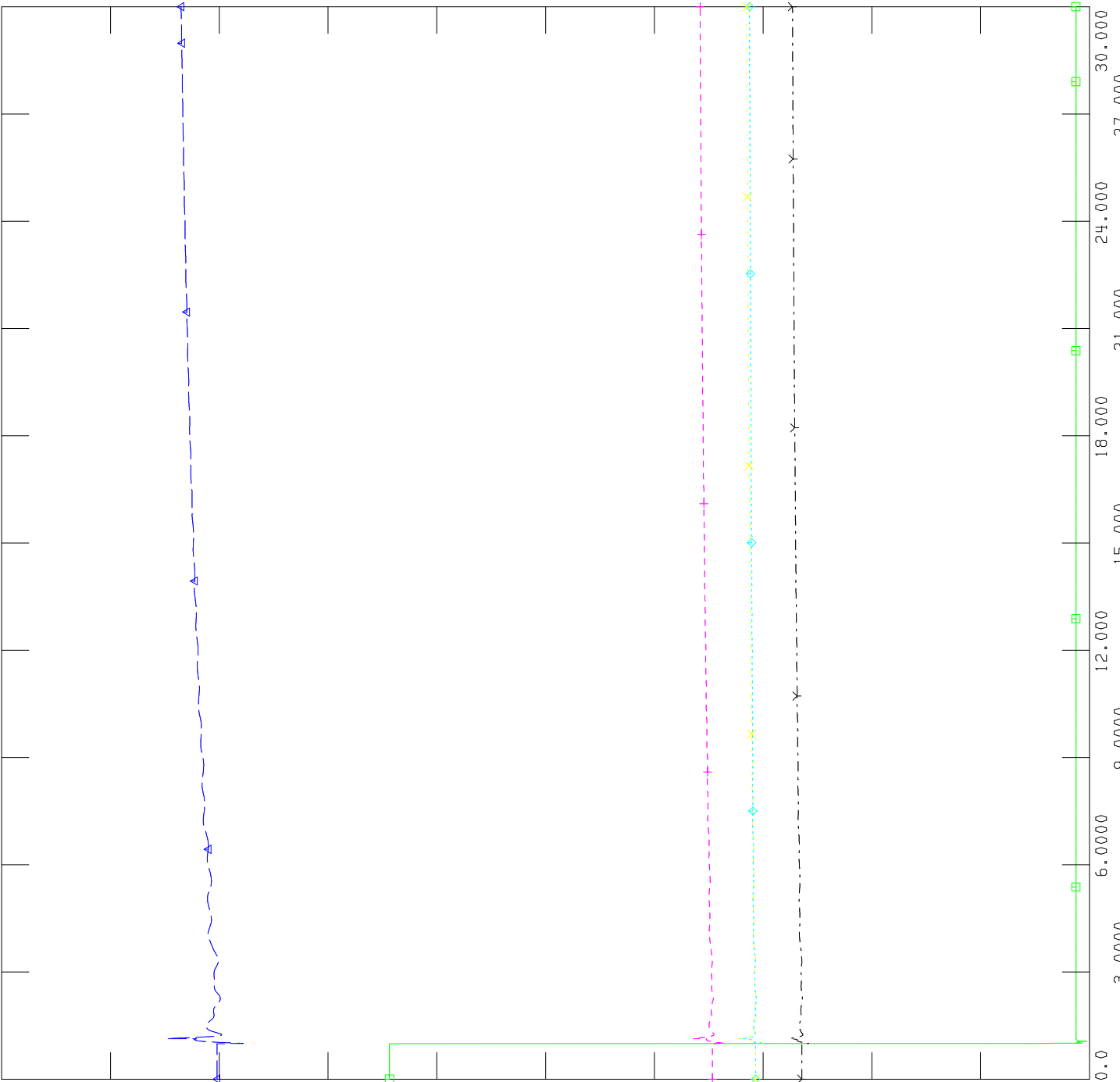
Attachment C-5: Proposed Connection with SATR Transient

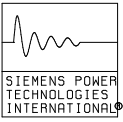
Stability Analysis Results -- Scenario 2



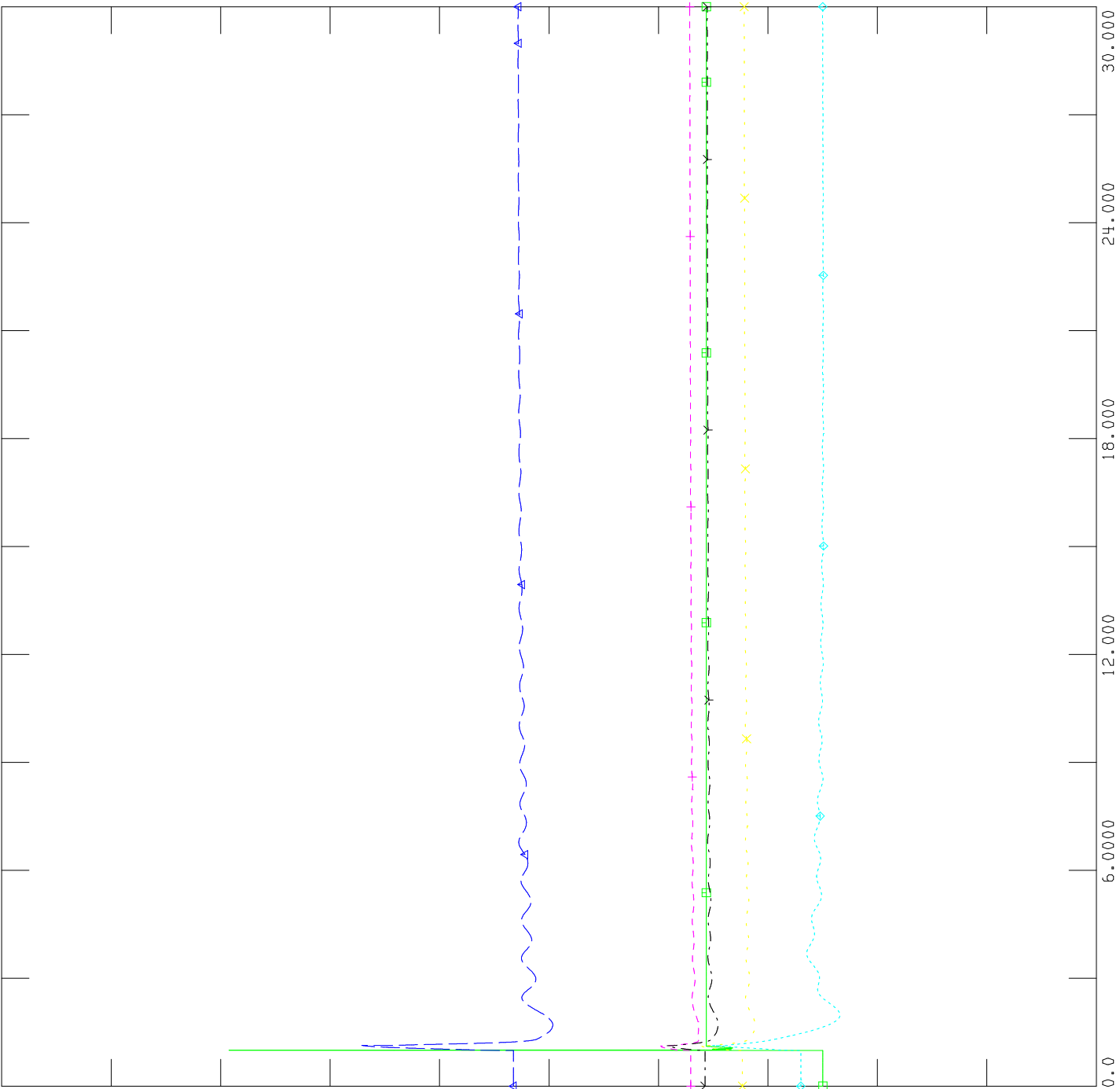
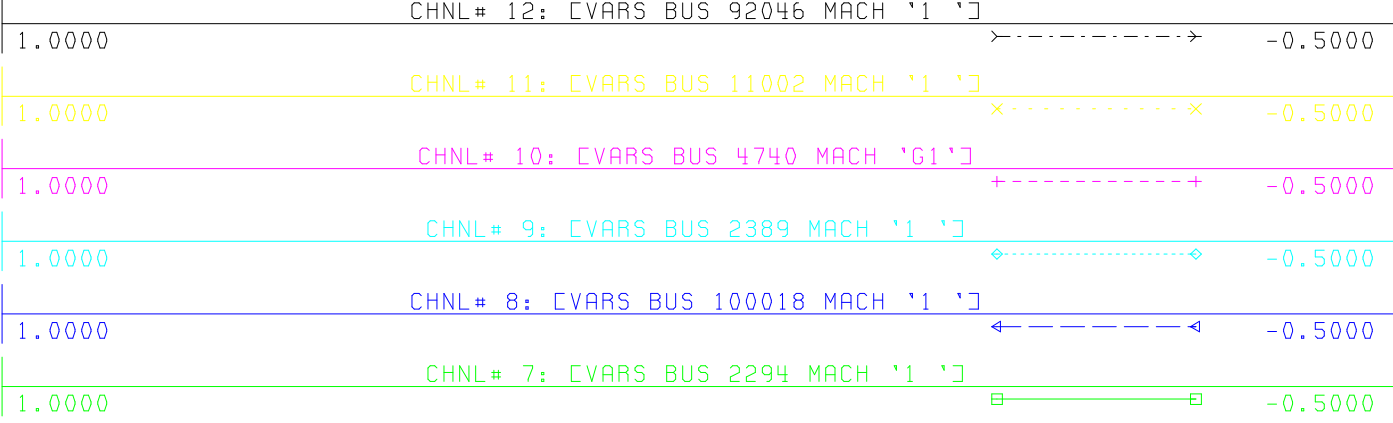
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_171L.out

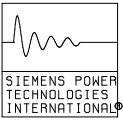
Channel	Label	Value
1.0000	CHNL# 6: [POWR BUS 92046 MACH '1 ']	-0.0100
1.0000	CHNL# 5: [POWR BUS 11002 MACH '1 ']	-0.0100
1.0000	CHNL# 4: [POWR BUS 4740 MACH 'G1']	-0.0100
1.0000	CHNL# 3: [POWR BUS 2389 MACH '1 ']	-0.0100
1.0000	CHNL# 2: [POWR BUS 10018 MACH '1 ']	-0.0100
1.0000	CHNL# 1: [POWR BUS 2294 MACH '1 ']	-0.0100





FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_171L.out

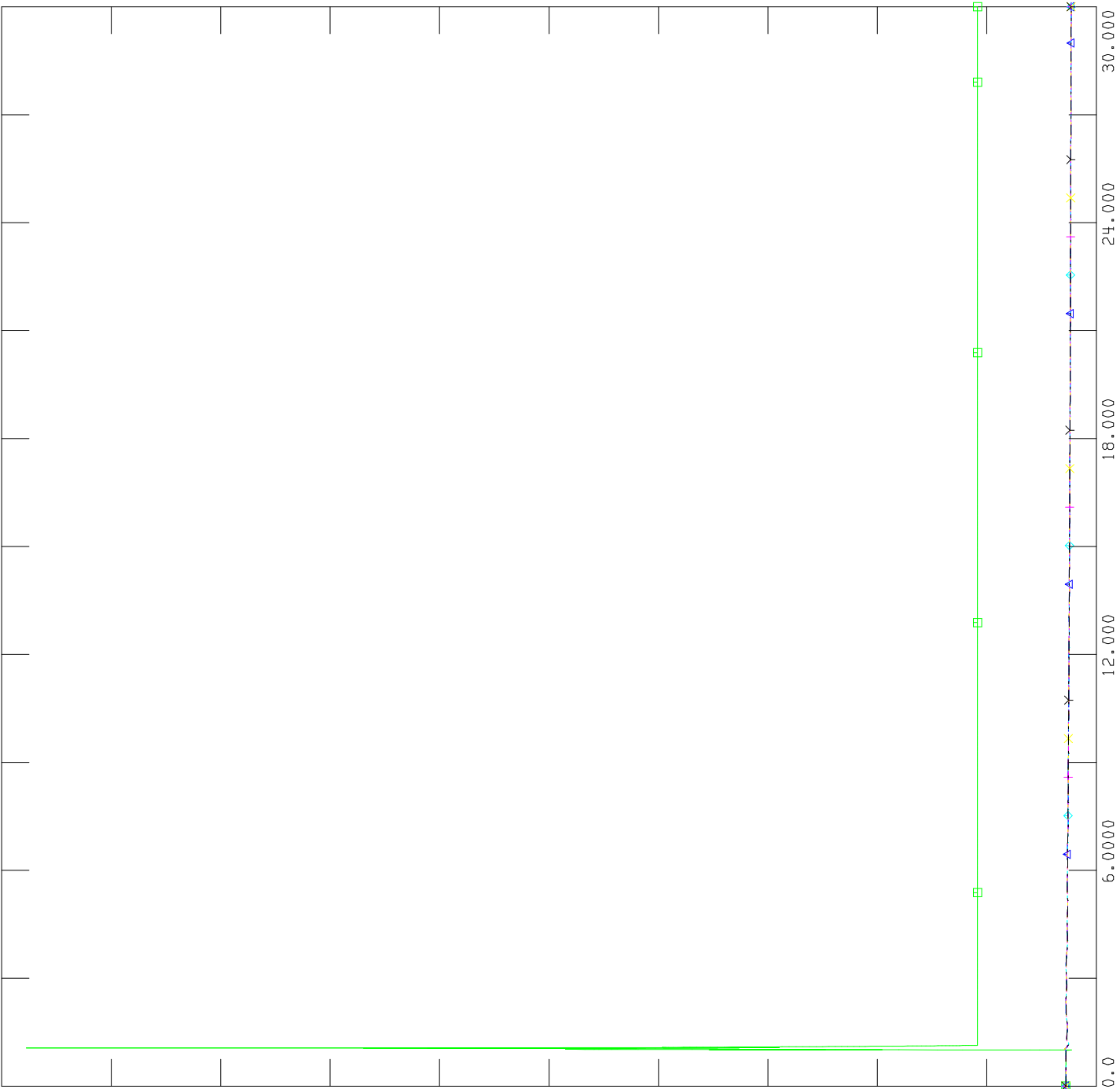




TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
 SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

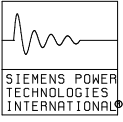
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_171L.out

Channel	CFREQ	Component	Value
CHNL# 18	92046	CMCBRIDE6	0.6900
CHNL# 17	11002	CGARDNG2	0.5750
CHNL# 16	4740	CARD_07	1.0000
CHNL# 15	2389	CHILLRIDG	25.0000
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900



WED, NOV 17 2010 16:34
 BUS FREQUENCY

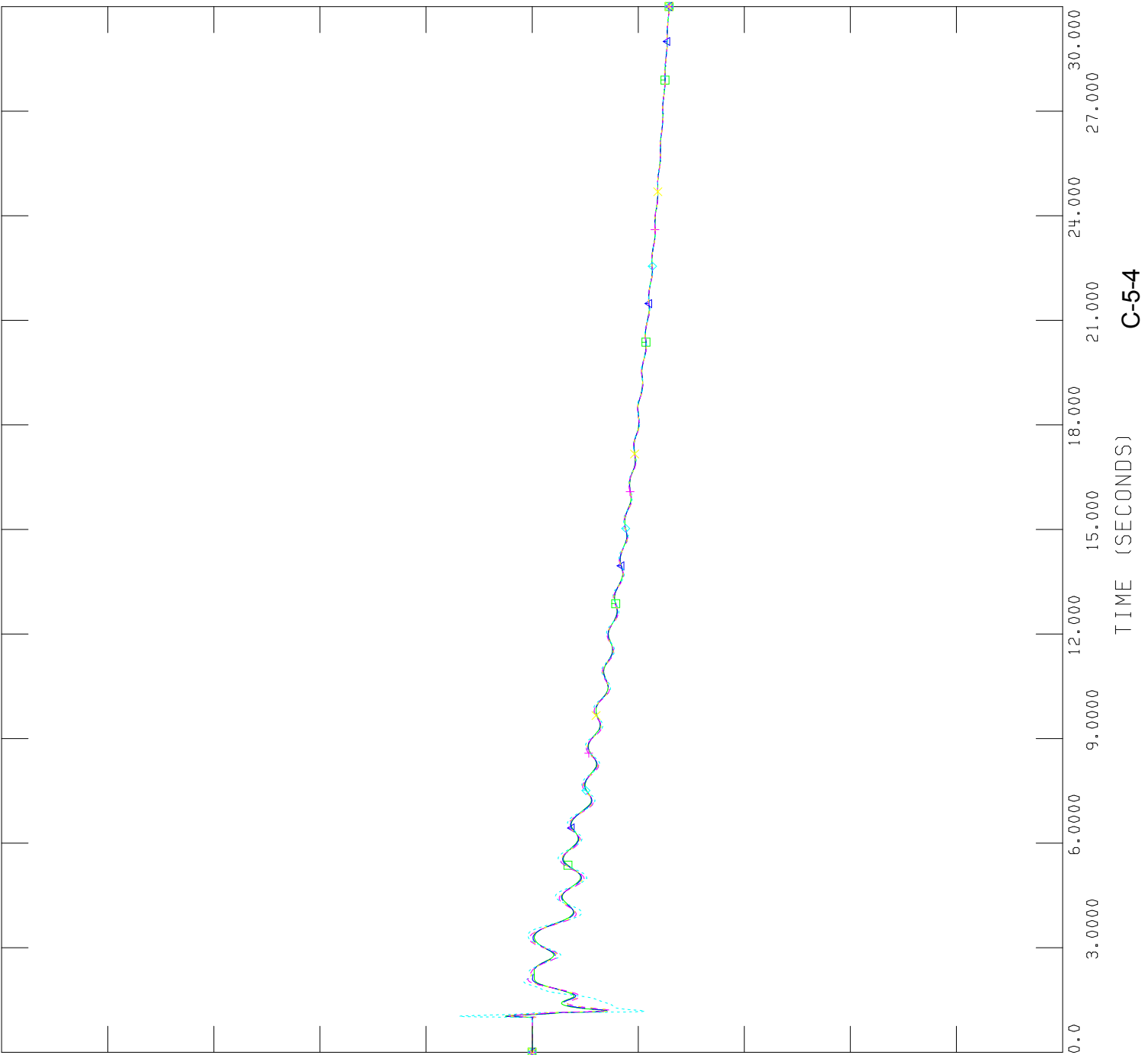
TIME (SECONDS) C-5-3



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_171L.out

WED, NOV 17 2010 16:35
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270 CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680 CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271 CBULLS H7	138.00]]	o-----o	-0.0067
0.00670	CHNL# 20: CFREQ	269 CBURDETT7	138.00]]	^-----^	-0.0067
0.00670	CHNL# 19: CFREQ	31 CFINCAST7	138.00]]	□-----□	-0.0067

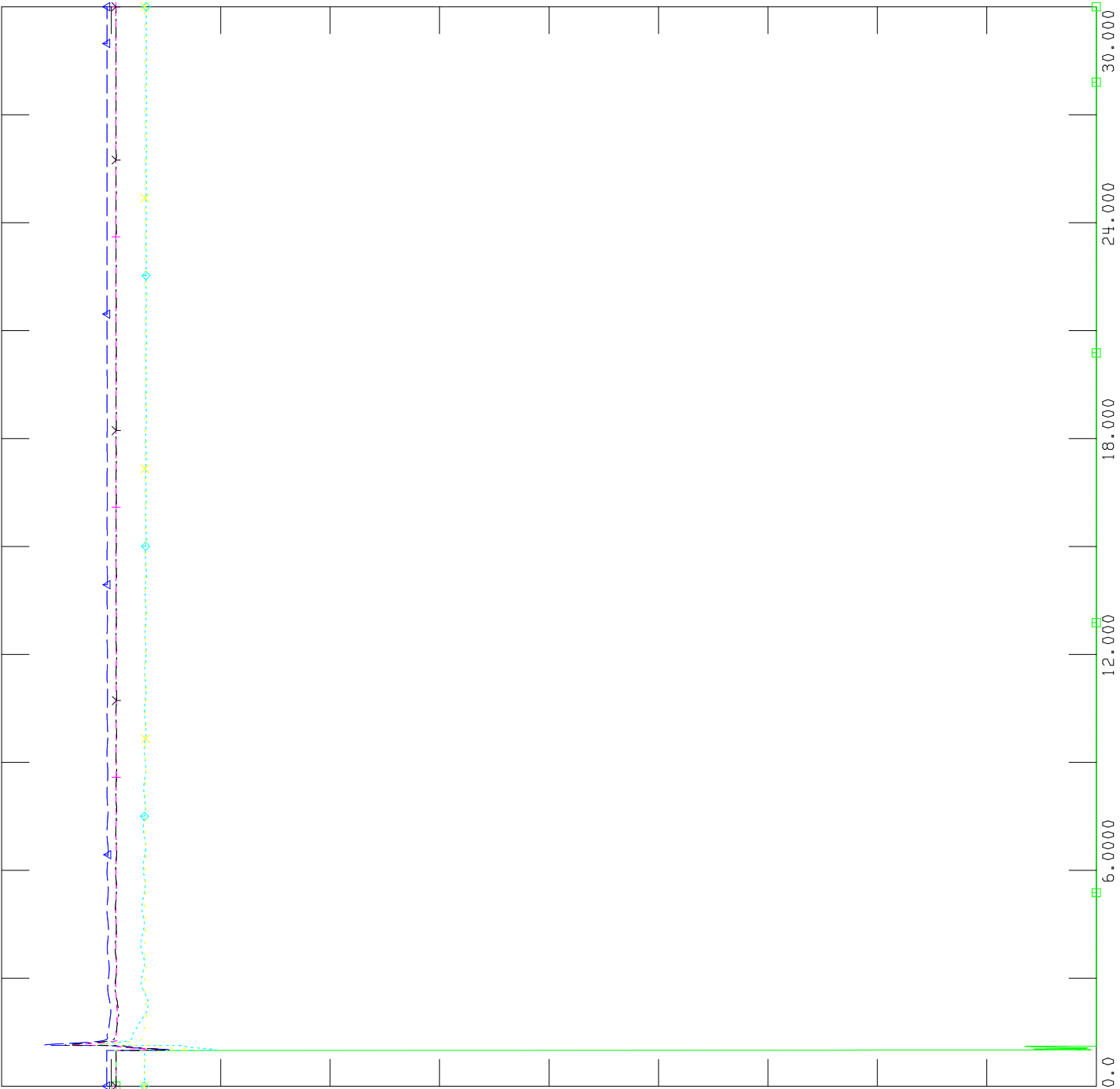


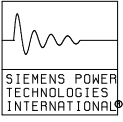
C-5-4



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513&SATR_171L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [MCMBRIDE6]	0.6900
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750
CHNL# 27	EVOLT 4740 [CARD_07]	1.0000
CHNL# 26	EVOLT 2389 [CHILLRIDG]	25.0000
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900

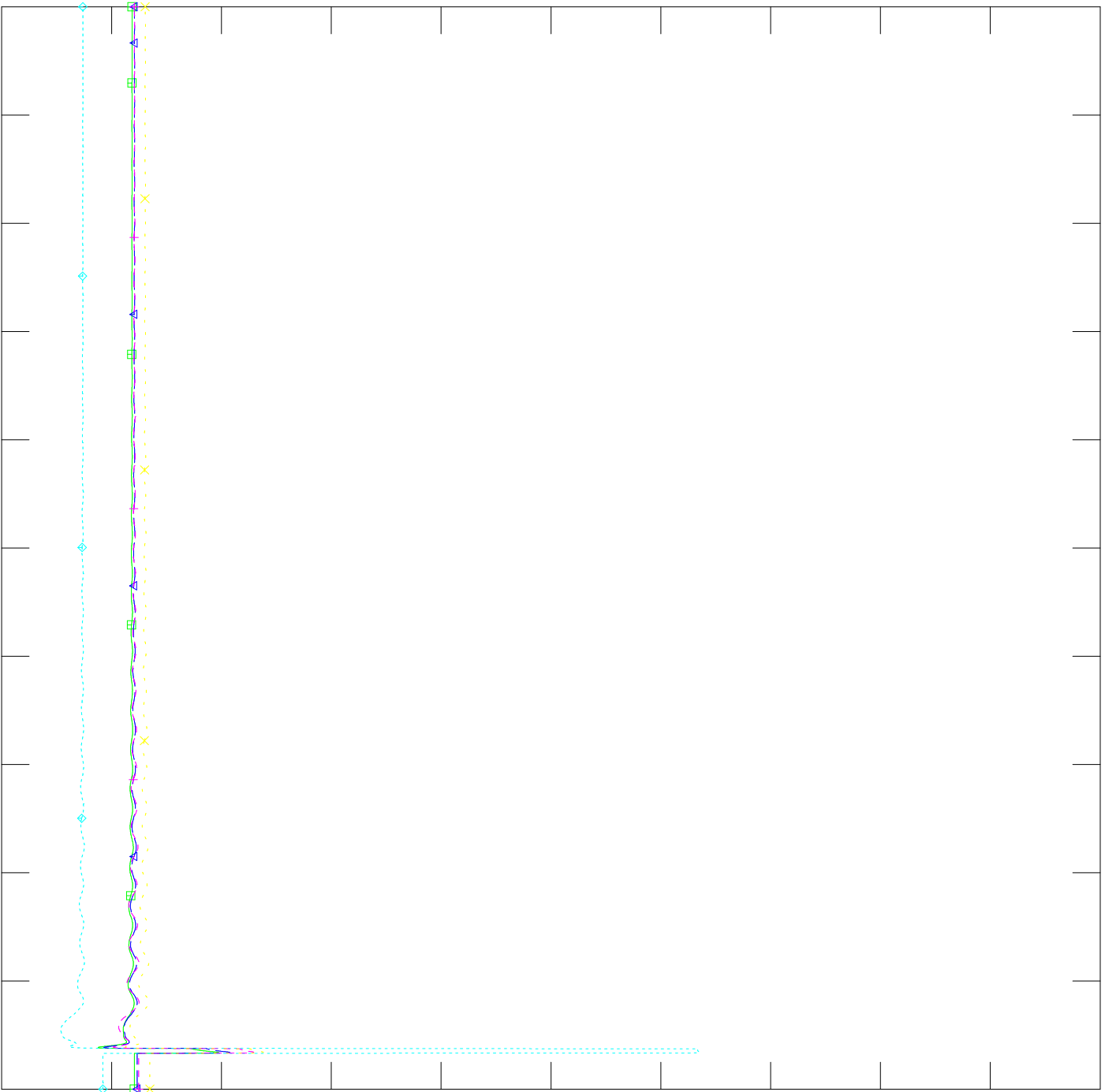


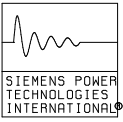


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_171L.out

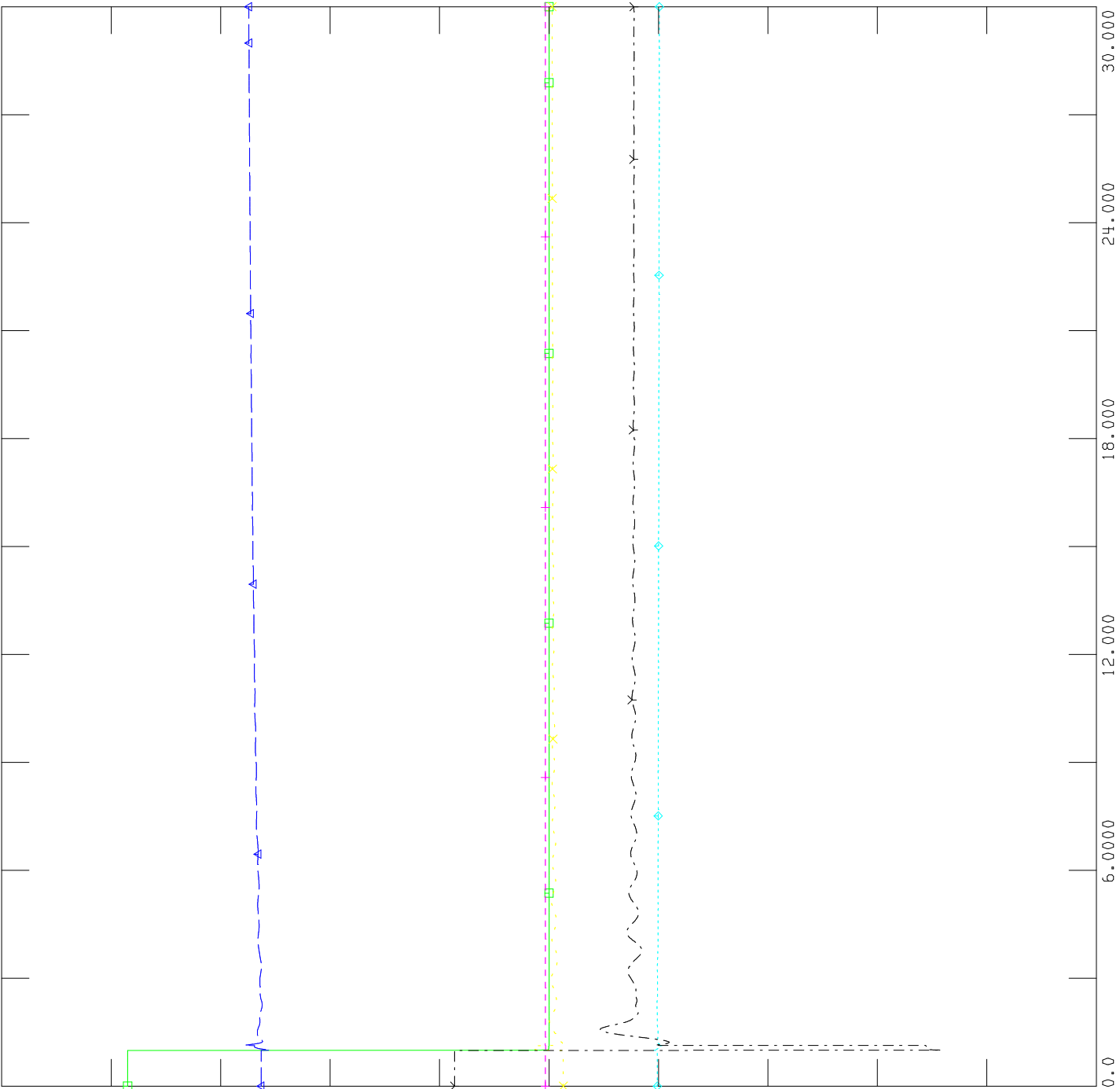
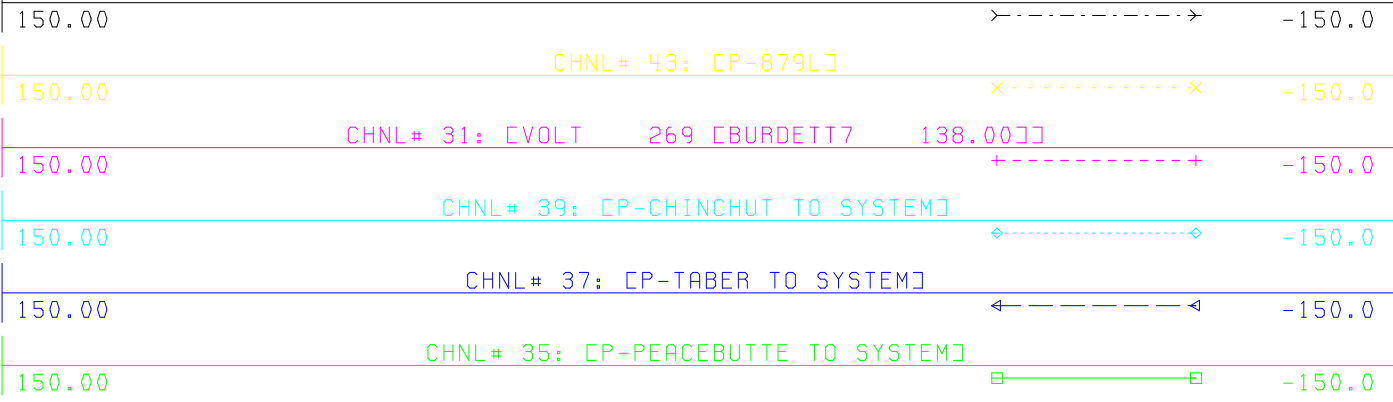
WED, NOV 17 2010 16:36
BUS VOLTAGE

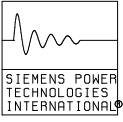
Channel	Label	Value	Scale
CHNL# 34	EVOLT 270 [SUFFIEL7	138.00]]
CHNL# 33	EVOLT 680 [MEDICIN7	138.00]]
CHNL# 32	EVOLT 271 [BULLS H7	138.00]]
CHNL# 31	EVOLT 269 [BURDETT7	138.00]]
CHNL# 30	EVOLT 31 [FINCAST7	138.00]]



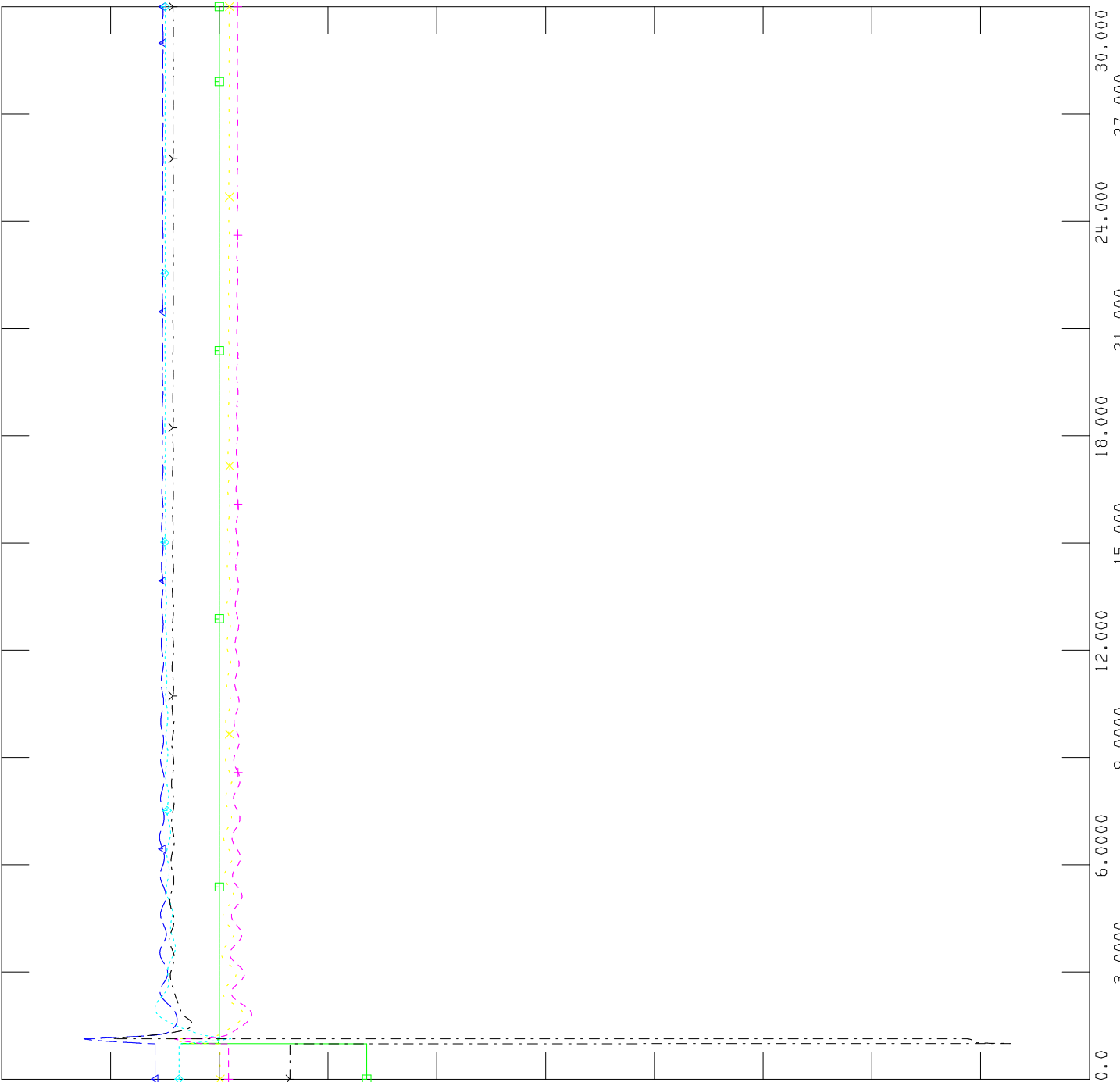
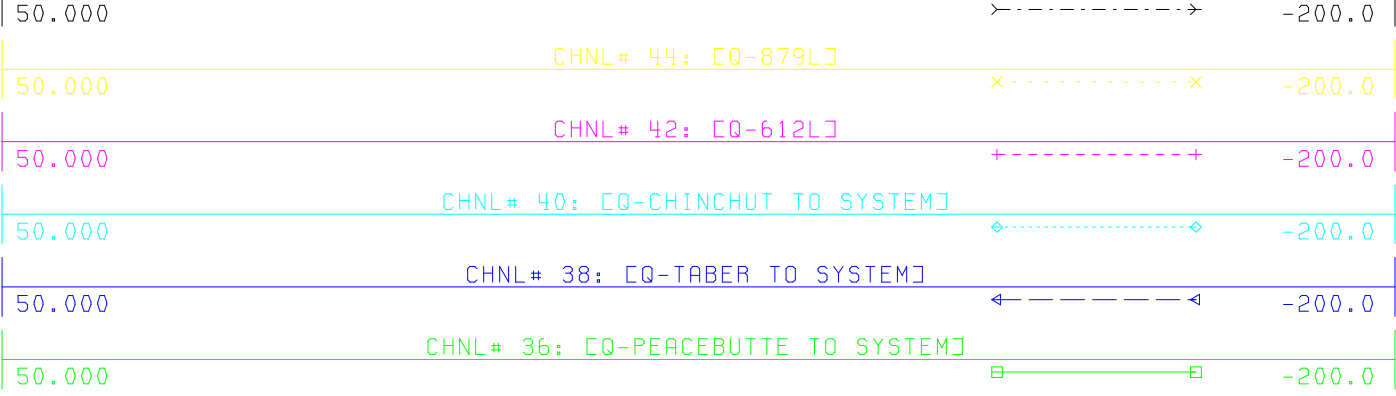


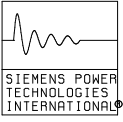
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_171L.out
 CHNL# 45: CP-880L]



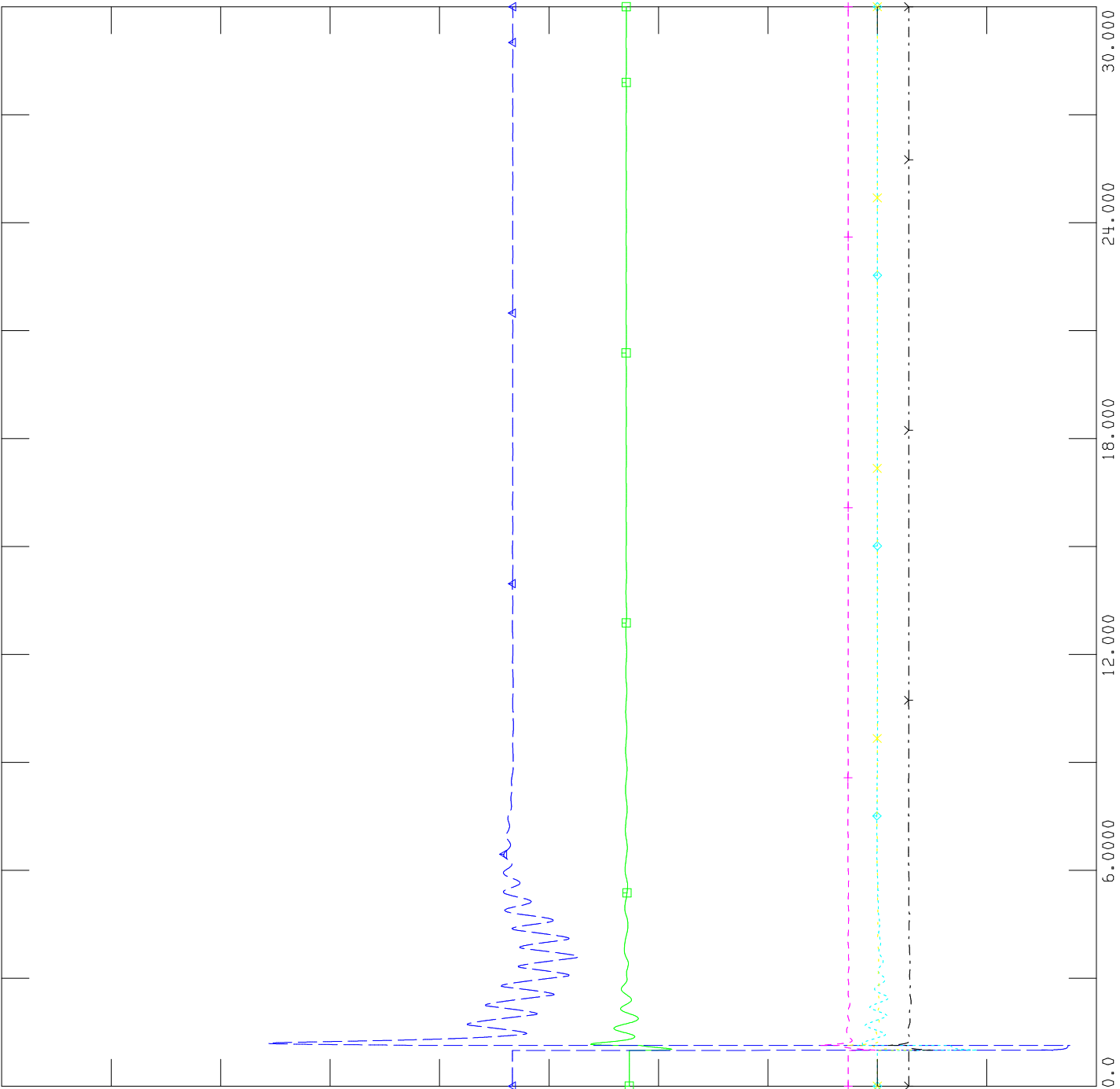
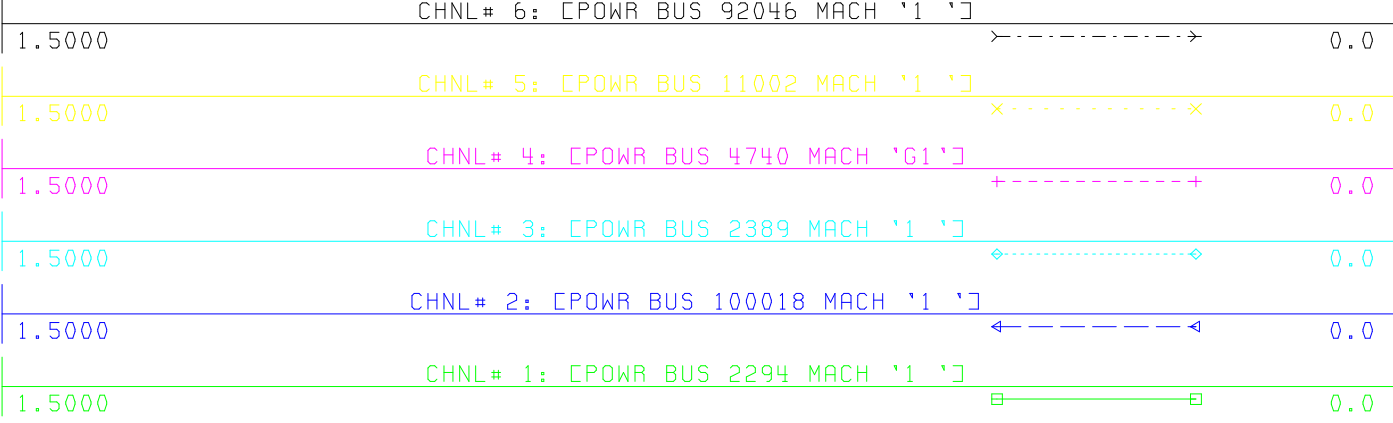


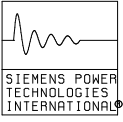
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_171L.out
CHNL# 46: [Q-880L]



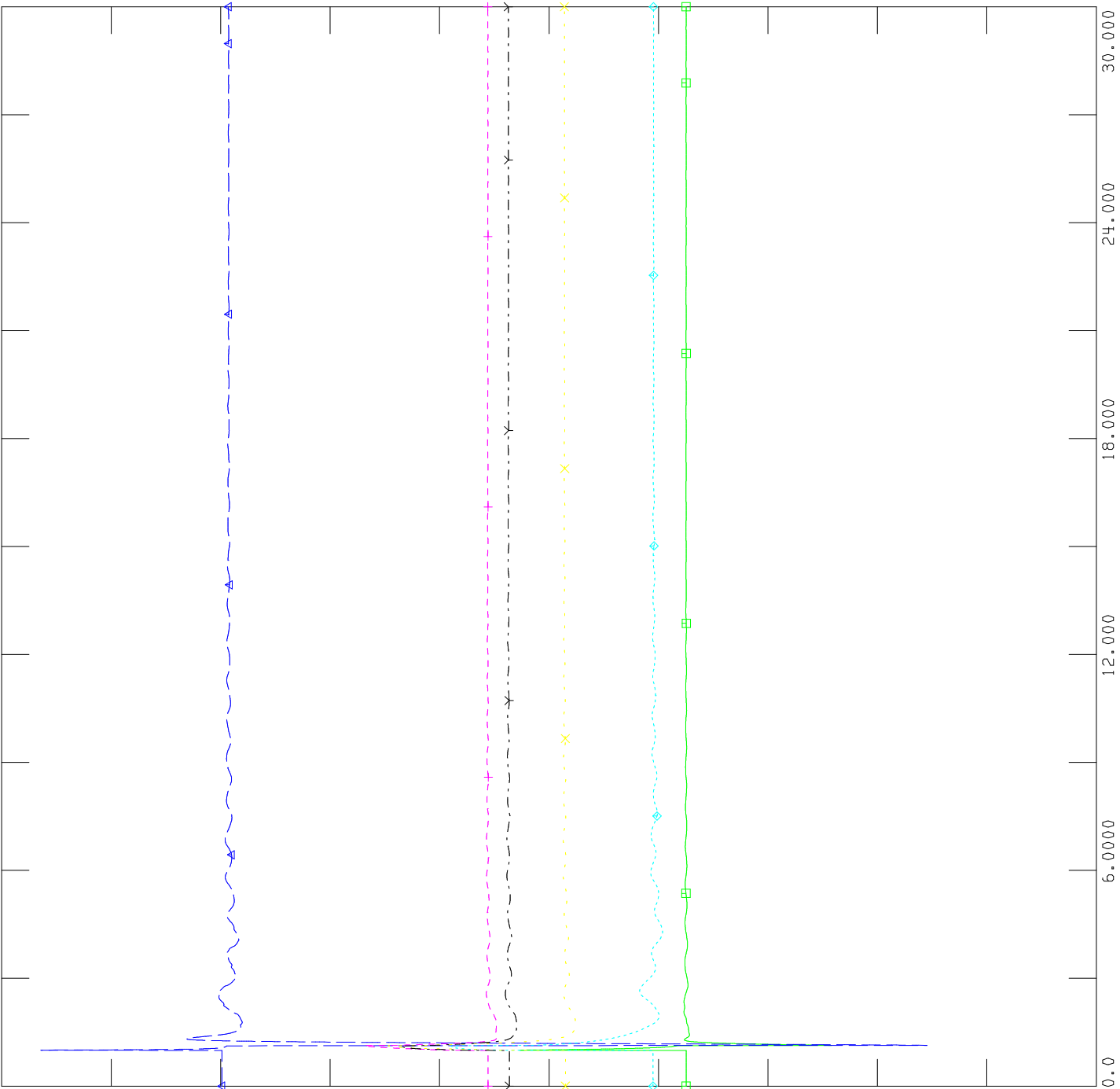
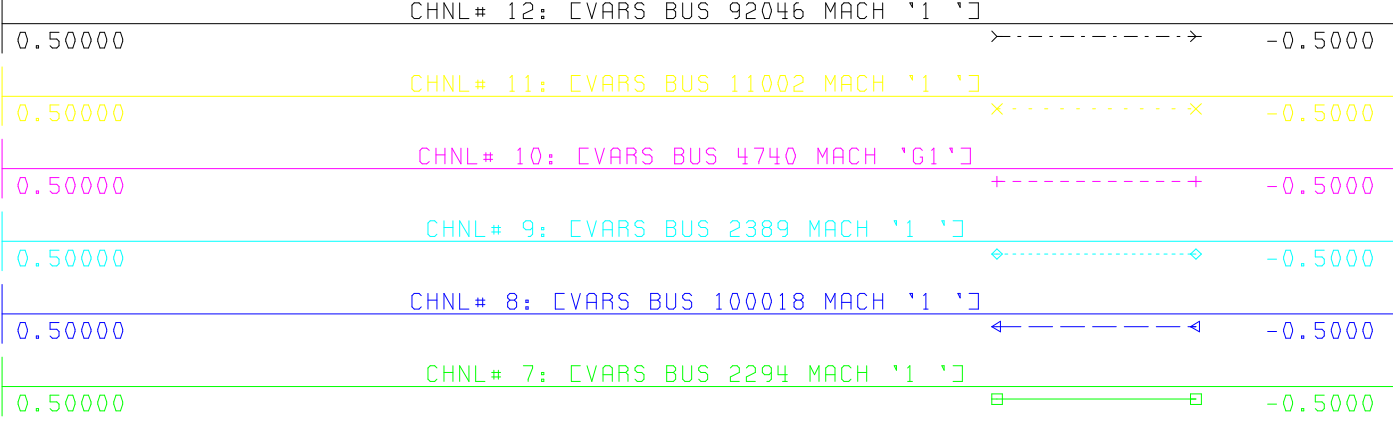


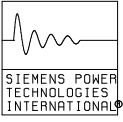
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_612L.out





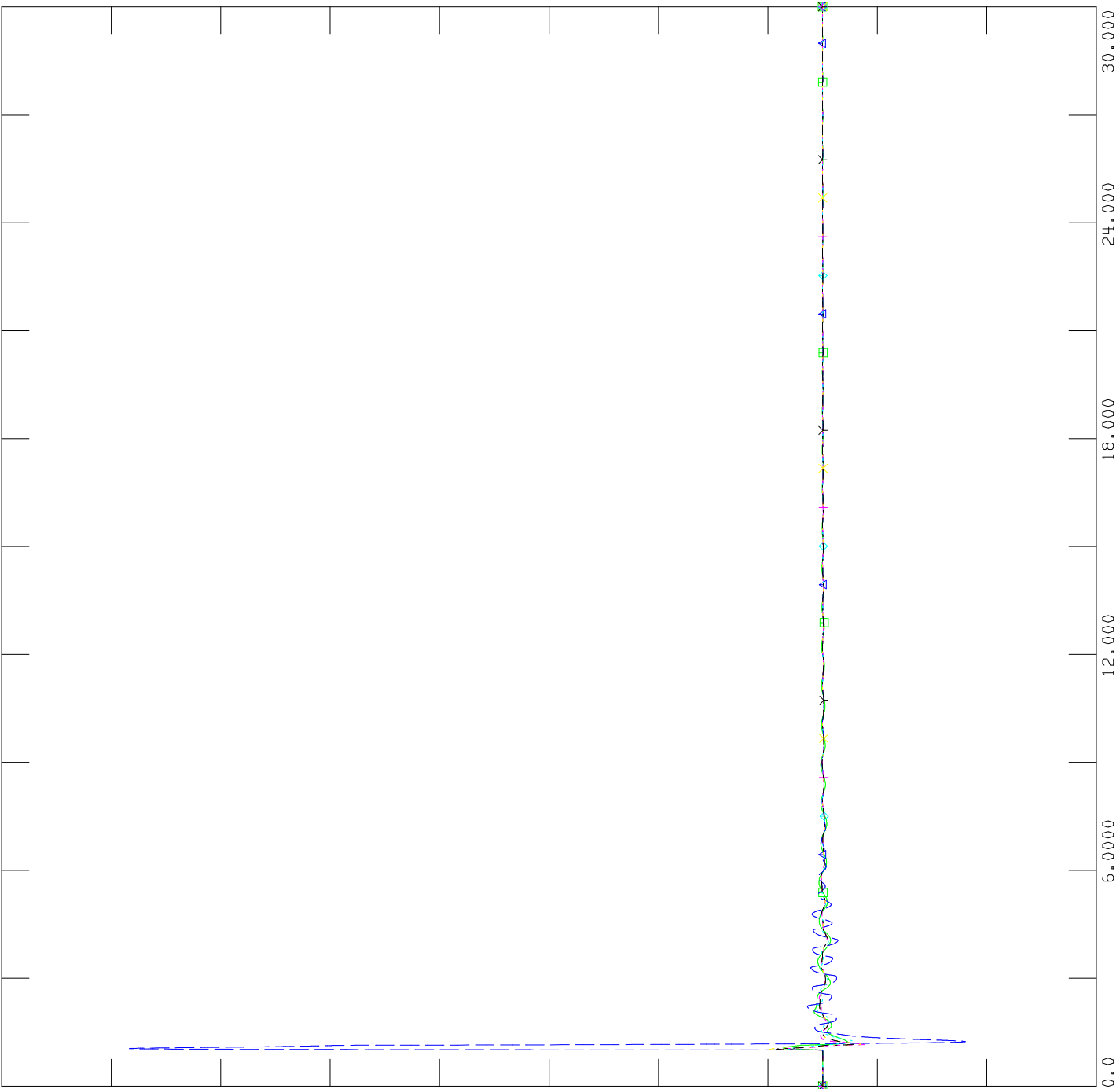
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_612L.out

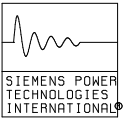




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_612L.out

Channel	CFREQ	Component	Value
CHNL# 18	92046	CMCBRIDE6	0.6900
CHNL# 17	11002	CGARDNG2	0.5750
CHNL# 16	4740	CARD_07	1.0000
CHNL# 15	2389	CHILLRIDG	25.0000
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900

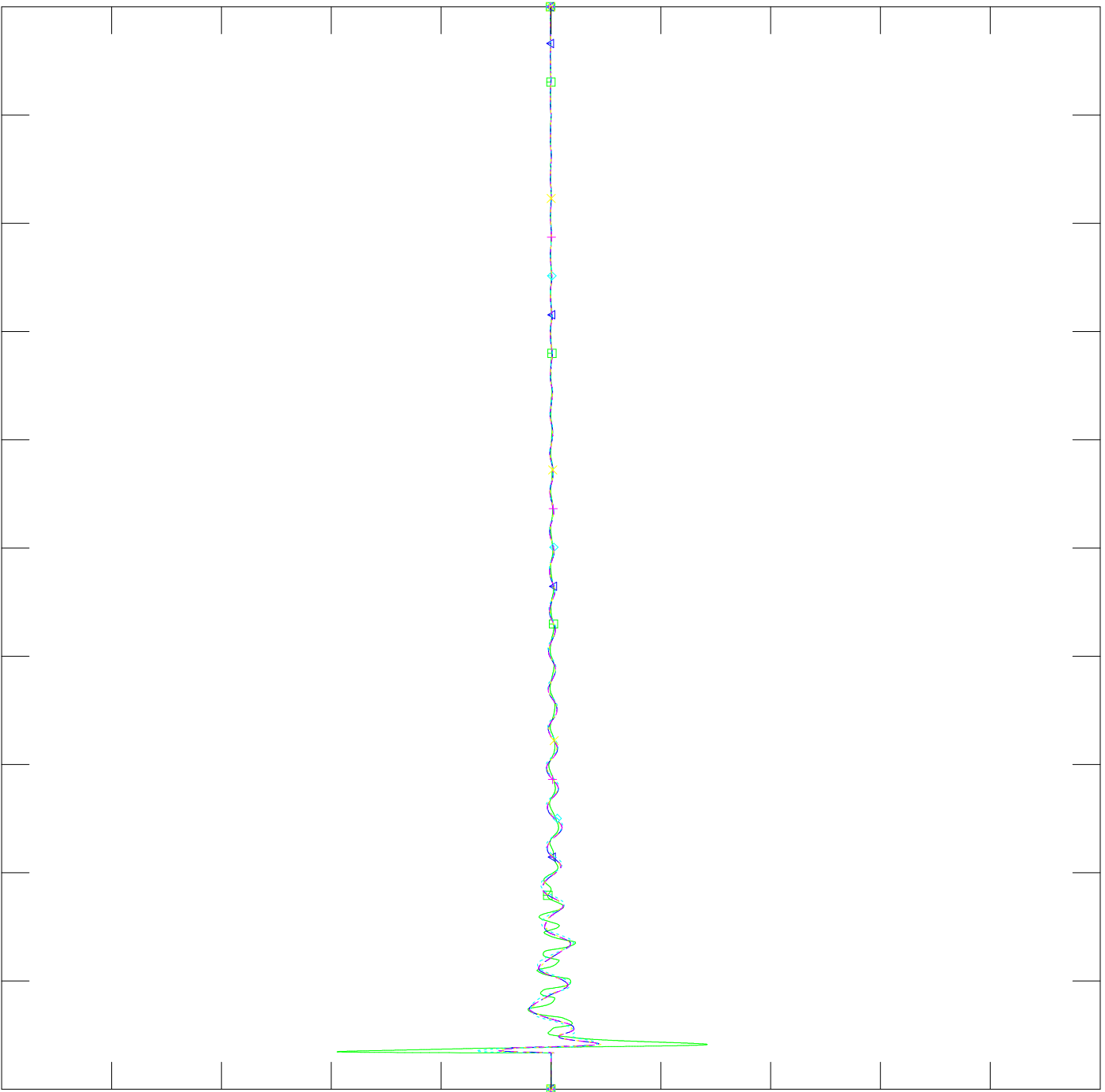




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_612L.out

WED, NOV 17 2010 16:44
 BUS FREQUENCY

Channel	Frequency (Hz)	Phase (degrees)
CHNL# 23: CFREQ	270 [SUFFIEL7	138.00]]
CHNL# 22: CFREQ	680 [MEDICIN7	138.00]]
CHNL# 21: CFREQ	271 [BULLS H7	138.00]]
CHNL# 20: CFREQ	269 [BURDETT7	138.00]]
CHNL# 19: CFREQ	31 [FINCAST7	138.00]]

