SNA NRJE Node Manager's Guide

HP 3000 MPE/iX Computer Systems

Edition 3

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Preface

This manual describes Hewlett-Packard Company's Systems Network Architecture Network Remote Job Entry (SNA NRJE) product for both the MPE V (NRJE/V) and MPE XL (NRJE/XL) operating systems. Systems Network Architecture (SNA) is a comprehensive specification for distributed data processing networks, developed by IBM.

NOTE

In this manual, the term **NRJE** is used when the information being given is true for both NRJE/V and NRJE/XL. The terms **NRJE/V** and **NRJE/XL** are used when a distinction between the two subsystems is necessary.

NRJE allows HP 3000 users to submit batch jobs to a remote host system for processing. The host system uses one of the supported job entry subsystems in an SNA environment. You can submit a job and receive output by using either SNA NRJE commands or a set of procedures called **intrinsics**. If the data communications line is busy, your job is spooled and is automatically processed when the line becomes free. The IBM host sends output back to the remote SNA NRJE site for printing and storing on disk. SNA NRJE conforms to the protocols defined for a Physical Unit Type 2 (PU.T2), Logical Unit Type 1 (LU.T1) node in an SNA network.

This manual describes the steps for configuring SNA NRJE on the HP 3000 system.

Audience

This manual addresses the HP node manager responsible for planning, configuring, and monitoring the operation of an HP 3000 SNA data communications subsystem. A node manager also handles data communications activities associated with the link between SNA NRJE and the host. The node manager should have knowledge of the MPE operating system, be familiar with how the host system operates, and have HP 3000 node manager (NM) and network administrator (NA) capabilities.

Organization

This manual is divided into the following chapters and appendix:

Chapter 1 , “SNA NRJE Overview,” contains an overview of SNA NRJE and the components of the network.

Chapter 2 , “SNA NRJE Installation Guidelines,” discusses installation procedures.

Chapter 3 , “SNA NRJE Configuration,” explains how to use the NM configuration manager (NMMGR) to create a hierarchical configuration file for SNA NRJE.

Chapter 4 , “NA NRJE Workstation Startup and Shutdown,” describes how to establish and terminate SNA NRJE workstation sessions.

Chapter 5 , “SNA NRJE Troubleshooting,” gives you information about solving problems that might occur while installing, configuring, and running SNA NRJE.

Chapter 6 , “Commands,” contains the MPE and NRJE commands a node manager uses.

Appendix A , “Result Codes and Messages,” contains the messages you might encounter while using SNA NRJE.

Related HP Publications

As an SNA NRJE node manager, you can find related information in these manuals:

- *Getting Started With SNA Node Management* (MPE V only)
- *Using the Node Management Services Utilities* (MPE XL only)
- *SNA Link Services Reference Manual* (MPE V only)
- *SNA Link/XL Node Manager's Guide* (MPE XL only)
- *SNA NRJE User/Programmer Reference Manual*
- *HP SNA Products: Manager's Guide Host System Programmer's Reference*
- *HP SNA Products: ACF/NCP and ACF/VTAM Guide Host System Programmer's Reference*
- *HP SNA Products: Job Entry Subsystem Guide Host System Programmer's Reference*
- *MPE V Command Reference Manual*
- *MPE Software Pocket Guide*
- *MPE V System Operation and Resource Management Reference Manual*
- *MPE V Intrinsics Reference Manual*
- *MPE XL Commands Reference Manual*
- *HP SNA Server/Access User's Guide* (MPE V only)
- *HP SNA Server/Access User's Guide* (MPE XL only)

1 SNA NRJE Overview

Systems Network Architecture Network Remote Job Entry (SNA NRJE) is a data communications package that provides HP-to-IBM batch communications in a Systems Network Architecture (SNA) environment. With SNA NRJE, you can submit batch jobs for processing on an IBM host. A spool file is created to receive the input job files. Once communication with the host starts and the host begins to accept job input, each job is routed to its destination based on its position in the queue.

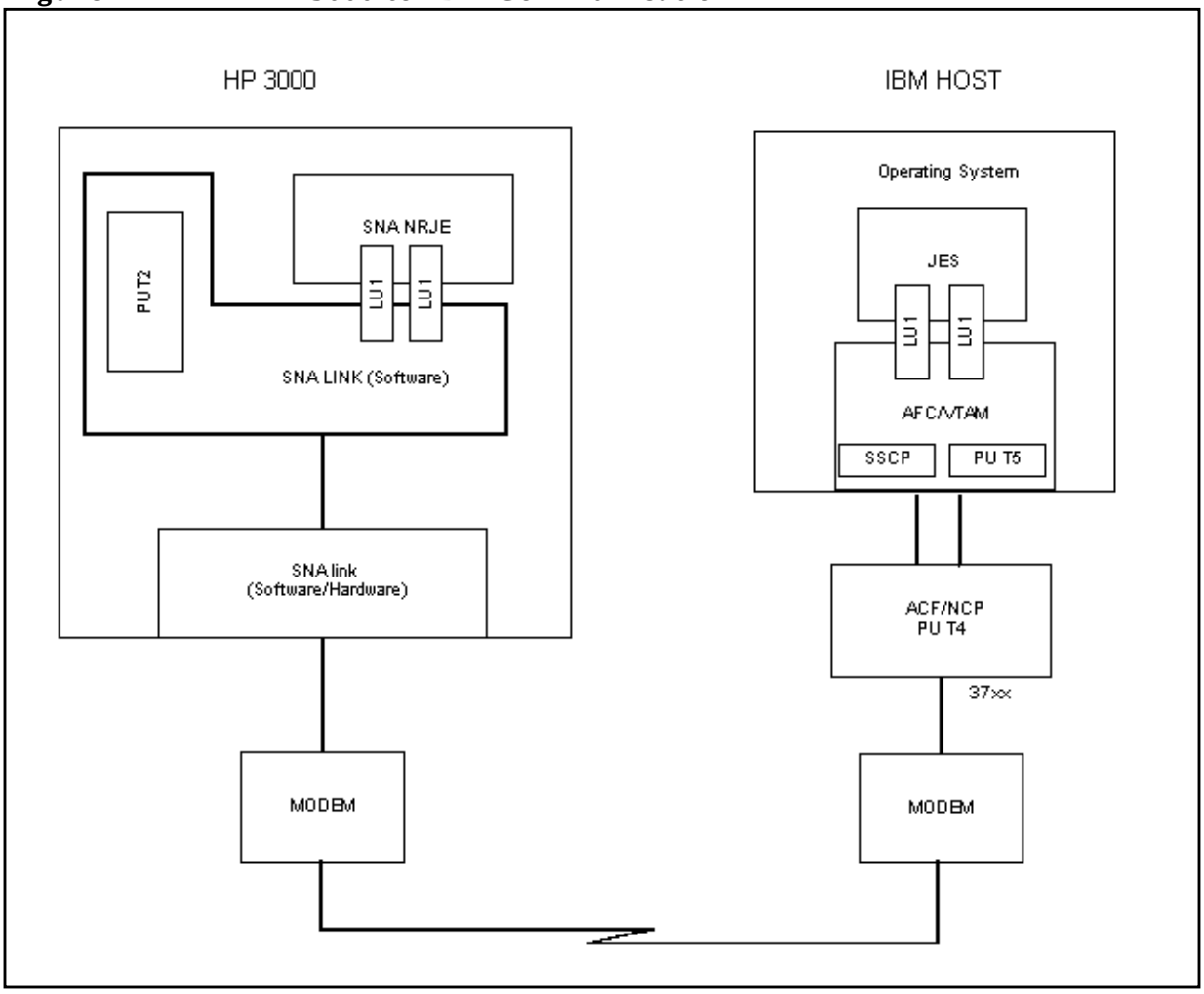
SNA NRJE workstations send jobs to the host over logical readers and receive output from the host over logical writers. A logical reader is configured for each workstation so that data can be transferred from the HP 3000 to the host. Workstations receive output from the host through logical writers.

NOTE

In this manual, the term **SNA link product** is used when the information being given is true for all of the SNA link products: SNA Link/V, SNA/SDLC Link/XL, and SNA/X.25 Link/XL. The terms **SNA Link/V**, **SNA/SDLC Link/XL**, and **SNA/X.25 Link/XL** are used when a distinction among the three products is necessary.

SNA NRJE uses the SNA link product, a bundled hardware and software product that supports a logical and physical connection in an SNA NRJE network. SNA NRJE and the SNA link product form an HP 3000 subsystem that allows the HP 3000 to emulate the functions of an IBM 8100 DPPX/RJE workstation. Architecturally, this is an SNA Physical Unit Type 2 (PU.T2), Logical Unit Type 1 (LU.T1) node. Figure 1-1 shows the different LU types that SNA NRJE can implement.

Figure 1-1 HP 3000-to-IBM Communication



2 SNA NRJE Installation Guidelines

To run SNA NRJE on your HP 3000, you and your HP representative must install the product and configure both your HP 3000 environment and the host system to support SNA NRJE. As part of the configuration process, you must ensure that the HP 3000 parameters match those on the host side. The necessary parameters are described in Chapter 3 , "SNA NRJE Configuration," of this manual.

This chapter assumes that installation tasks are divided between you (the node manager) and your HP representative.

Before the HP representative arrives to install SNA NRJE on the HP 3000, you must do the following:

1. Ensure that the modem link operates between the HP 3000 and the host. If you use HP modems, Hewlett-Packard will help you verify that these modems work.
2. Configure the host according to the procedures detailed in the *HP SNA Products* guides (see the list of related publications in the preface of this manual).

   Be sure to obtain a copy of the host system generation. Your HP representative will need this information later during SNA NRJE installation.
3. Ensure that the host system has the hardware and software requirements as listed in the *SNA NRJE User/Programmer Reference Manual*.
4. Ensure that the SNA link product has been installed by an HP representative. Remember, the SNA link product includes hardware (the INP and cable [for SNA Link/V] or the PSI and cables [for SNA/SDLC Link/XL and SNA/X.25 Link/XL]) and software (SNA Transport).

NOTE

Although SNA NRJE and SNA IMF can use the same SNA link, you must configure each service. For example, if you are installing SNA NRJE on a system that has SNA IMF, you must configure workstations, logical readers, logical writers, and so forth. Also, SNA NRJE and SNA IMF require separate Logical Units (LUs). For example, to use the same SNA link, you should devote LUs W through X to SNA NRJE and LUs Y through Z to SNA IMF, or vice versa.

After you do these preliminary installation tasks, your HP representative takes over and completes the installation of the software required for using SNA NRJE. Your HP representative installs the NRJE software and changes the I/O configuration, if needed.

Bulletin File

Additional configuration and user information not documented in any of the SNA NRJE manuals can be found in the file BULLETIN.NRJE.SYS.

NRJE Segments

The segments listed in Table 2-1 are necessary to run SNA NRJE. On MPE V and releases 1.1, 1.2, and 2.0 of MPE XL, all four segments are located in SL.PUB.SYS. On MPE XL release 2.1 and later, NRJEINT, NRJEMISC, and NRJEMISC2 are located in NRJEXL.NRJE.SYS. NRJEMISC3 is located in SL.PUB.SYS for all versions of SNA NRJE.

Table 2-1 NRJE Segments

Segment Name	Contents
NRJEINT	NRJE intrinsics
NRJEMISC	NRJE miscellaneous procedures
NRJEMISC2	More NRJE miscellaneous procedures
NRJEMISC3	More NRJE miscellaneous procedures

NRJE Product Files

These NRJE product files must be in NRJE.SYS unless otherwise indicated. Refer to Table 2-2.

Table 2-2 NRJE Files

File Name	Contents
IONRDR0	NRJE Virtual Reader Driver. IONRDR0 must be in PUB.SYS (MPE V only).
NRJE	NRJE subsystem command interpreter.
NRJECAT	NRJE message catalog.
NRJECONS	NRJE console program. This program is run as a son process of the NRJE command interpreter.
NRJELU	LU program. Son process of NRJEMON.
NRJELUT	LU program with internal tracing. Son process of NRJEMON. (MPE V and MPE XL releases prior to 2.1 only.)
NRJEMON	NRJE monitor. This program is run by an MPE job that is streamed in response to a command to activate the workstation.
NRJEWEL	NRJE welcome message text.
NSHUT	A system process to shut down NRJE.
SAMPEXIT	Sample NRJE exit procedure file.
SAMPTABL	Sample Formid Lookup Table file.
TESTJES2	Sample JCL file for testing NRJE on JES2. This job is run by the HP representative after NRJE installation.
TESTJES3	Sample JCL file for testing NRJE on JES3. This job is run by the HP representative after NRJE installation.
TESTPOWR	Sample JCL file for testing NRJE on VSE/POWER. This job is run by the HP representative after NRJE installation.

3 SNA NRJE Configuration

This chapter describes how to use the NM configuration manager (NMMGR) to create or modify a hierarchical configuration file for SNA NRJE. For NRJE/V, you also must configure the virtual reader through the SYSDUMP utility. (See the *SNA Link Services Reference Manual*.)

NOTE

Before you can configure SNA NRJE, you must have successfully configured the SNA link (including logging). Configuration of the SNA link is described in the *SNA Link Services Reference Manual* (for SNA Link/V) and the *SNA Link/XL Node Manager's Guide* (for SNA/SDLC Link/XL and SNA/X.25 Link/XL). You also must coordinate the SNA NRJE configuration with the ACF/NCP, ACF/VTAM, JES2 or JES3, and VSE/POWER host configurations. Host configuration is described in the *HP SNA Products* guides. (See the list of related publications in the preface of this manual.)

This chapter contains the following information:

- A description of data required from the host configuration.
- An overview of the NMMGR configuration for SNA NRJE.
- Directions for SNA NRJE configuration.

Data Required From the Host Configuration

Data in an NRJE configuration file must correspond to information from the host configuration. Before using NMMGR, you should have certain information from the host configuration.

You must coordinate the SNA NRJE configuration with the ACF/NCP, ACF/VTAM, JES2 or JES3, and VSE/POWER host configurations. The *HP SNA Products* guides explain these configurations. (See the list of related publications in the preface of this manual.) Table 3-1 shows the relationship between items from the host configuration and items in the NRJE configuration file. To determine whether the value of a host macro must match the value entered in the corresponding NMMGR screen field, see that field's description later in this chapter.

Table 3-1 AFC/NCP and ACF/VTAM Macro Corresponding Values

Host Configuration Macro and Operand	Field in NMMGR Screen	SNA NRJE NMMGR Screen
PU *puname*	SNAnode Name	Workstation Data

Table 3-2 shows the relationship between items from the host configuration and items in the NRJE configuration file.

Table 3-2 AFC/NCP and ACF/VTAM Logmode Table

Host Configuration Logmode Table Macro and Parameter		Field in NMMGR Screen	SNA NRJE NMMGR Screen
MODEENT	LOGMODE	Logmode Identifier	Workstation Data
	RUSIZES	Logical Unit RU Size	Workstation Data
	PRIPROT	Compression On	Reader Data

Table 3-3 shows the relationship between items from the host configuration and items in the NRJE configuration file.

Table 3-3 JES2 Global Parameter Corresponding Values

Host Configuration Global Parameter and Subparameter		Field in NMMGR Screen	SNA NRJE NMMGR Screen
&STDFORM		Host Standard Print Form Name	Workstation Data Page 2
		Host Standard Punch Form Name	Workstation Data Page 2
LOGON*n*	APPLID	APPLID	Workstation Data

NOTE If you are using JES2 version 1.3.6 (or later) or 2.1.5 (or later), the &STDFORM parameter is different; use the migration tables to determine the correct &STDFORM. For JES2 version 3 (or later), use COMPRESS=YES instead of COMP.

Table 3-4 shows the relationship between items from the host configuration and items in the NRJE configuration file.

Table 3-4 JES2 Macro Corresponding Values

Host Configuration Macro and Parameter		Field in NMMGR Screen	SNA NRJE NMMGR Screen
LINE*nnn*	PASSWORD	Line Password	Workstation Data
RMT*nnnn*		Remote Node Number	Workstation Data
	COMP or COMPRESS=YES	Compression On	Reader Data
	PASSWORD	Term Password	Workstation Data
	BUFSIZE	Logical Unit RU Size	Workstation Data
	NUMRD	Number of Readers	Reader Data
R*nnnn*.PR*m*		Writer Name (PR*m*)	Writer List
		New Name (PR*m*)	Writer List
	PRWIDTH	MPE configured record size for the default device (SYSDUMP).	none
R*nnnn*.PU*m*		*Writer Name* (*PUm*)	Writer List
		New Name (PU*m*)	Writer List
	LRECL	MPE configured record size for the default device (SYSDUMP).	none

Table 3-5 shows the relationship between items from the host configuration and items in the NRJE configuration file.

Table 3-5 JES3 Global Parameter Corresponding Values

Host Configuration Global Parameter and Subparameter		Field in NMMGR Screen	SNA NRJE NMMGR Screen
BUFFER	BUFSIZE	Logical Unit RU Size	Workstation Data
OUTSERV	FORMS	Host Standard Print Form Name	Workstation Data Page 2
	CDSTOCK	Host Standard Punch Form Name	Workstation Data Page 2
COMMDEFN	APPLID	APPLID	Workstation Data

Table 3-6 shows the relationship between items from the host configuration and items in the NRJE configuration file.

Table 3-6 JES3 Macro Corresponding Values

Host Configuration Macro and Parameter		Field in NMMGR Screen	SNA NRJE NMMGR Screen
RJPWS	P	Line Password	Workstation Data
	N	Remote Node Number	Workstation Data
	RD	Number of Readers	Reader Data
CONSOLE	JNAME	Remote Node Number	Workstation Data
DEVICE	JNAME	Remote Node Number	Workstation Data
		Writer Name (PR*m* or PU*m*)	Writer List
		New Name (PR*m* or PU*m*)	Writer List

Table 3-7 shows the relationship between items from the host configuration and items in the NRJE configuration file.

Table 3-7 VSE/POWER Macro Corresponding Values

Host Configuration Macro and Parameter		Field in NMMGR Screen	SNA NRJE NMMGR Screen
PRMT	REMOTE	Remote Node Number	Workstation Data
	PSWRD	Line Password	Workstation Data

NMMGR Configuration Overview

After you have completed the SYSDUMP configuration (for NRJE/V) to install the virtual reader, and after the link is configured, you are ready to configure NRJE. The configuration is done by using NMMGR to create or modify a configuration file. The basic operation of NMMGR is described in *Using the Node Management Services Utilities*; if you are not familiar with NMMGR, you should read that manual before continuing. Note that you must have node manager (NM) and network administrator (NA) capabilities to use NMMGR.

NOTE

When configuring SNA NRJE, the configuration file can be named anything you prefer. However, when you *run* SNA NRJE, it looks for a configuration file named `NMCONFIG.PUB.SYS`. For example, you could have these configuration files:

```
XYZ.CONFIG.SYS
CONFIG1.FILES.SYS
FILE3.CONFIG.SYS
```

If you wanted to use `FILE3.CONFIG.SYS` when you ran NRJE, you would have to rename or copy the file to `NMCONFIG.PUB.SYS` before you started NRJE.

NRJE workstations manage job transmission to the host by using **logical readers**. For NRJE/V, you configure a **virtual reader** into the I/O system through the SYSDUMP utility. This reader is an MPE spooled device that holds submitted jobs until they are transmitted to the host. When the system is rebooted, NRJE/XL will complete the configuration process for you, using the `Logical Device` configured on the NRJE Configuration: Reader Data screen for each workstation. Workstations receive output data sets from the host (by using **logical writers**). Each NRJE workstation is associated with an SNA node, which manages communication with the SSCP and passes the data to the link for transmission.

You configure these items for an NRJE workstation:

- **SNA node and workstation identification data**. This is the name of the SNA node that the workstation will use, and data that identifies the workstation to the host.
- **LU data**. A list of up to 16 LUs can be configured for a remote workstation, as well as an autostart field for each LU.
- **The virtual reader (for NRJE/V)**. This is transmission and translation information about the virtual reader. The virtual reader holds submitted jobs until they are transmitted to the host. This reader is an internal MPE spooling device and has no corresponding definition at the host.

- **Readers**. This is transmission and translation information about each logical reader. For JES2 and JES3, you must configure from one through seven readers. For VSE/POWER, one reader is assumed. The number of logical readers must match the number of readers configured on the host.
- **Writers**. This is translation and formatting information about each logical writer. The logical writers receive output data streams from the host. You must configure an NRJE writer for each printer or punch defined at the host.

CAUTION You should not modify the configuration for NRJE while it is running; if you do, the results are unpredictable. You can modify the configuration of another, non-running SNA subsystem while SNA NRJE is running.

NOTE For each workstation, you must also build a job stream to start the NRJE workstation monitor. See Chapter 4 , “NA NRJE Workstation Startup and Shutdown,” for more information.

CAUTION NRJE uses the files INPUT and OUTPUT for processing internal messages. Therefore, these files are reserved for use by NRJE and should not be specified by the user. Use of these files could result in corrupted user data.

Location of NMMGR Screens

Table 3-8 is an index of the NMMGR screens used in SNA NRJE Configuration; it lists the page in this manual on which each screen is shown.

Table 3-8 NMMGR Screen Index

Screen	Page
Figure 3-1, “Main Screen,”	Figure 3-1 on page 32
Figure 3-2, “HP-IBM Configuration Screen.”	Figure 3-2 on page 33
Figure 3-3, “NRJE Configuration Screen Example.”	Figure 3-3 on page 34
Figure 3-4, “NRJE Workstation Data Screen Example.”	Figure 3-4 on page 35
Figure 3-5, “Workstation Data Page 2 Screen Example.”	Figure 3-5 on page 40
Figure 3-6, “LU Data Screen Example.”	Figure 3-6 on page 43
Figure 3-7, “Reader Data Screen Example.”	Figure 3-7 on page 45
Figure 3-8, “Writer List Screen Example.”	Figure 3-8 on page 48
Figure 3-9, “Writer Data Screen Example.”	Figure 3-9 on page 50

NOTE NRJE logging is not configured through the NRJE Configuration screens. See “The Logging Facility” in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual for information on logging configuration.

Configuration File Validation

Validating the configuration file ensures that the configuration data is logically and syntactically correct. Each SNA service's data is also checked against the SNA node configuration data for correctness (for example, correct LU names). See Appendix A , "Result Codes and Messages," of this manual for SNA NRJE validation error messages.

You should validate the configuration file after completing any of these tasks:

- An initial configuration of one or more SNA nodes.
- An initial configuration of one or more SNA services.
- A modification of an existing configuration.

The configuration file is validated through NMMGR; see *Using the Node Management Services Utilities*.

Configuration File Critical Summary

NMMGR allows you to create a summary of critical NRJE configuration data. The critical summary is a printout of the NRJE data in the configuration file. It can be used to check current contents of the configuration file to determine whether the configuration is correct. The critical summary is generated through NMMGR; see *Using the Node Management Services Utilities*.

An example of a critical summary of SNA NRJE configuration data is shown here.

```
                CRITICAL SUMMARY - NRJE CONFIGURATION

THU, FEB 16, 1989,  2:49 PM
CONFIGURATION FILE NAME: NMCONFIG.PUB.SYS
Validated subsystem.

WSID NAME: R20

  SNANODE Name:              IBMNODE     Remote Number:              RMT20
  Log Mode:                  MODNRJ      LU RU Size:                 256
  APPLID:                    JES2        Job Entry Subsys:           JES2
  Term Password:             termpass    Line Password:              linepass
  Host Commands:             $           Job Management:             Y
  Auto Recovery:             Y           Host Command Prefix Char:   $
  Workstation Prompt:        R20         Console Mode Prompt:        CONS
  Punch Banner Code:         H           Punch Banner Job # Loc:     76
  Joblog Data File:          JOBLOGFL    Joblog Key File:            JOBLOGKY
  Host Standard Print Form:  STD         Host Standard Punch Form:   STD
  Console Scan Procedure:    CONSOLE-SCAN-PROC
  FormID Lookup Table:       NRJETABL.NRJE

LU DATA
  LU Name AutoStart   LU Name AutoStart  LU Name AutoStart LU Name AutoStart
  ------- ---------   ------- ---------  ------- --------- ------- ---------
  LUNAME01   N        LUNAME02   N       LUNAME03   N      LUNAME04   N
  LUNAME05   Y        LUNAME06   Y       LUNAME07   Y      LUNAME08   Y
  LUNAME09   N        LUNAME10   Y       LUNAME11   N      LUNAME12   Y
  LUNAME13   Y        LUNAME14   N       LUNAME15   Y      LUNAME16   N


READER DATA
  Logical Device:      999   Chain Size:      10  Translation Indicator  255
  Number of Readers:   1     Compression On:  Y
WRITER LIST
  Name    Destination  Forced  Pri   Translation Indicator  Writer Exit Proc
  ----    ----------   ------  ---   ---------------------  ----------------
  PR5     CLASS001     N       14    255                    ABCDEFGHIJKLMNOP
  PR1     12345678     N       8     -1                     WRITER-EXIT-PROC
  PR2     LKDF         N       8     0                      SLKDFSDLKFSFDLKF
  PR3     SDKFJ        N       8     0
  PR4     SKDFJ        N       8     0                      LKJKJGKJGG
  PR6     PR6DATA      N       8     255                    WRITEREXITPROCED
  PR7     'LASKD'      Y       8     200                    LKDJFAKDSJ
  PU      LKLH         N       8     138                    LKJKJNEF

--------------------------------------------------------------------------------
WSID NAME: R21
     .
     .
     .
```

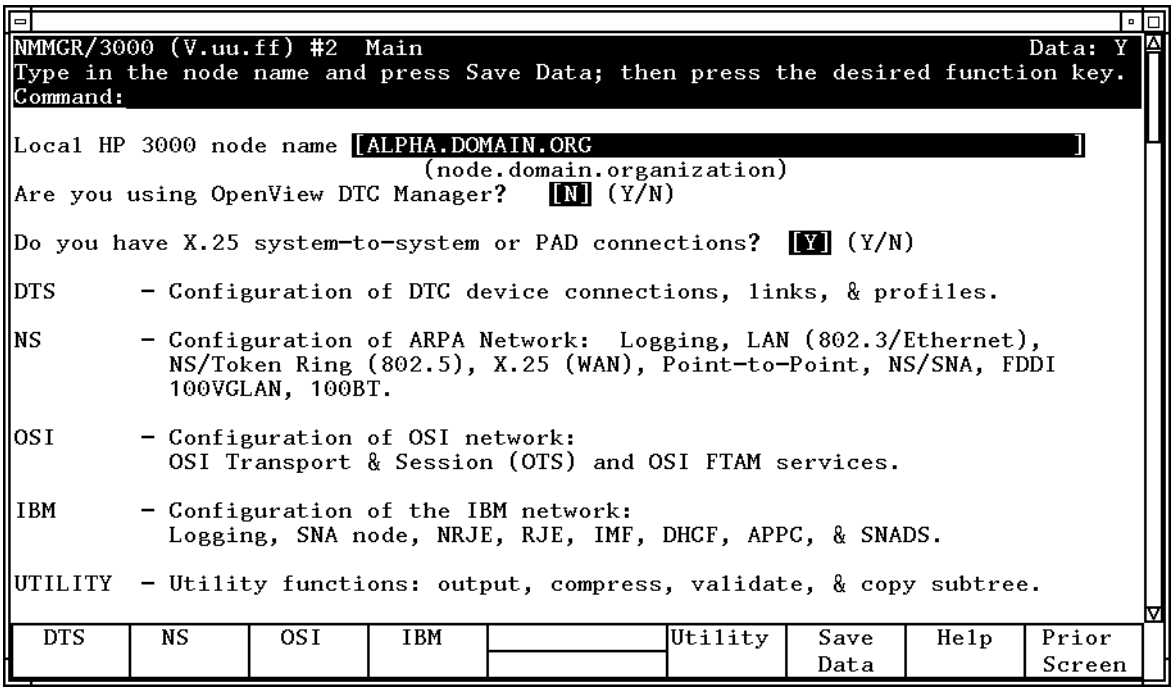
Configuring SNA NRJE

Once you have opened the configuration file, you are placed in the NMMGR Main screen.

Main Screen

From the Main Screen you can select the category of network subsystems you want to configure, as shown in Figure 3-1.

Figure 3-1 Main Screen

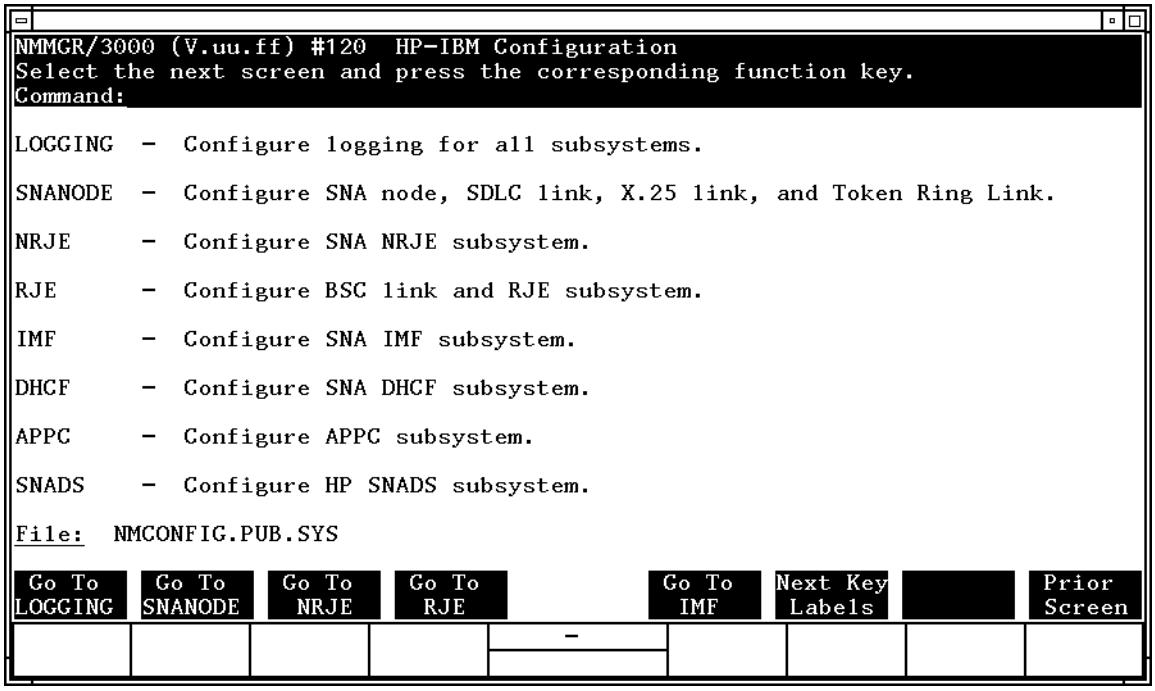


To access the NMMGR branch for configuring SNA NRJE, press **[f4] (Go To HP-IBM)**. This places you at the HP-IBM Configuration screen.

HP-IBM Configuration Screen

From the HP-IBM Configuration Screen you can select the item you want to configure, see Figure 3-2.

Figure 3-2 HP-IBM Configuration Screen

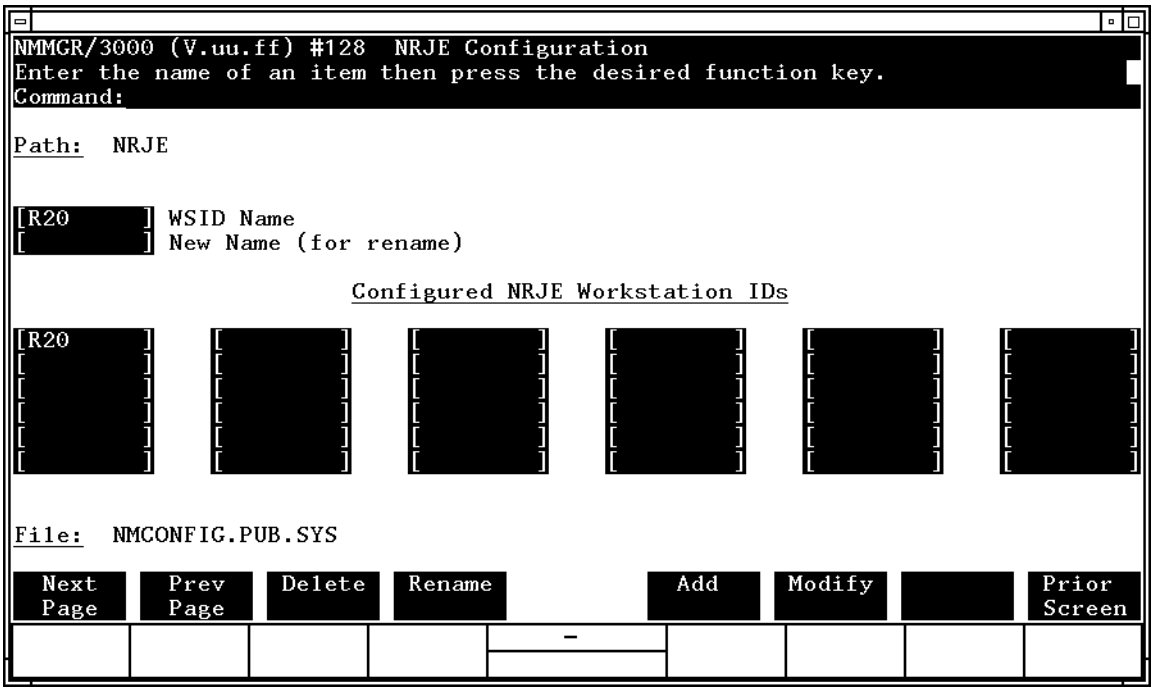


To select NRJE configuration press **[f3] [Go To NRJE]**.

NRJE Configuration Screen

After you have selected NRJE configuration, NMMGR displays the NRJE Configuration Screen, as shown in Figure 3-3. (You can go directly to this screen from any screen by typing @NRJE in the command window and pressing **[ENTER]**.) Here you specify information about the new NRJE workstation you are configuring or the existing workstation you are modifying.

Figure 3-3 NRJE Configuration Screen Example



Fields

Path

For display only. The NMMGR branch you are in.

WSID Name

The name of the new workstation you are configuring, or the existing NRJE workstation whose configuration you are modifying. The name can be up to eight alphanumeric characters long; the first character must be alphabetic.

New Name

The new name of an existing NRJE workstation. The name can be up to eight alphanumeric characters long; the first character must be alphabetic.

Once you have entered the new name, press **[f4] [Rename]**; the workstation is then renamed.

Configured NRJE Workstation IDs

For display only. The names of the NRJE workstations that have been configured. You can configure a maximum of 64 workstations in a configuration file (use **[f1] [Next Page]** to display more

fields); no more than 8 workstations can be active at one time.

File

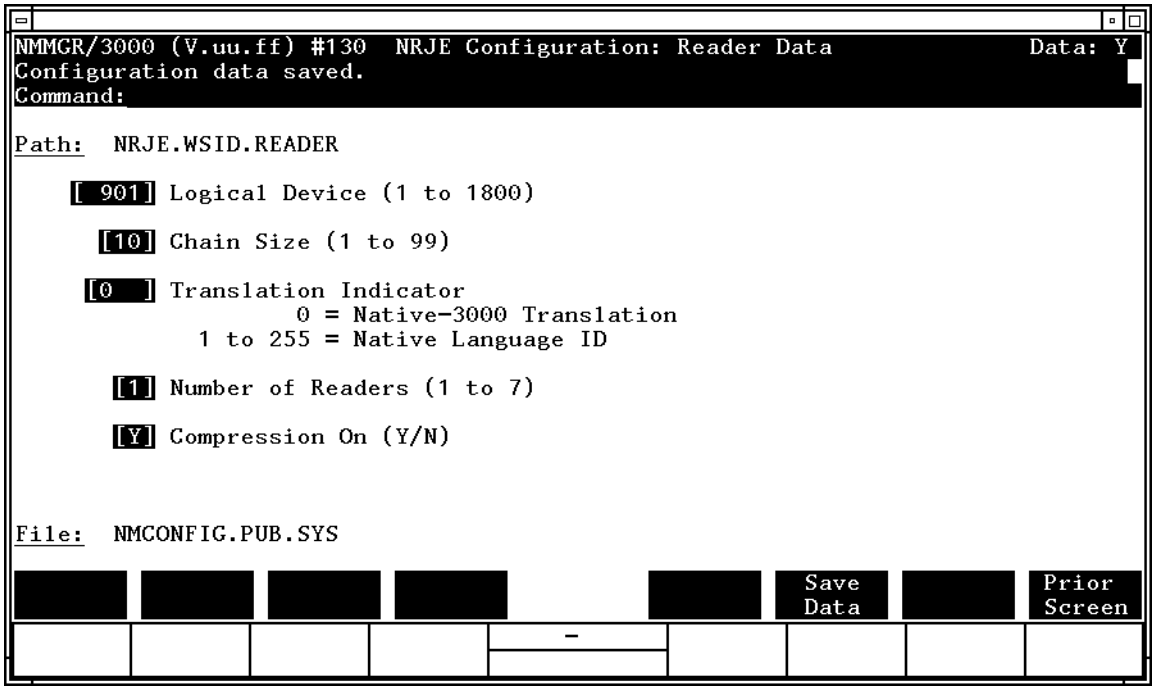
For display only. The name of the configuration file.

Once you have entered the name of the workstation, press **[f5] [Add]** if this is a new configuration, or press **[f6] [Modify]** if you are modifying a configuration. This places you at the NRJE Configuration: Workstation Data screen.

Workstation Data Screen

After you have selected a workstation, NMMGR displays the NRJE Configuration: Workstation Data Screen, as shown in Figure 3-4. (You can go directly to this screen from any screen by typing @NRJE.*wsid* in the command window and pressing **[ENTER]**.) Here you specify the SNA node to be associated with the workstation, and data to identify the workstation to the host.

Figure 3-4 NRJE Workstation Data Screen Example



Fields

Path

For display only. The NMMGR path for this screen. It includes the name of the NRJE workstation you are configuring.

SNAnode Name

Required. The name of the SNA node the workstation is to use.

Host Configuration: For troubleshooting purposes, we strongly recommend that this match the *puname* operand of the PU macro that defines this node on the host (VTAM); see Table 3-1.

Remote Node Number

Required. This identifies the workstation to the host.

Host Configuration:

- JES2: This must match the RMT*nnnn* macro for the SNA node this workstation is to use; see Table 3-4.
- JES3: This must match the *N* parameter of the RJPWS macro, the *JNAME* parameter of the CONSOLE macro, and the *JNAME* parameter of the DEVICE macro; see Table 3-6.
- VSE/POWER: This must match the *REMOTE* parameter of the PRMT macro; see Table 3-7.

Line Password

The password for the supported host job entry subsystem.

Default: Blank (no password)

Host Configuration:

- JES2: This must match the *PASSWORD* parameter of the LINE*nnn* macro; see Table 3-4.
- JES3: This must match the *P* parameter of the RJPWS macro; see Table 3-6.
- VSE/POWER: This must match the *PSWRD* parameter of the PRMT macro; see Table 3-7.

Logmode Identifier

An entry in the Logmode Table. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

Default: Blank (use the first entry in the Logmode Table)

Host Configuration: This must match the *LOGMODE* parameter of the MODEENT macro in the Logmode Table entry used by this workstation (VTAM); see Table 3-2.

APPLID

Required. The VTAM application identifier for the host job entry subsystem. If you do not know the correct identifier to enter here, ask the host system programmer.

Host Configuration:

- JES2: This must match the *APPLID* subparameter of the LOGON*n* global parameter; see Table 3-3.
- JES3: This must match the *APPLID* subparameter of the *COMMDEFN* global parameter; see Table 3-5.

Term Password

The terminal password. You must type the case (upper case or lower case) of each character exactly as it was specified on the host.

Default: Blank (no password)

Host Configuration:

- JES2: This must match the *PASSWORD* parameter of the RMT*nnnn* macro; see Table 3-4.
- JES3: Do not specify.
- VSE/POWER: Do not specify.

Workstation Prompt

Required. The prompt for terminal users of this workstation. Leading or imbedded blanks are not removed.

Default: The greater-than sign (>)

Console Mode Prompt

The prompt for the owner of the workstation console.

Default: Blank (no prompt)

Job Entry Subsystem

Required. The subsystem the host is running. Enter JES2, JES3, or POWER (for VSE/POWER).

Host Command Prefix Char

Required. The character preceding all host console commands.

Host Configuration:

- JES2 and JES3: The command prefix can be configured; this parameter must match the prefix specified in the host job entry subsystem configuration.
- VSE/POWER: The value entered here is used interactively only. VSE/POWER commands must be entered using this prefix. Any non-interactive VSE/POWER command must still be preceded by

  *Δ . . Δ

  (Δ represents a blank).

Allowed Host Commands

The host commands users without NM capabilities are allowed to include in jobs submitted to the host. Multiple commands can be specified by separating them with semicolons (;). NRJE will compare the value (up to the first blank character) in this field with the command entered. If the characters match, the command is transmitted to the host.

Default: All blanks

Examples:

Allowed Host Commands	**Explanation**
$D	Allows all JES2 commands that start with “$D”.
$D; $C; $L	Allows all JES2 commands that start with “$D”, “$C”, or “$L”.
$	Allows all JES2 commands.
*I	Allows all JES3 commands that start with “*I”.
all blanks	No commands are allowed.

Auto Recovery

Required. Enter Y if you want NRJE to try to recover if SNA Transport reports a link error; NRJE will keep trying to recover until it is successful.

Default: Y

Job Management

Required. Enter Y to cause the output routing options (PRINT, PUNCH, and FORMS) of the SUBMIT command to be supported; N, otherwise.

Default: Y

Logical Unit RU Size

Required. The maximum size of the RUs, in bytes, that NRJE can send to the host.

Values: 256, 512, and 768 (integer)

Default: 256

Host Configuration: This must match the *RUSIZES* parameter of the MODEENT macro in the Logmode Table entry used by the workstation; see Table 3-2. Note that in the MODEENT definition the RU sizes are specified in hexadecimal (for example, X'85' for 256).

- JES2: This must match the *BUFSIZE* parameter in the RMT*nnnn* macro; see Table 3-4. Note that the *BUFSIZE* parameter overrides the *RUSIZES* parameter mentioned above.
- JES3: This must match the *BUFSIZE* subparameter of the *BUFFER* global parameter; see Table 3-5. Note that the *BUFSIZE* subparameter overrides the *RUSIZES* parameter mentioned above.
- VSE/POWER: 256 is the only valid value.

File

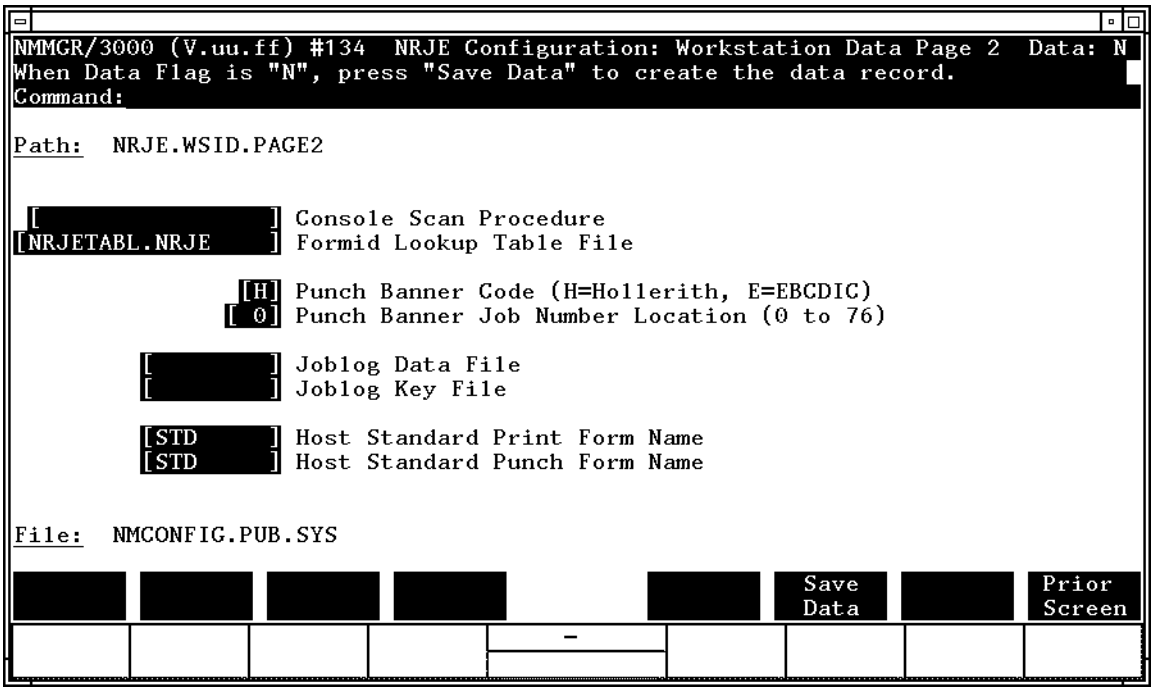
For display only. The name of the configuration file.

Once you have entered all of the necessary information on this screen, press **[f6] [Save Data]**. After the information has been processed, press **[f4]** (**Go To PAGE2**) to specify more information.

Workstation Data Page 2 Screen

This screen is a continuation of the NRJE Configuration: Workstation Data Screen, as shown in Figure 3-5. Select this screen by pressing **[f4]** (**Go To PAGE2**) on the Workstation Data screen. (You can go directly to this screen from any screen by typing @NRJE.*wsid*.PAGE2 in the command window and pressing **[ENTER]**.) Here you specify more information about the workstation.

Figure 3-5 Workstation Data Page 2 Screen Example



Fields

Path

For display only. The NMMGR path for this screen. It includes the name of the NRJE workstation you are configuring.

Console Scan Procedure

The name of a user-defined procedure which scans the host console for an “on reader” message. For further information about creating your own procedure, see the *SNA NRJE User/Programmer Reference Manual*. If no procedure name is specified, NRJE uses an internal parsing algorithm to decode the messages.

Formid Lookup Table File

The file (*filename.group*) used to route forms output. This file is created by the user, and it must be in the SYS account; the filename and group are determined by the user. See the *SNA NRJE User/Programmer Reference Manual* for more information.

Note that a sample Formid Lookup Table file is provided in the SAMPTABL file in NRJE.SYS.

Default: NRJETABL.NRJE

Punch Banner Code

Required. The code the punch banner is in. Enter H for Hollerith, or E for EBCDIC.

Default: H

Punch Banner Job Number Location

Required. The location in which the host job number begins in a punch banner.

Range: 0 – 76 (integer)

Default: 0 (the beginning of the banner)

Joblog Data File

Required. The data file (in NRJE.SYS) containing information about each job submitted. This file is created by SNA NRJE and given the name specified here when the workstation is activated for the first time; after that, the file is appended to. This file name must be unique for each workstation.

Joblog Key File

Required. The key file (in NRJE.SYS) used to access the Joblog Data File. This file is created by SNA NRJE and given the name specified here when the workstation is activated for the first time; after that, the file is appended to. This file name must be unique for each workstation.

Host Standard Print Form Name

The default print form name for the workstation. This must match the name of the form in the Peripheral Data Information Record (PDIR) for output routed to the standard form on a print device. To determine this, see the *SNA NRJE User/Programmer Reference Manual*.

Default: STD

Host Configuration:

- JES2: This must match the *&STDFORM* global parameter; see Table 3-3. Note that if you are using JES2 version 1.3.6 (or later) or 2.1.5 (or later), the *&STDFORM* parameter is different; use the migration tables to determine the correct *&STDFORM*. If *&STDFORM* is not specified, enter STD here.

- JES3: This must match the *FORMS* subparameter of the *OUTSERV* global parameter; see Table 3-5. If FORMS is not specified, enter 1PRT here.
- VSE/POWER: Enter all blanks.

Host Standard Punch Form Name

The default punch form name for the workstation. This must match the name of the form in the Peripheral Data Information Record (PDIR) for output routed to the standard form on a punch device. To determine this, see the *SNA NRJE User/Programmer Reference Manual*.

Default: STD

Host Configuration:

- JES2: This must match the *&STDFORM* global parameter; see Table 3-3. Note that if you are using JES2 version 1.3.6 (or later) or 2.1.5 (or later), the *&STDFORM* parameter is different; use the migration tables to determine the correct *&STDFORM*. If *&STDFORM* is not specified, enter STD here.
- JES3: This must match the *CDSTOCK* subparameter of the *OUTSERV* global parameter; see Table 3-5. If *CDSTOCK* is not specified, enter 5081 here.
- VSE/POWER: Enter all blanks.

File

For display only. The name of the configuration file.

