

Lucent Technologies
Bell Labs Innovations



DACS II
Release 9.0 MML
1.544 Mb/s Interface
Quick Reference Guide

365-353-273
Issue 1.0
October 1999

Copyright © 1999 Lucent Technologies

All Rights Reserved

Printed in U.S.A

This material is protected by the copyright and trade secret laws of the United States and other countries. It may not be reproduced, distributed or altered in any fashion by any entity (either internal or external to Lucent Technologies), except in accordance with applicable agreements, contracts, or licensing, without the express written consent of the Customer Training and Information Products organization and the business management owner of the material.

Notice

Every effort was made to ensure that the information in this document was complete and accurate at the time of printing. However, information is subject to change.

Mandatory Customer Information

Security Statement

In rare instances, unauthorized individuals make connections to the telecommunications network through the use of remote access features. In such event, applicable tariffs require that the customer pay all network charges for traffic. Lucent Technologies cannot be responsible for such charges, and will not make any allowance or give any credit for charges that result from unauthorized access.

Documentation Ordering Information

The ordering number for this document is Lucent Technologies 365-353-273. To order this document, call the Lucent Technologies Customer Information Center in Indianapolis, Indiana, on 1-888-582-3688. For more ordering information, refer to "How to Order Documentation" in the section "About this Document."

Trademarks

5ESS and SLC[®] is a registered trademark of Lucent Technologies.

COMMON LANGUAGE is a registered trademark and CLEI, CLLI, CLCI, and CLFI are trademarks of Bell Communications Research, Inc.

American Express is a registered trademark of American Express Company.

MasterCard is a registered trademark of Mastercard International Inc.

Visa is a registered trademark of VISA International Service Association.

Customer Assistance and Technical Support Telephone Number

Lucent Technologies provides technical assistance 24 hours a day, seven days a week. For technical assistance within the United States, call 1-800-225-RTAC. For technical assistance in Europe, call the Netherlands Technical Support Organization (TSO) at 31-3587-1555. For technical assistance in the Far East, call the Singapore TSO at 65-241-0880. If your country of origin provides local technical support, please contact them directly.

Documentation Support Telephone Number

Lucent Technologies provides a telephone number for you to report errors or to ask questions about the information in this document. The support telephone numbers are:

Outside the United States - 1-317-322-6847

Inside the United States - 1-800-645-6759

Acknowledgements

This document was developed by the Lucent Technologies Customer Training and Information Products Organization.

How Are We Doing?

Document Title: DACS II Rel.9.0, MML 1.544 Mb/s Int. Quick Ref. Guide_

Document No.: _____ 365-353-273 _____

Issue No. _____ 1.0 _____ Date: _____ October 1999 _____

Lucent Technologies welcomes your feedback on this Customer Information Product (CIP). Your comments can be of great value in helping us to improve our CIPs.

1. Please rate the effectiveness of this CIP in the following areas:

	Excellent	Good	Fair	Poor	Not Applicable
Ease of Use					////////////////////
Clarity					////////////////////
Completeness					////////////////////
Accuracy					////////////////////
Organization					////////////////////
Appearance					////////////////////
Examples					
Illustrations					
Overall Satisfaction					////////////////////

2. Feel free to write any comments below or on an attached sheet.

If we may contact you concerning your comments, please complete the following:

Name: _____ Telephone Number: _____

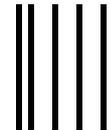
Company/Organization: _____ Date: _____

Address: _____

When you have completed this form, please return to address on back or Fax to: 732 949-5000.

cut

Lucent Technologies
Bell Labs Innovations

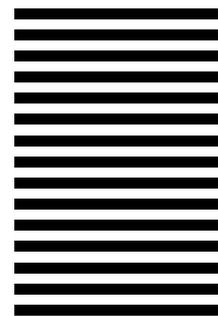


NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 1999 GREENSBORO, NC

POSTAGE WILL BE PAID BY ADDRESSEE



DOCUMENTATION SERVICES
2400 Reynolda Road
Winston-Salem, NC 27199-2029



Contents

	About this Document	ix
1	Link/Login/Logoff Commands	1-1
2	Provisioning Commands	2-1
3	Performance Monitoring Commands	3-1
4	Cross-Connect Commands	4-1
5	Macro and Map Commands	5-1
6	Roll Commands	6-1

Contents

14 Denial Codes [14-1](#)

IN Index [IN-1](#)

Contents

About this Document

Background

Purpose The purpose of this manual is to provide an intermediate or expert DACS II user/administrator with quick access to DACS II commands.

The *DACS II Quick Reference Guide* provides a listing and syntax for input commands used by the craft personnel involved in the daily operation and maintenance of the Digital Access and Cross-connect System II.

Intended Audiences This document is for reference by a technician or craftsperson who already understands the commands and needs a reminder of syntax.

How to Use this Document

Accessing the Information

There are two ways to access the information in this document:

- This index in the back of the manual
 - The overall table of contents in the front of the manual.
-

Prerequisites

Before you use this document, you should have completed the DACS II Operation and Maintenance course (TR3521 or TR3621).

If you were not able to take either training course, you should carefully study the information in the *DACS II Operation and Maintenance Manual*. You should also become familiar with the reasons that a command could be denied; this information is presented in Chapter 1 of the *DACS II Operation and Maintenance Manual* and under the appropriate command in the *DACS II Command and Message Manual*.

Manual Contents

Overview This manual contains DACS II commands only. For additional reference or procedural information, refer to the DACS II Operation and Maintenance Manual.

Contents The contents of the *DACS II Quick Reference Guide* are listed below:

- **Chapter 1 - Link/Login/Logoff Commands**

This chapter contains commands for adding user logins, logging in and logging off the DACS II, changing link provisioning options, and connecting data communications equipment to the DACS II.

- **Chapter 2 - Provisioning Commands**

This chapter contains the commands to provision Network Processing Modules (NPMs), Network Processing Circuits (NPCs), Timing References, and Administrative Links.

- **Chapter 3 - Performance Monitoring Commands**

This chapter contains commands for setting threshold values for certain parameters that are used to monitor the performance of the transmission lines that are connected to the DACS II.

(Continued on next page)

Manual Contents (Continued)

Contents, Continued

- **Chapter 4 - Cross-connect Commands**

This chapter contains the commands to establish various types of 64 kbit/s, Clear-DS1, and Channelized DS1 cross-connections, and to disconnect these cross-connections.

- **Chapter 5 - Macro and Map Commands**

This chapter contains the commands to create, activate, change, and delete macro files and cross-connection maps.

- **Chapter 6 - Roll Commands**

This chapter contains the commands to perform and disconnect the various facility and DS0 circuit rolls.

- **Chapter 7 - Change Commands**

This chapter contains the commands to perform changes to various cross-connections, circuit and alarm parameters, NPC types and other options.

- **Chapter 8 - Remove Commands**

This chapter contains the commands to remove links, NPCs, units, and TSIs.

- **Chapter 9 - Restore Commands**

This chapter contains the commands to restore links, NPCs, units, and TSIs.

(Continued on next page)

Manual Contents (Continued)

Contents, Continued

- **Chapter 10 - Test Access Commands**

This chapter contains the commands to establish test ports and 64 kbit/s test connections.

- **Chapter 11 - Subrate Commands**

This chapter contains the commands for creating subrate cross-connections and disconnections, establishing subrate channel, and creating and deleting subrate test access connections.

- **Chapter 12 - Troubleshooting**

This chapter contains commands for isolating and clearing various DACS II troubles.

- **Chapter 13 - Miscellaneous Commands**

This chapter contains miscellaneous DACS II commands.

- **Chapter 14 - Denial Codes**

This chapter lists the denial codes and their meanings. This information is useful in determining problems with the DACS II.

Manual Conventions

Special Font Used

This manual uses special fonts for the user to differentiate computer input/output. The **constant width bold font** indicates message formats, keywords, letter representations of parameters, parameter values, and messages as they would appear on a DACS II terminal screen.

Related Documentation

Related DACS II Documents

The following documents support the DACS II system:

- DACS II Installation Manual:
 - IPH903 (DACS II CEF)
 - IPH903I (DACS II ESBF)

Audience: Customers planning to install the equipment

Content: Customer installation instructions.

- DACS II Release 7.0 Product Description Manuals:
 - 365-353-085 (24 Channel)
 - 365-353-086 (30 Channel)

Audience: Network planners, engineers, and others that need to know how the DACS II works and fits into the network

Content: Features, applications, and description and other reference information.

(Continued on next page)

Related Documentation (Continued)

Related DACS II Documents, Continued

- **DACS II Release 9.0 Operation and Maintenance Manuals:**

- 365-353-261 (PDS)
- 365-353-271 (MML)
- 365-353-281 (PDS 2.048-Mb/s Interface)
- 365-353-291 (MML 2.048-Mb/s Interface)

Audience: End-user maintenance personnel

Contents: Procedures to operate and maintain the DACS II.

- **DACS II Release 9.0 Command and Message Manuals:**

- 365-353-262 (PDS)
- 365-353-272 (MML)
- 365-353-282 (PDS 2.048-Mb/s Interface)
- 365-353-292 (MML 2.048-Mb/s Interface)

Audience: End-user maintenance personnel

Content: Description of each software input message and its response along with a description of each system output report.

(Continued on next page)

Related Documentation (Continued)

Related DACS II Documents, Continued

- DACS II Release 9.0 Quick Reference Guides:
 - 365-353-263 (PDS)
 - 365-353-273 (MML)
 - 365-353-283 (PDS 2.048-Mb/s)
 - 365-353-293 (MML 2.048-Mb/s)

Audience: End-user maintenance personnel

Content: Abbreviated list of system commands and parameters.

- DACS II Release 9.0 Software Release Description:
 - Comcode C108460080 (??)

Audience: End-user maintenance personnel

Content: Upgrade procedures for the new software release, status of problems fixed in previous releases, and operating issues for the specified software release.

(Continued on next page)

Related Documentation (Continued)

Related DACS II Documents, Continued

- X.50/X.57 Subrate Application
Release 1.0.3 for DACS II
Release 1.0.4 for DACS II ISX
MML 2.048 Mbit/s Interface
User's Manual

— 365-350-101 (MML)

Audience: End-user maintenance personnel

Content: Complete manual describing how to install and operate the X.50/X.57 Subrate application on the DACS II or DACS II ISX. Commands and messages describing how to perform subrate cross-connects and subrate test access are included.

(Continued on next page)

Related Documentation (Continued)

Related DACS II Documents, Continued

- DDS Subrate and MJU Application
Release 1.0.4 for DACS II
Release 1.0.5 for DACS II ISX
User's Manual
 - 365-350-110 (PDS)
 - 365-350-111 (MML)

Audience: End-user maintenance personnel

Content: Complete manual describing how to install and operate the DDS Subrate and MJU application on the DACS II or DACS II ISX. Commands and messages describing how to perform DDS subrate cross-connects, subrate test access, and subrate MJU operations are included.

(Continued on next page)

Related Documentation (Continued)

Related DACS II Documents, Continued

- Digital Multipoint Bridge (DMB)
DSP Platform Application
Release 1.0.2 for DACS II
Release 1.0.3 for DACS II ISX
User's Manual
 - 365-353-144 (PDS)
 - 365-353-154 (MML)

Audience: End-user maintenance personnel

Content: Complete manual describing how to install and operate the DMB application on the DACS II or DACS II ISX. Commands and messages describing how to perform DMB cross-connects and DMB test access operations are included.

How to Order Documentation

Overview To order additional copies of this document, orders can be placed:

- By Mail
 - By Telephone
 - By Fax
 - Via the World Wide Web.
-

**Ordering
by Mail**

To order by Mail, send a letter to:

Lucent Technologies
Customer Information Center
Attention: Order Entry Section
2855 N. Franklin Road
P. O. Box 19901
Indianapolis, IN 46219

(Continued on next page)

How to Order Documentation (Continued)

Ordering by Telephone

To order by Telephone (Monday through Friday), call:

- Within the United States of America:
1-888-LUCENT-8 (7:30 a.m. to 6:30 p.m. EST)
(1-888-582-3688)
 - Australia and all European countries:
Toll 317-322-6416
 - Far East, North America, and other:
Toll 317-322-6646
-

Ordering by Fax

To order by Fax, fax a letter to:

- Within the United States of America:
1-317-322-6484
 - All International countries:
Toll 317-322-6699
-

How to Order Documentation (Continued)

Ordering Via the World Wide Web

The Lucent CIC maintains a netsite that can be used for ordering Lucent customer information products. The netsite address for the Lucent CIC homepage is:

<http://www.lucentdocs.com/>

Once you access the Lucent CIC homepage, clicking on the Documents selection will take you to the area through which numerous types of customer information products can be located, ordered, and/or downloaded.

RBOC and BOC Orders

Regional Bell Operating Companies (RBOC) and Bell Operating Companies (BOC) must process orders through their company documentation coordinator.

Commer- cial Customer Orders

For commercial customers, a check, money order, purchase order number, or charge card number (*VISA*^{®*} bank card, *American Express*^{®†} credit card services, or *Master Card*^{®‡} bank card) is required with all orders.

Checks must be made payable to Lucent Technologies.

* Registered trademark of VISA International Service Association

† Registered Trademark of American Express Company

‡ Registered Trademark of Mastercard International Incorporated

How to Order Documentation (Continued)

Lucent Technolo- gies Orders

Lucent Technologies entities should use Form IND 1-80.80 FA, available through the Customer Information Center.

Standing Order Customers

One-time orders include a binder (if applicable) and the document contents for the current issue in effect at the time of order. After placing a one-time order, you can request a standing order for any document revisions *of that software release*.

Documents for new software releases do *not* go to standing-order customers. You will only get those documents if you order the new software release.

How to Comment on This Document

Using the Feedback Form

A feedback form is located at the beginning of this publication, immediately after the title page. Please fill out the feedback form and return it (postage free) to the address on the back.

Without the Feedback Form

If the feedback form is missing, send comment on this publication to:

Lucent Technologies
DACS II Documentation Coordinator
Attn: Tabatha Wright
Room 1B-320
101 Crawfords Corner Road
Holmdel, NJ 07733-3030 USA

Electronic Documentation

Overview Documentation for DACS II and DACS II ISX is now available in electronic form, on CD-ROM (compact disk, read-only memory). CD-ROM has many advantages over traditional paper documentation, including cost savings, search and retrieve capability, and the assurance of the most current documentation.

CD-ROM is available by annual subscription (on standing order).

**Ordering a
CD-ROM** To order a CD-ROM, call your Technical Information Resource Manager, your Lucent Technologies Account Executive, or the Lucent Technologies Customer Information Center (1-888-582-3688).

**Pricing
Informa-
tion** For pricing information, contact your Lucent Technologies Network Systems Account Executive or the Lucent Technologies Customer Information Center (1-888-582-3688).

**Technical
Informa-
tion** For technical information, call Lucent Technologies Documentation Support:

Outside the United States - 1-800-645-6759

Inside the United States - 1-317-322-6847

Link/Login/Logoff Commands

1

Change User Password [I.38301]

CHG-LGN:::[<old password>:<new password>];

If the user is on a Snider protocol administrative link, the command is entered as follows:

CHG-LGN;

DACS II will then prompt the user for the old and new password:

OLD PASSWD: (user enters the old password)

NEW PASSWD: (user enters the new password)

PASSWD: (user re-enters the new password for verification)

Add User [I.36101]

If the command is entered on a Snider link:

```
CRTE-LGN::::<user id>[,NEW];
```

DACS II generates the message below and a dialog is started:

```
PASSWD: (The frame administrator enters user password.)
```

```
REENTER PASSWD: (The frame administrator again enters the user password.)
```

Note that the user password is not echoed by DACS II.

If the command is entered on an X.25 link:

```
CRTE-LGN::::<user id>,<user password>;
```

No dialog is initiated by DACS II.

Delete User [I.37101]

```
DLT-LGN::::<user id>;
```

Add TABS [I.36007]

Link

Parameters

```
ED-PRMTR-LINK::j::APPL-{ASCS|ASCD|PM}\  
[,L2AD-aa][,POLL-ttt];
```

**Add Link,
X.25,
Protocol,
Data Link,
Layer
Parameters** [l.36003]

ED-PRMTR-LINK::j::[K-b][,T1-eee][,T3-ggg]\
[,N2-aa][,FRMAD-{A|B}];

**Add Link,
Protocol,
Baud** [l.36001]

ED-PRMTR-LINK::j::PTCOL-{S|X|T|M}\
[,BAUD-bb][,ALM-k][,BS-e][,ENQ-q]\
[,XON-x]:[INIT];

If the link protocol is Snider, enter the following command:

```
ED-PRMTR-LINK::j::PTCOL-S[,BAUD-bb]\  
[,ALM-k][,BS-e][,ENQ-q][,XON-x]:[INIT];
```

If the link protocol is X.25, enter the following command:

```
ED-PRMTR-LINK::j::PTCOL-X[,ALM-k]:[INIT];
```

If the link protocol is TABS, enter the following command line:

```
ED-PRMTR-LINK::j::PTCOL-T[,BAUD-bb]\  
[,ALM-k]:[INIT];
```

If the link protocol is Modified Snider, enter the following command:

```
ED-PRMTR-LINK::j::PTCOL-M[,ALM-k]:[INIT];
```

Add X.25 [I.36005]

Link

Parameters

```
ED-PRMTR-LINK::l[mm]::[W-c][,P-ddd]\
[,T20-iii][,T22-jjj][,T23-kkk][,T25-lll]\
[,T26-mmm][,R20-nn][,R22-p][,R23-qq]\
[,R25-r][,DBIT-v][,VC-ppss&-gghh];
```

**Log On To
DACS II** [I.39001]

```
LGN-USER::::<user id>[,<user password>];
```

If the user is on a Snider administrative link, the command is entered as follows:

```
LGN-USER::::<user id>;
```

DACS II will then prompt for the following:

```
PASSWD: (user enters the user password)
```

**Log Off User
or Link** [I.39101]

```
LGT-{TERM|USER}::::{l[mm][,INCL]|<user id>;
```

Change User/Link Screening [I.38401]
`SET-PRVG-{TERM|USER}::::{1[mm][,INCL]| \
<user id>}:[SCR-n[,GR-a&-b&-c&-d&-e&-f]]:\
[{MCON|MCOFF}]:[INIT];`

Add User/Link Language, NPC Addressing and Priority [I.36103]
`SET-PRVG-{USER|TERM|ALL}::::\
{<user id>|1[mm][,INCL]}:[LANG-{P|M|F}]:\
[NPCAD-{E|X|H}]:[LEV-a&-b&-c&-d&-e&-f]:\
[{RMON|RMOFF}]:[RLK-{A|I}]:[INIT];`

Provisioning Commands

2

**Provision a
Unit** [l.31211]

For DACS II Non-CEF frames:

```
CRTE-CNFGRN-EQPT::UNIT-q::\  
[a[,b[,c[,d[,e [,f]]]]]]:[utxyz];
```

For DACS II CEF frames:

```
CRTE-CNFGRN-EQPT::UNIT-[q]q:::[utxyz];
```

**Provision
Digital
Signal
Processing
Unit NPC** [l.31331]

```
CRTE-EQPT::NPC-[s]abc[&&-[t]def]::mnxyz;  
CRTE-EQPT::NPC-uv-m-np[&&&-wx-k-qr]::mnxyz;
```

**Provision
Digital
Signal
Processing
Unit NPC** [l.31351]

CRTE-EQPT::NPC-[s]abc::mnxyz;
CRTE-EQPT::NPC-uv-m-np::mnxyz;



CAUTION:

The NPC should be restored immediately (both duplicated sides, 0 and 1) using Message No. l.34351 (RST-EQPT::NPC) after being grown to avoid having both sides out of service. If this is not possible, the NPC should be degrown immediately using Message No. l.32341 (DISC-EQPT::NPC).