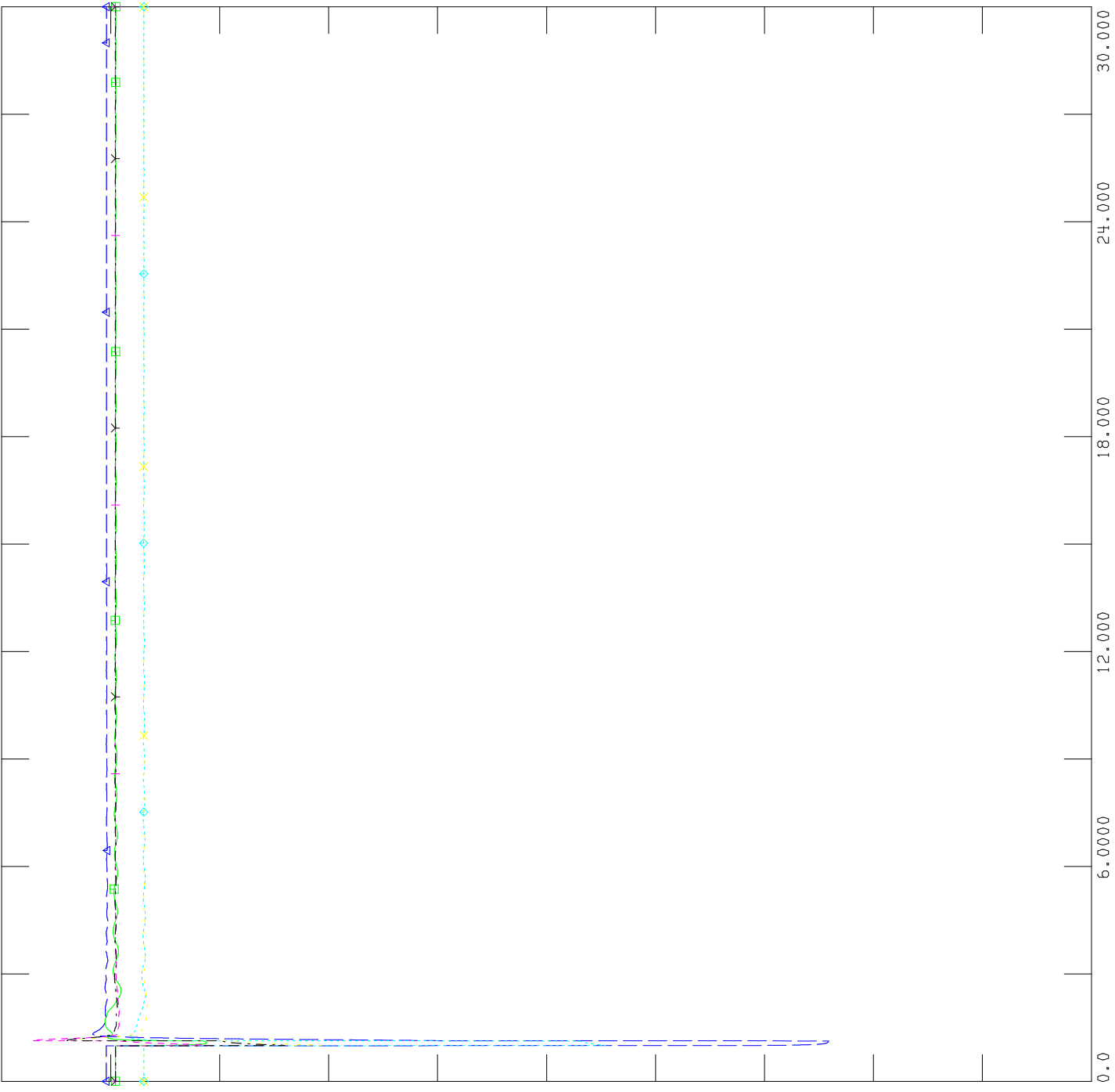


C-5-12



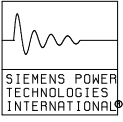
FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513&SATR_612L.out

1.1500	CHNL# 29: EVOLT	92046	CMCBRIDE6	0.6900	0.0
1.1500	CHNL# 28: EVOLT	11002	EGARDNG2	0.5750	0.0
1.1500	CHNL# 27: EVOLT	4740	CARD_07	1.0000	0.0
1.1500	CHNL# 26: EVOLT	2389	CHILLRIDG	25.000	0.0
1.1500	CHNL# 25: EVOLT	100018	CPURPLESP	0.5750	0.0
1.1500	CHNL# 24: EVOLT	2294	CTOTHILL2	0.6900	0.0



WED, NOV 17 2010 16:45
 BUS VOLTAGE

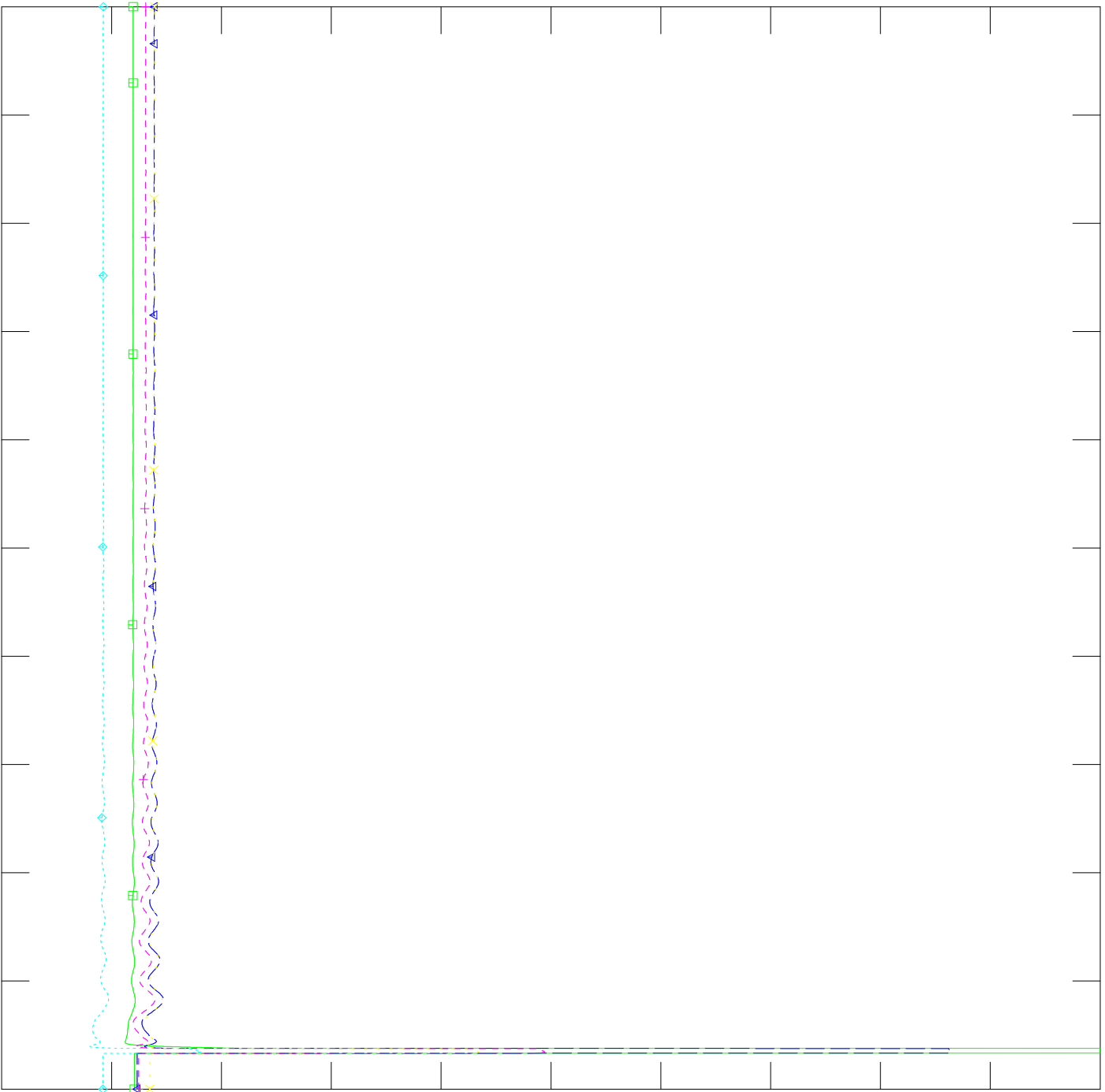
TIME (SECONDS) C-5-13



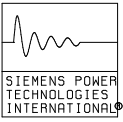
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_612L.out

WED, NOV 17 2010 16:46
BUS VOLTAGE

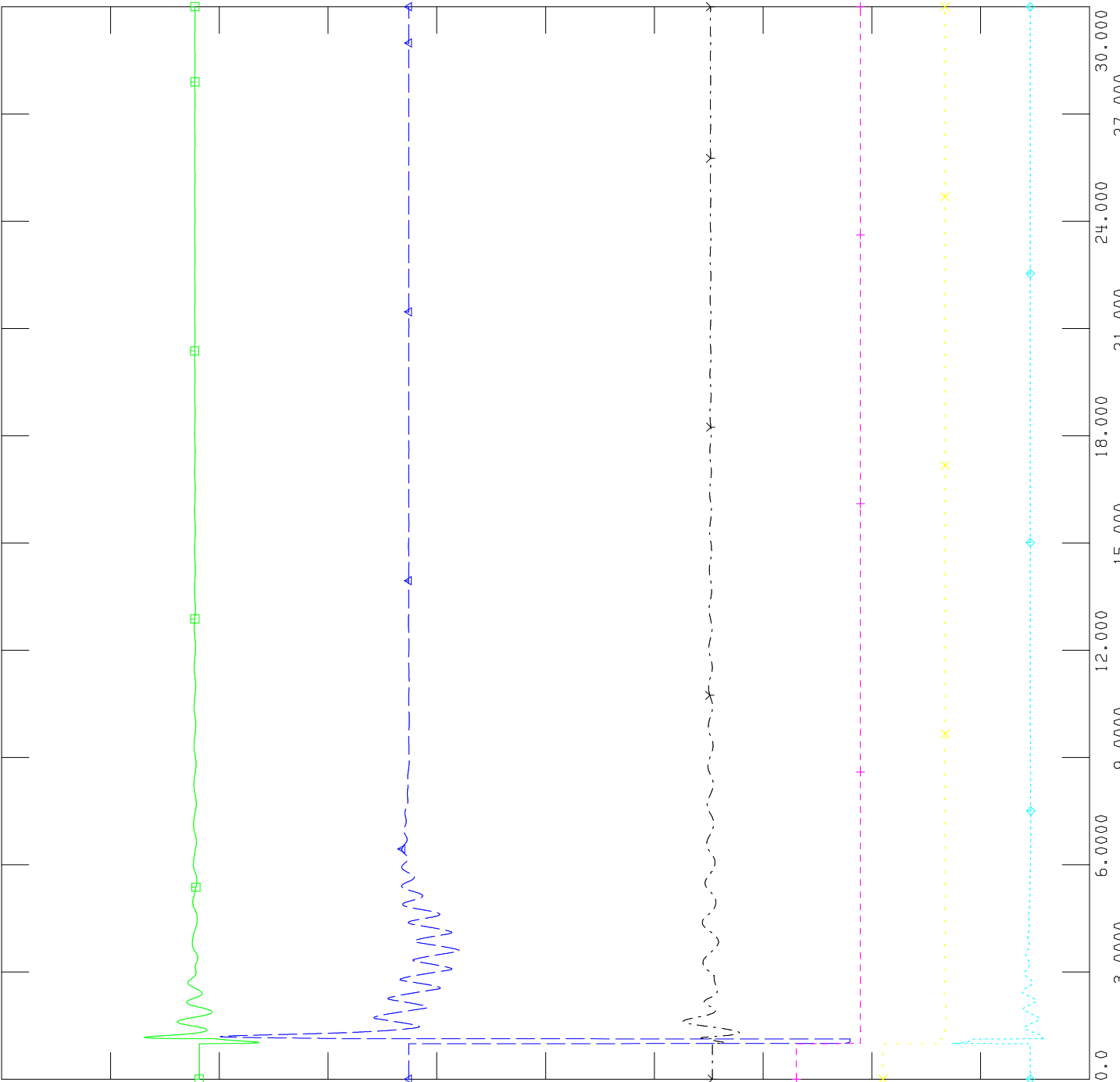
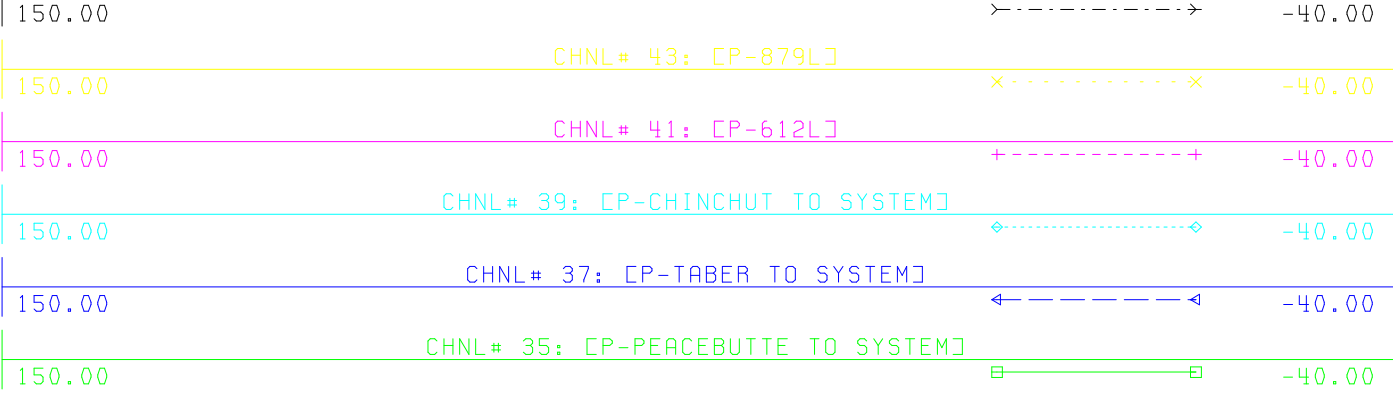
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



C-5-14



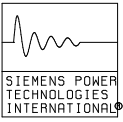
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_612L.out
CHNL# 45: [P-880L]



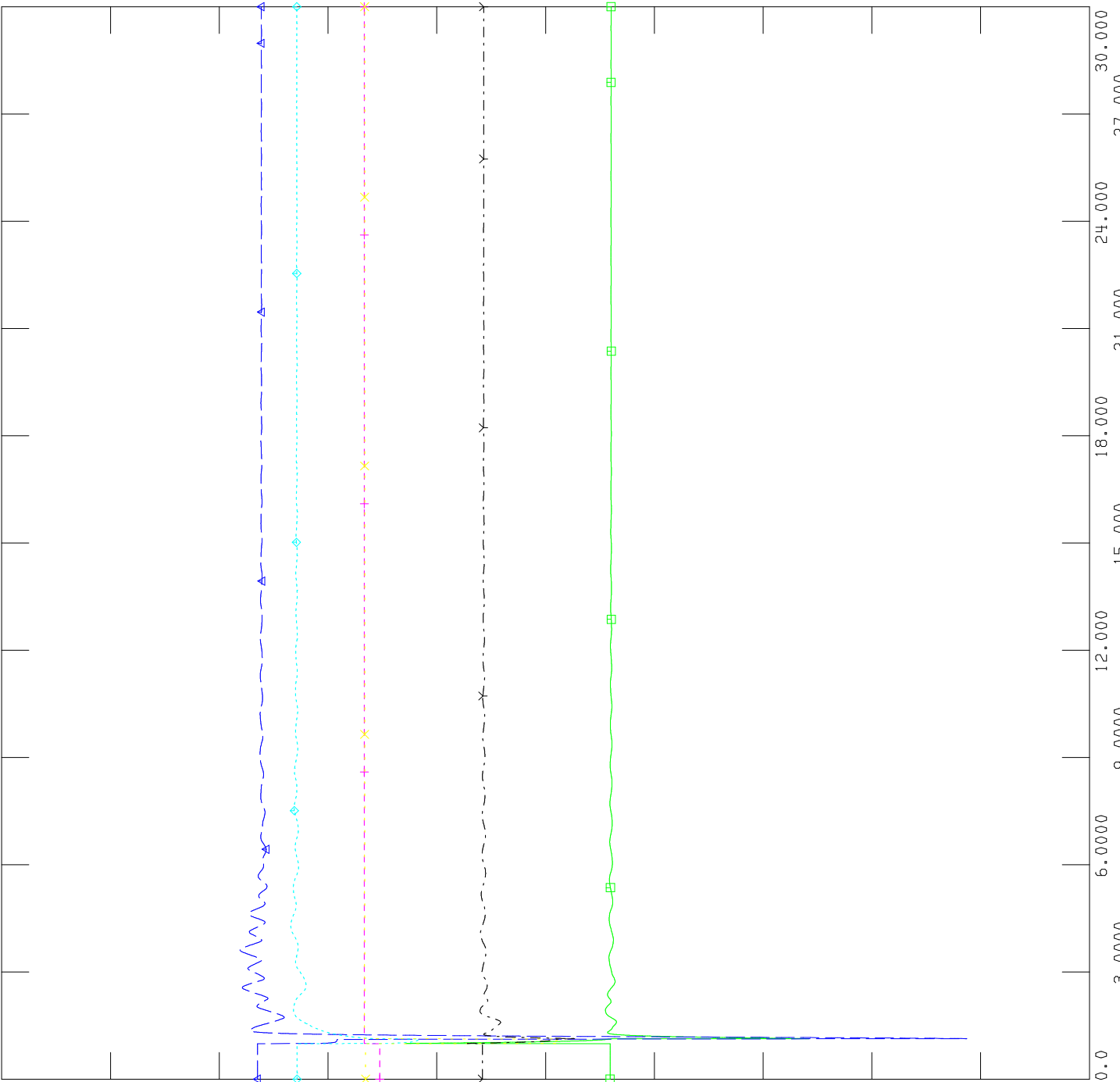
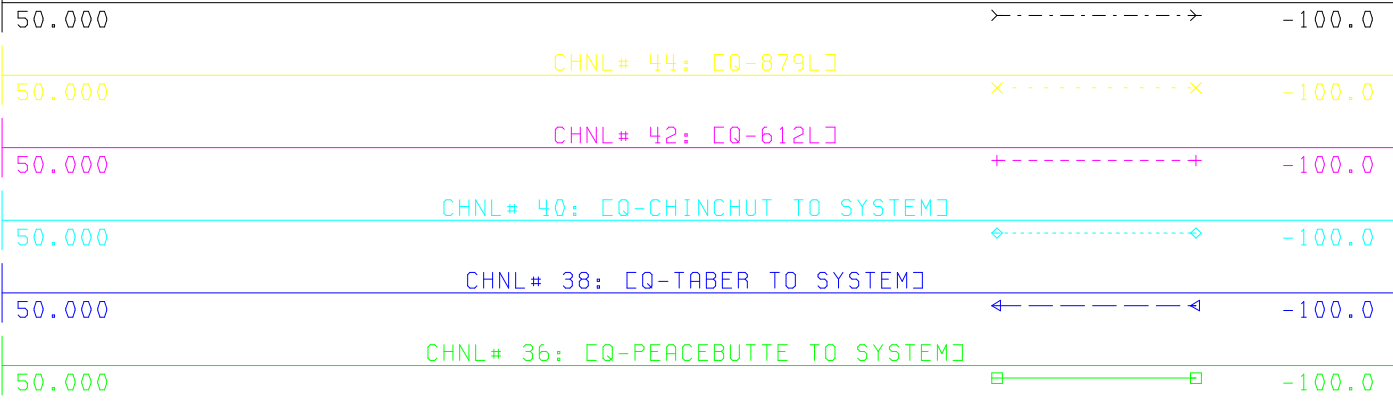
WED, NOV 17 2010 16:47
BRANCH ACTIVE POWER

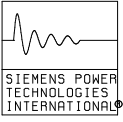
C-5-15

TIME (SECONDS)

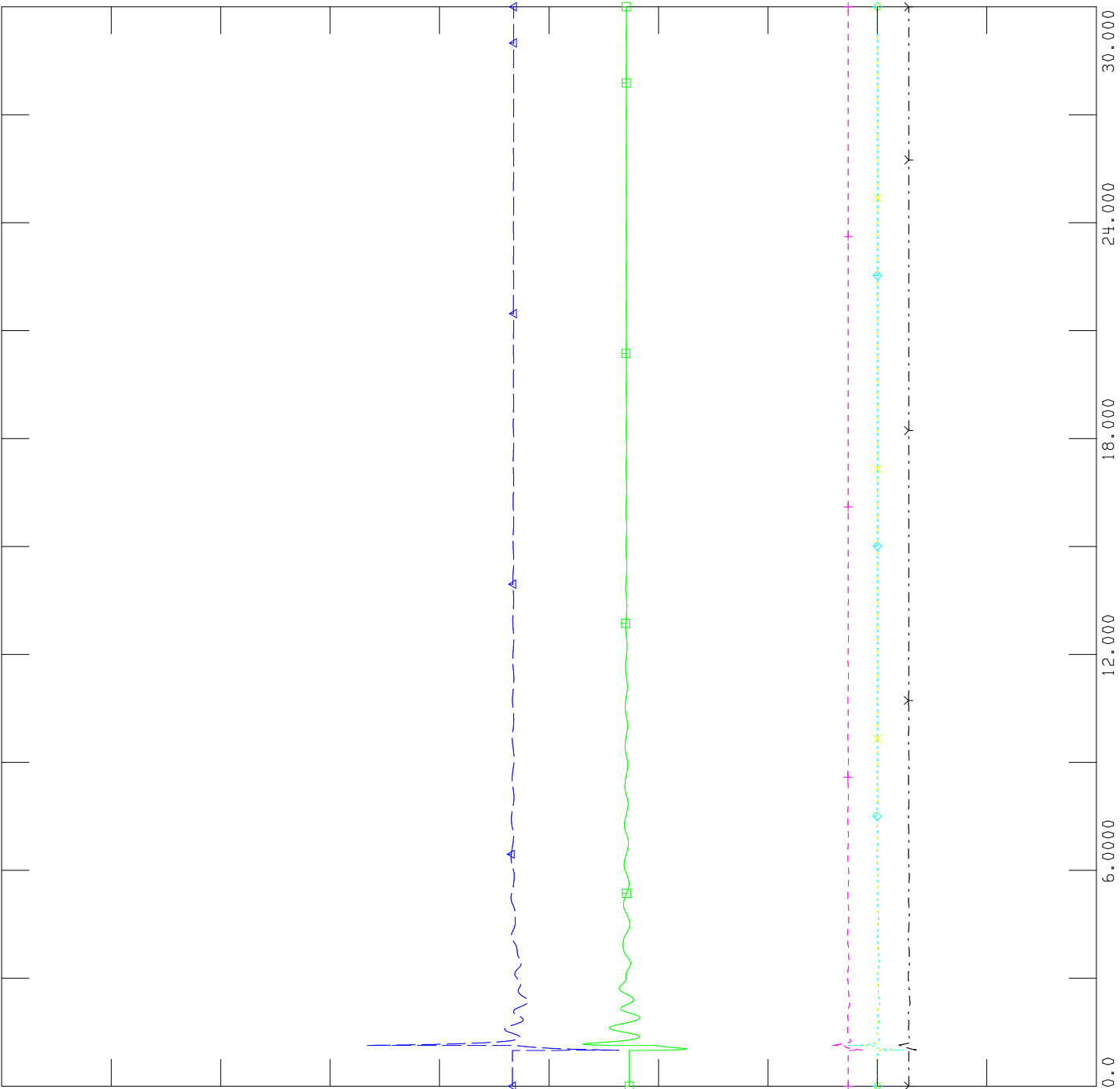
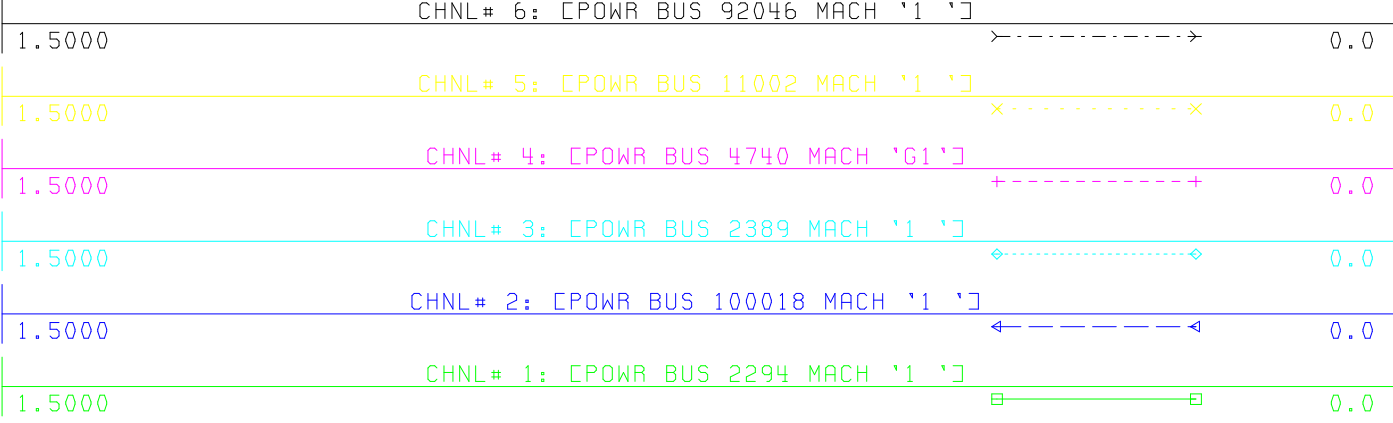


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_612L.out
CHNL# 46: [Q-880L]



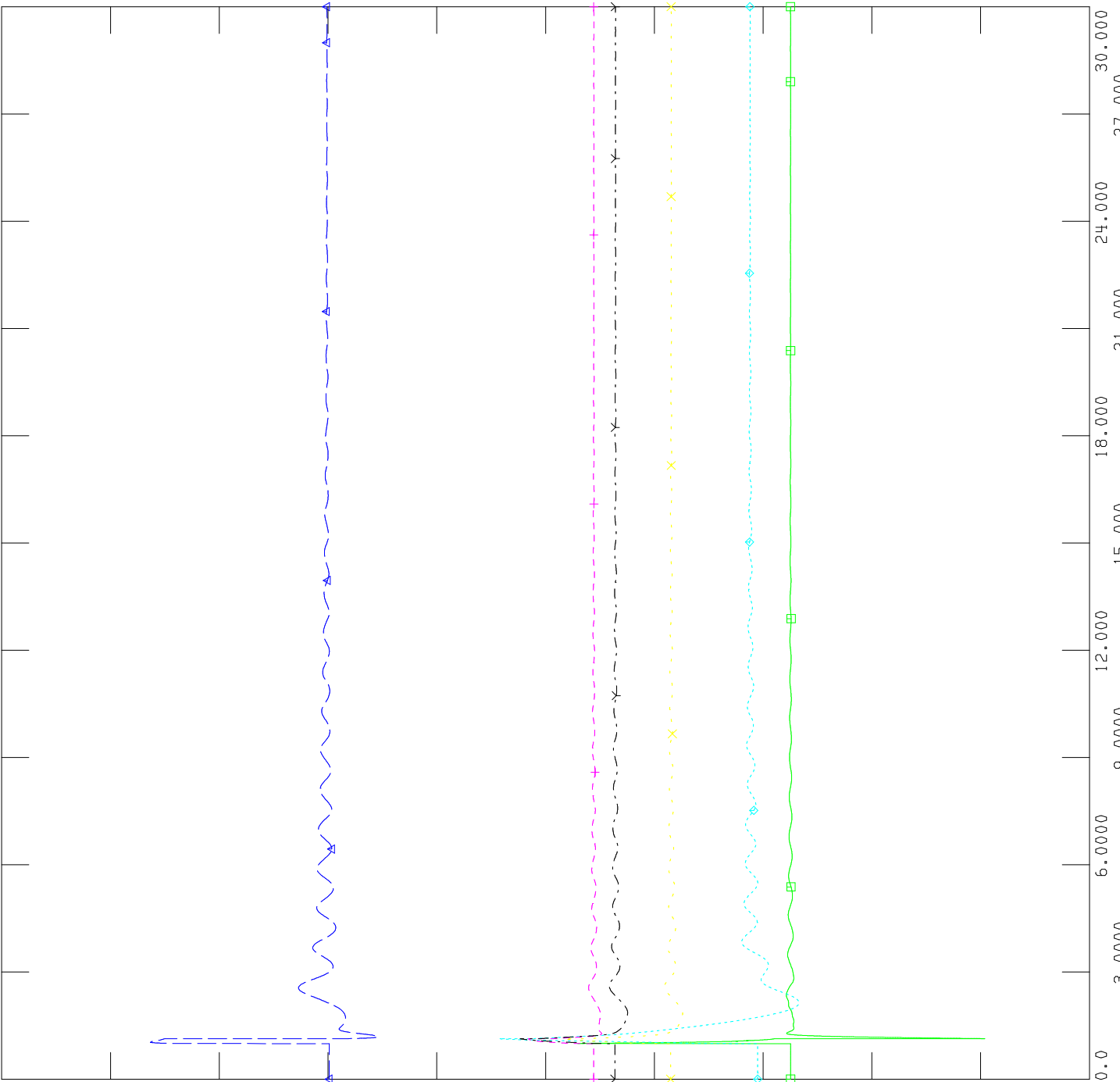
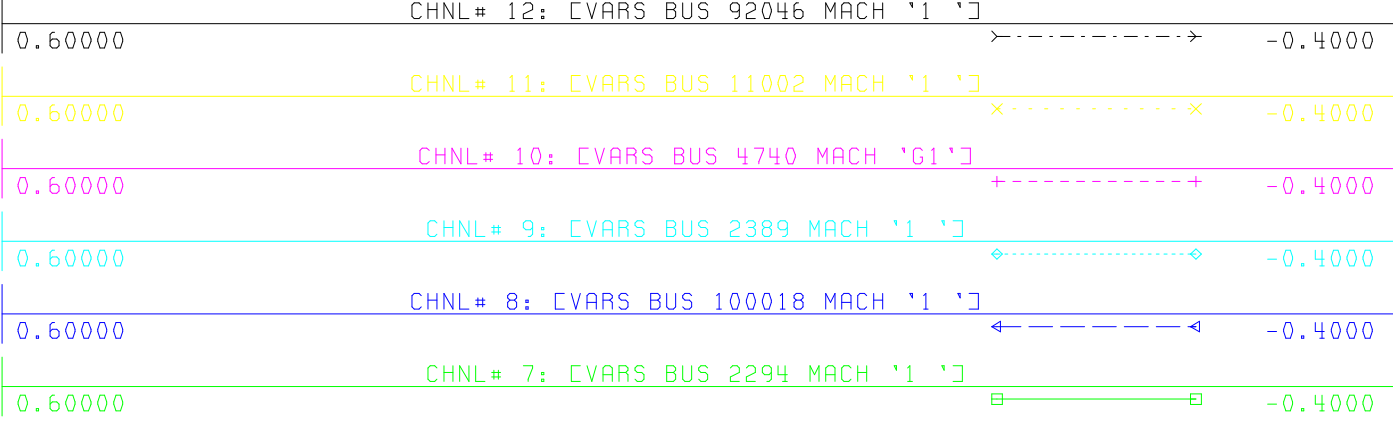


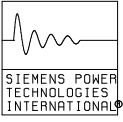
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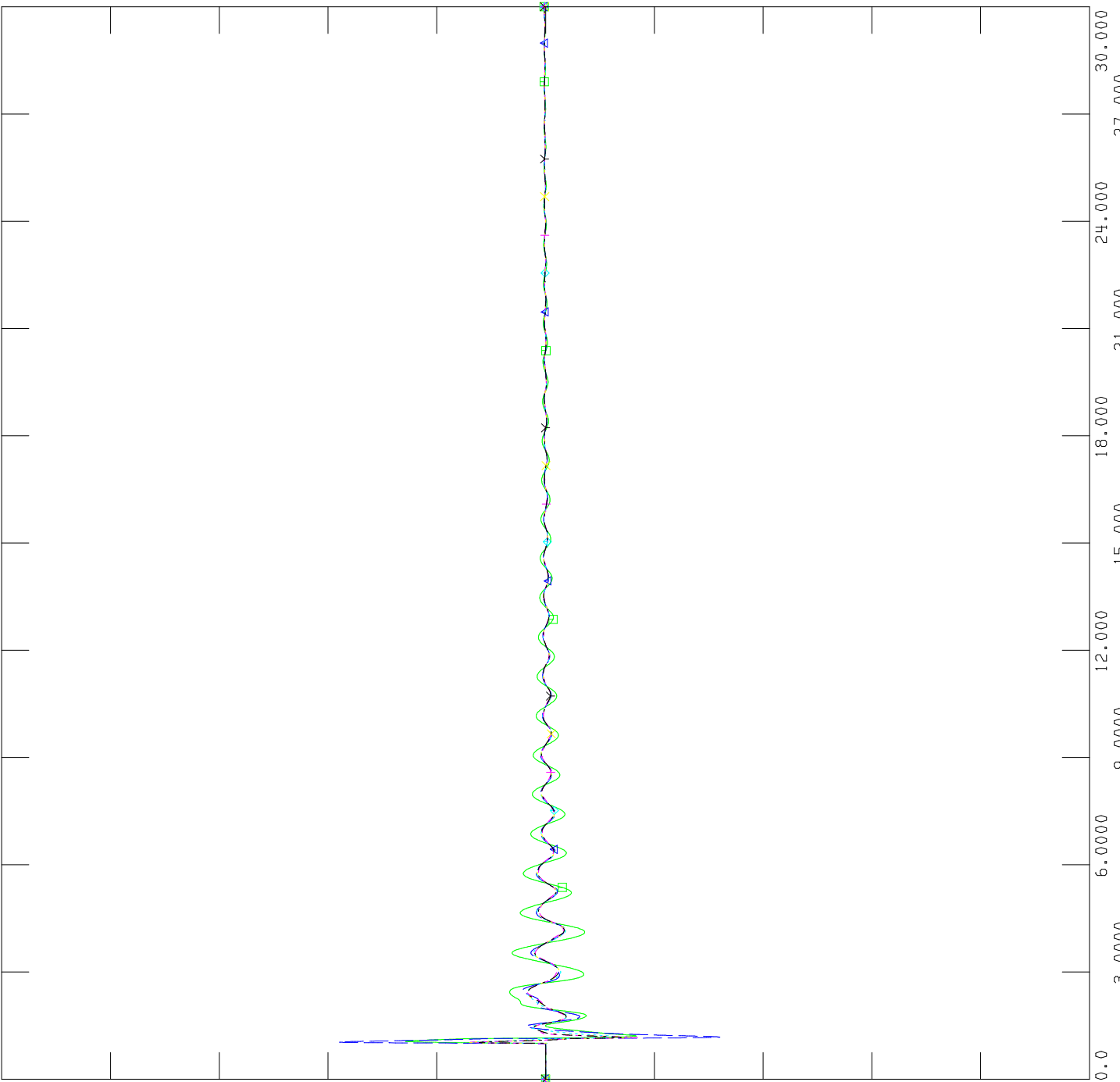
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_760L.out

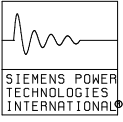




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_760L.out

0.00670	CHNL# 18: CFREQ 92046 EMCBRIDE6 0.6900]]	-0.0067
0.00670	CHNL# 17: CFREQ 11002 EGARDNG2 0.5750]]	-0.0067
0.00670	CHNL# 16: CFREQ 4740 CARD_07 1.0000]]	-0.0067
0.00670	CHNL# 15: CFREQ 2389 CHILLRIDG 25.000]]	-0.0067
0.00670	CHNL# 14: CFREQ 100018 CPURPLESP 0.5750]]	-0.0067
0.00670	CHNL# 13: CFREQ 2294 CTOTHILL2 0.6900]]	-0.0067

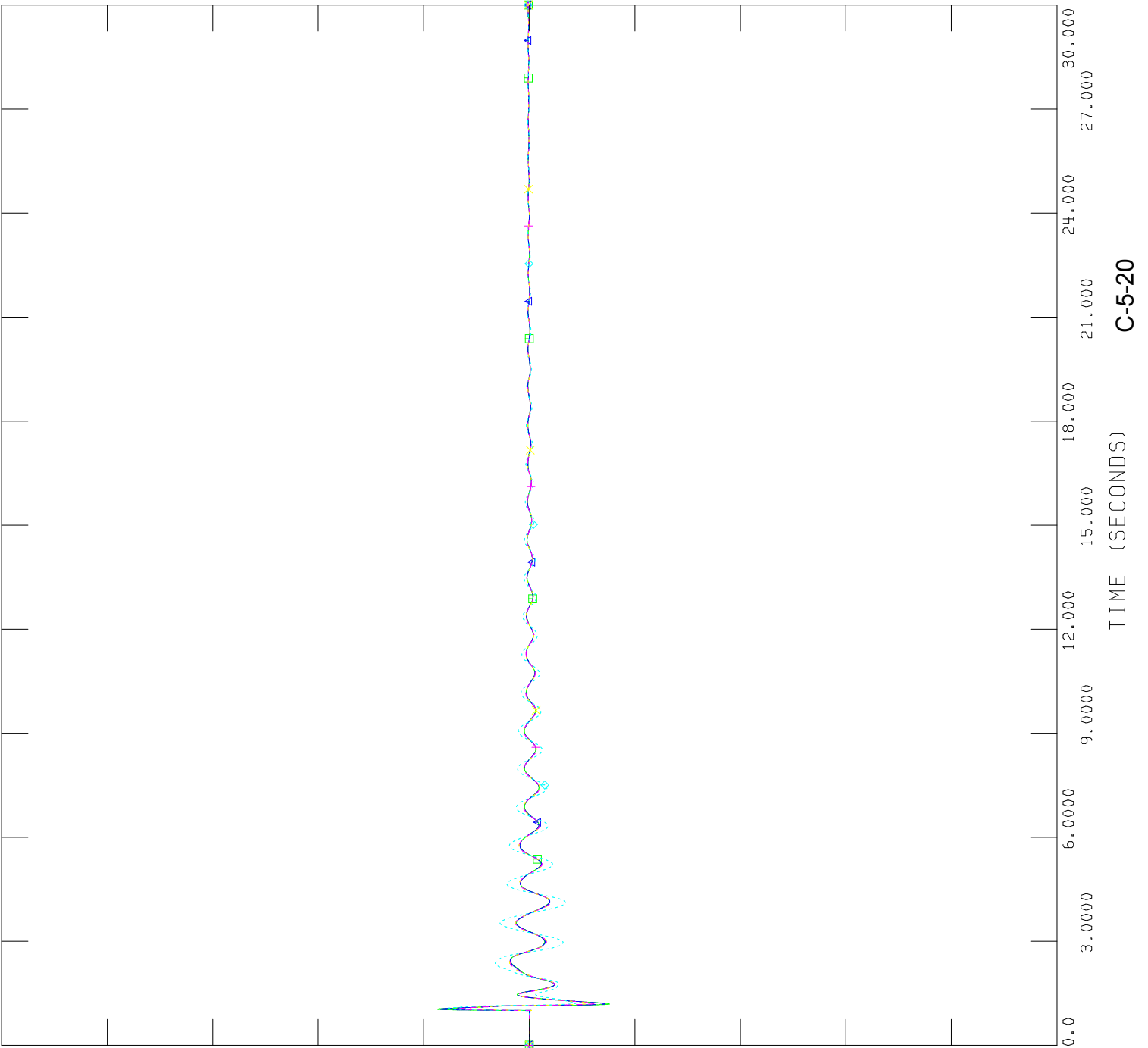




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_760L.out

WED, NOV 17 2010 16:52
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270 CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680 CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271 CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 20: CFREQ	269 CBURDETT7	138.00]]	←-----←	-0.0067
0.00670	CHNL# 19: CFREQ	31 CFINCAST7	138.00]]	▣-----▣	-0.0067

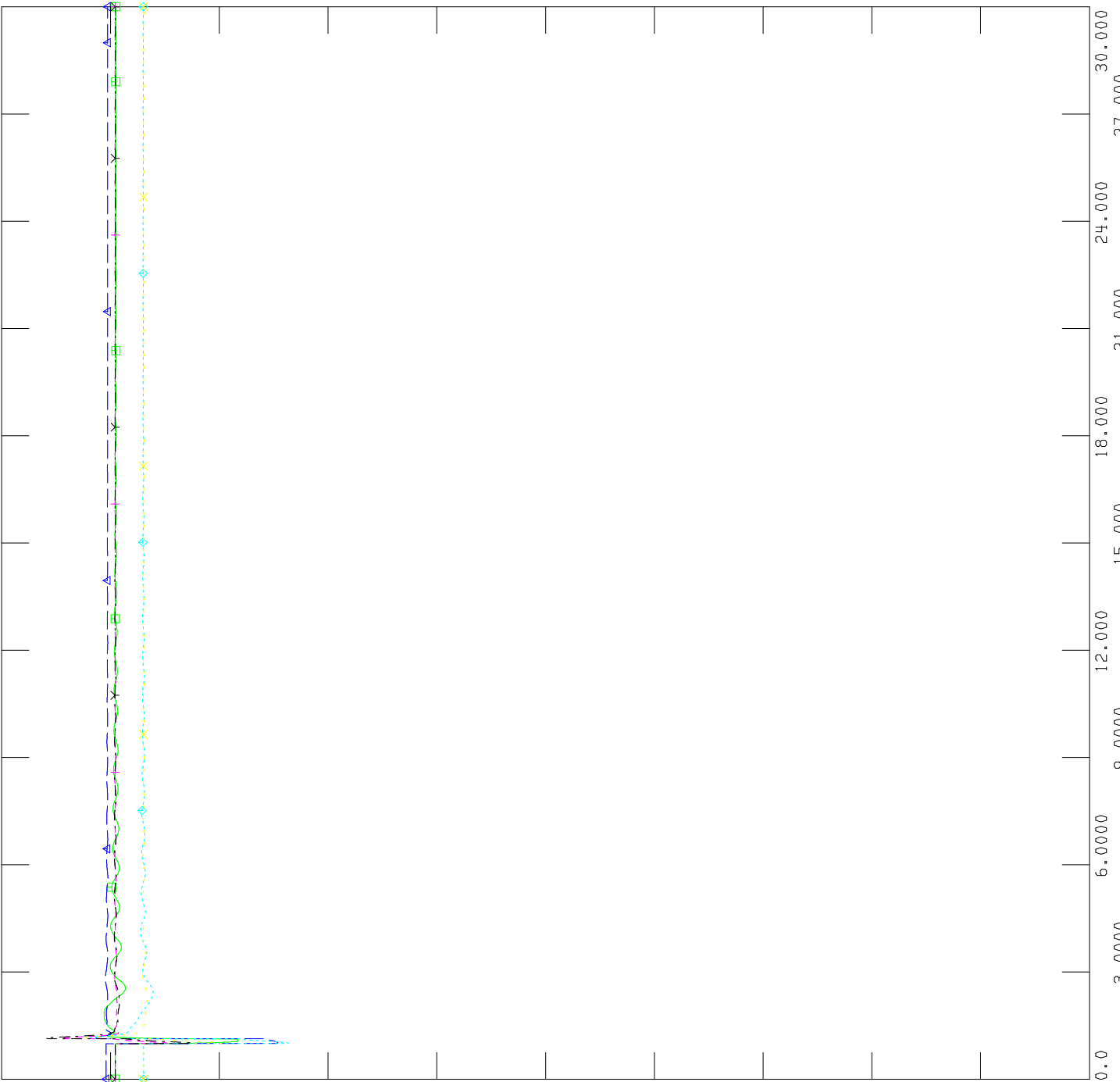


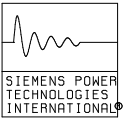
C-5-20



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513&SATR_760L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [MCMBRIDE6]	0.6900
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750
CHNL# 27	EVOLT 4740 [CARD_07]	1.0000
CHNL# 26	EVOLT 2389 [CHILLRIDG]	25.0000
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900

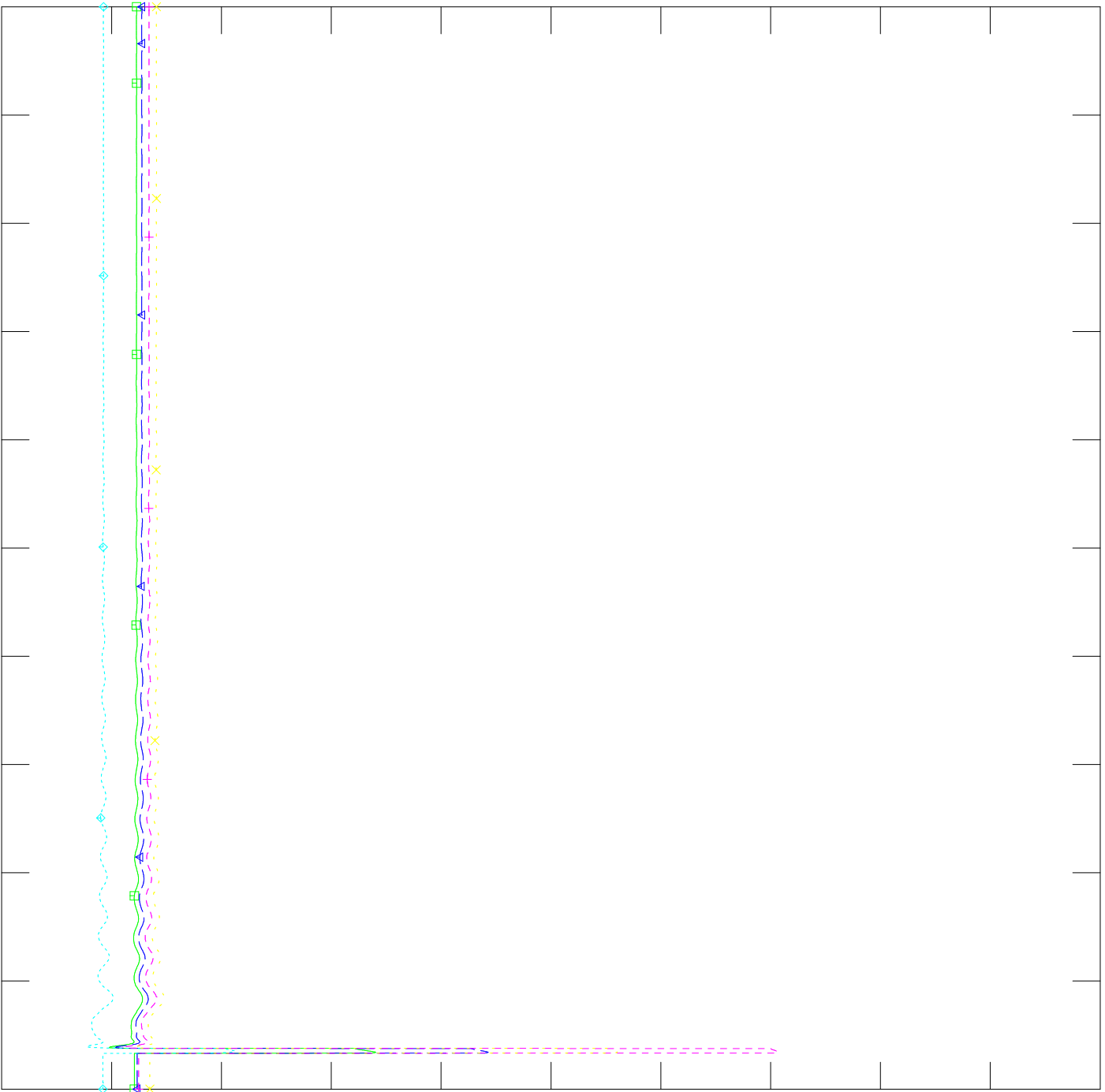




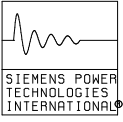
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_760L.out

WED, NOV 17 2010 16:53
BUS VOLTAGE

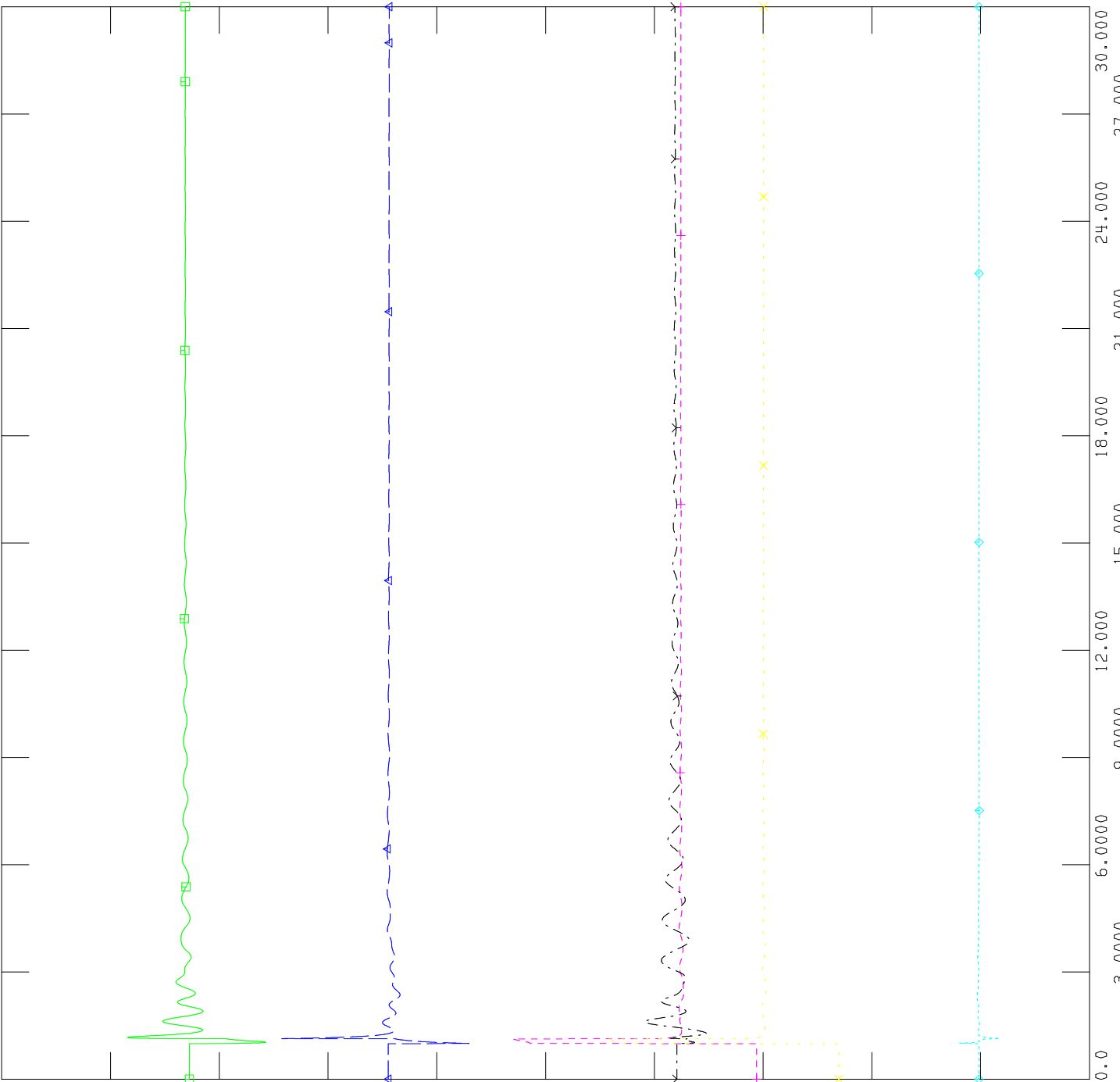
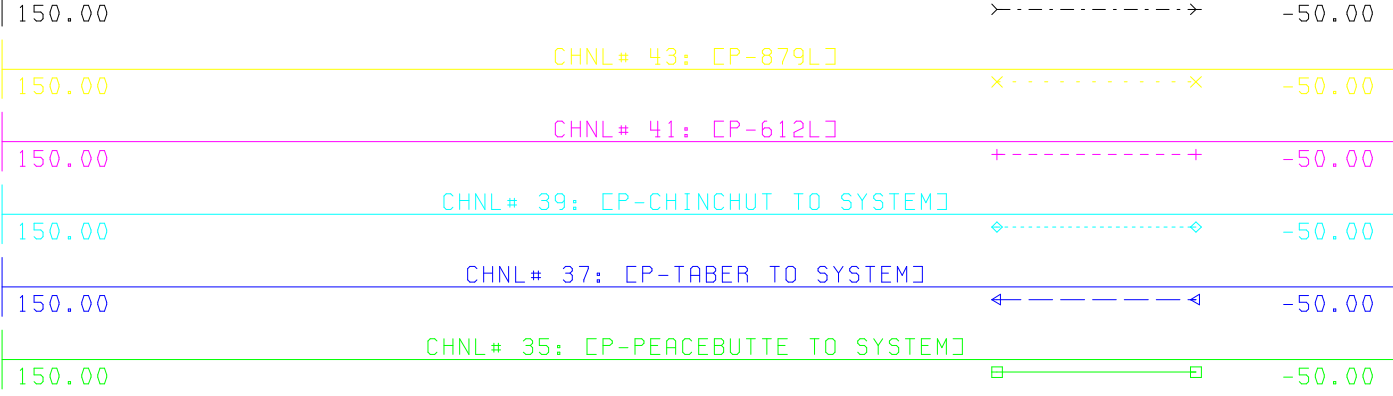
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



C-5-22



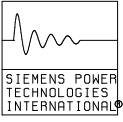
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_760L.out
CHNL# 45: CP-880L]



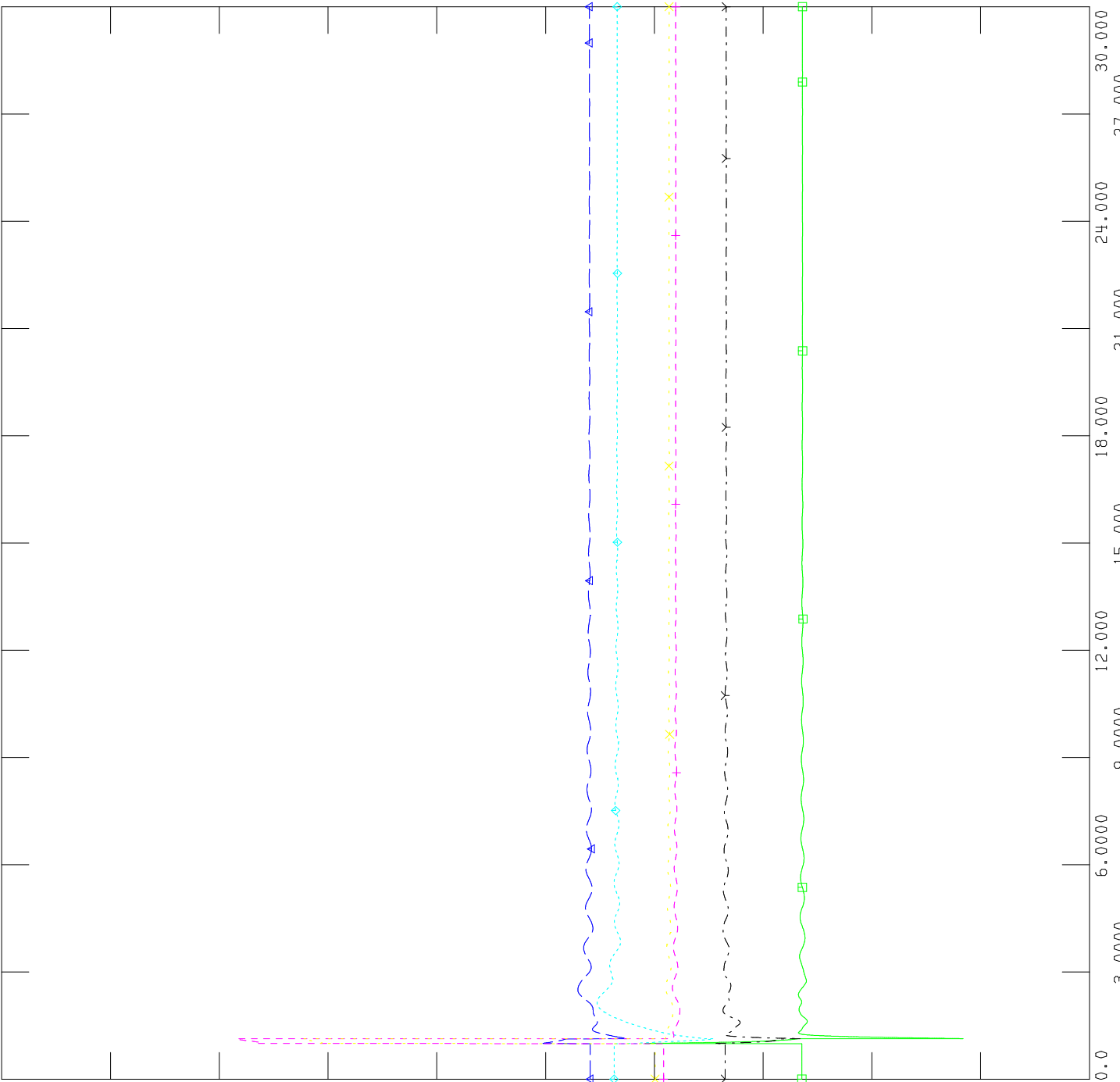
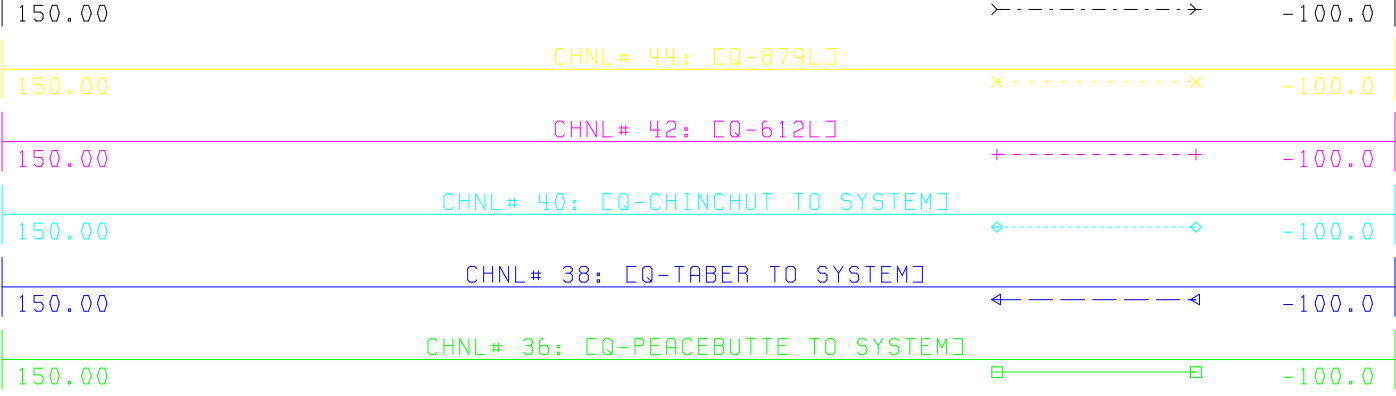
WED, NOV 17 2010 16:54
BRANCH ACTIVE POWER