Once you have entered all of the necessary information on this screen, press **[f6] [Save Data]**.

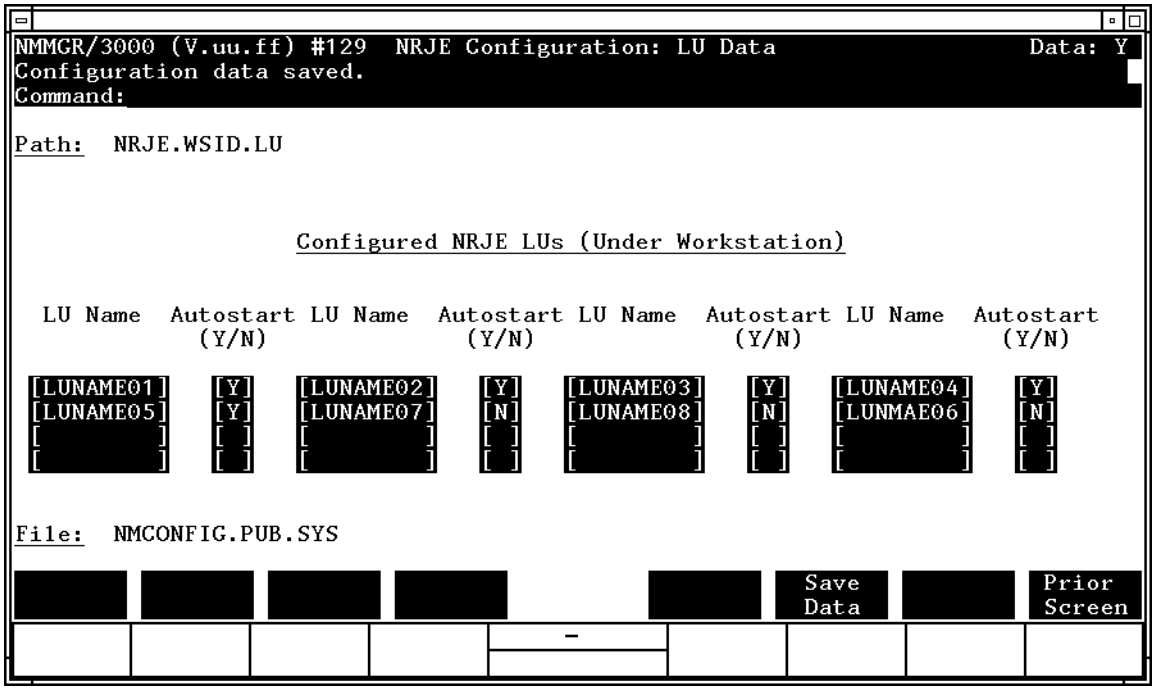
After the information is processed, press **[f8] [Prior Screen]** to redisplay the NRJE Configuration: Workstation Data screen. Then, if you need to configure LUs for the workstation, press **[f1]** (**Go To LU**). Otherwise, press **[f8] [Prior Screen]** until you get to the NMMGR menu screen or select screen you need next.

LU Data Screen

Once you have specified all of the workstation data, you are ready to configure the LUs for the workstation. You do this on the NRJE Configuration: LU Data Screen, as shown in Figure 3-6. Select this screen by pressing **[f1]** (**Go To LU**) on the NRJE Configuration: Workstation Data Screen. (You can go directly to this screen from any screen by typing @NRJE.*wsid*.LU in the command window and pressing

[ENTER].) The LUs implement the logical readers and the logical writers. Note that the LUs are pooled: A given LU can implement any of the logical readers or writers.

Figure 3-6 LU Data Screen Example



Fields

Path

For display only. The NMMGR path for this screen. It includes the name of the workstation whose LUs you are configuring.

Configured NRJE LUs (Under Workstation)

The names of the LUs you want to configure for the workstation. You can configure a maximum of 16 LUs for a workstation.

LU Name

For NRJE/V, this is the name of an SNA node class configured on the MPE V SNA Configuration: Classes screen. For NRJE/XL, this is the LU Name (not the NAU number) of an LU as it is configured on the MPE XL SNANode Configuration: PU and LU Data screen.

The name can be up to eight alphanumeric characters long; the first character must be alphabetic.

Autostart

Enter Y if you want the LU to be automatically initialized when the workstation is started up; N, otherwise. You can override this at workstation startup time. Note that you cannot enter a value in this field if a value is not also entered in the corresponding LU Name field.

Default: N

File

For display only. The name of the configuration file.

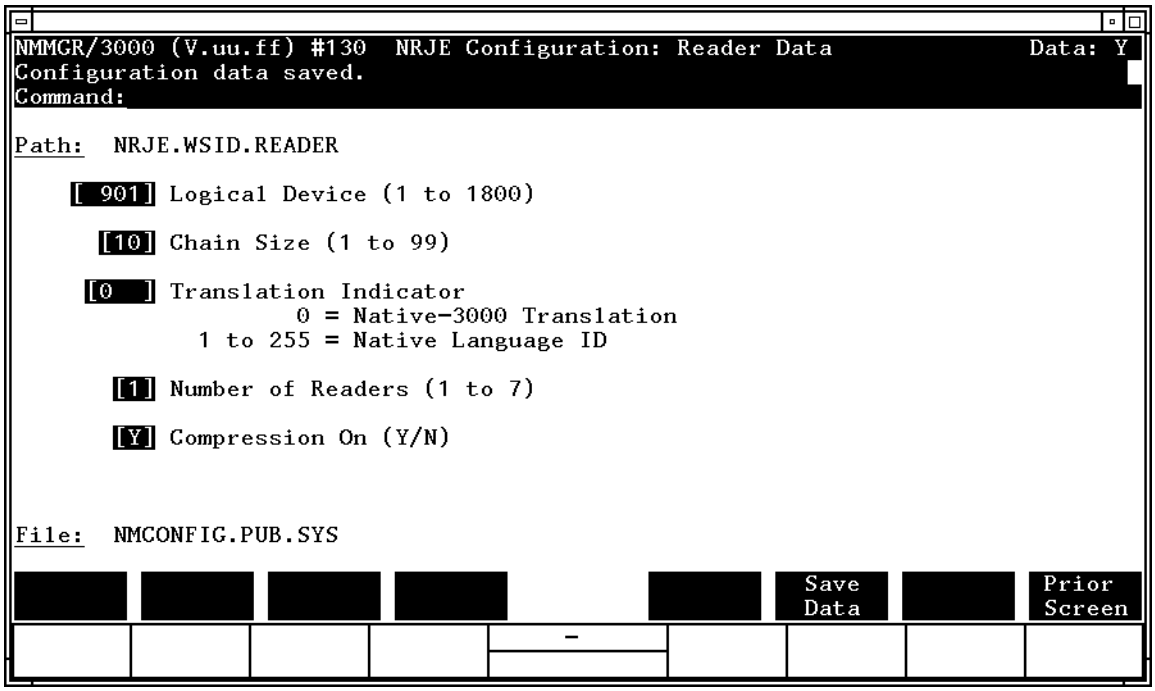
Once you have entered the data for all of the LUs, press **[f6] [Save Data]**.

After the information is processed, press **[f8] [Prior Screen]** until you get back to the NRJE Configuration: Workstation Data screen. Then, if you need to configure the virtual reader for the workstation, press **[f2]** (**Go To READER**).

Reader Data Screen

Once you have configured the LUs for the workstation, you should configure the workstation's virtual reader next. You do this on the NRJE Configuration: Reader Data Screen. Select this screen by pressing **[f2]** (**Go To READER**) on the NRJE Configuration: Workstation Data screen. (You can go directly to this screen from any screen by typing @NRJE.*wsid*.READER in the command window and pressing **[ENTER]**.) NRJE spools submitted jobs to the virtual reader. If the communications line to the host is down, NRJE holds jobs in the queue until the line is active. NRJE then transmits the jobs according to their position in the queue. You configure only one reader for each workstation. This reader is an internal MPE spooling device and does not correspond to readers configured at the host.

Figure 3-7 Reader Data Screen Example



Fields

Path

For display only. The NMMGR path for this screen. It includes the name of the workstation whose virtual reader you are configuring.

Logical Device

Required. The ldev to which NRJE will spool submitted jobs. For NRJE/V, you must configure this ldev into the I/O system by using the SYSDUMP utility (see the *SNA Link Services Reference Manual*); this must be followed by a cold start. This ldev must not be used for anything else. When the system is rebooted, NRJE/XL will complete the configuration process for you.

The ldev number for the NRJE reader should be above 900 to avoid conflicts. Ldevs below 900 may be used by other devices including virtual terminals. Do not specify the same reader ldev for workstations that might be simultaneously active.

SYSDUMP (MPE V only): Configure the ldev as a type 22 subtype 2 device. The DRT must be

back-referenced to the ldev number of the INP or the system disk. Set the record width to 40 words; set the unit, channel, and output device to 0. Specify driver IONRDR0.

Chain Size

Required. The maximum number of RUs that NRJE will transmit before requiring a definite response from the host. You can get higher throughput with larger values, but if line trouble occurs, the data might have to be retransmitted from the beginning of the chain. Also, if you are using only a few LUs, specifying a larger value here might impact remote console response time.

Range: 1 – 99 (integer)

Default: 10

Translation Indicator

Required. The type of translation NRJE will perform on jobs sent to the host:

- 0 = Native – 3000 translation

  Input in the Native–3000 language (ASCII) is translated to EBCDIC before it is sent to the host.

- 1 – 255 = Native Language ID

  An integer that corresponds to 8-bit languages other than Native–3000. Input in the language chosen is translated to EBCDIC before it is sent to the host.

  Invalid values are:

  201 Simplified Chinese
  211 Traditional Chinese
  221 Japanese
  231 Korean

  For more information on Native Language Support, see the *Native Language*, *Message Catalogs*, and *User Logging* manual.

  Default: 0

Number of Readers

Required. The number of logical host readers that the NRJE remote workstation will use. (Also see the LU Data screen description earlier in this chapter.)

Range: 1 – 7

Default (JES2 and JES3): 1

Host Configuration:

- JES2: This must be less than or equal to the *NUMRD* parameter of the RMT*nnnn* macro; see Table 3-4.
- JES3: This must be less than or equal to the *RD* parameter of the RJPWS macro; see Table 3-6.
- VSE/POWER: This field is ignored (because one reader is assumed).

Compression On

Required. Enter Y if the host accepts compressed in-bound data; N, otherwise.

Default: Y

Host Configuration: This must match the *PRIPROT* parameter of the MODEENT macro in the Logmode Table entry used by this workstation (VTAM); see Table 3-2.

- JES2: If you specify Y, the *COMP* parameter must be specified in the RMT*nnnn* macro for the workstation; see Table 3-4. Starting with version 3 (or later) of JES2, use COMPRESS=YES instead of COMP.
- JES3: Does not apply.
- VSE/POWER: You must specify N, because VSE/POWER does not support compressed in-bound data.

File

For display only. The name of the configuration file.

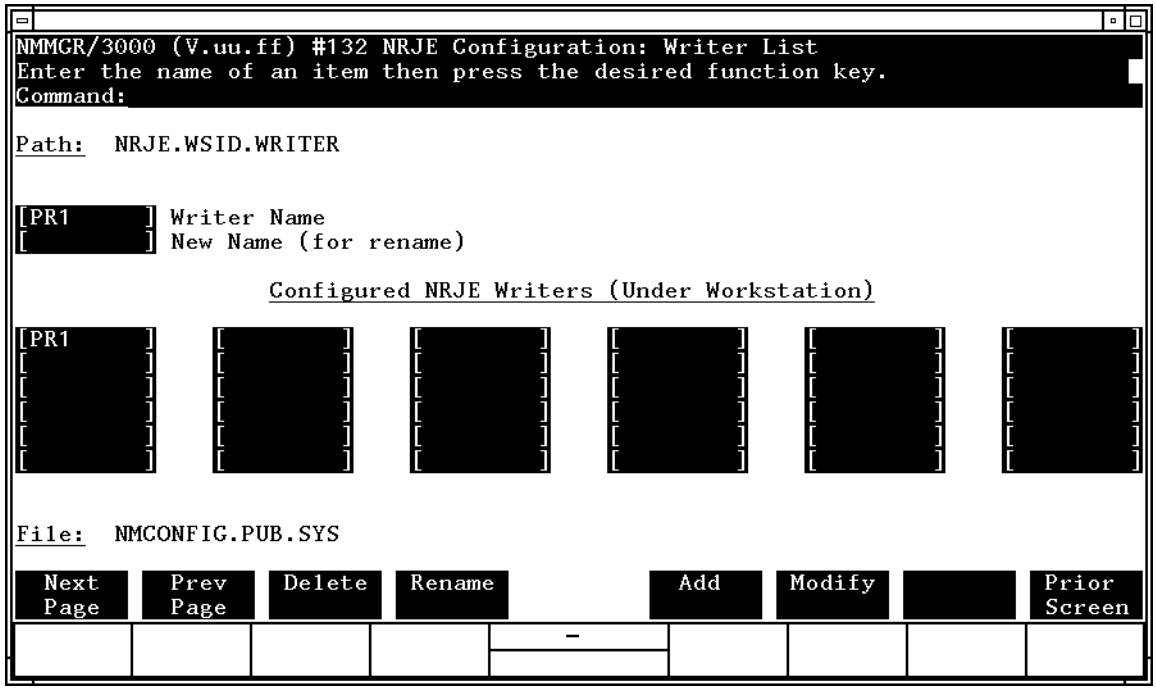
Once you have configured the readers for the workstation, press **[f6] [Save Data]**.

After the information is processed, press **[f8] [Prior Screen]** until you get back to the NRJE Configuration: Workstation Data screen. Then, if you need to configure the virtual writers for the workstation, press **[f3]** (**Go To WRITER**). Otherwise, press **[f8] [Prior Screen]** until you get to the NMMGR menu screen or select screen you need next.

Writer List Screen

Once you have configured the workstation's virtual reader, you should configure the virtual writers. You do this on the NRJE Configuration: Writer List Screen, as shown in Figure 3-8. Select this screen by pressing **[f3]** (**Go To WRITER**) on the NRJE Configuration: Workstation Data screen. (You can go directly to this screen from any screen by typing @NRJE.*wsid*.WRITER in the command window and pressing **[ENTER]**.) You must configure an NRJE writer for each printer or punch defined at the host. The writers are spooled devices; they act as logical printers and punches and receive output data sets from the host. You must configure at least one writer per workstation.

Figure 3-8 Writer List Screen Example



Fields

Path

For display only. The NMMGR path for this screen. It includes the name of the workstation whose virtual writers you are configuring.

Writer Name

The name of the new writer you are configuring, or the existing writer whose configuration you are modifying. The name must be in one of these formats:

- PR*x* = a logical printer, where *x* is an integer from 1 through 7.
- PU*x* = a logical punch, where *x* is an integer from 1 through 7.

Host Configuration:

- JES2: This must match the PR*m* or PU*m* portion, respectively, of the R*nnnn*.PR*m* or R*nnnn*.PU*m* macro; see Table 3-4.
- JES3: This must match the number of the device (PR*m* or PU*m*) in the *JNAME* parameter of the DEVICE macro; see Table 3-6.
- VSE/POWER: Specify PR1 and PU1.

New Name

The new name of an existing writer. The name must be in one of these formats:

- PR*x* = a logical printer, where *x* is an integer from 1 through 7.
- PU*x* = a logical punch, where *x* is an integer from 1 through 7.

Host Configuration:

- JES2: This must match the PR*m* or PU*m* portion, respectively, of the R*nnnn*.PR*m* or R*nnnn*.PU*m* macro; see Table 3-4.
- JES3: This must match the number of the device (PR*m* or PU*m*) in the *JNAME* parameter of the DEVICE macro; see Table 3-6.
- VSE/POWER: Specify PR1 and PU1.

Once you have entered the new name, press **[f4] [Rename]**; the writer is then renamed.

Configured NRJE Writers (Under Workstation)

For display only. The names of the logical writers that have been configured for the workstation. You can configure a maximum of 14 writers for a workstation (seven readers and seven writers). Note that the total number of configured writers must match the number of writers configured in the host job entry subsystem.

File

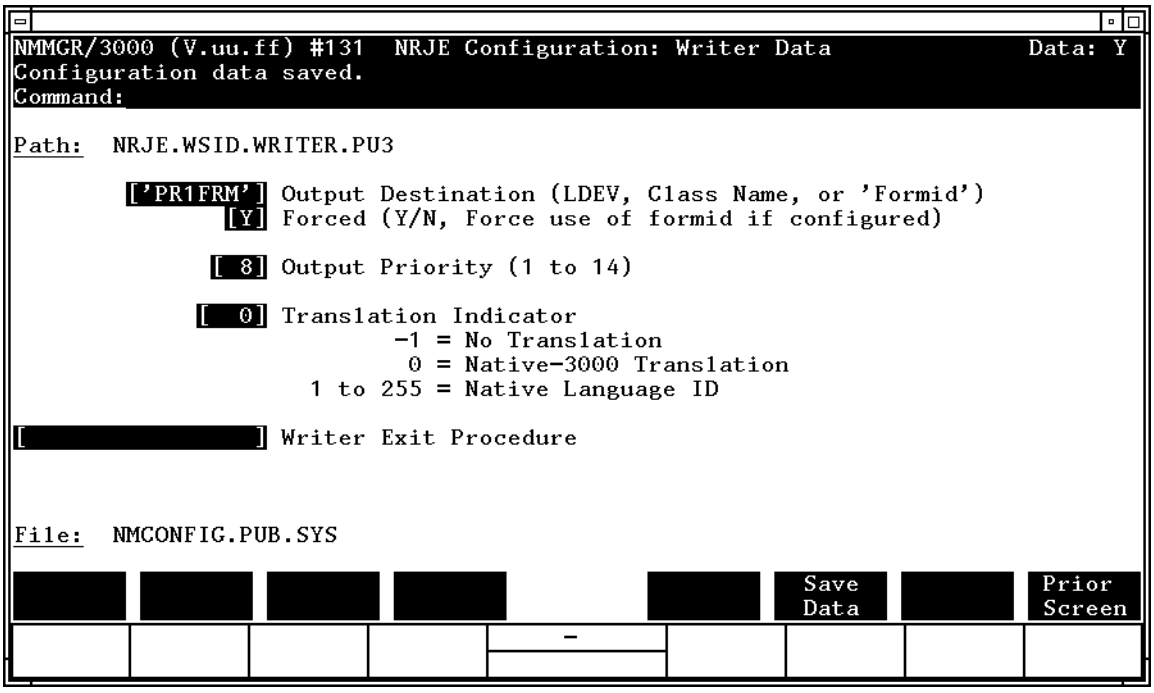
For display only. The name of the configuration file.

Once you have entered the name of the writer, press **[f5]** (**Add**) if this is a new configuration, or press **[f6]** (**Modify**) if you are modifying a configuration. This places you at the NRJE Configuration: Writer Data screen.

Writer Data Screen

After you have selected a writer, NMMGR displays the NRJE Configuration: Writer Data Screen, as shown in Figure 3-9. (You can go directly to this screen from any screen by typing `@NRJE.`*`wsid`*`.WRITER.`*`writername`* in the command window and pressing **[ENTER]**.) Here you enter information about the logical writer you are configuring.

Figure 3-9 Writer Data Screen Example



Fields

Path

For display only. The NMMGR path for this screen. It includes the names of the workstation and the writer you are configuring.

Output Destination

Required. The default destination for output received on the writer. Enter an MPE device class specification (eight alphanumeric characters or less), an ldev number of a spooled device, or a formid (in single quotes). Use the formid to specify a Lookup Table entry that defines the default output device characteristics.

Forced

Required. Enter Y if the formid specified in the `Output Destination` field is to be used for all job output (standard form and non-standard form) from this writer. Note that you can enter Y only if you have specified a formid in `Output Destination`. Enter N if all output management routing requests (special forms designations in the host JCL) received on the writer are to be honored. This field does not affect job management output routing requests (that is, routing designations given as part of the `SUBMIT` command).

Default: N

Output Priority

Required. The priority for output from this writer.

Range: 1 – 14 (integer)

Default: 8

Translation Indicator

Required. The type of translation NRJE will perform on data sets received from the host:

- -1 = No translation

  SNA NRJE will write whatever it receives from the host without translation.

- 0 = Native–3000 Translation

  SNA NRJE will use the Native–3000 translation table to translate data received from the host. You also must have specified 0 for the `Translation Indicator` field on the NRJE Configuration: Reader Data screen.

- 1 – 255 = Native Language ID

  An integer that corresponds to 8-bit languages other than Native–3000. SNA NRJE will use the translation table for the designated native language to translate data received from the host. You also

must have specified the same value for the `Translation Indicator` field on the NRJE Configuration: Reader Data screen.

Invalid values are:

201 Simplified Chinese
211 Traditional Chinese
221 Japanese
231 Korean

For more information on Native Language support, see the *Native Language*, *Message Catalogs*, and *User Logging* manual.

Default: 0

`Writer Exit Procedure`

The name of a user-defined procedure that will decode the host banner (separator page) and inform SNA NRJE of the host job number of returning data sets. For more information about creating your own procedure, see the *SNA NRJE User/Programmer Reference Manual*. If no procedure name is specified, NRJE uses an internal parsing algorithm to decode the banner.

Default: Blank (no procedure name)

`File`

For display only. The name of the configuration file.

Once you have entered the writer information, press **[f6] [Save Data]**.

After the information is processed, press **[f8] [Prior Screen]** until you get to the NMMGR menu screen or select screen you need next.

4 NA NRJE Workstation Startup and Shutdown

This chapter describes how SNA NRJE workstations are started up (establishing an LU-LU session) and how workstations are shutdown (terminating an LU-LU session).

Before You Start a Workstation

Before you begin starting up workstations, you must have prepared a job stream file for each workstation you want to start. Each job must be named *Wsid*.NRJE.SYS, where *Wsid* is the workstation's configured identification. When you issue a command to start an NRJE workstation, the corresponding *Wsid*.NRJE.SYS file is streamed. Each job must be in this format:

```
!JOB NRJEuser.SYS,NRJE
any JCWS, etc.
!RUN NRJEMON;INFO="Wsid"
!EOJ
```

where

- *Manager* is a user who has all the MPE capabilities except system manager (SM), which is optional.
- *Wsid* is the wsid for the workstation. This must match the wsid in the job's file name.

This stream job starts NRJEMON, which is the monitor for SNA NRJE workstations. You can include other MPE commands in the stream file. For example, a JCW can be used to determine whether to automatically restart NRJE. See the *SNA NRJE User/Programmer Reference Manual* for more information.

NOTE If you are using the SNA Server for the node, the stream job is different. See Chapter 2 , "SNA NRJE Installation Guidelines," of the *HP SNA Server/Access User's Guide* for more information.

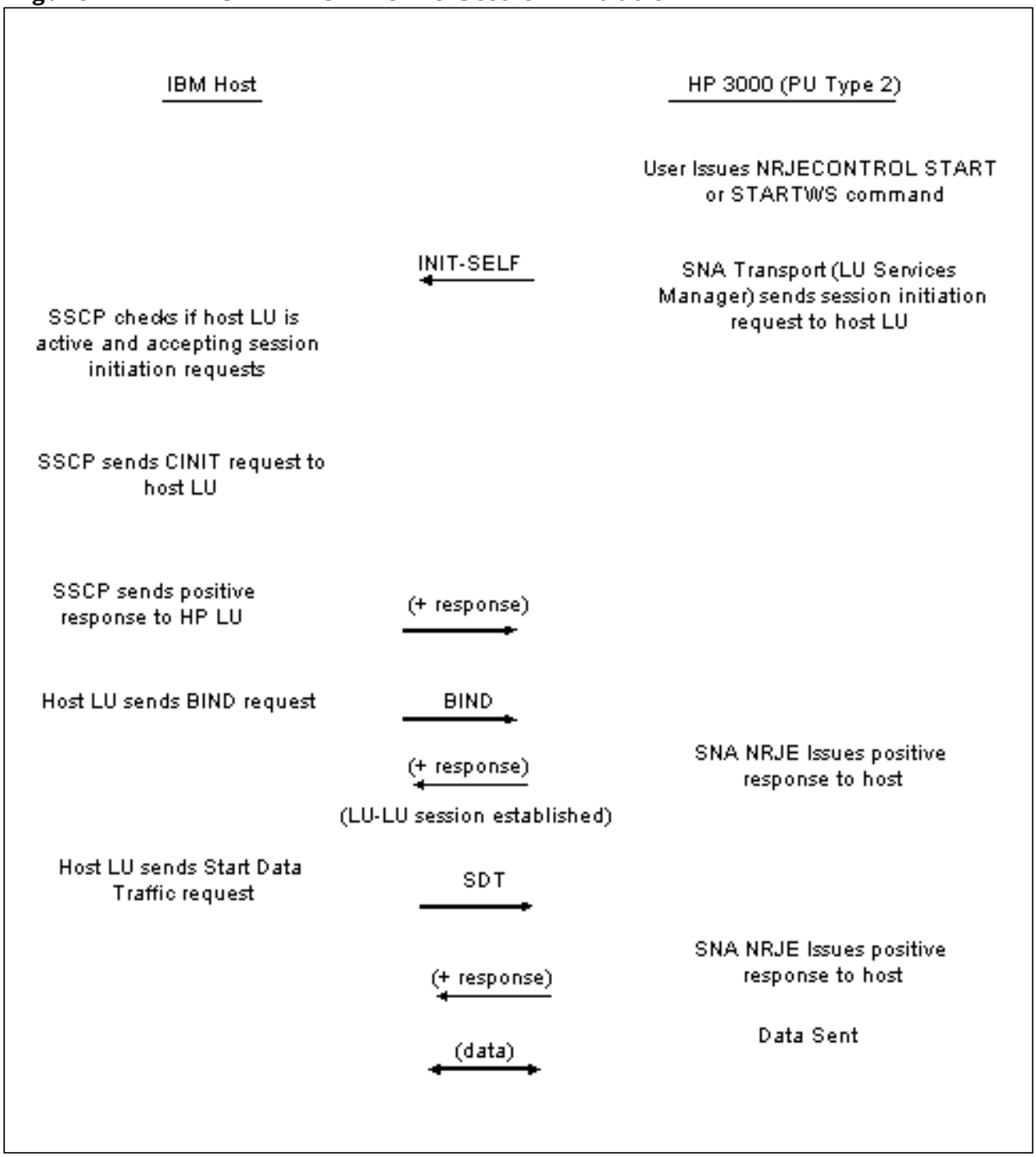
If several NRJE workstations are going to be run simultaneously, increase the limit on the number of jobs so that it accommodates the number of workstations that will be active.

Starting a Workstation

Once you have created the corresponding stream job files, you can start up the workstations. To use an SNA NRJE workstation, you must initiate an LU-LU session between an HP 3000 LU (the secondary LU) and a host LU (the primary LU). An NRJE LU-LU session is initiated by the LU in the HP 3000 node, with the MPE command `NRJECONTROL START` or the NRJE command `STARTWS` (see Chapter 6 , “Commands,” of this manual). The issued command causes an INITiate-SELF (INIT-SELF) request to be sent to the SSCP.

In processing the INIT-SELF request, the SSCP determines if the host LU is accepting session-initiation requests. The SSCP then sends a Control INITiate (CINIT) request to the host LU. The host LU then sends a BIND request to the HP 3000 LU. The BIND protocols specified in the request must be accepted by the HP 3000. If the protocols are acceptable, the HP 3000 LU sends a positive response, and the LU-LU session is established. The host LU sends a SESSion STarted (SESSST) request to notify the SSCP that the session has been established. The host LU sends a Start Data Traffic (SDT) request to the HP 3000 LU, to allow data requests to be transmitted. Figure 4-1 shows how an NRJE LU-LU session is initiated.

Figure 4-1 SNA NRJE LU-LU Session Initiation

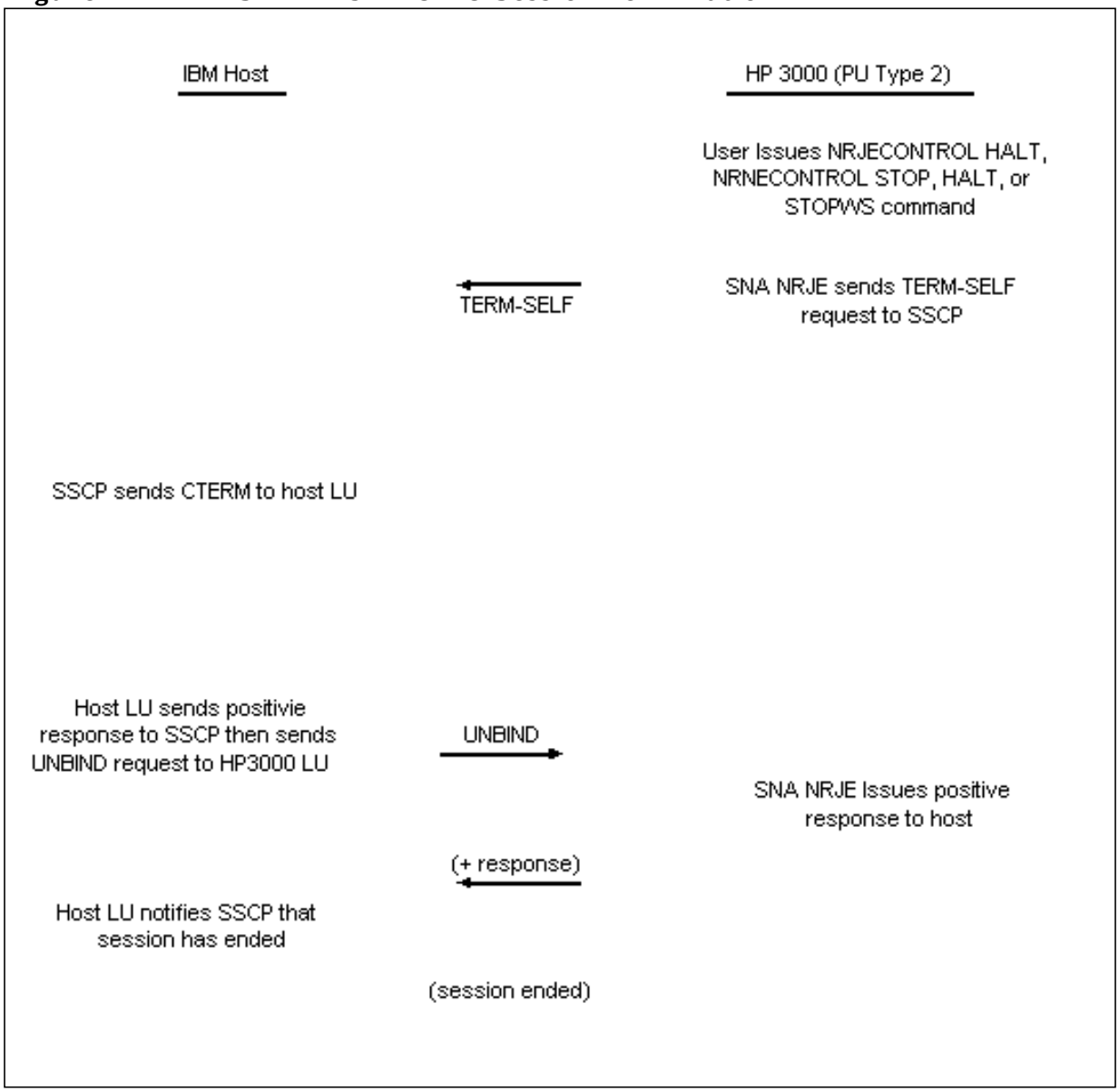


Stopping a Workstation

An LU-LU session exists to allow two users to communicate in an SNA network. Once that communication is completed, the LU-LU session should be terminated to allow the LUs to participate in other LU-LU sessions. Terminating an LU-LU session stops an NRJE workstation (after all NRJE LUs are down).

An NRJE workstation is stopped by either the NRJECONTROL HALT or NRJECONTROL STOP MPE command, or by either of the NRJE commands HALT and STOPWS (see Chapter 6 , “Commands,” of this manual). The issued command causes the HP 3000 to send a TERM-SELF request to the host. The SSCP sends a positive response to the HP 3000 LU then sends a Control TERMinate (CTERM) request to the host LU. The host LU sends a positive response to the SSCP then sends an UNBIND request to the HP 3000 LU. SNA NRJE sends a positive response to the host LU. The host LU sends a SESSion END (SESSEND) request to notify the SSCP that the session has ended. Figure 4-2 shows a typical NRJE LU-LU session termination.

Figure 4-2 SNA NRJE LU-LU Session Termination



5 SNA NRJE Troubleshooting

You can troubleshoot SNA NRJE by using the tracing and logging facilities.

This chapter describes the following:

- The tracing facility.
- The logging facility.
- Using the NMDUMP utility for SNA NRJE.
- Using the NMMAINT utility for SNA NRJE.
- Resolutions to common problems.
- Guidelines for submitting service requests (SRs).
- Troubleshooting output routing problems.
- Troubleshooting exit procedures.

NOTE Depending on the type of service contract you have with Hewlett-Packard, you might be billed on a time and materials basis. For example, Hewlett-Packard does not support, correct, or attend to any customer-performed modification of the MPE operating system. Remember, if you cannot solve a problem, the more data you can supply, the faster your HP representative can pinpoint a problem and solve it.

The Tracing Facility

Tracing is an interpretive diagnostic technique that provides data for analysis, and can be done at many levels. SNA link tracing is done at the lowest level and at an intermediate level (see the *SNA Link Services Reference Manual*, or the *SNA Link/XL Node Manager's Guid*e). SNA NRJE tracing is at the highest level, and is controlled through MPE commands or NRJE commands (see Chapter 6 , "Commands," of this manual).

The tracing facility for SNA NRJE performs two types of tracing: **intrinsic tracing** and **LU tracing**.

Intrinsic Tracing

Intrinsic tracing records NRJE intrinsics called by NRJE users or invoked through NRJE commands. Intrinsic trace records are created after successful completion of the intrinsic. If the intrinsic fails, only the *Result* array parameter is traced. Intrinsic tracing is turned on with the NRJECONTROL START or NRJECONTROL TRACEON MPE command, or with the STARTWS or TRACEON NRJE command. It is turned off with the NRJECONTROL TRACEOFF MPE command or the TRACEOFF NRJE command. Intrinsic tracing goes to a disk file. The trace file name can be specified as an argument to any of the commands used to start tracing. Naming the file this way allows the contents of the file to be overwritten each time a new trace is started. (No warning is issued.) Or you can let the default name be assigned: NMTC*nnnn*.PUB.SYS, where *nnnn* is a number from 0000 through 9999.

The trace file can be formatted through the NMDUMP utility. Using NMDUMP for SNA NRJE is described later in this chapter. More detailed information about NMDUMP is contained in the *SNA Link Services Reference Manual* (for MPE V) and in *Using the Node Management Services Utilities* (for MPE XL).

LU Tracing

You should use LU tracing only under the recommendation of an HP service representative.

LU tracing records NRJE internal program events. Most modules are traced during LU tracing. LU tracing for a workstation can be initially turned on only when the workstation is started. After that, it can be turned off or on as long as the workstation is active. LU tracing is turned on with the NRJECONTROL START or (once the workstation is active) NRJECONTROL TRACEON MPE command, or with the STARTWS or (once the workstation is active) TRACEON NRJE command. It is turned off with the NRJECONTROL STOP or NRJECONTROL TRACEOFF MPE command, or the STOPWS or TRACEOFF NRJE command. LU tracing goes

to a disk file. The trace file name can be specified as an argument to any of the commands used to start tracing. Naming the file this way allows the contents of the file to be overwritten each time a new trace is started (no warning is issued). Or you can let the default name be assigned: NMTC*nnnn*.PUB.SYS, where *nnnn* is a number from 0000 through 9999.

The trace file can be formatted through the NMDUMP utility. Using NMDUMP for SNA NRJE is described later in this chapter. More detailed information about NMDUMP is contained in the *SNA Link Services Reference Manual* (for MPE V) and in *Using the Node Management Services Utilities* (for MPE XL).

NOTE

Although the format of the default trace file name is the same for all types of tracing, the same default file name will not be assigned for more than one trace. This is because the default trace file name is automatically assigned in numerical order. For example, suppose the last default trace file name assigned was NMTC0004.PUB.SYS. If you started SNA Transport intrinsic tracing, and did not specify a trace file name, the default name NMTC0005.PUB.SYS would be assigned. Then, if you started SNA NRJE intrinsic tracing without specifying a trace file name, the default name NMTC0006.PUB.SYS would be assigned. Finally, if you started NRJE LU tracing, and did not specify a file name, the default name NMTC0007.PUB.SYS would be assigned.

Remember, this applies only when you are using the default file-naming scheme.

The Logging Facility

Logging records subsystem events — significant normal events, as well as error events — for use in problem determination. SNA NRJE logging is configured through NMMGR (see the *SNA Link Services Reference Manual* [for MPE V] or the *SNA Link/XL Node Manager's Guide* [for MPE XL]), and it is controlled through the MPE commands SHOWNMLOG, SWITCHNMLOG, and RESUMENMLOG. These commands enable the node manager to determine the name of the current log file and the amount of available space in it, close the current log file and open a new one, and activate logging after a recoverable error. The MPE commands are described in the *SNA Link Services Reference Manual* and in the *SNA Link/XL Node Manager's Guide*. SNA NRJE logging records NRJE events, errors, and host job entry subsystem messages.

When you configure logging, you indicate the level you want logging configured for by specifying the level's subsystem number. Then, within each subsystem, you can indicate which events you want logged, by specifying event class numbers.

The subsystem number for SNA NRJE is SUB0002, and the class numbers are as follows:

- CLAS0010 — workstation events.
  - — Job transmission.
  - — Job output reception (including Peripheral Device Information Records [PDIRs]).
  - — Noncritical errors.
- CLAS0012 — critical events and errors.
  - — Critical errors.
  - — LU startup.
  - — LU shutdown.
- CLAS0013 — JES2, JES3, and VSE/POWER console commands and messages.

CLAS0012 logging (at least to disk) should always be on.

Example

An example of SNA NRJE console logging (logging displayed on the HP 3000 console) is shown below. In this example, the user followed the logging configuration guidelines in the *SNA Link Services Reference Manual* or the *SNA Link/XL Node Manager's Guide*, and turned on logging for SNA NRJE class CLAS0012.

Note that JES2 is NAU 1 at the host (shown as `Remote NAU = 1`).

```
SNA/TRANSPORT Logging
    Session Started on node PU3000E
    Local NAU = 3, Remote NAU = 1
```

For SNA NRJE, the user issues an NRJECONTROL START command. SNA NRJE LU-LU sessions are started on LUs 1–4. The remote LU is JES2. Note that the sessions need not be started in order according to the NAUs.

```
@COMPUTERTEXTW = SNA/TRANSPORT Logging
    Session started on node PU3000E
    Local NAU = 2 , Remote NAU = 1

SNA/TRANSPORT Logging
    Local NAU = 1 , Remote NAU = 1

SNA/TRANSPORT Logging
    Session started on node PU3000E
    Local NAU = 4 , Remote NAU = 1

NRJE Logging                              LU sessions are active with JES2.
THU, MAR  1, 1984, 10:42 AM
NRJE (R20     ;LU03    ) - LU ACTIVATION COMPLETED. (SC=1226)

NRJE Logging
NRJE (R20     ;LU02    ) - LU ACTIVATION COMPLETED. (SC=1226)

NRJE Logging
NRJE (R20     ;LU01    ) - LU ACTIVATION COMPLETED. (SC=1226)

NRJE Logging
NRJE (R20     ;LU04    ) - LU ACTIVATION COMPLETED. (SC=1226)
```

After SNA NRJE-to-host activity, the user issues an `NRJECONTROL STOP` command. SNA NRJE sends a TERM-SELF to the host for each LU (class) with an LU-LU session. For each TERM-SELF received, the host sends an UNBIND to SNA NRJE. SNA NRJE logs receipt of the UNBIND, SNA Transport logs LU-LU session termination as SNA NRJE sends positive responses to the UNBINDS, and SNA NRJE logs LU termination.

```
NRJE Logging                                  SNA NRJE receives UNBIND
THU, MAR  1, 1984, 11:11 AM                   for LU01.
NRJE (R20     ;LU01    ) - RECEIVED UNBIND= 3201 (SC=1224)


SNA/TRANSPORT Logging                         SNA Transport logs session
    Session terminated on node PU3000E        termination.
    Local NAU = 1 , Remote NAU = 100


NRJE Logging                                  SNA NRJE receives UNBIND
THU, MAR  1, 1984, 11:11 AM                   for LU04.
NRJE (R20     ;LU04    ) - RECEIVED UNBIND= 3201 (SC=1224)


SNA/TRANSPORT Logging                         SNA Transport logs session
    Session terminated on node PU3000E        termination.
    Local NAU = 4 , Remote NAU = 1


NRJE Logging                                  SNA NRJE logs LU (class)
THU, MAR  1, 1984, 11:11 AM                   termination.
NRJE (R20     ;LU01    ) - TERMINATED. (LU=1121)


NRJE Logging                                 SNA NRJE logs LU (class)
THU, MAR  1, 1984, 11:11 AM                  termination.
NRJE (R20     ;LU04    ) - TERMINATED. (LU=1121)


NRJE Logging                                  SNA NRJE receives UNBIND for
THU, MAR  1, 1984, 11:11 AM                   LU02.
NRJE (R20     ;LU02    ) - RECEIVED UNBIND= 3201 (SC=1224)


SNA/TRANSPORT Logging                         SNA Transport logs session
    Session terminated on node PU3000E        termination.
    Local NAU = 2 , Remote NAU = 1


NRJE Logging                                  SNA NRJE receives UNBIND for
THU, MAR  1, 1984, 11:11 AM                   LU03.
NRJE (R20     ;LU03    ) - RECEIVED UNBIND= 3201 (SC=1224)


SNA/TRANSPORT Logging                         SNA Transport logs session
    Session terminated on node PU3000E        termination.
    Local NAU = 3 , Remote NAU = 1


NRJE Logging                                  SNA NRJE logs LU (class)
THU, MAR  1, 1984, 11:11 AM                   termination.
NRJE (R20     ;LU02    ) - TERMINATED. (LU=1121)


NRJE Logging                                  SNA NRJE logs LU (class)
THU, MAR  1, 1984, 11:11 AM                   termination.
NRJE (R20     ;LU03    ) - TERMINATED. (LU=1121)
```

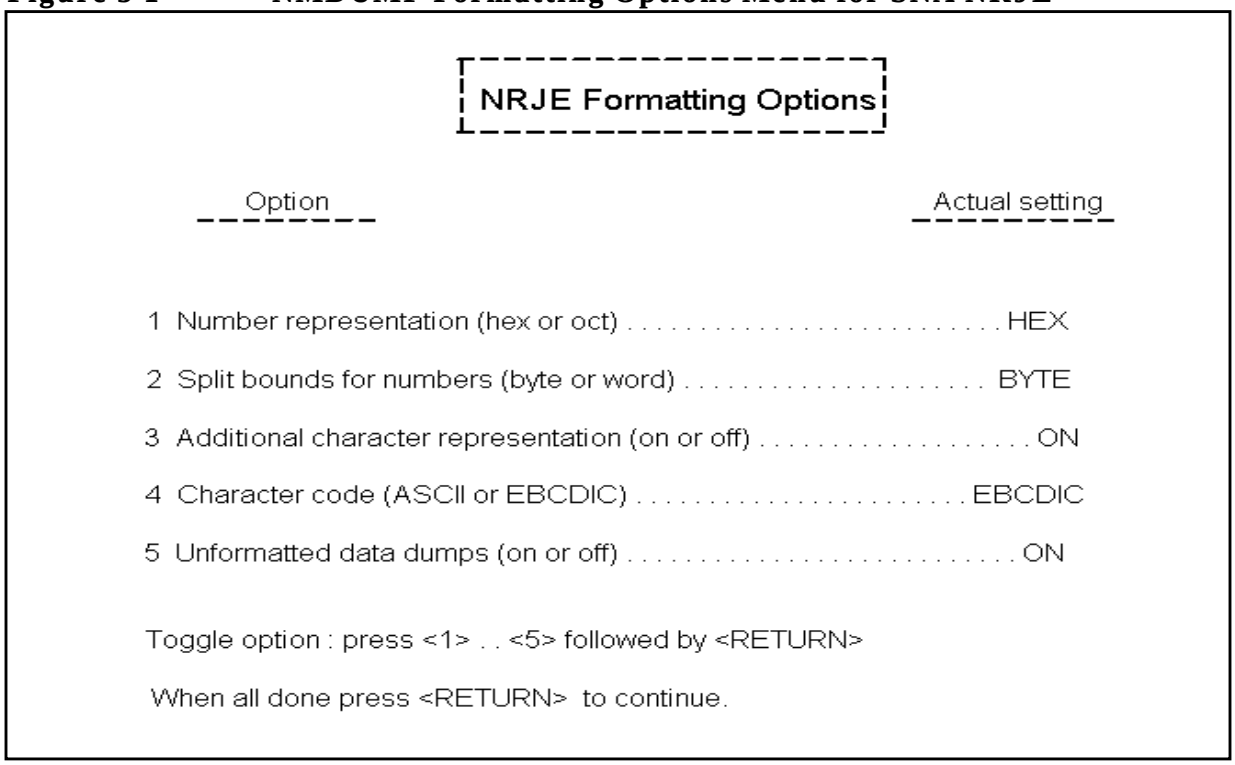
Using NMDUMP for SNA NRJE

When NMDUMP displays the list of subsystems and IDs, and prompts you for the IDs you want to select, specify the SNA NRJE ID: 2. Then, proceed normally with NMDUMP. Note that NMDUMP is described in more detail in the *SNA Link Services Reference Manual* (for MPE V) and in *Using the Node Management Services Utilities* (for MPE XL). If you are not familiar with NMDUMP, you should read the information in the appropriate manual before running NMDUMP.

SNA NRJE Formatting Options Menu

For SNA NRJE, NMDUMP displays a formatting options menu, as shown in Figure 5-1 that allows you to specify how you want the tracing or logging records to be displayed:

Figure 5-1 NMDUMP Formatting Options Menu for SNA NRJE



- Option 1 specifies the numerical representation for the unformatted data dumps.
- Option 2 specifies whether the unit to be represented as one number is the byte or the word. In the formatted output, hexadecimal numbers are preceded by an exclamation point (!), and octal numbers are preceded by a percent sign (%). All the other numbers are decimal, except in cases where the digits 0 and 1 are used to indicate the setting of a specific bit.

- Option 3 specifies whether character mode is to be on or off. If character mode is on, each unformatted hexadecimal or octal output line is followed by a line containing the corresponding printable characters in the character code specified by option 4. Nonprintable characters are represented as periods.
- Option 4 specifies the character code the data is to be printed in: ASCII or EBCDIC.
- Option 5 allows the user to disable or enable unformatted data dumps (that is, lines with hexadecimal or octal numbers only [no text]). If the data dumps are enabled, the data of the formatted sections is also represented as unformatted raw data (as it appears in the input record). If the dumps are disabled, only formatted sections appear in the output (except for the Request Unit sections in some SNA Transport records, which are always printed).

In Figure 5-1, the values shown for the options are the default values. To change the value of an option, type the option number and press **[RETURN]**. If all the values are as you want them, you can exit the menu by pressing **[RETURN]** without specifying an option number.

SNA NRJE Output Formats

For SNA NRJE, NMDUMP formats tracing records and logging records. The format for each type of record is described below.

Tracing Records

Tracing records are identified by a type and a subtype. In a formatted trace record, the type and subtype numbers are shown in parentheses, on the first line of information after the “Info section.”

The data in the “Info section” is displayed in either hexadecimal (preceded by a pound sign) or octal (preceded by a percent sign), according to what was specified for option 1 on the NMDUMP Formatting Options menu.

LU Trace Records @LU trace records are type 0, and are formatted according to five subtypes:

- **Called by CI or intrinsics:**
  - — Subtype 0: workstation number
  - — Subtype 1: wsid and number
- **Called from an LU process:**
  - — Subtype 4: LU number and workstation number
  - — Subtype 6: LUID and number, and workstation number
  - — Subtype 7: LUID and number, and wsid and number

Intrinsic Trace Records Intrinsic trace records are type 1, and are formatted according to two subtypes:

- Subtype 0: workstation number
- Subtype 1: wsid and number

SNA NRJE produces a subtype 1 intrinsic trace record for the first intrinsic trace record in a trace file for a given workstation. (Any continuation records for subtype 1 intrinsic trace records are also subtype 1.) A subtype 1 trace record header shows the type of tracing, the version ID, the workstation number (used to identify the workstation within a trace file), the workstation ID (wsid), the user ID, and the intrinsic number.

