Operational Traps

This chapter describes operational traps. If you need help in interpreting these traps, contact your customer support representative.

Trap Grouping by Category

Traps are grouped alphabetically into sections in this chapter according to the software module in which they occur. Within each section, traps are listed in numerical order.

Note Within some software modules, gaps exist in the trap numbering sequence. This is because traps have been added or removed during the product life cycle. For instance, LCC traps begin with LCC_4 because LCC_1, LCC_2, and LCC_3 have been removed.

Comment Traps

This section lists traps generated by use of the **comment** command.

Trap Name	COMMENT_1001
Trap Text	`<string specified by user>` When the user is a human operator, the string can say anything. When the trap is invoked by scripts that run during installation, the string is one of the following: 1. `swchgver: Rebooting the network processor` 2. `WARNING: distribution to standby network processor got error. Consult your release note for more information.` 3. `VALIDATE ERROR: Inconsistencies in system installation: see trap log for more details`
Description	This trap is generated by an operator, a support engineer, or a system script using the **comment** command. The installation scripts use this trap to notify you of system events associated with the installation of new hardware or software. (See the *LightStream 2020 NP O/S Reference Manual* for more information on the **comment** command.)
Action	When the trap is invoked by a human operator, it should suggest appropriate actions. When the trap is invoked by scripts that run during installation, match the trap text above to the action below: 1. No action is required. 2. Take the action suggested by the trap message. 3. Review the trap log and take the actions recommended for the informational traps you find there.

FCLoad Traps

This section lists traps for the FCLoad (function card load) module. FCLoad may be invoked by the system during the installation of new system software (as described in the *LightStream 2020 Release Notes*), and by the operator during the installation of new line cards (as described in the *LightStream 2020 Hardware Reference & Troubleshooting Guide*).

Trap Name	FCLOAD_2
Trap Text	`Slot <slot#>: loading flash image (<flash image name>)`
Description	This trap is generated when a new flash image is loaded into the indicated card by an operator. Loading flash may be necessary when installing a card in an existing system, as described in the *LightStream 2020 Hardware Reference & Troubleshooting Guide.*
Related Traps	FCLOAD_2021, FCLOAD_2011, FCLOAD_2012
Action	None.

Trap Name	FCLOAD_20
Trap Text	Slot <slot#>: flash load error
Description	This trap is generated when an error occurs during load of flash memory.
Related Traps	FCLOAD_2020, FCLOAD_2021, FCLOAD_2022, FCLOAD_2023
Action	Check the trap log for the related informational traps, which provide more detailed information about the error. Take the actions recommended for the related traps.

LCC Traps

This section lists traps for the Line Card Control (LCC) process.

Trap Name	LCC_4
Trap Text	Warning: attempt to configure an incompatible protocol on port <port#>
Description	This trap indicates that an attempt was made to configure an edge port on a trunk card or a trunk port on an edge card, but the change has been rejected by the software.
Causes	This message is generated only when an attempt is made to change to an incompatible port type on a port that is *not* the lowest-numbered configured port. Card type is derived from the lowest-numbered configured port on the card: if the lowest numbered port is an edge, then the card is an edge. Therefore, if an attempt is made to change a port other than the lowest-numbered port, the change is rejected and the LCC_4 trap is generated. If the change is made to the lowest-numbered configured port, then the LCC_5 trap is generated.
Action	To change the port type, reconfigure the card type. See the *LightStream 2020 Configuration Guide* for information on configuring cards.

Trap Name	**LCC_5**
Trap Text	```Warning: port protocol overriding configured card type on port <port#> - card will be rebooted```
Description	This trap indicates that the lowest-numbered port on the card was changed from an edge to a trunk or from a trunk to an edge. Because card type (trunk or edge) is derived from the type of the lowest-numbered configured port, the line card control process automatically updates the EEPROM to reflect the change and the card is rebooted. When the line card restarts, it should reflect the change to the lowest-numbered port.
Causes	The lowest-numbered configured port may have been changed to a different type (either from edge to trunk or from trunk to edge.) This trap can also be generated when a new line card is inserted in a chassis, if the EEPROM setting as shipped from manufacturing is different from the configured setting.
Action	This problem is self-correcting. The line card should automatically reconfigure and restart with no operator intervention. If this trap recurs, run diagnostics on the line card. (Refer to the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for information.)