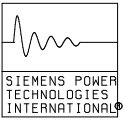
C-5-23

TIME (SECONDS)

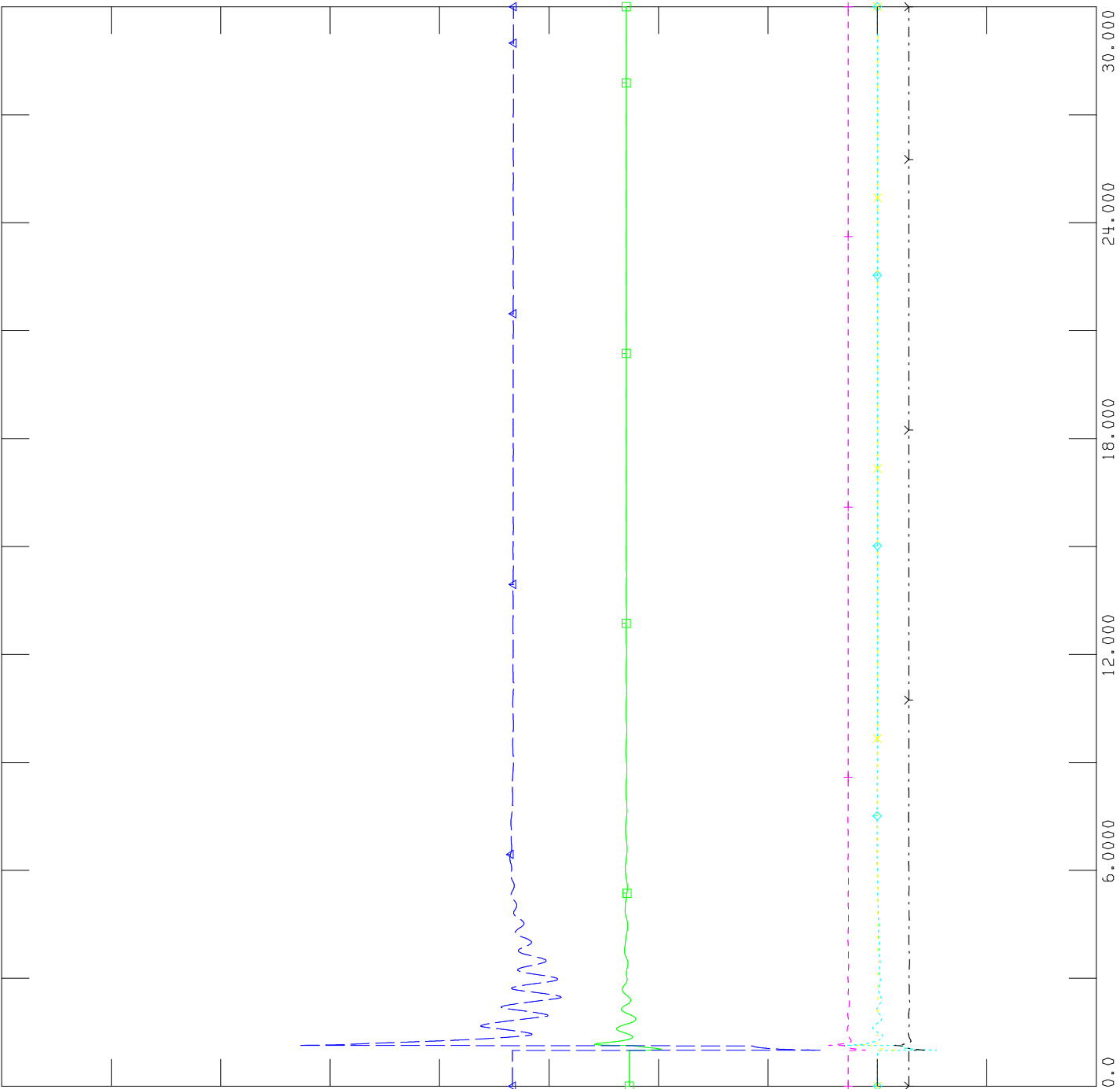
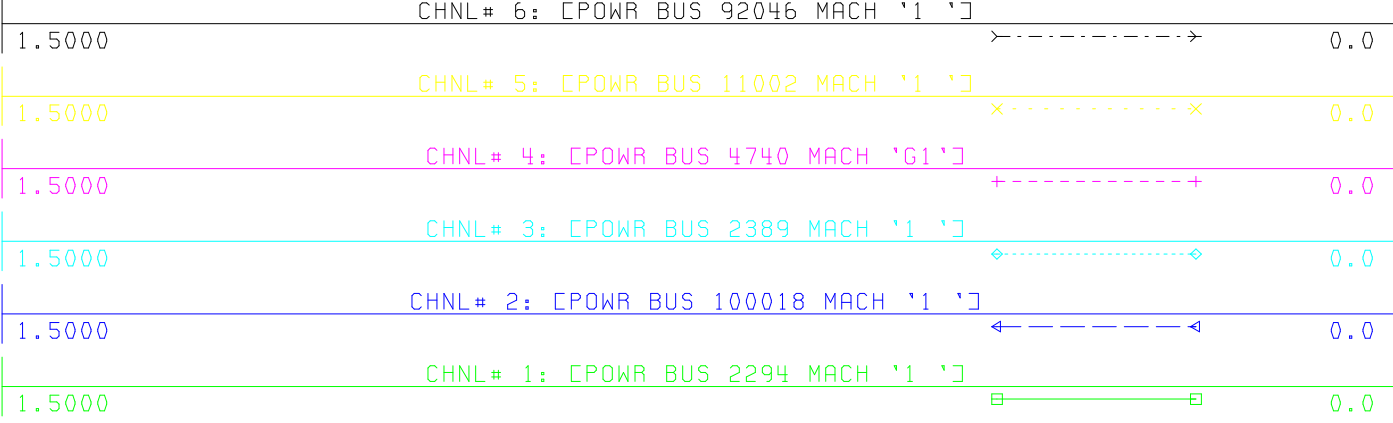


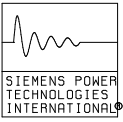
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CHNL# 46: [EQ-880L]



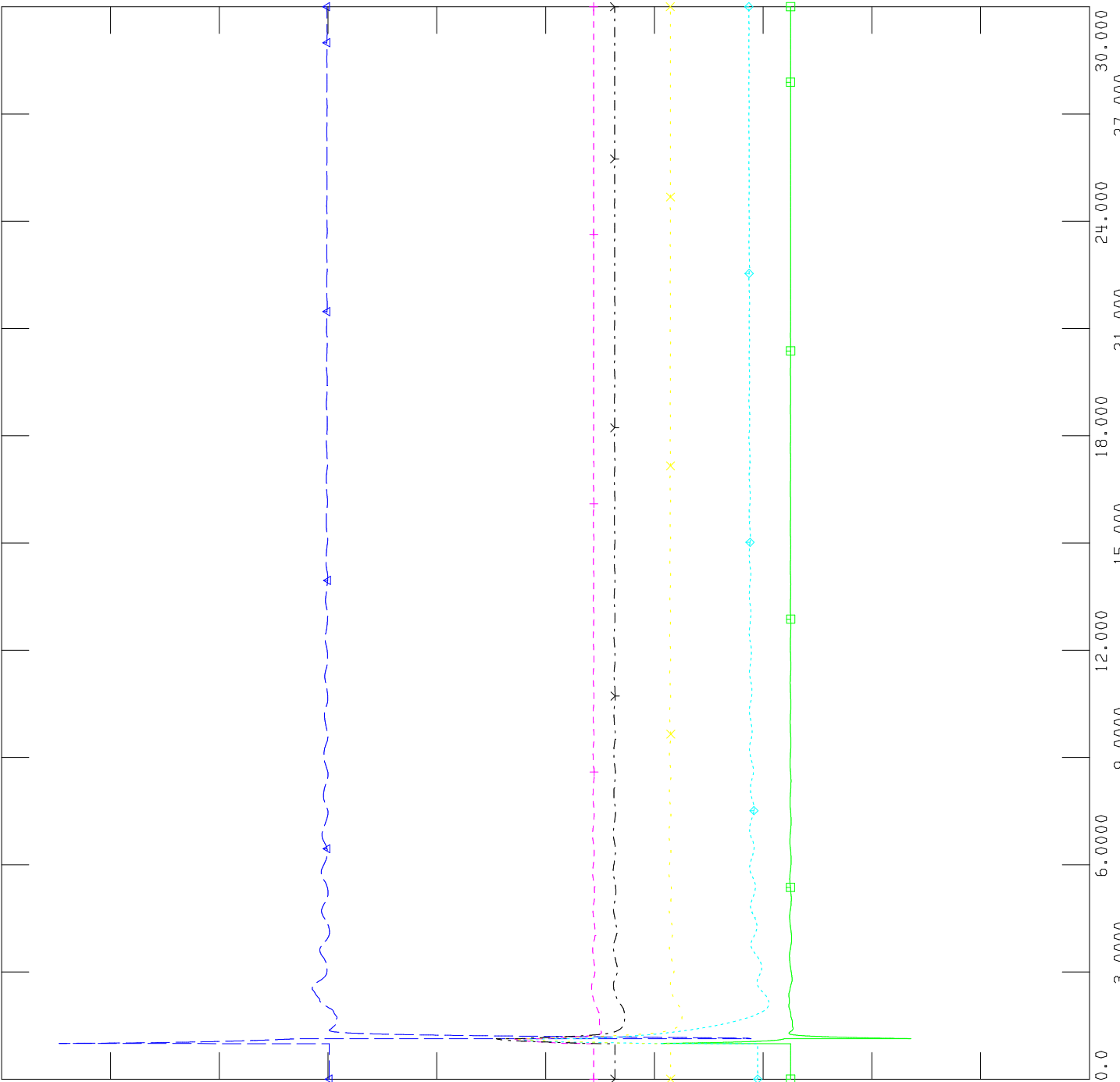
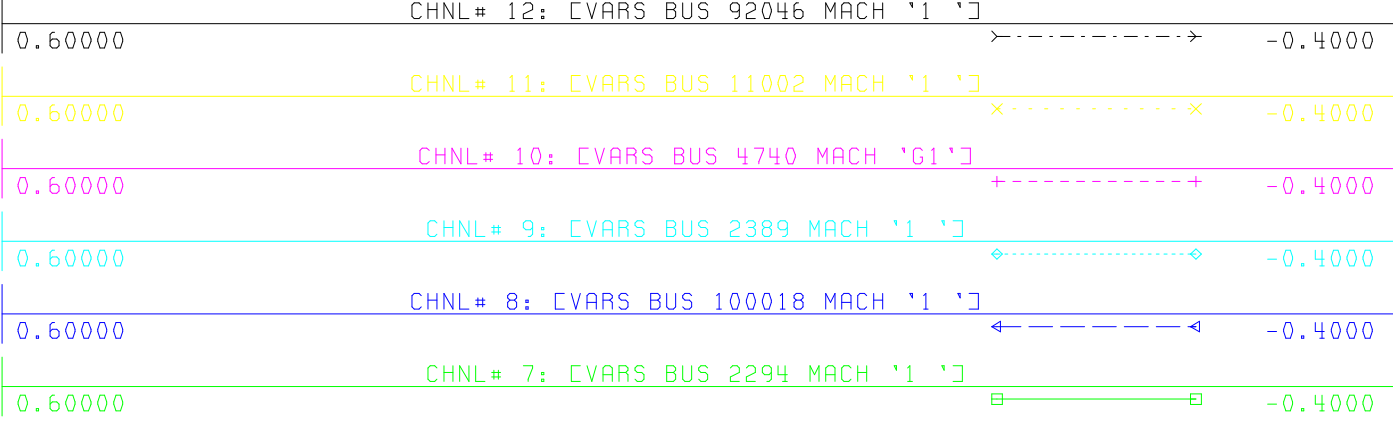


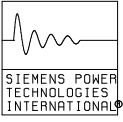
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_879L.out





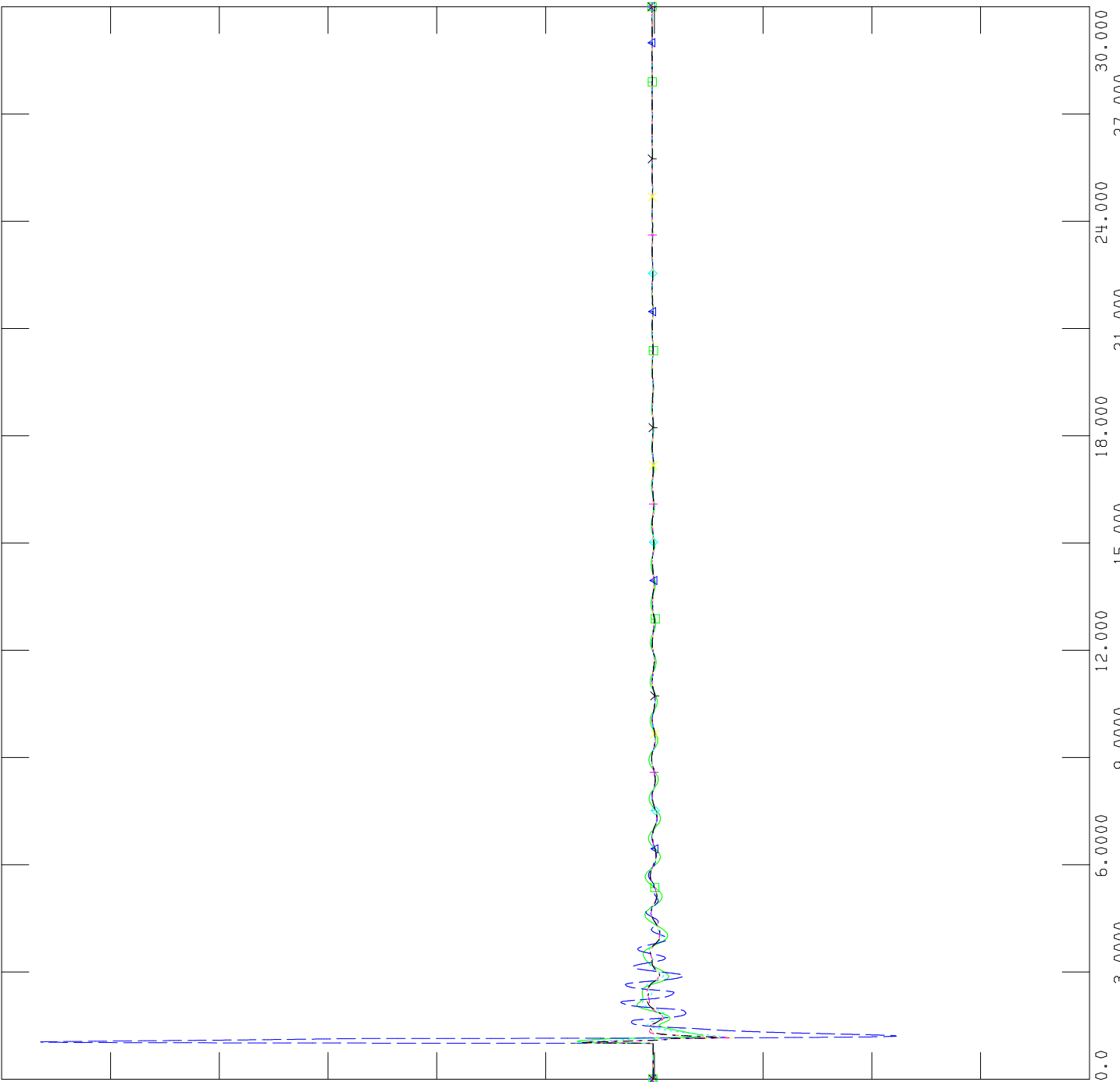
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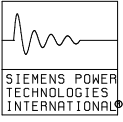




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_879L.out

Channel	CFREQ	Component	Value
CHNL# 18	92046	CMCBRIDE6	0.6900
CHNL# 17	11002	CGARDNG2	0.5750
CHNL# 16	4740	CARD_07	1.0000
CHNL# 15	2389	CHILLRIDG	25.000
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900



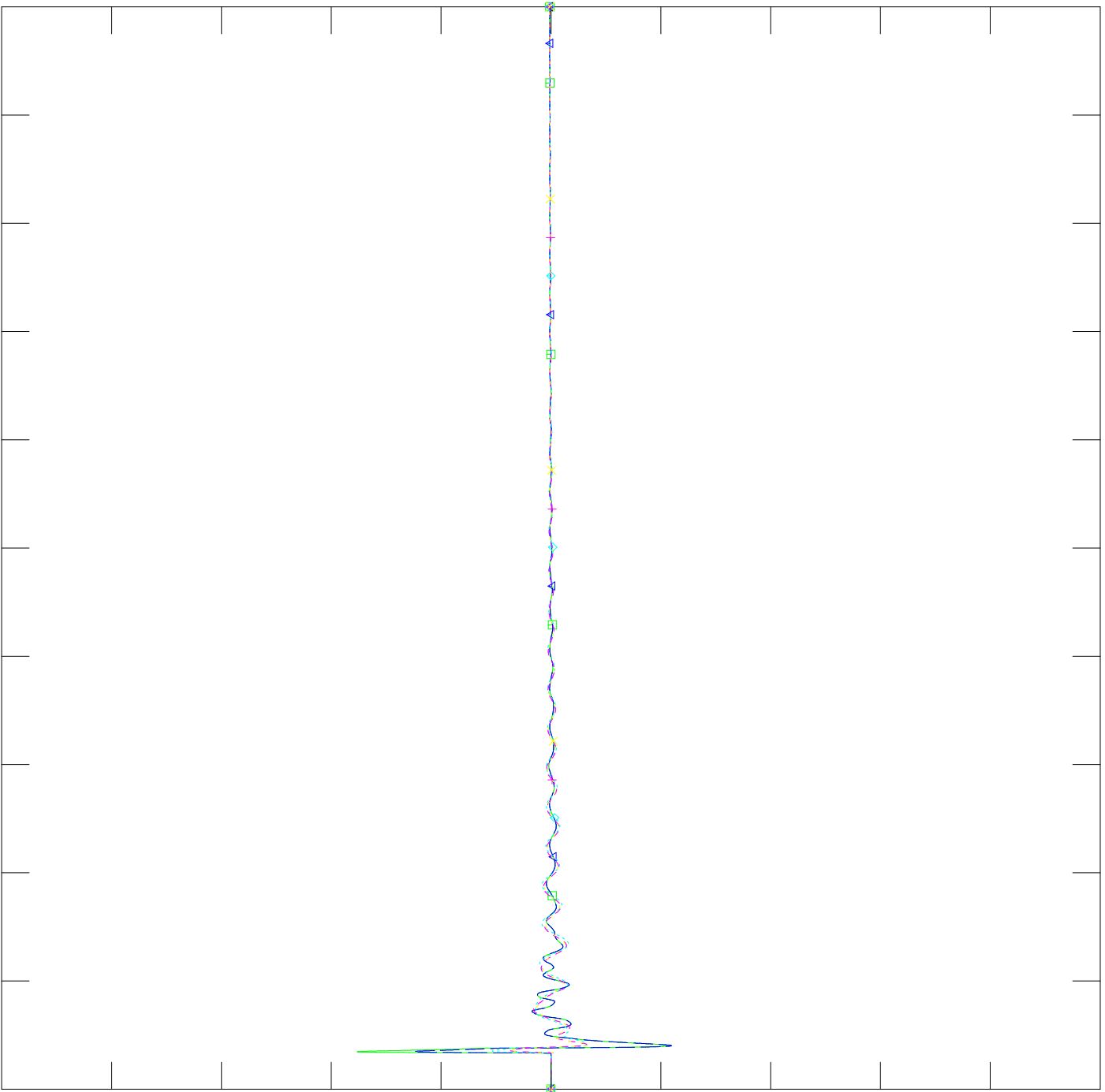


TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
 SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_879L.out

WED, NOV 17 2010 17:00
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270 CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680 CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271 CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 20: CFREQ	269 CBURDETT7	138.00]]	←-----←	-0.0067
0.00670	CHNL# 19: CFREQ	31 CFINCAST7	138.00]]	▣-----▣	-0.0067

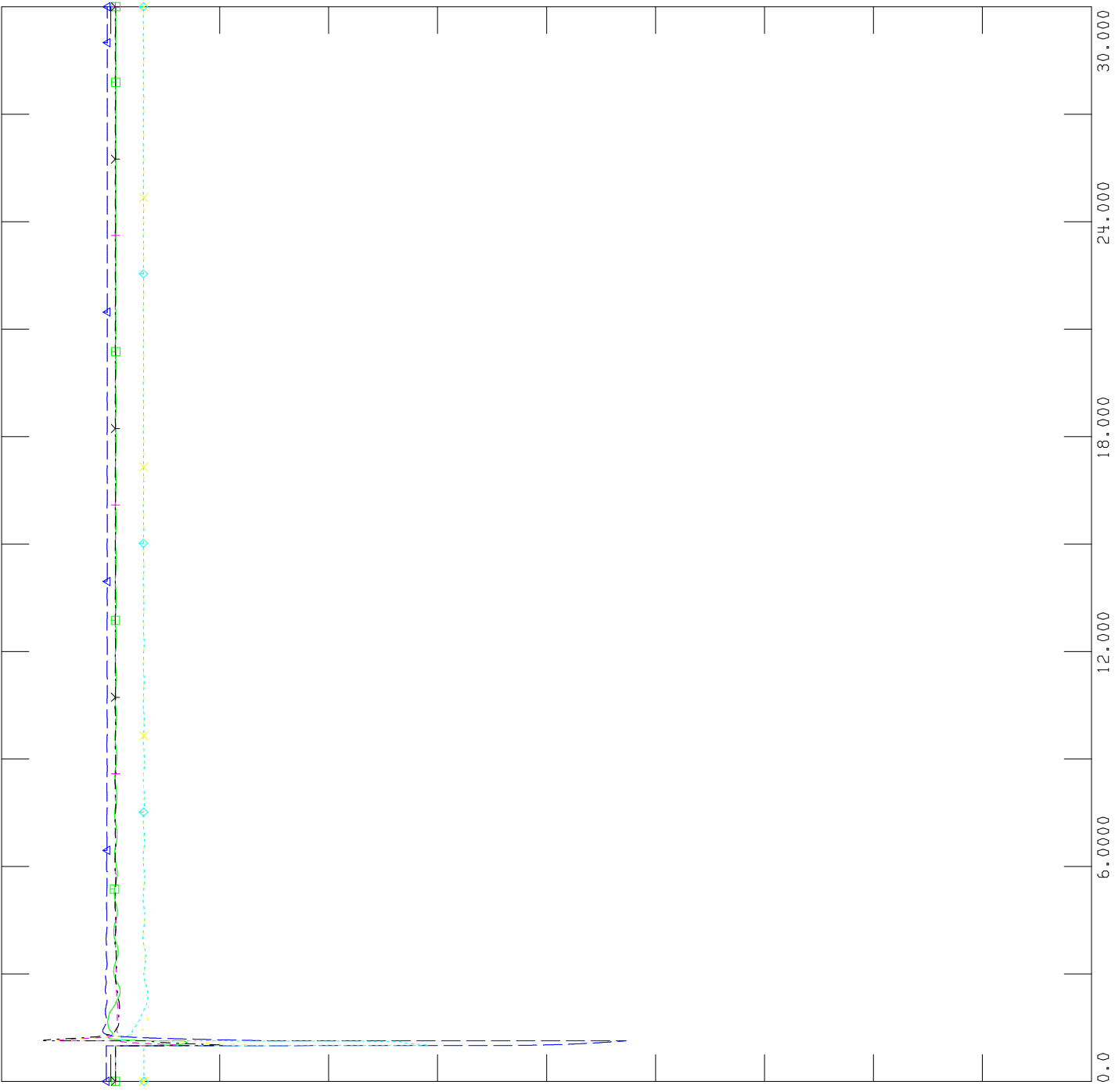


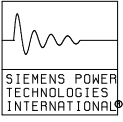
C-5-28



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513&SATR_879L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [MCMBRIDE6]	0.6900
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750
CHNL# 27	EVOLT 4740 [CARD_07]	1.0000
CHNL# 26	EVOLT 2389 [CHILLRIDG]	25.0000
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900

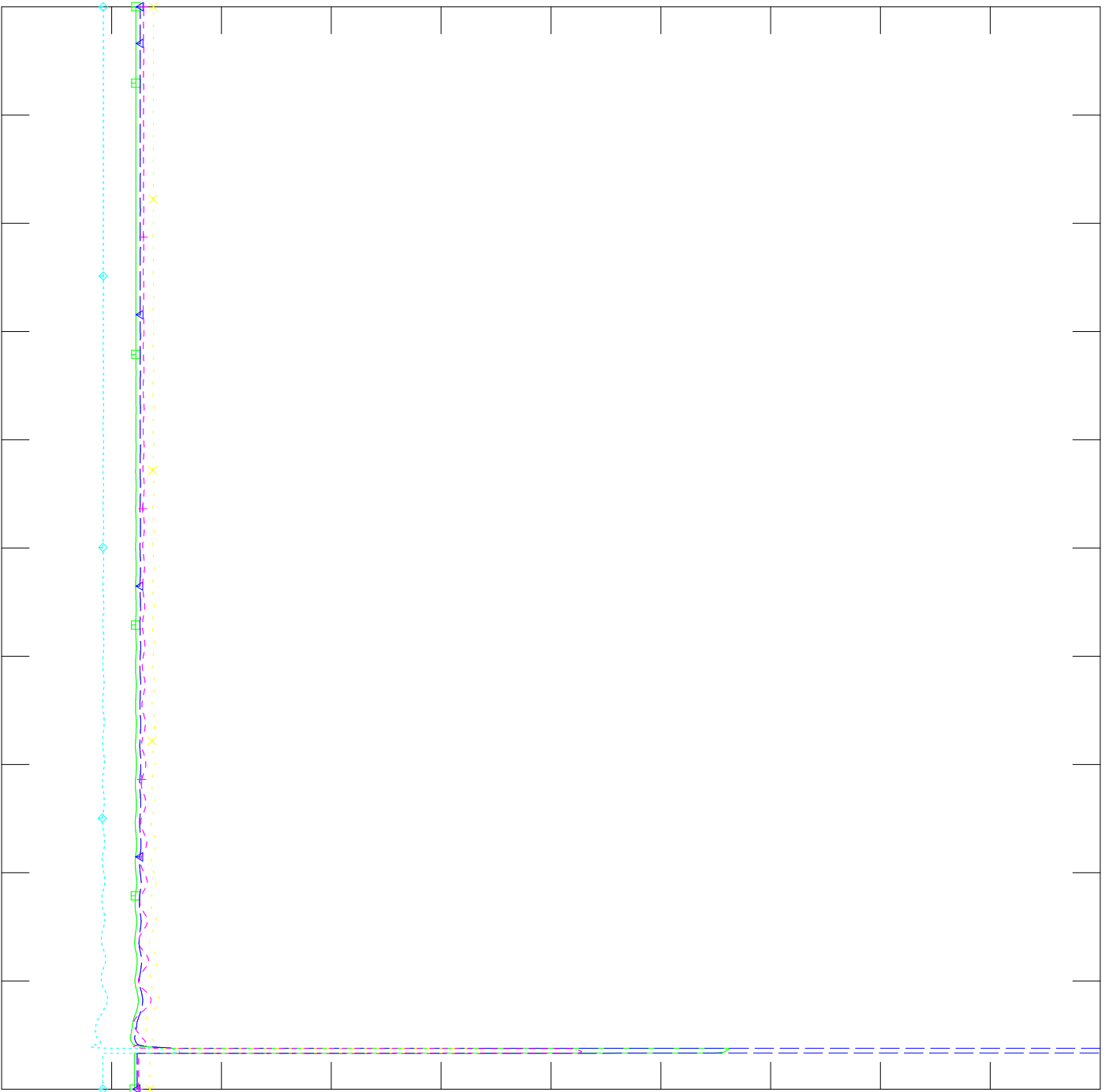


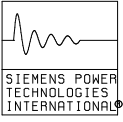


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_879L.out

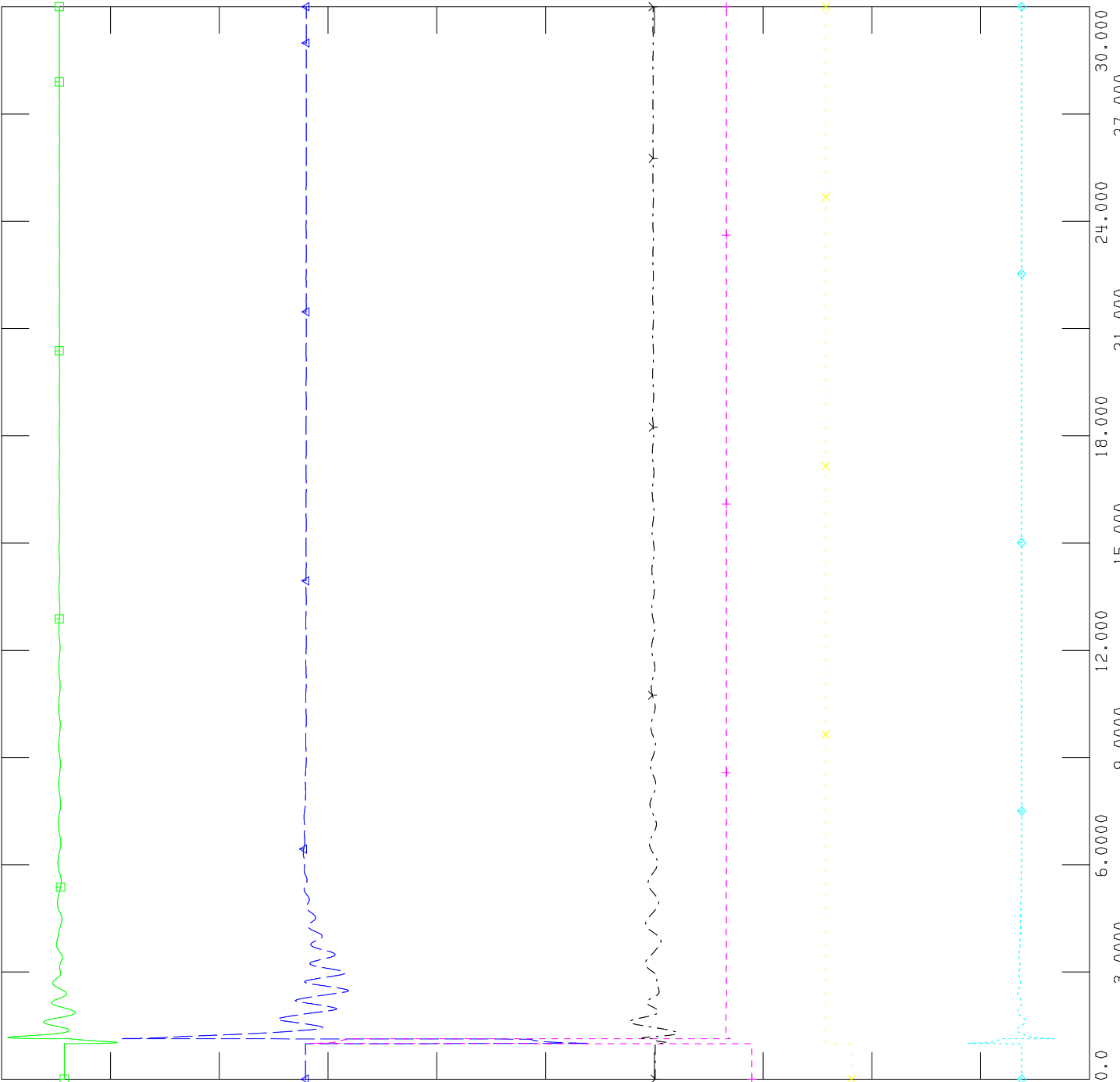
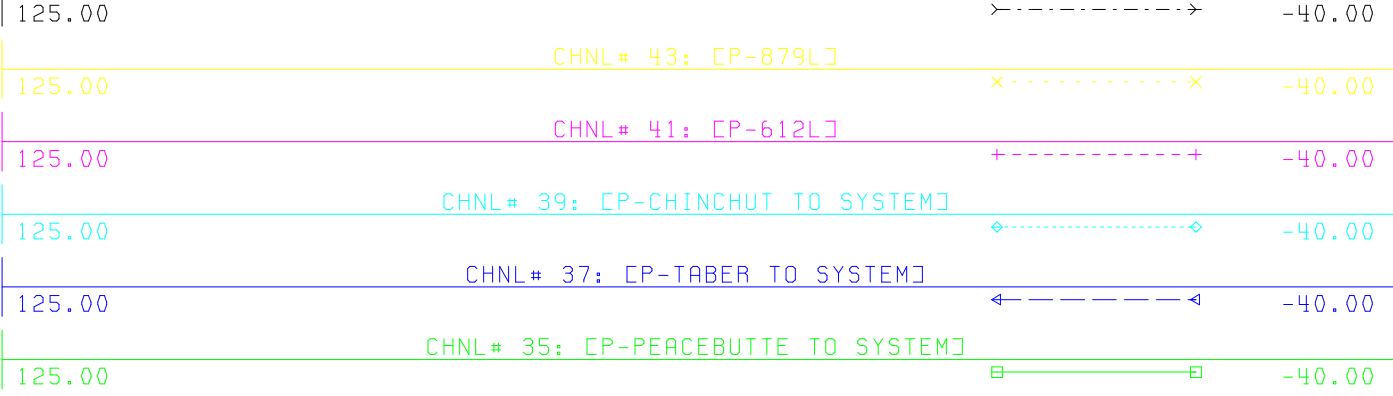
WED, NOV 17 2010 17:01
BUS VOLTAGE

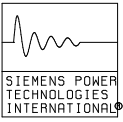
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



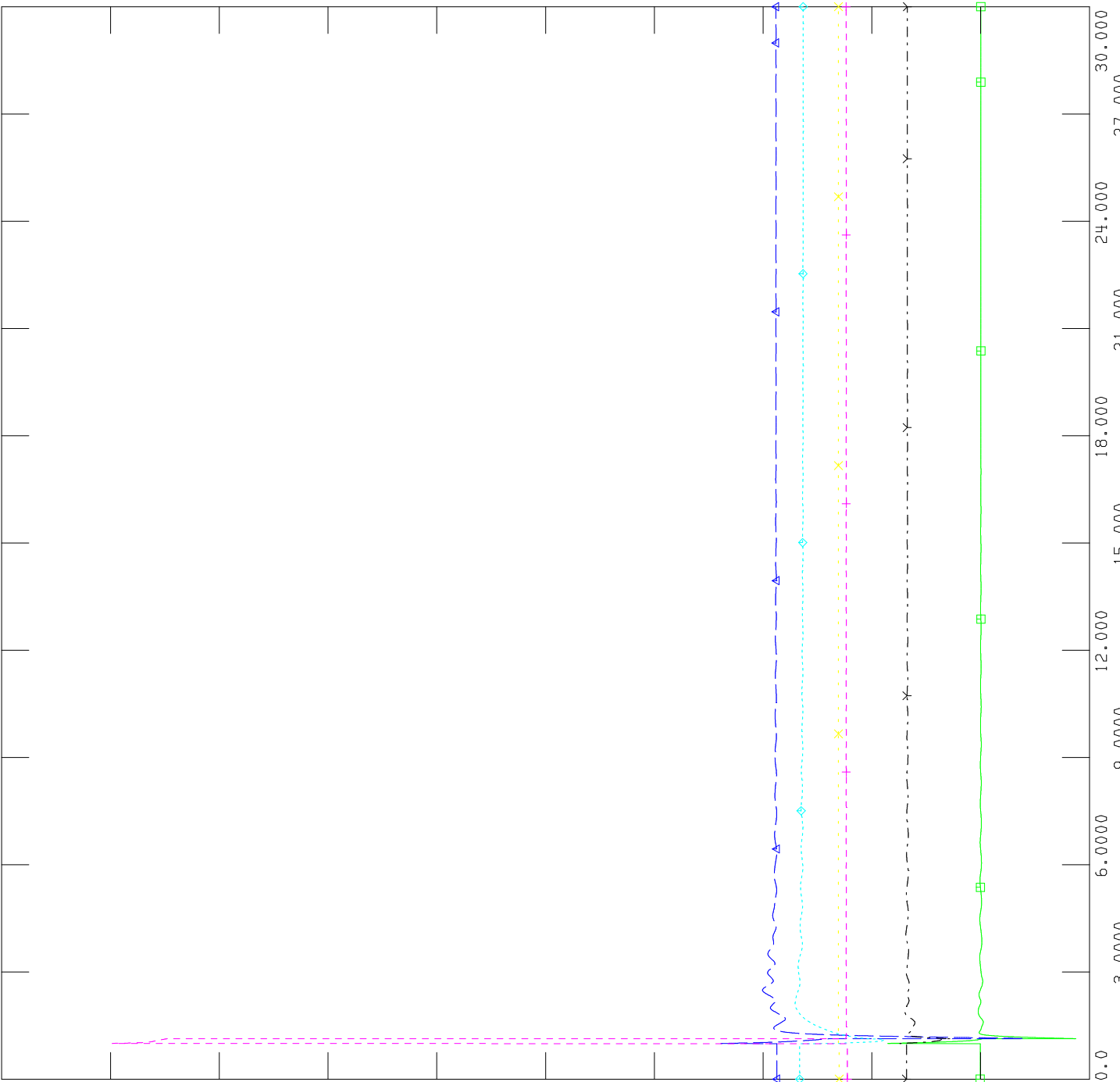
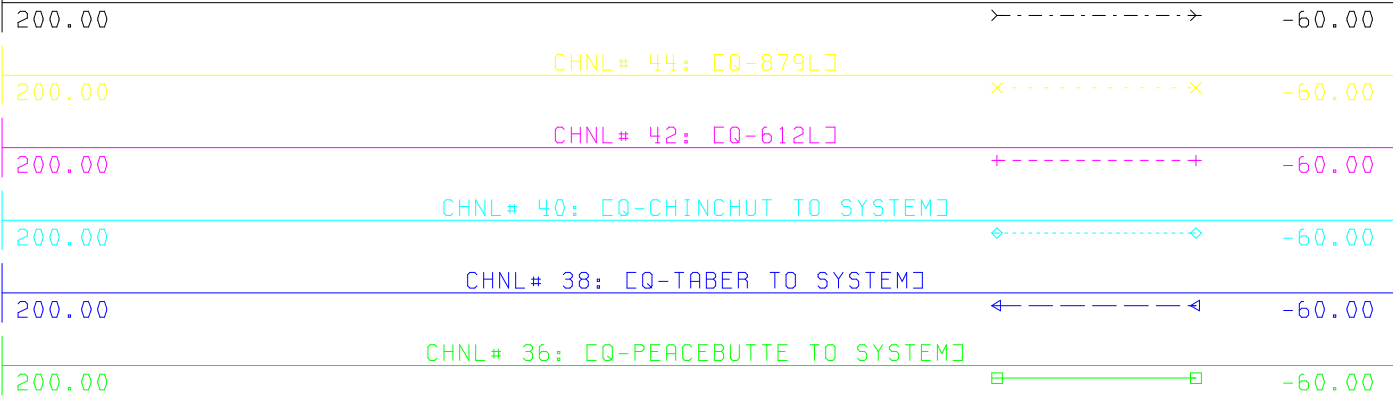


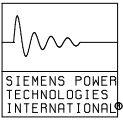
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_879L.out
CHNL# 45: [P-880L]





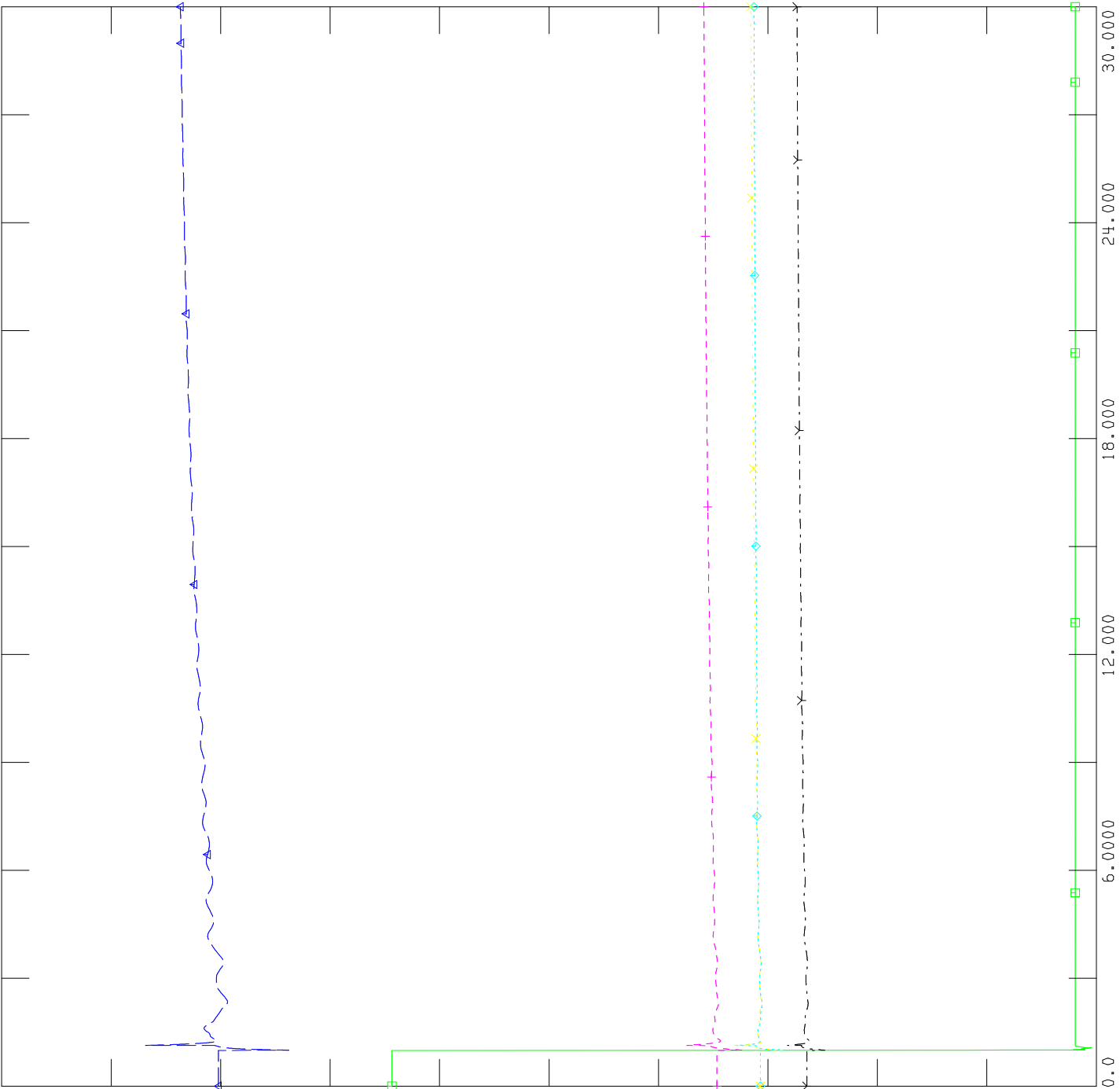
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CHNL# 46: [Q-880L]

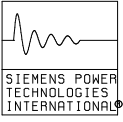




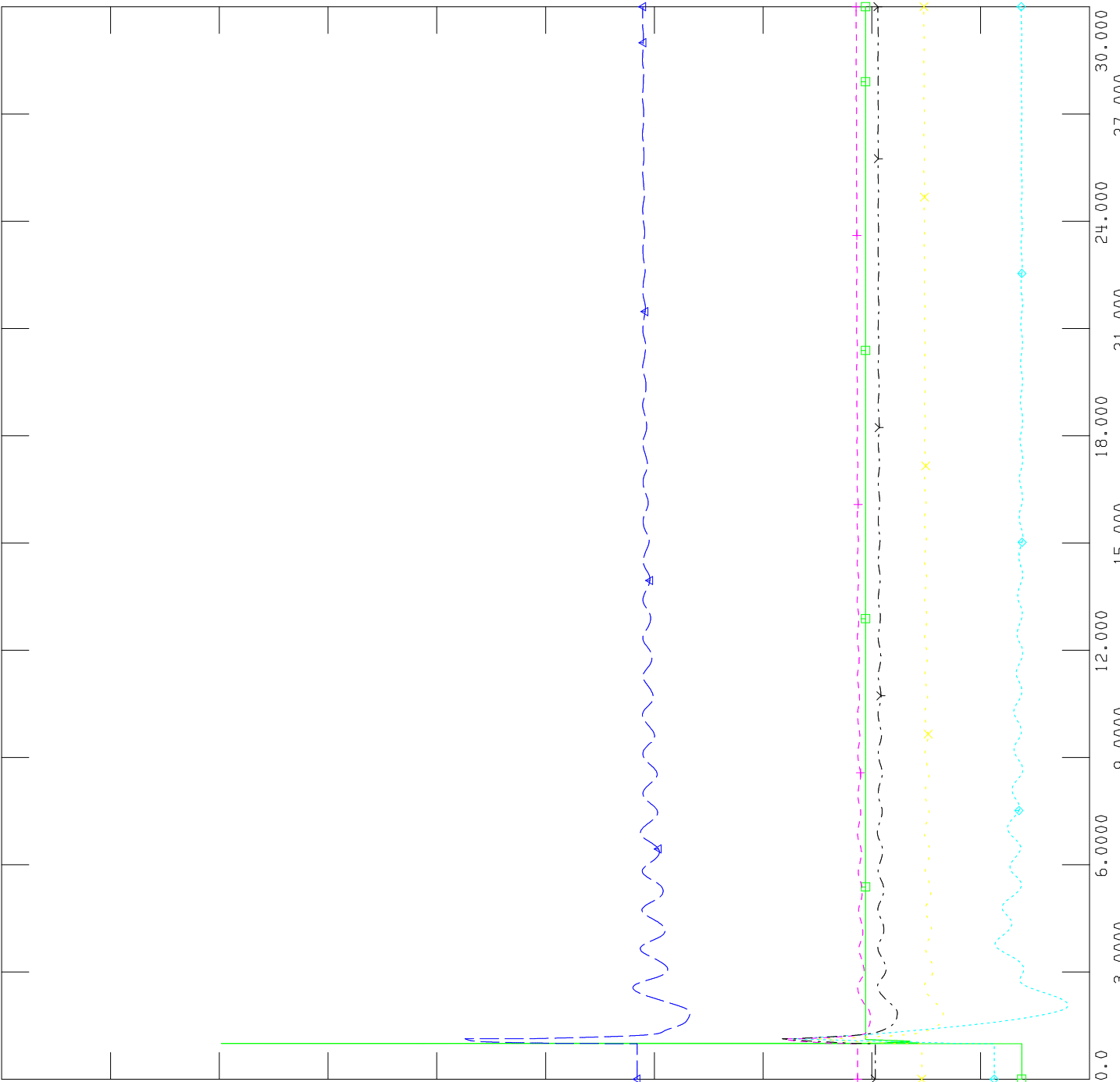
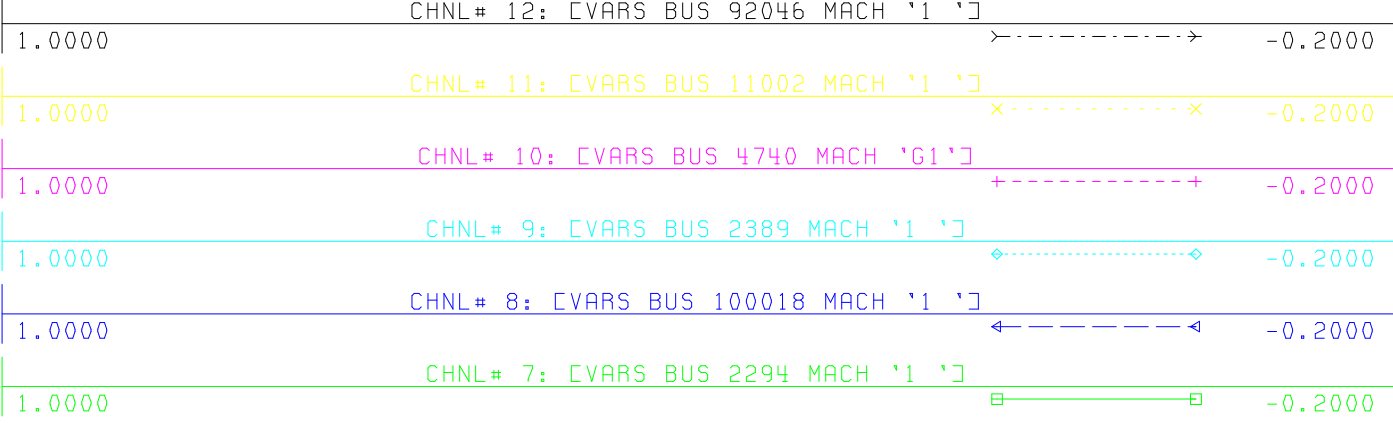
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_880L.out

Channel	Label	Value
1.0000	CHNL# 6: [POWR BUS 92046 MACH '1 ']	-0.0100
1.0000	CHNL# 5: [POWR BUS 11002 MACH '1 ']	-0.0100
1.0000	CHNL# 4: [POWR BUS 4740 MACH 'G1']	-0.0100
1.0000	CHNL# 3: [POWR BUS 2389 MACH '1 ']	-0.0100
1.0000	CHNL# 2: [POWR BUS 10018 MACH '1 ']	-0.0100
1.0000	CHNL# 1: [POWR BUS 2294 MACH '1 ']	-0.0100





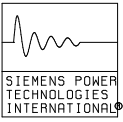
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_880L.out



THU, NOV 18 2010 8:56
OELEC

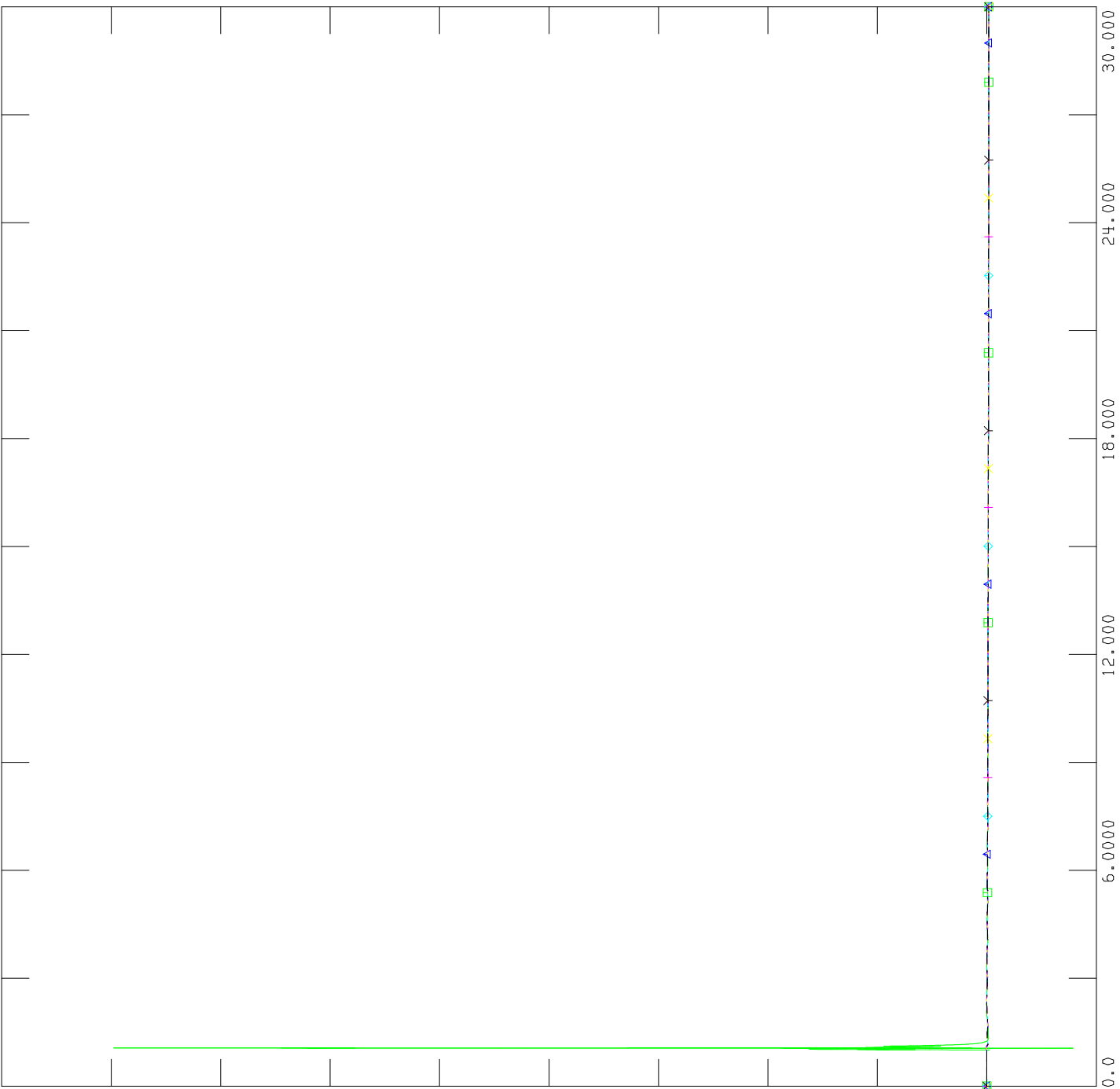
C-5-34

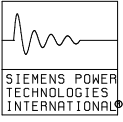
TIME (SECONDS)



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_880L.out

0.90000	CHNL# 18: CFREQ 92046 [MCMBRIDE6 0.6900]]	-0.1000
0.90000	CHNL# 17: CFREQ 11002 [EGARDNG2 0.5750]]	-0.1000
0.90000	CHNL# 16: CFREQ 4740 [CARD_07 1.0000]]	-0.1000
0.90000	CHNL# 15: CFREQ 2389 [CHILLRIDG 25.000]]	-0.1000
0.90000	CHNL# 14: CFREQ 100018 [CPURPLESP 0.5750]]	-0.1000
0.90000	CHNL# 13: CFREQ 2294 [CTOTHILL2 0.6900]]	-0.1000

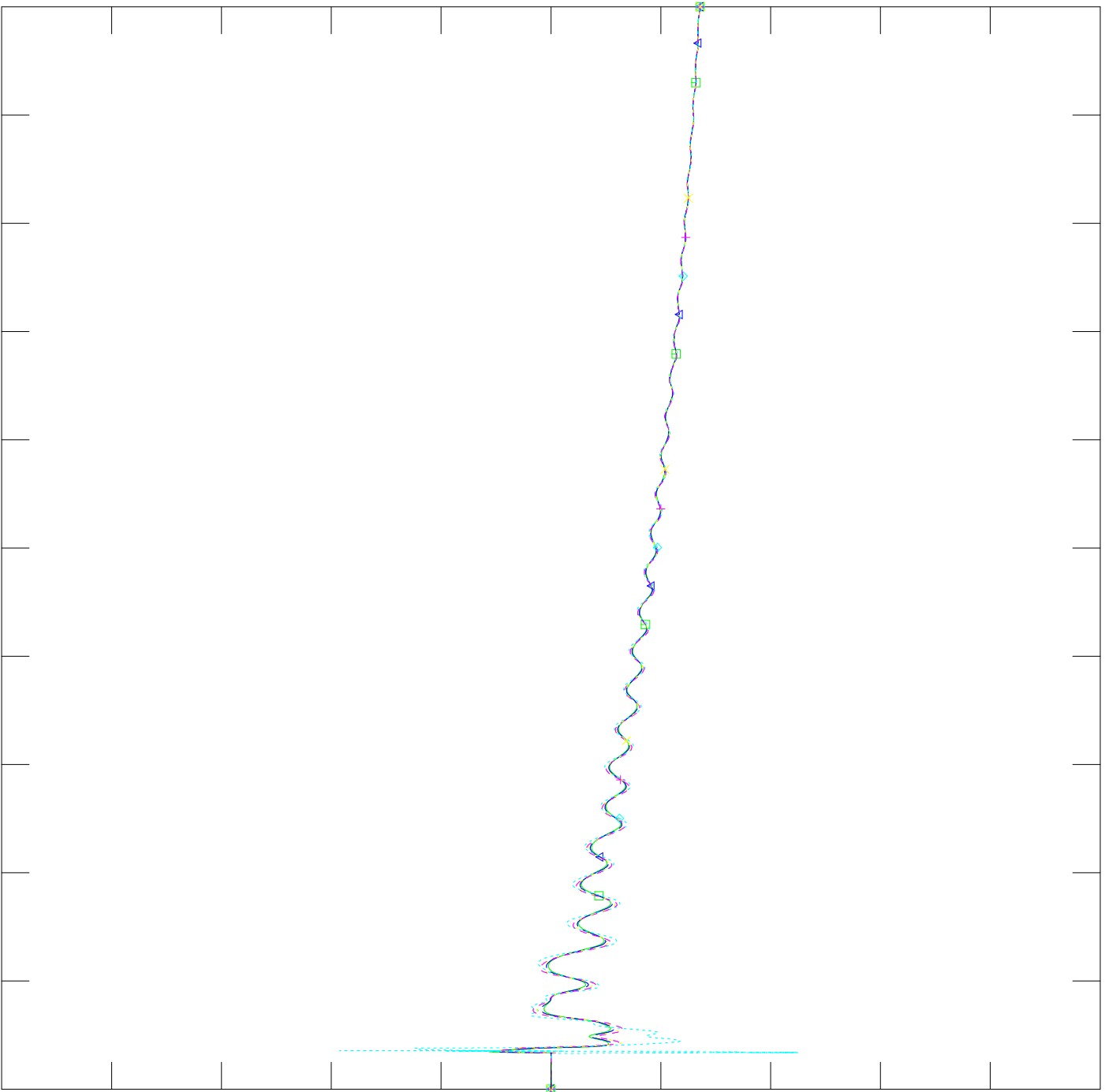




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_880L.out

THU, NOV 18 2010 8:59
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270 CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680 CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271 CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 20: CFREQ	269 CBURDETT7	138.00]]	←-----←	-0.0067
0.00670	CHNL# 19: CFREQ	31 CFINCAST7	138.00]]	□-----□	-0.0067