The intrinsic names and their corresponding numbers are shown below.

INTRINSIC NAME	MODULE #	INTRINSIC NAME	MODULE #
NRJEQUEUE	1	NRJESTARTWS	9
NRJEALTER	2	NRJEWSINFO	10
NRJECANCEL	3	NRJEWRITER	11
NRJERDRFENCE	4	NRJELULIST	12
NRJEDRACCESS	5	NRJECONSOLE	13
NRJEJOBINFO	6	NRJETRACE	14
NRJESUBMIT	7	NRJELUSTATUS	15
NRJESTOPWS	8		

This is an example of a subtype 1 intrinsic trace record header.

```
**********************************************************************
*  Subsystem NRJE (2)                          Intrinsic tracing data  *
*           TUE, APR  3, 1984,  4:07 PM, TIMER= 58021.707              *
*                                                                      *
*  ------------------------- Info section -------------------------   *
*  #:  0101    0000    0000    0000    0000    5232    3020    2020  *
*      2020    0001    4B45    5649    4E20    2020    4B4F    5242  *
*      2020    2020    4E52    4A45    2020    2020    000E          *
*                                                                      *
*  Intrinsic tracing: Workstation header record  (1/1)                *
*  Version          : A.00.00.000                                     *
*  Workstation      :  1 , ID = R20                                   *
*  User             : MANAGER.SYS, NRJE                               *
*  Intrinsic        : 14                                              *
**********************************************************************
```

Logging Records

Logging records that reflect an error (logging class CLAS0010 [noncritical errors] or CLAS0012 [critical errors]) are formatted with a border of asterisks. This distinguishes them from logging records that do not reflect an error (which do not have a border).

The first 16 bits of a logging record are printed in the "Logging word" field. This word is reserved and is displayed in hexadecimal (preceded by a pound sign) or octal (preceded by a percent sign), according to what was specified for option 1 on the NMDUMP Formatting Options menu. The SNA NRJE version number is in the format *v.uu.ff.iii*, where *v* = version, *uu* = update, *ff* = fix, and *iii* = internal fix. This is followed by SNA NRJE logging. This is an example of the format for SNA NRJE logging record information. The message text associated with the message number (number 4009 in the example) is found in the *SNA NRJE User/Programmer Reference Manual*. The parameters for a specific message (R20, LU01, and the console message [8.13.06 through E=N], in the example), up to 5, are taken from the logging record.

```
**********************************************************************
*  Subsystem NRJE (2)                                    logging data  *
*                   Sun, NOV 13, 1983, 8:14 AM                       *
*                                                                    *
*  Logging word     : #0000                                          *
*  Version          : A.00.00.000                                    *
*                                                                    *
*  NRJE(R20     ;LU01     ):  CONSOLE MESSAGE:  8.13.06              *
*  $HASP628 LINE13    SNA ACTIVE    (RMT20)  E=N     (FMD=4009).     *
**********************************************************************
```

Using NMMAINT for SNA NRJE

The NMMAINT utility displays the version numbers of the HP data communications software installed on your system. The example below shows the SNA NRJE information displayed when you run NMMAINT. Note that the version numbers shown below are not necessarily the current version numbers for SNA NRJE; they are shown only as an example. NMMAINT is described in more detail in the *SNA Link Services Reference Manual* (for MPE V) and in *Using the Node Management Services Utilities* (for MPE XL). If you are not familiar with NMMAINT, you should read that manual before you run NMMAINT.

```
SNA NRJE ProductNum module versions:

Program file: NRJE.NRJE.SYS              Version: A6000602
Program file: NRJECONS.NRJE.SYS          Version: A6000000
Program file: NRJEMON.NRJE.SYS           Version: A6000602
Program file: NRJELU.NRJE.SYS            Version: A6000609
Program file: NRJELUT.NRJE.SYS           Version: A6000609
Program file: NSHUT.NRJE.SYS             Version: A6000600
Program file: IONRDR0.PUB.SYS            Version: A6000106
SL Procedure: NRJEMISCVERS               Version: A6000602
SL Procedure: NRJEMISC2VERS              Version: A6000600
SL Procedure: NRJEMISC3VERS              Version: A6000600
SL Procedure: NRJEINTVERS                Version: A6000605
SL Procedure: SUBSYS2FMTVERS             Version: A6000600
Catalog file: NRJECAT.NRJE.SYS           Version: A6000600

SNA NRJE ProductNum overall version = A.60.00
```

Note that in this example, program `IONRDR0.PUB.SYS` would be displayed only if you were running NRJE/V. Program `NRJELUT.NRJE.SYS` would be displayed only if you were running NRJE/V or a version of NRJE/XL prior to release 2.1.

The SNA NRJE version numbers can also be displayed by using the `NRJECONTROL VERSION` MPE command (see Chapter 6 , “Commands,” of this manual).

Problem Resolution

Problems that can occur while installing, configuring, and running SNA NRJE — and how to deal with them — are described here. Guidelines for submitting a service request (SR) are also described.

When an NRJE problem occurs, to enable collection of some important information, you must perform these steps:

- For MPE V, enable SNA LU-LU tracing to disk (if directed to by an HP service representative) for each LU you are using by doing the following things:
  - — Specifying the LUs you are using, in the SNA Configuration: LUs screen.
  - — Setting `Trace State LU-LU` to Disk, in the SNA Configuration: LU Data screen.
- For MPE XL, enable SNA intrinsic tracing to disk for each LU you are using by doing these things:
  - — Specifying the LUs you are using, in the SNANode Configuration: PU and LU Data screen.
  - — Turning on intrinsic tracing by using the *`INTRINSIC`* parameter of the `SNACONTROL TRACEON` command.
- Enable logging to disk for the NRJE subsystem by doing these things:
  - — Configuring SNA NRJE logging, in the Logging Configuration screen.
  - — Configuring all SNA NRJE logging classes, in the Logging Configuration: Logging Classes screen.
  - — Enabling disk logging, in the Logging Configuration: Class Data screen.

Specific procedures for configuring MPE V logging and tracing are in the *SNA Link Services Reference Manual*. MPE XL logging configuration and trace enabling are described in the *SNA Link/XL Node Manager's Guide*.

Once tracing and logging are enabled, attempt to recreate the problem. Whether or not you are able to recreate the problem, you should follow the procedures below to collect the information you need to resolve the problem.

Common Problems

Some problems are common to many situations — invalid software installation, version incompatibilities, insufficient MPE resources, corrupt configuration files, and file system errors. In most cases, you can resolve these problems yourself; the resolutions to these problems are described here. However, in some cases you should submit an SR. To enable Hewlett-Packard to solve your problem in an efficient manner, you should follow certain guidelines when submitting an SR; these guidelines are listed later in this chapter.

Invalid Software Installation

A software installation might be invalid. Run `NMMAINT.PUB.SYS` to get a listing of all software modules and their version IDs. Check that all required modules are present, and that the first five characters of the version IDs (the *v.uu.ff* fields) of these modules are the same within each subsystem. Finally, check the version IDs with the *SYSTEM STATUS BULLETIN* or other HP source to be sure the versions of software you have are supported by the version of MPE you have. If a problem is found with any of these checks, you have an incorrect software version installed. Locate a known valid version of the suspect software (perhaps from one of your system backup tapes) and install it.

Version Incompatibilities

Version incompatibilities between NMS software and other subsystem software are possible. Run NMMAINT to get a listing of version IDs for NMS and for all of the NMS-dependent subsystems. Locate the overall version IDs for NMS and for each subsystem. Compare the first five characters of these version IDs (the *v.uu.ff* fields) with those listed as compatible with each other in the *SYSTEM STATUS BULLETIN* or other HP source. If a discrepancy is found, locate a known set of compatible software (perhaps from one of your system backup tapes) and install it.

Insufficient MPE Resources

The system might have insufficient MPE resources, such as configured table sizes, stack size, concurrent jobs, and maximum segment size. For NRJE/V, check whether the MPE configuration has enough DST and PCB entries configured, and run `OPT.PUB.SYS` in the “#T” or MPE tables context to check MPE table utilization. Reconfigure MPE to fix any problems found, and restart the system.

Corrupt Configuration File

The configuration file is possibly corrupt. Validate the configuration file to check for possible corruption. If the error persists, use NMMGR to manually check the configuration file (if possible). If bad records seem

to be localized to a particular item, delete that item and reconfigure it. If necessary, RESTORE a backup copy of the file.

File System Errors

A file system error (FSERR)might have occurred while attempting to access the configuration file. Try to access the configuration file, under the same userid, using NMMGR. Use the NMMGR error screen to find out what the underlying FSERR is. Correct the problem and retry.

Configuration Problems

Configuration problems can occur on both the HP 3000 and the host.

HP 3000 Configuration Problems

Listed below are some configuration problems that can occur on the HP 3000.

- **INP or PSI problems.**

  When you run the PUs concurrently, each INP or PSI requires a unique PU, and each PU requires a unique INP or PSI.

  Also, for NRJE/V, ensure that you correctly configured the Logical device field of the Link Configuration: SNA/SDLC Link Data Screen (see the *SNA Link Services Reference Manual).* For NRJE/XL, ensure that you correctly configured the Physical Path field of the SNANode Configuration: SDLC Linkdata Screen (see the *SNA Link/XL Node Manager's Guide*).

- **Configuration file misnamed.**

  Remember, when configuring SNA NRJE, the configuration file can be named anything you prefer. However, when you run SNA NRJE, it looks for a configuration file named NMCONFIG.PUB.SYS.

Host Configuration Problems

Listed below are some configuration problems that can occur on the host.

- **Incorrect device specified.**

  You might have configured too many devices or the wrong type of device for a particular line.

- **Incorrect macro definition.**

  You might have incorrectly placed macro operands within the hierarchical structure. Although you can define the operands for lower-level macros in a higher-level macro, you must remember this structure: GROUP, LINE, SERVICE, PU, and LU.

A macro could be missing a required operand or you might have specified an invalid operand for a particular macro.

- **Incorrect Logmode Table definition.**

  Ensure that you are using the correct Logmode Table definitions. See the *HP SNA Products: ACF/NCP and ACF/VTAM Guide Host System Programmer's Reference* for more information.

Installation Problems

Some common problems that might occur during installation, or as a result of improper or unsuccessful installation, are described below.

- **Inactive VTAM node.**

  This is probably the most common problem that occurs on the host. Ensure that you have issued the proper activation commands. Setting the `ISTATUS` operand of the `LU` macro to `ACTIVE` will help, especially if it is moved up to either the `GROUP` or `LINE` macro. This `ACTIVE` setting *sifts down* to all lower-level macros. This problem most frequently occurs in a switched line configuration when the major node containing the `VBUILD` macro was never activated. In this case, an inactive macro causes the host to fail to find a match for the remote's XID number. The only way you will be aware that this XID problem has happened is a message at the host operator's console. To avoid these problems remember this rule: When in doubt, **ACTIVATE**.

- **Switched lines.**

  Be sure to put the `VBUILD` macros in a separate member in the VTAM parameter library (SYS1.VTAMLST).

- **Hardware problems.**

  Ensure that all hardware is installed properly. Many problems are related to such things as incompatible modems, bad phone lines and cables, etc.

  Ensure that the host is up, the line is active (being polled), and the host telecommunications subsystem (for example, VTAM) is active. You might need to use a line monitor, such as an HP 4953, which requires the link option to check whether the line is being polled and to determine the addresses being polled. You also can use one of the other HP 495x Protocol Analyzers in addition to the standard HP 4953.

SNA NRJE Run-Time Problems

After both the hardware and software are installed, problems might occur. Many run-time problems are caused by inaccurate configuration. You might encounter some of these problems while trying to run NRJE or while actually running NRJE:

- **Inactive SNA node.**

  If you try to run SNA NRJE without starting the node on which NRJE will be running, you will receive this message:

  ```
  Inactive node or invalid node name. (SNAERR 29)
  ```

  Use the SNACONTROL START command to activate the node. For example, on MPE V:

  ```
  :SNACONTROL START;CONFIG=ConfigFile;NODE=NodeName
  ```

  and, on MPE XL:

  ```
  SNACONTROL START;NODE=NodeName
  ```

  (The SNACONTROL commands are described in the *SNA Link Services Reference Manual* [for MPE V] and the *SNA Link/XL Node Manager's Guide* [for MPE XL].) If everything is set up correctly, you should receive some SNA logging messages that indicate that the line has been activated, and that sessions (SSCP-PU and SSCP-LU) have been started for the PU and LUs that you want to use. If not, you should ensure that the proper resources are active on the host side, by issuing the DISPLAY command at a host operator's console.

  ```
  D NET,E,ID=LineName
  ```

  Then, if the proper resources are not active, issue the VARY command

  ```
  V NET,ACTIVE,ID=LineNam
  ```

  to activate the line. Then, issue a second VARY command:

  ```
  V NET,ACTIVE,ID=PUName
  ```

  or

  ```
  V NET,ACTIVE,ID=LUName
  ```

  to activate the PU or LU. Note that you also can do both of the above steps by issuing only one command:

  ```
  V NET,ACTIVE,SCOPE=ALL,ID=LineName
  ```

  The PU and each LU activation request might require a separate VARY command to completely activate the node. This occurs when the ISTATUS operand of the LU macro (in the node definition) is not set to ACTIVE or is not placed high enough in the node definition (see "Host Configuration Problems" earlier in this chapter).

- **SNA Transport activates, but one or more SNA NRJE LUs do not (MPE V only).**

  — Ensure that the transmit buffer size (in the Link Configuration: SNA/SDLC Link Data screen), the maximum RU size (in the SNA Configuration: LU Data screen), and the RU size (in the NRJE Configuration: Reader Data screen) are consistent. If the SNA maximum RU size for the LU has been configured less than the NRJE RU size, that LU will not be able to send an INIT-SELF to request an LU-LU session with the host.

  — Ensure that the host has activated the LU. If it has not, make the LU active by issuing

  `V NET,ACTIVE,ID=`*`LUName`*

  at a host operator's console. You might have to issue a separate VARY command for each LU.

- **SNA Transport activates (case 1).**

  Although SNA Transport is active when the NRJE *Wsid* command is typed, this message is received:

  `WORKSTATION `*`Wsid`*` NOT CONFIGURED (CIERR 4435)`

  SNA NRJE has not found a file named NMCONFIG.PUB.SYS to use as its configuration file. You must name the SNA NRJE configuration file NMCONFIG.PUB.SYS.

- **SNA Transport activates (case 2).**

  Although SNA Transport is active when you try to start an SNA NRJE workstation with a STARTWS or NRJECONTROL STARTWS command, you get this message:

  `UNABLE TO STREAM MONITOR JOB (INT=123)`

  which can be caused by (1) the MPE streaming facility not being enabled, or (2) an unfound XXX.NRJE.SYS job stream file for the SNA NRJE workstation. (See Chapter 4 , "NA NRJE Workstation Startup and Shutdown," of this manual for a description of this job stream file.)

- **This message is logged for each LU just before it terminates:**

  ```
  FMD CANNOT ACCESS READER AND WRITER CONFIGURATION
  DATA (SPOOLER=-7) (MIDAS=0) (FMD=4121)
  ```

  This indicates a probable problem in NMCONFIG.PUB.SYS: You might have changed data on a configuration screen but not pressed **[f6]** (**Update Data**) afterwards. So, the configuration was not updated.

NOTE

Remember to consult Appendix A , “Result Codes and Messages,” of this manual for a description of error messages and intrinsic result codes.

You might encounter other error messages while using SNA NRJE. See the *SNA Link Services Reference Manual* (for MPE V) or *Using the Node Management Services Utilities* (for MPE XL) for generic messages produced by NMMGR and the utilities NMMAINT and NMDUMP.

Submitting an SR

Listed below are some guidelines for submitting a service request (SR). Some of the guidelines refer to Node Management Services (NMS) programs (NMDUMP, NMMAINT, NMMGR, etc.). Using NMDUMP and NMMAINT for SNA NRJE is explained earlier in this chapter. Using NMMGR for SNA NRJE is explained in Chapter 3 , "SNA NRJE Configuration," of this manual. For more NMS information, see the *SNA Link Services Reference Manual* (for MPE V) or *Using the Node Management Services Utilities* (for MPE XL).

Common Information

For any SR, include this common information, where applicable:

- A characterization of the problem. Describe the events leading up to and including the problem. Try to describe the source of the problem. Describe the symptoms of the problem.

  Your characterization should include MPE commands, communication subsystem commands, job streams, result codes and messages, and data that can reproduce the problem.

  List the context and environment in which the message occurred. Prepare copies of the HP 3000 system console and workstation information.

  Give a brief history of your site, including when SNA NRJE was installed, the circumstances that usually produce problems, other data communications products installed, and any other products you were using when the problem arose.

- Obtain the version, update, and fix information for all software by running NMMAINT. This allows Hewlett-Packard to determine whether the problem is already known and if the correct software is installed at your site.

- Record all intrinsic result codes and messages that appear at the SNA NRJE workstation and the system console.

- Run NMDUMP to format the NM log file (`NMLG`*`nnnn`*`.PUB.SYS`) that was active when the problem occurred. You might need to issue the MPE command `SWITCHNMLOG` to free the NM log file. For more information, see the *SNA Link Services Reference Manual* or the *SNA Link/XL Node Manager's Guide*. Inspect the formatted output and try to locate errors. Prepare the formatted output and a copy of the log file for your HP representative to analyze.

- Prepare a listing of the configuration file and the MPE configuration you are using for your HP representative to analyze. Inspect the output and try to locate errors.

- Try to determine the general area, within the software, where you think the problem exists. If you think the problem is caused by an SNA link, refer to the *SNA Link/XL Node Manager's Guide*, and follow the guidelines there for gathering information for problems.
- Document your interim, or "workaround," solution. The cause of the problem can sometimes be found by comparing the circumstances in which it occurs with the circumstances in which it does not occur.
- Save copies of any SNA trace and communications link trace files that were active when the problem occurred, for your HP representative to analyze.
- If the problem involves NMMGR, give a copy of `NMMGRF.PUB.SYS` to your HP representative.
- *If a system failure occurs, a full memory dump must be taken.*
- If a fatal link error has occurred, a message in this format is displayed on the operator's console:

  ```
  SDLC (LinkName) Error ErrorNum:
  SDLC (LinkName) Info: Status=Status, Loc=LocationId,
  Path=PhysPath
  ```

  Be sure to include this error message in the SR *exactly as it appears on the operator's console.*
- Save copies of all active or in-use trace files for analysis by your HP representative.
- Save copies of all active or in-use log files for analysis by your HP representative.
- Always obtain a copy of the generation of the host system you are using for ACF/VTAM and ACF/NCP. Also be sure you are using the correct configuration for the job entry subsystem (JES). For the host configuration to be compatible with SNA NRJE, Hewlett-Packard sets certain operands and parameters to required values. See Chapter 3 , "SNA NRJE Configuration," of this manual. Also see the *SNA Link Services Reference Manual* (for MPE V) or the *SNA Link/XL Node Manager's Guide* (for MPE XL) for more host configuration information. Note any differences between the actual system generation and your expectations. Keep this information for your HP representative. *This is very important.*
- Give a copy of `NMCONFIG.PUB.SYS` to your HP representative.

SNA Transport Information

For problems that might involve SNA Transport, see the *SNA Link Services Reference Manual* or the *SNA Link/XL Node Manager's Guide*, keeping this in mind:

- For NRJE/V, when using the MPE command `ABORTIO ldev` to try to free an SNA Transport hang, *ldev* specifies the INP being used.

Communications Link Information

For problems that might involve the communications link, see the *SNA Link Services Reference Manual* or the *SNA Link/XL Node Manager's Guide*, keeping these things in mind:

- If you are running NRJE/V, an INP (instead of PSI) failure is a possible problem. If this happens, give the file `INPLOG`*xx*`.PUB.SYS` (where *xx* is a number from 00 through 99) to your HP representative for additional analysis.
- If you are running NRJE/V and an INP failure has not occurred, turn the trace on with the `LINKCONTROL TRACEON` MPE command.

SNA NRJE Information

For problems related to SNA NRJE, collect this additional information to help your HP representative determine the cause and to solve your problems:

- Supply copies of the output produced by the SNA NRJE `DISPLAY` and `STATUS` commands. This output gives information about the workstation and LUs.
- If an NRJE LU terminates abnormally with message #9074,

  ```
  LU ABNORMAL TERMINATION. STACK DUMPED TO STDLIST.
  ```

  obtain the printout from $STDLIST of the NRJE monitor process (NRJEMON).
- If an LU hangs, you can force the LU to dump its stack to an output spool file on device "LP" by issuing the NRJE command

  `DUMPLU;LU=`*LUName*
- Examine the status of the SNA NRJE remote workstation at a host operator's console. For example, for a JES2 host you would issue the command

  `$DU,RMT`*xx*

  where *xx* is the remote workstation number, or its equivalent, for your job entry subsystem. Make a copy of this information for your HP representative.

Troubleshooting Output Routing Problems

Information to help you resolve problems you might have with output returning from the host and being routed to an unexpected destination is given below.

Common Routing Problem Causes

When troubleshooting any output routing problems, always double check these things:

- The value specified for `Host Standard Print Form Name` or `Host Standard Punch Form Name` in the NRJE Configuration: Workstation Data Page 2 screen must match the eight-byte field `Standard form name` in the host. Obtain the host `Standard form name` from the host generation.
- For JES2 and JES3, the "Job Received" message must be in a format that can be parsed by NRJE. If the "Job Received" message is non-standard, you must install an exit procedure to parse this message. If you do not want parsing to occur, you must disable the check for "Job Received" messages by specifying N in the `Job Management` field of the NRJE Configuration: Workstation Data screen. See the *SNA NRJE User/Programmer Reference Manual* for information on the internal parsing algorithms used by SNA NRJE. Information to develop your own parsing procedures for user exits available with NRJE can also be found in that manual.
- The `SOLICITED` JCW might be set.
- The JES2 banner might be turned off.

Output Routing Problem Symptoms

A list of symptoms of routing problems you might encounter, and possible solutions to those problems, is given below.

- **NRJE rejects job output from the host.**

  Verify that the host sends a PDIR before the output. NRJE requires that the host send an FMH2 PDIR after the FMH1 BDS (Begin Destination Selection) command before sending job output. Incorrect host configuration or problems in host user exit procedures may cause the PDIR not to be sent.

- `PRINT=` and `PUNCH=` **designations in the** `SUBMIT` **command do not work.**

  Output always goes to the default destination. (This feature applies to JES2 and JES3 only. It is not supported with VSE/POWER.)

Try routing with the FORMS= keyword even though the output is presumably being received on the "standard" form. If output is routed to the desired destination this time, then either the configuration for the Host Standard Print Form Name or Host Standard Punch Form Name in the NRJE Configuration: Workstation Data Page 2 Screen is incorrect, or your job is actually generating "special forms" output.

If output continues to go to the default destination with the FORMS= keyword, then use the SHOW command to display the job status. If no Joblog entry is displayed, then either (1) NRJE failed to parse the "Job Received" message correctly, and you need to install an exit procedure to do the parsing, or (2) no "Job Received" message was sent by the host (in which case you must work with host system programmers to resolve the problem).

If the SHOW command does display the Joblog entry but indicates that the status is either (1) "TRANSMITTED TO HOST" (that is, apparently no data sets have been received), or (2) "*n* DATA SETS RECEIVED," where n is a number less than expected. In either case, if you know more data sets were received by NRJE but NRJE failed to associate the output with your job, then verify that the host is transmitting banners (separator pages) with the output.

Alternately, NRJE might be unable to correctly parse the host banners and an exit procedure might be needed to do this parsing. See the *SNA NRJE User/Programmer Reference Manual*.

If the SHOW command indicates that the correct number of data sets have been received but output still goes to the incorrect destination, check any messages which might have been logged by NRJE indicating any failures to route output as requested.

NOTE For routing to disk files, both the user and MANAGER.SYS must have write access to the output file at the file, group, and account levels.

- **The copies parameter in your JCL is not recognized.**

  NRJE opens the output spool file with number of copies = 1 regardless of whether you request additional copies in your JCL (such as with the DD card copies parameter).

  Verify that the PDIR actually sent by the host with the data set has the "copies" field set to the requested number of additional copies.

- **A back-referenced file equation does not work.**

  (This is used with either the SUBMIT command routing options for PRINT, PUNCH, or FORMS, or for a Formid Lookup Table entry.)

  Check any messages logged by NRJE upon attempting to execute the file equation. Ensure that MANAGER.SYS has write access to the destination file.

- **A Formid Lookup Table entry specifying both an environment file and hard copy form mount does not work.**

  NRJE opens the output file with the hard copy form mount message but ignores the environment file.

  To select both an environment file and hard copy form, always specify the environment file first. For example, enter:

  ```
  :checks;dev=pp
            ;env=checkenv.hpenv.sys;forms=checks.
  ```

  Do not enter:

  ```
  :checks2;dev=pp;forms=checks.
            ;env=checkenv.hpenv.sys
  ```

- **A submitted file stays in the reader queue and is not transmitted to the host, even though the workstation is "active."**

  Use the SHOW command to ensure that the file priority is above the fence for the reader. The reader fence can be displayed by using the DISPLAY QUEUE command.

  Use the STATUS command to check the status of the LUs. If no LUs have the FMD state set to "no traffic," then no LUs are available for sending the job to the host.

  One job might have been sent to the host, but the host sent a "Job Received" message that was in a non-standard format, and so it was not recognized by NRJE.

  Use NMDUMP to format the log file, and then examine the format of any JES2 "HASP100" or JES3 "IAT6101" messages. (Note that logging for SNA NRJE must have been configured; otherwise, no log file was generated for NRJE.) Using NMDUMP for SNA NRJE is explained earlier in this chapter. Algorithms used to parse the messages are described in the *SNA NRJE User/Programmer Reference Manual*.

- For JES2, verify that the host is not DRAINED.

Troubleshooting Exit Procedures

If an exit procedure is needed to parse either the host banner or "Job Received" message, then these guidelines will be helpful in troubleshooting exit procedures.

Using the DEBUG Facility

To use the DEBUG facility, you must declare the DEBUG intrinsic in your exit procedure:

```
Intrinsic debug;
```

Then, at the appropriate points in your procedure you can execute calls to DEBUG.

Note, however, that calls to DEBUG are ignored in batch jobs. You must first run the NRJEMON program from a session. To do this you must replace the stream job that runs NRJEMON with a job that does nothing. For example:

```
!Job debugit,manager/pass.sys,nrje;outclass=,1
!Comment ** Use to debug an exit procedure
!Tellop ; RUN THE MONITOR FROM YOUR TERMINAL NOW.
!eoj>
```

Then, execute a command to start your workstation:

```
:NRJECONTROL START;WSID=Wsid
```

The stream job then runs. When the job is done, you should run NRJEMON from a terminal while logged on as MANAGER.SYS,NRJE:

```
:RUN NRJEMON;INFO=Wsid
```

You will then be placed in whenever your procedure calls the DEBUG intrinsic. See the *MPE Debug/Stack Dump Reference Manual* for additional information.

Using the PRINTOP Intrinsic

As an alternative to using DEBUG and setting breakpoints in your procedure, you can use the PRINTOP intrinsic to display variable values. Note that the PRINT intrinsic will be of little use because PRINT writes to $STDLIST only, and the PRINTOP intrinsic writes to the system console. See the *MPE Intrinsics Reference Manual* for additional information.

6 Commands

This chapter describes commands that can be used by a node manager (or any other user with NM capability) to manage NRJE operations:

- MPE commands for SNA NRJE.
- NRJE manager commands.

Users without NM capability can be allowed to use host console commands if the commands are configured in the `Allowed Host Commands` field of the NRJE Configuration: Workstation Data screen.

SNA NRJE displays a prompt string after a command has executed. Usually, no other output is generated after a command has successfully executed.

Most of the commands in this chapter have manager intrinsic counterparts. The intrinsics are described in the *SNA NRJE User/Programmer Reference Manual*.

MPE Commands

Described below, in alphabetical order, are the MPE commands for SNA NRJE. You must have MPE node manager (NM) capability to use these commands. Table 6-1 summarizes the function of each command.

Table 6-1 MPE Commands for SNA NRJE

Command	Function
NRJECONTROL HALT	Stops active LU-LU sessions immediately.
NRJECONTROL START	Starts a workstation or individual LUs, and optionally starts intrinsic and/or LU tracing.
NRJECONTROL STOP	Stops active LU-LU sessions in an orderly manner.
NRJECONTROL TRACEOFF	Turns off intrinsic and/or LU tracing for a workstation.
NRJECONTROL TRACEON	Turns on intrinsic and/or LU tracing for a workstation.
NRJECONTROL VERSION	Lists the version numbers of SNA NRJE software.

NRJECONTROL HALT

Stops active LU-LU sessions immediately.

Syntax

```
NRJECONTROL HA[LT];W[SID]=Wsid[;LU=LUName[,LUName ]...]
```

Parameters

Wsid **Required.** The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

The workstation must have been configured.

LUName For NRJE/V, this is the name of the SNA node LU class whose LU-LU sessions you want to stop. (Node classes are configured on the MPE V SNA Configuration: Classes screen.) For NRJE/XL, this is the configured LU Name (not the NAU number) of the LU whose LU-LU sessions you want to stop. (LUs are configured on the MPE XL SNANode Configuration: PU and LU Data screen.)

The name can be up to eight alphanumeric characters long; the first character must be alphabetic. You can specify a maximum of five *LUNames*. If you do not specify any *LUNames*, all active LUs for the workstation are stopped.

Description

This command enables you to stop active LU-LU sessions immediately. This differs from the NRJECONTROL STOP command, which causes an orderly termination of the LU-LU sessions. You can halt all active LU-LU sessions by not specifying any *LUNames*, or you can select sessions to halt by specifying *LUNames*.

NOTE Control is returned to NRJE *before* completing execution of this command.

An LU-LU session can also be stopped without issuing an NRJECONTROL HALT in these ways:

- By issuing the NRJE command HALT.
- By issuing the NRJE command STOPWS.
- By issuing the MPE command NRJECONTROL STOP.
- By issuing the MPE command SNACONTROL STOP.
- By the host job entry subsystem; SNA NRJE honors the request. This can happen at any time.

Text Reference

See NRJECONTROL STOP, HALT, and STOPWS later in this chapter. NRJEStopWS is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

NRJECONTROL START

Starts a workstation or individual LUs, and optionally starts intrinsic and/or LU tracing.

Syntax

```
NRJECONTROL STAR[TWS];W[SID]=Wsid
                    [;CH[AINSIZE]=NumRUs]
                    [;LU=LUName[,LUName]...]
                    [;TR[ACE]=Type[,Type][,File][,Size]]
```

Parameters

Wsid **Required.** The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

The workstation must have been configured.

NumRUs The number (from 0 through 99) of request units (RUs) that NRJE is to send before requesting a definite response from the host.

LUName For NRJE/V, this is the name of the SNA node LU class you want to start. (Node classes are configured on the MPE V SNA Configuration: Classes screen.) For NRJE/XL, this is the configured `LU Name` (not the NAU number) of the LU you want to start. (LUs are configured on the MPE XL SNANode Configuration: PU and LU Data screen.)

The name can be up to eight alphanumeric characters long; the first character must be alphabetic. You can specify a maximum of five *LUNames*. If you do not specify any *LUNames*, all LUs that are configured to be initially started are started.

You cannot start an LU that is already started.

Type The type of trace to be started:

- LU: for NRJE LU procedures.
- INTRINSIC: for intrinsics accessed by NRJE workstation users and managers. These intrinsics are traced:

```
NRJEAlter        NRJELUList       NRJEStopWS
NRJECancel       NRJELUStatus     NRJESubmit
NRJEConsole      NRJEQueue        NRJE2Submit
NRJEHJCancel     NRJERdrAccess    NRJETrace
NRJEHJInfo       NRJERdrFence     NRJEWriter
NRJEJobInfo      NRJEStartWS      NRJEWSInfo
```

NOTE Use this option only when recommended by your HP representative. This type of tracing can have a performance impact.

LU tracing for a workstation can be initially started only when the workstation is started. After that, it can be started and stopped at any time, as long as the workstation is active.

File An actual file designator of a disk file used for trace output data.

If you do not specify the name of a trace output file, the default file name NMTC*nnnn*.PUB.SYS is used, where *nnnn* is a number from 0000 through 9999. The *nnnn* integer is incremented to form and find the next available trace file name. You can always retain trace data by using a default file name; however, considerable disk space might be used.

If you specify a disk file that does not exist, it will be created as the destination for trace output.

If you specify an existing file, and it already is in use for trace output, then trace output records for this activity are interleaved with other trace output records. You minimize the use of disk space by using an old file appropriately; however, trace output can be overwritten. If you specify an old file that is not already open, the file will be overwritten with new trace data. No warning is issued.

Size The number of logical records to be stored in the trace file, from 0 through 32767. A logical record occupies one sector. A trace file is created with 16 extents. One extent is initially allocated, and additional extents are allocated one at a time, as needed. If the trace file becomes full and more trace data is to be written, the file is overwritten (beginning with the first record).

If you omit this parameter, a default of 1024 is used.

Description

When the NRJECONTROL START command is issued, the NRJE monitor is streamed and runs as an MPE job. (See Chapter 4 , “NA NRJE Workstation Startup and Shutdown,” of this manual.) You can start a workstation or individual LUs.

If you do not specify any *LUNames*, all LUs configured to be initially started are started. If you specify *LUName*, only those LUs are started.

You also can start intrinsic and/or LU tracing (with the *Type* parameter) with this command. Note that LU tracing can be started for an active workstation only.

NOTE If an error occurs because of a bad trace parameter, the workstation or LUs will not start.

Text Reference

See STARTWS later in this chapter. NRJEStartWS is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

NRJECONTROL STATUS

Displays the current status of LU sessions.

Syntax

```
NRJECONTROL STATUS[;W[SID]=Wsid][;LU=LUName[,LUName]...]
```

Parameters

Wsid — The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

LUName — For NRJE/V, this is the name of the SNA node LU class whose status you want displayed. (Node classes are configured on the MPE V SNA Configuration: Classes screen.) For NRJE/XL, this is the configured LU Name (not the NAU number) of the LU whose status you want displayed. (LUs are configured on the MPE XL SNANode Configuration: PU and LU Data screen.)

The name can be up to eight alphanumeric characters long; the first character must be alphabetic. You can specify a maximum of five *LUNames*. If you do not specify any *LUNames*, the status is displayed for all LUs configured for the workstation.

Description

This command displays the condition of LU sessions of a workstation. You can specify a particular workstation by specifying a *Wsid*. The NRJECONTROL STATUS command is intended as a support tool to aid in identifying the state of each LU for your workstation.

NOTE The output of the NRJECONTROL STATUS command is in text format, which may vary somewhat with different releases of NRJE.

Text Reference

NRJELUStatus is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

NRJECONTROL STOP

Stops active LU-LU sessions in an orderly manner.

Syntax

```
NRJECONTROL STO[P];W[SID]=Wsid[;LU=LUName[,LUName]...]
```

Parameters

Wsid **Required.** The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

The workstation must have been configured.

LUName For NRJE/V, this is the name of the SNA node LU class whose LU-LU sessions you want to stop. (Node classes are configured on the MPE V SNA Configuration: Classes screen.) For NRJE/XL, this is the configured LU Name (not the NAU number) of the LU whose LU-LU sessions you want to stop. (LUs are configured on the MPE XL SNANode Configuration: PU and LU Data screen.)

The name can be up to eight alphanumeric characters long; the first character must be alphabetic. You can specify a maximum of five *LUNames*. If you do not specify any *LUNames*, all active LUs for that workstation are stopped.

Description

When the NRJECONTROL STOP command is issued, active LU-LU sessions are stopped in an orderly manner. This differs from the NRJECONTROL HALT command, which causes an immediate termination of the LU-LU sessions. You can halt all LU-LU sessions by not specifying any *LUNames*, or you can select sessions to halt by specifying *LUNames*. Activities at the workstation can consist of several LU-LU sessions. All current activities of LU-LU sessions will continue to completion before stopping. This is called quiescing. Note that intrinsic tracing for the workstation is not stopped.

NOTE Control is returned to NRJE *before* completing execution of this command.

An LU-LU session can also be stopped without issuing an NRJECONTROL STOP in these ways:

- By issuing the NRJE command HALT.
- By issuing the NRJE command STOPWS.
- By issuing the MPE command NRJECONTROL HALT.
- By issuing the MPE command SNACONTROL STOP.
- By the host job entry subsystem; SNA NRJE honors the request. This can happen at any time.

Text Reference

See NRJECONTROL HALT earlier in this chapter, and HALT and STOPWS later in this chapter. NRJEStopWS is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

NRJECONTROL TRACEOFF

Turns off intrinsic and/or LU tracing for a workstation.

Syntax

```
NRJECONTROL TRACEOF[F];W[SID]=Wsid[;TRACE=Type[,Type]]
```

Parameters

Wsid **Required.** The workstation name. This can be up to eight alphanumeric characters long; the first letter must be alphabetic.

The workstation must have been configured.

Type The type of trace to be stopped:

- LU: for NRJE LU procedures.
- INTRINSIC: for commands and intrinsics accessed by NRJE workstation users and operators.

If you omit this parameter, all tracing that is on is turned off.

Description

This command is used to turn off intrinsic and/or LU tracing for all active LU-LU sessions of a workstation. Tracing is described in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual.

Text Reference

See TRACEOFF later in this chapter. NRJETrace is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

NRJECONTROL TRACEON

Turns on intrinsic and/or LU tracing for a workstation.

Syntax

```
NRJECONTROL TRACEON;W[SID]=Wsid
                  [;TRACE=Type[,Type][,File][,Size]]
```

Parameters

Wsid **Required.** The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

The workstation must have been configured.

Type The type of trace to be started:

- LU: for NRJE LU procedures.
- INTRINSIC: for commands and intrinsics accessed by NRJE workstation users and managers. These intrinsics are traced:

NRJEAlter	NRJELUList	NRJEStopWS
NRJECancel	NRJELUStatus	NRJESubmit
NRJEConsole	NRJEQueue	NRJE2Submit
NRJEHJCancel	NRJERdrAccess	NRJETrace
NRJEHJInfo	NRJERdrFence	NRJEWriter
NRJEJobInfo	NRJEStartWS	NRJEWSInfo

NOTE Use this option only when recommended by your HP representative. This type of tracing can have a performance impact.

LU tracing for a workstation can be initially started only when the workstation is started. After that, it can be started and stopped at any time, as long as the workstation is active.

File An actual file designator of a disk file used for trace output data.

If you do not specify the name of a trace output file, the default file name NMTC*nnnn*.PUB.SYS is used, where *nnnn* is a number from 0000 through 9999. The *nnnn* integer is incremented to form and find the next available trace file name. You can always retain trace data by using a default file name; however, considerable disk space might be used.

If you specify a disk file that does not exist, it will be created as the destination for trace output.

If you specify an existing file, and it already is in use for trace output, then trace output records for this activity are interleaved with other trace output records. You minimize the use of disk space by using an old file appropriately; however, trace output can be overwritten. If you specify an old file that is not already open, the file will be overwritten with new trace data. No warning is issued.

Size The number of logical records to be stored in the trace file, from 0 through 32767. A logical record occupies one sector. A trace file is created with 16 extents. One extent is initially allocated, and additional extents are allocated one at a time, as needed. If the trace file becomes full and more trace data is to be written, the file is overwritten (beginning with the first record). If you omit this parameter, a default of 1024 is used.

Description

This command is used to start intrinsic and/or LU tracing for a workstation. Note that LU tracing can be started for an active workstation only. Tracing is described in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual.

Text Reference

See TRACEON later in this chapter. NRJETrace is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

NRJECONTROL VERSION

Lists the version numbers of SNA NRJE software.

Syntax

```
NRJECONTROL VERSION
```

Description

This command lists the version numbers of SNA NRJE program files, segments, the message file, and the overall version. Output from NRJECONTROL VERSION is sent to $STDLIST.

Example

```
:NRJECONTROL VERSION

SNA NRJE ProductNum module versions:

Program file: NRJE.NRJE.SYS              Version: A6000602
Program file: NRJECONS.NRJE.SYS          Version: A6000000
Program file: NRJEMON.NRJE.SYS           Version: A6000602
Program file: NRJELU.NRJE.SYS            Version: A6000609
Program file: NRJELUT.NRJE.SYS           Version: A6000609
Program file: NSHUT.NRJE.SYS             Version: A6000600
Program file: IONRDR0.PUB.SYS            Version: A6000106
SL Procedure: NRJEMISCVERS               Version: A6000602
SL Procedure: NRJEMISC2VERS              Version: A6000600
SL Procedure: NRJEMISC3VERS              Version: A6000600
SL Procedure: NRJEINTVERS                Version: A6000605
SL Procedure: SUBSYS2FMTVERS             Version: A6000600
Catalog file: NRJECAT.NRJE.SYS           Version: A6000600

SNA NRJE ProductNum overall version = A.60.00
```

Note that in this example, program IONRDR0.PUB.SYS would be displayed only if you were running NRJE/V, and program NRJELUT.NRJE.SYS would be displayed only if you were running NRJE/V or a version of NRJE/XL prior to release 2.1. Also, the version numbers shown above are not necessarily the current versions for SNA NRJE; they are shown only as an example.

Text Reference

This command has the same effect as the NRJE VERSION command, which is described in the *SNA NRJE User/Programmer Reference Manual*.

NRJE Manager Commands

Most subsystem commands are available only to NRJE managers (users with NM capability). Users without NM capability can have access to the console commands, provided that one or more of the commands have been "allowed" in the NRJE configuration file. (This is described later in this chapter.) Table 6-2 summarizes NRJE manager commands.

Table 6-2 NRJE Manager Commands

Command	Function
CONSOLE	Obtains access to the host remote console of a workstation.
HALT	Stops active LU-LU sessions immediately.
PURGE	Purges entries in the NRJE Joblog. This command does not apply if you are connected to a VSE/POWER host system.
RDRDOWN	Disables the reader of an NRJE workstation.
RDRFENCE	Updates the outfence value of the NRJE workstation reader.
RDRUP	Enables the reader of an NRJE workstation.
RELEASE	Relinquishes access to the host remote console of a workstation.
RELOAD	Causes NRJE to reload the Formid Lookup Table.
STARTWS	Starts a workstation or individual LUs, and optionally starts intrinsic and/or LU tracing.
STATUS	Displays the current status of LU sessions.
STOPWS	Stops active LU-LU sessions in an orderly manner.
TRACEOFF	Turns off intrinsic and/or LU tracing for a workstation.
TRACEON	Turns on intrinsic and/or LU tracing for a workstation.
VERIFY	Verifies the entries in the Formid Lookup Table.
WELCOME	Updates the NRJE subsystem welcome message.
[] ...	A host job entry system console command preceded by the host command prefix character configured for the workstation.

User Commands with Manager Extensions

NRJE managers (users with NM capability) use the commands in Table 6-3 with extended features. These commands are also available to users, but without features. The commands are described in the *SNA NRJE User/Programmer Reference Manual*.

Table 6-3 User Commands with NRJE Manager Extensions

Command	Function
ALTER	Revises the priority of a submitted job or jobs.
CANCEL	Purges jobs awaiting transmission. Deletes returning output data sets for jobs already transmitted to the host. If you are connected to a VSE/POWER host system, only jobs awaiting transmission are cancelled.
SHOW	Provides information about jobs that have been submitted. If you are connected to a VSE/POWER host system, only those jobs awaiting transmission are shown.
SUBMIT	Prepares a batch input job stream for transmission to a host system.

Remote Console Facility for NRJE Users

Users who do not have NM capability can access the remote console facility, provided one or more commands have been "allowed." This is done through the `Allowed Host Commands` field on the NRJE Configuration: Workstation Data screen. If desired, the NRJE manager can limit remote console access to only those who have NM capability, by setting the `Allowed Host Commands` field to all blanks. This specifies that no commands are allowed to users without NM capability. Multiple commands can be allowed to NRJE users by listing the commands in the `Allowed Host Commands` field, separated by semicolons (`;`).

Examples:

Allowed Host Commands	**Explanation**
$D	Allows all JES2 commands that start with "$D".
$D; $C; $L	Allows all JES2 commands that start with "$D", "$C", or "$L".
$	Allows all JES2 commands.
*I	Allows all JES3 commands that start with "*I".
all blanks	No commands are allowed.

Once in the console facility, all users remain there indefinitely until either the workstation terminates or the user issues the RELEASE command to exit the console. If the workstation terminates, the RELEASE command is executed automatically for the user.

CONSOLE

Obtains access to the host remote console of a workstation.

Syntax

```
CONSOLE
```

Description

This command obtains access to the host console of a workstation. While you have access to the console, the console mode prompt that you have configured for the workstation is displayed on the screen in place of the usual NRJE prompt. (The console mode prompt is configured in the NRJE Configuration: Workstation Data screen.)

The following conditions are necessary for this command to be issued successfully:

- You must have NM capability, or if you do not have NM capability, this command must have been “allowed” on the NRJE Configuration: Workstation Data screen.
- The communications line for your workstation must be open; the workstation must be connected to the host job entry subsystem.
- The console facility must be free or available. Up to 28 users can access the console simultaneously.

Note that since you cannot specify a *Wsid* in this command, you can obtain access to the console of the default workstation only.

Once you can access the console, you can enter host console commands. Each of these commands must begin with the configured host command prefix character configured on the NRJE Configuration: Workstation Data screen. For example,

```
CONS>$DA
```

where `CONS>` is the console mode prompt configured for the workstation, and `$DA` is a JES2 host command. (The $ is the host command prefix character.)

NOTE

NRJE does not check the host console command syntax. NRJE simply sends all the text you entered, including the host console command prefix, to your host as a console command.

If you are connected to a VSE/POWER host, the host console command prefix is required before each command, but by host system requirement, it is stripped off before transmission.

While you have access to the console, you receive *all* console messages issued by the host. So, you can receive console messages in response to your own commands, as well as messages in response to commands by other users. You also receive all other output sent by the host to the remote console. This includes host "Job Received" messages sent by some host systems when a job is received from a remote workstation. NRJE writes this output to your job or session output device, $STDLIST.

Node Management Services can also log messages (CLAS0013 in SUB0002) sent to the host remote console of your workstation. If no user has access to the console, you can retrieve a lost message by using the Node Management Services utility program NMDUMP. See the *SNA Link Services Reference Manual* (for MPE V) or *Using the Node Management Services Utilities* (for MPE XL) for more information about this utility.

If you currently have access to the console and no longer need it, issue a RELEASE command. That command terminates your access to the console and frees that facility for use by other users.

Example

```
:NRJE RMT11                    Enter the NRJE subsystem with RMT11 as the
                               default workstation.

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WELCOME TO NRJE

RMT11> ...                     Execute subsystem commands.

RMT11>CONSOLE                  Acquire the console.

CON11> ...                     Execute other subsystem commands from the
                               configured console mode prompt.

CON11>$DA                      Issue a host remote console command, with the
                               configured host command prefix character.
                               Output messages related to this command might
                               not return immediately.

CON11> ...                     Execute subsystem commands.

CON11>RELEASE                  Relinquish ownership of the console.

RMT11> ...                     Remote workstation prompt is returned.
```

Text Reference

Programmatic access to the host remote console is provided by these manager intrinsics:

- `NRJEConsole`: obtains access to the console.
- `NRJESendCmd`: transmits a console command.
- `NRJEConsCheck`: determines whether any outstanding host remote console messages are waiting to be received.
- `NRJERcvMsg`: receives a console message.
- `NRJERelease`: relinquishes access to the console.

These intrinsics are described in the *SNA NRJE User/Programmer Reference Manual*.

HALT

Stops active LU-LU sessions immediately.

Syntax

```
H[ALT][;W[SID]=Wsid][;LU=LUName[,LUName]...]
```

Parameters

Wsid — The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

LUName — For NRJE/V, this is the name of the SNA node LU class whose LU-LU sessions you want to halt. (Node classes are configured on the MPE V SNA Configuration: Classes screen.) For NRJE/XL, this is the configured LU Name (not the NAU number) of the LU whose LU-LU sessions you want to halt. (LUs are configured on the MPE XL SNANode Configuration: PU and LU Data screen.)

The name can be up to eight alphanumeric characters long; the first character must be alphabetic. You can specify a maximum of five *LUNames*. If you do not specify any *LUNames*, all active LUs for the workstation are halted.

Description

This command enables you to stop active LU-LU sessions immediately. This differs from the STOPWS command, which causes an orderly termination of the LU-LU sessions. You can specify a particular workstation by specifying a *Wsid*. You can halt all active LU-LU sessions by not specifying any *LUNames*, or you can select sessions to halt by specifying *LUNames*.