CAUTION:

The NPC and (Expanded) Time Slot Interchanger (TSI/ETSI) circuit packs must be inserted into the inactive side of DACS II. Inserting circuit packs into the active side may result in transmission "hits."

**Provision
NPC Type
DS** [l.31371]

CRTE-EQPT::NPC-[s]abc[&&-[t]def]::DSxyz:\
[rr/m[&rr/m\[...]]]:[IW-X-pq];

CRTE-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::DSxyz:\
[rr/m[&rr/m\[...]]]:[IW-X-pq];

**Provision
ANSI NPC** [l.31341]

```
CRTE-EQPT::NPC-[s]abc[&&-[t]def]::mnxyz:\
[rr/m][&rr/m][...]:[IW-X-pq[,INCL]]\
[,AIS-{INFO|MJ|MN}][,PL-{ENA|DSA}];
```

```
CRTE-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::mnxyz:\
[rr/m][&rr/m][...]:[IW-X-pq[,INCL]]\
[,AIS-{INFO|MJ|MN}][,PL-{ENA|DSA}];
```

**Provision
NPC** [l.31352]

```
CRTE-EQPT::NPC-[s]abc[&&-[t]def]::[mnxyz]:\
[rr/m][&rr/m]\[&...]:[IW-X-pq[,INCL]]\
[,AIS-{INFO|MJ|MN}];
```

```
CRTE-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::\
[mnxyz]:[rr/m]\[&rr/m][&...]:[IW-X-pq[,INCL]]\
[,AIS-{INFO|MJ|MN}];
```

**Provision
Test-Access
Group NPC** [l.31401]

```
CRTE-EQPT::NPC-[s]abc::NPCTG-rrr;
CRTE-EQPT::NPC-uv-m-np::NPCTG-rrr;
```

Provision Test Port NPC [l.31381]
CRTE-EQPT::NPC-[s]abc::NPCTP-n;
CRTE-EQPT::NPC-uv-m-np::NPCTP-n;

Provision Synchronizer Time Base [l.31101]
CRTE-EQPT::SYNC::TBpqr;

Provision Clock Reference Oscillator [l.31111]
CRTE-EQPT::SYNC::TBpqr:TLI-3;

Provision Synchronizer Timing Link Interface [l.31121]
CRTE-EQPT::SYNC::TLI-m:\ {txyz,SSP-a,SRC-p|TDxyz};

Provision Test-Access Group [l.31421]
CRTE-EQPT::TG-mmm::rrr-eee[&&-fff],\ sss-www[&&-xxx]:[<tc>;

**Provision
Test Port** [l.31411]

CRTE-EQPT::TP-kk::[<tc>;

**Provision
Facility
Terminating
Module
Interface** [l.31321]

CRTE-EQPT::UNIT-[q]q::FTMI-d:EQL-l,r;

**Provision
Multiplexer
Interface
Unit** [l.31501]

CRTE-EQPT::UNIT-[q]q::MIU-c[&&-d]:[mnxyz];

**Provision
Multiplexer** [l.31511]

CRTE-EQPT::UNIT-[q]q::MXR-c[&&-d]:[mnxyz]:\
[BERM-s][,BERT-t][,LBO-;

**Deprovision
NPC** [l.32341]

DISC-EQPT::NPC-[s]abc[&&-[t]def];
DISC-EQPT::NPC-uv-m-np[&&&-uv-k-qr];

Deprovision Test-Access Group NPC [l.32401]
DISC-EQPT::NPC-[s]abc::NPCTG-rrr:[TGR];
DISC-EQPT::NPC-uv-m-np::NPCTG-rrr:[TGR];

Deprovision Test Port NPC [l.32381]
DISC-EQPT::NPC-[s]abc::NPCTP-n:[TPR];
DISC-EQPT::NPC-uv-m-np::NPCTP-n:[TPR];

Deprovision Synchronizer Time Base [l.32101]
DISC-EQPT::SYNC::TB;

Deprovision Synchronizer Timing Link Interface [l.32121]
DISC-EQPT::SYNC::TLI-m:[SSP-a];

Deprovision Test-Access Group [l.32421]
DISC-EQPT::TG-mmm[&&-nnn];

**Deprovision
Test Port** [l.32411]

DISC-EQPT::TP-kk;

**Deprovision
Unit** [l.32211]

DISC-EQPT::UNIT-[q]q;

**Deprovision
Facility
Terminating
Module
Interface** [l.32321]

DISC-EQPT::UNIT-[q]q::FTMI-d;

**Deprovision
Multiplexer
Interface
Unit** [l.32511]

DISC-EQPT::UNIT-[q]q::MIU-c[&&-d];

**Deprovision
Multiplexer** [l.32501]

DISC-EQPT::UNIT-[q]q::MXR-c[&&-d];

**Test Port
Release** [l.27002]

DISC-TACC-T0:::ALL:[OOS];

Delete Association of NPC with SLC[®] RT [l.37211]

```
DLT-PRMTR-EQPT::[DGA-[s]aaa][,DGB-[s]bbb]\
[,DGC-[s]ccc] [,DGD-[s]ddd] [,DGP-[s]ppp]::\
{RT|DL}-ffff;
```

```
DLT-PRMTR-EQPT::[DGA-uv-j-ab][,DGB-uv-k-cd]\
[,DGC-uv-l-ef][,DGD-uv-m-gh][,DGP-uv-j-pr]::\
{RT|DL}-ffff;
```

Add Network Processing Circuit [l.36021]

```
ED-ADD-MAP::NPC-{[s]abc&&-[t]def|[s]abc\
[&-[s]ghi]....[&-[t]def]};
```

```
ED-ADD-MAP::NPC-{uv-m-np&&-wx-k-qr|uv-m-np\
[&-ab-c-de]....[&-wx-k-qr]};
```

Provision Frame [l.30101]

```
ED-PRMTR-NE::::<uid>[,FRAME-fg]:[CHAR-m];
```

Configure Synchronizer [l.35011]

```
ENT-EQPT::SYNC-a::FPLL;
```

**Inhibit
Switch
MMFG** [l.35311]

 INH-SW-EQPT::UNIT-[q]q::MMFG-c[&&-d]:\
 {PROTN|WKG};

**Configure
Frame** [l.35021]

 INIT-SYS::FRAME;

**Facility
Loopback
Activate** [l.26141]

 OPR-LPBK-T1::[s]abc::loop:locn;
 OPR-LPBK-T1::uv-m-np::loop:locn;

**Facility Test
Signal
Activate** [l.28101]

 OPR-TSIG-T1::[s]abc::test;
 OPR-TSIG-T1::uv-m-np::test;

**Facility
Loopback
Release** [l.26151]

 RLS-LPBK-T1::[s]abc::loop:locn;
 RLS-LPBK-T1::uv-m-np::loop:locn;

Facility Test [l.28201]

Signal

Deactivate

RLS-TSIG-T1::[s]abc::test;
RLS-TSIG-T1::uv-m-np::test;

Remove [l.33401]

Facility Line

Interface

RMV-EQPT::UNIT-[q]q::FLI-k;

Remove [l.33411]

Formatter

RMV-EQPT::UNIT-[q]q::FMT-s;

Remove [l.33431]

Multiplexer

Interface

Unit

RMV-EQPT::UNIT-[q]q::MIU-c[&&-d]:[INCL];

Remove [l.33421]

MMFG

RMV-EQPT::UNIT-[q]q::MMFG-c[&&-d]:[FRC[,INCL]];

Restore [l.34401]

Facility Line

Interface

Restore Facility Line Interface ;

**Restore
Formatter** [l.34411]

`RST-EQPT::UNIT-[q]q::FMT-s;`

**Restore
Multiplexer
Interface
Unit** [l.34431]

`RST-EQPT::UNIT-[q]q::MIU-c[&&-d]:[INCL];`

**Restore
MMFG** [l.34421]

`RST-EQPT::UNIT-[q]q::MMFG-c[&&-d]:[INCL];`

Performance Monitoring Commands

3

Allow DS1 Performance Monitoring Report [I.51171]
ALW-PMREPT-T1:: {NPC-[s]abc[&&-[t]def] | ALL};
ALW-PMREPT-T1:: {NPC-uv-m-np[&&&-wx-k-qr] | ALL};

Inhibit DS1 Performance Monitoring Report [I.51161]
INH-PMREPT-T1:: {NPC-[s]abc[&&-[t]def] | ALL};
INH-PMREPT-T1:: {NPC-uv-m-np[&&&-wx-k-qr] | ALL};

Utility Clear Hardware/Software Error Recovery Log File [I.56061]
INIT-LOG:::ERR:{HWER | SWER};

Utility Clear Counter or State of All In-Service NPCs [I.56011]
INIT-REG:::<parameter>:ALL;

Clear Facility Performance Parameters [I.56051]
INIT-REG::NPC-[s]abc;
INIT-REG::NPC-uv-m-np;

Utility Clear Counter or State of a Single In-Service NPC or Range of In-Service NPCs [I.56001]
INIT-REG::[NPC-[s]abc[&&-[t]def]]::\
<parameter>:[{RT|DL}-ffff];
INIT-REG::[NPC-uv-m-np[&&&-wx-k-qr]]::\
<parameter>:[{RT|DL}-ffff];

Utility Clear DA/TA/PA NPC Parameters [I.56071]
INIT-REG-T1::{NPC-[s]abc[&&-[t]def]|ALL}::\
<parameter>,[aaaaa] ,[locn],[dddd],[tttt];
INIT-REG-T1::{NPC-uv-m-np[&&&-wx-k-qr]|ALL}::\
<parameter>,[aaaaa] ,[locn],[dddd],[tttt];

Retrieve Performance Monitoring Report Schedule [I.51071]
RTRV-PMREPT-SCHED::::{CFA,MONDAT|CFA|,MONDAT};

Query [I.56091]
Performance
Monitoring
Data for DA,
TA, and PA
Type NPCs

```
RTRV-PM-T1:: {NPC-[s]abc[&&-[t]def] | ALL}:: \
<parameter>,aaaaa , [1111111111], [locn], \
[dddd], [tttt];
```

```
RTRV-PM-T1:: {NPC-uv-m-np[&&&-wx-k-qr] | ALL}:: \
<parameter>,aaaaa , [1111111111], [locn], \
[dddd], [tttt];
```

Schedule [I.51141]
DS1
Performance
Monitoring
Report

```
SCHED-PMREPT-T1:: NPC-[s]abc[&&-[t]def]:: \
rrrrr, ssss, nm, <parameter>, 1111111111, locn, \
aaaaa, ttttt[&&-ooooo]: \ [p[vv]][&q[vv]]];
```

```
SCHED-PMREPT-T1:: NPC-uv-m-np[&&&-wx-k-qr]:: \
rrrrr, ssss, nm, <parameter>, 1111111111, locn, \
aaaaa, ttttt[&&-ooooo]: [p[vv]][&q[vv]]];
```

Utilities, [I.51101]
Alarm
Reporting

```
SET-ATTR-EQPT::: ALM-a;
```

Cross-Connect Commands

4

Broadcast [l.13001]

Cross-

Connections

```
CONN-BDCST-T0:[s]abc-ddd[&&-eee],[t]ghi-yyy\  
[&[t]klm-nnn&..]:<tc>:[RDLD][,{CUS|INCL}]:\  
[ {NTR|LPD|CONV} ]:[NORM];
```

```
CONN-BDCST-T0:uv-m-np-ddd[&&-eee],wx-k-qr-yyy\  
[&ed-h-fg-nnn&..]:<tc>:[RDLD][,{CUS|INCL}]:\  
[ {NTR|LPD|CONV} ]:[NORM];
```

Broadcast [l.13002]

Cross-

Connection

```
CONN-BDCST-T0:[s]abc-ddd[&&-eee],\  
[t]ghi-yyy[&&-kkk]:<tc>:[RDLD][,{CUS|INCL}]:\  
[ {NTR|LPD|CONV} ]:[NORM];
```

```
CONN-BDCST-T0:uv-m-np-ddd[&&-eee],\  
wx-k-qr-yyy[&&-kkk]:<tc>:[RDLD][,{CUS|INCL}]:\  
[ {NTR|LPD|CONV} ]:[NORM];
```

Broadcast Cross-Connection [l.13011]
CONN-BDCST-T1::[s]abc,[u]ghi[&[v]jkl][&[t]mno]\
[...]::[RDLD][,{CUS|INCL}]:[{NTR|LPD|CONV}];

CONN-BDCST-T1::uv-m-np,wx-k-qr[&ed-f-hg]\
[&st-m-no]\[...]::[RDLD][,{CUS|INCL}]:\
[{NTR|LPD|CONV}];

Broadcast Cross-Connection [l.13021]
CONN-BDCST-T1::[s]abc,[t]def::[RDLD]\
[,{CUS|INCL}]:[{NTR|LPD|CONV}];

CONN-BDCST-T1::uv-m-np,wx-k-qr::\
[RDLD][,{CUS|INCL}]:\ [{NTR|LPD|CONV}];

One Way Cross-Connections [l.11101]
CONN-CRS1-T0::[s]abc-ddd[&&-eee],\
[t]ghi-yyy[&&-kkk]::<tc>:[RDLD][{,CUS|,INCL}]:\
[{NORM|TERM}]:[PRIOUT];

CONN-CRS1-T0::uv-m-np-ddd[&&-eee],wx-k-qr-yyy\
[&&-kkk]::<tc>:[RDLD][{,CUS|,INCL}]:\
[{NORM|TERM}]:[PRIOUT];

**One Way
Cross-
Conne-
ctions** [l.11121]

```
CONN-CRS1-T0::[s]abc-ddd[&&-eee],\  
[t]ghi-jjj[&&-kkk]::<tc>:[RDLD][,{CUS|INCL}]:\  
fmd,tmd:[{NORM|TERM}];
```

```
CONN-CRS1-T0::uv-m-np-ddd[&&-eee],\  
wx-k-qr-jjj[&&-kkk]::<tc>:[RDLD][,{CUS|INCL}]:\  
fmd,tmd:[{NORM|TERM}];
```

**One-Way
Non-
Channelized
Digital
Signal Cross
Connect** [l.11131]

```
CONN-CRS1-T1::[s]abc,[t]ghi::[RDLD]\  
[,{CUS|INCL}]:[ {NORM|TERM} ]:[PRIOUT];
```

```
CONN-CRS1-T1::uv-m-np,wx-k-qr::[RDLD]\  
[,{CUS|INCL}]:[ {NORM|TERM} ]:[PRIOUT];
```

**Two-Way
Cross-
Connections** [l.11051]

```
CONN-CRS-T0::[s]abc-ddd,[t]ghi-jjj::\  
[ {PFW-abcdefg&ijklmno|NFW} ]:\  
[ {NORM,NORM|TERM,TERM} ];
```

```
CONN-CRS-T0::uv-m-np-ddd,wx-k-qr-jjj:\  
[ {PFW-abcdefg&ijklmno|NFW} ]:\  
[ {NORM,NORM|TERM,TERM} ];
```

Two-Way Cross-Connection [l.11001]

```
CONN-CRS-T0::[s]abc-ddd[&&-eee],[t]ghi-yyy\  
[&&-kkk]::<tc>:[RDLD][,{CUS|INCL}]:[AIS]:\  
[ {NORM,NORM|TERM,TERM} ]:\ [PRIOUT];
```

```
CONN-CRS-T0::uv-m-np-ddd[&&-eee],  
wx-k-qr-yyy[&&-kkk]::<tc>:[RDLD][,{CUS|INCL}]:\  
[AIS]:[ {NORM,NORM|TERM,TERM} ]:\ [PRIOUT];
```

Two-Way Cross-Connect From, To Multipoint Mode [l.11021]

```
CONN-CRS-T0::[s]abc-ddd[&&-eee],[t]ghi-yyy  
[&&-kkk]::<tc>:[RDLD][,{CUS|INCL}]:fmd,tmd:\  
[NTR-m]:[ {NORM,NORM|TERM,TERM} ];
```

```
CONN-CRS-T0::uv-m-np-ddd[&&-eee],\  
wx-k-qr-yyy[&&-kkk]::<tc>:\  
[RDLD][,{CUS|INCL}]:fmd,tmd:[NTR-m]:\  
[ {NORM,NORM|TERM,TERM} ];
```

Two-Way Non-Channelized Digital Signal Cross Connection [l.11011]

```
CONN-CRS-T1::abc,ghi::[RDLD][,{CUS|INCL}]:\  
[ {NORM,NORM|TERM,TERM} ]:[PRIOUT];
```

```
CONN-CRS-T1::uv-m-np,wx-k-qr::[RDLD]\  
[,{CUS|INCL}]:[ {NORM,NORM|TERM,TERM} ]:[PRIOUT];
```

**Broadcast
Disconnec-
tion**

[l.15201]

```
DISC-BDCST-T0::[s]abc-ddd[&&-eee],  
[t]ghi-jjj[&&-kkk]::[INCL]:[OOS][,DCC][,CONV];
```

```
DISC-BDCST-T0::uv-m-np-ddd[&&-eee],  
wx-k-qr-jjj[&&-kkk]::[INCL]:[OOS][,DCC][,CONV];
```

**Broadcast
Disconnec-
tion**

[l.15211]

```
DISC-BDCST-T0::[s]abc-ddd[&&-eee],[t]ghi-jjj\  
[&[u]klm-nnn&..]::[INCL]:[OOS][,DCC][,CONV];
```

```
DISC-BDCST-T0::uv-m-np-ddd[&&-eee],wx-k-qr-jjj\  
[&ed-h-fg-nnn&..]::[INCL]:[OOS][,DCC][,CONV];
```

**Broadcast
Disconnec-
tion**

[l.15221]

```
DISC-BDCST-T1::\  
[s]abc,[t]ghi[&[u]jkl][&[v]mno][...]:\  
[INCL]:[OOS][,CONV];
```

```
DISC-BDCST-T1::uv-m-np,wx-k-qr[&ed-h-fg]\  
[&op-q-rs][...]:\  
[INCL]:[OOS][,CONV];
```

**Broadcast
Disconnec-
tion**

[l.15231]

```
DISC-BDCST-T1::[s]abc,[t]ghi::[INCL]:\  
[OOS][,CONV];
```

```
DISC-BDCST-T1::uv-m-np,wx-k-qr::[INCL]:\  
[OOS][,CONV];
```

**One-Way
Multipoint
Disconnec-
tions**

[l.15102]

```
DISC-CRS1-T0::[s]abc-ddd[&&-eee],[t]ghi-jjj\  
[&&-kkk]::[INCL]:[OOS][,DCC];
```

```
DISC-CRS1-T0::uv-m-np-ddd[&&-eee],\  
wx-k-qr-jjj[&&-kkk]::[INCL]:[OOS][,DCC];
```

**One-Way
Disconnect**

[l.15101]

```
DISC-CRS1-T0::[s]abc-ddd[&&-eee],[t]ghi-jjj\  
[&&-kkk]::[INCL]:[OOS][,DCC]:[PRIOUT];
```

```
DISC-CRS1-T0::uv-m-np-ddd[&&-eee],\  
wx-k-qr-jjj[&&-kkk]::[INCL]:[OOS][,DCC]:\  
[PRIOUT];
```