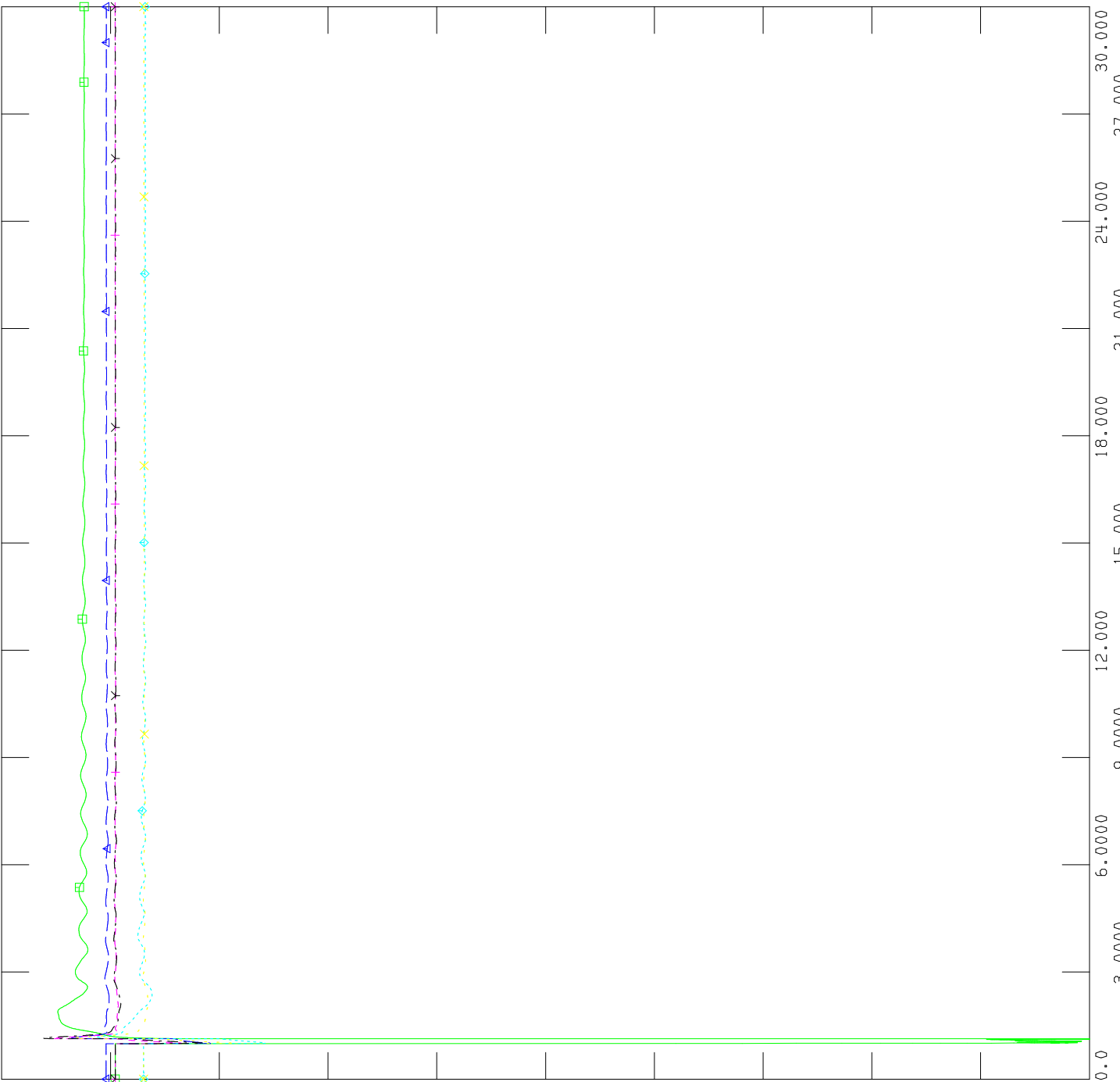


C-5-36



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_880L.out

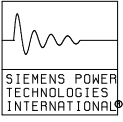
1.1500	CHNL# 29: EVOLT	92046	CMCBRIDE6	0.6900	0.0
1.1500	CHNL# 28: EVOLT	11002	EGARDNG2	0.5750	0.0
1.1500	CHNL# 27: EVOLT	4740	CARD_07	1.0000	0.0
1.1500	CHNL# 26: EVOLT	2389	CHILLRIDG	25.0000	0.0
1.1500	CHNL# 25: EVOLT	100018	CPURPLESP	0.5750	0.0
1.1500	CHNL# 24: EVOLT	2294	CTOTHILL2	0.6900	0.0



THU, NOV 18 2010 9:00
 BUS VOLTAGE

C-5-37

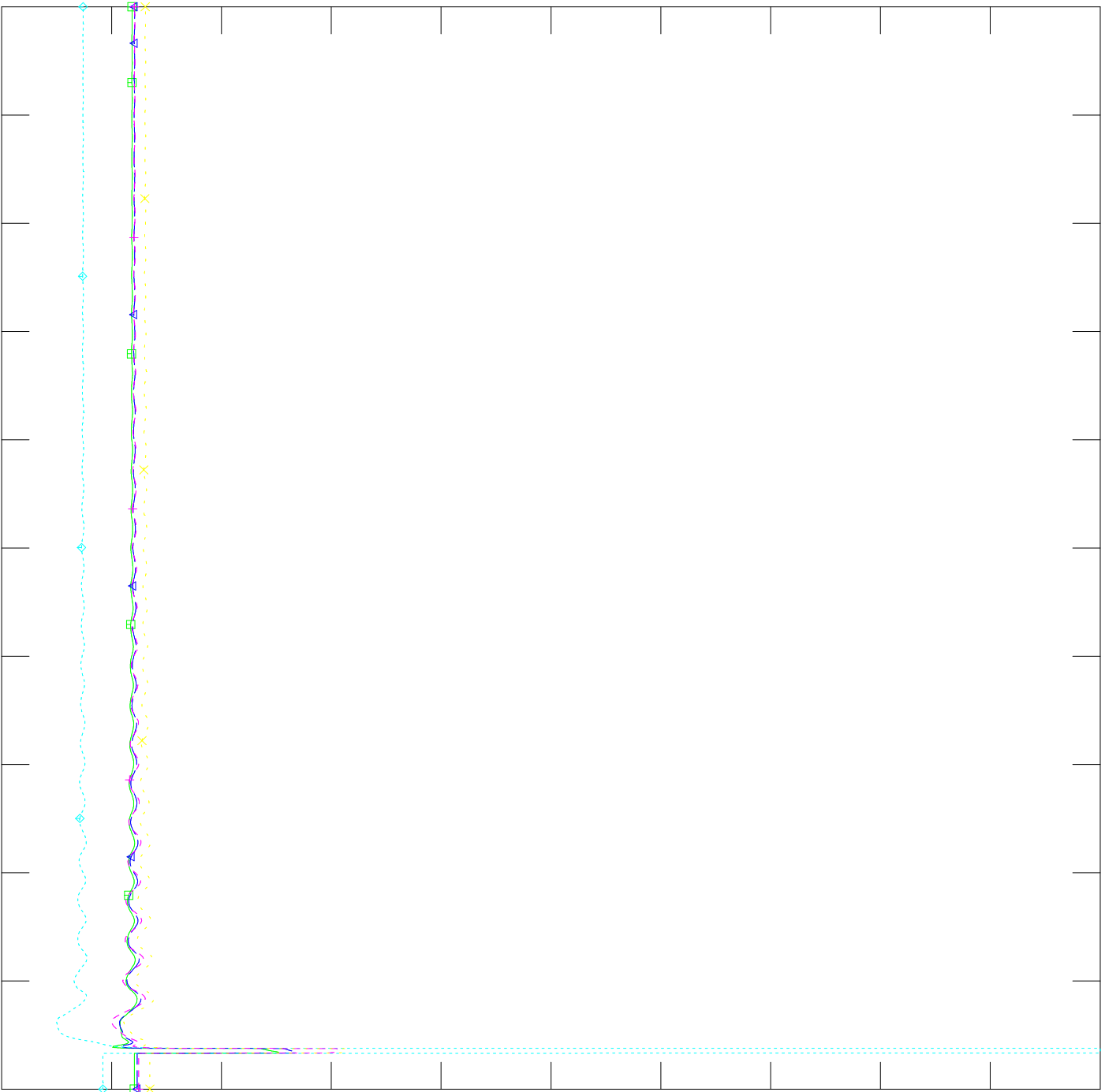
TIME (SECONDS)



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_880L.out

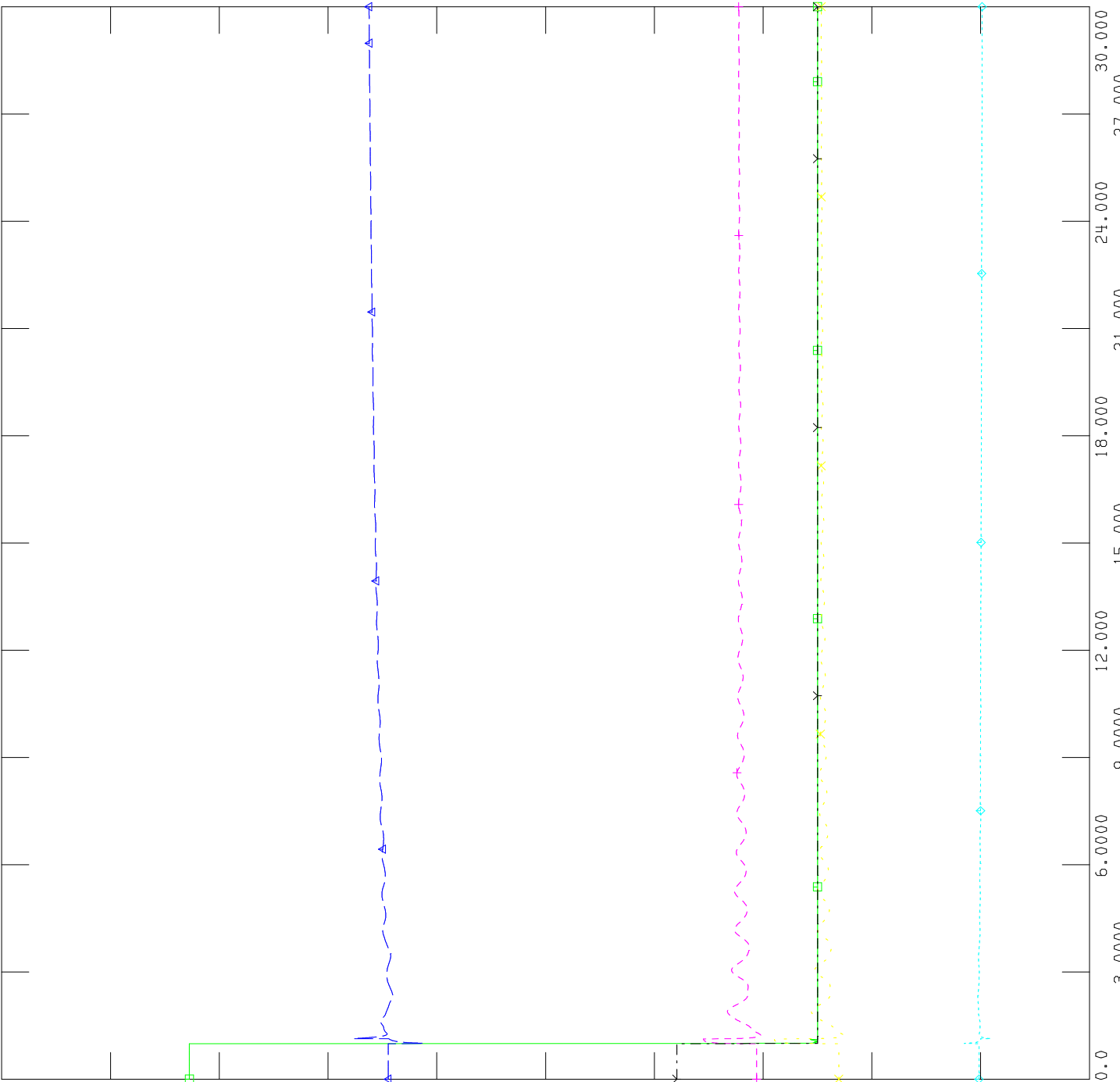
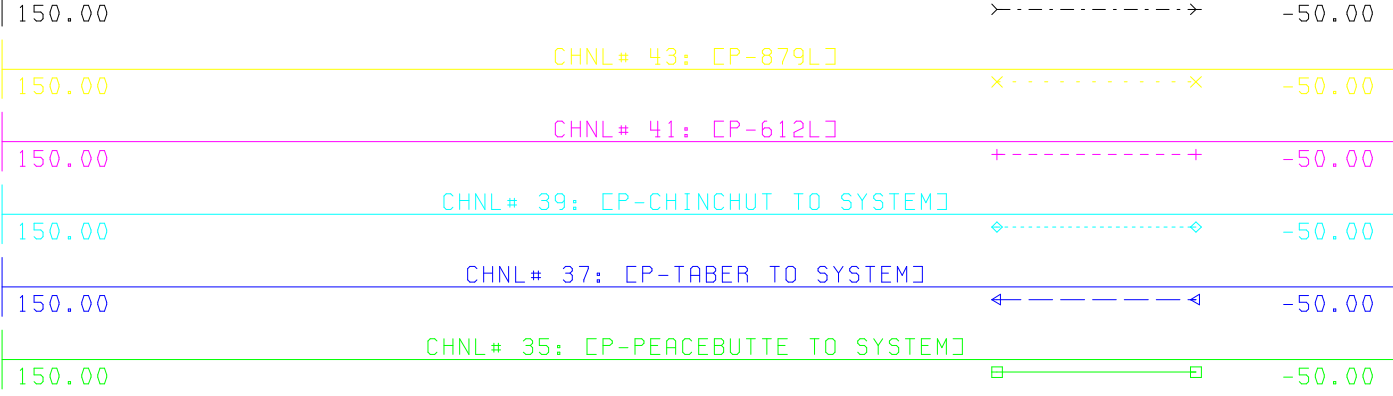
THU, NOV 18 2010 9:01
BUS VOLTAGE

Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]





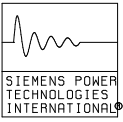
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_880L.out
CHNL# 45: [P-880L]



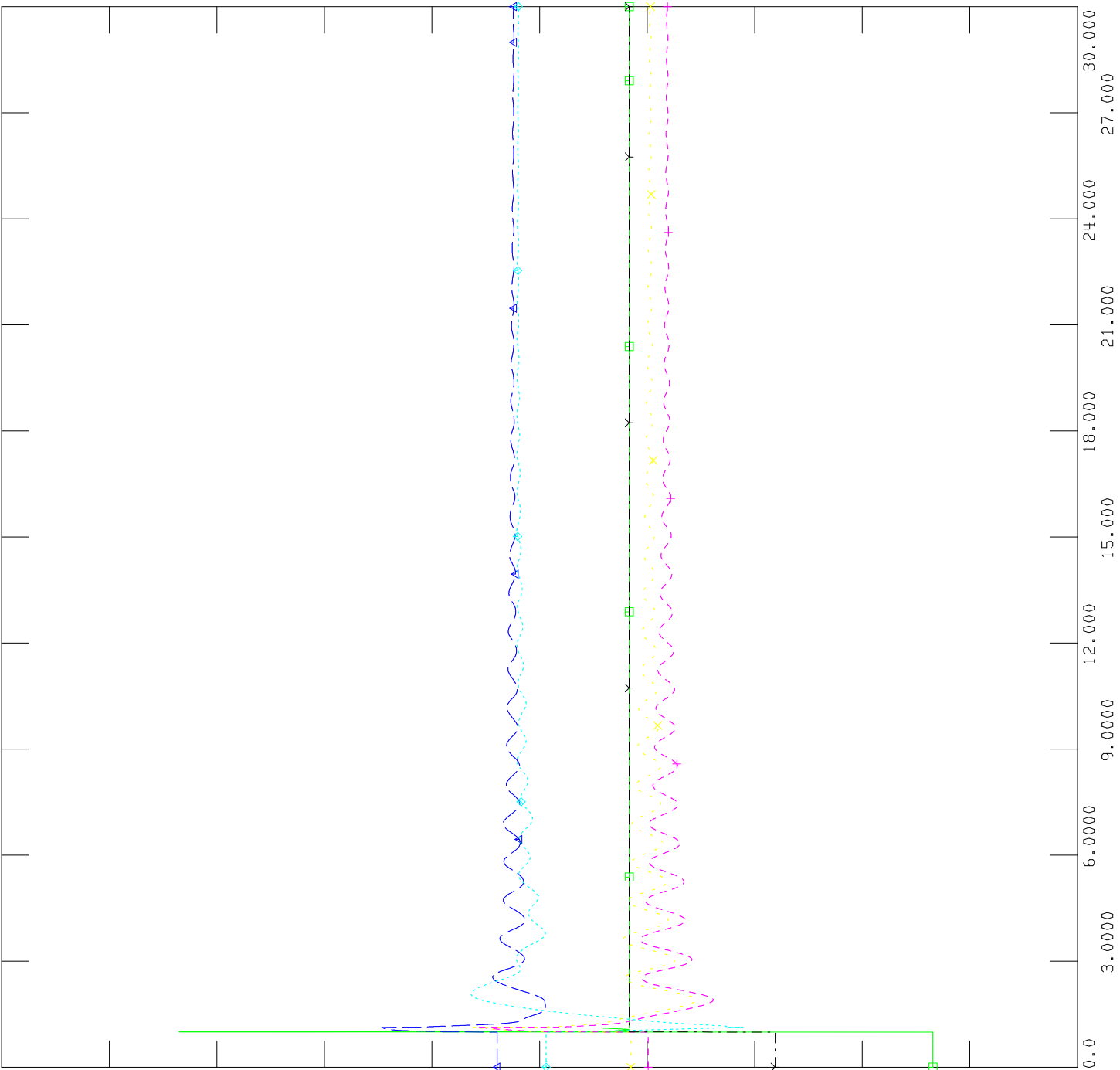
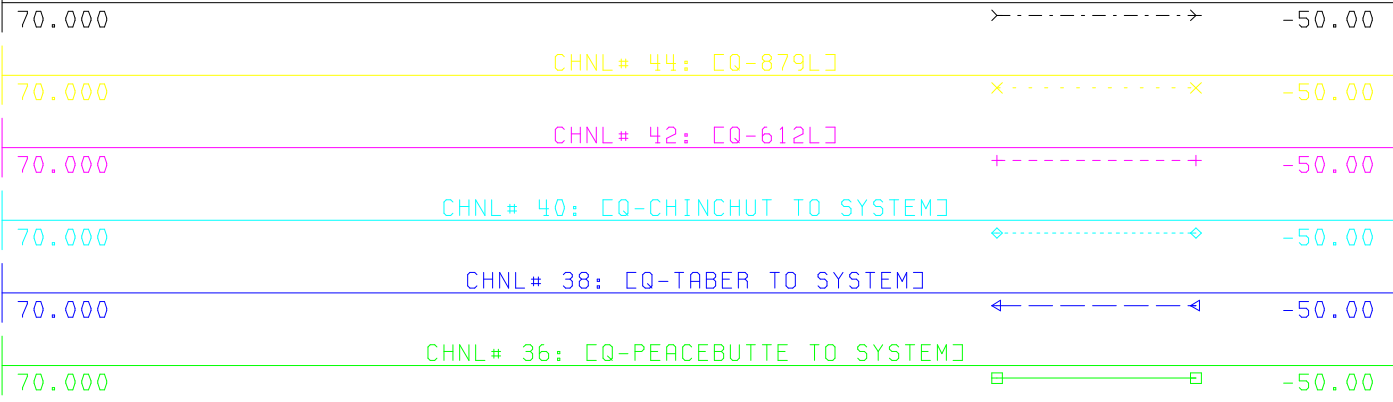
THU, NOV 18 2010 9:02
BRANCH ACTIVE POWER

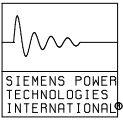
C-5-39

TIME (SECONDS)

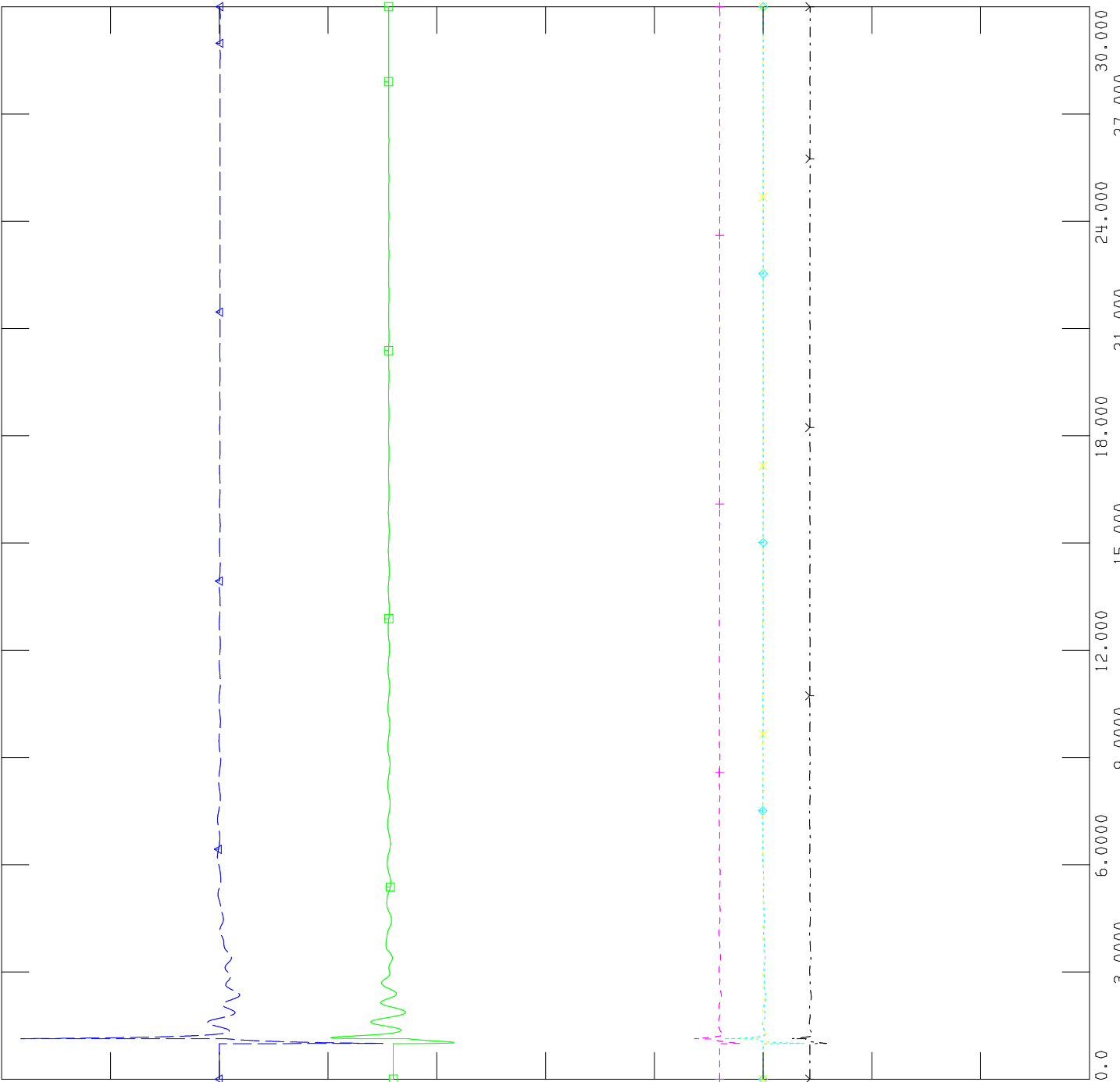
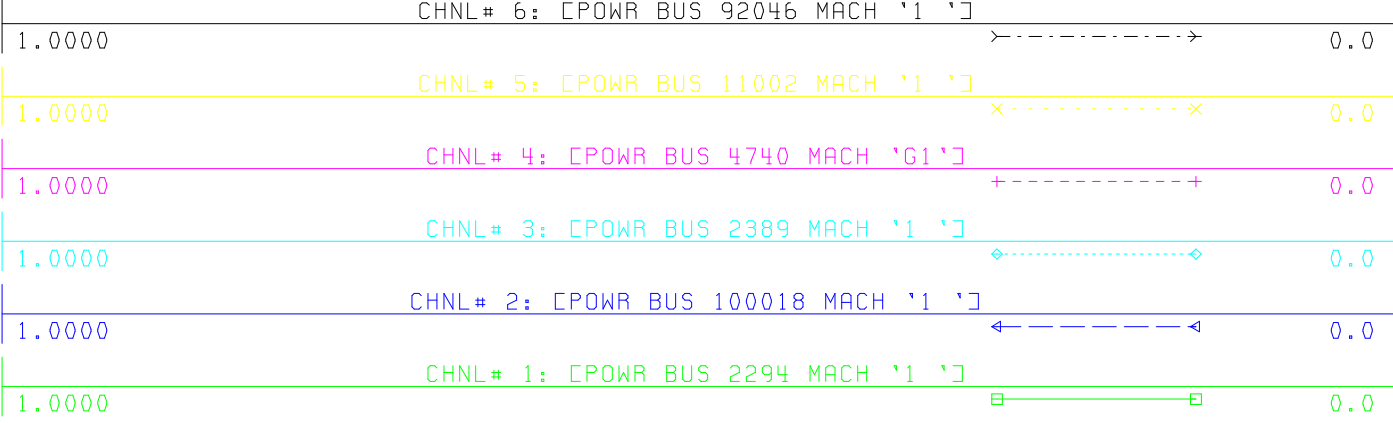


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_880L.out
CHNL# 46: [Q-880L]



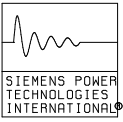


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_892L.out

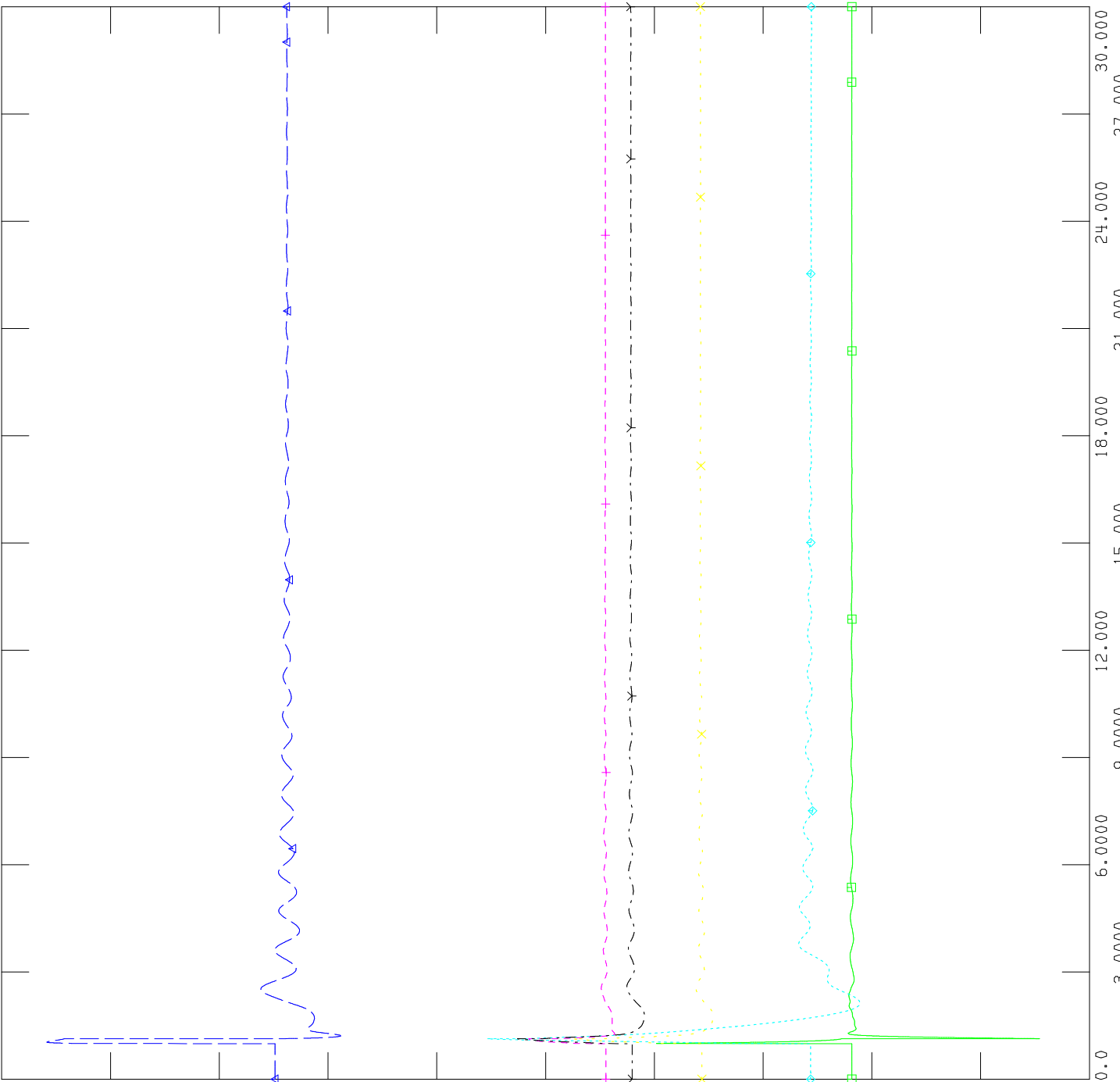
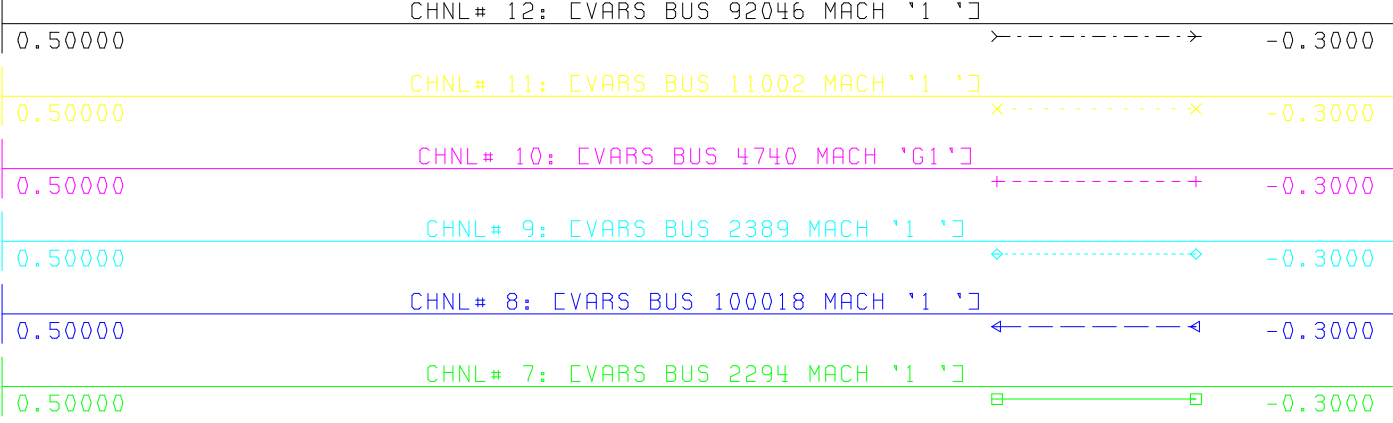


THU, NOV 18 2010 9:04
PELEC

TIME (SECONDS) C-5-41



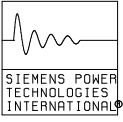
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_892L.out



THU, NOV 18 2010 9:05
 OELEC

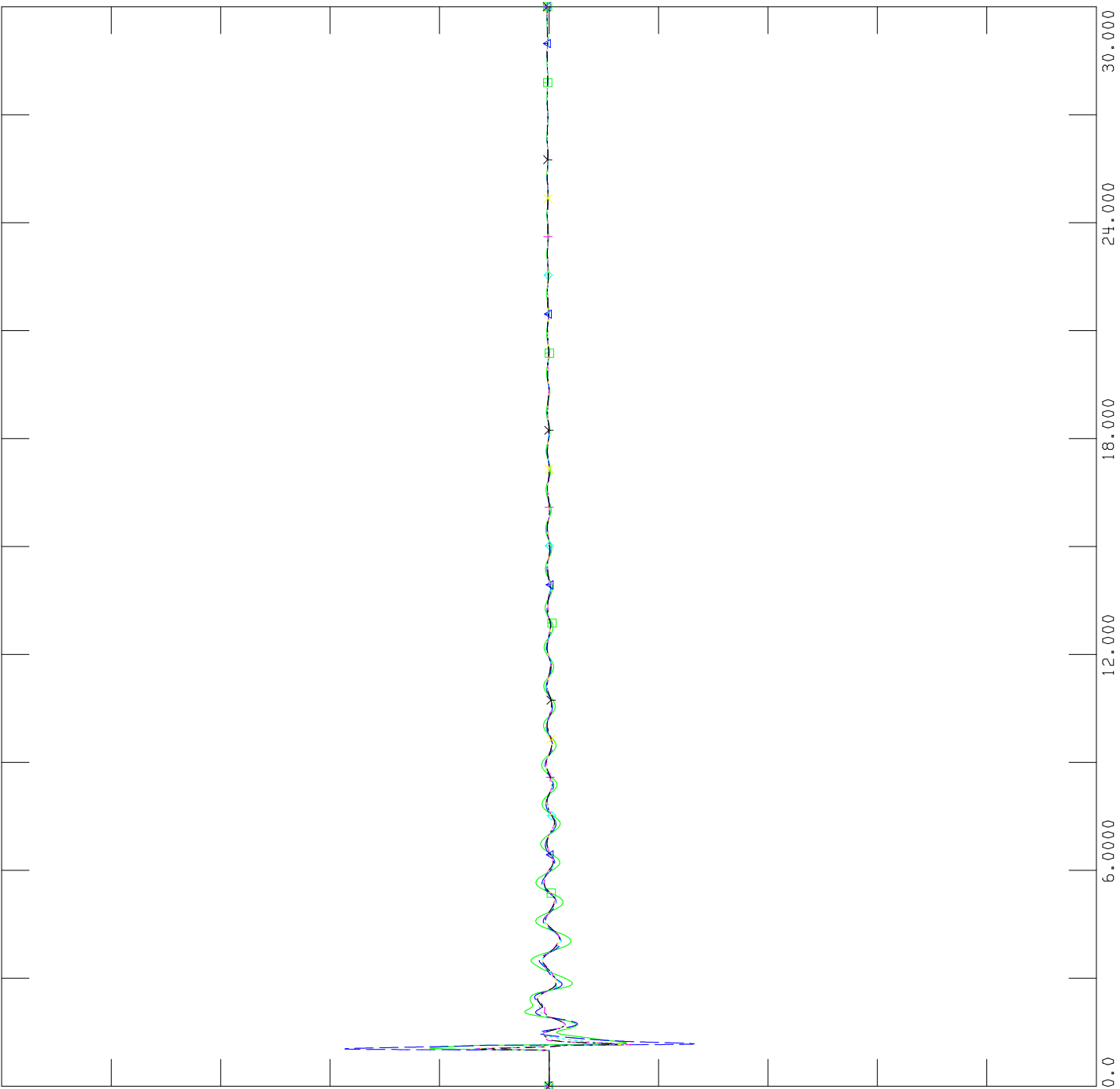
C-542

TIME (SECONDS)



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_892L.out

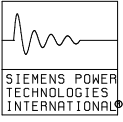
Channel	CFREQ	Channel Name	Value
CHNL# 18	92046	CMCBRIDE6	0.6900
CHNL# 17	11002	EGARDNG2	0.5750
CHNL# 16	4740	CARD_07	1.0000
CHNL# 15	2389	CHILLRIDG	25.0000
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900



THU, NOV 18 2010 9:06
BUS FREQUENCY

C-543

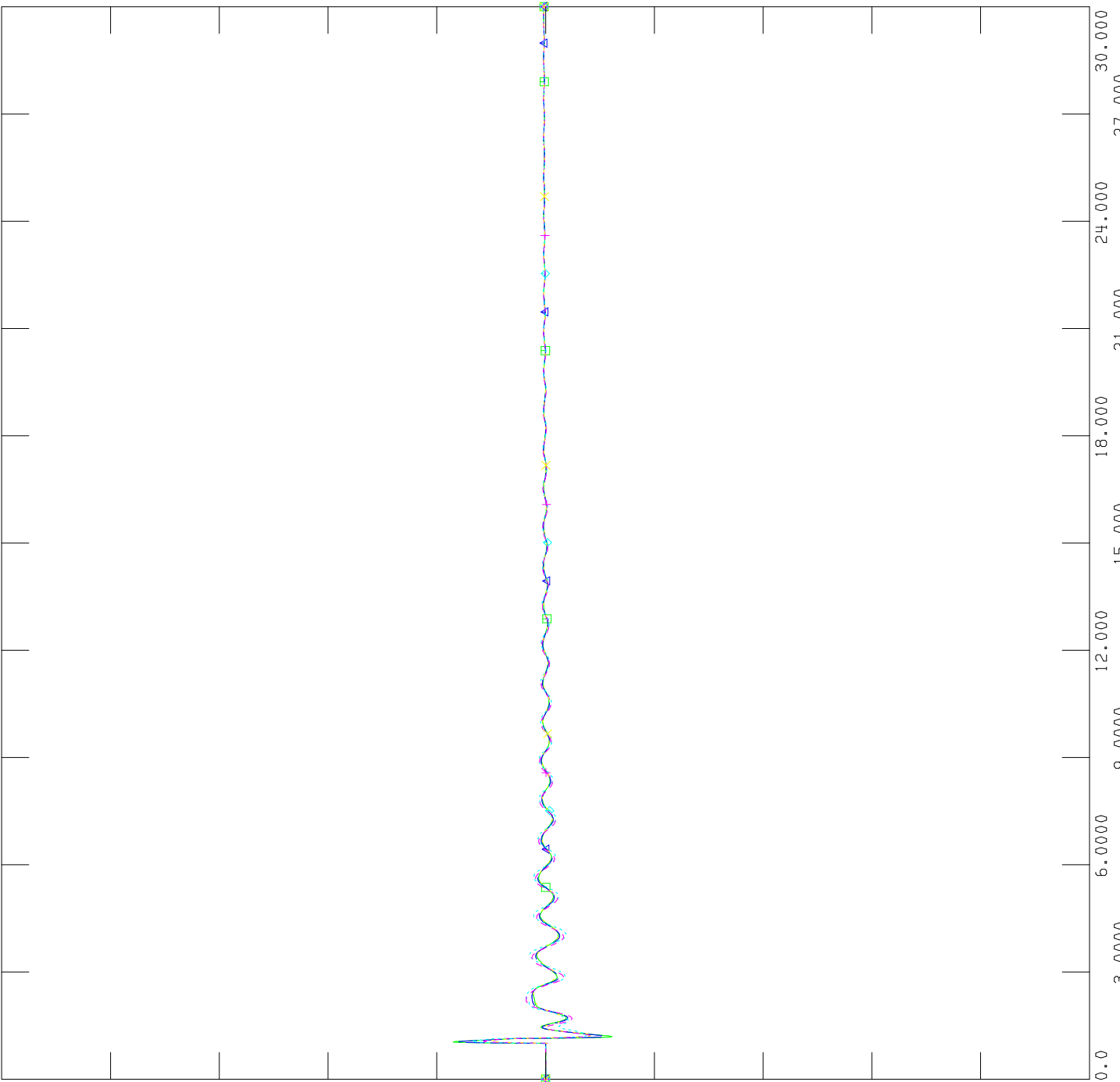
TIME (SECONDS)



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_892L.out

THU, NOV 18 2010 9:07
BUS FREQUENCY

Channel	Frequency	Value
CHNL# 23: CFREQ	270 [SUFFIEL7	138.00]]
0.00670		x-----x -0.0067
CHNL# 22: CFREQ	680 [MEDICIN7	138.00]]
0.00670		+-----+ -0.0067
CHNL# 21: CFREQ	271 [BULLS H7	138.00]]
0.00670		◇-----◇ -0.0067
CHNL# 20: CFREQ	269 [BURDETT7	138.00]]
0.00670		←-----← -0.0067
CHNL# 19: CFREQ	31 [FINCAST7	138.00]]
0.00670		□-----□ -0.0067

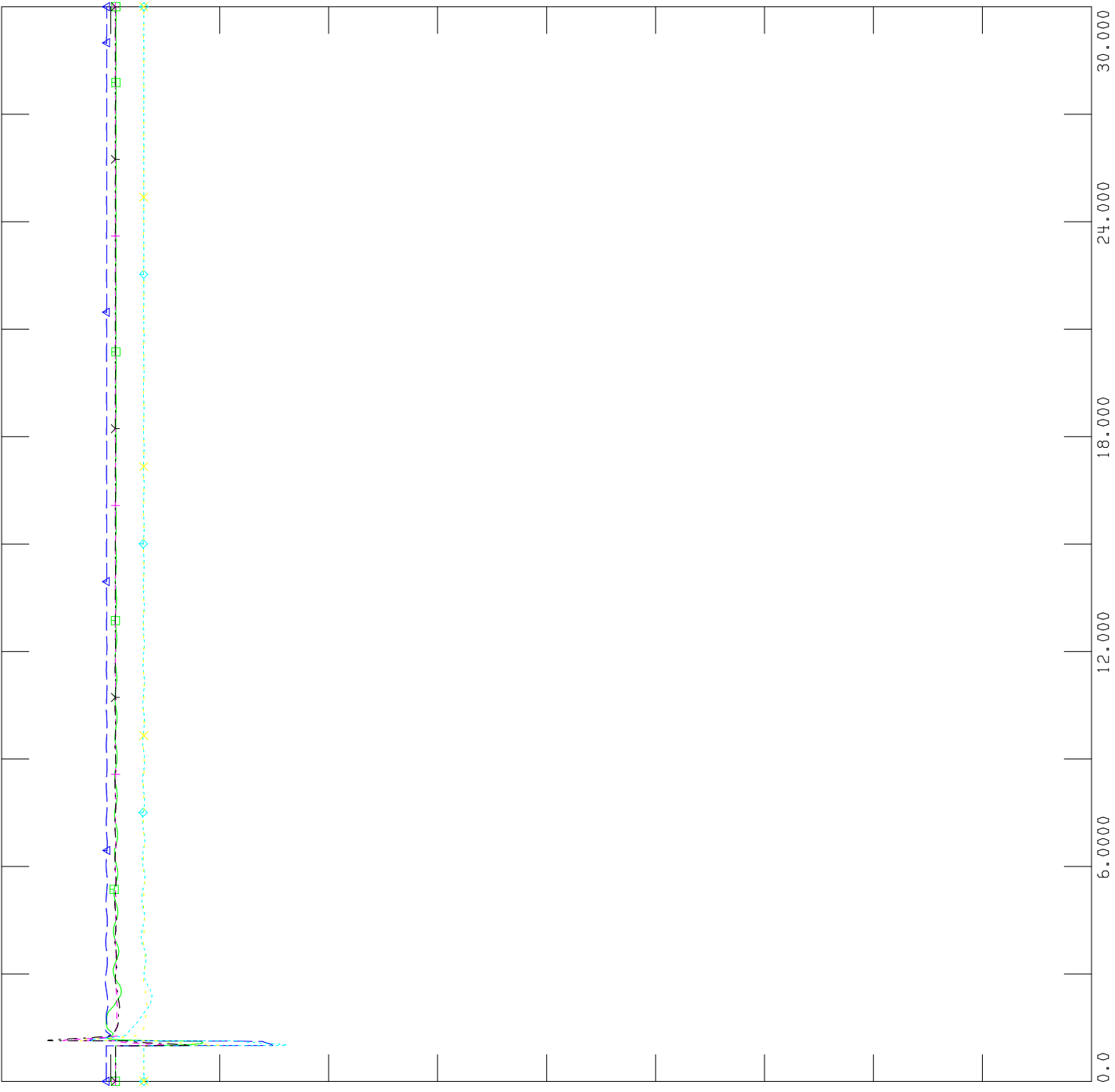


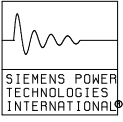
TIME (SECONDS) C-544



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC2_513&SATR_892L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [MCMBRIDE6]	0.6900
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750
CHNL# 27	EVOLT 4740 [CARD_07]	1.0000
CHNL# 26	EVOLT 2389 [CHILLRIDG]	25.0000
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900

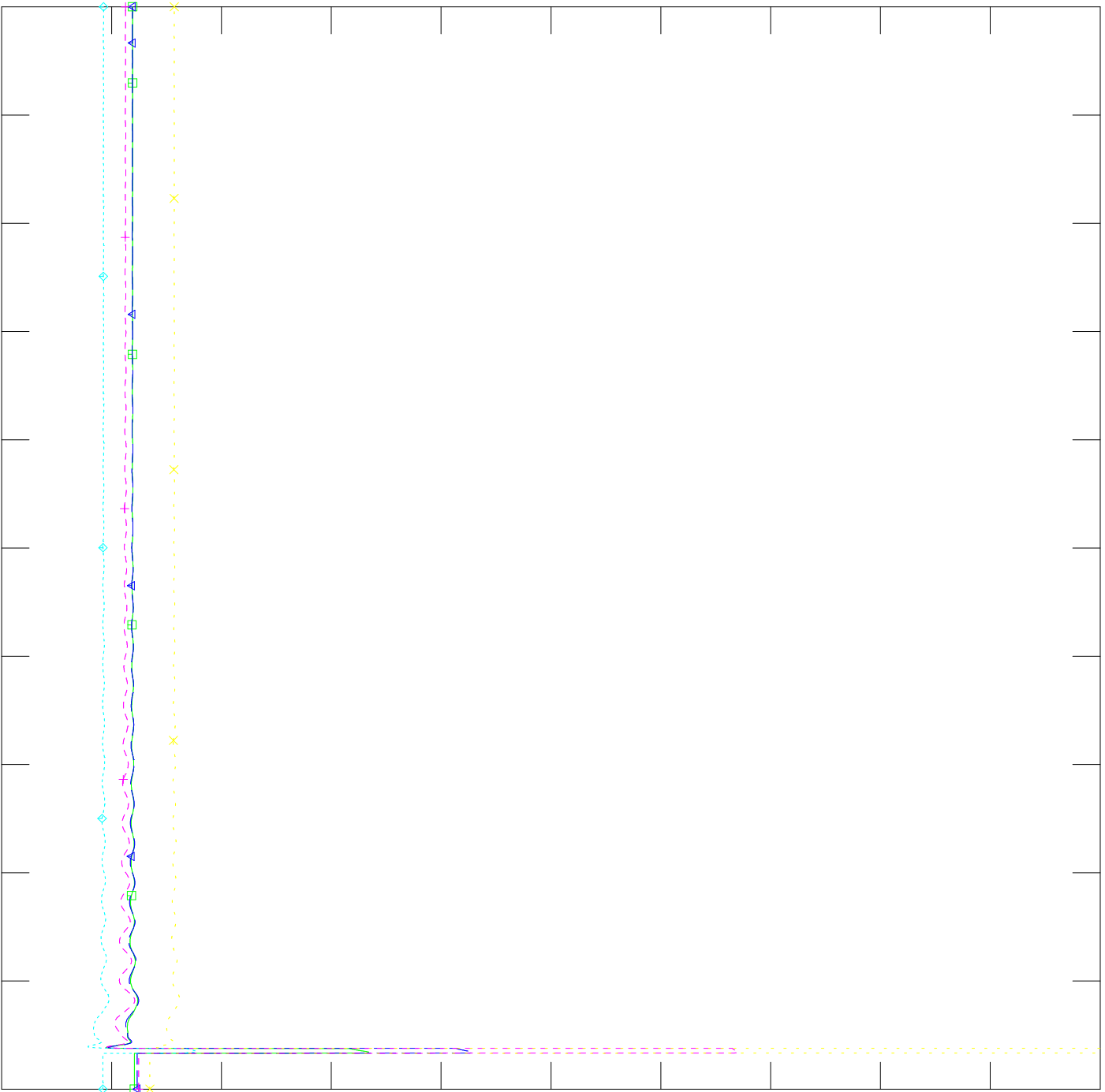




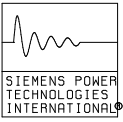
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_892L.out

THU, NOV 18 2010 11:37
BUS VOLTAGE

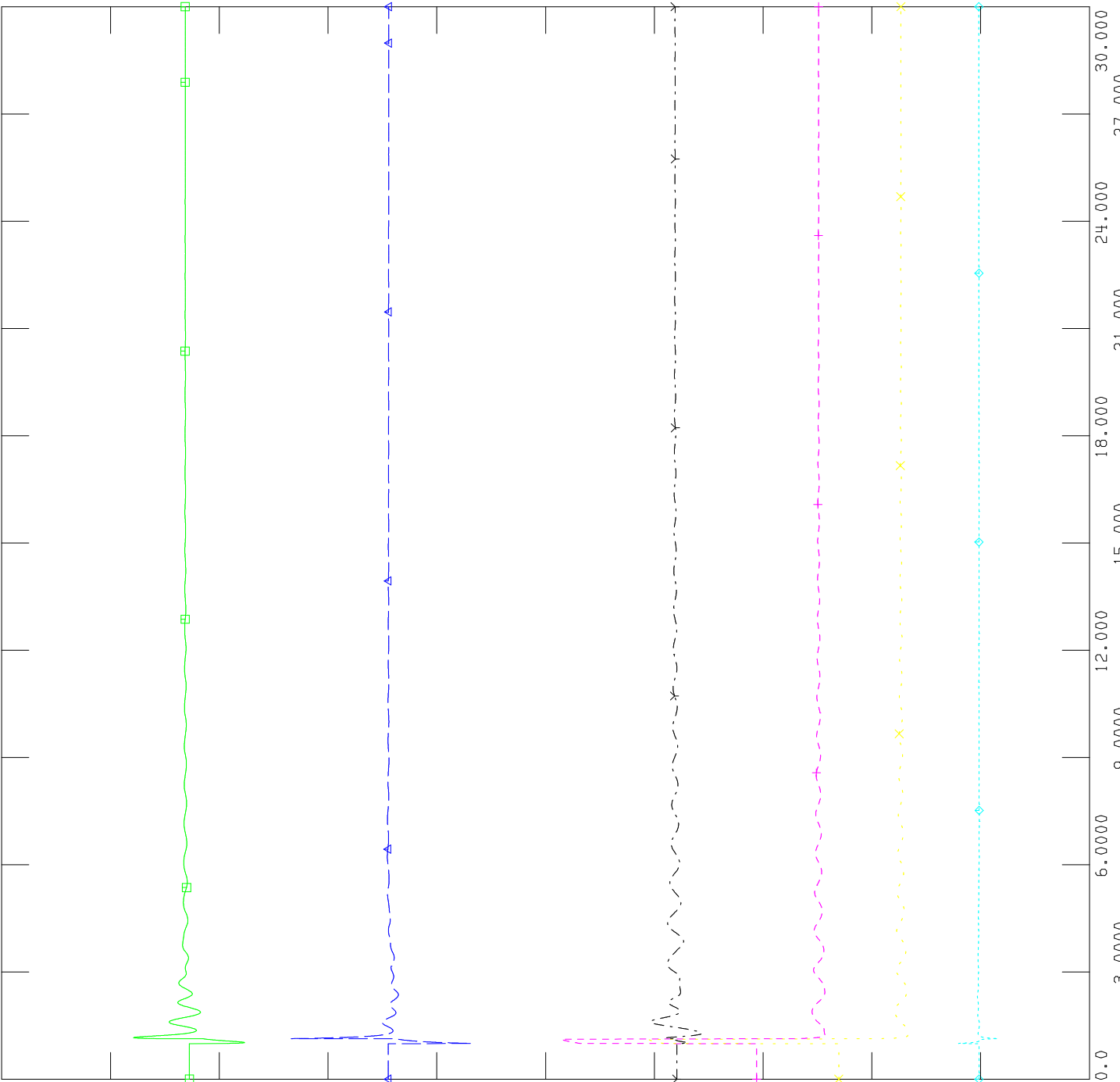
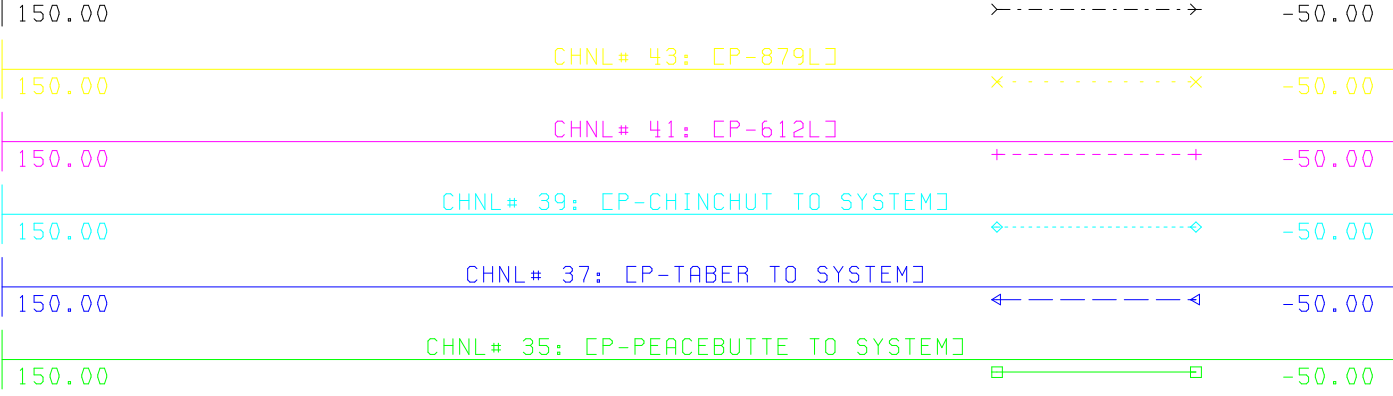
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



C-5-46



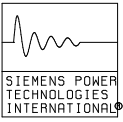
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_892L.out
CHNL# 45: CP-880L]



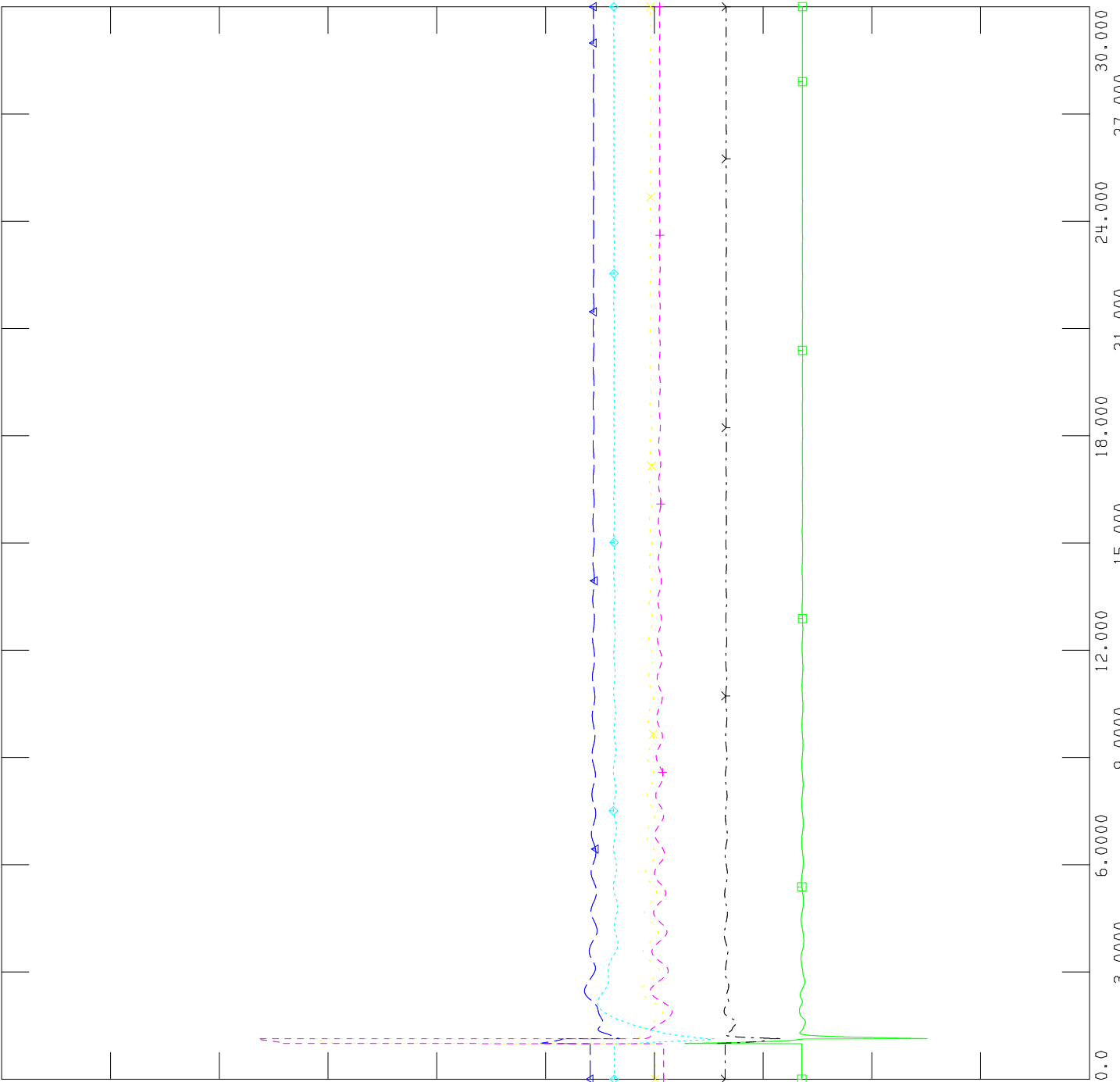
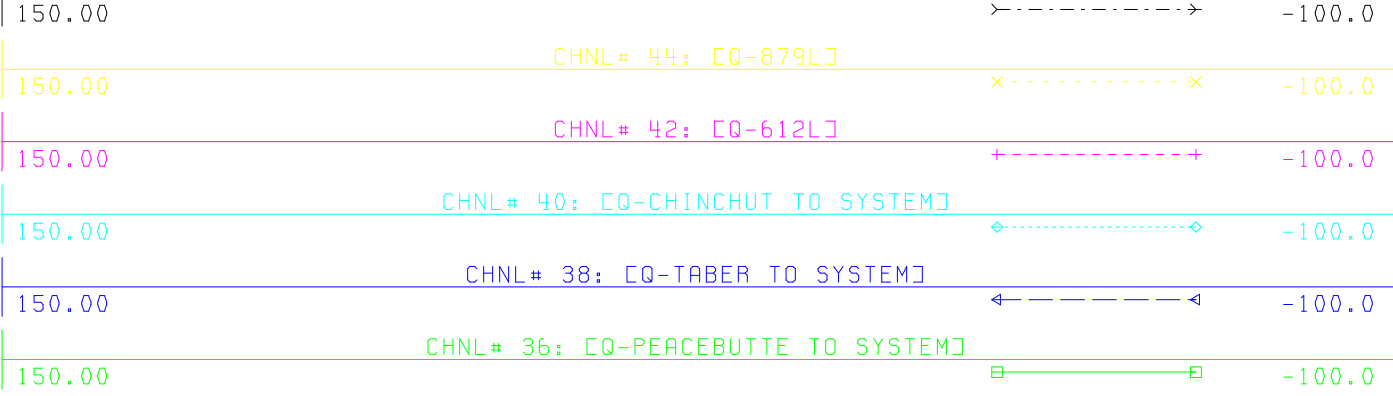
THU, NOV 18 2010 11:45
BRANCH ACTIVE POWER