NOTE Control is returned to NRJE *before* completing execution of this command.

An LU-LU session can also be stopped without issuing a HALT in these ways:

- By issuing the NRJE command STOPWS.
- By issuing the MPE command NRJECONTROL HALT.
- By issuing the MPE command NRJECONTROL STOP.
- By issuing the MPE command SNACONTROL STOP.
- By the host job entry subsystem; SNA NRJE honors the request. This can happen at any time.

Text Reference

See NRJECONTROL HALT and NRJECONTROL STOP earlier in this chapter, and STOPWS later in this chapter. NRJEStopWS is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

PURGE

Purges entries in the NRJE Joblog.

This command does not apply if you are connected to a VSE/POWER host system.

Syntax

```
        {ALL}
PUR[GE] {O[LD][;DATE=Date[;TIME=Time{AM}]]}[;W[SID]=Wsid]
                                    {PM}
```

Parameters

ALL	Empties the Joblog file. NRJE prompts you with `PURGE ENTIRE JOBLOG, (Y/N)?`
OLD	Purges entries for cancelled jobs and jobs that were placed in the Joblog prior to the specified date and time. (Entries are placed in the Joblog at the time of transmission to the host.) OLD also causes entries for jobs that were transmitted to the host, but not acknowledged as having been received, to be purged.
Date	The date in the custom date format for the language in use. **Default:** yesterday
Time	The time in the custom time format for the language in use. **Default:** 12:01 a.m.
Wsid	The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic. If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

Description

This command allows you to purge entries in the NRJE Joblog.

NOTE If you are running SNA NRJE in batch mode, the PURGE command will execute without asking you to confirm it with a Y or an N.

If exclusive access to the Joblog can be obtained, then disk space can be recovered by a PURGE. Otherwise, Joblog entries will be marked for deletion with no space recovery. Exclusive access can be obtained only while the workstation is inactive.

NOTE You must logon to the SYS account to purge the Joblog.

Example

```
For this example, the current date/time is assumed to be 8/5/87, 11:42 a.m.:

R11>purge old
PURGE ALL ENTRIES PRIOR TO TUE, AUG 4, 1987, 12:01 AM (Y/N)?

R11>purge old;date=8/4/87
PURGE ALL ENTRIES PRIOR TO TUE, AUG 4, 1987, 12:01 AM (Y/N)?

R11>purge old;date=8/4/87;time=11:27am
PURGE ALL ENTRIES PRIOR TO TUE, AUG 4, 1987, 11:27 AM (Y/N)?
```

RDRDOWN

Disables the reader of an NRJE workstation.

Syntax

```
RDRD[OWN] [Wsid]
```

Parameter

Wsid The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

Description

This command disables the reader of an NRJE workstation. When RDRDOWN is executed successfully, NRJE users are prevented from submitting jobs. Some reasons for inhibiting use of the reader of an NRJE workstation are as follows:

- The configured spooled disk space on the HP 3000 has been used up.
- The host has been down for a long time, and many jobs are being submitted.

This command has the same effect as the MPE console command SHUTQ *ldev*, where *ldev* is the logical device number of the NRJE workstation reader.

You can specify a particular workstation by specifying a *Wsid*.

Text Reference

NRJERdrAccess is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*. Also see SHUTQ in that manual.

RDRFENCE

Updates the outfence value of the NRJE workstation reader.

Syntax

```
RDRF[ENCE] ReaderOutFence[;W[SID]=Wsid]
```

Parameters

ReaderOutFence

Required. The output fence for the workstation reader. This is an integer from 1 through 14; however, note that you can specify 0 to use the system output fence, instead. If you do this, the *ReaderOutFence* value is changed to the value of the system output fence.

When an LU is configured to transmit the spooled file, any spooled file whose priority exceeds the value of *ReaderOutFence* is transmitted once the workstation is in communication with the host.

Wsid

The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

Description

This command updates the outfence value of the NRJE workstation reader. You can specify a particular workstation by specifying a *Wsid*. This command is equivalent to the following MPE command for NRJE spool files:

```
:OUTFENCE ReaderOutFence;LDEV=ldev
```

You can influence the transmission of spooled files from the reader transmission queue to the host by varying *ReaderOutFence*. Any spooled file in the workstation's reader transmission queue with an output priority less than or equal to the value of *ReaderOutFence* is deferred until one of these events takes place:

- The value of *ReaderOutFence* is lowered with a RDRFENCE command.

- The value of *ReaderOutFence* is lowered with an OUTFENCE command for the NRJE workstation reader.
- The priority of the reader spool file is raised to exceed the value of *ReaderOutFence*, by issuing an ALTER command or calling the NRJEAlter intrinsic.

Reader spool files, once created, are disposed of when one of these actions happens:

- The spool file has been transmitted to the host system.
- The spool file is deleted by issuing a CANCEL command or calling NRJECancel.
- A SPOOLF;DELETE or DELETESPOOLFILE console command, or its SPOOK equivalent, is issued.
- A *cool start* is used to recover from an HP 3000 system shutdown. This deletes all spool files.

Text Reference

NRJERdrFence is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

RDRUP

Enables the reader of an NRJE workstation.

Syntax

```
RDRU[P] [Wsid]
```

Parameter

Wsid The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

Description

This command enables the reader of an NRJE workstation. Note that a workstation's reader does not have to be enabled before the workstation can be started. When RDRDUP is executed successfully, NRJE users can submit jobs.

This command has the same effect as the MPE console command OPENQ *ldev*, where *ldev* is the logical device number of the NRJE workstation reader. You can specify a particular workstation by specifying a *Wsid*.

Text Reference

NRJERdrAccess is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*. Also see OPENQ in that manual.

RELEASE

Relinquishes access to the host remote console of a workstation.

Syntax

```
REL[EASE]
```

Description

Use this command to relinquish access to the host remote console of a workstation. You must have NM capability or be an “allowed” console user to use this command. You remain in the console of a workstation until a RELEASE command is issued, or until you exit from the NRJE CI. Note that since you cannot specify a *Wsid* in this command, you can release access to the default workstation only.

Text Reference

See CONSOLE earlier in this chapter for a general description of how to use the host remote console. NRJERelease is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

RELOAD

Causes NRJE to reload the Formid Lookup Table.

Syntax

```
RELO[AD][;W[SID]=Wsid]
```

Parameter

Wsid — The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

Description

This command causes NRJE to reload the Formid Lookup Table into its internal copy of the table. The RELOAD command can be used any time NRJE is active. This command should be used anytime the table is modified after NRJE is started. A message indicating whether the reload attempt was successful is *logged*; the message is not necessarily sent to the terminal of the user who issued the RELOAD command.

This command is not valid unless the workstation is configured to use the Formid Lookup Table, in the NRJE Configuration: Workstation Data Page 2 screen.

Use of the Formid Lookup Table is described in the *SNA NRJE User/Programmer Reference Manual*.

Text Reference

See VERIFY later in this chapter for information about verifying the Formid Lookup Table.

STARTWS

Starts a workstation or individual LUs, and optionally starts intrinsic and/or LU tracing.

Syntax

```
STAR[TWS][;W[SID]=Wsid]
         [;CH[AINSIZE]=NumRUs]
         [;LU=LUName[,LUName]...]
         [;TR[ACE]=Type[,Type][,File][,Size]]
```

Parameters

Wsid — The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

NumRUs — The number (from 0 through 99) of request units (RUs) that NRJE is to send before requesting a definite response from the host.

LUName — For NRJE/V, this is the name of the SNA node LU class you want to start. (Node classes are configured on the MPE V SNA Configuration: Classes screen.) For NRJE/XL, this is the configured LU Name (not the NAU number) of the LU you want to start. (LUs are configured on the MPE XL SNANode Configuration: PU and LU Data screen.)

The name can be up to eight alphanumeric characters long; the first character must be alphabetic. You can specify a maximum of five *LUNames*. If you do not specify any *LUNames*, all LUs that are configured to be initially started are started.

You cannot start an LU that is already started.

Type — The type of trace to be started:

- LU: for NRJE LU procedures.

- INTRINSIC: for intrinsics accessed by NRJE workstation users and managers. These intrinsics are

```
NRJEAlter          NRJELUList         NRJEStopWS
NRJECancel         NRJELUStatus       NRJESubmit
NRJEConsole        NRJEQueue          NRJE2Submit
NRJEHJCancel       NRJERdrAccess      NRJETrace
NRJEHJInfo         NRJERdrFence       NRJEWriter
NRJEJobInfo        NRJEStartWS        NRJEWSInfo
```

NOTE Use this option only when recommended by your HP representative. This type of tracing can have a performance impact.

LU tracing for a workstation can be initially started only when the workstation is started. After that, it can be started and stopped at any time, as long as the workstation is active.

File An actual file designator of a disk file used for trace output data.

If you do not specify the name of a trace output file, the default file name NMTC*nnnn*.PUB.SYS is used, where *nnnn* is a number from 0000 through 9999. The *nnnn* integer is incremented to form and find the next available trace file name. You can always retain trace data by using a default file name; however, considerable disk space might be used.

If you specify a disk file that does not exist, it will be created as the destination for trace output.

If you specify an existing file, and it already is in use for trace output, then trace output records for this activity are interleaved with other trace output records. You minimize the use of disk space by using an old file appropriately; however, trace output can be overwritten. If you specify an old file that is not already open, the file will be overwritten with new trace data. No warning is issued.

Size The number of logical records to be stored in the trace file, from 0 through 32767. A logical record occupies one sector. A trace file is created with 16 extents. One extent is initially allocated, and additional extents are allocated one at a time, as needed. If the trace file becomes full, and more trace data is to be written, the file is overwritten (beginning with the first record).

If you omit this parameter, a default of 1024 is used.

Description

When the STARTWS command is issued, the NRJE monitor is streamed and runs as an MPE job (see Chapter 4 , “NA NRJE Workstation Startup and Shutdown,” of this manual). You can start a workstation or individual LUs.

If you do not specify a *Wsid*, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

If you do not specify any *LUNames*, all LUs configured to be initially started are started. If you specify *LUName*, only those LUs are started.

You also can start intrinsic and/or LU tracing (with the parameter) with this command. Tracing is described in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual. Note that LU tracing can be started for an active workstation only.

NOTE If an error occurs because of a bad trace parameter, the workstation or LUs will not start.

Text Reference

See NRJECONTROL START earlier in this chapter. NRJEStartWS is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

STATUS

Displays the current status of LU sessions.

Syntax

```
STATUS[;W[SID]=Wsid][;LU=LUName[,LUName]...]
```

Parameters

Wsid The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

LUName For NRJE/V, this is the name of the SNA node LU class whose status you want displayed. (Node classes are configured on the MPE V SNA Configuration: Classes screen.) For NRJE/XL, this is the configured LU Name (not the NAU number) of the LU whose status you want displayed. (LUs are configured on the MPE XL SNANode Configuration: PU and LU Data screen.)

The name can be up to eight alphanumeric characters long; the first character must be alphabetic. You can specify a maximum of five *LUNames*. If you do not specify any *LUNames*, the status is displayed for all LUs configured for the workstation.

Description

This command displays the condition of LU sessions of a workstation. You can specify a particular workstation by specifying a *Wsid*. The STATUS command is intended as a support tool to aid in identifying the state of each LU for your workstation.

NOTE The output of the STATUS command is in text format, which may vary somewhat with different releases of NRJE.

Text Reference

NRJELUStatus is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

STOPWS

Stops active LU-LU sessions in an orderly manner.

Syntax

```
STO[PWS][;W[SID]=Wsid][;LU=LUName[,LUName]...]
```

Parameters

Wsid — The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

LUName — For NRJE/V, this is the name of the SNA node LU class whose LU-LU sessions you want to stop. (Node classes are configured on the MPE V SNA Configuration: Classes screen.) For NRJE/XL, this is the configured LU Name (not the NAU number) of the LU whose LU-LU sessions you want to stop. (LUs are configured on the MPE XL SNANode Configuration: PU and LU Data screen.)

The name can be up to eight alphanumeric characters long; the first character must be alphabetic. You can specify a maximum of five *LUNames*. If you do not specify any *LUNames*, all active LUs for that workstation are stopped.

Description

When the STOPWS command is issued, active LU-LU sessions are stopped in an orderly manner. This differs from the HALT command, which causes an immediate termination of the LU-LU sessions. You can specify a particular workstation by specifying a *Wsid*. You can halt *all* LU-LU sessions by not specifying any *LUNames*, or you can select sessions to halt by specifying *LUNames*. Activities at the workstation can consist of several LU-LU sessions. All current activities of LU-LU sessions will continue to completion before stopping. This is called quiescing. Note that intrinsic tracing for the workstation is not stopped.

NOTE Control is returned to NRJE *before* completing execution of this command.

An LU-LU session can also be stopped without issuing a STOPWS in these ways:

- By issuing the NRJE command HALT.
- By issuing the MPE command NRJECONTROL HALT.
- By issuing the MPE command NRJECONTROL STOP.
- By issuing the MPE command SNACONTROL STOP.
- By the host job entry subsystem; SNA NRJE honors the request. This can happen at any time.

Text Reference

See NRJECONTROL HALT, NRJECONTROL STOP, and HALT earlier in this chapter. NRJEStopWS is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

TRACEOFF

Turns off intrinsic and/or LU tracing for a workstation.

Syntax

```
TRACEOF[F][;W[SID]=Wsid][;TRACE=Type[,Type]]
```

Parameters

Wsid The workstation name. This can be up to eight alphanumeric characters long; the first letter must be alphabetic.

If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

Type The type of trace to be stopped:

- LU: for NRJE LU procedures.
- INTRINSIC: for commands and intrinsics accessed by NRJE workstation users and operators.

If you omit this parameter, all tracing that is on is turned off.

Description

This command is used to turn off intrinsic and/or LU tracing for all active LU-LU sessions of a workstation. Tracing is described in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual. You can specify a particular workstation by specifying a *Wsid*.

Text Reference

See NRJECONTROL TRACEOFF earlier in this chapter. NRJETrace is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

TRACEON

Turns on intrinsic and/or LU tracing for a workstation.

Syntax

```
TRACEON[;W[SID]=Wsid]
       [;TR[ACE]=Type[,Type][,File][,Size]]
```

Parameters

Wsid The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

Type The type of trace to be started:

- LU: for NRJE LU procedures.
- INTRINSIC: for commands and intrinsics accessed by NRJE workstation users and managers. These intrinsics are traced:

NRJEAlter	NRJELUList	NRJEStopWS
NRJECancel	NRJELUStatus	NRJESubmit
NRJEConsole	NRJEQueue	NRJE2Submit
NRJEHJCancel	NRJERdrAccess	NRJETrace
NRJEHJInfo	NRJERdrFence	NRJEWriter
NRJEJobInfo	NRJEStartWS	NRJEWSInfo

NOTE Use this option only when recommended by your HP representative. This type of tracing can have a performance impact.

LU tracing for a workstation can be initially started only when the workstation is started. After that, it can be started and stopped at any time, as long as the workstation is active.

File An actual file designator of a disk file used for trace output data.

If you do not specify the name of a trace output file, the default file name NMTC*nnnn*.PUB.SYS is used, where *nnnn* is a number from 0000 through 9999. The *nnnn* integer is incremented to form and find the next available trace file name. You can always retain trace data by using a default file name; however, considerable disk space might be used.

If you do not specify the name of a trace output file, the default file name NMTC*nnnn*.PUB.SYS is used, where *nnnn* is a number from 0000 through 9999. The *nnnn* integer is incremented to form and find the next available trace file name. You can always retain trace data by using a default file name; however, considerable disk space might be used.

If you specify an existing file, and it already is in use for trace output, then trace output records for this activity are interleaved with other trace output records. You minimize the use of disk space by using an old file appropriately; however, trace output can be overwritten. If you specify an old file that is not already open, the file will be overwritten with new trace data. No warning is issued.

Size The number of logical records to be stored in the trace file, from 0 through 32767. A logical record occupies one sector. A trace file is created with 16 extents. One extent is initially allocated, and additional extents are allocated one at a time, as needed. If you omit this parameter, a default of 1024 is used.

Description

This command is used to start intrinsic and/or LU tracing for a workstation. Tracing is described in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual. You can specify a particular workstation by specifying a *Wsid*. Note that LU tracing can be started for an active workstation only.

Text Reference

See NRJECONTROL TRACEON earlier in this chapter. NRJETrace is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

VERIFY

Verifies the entries in the Formid Lookup Table.

Syntax

```
VERI[FY][;W[SID]=Wsid]
```

Parameter

Wsid — The workstation name. This can be up to eight alphanumeric characters long; the first character must be alphabetic.

If you omit this parameter, the default workstation identifier is used. You can specify a default workstation identifier in the NRJE command.

Description

After building the Formid Lookup Table and then configuring it in the NRJE Configuration: Workstation Data Page 2 screen, you should use the VERIFY command to verify all of the records. Note that all of the devices in the Formid Lookup Table must be available. Also, if your workstation is established over a data communications line (DS line), the line must be open. For additional information about the Formid Lookup Table, see the *SNA NRJE User/Programmer Reference Manual*.

You should be logged on as MANAGER.SYS,NRJE when you issue this command. If any Formid Lookup Table records reference a tape device, then a tape mount request will be sent to the operator's console. This command can be terminated by a **[CTRL]-Y**.

Text Reference

See RELOAD earlier in this chapter for information about reloading the Formid Lookup Table.

Example

```
R18>VERIFY

..............          A dot is printed as each record is verified.
ALL RECORDS PASSED
R18>
```

If an error occurs, NRJE will report the nature of the error and will continue checking the remainder of the records in the table.

```
R18>VERIFY

......
RECORD 7:
UNKNOWN DEVICE CLASS.  (CIERR 344)
NRJE FORMID = ANNE      ;FILE EQUATION ATTEMPTED:
FILE TEST7 ;DEV= NOTTHERE

..
RECORD 10;
NONEXISTENT PERMANENT FILE (FSERR 52)
NRJE FORMID = PUNOUT   ;FILE EQUATION ATTEMPTED:
FILE TEST10 =PUNMSG,OLD

..............

ALL BUT 2 RECORD(S) PASSED.
R18>
```

If an error is detected, NRJE will report the logical record number of concatenated records in the Formid Lookup Table. The first record is record zero.

WELCOME

Updates the NRJE subsystem welcome message.

Syntax

```
W[ELCOME]
```

Description

This command updates the NRJE subsystem welcome message. The welcome message is broadcast every time any user enters the subsystem, and when a `DISPLAY INFO` command is issued. It is not broadcast when a user invokes the `NRJE` subsystem command to change from one default workstation to another.

When you enter this command, NRJE puts you in edit mode with an *nn*> prompt at which you can enter a line of the welcome message. For each welcome message line you enter, *nn* is incremented by one.

An *nn*> **[RETURN]** terminates welcome message text input from sessions. An `E0W` subcommand terminates welcome message text that is input from a job stream. The `WELCOME` command applies to the entire NRJE subsystem.

A welcome message can be updated as shown in the example below. NRJE can accept lines of up to 80 characters long, and adds a carriage control and a line feed at the end of each line. The maximum total number of characters that can be included in the welcome file is 1920. This fills the screen of HP 264x and HP 262x terminals. The lines are stored in image mode and are displayed in the format in which they are entered.

Example

```
:NRJE RMT11                          Enter the NRJE subsystem command interpreter
                                     using RMT11 as the default workstation.

ProductNum VersionNum NRJE (C) HEWLETT-PACKARD CO. CopyrightYear

                                     NRJE displays its banner line.

WELCOME MESSAGE TO BE REVISED        The welcome message is displayed.

RMT11> ...

                                     The NRJE subsystem command interpreter
                                     issues you a prompt.

RMT11>WELCOME [RETURN]               Begin WELCOME command sequence.

1>WELCOME TO NRJE. [RETURN]          You are prompted with an nn> to begin each
2>RMT11 READER IS DOWN. [RETURN]     line of the welcome message.
3>HOST IS DOWN FOR GEN. [RETURN]
4>SPOOL FILES 75% FILLED. [RETURN]
5>[RETURN] or EOW for a job stream.  The welcome message is terminated when
                                        you enter a [RETURN] with no data, or
                                     EOW [RETURN] in response to an nn> prompt.
```

Text Reference

NRJEUpdWel is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*. Also see NRJEWelcome, which provides the text of the current welcome message, in that manual.

[] ... HOST CONSOLE COMMAND

A host job entry system console command preceded by the host command prefix character configured for the workstation.

Syntax

[]*command*

Parameters

[]	The host job entry subsystem command prefix character you have configured for the workstation. Begin every remote console command to the host with this character.
command	Any legitimate command recognized by the host remote console command processor. If you do not have NM capability, this command must be allowed through the NRJE Configuration: Workstation Data screen.

Description

The host command prefix character and a console mode prompt are configured options in NRJE. They are entered in the NRJE Configuration: Workstation Data screen. The configured host command prefix character must be consistent with what is configured on the host system. See the *SNA Link Services Reference Manual* (for MPE V) or the *SNA NRJE Node Manager's Guide* (for MPE XL) for configuration information.

NOTE If you are connected to a VSE/POWER host system, the host expects no command prefix. NRJE does require a prefix with each command, however, to recognize that the string you enter is a VSE/POWER command. NRJE strips off the command prefix before sending it to the VSE/POWER host.

Entering a command string that begins with the host command character enables you to issue a host job entry system command. If your workstation is communicating with the host system and you have access to the console, your command is transmitted. If you have not obtained the console (see the CONSOLE command earlier in this chapter) before issuing a host command, NRJE obtains it for you. While in console mode, the configurable console mode prompt is displayed instead of the standard workstation prompt. To relinquish access to the host remote console, use the RELEASE command.

NRJE does not check the syntax of the command.

Check the IBM documentation that applies to your host installation for the commands available and the syntax you must use. A list of IBM documents is in the preface of the *SNA NRJE User/Programmer Reference Manual*.

Example

```
R22>$DA                          Display all active jobs for a workstation.
                                 Two NRJE subsystem messages follow.
OPENING CONSOLE IN PROGRESS ... (CI=780)
HOST CONSOLE IS OPEN.  (CI=858)


10.01.14 JOB  753 $HASP608 XPRTRUN5 EXECUTING I PRIO  6 IPO1
10.01.14 JOB  754 $HASP608 XPRTRUN6 EXECUTING I PRIO  6 IPO1
```

This example shows that you can issue a host job entry subsystem command without issuing a CONSOLE command.

Text Reference

NRJESendCmd is the manager intrinsic counterpart of this command; it is described in the *SNA NRJE User/Programmer Reference Manual*.

A Result Codes and Messages

This appendix contains messages and result codes that are unique to SNA NRJE activity. These messages are described:

- Validation messages: These are messages that might occur when you validate NRJE configuration data.
- NRJE error messages: These are written to $STDLIST.

  Note that you also can obtain an online description of each message by typing

  `:HELP` *nnnn*

  where *nnnn* is the error message number. For example, typing

  `:HELP 584`

  will display a description of NRJE error message 584 on your terminal screen. Note that online help is available only for SNA NRJE error messages.
- NRJE logging messages: These are written to the log destination configured for your workstation in the `Joblog Data File` field on the NRJE Configuration: Workstation Data Page 2 screen. These messages are not written to $STDLIST. Online help is not available for NRJE logging messages.
- Reverse NRJE messages: These are displayed on the host system console, and are not displayed at the workstation.

Message parameters and suffixes are described below, before the error message listings. “Problem Resolution,” in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual, can help you determine the kind of information to gather when you encounter a problem.

Message Parameters

Parameters in messages are identified by ! characters. The parameters can be numbers or alphanumeric strings.

Message Suffixes

Some letters and numbers appear in parentheses at the end of messages; for example, (INT=35). The numbers are either intrinsic *Result* codes, or message numbers printed to $STDLIST or logged through Node Management Services. Result codes are returned in the *Result* parameter of NRJE intrinsics. You can use the MPE intrinsic GENMESSAGE to access the message system after you have called an NRJE intrinsic. The letters indicating the message set are in Table A-1.

Table A-1 Message Suffixes

Suffix	Meaning
CFG	NRJE configuration procedures
CI	NRJE command interpreter
COMM	NRJE link interface
CON	Console intrinsics error code, for NRJEConsCheck, NRJEConsole, NRJERcvMsg, and NRJESendcmd.
DFC	Data Flow Control
FMD	Function Management Data
FSERR	File System error number
INT	A general intrinsic error code
LOAD ERR	Loader error
LU	Logical Unit error number, generated by the NRJELU
MIDAS	MIDAS node manager services
MON	NRJEMON process
NLERR	Native language intrinsic error number
NRJEOUT	Job output management
NS	Network Services
SC	Session control
SPOOLER	Spooler system message
SUB	NRJESubmit intrinsic error code
TRC	NRJETrace intrinsic error code
XDS	Extra Data Segment

Validation Messages

Listed below are the messages that might occur when you validate the NRJE configuration data. They are listed in numerical order according to message number. Configuration file validation is discussed in Chapter 3 , "SNA NRJE Configuration," of this manual.

NRJEVALERR 3 **MESSAGE: Configuration file corrupt. Missing NRJE path. (NRJEVALERR 3)**

CAUSE: The SNA NRJE path is missing from the configuration file.

ACTION: Create a new configuration file.

NRJEVALERR 4 **MESSAGE: Configuration file corrupt. Missing NRJE version. (NRJEVALERR 4)**

CAUSE: No version stamp exists for the SNA NRJE path.

ACTION: Create a new configuration file.

NRJEVALWARN 5 **MESSAGE: No configuration data exists for NRJE subsystem. (NRJEVALWARN 5)**

CAUSE: No data is configured for SNA NRJE. Note that this is a warning message.

ACTION: If you do not want SNA NRJE to be configured, no action is necessary. If you want NRJE to be configured, you must configure it before validating the configuration file again.

NRJEVALERR 6 **MESSAGE: Path: !**
Path name not found. (NRJEVALERR 6)

CAUSE: The indicated path cannot be found in the configuration file.

ACTION: Ensure that the configuration data indicated in the path (for example, *wised* or *writername*) is correctly configured. If it is, contact your HP representative.

NRJEVALERR 7 **MESSAGE: Path: !**
No data found in path record. (NRJEVALERR 7)

CAUSE: No data is in the record for the indicated path.

ACTION: Ensure that data is configured for the indicated path. If it is, contact your HP representative.

NRJEVALERR 8 **MESSAGE: Path: !**
Node "!" is not configured under SNANODE screen. (NRJEVALERR 8)

CAUSE: NA node listed as a configured SNA NRJE node was not configured as an SNA node.

ACTION: Configure the indicated node as an SNA node on the SNA Node Configuration screen.

NRJEVALERR 9

MESSAGE: Path: !
Logical device "!" is not a valid NRJE reader. (NRJEVALERR 9)

CAUSE: The indicated ldev is invalid for the reader indicated in the path. This usually happens when the ldev is already configured for another subsystem.

ACTION: Configure the correct ldev for the reader in the Logical Device field of the NRJE Configuration: Reader Data screen. Remember that you should not configure the same reader ldev for workstations that might be simultaneously active.

NRJEVALERR 10

MESSAGE: Path: !
Lookup table is not configured under PAGE2 screen. (NRJEVALERR 10)

CAUSE: A formid is configured in the Output Destination field of the NRJE Configuration: Writer Data screen, but a lookup table is not configured in the Formid Lookup Table File field of the NRJE Configuration: Workstation Data Page 2 screen.

ACTION: If you want a lookup table to be used, ensure that a table is correctly configured on the NRJE Configuration: Workstation Data Page 2 screen. If you do not want a lookup table to be used, ensure that a formid is not configured on the NRJE Configuration: Writer Data screen.

NRJEVALWARN 11

MESSAGE: Path: !
LUs not validated. Invalid SNAnode "!". (NRJEVALWARN 11)

CAUSE: This error is related to NRJEVALERR 8. If an invalid node name is specified on the NRJE Configuration: Workstation Data screen, the LUs cannot be validated. Note that this is a warning message.

ACTION: Ensure that the indicated SNA node name is correct. If it is, contact your HP representative.

NRJEVALERR 12

MESSAGE: Path: !
LU "!" is not configured for SNAnode "!". (NRJEVALERR 12)

CAUSE: The indicated LU is not configured under the indicated SNA node.

ACTION: Ensure that the LU should be configured under the SNA node. If it should be configured, configure it on the SNA Configuration: PU and LU Data screen.

NRJEVALERR 13

MESSAGE: Path: !
No writers are configured. (NRJEVALERR 13)

CAUSE: No writer is configured for the workstation indicated in the path.

ACTION: Configure at least one writer for the workstation on the NRJE Configuration: Writer List screen.

NRJEVALERR 14 **MESSAGE: Path: !**
Logging subsystem “SUB0002” is not configured. (NRJEVALERR 14)

CAUSE: The logging subsystem for SNA NRJE is not configured.

ACTION: Configure the SNA NRJE logging subsystem (SUB0002) on the Logging Configuration screen.

NRJEVALERR 15 **MESSAGE: Path: !**
Logging class “!” is not configured. (NRJEVALERR 15)

CAUSE: The indicated SNA NRJE logging class is not configured.

ACTION: Configure the indicated SNA NRJE logging class on the Logging Configuration: Logging Classes screen.

NRJEVALERR 16 **MESSAGE: Path: !**
Unknown error occurred while getting this path. (NRJEVALERR 16)

CAUSE: An unexpected error occurred while attempting to obtain a path from the configuration file. This usually indicates a problem with the validation procedure.

ACTION: Contact your HP representative.

NRJEVALERR 17 **MESSAGE: Path: !**
Unknown error occurred while reading the path data. (NRJEVALERR 17)

CAUSE: An unexpected error occurred while attempting to read data from the configuration file. This usually indicates a problem with the validation procedure.

ACTION: Contact your HP representative.

SNA NRJE Error Messages

Listed below are the SNA NRJE messages that are written to $STDLIST. They are listed in numerical order according to the number in the message suffix; if more than one suffix is displayed, the message is listed here according to the number in the last suffix. These messages are not logged. Note that online help is available for these messages. (See the beginning of this Appendix.)

1 **MESSAGE: ONE OF THE PARAMETERS IS OUT OF BOUNDS: SEG#!, P=!. (INT=1)**

CAUSE: At least one of the parameters passed to an NRJE intrinsic is not within user stack boundary. SEG#! (code segment#) and P=! (program counter) represents the return address right after the intrinsic call.

ACTION: The caller should check all of the parameters passed to the intrinsic and call it again.

2 **MESSAGE: SPLIT STACK CALL IS NOT ALLOWED. (INT=2)**

CAUSE: DB register is not pointing to caller's stack when invoking an NRJE intrinsic.

ACTION: Make sure that the DB register is pointing to caller's stack before calling NRJE intrinsics.

4 **MESSAGE: INSUFFICIENT STACK SPACE. (INT=4)**

CAUSE: NRJE does not have enough extra stack space reserved.

ACTION: Run or Prep program with *Stack* parameter equal to program requirement + 8000 words.

5 **MESSAGE: INVALID INCOUNT IN NRJEQUEUE CALL. (INT=5)**

CAUSE: *InCount* parameter for reader device classes of NRJEQueue intrinsic is less than 0.

ACTION: Recall NRJEQueue with *InCount* greater than or equal to 0.

6 **MESSAGE: UNABLE TO OBTAIN SPOOLED READER INFO FROM CONFIGURATION. (INT=6)**

CAUSE: Attempt to obtain NRJE reader information from NRJE configuration failed.

ACTION: Possible configuration error. Check NRJE configuration.

7 **MESSAGE: UNABLE TO OBTAIN READER FENCE AND ITS STATUSES. (INT=7)**

CAUSE: Attempt to obtain NRJE reader information from MPE configuration failed.

ACTION: Possible configuration error. Check NRJE configuration.

8 **MESSAGE: UNABLE TO OBTAIN DEVICE CLASSES FOR THE READER. (INT=8)**

CAUSE: Attempt to obtain device classes for NRJE reader failed.

ACTION: Check *InCount* parameter of NRJEQueue and make sure that *InCount* is big enough to obtain all device classes; *InCount* maximum value is 8.

10 **MESSAGE: INPUT NAME LENGTH IS NOT BETWEEN 1 AND 17 CHARACTERS. (INT=10)**

CAUSE: Input name length in SHOW, CANCEL, or ALTER command, or NRJEShow, NRJECancel, or NRJEAlter intrinsic is not between 1 and 17 characters. The input name must be in the form of JobName, @, *SpoolfileId*, or *UserName.AcctName*.

ACTION: Make sure the input name is valid.

12 **MESSAGE: NEW PRIORITY FOR SPOOLED FILES IS NOT BETWEEN 0 AND 14. (INT=12)**

CAUSE: Input new priority in ALTER command or NRJEAlter intrinsic is not between 0 and 14.

ACTION: Make sure the new priority is valid.

13 **MESSAGE: INPUT NAME IS INVALID. NO SPOOL FILES WERE CANCELLED. (INT=13)**

CAUSE: Input name in CANCEL command or NRJECancel intrinsic is not valid.

ACTION: Make sure input name is in the form of *JobName*, @, *SpoolfileID*, or *UserName.AcctName*.

14 **MESSAGE: INPUT NAME IS INVALID. NO SPOOL FILES WERE ALTERED. (INT=14)**

CAUSE: Input name in ALTER command or NRJEAlter intrinsic is not valid.

ACTION: Make sure input name is in the form of *JobName*, @, *SpoolfileID*, or *UserName.AcctName*.

15 **MESSAGE: NM CAPABILITY REQUIRED TO ACCESS OTHERS' SPOOLED FILES. (INT=15)**

CAUSE: Attempt to manipulate others' spooled files failed.

ACTION: Must have NM capability to perform this.

16 **MESSAGE: NODE MANAGEMENT CAPABILITY IS REQUIRED. (INT=16)**

CAUSE: Attempt to do something that required NM capability failed.

ACTION: Must have NM capability.

17 **MESSAGE: INPUT READER FENCE IS NOT BETWEEN 0 AND 14. (INT=17)**

CAUSE: Reader fence value is out of bounds.

ACTION: Reader fence value between 0 and 14 is required.

18 **MESSAGE: INVALID OPCODE FOR NRJERDRACCESS. (INT=18)**

CAUSE: Operand code for NRJERdrAccess intrinsic is not within valid bound.

ACTION: Correct the operand code.

22 **MESSAGE: UNABLE TO OBTAIN REMOTE NAME & JES FOR THE WORKSTATION. (INT=22)**

CAUSE: Attempt to obtain remote and JES names from NRJE configuration failed.

ACTION: Check NRJE configuration file.

23 **MESSAGE: INCOUNT FOR NRJEWRITER CALL IS NOT GREATER THAN 0. (INT=23)**

CAUSE: A negative or zero value was passed in the *InCount* parameter to the NRJEWriter intrinsic.

ACTION: Pass a positive value in the *InCount* parameter to NRJEWriter.

24 **MESSAGE: UNABLE TO OBTAIN LIST OF NRJE WRITERS. (INT=24)**

CAUSE: Possible configuration error. A configuration error message appears right after this message to describe the exact cause.

ACTION: Check NRJE configuration file for correctness.

25 **MESSAGE: UNABLE TO OBTAIN LIST OF NRJE ACTIVE WORKSTATIONS. (INT=25)**

CAUSE: Possible configuration error.

ACTION: Check NRJE configuration file for correctness.

26 **MESSAGE: INCOUNT FOR NRJEJOBINFO IS TOO SMALL. (INT=26)**

CAUSE: *InCount* parameter for NRJEJobInfo is less than the number of spooled files that qualified to be returned.

ACTION: Increase the *InCount* parameter value and sizes of the intrinsic arrays.

27 **MESSAGE: LU NOT ACTIVE. (INT=27)**

CAUSE: An attempt was made to obtain information about an inactive LU.

ACTION:

28 **MESSAGE: INCOUNT FOR NRJEACTIVEWS CALL IS NOT GREATER THAN 0. (INT=28)**

CAUSE: A negative or zero value was passed in *InCount* to NRJEActiveWS. A positive value is required.

ACTION: Pass a positive value in *InCount* to NRJEActiveWS.

29 **MESSAGE: SEVERE ERROR. ACTIVE LU NAME NOT CONFIGURED. (SEV=29)**

CAUSE:

ACTION:

30 **MESSAGE: UNABLE TO ALTER NRJE READER FENCE. (SEV=30)**

CAUSE: Possible configuration error.

ACTION: Check configuration and make sure the spooled reader is configured, spooled, and has device type 22 subtype 2.

31 **MESSAGE: INCOMPATIBLE CONFIGURATION FILE. (SEV=31)**

CAUSE: The current configuration file does not have the correct version stamp to run with this version of NRJE.

ACTION: If you have recently updated to a new version of NRJE that requires a configuration file update, make sure that the configuration file was updated properly.

32 **MESSAGE: INVALID INPUT NAME. NO SPOOL FILES WERE RETURNED. (INT=32)**

CAUSE: Input name in SHOW command or NRJEJobList intrinsic is not in the form of *JobName*, @, *SpoolfileID*, or *UserName.AcctName*.

ACTION: Correct the input name.

34 **MESSAGE: INCOUNT FOR NRJEJOBINFO IS NOT BETWEEN 1 AND 500. (INT=34)**

CAUSE: The *InCount* parameter for the NRJEJobInfo intrinsic is out of the allowable 1–500 range.

ACTION: Pass an *InCount* parameter to NRJEJobInfo within the 1–500 range.

35 **MESSAGE: NRJEERRMSG CALL COMPLETED IN ERROR STATE. (INT=35)**

CAUSE: This error might be caused by a variety of reasons, such as (1) unable to open the file NRJECAT.NRJE.SYS, (2) system administrator has changed NRJECAT so that some messages in it become too long to read, or (3) a message is missing in NRJECAT.

ACTION: Depending on the reason, (1) check and make sure NRJECAT exists in NRJE.SYS, (2) make sure no message in the intrinsic, management, configuration and spooling categories is longer than 72 characters long, or (3) print the *Status* array passed to NRJEErrMsg. All error numbers used in NRJEErrMsg are in Set 1 of NRJECAT.NRJE.SYS.

36 **MESSAGE: UNMATCHED INPUT NAME — NO SPOOL FILE HAS BEEN ALTERED. (INT=36)**

CAUSE: No spool file exists whose name matches the one specified in the ALTER command or NRJEAlter intrinsic.

ACTION: None.

37 **MESSAGE: UNMATCHED INPUT NAME — NO SPOOL FILE HAS BEEN CANCELED. (INT=37)**

CAUSE: No spool file exists whose name matches the one specified in the CANCEL command or NRJECancel intrinsic.

ACTION: None.

38 **MESSAGE: UNMATCHED INPUT NAME — NO SPOOL FILE HAS BEEN FOUND. (INT=38)**

CAUSE: No spool file exists whose name matches the one specified in the SHOW command or NRJEJobInfo intrinsic.

ACTION: None.

39 **MESSAGE: LU NOT CONFIGURED. (INT=39)**

CAUSE: The LU named was not found in the configuration.

ACTION: Check your spelling or the configuration file.

40 **MESSAGE: WSID IS NOT CONFIGURED OR DOES NOT EXIST. (INT=40)**

CAUSE: The *wsid* named was not found in the configuration.

ACTION: Check your spelling or the configuration file.

50 **MESSAGE: UNABLE TO OPEN NRJEWEL.NRJE.SYS FILE. (INT=50)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

51 **MESSAGE: UNABLE TO READ NRJEWEL.NRJE.SYS FILE. (INT=51)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

52 **MESSAGE: UNABLE TO WRITE NRJEWEL.NRJE.SYS FILE. (INT=52)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

53 **MESSAGE: UNABLE TO CLOSE NRJEWEL.NRJE.SYS FILE. (INT=53)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

54 **MESSAGE: WELCOME MSG LENGTH IS NOT BETWEEN 0 AND 1912 CHARACTERS. (INT=54)**

CAUSE: The length of the welcome message text is out of range.

ACTION: Enter a welcome message whose length is within range.

55 **MESSAGE: MAXLEN FOR NRJEWELCOME CALL IS NOT GREATER THAN 0. (INT=55)**

CAUSE: The *MaxLen* parameter passed to the NRJEWelcome intrinsic is negative or zero.

ACTION:

56 **MESSAGE: SPOOL FILE NOT READY — NO SPOOL FILE HAS BEEN ALTERED. (INT=56)**

CAUSE: Spool file must be in the READY state to be altered.

ACTION: None.

60 **MESSAGE: NUMBER OF INPUT FILES IS NOT BETWEEN 1 AND 100. (SUB=60)**

CAUSE: The *NumFiles* parameter passed to NRJESubmit is out of range.

ACTION: Pass a value in *NumFiles* to NRJESubmit that is in range.

61 **MESSAGE: LENGTH OF INPUT FILE NAME # ! IS NOT GREATER THAN 0. (SUB=61)**

CAUSE: ! is the file number in the order of input to NRJESubmit intrinsic or SUBMIT command.

ACTION: Correct the problem and re-execute.

63 **MESSAGE: UNABLE TO OPEN NRJE READER. (SUB=63)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

64 **MESSAGE: UNABLE TO OPEN INPUT FILE #!. (SUB=64)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

65 **MESSAGE: UNABLE TO PERFORM TRANSLATION OF INPUT FILE #!. (SUB=65)**

CAUSE:

ACTION:

66 **MESSAGE: UNABLE TO WRITE INPUT DATA OF FILE # ! TO READER. (SUB=66)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

67 **MESSAGE: UNABLE TO CLOSE INPUT FILE #!. (SUB=67)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

68 **MESSAGE: UNABLE TO READ INPUT FILE #!. (SUB=68)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

69 **MESSAGE: UNABLE TO COMPRESS DATA FILE # !. (SUB=69)**

CAUSE: ! is the file number in the order of input to NRJESubmit intrinsic or SUBMIT command.

ACTION: Correct the problem and re-execute.

70 **MESSAGE: INPUT PRIORITY MUST BE BETWEEN 0 AND 14. (SUB=70)**

CAUSE: The input priority value is out of bounds.

ACTION: Resubmit with an input priority within the bounds of 0 and 14.

71 **MESSAGE: UNABLE TO CLOSE READER. (SUB=71)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

72 **MESSAGE: SUBMISSION CODE OF FILE #! IS NOT BETWEEN 0 AND 2. (SUB=72)**

CAUSE: ! is the file number in the order of input to NRJESubmit intrinsic or SUBMIT command.

ACTION: Correct the problem and re-execute.

73 **MESSAGE: UNABLE TO OBTAIN SPOOL FILE NUMBER FOR THE JOB. (SEV=73)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

74 **MESSAGE: INVALID DIRECT OPTION FOR FILE #!. (SUB=74)**

CAUSE: ! is the file number in the order of input to NRJESubmit intrinsic or SUBMIT command.

ACTION: Correct the problem and re-execute.

75 **MESSAGE: UNABLE TO WRITE CONTROL PARAMETERS TO SPOOL FILE. (SEV=75)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

76 **MESSAGE: INVALID JOB NAME. (SUB=76)**

CAUSE: The job naming convention has been violated.

ACTION: Make sure that the job name begins with a letter and is eight or fewer alphanumeric characters long.

77 **MESSAGE: CONFIGURATION ERROR. UNABLE TO OBTAIN RU SIZE. (SUB=77)**

CAUSE: Configuration error.

ACTION: Check the configuration file for correctness. If the problem still occurs contact Hewlett-Packard for assistance.

78 **MESSAGE: WORKSTATION READER IS DOWN. (SUB=78)**

CAUSE: The workstation reader is not available.

ACTION: Determine whether the workstation is active.

79 **MESSAGE: NM CAPABILITY REQUIRED FOR COMPRESSED FILE. (SUB=79)**

CAUSE:

ACTION:

81 **MESSAGE: ATTACHIO FAILURE IN CONSOLE PROCESS. (CI=81)**

CAUSE: A call from the console process to the system internal intrinsic ATTACHIO failed to execute properly. Internal error.

ACTION: Contact Hewlett-Packard.

82 **MESSAGE: FAILED TO ARM ABORT TRAP IN CONSOLE PROCESS. (CI=82)**

CAUSE: Internal error. A call to the system intrinsic XDSNTRAP failed.

ACTION: Contact Hewlett-Packard.

83 **MESSAGE: FILE SYSTEM ERROR IN CONSOLE PROCESS: ! (CI=83)**

CAUSE: Internal error. The console process could not access a needed file.

ACTION: Use the VERSION command to verify the NRJE installation. If versions are correct, contact Hewlett-Packard.

84 **MESSAGE: CANNOT WRITE TO STDLIST FROM THE CONSOLE PROCESS. (CI=84)**

CAUSE: Internal error.

ACTION: Contact Hewlett-Packard.

85 **MESSAGE: THE HOST CONSOLE IS OPEN. (CI=85)**

CAUSE: The CONSOLE command executed successfully.

ACTION: None.

86 **MESSAGE: THE HOST CONSOLE IS RELEASED. (CI=86)**

CAUSE: The RELEASE command executed successfully.

ACTION: None.

87 **MESSAGE: CONSOLE CANNOT BE ACCESSED UNTIL THE WORKSTATION IS ACTIVE. (CI=87)**

CAUSE: The CONSOLE command was issued but the workstation is not in session with the host.

ACTION: Use the STATUS command to verify the state of the workstation. If not active, start the workstation.

88 **MESSAGE: THE WORKSTATION HAS TERMINATED. (INT=88)**

CAUSE: The workstation has disconnected from the host while the console was open. The console will be automatically released by the NRJE CI process.

ACTION: None required for NRJE CI users. Programmatic users should call the NRJERelease intrinsic to release internal resources pertaining to the console.

89 **MESSAGE: IOWAIT COMPLETION ERROR ON CONSOLE PORT. (IOWAIT ERR=!) (INT=89)**

CAUSE: Internal error occurred in the NRJERcvMsg intrinsic.

ACTION: Contact Hewlett-Packard.

90 **MESSAGE: INVALID CONSOLE ID. (INT=90)**

CAUSE: An attempt was made to access an NRJE console command intrinsic with a "consoleid" that was not returned by the NRJEConsole intrinsic.

ACTION: Always call NRJEConsole and obtain the consoleid prior to calling any other console intrinsics.

91 **MESSAGE: THE CONSOLE IS NOT AVAILABLE. (INT=91)**

CAUSE: All console access ports in the NRJE extra data segment are taken. No additional users may access the console until someone releases a console access port by entering the RELEASE command.

ACTION: Try again later.

92 **MESSAGE: NO COMMANDS ALLOWED TO USERS WITHOUT "NM" CAPABILITY. (INT=92)**

CAUSE: A user who does not possess "NM" capability issued the NRJE CONSOLE command and no commands have been allowed to non-NM users in the NRJE configuration (the NRJE Configuration: Workstation Data screen).

ACTION: The user should contact the NRJE manager. Any commands which the NRJE manager would like to allow to users who do not have NM capability should be specified in the NRJE configuration.

93 **MESSAGE: CANNOT CREATE IPC PORT FOR CONSOLE. (PORT STATUS=!) (INT=93)**

CAUSE: Internal error. A call to the system internal procedure CREATE'IOWAITPORT failed.

ACTION: Use the NRJE VERSION command to verify that NRJE has been installed correctly. Contact Hewlett-Packard.

94 **MESSAGE: WARNING: COMMAND NOT ALLOWED. (INT=94)**

CAUSE: A user who does not have NM capability issued a console command which was not allowed by the NRJE manager in the NRJE configuration (the NRJE Configuration: Workstation Data screen).

ACTION: The user should contact the NRJE manager. Any commands which the NRJE manager would like to allow to users who do not have NM capability should be specified in the NRJE configuration.

95 **MESSAGE: INVALID CONSOLE ID. (INT=95)**

CAUSE: An attempt was made to access an NRJE console command intrinsic with a "consoleid" that was not returned by the NRJEConsole intrinsic.

ACTION: Always call NRJEConsole and obtain the consoleid prior to calling any other console intrinsics.

96 **MESSAGE: SEMICOLONS ARE NOT ALLOWED IN CONSOLE COMMANDS. (INT=96)**

CAUSE: A user who does not have NM capability issued a console command with a semicolon (;) in it. Multiple commands may not be concatenated by using a semicolon. Each command must be issued separately.

ACTION: Reissue the command without a semicolon.

97 **MESSAGE: NO CONSOLE MESSAGES ARE PENDING. (INT=97)**

CAUSE: Returned only by NRJEConsCheck when no messages have been received from the host since the last call to NRJERcvMsg.