**One-Way
Disconnect**

[l.15111]

```
DISC-CRS1-T1::[s]abc,[t]ghi::[INCL]:[OOS]:\  
[PRIOUT];
```

```
DISC-CRS1-T1::uv-m-np,wx-k-qr::[INCL]:[OOS]:\  
[PRIOUT];
```

**Two-Way
Disconnec-
tions**

[l.15002]

```
DISC-CRS-T0::[s]abc-ddd,[t]ghi-jjj::[INCL]:\  
[DCC][,OOS];
```

```
DISC-CRS-T0::uv-m-np-ddd,\  
wx-k-qr-jjj::[INCL]:[DCC][,OOS];
```

**Disconnec-
tions, Cross-
Connect
Circuits**

[l.15001]

```
DISC-CRS-T0::[s]abc-ddd[&&-eee],[s]ghi-jjj\  
[&&-kkk]::[INCL]:[OOS][,DCC]:[PRIOUT];
```

```
DISC-CRS-T0::uv-m-np-ddd[&&-eee],\  
wx-k-qr-jjj[&&-kkk]::[INCL]:[OOS][,DCC]:\  
[PRIOUT];
```

**Two-Way
Disconnec-
tion** [l.15011]

```
DISC-CRS-T1::[s]abc,[t]ghi::[INCL]:[OOS]:\  
[PRIOUT];
```

```
DISC-CRS-T1::uv-m-np,wx-k-qr::[INCL]:[OOS]:\  
[PRIOUT];
```

**Alternate
Cross-
Connec-
tions** [l.14001]

```
ED-CRS-T0::[s]abc-ddd,[t]ghi-jjj::[INCL];
```

```
ED-CRS-T0::uv-m-np-ddd,wx-k-qr-jjj::[INCL];
```

Macro and Map Commands

5

Stop Macro [l.39311]

```
ABT-PROC::::[l[mm]];
```

**Delete Lines
From
Macro** [l.19051]

```
DELETE[::{<starting line>|END}\  
[-{<ending line>|END}]::];
```

**Delete
Macro** [l.37201]

```
DLT-{MACRO|MAP}::::{<macro name>|<map name>}:\  
[<user id>;
```

**Edit Delete
Map** [l.37001]

```
ED-DLT-MAP::NPC-{[s]abc&&-[s]def|[s]\  
abc[&-[s]ghi]....[&-[t]def]};
```

```
ED-DLT-MAP::NPC-{uv-m-np&&-wx-k-qr|uv-m-np\  
[&-ab-c-de]....[&-wx-k-qr]};
```

Create or Edit a Macro or Map [l.19001]
ED-**{MACRO|MAP}**::::**{<macro name>|<map name>}**;

Change MacroSpace [l.38501]
ED-PRMTR-**{MACRO|MAP}**::::**sss**;

Create Picture Alternate Map [l.19031]
ED-PRMTR-**MAP**::::**<new map name>, \<reference map name>**;

Execute Macro [l.39301]
EXC-**MACRO**::::**<macro name>:**
[<p1>[&<p2>[&<p3>[&...[&<p10>]]]]];

Activate Alternate Maps [l.39201]
EXC-**MAP**::::**<map name>:[CLR][,INCL];**

**Query Line
Number** [l.19071]
`LINE;`

**List Macro
Contents** [l.19061]
`LIST[::{<starting line>|END}\
[-{<ending line>|END}]::];`

**Move Macro
Lines** [l.19091]
`MOVE::{<starting line>|END}\
[-{<ending line>|END}],\
{<destination line>|END}::;`

**Save
Component
Commands** [l.19081]
`SAVE;`

Roll Commands

6

DS0 Circuit Roll - Bridge Command [l.14021]

```
SW-BDCST-T0::[s]abc-ddd[&&-eee],[t]ghi-jjj\  
[&&-kkk]::\[INCL];
```

```
SW-BDCST-T0::uv-m-np-ddd[&&&-eee],\  
wx-k-qr-jjj[&&&-kkk]::\[INCL];
```

Facility Roll - Bridge Command [l.14061]

```
SW-BDCST-T1::[s]abc,[t]ghi::[INCL];  
SW-BDCST-T1::uv-m-np,wx-k-qr::[INCL];
```

DS0 Circuit Roll - Disconnect Command [l.14041]

```
SW-DISC-T0::[s]abc-ddd[&&-eee]::[OOS];  
SW-DISC-T0::uv-m-np-ddd[&&&-eee]::[OOS];
```

**Facility Roll
- Disconnect
Command** [l.14081]

SW-DISC-T1::[s]abc::[OOS];
SW-DISC-T1::uv-m-np::[OOS];

**Configure
Digroup
Circuits** [l.35001]

SW-DX-EQPT::XC-s::[INCL];

**DS0 Circuit
Roll- Roll
Command** [l.14031]

SW-ROLL-T0::[s]abc-ddd[&&-eee],[t]ghi-jjj\
[&&-kkk]::[INCL]:[FRC]:[OOS];

SW-ROLL-T0::uv-m-np-ddd[&&&-eee],\
wx-k-qr-jjj[&&&-kkk]::[INCL]:[FRC]:[OOS];

**Facility Roll
- Roll
Command** [l.14071]

SW-ROLL-T1::[s]abc,[t]ghi::[INCL]:[FRC]:[OOS]:\
[TWAY];

SW-ROLL-T1::uv-m-np,wx-k-qr::[INCL]:[FRC]:\
[OOS]:[TWAY];

Change Commands

7

Change Circuit Parameters [l.18001]

```
CHG-RPATH-T0::\  
[s]abc-ddd[&[t]ghi-jjj&[u]klm-nnn&...]::\[INCL];
```

CHG-RPATH-T0::\
uv-m-np-ddd[&wx-k-qr-jjj&ed-h-fg-nnn&...]:\
[INCL];

Change Switch, TOX [l.18011]

```
CHG-RPATH-T1::[s]ghi[&[t]jkl][&[v]mno][...]:\  
[INCL];
```

CHG-RPATH-T1::uv-m-np[&wx-k-qr]\
[&ed-h-fg][...]:[INCL];

Change Connectivity [l.38101]

```
ED-CNFGRN-EQPT::UNIT-q::a[,b[,c[,d[,e[,f]]]]];
```

Change Commands

Change Substrate [l.19581]
Cross-Connection ED-CONN-TS::[s]abc-ddd[-ff],[t]ghi-jjj[-ll];
ED-CONN-TS::uv-m-np-ddd[-ff],wx-k-qr-jjj[-ll];

Change Substrate [l.19591]
Cross-Connection ED-CONN-TS::[s]abc-ddd[-ff],\
[t]ghi-jjj[-ll]::MPTM;
ED-CONN-TS::uv-m-np-ddd[-ff],\
wx-k-qr-jjj[-ll]::MPTM;

Change Substrate [l.19501]
Established Channel ED-CRTE-TS::[s]abc-ddd[-eee],\
[t]ghi-jjj[-kkk]::[PCH-ppp]:[DCC];
ED-CRTE-TS::uv-m-np-ddd[-eee],\
wx-k-qr-jjj[-kkk]::[PCH-ppp]:[DCC];

Change/Set Options [l.38201]
ED-OPT-T1::NPC::{TYPE-mn|ALL}:rr:a,b,c;

Change NPC Options [l.38221]

```
ED-PRMTR-EQPT::NPC-[s]abc::rr/m[&rr/m][...];  
ED-PRMTR-EQPT::NPC-uv-m-np::rr/m[&rr/m][...];
```

Change NPC AIS Alarm Option [l.38281]

```
ED-PRMTR-EQPT::NPC-[s]abc[&&-[t]ghi]::\  
{ALMOPT|PLOPT}:{AIS-{INFO|MJ|MN}|PL-{ENA|DSA}};  
  
ED-PRMTR-EQPT::NPC-uv-m-np[&&&-wx-k-qr]::\  
{ALMOPT|PLOPT}:{AIS-{INFO|MJ|MN}|PL-{ENA|DSA}};
```

Change NPC Type [l.38211]

```
ED-PRMTR-EQPT::NPC-[s]abc::mnxyz\  
[IW-X-pq[,INCL]];  
  
ED-PRMTR-EQPT::NPC-uv-m-np::mnxyz\  
[IW-X-pq[,INCL]];
```

Change NPC Type for TH Type NPCs [l.38311]

```
ED-PRMTR-EQPT::NPC-[s]abc::mnxyz:[IW-X-pq[r]];  
ED-PRMTR-EQPT::NPC-uv-m-np::mnxyz:[IW-X-pq[r]];
```

Change DS3U NPC Type [l.38271]
ED-PRMTR-EQPT::NPC-[s]abc[&&-[t]def]::mnxyz:\ [IW-X-pq[, INCL]] ;

ED-PRMTR-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::\ mnxyz:\ [IW-X-pq[, INCL]] ;

Change NPC Frame-Word Setting [l.38324]
ED-PRMTR-EQPT::NPC-[s]abc[&&-[t]def]::\ NFS-abcdefghi ;

ED-PRMTR-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::\ NFS-abcdefghi ;

Change NPC Time Slot Zero [l.38321]
ED-PRMTR-EQPT::NPC-[s]abc[&&-[t]def]::\ TS0-abcdefgh ;

ED-PRMTR-EQPT::NPC-uv-m-np[&&-uv-k-qr]::\ TS0-abcdefgh ;

Change Time Slot Zero Monitor [l.38323]
ED-PRMTR-EQPT::NPC-[s]abc[&&-[t]def]::\ TS0M-abcdefgh ;

ED-PRMTR-EQPT::NPC-uv-m-np[&&-wx-k-qr]::\ TS0M-abcdefgh ;

**Change
Options**

[l.38241]

```
ED-PRMTR-EQPT:: {NPC-[s]abc | RT-ffff | DL-  
ffff | TYPE-mnxyz }:: \rr/m[&rr/m...];  
ED-PRMTR-EQPT:: {NPC-uv-m-np | RT-ffff | DL-  
ffff | TYPE-mnxyz }:: \rr/m[&rr/m...];
```

**Change
Bank
Number**

[l.38351]

```
ED-PRMTR-EQPT::: {RT | DL}-ffff: {RT | DL}-gggg;
```

**Change RT/
DL**

[l.38481]

```
ED-PRMTR-EQPT::: {RT | DL}-ffff: {ZCS | B8ZS};
```

**Change Pwr/
Misc Option
or FPC RT
Retrofit
Status**

[l.38361]

```
ED-PRMTR-EQPT::: RT-ffff: [ {sss | RTF} ]: [SWMN-x];
```

**Configure
Synchronizer**

[l.35013]

```
ED-PRMTR-EQPT:: SYNC:: {MASTER | SLAVED};
```

**Configure
Synchro-
nizer
Stratum** [l.35012]
`ED-PRMTR-EQPT::SYNC:: {STR2 | STR3 | TOLL | LOCAL};`

**Change
Priorities
and/or Type,
Synchronize
r or NPC** [l.38011]
`ED-PRMTR-EQPT::SYNC:: TLI-m:SSP-b:texyz;`
`ED-PRMTR-EQPT::SYNC:: \
SRC-i/a,b[&j/c,d[&k/e,f[&l/g,h]]];`

**Change
Type,
Options** [l.38231]
`ED-PRMTR-EQPT::TYPE-mnxyz::rr/m[&rr/m][...];`

**Change
FTMI
Equali-
zation** [l.38111]
`ED-PRMTR-EQPT::UNIT-[q]q::FTMI-d:EQL-l,r;`

**Change
Subrate
Error
Correction
Location** [l.38261]
`ED-PRMTR-NE::::ECLOC: {MJU | SRM};`

**Change Hub
Identification** [l.38251]
ED-PRMTR-NE:::HUBID-O-ab;

**Change
Cross-
Connect
Termination
Status** [l.17001]
ED-PRMTR-T0::[s]abc-ddd[&&-eee],[t]ghi-jjj\
[&&-kkk]::[INCL]:{TERM|RLS}{F|T|B|L|G|A}:\
[NOT-[u]rst-uvw];

ED-PRMTR-T0::uv-m-np-ddd[&&-eee],\
wx-k-qr-jjj[&&-kkk]::[INCL]:{TERM|RLS}\
{F|T|B|L|G|A}:[NOT-ed-h-fg-uvw];

**Change
Circuit
Parameters** [l.17002]
ED-PRMTR-T0::[s]abc-ddd,[t]ghi-jjj::[INCL]:\
[TLP-snn-smm,NG-nn,ES-ee];

ED-PRMTR-T0::uv-m-np-ddd,wx-k-qr-jjj::[INCL]:\
[TLP-snn-smm,NG-nn,ES-ee];

**Change
Circuit
Parameters** [l.17011]
ED-PRMTR-T1::[s]abc,[t]ghi::[INCL]:\
{TERM|RLS}{F|T|B|A}:[NOT-[u]rst];

ED-PRMTR-T1::uv-m-np,wx-k-qr::[INCL]:\
{TERM|RLS}{F|T|B|A}:[NOT-ed-h-fg];

**Change DS3
Parameters**

[l.38601]

```
ED-PRMTR-T3::UNIT-[q]q::DS3-c[&&-d]:[BERM-s]\  
[,BERT-t][,LBO-<b>][,TYPE-mnxyz];
```

**Change
Unprotected
Alarm
Setting**

[l.38611]

```
ED-PRMTR-T3::::UNPROTALM-{ON|OFF};
```

**Change DS1
Alarm
Suppression
for DS1s
Within a
DS3**

[l.38621]

```
ED-PRMTR-T3::::DS1ALMDS3-{ON|OFF};
```

**Change
Terminate
and Leave**

[l.19561]

```
ED-PRMTR-TS::[s]abc-ddd[-ff]::MJU-ssss:[BRi]:\  
{TERM|RLS}m;  
ED-PRMTR-TS::uv-m-np-ddd[-ff]::MJU-ssss:[BRi]:\  
{TERM|RLS}m;
```

**Change
Subrate
Terminate
and Leave**

[l.19551]

```
ED-PRMTR-TS::[s]abc-ddd[-ff]:::{TERM|RLS}m;  
ED-PRMTR-TS::uv-m-np-ddd[-ff]:::{TERM|RLS}m;
```

Remove Commands

8

Remove TSI (Non-CEF Only) [l.33231]
`RMV-CNFGRN-EQPT::UNIT-q::CCN-s,TSIS:\`
`[(a[,b[,c[,d[,e[,f]]]])];`

Remove Cross-Connect Buffer (Non-CEF Only) [l.33202]
`RMV-EQPT::CCB-sf;`

Remove Clock Control Interface [l.33251]
`RMV-EQPT::CCI-s;`

Remove Cross-Connect Network Interface [l.33201]
`RMV-EQPT::CCNI-s;`

Remove Commands

**Remove TSI
on Cross-
Connect
Side (Non-
CEF Only)** [l.33241]
`RMV-EQPT::CCN-s,TSIS;`

**Remove
ETSI** [l.33261]
`RMV-EQPT::ETSI-spq;`

**Remove
ETSI All** [l.33271]
`RMV-EQPT::ETSI,ECCN-s;`

**Remove
Link** [l.33011]
`RMV-EQPT::LINK-j;`

**Remove
Main
Controller** [l.33001]
`RMV-EQPT::MC;`

Remove Commands

Remove NPCs

[l.33351]

```
RMV-EQPT::NPC-[s]abc[&&-[t]def]::\  
[SIDE-s]:[INCL];
```

```
RMV-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::\  
[SIDE-s]:[INCL];
```

Remove PMEM or SMEM

[l.33211]

```
RMV-EQPT:: {PMEM | SMEM};
```

Remove RT/ DL

[l.33481]

```
RMV-EQPT:: {RT | DL} -ffff;
```

Remove Synchro- nizer

[l.33101]

```
RMV-EQPT:: SYNC-a;
```

Remove Synchro- nizer's TLI or SSP

[l.33121]

```
RMV-EQPT:: SYNC-a:: TLI-m: [SSP-b];
```

Remove Commands

Remove Synchronizer Time Base As a Clock Reference Oscillator [l.33111]
`RMV-EQPT::TLI-3::CRO;`

Remove Time Slot Interchange [l.33221]
`RMV-EQPT::TSI-sft;`

Remove Unit Format Converter [l.33331]
`RMV-EQPT::UNIT-[q]q::FC-sb;`

Remove FTMI or DSPI [l.33321]
`RMV-EQPT::UNIT-[q]q::{FTMI-d|DSPI};`

Remove Unit Controller [l.33311]
`RMV-EQPT::UNIT-[q]q::UC;`

Restore Commands

9

Restore TSI That Connects Units (Non-CEF Only) [l.34231]
`RST-CNFGRN-EQPT::UNIT-q::CCN-s,TSIS:\
[[a[,b[,c[,d[,e[,f]]]]]]];`

Restore Cross-Connect Buffer [l.34202]
`RST-EQPT::CCB-sf;`

Restore Control and Clock Interface [l.34251]
`RST-EQPT::CCI-s;`

Restore Cross-Connect Network Interface [l.34201]
`RST-EQPT::CCNI-s;`

Restore Commands

Restore Expanded Time Slot Inter-changer [l.34261]
`RST-EQPT::ETSI-sqq;`

Restore All ETSIS [l.34271]
`RST-EQPT::ETSYS,ECCN-s;`

Restore Administrative Link [l.34011]
`RST-EQPT::LINK-j;`

Restore Main Controller [l.34001]
For Normal Operations:
`RST-EQPT::MC::[{MCOND | NOJRNL | FRC}];`

For Installation and Product Evaluation Only,
(can be used only if the Lucent security warning feature bit is set):
`RST-EQPT::MC::CLR[,ALL];`

Restore Commands

**Restore
NPCs** [l.34351]

```
RST-EQPT::NPC-[s]abc[&&-[t]def]::[SIDE-s];  
RST-EQPT::NPC-uv-m-np[&&&-uv-k-qr]::[SIDE-s];
```

**Restore
PMEM and/
or SMEM** [l.34211]

```
RST-EQPT::{PMEM|SMEM}::[CLR]:[FRC]:[BKGRND];
```

**Restore RT/
DL** [l.34481]

```
RST-EQPT::{RT|DL}-ffff;
```

**Restore
Synchro-
nizer** [l.34101]

```
RST-EQPT::SYNC-a;
```

**Restore
Synchro-
nizer's
Timing Link
Interface** [l.34121]

```
RST-EQPT::SYNC-a::TLI-m:[SSP-b];
```

**Restore
Clock
Reference
Oscillator** [l.34111]

```
RST-EQPT::TLI-3::CRO;
```

Restore Commands

Restore Time Slot Interchange [l.34221]
RST-EQPT::TSI-sft;

Restore Time Slot Interchanges [l.34241]
RST-EQPT::TSIS,CCN-s;

Restore Unit [l.34331]
RST-EQPT::UNIT-[q]q::FC-sb;

Restore FTMI or DSPI [l.34321]
RST-EQPT::UNIT-[q]q::{FTMI-d|DSPI};

Restore Unit Controller [l.34311]
RST-EQPT::UNIT-[q]q::UC;