C-547

TIME (SECONDS)

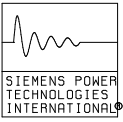


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC2_513&SATR_892L.out
CHNL# 46: [EQ-880L]



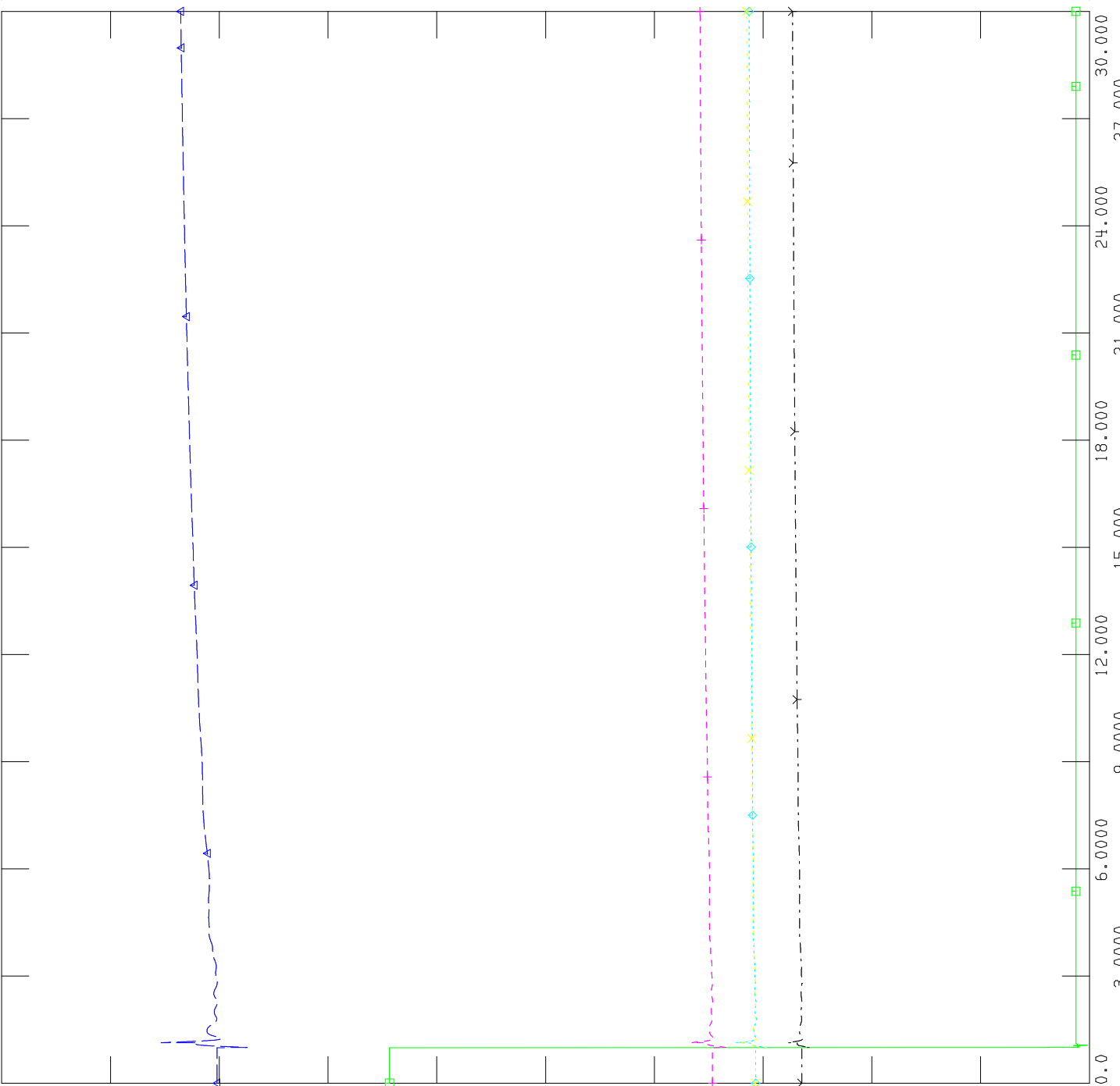
Attachment C-6: Proposed Connection with SATR Transient

Stability Analysis Results -- Scenario 3



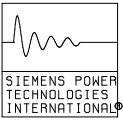
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_171L.out

Channel	Label	Value
1.0000	CHNL# 6: [POWR BUS 92046 MACH '1 ']	-0.0100
1.0000	CHNL# 5: [POWR BUS 11002 MACH '1 ']	-0.0100
1.0000	CHNL# 4: [POWR BUS 4740 MACH 'G1']	-0.0100
1.0000	CHNL# 3: [POWR BUS 2389 MACH '1 ']	-0.0100
1.0000	CHNL# 2: [POWR BUS 10018 MACH '1 ']	-0.0100
1.0000	CHNL# 1: [POWR BUS 2294 MACH '1 ']	-0.0100

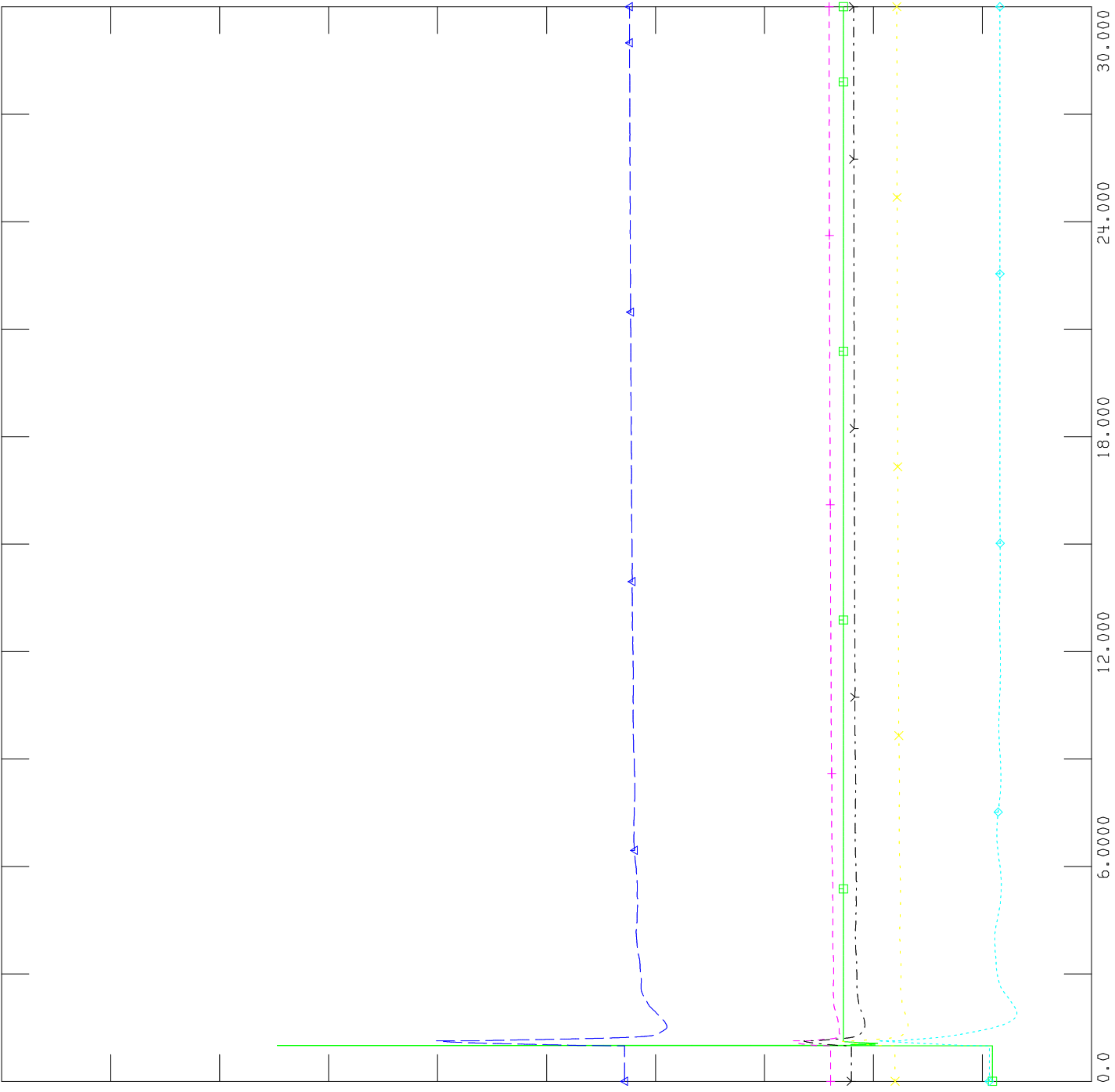
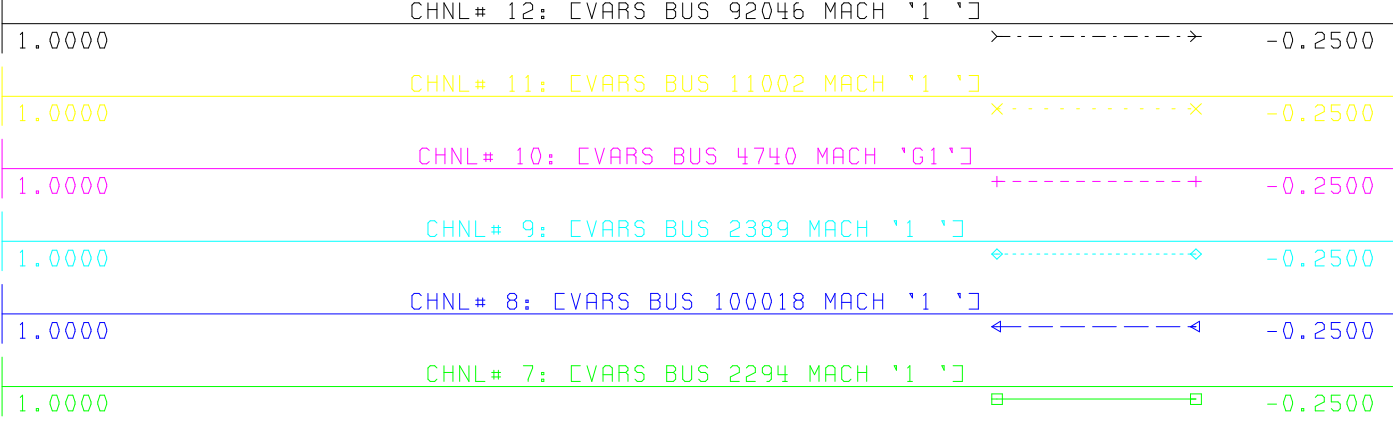


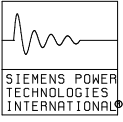
THU, NOV 18 2010 13:45
PELEC

C-6-1
TIME (SECONDS)



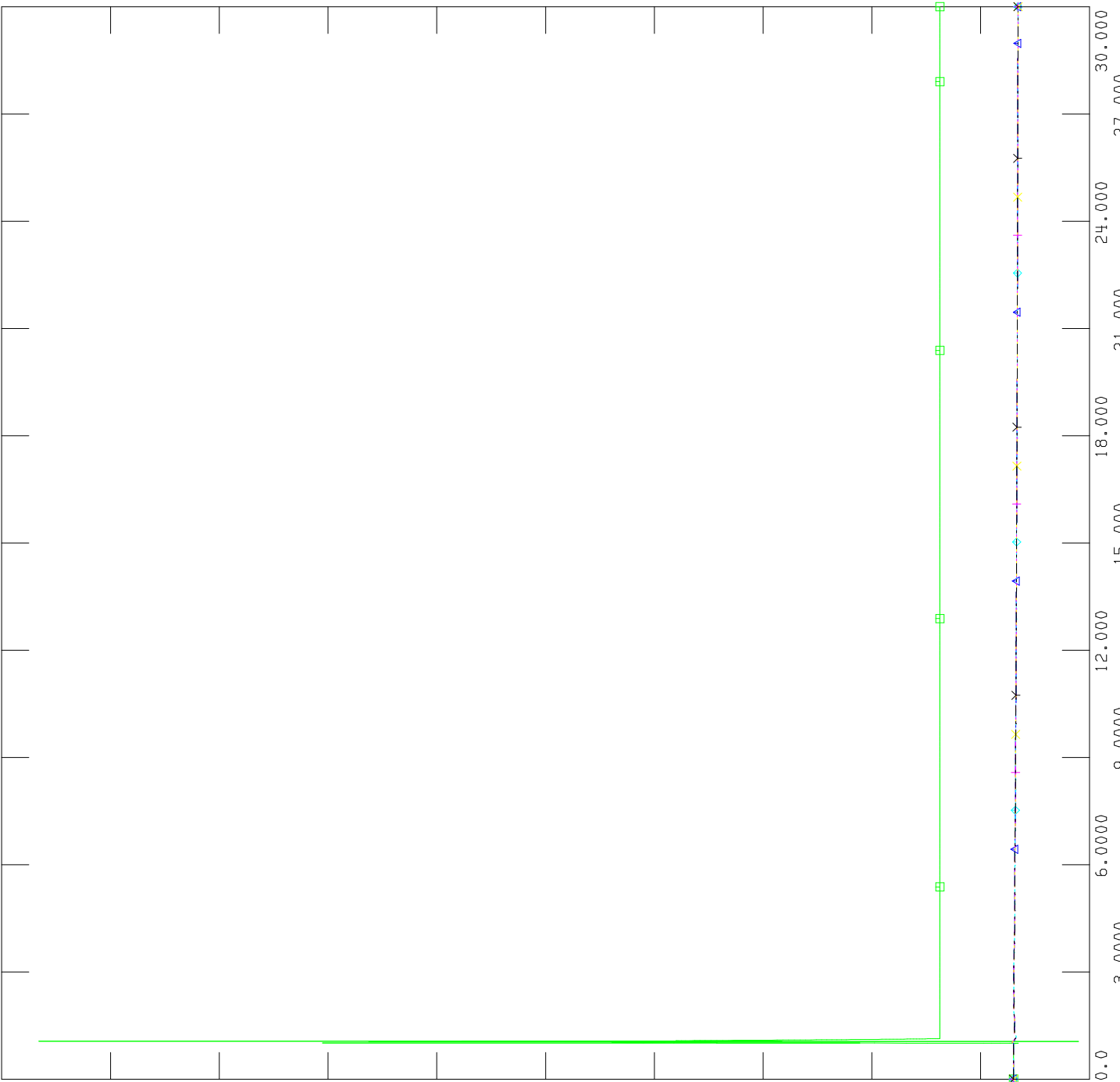
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_171L.out

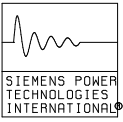




FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_171L.out

Channel	CFREQ	Component	Value
CHNL# 18	92046	CMCBRIDE6	0.6900
CHNL# 17	11002	CGARDNG2	0.5750
CHNL# 16	4740	CARD_07	1.0000
CHNL# 15	2389	CHILLRIDG	25.0000
CHNL# 14	100018	CPURPLESP	0.5750
CHNL# 13	2294	CTOTHILL2	0.6900

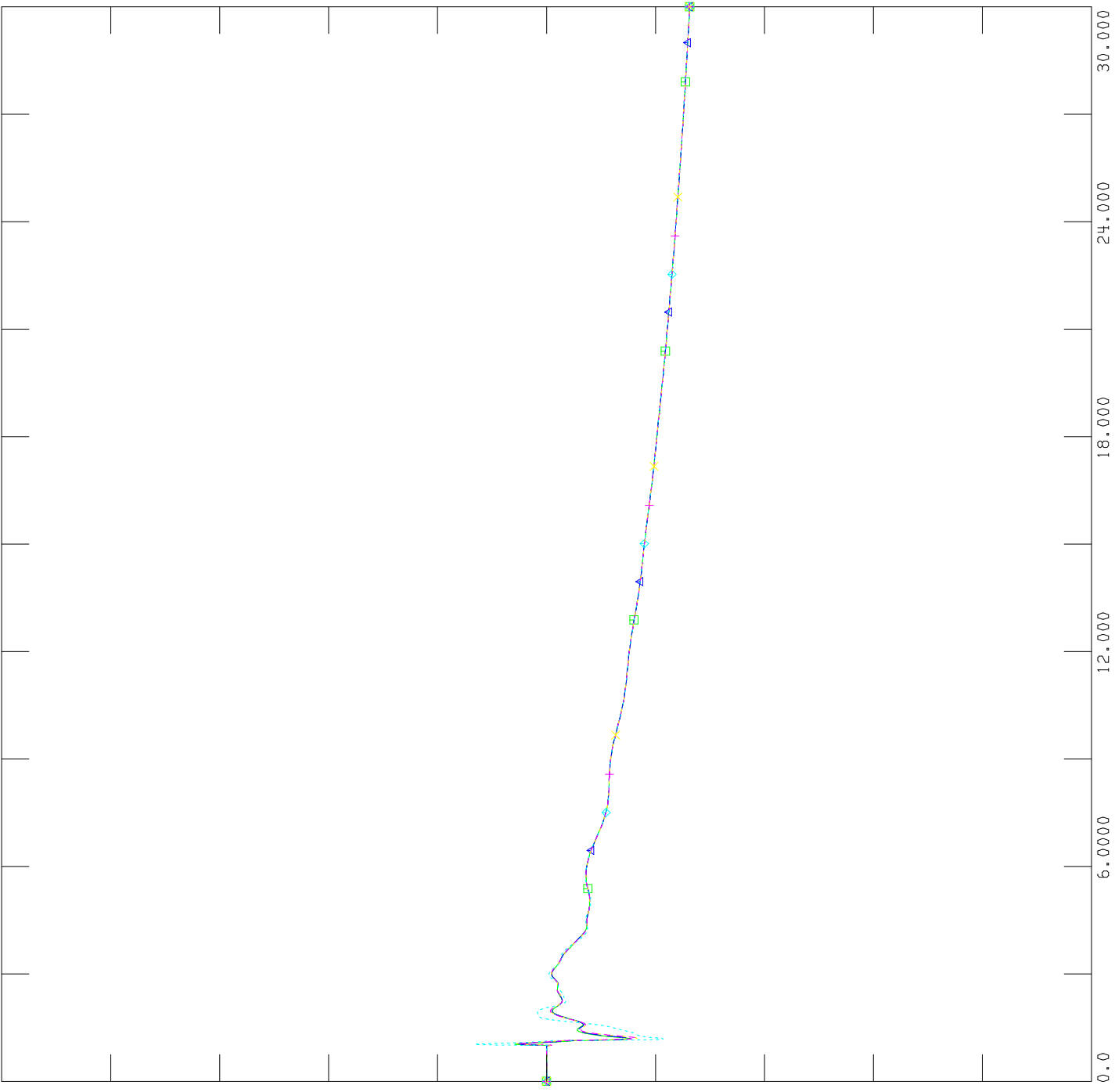




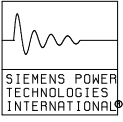
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_171L.out

THU, NOV 18 2010 13:49
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270 CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680 CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271 CBULLS H7	138.00]]	o-----o	-0.0067
0.00670	CHNL# 20: CFREQ	269 CBURDETT7	138.00]]	^-----^	-0.0067
0.00670	CHNL# 19: CFREQ	31 CFINCAST7	138.00]]	□-----□	-0.0067

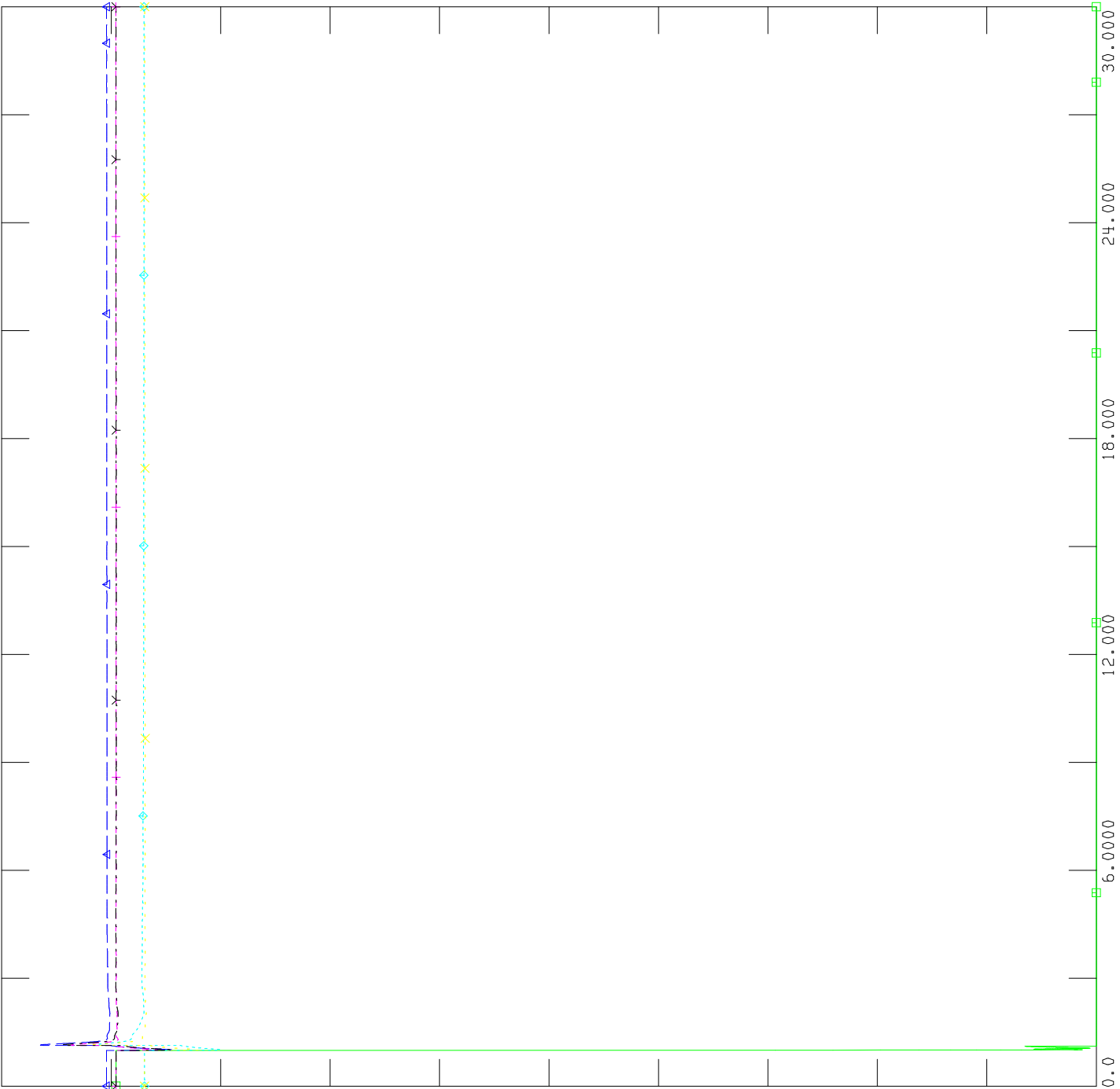


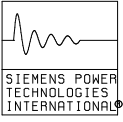
C-6-4



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513&SATR_171L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 EMCBRIDE6	0.6900
CHNL# 28	EVOLT 11002 EGARDNG2	0.5750
CHNL# 27	EVOLT 4740 CARD_07	1.0000
CHNL# 26	EVOLT 2389 CHILLRIDG	25.000
CHNL# 25	EVOLT 100018 CPURPLESP	0.5750
CHNL# 24	EVOLT 2294 CTOTHILL2	0.6900

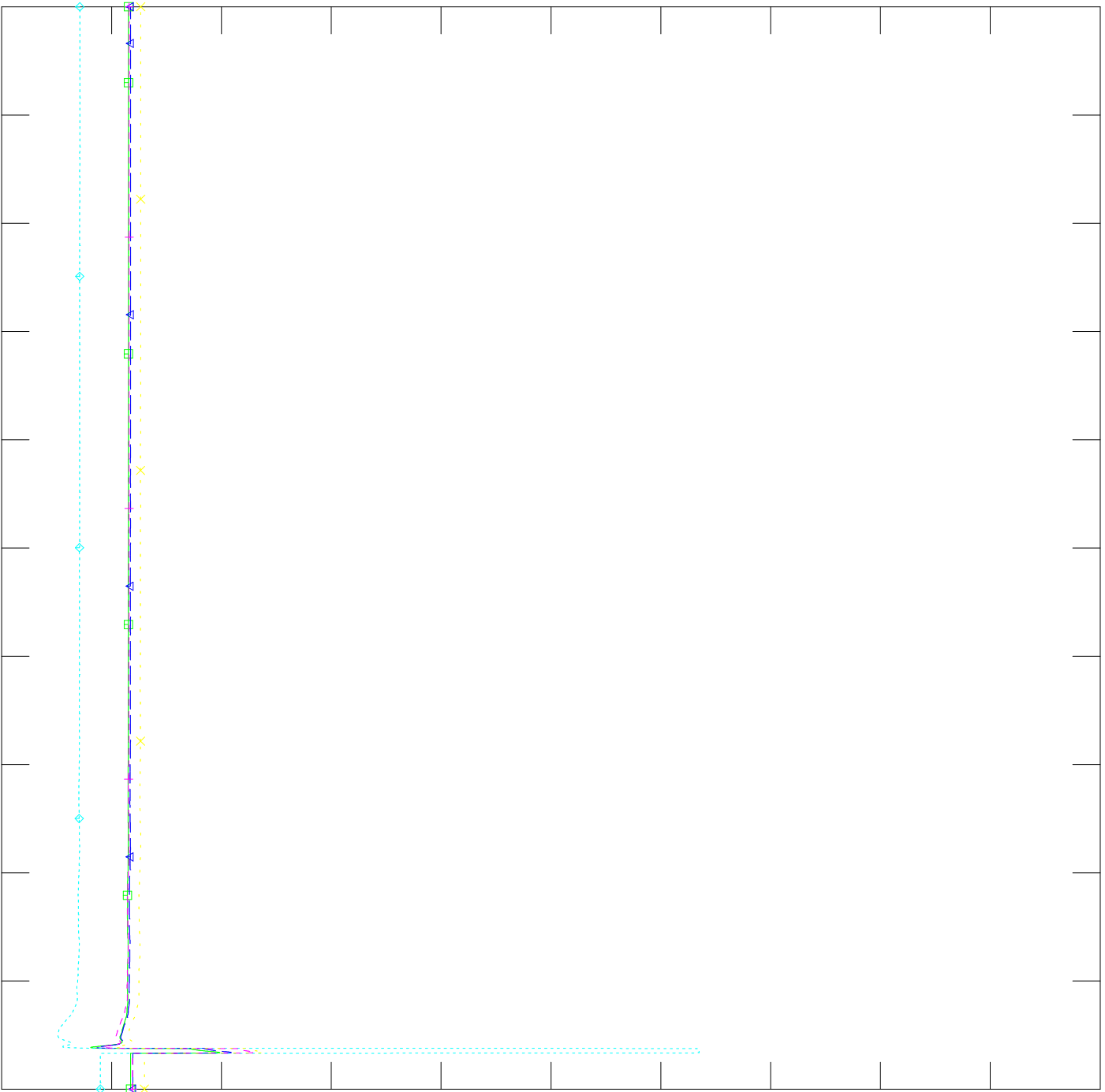




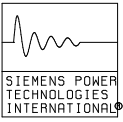
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_171L.out

THU, NOV 18 2010 13:50
BUS VOLTAGE

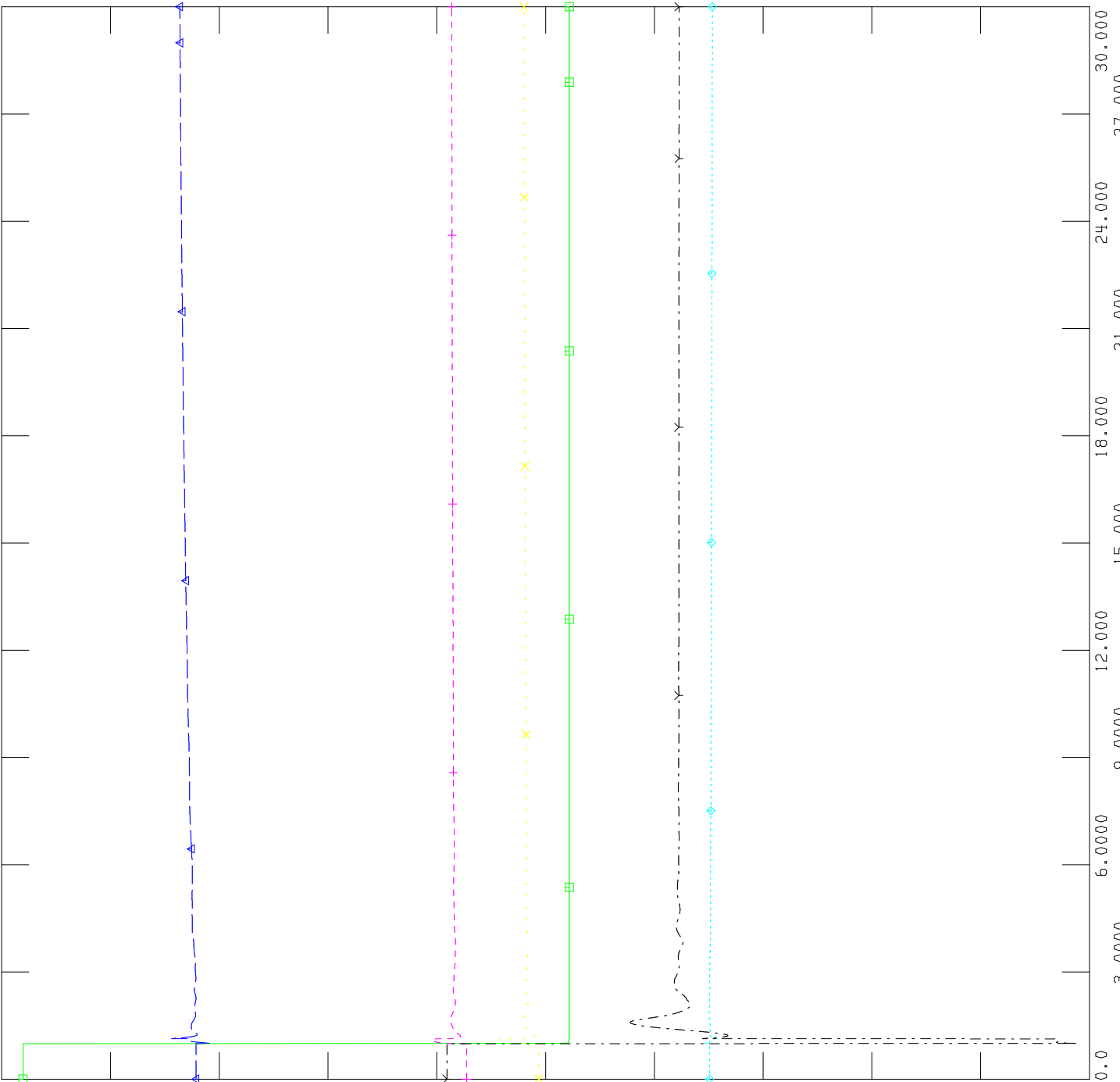
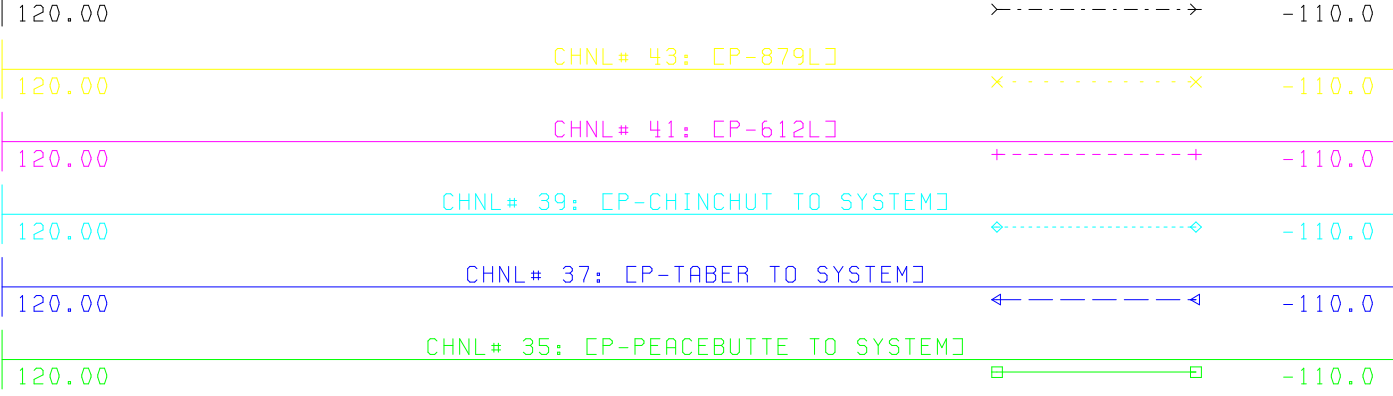
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



TIME (SECONDS) C-6-6



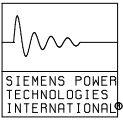
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_171L.out
CHNL# 45: CP-880LJ



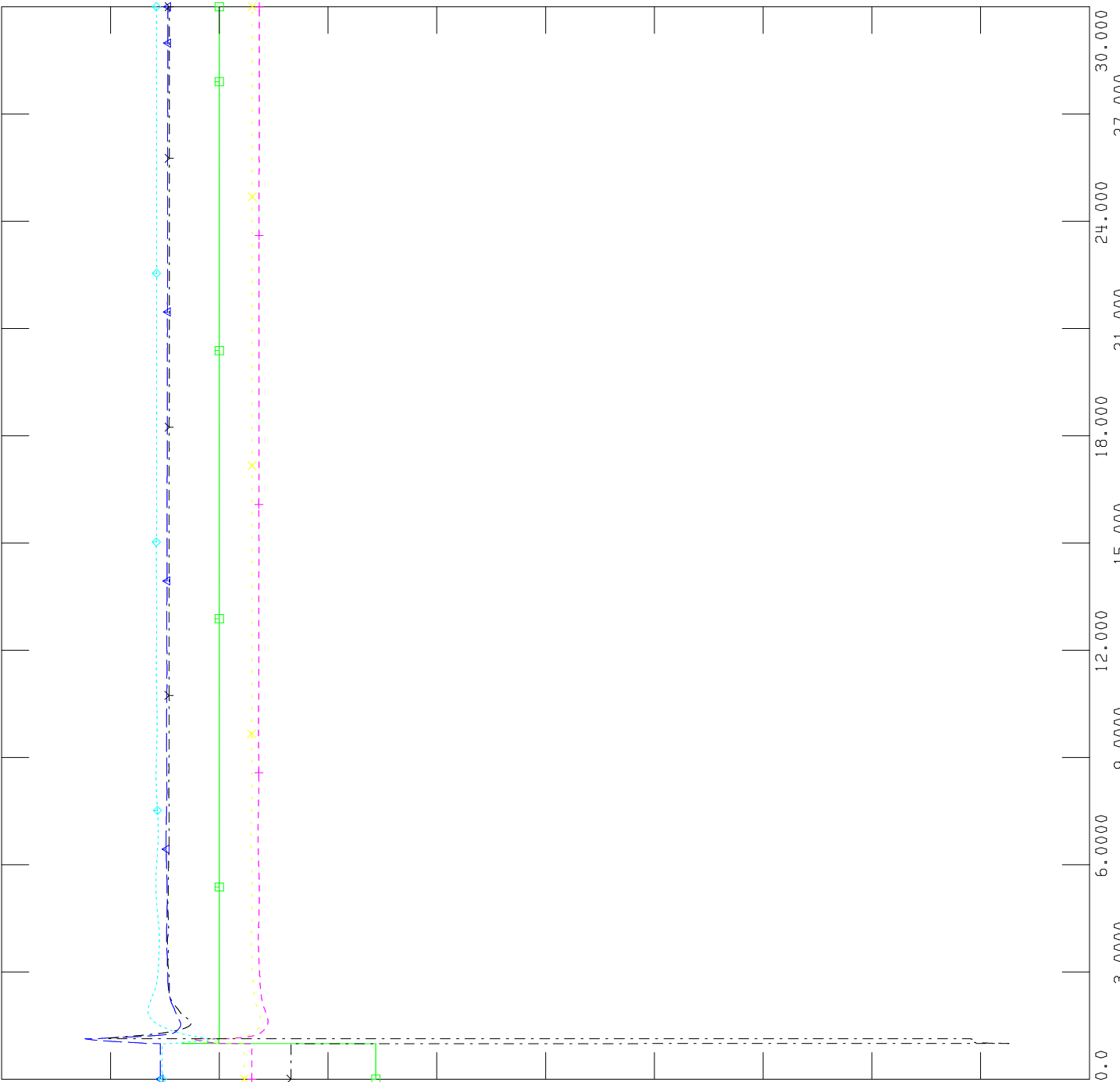
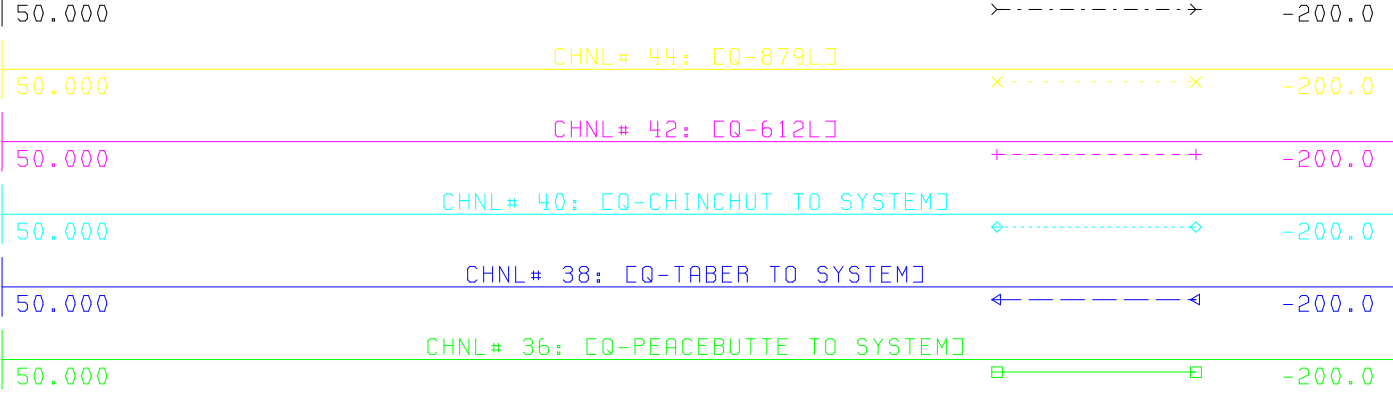
THU, NOV 18 2010 13:51
BRANCH ACTIVE POWER

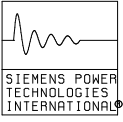
C-6-7

TIME (SECONDS)

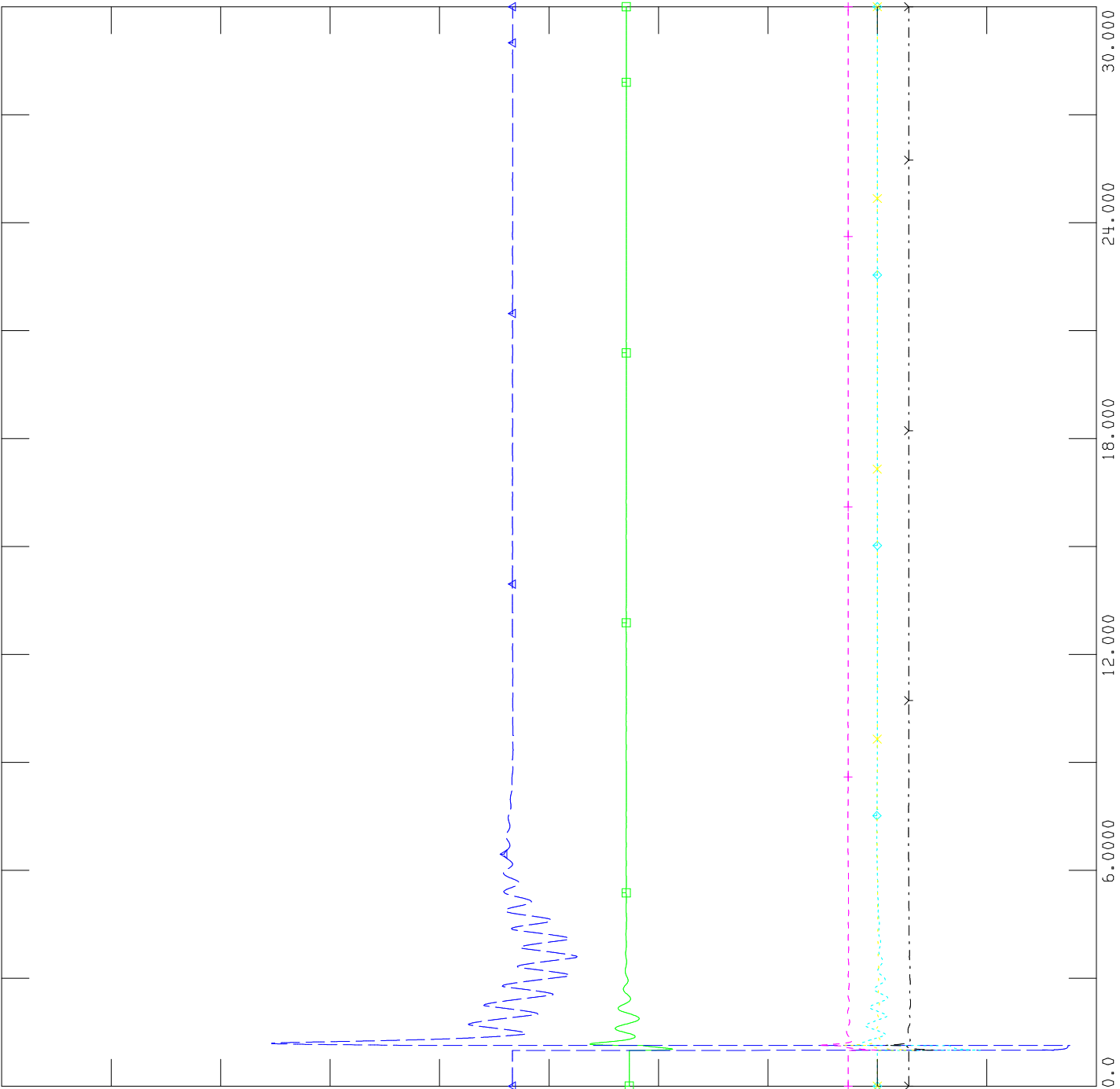
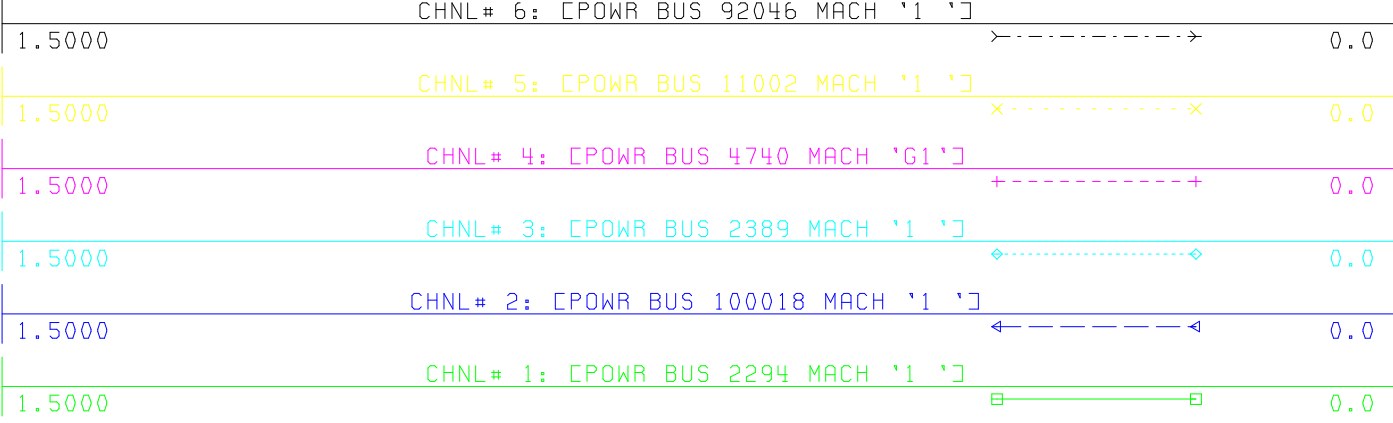


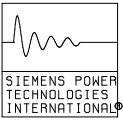
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_171L.out
CHNL# 46: [Q-880L]



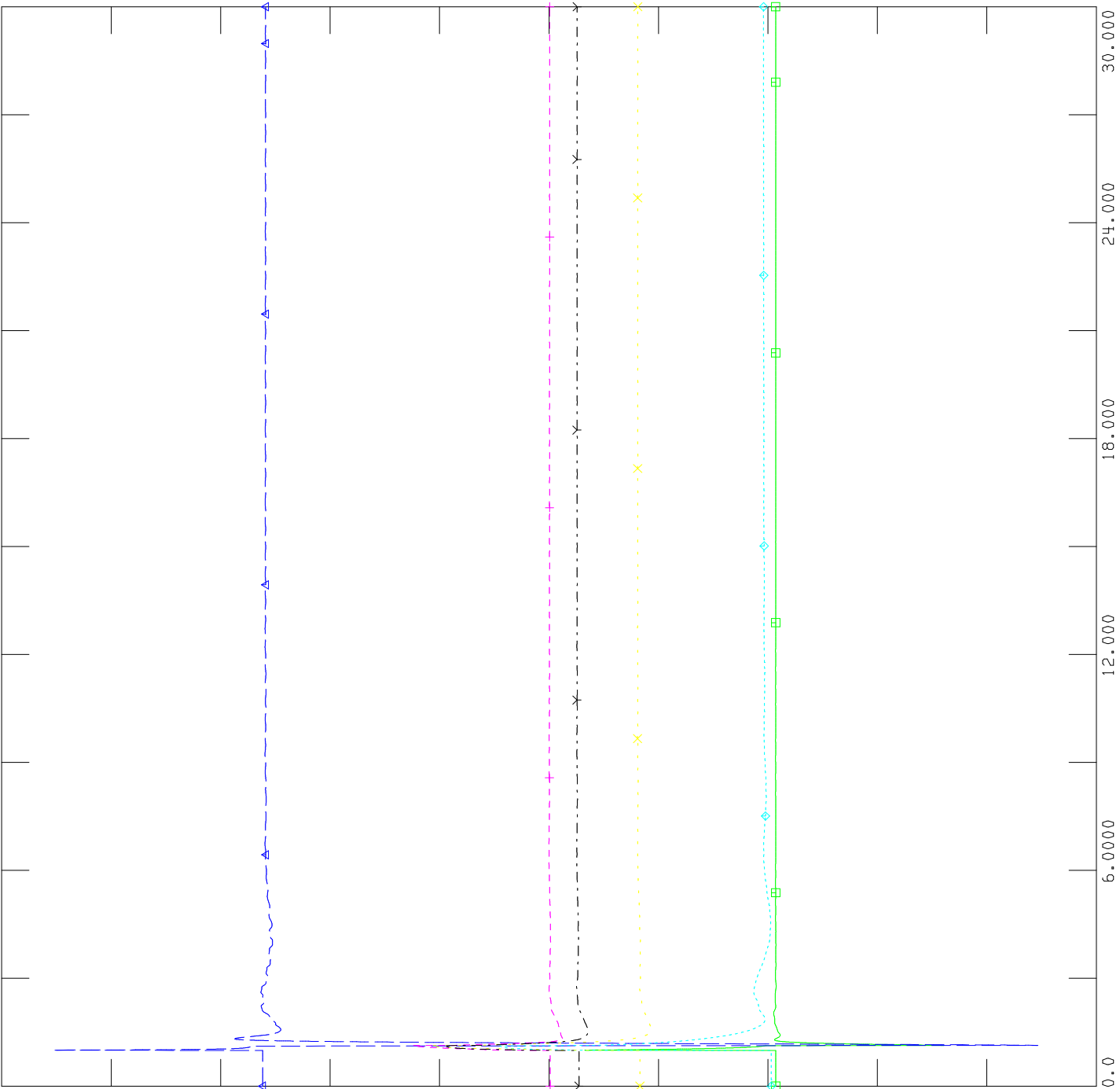
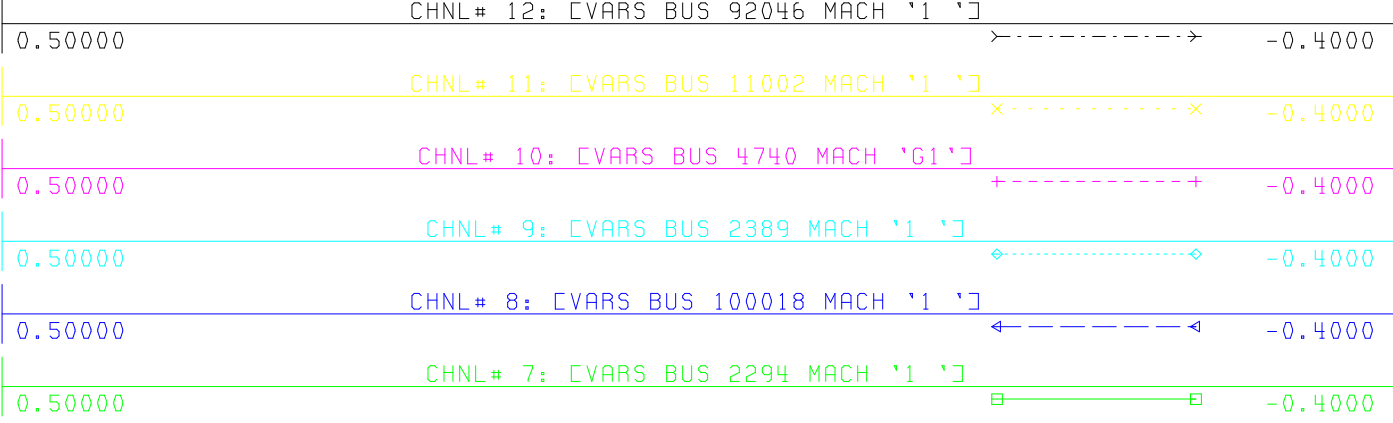


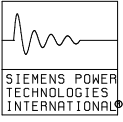
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_612L.out





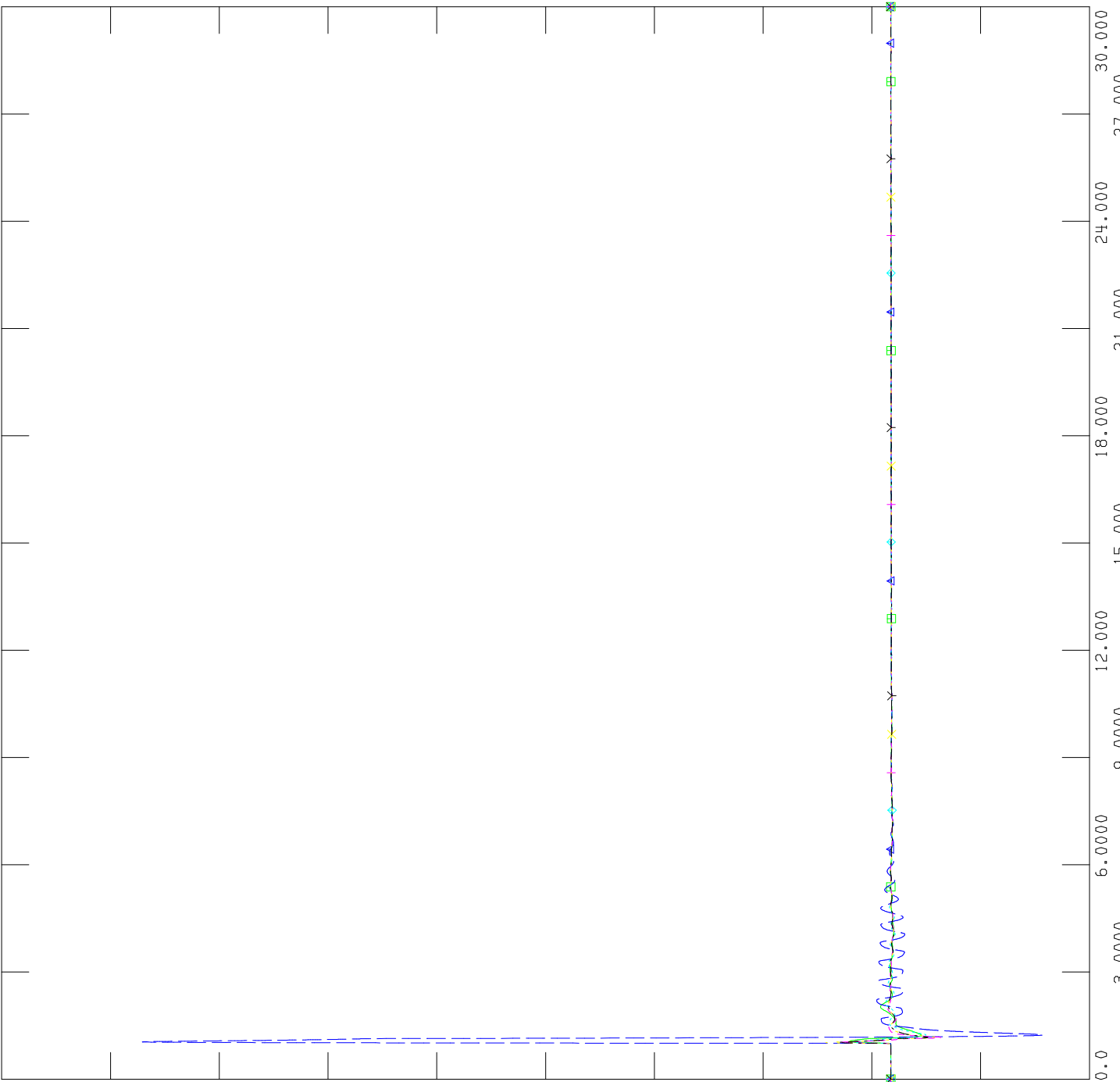
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_612L.out





FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_612L.out

0.03000	CHNL# 18: CFREQ 92046 [MCMBRIDE6 0.6900]]	-0.0067
0.03000	CHNL# 17: CFREQ 11002 [EGARDNG2 0.5750]]	-0.0067
0.03000	CHNL# 16: CFREQ 4740 [CARD_07 1.0000]]	-0.0067
0.03000	CHNL# 15: CFREQ 2389 [CHILLRIDG 25.000]]	-0.0067
0.03000	CHNL# 14: CFREQ 100018 [PURPLESP 0.5750]]	-0.0067
0.03000	CHNL# 13: CFREQ 2294 [TOTHILL2 0.6900]]	-0.0067

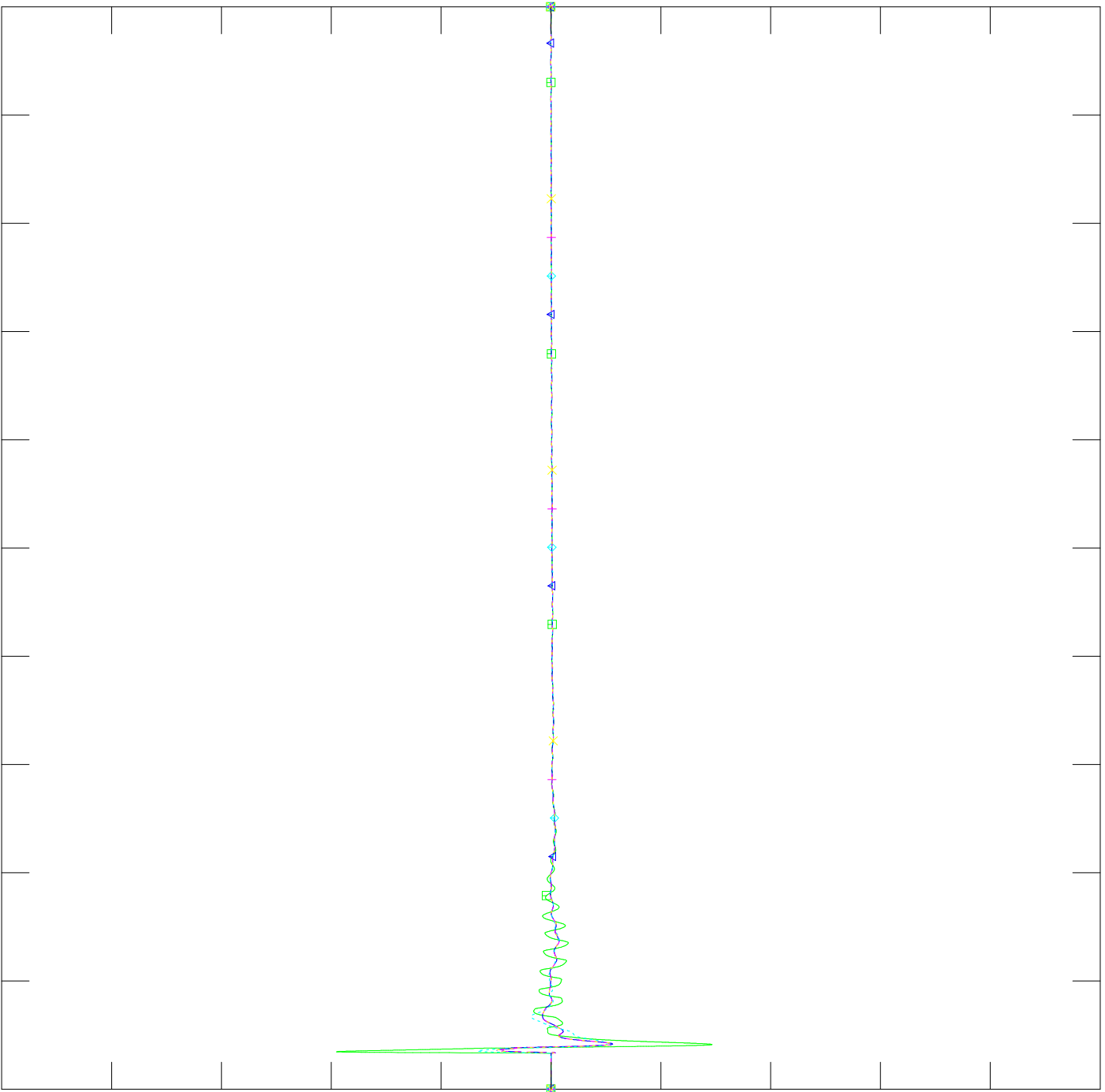




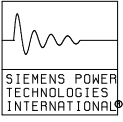
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_612L.out