ACTION:

98 **MESSAGE: NO LU IS ACTIVE. THE CONSOLE COMMAND CANNOT BE SENT. (INT=98)**

CAUSE: A console command was issued and although the workstation was active at the time the command was issued, no LU was found to be active. The command is rejected. The workstation may be in the process of terminating.

ACTION: Use the STATUS command to check the status of each LU. If necessary, use the STARTWS command to restart the workstation.

99 **MESSAGE: RECEIVE MESSAGE BUFFER MUST BE AT LEAST ONE BYTE LONG. (CON=99)**

CAUSE: The maximum buffer length parameter specified for the console message in NRJERcvMsg was negative or zero.

ACTION: Revise the maximum buffer length parameter value for the NRJERcvMsg intrinsic to a positive number. Console messages range from 80 to 132 characters long.

100 **MESSAGE: CONSOLE COMMAND LENGTH IS NOT BETWEEN 1 AND 80 CHARS. (CON=100)**

CAUSE: The length of the console command indicated in the NRJESendCmd intrinsic call was negative or zero.

ACTION: Revise the length of the console command to a positive number between 1 and 80 characters.

121 **MESSAGE: INPUT CHAIN SIZE = !. IT MUST BE BETWEEN 0 AND !. (INT=121)**

CAUSE: First ! is the input chain size. Second ! is the upper limit.

ACTION: Input chain size with the range between 0 and second !.

122 **MESSAGE: NUMBER OF LUS INPUT IS !. IT MUST BE BETWEEN 0 AND !. (INT=122)**

CAUSE: First ! is the number of LUs input. Second ! is the upper limit.

ACTION: Input number of LUs with the range between 0 and second !.

123 **MESSAGE: UNABLE TO STREAM MONITOR JOB. (INT=123)**

CAUSE: NRJE unable to stream monitor job. The monitor job is a streamable file residing under NRJE.SYS and has the same name as the workstation name.

ACTION: Refer to the manual and create or update the monitor job so that it is streamable.

124 **MESSAGE: UNABLE TO OBTAIN NAMES OF MONITOR MESSAGE FILES. (SEV=124)**

CAUSE:

ACTION:

125 **MESSAGE: UNABLE TO OPEN “TO MONITOR” MESSAGE FILE. (SEV=125)**

CAUSE:

ACTION:

126 **MESSAGE: UNABLE TO SEND A MESSAGE TO THE MONITOR. (SEV=126)**

CAUSE:

ACTION:

128 **MESSAGE: UNABLE TO OPEN “FROM MONITOR” MESSAGE FILE. (SEV=128)**

CAUSE:

ACTION:

129 **MESSAGE: LU NAME IS NOT CONFIGURED FOR THE WORKSTATION. (INT=129)**

CAUSE: Attempt to activate or deactivate an LU that is not configured.

ACTION:

130 **MESSAGE: LU IS ALREADY ACTIVE. (INT=130)**

CAUSE: Attempt to activate an LU that is already active.

ACTION:

131 **MESSAGE: STOP OR HALT IS INVALID IF WORKSTATION IS NOT ACTIVE. (INT=131)**

CAUSE: The workstation may not have been started or another NRJE manager may have already stopped or halted the workstation.

ACTION:

132 **MESSAGE: UNABLE TO OBTAIN A LIST OF ACTIVE LUS. (SEV=132)**

CAUSE:

ACTION:

133 **MESSAGE: STOP OR HALT CODE IS NOT 0 OR 1. (INT=133)**

CAUSE: The *StopCode* parameter passed to the NRJEStopWS intrinsic is out of range.

ACTION: Correct the *StopCode* parameter value.

134 **MESSAGE: LU IS NOT ACTIVE. (INT=134)**

CAUSE: An attempt was made to deactivate an LU that is not active.

ACTION:

135 **MESSAGE: LU NAME MUST BE SPECIFIED SINCE WORKSTATION IS ACTIVE. (INT=135)**

CAUSE: Attempt to start workstation was made but it is already active.

ACTION:

136 **MESSAGE: UNABLE TO OBTAIN A LIST OF CONFIGURED LUS. (INT=136)**

CAUSE: Possible configuration error.

ACTION: Check configuration file for correctness and retry.

137 **MESSAGE: NUMBER OF LUS INPUT IS !. IT MUST BE BETWEEN 1 AND !. (INT=137)**

CAUSE: The *MaxEntries* parameter passed to the NRJELUList intrinsic was out of range. The first ! parameter of the message is the

MaxEntries value. The second ! parameter of the message is the upper limit.

ACTION:

139 **MESSAGE: INPUT LU NAMES ARE DUPLICATED. (INT=139)**

CAUSE: An LU name appears more than once in the list.

ACTION: Delete duplicate LU names from the list.

140 **MESSAGE: NRJE2SUBMIT CONFIGURATION ACCESS ERROR. (INT=140)**

CAUSE:

ACTION: Check configuration file — error occurred reading job entry subs.

141 **MESSAGE: INPUT FILE RECORD SIZE EXCEEDS MAXREC PARM (DEFAULT=80). (INT=141)**

CAUSE: Input or ##FD file is wider than MAXREC (default MAXREC=80).

ACTION:

142 **MESSAGE: MAXREC 128 SPECIFIED. 128 (POWER MAXIMUM) USED. (INT=142)**

CAUSE: *MAXREC* parm to NRJE3Submit was too big for VSE/POWER.

ACTION:

143 **MESSAGE: MAXREC 252 SPECIFIED. 252 (JES/512 BYTE RU MAX) USED. (INT=143)**

CAUSE: *MAXREC* parm to NRJE3Submit was too big for JES using a 512 byte RU.

ACTION:

144 **MESSAGE: MAXREC 248 SPECIFIED. 248 (JES/256 BYTE RU MAX) USED. (INT=144)**

CAUSE: *MAXREC* parm to NRJE3Submit was too big for JES using a 256 byte RU.

ACTION:

145 **MESSAGE: MAXREC 80 SPECIFIED. 80 USED. (INT=145)**

CAUSE: *MAXREC* parms 80 bytes aren't allowed by NRJE3Submit.

ACTION:

146 **MESSAGE: MAXREC MUST BE GREATER THAN 0. (INT=146)**

CAUSE: Negative *MAXREC* parms to NRJE3Submit aren't allowed.

ACTION:

150 **MESSAGE: ONE OF THE PARAMETERS IS OUT OF BOUNDS: SEG#!, P=!. (INT=150)**

CAUSE: At least one of the parameters passed to NRJEHJCancel is not within the user's stack. SEG#! (code segment #) and P=! (program counter) represent the return address right after the intrinsic call.

ACTION: The caller should check all of the parameters passed to the intrinsic, correct the one in error, and redo.

151 **MESSAGE: USERNAME MUST BE BETWEEN 1 AND 17 CHARACTERS. (INT=151)**

CAUSE: The username length passed to NRJEHJCancel was not between 1 and 17. No jobs were cancelled.

ACTION: Correct and reissue.

152 **MESSAGE: USERNAME OR JOBLIST MUST BE SPECIFIED. (INT=152)**

CAUSE: Neither a username nor a joblist was passed to NRJEHJCancel. No jobs were cancelled.

ACTION: Correct and reissue. Check *UserNameLen* and *JobListLen* to make sure that they are not both equal to 0.

153 **MESSAGE: ERROR LOCKING JOBLOG IN NRJEHJCANCEL. (INT=153)**

CAUSE: File system related error. A file system error msg will appear after this message. Some jobs may not have been cancelled.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

154 **MESSAGE: FFINDBYKEY ERROR IN NRJEHJCANCEL. (INT=154)**

CAUSE: File system related error. A file system error msg will appear after this message. Some jobs may not have been cancelled.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

155 **MESSAGE: ERROR READING FROM JOBLOG IN NRJEHJCANCEL. (INT=155)**

CAUSE: File system related error. A file system error msg will appear after this message. Some jobs may not have been cancelled.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

156 **MESSAGE: USERNAME DOESN'T MATCH LOGON — NM CAPABILITY REQUIRED. (INT=156)**

CAUSE: NM capability is required to cancel jobs submitted by other users. No jobs were cancelled.

ACTION: Correct the problem and reissue.

157 **MESSAGE: INVALID USERNAME. (INT=157)**

CAUSE: Only @ and *UserName.AcctName* are valid usernames to cancel jobs by. No jobs were cancelled.

ACTION: Correct and reissue.

158 **MESSAGE: CONFIGURATION ACCESS ERROR. (INT=158)**

CAUSE: A configuration error may have taken place. No jobs were cancelled.

ACTION: Check NRJE configuration file.

159 **MESSAGE: ERROR OPENING JOBLOG IN NRJEHJCANCEL. (INT=159)**

CAUSE: File system related error. A file system error message will appear after this message. No jobs were cancelled.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

160 **MESSAGE: ERROR READING JOBLOG FILE LABEL IN NRJEHJCANCEL. (INT=160)**

CAUSE: File system related error. A file system error message will appear after this message. No jobs were cancelled.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

161 **MESSAGE: JOBLOG BELONGS TO ANOTHER WORKSTATION. (INT=161)**

CAUSE: There is a job log/workstation inconsistency. The NRJE configuration file specifies a particular job log for this workstation. That job log names a workstation different from its owner. A configuration error may have taken place. No jobs were cancelled.

ACTION: Check the NRJE configuration.

162 **MESSAGE: ERROR CLOSING JOBLOG IN NRJEHJCANCEL. (INT=162)**

CAUSE: File system related error. A file system error message will appear after this message. All specified jobs were probably cancelled successfully despite this error.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

163 **MESSAGE: ERROR UPDATING JOBLOG IN NRJEHJCANCEL. (INT=163)**

CAUSE: File system related error. A file system error message will appear after this message. Some jobs specified may not have been cancelled.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

164 **MESSAGE: UNABLE TO UNLOCK JOBLOG FILE IN NRJEHJCANCEL. (INT=164)**

CAUSE: File system related error. A file system error message will appear after this message. Some jobs may not have been cancelled.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

170 **MESSAGE: TRACE INTRINSIC ON/OFF PARAMETER MUST BE 1 OR 0. (TRC=170)**

CAUSE: The *TraceOnOff* parameter passed to NRJETrace contains an invalid number.

ACTION: Change the value of the *TraceOnOff* parameter to 1 or 0.

171 **MESSAGE: NRJE ONLY PERFORMS LU (INTERNAL) OR INTRINSIC (USER) TRACING. (TRC=171)**

CAUSE: An invalid trace type was indicated.

ACTION: Correct the type of trace desired to LU (internal) or intrinsic (user) tracing. When calling NRJETrace, the *Traces* parameter must be 1 or 2.

172 **MESSAGE: TRACE FILE NAME MUST BE 0 TO 35 CHARACTERS LONG. (TRC=172)**

CAUSE: A zero or negative number was passed in the *TraceFileLen* parameter to NRJETrace.

ACTION: Pass a positive number in *TraceFileLen* to indicate the actual length of the trace file name

173 **MESSAGE: TRACE FILE MEDIUM MUST BE DISK (0) OR TAPE (1). (TRC=173)**

CAUSE: The *TraceMedium* parameter passed to NRJETrace was out of range. It must contain a 0 to indicate disk or a 1 to indicate tape.

ACTION: Change the value of the *TraceMedium* parameter.

174 **MESSAGE: TRACE DEFAULT FILE LENGTH MUST BE GREATER THAN 0. (TRC=174)**

CAUSE: The *DefaultFileLen* parameter passed to the NRJETrace intrinsic contained a zero or negative number. *DefaultFileLen* is the length of the trace file name.

ACTION: Change the value of *DefaultFileLen* to a positive number.

175 **MESSAGE: NODE MANAGEMENT COULDN'T START OR STOP NRJE TRACE. (SEV=175)**

CAUSE:

ACTION:

176 **MESSAGE: NRJE MANAGEMENT COULDN'T START OR STOP NRJE TRACE. (SEV=176)**

CAUSE:

ACTION:

177 **MESSAGE: WORKSTATION IS NOT PERFORMING INTRINSIC (USER) TRACING. (TRC=177)**

CAUSE: Attempt to stop intrinsic (user) tracing was made but workstation is not performing it.

ACTION:

178 **MESSAGE: WORKSTATION IS NOT PERFORMING LU (INTERNAL) TRACING. (TRC=178)**

CAUSE: Attempt to stop LU (internal) tracing was made but workstation is not performing it.

ACTION:

179 **MESSAGE: LU (INTERNAL) TRACE MUST BEGIN WHEN WORKSTATION IS STARTED. (TRC=179)**

CAUSE: Attempt to start LU (internal) trace was made but workstation is not started or active.

ACTION: Indicate internal tracing when starting a workstation.

180 **MESSAGE: WORKSTATION IS ALREADY PERFORMING INTRINSIC (USER) TRACING. (TRC=180)**

CAUSE: Attempt to start intrinsic (user) tracing but workstation is performing it.

ACTION:

181 **MESSAGE: WORKSTATION IS ALREADY PERFORMING LU (INTERNAL) TRACING. (TRC=181)**

CAUSE: Attempt was made to start LU (internal) tracing, which the workstation is already performing.

ACTION:

182 **MESSAGE: TRACE FILE SIZE MUST BE BETWEEN 0 AND 32767 RECORDS. (TRC=182)**

CAUSE: An out-of-bounds trace file size value was in the *TraceSize* parameter passed to NRJETrace, or its equivalent command.

ACTION: Change the *TraceSize* parameter to a number between 0 and 32767 records. A zero value indicates that a default is desired.

183 **MESSAGE: ERROR OCCURRED WHILE TRYING TO ACCESS CONFIGURATION. (SEV=183)**

CAUSE:

ACTION:

184 **MESSAGE: WORKSTATION CANNOT INITIATE ANY NEW TRACING. (SEV=184)**

CAUSE:

ACTION:

185 **MESSAGE: WORKSTATION IS NOT PERFORMING ANY TRACING. (TRC=185)**

CAUSE:

ACTION:

193 **MESSAGE: UNABLE TO ISSUE RESET VIA “COMMAND”. ERROR #!. PARM #!. (INT=193)**

CAUSE: A file system related error has occurred. The error # was issued by the MPE Command intrinsic. The command itself is: RESET N1234567. The parm # if returned refers to the parameter within the command that was in error.

ACTION: Determine the cause (possibly with the help of your HP representative) and correct the problem.

194 **MESSAGE: PR OUTPUT DESTINATION SPECIFICATION EXCEEDS MAX WIDTH. (INT=194)**

CAUSE: The job log can only handle a total of 214 characters of output destination information. The PR specification alone is too long. (Note: file names are fully qualified by SUBMIT before they end up in the job log, and backreferences are expanded to the original file equation).

ACTION: Correct the problem.

195 **MESSAGE: PR & PU OUTPUT DESTINATIONS EXCEED MAX WIDTH. (INT=195)**

CAUSE: The job log can only handle a total of 214 characters of output destination information. The PR and PU destinations, together, are too long. Note: file names are fully qualified by SUBMIT before they end up in the job log, and backreferences are expanded to the original file equation.

ACTION: Correct the problem.

196 **MESSAGE: PR, PU, & FO OUTPUT DESTINATIONS EXCEED MAX WIDTH. (INT=196)**

CAUSE: The job log can only handle a total of 214 characters of output destination information. The PR, PU, and FO destinations, together, are too long. Note: file names are fully qualified by SUBMIT before they end up in the job log, and back references are expanded to the original file equation).

ACTION: Correct the problem.

197 **MESSAGE: DISALLOWED CONSOLE COMMAND STRIPPED FROM JOB STREAM. (INT=197)**

CAUSE: Users without NM capability are allowed to insert in a job stream only those host commands specified in the configuration file.

ACTION: No action is required.

198 **MESSAGE: UNABLE TO READ FROM CONSOLE TEMP FILE. INPUT FILE #!. (INT=198)**

CAUSE: A file system error has occurred. A file system error message will follow.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

CAUSE: A severe error has occurred.

ACTION: See “Problem Resolution” in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual, and contact your HP representative for assistance.

199 **MESSAGE: UNABLE TO WRITE CONSOLE DATA TO SPOOLFILE. INPUT FILE #!. (INT=199)**

CAUSE: A file system error has occurred. A file system error message will follow.

ACTION: See “Problem Resolution” in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual, and contact your HP representative for assistance.

200 **MESSAGE: INCOMPATIBLE TRANS AND/OR COMP SPECIFIED. FILE #!. (INT=200)**

CAUSE: The user specified that the indicated file (or one of its ##FD include files) is already translated and/or compressed, but this workstation is configured to send data untranslated and/or uncompressed.

ACTION: Correct the file subcode or ##FD parameter in error.

201 **MESSAGE: INCOMPATIBLE TRANSLATION SPECIFIED. FILE #!. (INT=201)**

CAUSE: The user specified that the indicated file (or one of its ##FD include files) is already translated, but this workstation is configured "notranslate".

ACTION: Correct the file subcode or ##FD parameter in error.

202 **MESSAGE: UNABLE TO OPEN INPUT FILE #!. (INT=202)**

CAUSE: File system related error. The ! parameter is the file number in the order of input to SUBMIT or NRJE2Submit (The error may refer to an ##FD file specified within this input file.) A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

203 **MESSAGE: INVALID CHAR FOLLOWING ##FD FILENAME. IN INPUT FILE #!. (INT=203)**

CAUSE: Syntax error on ##FD record. The ! parameter is the file number in the order of input to SUBMIT or NRJE2Submit. An open parenthesis "(" or a carriage return was expected following the file name.

ACTION: Locate the ##FD record in error and correct the problem.

204 **MESSAGE: INVALID ##FD OPTION IN INPUT FILE #!. (INT=204)**

CAUSE: Syntax error on ##FD record. The ! parameter is the file number in the order of input to SUBMIT or NRJE2Submit. **N[OTRANSLATE]** and **T[RANSPARENT]** are the only valid options.

ACTION: Locate the ##FD record in error and correct the problem.

205 **MESSAGE: UNABLE TO OPEN ##FD FILE REFERENCED THROUGH INPUT FILE #!. (INIT=205)**

CAUSE: File system related error. The ! parameter is the file number in order of input to SUBMIT or NRJE2Submit. The error refers to a ##FD file (perhaps multiply nested) within this file. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error.

206 **MESSAGE: UNABLE TO PARSE ##FD RECORD IN INPUT FILE #!. (INT=206)**

CAUSE: An irreconcilable parsing error of an ##FD record occurred. The ! parameter is the file number in the order of input to SUBMIT or NRJE2Submit.

ACTION: Locate and inspect the ##FD record for errors, and correct the problem.

207 **MESSAGE: UNABLE TO CLOSE TEMPORARY FILE DURING ERROR PROCESSING. (INT=207)**

CAUSE: A SUBMIT or NRJE2Submit error occurred. It was impossible to close the (pre-job console cmd) temporary file in the error cleanup routine. Any file system error message following this message does not refer to this error but to the original error that generated a need for cleanup processing.

ACTION: Report the occurrence to your HP representative.

208 **MESSAGE: UNABLE TO OPEN TEMPORARY FILE. (INT=208)**

CAUSE: File system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

209 **MESSAGE: MAXIMUM NUMBER OF ##FD LEVELS EXCEEDED. INPUT FILE #!. (INT=209)**

CAUSE: ##FD inclusions may be nested to a maximum depth of 20. This maximum was exceeded in SUBMIT or NRJE2Submit. The ! parameter is the file number in the order of input to SUBMIT or NRJE2Submit.

ACTION: Correct the problem.

210 **MESSAGE: UNABLE TO CLOSE FILEQ TEMPORARY FILE. (INT=210)**

CAUSE: A SUBMIT or NRJE2Submit error occurred. It was impossible to close the (fileq) temporary file in the error cleanup routine. Any file system error message following this message does not refer to this error but to the original error that generated a need for cleanup processing.

ACTION: Report the occurrence to your HP representative.

211 **MESSAGE: NLINFO ERROR #! WHILE LOADING TO HOST TRANSLATION TABLE. (INT=211)**

CAUSE: SUBMIT or NRJE2Submit was unable to load the “to host” translation table because of a “Native Language Support” error. The ! parameter is the Native Language error code.

ACTION: Determine the cause by inspecting the Native Language error code and correct the problem.

212 **MESSAGE: UNABLE TO CLOSE INPUT FILE. (SUB=212)**

CAUSE: A file system related error occurred in SUBMIT or NRJE2Submit. While cleaning up in preparation for exiting on account of this error, NRJE was unable to close the currently open input file. Any file system error message following this message does not refer to this error but to the original file system error.

ACTION: Report the occurrence to your HP representative.

213 **MESSAGE: NO FILENAME FOLLOWING ##FD. IN INPUT FILE #!. (INT=213)**

CAUSE: An MPE filename must follow when ##FD is found in columns 1–4 of a record. The ! parameter is the file number in the order of input to SUBMIT or NRJE2Submit.

ACTION: Locate the ##FD record in error and correct it.

214 **MESSAGE: UNABLE TO CLOSE INPUT FILE #! OR ONE OF ITS ##FD FILES. (INT=214)**

CAUSE: A file system related error has occurred. The ! parameter is the file number in order of input to SUBMIT or NRJE2Submit. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

215 **MESSAGE: COMMAND ERROR #!. PARM #! IN ERROR. (INT=215)**

CAUSE: A file system related error has occurred. ERROR #! refers to an error returned by the MPE COMMAND intrinsic. The command itself is: BUILD EQUATES;TEMP. *PARM #!* refers to the parameter within the command which is in error.

ACTION: Determine the cause (possibly with your HP representative's help) by inspecting the error code parameters provided, and correct the problem.

216 **MESSAGE: DISALLOWED CONSOLE COMMAND STRIPPED FROM JOB STREAM. (INT=216)**

CAUSE: Users without NM capability are allowed to insert in a job stream only those host commands specified in the configuration file.

ACTION:

217 **MESSAGE: HOST COMMAND AFTER 1ST JOB CARD STRIPPED OUT. (INT=217)**

CAUSE: Host console commands must appear in the job stream prior to the first job card.

ACTION: No action is required.

218 **MESSAGE: SIGNOFF CARD STRIPPED FROM JOB STREAM. (INT=218)**

CAUSE: Host signoff commands are not allowed in an NRJE job stream.

ACTION: No action is required.

219 **MESSAGE: COMMAND ERROR #!. PARM #! IN ERROR. (INT=219)**

CAUSE: An error has occurred in programmatically executing the command: LISTEQ *N1234567. ERROR #! refers to an error returned by the MPE COMMAND intrinsic. *PARM #!* refers to the parameter within the command which is in error.

ACTION: Determine the cause (possibly with your HP representative's help) by examining the error code parameters, and correct the problem.

220 **MESSAGE: UNABLE TO RESOLVE PR/PU/FO DESTINATION BACKREFERENCE. (INT=220)**

CAUSE: User specified a file backreference as a print, punch or forms destination in SUBMIT or NRJE2Submit but has no file equations in which to resolve it.

ACTION: Correct the problem.

221 **MESSAGE: UNABLE TO OPEN FILEQ TEMPORARY FILE. (INT=221)**

CAUSE: A file system related error has occurred. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

222 **MESSAGE: UNABLE TO READ FILEQ TEMPORARY FILE. (INT=222)**

CAUSE: A file system related error has occurred. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

223 **MESSAGE: UNABLE TO CLOSE FILEQ TEMPORARY FILE. (INT=223)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

224 **MESSAGE: UNABLE TO RESOLVE PRINT DESTINATION BACKREFERENCE. (INT=224)**

CAUSE: Backreferenced print destination for SUBMIT or NRJE2Submit cannot be resolved with the user's file equations.

ACTION: Check your spelling or your file equations.

225 **MESSAGE: UNABLE TO RESOLVE PUNCH DESTINATION BACKREFERENCE. (INT=225)**

CAUSE: Backreferenced print destination for SUBMIT or NRJE2Submit cannot be resolved with the user's file equations.

ACTION: Check your spelling or your file equations.

226 **MESSAGE: UNABLE TO RESOLVE FORMS DESTINATION BACKREFERENCE. (INT=226)**

CAUSE: Backreferenced print destination for SUBMIT or NRJE2Submit cannot be resolved with the user's file equations.

ACTION: Check your spelling or your file equations.

227 **MESSAGE: ERROR IN ACCESSING CONFIGURATION FILE. (INT=227)**

CAUSE: A severe error may have occurred. Another, more specific message should follow this.

ACTION: See the message following this one to determine the error.

228 **MESSAGE: UNABLE TO CLOSE PRINT DESTINATION FILE AFTER TEST-OPENING. (INT**

CAUSE: SUBMIT or NRJE2Submit test most output destinations to be sure they're there. NRJE was unable to close the print destination file after test-opening it. A file system related error. A file system error message will follow.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

229 **MESSAGE: UNABLE TO CLOSE PUNCH DESTINATION FILE AFTER TEST-OPENING. (INT=229)**

CAUSE: SUBMIT and NRJE2Submit test most output destinations to be sure they're there. NRJE was unable to close the punch destination file after test-opening it. A file system related error. A file system error message will follow.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

230 **MESSAGE: UNABLE TO CLOSE FORMS DESTINATION FILE AFTER TEST-OPENING. (INT=230)**

CAUSE: SUBMIT and NRJE2Submit test most output destinations to be sure they're there. NRJE was unable to close the forms destination file after test-opening it. A file system related error. A file system error message will follow.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

231 **MESSAGE: UNABLE TO TEST-OPEN PRINT DESTINATION FILE. (INT=231)**

CAUSE: SUBMIT and NRJE2Submit test most output destinations (by opening them) to be sure they're there. A file system related error. A file system error message will follow.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

232 **MESSAGE: UNABLE TO TEST-OPEN PUNCH DESTINATION FILE. (INT=232)**

CAUSE: SUBMIT and NRJE2Submit test most output destinations (by opening them) to be sure they're there. A file system related error. A file system error message will follow.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

233 **MESSAGE: UNABLE TO TEST-OPEN FORMS DESTINATION FILE. (INT=233)**

CAUSE: SUBMIT and NRJE2Submit test most output destinations (by opening them) to be sure they're there. A file system related error. A file system error message will follow.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

234 **MESSAGE: UNABLE TO CLOSE JOB SPOOL FILE DURING ERROR CLEANUP. (INT=234)**

CAUSE: While trying to clean up from a previous file system error in preparation for an error return, SUBMIT or NRJE2Submit was unable to close the currently open output spool file. Any file system error message following this message refers not to this error but to the original file system error.

ACTION: Exit NRJE to close the spool file. Then use SPOOK (or NRJE) to delete it. Report problems of this nature to your HP representative.

235 **MESSAGE: COMPACTION OF INPUT FILES IS NOT SUPPORTED. INPUT FILE #!. (INT=235)**

CAUSE: A compaction SCB was found in the input file specified or one of its ##FD include files.

ACTION: See "Problem Resolution" in Chapter 5 , "SNA NRJE Troubleshooting," of this manual, and contact your HP representative for assistance.

236 **MESSAGE: UNABLE TO WRITE INPUT DATA OF FILE #! TO SPOOL FILE. (INT=236)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

237 **MESSAGE: UNABLE TO WRITE INPUT DATA OF FILE #! TO SPOOL FILE. (INT=237)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

CAUSE: One cause of this message is an invalid JOB card. If this message is caused by an invalid JOB card, no file system error message will follow.

ACTION: Check the format of the JOB card for the first input file specified in your SUBMIT command. Make sure it meets the specifications of the host JCL.

238 **MESSAGE: UNABLE TO WRITE INPUT DATA OF FILE #! TO SPOOL FILE. (INT=238)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

239 **MESSAGE: UNABLE TO READ FROM TEMPORARY FILE. INPUT FILE #!. (INT=239)**

CAUSE: A file system error has occurred. A file system error message will follow.

ACTION: Determine the cause by inspecting the file system error message and correct the problem. See “Problem Resolution” in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual, and contact your HP representative for assistance.

240 **MESSAGE: READ LENGTH < > WRITE LENGTH. INPUT FILE #!. (INT=240)**

CAUSE: A severe error has occurred.

ACTION: See “Problem Resolution” in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual, and contact your HP representative for assistance.

241 **MESSAGE: NLINFO ERROR #! WHILE LOADING FROM HOST TRANSLATION TABLE. (INT=241)**

CAUSE: SUBMIT or NRJE2Submit was unable to load the "from host" translation table because of a "Native Language Support" error. The ! parameter is the Native Language error code.

ACTION: Determine the cause by inspecting the Native Language error code and correct the problem.

242 **MESSAGE: UNABLE TO CLOSE CONSOLE TEMPORARY FILE. (INT=242)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem. See "Problem Resolution" in Chapter 5 , "SNA NRJE Troubleshooting," of this manual, and contact your HP representative for assistance.

243 **MESSAGE: NO FILENAME FOLLOWING ##FD IN INPUT FILE #!. (INT=243)**

CAUSE: An MPE filename is expected following ##FD in columns 1–4 of an input record. The ! parameter is the number of the file in order of input to SUBMIT or NRJE2Submit.

ACTION: Locate and correct the ##FD record in error.

244 **MESSAGE: "N" SPECIFIED TWICE IN ##FD OPTIONS — INPUT FILE #!. (INT=244)**

CAUSE: An ##FD syntax error. The ! parameter is the number of the file in order of input to SUBMIT or NRJE2Submit.

ACTION: Locate and correct the ##FD record in error.

245 **MESSAGE: "T" SPECIFIED TWICE IN ##FD OPTIONS — INPUT FILE #!. (INT=245)**

CAUSE: An ##FD syntax error. The ! parameter is the number of the file in order of input to SUBMIT or NRJE2Submit.

ACTION: Locate and correct the ##FD record in error.

247 **MESSAGE: INVALID TRANSPARENT JOB CARD IN INPUT FILE #!. (INT=247)**

CAUSE: Only host console commands and ##FD records that include host console commands are allowed prior to the first nontransparent job card. A transparent job card was encountered before a nontransparent job card. The ! parameter is the number of the file in the order input to SUBMIT or NRJE2Submit.

ACTION: Correct the job stream.

248 **MESSAGE: DATA PRECEDES JOB CARD IN INPUT FILE #!. (INT=248)**

CAUSE: Only host console commands and ##FD records that include host console commands are allowed prior to the first nontransparent job card. Something else was encountered. The ! parameter is the number of the file in the order input to SUBMIT or NRJE2Submit.

ACTION: Correct the job stream.

249 **MESSAGE: UNABLE TO OPEN OUTPUT SPOOL FILE. INPUT FILE #!. (INT=249)**

CAUSE: A file system related error. A file system error message will appear after this message. The ! parameter is the number of the file being processed in order input to SUBMIT or NRJE2Submit.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

250 **MESSAGE: UNABLE TO REWIND FILEQ TEMPORARY FILE. (INT=250)**

CAUSE: A file system related error. A file system error message follows this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem. Notify Hewlett-Packard if you cannot determine the cause.

251 **MESSAGE: THE NRJE LOGICAL READER IS INCORRECTLY CONFIGURED. (INT=251)**

CAUSE: The NRJE logical reader should be configured as a type 2, subtype 22 device.

ACTION: Correct the reader configuration.

252 **MESSAGE: $NULL, $STDLIST, $NEWPASS NOT ALLOWED AS INPUT FILES. (INT=252)**

CAUSE: These system files are not allowed as input to SUBMIT or NRJE2Submit.

ACTION: Correct and reissue.

253 **MESSAGE: PRINT DESTINATION MUST BE LESS THAN 86 CHARACTERS. (INT=253)**

CAUSE: The print destination for SUBMIT or NRJE2Submit must be between 1 and 86 characters if one is supplied.

ACTION: Correct the print destination.

254 **MESSAGE: PUNCH DESTINATION MUST BE LESS THAN 86 CHARACTERS. (INT=254)**

CAUSE: The punch destination for SUBMIT or NRJE2Submit must be between 1 and 86 characters if one is supplied.

ACTION: Correct the punch destination.

255 **MESSAGE: FORMS DESTINATION MUST BE LESS THAN 86 CHARACTERS. (INT=255)**

CAUSE: The forms destination for SUBMIT or NRJE2Submit must be between 1 and 86 characters if one is supplied.

ACTION: Correct the forms destination.

256 **MESSAGE: OUTPUT DESTINATIONS MAY NOT RESOLVE TO SYSTEM FILES. (INT=256)**

CAUSE: The print, punch, or forms destination resolved to $*FileName*. This is not supported in NRJE II.

ACTION: Correct the output destination.

257 **MESSAGE: INVALID OUTPUT DESTINATION BACKREFERENCE. (INT=257)**

CAUSE: A non-alphanumeric character was found in an output destination backreference.

ACTION: Correct the output destination.

258 **MESSAGE: UNABLE TO WRITE JOBLOG RECORD TO SPOOL FILE. INPUT FILE #!. (INT=258)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

259 **MESSAGE: FILE SUBCODE OUT OF RANGE — INPUT FILE #!. (INT=259)**

CAUSE: The subcode of an input file must be between 0 and 2. The ! parameter is the file number in order input to SUBMIT or NRJE2Submit.

ACTION: Correct subcode array element to a value within range.

260 **MESSAGE: RECORD TYPE OUT OF RANGE — INPUT FILE #!. (INT=260)**

CAUSE: A severe error has occurred.

ACTION: See “Problem Resolution” in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual, and contact your HP representative for assistance.

261 **MESSAGE: NRJE2SUBMIT INTERNAL ERROR. (INT=261)**

CAUSE: A severe error has occurred.

ACTION: See “Problem Resolution” in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual, and contact your HP representative for assistance.

263 **MESSAGE: N[OTRANSLATE] ##FD OPTION INCOMPATIBLE WITH SUBMIT DIRECT. (INT=263)**

CAUSE: The ##FD option **N[OTRANSLATE**] cannot be used within a job that is submitted with the ";DIRECT" option, i.e., jobs already translated cannot be submitted ;DIRECT.

ACTION: Correct the problem and resubmit the job.

264 **MESSAGE: MISSING ")" ON ##FD RECORD OPTION LIST IN INPUT FILE #!. (INT=264)**

CAUSE: The correct syntax for a ##FD record is: ##FD *filename* (*optionlist*). The ! parameter is the file index in order of input to SUBMIT or NRJE2Submit.

ACTION: Correct the ##FD record and resubmit the job.

265 **MESSAGE: FILE ERROR WHILE CHECKING PRINT DESTINATION. (INT=265)**

CAUSE: A file system related error. A file system error message follows this message. NRJE, after successfully test-opening the print destination, was unable to obtain information about it.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

266 **MESSAGE: FILE ERROR WHILE CHECKING PUNCH DESTINATION. (INT=266)**

CAUSE: A file system related error. A file system error message follows this message. NRJE, after successfully test-opening the punch destination, was unable to obtain information about it.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

269 **MESSAGE: COMMAND ERROR #!. PARM #! IN ERROR. (INT=269).**

CAUSE: An error occurred in programmatically executing the command RESET N1234567.

ACTION: Determine the cause (possibly with your HP representative's help) by examining the error codes and correct the problem.

270 **MESSAGE: COMMAND ERROR #!. PARM #! IN ERROR. (INT=270).**

CAUSE: An error occurred in programmatically executing the command FILE N1234567 = EQUATES,OLDTEMP.

ACTION: Determine the cause (possibly with your HP representative's help) by examining the error codes, and then correct the problem. See "Problem Resolution" in Chapter 5 , "SNA NRJE Troubleshooting," of this manual, and contact your HP representative for assistance.

271 **MESSAGE: ",NEW" NOT VALID IN PRINT DESTINATION. (INT=271)**

CAUSE: Output destination files must have been built before the job is submitted.

ACTION: Build the output destination file and correct the file designator and/or file equations.

272 **MESSAGE: ",NEW" NOT VALID IN PUNCH DESTINATION. (INT=272)**

CAUSE: Output destination files must have been built before the job is submitted.

ACTION: Build the output destination file and correct the file designator and/or file equations.

273 **MESSAGE: ",NEW" NOT VALID IN FORMS DESTINATION. (INT=273)**

CAUSE: Output destination files must have been built before the job is submitted.

ACTION: Build the output destination file and correct the file designator and/or file equations.

274 **MESSAGE: UNABLE TO REWIND CONSOLE CMD TEMPORARY FILE. INPUT FILE #!. (INT=274)**

CAUSE: A file system related error. A file system error message follows this message.

ACTION: Determine the cause by inspecting the file system error message, and then correct the problem.

CAUSE: A severe error has occurred.

ACTION: See "Problem Resolution" in Chapter 5 , "SNA NRJE Troubleshooting," of this manual, and contact your HP representative for assistance.

275 **MESSAGE: UNABLE TO FCONTROL CONSOLE CMD TEMPORARY FILE. INPUT FILE #!. (INT=275)**

CAUSE: A file system related error. A file system error message follows this message.

ACTION: Determine the cause by inspecting the file system error message, and then correct the problem.

CAUSE: A severe error has occurred.

ACTION: See "Problem Resolution" in Chapter 5 , "SNA NRJE Troubleshooting," of this manual, and contact your HP representative for assistance.

276 **MESSAGE: UNABLE TO WRITE “DIRECT” TO SPOOL FILE FROM INPUT FILE #!. (INT=276)**

CAUSE: A file system related error. A file system error message follows this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

277 **MESSAGE: INVALID PRINT DESTINATION. (INT=277)**

CAUSE: Specified print destination does not appear to be an actual file name, a backreferenced file, an ldev, a formid, or a device class.

ACTION: Correct the problem.

278 **MESSAGE: INVALID PUNCH DESTINATION. (INT=278)**

CAUSE: Specified punch destination does not appear to be an actual file name, a backreferenced file, an ldev, a formid, or a device class.

ACTION: Correct the problem.

279 **MESSAGE: INVALID FORMS DESTINATION. (INT=279)**

CAUSE: Specified forms destination does not appear to be an actual file name, a backreferenced file, an ldev, a formid, or a device class.

ACTION: Correct the problem.

280 **MESSAGE: ONE OF THE PARAMETERS IS OUT OF BOUNDS: SEG# !, P=!. (INT=280)**

CAUSE: One or more of the parameters passed to NRJEHJInfo (SHOW;HJ=) is not within the user's stack boundary. SEG# ! (code segment #) and P=! (program counter) are the return address after the intrinsic call. If this error was returned when you typed SHOW;HJ=... from the NRJE command interpreter, then a severe error has occurred.

ACTION: If you are calling NRJEHJInfo directly, check all of the parameters passed to the intrinsic, correct the problem, and call it again. If you typed SHOW;HJ=..., see “Problem Resolution” in Chapter 5 , “SNA NRJE Troubleshooting,” of this manual, and contact your HP representative for assistance.

281 **MESSAGE: USER.ACCT MUST BE BETWEEN 1 AND 17 CHARACTERS LONG. (INT=281)**

CAUSE: The *UserName.AcctName* length is out of range.

ACTION: Correct the problem and execute again.

282 **MESSAGE: INCOUNT FOR NRJEHJINFO IS < 0. (INT=282)**

CAUSE: The *InCount* parameter for the NRJEHJInfo intrinsic is out of the allowable range.

ACTION: Pass an *InCount* parameter to NRJEHJInfo that's greater than 0.

283 **MESSAGE: JOBLISTLEN FOR NRJEHJINFO IS < 0. (INT=283)**

CAUSE: The *JoblistLen* parameter for the NRJEHJInfo intrinsic is out of the allowable range. A list of host job names and numbers cannot have a negative number of elements.

ACTION: Pass a *JoblistLen* parameter to NRJEHJInfo that's greater than 0.

284 **MESSAGE: UNABLE TO OPEN JOBLOG. (INT=284)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

285 **MESSAGE: UNABLE TO CLOSE JOBLOG. (INT=285)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

286 **MESSAGE: UNABLE TO LOCK JOBLOG. (INT=286)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

287 **MESSAGE: FFINDBYKEY ERROR ON JOBLOG. (INT=287)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

288 **MESSAGE: UNABLE TO READ FROM JOBLOG. (INT=288)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

289 **MESSAGE: UNABLE TO UNLOCK JOBLOG. (INT=289)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

290 **MESSAGE: INVALID USERNAME. (INT=290)**

CAUSE: The username in the SHOW command or the NRJEHJInfo intrinsic parameter is not in the proper form for a *UserName.AcctName* or @.

ACTION: Correct the username.

291 **MESSAGE: NM CAPABILITY REQUIRED TO SHOW OTHER'S TRANSMITTED JOBS. (INT=291)**

CAUSE: The user's logon account doesn't match the specified in the SHOW command or NRJEHJInfo intrinsic.

ACTION: A user must have NM capability to manipulate jobs submitted outside the logon *UserName.AcctName*.

292 **MESSAGE: EITHER USERNAME OR JOBLIST MUST BE SUPPLIED. (INT=292)**

CAUSE: Neither a *UserName* nor a list of host job names and numbers was supplied to the SHOW command or NRJEHJInfo intrinsic. One or the other must be supplied.

ACTION: Make sure that either a *UserName* or *JobList* is supplied and that *UserNameLen* or *JobListLen* is greater than 0 (NRJEHJInfo).

293 **MESSAGE: STARTPOS MUST BE GREATER THAN 0. (INT=293)**

CAUSE: The *StartPos* parameter to NRJEHJInfo must be greater than or equal to 1. *StartPos* is out of range.

ACTION: Make sure the value is in range.

294 **MESSAGE: DISALLOWED CONSOLE COMMAND STRIPPED FROM JOB STREAM. (INT=294)**

CAUSE: Users without NM capability are allowed to insert in a job stream only those host commands specified in the configuration file.

ACTION: No action is required.

295 **MESSAGE: CONFIGURATION FILE ACCESS ERROR. (INT=295)**

CAUSE: The SHOW command or NRJEHJInfo intrinsic was unable to access the workstation information. A more specific configuration file error message should follow this one.

ACTION: Determine the cause, if possible, by inspecting the message that follows this, and correct the problem. If the problem still occurs, contact your HP representative for assistance.

296 **MESSAGE: CONFIGURED JOBLOG BELONGS TO ANOTHER WORKSTATION. (INT=296)**

CAUSE: A job log file label specifies the workstation that owns the job log. The configuration file specifies the job log file that each workstation

owns. The job log file specified for this workstation has a label naming a different workstation as owner. Possible configuration error.

ACTION: Check that the configuration file specifies the appropriate job log for the workstation. If the problem still occurs, contact your HP representative for assistance.

297 **MESSAGE: UNABLE TO READ JOBLOG FILE LABEL. (INT=297)**

CAUSE: A file system related error. A file system error message will appear after this message.

ACTION: Determine the cause by inspecting the file system error message and correct the problem.

300 **MESSAGE: FAILED TO OPEN NEW JOBLOG FILE. (INT=300)**

CAUSE: Internal software error. Possibly out of disk space on the system.

ACTION: Contact your HP representative.

304 **MESSAGE: FPOINT ERROR ON JOBLOG FILE. (INT=304)**

CAUSE:

ACTION:

305 **MESSAGE: ERROR READING FROM JOBLOG FILE. (INT=305)**

CAUSE:

ACTION:

306 **MESSAGE: UNABLE TO DELETE A JOBLOG RECORD. (INT=306)**

CAUSE:

ACTION:

307 **MESSAGE: ERROR READING FROM JOBLOG FILE. (INT=307)**

CAUSE:

ACTION:

308 **MESSAGE: ERROR WRITING TO NEW JOBLOG FILE. (INT=308)**

CAUSE:

ACTION:

309 **MESSAGE: ERROR WHILE ATTEMPTING TO LOCK JOBLOG FILE. (INT=309)**

CAUSE:

ACTION:

310 **MESSAGE: READ ERROR ON LOOKUP TABLE. (INT=310)**

CAUSE:

ACTION:

311 **MESSAGE: LOOKUP TABLE IS EMPTY. (INT=311)**

CAUSE: NRJE attempted to load a Lookup Table that has no entries.

ACTION: Rebuild designated Lookup Table and restart workstation.

312 **MESSAGE: READ ERROR ON LOOKUP TABLE. (INT=312)**

CAUSE:

ACTION:

313 **MESSAGE: DMOVOUT ERROR WHILE ATTEMPTING TO LOAD LOOKUP TABLE. (INT=313)**

CAUSE:

ACTION:

314 **MESSAGE: WRITE ERROR WHILE ATTEMPTING TO LOAD LOOKUP TABLE. (INT=314)**

CAUSE:

ACTION:

315 **MESSAGE: READ ERROR ON LOOKUP TABLE. (INT=315)**

CAUSE:

ACTION:

316 **MESSAGE: DMOVOUT ERROR WHILE ATTEMPTING TO LOAD LOOKUP TABLE. (INT=316)**

CAUSE:

ACTION:

317 **MESSAGE: LOOKUP TABLE MUST BE LESS THAN 260 BYTES IN WIDTH. (INT=317)**

CAUSE: Record length out of bounds.

ACTION: Rebuild Lookup Table < 260 bytes.

318 **MESSAGE: FFILEINFO ERROR WHILE ACCESSING LOOKUP TABLE. (INT=318)**

CAUSE:

ACTION:

320 **MESSAGE: FAILED TO OPEN LOOKUP TABLE. (INT=320)**

CAUSE:

ACTION:

321 **MESSAGE: FFILEINFO ERROR WHILE ACCESSING LOOKUP TABLE. (INT=321)**

CAUSE:

ACTION:

322 **MESSAGE: FAILED TO OPEN LOOKUP TABLE. (INT=322)**

CAUSE:

ACTION:

324 **MESSAGE: GETDSEG FAILURE CODE = ! WHILE LOADING LOOKUP TABLE. (INT=324)**

CAUSE:

ACTION:

326 **MESSAGE: CLOSE FAILURE ON LOOKUP TABLE. (INT=326)**

CAUSE:

ACTION:

328 **MESSAGE: ERROR WHILE WRITING LABEL TO JOBLOG FILE. (INT=328)**

CAUSE:

ACTION:

329 **MESSAGE: ERROR WHILE WRITING LABEL TO JOBLOG FILE. (INT=329)**

CAUSE:

ACTION:

334 **MESSAGE: THE JOBLOG IS EMPTY. (INT=334)**

CAUSE:

ACTION:

336 **MESSAGE: ERROR OPENING LOOKUP TABLE. (INT=336)**

CAUSE:

ACTION:

337 **MESSAGE: LOOKUP TABLE IS NOT SPECIFIED IN CONFIGURATION FILE. (INT=337)**

CAUSE:

ACTION: Make sure the Lookup Table is configured in the configuration file.

339 **MESSAGE: READ ERROR ON LOOKUP TABLE. (INT=339)**

CAUSE:

ACTION:

345 **MESSAGE: ERROR OBTAINING WORKSTATION STATUS. (XDS=!) (INT=345)**

CAUSE:

ACTION:

346 **MESSAGE: WORKSTATION IS NOT ACTIVE. REQUEST NOT EXECUTED. (INT=346)**

CAUSE: The RELOAD command was issued with the workstation inactive.

ACTION: No action is required.

351 **MESSAGE: CONFIGURATION FILE ACCESS ERROR. (CFG=!) (INT=351)**

CAUSE:

ACTION:

352 **MESSAGE: FAILED TO OPEN JOBLOG FILE. (INT=352)**

CAUSE:

ACTION:

353 **MESSAGE: FAILED TO LOCK JOBLOG FILE. (INT=353)**

CAUSE:

ACTION:

354 **MESSAGE: FAILED TO CLOSE JOBLOG FILE. (INT=354)**

CAUSE:

ACTION:

355 **MESSAGE: FAILED TO PURGE OLD JOBLOG FILE. (INT=355)**

CAUSE:

ACTION:

356 **MESSAGE: NRJE MANAGER COMMANDS MAY NOT EXCEED 120 BYTES. (INT=356)**

CAUSE: A command such as STARTWS or STOPWS was entered which exceeded the maximum supported length.

ACTION: Re-enter as separate commands.

357 **MESSAGE: THE WORKSTATION IS NOT ACTIVE. (INT=357)**

CAUSE: A control command sent to the NRJE monitor could not be processed because the monitor is not active.

ACTION: Use the STATUS command to verify the state of the workstation.

358 **MESSAGE: THE LU IS NOT ACTIVE. (INT=358)**

CAUSE: A control command sent to an LU cannot be processed because the LU is not active.

ACTION: Use the STATUS command to verify the state of the LU.

390 **MESSAGE: SUBMITTED FILE RECORD SIZE EXCEEDS READER RECORD SIZE (INT=390)**

CAUSE:

ACTION:

391 **MESSAGE: RECORD SIZE OF 1ST FILE SUBMITTED IS < FOLLOWING FILES (INT=391)**

CAUSE:

ACTION:

392 **MESSAGE: UNABLE TO OBTAIN READER RECORD SIZE FROM IO CONFIG (INT=392)**

CAUSE:

ACTION:

401 **MESSAGE: UNABLE TO UNLOCK THE NRJE EXTRA DATA SEGMENT. (SEV=401)**

CAUSE:

ACTION:

402 **MESSAGE: ATTEMPT TO CREATE AN ACTIVE WORKSTATION ENTRY. (MAN=402)**

CAUSE: Attempt to start a workstation that is already active.