Subrate Commands

10

**Subrate Test
Access** [l.19661]

```
CHG-TL-TS:::kk:TERM{F|T|B};
```

**Subrate
Cross-
Connection** [l.19221]

```
CONN-CRS-TS:<xy>:[s]abc-ddd[-ff]::\  
MJU-ssss:[RATE-rr]:[MA-tttt-u]:[<branch>\  
[,<branch>][,<branch>][,<branch>]:\  
[NORM,NORM];
```

```
CONN-CRS-TS:<xy>:uv-m-np-ddd[-ff]::\  
MJU-ssss:[RATE-rr]:\[MA-tttt-u]:[<branch>\  
[,<branch>][,<branch>][,<branch>]:[NORM,NORM];
```

Subrate Terminated Cross-Connection [l.19321]

```
CONN-CRS-TS::[s]abc-ddd[-ff]::MJU-ssss:\
[RATE-rr]:\[MA-tttt-u]:<branch>[,<branch>]\
[,<branch>][,<branch>]:TERM,TERM;

CONN-CRS-TS::uv-m-np-ddd[-ff]::MJU-ssss:\
[RATE-rr]:\[MA-tttt-u]:<branch>[,<branch>]\
[,<branch>][,<branch>]:TERM,TERM;
```

Subrate Cross-Connection [l.19201]

```
CONN-CRS-TS::[s]abc-ddd[-ff],[t]ghi-jjj\
[-ll]::RATE-rr:\[NORM,NORM];

CONN-CRS-TS::uv-m-np-ddd[-ff],wx-k-qr-jjj\
[-ll]::RATE-rr:\[NORM,NORM];
```

Subrate [l.19211]
Cross-Connection For a DSOA Channel

```
CONN-CRS-TS:<xy>:[s]abc-ddd&&-eee[-01],\  
[t]ghi-jjj&&-kkk[-01]::RATE-rr:[NORM,NORM];
```

For a DSOB Channel

```
CONN-CRS-TS:<xy>:[s]abc-ddd-ff&&-mm,\  
[t]ghi-jjj-ll&&-nn::RATE-rr:[NORM,NORM];
```

For a DSOA Channel

```
CONN-CRS-TS:<xy>:uv-m-np-ddd&&-eee[-01],\  
wx-k-qr-jjj&&-kkk[-01]::RATE-rr:[NORM,NORM];
```

For a DSOB Channel

```
CONN-CRS-TS:<xy>:uv-m-np-ddd-ff&&-mm,\  
wx-k-qr-jjj-ll&&-nn::RATE-rr:[NORM,NORM];
```

Subrate Terminated [l.19301]
Cross-Connection

```
CONN-CRS-TS:<xy>:[s]abc-ddd[-ff],\  
[t]ghi-jjj[-ll]::\RATE-rr:TERM,TERM;
```

```
CONN-CRS-TS:<xy>:uv-m-np-ddd[-ff],\  
wx-k-qr-jjj[-ll]::\RATE-rr:TERM,TERM;
```

Subrate [I.19311]

Terminated

Cross-

Connection

USAGE: The following applies to a range of DS0A channels:

```
CONN-CRS-TS: : [s]abc-ddd&&-eee[-01],\  
[t]ghi-jjj&&-kkk[-01]::RATE-rr:TERM,TERM;
```

USAGE: The following applies to a range of DS0B channels:

```
CONN-CRS-TS: : [s]abc-ddd-ff&&-mm,\  
[t]ghi-jjj-ll&&-nn:RATE-rr:TERM,TERM;
```

USAGE: The following applies to a range of DS0A channels:

```
CONN-CRS-TS: : uv-m-np-ddd&&-eee[-01],\  
wx-k-qr-jjj&&-kkk[-01]::RATE-rr:TERM,TERM;
```

USAGE: The following applies to a range of DS0B channels:

```
CONN-CRS-TS: : uv-m-np-ddd-ff&&-mm,\  
wx-k-qr-jjj-ll&&-nn:RATE-rr:TERM,TERM;
```

Subrate Test [I.19601]

Access

```
CONN-TACC-TS: : [s]abc-ddd[-ff]::kk:MON;  
CONN-TACC-TS: : uv-m-np-ddd[-ff]::kk:MON;
```

**Subrate Test
Access** [l.19621]

```
CONN-TACC-TS::[s]abc-ddd[-ff]::kk:MON:\
MJU-ssss:[BRi];
CONN-TACC-TS::uv-m-np-ddd[-ff]::kk:MON:\
MJU-ssss:[BRi];
```

**Subrate Split
Test Access** [l.19631]

```
CONN-TACC-TS::[s]abc-ddd[-ff]::kk:SPLT;
CONN-TACC-TS::uv-m-np-ddd[-ff]::kk:SPLT;
```

**Subrate Test
AccessSplit** [l.19651]

```
CONN-TACC-TS::[s]abc-ddd[-ff]::kk:SPLT:\
MJU-ssss:[BRi];
CONN-TACC-TS::uv-m-np-ddd[-ff]::kk:SPLT:\
MJU-ssss:[BRi];
```

**Subrate
Establish
Channel** [l.19101]

```
CRTE-CRS-TS::[s]abc-ddd[&&-eee]::\
{DS0A-rr|DS0B-nn}:\[{SEC|PCH[-ppp]}];

CRTE-CRS-TS::uv-m-np-ddd[&&-eee]::\
{DS0A-rr|DS0B-nn}:\[{SEC|PCH[-ppp]}];
```

Subrate Establish Channel [l.19111]
CRTE-CRS-TS::[s]abc-ddd[&&-eee]::RATE-rr:\ [{DP|DP,PCH[-ppp]}] ;

CRTE-CRS-TS::uv-m-np-ddd[&&-eee]::RATE-rr:\ [{DP|DP,PCH[-ppp]}] ;

Subrate Disconnection [l.19421]
DISC-CRS-TS::[s]abc-ddd[-ff]::MJU-ssss:\ [RATE-rr]:\<branch>[,<branch>][,<branch>]\ [,<branch>] ;

DISC-CRS-TS::uv-m-np-ddd[-ff]::MJU-ssss:\ [RATE-rr]:\<branch>[,<branch>][,<branch>]\ [,<branch>] ;

Subrate Disconnection [l.19431]
DISC-CRS-TS:::[s]abc-ddd[-ff]::MJU-ssss:\ [RATE-rr]:[ALL] ;

DISC-CRS-TS:::uv-m-np-ddd[-ff]::MJU-ssss:\ [RATE-rr]:[ALL] ;

Subrate Disconnection [l.19401]
DISC-CRS-TS::[s]abc-ddd[-ff],[t]ghi-jjj\
[-ll]::[RATE-rr];

DISC-CRS-TS::uv-m-np-ddd[-ff],wx-k-qr-jjj\
[-ll]::[RATE-rr];

Subrate Disconnection [l.19411]
DISC-CRS-TS::[s]abc-ddd{&&-eee[-01]|-ff&&-mm},\
[t]ghi-jjj{&&-kkk[-01]|-ff&&-mm}::[RATE-rr];

DISC-CRS-TS::uv-m-np-ddd\
{&&-eee[-01]|-ff&&-mm},wx-k-qr-jjj\
{&&-kkk[-01]|-ll&&-nn}::[RATE-rr];

Subrate Test Access [l.19671]
DISC-TACC-TS:::kk;

Subrate Disestablish Channel [l.19151]
DLT-CRS-TS::[s]abc-ddd[&&-eee]::\
[PCH[-ppp]]:[DCC];

DLT-CRS-TS::uv-m-np-ddd[&&-eee]::\
[PCH[-ppp]]:[DCC];

Test Access Commands

11

**Two-Way
Test Access
Line
Loopback** [l.26101]
ALW-LPBK-
T1::{DGA|DGB|DGC|DGD|DGP}::**LLB:**[{TO|FROM}]:\
RT-ffff;

**Non-
Channelized
Test,
Monitor,
Split, Loop** [l.20101]
CHG-ACCMD-T1::[s]abc[&[t]def]::**<tmode>:**[AIS]:\
[INCL];
CHG-ACCMD-T1::uv-m-np[&wx-k-qr]::**<tmode>:**\
[AIS]:[INCL];

**Two-Way
Test Access
Monitor Test
Port** [l.21011]
CHG-TACC-T0:::kk::**MON;**

Test Access Commands

**Two-Way
Test
Access** [l.23001]

 CHG-TACC-T0:::kk:SPLT;

**Nx64 kbit/s
Two-Way
Test Access,
Monitor** [l.21031]

 CHG-TACC-T0:::TG-mmm:MON;

**Nx64 kbit/s
Two-Way
Test Access,
Split** [l.23021]

 CHG-TACC-T0:::TG-mmm:SPLT;

**Non-
Channelized
Test FAD,
Emode,
Fmode** [l.20111]

 CHG-TACC-
T1::[s]abc[&[t]def]:: {[<emode>][,<fmode>]}:\
[INCL];

 CHG-TACC-T1::uv-m-np[&wx-k-
qr]:: {[<emode>][,<fmode>]}:\ [INCL];

**Change Test
Access Time
Slot** [l.19626]

 CHG-TACC-TS:::kk:MON;

**Change
Subrate Test
AccessSplit** [I.19656]
CHG-TACC-TS::::kk:SPLT;

**Two-Way
Test Access** [I.25101]
CHG-TL-T0::::kk:TERM{F|T|B|L|G|A}:\
[NOT-[t]rst-*vvv*];
CHG-TL-T0::::kk:TERM{F|T|B|L|G|A}:\
[NOT-uv-m-np-*vvv*];

**Nx64 kbit/s
Two-Way
Test Access,
Terminate-
And-Leave-
Active** [I.25121]
CHG-TL-T0::::TG-*mmm*:TERM{F|T|B};

**Two-Way
Test Access,
Hub** [I.24001]
CONN-HUB-T0::[t]ghi-*jjj*::kk:<tc>;
CONN-HUB-T0::uv-m-np-*jjj*::kk:<tc>;

**Nx64 kbit/s
Two-Way
Test Access,
Hub** [l.24021]
CONN-HUB-T0::[s]abc-ddd,[t]ghi-jjj::\
TG-mmm:[<tc>];

CONN-HUB-T0::uv-m-np-ddd,wx-k-qr-jjj::\
TG-mmm:[<tc>];

**Non-
Channelized
Test Hub** [l.20031]
CONN-HUB-T1::[s]abc,[t]jkl::[INCL];
CONN-HUB-T1::uv-m-np,wx-k-qr::[INCL];

**Two-Way
Test Access,
Monitor** [l.21001]
CONN-TACC-T0::[t]ghi-jjj::kk:[<tc>]:MON;
CONN-TACC-T0::uv-m-np-jjj::kk:[<tc>]:MON;

**Nx64 kbit/s
Two-Way
Test Access,
Monitor** [l.21021]
CONN-TACC-T0::[t]ghi-jjj[&&-kkk]\
[&-lll&...]::TG-mmm:[<tc>]:MON;

CONN-TACC-T0::wx-k-qr-jjj[&&-kkk]\
[&-lll&...]::TG-mmm:[<tc>]:MON;

Test Access Commands

Non-Channelized Test Access (Monitor, Split, or Loop) [I.20001]
CONN-TACC-T1::[s]abc[&[t]def],\
[u]ghi[, [v]jkl]::<tmode>:[AIS]:[INCL];
CONN-TACC-T1::uv-m-np[&wx-k-qr],eg-h-ij\
[, jk-l-mn]::\<tmode>:[AIS]:[INCL];

Two-Way Test Access [I.27001]
DISC-TACC-T0:::kk:[OOS];

Two-Way Test Access [I.25501]
DISC-TACC-T0:::kk:RLS{F|T|B|L|G|A}:\
[NOT-[t]rst-vvv];
DISC-TACC-T0:::kk:RLS{F|T|B|L|G|A}:\
[NOT-uv-m-np-vvv];

Nx64 kbit/s Two-Way Test Access, Test-Access Group Release [I.27021]
DISC-TACC-T0:::TG-mmm[&&-nnn]:[OOS];

Test Access Commands

**Nx64 kbit/s
Two-Way
Test Access,
Terminate-
And-Leave-
Release** [l.25521]
`DISC-TACC-T0:::TG-mmm:RLS{F|T|B};`

**Non-
Channelized
Test NPC
Release** [l.20202]
`DISC-TACC-T1:::ALL:[OOS];`

**Non-
Channelized
Test NPC
Release** [l.20201]
`DISC-TACC-T1::[s]abc[&[t]def]::[OOS];`
`DISC-TACC-T1::uv-m-np[&wx-k-qr]::[OOS];`

**Disconnect
Test Access
Time Slot** [l.19681]
`DISC-TACC-TS::: {ALL|LINKS};`

**Subrate Test
Access
Terminate
and Leave
Release** [l.19666]
`DISC-TACC-TS:::kk:RLS{F|T|B};`

Test Access Commands

**Two-Way
Test Access
Line
Loopback** [l.26111]
`INH-LPBK-T1:: {DGA | DGB | DGC | DGD | DGP} :: LLB:\
{TO | FROM} : {RT | DL} -ffff;`

**Disconnect
Test Access
Time Slot** [l.19681]
`DISC-TACC-TS::: {ALL | LINKS};`

**Looped Test
Access** [l.29001]
`OPR-LPBK-T0:::kk:<tc>;`

**Nx64 kbit/s
Looped Test
Access** [l.29021]
`OPR-LPBK-T0:::TG-mmm: [<tc>];`

**Two-Way
Test Access
Line
Loopback** [l.26121]
`OPR-LPBK-T1:: {DGA | DGB | DGC | DGD | DGP} :: LLB:\
RT-ffff;`

Test Access Commands

Non-Channelized Loop Test Access Facility [I.20301]
OPR-LPBK-T1::[s]abc::LPBKT:[INCL];
OPR-LPBK-T1::uv-m-np::LPBKT:[INCL];

Two-Way Test Access Line Loopback [I.26131]
RLS-LPBK-T1::{DGA|DGB|DGC|DGD|DGP}::LLB:\
RT-ffff;

Troubleshooting Commands

12

**Diagnose
Cross-
Connect
Buffer** [l.41211]
DGN-EQPT::CCB-sf:: [CFT-X-vwxy];

**Diagnostics,
CCI and BT
Packs** [l.41251]
DGN-EQPT::CCI-s:: [CFT-X-vwxy];

**Diagnose
CCNI** [l.41201]
DGN-EQPT::CCNI-s:: [CFT-X-vwxy];

**Diagnose
Communica-
tions
Interface** [l.41031]
DGN-EQPT::CI:: [CFT-X-vwxy];

Diagnose ETSI [l.41261]
DGN-EQPT::ETSI-sq:: [CFT-X-vwxy] ;

Diagnose All ETSIs on ECCNSide [l.41271]
DGN-EQPT::ETSI-s::ECCN-s:ALL;

Diagnose Link [l.41011]
DGN-EQPT::LINK-a:: [CFT-X-vwxy] ;

Diagnose Main Controller [l.41001]
DGN-EQPT::MC:: [CFT-X-vwxy] ;

Diagnose Main Processor [l.41021]
DGN-EQPT::MP:: [CFT-X-vwxy] ;

Diagnose Network Processing Circuits [l.41361]
DGN-EQPT::NPC-[s]abc&&- [t]def ;
DGN-EQPT::NPC-uv-m-np&&&-uv-k-qr ;

**Diagnose
NPC** [l.41351]

DGN-EQPT::NPC-[s]abc::[SIDE-s]:[CFT-X-vwxy];
DGN-EQPT::NPC-uv-m-np::[SIDE-s]:[CFT-X-vwxy];

**Diagnose
Memory
Card** [l.41051]

DGN-EQPT::{PMEM|SMEM}::\
[{CFT-X-vwxy|PROG|DBASE}]:[VERIFY];

**Diagnose
Synchro-
nizer** [l.41101]

DGN-EQPT::SYNC-a;

**Diagnose
Synchro-
nizer** [l.41111]

DGN-EQPT::SYNC::TLI-3:CRO;

**Diagnose
Synchro-
nizer Timing
Link
Interface** [l.41121]

DGN-EQPT::SYNC-a::TLI-m:[SSP-b];

Diagnose [l.41241]

Time Slot

Inter-

changes

DGN-EQPT::TSI::CCN-s:ALL;

Diagnose [l.41232]

Time Slot

Interchanges

DGN-EQPT::TSI::CCN-s:UNIT-q:\
[a[,b[,c[,d[,e[,f]]]]]]];

Diagnose [l.41221]

Time Slot

Interchange

DGN-EQPT::TSI-sft::[CFT-X-vwxy];

Diagnose [l.41341]

DSPU

DGN-EQPT::UNIT-[q]q::DSPI:[CFT-X-vwxy];

Diagnose [l.41331]

Format

Converter

DGN-EQPT::UNIT-[q]q::FC-sb:[CFT-X-vwxy];

Diagnose [l.41401]

FLI

DGN-EQPT::UNIT-[q]q::FLI-k:[CFT-X-vwxy];

**Diagnose
FMT** [l.41411]

DGN-EQPT::UNIT-[q]q::FMT-s:[CFT-X-vwxy];

**Diagnose
Facility
Terminating
Module
Interface** [l.41321]

DGN-EQPT::UNIT-[q]q::FTMI-d:[CFT-X-vwxy];

**Diagnose
MIU** [l.41431]

DGN-EQPT::UNIT-[q]q::MIU-c:[CFT-X-vwxy];

**Diagnose
MXR** [l.41421]

DGN-EQPT::UNIT-[q]q::MXR-c:[DEV-devc:\
[CFT-X-vwxy]];

**Diagnose
UnitOnUC** [l.41311]

DGN-EQPT::UNIT-[q]q::UC:[CFT-X-vwxy];

**Clear Power
Supply or
Backup
Failure** [l.56052]

INIT-REG::PWR-pp;

Utility [I.51081]
Recover
Password RST-PASSWD ;

Utility [I.53111]
Recover
Password RTRV-ALM-EQPT : <xy> ;

Utility [I.53151]
Query
Alarms RTRV-ALM-EQPT : : : DBASE ;

Query [I.81001]
Facility
Alarms RTRV-ALM-EQPT : : NPC : : { CFA | CGA | LOS } ;

Utility [I.53141]
Query
Alarms RTRV-ALM-EQPT : : { RT | DL } - ffff ;

Query DS3 [I.56331]
Alarms RTRV-ALM-T3 ;

Utility [I.52111]
Query
Broadcast RTRV-BDCST-T0::[s]abc-ddd;
RTRV-BDCST-T0::uv-m-np-ddd;

Query [I.52101]
Broadcast
All RTRV-BDCST-T0::::ALL;

Utility [I.52121]
Query
Broadcast RTRV-BDCST-T1::[s]abc::FROM;
From RTRV-BDCST-T1::uv-m-np::FROM;

Utility [I.53031]
Query
Equipment RTRV-CNFGRN-EQPT::UNIT::EQPD;
Connect-
ivity

Utility [I.53121]
Query
Circuit RTRV-COND-EQPT::NPC-[s]abc::CS;
Status RTRV-COND-EQPT::NPC-uv-m-np::CS;
NPC

Query [I.52011]

Partial

**Cross-
Connect
Map**

RTRV-CRS-T1::[s]abc[&&[t]def]::MAP;
RTRV-CRS-T1::uv-m-np[&&&-wx-k-qr]::MAP;

Query Full [I.52031]

**Cross-
Connect
Map**

RTRV-CRS-T1::NPC::MAP;

Utility [I.52311]