THU, NOV 18 2010 13:57
 BUS FREQUENCY

Channel	Channel ID	Bus Name	Frequency (Hz)	Value
CHNL# 23	CFREQ	270 CSUFFIEL7	138.00	-0.0067
CHNL# 22	CFREQ	680 CMEDICIN7	138.00	-0.0067
CHNL# 21	CFREQ	271 CBULLS H7	138.00	-0.0067
CHNL# 20	CFREQ	269 CBURDETT7	138.00	-0.0067
CHNL# 19	CFREQ	31 CFINCAST7	138.00	-0.0067

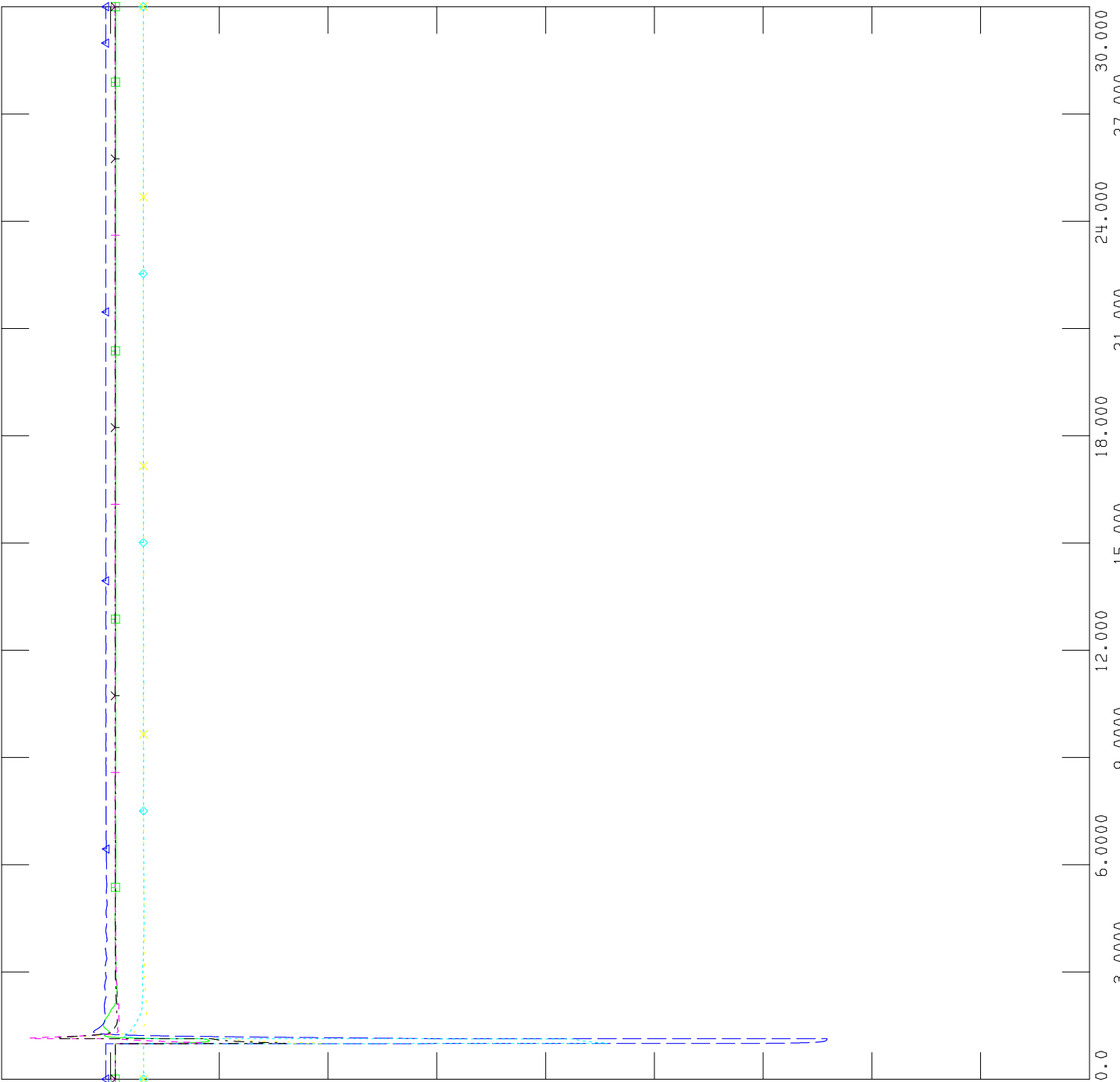


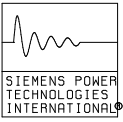
C-6-12



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513&SATR_612L.out

Channel	Label	Value	Scale
CHNL# 29	EVOLT 92046 [MCBRIDE6]	0.6900	0.0
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750	0.0
CHNL# 27	EVOLT 4740 [CARD_07]	1.0000	0.0
CHNL# 26	EVOLT 2389 [CHILLRIDG]	25.000	0.0
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750	0.0
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900	0.0

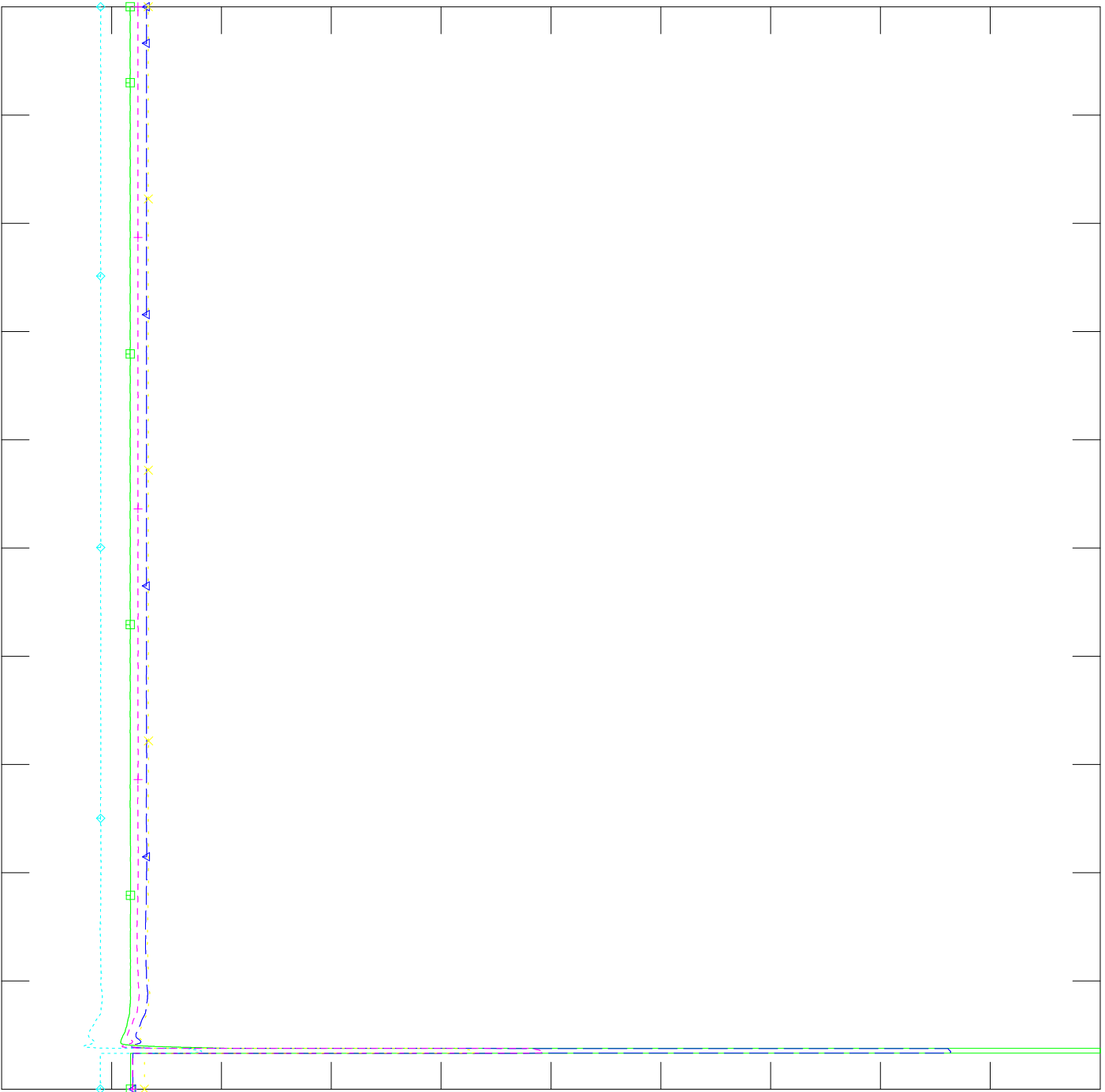




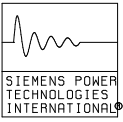
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_612L.out

THU, NOV 18 2010 13:58
 BUS VOLTAGE

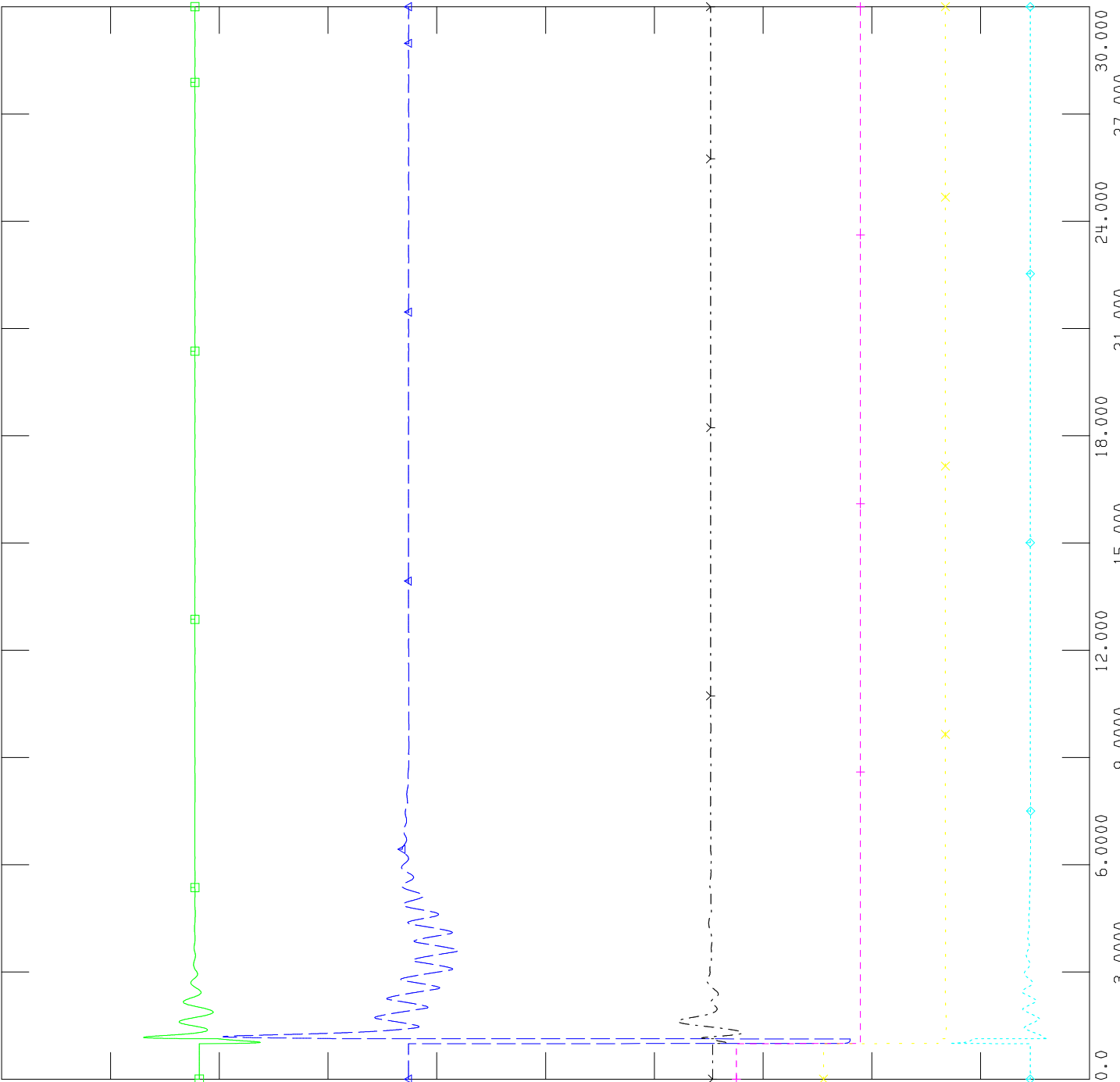
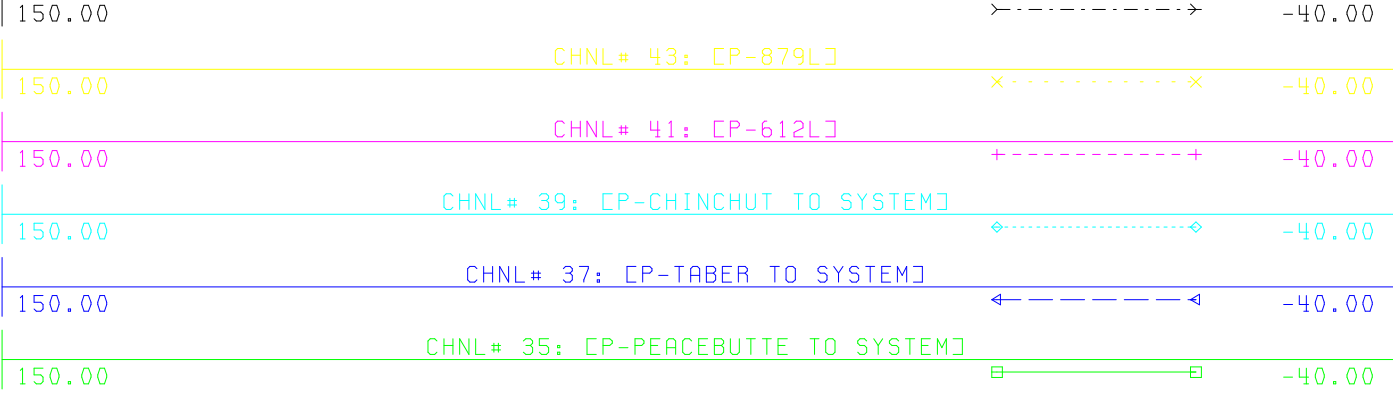
Channel	Label	Value	Marker
CHNL# 34	EVOLT 270 [SUFFIEL7	138.00]]	x
CHNL# 33	EVOLT 680 [MEDICIN7	138.00]]	+
CHNL# 32	EVOLT 271 [BULLS H7	138.00]]	◇
CHNL# 31	EVOLT 269 [BURDETT7	138.00]]	◀
CHNL# 30	EVOLT 31 [FINCAST7	138.00]]	■

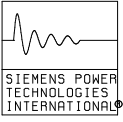


C-6-14

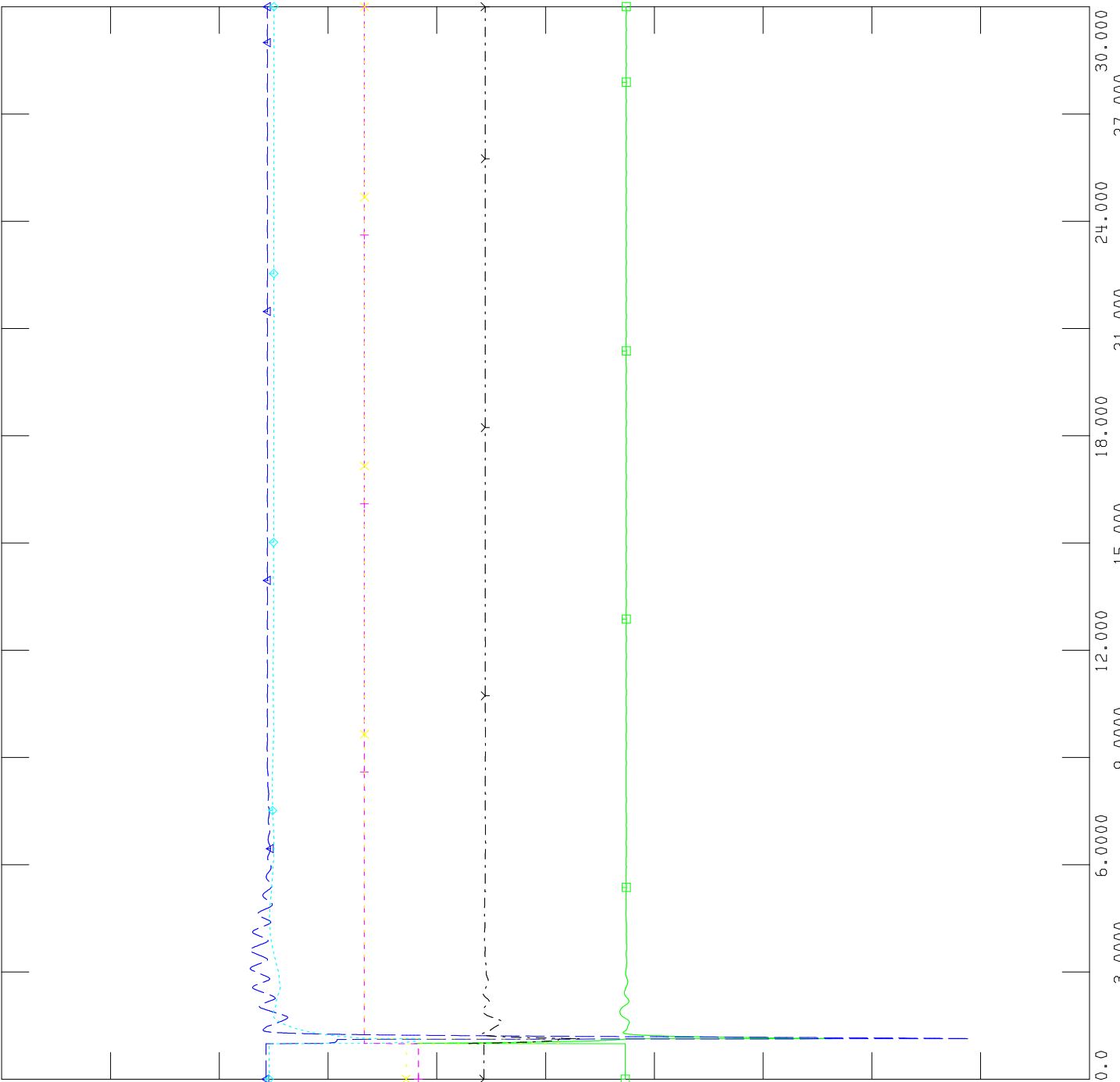
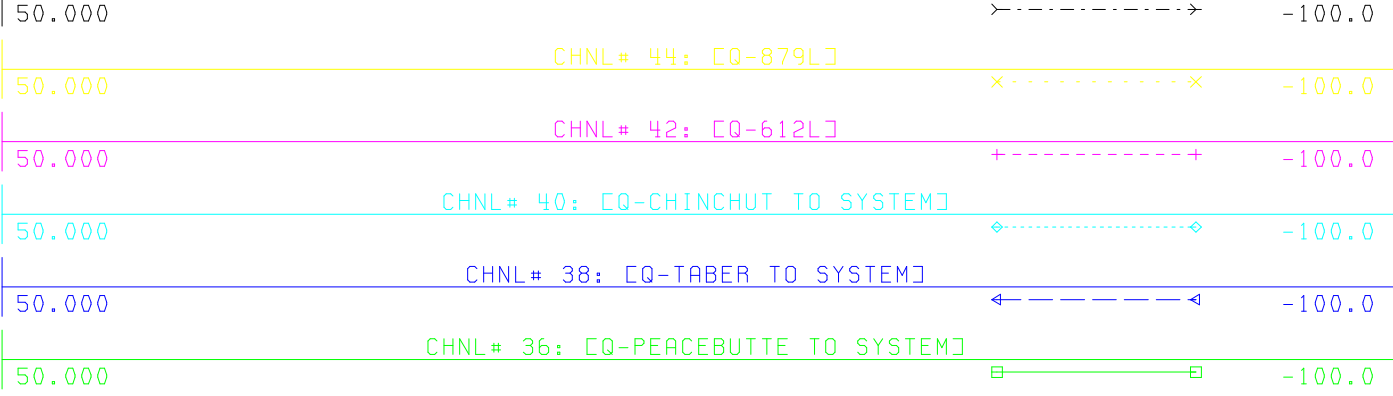


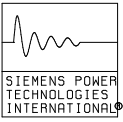
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_612L.out
CHNL# 45: [P-880L]



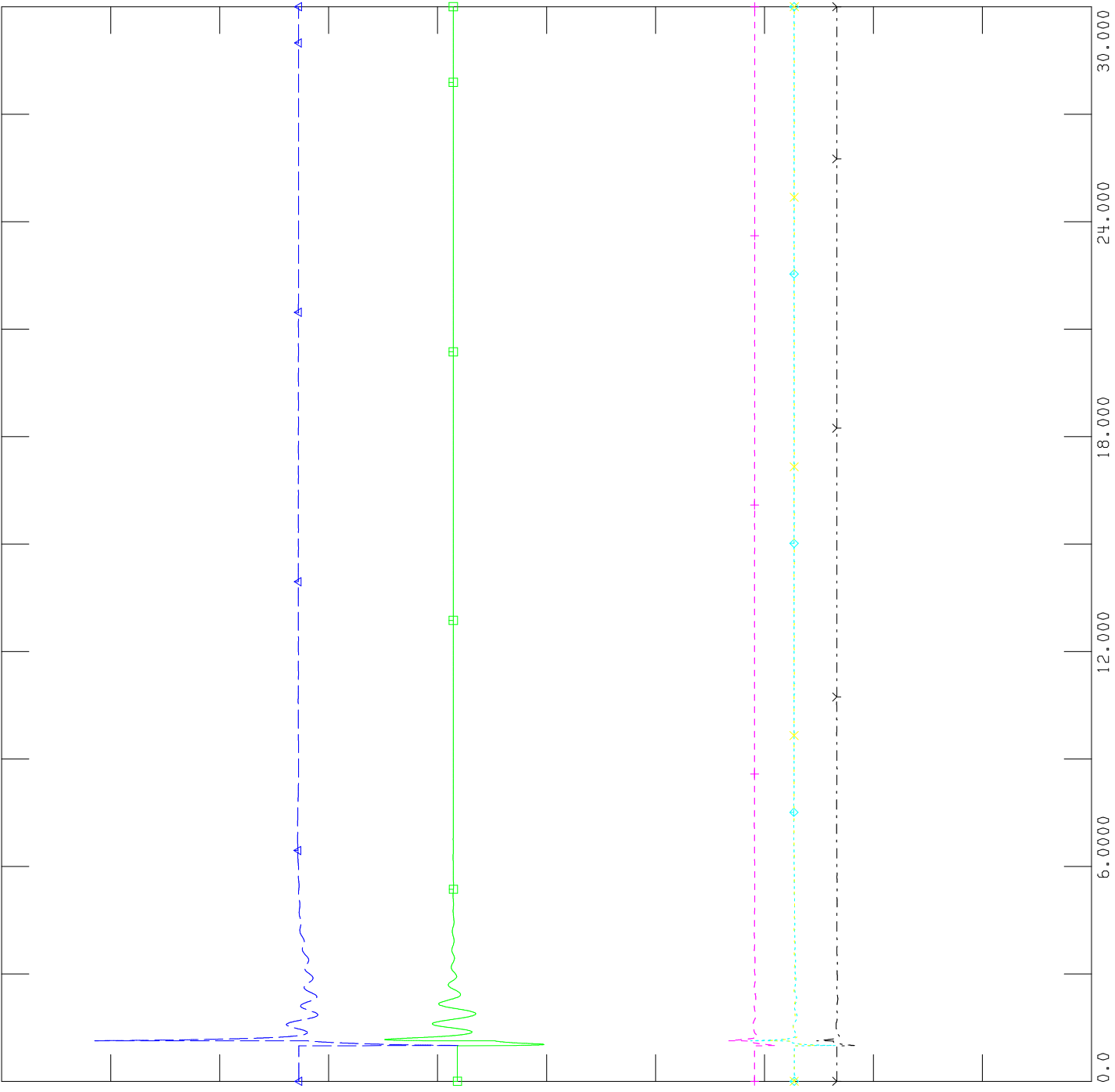
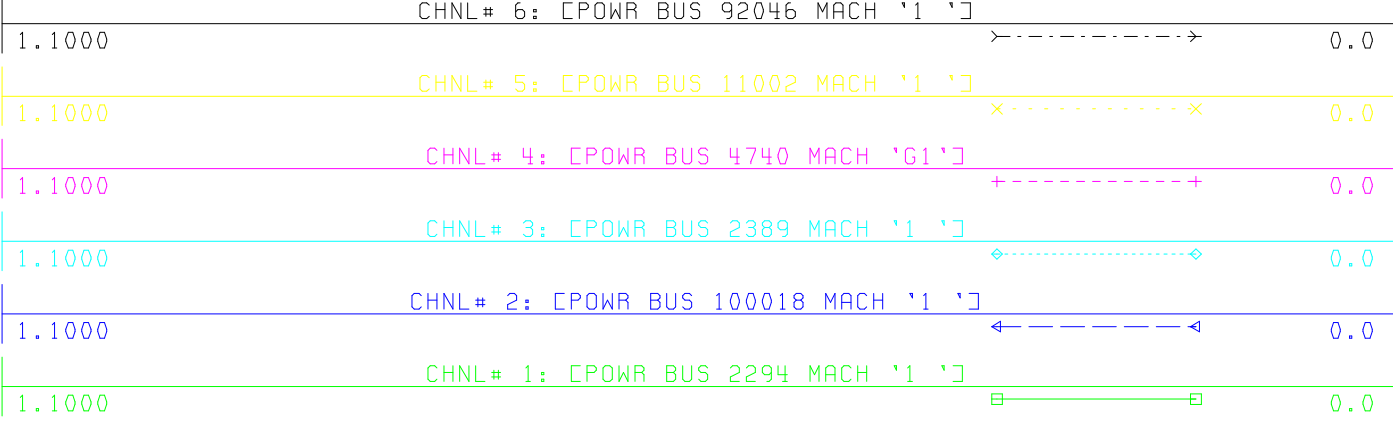


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_612L.out
CHNL# 46: [Q-880L]



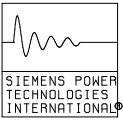


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_760L.out

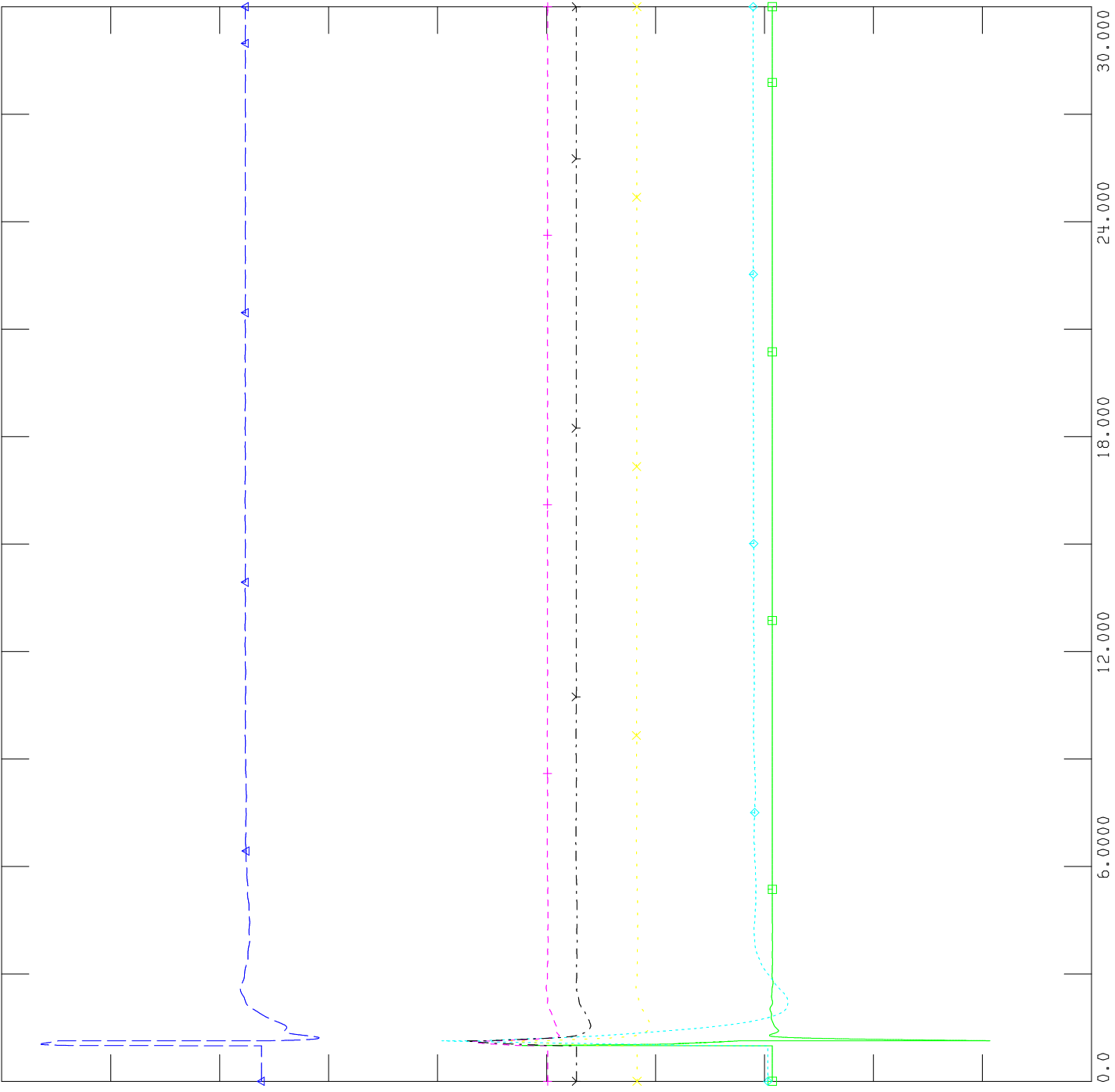
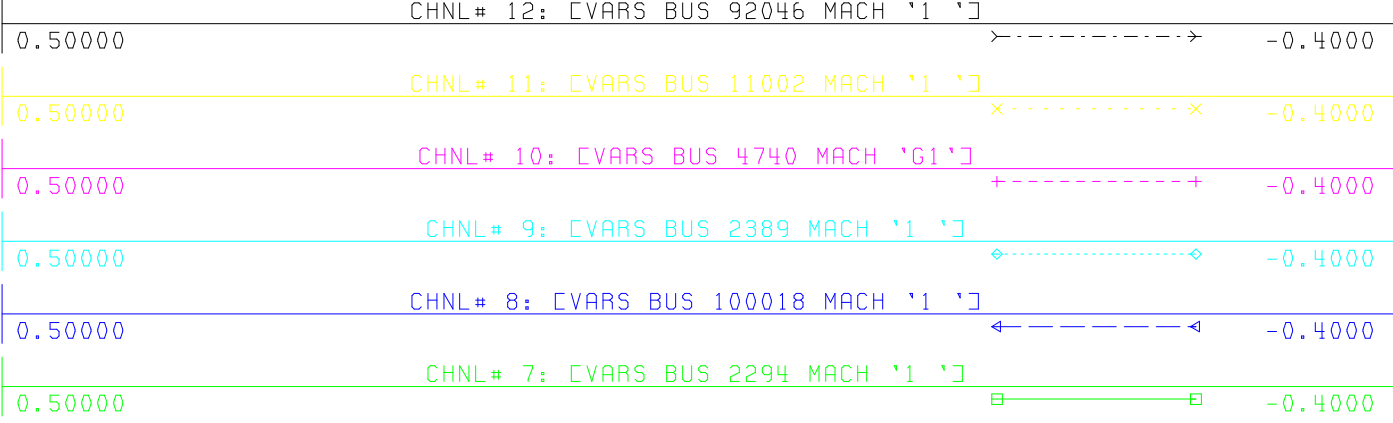


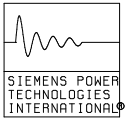
C-6-17

TIME (SECONDS)



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_760L.out

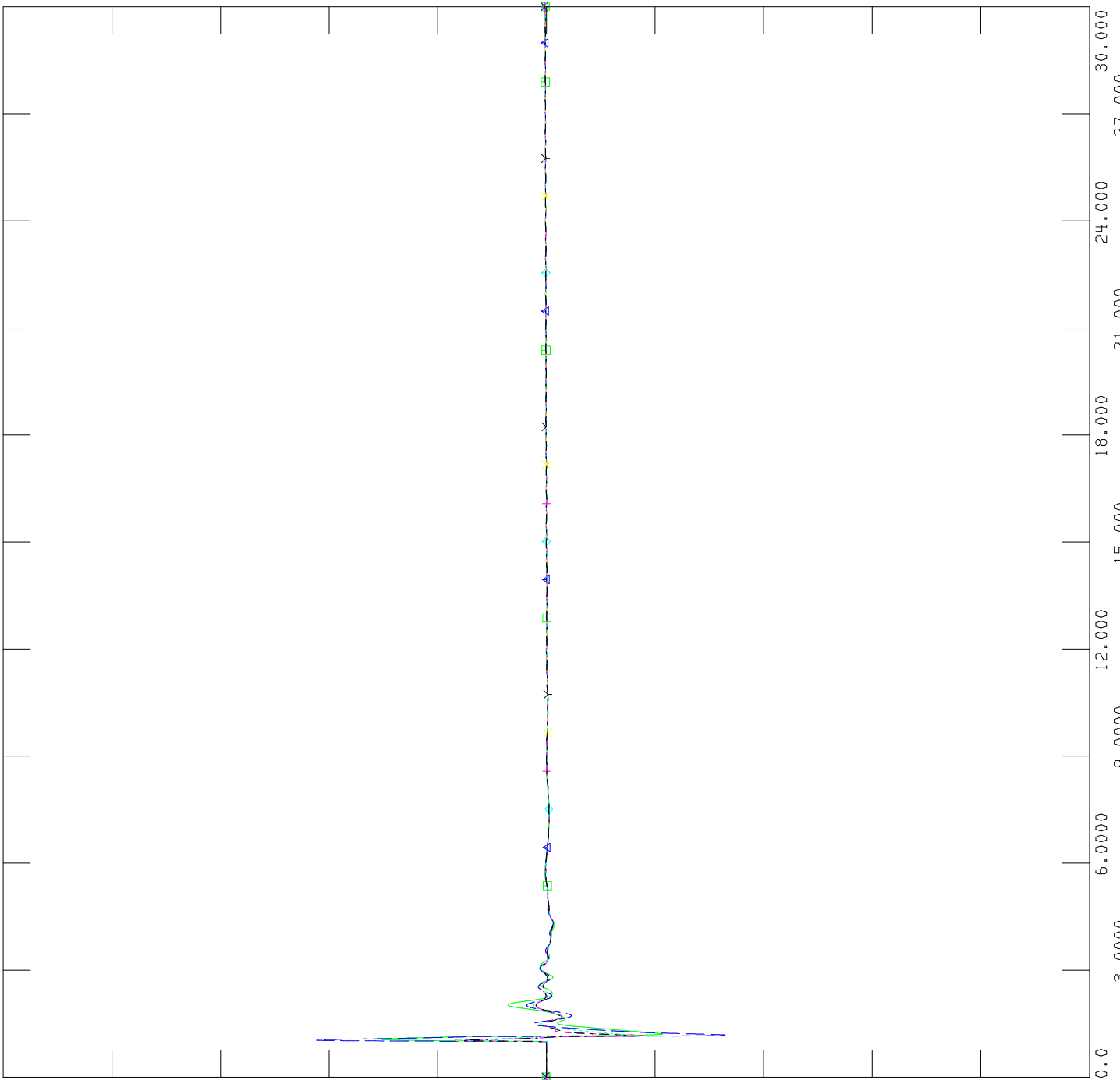




TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
 SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_760L.out

0.00670	CHNL# 18: CFREQ 92046 EMCBRIDE6 0.6900]]	-0.0067
0.00670	CHNL# 17: CFREQ 11002 EGARDNG2 0.5750]]	-0.0067
0.00670	CHNL# 16: CFREQ 4740 CARD_07 1.0000]]	-0.0067
0.00670	CHNL# 15: CFREQ 2389 CHILLRIDG 25.000]]	-0.0067
0.00670	CHNL# 14: CFREQ 100018 CPURPLESP 0.5750]]	-0.0067
0.00670	CHNL# 13: CFREQ 2294 CTOTHILL2 0.6900]]	-0.0067



THU, NOV 18 2010 14:04
 BUS FREQUENCY

C-6-19

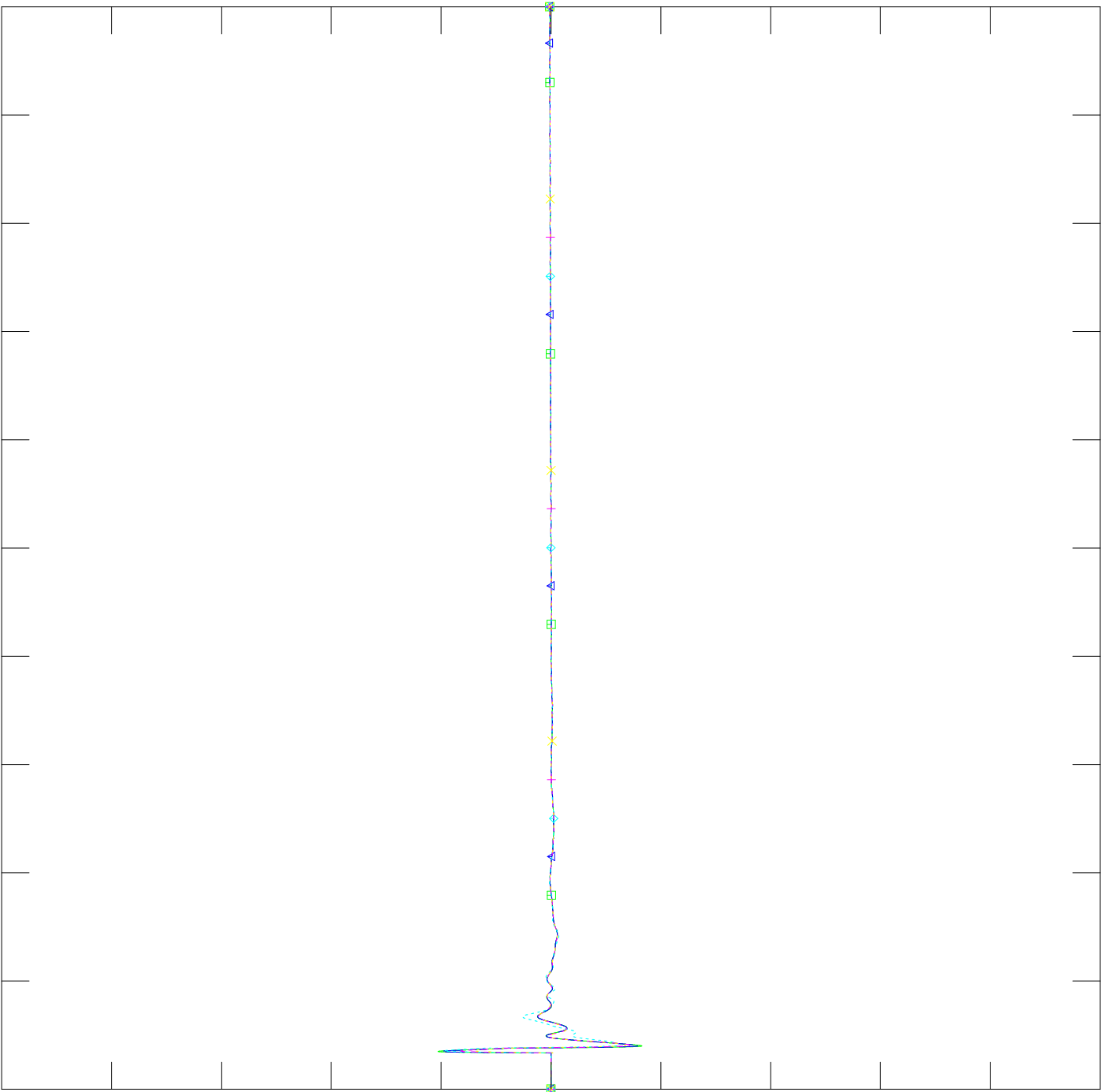


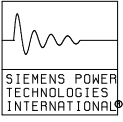
TASMO MODEL; OUTPUT GENERATED 2010-03-01 14:19:37
SWINGBUS 1520 FOR FC-2009-5:2013-04-30:6:34--1--1-0-0

FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_760L.out

THU, NOV 18 2010 14:04
BUS FREQUENCY

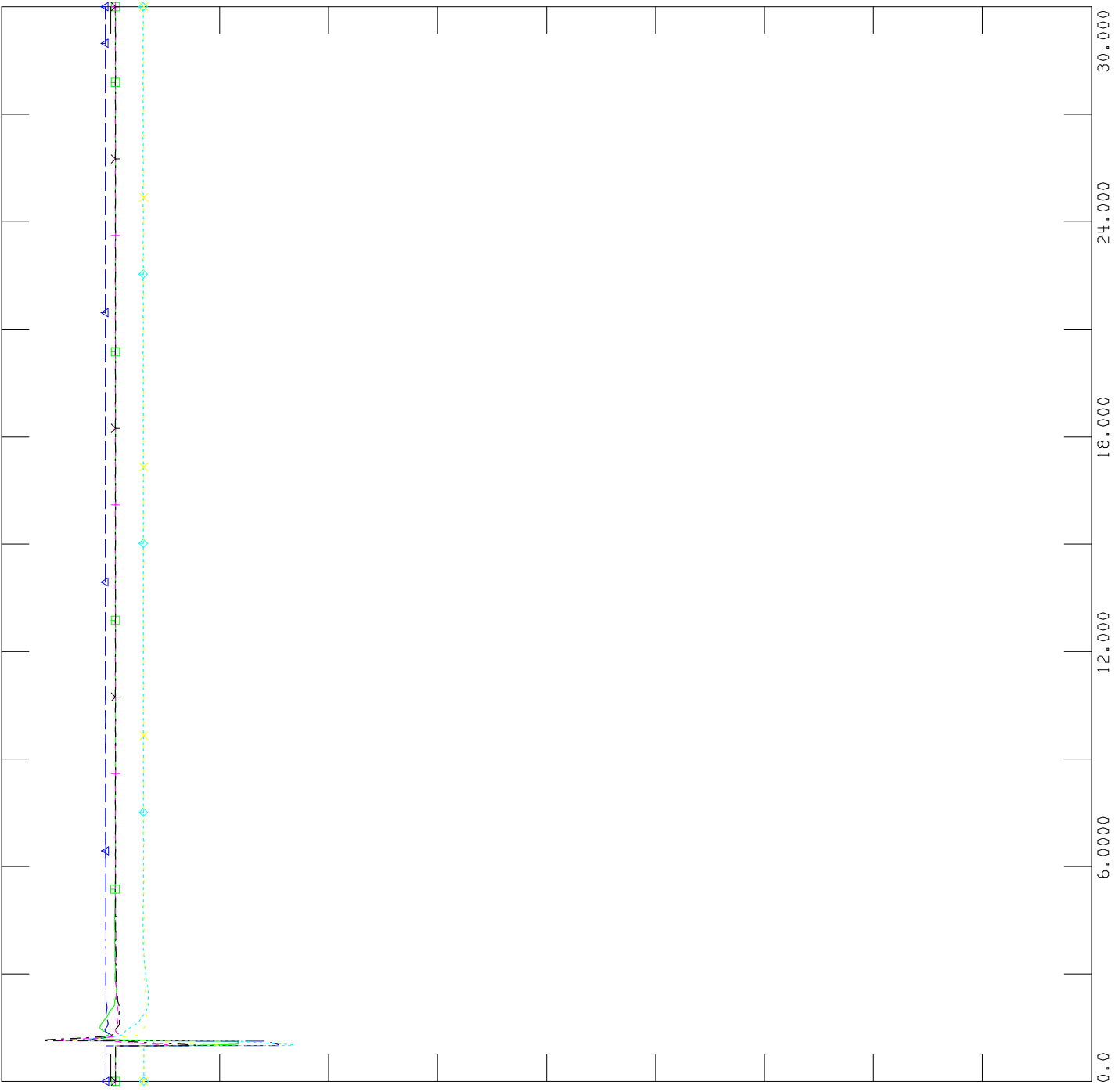
Channel	Frequency (Hz)	Value
CHNL# 23: CFREQ	270 [SUFFIEL7	138.00]]
CHNL# 22: CFREQ	680 [MEDICIN7	138.00]]
CHNL# 21: CFREQ	271 [BULLS H7	138.00]]
CHNL# 20: CFREQ	269 [BURDETT7	138.00]]
CHNL# 19: CFREQ	31 [FINCAST7	138.00]]

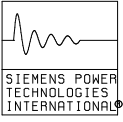




FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513&SATR_760L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [MCMBRIDE6]	0.6900
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750
CHNL# 27	EVOLT 4740 [CARD_07]	1.0000
CHNL# 26	EVOLT 2389 [CHILLRIDG]	25.0000
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900

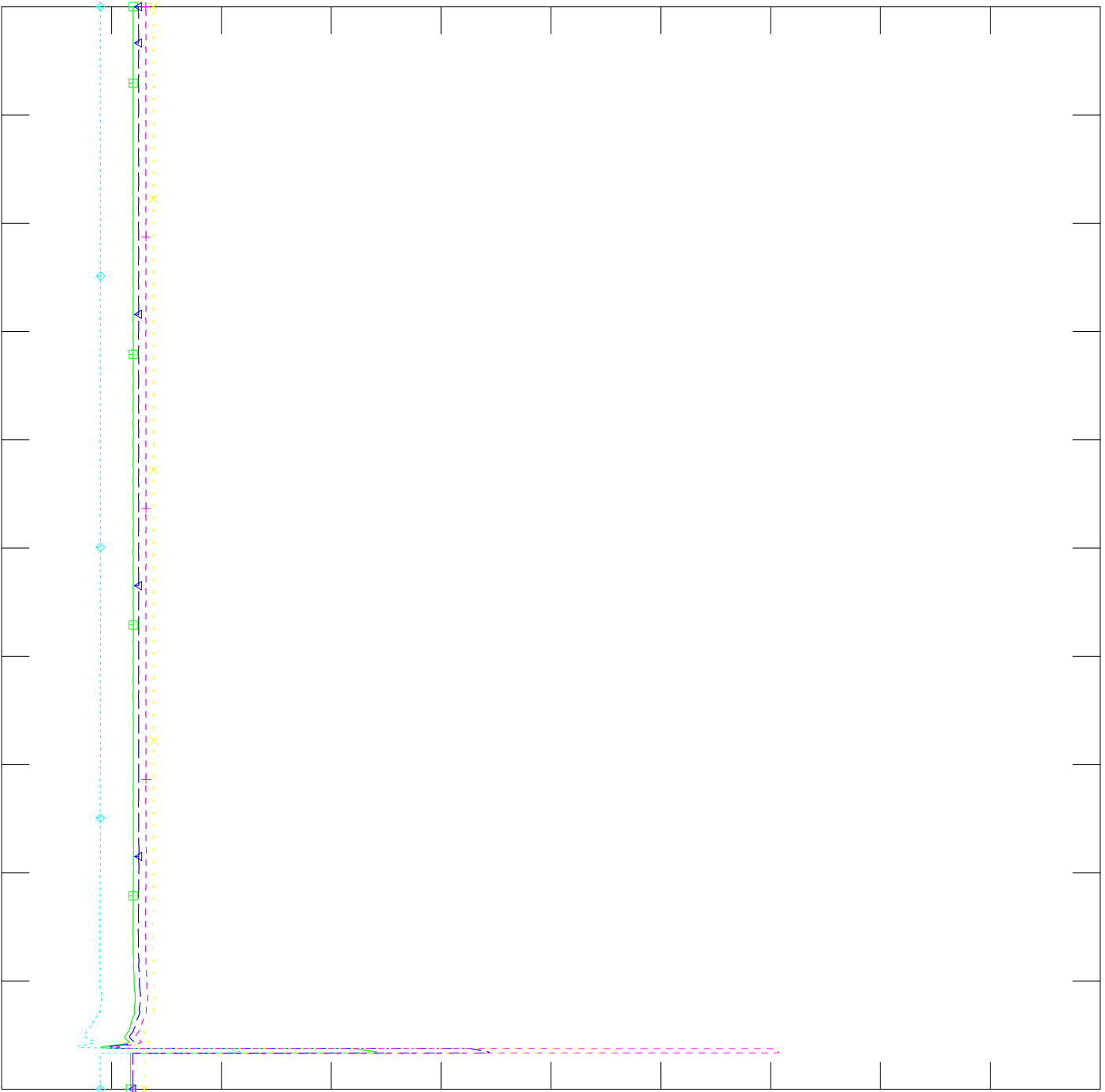




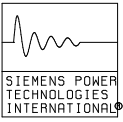
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_760L.out

THU, NOV 18 2010 14:05
 BUS VOLTAGE

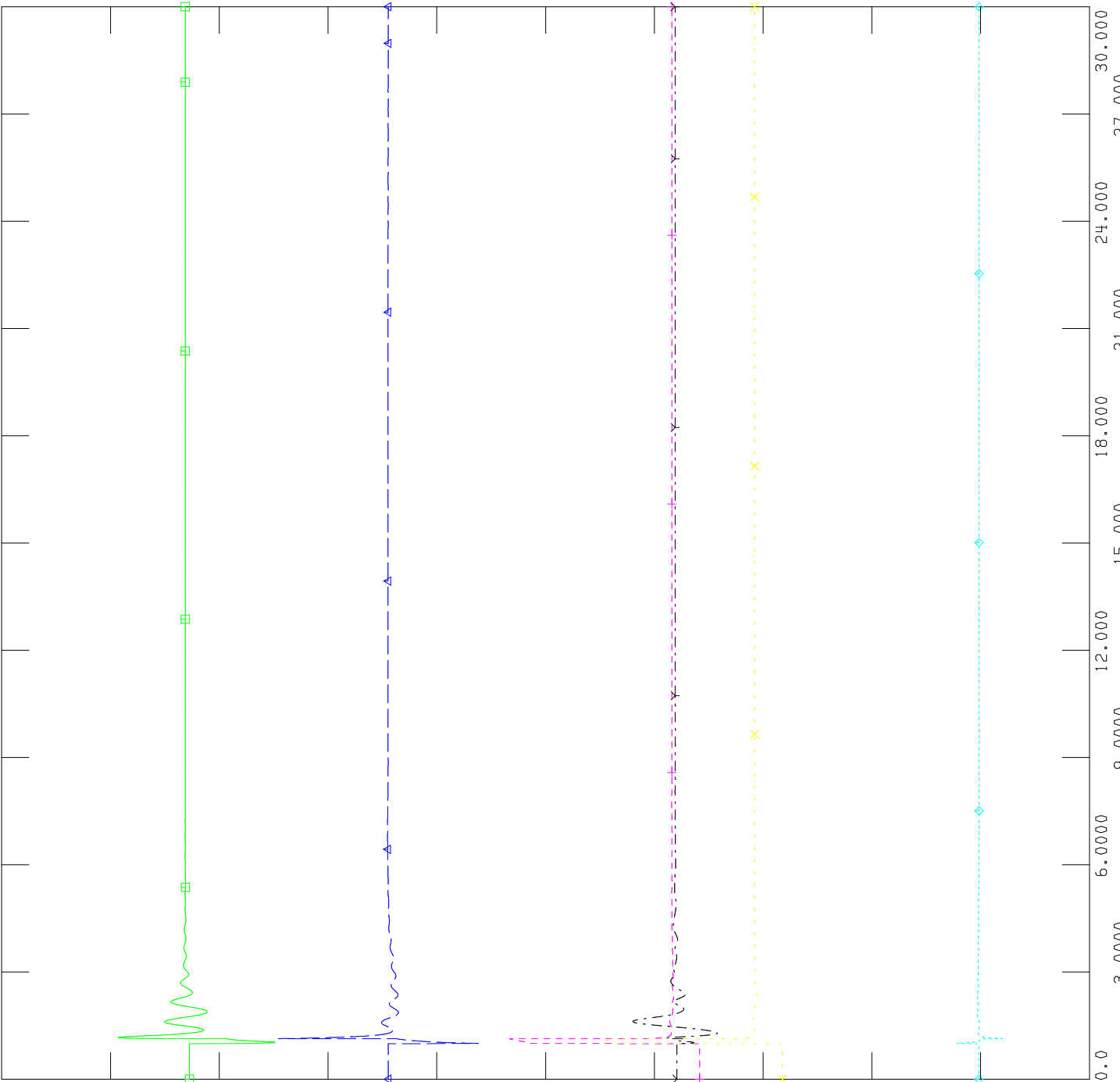
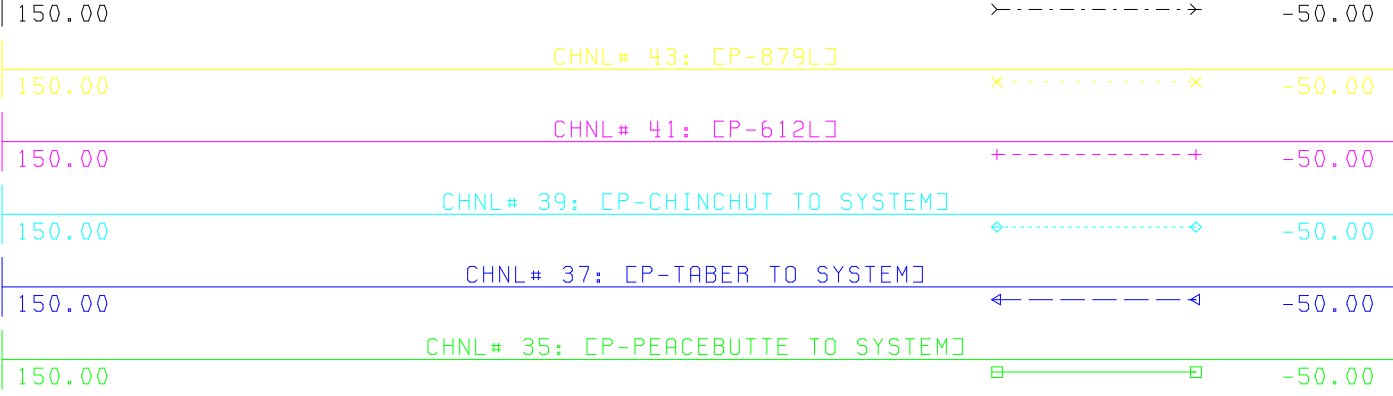
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]

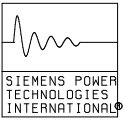


C-6-22

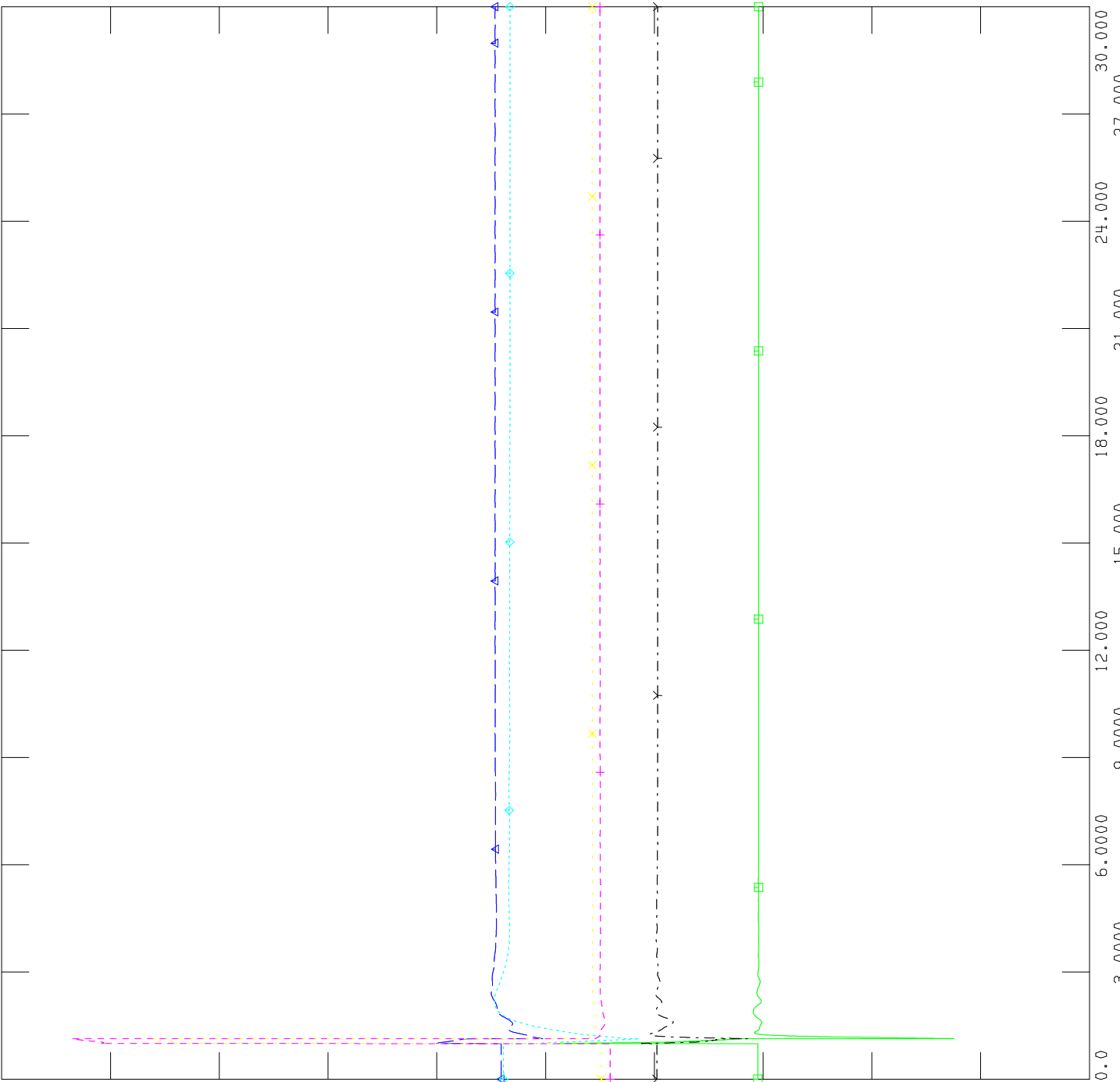
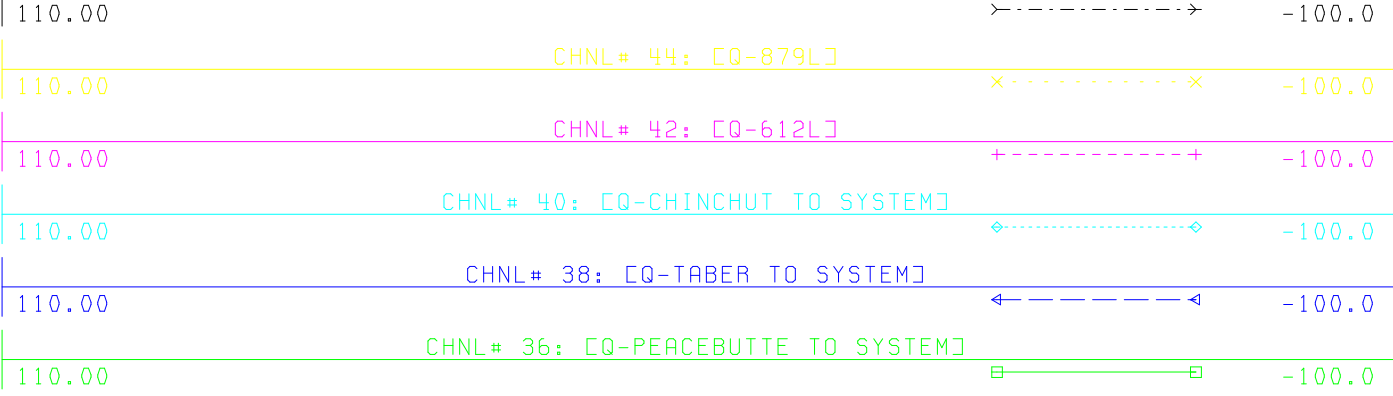