ACTION:

403 **MESSAGE: NO AVAILABLE WORKSTATION ENTRY LEFT IN NRJE XDS. (MAN=403)**

CAUSE: NRJE allows only eight workstations to be active concurrently.

ACTION: Bring down some active workstations if other workstations need to be started.

404 **MESSAGE: ATTEMPT TO ACCESS A NON EXISTING WORKSTATION ENTRY. (MAN=404)**

CAUSE: There should be a message preceding this message.

ACTION: Look at the preceding message and determine the error.

405 **MESSAGE: ATTEMPT TO CREATE AN EXISTING AND ACTIVE LU ENTRY. (MAN=405)**

CAUSE: Attempt to create an LU entry that already exists.

ACTION:

406 **MESSAGE: NO AVAILABLE LU ENTRY LEFT FOR THE WORKSTATION. (SEV=406)**

CAUSE: User attempted to use more LUs than are available (maximum=16).

ACTION:

407 **MESSAGE: ATTEMPT TO ACCESS A NON EXISTING LU ENTRY. (MAN=407)**

CAUSE: Attempt to access an LU entry but it does not exist in the NRJE extra data segment.

ACTION:

409 **MESSAGE: BUFFER COUNT MUST BE GREATER THAN 0. (SEV=409)**

CAUSE:

ACTION:

411 **MESSAGE: OFFSET MUST BE 0 OR POSITIVE. (SEV=411)**

CAUSE:

ACTION:

412 **MESSAGE: BUFFER SIZE IS TOO SMALL. (SEV=412)**

CAUSE:

ACTION:

413 **MESSAGE: AT LEAST ONE OF THE PARAMETERS IS OUT OF BOUNDS. (SEV=413)**

CAUSE:

ACTION

414 **MESSAGE: WRONG INPUT IN NXDSREAD OR NXDSWRITE. (SEV=414)**

CAUSE:

ACTION:

415 **MESSAGE: NOT ENOUGH STACK SPACE. (MAN=415)**

CAUSE: If this message appears when executing the NRJE subsystem, then a severe error has occurred.

ACTION: See "Problem Resolution" in Chapter 5 , "SNA NRJE Troubleshooting," of this manual, and contact your HP representative for assistance.

CAUSE: If this problem took place during the execution of a user program, then the NRJE intrinsics did not have sufficient stack space.

ACTION: PREP or RUN the user program with a larger STACK=*StackSize* parameter.

416 **MESSAGE: SPLIT STACK CALL IS NOT ALLOWED. (SEV=416)**

CAUSE:

ACTION:

418 **MESSAGE: THE OUTPUT LIST IS TOO SHORT IN NXDSLULIST. (SEV=418)**

CAUSE:

ACTION:

419 **MESSAGE: WORKSTATION ENTRY IS IN PENDING STATE. (MAN=419)**

CAUSE: Attempt to start a workstation that is in the pending activation state. Pending state is the state when the workstation is about to be active.

ACTION:

420 **MESSAGE: WORKSTATION ENTRY IS IN MONITOR PENDING STATE. (MAN=420)**

CAUSE: Attempt to start or stop a workstation but it is in the monitor pending state. Monitor pending state is the state when workstation monitor is about to be active.

ACTION:

421 **MESSAGE: WORKSTATION ENTRY IS NOT IN ACTIVE OR INITIALIZED STATE. (MAN=421)**

CAUSE:

ACTION:

422 **MESSAGE: A SEVERE ERROR OCCURRED IN THE DICTIONARY SUBSYSTEM. (SEV=422)**

CAUSE:

ACTION:

423 **MESSAGE: A SEVERE ERROR OCCURRED IN NODE MANAGEMENT. (SEV=423)**

CAUSE:

ACTION:

424 **MESSAGE: SEVERE ERROR: WORKSTATION HAS AN UNDEFINED STATE. (SEV=424)**

CAUSE:

ACTION:

425 **MESSAGE: XDS ACCESS ERROR: NRJE XDS DOES NOT EXIST. (SEV=425)**

CAUSE:

ACTION:

426 **MESSAGE: ATTEMPT TO UNLOCK XDS LOCKED BY ANOTHER PIN. (SEV=426)**

CAUSE:

ACTION:

427 **MESSAGE: ATTEMPT TO LOCK XDS WHEN LOCKED BY SAME PIN. (SEV=427)**

CAUSE:

ACTION:

428 **MESSAGE: NO ROOM FOR AN NRJE XDS DST ENTRY. (SEV=428)**

CAUSE:

ACTION:

429 **MESSAGE: NO SWAP SPACE FOR AN NRJE XDS. (SEV=429)**

CAUSE:

ACTION:

430 **MESSAGE: UNABLE TO LOCK THE NRJE XDS. SHUTDOWN PENDING. (MAN=430)**

CAUSE: The NRJE extra data segment is being deleted due to a system or NMMON shutdown. NRJE workstations can no longer be activated.

ACTION: Restart the system or NMMON before using NRJE.

431 **MESSAGE: UNABLE TO OBTAIN PORTS FACILITY XDS FOR NRJE IPC. (INT=431)**

CAUSE: NRJE was unable to obtain an extra data segment for use in the ports facility to provide interprocess communication between the several NRJE processes.

ACTION: Verify that all versions are correct. Increase the size of the DST table using SYSDUMP (SYSTEM TABLE CHANGES). Refer to the *SNA Link Services Reference Manual* for system configuration information.

501 **MESSAGE: WORKSTATION ! IS NOT IN THE PENDING STATE. (MON=501)**

CAUSE: Attempted to run NRJE monitor (NRJEMON) without calling NRJEStartWS or issuing a STARTWS command.

ACTION: Call NRJEStartWS or issue STARTWS command.

502 **MESSAGE: UNABLE TO SET THE ABORT TRAP. SEVERE ERROR. (SEV=502)**

CAUSE:

ACTION:

503 **MESSAGE: WORKSTATION LENGTH IS NOT BETWEEN 1 AND 8 CHARACTERS. (MON=503)**

CAUSE: NRJE monitor (NRJEMON) is run with the *Info* parameter containing an invalid workstation name length.

ACTION: Rerun NRJEMON with a valid and existing workstation name. Note: NRJEStartWS intrinsic must have been previously called or STARTWS command previously issued.

505 **MESSAGE: UNABLE TO READ DATA FROM “TO MONITOR” MESSAGE FILE. (SEV=505)**

CAUSE:

ACTION:

506 **MESSAGE: UNABLE TO PURGE “TO HOST” CONSOLE MESSAGE FILE. (SEV=506)**

CAUSE: “TO HOST” console message file is being opened by an NRJE operator and NRJE monitor is terminating.

ACTION: Locate the operator and tell it to close the file.

507 **MESSAGE: UNABLE TO PURGE “FROM HOST” CONSOLE MESSAGE FILE. (MON=507)**

CAUSE: “FROM HOST” console message file is being opened by an NRJE manager and NRJE monitor is terminating.

ACTION: Locate the manager and have the file closed.

508 **MESSAGE: UNABLE TO PURGE “TO MONITOR” MESSAGE FILE. (SEV=508)**

CAUSE:

ACTION:

509 **MESSAGE: UNABLE TO PURGE “FROM MONITOR” MESSAGE FILE. (SEV=509)**

CAUSE:

ACTION:

510 **MESSAGE: UNABLE TO BUILD “TO HOST” CONSOLE MESSAGE FILE. (SEV=510)**

CAUSE:

ACTION:

511 **MESSAGE: UNABLE TO BUILD “FROM HOST” CONSOLE MESSAGE FILE. (SEV=511)**

CAUSE:

ACTION:

512 **MESSAGE: UNABLE TO BUILD “TO MONITOR” MESSAGE FILE. (SEV=512)**

CAUSE:

ACTION:

513 **MESSAGE: UNABLE TO BUILD “FROM MONITOR” MESSAGE FILE. (SEV=513)**

CAUSE:

ACTION:

515 **MESSAGE: UNABLE TO ABORT THE LU CLASS: !. (MON=515)**

CAUSE: NRJE performed a kill on LU class ! but the kill failed.

ACTION: Bring down the workstation job whenever possible. If the problem still occurs, contact HP for assistance.

516 **MESSAGE: UNABLE TO STOP THE LU CLASS: ! SINCE IT IS NOT ACTIVE. (MON=516)**

CAUSE:

ACTION:

517 **MESSAGE: UNABLE TO OPEN “TO MONITOR” MESSAGE FILE. (MON=517)**

CAUSE: The message file between the command interpreter and the workstation monitor failed to open.

ACTION: Attempt to start the workstation again. If the problem continues, contact your HP representative for assistance.

518 **MESSAGE: UNABLE TO SET TIMED READ ON “TO MONITOR” FILE. (SEV=518)**

CAUSE:

ACTION:

519 **MESSAGE: UNABLE TO FIND THE WORKSTATION, !, IN THE NRJE XDS. (MON=519)**

CAUSE: The NRJE monitor (NRJEMON) is being run without preparation. ! is the workstation name.

ACTION: Issue a STARTWS command or call NRJESTARTWS intrinsic before running the monitor.

520 **MESSAGE: UNABLE TO START THE LU CLASS: !. (MON=520)**

CAUSE: The workstation monitor could not start the LU.

ACTION: See subsequent messages that appear for an explanation.

521 **MESSAGE: FILE SYSTEM ERROR: ! (MON=521)**

CAUSE: File system error has occurred.

ACTION: Determine the cause of the file system error.

522 **MESSAGE: UNABLE TO OPEN “FROM MONITOR” MESSAGE FILE. (SEV=522)**

CAUSE:

ACTION:

523 **MESSAGE: UNABLE TO CREATE A PROCESS FOR LU: !. (MON=523)**

CAUSE:

ACTION: Ensure that the NRJELU program exists under NRJE.SYS.

524 **MESSAGE: NO LU SPECIFIED FOR INITIATION. (MON=524)**

CAUSE: Neither the START command nor the NRJE configuration specified any LUs to be initiated.

ACTION: Issue a START command with the LU parameter, and/or revise the NRJE configuration.

525 **MESSAGE: UNABLE TO STOP LU: !; XDS ERROR. (SEV=525)**

CAUSE:

ACTION:

526 **MESSAGE: ATTEMPT TO EXTEND WAIT ON “TO MONITOR” FILE FAILED. (SEV=526)**

CAUSE:

ACTION:

527 **MESSAGE: UNABLE TO OPEN CONFIGURATION FILE. NM CODE = ! (SEV=527)**

CAUSE:

ACTION:

528 **MESSAGE: UNABLE TO LOCK CONFIGURATION FILE. NM CODE = ! (SEV=528)**

CAUSE:

ACTION:

529 **MESSAGE: UNABLE TO HALT LU: ! ; XDS ERROR. (SEV=529)**

CAUSE:

ACTION:

530 **MESSAGE: NRJE UNABLE TO BUILD A NEW JOBLOG FILE. (MON=530)**

CAUSE:

ACTION:

531 **MESSAGE: NRJE UNABLE TO OPEN JOBLOG IN SEQUENTIAL ACCESS MODE. (MON=531)**

CAUSE:

ACTION:

532 **MESSAGE: NRJE UNABLE TO BUILD A NEW JOB LOG DUE TO CONFIGURATION FILE ACCESS ERROR. (MON=532)**

CAUSE:

ACTION:

533 **MESSAGE: NRJE ENCOUNTERED FWRITE ERROR WHILE ATTEMPTING TO REBUILD THE JOBLOG FILE. (MON=533)**

CAUSE:

ACTION:

534 **MESSAGE: NRJE UNABLE TO DELETE CORRUPTED JOBLOG FILE (MON=534)**

CAUSE:

ACTION:

535 **MESSAGE: NRJE 'FPOINT' ERROR ENCOUNTERED ON JOBLOG FILE. (MON=535)**

CAUSE:

ACTION:

536 **MESSAGE: NRJE UNABLE TO OPEN JOBLOG DUE TO FILE SYSTEM ERROR. (MON=536)**

CAUSE:

ACTION:

537 **MESSAGE: NRJE UNABLE TO CLOSE NEW JOBLOG TO PERMANENT DOMAIN (MON=537)**

CAUSE:

ACTION:

538 **MESSAGE: NRJE ENCOUNTERED FREAD ERROR WHILE ATTEMPTING TO REBUILD THE JOBLOG FILE. (MON=538)**

CAUSE:

ACTION:

539 **MESSAGE: NRJE UNABLE TO LOCK THE JOBLOG FILE. (MON=539)**

CAUSE:

ACTION:

540 **MESSAGE: NRJE UNABLE TO READ JOBLOG VERSION STAMP LABEL. (MON=540)**

CAUSE:

ACTION:

541 **MESSAGE: NRJE CONFIGURATION ERROR. JOBLOG FILE BELONGS TO ANOTHER WORKSTATION. (MON=541)**

CAUSE:

ACTION:

542 **MESSAGE: NRJE UNABLE TO PURGE CORRUPT JOBLOG KEY FILE. (MON=542)**

CAUSE:

ACTION:

543 **MESSAGE: NRJE UNABLE TO READ WORKSTATION ID LABEL ON JOBLOG FILE. (MON=543)**

CAUSE:

ACTION:

544 **MESSAGE: NRJE UNABLE TO OPEN LOOKUP TABLE. (MON=544)**

CAUSE: There should be a message preceding this one.

ACTION: Look at the preceding message and determine the error.

545 **MESSAGE: NRJE UNABLE TO LOCK NEW JOB LOG FILE. (MON=545)**

CAUSE:

ACTION:

546 **MESSAGE: NRJE UNABLE TO ACQUIRE A LOCAL RIN. (MON=546)**

CAUSE:

ACTION:

547 **MESSAGE: NRJEMON TERMINATING — MUST BE RUN FROM NRJE.SYS. (MON=547)**

CAUSE:

ACTION:

550 **MESSAGE: WORKSTATION ! ACTIVATED. BEGIN TO DISPATCH ! LUS. (MON=550)**

CAUSE:

ACTION:

551 **MESSAGE: COMMAND CODE TO MONITOR = ! (0=STOP, 1=HALT, 2=START). (MON=551)**

CAUSE:

ACTION:

552 **MESSAGE: MONITOR INPUT CHAIN SIZE = !. (MON=552)**

CAUSE:

ACTION:

553 **MESSAGE: LUS AFFECTED BY THE COMMAND CODE: ! NUMBER OF LUS: !. (MON=553)**

CAUSE:

ACTION:

554 **MESSAGE: LU: ! IS DISPATCHED SUCCESSFULLY. (MON=554)**

CAUSE:

ACTION:

555 **MESSAGE: LU: ! IS ABORTED SUCCESSFULLY. (MON=555)**

CAUSE:

ACTION:

556 **MESSAGE: LU: ! IS SUCCESSFULLY SIGNALED TO STOP. (MON=556)**

CAUSE:

ACTION:

557 **MESSAGE: WORKSTATION ! TERMINATED. (MON=557)**

CAUSE:

ACTION:

558 **MESSAGE: NO ACTIVE LU. WORKSTATION ! IS TERMINATING . . . (MON=558)**

CAUSE:

ACTION:

559 **MESSAGE: LU: ! IS SUCCESSFULLY SIGNALED TO HALT. (MON=559)**

CAUSE:

ACTION:

600 **MESSAGE: LENGTH OF DEVICE LIST IS 0. (NRJEOUT=600)**

CAUSE: NRJEOUT is run without a device list or the *Info* parameter.

ACTION: Rerun NRJEOUT with the *Info* parameter that contains an MPE device list.

601 **MESSAGE: UNABLE TO PARSE THE DEVICE LIST IN INFO PARAMETER. (NRJEOUT=601)**

CAUSE: A syntax error occurred in parsing the *Info* parameter after issuing RUN NRJEOUT.

ACTION: Redo RUN NRJEOUT command.

602 **MESSAGE: UNABLE TO LOCATE CLASS: !. (NRJEOUT=602)**

CAUSE: An unidentified device class name was specified in the *Info* parameter of a RUN NRJEOUT command.

ACTION: Verify that the device class name is in the MPE configuration and has been entered correctly in the RUN NRJEOUT command.

603 **MESSAGE: UNABLE TO LOCATE LDEV: !. (NRJEOUT=603)**

CAUSE: An unidentified logical device number was specified in the *Info* parameter of a RUN NRJEOUT command.

ACTION: Verify that the logical device number is in the MPE configuration and has been entered correctly in the RUN NRJEOUT command.

604 **MESSAGE: INVALID DEVICE ID: !. (NRJEOUT=604)**

CAUSE: An incorrect logical device number or device class name was indicated in the *Info* parameter of a RUN NRJEOUT command.

ACTION: Verify that the logical device number or device class name is configured to be with a logical writer by Network Management Services.

605 **MESSAGE: SPOOL FILE INFORMATION ERROR. DEV=!, SP STATUS=!. (SEV=605)**

CAUSE:

ACTION:

606 **MESSAGE: SPOOL FILE ALTERATION ERROR. DEV=!, SP STATUS=!. (SEV=606)**

CAUSE:

ACTION:

607 **MESSAGE: SPOOL FILE OPENING ERROR. DEV=!, SP STATUS=!. (SEV=607)**

CAUSE:

ACTION:

608 **MESSAGE: CLASS NAME IS TOO LONG: !. (NRJEOUT=608)**

CAUSE: There are too many characters in a device class name in the *Info* parameter of a RUN NRJEOUT command.

ACTION: Correct the device class name so that it begins with a letter and is eight or fewer characters long.

609 **MESSAGE: DEVICE INFORMATION ERROR. DEV=!, SP STATUS=!. (SEV=609)**

CAUSE:

ACTION:

610 **MESSAGE: FILE SYSTEM ERROR: !. (NRJEOUT=610)**

CAUSE: An access error occurred on a file.

ACTION: See subsequent messages identifying the file.

613 **MESSAGE: UNABLE TO OPEN $STDIN. (SEV=613)**

CAUSE:

ACTION:

614 **MESSAGE: UNABLE TO OPEN $STDLIST. (SEV=614)**

CAUSE:

ACTION:

615 **MESSAGE: SPOOL FILE CLOSE ERROR. DEV=!, SP STATUS=!. (SEV=615)**

CAUSE:

ACTION:

616 **MESSAGE: SPOOL FILE PURGE ERROR. DEV=!, SP STATUS=!. (SEV=616)**

CAUSE:

ACTION:

617 **MESSAGE: SPOOL FILE READ ERROR. DEV=!, SP STATUS=!. (SEV=617)**

CAUSE:

ACTION:

618 **MESSAGE: MAXIMUM ALLOWABLE CLASSES, 100, EXCEEDED. (NRJEOUT=618)**

CAUSE: Too many device classes have been indicated in the *Info* parameter of a RUN NRJEOUT command.

ACTION: Reduce the number of device classes indicated in the *Info* parameter of the RUN NRJEOUT command. Separate jobs or sessions may be suitable.

619 **MESSAGE: MAXIMUM ALLOWABLE LDEVS, 100, EXCEEDED. (NRJEOUT=619)**

CAUSE: Too many logical device numbers have been indicated in the *Info* parameter of a RUN NRJEOUT command.

ACTION: Reduce the number of logical device numbers indicated in the *Info* parameter of the RUN NRJEOUT command. Separate jobs or sessions may be suitable.

620 **MESSAGE: WARNING: MAXIMUM CHAIN, 100, REACHED. (NRJEOUT=620)**

CAUSE: There are too many spool files in one chain.

ACTION: Alter the host job so that fewer data sets are generated.

622 **MESSAGE: NRJEOUT STACK DESTROYED BY USER PROCEDURE. (NRJEOUT=622)**

CAUSE: NRJEOutData, supplied by a user, destroyed the integrity of data, DB through Q, in the NRJEOUT routine.

ACTION: Check the indexing range of operations that do storage.

623 **MESSAGE: FAILED TO FIND PROGRAM FILE NAME. (NRJEOUT=623)**

CAUSE:

ACTION:

624 **MESSAGE: FAILED TO FIND PROGRAM FILE NAME. (NRJEOUT=624)**

CAUSE:

ACTION:

625 **MESSAGE: NRJEOUT NOT RUN FROM THE GROUP NRJE.SYS. (NRJEOUT=625)**

CAUSE:

ACTION:

701 **MESSAGE: COMMA IS EXPECTED. (CI=701)**

CAUSE: Parsing error.

ACTION: Re-enter data.

702 **MESSAGE: COMMA OR CARRIAGE RETURN IS EXPECTED. (CI=702)**

CAUSE: Parsing error.

ACTION: Re-enter data.

703 **MESSAGE: KEYWORD CAN BE SPECIFIED ONLY IN THE DISPLAY COMMAND. (CI=703)**

CAUSE: A keyword was used out of context.

ACTION: Re-enter data without the keyword.

704 **MESSAGE: DUPLICATE KEYWORDS DETECTED. (CI=704)**

CAUSE: A keyword was used more than once where prohibited.

ACTION: Re-enter data and do not repeat the keyword.

705 **MESSAGE: ENTER WELCOME MESSAGE (HIT CARRIAGE RETURN TO TERMINATE). (CI=705)**

CAUSE: This is an information message for an NRJE manager entering a welcome message.

ACTION: Enter welcome message data lines followed by a **[RETURN]**. Enter a **[RETURN]** immediately after a prompt to terminate the welcome message.

706 **MESSAGE: EQUAL SIGN EXPECTED AFTER A KEYWORD. (CI=706)**

CAUSE: A data entry error has occurred. An equal sign following a keyword has been omitted.

ACTION: Scan the data for a keyword that requires an equal sign and a parameter. Re-enter the information.

707 **MESSAGE: INPUT ERROR. (CI=707)**

CAUSE: An error has occurred in reading from $STDIN.

ACTION: Re-enter the NRJE subsystem and then re-enter the data. If this occurs again, contact your HP representative for assistance.

708 **MESSAGE: INVALID CHAIN SIZE. (CI=708)**

CAUSE: The chain size parameter value is out of range.

ACTION: Correct the chain size parameter value and re-enter data.

709 **MESSAGE: INVALID PRIORITY. (CI=709)**

CAUSE: The priority value is out of range.

ACTION: Correct the priority value and re-enter data.

710 **MESSAGE: INVALID JOB NAME, JOB NUMBER OR USER.ACCOUNT. (CI=710)**

CAUSE: An incorrect job name, job number or *UserName.AcctName* was entered.

ACTION: Job names must begin with a letter and be eight or fewer alphanumeric characters long. Job numbers are five digit numeric strings. A *UserName* and *AcctName* each must begin with a letter and be eight or fewer alphanumeric characters long; a period must separate the two.

711 **MESSAGE: INVALID JOB NAME. (CI=711)**

CAUSE: An incorrect job name was entered.

ACTION: A job name must begin with a letter and be eight or fewer alphanumeric characters long. Correct the information and re-enter the data.

712 **MESSAGE: INVALID JOB NUMBER. (CI=712)**

CAUSE: An incorrect job number was entered.

ACTION: A job number is a string of five or fewer numbers. Correct the information and re-enter the data.

713 **MESSAGE: NO SUCH KEYWORD. (CI=713)**

CAUSE: An unknown keyword was entered.

ACTION: Correct the information and re-enter the data.

714 **MESSAGE: LENGTH OF THE LU NAME IS OUT OF RANGE. (CI=714)**

CAUSE: An invalid LU name was entered.

ACTION: An LU name must begin with a letter and may be eight or fewer alphanumeric characters long. Correct the information and re-enter the data.

715 **MESSAGE: NEW PRIORITY MUST BE BETWEEN 0 AND 14. (CI=715)**

CAUSE: An invalid new priority value was entered.

ACTION: A priority must be between 0 and 14. Correct the information and re-enter the data.

716 **MESSAGE: INVALID USER.ACCOUNT. (CI=716)**

CAUSE: An incorrect *UserName.AcctName* was entered.

ACTION: Verify that the *UserName* and *AcctName* exist. A *UserName* and *AcctName* must each begin with a letter and may be eight or fewer alphanumeric characters long. One must be separated from the other by a period.

717 **MESSAGE: INVALID WORKSTATION ID. (CI=717)**

CAUSE: An invalid workstation identification was entered.

ACTION: Verify that the workstation identification exists. A workstation must begin with a letter and may be eight or fewer alphanumeric characters long. Correct the information and re-enter the data.

718 **MESSAGE: LENGTH OF THE WORKSTATION ID IS OUT OF RANGE. (CI=718)**

CAUSE: The workstation identification contains too many, or too few characters.

ACTION: A workstation identification must begin with a letter and may be eight or fewer alphanumeric characters long. Correct the information and re-enter the data.

719 **MESSAGE: NEW PRIORITY IS EXPECTED. (CI=719)**

CAUSE: The new priority value was omitted.

ACTION: Correct the information and re-enter the data.

720 **MESSAGE: NO PARAMETER IS EXPECTED. (CI=720)**

CAUSE: A superfluous parameter was entered.

ACTION: Correct the information and re-enter the data.

721 **MESSAGE: NO SUCH COMMAND. (CI=721**

CAUSE: An unknown command was entered.

ACTION: Correct the information and re-enter the data.

722 **MESSAGE: NO SUCH COMMAND OR PARAMETER. (CI=722)**

CAUSE: An unknown command or parameter was entered.

ACTION: Correct the command or parameter and re-enter the data.

723 **MESSAGE: KEYWORD VALID ONLY IN SOME OF THE OPERATOR COMMANDS. (CI=723)**

CAUSE: A keyword has been entered and is not valid for the current command.

ACTION: Refer to NRJE manual for command syntax and reenter.

724 **MESSAGE: UNABLE TO PARSE THE PARAMETER LIST. (CI=724)**

CAUSE: A syntax error has occurred in the parameter list.

ACTION: Correct the information and re-enter the data.

725 **MESSAGE: SEMICOLON IS EXPECTED. (CI=725)**

CAUSE: A semicolon was omitted.

ACTION: Correct the information and re-enter.

726 **MESSAGE: KEYWORD CAN BE SPECIFIED ONLY IN THE STARTWS COMMAND. (CI=726)**

CAUSE: A keyword was used incorrectly.

ACTION: Omit the keyword from the command and re-enter the data.

727 **MESSAGE: UNABLE TO OPEN $STDINX. (CI=727)**

CAUSE: The $STDINX input file could not be opened.

ACTION: Another routine may be using $STDINX. Wait and then try to open again.

728 **MESSAGE: UNABLE TO OPEN $STDLIST. (CI=728)**

CAUSE: The $STDLIST output file could not be opened.

ACTION: Another routine may be using $STDLIST. Wait and then try to open again.

729 **MESSAGE: KEYWORD CAN BE SPECIFIED ONLY IN THE SUBMIT COMMAND. (CI=729)**

CAUSE: The keyword use is limited to the SUBMIT command.

ACTION: Delete the keyword from this command and re-enter the data.

730 **MESSAGE: WARNING: ATTEMPT TO SWITCH TO THE CURRENT WORKSTATION. (CI=730)**

CAUSE: The current workstation and the new workstation are identical.

ACTION: Switching workstation is superfluous.

731 **MESSAGE: MORE PARAMETERS ARE EXPECTED. (CI=731)**

CAUSE: There are too few parameters.

ACTION: Check the parameter list, add to it, and re-enter the data.

732 **MESSAGE: WARNING: EXTRA PARAMETERS ARE DETECTED AND IGNORED. (CI=732)**

CAUSE: There are too many parameters.

ACTION: No action is required. If this error message was printed because of prestored input, delete the extra parameters to prevent this message from being printed again.

733 **MESSAGE: UNABLE TO PARSE THE COMMAND. (CI=733)**

CAUSE:

ACTION:

734 **MESSAGE: THE CONSOLE MUST BE OPENED PRIOR TO USING THIS COMMAND. (CI=734)**

CAUSE: An attempt was made to RELEASE the console when it was not open.

ACTION: Issue a CONSOLE command, or call NRJEConsole, then enter a host console command or call NRJESendCmd.

735 **MESSAGE: WORKSTATION ID IS EXPECTED. (CI=735)**

CAUSE: A workstation identification was omitted from this command and there is no default workstation. The NRJE subsystem was entered without specifying a workstation identification.

ACTION: Re-enter this command including a workstation identification parameter. Or enter an NRJE command with a workstation identification parameter to establish a default workstation, and then enter this command.

736 **MESSAGE: UNABLE TO READ WELCOME MESSAGE INPUT. (CI=736)**

CAUSE: NRJE command interpreter unable to read input welcome messages from the user. A file system error should follow to clarify the situation.

ACTION: Investigate the file system error message and if possible reenter.

737 **MESSAGE: END OF INPUT FILE DETECTED, SUBSYSTEM IS TERMINATING... (CI=737)**

CAUSE: NRJE command interpreter received an end of file condition from MPE file system when attempting to read user input.

ACTION:

738 **MESSAGE: UNDEFINED MPE COMMAND. (CI=738)**

CAUSE: An undefined MPE command was entered from the NRJE subsystem.

ACTION: Correct the MPE command and re-enter the data.

739 **MESSAGE: UNABLE TO EXECUTE MPE COMMAND. MPE ERROR # !. (CI=739)**

CAUSE: An MPE command that was entered from the NRJE subsystem could not be executed. The meaning of MPE error number ! can be found in *System Operation and Resource Management Reference Manual*. The command to be executed may be limited to non-break mode.

ACTION: In order to execute the MPE command, EXIT from NRJE, execute the MPE command, and then re-enter NRJE.

740 **MESSAGE: MAXIMUM OF 5 LU NAMES CAN BE ENTERED. (CI=740)**

CAUSE: There are more than five LU name parameters in the command.

ACTION: Reduce the number of LU names to five, or less, and re-enter the command.

741 **MESSAGE: LENGTH OF THE INFILE NAME IS OUT OF RANGE. (CI=741)**

CAUSE: An *InFile* reference is too long.

ACTION: An *InFile* reference can be a fully qualified file name, or * followed by a formal designator reference to a FILE command. All parts of a fully qualified file name, and a formal designator, must begin with a letter and are eight or fewer alphanumeric characters long.

742 **MESSAGE: DUPLICATE INFILE OPTION IS DETECTED. (CI=742)**

CAUSE: An *InFile* reference was followed by a (C,C) or (T,T).

ACTION: Correct the command and re-enter it.

743 **MESSAGE: EXPECTED A RIGHT PARENTHESIS AFTER THE INFILE OPTIONS. (CI=743)**

CAUSE: A right parenthesis was omitted.

ACTION: Correct the command and re-enter it.

744 **MESSAGE: EXTRANEOUS TOKEN AFTER THE INFILE OPTION IS DETECTED. (CI=744)**

CAUSE: A token that is not a comma, semicolon, or carriage return is detected after an infile option.

ACTION: Refer to NRJE manual and re-enter.

745 **MESSAGE: MAXIMUM OF 5 INFILES CAN BE ENTERED. (CI=745)**

CAUSE: Too many infiles have been specified.

ACTION: If the SUBMIT command is for more than one job, divide the task into several SUBMIT commands. If the SUBMIT command is for one

job, consolidate the files as follows: (1) append several files together and SUBMIT again, and (2) write a routine using the NRJESubmit intrinsic.

746 **MESSAGE: SEMICOLON OR CARRIAGE RETURN IS EXPECTED. (CI=746)**

CAUSE: A semicolon or carriage return was omitted.

ACTION: Correct the information and re-enter the data.

747 **MESSAGE: INFILE OPTION IS INVALID. (CI=747)**

CAUSE: An invalid infile option was specified.

ACTION: Correct the information and re-enter the data.

748 **MESSAGE: NO WORKSTATION IS SELECTED. (CI=748)**

CAUSE: No workstation identification has been specified.

ACTION: Enter an NRJE command with a workstation identification to specify a default workstation, or use a workstation identification with the commands that require it.

751 **MESSAGE: UNABLE TO EXECUTE RUN COMMAND. CREATEPROCESS ERROR # !. (CI=751)**

CAUSE: A RUN command has been issued within the CI but failed.

ACTION: Check and make sure the program does exist.

752 **MESSAGE: KEYWORD VALID ONLY IN THE SUBMIT OR DISPLAY COMMAND. (CI=752)**

CAUSE: A keyword has been entered out of context.

ACTION: Correct and re-enter the command.

753 **MESSAGE: REDO INPUT EXCEEDS THE MAXIMUM COMMAND LENGTH. (CI=753)**

CAUSE: The input to correct a command is too long.

ACTION: Correct the command in stages.

754 **MESSAGE: REDO INPUT CONTAINS GARBAGE DELETION. (CI=754)**

CAUSE: Garbage characters detected after delete characters (D).

ACTION: Re-enter.

755 **MESSAGE: UNABLE TO OPEN THE HOST CONSOLE. (CI=755)**

CAUSE: The workstation is not active, or the host console is already in use.

ACTION: Use the DISPLAY command, or its intrinsic equivalent, to determine whether the workstation is active, or the host console is already in use. Wait until the workstation is active, or the host console is available, and re-enter the command.

756 **MESSAGE: WORKSTATION ID LENGTH IS NOT BETWEEN 1 AND 8 CHARACTERS. (CI=756)**

CAUSE: A workstation identification length is out of range.

ACTION: A workstation identification must begin with a letter and be eight or fewer alphanumeric characters long. Correct the information and re-enter the data.

757 **MESSAGE: WORKSTATION ID DOES NOT EXIST. (CI=757)**

CAUSE: The workstation identification specified is in error, or has not been configured.

ACTION: Verify the workstation identification desired. Correct the information and re-enter the data.

758 **MESSAGE: WARNING: NO WORKSTATION ID HAS BEEN SPECIFIED. (CI=758)**

CAUSE: There is no default workstation.

ACTION: Enter an NRJE command with a workstation identification, or enter subsequent commands and include the workstation identification.

759 **MESSAGE: NO INPUT FILE SPECIFIED FOR THE SUBMIT COMMAND. (CI=759)**

CAUSE: An input file name is required. It may be a fully qualified file name or a file reference.

ACTION: Correct the SUBMIT command to include an input file name, and re-enter it.

760 **MESSAGE: TRANSLATION OR COMPRESSION CANNOT BE SPECIFIED WITH DIRECT. (CI=760)**

CAUSE: Translation and compression cannot be combined with the DIRECT option.

ACTION: Revise the command to omit this combination and re-enter it.

761 **MESSAGE: COMPRESSED AND UNTRANSLATED INPUT FILE IS NOT ALLOWED. (CI=761)**

CAUSE: An input file submitted with compressed and untranslated options is not allowed. An input file must have been translated before compression on it can be performed.

ACTION: Resubmit and specify compressed and translated for the file.

762 **MESSAGE: NO NULL KEYWORD IS ALLOWED. (CI=762)**

CAUSE: Two semicolons without any token between them detected.

ACTION: Re-enter.

767 **MESSAGE: CONSOLE ALREADY OPENED. (CI=767)**

CAUSE:

ACTION:

769 **MESSAGE: NULL TRACE TYPE IS NOT ALLOWED. (CI=769)**

CAUSE: No trace type has been specified in the TRACEON command while other keywords for the command are specified.

ACTION: Re-enter.

770 **MESSAGE: ILLEGAL TRACE TYPE IS DETECTED. (CI=770)**

CAUSE:

ACTION:

771 **MESSAGE: TRACE TYPE IS ALREADY SPECIFIED. (CI=771)**

CAUSE:

ACTION:

772 **MESSAGE: ILLEGAL TRACE MEDIUM: MUST BE DISC OR TAPE. (CI=772)**

CAUSE:

ACTION:

773 **MESSAGE: ILLEGAL NUMBER OF RECORDS (0-32767). (CI=773)**

CAUSE:

ACTION:

777 **MESSAGE: PM CAPABILITY REQUIRED TO EXECUTE THE COMMAND. (CI=777)**

CAUSE:

ACTION:

778 **MESSAGE: MISSING FILE NAME. (CI=778)**

CAUSE: SUBMIT command detects no input file has been entered.

ACTION: Re-enter SUBMIT command with file name.

780 **MESSAGE: OPENING CONSOLE IN PROGRESS ... (CI=780)**

CAUSE:

ACTION:

781 **MESSAGE: JCW TABLE IS FULL. UNABLE TO OBTAIN CONSOLE. (CI=781)**

CAUSE:

ACTION:

783 **MESSAGE: UNABLE TO RUN VERSION PROGRAM. MAKE SURE NRJEVERS.NRJE.SYS EXISTS. (CI=783)**

CAUSE:

ACTION:

784 **MESSAGE: COMMAND NOT VALID WITH NRJECONTROL. (CI=784)**

CAUSE:

ACTION:

785 **MESSAGE: KEYWORDS: SYNTAX, PARMS, OPERATION, ALL**

CAUSE:

ACTION:

786 **MESSAGE: ATTEMPTING TO REOPEN CONSOLE. (CI=786)**

CAUSE:

ACTION:

800 **MESSAGE: GENERAL INFORMATION**

CAUSE:

ACTION:

801 **MESSAGE: READER QUEUE**

CAUSE:

ACTION:

802 **MESSAGE: LOGICAL WRITER**

CAUSE:

ACTION:

803 **MESSAGE: ACTIVE WORKSTATIONS**

CAUSE:

ACTION:

804 **MESSAGE: WORKSTATION LU LIST**

CAUSE:

ACTION:

805 **MESSAGE: JOB SUCCESSFULLY SUBMITTED. THE SPOOL FILE IS:**

CAUSE:

ACTION:

806 **MESSAGE: NO WORKSTATION IS ACTIVE. (CI=806)**

CAUSE:

ACTION:

807 **MESSAGE: WORKSTATION IS NOT ACTIVE. DISPLAY IS USED. (CI=807)**

CAUSE:

ACTION:

808 **MESSAGE: WHEN READER FENCE IS 0, MPE SYSTEM OUTFENCE IS USED. (CI=808)**

CAUSE:

ACTION:

818 **MESSAGE: NO USER, @, SPOOLFILE, OR HOST JOB SPECIFIED. (CI=818)**

CAUSE: Syntax to CANCEL was invalid.

ACTION: Re-enter CANCEL command with the correct parameters.

819 **MESSAGE: NO USER, @, SPOOLFILE, OR HOST JOB SPECIFIED. (CI=819)**

CAUSE: Syntax to SHOW was invalid.

ACTION: Re-enter SHOW command with the correct parameters.

820 **MESSAGE: PR SPECIFICATION MUST BE BETWEEN 1 AND 86 CHARACTERS. (CI=820)**

CAUSE: An incorrect print destination was entered on a SUBMIT command.

ACTION: A print destination specification must be between 1 and 86 characters. Correct the information and re-enter the data.

821 **MESSAGE: PU SPECIFICATION MUST BE BETWEEN 1 AND 86 CHARACTERS. (CI=821)**

CAUSE: An incorrect punch destination was entered on a SUBMIT command.

ACTION: A punch destination specification must be between 1 and 86 characters. Correct the information and re-enter the data.

822 **MESSAGE: FO SPECIFICATION MUST BE BETWEEN 1 AND 86 CHARACTERS. (CI=822)**

CAUSE: An incorrect forms destination was entered on a SUBMIT command.

ACTION: A forms destination specification must be between 1 and 86 characters. Correct the information and re-enter the data.

823 **MESSAGE: KEYWORD HJ= VALID ONLY IN SHOW AND CANCEL COMMANDS. (CI=823)**

CAUSE: A keyword was used incorrectly.

ACTION: Omit the keyword from the command and re-enter the data.

824 **MESSAGE: HOST JOB NAME MUST BE BETWEEN 1 AND 8 CHARACTERS. (CI=824)**

CAUSE: An incorrect host job name or number was entered in a SHOW or CANCEL command.

ACTION: A host job name or number is 1 to 8 characters. Correct the information and re-enter.

825 **MESSAGE: ERROR IN CONFIGURATION FILE ACCESS. (CI=825)**

CAUSE: The NRJE command interpreter received an error when trying to access workstation information from the configuration file. Another, more specific message will appear after this message.

ACTION: Determine the cause by inspecting the second error message and correct the problem.

826 **MESSAGE: ERROR IN CONFIGURATION FILE ACCESS. (CI=826)**

CAUSE: The NRJE command interpreter received an error when trying to access workstation information from the configuration file. Another more specific message will appear from this message.

ACTION: Determine the cause by inspecting the second error message and correct the problem. A severe error has occurred.

827 **MESSAGE: HOST JOB NAME MUST BE BETWEEN 1 AND 8 CHARACTERS. (CI=827)**

CAUSE: An incorrect host job name or number was entered in a SHOW or CANCEL command.

ACTION: A host job name or number is 1 to 8 characters. Correct the information and re-enter.

830 **MESSAGE: 'ALL' OR 'OLD' EXPECTED. (CI=830)**

CAUSE:

ACTION:

831 **MESSAGE: INVALID KEYWORD LENGTH. 'ALL' OR 'OLD' EXPECTED. (CI=831)**

CAUSE:

ACTION:

832 **MESSAGE: DATE KEYWORD IS NOT VALID WITH THIS COMMAND. (CI=832)**

CAUSE:

ACTION:

833 **MESSAGE: TIME KEYWORD IS NOT VALID WITH THIS COMMAND. (CI=833)**

CAUSE:

ACTION:

834 **MESSAGE: TIME PARAMETER LENGTH IS INVALID. (CI=834)**

CAUSE:

ACTION:

835 **MESSAGE: DATE PARAMETER LENGTH IS INVALID. (CI=835)**

CAUSE:

ACTION:

836 **MESSAGE: INVALID DATE FORMAT. (NLERR=!). (CI=836)**

CAUSE:

ACTION:

837 **MESSAGE: INVALID KEYWORD. ‘ALL’ OR ‘OLD’ EXPECTED. (CI=837)**

CAUSE:

ACTION:

838 **MESSAGE: INVALID DATE AND TIME FORMAT. (NLERR=!). (CI=838)**

CAUSE:

ACTION:

839 **MESSAGE: INVALID TIME FORMAT. (NLERR=!). (CI=839)**

CAUSE:

ACTION:

840 **MESSAGE: WARNING: FUTURE DATE AND TIME SPECIFIED. ENTIRE JOBLOG WILL BE PURGED. (CI=840)**

CAUSE:

ACTION:

841 **MESSAGE: INVALID MAXREC VALUE SPECIFIED. (CI=841)**

CAUSE:

ACTION:

842 **MESSAGE: WARNING: ‘TRANSLATED’ KEYWORD USED. ‘NOTRANSLATE’ WILL BE ASSUMED. (CI=842)**

CAUSE:

ACTION:

850 **MESSAGE: ENTIRE JOBLOG PURGED. DISC SPACE RECOVERED. (CI=850)**

CAUSE:

ACTION:

851 **MESSAGE: JOBLOG PURGED OF ! ENTRIES. DISC SPACE WAS NOT RECOVERED. (CI=851)**

CAUSE:

ACTION:

852 **MESSAGE: JOBLOG PURGED OF ! ENTIRES. DISC SPACE RECOVERED. (CI=852)**

CAUSE:

ACTION:

853 **MESSAGE: JOBLOG PURGED OF ! ENTRIES. DISC SPACE WAS NOT RECOVERED. (CI=853)**

CAUSE:

ACTION:

854 **MESSAGE: INVALID TIME FORMAT. FOR NATIVE-3000, “AM” OR “PM” MUST BE INDICATED. (EX: 10:42 AM). (NLERR=!). (CI=854)**

CAUSE:

ACTION:

855 **MESSAGE: YOU MUST LOG ON TO THE SYS ACCOUNT TO PURGE THE JOBLOG. (CI=855)**

CAUSE:

ACTION:

856 **MESSAGE: ENVID length is not between 1 and 50 characters. (CI=856)**

CAUSE:

ACTION:

857 **MESSAGE: Info string length is not between 1 and 65 characters. (CI=857)**

CAUSE:

ACTION:

858 **MESSAGE: Unauthorized SNA Server user. (CI=858)**

CAUSE:

ACTION:

1010 **MESSAGE: WORKSTATION ID NOT FOUND IN CONFIGURATION FILE. (CFG=1010)**

CAUSE:

ACTION:

1020 **MESSAGE: ARRAYS TOO SMALL TO RETURN LU CONFIGURATION. (CFG=1020)**

CAUSE:

ACTION:

1030 **MESSAGE: ARRAYS TOO SMALL TO RETURN WRITER CONFIGURATION. (CFG=1030)**

CAUSE:

ACTION:

SNA NRJE Logging Messages

Listed below are the SNA NRJE messages that are logged in the log destination configured for your workstation in the `Joblog Data File` field of the NRJE Configuration: Workstation Data Page 2 screen. They are listed in numerical order according to the number in the message suffix; if more than one suffix is displayed, the message is listed here according to the number in the last suffix. These messages are not written to $STDLIST. Note that online help is not available for these messages. (See the beginning of this appendix.)

Message Prefixes

LU processes add this prefix to some logging messages:

NRJE(*Wsid*;*LUClassName*)

325 **MESSAGE: MISSING PARM FOR ‘RELOAD TABLE’ ROUTINE. WSID=! (INT=325)**

CAUSE:

ACTION:

327 **MESSAGE: NRJE(!): CANNOT BUILD JOBLOG DUE TO A CONFIGURATION ERROR. (CFG=!). (MON=!). (INT=327)**

CAUSE:

ACTION:

330 **MESSAGE: NRJE(!): CONFIGURATION ACCESS ERROR OBTAINING LOOKUP TABLE NAME (CFG=!) (INT=330)**

CAUSE:

ACTION:

331 **MESSAGE: NRJE(!): INTERNAL ERROR WHILE RELOADING TABLE. (STATUS=!) (FSERR=!) (INT=331)**

CAUSE:

ACTION:

332 **MESSAGE: FAILED TO OPEN ‘CATALOG.PUB.SYS’. !. (INT=332)**

CAUSE:

ACTION:

333 **MESSAGE: FAILED TO EXECUTE GENMESSAGE INTRINSIC ON ‘CATALOG.PUB.SYS’ NRJE SET NUM = !. NRJE ERROR =!. GENMESSAGE ERROR CODE = !. (INT=333)**

CAUSE:

ACTION:

335 **MESSAGE: MPE ERROR ENCOUNTERED: '!' (INT=335)**

CAUSE:

ACTION:

358 **MESSAGE: THE LU IS NOT ACTIVE. (INT=358)**

CAUSE: A control command sent to an LU cannot be processed because the LU is not active.

ACTION: Use the STATUS command to verify the state of the LU.

411 **MESSAGE: OFFSET MUST BE 0 OR POSITIVE. (SEV=411)**

CAUSE:

ACTION:

412 **MESSAGE: BUFFER SIZE IS TOO SMALL. (SEV=412)**

CAUSE:

ACTION:

413 **MESSAGE: AT LEAST ONE OF THE PARAMETERS IS OUT OF BOUNDS. (SEV=413)**

CAUSE:

ACTION:

414 **MESSAGE: WRONG INPUT IN NXDSREAD OR NXDSWRITE. (SEV=414)**

CAUSE:

ACTION:

415 **MESSAGE: NOT ENOUGH STACK SPACE. (MAN=415)**

CAUSE:

ACTION:

422 **MESSAGE: A SEVERE ERROR OCCURRED IN THE DICTIONARY SUBSYSTEM. (SEV=422)**

CAUSE:

ACTION:

423 **MESSAGE: A SEVERE ERROR OCCURRED IN NODE MANAGEMENT. (SEV=423)**

CAUSE:

ACTION:

424 **MESSAGE: A SEVERE ERROR: WORKSTATION HAS AN UNDEFINED STATE. (SEV=424)**

CAUSE:

ACTION:

425 **MESSAGE: XDS ACCESS ERROR: NRJE XDS DOES NOT EXIST. (SEV=425)**

CAUSE:

ACTION:

426 **MESSAGE: ATTEMPT TO UNLOCK XDS BY ANOTHER PIN. (SEV=426)**

CAUSE:

ACTION:

427 **MESSAGE: ATTEMPT TO LOCK XDS WHEN LOCKED BY SAME PIN. (SEV=427)**

CAUSE:

ACTION:

428 **MESSAGE: NO ROOM FOR AN NRJE XDS DST ENTRY. (SEV=428)**

CAUSE:

ACTION:

429 **MESSAGE: NO SWAP SPACE FOR AN NRJE XDS. (SEV=429)**

CAUSE:

ACTION:

430 **MESSAGE: UNABLE TO LOCK THE NRJE XDS. SHUTDOWN PENDING. (MAN=430)**

CAUSE:

ACTION:

542 **MESSAGE: NRJE (!): CONFIGURATION ERROR JOBLOG FILE BELONGS TO ANOTHER WORKSTATION. (MON=542)**

CAUSE: The workstation was configured to use a Joblog file which was built by another workstation.