**Query
RTMAP,
DLMAP**

RTRV-CRS-T1::::[ffff]:{RTMAP|DLMAP};

Utility [I.52511]

**Query Far-
End
Substrate
Channel
Informa-
tion**

RTRV-CRS-TS::[s]abc-ddd[&&-eee];
RTRV-CRS-TS::uv-m-np-ddd[&&-eee];

Utility [I.52531]

**Query
Circuit/
Hardware
Substrate
Trace**

RTRV-EQPT-TS::[s]abc-ddd[-ff]::SRHDW;
RTRV-EQPT-TS::uv-m-np-ddd[-ff]::SRHDW;

Utility [I.56501]

Query

Framing

Status of

Subrate

Multi-

plexer

RTRV-EVT-TS::[[s]abc-ddd[&&-eee]]::SROOF:[ALL] ;
RTRV-EVT-TS::[uv-m-np-ddd[&&eee]]::SROOF:[ALL] ;

Query [I.51121]

Feature

Package

RTRV-FPKG-NE ;

QueryDate [I.51031]

RTRV-HDR ;

Utility [I.51041]

QueryWho

RTRV-HDR-NE ;

Utility [I.56401]

Query

Location

RTRV-LOC-EQPT::<entity>::[<arg>] ;

Query [I.55011]
**Software/
Hardware
Error
Recovery** RTRV-LOG::::ERR:{SWER|HWER}\
[, {INT-mn | [DATE-[ce]yr-mo-da,]\
TOD-hr-mn-sc}][, TN-X-dddd][, EVENT-X-eeee]\
[, ERCL-{HARD|TRANS|APPINT}][, ENTY-<entity>];

Utility [I.54121]
**Query
Macro** RTRV-MACRO::::<name>:[<user id>;

Utility [I.54131]
**Query List
Macro** RTRV-MACRO-COM::::<macro name>:[<user id>;

Utility [I.54101]
**Query List
Map** RTRV-MAP-COM::::<name>:[<user id>;

Utility [I.54111]
**Query NPC
Map** RTRV-MAP-EQPT::NPC::<name>:[<user id>;

**Retrieve
Memory
Status** [I.51001]

 RTRV-MEMSTAT;

**Utility
Query
Options
NPCs** [I.53051]

 RTRV-OPT-T1::NPC::[{mn | ALL}] ;

**Query DS1
Performance
Monitoring
Report
Schedule** [I.51151]

 RTRV-PMSCHED-T1:: {NPC-[s]abc[&&-[t]def] | ALL} ;
 RTRV-PMSCHED-T1:: {NPC-uv-m-np[&&&-wx-kqr] | ALL} ;

**Utility
QueryLoad** [I.52581]

 RTRV-PRMTR-EQPT:::LOAD: { [s]abc | TOTAL } ;
 RTRV-PRMTR-EQPT:::LOAD: { uv-m-np | TOTAL } ;

**Utility
Query All** [I.56031]

 RTRV-PRMTR-EQPT::NPC::<parameter>:ALL;

Utility [I.56021]
Query Alarm
Option,AIS RTRV-PRMTR-EQPT::NPC-[s]abc[&&-[v]ghi]::\
ALMOPT:AIS;

RTRV-PRMTR-EQPT::NPC-uv-m-np\
[&&&-wx-k-qr]::ALMOPT:AIS;

Query [I.56041]
Network
Processing RTRV-PRMTR-EQPT::[NPC-[s]abc[&&-[t]def]]::\
Circuit <parameter>:[{RT|DL}-ffff];
Parameter

RTRV-PRMTR-EQPT::[NPC-uv-m-np\
[&&&-wx-k-qr]]::<parameter>:\[{RT|DL}-ffff];

Utility [I.52321]
Query
SCDG RTRV-PRMTR-EQPT::[NPC-[s]abc]::SCDG:[STATE]:\
[{RT-ffff | DL-ffff | ALL}];

RTRV-PRMTR-EQPT::[NPC-uv-m-np]::SCDG:[STATE]:\
[{RT-ffff | DL-ffff | ALL}];

Query Link [I.55113]
Status and
Protocol RTRV-PRMTR-LINK::j[mm[&&jnn]];

**Query Macro
Attributes** [I.54211]

```
RTRV-PRMTR-MACRO::::ATTR:[{<user id>|ALL}];
```

**Utility
Query
Macro/Map
Space** [I.54221]

```
RTRV-PRMTR-{MACRO|MAP}::::SPACE:\  
[ {<user id>|ALL|SYSTEM}];
```

**Utility
QueryMap** [I.54201]

```
RTRV-PRMTR-MAP::::ATTR:\  
[ {ALL|<user id>|<name>}];
```

Only the DACS II frame administrator can use the ALL option.

**Utility
Query
Configure** [I.51091]

```
RTRV-PRMTR-NE;
```

**Query Error
Correction
Location** [I.51511]

```
RTRV-PRMTR-NE::::ECLOC;
```

Utility [I.51501]
Query Hub
Identifier RTRV-PRMTR-NE:::HUBID;

Utility [I.51131]
Query
Sequence RTRV-PRMTR-SQN;

Utility [I.52051]
Query
From RTRV-PRMTR-T0::[s]abc-ddd[&&-eee]::FROM;
RTRV-PRMTR-T0::uv-m-np-ddd[&&-eee]::FROM;

Query [I.52211]
Channel
Marks RTRV-PRMTR-T0::[s]abc-jjj[&&-kkk]::MARK;
RTRV-PRMTR-T0::uv-m-np-jjj[&&-kkk]::MARK;

Query Trunk [I.52601]
Signaling
Conversion RTRV-PRMTR-T0::abc-ddd::SIGST;
State RTRV-PRMTR-T0::uv-m-np-ddd::SIGST;

Query Destination Cross-Connect [l.52041]
RTRV-PRMTR-T0::[s]abc-ddd[&&-eee]::TO;
RTRV-PRMTR-T0::uv-m-np-ddd[&&-eee]::TO;

Utility Query From [l.52071]
RTRV-PRMTR-T1::[s]abc::FROM;
RTRV-PRMTR-T1::uv-m-np::FROM;

Utility Query Markings [l.52201]
RTRV-PRMTR-T1::[s]abc[&&-[t]def]::MARK;
RTRV-PRMTR-T1::uv-m-np[&&&-wx-k-qr]::MARK;

Non-Channelized Utility Query To [l.52061]
RTRV-PRMTR-T1::[s]abc::TO;
RTRV-PRMTR-T1::uv-m-np::TO;

Query DS3 Line Build Out [l.53231]
RTRV-PRMTR-T3::::LBO;

Utility [I.53221]
Query DS3
Bit Error RTRV-PRMTR-T3::[UNIT-[q]q]::BERMT;
Rate

Query [I.52521]
Subrate
Cross- RTRV-PRMTR-TS::[s]abc-ddd[-ff];
Connect RTRV-PRMTR-TS::uv-m-np-ddd[-ff];

Query [I.54001]
User | link
Screening RTRV-PRVG-{TERM|USER}:::{j[mm][&&jnn] | <user
Option id> | ALL};

Query Log [I.54011]

RTRV-PRVG-USER::LOG::[ALL];

Utility [I.55401]
Query Error
Source RTRV-REG-EQPT::CCN-a::ESR;
Register

Query ECCN Error Source Register [l.55411]
RTRV-REG-EQPT::ECCN-s::ESR;

Query Error Source Register Main Processor [l.55111]
RTRV-REG-EQPT::MP::ESR;

Utility Query ESR for FTU or Substrate NPC [l.55601]
RTRV-REG-EQPT::NPC-[s]abc::[SIDE-s]:ESR;
RTRV-REG-EQPT::NPC-uv-m-np::[SIDE-s]:ESR;

Utility Query Synchronizer [l.55201]
RTRV-REG-EQPT::SYNC-a::STR;

Utility Query SSP [l.55321]
RTRV-REG-EQPT::SYNC-a::TLI-m:SSP-b:STR;

Utility Query Timing Link Interface [l.55311]
RTRV-REG-EQPT::SYNC-a::TLI-m:STR;

Query Error [I.55531]
Source
Register RTRV-REG-EQPT::UNIT-[q]q::DSP:ESR;

Utility [I.55501]
Query Error
Source RTRV-REG-EQPT::UNIT-[q]q::ESR;
Register

Query Error [I.55521]
Source
Register RTRV-REG-EQPT::UNIT-[q]q::FC-sb:ESR;

Query Error [I.55801]
Source
Register RTRV-REG-EQPT::UNIT-[q]q::FLI-k:ESR;
Facility Line
Interface

Query Error [I.55811]
Source
Register RTRV-REG-EQPT::UNIT-[q]q::FMT-s:ESR;
Formatter

Query Error [I.55511]
Source
Register RTRV-REG-EQPT::UNIT-[q]q::FTMI-d:ESR;
FTMI

Query Error [l.55831]

Source

Register RTRV-REG-EQPT::UNIT-[q]q::MIU-c:ESR;

Multiplexer

Interface _____

Unit

Query Error [l.55821]

Source

Register RTRV-REG-EQPT::UNIT-[q]q::MXR-c:ESR;

Multiplexer _____

Query Cross- [l.55181]

Connect

Status Bus RTRV-REG-EQPT::XCSB::[UNIT-[q]q];

Utility [l.55191]

Query Status

Register RTRV-REG-EQPT::XC-a::STR;

Utility [l.52081]

Query Roll

DS0

RTRV-ROLL-T0::\
{NPC-[s]abc[&&-[t]def]|ALL[,UNIT-[q]q]};

RTRV-ROLL-T0::\
{NPC-uv-m-np[&&&-wx-k-qr]|ALL[,UNIT-[q]q]};

Utility [I.52091]
Query Roll
DS1 RTRV-ROLL-T1::\
{NPC-[s]abc[&&-[t]def]|ALL[,UNIT-[q]q]};

RTRV-ROLL-T1::\
{NPC-uv-m-np[&&&-wx-k-qr]|ALL[,UNIT-[q]q]};

Query All [I.53104]
Common
Equipment RTRV-STATE-COM::::ALL;

Utility [I.53109]
Query
Equipage, RTRV-STATE-COM::::EQPD;
Common

Utility [I.53105]
Query Status
Common RTRV-STATE-COM::::{PEST|FAIL|OOS};
Equipment

Utility [I.54340]
Query State
Alarm Cut RTRV-STATE-EQPT::::ACO;
Off

Utility [I.53022]
Query
Equipment of RTRV-STATE-EQPT::ETSI::EQPD;
ETSI

Query [I.53201]
Equipped
Multiplexer RTRV-STATE-EQPT::MIU::EQPD;
Interface
Units

Utility [I.53211]
Query
Equipped RTRV-STATE-EQPT::MXR::EQPD;
Multiplexers
inDS3Unit

Utility [I.56311]
Query
State RTRV-STATE-EQPT::NPC-[s]abc[&&-[t]def];
RTRV-STATE-EQPT::NPC-uv-m-np[&&&-wx-k-qr];

Utility [I.56314]
Query
NPC RTRV-STATE-EQPT::NPC-[s]abc[&&-[t]def];
State RTRV-STATE-EQPT::NPC-uv-m-np[&&&-wx-k-qr];

**Query
Equipped
NPCs** [I.53041]
RTRV-STATE-EQPT::NPC::EQPD[,TOTAL]:[UNIT-[q]q];

**Utility
Query
Loopback** [I.53131]
RTRV-STATE-EQPT::NPC-[s]abc[&&-[t]def]::LPBK;
RTRV-STATE-EQPT::NPC-uv-m-np[&&&-wx-kqr]::LPBK;

**Query ANSI
NPC Test
Signal** [I.53161]
RTRV-STATE-EQPT::NPC-[s]abc[&&-[t]def]::TSIG;
RTRV-STATE-EQPT::NPC-uv-m-np[&&&-wx-kqr]::TSIG;

**Query NPC
Time Slot
Zero** [I.56321]
RTRV-STATE-EQPT::NPC-[s]abc[&&-[t]def]::TS0-s;
RTRV-STATE-EQPT::NPC-uv-m-np[&&-wx-k-qr]::TS0s;

**Query Time
Slot Zero
Monitor** [I.56323]
RTRV-STATE-EQPT::NPC-[s]abc[&&-[t]def]::TS0M;
RTRV-STATE-EQPT::NPC-uv-m-np[&&-wx-k-qr]::TS0M;

Utility [I.56301]
Query
Synchronizer State RTRV-STATE-EQPT::SYNC;

Utility [I.53001]
Query
Synchronizer Provisioning RTRV-STATE-EQPT::SYNC::EQPD;

Utility [I.53021]
Query
Equipped TSIs RTRV-STATE-EQPT::TSI::EQPD;

Query All [I.53101]

RTRV-STATE-EQPT::[UNIT-[q]q]::ALL;

Utility [I.53011]
Query
Equipage Status RTRV-STATE-EQPT::UNIT::EQPD;

Utility [I.53108]
Query Entity
Equipage RTRV-STATE-EQPT::[UNIT-[q]q]::EQPD;

Utility [l.53071]

Query

**Equaliza-
tion, Impe-
dance**

RTRV-STATE-EQPT::UNIT-[q]q::FTMI-b;

Utility [l.53181]

Query

**Hybrid DS3
Loopback**

RTRV-STATE-EQPT::UNIT-[q]q::LPBK;

Utility [l.53103]

**Query Status
of Entities/
Equipment**

RTRV-STATE-EQPT::[UNIT-[q]q]::{PEST|FAIL|OOS};

Query Unit [l.56511]

**Protection
State**

RTRV-STATE-EQPT::UNIT-[q]q::PROTN;

Query State [l.56361]

Unit DS3

RTRV-STATE-T3::UNIT-[q]q::DS3-c[&&-d];

Utility [l.52501]

Query

**Substrate
Channels**

RTRV-STATE-TS::[s]abc-ddd[&&-eee];

RTRV-STATE-TS::uv-m-np-ddd[&&-eee];

Utility [I.53091]
Query Test-
Access RTRV-TACC-T0::NPCTG-rrr[&&-sss];
GroupNPC

Utility [I.53081]
Query Test-
Access RTRV-TACC-T0::TG-mmm[&&-nnn];
Group

Utility [I.53061]
Query Test
Ports RTRV-TACC-T1;

Miscellaneous Commands

13

Abort [l.55711]

ABT-CMD;

**Allow
Switch of
MMFG**

[l.35301]

**ALW-SW-EQPT::UNIT-[q]q::MMFG-c[&&-d]:\
{PROTN|WKG};**

**Protection
Switching**

[l.39411]

**ALW-SW-T1:: {NPC-[s]abc|xxx}:: [RT-ffff]: [INCL];
ALW-SW-T1:: {NPC-uv-m-np|xxx}:: [RT-ffff]: [INCL];**

**Append
Component
Command**

[l.19041]

APPEND[:: {<line number>|END}::];

Copy NPC [I.31521]

```
COPY-EQPT::NPC-[s]abc,[t]def[&&-[u]ghi];  
COPY-EQPT::NPC-uv-m-np,wx-k-qr[&&&-gh-i-kl];
```

**Backup
Memory
Transfer** [I.55701]

```
CPY-MEM::::<from>,<to>:[PROG]:[INCL];
```

**Delete
Feature
Package
Identifi-
cation** [I.37301]

```
DLT-FPKG::::nnnnnnnn;
```

Set Date [I.51021]

```
ED-DATE::::[ce]yr-mo-da:[INT-ii];  
ED-DATE::::,hr-mn-sc;
```

Add NPC to [l.36201]

**SLC[®] Carrier
Bank**

```
ED-PRMTR-EQPT::[DGA-[s]aaa][,DGB-[s]bbb)\  
[,DGC-[s]ccc][,DGD-[s]ddd][,DGP-[s]ppp]::\  
{RT|DL}-ffff,g[g]:[{sss|NDL|RTF}];
```

```
ED-PRMTR-EQPT::[DGA-uv-j-ab][,DGB-uv-k-cd)\  
[,DGC-uv-l-ef][,DGD-uv-m-gh][,DGP-uv-j-pr]::\  
{RT|DL}-ffff,g[g]:\[{sss|NDL|RTF}];
```

Switch [l.39421]

**Inhibition
for SLC[®]**

```
INH-SW-T1::{NPC-[s]abc|xxx}::[RT-ffff]:[FRC]:\  
[INCL];
```

```
INH-SW-T1::{NPC-uv-m-np|xxx}::[RT-ffff]:[FRC]:\  
[INCL];
```

Alarm [l.51111]

Cutoff

```
OPR-ACO-ALL;
```

Set Daily [l.51011]

**Facility
Alarm
Reporting
Time**

```
SCHED-PMREPT-ALL:::[hr-mn-sc],\  
{CFA|FAC-X-abcdef|PRIM-X-ghij|MONDAT};
```

UtilityBoot [I.58001]

STA-LOCL-RST::PMEM::[CLR];

**Switch
FLI To
Protection** [I.35101]

SW-TOPROTN-EQPT::UNIT-[q]q::FLI;

**Switch
MMFG To
Protection** [I.35111]

SW-TOPROTN-EQPT::UNIT-[q]q::MMFG-c:[FRC];

**Request
PSW, USW,
ALW, or INH
on SLC[®]** [I.39401]

SW-TOPROTN-T1::{NPC-[s]abc|xxx}::\
[RT-ffff]:[INCL];

SW-TOPROTN-T1::{NPC-uv-m-np|xxx}::\
[RT-ffff]:[INCL];

**Switch FLI
To Service** [I.35105]

SW-TOWKG-EQPT::UNIT-[q]q::FLI;

**Switch
MMFG To
Service** [I.35121]
`SW-TOWKG-EQPT::UNIT-[q]q::MMFG-c;`

**Allow
Termination
of Protection
Switching** [I.39431]
`SW-TOWKG-T1:: {NPC-[s]abc | DGx} :: \
[{RT | DL} -ffff] : [INCL] ;`
`SW-TOWKG-T1:: {NPC-uv-m-np | DGx} :: \
[{RT | DL} -ffff] : [INCL] ;`