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_760L.out
CHNL# 45: CP-880L]





FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_760L.out
CHNL# 46: [EQ-880L]



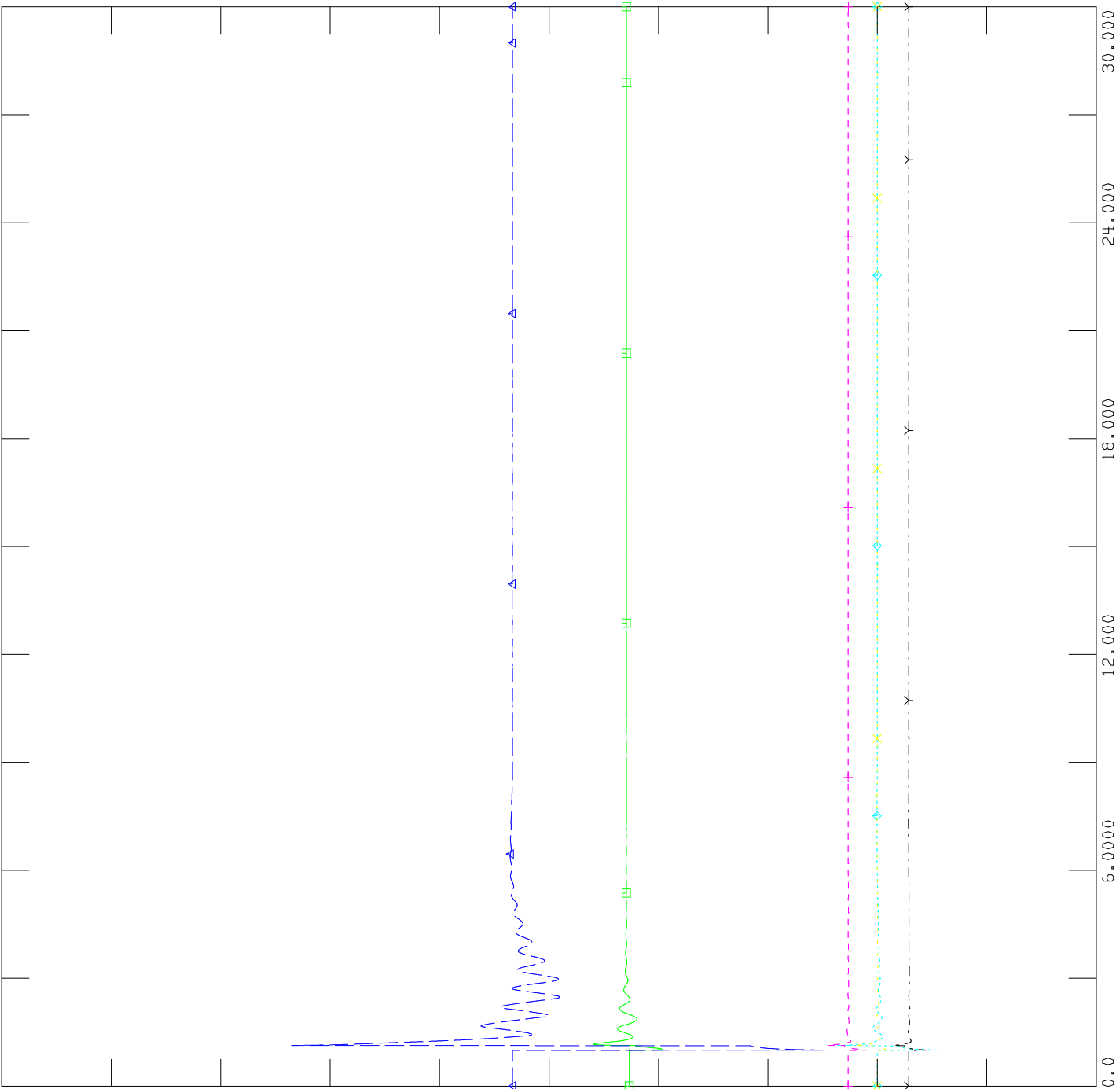
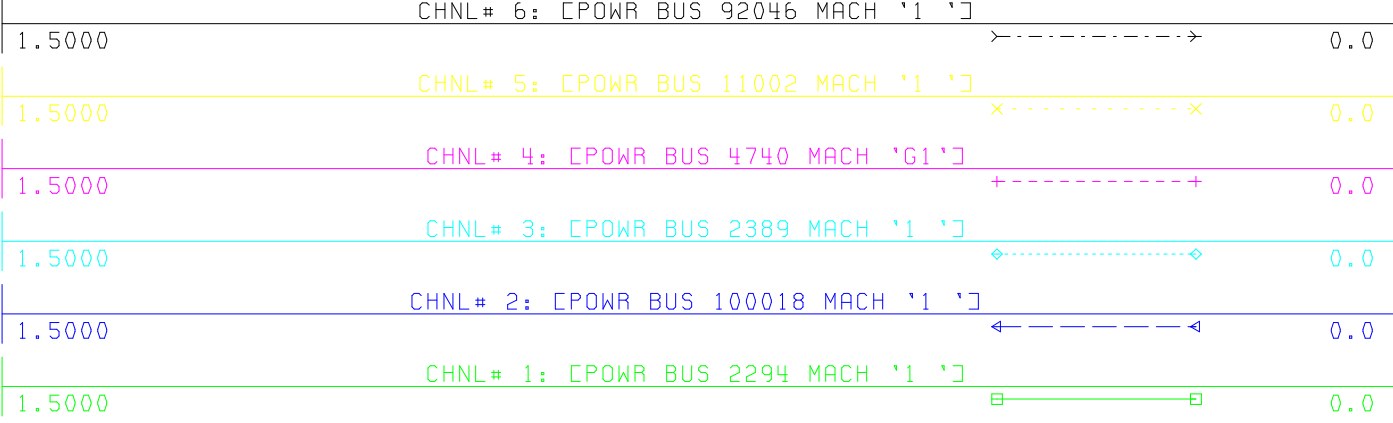
THU, NOV 18 2010 14:08
BRANCH REACTIVE POWER

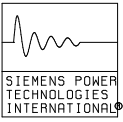
C-6-24

TIME (SECONDS)

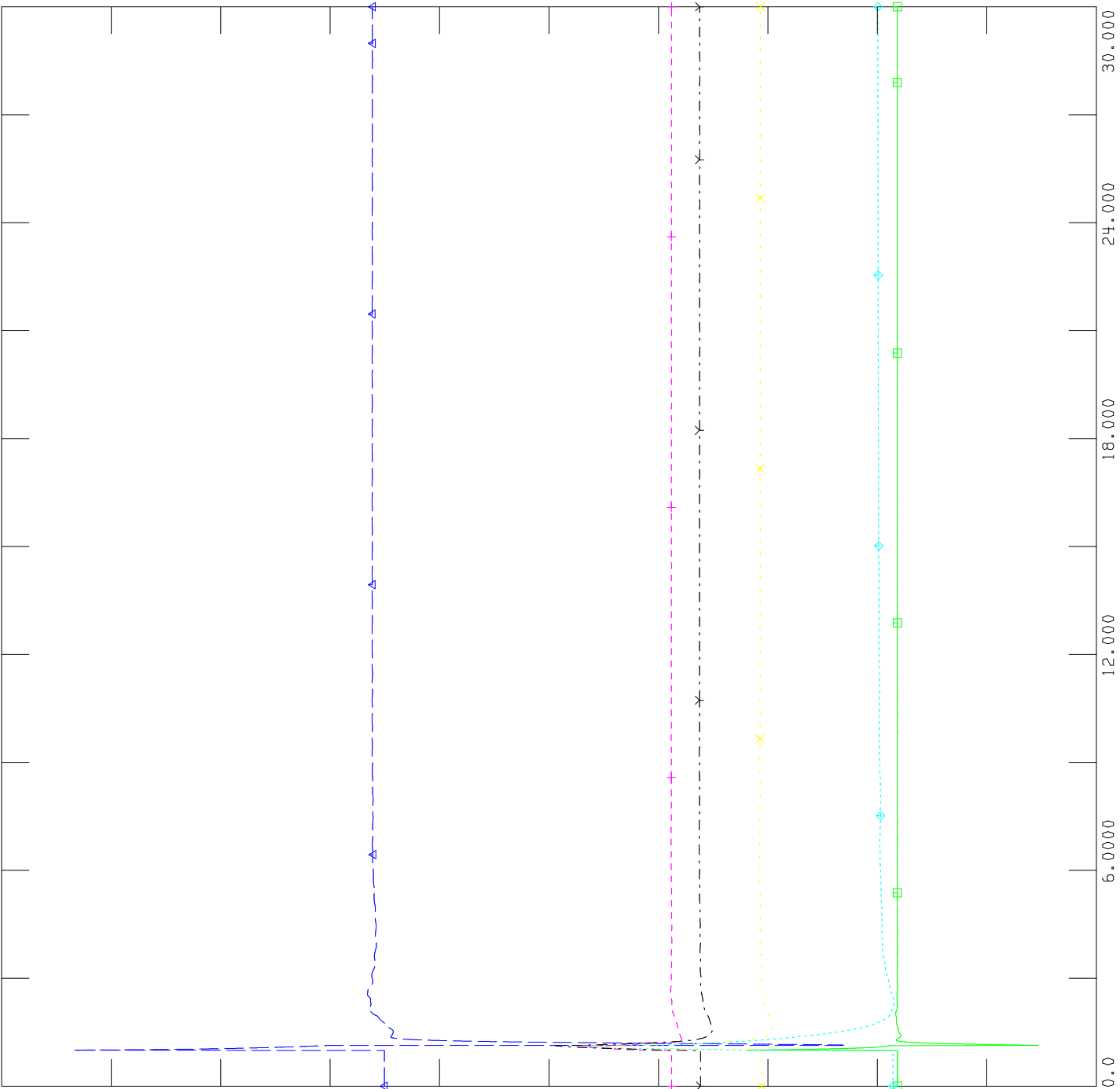
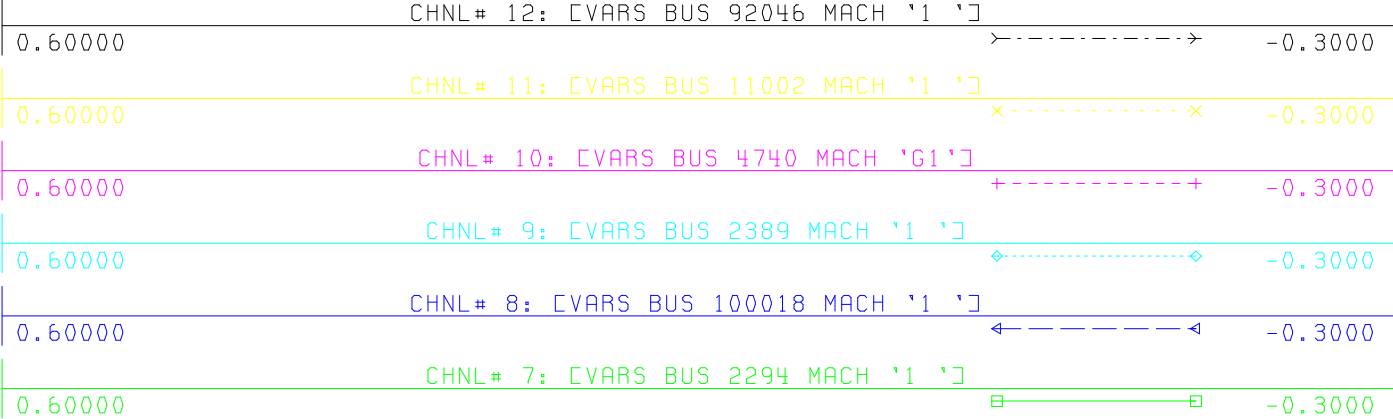


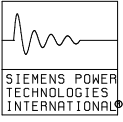
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_879L.out





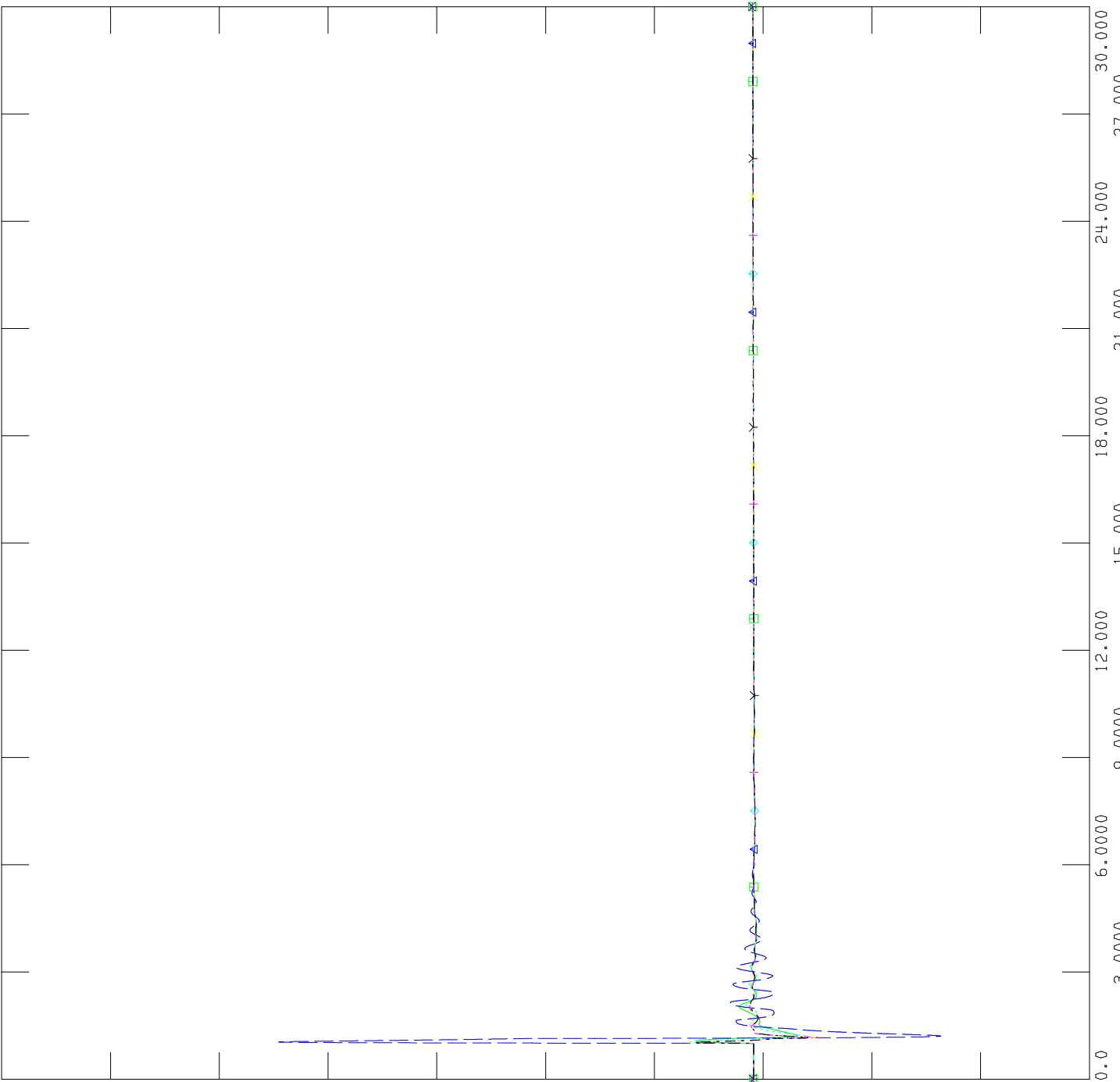
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_879L.out





FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_879L.out

0.01500	CHNL# 18: CFREQ 92046 [MCMBRIDE6 0.6900]]	-0.0067
0.01500	CHNL# 17: CFREQ 11002 [EGARDNG2 0.5750]]	-0.0067
0.01500	CHNL# 16: CFREQ 4740 [CARD_07 1.0000]]	-0.0067
0.01500	CHNL# 15: CFREQ 2389 [CHILLRIDG 25.000]]	-0.0067
0.01500	CHNL# 14: CFREQ 100018 [PURPLESP 0.5750]]	-0.0067
0.01500	CHNL# 13: CFREQ 2294 [TOTHILL2 0.6900]]	-0.0067



THU, NOV 18 2010 14:13
 BUS FREQUENCY

C-6-27

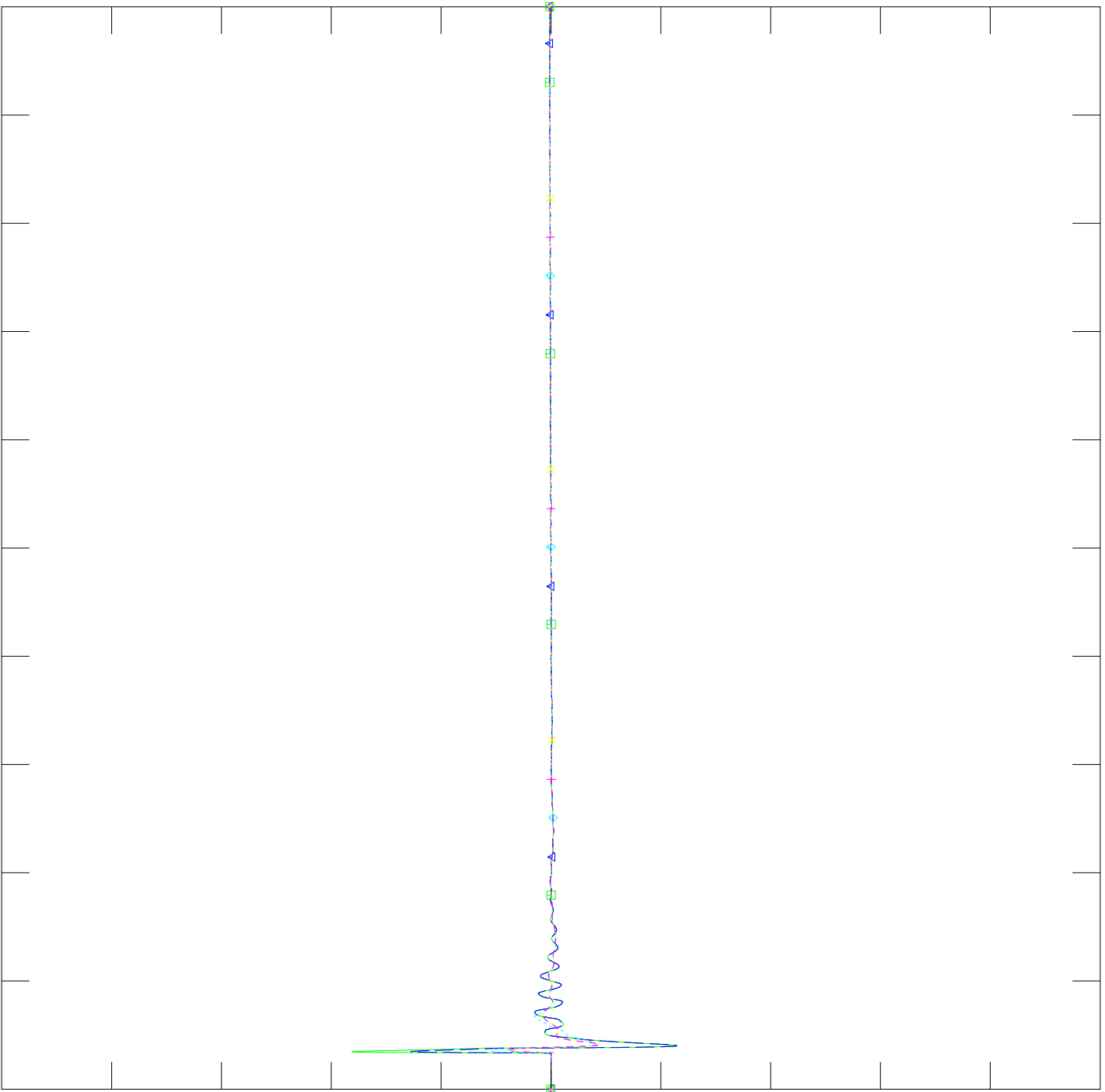
TIME (SECONDS)

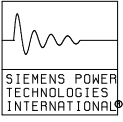


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_879L.out

THU, NOV 18 2010 14:13
BUS FREQUENCY

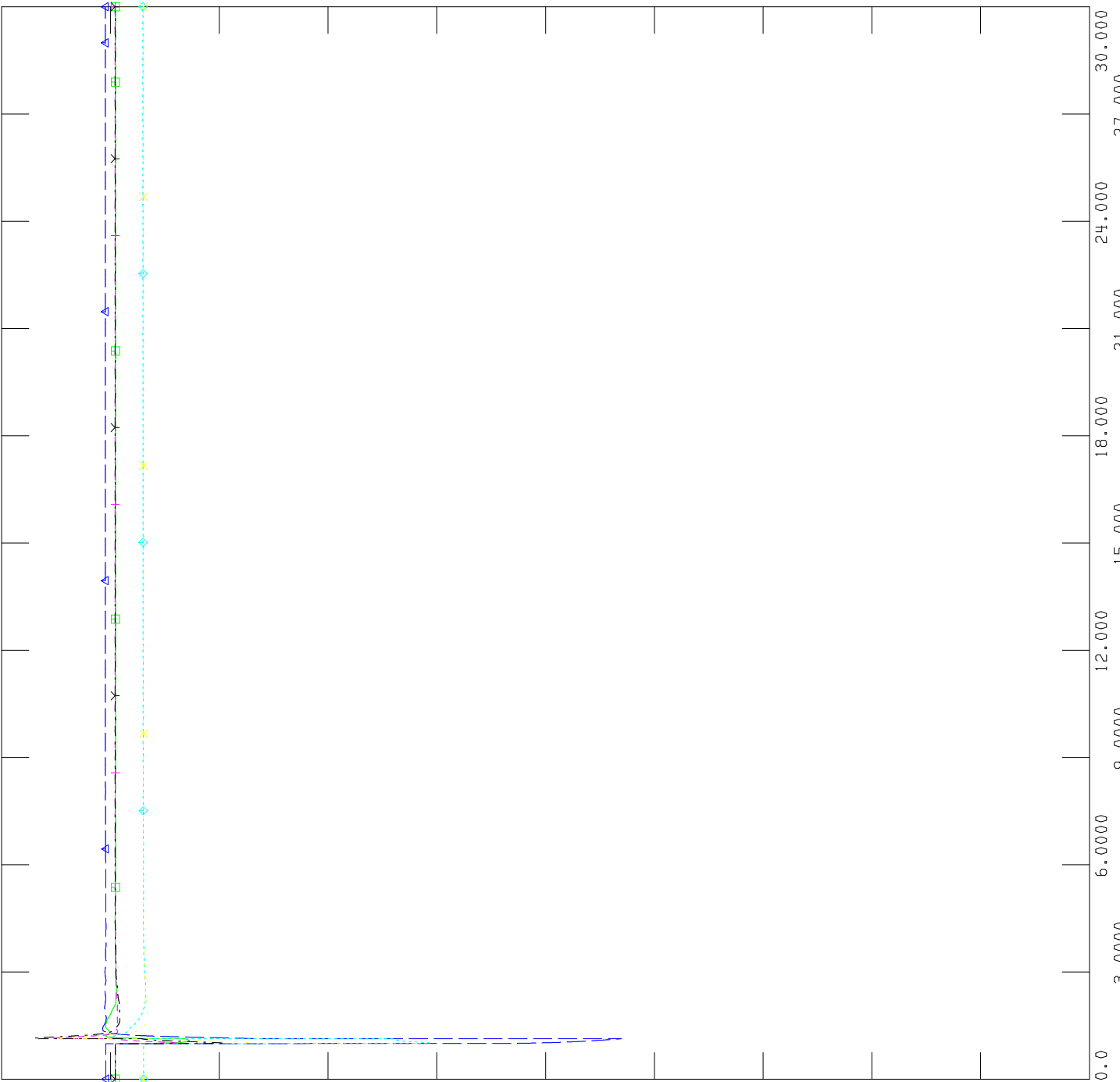
Channel	Frequency (Hz)	Value
CHNL# 23: CFREQ	270 [SUFFIEL7	138.00]]
CHNL# 22: CFREQ	680 [MEDICIN7	138.00]]
CHNL# 21: CFREQ	271 [BULLS H7	138.00]]
CHNL# 20: CFREQ	269 [BURDETT7	138.00]]
CHNL# 19: CFREQ	31 [FINCAST7	138.00]]

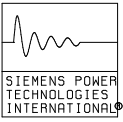




FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513&SATR_879L.out

Channel	Label	Value	Unit
CHNL# 29	EVOLT 92046 EMCBRIDE6	0.6900	V
CHNL# 28	EVOLT 11002 EGARDNG2	0.5750	V
CHNL# 27	EVOLT 4740 CARD_07	1.0000	V
CHNL# 26	EVOLT 2389 CHILLRIDG	25.000	V
CHNL# 25	EVOLT 100018 CPURPLESP	0.5750	V
CHNL# 24	EVOLT 2294 CTOTHILL2	0.6900	V

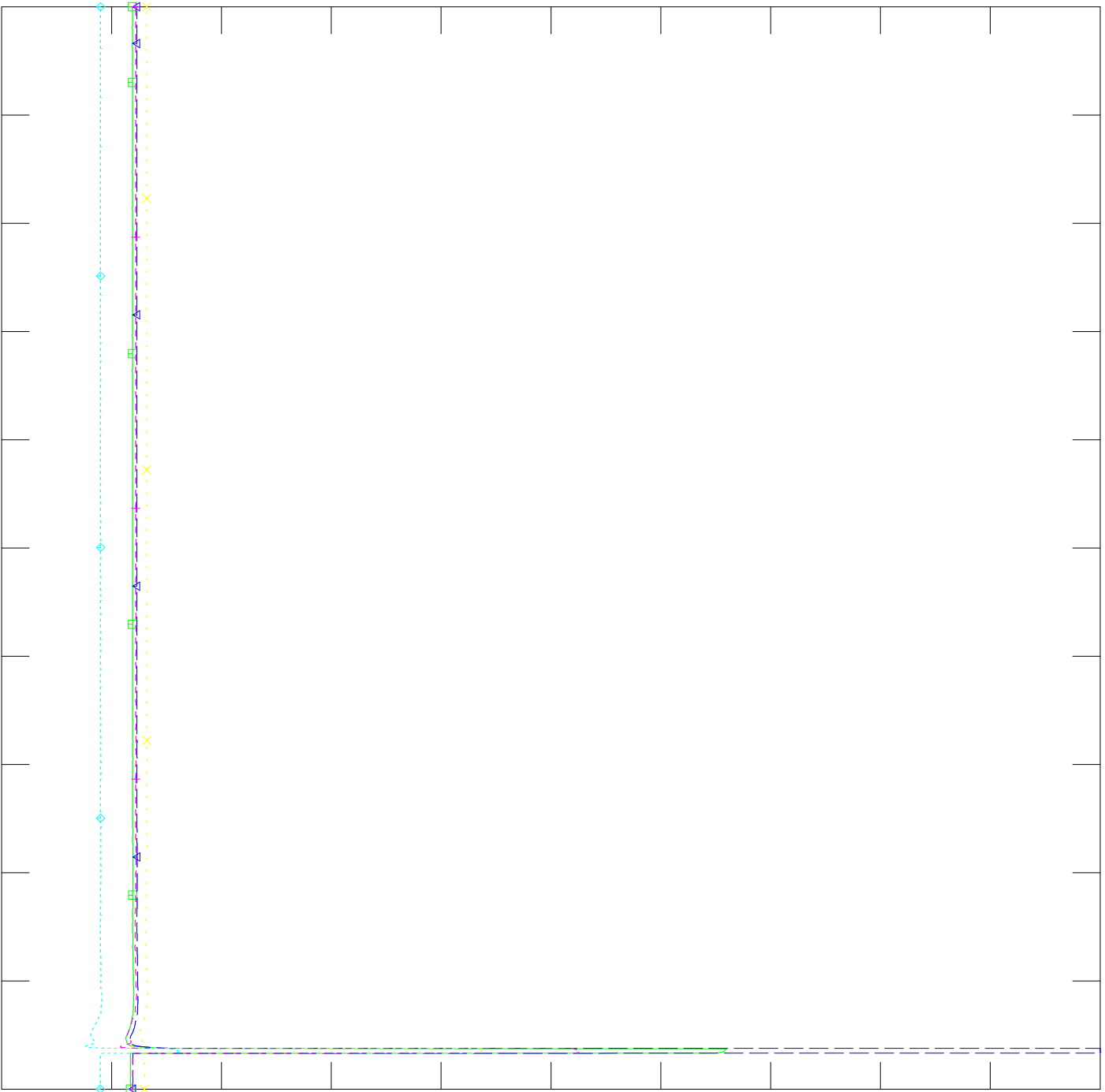




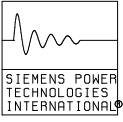
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_879L.out

THU, NOV 18 2010 14:14
BUS VOLTAGE

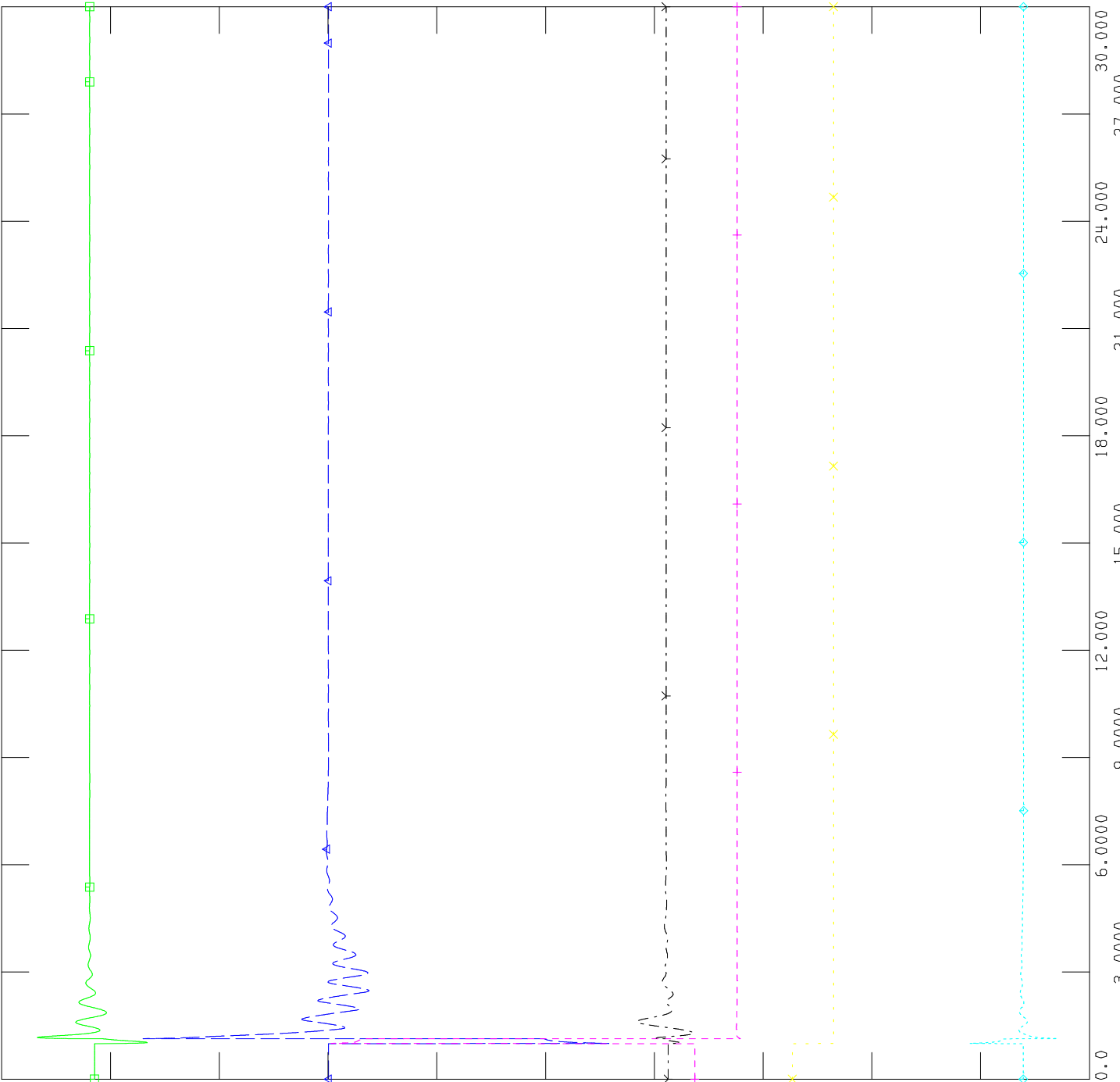
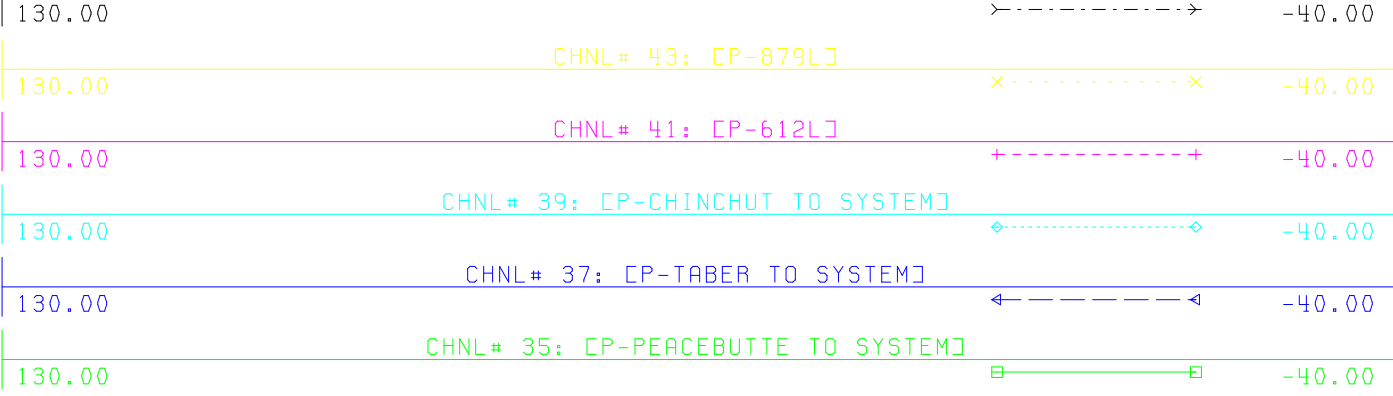
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



C-6-30



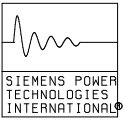
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_879L.out
 CHNL# 45: [P-880L]



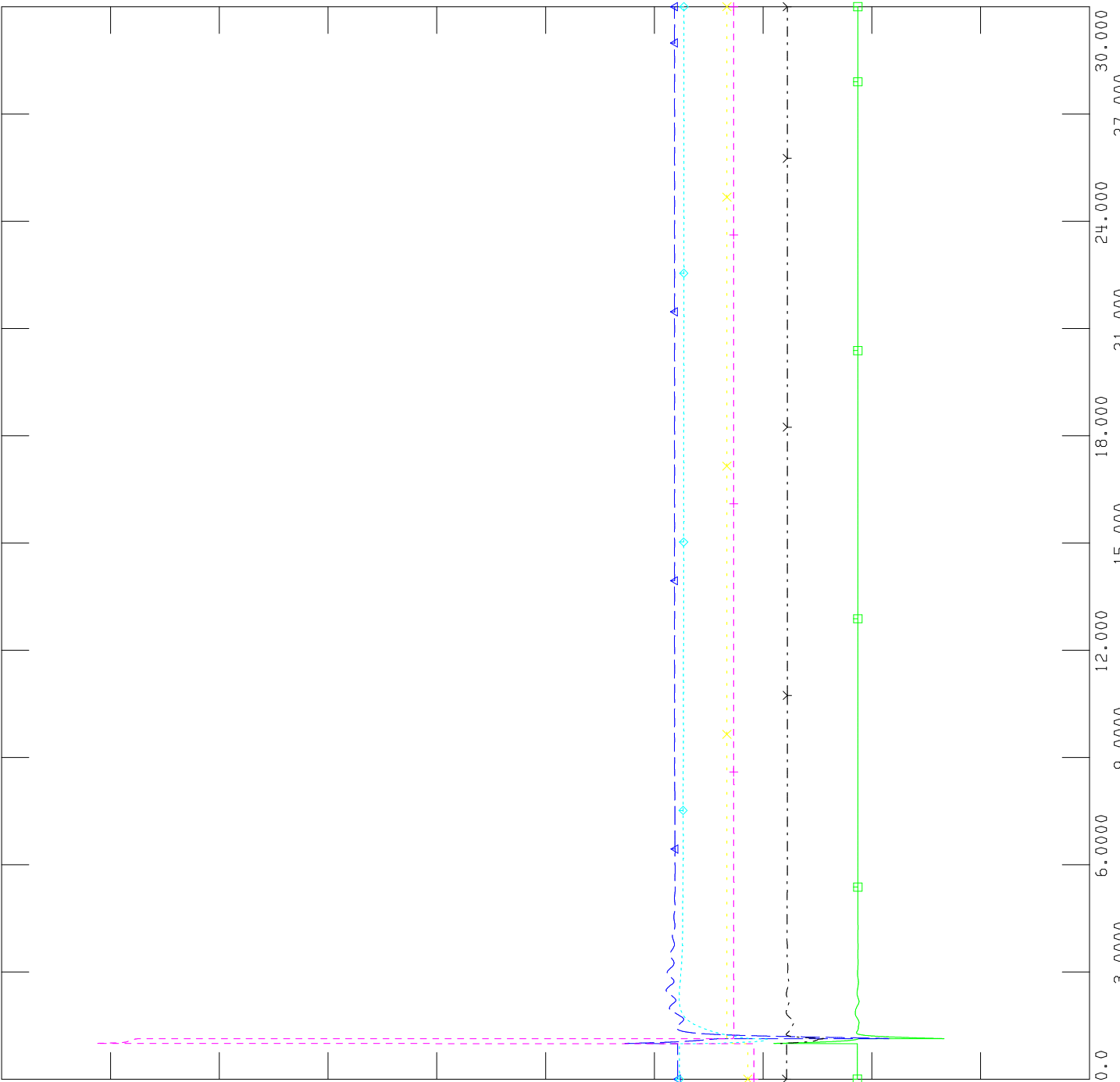
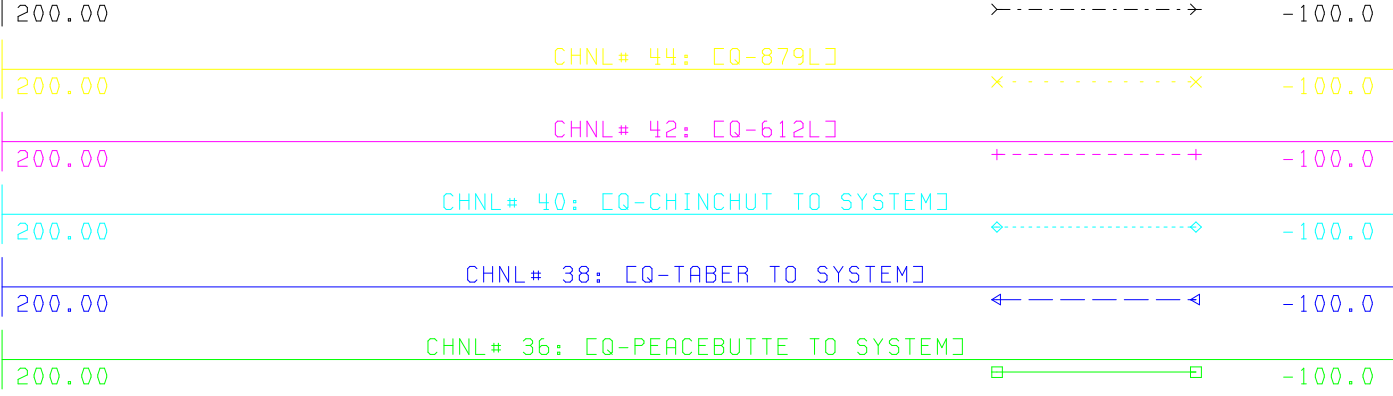
THU, NOV 18 2010 14:15
 BRANCH ACTIVE POWER

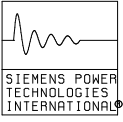
C-6-31

TIME (SECONDS)



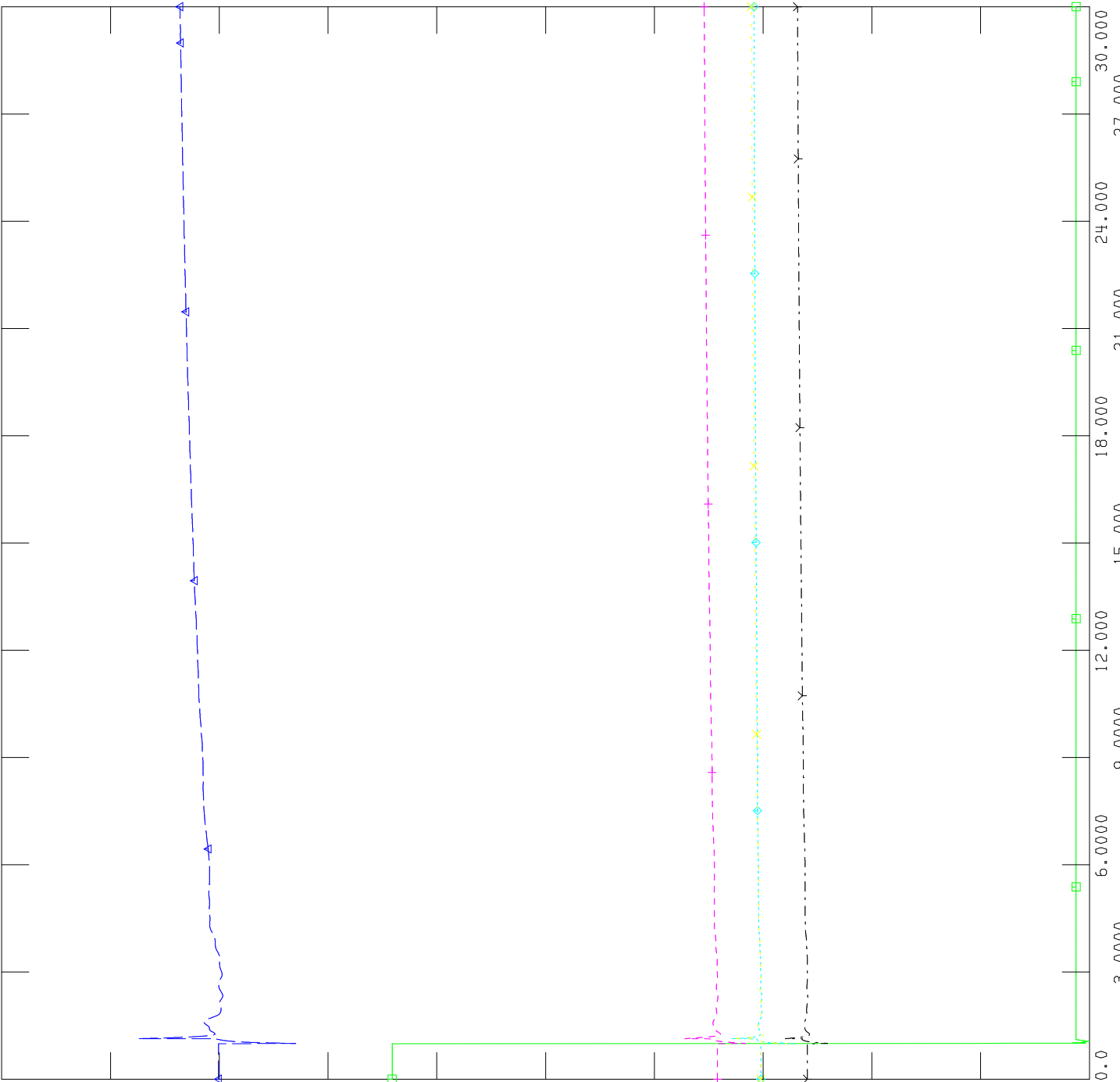
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_879L.out
CHNL# 46: [Q-880L]





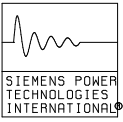
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_880L.out

Channel	Label	Value
1.0000	CHNL# 6: [POWR BUS 92046 MACH '1 ']	-0.0030
1.0000	CHNL# 5: [POWR BUS 11002 MACH '1 ']	-0.0030
1.0000	CHNL# 4: [POWR BUS 4740 MACH 'G1']	-0.0030
1.0000	CHNL# 3: [POWR BUS 2389 MACH '1 ']	-0.0030
1.0000	CHNL# 2: [POWR BUS 10018 MACH '1 ']	-0.0030
1.0000	CHNL# 1: [POWR BUS 2294 MACH '1 ']	-0.0030

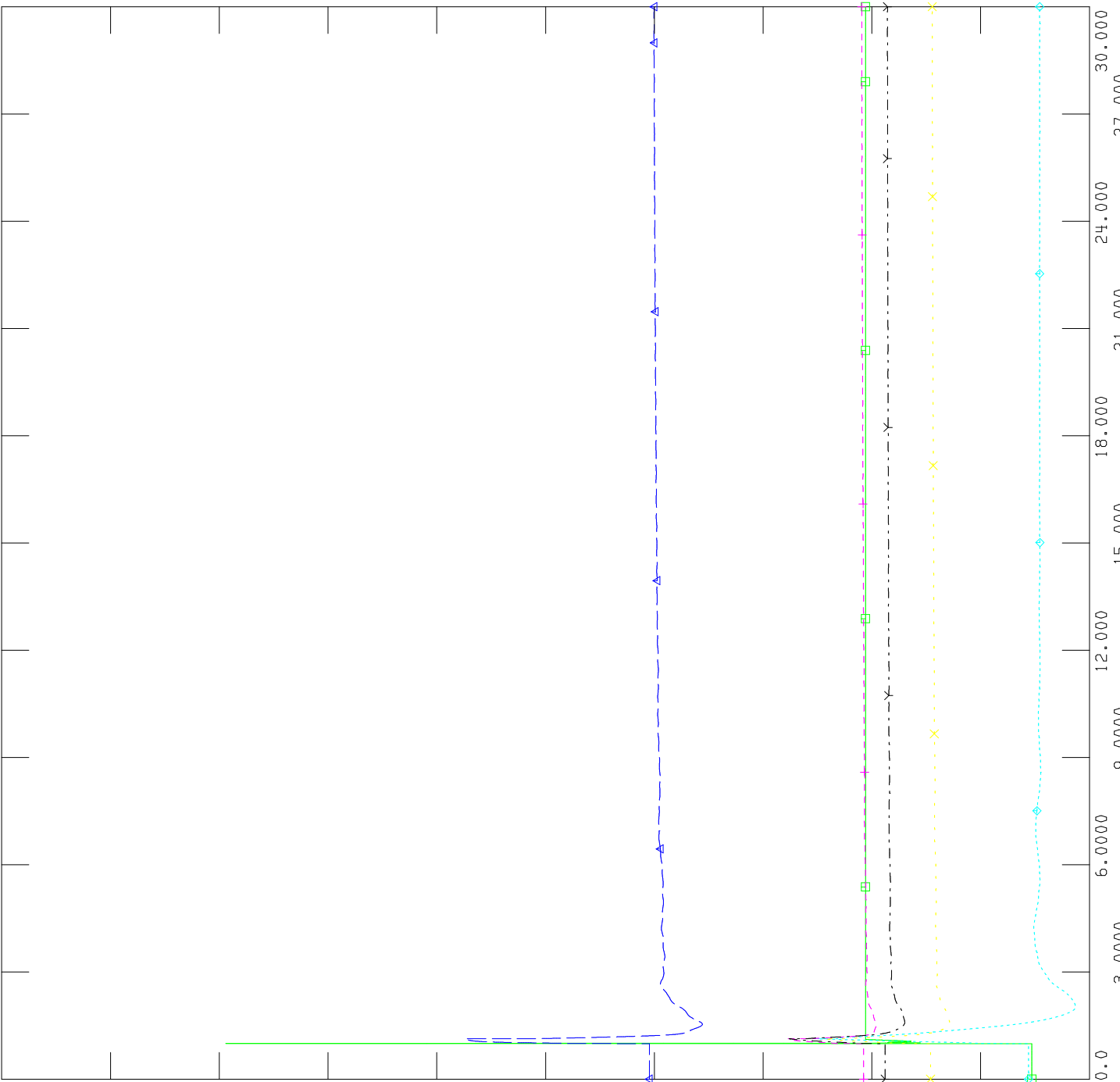
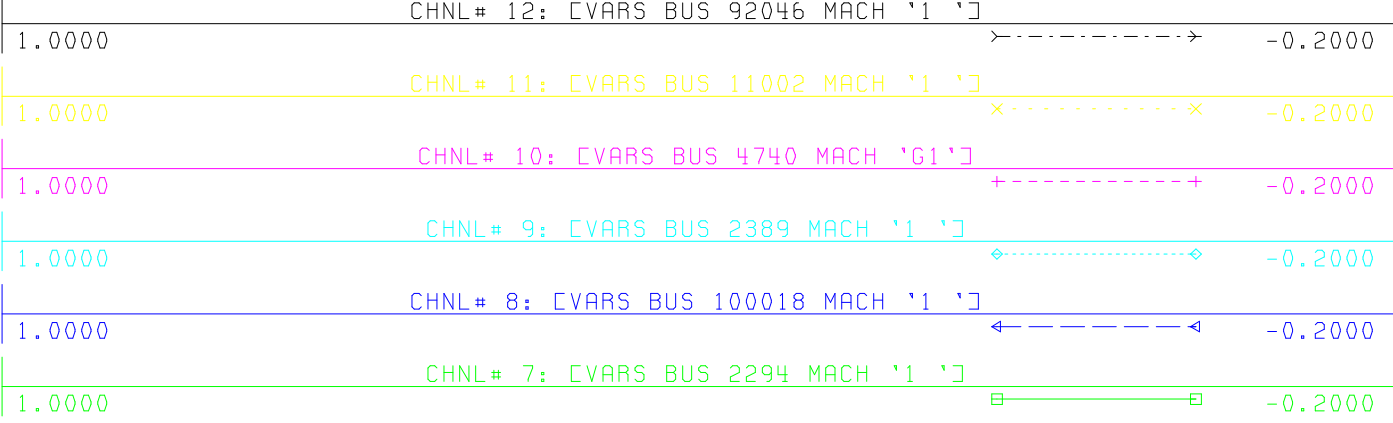


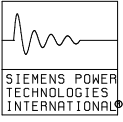
THU, NOV 18 2010 14:17
PELEC

C-6-33
TIME (SECONDS)



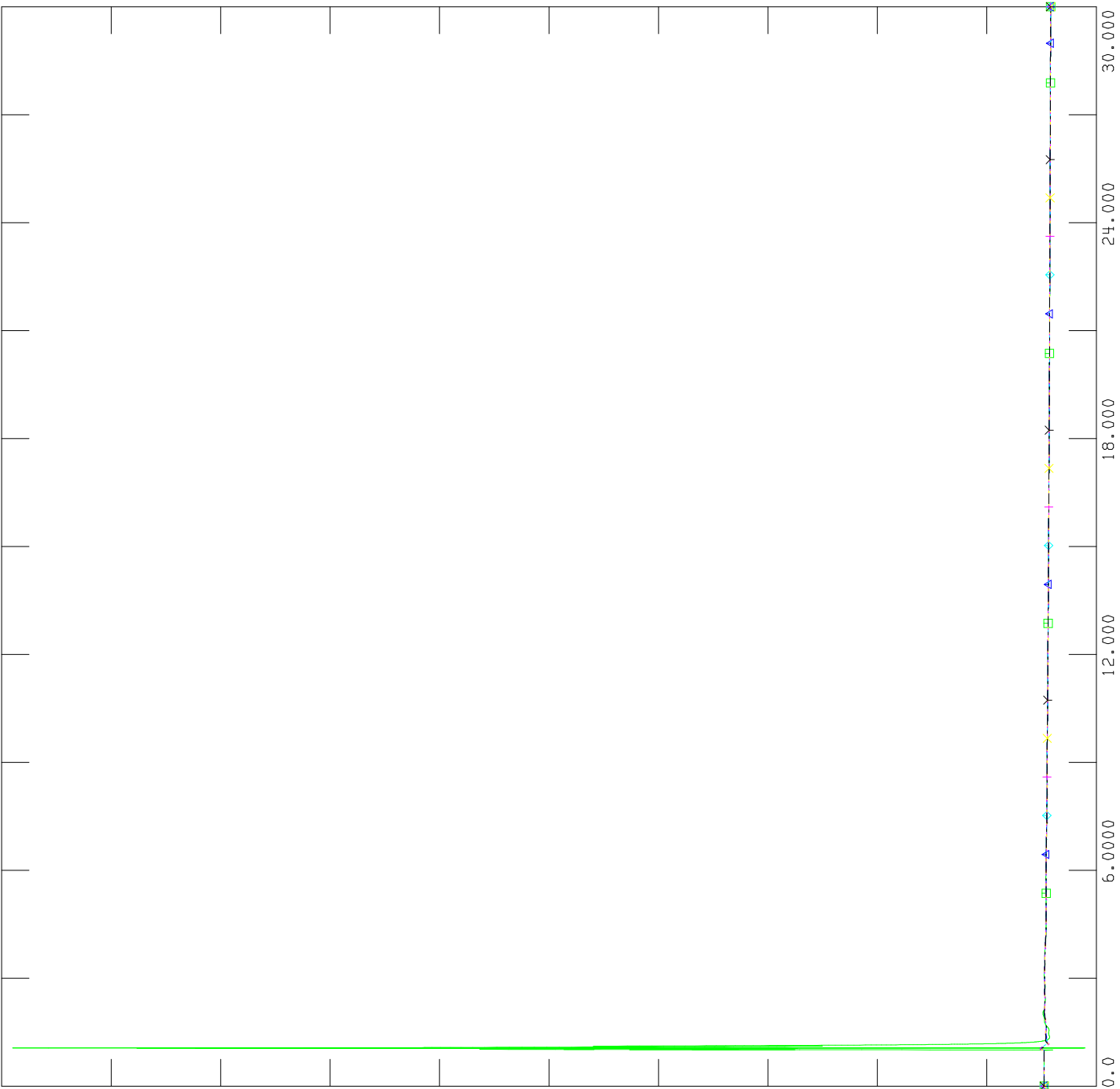
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_880L.out





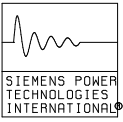
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_880L.out

0.30000	CHNL# 18: CFREQ 92046 [MCMBRIDE6 0.6900]]	-0.0150
0.30000	CHNL# 17: CFREQ 11002 [EGARDNG2 0.5750]]	-0.0150
0.30000	CHNL# 16: CFREQ 4740 [CARD_07 1.0000]]	-0.0150
0.30000	CHNL# 15: CFREQ 2389 [CHILLRIDG 25.0000]]	-0.0150
0.30000	CHNL# 14: CFREQ 100018 [CPURPLESP 0.5750]]	-0.0150
0.30000	CHNL# 13: CFREQ 2294 [CTOTHILL2 0.6900]]	-0.0150