ACTION: Correct the configuration for the `Joblog Data File` and `Joblog Key File` fields of the NRJE Configuration: Workstation Data Page 2 screen. Note that the defaults must be changed if more than one workstation is configured.

547 **MESSAGE: NRJEMON TERMINATING — MUST BE RUN FROM NRJE.SYS. (MON=547)**

CAUSE: *UserName.AcctName* of batch job running NRJEMON must be NRJE.SYS.

ACTION:

549 **MESSAGE: NRJE(!): FAILED TO LOCK DUMP'LU LOCAL RIN. (MON=549)**

CAUSE:

ACTION:

565 **MESSAGE: NRJE(!): NRJE JOBLOG RECOVERY SUCCESSFUL. (MON=565)**

CAUSE:

ACTION:

566 **MESSAGE: NRJE(!): NRJE ENCOUNTERED CORRUPTED KEY FILE ON JOBLOG DUE TO A PREVIOUS SYSTEM FAILURE. REBUILD OF JOBLOG IN PROGRESS. (MON=566)**

CAUSE:

ACTION:

567 **MESSAGE: NRJE(!): FAILED TO OBTAIN JOBLOG AND LOOKUP TABLE FILE FROM THE CONFIGURATION FILE. (CFG=!) (MON=567)**

CAUSE:

ACTION:

568 **MESSAGE: NRJE(!): NEW JOBLOG FILE BUILT SUCCESSFULLY. (MON=568)**

CAUSE:

ACTION:

569 **MESSAGE: NRJE(!): WARNING: CONFIGURATION ERROR. LOOKUP TABLE SPECIFIED IN CONFIGURATION FILE COULD NOT BE FOUND. (MON=569)**

CAUSE: NRJE was configured to use a Formid Lookup Table, but the file does not exist.

ACTION: If you want to use a Lookup Table, create the table file, store it in the SYS account, and specify the file's name in the Formid Lookup Table File field of the NRJE Configuration: Workstation Data Page 2 screen. If you do not want to use a Lookup Table, specify all blanks in the Formid Lookup Table File field of the Workstation Data Page 2 screen.

570 **MESSAGE: (!) ! (MON=570).**

CAUSE:

ACTION:

571 **MESSAGE: NRJE(!): CREATING NEW JOBLOG FILE. (MON=571**

CAUSE:

ACTION:

574 **MESSAGE: NRJE(!): WARNING: DMOVIN FAILURE. COULD NOT EXECUTE 'RELOAD' COMMAND. (MON=574)**

CAUSE:

ACTION:

575 **MESSAGE: NRJE(!): SUCCESSFULLY RELOADED LOOKUP TABLE (MON=575)**

CAUSE:

ACTION:

576 **MESSAGE: NRJE(!): UNABLE TO RELOAD LOOKUP TABLE (MON=576)**

CAUSE:

ACTION:

581 **MESSAGE: NRJE (!): FAILED TO CREATE IOWAIT PORT FOR NRJE MONITOR STATUS=! (MON=581)**

CAUSE: NRJE could not obtain a port for interprocess communication using the CREATIOWAITPORT system procedure. This is an internal error.

ACTION: Contact Hewlett-Packard.

582 **MESSAGE: NRJE (!): NRJEMON CANNOT ACCESS READER CONFIGURATION DATA (CFG=!) (MON=582)**

CAUSE: NRJE failed to read the contents of the NRJE Configuration: Reader Data screen in the configuration file.

ACTION: Use NMMGR to verify the contents of the configuration file. Ensure that the Data flag for the NRJE Configuration: Reader Data screen is “Yes”. Check the versions of NRJE and NMS, using NMMAINT.

583 **MESSAGE: NRJE (!): NRJEMON CANNOT ACCESS READER LDEV SYSTEM CONFIGURATION INFORMATION. (STATUS=!) (MON=583)**

CAUSE: NRJE cannot obtain the device queue for the NRJE reader.

ACTION: Verify that the logical device number on the NRJE Configuration: Reader Data screen matches a logical device in the

system I/O configuration of type 22, subtype 2, driver name=IONRDR0. Ensure that the ldev is accessed by only one workstation.

584 **MESSAGE: NRJE (!): NRJE CANNOT OBTAIN OUTFENCE INFORMATION FOR THE NRJE VIRTUAL READER (SPOOLER=!) (MON=584).**

CAUSE: NRJEDEVINFO returned non-zero status.

ACTION: Verify that the logical device number in the NRJE Configuration: Reader Data screen matches a logical device in the system I/O configuration of type 22, subtype 2, driver name=IONRDRO. Ensure that the ldev is accessed by only one workstation.

585 **MESSAGE: NRJE(!): NRJE CANNOT OBTAIN INFORMATION ABOUT SPOOLFILES QUEUED TO THE NRJE VIRTUAL READER (SPOOLER=!) (MON=585).**

CAUSE: A call to NRJESPOOLINFO returned non-zero status.

ACTION: Verify that the logical device number in the NRJE Configuration: Reader Data screen matches a logical device in the system I/O configuration of type 22, subtype 2, driver name=IONRDR0. Ensure that the ldev is accessed by only one workstation.

809 **MESSAGE: INTERNAL TRACING NOT TURNED ON — UNAVAILABLE FEATURE. (CI=809)**

CAUSE:

ACTION:

851 **MESSAGE: ! (CI=851)**

CAUSE:

ACTION:

853 **MESSAGE: UNABLE TO SET ABORT TRAP. (SEV=853)**

CAUSE:

ACTION:

855 **MESSAGE: UNABLE TO EXTEND WAIT ON THE “FROM HOST” MESSAGE FILE. (SEV=855)**

CAUSE:

ACTION:

856 **MESSAGE: UNABLE TO WRITE A CONSOLE MESSAGE TO STDLIST. (CI=856)**

CAUSE:

ACTION:

857 **MESSAGE: UNABLE TO READ A CONSOLE MESSAGE FROM THE "FROM HOST" FILE. (SEV=857)**

CAUSE:

ACTION:

858 **MESSAGE: HOST CONSOLE IS OPEN. (CI=858)**

CAUSE: The CI is ready to accept console commands.

ACTION:

859 **MESSAGE: HOST CONSOLE IS RELEASED. (CI=859)**

CAUSE: The CI is no longer accepting console commands.

ACTION:

1101 **MESSAGE: NRJE(!;!) — WS INDEX NOT IN THE RANGE OF 1 TO 8. (LU=1101)**

CAUSE: NRJELU is not run as a son of NRJEMON.

ACTION: Run NRJEMON which will run NRJELU. If the error still occurs please report it to Hewlett-Packard.

1102 **MESSAGE: NRJE(!;!) — LU INDEX NOT IN THE RANGE OF 0 TO 63. (LU=1102)**

CAUSE: NRJELU is not run as a son of NRJEMON.

ACTION: Run NRJEMON which will run NRJELU. If the error still occurs please report it to Hewlett-Packard.

1103 **MESSAGE: NRJE(!;!) — LU# ! WS NOT ACTIVE. (LU=1103)**

CAUSE: NRJELU is not run as a son of NRJEMON.

ACTION: Run NRJEMON which will run NRJELU. If the error still occurs please report it to Hewlett-Packard.

1104 **MESSAGE: NRJE(!;!) — LU NOT IN PENDING STATE. (LU=1104)**

CAUSE: NRJELU is not run as a son of NRJEMON.

ACTION: Run NRJEMON which will run NRJELU. If the error still occurs please report it to Hewlett-Packard.

1105 **MESSAGE: NRJE(!;!) — UNABLE TO SET ABORT TRAP. (SEV=1105)**

CAUSE:

ACTION:

1106 **MESSAGE: NRJE(!;!) — "TO HOST" CONSOLE FILE OPEN FAILED. (SEV=1106)**

CAUSE:

ACTION:

1107 **MESSAGE: NRJE(!;!) — "FROM HOST" CONSOLE FILE OPEN FAILED. (SEV=1107)**

CAUSE:

ACTION:

1109 **MESSAGE: NRJE(!;!) — RELEASE READER CONTAINED A SEVERE ERROR. (SEV=1109)**

CAUSE:

ACTION:

1120 **MESSAGE: NRJE(!;!) — INITIALIZATION COMPLETED. (LU=1120)**

CAUSE: LU completes its initialization; communication to host is established.

ACTION:

1121 **MESSAGE: NRJE(!;!) — TERMINATED. (LU=1121)**

CAUSE: First ! contains a workstation name. Second ! contains an LU name.

ACTION:

1151 **MESSAGE: NRJE(!;!) — ABORT RECEIVE COMPLETION EXPECTED. (SEV=1151)**

CAUSE:

ACTION:

1153 **MESSAGE: NRJE(!;!) — SSCP RECEIVE COMPLETION EXPECTED. (SEV=1153)**

CAUSE:

ACTION:

1154 **MESSAGE: NRJE(!;!) — UNEXPECTED IOWAIT COMPLETION. (SEV=1154)**

CAUSE:

ACTION:

1155 **MESSAGE: NRJE(!;!) — UNEXPECTED IOWAIT COMPLETION FOR A RECEIVE. (SEV=1155)**

CAUSE:

ACTION:

1156 **MESSAGE: NRJE(!;!) — RECEIVE COMPLETED IN A WRONG STATE. (SEV=1156)**

CAUSE:

ACTION:

1157 **MESSAGE: NRJE(!;!) — IOWAIT RETURNS 0 FOR THE FILE NUMBER. (SEV=1157)**

CAUSE:

ACTION:

1158 **MESSAGE: NRJE(!;!) — UNABLE TO READ XPORT MESSAGE #: !. (SEV=1158)**

CAUSE:

ACTION:

1159 **MESSAGE: NRJE(!;!) — !. (COMMXPORT=1159)**

CAUSE: An XPORT error occurred. The third ! contains the error message.

ACTION:

1201 **MESSAGE: NRJE(!;!) — UNEXPECTED SDT. (SEV=1201)**

CAUSE:

ACTION:

1202 **MESSAGE: NRJE(!;!) — UNEXPECTED CLEAR. (SEV=1202)**

CAUSE:

ACTION:

1203 **MESSAGE: NRJE(!;!) — UNEXPECTED BIND. (SEV=1203)**

CAUSE:

ACTION:

1204 **MESSAGE: NRJE(!;!) — UNEXPECTED UNBIND. (SEV=1204)**

CAUSE:

ACTION:

1207 **MESSAGE: NRJE(!;!) — ILLEGAL BIND. (SC=1207)**

CAUSE: Session Control has rejected a BIND received from the host.

ACTION: Refer to configuration section in SNA link manual and reconfigure the logmode entry on the host correctly.

1208 **MESSAGE: NRJE(!;!) — UNRECOGNIZED SESSION CONTROL COMMAND. (SEV=1208)**

CAUSE:

ACTION:

1215 **MESSAGE: NRJE(!;!) — BRACKET ERROR, LU IS TERMINATING . . . (SEV=1215)**

CAUSE:

ACTION:

1220 **MESSAGE: NRJE(!;!) — SDT RECEIVED. (SC=1220)**

CAUSE:

ACTION:

1221 **MESSAGE: NRJE(!;!) — CLEAR RECEIVED. (SC=1221)**

CAUSE:

ACTION:

1222 **MESSAGE: NRJE(!;!) — RECEIVED BIND= ! (SC=1222)**

CAUSE:

ACTION:

1224 **MESSAGE: NRJE(!;!) — RECEIVED UNBIND= ! (SC=1224)**

CAUSE:

ACTION:

1226 **MESSAGE: NRJE(!;!) — LU ACTIVATION COMPLETED. (SC=1226)**

CAUSE: An illegal BIND, that is, one that doesn't match NMCONFIG parameters, or one that doesn't match hardcoded parameters has been received from the IBM host. These messages are an expansion of, and replacement for, error message 1207.

ACTION:

1270 **MESSAGE: ILLEGAL BIND — host config, format <> 0 (SC=1270)**

CAUSE:

ACTION:

1271 **MESSAGE: ILLEGAL BIND — host config, bind is non-negotiable (SC=1271)**

CAUSE:

ACTION:

1272 **MESSAGE: ILLEGAL BIND — host config, use FMPROF = X'03' (SC=1272)**

CAUSE:

ACTION:

1273 **MESSAGE: ILLEGAL BIND — host config, use TSPROF = X‘03’ (SC=1273)**

CAUSE:

ACTION:

1274 **MESSAGE: ILLEGAL BIND — host config, PRIPROT req mode (SC=1274)**

CAUSE:

ACTION:

1275 **MESSAGE: ILLEGAL BIND — host config, SECPROT chaining (SC=1275)**

CAUSE:

ACTION:

1276 **MESSAGE: ILLEGAL BIND — host config, SECPROT req mode (SC=1276)**

CAUSE:

ACTION:

1277 **MESSAGE: ILLEGAL BIND — host config, SECPROT chain rsp (SC=1277)**

CAUSE:

ACTION:

1278 **MESSAGE: ILLEGAL BIND — host config, SECPROT end bracket (SC=1278)**

CAUSE:

ACTION:

1279 **MESSAGE: ILLEGAL BIND — host config, COMPROT (SC=1279)**

CAUSE:

ACTION:

1280 **MESSAGE: ILLEGAL BIND — host config, PSERVIC bits 0–12 (SC=1280)**

CAUSE:

ACTION:

1281 **MESSAGE: ILLEGAL BIND — host config, PSERVIC (SC=1281)**

CAUSE:

ACTION:

1282 **MESSAGE: ILLEGAL BIND — host config, PSERVIC (SC=1282)**

CAUSE:

ACTION:

1283 **MESSAGE: ILLEGAL BIND — secondary RU size (SC=1283)**

CAUSE:

ACTION:

1284 **MESSAGE: ILLEGAL BIND — host config, RU infinity bit (SC=1284)**

CAUSE:

ACTION:

1285 **MESSAGE: ILLEGAL BIND — primary RU size too big (SC=1285**

CAUSE:

ACTION:

1286 **MESSAGE: ILLEGAL BIND — compression (SC=1286)**

CAUSE:

ACTION:

1287 **MESSAGE: ILLEGAL BIND — translation (SC=1287)**

CAUSE:

ACTION:

1288 **MESSAGE: ILLEGAL BIND — transport exception (SC=1288)**

CAUSE:

ACTION:

3000 **MESSAGE: NRJE(!;!): QUIESCE SHUTDOWN COMMAND RECEIVED (LU=3000)**

CAUSE:

ACTION:

3001 **MESSAGE: NRJE(!;!): PROTOCOL SHUTDOWN COMMAND RECEIVED (LU=3001)**

CAUSE:

ACTION:

3002 **MESSAGE: NRJE(!;!): LINK SHUTDOWN COMMAND RECEIVED (LU=3002)**

CAUSE:

ACTION:

3003 **MESSAGE: NRJE(!;!): LINK FAILURE INDICATION RECEIVED (LU=3003)**

CAUSE:

ACTION:

3004 **MESSAGE: NRJE(!;!): TRANSPORT INTERNAL ERROR REPORTED (LU=3004)**

CAUSE:

ACTION:

3005 **MESSAGE: NRJE(!;!): HIERARCHICAL SHUTDOWN COMMAND RECEIVED (LU=3005)**

CAUSE:

ACTION:

4001 **MESSAGE: NRJE(!;!): FMD CANNOT DECOMPRESS A CONSOLE MESSAGE (SENSE=!) (SEV=4001).**

CAUSE:

ACTION:

4002 **MESSAGE: NRJE(!;!): FMD ABORTED A BAD CONSOLE MESSAGE AT THE END OF CHAIN (FMD=4002).**

CAUSE:

ACTION:

4003 **MESSAGE: NRJE(!;!): FMD CANNOT UNLOCK THE CONSOLE MESSAGE PIPE (FS=!) (SEV=4003).**

CAUSE:

ACTION:

4004 **MESSAGE: NRJE(!;!): FMD CANNOT LOCK THE CONSOLE COMMAND PIPE (FS=!) (SEV=4004).**

CAUSE:

ACTION:

4005 **MESSAGE: NRJE(!;!): FMD CANNOT TRANSLATE A CONSOLE MESSAGE (SEV=4005).**

CAUSE:

ACTION:

4006 **MESSAGE: NRJE(!;!): FMD CANNOT WRITE TO THE CONSOLE MESSAGE PIPE (FS=!) (SEV=4006).**

CAUSE:

ACTION:

4007 **MESSAGE: NRJE(!;!): FMD RECEIVED A CANCEL REQUEST FOR A CONSOLE MESSAGE (FMD=4007).**

CAUSE:

ACTION:

4008 **MESSAGE: NRJE(!;!): THE PLU ABORTED THE TRANSMISSION OF A CONSOLE MESSAGE (FMD=4008).**

CAUSE:

ACTION:

4009 **MESSAGE: NRJE(!;!): CONSOLE MESSAGE: ! (FMD=4009).**

CAUSE:

ACTION:

4020 **MESSAGE: NRJE(!;!): FMD CANNOT UNLOCK THE CONSOLE COMMAND PIPE (FS=!) (SEV=4020).**

CAUSE:

ACTION:

4021 **MESSAGE: NRJE(!;!): FMD CANNOT LOCK THE CONSOLE COMMAND PIPE (FS=!) (SEV=4021).**

CAUSE:

ACTION:

4022 **MESSAGE: NRJE(!;!): FMD CANNOT TRANSLATE A CONSOLE COMMAND (SEV=4022).**

CAUSE:

ACTION:

4023 **MESSAGE: NRJE(!;!): FMD CANNOT READ FROM THE CONSOLE COMMAND PIPE (FS=!) (SEV=4023).**

CAUSE:

ACTION:

4024 **MESSAGE: NRJE(!;!): CONSOLE COMMAND: ! (FMD=4024).**

CAUSE:

ACTION:

4030 **MESSAGE: NRJE(!;!): FMD CANNOT LOCK JOB FILE #O! (SPOOLER=!) (SEV=4030).**

CAUSE:

ACTION:

4031 **MESSAGE: NRJE(!;!): FMD CANNOT OPEN JOB FILE #O! (SPOOLER=!) (FMD=4031).**

CAUSE:

ACTION:

4032 **MESSAGE: NRJE(!;!): FMD CANNOT ACTIVATE JOB #O! (SPOOLER=!) (SEV=4032).**

CAUSE:

ACTION:

4033 **MESSAGE: RJE(!;!): JOB #O! CONTAINS COMPRESSED DATA, BUT READER CONFIGURATION SPECIFIES NO COMPRESSION (FMD=4033).**

CAUSE:

ACTION:

4034 **MESSAGE: NRJE(!;!): JOB #O! CONTAINS DATA WHICH HAS NOT BEEN TRANSLATED ACCORDING TO READER CONFIGURATION (FMD=4034).**

CAUSE:

ACTION:

4035 **MESSAGE: NRJE(!;!): JOB #O! CONTAINS AN RU WHICH IS LARGER THAN THE READER CONFIGURATION RU SIZE (FMD=4035).**

CAUSE:

ACTION:

4036 **MESSAGE: NRJE(!;!): THE PLU ABORTED TRANSMISSION OF JOB #O! (FMD=4036).**

CAUSE:

ACTION:

4037 **MESSAGE: NRJE(!;!): FMD CANNOT READ FROM JOB FILE #O! (SPOOLER=!) (SEV=4037).**

CAUSE:

ACTION:

4038 **MESSAGE: NRJE(!;!): FMD CANNOT TRANSLATE JOB #O! (FMD=4038).**

CAUSE:

ACTION:

4039 **MESSAGE: NRJE(!;!): FMD CANNOT DEFER JOB #O! (SPOOLER=!) (SEV=4039).**

CAUSE:

ACTION:

4040 **MESSAGE: NRJE(!;!): FMD CANNOT CLOSE JOB FILE #O! (SPOOLER=!) (SEV=4040).**

CAUSE:

ACTION:

4041 **MESSAGE: NRJE(!;!): FMD CANNOT ACCESS THE READER AND SYSTEM FENCES (SPOOLER=!) (SEV=4041).**

CAUSE:

ACTION:

4042 **MESSAGE: NRJE(!;!): FMD CANNOT SELECT A JOB FOR TRANSMISSION FROM QUEUE ! (SPOOLER=!) (SEV=4042).**

CAUSE:

ACTION:

4043 **MESSAGE: NRJE(!;!): FMD RECEIVED A NEGATIVE RESPONSE TO JOB #0! SUSPEND FM HEADER (BIU=!) (SEV=4043).**

CAUSE:

ACTION:

4044 **MESSAGE: NRJE(!;!): FMD RECEIVED A NEGATIVE RESPONSE TO JOB #O! RESUME FM HEADER (BIU=!) (FMD=4044).**

CAUSE:

ACTION:

4045 **MESSAGE: NRJE(!;!): FMD RECEIVED A NEGATIVE RESPONSE TO JOB #O! ABORT FM HEADER (BIU=!) (FMD=4045).**

CAUSE:

ACTION:

4046 **MESSAGE: NRJE(!;!): FMD RECEIVED A NEGATIVE RESPONSE TO JOB #O! END FM HEADER (BIU=!) (FMD=4046).**

CAUSE:

ACTION:

4047 **MESSAGE: NRJE(!;!): FMD RECEIVED A NEGATIVE RESPONSE TO JOB #O! BEGIN FM HEADER (BIU=!) (FMD=4047).**

CAUSE:

ACTION:

4048 **MESSAGE: NRJE(!;!): FMD IS SENDING JOB #O! ON ! (FMD=4048).**

CAUSE:

ACTION:

4049 **MESSAGE: NRJE(!;!): FMD HAS FINISHED SENDING JOB #O! ON ! (FMD=4049).**

CAUSE:

ACTION:

4051 **MESSAGE: NRJE(!;!): FMD HAS ABORTED TRANSMISSION OF #O !; SPOOL FILE DEFERRED (SEV=4051).**

CAUSE:

ACTION:

4052 **MESSAGE: NRJE(!;!): FMD FAILED TO RELEASE XDS ENTRY FOR LOGICAL READER (SEV=4052)**

CAUSE:

ACTION:

4053 **MESSAGE: NRJE(!;!): FMD FAILED TO LOCK XDS; CODE = ! (SEV=4053)**

CAUSE:

ACTION:

4054 **MESSAGE: NRJE(!;!): XDS ACCESS FAILURE; CODE = ! (SEV=4054)**

CAUSE:

ACTION:

4055 **MESSAGE: NRJE(!;!): FMD FAILED TO UNLOCK XDS; CODE= ! (SEV=4055)**

CAUSE:

ACTION:

4056 **MESSAGE: NRJE(!;!): NO LOGICAL READER IS AVAILABLE FOR THIS WORKSTATION (FMD=4056)**

CAUSE: All logical readers for the workstation are drained.

ACTION: Stop and restart the workstation, and start the logical readers with the JES2 $S command.

4057 **MESSAGE: NRJE(!;!): XDS WRITE FAILURE; CODE = ! (SEV=4057**

CAUSE:

ACTION:

4070 **MESSAGE: NRJE(!;!): BUFFER OVERFLOW OCCURRED WHILE DECOMPRESSING OUTPUT FILE #O! (SEV=4070).**

CAUSE:

ACTION:

4071 **MESSAGE: NRJE(!;!): FMD CANNOT PROCESS OUTPUT FROM JOB ! BECAUSE DEVICE ! IS NOT SPOOLED (FMD=4071).**

CAUSE:

ACTION:

4072 **MESSAGE: NRJE(!;!): FMD CANNOT ACCESS JOB ! OUTPUT FILE INFORMATION (FS=!) (SEV=4072).**

CAUSE:

ACTION:

4073 **MESSAGE: NRJE(!;!): FMD CANNOT RENAME JOB ! OUTPUT FILE (SPOOLER=!) (SEV=4073).**

CAUSE:

ACTION:

4074 **MESSAGE: NRJE(!;!): FMD CANNOT WRITE TO OUTPUT FILE #O! (FS=!) (FMD=4074).**

CAUSE:

ACTION:

4075 **MESSAGE: NRJE(!;!): FMD CANNOT TRANSLATE OUTPUT FILE #O! (SEV=4075).**

CAUSE:

ACTION:

4076 **MESSAGE: NRJE(!;!): FMD CANNOT EXECUTE AN SNA CANCEL REQUEST (SPOOLER=!) (SENSE=!) (FMD=4076).**

CAUSE:

ACTION:

4077 **MESSAGE: NRJE(!;!): FMD RECOVERED OUTPUT FILE #O!; FILE #O! CONTAINS CORRECT DATA (FMD=4077).**

CAUSE:

ACTION:

4078 **MESSAGE: NRJE(!;!): FMD CANNOT DECOMPRESS OUTPUT FILE #O! (SENSE=!) (SEV=4078).**

CAUSE:

ACTION:

4079 **MESSAGE: NRJE(!;!): THE PLU ABORTED THE TRANSMISSION OF OUTPUT; CPU TIME= !; FILE= #O! (FMD=4079).**

CAUSE:

ACTION:

4080 **MESSAGE: NRJE(!;!): FMD CANNOT RECORD PDIR DATA IN OUTPUT FILE #O! (FS=!) (SEV=4080).**

CAUSE:

ACTION:

4081 **MESSAGE: NRJE(!;!): FMD IS RECEIVING OUTPUT FROM JOB ! IN FILE #O! ON ! (FMD=4081).**

CAUSE:

ACTION:

4082 **MESSAGE: NRJE(!;!): FMD CANNOT DEFER OUTPUT FILE #O! (SPOOLER=!) (FMD=4082).**

CAUSE:

ACTION:

4083 **MESSAGE: NRJE(!;!): FMD CANNOT CLOSE OUTPUT FILE #O! (SPOOLER=!) (FMD=4083).**

CAUSE:

ACTION:

4084 **MESSAGE: NRJE(!;!): FMD CANNOT OPEN OUTPUT FILE (FSERR=!) (FMD=4084).**

CAUSE:

ACTION:

4085 **MESSAGE: NRJE(!;!): FMD CANNOT ACCESS JOB ! OUTPUT FILE INFORMATION (SEV=4085).**

CAUSE:

ACTION:

4086 **MESSAGE: NRJE(!;!): FMD RECEIVED A CANCEL REQUEST FOR OUTPUT FILE #O! (FMD=4086).**

CAUSE:

ACTION:

4087 **MESSAGE: NRJE(!;!): FMD CANNOT COMPLETE PHYSICAL I/O TO OUTPUT FILE #O! AT END OF CHAIN (FS=!) (SEV=4087).**

CAUSE:

ACTION:

4088 **MESSAGE: NRJE(!;!): FMD DEFERRED BAD OUTPUT FILE #O! AT END OF CHAIN (FMD=4088).**

CAUSE:

ACTION:

4089 **MESSAGE: NRJE(!;!): FMD HAS FINISHED RECEIVING OUTPUT; CPU TIME= !; WALL TIME= !; FILE= #O! (FMD=4089).**

CAUSE:

ACTION:

4111 **MESSAGE: NRJE(!;!): FMD RECEIVED AN EXCEPTION REQUEST (BIU=!) (FMD=4111).**

CAUSE:

ACTION:

4112 **MESSAGE: NRJE(!;!): FMD RECEIVED A NEGATIVE RESPONSE TO AN END BRACKET OR CHANGE DIRECTION INDICATOR (BIU=!) (SEV=4112).**

CAUSE:

ACTION:

4113 **MESSAGE: NRJE(!;!): FMD RECEIVED A NEGATIVE RESPONSE TO AN RU OF FM DATA (BIU=!) (FMD=4113).**

CAUSE:

ACTION:

4114 **MESSAGE: NRJE(!;!): FMD RECEIVED A NEGATIVE RESPONSE TO A CANCEL REQUEST (BIU=!) (SEV=4114).**

CAUSE:

ACTION:

4115 **MESSAGE: NRJE(!;!): FMD RECEIVED A NEGATIVE RESPONSE TO A SIGNAL REQUEST (BIU=!) (FMD=4115).**

CAUSE:

ACTION:

4116 **MESSAGE: NRJE(!;!): FMD RECEIVED A RESPONSE TO AN LUSTAT (BIU=!) (SEV=4116).**

CAUSE:

ACTION:

4117 **MESSAGE: NRJE(!;!): FMD RECEIVED ILLEGAL OPCODE ! FROM DFC (SEV=4117).**

CAUSE:

ACTION:

4118 **MESSAGE: NRJE(!;!): FMD DID NOT RECEIVE AN RU FROM DFC (SEV=4118).**

CAUSE:

ACTION:

4119 **MESSAGE: NRJE(!;!): FMD RECEIVED ILLEGAL RU LENGTH ! FROM DFC (SEV=4119).**

CAUSE:

ACTION:

4120 **MESSAGE: NRJE(!;!): FMD RECEIVED ILLEGAL RESPONSE ! FROM DFC (SEV=4120).**

CAUSE:

ACTION:

4121 **MESSAGE: NRJE(!;!): FMD CANNOT ACCESS READER AND WRITER CONFIGURATION DATA (SPOOLER=!) (MIDAS=!) (FMD=4121).**

CAUSE:

ACTION:

4122 **MESSAGE: NRJE(!;!): FMD CANNOT RECORD STATUS INFORMATION IN THE NRJE EXTRA DATA SEGMENT (XDS=!) (SEV=4122).**

CAUSE:

ACTION:

4123 **MESSAGE: NRJE(!;!): FMD SENT A NEGATIVE RESPONSE (BIU=!) (FMD=4123).**

CAUSE:

ACTION:

5001 **MESSAGE: NRJE(!;!): NS RECEIVED A MAIL MESSAGE FROM A NONEXISTENT MODULE (MESSAGE=!) (SEV=5001).**

CAUSE:

ACTION:

5002 **MESSAGE: NRJE(!;!): NS RECEIVED A MAIL MESSAGE OF THE WRONG LENGTH (MESSAGE=!) (SEV=5002).**

CAUSE:

ACTION:

5003 **MESSAGE: NRJE(!;!): NS RECEIVED AN ILLEGAL OPCODE (MESSAGE=!) (SEV=5003).**

CAUSE:

ACTION:

5004 **MESSAGE: NRJE(!;!): NS RECEIVED AN RU WHICH WAS NOT FROM THE SSCP (MESSAGE=!) (SEV=5004).**

CAUSE:

ACTION:

5005 **MESSAGE: NRJE(!;!): NS RECEIVED A RESPONSE RU (BIU=!) (SEV=5005).**

CAUSE:

ACTION:

5006 **MESSAGE: NRJE(!;!): NS RECEIVED A REQUEST WHICH WAS NOT AN FMNS REQUEST (BIU=!) (SEV=5006).**

CAUSE:

ACTION:

5007 **MESSAGE: NRJE(!;!): NS RECEIVED A REQUEST WHICH WAS NOT FIELD FORMATTED (BIU=!) (SEV=5007).**

CAUSE:

ACTION:

5008 **MESSAGE: NRJE(!;!): NS RECEIVED AN ENCIPHERED REQUEST (BIU=!) (SEV=5008).**

CAUSE:

ACTION:

5009 **MESSAGE: NRJE(!;!): NS RECEIVED A MAIL MESSAGE WHICH CANNOT BE RECEIVED WHEN THE LU IS IN STATE ! (MESSAGE=!) (SEV=5009).**

CAUSE:

ACTION:

5010 **MESSAGE: NRJE(!;!): NS RECEIVED A MAIL MESSAGE WHICH CANNOT BE RECEIVED WHEN NS IS IN STATE ! (MESSAGE=!) (SEV=5010).**

CAUSE:

ACTION:

5011 **MESSAGE: NRJE(!;!): NS RECEIVED A NEGATIVE RESPONSE TO AN INITSELF REQUEST (SENSE=!) (NS=5011).**

CAUSE:

ACTION:

5012 **MESSAGE: NRJE(!;!): NS RECEIVED A NEGATIVE RESPONSE TO A TERMSELF REQUEST (SENSE=!) (NS=5012).**

CAUSE:

ACTION:

5013 **MESSAGE: NRJE(!;!): NS CANNOT SEND AN INITSELF REQUEST BECAUSE THE PLU REMOTE NUMBER HAS NOT BEEN CONFIGURED (NS=5013).**

CAUSE:

ACTION:

5014 **MESSAGE: NRJE(!;!): NS CANNOT SEND AN INITSELF REQUEST BECAUSE THE PLU APPLICATION IDENTIFIER HAS NOT BEEN CONFIGURED (NS=5014).**

CAUSE:

ACTION:

5014 **MESSAGE: NRJE(!;!): NS CANNOT TRANSLATE CHARACTER FIELDS OF THE INITSELF REQUEST (NS=5015).**

CAUSE:

ACTION:

5015 **MESSAGE: NRJE(!;!): THE CONFIGURED PLU REMOTE JOB ENTRY PROGRAM ! IS NOT SUPPORTED (NS=5016).**

CAUSE:

ACTION:

5017 **MESSAGE: NRJE(!;!): NS RECEIVED A NOTIFY REQUEST (BIU=!) (NS=5017).**

CAUSE:

ACTION:

5018 **MESSAGE: NRJE(!;!): NS RECEIVED AN NSPE; LU TERMINATING (BIU=!) (NS=5018).**

CAUSE:

ACTION:

5019 **MESSAGE: NRJE(!;!): NS RECEIVED AN UNSUPPORTED REQUEST (BIU=!) (NS=5019)**

CAUSE:

ACTION:

5020 **MESSAGE: NRJE(!;!): NS CANNOT UPDATE STATUS INFORMATION IN THE NRJE EXTRA DATA SEGMENT (XDS=!) (SEV=5020).**

CAUSE:

ACTION:

5021 **MESSAGE: NRJE(!;!): NS CANNOT ACCESS INITSELF REQUEST DATA IN CONFIGURATION (CFG/MIDAS=!) (NS=5021).**

CAUSE:

ACTION:

6600 **MESSAGE: NRJE(!;!): PUTTRACE PARAMETER ERROR (SEV=6600)**

CAUSE:

ACTION:

6601 **MESSAGE: NRJE(!;!): PUTTRACE XDS ACCESS ERROR= ! (SEV=6601)**

CAUSE:

ACTION:

6602 **MESSAGE: NRJE(!;!): PUTTRACE LOCK FAILURE= ! (SEV=6602)**

CAUSE:

ACTION:

6603 **MESSAGE: NRJE(!;!): PUTTRACE UNLOCK FAILURE= ! (SEV=6603)**

CAUSE:

ACTION:

6604 **MESSAGE: NRJE(!;!): NMWRITETRACE ERROR; NMERR= ! (INT=6604)**

CAUSE: An error occurred attempting to write a trace record.

ACTION: See NMERR message text in the *SNA Link Services Reference Manual* or in *Using the Node Management Services (NMS) Utilities*.

6605 **MESSAGE: NRJE(!;!): TRACE RECORD OVERFLOW (SEV=6605)**

CAUSE:

ACTION:

6700 **MESSAGE: NRJE(!;!): NXDSUNLOCK FAILED IN DUMPXDS (SEV=6700)**

CAUSE:

ACTION:

6701 **MESSAGE: NRJE(!;!): FILE SYSTEM ERROR IN DUMPXDS (SEV=6701)**

CAUSE:

ACTION:

7001 **MESSAGE: NRJE(!;!): BAD FMD OPCODE RETURNED; FMD MSG= ! (SEV=7001)**

CAUSE:

ACTION:

7002 **MESSAGE: NRJE(!;!): BRACKET/CHAIN MANAGER ERROR (SEV=7002)**

CAUSE:

ACTION:

7003 **MESSAGE: NRJE(!;!): XDS CHAIN READ FAILURE; CODE= ! (SEV=7003)**

CAUSE:

ACTION:

7005 **MESSAGE: NRJE(!;!): INBOUND DFC SEQUENCE ERROR (DFC=7005)**

CAUSE:

ACTION:

7008 **MESSAGE: NRJE(!;!): BAD DFC RESPONSE RECEIVED; OUTBIU= ! (SEV=7008)**

CAUSE:

ACTION:

7009 **MESSAGE: NRJE(!;!): NEGATIVE RESPONSE TO CANCEL RECEIVED (SEV=7009)**

CAUSE:

ACTION:

7010 **MESSAGE: NRJE(!;!): NEGATIVE RESPONSE TO SHUTC RECEIVED (SEV=7010)**

CAUSE:

ACTION:

7010 **MESSAGE: NRJE(!;!): NEGATIVE RESPONSE TO SHUTC RECEIVED (SEV=7010)**

CAUSE:

ACTION:

7011 **MESSAGE: NRJE(!;!): ILLEGAL RESPONSE TO SHUTD RECEIVED (SEV=7011)**

CAUSE:

ACTION:

7012 **MESSAGE: NRJE(!;!): ILLEGAL RESPONSE TO DFC REQUEST RECEIVED (SEV=7012)**

CAUSE:

ACTION:

7013 **MESSAGE: NRJE(!;!): ILLEGAL RESPONSE TO CHASE RECEIVED (SEV=7013)**

CAUSE:

ACTION:

7015 **MESSAGE: NRJE(!;!): HDX/FF ERROR; RESPONSE RECEIVED (SEV=7015)**

CAUSE:

ACTION:

7016 **MESSAGE: NRJE(!;!): ILLEGAL CANCEL RECEIVED; BIU= ! (SEV=7016)**

CAUSE:

ACTION:

7017 **MESSAGE: NRJE(!;!): EC MISSING ON OUTBOUND FMH (SEV=7017)**

CAUSE:

ACTION:

7018 **MESSAGE: NRJE(!;!): HOST RESPONSE LACKS EC (SEV=7018)**

CAUSE:

ACTION:

7019 **MESSAGE: NRJE(!;!): HDX/FF ERROR ON OUTBOUND RESPONSE (SEV=7019)**

CAUSE:

ACTION:

7020 **MESSAGE: NRJE(!;!): HDX/FF ERROR ON OUTBOUND REQUEST (SEV=7020)**

CAUSE:

ACTION:

7021 **MESSAGE: NRJE(!;!): ILLEGAL FMD RESPONSE (SEV=7021)**

CAUSE:

ACTION:

7022 **MESSAGE: NRJE(!;!): XDS WRITE FAILURE; CODE= ! (SEV=7022)**

CAUSE:

ACTION:

7023 **MESSAGE: NRJE(!;!): INVALID SEND CODE; BIU= ! (SEV=7023**

CAUSE:

ACTION:

7024 **MESSAGE: NRJE(!;!): INVALID SENT CODE; BIU= ! (SEV=7024)**

CAUSE:

ACTION:

7025 **MESSAGE: NRJE(!;!): UNSUPPORTED SIGNAL CODE RECEIVED; BIU= ! (DFC=7025)**

CAUSE:

ACTION:

7026 **MESSAGE: NRJE(!;!): NXDSLOCK FAILED (SEV=7026)**

CAUSE:

ACTION:

7027 **MESSAGE: NRJE(!;!): NXDSREAD FAILED (SEV=7027)**

CAUSE:

ACTION:

7028 **MESSAGE: NRJE(!;!): NXDSUNLOCK FAILED (SEV=7028)**

CAUSE:

ACTION:

7029 **MESSAGE: NRJE(!;!): NXDSLOCK FAILED (SEV=7029)**

CAUSE:

ACTION:

7030 **MESSAGE: NRJE(!;!): NXDSREAD FAILED (SEV=7030)**

CAUSE:

ACTION:

7031 **MESSAGE: NRJE(!;!): NXDSWRITE FAILED (SEV=7031)**

CAUSE:

ACTION:

7032 **MESSAGE: NRJE(!;!): NXDSUNLOCK FAILED (SEV=7032)**

CAUSE:

ACTION:

7033 **MESSAGE: NRJE(!;!): NXDSWRITE FAILED (SEV=7033)**

CAUSE:

ACTION:

7700 **MESSAGE: NRJE(!;!): NMCONFIG FILE RU DATA READ FAILED (SEV=7700)**

CAUSE:

ACTION:

7701 **MESSAGE: NRJE(!;!): NMCONFIG FILE RDR DATA READ FAILED (SEV=7701)**

CAUSE:

ACTION:

7998 **MESSAGE: NRJE(!;!): LU OUT OF BUFFERS (SEV=7998)**

CAUSE:

ACTION:

7999 **MESSAGE: NRJE(!;!): INVALID BUFFER LENGTH (SEV=7999)**

CAUSE:

ACTION:

8001 **MESSAGE: NRJE(!;!): SNACLOSEUSER FAILED; RESULT=! (LUX=8001)**

CAUSE:

ACTION:

8002 **MESSAGE: NRJE(!;!): AUTORECOVERY CONFIGURATION CHECK FAILED; RESULT=! (LUX=8002)**

CAUSE:

ACTION:

8003 **MESSAGE: NRJE(!;!): SNARCV FAILED ON RECOVERY; RESULT=! (LUX=8003)**

CAUSE:

ACTION:

8004 **MESSAGE: NRJE(!;!): NAU FAILED TO ACTIVATE ON RECOVERY; RESULT=! (LUX=8004)**

CAUSE:

ACTION:

8005 **MESSAGE: NRJE(!;!): SNAOPENUSER FAILED; RESULT=! (LUX=8005)**

CAUSE:

ACTION:

9000 **MESSAGE: NRJE(!:!): WARNING: FAILURE TO LOAD WRITER EXIT PROCEDURE: '!'. INTERNAL BANNER DECODE ROUTINE WILL BE USED. (LOAD ERR=!) (LU=9000)**

CAUSE: NRJE was configured to use an external procedure for a logical writer but the attempt to load the procedure failed.

ACTION: Refer to the *MPE Intrinsics Reference Manual* for information on LOAD ERR.

Ensure that the exit procedure is in SL.NRJE.SYS or SL.PUB.SYS and that the Writer Data screen indicates the correct procedure name. Ensure that the RUN command in the NRJE stream file runs the NRJEMON program with "LIB=G".

9001 **MESSAGE: NRJE(!:!): FAILED TO ACCESS CONFIGURATION FILE. (CFG=!) (LU=9001)**

CAUSE: NRJE failed to access the MIDAS database which returned an error number of 'CFG'.

ACTION: Ensure that the configuration file exists as NMCONFIG.PUB.SYS. It may be necessary to convert the configuration

file to a new format by running the Node Management Services conversion utility NMMGRVER.

9002 **MESSAGE: NRJE(!:!): WARNING: COULD NOT LOAD CONSOLE EXIT PROCEDURE. INTERNAL DECODE ROUTINE WILL BE USED. (LOAD ERR=!) (LU=9002)**

CAUSE: NRJE encountered a loadproc error while attempting to load the console exit procedure.

ACTION: Ensure that the procedure name in the Workstation Data screen is correct and that the procedure exists in SL.NRJE.SYS or SL.PUB.SYS. Ensure that the RUN command of the NRJE Stream file runs the NRJEMON program with "LIB=G".

9003 **MESSAGE: NRJE(!:!): FAILED TO LOCK LU'DUMP'RIN. (LU=9003)**

CAUSE: Internal software error. Logged only while aborting due to a more serious error.

ACTION: None.

9004 **MESSAGE: NRJE(!:!): FAILURE TO OPEN JOBLOG FILE (LU=9004)**

CAUSE: An FOPEN error occurred on the Joblog file.

ACTION: Check the preceding error message which will identify the nature of the fopen failure. Ensure that Workstation Data screen correctly identifies the name of the Joblog in the NRJE group of the SYS account. Ensure that all NRJE module versions are compatible.

9005 **MESSAGE: NRJE(!:!): FAILED TO WRITE TO NRJE XDS (XDS=!) (LU=9005)**

CAUSE: Access error occurred while attempting to save the Joblog record length value in the NRJE XDS. An internal software error.

ACTION: Contact Hewlett-Packard for assistance.

9006 **MESSAGE: NRJE(!:!): FAILED TO OPEN JOB, TEMP COPY OF LOOKUP TABLE (FSERR=!) (LU=9006)**

CAUSE: FOPEN failure on the internal job temporary copy of the Lookup Table.

ACTION: Ensure that NRJE versions are correct. If versions are compatible, contact Hewlett-Packard for assistance.

9007 **MESSAGE: NRJE(!:!): FAILED TO ACQUIRE FORMID XDS (LU=9007)**

CAUSE: A GETDSEG failure was encountered.

ACTION: Ensure that NRJE versions are compatible. Ensure that the system configuration for "MAXIMUM NUMBER OF EXTRA DATA SEGMENTS/PROCESS" is greater than 4.

9008 **MESSAGE: NRJE(!:!): FAILED TO WRITE TO NRJE XDS (XDS=!) (LU=9008)**

CAUSE: NRJE could not zero out the length field for the Joblog record in the NRJE XDS. Internal software error.

ACTION: Contact Hewlett-Packard.

9009 **MESSAGE: NRJE(!:!): READ ERROR ON SUBMITTED SPOOLFILE (SPOOLER=!) (LU=9009)**

CAUSE: NRJE encountered an error while attempting to copy a file from the NRJE reader to the host.

ACTION: Ensure that the NRJE Reader is properly configured into the MPE I/O configuration. Ensure that NRJE versions are correct.

9010 **MESSAGE: NRJE(!:!): WARNING: NRJE READER RELEASED WHILE WAITING FOR 'ON READER' MESSAGE FROM HOST. OUTPUT WILL BE UNSOLICITED (LU=9010)**

CAUSE: NRJE submitted a job to the host and was waiting for the host "ON READER" message which would inform NRJE of the host job number when NRJE received a command to terminate communication with the host. Termination may have been due to any number of causes including receiving an unexpected "UNBIND", a communications line failure, or a "KILL" command issued by the node manager.

ACTION: None.

9011 **MESSAGE: NRJE(!:!): FAILED TO WRITE TO JOBLOG XDS (LU=9011)**

CAUSE: A DMOVOUT error occurred while attempting to save the Joblog record in the Joblog extra data segment. An internal software error.

ACTION: Contact Hewlett-Packard for assistance.

9012 **MESSAGE: NRJE(!:!): FAILED TO READ FROM JOBLOG XDS (STATUS=!) (LU=9012)**

CAUSE:

ACTION:

9013 **MESSAGE: NRJE(!:!): WARNING: INVALID FILE NUMBER RETURNED BY WRITER EXIT PROCEDURE. (FSERR=!) (LU=9013)**

CAUSE: An exit procedure for a writer returned a non-zero value for file number. An FCHECK was executed on this file number and non-zero error value returned as FSERR.

ACTION: Correct the exit procedure.

9014 **MESSAGE: NRJE(!:!): FAILED TO READ FROM JOBLOG XDS (XDS=!) (LU=9014)**

CAUSE: NRJE failed to read the length value of the Joblog record from the NRJE XDS. Internal software error.

ACTION: Contact Hewlett-Packard.

9015 **MESSAGE: NRJE(!:!): FAILED TO LOAD NATIVE-3000 TRANSLATION TABLE (NLERR=!) (LU=9015)**

CAUSE: NRJE Failed to execute the NLINFO intrinsic which returned an error code of NLERR.

ACTION: Refer to the *Native Language Support Reference Manual* for information on NLERR.

9016 **MESSAGE: NRJE(!:!): FAILED TO ACQUIRE JOBLOG XDS (LU=9016)**

CAUSE: NRJE encountered a GETDSEG intrinsic failure while attempting to acquire the Joblog buffer XDS.

ACTION: Ensure that MPE is configured for a MAXIMUM NUMBER OF EXTRA DATA SEGMENTS PER PROCESS of 5 or more. Check NRJE versions for compatibility.

9017 **MESSAGE: NRJE(!:!): WARNING: COULD NOT LOAD WRITER TRANSLATION TABLE. NATIVE LANGUAGE ID=!. WILL USE NATIVE-3000 TRANSLATION TABLE. (NLERR=!) (LU=9017)**

CAUSE: NRJE failed to execute the NLINFO intrinsic.

ACTION: Consult the *Native Language Support Reference Manual* for information regarding the NLERR error number.

9018 **MESSAGE: NRJE(!:!): WARNING: COULD NOT LOAD READER TRANSLATION TABLE FOR LANGUAGE ID=!. WILL USE NATIVE-3000 TRANSLATION TABLE. (NLERR=!) (LU=9018)**

CAUSE: NRJE failed to execute the NLINFO intrinsic.

ACTION: Consult the *Native Language Support Reference Manual* for information regarding the NLERR error number.

9019 **MESSAGE: NRJE(!:!): WARNING: JOBNAMES IN HOST 'ON READER' MESSAGE AND 'SUBMIT INTRINSIC' MESSAGE DID NOT AGREE FOR HOST JOB NUMBER !. SUBMIT JOBNAME OF '!' WAS REPLACED BY HOST JOBNAME OF '!'. (LU=9019)**

CAUSE: The NRJE SUBMIT intrinsic parsed the users submitted job and identified the name of the job but the parsing done by the host yielded a different job name (this job name is sent to NRJE in the 'ON READER' message).