**Upgrade
Frame** [I.55731]
`UPGRD-SYS;`

mmmm *Explanation*

ENEQ CCB not eqd, not IS, or failed or inactive side CCB not eqd or not IS
CPR is not equipped
Copy source NPC is not equipped
DSPI not equipped, not in service, or failed
DSPU is not equipped
Database corrupt
ETSI not equipped, not in service, or failed
FC not eqd, not IS, or failed or inactive side FC not eqd or not IS
FMT not eqd, not IS, or failed, or inact side FMT not eqd, or not IS
FTMI not equipped, not in service, or failed
MIU is not equipped
Mate NPC is not equipped
NPC not equipped
NPC not provisioned as DGA
NPCTG not grown
NPCTP is not grown
No CBTYPE NPC equipped
No DSP unit equipped
Not enough DSPPs are equipped
Protection MIU is not equipped
Protection entity is unequipped
Required FLI not equipped, not in service, or failed
Required MIU not equipped, not in service, or failed

mmmm	<i>Explanation</i>
	Required MXR not equipped, not in service, or failed
	SYNC TB is not equipped
	Service MXR is not equipped
	Subject entity is not equipped
	Sync source NPC is not equipped
	TSI not eqd, not IS, or failed or inactive side TSI not eqd or not IS
	The MXR is not grown
	The pair MXR is not equipped
	Unit not equipped, not in service, or failed
	Test group unequipped
	Virtual SLC NPC not provisioned
ENFE	Cross-connect not consistent with feature package
	Software does not contain Enhanced CEPT feature
	Subject NPC does not support CEPT BER feature
ENIE	Option rr/m has not been set up on 2nd database
	Termination is not connected as indicated
	Two confs. were prev. connected or the concat. cause BRD-BBL loop
ENRE	Corresponding NPC for FROM virtual channel is not provisioned
	Corresponding NPC for TO virtual channel is not provisioned
	Corresponding NPC for virtual channel is not provisioned
	FROM NPC is not provisioned as DGA
	Illegal connectivity specified
	NPC not provisioned for CAS
	NPC not provisioned for NSA
	PMEM type no longer supported
	SMEM is a normal SMEM
	SSC circuit pack is still equipped; pull-out/remove SSC
	Subject entity is equipped
	TO NPC is not provisioned as DGA
ERLC	Attempt to remove DGA w/o INCL keyword or prior prot. sw. request
	Customer control or red circuit exists
	DGA protected; use INCL to remove, or unswitch protection

mmmm	<i>Explanation</i>
ICNV	PM scheduling report is already allowed for this entity PM scheduling report is already inhibited for this entity TS0 is crossconnected to TS0 Bit value not allowed for NPC type Current error corrector pack type specified in command Current Hub id specified in command not allowed for clear 2MB
IDMS	Both FAC and PRIM values(keywords) are required INCL keyword needed to perform this command INCL must be specified for SRDC ckts SIDE must be specified for substrate NPC Some priority values required Unspecified L2 address
IDNC	FDL selected with width not 1 Inconsistent or invalid circuit type for Nx64Kbit TA Old or new is a non-channelized type in a DS0 command One NPC is a non-channelized type and the other is not Some priority values not required TG width incompatible with circuit The two FADS entered are not associated with one another. Incompatible HUB feature types Inconsistent BCON width for test access Inconsistent HUB width for specified TG Invalid channel designation for BCON Not all FROM channels on same NPC
IDNV	A locally switched channel is specified as BBL, LEG, or BRD A substrate circuit pack is specified in the command line AIS entered for MONE/MONF/MONEF/SPLTA/SPLTB/SPLTAB AIS invalid for cross-connection specified AIS keyword incompatible with NPC type Adding two digroups from one bank on same DDC Alarm option and bank mode don't match All NPC(s) are either not valid or not grown

mmmm	<i>Explanation</i>
	Attempt to broadcast a locally switched channel
	Attempt to one way cross-connect a locally switched channel
	BER must not be less than 4 for Clear DS1
	Bad PRIM X'efgh values
	Bank id number not found
	CPR circuit pack specified in the command
	Can't Use LCN 0/LGN 0 - designated as a supervisory channel only
	Can't delete because not all associated NPCs of the RT are entered
	Command not allowed
	Conference first channel doesn't match input
	Conference port cannot be dropped out of conference by switch command
	Conference port is not in conference circuit
	Connectivity can not be specified for CEF unit
	Counting sequence and operational mode don't match
	Cross-connect a non Mode I channel to DCLU
	Cross-connect a non SLC channel to DCLU
	DGA and DGB must be specified together in the command
	DGA with NDL option is not provisioned with D4 or ESF framing format
	DGA/DGP of RT/DL Mode I must be assigned to one DDC
	DGC and DGD must be specified together in the command
	DGP designated to bank without data link
	Digroup name and bank id don't match
	Digroups from same bank are added to two different FTUs
	Digroups from same bank have different counting sequence
	Digroups from same bank have different modes
	Duplicate L2 address
	Duplicate ports specified
	ENQ/ACK flow control is supported only on Snider link
	Error in input
	Framing format, digroup name & operational mode don't match
	INCL not specified and at least one NPC In Service

mmmm	<i>Explanation</i>
	IU type NPC(s) cannot be provisioned for Minor Alarm
	IW option is not allowed for new type of Clear-DS1 NPC
	Inconsistent Signaling on CEPT NPCTGs
	Inconsistent channel range width
	Invalid CEPT NPC
	Invalid CFT code
	Invalid FPI value
	Invalid FROM channel number
	Invalid MIU/MXR type specified
	Invalid NPC addressing scheme specified
	Invalid SLC Mode-III channel number
	Invalid TC specification
	Invalid TO channel number
	Invalid channel 000 cross-connection specified
	Invalid channel 031 cross-connection specified
	Invalid channel number
	Invalid circuit type
	Invalid keyword(s) combination specified
	Invalid line number
	Invalid link number specified
	Invalid poll time
	Invalid switch request for DCLU
	Leg type mismatch
	MUX or TRB invalid for cross-connection specified
	Mode I RT/DL IDs don't match for DGA/DGP on same DDC
	NAM invalid for cross-connection specified
	NDL option is specified for DGA
	NDL option is used without DGA
	NPC containing channel 000 is invalid type.
	NPC is a DGP
	NPC is channelized type
	NPC is not part of a one-way connection
	NPC number and bank id don't match

mmmm	<i>Explanation</i>
	NPC number and digroup name don't match
	NPC parameter only valid with TU type TLI
	NPC type is not DS type
	NPC type option Y is invalid for SLC-96 NPC
	NPC used as a timing reference
	NPC(s) actual type incompatible with TYPE keyword and/or alarm type
	No OOS keyword is given for out-of-service NPC
	No PM data available
	No mapped circuit under test; emode/fmode can't be changed.
	Number of transmitting ports does not match existing conference
	OLD and NEW Data and Parity channels partially overlap
	OLD and NEW channels cannot be the same
	OLD data channel cannot be parity channel type
	Old and new are the same NPC in a DS1 command
	One-way circuit under test; emode can't be changed.
	Operation mode and digroup name don't match
	Option not programmable for this NPC type
	PWR/MISC alarm is specified to a digroup other than DGA
	Parameter only valid with PA, PB, or PC type NPCs
	RT-DCLU cross-connect with different channel number
	RT-DCLU cross-connect with different ids
	RTF keyword and the operation mode does not match
	RTF keyword is used without DGA
	Range entered without FRC keyword
	Range not allowed for circuit type
	SC invalid for cross-connection specified
	Selectable AIS not valid for specified NPC(s) type
	Side specified for non-duplicated NPC
	Signaling processing is not activated for the channel
	Superuser logged on
	TG East/West type inconsistent with each other or circuit
	TS0 specified with width not 1

mmmm *Explanation*

TS16 specified for CAS TG
TS16 specified for test with width not 1
The RT id entered is not a retrofit one
The common bit(s) is(are) not set in both FAC & PRIM
The facility parameter not programmable for specified x or z parameter
The parameter specified does not match with the NPC type
The specified parameter is not applicable to operation mode of the RT
Trunk type is not allowed in the circuit specified
Unmatched channel range
Unmatched channel range involving SLC Mode III termination
Unrunnable CFT code
Using the 24th channel of a DMI NPC
Using the 24th channel of a T1DM NPC
Virtual circuit is not specified for X.25 link
XON/XOFF flow control is supported only on Snider link
ZBTSI option is only valid with the ESF mode
Emode/fmode can't be changed under current test mode.
x & z parameters on DSxyz are inconsistent

IDRG

Command did not execute for any entity specified in the command
Ending channel is out of range
First and Last NPCs are outside a module boundary
First and Last NPCs are outside unit boundary
Invalid FROM channel number range
Invalid TO channel number range
Invalid range for specified FROM NPC type
Invalid range for specified NPC type
Invalid range for specified TO NPC type
NPC range crosses unit boundary
OFFSET range is invalid
Old and New channel on same NPC and within the range
Only up to 4 historical data registers are allowed
TG width too large for single NPCTG

mmmm	<i>Explanation</i>
	Threshold value is out of range
	Unit type (xyz) not supported
	Input channel out of range (SLC not supported)
IICM	Clear gateway test access disallowed.
	SRDC timeslots are allocated on this NPC
IIDT	AIS not entered for SPLTE/SPLTF/SPLTEF/LOOPE/LOOPF
	Database conference width does not match the range in input command
	Illegal BBL BBL combination
	Illegal BBL SYM combination
	Illegal BRD BRD combination
	Illegal BRD SYM combination
	Illegal LEG LEG combination
	Illegal SYM BBL combination
	Illegal SYM BRD combination
	Invalid change from previous mode
	Invalid change parameter combinations
	Invalid input BBL as fmd in ONE-WAY command
	Invalid input BBL in terminated TWOWAY/ONEWAY command
	Invalid input BRD as tmd in ONE-WAY command
	Invalid test mode for a one-way test session
	Invalid test mode for an unmapped test session
	Invalid use of CONV keyword
	NPC is a channelized NPC
	NPC is a non-channelized NPC
	NPC is not a F-end
	NPC is not a Facility Access Digroup
	NPC is not an E-end
	NPC type mismatch
	No NPC's out of service and OOS keyword used
	No RDLD or CUS circuits and INCL keyword used
	Report interval is not an integral number of accumulation interval
	TO side is not a DMB type NPC

mmmm	<i>Explanation</i>
	This NPC type does not allow unframed Clear-DS1 Transmission parameters in command will not change existing settings
IIFM	Trunk conditioning is invalid Bad FAC value entered Exceeded depth limit of 6 on broadcast conference concatenation FMC cannot be cross-connected in this format Invalid FROM NPC type for AIS insertion Invalid NPC type for AIS insertion Invalid TO NPC type for AIS insertion Try to operate a ONE-WAY conference with a TWO-WAY input command Try to operate a TWO-WAY conference with an ONE-WAY input command
IPNV	Accumulation Interval field is missing Accumulation Interval field is not allowed FAC keyword is invalid for this feature Historical data can not be specified Interval is not valid/not available Invalid direction specified for NTST TLA/TLR Invalid parameter combination Invalid use of INCL keyword Level field is not allowed MONDAT keyword is invalid for this feature MONDAT set to ALL is not allowed MONTIM set to ALL is not allowed Mismatch between channel 0 crossconnect and keywords Monitored Date field is not allowed Monitored Time field is not allowed NPC is non-channelized NPC number out of range No PM data available Only 15MIN for accumulation interval is allowed Only DAILY for accumulation interval is allowed

mmmm	<i>Explanation</i>
	Only historical data can be specified
	Only one parameter is allowed
	PRIM keyword is invalid for this feature
	Scheduled reporting for this npc is inhibited
	Scheduling report could not be found
	The MONDAT and MONTIM parameters can not both be specified
	This NPC type does not allow Payload
NCON	No conditions
SAAL	Feature is active
	Manual Pending is Active
	PA NPC threshold already in allow mode
	Protection switching is already allowed
	The switch is allowed (not inhibited)
SAAS	All channels assigned, cannot be grown as NPCTG
	Another NPC is grown and added as this digroup
	BCON BBL has one or more legs under test
	Channel(s) is already registered
	Channels assigned, cannot be grown as test group
	Channels assigned, cannot be grown as test port
	Conference Port is currently registered to a different channel
	New bank id is an assigned one
	TG number previously assigned
	Termination is already assigned
	Termination is in process of being rolled
	The MIU is already equipped
	Channel already under test
	Channel part of a TP or TG
	Circuit contains mapped channels for HUB request
SAIN	Loop back inhibited for digroup
	No mapped slots on a tsi
	No unmapped slots on a bus
	PA NPC threshold already in inhibit mode
	Parity channel cannot be within the range of a DS0 command.

mmmm	<i>Explanation</i>
	Protection switching is already inhibited
	Subject entity is pested
	Termination is under test or is a test port or group
	The switch is already inhibited
	Can't change option, inhibition is active
SAIS	Both syncs are in-service
	CCN side s is in service
	CRO is still equipped
	Conference already exists
	DS3U NPC already In-Service
	DSPI is in service
	MIU is already in service
	Mate NPC (DGA/DGP) is in service
	NPC not IU/TI type
	Some TLIs are still equipped
	Some TSIs to degrow are in service
	Subject entity is in service
	TLI 3 or 4 still equipped
	Test group is not idle or frame is not In Service
	Test port is not idle or frame is not inservice
	The MMFG is already In-Service
	The MXR is in service
	The selected FLI is IS and Pested and at least 1 Service MXR is eqd
SAOP	RT's alarm exists
	This signal is already being sent
SAOS	A DMB on the Unit is OOS
	Both syncs are out-of-service
	CCB is out of service
	CCI is out of service
	CCN side s is out of service
	CCNI is out of service
	DSPI out-of-service

mmmm	<i>Explanation</i>
	ETSI is out of service
	FC out of service
	FLI is out of service
	FMT is out of service
	FTMI is out of service
	File has already been cleared
	Formatter (FMT) on active CCN side is Out-Of-Service
	IU/TI type NPC failed
	MIU is out of service
	MXR is out of service
	Mate CCN side is out of service
	Mate SYNC is out of service
	NPC out of service or failed
	Protection MIU is out of service
	Protection MXR is out of service
	Protection entity out of service or failed
	SYNC is out of service
	Service MIU is out of service
	Service MXR is out of service
	Subject entity is out of service
	Sync 0 is not in-service
	Sync 1 is not in-service
	The MMFG is Out Of Service
	The mate FLI is OOS and Protection MIU is equipped
	The mate FLI is OOS and Protection MXR is IS
	The mate FLI is OOS and at least one Service MXR is equipped
	The protection FLI is out of service or pested (TOPRTN option)
	The selected MIU associated with the NPC is Out-Of-Service
	The selected MXR associated with the NPC is Out-Of-Service
	The service FLI is out of service or pested (TOSRVC option)
	UC is out of service
SAPS	Frame ID is protected
	The Service MMFG is already under protection

mmmm	<i>Explanation</i>
	The protection FLI is already selected (TOPRTN option)
	Can't change option, protection switch is active
SAPV	Option LOCAL already exists
	Option REMOTE already exists
SARB	Exceeded limit of reports with accum. interval of 15 min. or less
	Exceeded maximum limit of PM reports
SARL	No FADs were activated by link n
	No test ports were activated by link n
SATF	Can't run test on active side
SAWS	An autonomous switch is in progress
	C-bit modify function is active
	C-bit operations are enabled
	Conference exists in a DMB
	Mapped slots exist on a tsi
	NPC already allocated as sync timing source
	NPC already grown as non-synchronization source
	NPC already has Equipment Loopback
	NPC is already grown and added as SLC digroup
	The Service MMFG is not under protection
	The service FLI is already selected (TOSRVC option)
SNAS	Connectivity contains unequipped units
SNIS	CPR is out of service
	Cannot clear journals for OOS unit
	DSPU unit controller is out of service
	NPC is OOS for a TGR command and OOS keyword not specified
	NPC unequipped, out of service or failed
	RT/DL has unrestored DGA
	Sync source NPC is not inservice
	TD on one(both) sync(s) is not equipped or not in-service
	Unit(s) OOS, and additional backup required
SNOS	In-service NPC change not allowed
	Subject PWR to be cleared is not failed
SNVS	(Timing Distributor) TLI is not equipped

mmmm	<i>Explanation</i>
	1 hr >= 24 hr for DM opt
	15 min >= 24 hr for ERS opt
	15 min >= 24 hr for SERS opt
	15 min >= 24 hr for SLIP opt
	15 min >= 24 hr for US opt
	3 Timing Distributor type TLIs are equipped
	A DMB mode was assigned to a FTU-type NPC on the input
	A loopback is active on the FROM termination
	A loopback is active on the TO termination
	A user is already logged in on the link/vc
	Active CCN side is out of service
	Adding DL DGP forbidden for SLC 96 MD 1
	Alarm bits cannot be passed through or inverted
	All digroups not out of service
	Another signal already active prevents this signal from being sent
	Assignment of single priority to multiple SSPs
	At least one UC is OOS or At least one UC is failed
	At least one UC is not the correct type
	Attempt to add to a null transmitting port
	Attempt to remove a Service MIU which is under protection
	Attention: preceding ccode 83 is an anomaly - see problem list
	Autonomous loopback is active on DGA
	Backup required before executing this command
	Bad sync mode
	Bad use of INCL, cannot override the current state of the conference
	Bad use of INCL, cannot use keyword on conf.-to-conf. connection
	Bit 3 provisioned for use as RAI3
	Bit 4 provisioned for use as RAIS
	Bit 4 provisioned for use as RBER
	Bit 5 provisioned for use as SFI
	Bit c not settable
	Bits 3 through 8 are provisioned for Transmic 1G

mmmm	<i>Explanation</i>
	Boot in progress, can't service request
	Both ITS TG bundles must be on same TG193B card
	Both sides of CCN are OOS
	Broadcast unassigned channel/NPC in QRY,TO
	C-bit modify function is disabled
	CATP due to skipping continuity test for FMT
	CCB is inservice but failed
	CCI is inservice but failed
	CCI is not present
	CCNI is inservice but failed
	CPR in buffer overflow condition
	CRO type TLI (SSP portion not required)
	CUS flag doesn't match that of conference
	Can not create any more users
	Can not execute privileged command
	Can not perform DMB CHG on input direction A
	Can not perform DMB CHG on input direction B
	Can not perform DMB CHG on input direction F
	Can not perform DMB CHG on input direction G
	Can not perform DMB CHG on input direction L
	Can not perform DMB CHG on input direction T
	Can not remove Frame administrator
	Can not remove own link
	Can not use 12-th TP when NPCTP is in the T1DM or DMI mode
	Can't disconnect return leg unless entire conference disconnected
	Can't mount or unmount BOTH_MEM
	Can't mount or unmount PMEM
	Can't mount or unmount SMEM
	Can't mount or unmount password recovery card
	Can't perform DMB CHG because NTR flag set on FROM side
	Can't perform DMB CHG because NTR flag set on TO side
	Can't RST MC CLR when a unit is equipped
	Can't start new session - previous session still verifying

mmmm	<i>Explanation</i>
	Change not valid
	Change to T1DM digroup with cross-connect that is not TRSP
	Change to non-ESF digroup with 16-state cross-connect
	Channel has a FAR, which is within the range
	Channel or NPC not bridged
	Channel out of bound in a BCON/v.c
	Channels and conference port do not match
	Clock absent for XPC to loop back
	Combination of bit g (b7) and h (b8) is invalid
	Command and protocol are inconsistent
	Command invalid while backup in progress
	Command is Frame administrator (DAX) only.
	Conference Port is already registered to the same group of channels
	Conference is LPD: has no switchable return leg
	Conference is NTR: has no switchable return leg
	Conference port is currently connected
	Conference port is not registered
	Conversion leg is terminated
	Cross-connect to CPR is required
	Customer controlled circuit, INCL not entered
	DB MP or units ram error
	DB retrofit fail
	DCTN conference channel cannot be rolled
	DGA is not added
	DGN on subject entity denied
	DGP is protecting a primary digroup
	DL ffff is used w/ operational mode other than Mode I
	DMI combined with T1DM
	DSPP not in service, or failed
	DSPP pack FTMI Failed or Out of Service
	DSPP pack NPC Failed or Out of Service
	DSPP pack UC Failed or Out of Service