THU, NOV 18 2010 14:19
 BUS FREQUENCY

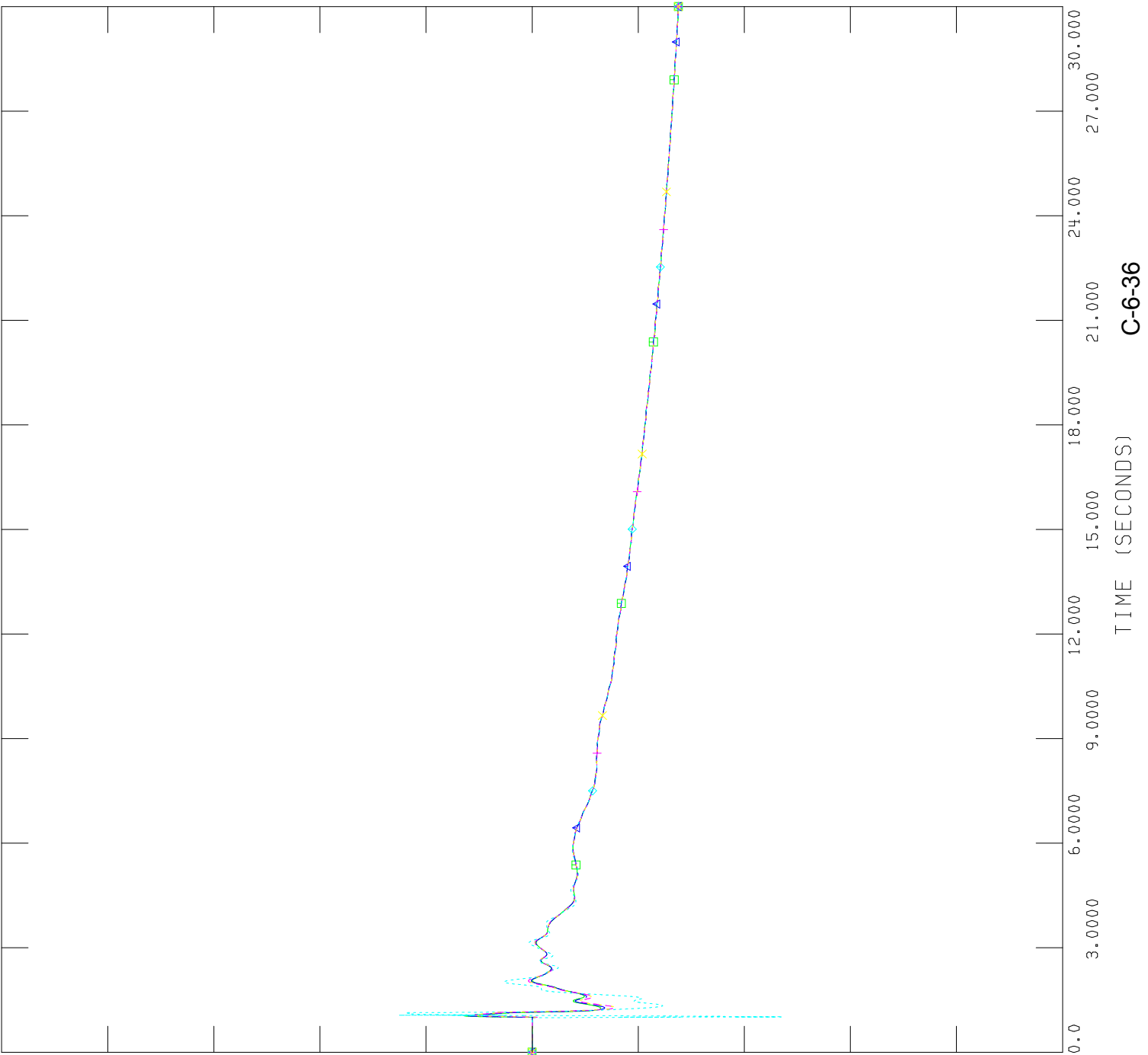
TIME (SECONDS) C-6-35



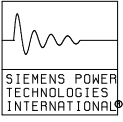
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_880L.out

THU, NOV 18 2010 14:20
 BUS FREQUENCY

0.00670	CHNL# 23: CFREQ	270 CSUFFIEL7	138.00]]	x-----x	-0.0067
0.00670	CHNL# 22: CFREQ	680 CMEDICIN7	138.00]]	+-----+	-0.0067
0.00670	CHNL# 21: CFREQ	271 CBULLS H7	138.00]]	◇-----◇	-0.0067
0.00670	CHNL# 20: CFREQ	269 CBURDETT7	138.00]]	←-----←	-0.0067
0.00670	CHNL# 19: CFREQ	31 CFINCAST7	138.00]]	□-----□	-0.0067

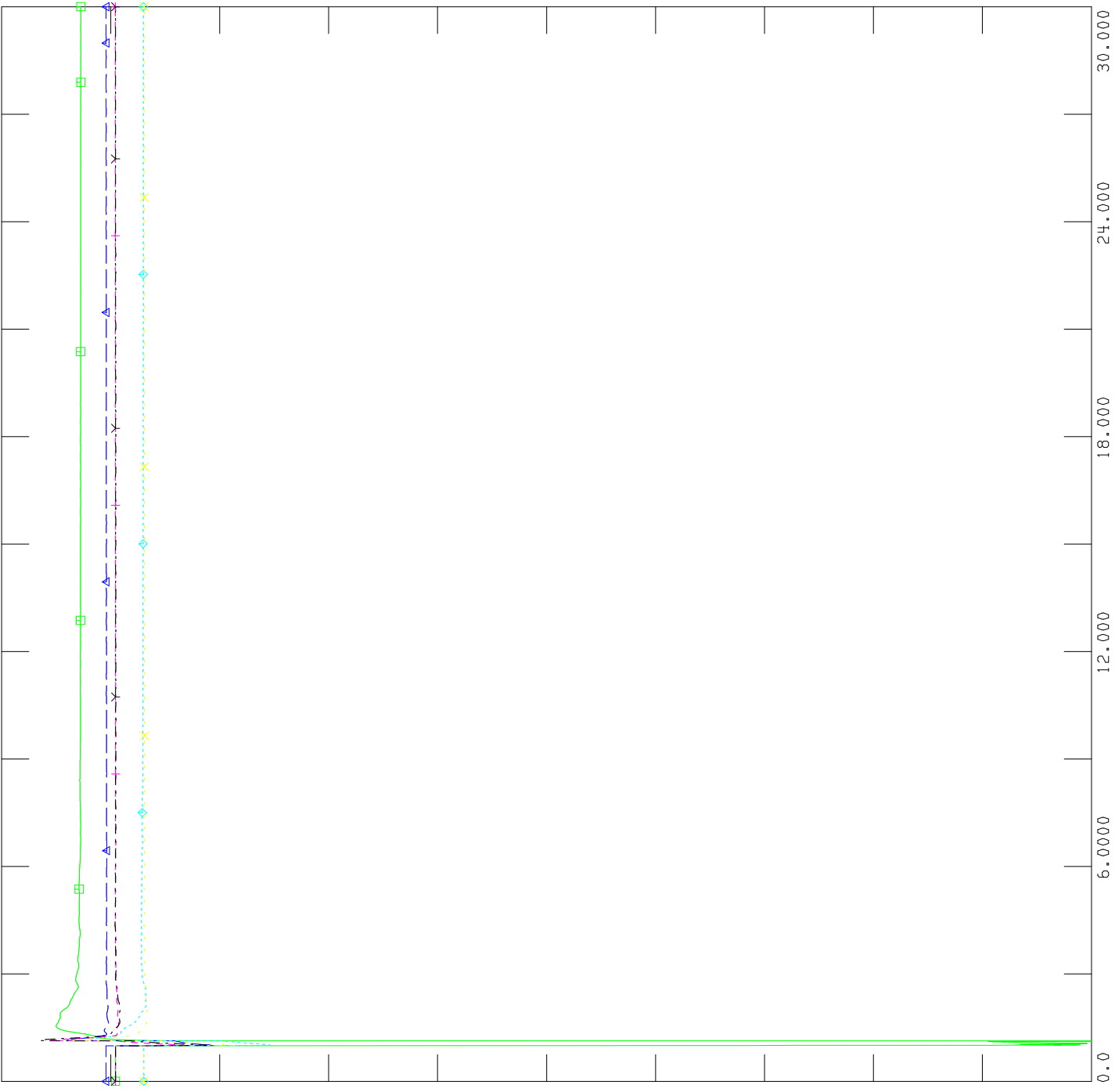


C-6-36



FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513&SATR_880L.out

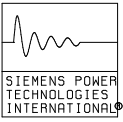
Channel	Label	Value	Symbol
CHNL# 29	EVOLT 92046 [MCBRIDE6]	0.6900	→
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750	×
CHNL# 27	EVOLT 4740 [CARD_07]	1.0000	+
CHNL# 26	EVOLT 2389 [CHILLRIDG]	25.000	◇
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750	←
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900	■



THU, NOV 18 2010 14:21
BUS VOLTAGE

C-6-37

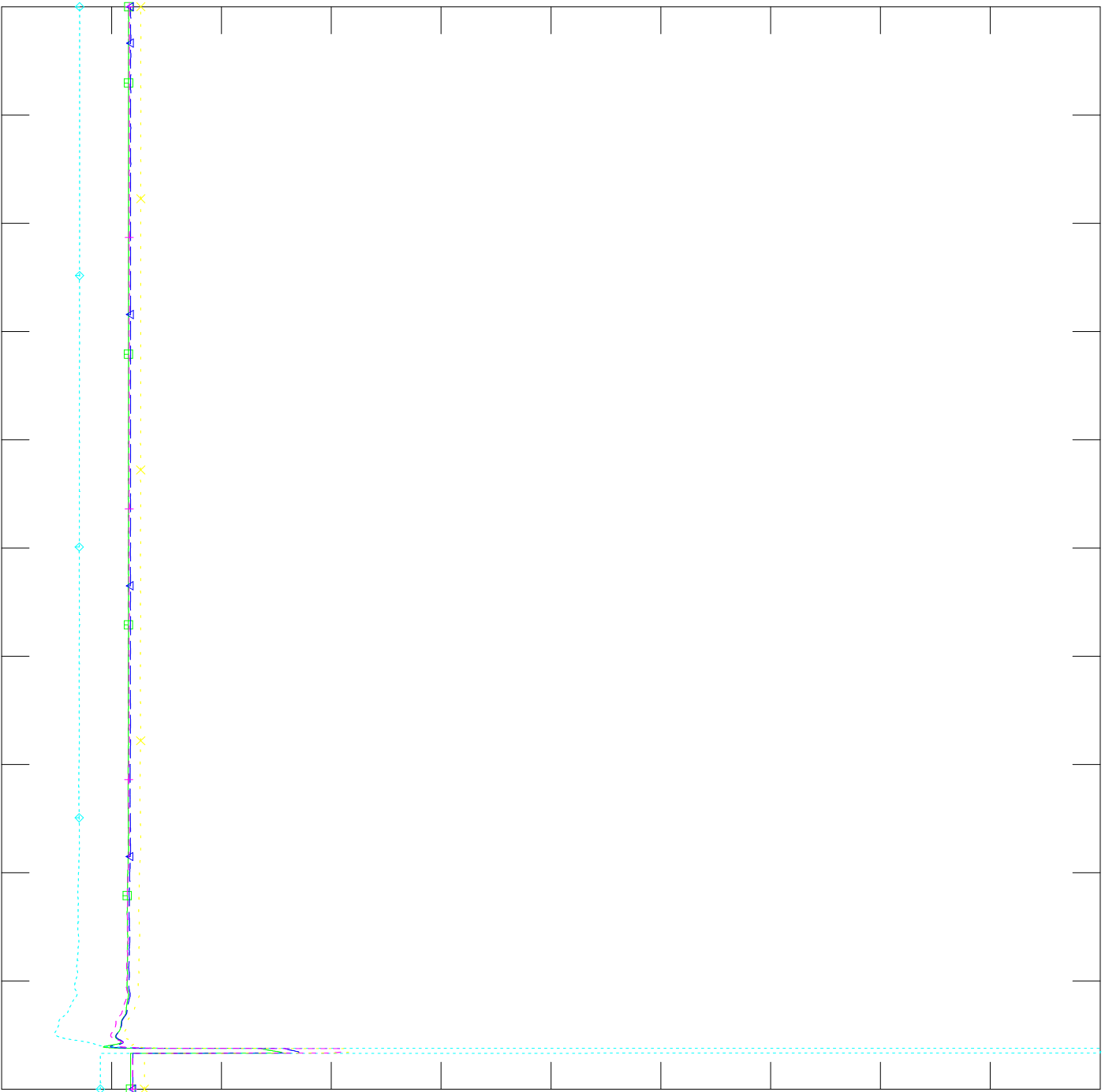
TIME (SECONDS)



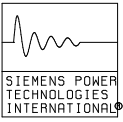
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_880L.out

THU, NOV 18 2010 14:21
BUS VOLTAGE

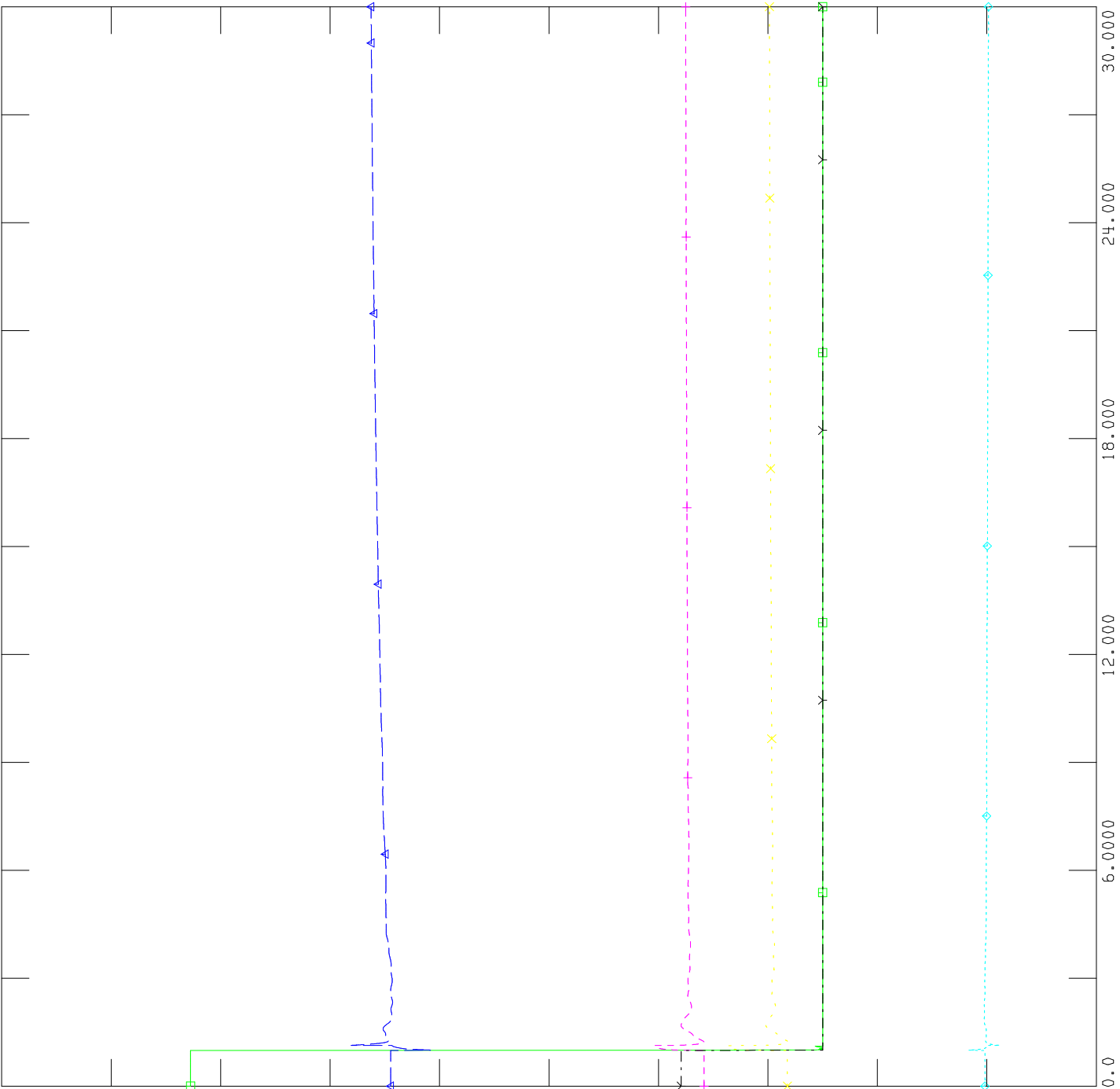
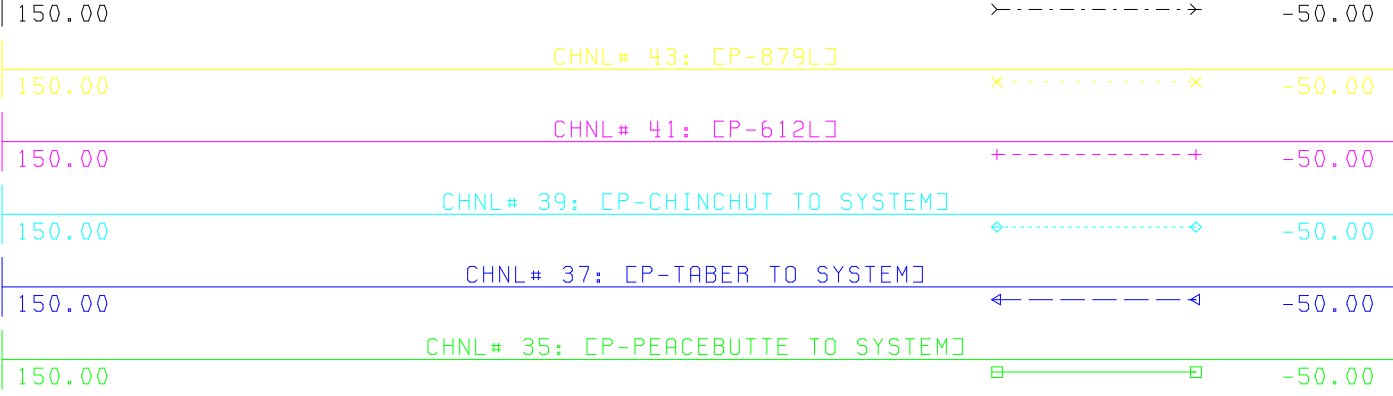
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



C-6-38



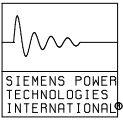
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_880L.out
CHNL# 45: [P-880L]



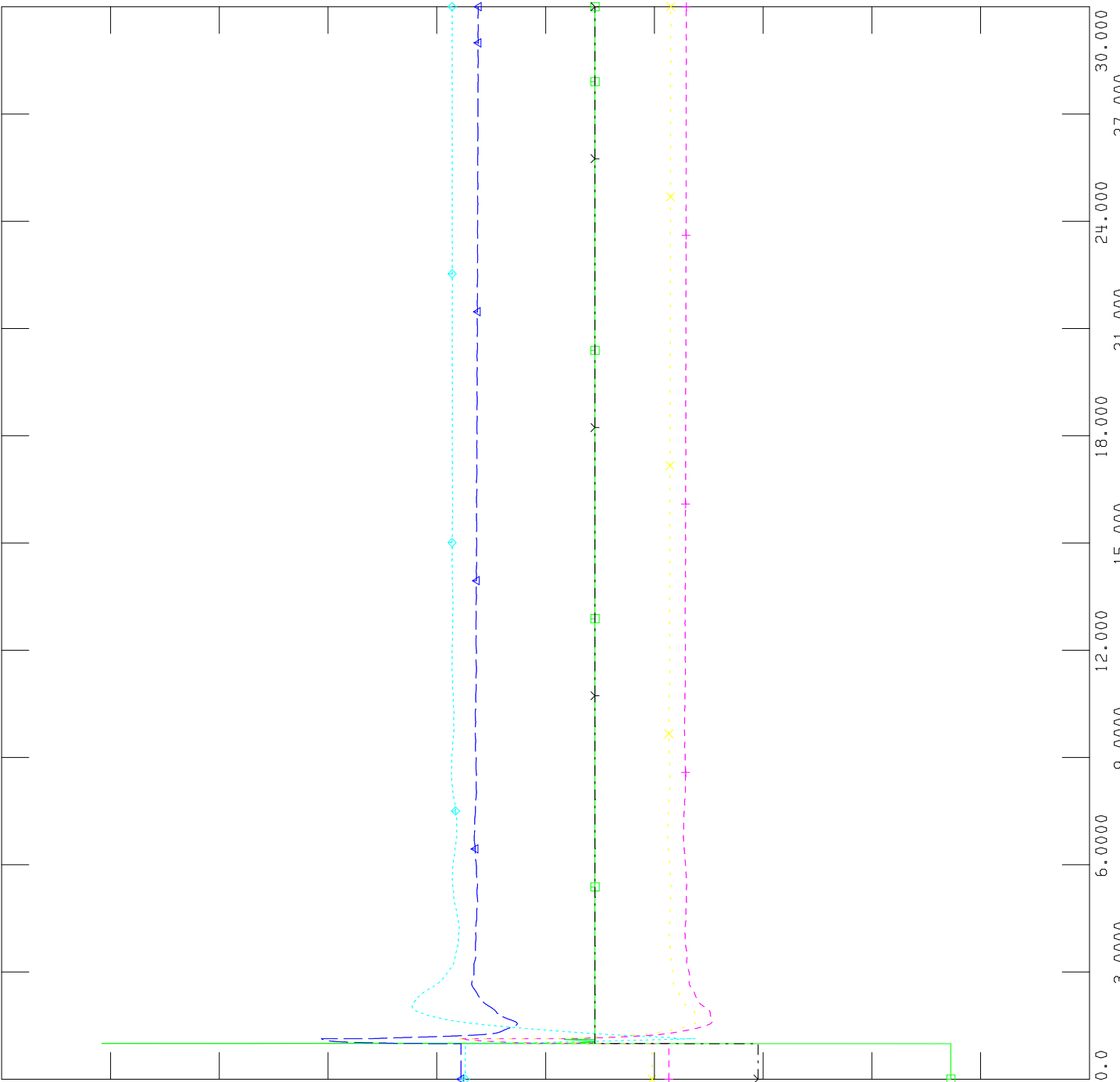
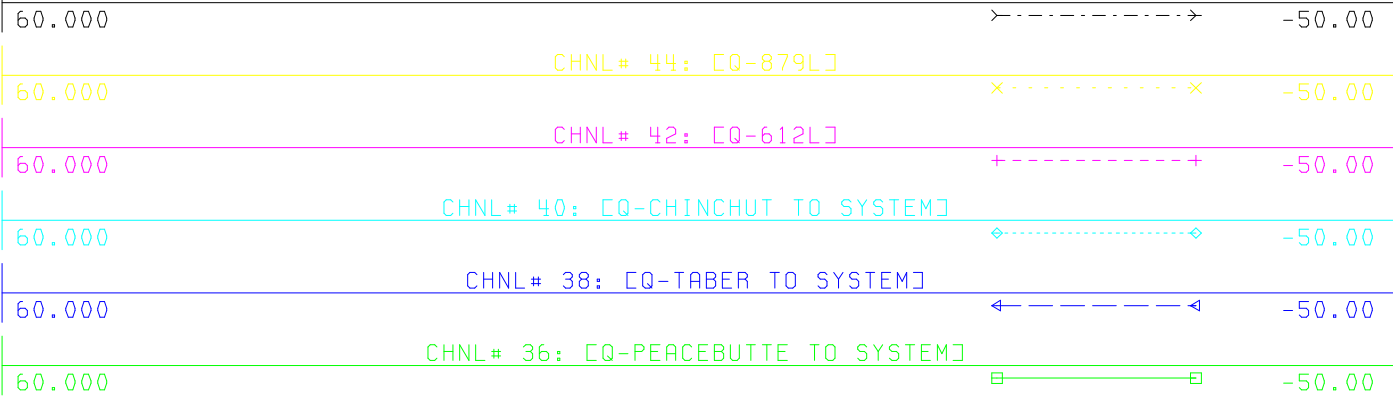
THU, NOV 18 2010 14:23
BRANCH ACTIVE POWER

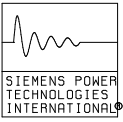
C-6-39

TIME (SECONDS)

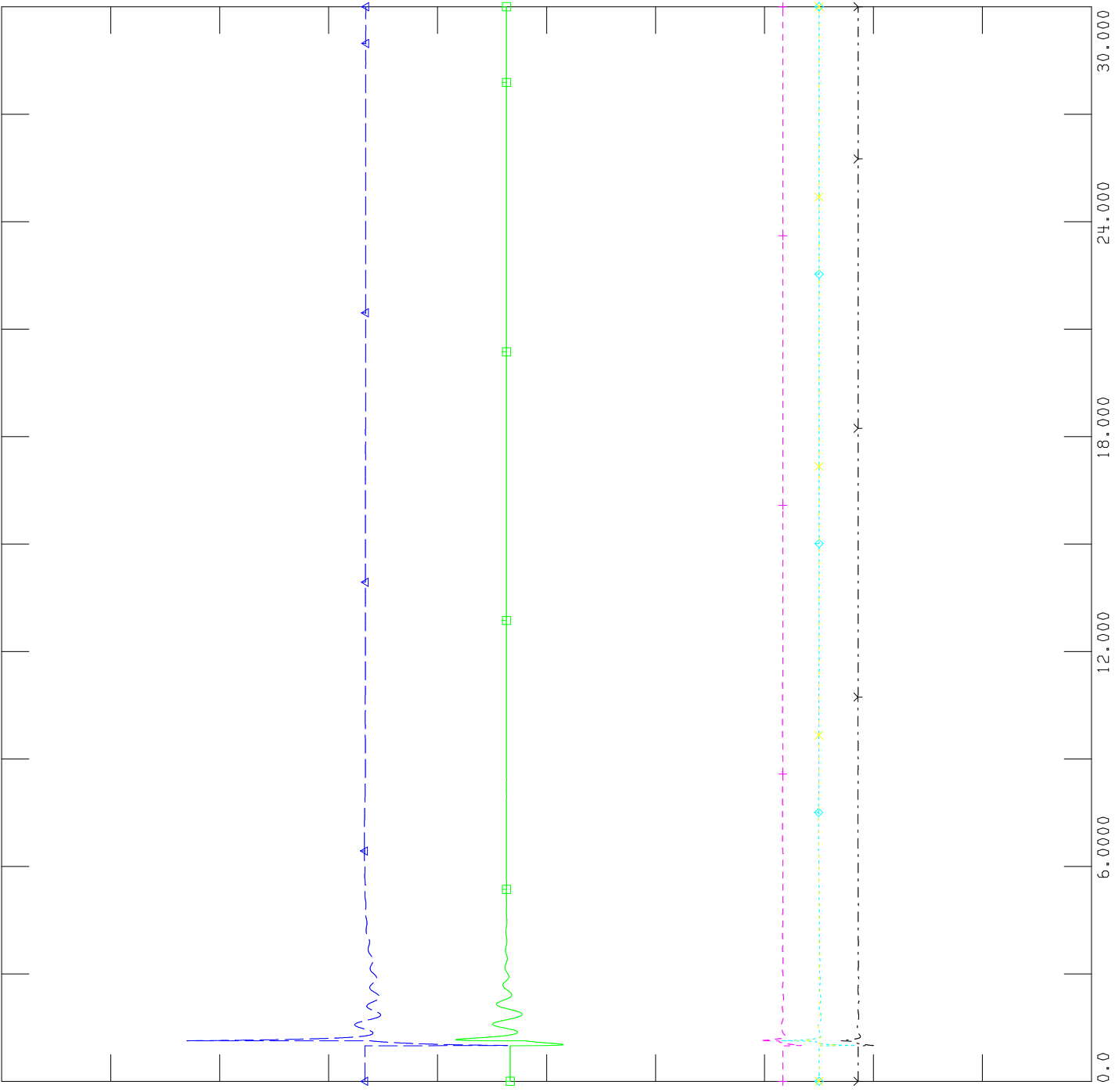
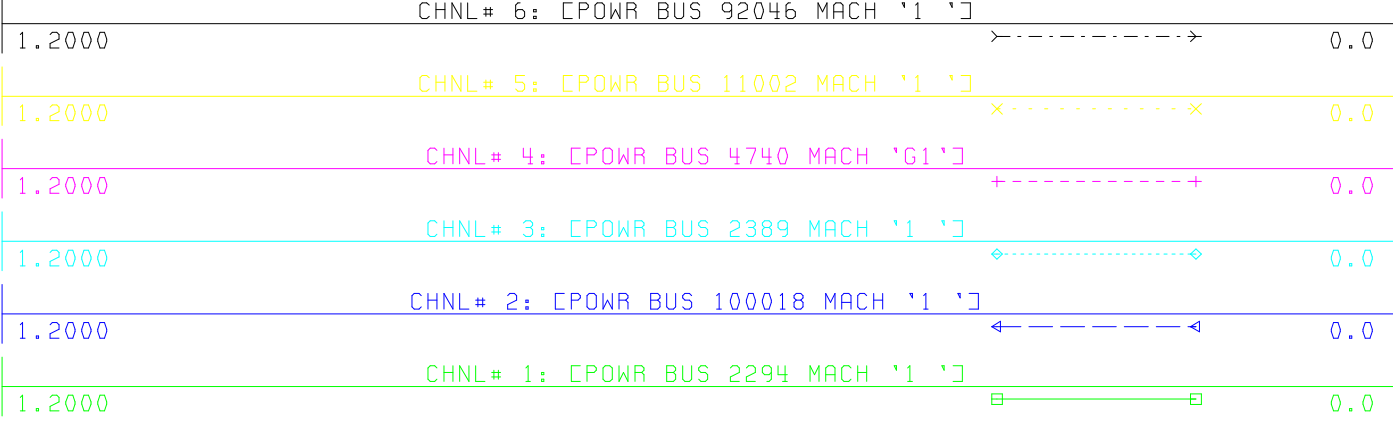


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_880L.out
CHNL# 46: [EQ-880L]



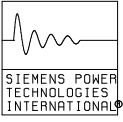


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_892L.out

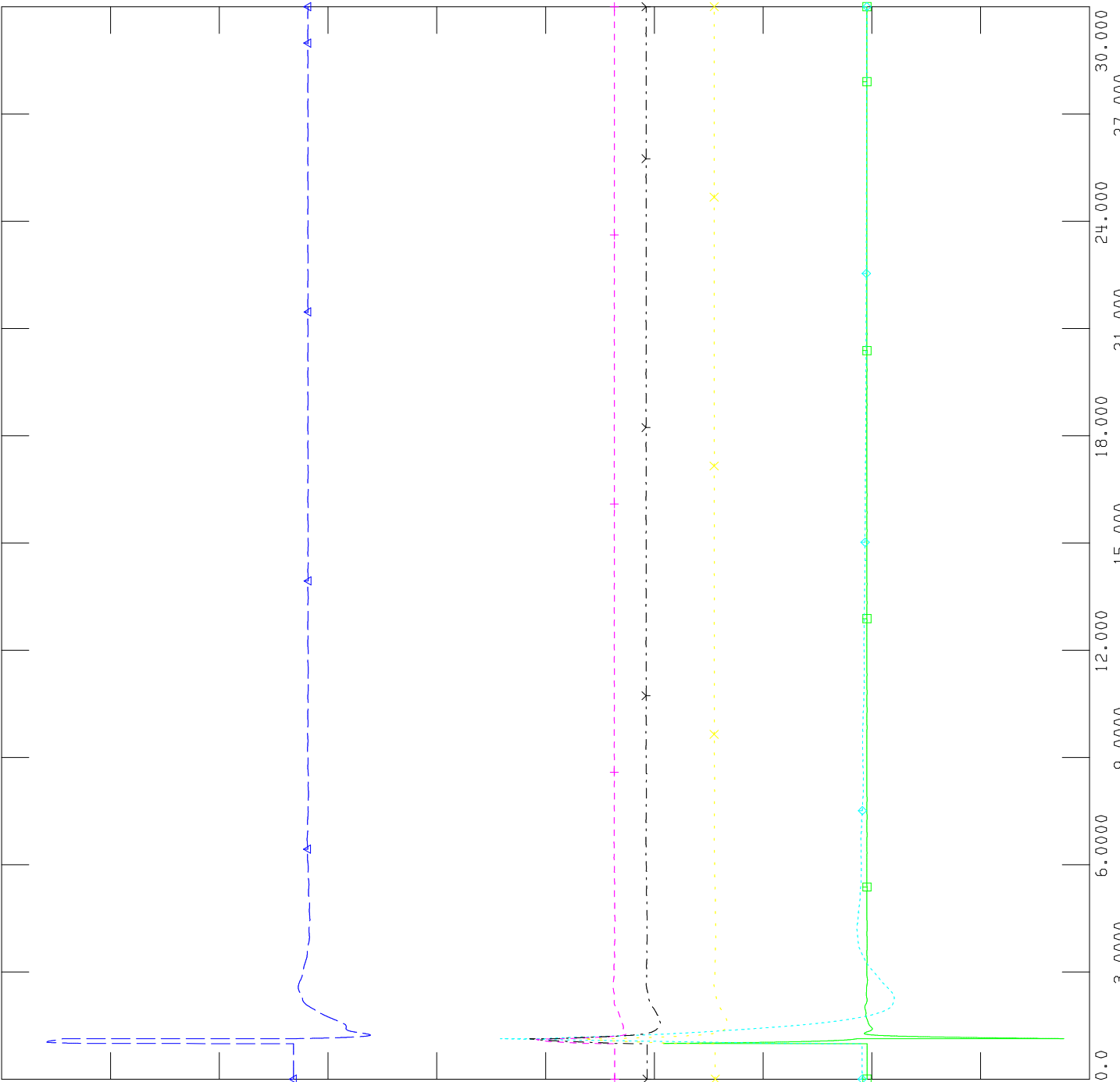
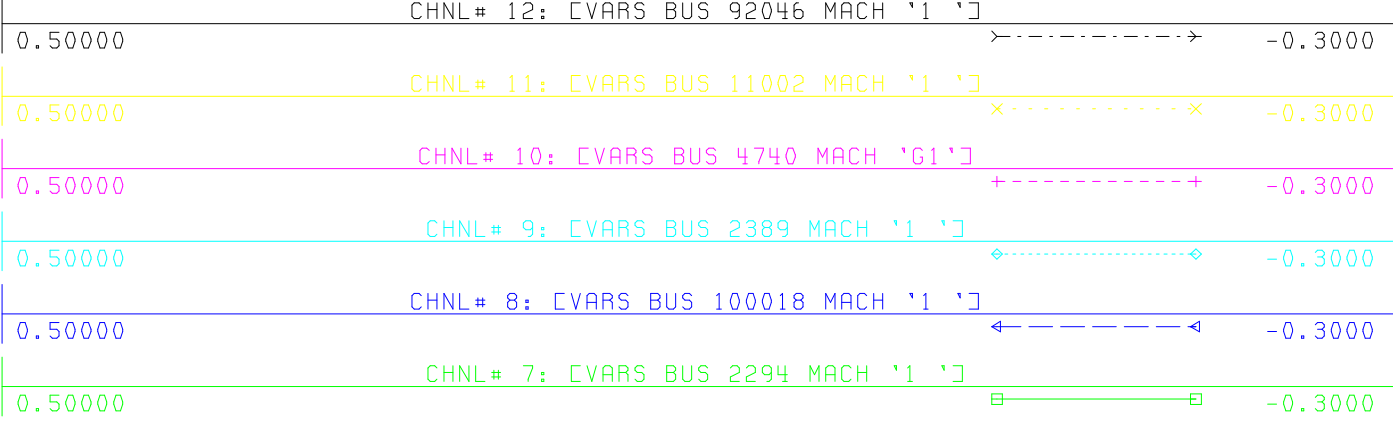


C-6-41

TIME (SECONDS)



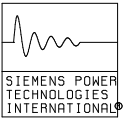
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_892L.out



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 OELEC

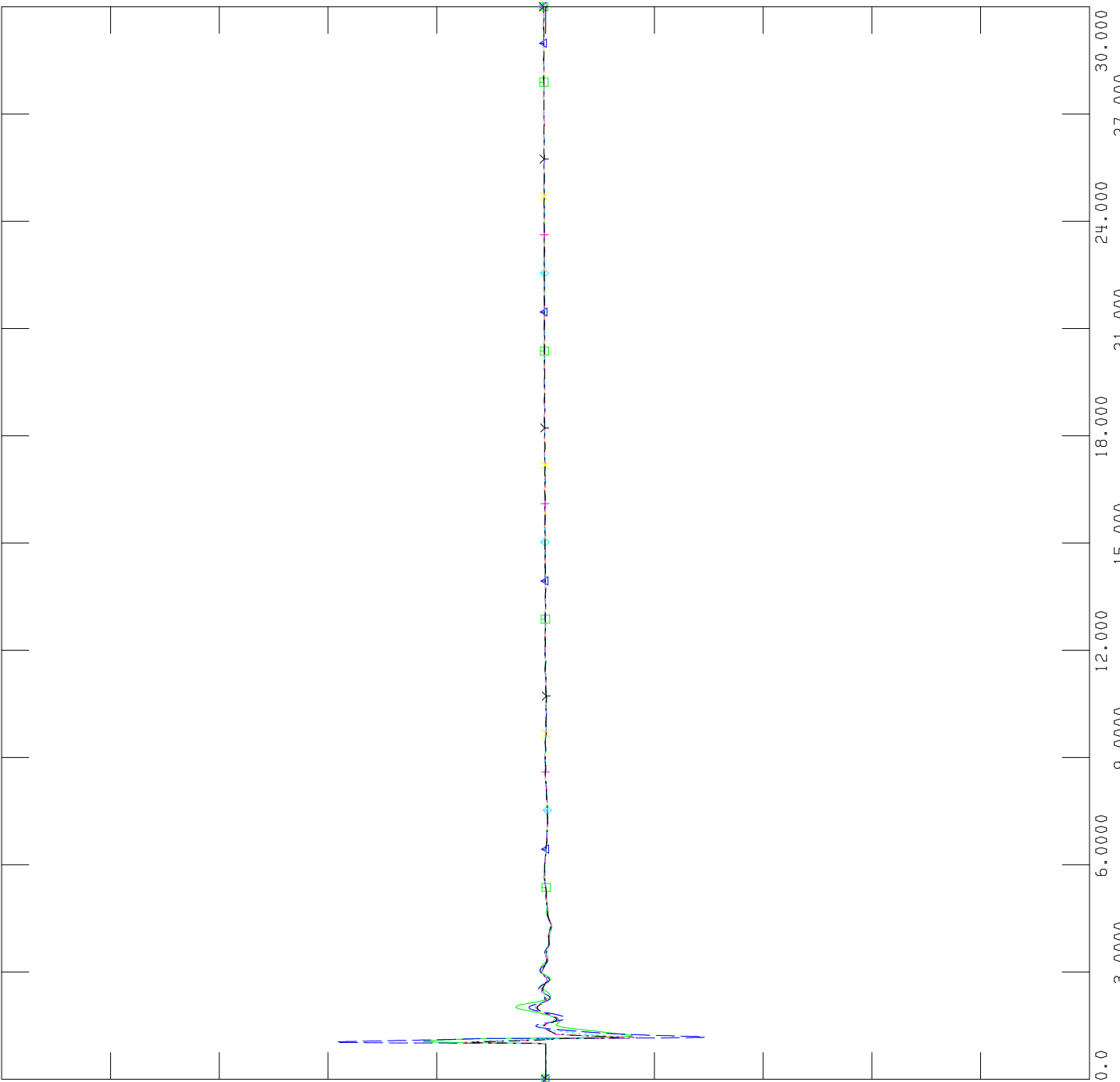
C-6-42

TIME (SECONDS)



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_892L.out

0.00670	CHNL# 18: CFREQ 92046 EMCBRIDE6 0.6900]]	-0.0067
0.00670	CHNL# 17: CFREQ 11002 EGARDNG2 0.5750]]	-0.0067
0.00670	CHNL# 16: CFREQ 4740 CARD_07 1.0000]]	-0.0067
0.00670	CHNL# 15: CFREQ 2389 CHILLRIDG 25.000]]	-0.0067
0.00670	CHNL# 14: CFREQ 100018 CPURPLESP 0.5750]]	-0.0067
0.00670	CHNL# 13: CFREQ 2294 CTOTHILL2 0.6900]]	-0.0067



THU, NOV 18 2010 14:26
 BUS FREQUENCY

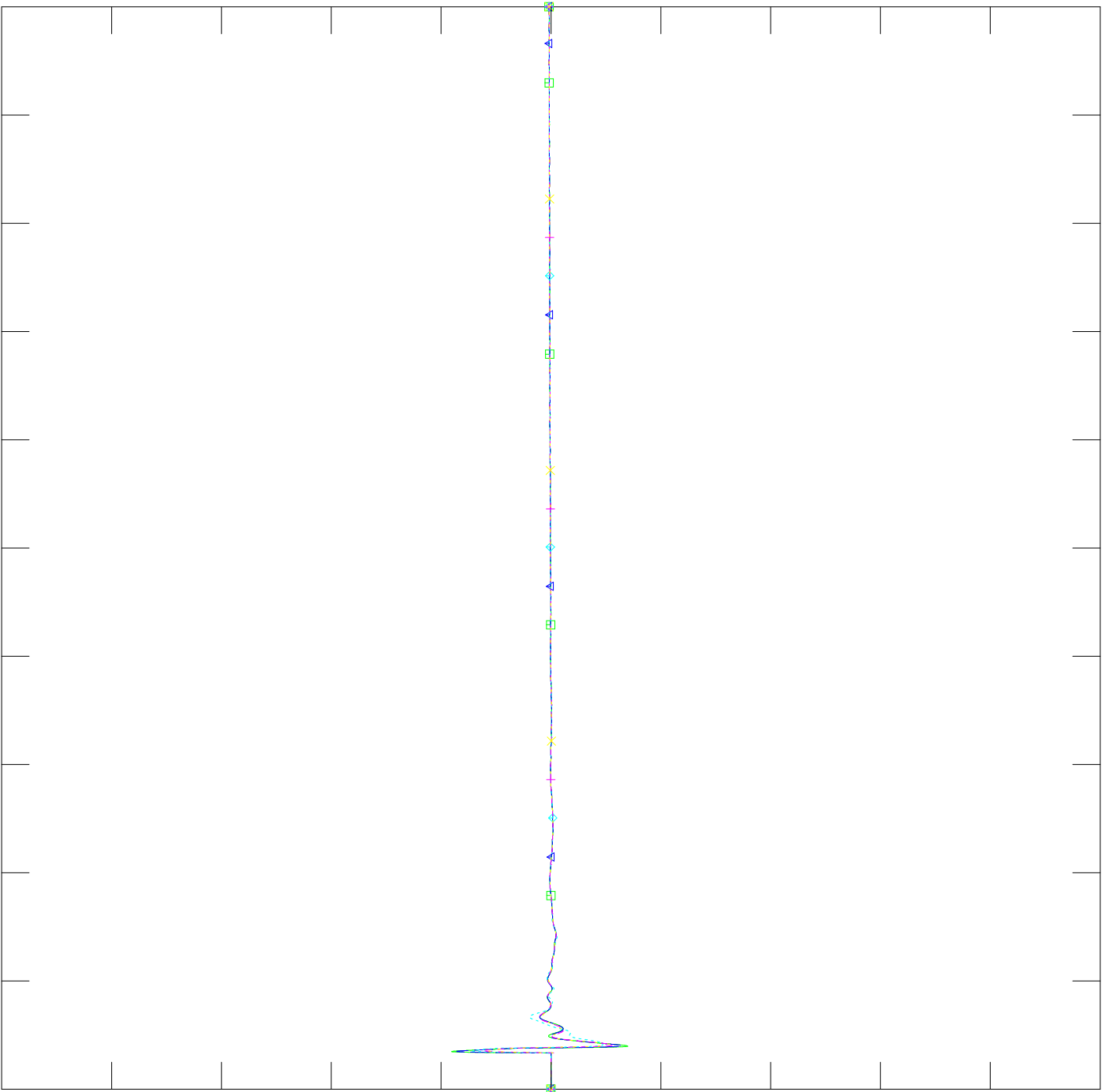
C-6-43

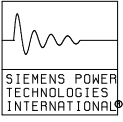


FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_892L.out

THU, NOV 18 2010 14:27
BUS FREQUENCY

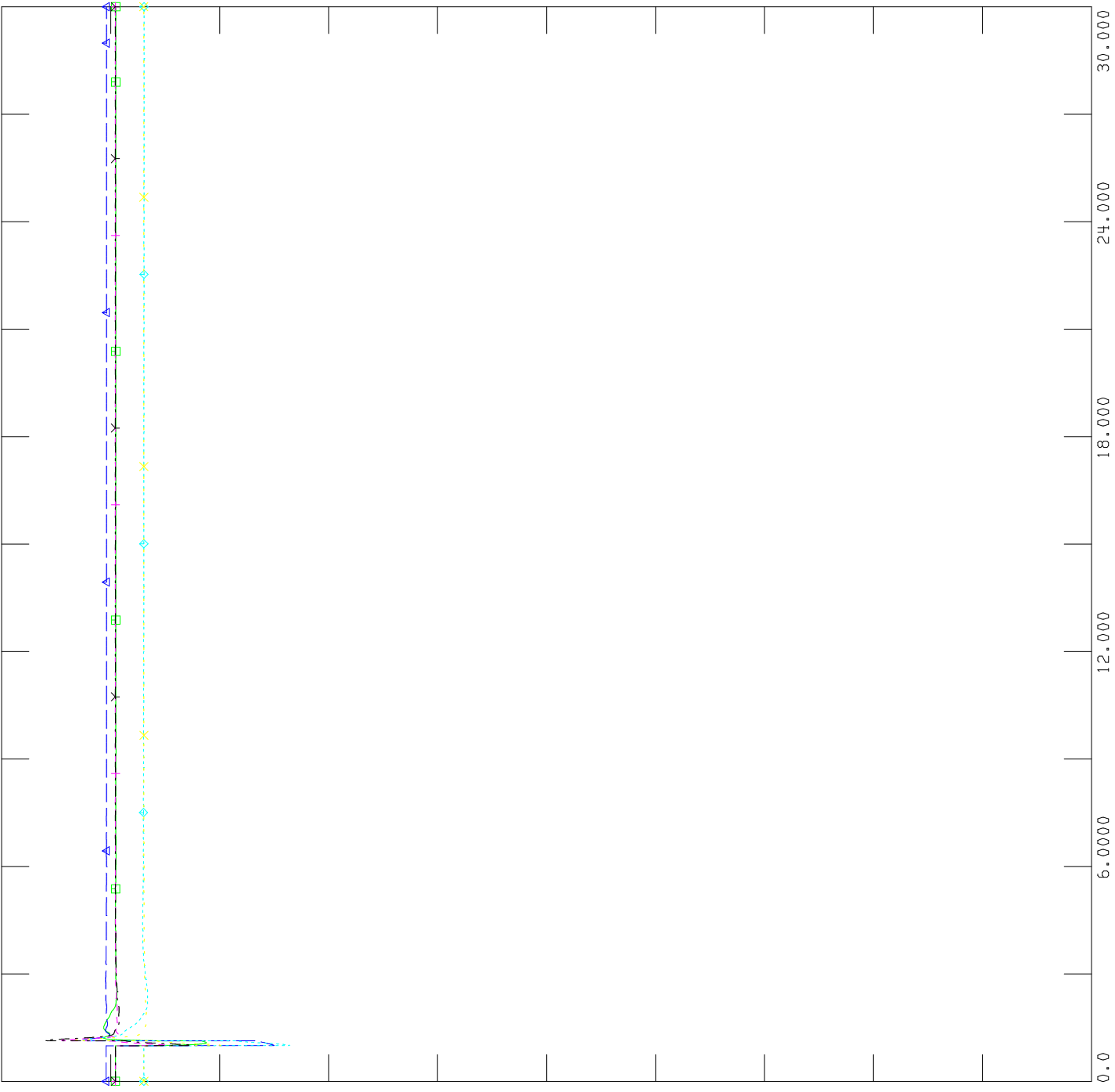
Channel	Frequency (Hz)	Value
CHNL# 23: CFREQ	270 [SUFFIEL7	138.00]]
CHNL# 22: CFREQ	680 [MEDICIN7	138.00]]
CHNL# 21: CFREQ	271 [BULLS H7	138.00]]
CHNL# 20: CFREQ	269 [BURDETT7	138.00]]
CHNL# 19: CFREQ	31 [FINCAST7	138.00]]

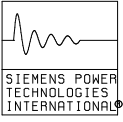




FILE: \\...\\513 Peace Butte NID Dynamic Studies\\SC3_513&SATR_892L.out

Channel	Label	Value
CHNL# 29	EVOLT 92046 [MCMBRIDE6]	0.6900
CHNL# 28	EVOLT 11002 [EGARDNG2]	0.5750
CHNL# 27	EVOLT 4740 [CARD_07]	1.0000
CHNL# 26	EVOLT 2389 [CHILLRIDG]	25.0000
CHNL# 25	EVOLT 100018 [PURPLESP]	0.5750
CHNL# 24	EVOLT 2294 [TOTHILL2]	0.6900

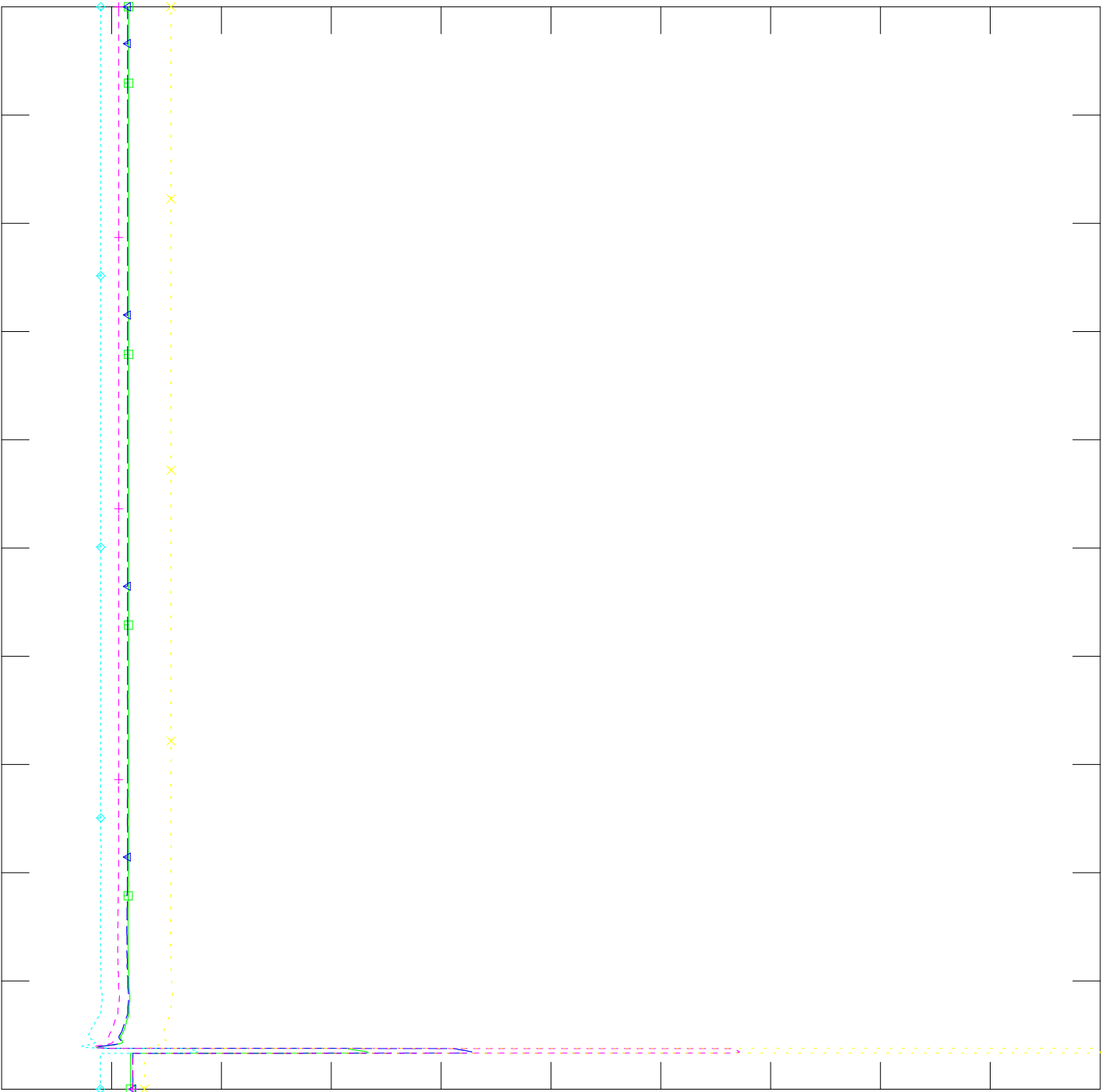




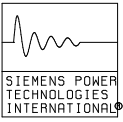
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_892L.out

THU, NOV 18 2010 14:28
BUS VOLTAGE

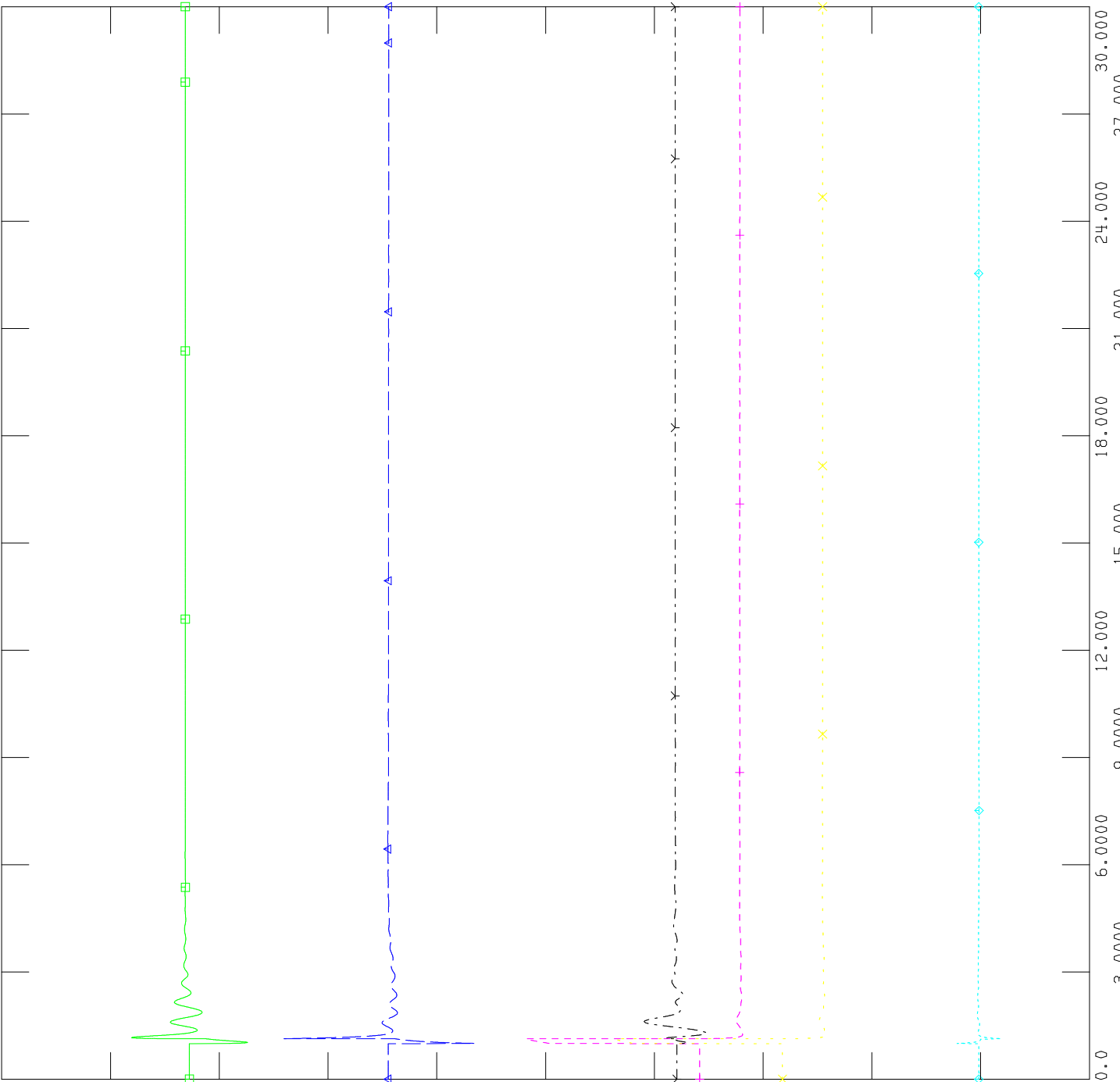
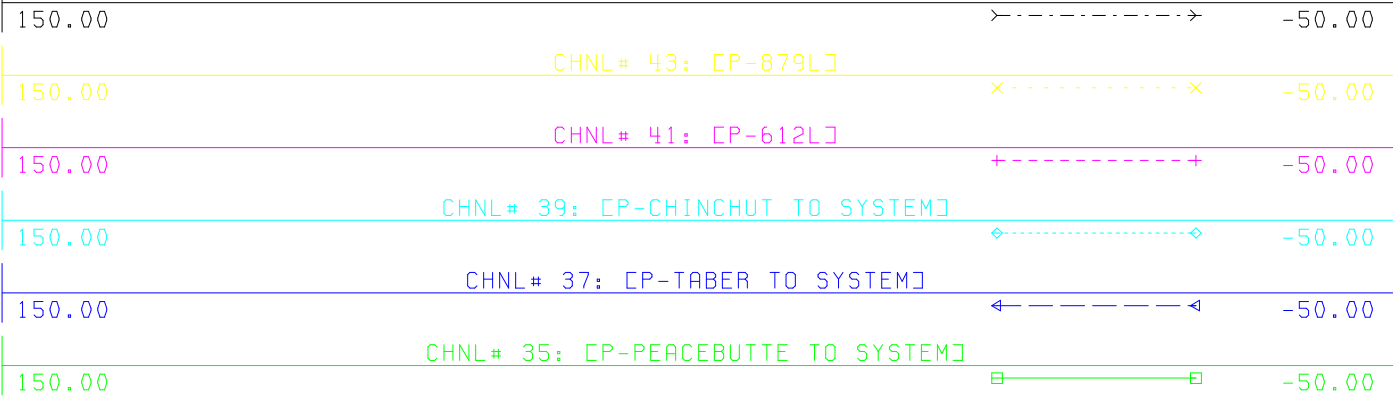
Channel	Location	Value
CHNL# 34: EVOLT	270 [SUFFIEL7	138.00]]
CHNL# 33: EVOLT	680 [MEDICIN7	138.00]]
CHNL# 32: EVOLT	271 [BULLS H7	138.00]]
CHNL# 31: EVOLT	269 [BURDETT7	138.00]]
CHNL# 30: EVOLT	31 [FINCAST7	138.00]]



C-6-46



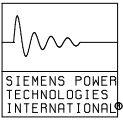
FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_892L.out
CHNL# 45: CP-880L]



THU, NOV 18 2010 14:29
BRANCH ACTIVE POWER

C-6-47

TIME (SECONDS)



FILE: \\...\513 Peace Butte NID Dynamic Studies\SC3_513&SATR_892L.out
 CHNL# 46: [Q-880L]