ACTION: Contact Hewlett-Packard.

9020 **MESSAGE: NRJE(!:!): FLOCK FAILURE ON JOBLOG FILE (LU=9020)**

CAUSE: NRJE failed to execute the FLOCK intrinsic.

ACTION: Ensure that NRJE versions are compatible. Contact Hewlett-Packard.

9021 **MESSAGE: NRJE(!:!): FAILED TO EXECUTE FFINDBYKEY INTRINSIC ON JOBLOG (LU=9021)**

CAUSE: NRJE could not execute FFINDBYKEY on the Joblog while in error recovery mode for a DUPLICATE 'KEY' VALUE (FSERR 171) error on the Joblog.

ACTION: Refer to the preceding error message for the nature of the file system error. Contact Hewlett-Packard.

9022 **MESSAGE: NRJE(!:!): FAILED TO UPDATE JOBLOG FILE (LU=9022)**

CAUSE: An FUPDATE intrinsic error occurred.

ACTION: Refer to the preceding error message for the nature of the file system error. Contact Hewlett-Packard.

9023 **MESSAGE: NRJE(!:!): FAILED TO WRITE TO JOBLOG FILE (LU=9023)**

CAUSE: An FWRITE intrinsic error occurred on the Joblog.

ACTION: Refer to the following message for the file system error number. Contact Hewlett-Packard.

9024 **MESSAGE: NRJE(!:!): WARNING: UNSOLICITED 'ON READER' MESSAGE RECEIVED. (LU=9024)**

CAUSE: The host sent the 'ON READER' message indicating that a job was on one of NRJE's readers but NRJE did not have a job active on a reader. The message is ignored. This may occur upon signing on to the host after having previously terminating a connection abnormally. When an abnormal termination occurs, there may be console messages queued up for transmission to the remote console which will be sent when the remote signs on again.

ACTION: None.

9025 **MESSAGE: NRJE(!:!): FAILED TO READ FROM JOBLOG XDS (LU=9025)**

CAUSE: Error occurred in the DMOVIN intrinsic while attempting to obtain a record from the Joblog buffer.

ACTION: Check NRJE versions. Contact Hewlett-Packard.

9026 **MESSAGE: NRJE(!:!): FAILED TO UNLOCK NRJE XDS (XDS=!). (LU=9026)**

CAUSE: Error encountered in NXDSUNLOCK.

ACTION: Contact Hewlett-Packard.

9027 **MESSAGE: NRJE(!:!): FAILED TO LOCK NRJE XDS (XDS=!) (LU=9027)**

CAUSE: Error encountered in NXDSLOCK.

ACTION: Contact Hewlett-Packard.

9028 **MESSAGE: NRJE(!:!): FAILED TO WRITE TO NRJE XDS (XDS=!) (LU=9028)**

CAUSE: Error encountered in NXDSWRITENL while attempting to store the LU's PIN in the XDS to reserve a reader.

ACTION: Contact Hewlett-Packard.

9029 **MESSAGE: NRJE(!:!): FAILED TO OPEN BANNER FILE (FSERR=!) (LU=9029)**

CAUSE: FOPEN failed while attempting to open the internal banner file (used to save host banners until banner decode succeeds).

ACTION: The preceding error message will indicate the nature of the file system error. The LU name is used as the file name of the banner file. Ensure that the LU name is a valid MPE file name.

9030 **MESSAGE: NRJE(!:!): FAILED TO OPEN PUNCH OUTPUT FILE FOR HOST JOB NAME '!'. SENSE CODE RETURNED TO HOST =! (LU=9030)**

CAUSE: The Output Destination identified in the NRJE Configuration: Writer Data screen could not be opened. One or more messages logged prior to this message identify the nature of the failure.

ACTION: Refer to the message(s) preceding this one to identify the nature of the failure. Correcting the problem will usually require either (1) reconfiguring the Writer Data screen, or (2) recovering lost disk space.

9031 **MESSAGE: NRJE(!:!): FAILED TO OPEN PRINT OUTPUT FILE FOR HOST JOB NAME '!'. SENSE CODE RETURNED TO HOST =! (LU=9031)**

CAUSE: The Output Destination identified in the NRJE Configuration: Writer Data screen could not be opened. One or more messages logged prior to this message identify the nature of the failure.

ACTION: Refer to the message(s) preceding this one to identify the nature of the failure. Correcting the problem will usually require either (1) reconfiguring the Writer Data screen, or (2) recovering lost disk space.

9032 **MESSAGE: NRJE(!:!): FAILED TO READ FROM FORMID XDS (LU=9032)**

CAUSE: DMOVIN failure occurred while attempting to lookup a form name in the FORMID XDS.

ACTION: Check NRJE versions. Contact Hewlett-Packard.

9033 **MESSAGE: NRJE(!:!): FPOINT FAILURE ON LOOKUP TABLE (FSERR=!) (LU=9033)**

CAUSE: A formid was found in the Lookup Table XDS but the applicable record in the internal temporary copy of the Lookup Table could not be referenced.

ACTION: Refer to the preceding message for a description of FSERR. Contact Hewlett-Packard.

9034 **MESSAGE: NRJE(!:!): WARNING: FAILED TO PARSE 'ON READER' MESSAGE: ! INVALID READER NUMBER DETECTED = !. (LU=9034)**

CAUSE: NRJE received what looked like an "ON READER" message but could not correctly identify the reader number in the message (valid reader number range is 1 to 7). If an actual "ON READER" message was received, then this reader will be unavailable for further job submissions.

ACTION: If the message is in fact an "ON READER" message then determine whether the format of the message has been modified by host system programmers. If the message has not been modified, contact Hewlett-Packard for assistance. If the message has been modified, install an exit procedure to parse the message. Refer to the *NRJE User/Programmer Reference Manual* for additional information.

9035 **MESSAGE: NRJE(!:!): MEDIUM NOT PASSED TO GETWRITER. (LU=9035)**

CAUSE: GETWRITER was not passed a required parameter.

ACTION: Contact Hewlett-Packard.

9036 **MESSAGE: NRJE(!:!): REQUIRED PARAMETERS NOT PASSED TO SET'OUTPUT'PARMS (LU=9036)**

CAUSE: FNUM or STATUS not passed to SET'OUTPUT'PARMS.

ACTION: Contact Hewlett-Packard.

9037 **MESSAGE: NRJE(!:!): FAILED TO OPEN $NULL FILE (LU=9037)**

CAUSE: A user wants to cancel his output, causing NRJE to route the output to $NULL which could not be opened.

ACTION: Contact Hewlett-Packard.

9038 **MESSAGE: NRJE(!:!): WARNING: USER ATTEMPTED TO ACCESS A LOOKUP TABLE ENTRY WHEN THE LOOKUP TABLE WAS NOT IN USE. JOBNUMBER=! USER ID = !. (LU=9038)**

CAUSE: A user submitted a job specifying an alternate formid in the Lookup Table (for example, SUBMIT *job*;FO='*formid*') but NRJE is not configured to use a Lookup Table (Workstation Data screen).

ACTION: Contact the affected user.

9039 **MESSAGE: NRJE(!:!): WARNING: INVALID OUTPUT ROUTING OPTION SPECIFIED FOR JOB NUMBER !. (LU=9039)**

CAUSE: A user specified an invalid routing option for print, punch, or forms disposition. Output was routed to the default destination identified in the Writer Data screen. Message number 9050 will be logged immediately following this message identifying the affected user and jobname.

ACTION: Contact the affected user.

9040 **MESSAGE: NRJE(!:!): FAILED TO EXECUTE MPE 'FILE' COMMAND. COMMAND PARM ERROR = !. ATTEMPTED THE FOLLOWING FILE COMMAND: '!' (LU=9040)**

CAUSE: File equation identified in the message could not be executed. Message number 335 preceded this message identifying the nature of the error.

The file equation came from one of two sources: (1) Lookup Table entry, or (2) user-specified file equation (for example, SUBMIT *job*;FO=**fileq*)

ACTION: If source of the record was a Lookup Table entry, correct the entry and retry. Use the VERIFY command to check each record. If the source was a user specified file equation, contact the affected user.

9042 **MESSAGE: NRJE(!:!): FAILED TO READ FROM LOOKUP TABLE (FSERR=!) (LU=9042)**

CAUSE: FREAD intrinsic failure on the internal temporary copy of the Lookup Table.

ACTION: Contact Hewlett-Packard.

9043 **MESSAGE: NRJE(!:!): FAILED TO READ FROM FORMID XDS (LU=9043)**

CAUSE: DMOVIN failure on the formid XDS.

ACTION: Contact Hewlett-Packard.

9044 **MESSAGE: NRJE(!:!): WARNING: FORMID NOT FOUND IN LOOKUP TABLE. FORM '!' WAS REQUESTED BY JOB NUMBER ! (JOB NAME= !) OUTPUT ROUTED TO THE DEFAULT DESTINATION, OUTPUT PRIORITY = 2. (LU=9044)**

CAUSE: A user specified a form name which could not be found in the Lookup Table.

ACTION: Contact the affected user. Ensure that all users are informed of all form names supported by the workstation.

9046 **MESSAGE: NRJE(!:!): FAILED TO LOCK LOCAL RIN (LU=9046)**

CAUSE: Failed to execute LOCKLOCRIN. Possibly due to a failure by NRJEMON to acquire the local rin.

ACTION: Check NRJE versions. Ensure that NRJEMON and NRJELU versions are compatible. Contact Hewlett-Packard.

9049 **MESSAGE: NRJE(!:!): FILE SYSTEM ERROR OCCURRED ON '!': '!.' (LU=9049)**

CAUSE: As above.

ACTION: Depends upon the nature of the failure. Refer to other messages logged immediately prior to and after this message for corrective action.

9050 **MESSAGE: NRJE(!:!): COULD NOT ROUTE OUTPUT AS REQUESTED FOR JOB NAME = !. ALTERNATE DESTINATION OF '!' REQUESTED BY USER '!'. OUTPUT ROUTED TO DEFAULT DESTINATION, OUTPUT PRIORITY = 2. (LU=9050)**

CAUSE: A user specified an output routing option in the SUBMIT command but NRJE was unable to route the output as requested. The output was routed to the default destination specified in the writer data screen using an output priority of 2.

ACTION: Contact the affected user.

9051 **MESSAGE: NRJE(!:!): FAILURE TO EXECUTE FERRMSG INTRINSIC USING FILE SYSTEM ERROR CODE = !. (LU=9051)**

CAUSE: As above. Internal software error.

ACTION: Contact Hewlett-Packard.

9052 **MESSAGE: NRJE(!:!): FILE SYSTEM ERROR ON '!' ! FOR HOST JOB NUMBER: !. (LU=9052)**

CAUSE: The indicated error occurred while attempting to route a user's dataset to the proper destination.

ACTION: Contact the affected user.

9053 **MESSAGE: NRJE(!:!): FORMID NOT FOUND IN LOOKUP TABLE. FORM '!' WAS REQUESTED BY JOB NUMBER ! (JOB NAME= !). COULD NOT ROUTE OUTPUT AS REQUESTED. (LU=9053)**

CAUSE: A user specified a form name which could not be found in the Lookup Table.

ACTION: Contact the affected user. Ensure that all users are informed of all form names supported by the workstation.

9054 **MESSAGE: NRJE(!:!): FAILED TO OPEN OUTPUT FILE. '!.' HOST JOB NUMBER = !. (LU=9054)**

CAUSE: A File System error occurred while attempting to open an output file for a user's dataset. Output will be routed to the default destination with an output priority of 2.

ACTION: Contact the affected user.

9055 **MESSAGE: NRJE(!:!): BAD JOBNUMBER RETURNED BY WRITER EXIT PROCEDURE JOBNUMBER = !, IGNORED. (LU=9055)**

CAUSE: An exit procedure indicated it had decoded the host banner but returned a jobnumber which was not in the valid range of ASCII "-1" to ASCII "9999".

ACTION: Fix the procedure.

9056 **MESSAGE: NRJE(!:!): UNSOLICITED OUTPUT RECEIVED FOR HOST JOB NUMBER !. (LU=9056)**

CAUSE: Information message. NRJE is receiving a dataset for which the host jobnumber was not found in the Joblog. This is true of all output received from POWER hosts.

ACTION: Determine whether the console message format has been changed by host system programmers. If true then install an exit procedure to correctly parse the "ON READER" message. If false, contact Hewlett-Packard for assistance.

CAUSE: If JES2 or JES3 then the job apparently did not originate at this remote. If the job did originate at this remote then either (1) NRJE did not correctly parse the host "ON READER" message indicating the host job number or (2) the host sent an output dataset prior to sending the "ON READER" message.

ACTION: Reduce the number of LU's for the workstation.

9057 **MESSAGE: NRJE(!:!): CANNOT LOCK THE JOBLOG FILE. (FSERR=!) (LU=9057)**

CAUSE: FLOCK intrinsic could not be executed on the Joblog file. The message logged immediately prior to this one describes the FSERR number. Internal software error.

ACTION: Contact Hewlett-Packard.

9058 **MESSAGE: NRJE(!:!): WARNING: JOB NAME FOR HOST JOB NUMBER ! DOES NOT MATCH JOB LOG ENTRY. JOB LOG ENTRY = '!'. PDIR JOB NAME = '!'. JOBLOG ENTRY WILL BE IGNORED. (LU=9058)**

CAUSE: NRJE received a dataset with a host jobnumber for which an entry was found in the Joblog. However, the name of the job in the PDIR received from the host did not match with the name of the job in the Joblog record. This implies that the Joblog record is an 'old' entry and the host has recycled job numbers.

ACTION: Verify that the host has recycled job numbers since the indicated entry in the Joblog was made. If confirmed, execute the PURGE OLD command to clear the Joblog of old entries.

9059 **MESSAGE: NRJE(!:!): END OF FILE ENCOUNTERED WHILE RECEIVING OUTPUT FOR JOB !. REMAINDER OF DATA SET ROUTED TO DEFAULT DESTINATION, OUTPUT PRIORITY = 2. (LU=9059)**

CAUSE: While writing a data set to a disk file, NRJE encountered an end of file condition on the output file.

ACTION: Inform the owner of the indicated job. The user should ensure that all disk files are large enough to contain the output.

9060 **MESSAGE: NRJE(!:!): FAILED TO REWIND OUTPUT STREAM FILE (LU=9060)**

CAUSE: NRJE received a punch dataset on the reserved command form CMD. Before NRJE can stream the file it must execute a REWIND, FREAD, and FCLOSE on the output file. The REWIND failed.

ACTION: Refer to the message logged immediately prior to this message to identify the nature of the failure.

9061 **MESSAGE: NRJE(!:!): FAILED TO READ OUTPUT STREAM FILE (LU=9061)**

CAUSE: NRJE received a punch dataset on the reserved command form CMD. Before NRJE can stream the file it must execute a REWIND, FREAD, and FCLOSE on the output file. The FREAD failed.

ACTION: Refer to the message logged immediately prior to this message to identify the nature of the failure.

9062 **MESSAGE: NRJE(!:!): FAILED TO OPEN A BACK REFERENCED FILE EQUATION: '!'. (LU=9062)**

CAUSE: Output was routed to either a Lookup Table file equation entry or to a file equation entered by a user with the SUBMIT command. NRJE failed to open using this file equation. The output was routed to the default destination with an output priority of two.

ACTION: Refer to the message logged immediately following this message to identify the nature of the failure. If failure was due to a Lookup Table entry, correct the entry (use the VERIFY command to ensure all entries are valid).

9063 **MESSAGE: NRJE(!:!): FAILED TO WRITE TO OUTPUT FILE FOR JOB NUMBER !. (LU=9063)**

CAUSE: An FWRITE error occurred on an output file while receiving data from the host.

ACTION: Refer to the message logged immediately prior to this one which identifies the nature of the file system error.

9064 **MESSAGE: NRJE(!:!): DATASET LOST FOR HOST JOB ! OUTPUT FILE COULD NOT BE OPENED. ! RECORDS WERE RECEIVED (LU=9064)**

CAUSE: NRJE received a dataset for which banner decode failed and the default `Output Destination` specified in the in the NRJE Configuration: Writer Data screen could not be opened to route the output.

ACTION: Refer to the messages logged immediately prior to this one to identify the nature of the failure to open the output file.

9065 **MESSAGE: NRJE(!:!): WRITER EXIT PROCEDURE '!' LOADED. (LU=9065)**

CAUSE: A banner decode exit procedure configured for a writer was loaded successfully.

ACTION: None.

9066 **MESSAGE: NRJE(!:!): WARNING: JOB NUMBER ! WAS RECYCLED BY THE HOST. JOBLOG MAINTENANCE REQUIRED. (LU=9066)**

CAUSE: A job was submitted to the host which returned a host job number. This number was found to represent an entry in the Joblog which already existed. This indicates that the host has begun to recycle job numbers and has therefore overwritten the Joblog entry.

ACTION: Execute the `PURGE OLD` command to clear the Joblog of expired entries.

9067 **MESSAGE: NRJE(!:!): WARNING: RECORD WIDTH OF FILE ! IS ! BYTES WHICH EXCEEDS THE MAXIMUM ALLOWED WIDTH OF 256 BYTES. HOST JOB NUMBER = !. (LU=9067)**

CAUSE: Attempt was made to route output to a file of greater than 256 bytes, the maximum supported by NRJE. NRJE will still route the output to the destination file but will write a maximum of 256 bytes per record. NRJE pads with EBCDIC blanks when routing to fixed width disk files and will pad only to the maximum record width of 256 bytes.

ACTION: Inform the user of the affected job of the maximum supported record width.

9068 **MESSAGE: NRJE(!:!): WARNING: RECORD WIDTH OF FILE ! IS ! BYTES WHICH IS LESS THAN THE MINIMUM ALLOWED WIDTH OF 40 BYTES. HOST JOB NUMBER = !. (LU=9068)**

CAUSE: A user is attempting to route output to a destination with a record width of less than 40 bytes.

ACTION: Inform the affected user of the supported record widths (40 to 256 bytes).

9069 **MESSAGE: NRJE(!:!): NRJE HAS PASSED AN ENTIRE PRINT DATASET TO A USER EXIT PROCEDURE (LU=9069)**

CAUSE: Advisory message only. An exit procedure did not return either JOBNUMBER or FILENUMBER to NRJE causing NRJE to pass the entire dataset to the exit procedure. It is presumed that the exit procedure has routed the dataset to the proper destination.

ACTION: None.

9070 **MESSAGE: NRJE(!:!): NRJE HAS PASSED AN ENTIRE PUNCH DATASET TO A USER EXIT PROCEDURE (LU=9070)**

CAUSE: Advisory message only. An exit procedure did not return either JOBNUMBER or FILENUMBER to NRJE causing NRJE to pass the entire dataset to the exit procedure. It is presumed that the exit procedure has routed the dataset to the proper destination.

ACTION: None.

9071 **MESSAGE: NRJE(!:!): CONSOLE EXIT PROCEDURE '!' LOADED. (LU=9071)**

CAUSE:

ACTION:

9072 **MESSAGE: NRJE(!:!): FOPEN FAILURE: '!.' (LU=9072)**

CAUSE:

ACTION:

9073 **MESSAGE: NRJE(!:!): PDIR: HEAD=HEX'!'. ! (FMD=9073)**

CAUSE: A PDIR record was received. The first four bytes are displayed in hexadecimal, the remainder in ASCII.

ACTION:

9074 **MESSAGE: NRJE(!:!): LU ABNORMAL TERMINATION. STACK DUMPED TO STDLIST. (LU=9074)**

CAUSE:

ACTION: Print STDLIST output and contact your HP representative.

9075 **MESSAGE: NRJE(!:!): FMD IS RECEIVING OUTPUT FOR JOB ! ON !. (FMD=9075)**

CAUSE:

ACTION:

9076 **MESSAGE: NRJE(!:!): FMD HAS FINISHED RECEIVING OUTPUT; CPU TIME= !; WALL TIME= !. (FMD=9076)**

CAUSE: The indicated CPU time is in milliseconds.

ACTION:

9077 **MESSAGE: REQUIRED PARAMETERS NOT PASSED TO RELEASEPRINTER (LU=9077)**

CAUSE: Internal software error.

ACTION:

9078 **MESSAGE: REQUIRED PARAMETERS NOT PASSED TO RELEASEPUNCH (LU=9078)**

CAUSE: Internal software error.

ACTION:

9079 **MESSAGE: NRJE(!:!): FAILED TO OPEN OUTPUT FILE ON REMOTE NODE: OUTPUT FILE NAME = '!' HOST JOBNUMBER = !. OUTPUT ROUTED TO DEFAULT DESTINATION, OUTPUT PRIORITY = 2. (LU=9079)**

CAUSE: A remote environment ID was specified in the Joblog entry which was appended to the output file name by the NRJE LU. The FOPEN of this file failed.

ACTION: Refer to the message logged immediately following this one to identify the nature of the failure. If the NS connection to the remote system has been lost then terminate and restart the workstation. Contact the affected user.

9080 **MESSAGE: NRJE(!:!): FAILED TO READ FROM NRJE XDS (XDS=!) (LU=9080)**

CAUSE: Occurs only while communicating with a JES3 host. NRJE was attempting to obtain information about Joblog records in the Joblog XDS by reading from the NRJE XDS. Internal software error.

ACTION: Contact Hewlett-Packard.

9081 **MESSAGE: NRJE(!:!): DMOVIN INTRINSIC ERROR (LU=9081**

CAUSE: Access error on the Joblog buffer XDS. Internal software error.

ACTION: Contact Hewlett-Packard.

9082 **MESSAGE: NRJE(!:!): FAILED TO RELEASE A WRITER WHILE PROCESSING A CANCEL REQUEST. SENSE CODE RETURNED TO HOST=!. (LU=9082)**

CAUSE: NRJE could not close a non-spooled output file while attempting to process a cancel request. NRJE returned the indicated sense code to the host.

ACTION: Refer to the message logged immediately prior to this one to identify the nature of the failure.

9083 **MESSAGE: NRJE(!:!): FAILED TO OPEN OUTPUT FILE WHILE PROCESSING A CANCEL REQUEST. SENSE CODE RETURNED TO HOST=!. (LU=9083)**

CAUSE:

ACTION:

9084 **MESSAGE: FPOINT INTRINSIC ERROR WHILE PROCESSING CANCEL REQUEST. (LU=9084)**

CAUSE: FPOINT call failed even though NRJE had random access to an output file. Internal Software error.

ACTION: Contact Hewlett-Packard.

9085 **MESSAGE: NRJE(!:!): FREAD INTRINSIC ERROR WHILE PROCESSING A CANCEL REQUEST. (LU=9085)**

CAUSE: FREAD intrinsic failed on a non-spooled file even though NRJE had read access to the output file. Internal software error.

ACTION: Contact Hewlett-Packard.

9086 **MESSAGE: NRJE(!:!): WARNING: ENCOUNTERED UNEXPECTED FORMAT CODE IN JOBLOG RECORD. FORMAT CODE = !. (LU=9086)**

CAUSE: A Joblog record built by the SUBMIT intrinsic contained an invalid format code. The SUBMIT and NRJELU software modules are incompatible.

ACTION: Check NRJE versions. Reinstall NRJE.

9087 **MESSAGE: NRJE(!:!): FAILED TO SAVE FILE IN PERMANENT SYSTEM DOMAIN FOR HOST JOB NUMBER: !, HOST JOB NAME = !. DATASET DELETED. (LU=9087)**

CAUSE: An attempt was made to route output to a job temporary file with a filename which duplicated that of one in the permanent system domain. Upon receiving the end of the dataset, NRJE will attempt to close the output file in the system domain which will fail.

ACTION: Inform the affected user. Output files should not be routed to the job temporary domain of NRJE.

9088 **MESSAGE: NRJE(!:!): WARNING: MPE ERROR ENCOUNTERED WHILE ATTEMPTING TO STREAM OUTPUT FILE. HOST JOBNUMBER = !, JOB NAME = !. (CIERR=!) (LU=9088)**

CAUSE:

ACTION:

9089 **MESSAGE: NRJE(!:!): CAN NOT ARM “TO HOST” CONSOLE PIPE FOR SOFTWARE INTERRUPTS. (FSERR=!) (LU=9089)**

CAUSE: FCONTROL with *parm*=48 failed on the pipe file.

ACTION: Refer to the message logged immediately prior to this one for information on FSERR. Stop the workstation and purge any files in the group NRJE.SYS with the names TH*nnnnn* and FH*nnnnn*, then restart the workstation. If the error is encountered a second time, contact Hewlett-Packard for assistance.

9090 **MESSAGE: NRJE(!:!): CANNOT ROUTE TO A NEW, DISC FILE OUTSIDE OF THE SYS ACCOUNT. JOB NUMBER= !. OUTPUT ROUTED TO DEFAULT DESTINATION WITH PRIORITY = 2. (LU=9090)**

CAUSE: An attempt was made using a Lookup Table entry to route to a new disk file outside of the SYS account which is not allowed. NRJE cannot save new files across account boundaries.

ACTION: Delete any Lookup Table entries which attempt to direct NRJE to build files across account boundaries. Output should be routed to permanent disk files built by the user if routed outside of the SYS account. Alternately, output can be routed to new files in the SYS account but this can be done only once for each file. A second alternative is to use REVERSE NRJE to stream a job which can then build files in alternate accounts.

9091 **MESSAGE: NRJE(!:!): NEW DISC FILE RENAMED DUE TO DUPLICATE PERMANENT FILE. JOB NUMBER= !. OLD FILE NAME = !. NEW FILE NAME = !. (LU=9091)**

CAUSE: NRJE could not save a new disk file in the permanent domain due to a duplicate permanent file which already existed by this name. NRJE therefore saved the file with the new name of NRJE*nnnn* where *nnnn* represents the time (hours/minutes) at which the file was renamed.

ACTION: If a dataset is to be routed on a continual basis to the permanent disk domain then it should be routed to a permanent disk file. Replace the offending entry in the Lookup Table with one which uses the default domain of “old, permanent”.

9092 **MESSAGE: NRJE(!:!): FAILED TO RENAME OUTPUT FILE. JOB NUMBER = !. NEW NAME ATTEMPTED = !. (LU=9092)**

CAUSE: Output was routed to a new disk file which could not be closed to the permanent domain due to a duplicate permanent file of the same name. NRJE attempted to rename the output file to NRJE*nnnn* but this rename failed. The output for the data set was lost.

ACTION: If a dataset is to be routed on a continual basis to the permanent disk domain then it should be routed to a permanent disk file. Replace the offending entry in the Lookup Table with one which uses the default domain of “old, permanent”.

9093 **MESSAGE: NRJE(!:!): FAILED TO LOCK NRJE XDS. STATUS=! (LU=9093)**

CAUSE: Internal error.

ACTION: Contact Hewlett-Packard.

9094 **MESSAGE: NRJE(!:!): FAILED TO READ FROM NRJE XDS. STATUS=! (LU=9094)**

CAUSE: Internal error.

ACTION: Contact Hewlett-Packard.

9095 **MESSAGE: NRJE(!:!); FAILED TO WRITE TO NRJE XDS. STATUS=! (LU=9095)**

CAUSE: Internal error.

ACTION: Contact Hewlett-Packard.

9096 **MESSAGE: NRJE(!:!): FAILED TO UNLOCK NRJE XDS. STATUS=! (LU=9096)**

CAUSE: Internal error.

ACTION: Contact Hewlett-Packard.

9097 **MESSAGE: NRJE(!:!): FAILED TO CREATE IOWAIT PORT. STATUS=! (LU=9097)**

CAUSE: NRJE could not obtain a port for interprocess communication using the CREATIOWAITPORT system procedure. Internal error.

ACTION: Contact Hewlett-Packard.

9098 **MESSAGE: NRJE(!:!): IOWAIT COMPLETION ERROR. FSERR=! (LU=9098)**

CAUSE: The IOWAIT intrinsic return CCL. Internal error.

ACTION: Refer to the message logged immediately prior to this one for additional information on the file system error. Contact Hewlett-Packard.

9100 **MESSAGE: NRJE(!:!): ATTEMPT TO RELEASE CONSOLE WHEN IT IS NOT OWNED (LU=9100)**

CAUSE: An NRJE LU attempted to release the console facility when it was owned by another LU. Internal error.

ACTION: Contact Hewlett-Packard.

9101 **MESSAGE: NRJE(!:!): ATTEMPT TO OBTAIN CONSOLE DATA WHEN NO DATA IS PENDING (LU=9101)**

CAUSE: An NRJE LU attempted to access the “to host” console pipe to retrieve data without receiving a message indicating that console data was present. Internal error.

ACTION: Contact Hewlett-Packard.

9102 **MESSAGE: NRJE(!:!): WARNING: OUT OF MESSAGE FRAMES FOR REMOTE CONSOLE FACILITY; (NUM FREE=!) (NUM NEEDED=!) (LU=9102)**

CAUSE: An NRJE LU has console data from the host to deliver to one or more console users but the number of available message frames in the ports facility is insufficient. This message is repeated every 60 seconds until sufficient message frames become available. All NRJE activity will suspend until the console message can be delivered.

ACTION: Check any application programs which may have opened the console (with NRJEConsole) but has failed to receive messages using the NRJERcvMsg intrinsic.

9103 **MESSAGE: NRJE(!:!): INTRINSIC ERROR (INTR=!) (LU=9103)**

CAUSE: A call to an NRJE intrinsic (such as NRJEConsole) failed.

ACTION:

9104 **MESSAGE: NRJE(!:!): CANNOT OPEN 'TEMP STORAGE' DISC FILE. (LU=9104)**

CAUSE: FOPEN returned CCL on a the file.

ACTION: Refer to the preceding file system error message logged by NRJE.

9105 **MESSAGE: NRJE(!:!): FATAL ERROR WHILE ATTEMPTING TO ACCESS AN OUTPUT SPOOLFILE. (STATUS=!) (LU=9105)**

CAUSE: File system error occurred on the output file.

ACTION: Refer to the preceding file system error message logged by NRJE.

9106 **MESSAGE: NRJE(!:!): INTERNAL ERROR WHILE ACCESSING OUTPUT SPOOLFILE. (LU=9106)**

CAUSE: NRJE cannot setup for multirecord access to an output spool file.

ACTION: Refer to the file system error message logged immediately prior to this message.

9107 **MESSAGE: NRJE(!:!): WARNING: CANNOT ALTER PRIORITY OF OUTPUT SPOOLFILE. (LU=9107)**

CAUSE: NRJE could not temporarily change the priority of an output spool file to 1 while attempting to set up for multi-record access to the output spool file.

ACTION: Contact Hewlett-Packard.

9108 **MESSAGE: NRJE(!:!): CANNOT CHANGE STATE AND PRIORITY OF OUTPUT SPOOLFILE. (SPOOLER=!) (LU=9108)**

CAUSE: The system procedure NRJESPOOLALTER returned non-zero status while attempting to reset the output spool file priority and change its state to OPENED.

ACTION: Contact Hewlett-Packard.

9109 **MESSAGE: NRJE(!:!): FAILED TO CHANGE STATE OF AN OUTPUT SPOOLFILE. (SPOOLER=!) (LU=9109)**

CAUSE: The system procedure NRJESPOOLALTER returned non-zero status while attempting to change the state of an output spool file to READY.

ACTION: Contact Hewlett-Packard.

9110 **MESSAGE: NRJE(!:!): NUMBER OF PIU SEGMENTS RECEIVED = !; NUMBER OF RU'S = !; NUMBER OF RECORDS = !. (LU=9110)**

CAUSE:

ACTION:

9111 **MESSAGE: NRJE(!:!): THROUGHPUT = ! RU'S/SECOND; ! RECORDS/SECOND OUTPUT MODE = !. (LU=9111)**

CAUSE:

ACTION:

9112 **MESSAGE: NRJE(!:!): CPU LOAD = ! CPU MSECS/RU; CPU LOAD/LINE = ! CPU MSECS/LINE; CPU UTILIZATION = ! CPU BUSY. (LU=9112)**

CAUSE:

ACTION:

10000 **MESSAGE: NRJE: XDS ACCESS ERROR WHILE RELEASING CONSOLE FOR WORKSTATION NUMBER !; PIN=!; (XDS STATUS=!) (INTR=10000)**

CAUSE: While releasing the console the access portid in the NRJE extra data segment could not be released. May have occurred while a system shutdown was in progress.

ACTION: Contact Hewlett-Packard.

10001 **MESSAGE: NRJE: WARNING: CONSOLE ACCESS PORTID NOT FOUND IN NRJE XDS FOR WORKSTATION NUMBER !; PIN=!; (INTR=10001)**

CAUSE: A user in the host console facility released the console but the console access portid could not be found in the NRJE extra data segment. May have resulted from a workstation terminating just prior to the user attempting to release the console.

ACTION: Check preceding log messages to determine if a workstation had just terminated.

15001 **MESSAGE: ILLEGAL STRING ITEM (SEV=15001).**

CAUSE:

ACTION:

15002 **MESSAGE: ILLEGAL SPOOL FILE INDEX (SEV=15002).**

CAUSE:

ACTION:

15003 **MESSAGE: NONEXISTENT DEVICE (SPOOLER=15003).**

CAUSE:

ACTION:

15004 **MESSAGE: ILLEGAL STRING ITEMS COUNT (SEV=15004).**

CAUSE:

ACTION:

15005 **MESSAGE: ILLEGAL NEW ITEM VALUE (SEV=15005).**

CAUSE:

ACTION:

15006 **MESSAGE: ILLEGAL SPOOL FILE QUEUE (SEV=15006).**

CAUSE:

ACTION:

15007 **MESSAGE: ILLEGAL DEVICE (SPOOLER=15007).**

CAUSE:

ACTION:

15008 **MESSAGE: ILLEGAL CLASSNAME (SPOOLER=15008).**

CAUSE:

ACTION:

15009 **MESSAGE: ILLEGAL ITEM (SEV=15009).**

CAUSE:

ACTION:

15010 **MESSAGE: PARAMETER OUT OF BOUNDS (SEV=15010).**

CAUSE:

ACTION:

15011 **MESSAGE: ILLEGAL ITEMS COUNT (SEV=15011).**

CAUSE:

ACTION:

15012 **MESSAGE: SPLIT STACK CALLS NOT SUPPORTED (SEV=15012).**

CAUSE:

ACTION:

15013 **MESSAGE: END OF SPOOL FILE (SPOOLER=15013).**

CAUSE:

ACTION:

15014 **MESSAGE: NO SPOOL FILES IN QUEUE (SPOOLER=15014).**

CAUSE:

ACTION:

15015 **MESSAGE: DEVICE CLASS CAN'T BE CONFIGURED FOR MORE THAN ONE DEVICE (SPOOLER=15015).**

CAUSE:

ACTION:

15016 **MESSAGE: SPOOL FILE MUST BE LOCKED BEFORE IT IS OPENED (SEV=15016).**

CAUSE:

ACTION:

15018 **MESSAGE: INCOUNT FOR DEVICE CLASSES IS TOO SMALL (SEV=15018).**

CAUSE:

ACTION:

Reverse NRJE Messages

Listed below are the messages that are written to the host system console; they are not displayed at the workstation, written to $STDLIST, or logged.

MESSAGE: REMOTE JOB *nnnn* STREAMED

CAUSE: The output for host job *nnnn* was successfully streamed by NRJE.

ACTION: No action required.

MESSAGE: REMOTE JOB *nnnn* FAILED CIERR=*cccc*

CAUSE: Output for host job *nnnn* could not be streamed due to the command interpreter error *cccc*.

ACTION: Ensure that one banner card is sent to the punch device and that the translation indicator is set properly.

Glossary

A

ACF: *See* **Advanced Communication Function**.

ACF/NCP: *See* **Advanced Communication Function** for the **Network Control Program**.

ACF/VTAM: *See* **Advanced Communication Function** for the **Virtual Telecommunications Access Method**.

active state: A state in which part of an SNA node is able to function as it was designed.

Advanced Communication Function (ACF): A group of IBM program products that uses SNA concepts.

Advanced Communication Function for the Network Control Program (ACF/NCP):

An IBM program product that resides in the 37xx Communications Controller and supports single and multiple domains.

Advanced Communication Function for the Virtual Telecommunications Access Method (ACF/VTAM): An IBM program product on the host that provides communication access to and from the SNA network for single and multiple domains.

B

batch communications: A form of data communications in which a facility collects data over a period of time and then submits the collected information to a host computer. Typical batch communications consist of large amounts of information transmitted at infrequent intervals.

batch processing: A technique of data processing in which jobs are collected and grouped before processing. Data is collected over a period of time, then submitted to a host computer.

bind: An SNA request sent by the host to activate a session between two logical units. The request specifies the detailed protocol to be accepted before initiating an LU-LU session.

C

chain: A sequence of RUs constituting a recoverable entity.

CI: *See* **Command Interpreter**.

cluster controller: A programmable device that supports one or more terminals or printers. For example, the cluster controller would be the center node in a star shaped cluster network, governing all message traffic to and from the other nodes. A cluster controller communicates with the communications controller either

through a local channel attachment or through modems and phone lines.

Command Interpreter (CI):

The part of MPE which analyzes and processes commands entered during a session or submitted as part of a job.

communications controller: A type of front-end processor, such as an IBM 3705, 3720, or 3725, that communicates between the communications facility and a host computer. IBM supports both programmable and nonprogrammable communication controllers. Hewlett-Packard's INP and PSI are types of communications controllers.

communications link: The hardware that directly connects two locations for the purpose of data transfer, including the interface boards, cables, and modems (if a telephone line is used).

Control Unit (CU): A device that controls input and output for one or more devices such as printers or display stations.

CU: *See* **Control Unit**.

D

data set: In IBM terminology, any file.

Distributed Processing Programming eXecutive (DPPX): A general-purpose IBM operating system found on the IBM 8100. DPPX supports a remote job entry workstation facility (DPPX/RJE).

Distributed Processing Programming eXecutive/Remote Job Entry (DPPX/RJE) workstation facility: An IBM 8100 facility that enables users to submit batch jobs to host processors and to receive output.
Hewlett-Packard has developed products which, when taken together, emulate many of the major DPPX/RJE capabilities.

DPPX: *See* **Distributed Processing Programming eXecutive**.

DPPX/RJE: *See* **Distributed Processing Programming eXecutive/Remote Job Entry workstation facility.**

E

emulation: A technique, using software, allowing one computer to behave exactly like another computer. A Hewlett-Packard emulation of an IBM device is an HP data communications product that enables an HP computer or terminal to carry out many of the functions of the IBM device. For example, the HP SNA NRJE product enables an HP computer

to carry out many of the functions of an IBM 8100 DPPX/RJE workstation.

F

FMD: *See* **Function Management Data service**s.

FMH: *See* **Function Management Header**.

front end processor: A smaller computer that relieves a larger host computer of certain processing tasks, such as error detection, line control, and message handling.

Function Management Data (FMD) services: A generic term that describes two SNA layers: Session Presentation and Session Network Services.

Function Management Header (FMH): An SNA header that selects a destination or source for subsequent data transmission and supplies information for other data management tasks.

H

host: A central computer that provides services for other computers and terminals attached to it.

I

INIT-SELF: An SNA request to the SSCP to initiate an LU-LU session.

intrinsic: A subprogram provided by Hewlett-Packard systems. Intrinsics perform common functions such as opening files, opening communications lines, or transmitting data over a communications line.

J

JECL: *See* **Job Entry Control Language**.

JES: *See* **Job Entry Subsystem**.

JES2: *See* **Job Entry Subsystem 2**.

JES3: *See* **Job Entry Subsystem 3.0**.

job: The basic unit of batch work on an IBM system. A job consists of a series of job control language statements. In addition to these statements, a job can include programs and input data.

Job Entry Control Language (JECL): JECL statements are used for job control under the VSE/POWER subsystem. These statements define a job to VSE/POWER and specify how job input and output are to be processed.

Job Entry Subsystem (JES): A set of programs and routines that generally schedules spools and batch jobs. It also handles input and output.

Job Entry Subsystem 2 (JES2): A common IBM job entry subsystem used under the MVS operating system.

ob Entry Subsystem 3 (JES3):

An IBM job entry subsystem that is an extension of the Asymmetric Multiprocessing System (ASP) program. JES3, which supports multiprocessing, receives jobs into the system and processes all output produced by a job.

L

ldev: *See* **logical device**.

ldn: Logical device number. *See* l**ogical device**.

link: The physical or logical connection between two devices in a network.

logging: The recording of significant events that may be of use to the user at the time they occur. This is distinguished from tracing, which is the recording of events for future use.

logical device (ldev): A disk file, a set of disk files, or a physical device associated with a data stream between a host and a remote system. An HP logical device is identified either by a number or by a device class name.

logical printer: Receives line printer images from a host system.

logical punch: Receives card punch images from a host system.

logical reader: Transmits card punch images to a host system.

Logical Unit (LU): A program or a set of programs within a node that provides access to an SNA network for an end user. A logical unit can support two types of sessions: (1) an LU-SSCP session and (2) an LU-LU session. The logical unit formats message units, displays information, and handles error recovery. Multiple logical units can reside in an SNA node.

Logical Unit (LU) class: A set of logical units on the HP 3000. For SNA IMF, an LU class may contain multiple LUs.

Logical Unit Type 1 (LU.T1): A session between an application program and one or more data processing terminals. The environment may be interactive, distributed processing, or batch data transfer. Character-oriented printer devices, batch support (RJE), and the SNA Character String (SCS) are supported.

Logical Unit Type 2 (LU.T2): A session between an application program and one 3270-type display station using interactive data transfer.IBM 3270 Data Stream Capability (3270 DSC) and 3270-type display station support is provided.

Logical Unit Type 3 (LU.T3): A session between an application program and a printer. IBM`3270 Data Stream Capability (3270`DSC) is provided. Many devices support both LU.T1 and LU.T3 print requests.

logical writer: A logical printer or a logical punch.

LU: *See* **Logical Unit**.

LU class: *See* **Logical Unit class**.

LU-LU session: A connection between two LUs.

LU.T1: *See* **Logical Unit Type 1.**

LU.T2: *See* **Logical Unit Type 2**.

LU.T3: *See* **Logical Unit Type 3**.

M

modem: An acronym for MODulator-DEModulator. A modem converts serial digital data from a transmitting terminal into a form suitable for transmission over the analog telephone channel. A second modem reconverts this signal to serial digital data for acceptance by the receiving terminal. Bell 201, 208, and 209 modems are used for synchronous data transfer.

MPE: *See* **MultiProgramming Executive**.

Multiple Virtual Storage (MVS): An IBM operating system that is an extension of OS/MVT. MVS is also known as OS/VS2 Release 2. IBM enhanced the original version of MVS; these enhanced systems include MVS/SP (Multiple Virtual Storage/System Product) and MVS/XA (Multiple Virtual Storage/eXtended Architecture).

MultiProgramming Executive (MPE): The Hewlett-Packard operating system for the HP 3000 computer. MPE consists of programs that handle exchanges between HP terminals, printers, and executing programs and the internal HP 3000 Communications Software.

MVS: *See* **Multiple Virtual Storage**.

N

Native Language Support (NLS): A Hewlett-Packard product that provides the HP 3000 with the features necessary to produce localized application programs for end users without reprogramming for each language or country.

NAU: *See* **Network Addressable Unit**.

NCP: *See* **Network Control Program**.

network: A series of points interconnected by a communications channel. These may be computers, terminals, or other peripherals.

Network Addressable Unit (NAU): Either a program or group of programs that represents the source and destination of data in a network. The three kinds of network addressable units are SSCP, LU, and PU. A communication session must exist before data can be transferred. Sessions are established by the SSCP in this order:

- First with the PU.
- Then, with each LU before two LUs can communicate in a session.

Four types of sessions exist:

- SSCP-SSCP
- SSCP-PU
- SSCP-LU
- LU-LU

Network Control Program (NCP): A program that controls the operation of a communications controller.

Network File Transfer (NFT):

A user-level protocol that enables the transfer or copying of files from one node to another or within a single node, interactively or programmatically.

Network Services Procedure Error (NSPE): An SNA request from the SSCP to the LU indicating an error during session startup or shutdown.

NFT: *See* **Network File Transfer.**

NLS: *See* **Native Language Support**.

NMS: *See* **Node Management Services**.

node: A set of hardware devices and associated software at the end of a data link. In an SNA network, nodes can be distributed or host processors, communications controllers, cluster controllers, or terminals.

Node Management Services (NMS): A major software component of the HP 3000 operating system that provides a common set of services to HP networking products. It includes utilities and commands for configuration, event logging, message tracing, link management, and subsystem initiation, termination and control.

node name: A name assigned to a node configured into a Local Area Network (LAN). It must be a maximum of eight characters in length and cannot be qualified.

NSPE: *See* **Network Services Procedure Error**.

P

Physical Unit (PU): A component of an SNA node. A PU controls the resources of a node and reports errors and physical failures to the SSCP. One PU exists per node. A PU is the access method in a host node, the NCP in the communications controller node, and the hardware and software in the peripheral nodes. PU types for each kind of node are:

- PU.T1 is a terminal or printer in an SNA node.
- PU.T2 is a cluster controller, such as the IBM 3274, in an SNA node.
- PU.T4 is a communications controller, such as the IBM 3705, 3720, or 3725.
- PU.T5 is a host processor with a System Services Control Point (SSCP).

POWER: *See* **Priority Output Writers, Execution processors, and input Readers**.

Priority Output Writers, Execution processors, and input Readers: A common IBM subsystem used to improve the input and output of jobs to the VSE operating system environment.

PU: *See* **Physical Unit**.

R

remote: A workstation that is not local to the host system, and is configured under the host job entry subsystem. A remote can be connected to its host by communications facilities or by direct attachment.

remote job access: The submission of batch jobs to a host system from remote sites over communication links

Remote Job Entry (RJE):

Submission of jobs through an input unit which has access to a computer through a data communications link.

Request Header (RH): Control information that precedes a request/response unit (RU). It specifies the type of RU and contains control information for the RU.

Request Unit (RU): A message unit containing control information, such as a request code or function management headers, end-user data, or both.

Response Header (RH):

Control information that indicates whether a response is positive or negative. A response unit optionally follows it.

Response Unit (RU): A message unit that acknowledges a request unit. If the response unit is negative, it will contain

sense data that defines the exception condition. If the response unit is positive, it may contain additional information; for example, it may contain session parameters in response to BIND SESSION.

RH: *See* **Request Header** or **Response Header**.

RJE: *See* **Remote Job Entry**.

RU: *See* **Request Unit** or **Response Unit**.

S

SDLC: *See* **Synchronous Data Link Control**.

session: A logical connection between two network addressable units that allows them to communicate.

SNA: *See* **Systems Network Architecture**.

spooled reader: The MPE ldev for holding jobs to be sent to the host for a given SNA NRJE workstation.

SSCP: *See* **System Services Control Point**.

Synchronous Data Link Control (SDLC): An IBM term for a link protocol used for the transfer of data between stations. The information transfer is synchronous, thus eliminating the need for start and stop bits. It is also code-transparent, transmitted serial-by-bit, and may be transmitted in duplex or half-duplex over switched or nonswitched links. The link configuration may be point-to-point, multipoint, or loop.

System Services Control Point (SSCP): A part of an SNA host node that helps to manage configurations, controls network operations, does problem solving, and provides other session services for end users. An SSCP exists only in the host and is exercised by the host's communications access method.

Systems Network Architecture (SNA): A comprehensive specification for distributed data processing developed by IBM. SNA defines a layered protocol for communicating and controlling a communications network within the IBM environment.

T

TERM-SELF: An SNA request to the SSCP to terminate an LU-LU session.

TH: *See* **Transmission Header**.

timeout: Time limit imposed for a given task to be completed.

tracing: The recording of events for future use. (*See also* **logging**).

Transmission Header (TH): A transmission header is used by the Transmission Control and

Path Control layers of SNA for routing and sequencing data sent through an SNA network.

transmission queue: A queue of jobs to be transmitted to the host; spooled reader.

V

virtual reader: A logical device configured into the operating system that is used to queue files waiting for transmission to the host on a logical reader.

Virtual Storage Extended (VSE): An operating system that manages data processing resources for IBM System/370 mainframes.

Virtual Telecommunications Access Method (VTAM): An IBM communications access method within the host that handles the data communications and network control details for the host.

VSE: *See* **Virtual Storage Extended**.

VSE/POWER: A common IBM subsystem used to control the input and output of jobs to the VSE operating system environment.

VTAM: *See* **Virtual Telecommunications Access Method**.

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