mmmm	<i>Explanation</i>
	Database is empty
	Database is not empty
	Database not loaded
	Delete or change a leg from a conference that has no leg
	Deny Clear-2MB for Alternate Maps
	Deny SLC for Alternate maps
	Deny SP Type NPCs for Alternate Maps
	Deny non-channelized NPCs for Alternate Maps
	Designated TG or circuit to be tested in process of being rolled
	Different DSxyz types are used for DGA/DGP on same DDC for Mode I
	Digroup is protected
	Disable not allowed - supports another feature
	ETSI cannot be initialized when ECCN side is OOS or inservice but pested
	ETSI is inservice but failed
	ETSI is not present
	Entity can't be addressed in this configuration
	FC is inservice but failed
	FLI is inservice but failed
	FMT is in service but failed
	FPI on SMEM does not match one on PMEM
	FRC specified for protection, and service MMFG is In Service
	FROM is a two-way and no CONV specified
	FROM is not a backbone leg
	FTMI is PESTED
	FTMI is in service but failed
	FTMI type error
	Feature deactivation would leave system with core software
	Feature not enabled
	File already exists
	File doesn't exist/can't be accessed
	File is being accessed
	File is empty

mmmm	<i>Explanation</i>
	Firmware timing invalid for Transmic 1G NPC
	Flash Card is bad
	Flash Card is empty
	Flash Card is not present
	Frame is not in MCOND
	Frame time is not set
	Framed/Unframed clear 2Mbit/s NPC invalid for Automatic CRC-4
	Framed/Unframed clear 2Mbit/s NPC invalid for Firmware Timing
	Framed/Unframed clear 2Mbit/s NPC invalid for Transmic 1G, 2G
	G1 SMEM for SMEM->PMEM w/journals
	G4 to G4.1 retrofit failed
	Gateway test access not supported
	Hardware mismatch or not present
	INCL keyword needed when restricted Insertion Word specified
	IW is UMUX (18) but NPC not type DE4yz
	IW not allowed to be specified in Clear 2Mbit/s
	Illegal SSP type (not same as other SSPs)
	Illegal priority value
	Illegal test access mode for TS0
	Illegal test access mode for TS16
	Improper roll command sequence
	Inactive side NPC out of service and inactive side in service
	Incompatible types of NPCs on a circuit pack
	Incorrect language/addressing mode
	Incorrect number of parameters
	Incorrect or missing password
	Incorrect pack type in slot
	Initialization of application in progress, retry command later
	Input BRD (BBL) has same NPC and channel as BBL (BRD)
	Insufficient data for setting up a conference
	Integrated Test Set is currently active on TG
	Invalid NPC number specified
	Invalid PWR/MISC alarm level

mmmm	<i>Explanation</i>
	Invalid combination of "x" and "y" values
	Invalid combination of "x" and "z" values
	Invalid executable on card
	Invalid option, mailbox or flag
	ITS NPC Hardware Error
	ITS TG Already Generating
	ITS TG Already Monitoring
	ITS TG is Idle
	ITS TG Not Generating
	ITS TG Not Monitoring
	LEG mode was assigned to a DSPU-type NPC on the input
	LLB not initiated
	LPD invalid since existing conference is not already LPD
	Language "F" provisioned for this channel
	Language is not allowed
	Last link in service
	Line Loop Back is active
	Line format types are incompatible
	Link being used is not Link 1
	Logical conflicts found in the map
	Looped Circuit Access not allowed
	MP database not consistent with Configuration file
	Major/Minor BER threshold value is invalid for SLC NPCs
	Maj Min BER threshold is 7, but not in T1DM or Fe mode
	Map/macro file write deferred until backup is completed
	Mapped parity channel(s) on new
	Mate RT/DL mode is different
	Mate sync pack denied command
	Maximum number of CPRs have already been grown for this unit
	Minor <= major for BER opt
	Minor >= major for COFA opt
	Minor >= major for SLIP opt
	Minor Slip threshold disabled before Major Slip threshold

mmmm	<i>Explanation</i>
	Mismatch between MXR and NPC types
	Mismatch between service MXR and protection MXR types
	New NPC already cross-connected or mapped channel(s) exist on New
	NPC addressing scheme selected is not allowed in the configuration file
	NPC as 12th test port can not change to DMI nor T1DM
	NPC has active circuit
	NPC has been designated as NPCTG
	NPC has been designated as NPCTP
	NPC invalid type
	NPC is NPCTG and chan 24 is used in a TG; Can't change to T1DM or DMI
	NPC is NPCTG, changing to CAS/NSA is not allowed
	NPC is a Facility Access Digroup
	NPC is a test port
	NPC is not a NPCTG
	NPC is not a NPCTP
	NPC is not added
	NPC is not designated for this NPCTP/NPCTG
	NPC is still provisioned to provide sync timing
	NPC not DA or TA type.
	NPC not deleted
	NPC not designated as sync timing source
	NPC providing timing to inservice SSP
	NPC type error
	NPC type is inconsistent with FTMI type
	NPC type option xyz is unassigned or invalid for feature package
	NTR invalid since existing conference is not already NTR
	New NPC same as existing one
	New in CGA or PBA
	No CBTYPE NPC capacity remaining
	No DL digroups can be added until the associated RT bank is created

mmmm	<i>Explanation</i>
	No Facility Line Interface (FLI) is In Service
	No SAFE alarm for DGP
	No available timeslots on any inservice NPCS associated with FC/FMT
	No edit session active
	No equalization for CEPT FTMI
	No macro is currently executing
	No mapped channel on old
	No protection switch is currently active
	No signals active
	No unmapped time slot
	No user is logged in on the link/vc
	No user/link needs to be changed
	No zeros allowed for DAX privilege
	Not Timing Extractor type TLI (not SSP)
	Not a CRO TLI
	Not a DACS II compatible Flash Card
	Not enough DSPPs are in service
	Not enough TSIs for CCB test
	Not first channel in a BCON/virtual conf
	Not valid for frame administrator
	Number of DGPs on each unit is limited to 32
	Number of SLC RT's on each unit is limited to 80
	OLD termination is not mapped
	Obsolete circuit type
	Old and new channels have not been paired by a BCAST command.
	One of the FAR end channels is being rolled
	One of the far NPC(s) is SLC
	One or more FADs could not be released
	One or more test ports could not be released
	One way unassigned channel/NPC in QRY,TO
	Only one channel allowed to have this language
	Option NOT leg can not appear with F, T, or B

mmmm	<i>Explanation</i>
	Option NOT leg is not a FTU leg
	Option NOT leg is not in conference
	Other FLI is OOS
	Other NPC on this DDC not the same digroup for Mode I DGA/DGP
	PDI Version number mismatch
	PMEM and SMEM are different
	PMEM and SMEM synchronization fail
	PMEM error, boot from SMEM
	PMEM not in service or not ready
	PMEM not restored
	Parity channel out of bound on new
	Password recovery card is not READ-only
	Point number mismatch
	Priority values are same
	Problem occurred while accessing BOTH_MEM
	Problem occurred while accessing PMEM
	Problem occurred while accessing SMEM or unformatted SMEM
	Protection switch existing is autonomous
	RCV continuity test won't be run: SYNC OOS or pested
	RCV continuity test won't be run: at least one timeslot in use
	RCV continuity test won't be run: no DMB timeslots available
	RCV continuity test won't be run: no available IS NPCS for FC/FMT
	RDLD flag doesn't match that of conference
	RTBC conference exists
	Range overlapping between FROM and TO or between two TOs
	Ranges of old and new do not match
	Reading Feature Package Id from PMEM failed
	Red circuit, INCL not entered
	Release number mismatch
	Report already exists
	SLC 96 MD 1 RT DGP requires mate NPC to be unequipped
	SMEM error, boot from PMEM

mmmm	<i>Explanation</i>
	SMEM is not present
	SMEM unit is not restored
	SR NPC was specified - not allowed
	SSC Diagnostic Failure
	SSP number is illegal
	SSP number required
	SSP type(options) same
	SSP with 0 priority present
	SSP with non 0 priority present
	SYNC is inservice but failed
	Signaling state of the trunk failed for the channel
	Skip error summary since adjacent pack not in service or pested
	Software Identification Block failed comparison
	Software Identification Block is not readable
	Some associated NPCs are equipped
	Some circuits not activated,cleared or pictured
	Source does not contain requested information
	Specified width does not match existing conference width
	Stratum not allowed
	Sync architecture different
	Sync architecture is same
	Sync mode is same
	Sync stratum is same
	Syncs are equipped
	System macro/map space is full
	T1DM or DMI mode and channel 24 is connected
	TB type in hardware mismatches DB
	Termination is a test port
	Termination is protected (RDL D)
	Termination is under customer control (CUS)
	Termination is under test
	Test ports must be on CAS
	Test session already exists

mmmm *Explanation*

- Testport/testgroup channel cannot be rolled
- TG in TSM ON mode
- TG not in TSG ON mode
- TLA/TLR invalid with ITS test groups
- TO is a part of the same conference as a previous TO
- TO is already the return leg
- TO is not a leg of this/any conference
- TO is the backbone leg of a conference
- TO side of two-way to be converted is not an FTU NPC
- The INCL keyword is needed for DGA
- The MMFG is protected
- The NDL options are different for DGA's on the same DDC for Mode I
- The NPC of VC BBL leg doesn't match that in the input command
- The NPC to delete has not been previously added to map
- The OLD or NEW NPC is already being rolled.
- The associated MMFG is under protection (for Service MIUs)
- The associated MXR is In-Service but pested
- The conference does not exist
- The first channel of VC BBL leg doesn't match that in the input cmd
- The first channel of VC BRD leg doesn't match that in the input cmd
- The input BRD leg is not in VC
- The map is not valid
- The mode of the RT is not applicable
- The reference map does not exist
- The requested digroup is carrying service
- The selected MIU associated with the NPC is In-Service but failed
- The selected MXR associated with the NPC is In-Service but failed
- The session is terminated due to maintenance operation
- The total number of receiving ports specified exceeds the max.
- There are no INS MXRs to run test on
- Timeslot channel numbering not allowed with CAS
- Timing Extractor type TLI (need SSP info)

mmmm	<i>Explanation</i>
	Timing Extractor type TLIs are present
	Transmic 1G NPC designated as SYNC source invalid
	Transmitting port cannot be dropped
	Tried to disconnect a nonexisting VC
	Trunk conditioning doesn't match that of conference
	Try to add a BBL to VC, but the VC already has backbone
	Try to delete a BBL leg from VC; however, VC has no BBL leg
	Try to delete a BRD leg from VC; however, VC has no BRD leg
	Trying to add a BBL leg to a conference set up as SYM
	Trying to add a BBL to a DMB conference that already has one
	Trying to add a SYM leg to conference set up as broadcast
	Trying to add a broadcast leg to a conference set up as SYM
	Trying to add or delete a leg when a conference is under test
	Trying to change in NTR direction
	Trying to change level in on BBL leg
	Trying to change level out on BRD leg
	TS0 connected to nonTS0 in Mode 2 - "a" should be "-" or "b"
	Two digroups from same bank added to different FTMI
	UC is in service but failed
	Unable to verify Configuration file since MP DB not loaded
	Unassigned operational mode
	Unframed clear 2Mbit/s NPC invalid for Bit 4 used as RA IS/RBER
	Unframed clear 2Mbit/s NPC invalid for TS0 processing
	Unit is not FTU type
	Unit type error
	Unmapped channel(s) on old
	Unpestering error registers for subj. entity failed
	Use of this NPC is RESERVED for SLC 96 MD 1
	User does not exist
	User has been created
	User has logged in somewhere
	User is not logged in
	User logged off during session

mmmm	<i>Explanation</i>
	User login-id is not DAX
	User macro/map space is full
	User quit the menu
	User still owns files
	Width of existing two way does not match conference width
	Write to CPR failed
	Writing Feature Package Id to PMEM failed
	Wrong SSP type(Timing Extractor type)
	Wrong TLI type
	Wrong TLI type (need CRO grow command)
	X option is illegal
	XMIT continuity test won't be run: CFT code specified
	XMIT continuity test won't be run: no XMIT timeslots available
	Y option is illegal
	Z option is illegal
	Channel is OCON in opposite direction
	Circuit already terminated
	Circuit not terminated
	Hub id not set when MJU pack grown
	Invalid mode for TLA/TLR
	Invalid test access mode
SOSF	All CBTYPE NPCs out of service or failed
	DSPU unit controller is failed
SPFA	No protection is available for the Service MMFG
	Protection switch process failed
SPSW	The Protection MMFG is selected, and auto. switchback is unavailable
	The protection MMFG is serving another facility
SROF	(NPC) Hardware mismatch
	BOOT on subject entity failed
	CCN denied request
	Can't lock or unlock ram database
	Circuits TCONed itself cannot be UTST

mmmm	<i>Explanation</i>
	DB can't get the slave mail box
	DB can't send or receive mail
	DGN on subject entity failed
	Failed to boot CI
	Failed to boot CONF file
	Failed to boot DB
	Failed to boot journal--recurrence indicates database corruption
	Failed to boot subject CCN side
	Failed to boot unit
	Failed to switch SYNC side
	General boot failure (vanilla flavor)
	IU/TI type NPC
	MIU is failed
	MXR is failed
	Mismatch between MXR and MIU HDW types
	NPC Failed or Out of Service
	No Memory Backup Has Been Scheduled
	None of the designated NPCTG(s) are equipped
	None of the designated TG(s) are equipped
	PMEM verification failed
	Read/write eeprom error
	RST failed to boot DB
	RST failed to boot program
	SSC software out of date
	Sync not completely reset
	Sync pack denied command
	Syncs failed to cross couple
	The MIU boot failed
	The MIU diagnostics failed
	The MXR boot failed
	The MXR diagnostics failed
	Unit 1 denied request
	Unit 2 denied request

mmmm	<i>Explanation</i>
	Unit 3 denied request
	Unit 4 denied request
	Unit 5 denied request
	Unit 6 denied request
	Wrong MXR type grown for this MIU
SRTN	Test Port release failed
	Test group release failed
SWFA	Active CCN side not IS or failed or pested or hardware OOS
	Boot TLI failed
	Checksums verification failed
	DB PMEM error OP-CL-RD-WR-SK
	DB SMEM error OP-CL-RD-WR-SK
	DSPI failed
	Data link failed
	Device failed to format
	Device failed to initialize
	Failed to lock sync to timing reference
	Far end failed to respond
	Hardware database mismatch
	MXR LOS with unselected FLI
	Selected FLI has LOC with at least one inservice MXR
	Sync is not configured yet
	Unselected FLI has LOS with at least one inservice MXR

Index

A

- Abort, [13-1](#)
- Activate Alternate Maps, [5-2](#)
- Activate Facility Loopback, [2-9](#)
- Activate Facility Test Signal, [2-9](#)
- Add
 - Link, Protocol, Baud, [1-3](#)
 - Link, X.25, Protocol, Data Link, Layer Parameters, [1-3](#)
 - Network Processing Circuit, [2-8](#)
 - NPC Addressing and Priority, [1-5](#)
 - TABS Link Parameters, [1-2](#)
 - User, [1-2](#)
 - User/Link Language, [1-5](#)
 - X.25 Link Parameters, [1-4](#)
- Add NPC to SLC**V-Rg-V** Carrier Bank, [13-3](#)
- Administrative Link, Restore, [9-2](#)
- Alarm Cutoff, [13-3](#)
- Alarm Suppression
 - Change for DS1s Within a DS3, [7-8](#)
- Allow DS1 Performance Monitoring Report, [3-1](#)
- Allow Switch of MMFG, [13-1](#)
- Allow Termination of Protection Switching, [13-5](#)
- Alternate Cross-Connection, [4-8](#)
- Alternate Maps
 - Activate, [5-2](#)
 - Create Picture, [5-2](#)
- Append Component, [13-1](#)

B

- Backup Memory Transfer, [13-2](#)
- Broadcast Cross-Connection, [4-1](#) [4-2](#)
- Broadcast Disconnection, [4-5](#) [4-6](#)

C

- Change
 - Bank Number, [7-5](#)
 - Circuit Parameters, [7-1](#) [7-7](#)
 - Connectivity, [7-1](#)
 - Cross-Connect Termination Status, [7-7](#)
 - DS3 Parameters, [7-8](#)
 - DS3U NPC Type, [7-4](#)
 - FTMI Equalization, [7-6](#)
 - Hub Identification, [7-7](#)
 - NPC AIS Alarm Option, [7-3](#)
 - NPC Options, [7-3](#)
 - NPC Type, [7-3](#)
 - Options, [7-5](#)
 - Priorities and/or Type, Synchronizer or NPC, [7-6](#)
 - Pwr/Misc Option or FPC RT Retrofit Status, [7-5](#)
 - Subrate Cross-Connection, [7-2](#)
 - Subrate Error Correction Location, [7-6](#)
 - Subrate Established Channel, [7-2](#)
 - Subrate Terminate and Leave, [7-8](#)
 - Subrate Test Access Split, [11-3](#)
 - Switch, TOX, [7-1](#)
 - Terminate and Leave, [7-8](#)
 - Test Access Time Slot, [11-2](#)
 - Type, Options, [7-6](#)

Unprotected Alarm Setting, [7-8](#)
User Password, [1-1](#)
User/Link Screening, [1-5](#)
Change DS1 Alarm Suppression for
DS1s Within a DS3, [7-8](#)
Change Macro Space, [5-2](#)
Change NPC Frame-Word Setting, [7-4](#)
Change NPC Time Slot Zero, [7-4](#)
Change NPC Type for TH Type NPCs,
[7-3](#)
Change RT/DL, [7-5](#)
Change Time Slot Zero Monitor, [7-4](#)
Change/Set Options, [7-2](#)
Circuit Parameters, Change, [7-1](#) [7-7](#)
Clear Backup Failure, [12-5](#)
Clear Facility Performance Parameters,
[3-2](#)
Clear Power Supply, [12-5](#)
Clock Control Interface, Remove, [8-1](#)
Clock Reference Oscillator, Restore, [9-3](#)
Configure Digroup Circuits, [6-2](#)
Configure Frame, [2-9](#)
Configure Synchronizer, [2-8](#) [7-5](#)
Configure Synchronizer Stratum, [7-6](#)
Connectivity, Change, [7-1](#)
Contents of Document, [vii](#)
Control and Clock Interface, Restore,
[9-1](#)
Conventions Used, [x](#)
Copy NPC, [13-2](#)
Create Picture Alternate Map, [5-2](#)
Create/Edit a Macro or Map, [5-2](#)
Cross-Connect Buffer (Non-CEF Only),
Remove, [8-1](#)
Cross-Connect Buffer, Restore, [9-1](#)
Cross-Connect Circuits, Disconnection,
[4-7](#)
Cross-Connect Map, Query-Full, [12-8](#)
Cross-Connect Map, Query-Partial, [12-8](#)
Cross-Connect Network Interface,
Remove, [8-1](#)
Cross-Connect Network Interface,
Restore, [9-1](#)
Cross-Connection
Alternate, [4-8](#)

Broadcast, [4-1](#) [4-2](#)
Change Termination Status, [7-7](#)
One-Way, [4-3](#)
One-Way Non-Channelized Digital
Signal, [4-3](#)
Subrate, [10-1](#) [10-2](#) [10-3](#)
Subrate, Change, [7-2](#)
Subrate, Terminated, [10-2](#) [10-3](#)
Terminated, Subrate, [10-4](#)
Two-Way, [4-3](#) [4-4](#)
Two-Way, Multipoint, [4-4](#)
Cross-connection
One-Way, [4-2](#)
Two-Way Non-Channelized Digital
Signal, [4-4](#)