Trap Name	**LCC_10**
Trap Text	`Warning LC reported error <error> on port <port#>` where `<error>` = one of the following (see "Description" and "Action" section of table for meaning of corresponding superscript): `Illegal Command`[a] `Illegal Table`[a] `No Resources`[e] `Tsu Hardware`[b] `Illegal Alloc`[a] `Unknown Task`[a] `Unknown Table`[a] `Bad Port`[a] `Data Overflow`[a] `Port In Use`[f] `Illegal Bitrate`[c] `Illegal Index`[a] `Illegal Framesize`[c] `Illegal NIT`[g] `Eeprom Not Initialized`[a] `Illegal Value`[a] `Mismatched Cards`[d] `Unspecified`[a]
Description	Depending on `<error> type`, this trap indicates one of the following: a. There is a software problem. b. There is a hardware problem on the line card. c. There is a configuration problem. d. There is an incompatible line card/access card pair. e. There is a temporary resource shortage (for example, the system may have run out of buffers used to communicate with the line card). f. There is a temporary resource shortage from which the system will recover automatically. g. An illegal network interface type (NIT) or loop mode is specified for the port. (The legal network interface types are DTE, DCE, and DCE_ttloop.)
Action	a. Call your customer support representative. b. Troubleshoot line card hardware. (See the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for instructions.) c. Check the setting of the attribute. (See the *LightStream 2020 Configuration Guide*.) If the attribute value is within the legal range, contact your customer support representative. d. Check your line card and access card for the port, and change the appropriate card. e. Re-issue the most recent configuration change to the card in question. (For example, if you have recently enabled or disabled a port or created new circuits, you must re-issue the command or update the configuration again, as appropriate.) f. No action is required. g. Reset the port using the CLI commands **set port <card#.port#> inactive** and **set port <card#.port#> active**.

Trap Name	**LCC_11**
Trap Text	`Warning LC reported error illegal physical port type on port <port#>`
Description	This trap indicates that the physical port type is not on the list of supported port types for the line card.
Causes	For low-speed modules: jumper settings on the access card may be incorrect. For all module types: the version of software running on the line card may not support the hardware. (This could happen, for instance, if you installed a new type of access card and had not updated your line card software yet.)
Action	For low-speed modules: check jumper settings on the access card and correct if needed. See the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for information on setting jumpers. For all module types: check the line card software version by examining the Description field displayed when you enter the CLI **show port <port#> all** command. Upgrade your software if necessary. See the *LightStream 2020 Network Operations Guide* for information on the **show port** command. See the relevant release note for information on upgrading your software.

Trap Name	**LCC_12**
Trap Text	`Node <node name> Port <port#> entering internal loop mode`
Description	The CLI **set port <port#>loop** command has been issued to run an internal loopback test on the port. (See the *LightStream 2020 Network Operations Guide* for information on looping ports.)
Causes	This trap reports that the port has entered internal loop mode.
Action	None.

Trap Name	**LCC_14**
Trap Text	`Node <node name> Port <port#> entering remote loop mode`
Description	This trap reports that the port has entered remote loop mode.
Causes	The CLI **set port <port#> loop** command has been issued to run a remote loopback test on the port. (See the *LightStream 2020 Network Operations Guide* for more information on looping ports.)
Action	None.

Trap Name	**LCC_15**
Trap Text	`Node <node name> Port <port#> unlooped`
Description	This trap reports that the port has exited loop mode.
Causes	The CLI **set port <port#> unloop** command has been issued to stop the loopback test on the port. (See the *LightStream 2020 Network Operations Guide* for information on unlooping ports.)
Action	None.