D

Deactivate Facility Test Signal, [2-10](#)
Delete
Association of NPC with
SLC**V-Rg-V** RT, [2-8](#)
Delete Feature Package Identification,
[13-2](#)
Delete Lines From Macro, [5-1](#)
Delete Macro, [5-1](#)
Delete User, [1-2](#)
Deprovision
Facility Terminating Module Inter-
face, [2-7](#)
Multiplexer, [2-7](#)
Multiplexer Interface Unit, [2-7](#)
NPC, [2-5](#)
Synchronizer Time Base, [2-6](#)
Synchronizer Timing Link Interface,
[2-6](#)
Test Port, [2-7](#)
Test Port NPC, [2-6](#)
Test-Access Group, [2-6](#)
Test-Access Group NPC, [2-6](#)
Unit, [2-7](#)
Diagnose
All ETSIs on ECCN Side, [12-2](#)

CCNI, [12-1](#)
Communications Interface, [12-1](#)
Cross-Connect Buffer, [12-1](#)
DSPU, [12-4](#)
ETSI, [12-2](#)
Facility Terminating Module Interface, [12-5](#)
FLI, [12-4](#)
FMT, [12-5](#)
Format Converter, [12-4](#)
Link, [12-2](#)
Main Controller, [12-2](#)
Main Processor, [12-2](#)
Memory Card, [12-3](#)
MIU, [12-5](#)
MXR, [12-5](#)
Network Processing Circuit, [12-3](#)
Network Processing Circuits, [12-2](#)
Synchronizer, [12-3](#)
Synchronizer Timing Link Interface, [12-3](#)
Time Slot Interchange, [12-4](#)
Time Slot Interchanges, [12-4](#)
Unit On UC, [12-5](#)
Diagnostics
 CCI and BT Packs, [12-1](#)
Disconnect
 One-Way, [4-6](#) [4-7](#)
 Test Access Time Slot, [11-6](#) [11-7](#)
Disconnect DS0 Circuit Roll, [6-1](#)
Disconnect Facility Roll, [6-2](#)
Disconnection
 Broadcast, [4-5](#) [4-6](#)
 Cross-Connect Circuits, [4-7](#)
 One-Way,, [4-6](#)
 Subrate, [10-6](#) [10-7](#)
 Two-Way, [4-7](#) [4-8](#)
Disestablish Subrate Channel, [10-7](#)
Document Contents, [vii](#)
DS0 Circuit Roll, [6-2](#)
 Bridge, [6-1](#)
 Disconnect, [6-1](#)

E

Edit Delete Map, [5-1](#)
Emode, Non-Channelized Test FAD, [11-2](#)
Error Recovery, Software/Hardware Query, [12-10](#)
Establish Channel, Subrate, [10-5](#)
Establish Subrate Channel, [10-6](#)
ETSI, Remove, [8-2](#)
ETSIs, Remove All, [8-2](#)
ETSIs, Restore All, [9-2](#)
Execute Macro, [5-2](#)
Expanded Time Slot Interchange, Restore, [9-2](#)

F

Facility Alarm, Set Daily Reporting Time, [13-3](#)
Facility Loopback Activate, [2-9](#)
Facility Loopback Release, [2-9](#)
Facility Roll, [6-2](#)
 Bridge, [6-1](#)
 Disconnect, [6-2](#)
Facility Test Signal Activate, [2-9](#)
Facility Test Signal Deactivate, [2-10](#)
Fmode, Non-Channelized Test FAD, [11-2](#)
Frame, Configure, [2-9](#)
Frame, Provision, [2-8](#)
FTMI/DSPI, Remove, [8-4](#)
FTMI/DSPI, Restore, [9-4](#)

G

Glossary, IN1IX

H

How to Comment on This Document, [xxi](#)
How to Order Documentation, [xvii](#)
Hub Identification, Change, [7-7](#)
Hub, Query Identifier, [12-14](#)
Hub, Two-Way Test Access, [11-3](#)
Hub, Two-Way Test Access, Nx64 kbit/s, [11-4](#)
Hybrid DS3
 Loopback,, [12-24](#)

I

Inhibit DS1 Performance Monitoring
 Report, [3-1](#)
Inhibit Switch MMFG, [2-9](#)

L

Line Loopback, Test Access, [11-7](#) [11-8](#)
Line Loopback, Two-Way Test Access, [11-1](#)
Link, Remove, [8-2](#)
List Macro Contents, [5-3](#)
Log Off User/Link, [1-4](#)
Log On To DACS II, [1-4](#)
Looped Test Access, [11-7](#)
Looped Test Access, Nx64 kbit/s, [11-7](#)

M

Macros
 Change Space, [5-2](#)
 Create/Edit, [5-2](#)
 Delete, [5-1](#)

Delete Lines, [5-1](#)
Execute, [5-2](#)
List Contents, [5-3](#)
Move Lines, [5-3](#)
Stop, [5-1](#)
Main Controller, Remove, [8-2](#)
Main Controller, Restore, [9-2](#)
Maps
 Create/Edit, [5-2](#)
 Edit Delete, [5-1](#)
MMFG, Allow Switch of, [13-1](#)
Monitor Test Port, Two-Way Test Access, [11-1](#)
Monitor, Test Access, Nx64 kbit/s, [11-4](#)
Monitor, Two-Way Test Access, [11-4](#)
Move Macro Lines, [5-3](#)

N

Network Processing Circuit
 Add, [2-8](#)
Non Channelized Test, [11-1](#)
Non-Channelized Loop Test Access
 Facility, [11-8](#)
Non-Channelized Test Access, [11-5](#)
Non-Channelized Test FAD, Emode/
 Fmode, [11-2](#)
Non-Channelized Test Hub, [11-4](#)
Non-Channelized Test NPC Release, [11-6](#)
NPCs, Remove, [8-3](#)
NPCs, Restore, [9-3](#)
Nx64 kbit/s, Test Access, [11-4](#)
Nx64 kbit/s, Two-Way Test Access, [11-3](#) [11-4](#) [11-6](#)

O

One-Way Cross-Connection, [4-2](#) [4-3](#)
One-Way Disconnect, [4-6](#) [4-7](#)
One-Way Multipoint Disconnection, [4-6](#)

One-Way Non-Channelized Digital Signal
Cross-Connect, [4-3](#)

P

Password Recovery, [12-6](#)
Performance Monitoring, Query DS1
Report Schedule, [12-11](#)
PMEM/SMEM, Remove, [8-3](#)
PMEM/SMEM, Restore, [9-3](#)
Protection Switching, [13-1](#)
Provision
ANSI NPC, [2-3](#)
Clock Reference Oscillator, [2-4](#)
Digital Signal Processing Unit NPC,
[2-1](#) [2-2](#)
Facility Terminating Module Inter-
face, [2-5](#)
Frame, [2-8](#)
Multiplexer, [2-5](#)
Multiplexer Interface Unit, [2-5](#)
NPC, [2-3](#)
NPC Type DS, [2-2](#)
Synchronizer Time Base, [2-4](#)
Synchronizer Timing Link Interface,
[2-4](#)
Test Port, [2-5](#)
Test Port NPC, [2-4](#)
Test-Access Group, [2-4](#)
Test-Access Group NPC, [2-3](#)
Unit, [2-1](#)

Q

Query
Alarm Option, AIS, [12-12](#)
Alarms, [12-6](#)
All, [12-11](#) [12-23](#)
All Common Equipment, [12-20](#)
ANSI NPC Test Signal, [12-22](#)
Broadcast, [12-7](#)

Broadcast, All, [12-7](#)
Broadcast, From, [12-7](#)
Circuit Status, NPC, [12-7](#)
Circuit/Hardware Substrate Trace,
[12-8](#)
Configure, [12-13](#)
Cross-Connect Status Bus, [12-19](#)
Date, [12-9](#)
Destination Cross-Connect, [12-15](#)
DS1 Performance Monitoring Report
Schedule, [12-11](#)
DS1 Roll, [12-20](#)
DS3 Alarms, [12-6](#)
DS3 Bit Error Rate, [12-16](#)
DS3 Line Build Out, [12-15](#)
ECCN Error Source Register, [12-17](#)
Entity Equipage, [12-23](#)
Equalization, [12-24](#)
Equipage of ETSIs, [12-21](#)
Equipage Status, [12-23](#)
Equipage, Common, [12-20](#)
Equipment Connectivity, [12-7](#)
Equipped Multiplexer Interface Units,
[12-21](#)
Equipped Multiplexers in DS3 Unit,
[12-21](#)
Equipped NPCs, [12-22](#)
Equipped TSIs, [12-23](#)
Error Correction Location, [12-13](#)
Error Source Register, [12-16](#) [12-18](#)
Error Source Register Formatter,
[12-18](#)
Error Source Register FTMI, [12-18](#)
Error Source Register Main Proces-
sor, [12-17](#)
Error Source Register Multiplexer,
[12-19](#)
Error Source Register, Facility Line
Interface, [12-18](#)
Error Source Register, Multiplexer
Interface Unit, [12-19](#)
ESR for FTU or Substrate NPC, [12-17](#)
Facility Alarms, [12-6](#)
Feature Package, [12-9](#)
Framing Status of Substrate Multi-

plexor, [12-9](#)
From, [12-14](#) [12-15](#)
Full Cross-Connect Map, [12-8](#)
Hub Identifier, [12-14](#)
Hybrid DS3 Loopback, [12-24](#)
Impedance, [12-24](#)
Link Status and Protocol, [12-12](#)
Load, [12-11](#)
Location, [12-9](#)
Log, [12-16](#)
Loopback, [12-22](#)
Macro, [12-10](#)
Macro Attributes, [12-13](#)
Macro List, [12-10](#)
Macro/Map Space, [12-13](#)
Map, [12-13](#)
Map List, [12-10](#)
Markings, [12-15](#)
Marks, [12-14](#)
Memory Status, [12-11](#)
Network Processing Circuit Parameter, [12-12](#)
Non-Channelized, To, [12-15](#)
NPC Map, [12-10](#)
NPC State, [12-21](#)
NPC Time Slot Zero, [12-22](#)
NPCs Options, [12-11](#)
Partial Cross-Connect Map, [12-8](#)
Roll DS0, [12-19](#)
RTMAP/DLMAP, [12-8](#)
SCDG, [12-12](#)
Sequence, [12-14](#)
Software/Hardware Error Recovery, [12-10](#)
SSP, [12-17](#)
State, [12-21](#)
State Alarm Cut Off, [12-20](#)
State Unit DS3, [12-24](#)
Status Common Equipment, [12-20](#)
Status of Entities/Equipment, [12-24](#)
Status Register, [12-19](#)
Subrate Channel Information, Far-End, [12-8](#)
Subrate Channels, [12-24](#)
Subrate Cross-Connect, [12-16](#)

Synchronizer, [12-17](#)
Synchronizer Provisioning, [12-23](#)
Synchronizer State, [12-23](#)
Test Access Group NPC, [12-25](#)
Test Ports, [12-25](#)
Test-Access Group, [12-25](#)
Time Slot Zero Monitor, [12-22](#)
Timing Link Interface, [12-17](#)
Trunk Signaling Conversion State, [12-14](#)
Unit Protection State, [12-24](#)
User/Link Screening Option, [12-16](#)
Who, [12-9](#)
Query Line Number, [5-3](#)
Query Performance Monitoring Data for DA, TA, and PA Type NPCs, [3-3](#)

R

Recover Password, [12-6](#)
Related Documentation, xi
Release Facility Loopback, [2-9](#)
Release Test Port, [2-7](#)
Remove
 All ETSIs, [8-2](#)
 Clock Control Interface, [8-1](#)
 Cross-Connect Buffer (Non-CEF Only), [8-1](#)
 Cross-Connect Network Interface, [8-1](#)
 Facility Line Interface, [2-10](#)
 Formatter, [2-10](#)
 FTMI/DSPI, [8-4](#)
 Link, [8-2](#)
 Main Controller, [8-2](#)
 MMFG, [2-10](#)
 Multiplexer Interface Unit, [2-10](#)
 NPCs, [8-3](#)
 PMEM/SMEM, [8-3](#)
 Synchronizer, [8-3](#)
 Synchronizer Time Base/Clock Reference Oscillator, [8-4](#)
 Synchronizer TLI/SSP, [8-3](#)

Time Slot Interchange, [8-4](#)
TSI (Non-CEF Only), [8-1](#)
TSI on Cross-Connect Side
(Non-CEF Only), [8-2](#)
Unit Controller, [8-4](#)
Unit Format Converter, [8-4](#)
Remove ETSI, [8-2](#)
Remove RT/DL, [8-3](#)
Request PSW/USW/ALW/INH on
SLC**V-Rg-V**, [13-4](#)
Restore
Administrative Link, [9-2](#)
All ETSIs, [9-2](#)
Clock Reference Oscillator, [9-3](#)
Control and Clock Interface, [9-1](#)
Cross-Connect Buffer, [9-1](#)
Cross-Connect Network Interface,
[9-1](#)
Expanded Time Slot Interchange,
[9-2](#)
Facility Line Interface, [2-10](#)
Formatter, [2-11](#)
FTMI/DSPI, [9-4](#)
Main Controller, [9-2](#)
MMFG, [2-11](#)
Multiplexor Interface Unit, [2-11](#)
NPCs, [9-3](#)
PMEM/SMEM, [9-3](#)
Synchronizer, [9-3](#)
Synchronizer Timing Link Interface,
[9-3](#)
Time Slot Interchange, [9-4](#)
Time Slot Interchanges, [9-4](#)
TSI That Connects Units (Non-CEF
Only), [9-1](#)
Unit, [9-4](#)
Unit Controller, [9-4](#)
Restore RT/DL, [9-3](#)
Retrieve Memory Status, [12-11](#)
Retrieve Performance Monitoring Report
Schedule, [3-2](#)
Roll
DS0 Circuit, [6-2](#)
Roll, Facility, [6-2](#)

S

Save Component, [5-3](#)
Schedule DS1 Performance Monitoring
Report, [3-3](#)
Set Daily Facility Alarm Reporting Time,
[13-3](#)
Set Date, [13-2](#)
Stop Macro, [5-1](#)
Subrate
Change Test Access Split, [11-3](#)
Cross-Connection, [10-1](#) [10-2](#) [10-3](#)
Disconnection, [10-6](#) [10-7](#)
Disestablish Channel, [10-7](#)
Establish Channel, [10-5](#) [10-6](#)
Query Channels, [12-24](#)
Query Circuit/Hardware Subrate
Trace, [12-8](#)
Query Cross-Connect, [12-16](#)
Query Far-End Channel Information,
[12-8](#)
Query Multiplexor Framing Status,
[12-9](#)
Split Test Access, [10-5](#)
Terminated Cross-Connection, [10-2](#)
[10-3](#) [10-4](#)
Test Access, [10-1](#) [10-4](#) [10-5](#) [10-7](#)
Test Access, Terminate and Leave
Release, [11-6](#)
Subrate Established Channel, Change,
[7-2](#)
Subrate Terminate and Leave, Change,
[7-8](#)
Switch
FLI To Protection, [13-4](#)
FLI To Service, [13-4](#)
Inhibition of SLC**V-Rg-V**, [13-3](#)
MMFG To Protection, [13-4](#)
MMFG To Service, [13-5](#)
Synchronizer Time Base/Clock Refer-
ence Oscillator, Remove, [8-4](#)
Synchronizer Timing Link Interface,
Restore, [9-3](#)

Synchronizer TLI/SSP, Remove, [8-3](#)
 Synchronizer, Configure, [2-8](#)
 Synchronizer, Remove, [8-3](#)
 Synchronizer, Restore, [9-3](#)

T

Terminate and Leave Release, Subrate
 Test Access, [11-6](#)
 Terminate and Leave, Change, [7-8](#)
 Terminate-And-Leave-Active, Test
 Access, [11-3](#)
 Terminate-And-Leave-Release, Test
 Access, [11-6](#)
 Test Access
 Change Time Slot, [11-2](#)
 Disconnect Time Slot, [11-6](#) [11-7](#)
 Group Release, Nx64 kbit/s, [11-5](#)
 Looped, [11-7](#)
 Looped, Nx64 kbit/s, [11-7](#)
 Non-Channelized Test FAD, [11-2](#)
 Non-Channelized,, [11-5](#)
 Non-Channelized, Loop Facility,
[11-8](#)
 Non-Channelized, Monitor, Split,
 Loop, [11-1](#)
 Non-Channelized, NPC Release,
[11-6](#)
 Nx64 kbit/s, Monitor, [11-2](#)
 Query, Group, [12-25](#)
 Query, Group NPC, [12-25](#)
 Split, Subrate, [10-5](#)
 Subrate, [10-1](#) [10-4](#) [10-5](#) [10-7](#)
 Subrate Terminate and Leave
 Release, [11-6](#)
 Subrate, Change Split, [11-3](#)
 Subrate, Split, [10-5](#)
 Two-Way, [11-2](#) [11-3](#) [11-5](#)
 Two-Way, Hub, [11-3](#)
 Two-Way, Line Loopback, [11-1](#)
[11-7](#) [11-8](#)
 Two-Way, Monitor, [11-4](#)
 Two-Way, Monitor Nx64 kbit/s, [11-4](#)

Two-Way, Monitor Test Port, [11-1](#)
 Two-Way, Nx64 kbit/s, [11-3](#) [11-6](#)
 Two-Way, Nx64 kbit/s, Hub, [11-4](#)
 Two-Way, Split Nx64 kbit/s, [11-2](#)
 Test Port, Release, [2-7](#)
 Time Slot Interchange, Remove, [8-4](#)
 Time Slot Interchange, Restore, [9-4](#)
 Time Slot Interchanges, Restore, [9-4](#)
 Time Slot, Change Test Access, [11-2](#)
 TOX, Change Switch, [7-1](#)
 TSI (Non-CEF Only), Remove, [8-1](#)
 TSI on Cross-Connect Side (Non-CEF
 Only), Remove, [8-2](#)
 TSI That Connects Units, Remove, [9-1](#)
 Two-Way Cross-Connect, Multipoint,
[4-4](#)
 Two-Way Cross-Connection, [4-4](#)
 Two-Way Disconnection, [4-7](#) [4-8](#)
 Two-Way Non-Channelized Digital Signal
 Cross-Connection, [4-4](#)
 Two-Way Test Access, [11-2](#) [11-3](#) [11-5](#)
 Two-Way Test Access, Group Release,
[11-5](#)
 Two-Way Test Access, Hub, [11-3](#)
 Two-Way Test Access, Line Loopback,
[11-7](#) [11-8](#)
 Two-Way Test Access, Monitor, [11-4](#)
 Two-Way Test Access, Monitor Nx64
 kbit/s, [11-2](#)
 Two-Way Test Access, Nx64 kbit/s,
[11-3](#) [11-6](#)
 Two-Way Test Access, Split Nx64 kbit/s,
[11-2](#)

U

Unit Controller, Remove, [8-4](#)
 Unit Controller, Restore, [9-4](#)
 Unit Format Converter, Remove, [8-4](#)
 Unit, Restore, [9-4](#)
 Upgrade Frame, [13-5](#)
 User Password, Change, [1-1](#)
 User/Link Screening, Change, [1-5](#)

Utilities, Alarm Reporting, [3-3](#)
Utility Boot, [13-4](#)
Utility Clear Counter, State of a Single
 In-Service, [3-2](#)
Utility Clear Counter, State of All, [3-1](#)
Utility Clear DA/TA/PA NPC Parameters,
 [3-2](#)
Utility Clear Hardware/Software Error
 Recovery Log File, [3-1](#)

X

X.25 Link Parameters, Add, [1-4](#)