Trap Name	**LCC_16**
Trap Text	`Node <node name> Port <port#> is experiencing a high error rate`
Description	This trap reports that the port has a high receive or transmit error rate.
Causes	This trap is sent when a port's receive or transmit error rate exceeds its error threshold.
Action	Examine the node to determine why the error rate is high. See the *LightStream 2020 Network Operations Guide* and the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for more information on diagnosing the cause of high error rates.

Trap Name	**LCC_18**
Trap Text	`Node <node name> Card <slot#> has inaccessible or invalid EEPROM`
Description	This trap indicates that there is a problem with the card's EEPROM.
Causes	EEPROM may have been physically damaged or removed. EEPROM contents may have been corrupted.
Action	Contact your customer support representative.

MMA Traps

This section describes traps generated by the master management agent (MMA).

Trap Name	**MMA_1**
Trap Text	`Reloading configuration database.`
Description	This trap indicates that the MMA has read the local configuration database on the NP hard disk and is distributing the information to relevant software processes.
Causes	The MMA reads the local configuration database when the system is started up or rebooted, the NP is rebooted, the backup NP becomes primary, or when the MMA process itself is restarted due to a process error.
Action	None.

NDD Traps

This section lists traps for the Neighborhood Discovery Daemon (NDD).

Trap Name	**NDD_1**
Trap Text	`Network Processor <slot#> becoming primary NP.`
Description	This trap is provided for information only. When the system boots, it indicates the slot number of the NP that is operating as the primary NP (if you have two NPs in your system).
Action	None.

Trap Name	**NDD_2**
Trap Text	`Network Processor <slot#> becoming backup NP.`
Description	This trap is provided for information only. When the system boots, it indicates the slot number of the NP that is operating as the backup NP (if you have two NPs in your system).
Action	None.

Trap Name	**NDD_3**
Trap Text	`Line Card <node name:slot#> (<card type>) up.`
Description	This trap is provided for information only. It indicates that a particular line card has come up.
Action	None.

Trap Name	NDD_4
Trap Text	`Line Card <node name:slot#> (<card type>) down` `(switch up/down failure).`
Description	This trap indicates the deactivation or failure of a running line card. The trap can occur due to an operator action such as removing the card, deactivating the card, or running diagnostics on the card. It can also indicate a line card failure.
Action	If the operator didn't provoke the trap, run diagnostics on the specified line card, and replace the card if it fails diagnostics. (Refer to the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for instructions.)

Trap Name	NDD_5
Trap Text	`Line Card <node name:slot#> (<card type>) down (ERMP` `failure <ERMP code>).`

Description	This trap indicates the deactivation or failure of a running line card. The trap can occur due to an operator action such as removing the card, deactivating the card, or running diagnostics on the card. It can also indicate a line card failure.
	
	ERMP codes that probably indicate a failure or deactivation of the line card:
	• 0x401: keepalive-failure
	  The NP stopped receiving messages from the line card.
	• 0x405: rtx-failure
	  The NP was unable to get a message accepted and acknowledged by the line card.
	• 0x406: remote-keepalive-failure
	  The NP received a report from the line card that the line card could not receive messages from the NP.
	Other ERMP codes:
	• 0x404: close
	  The device at the remote end of the connection did a controlled close (for example, a neighbor NP rebooted).
	• 0x403: failure
	  Internal protocol failure. Report this event to your customer support representative.

Action	If the operator didn't provoke the trap, run diagnostics on the specified line card, and replace the card if it fails diagnostics. (See the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for instructions.)

Trap Name	NDD_6
Trap Text	`System Process <process type> exited unexpectedly` `(status <value>).`
Description	This trap indicates that the specified process exited unexpectedly. Either the process will be restarted automatically by NDD, or NDD will reboot the NP to re-initialize the entire system.
Action	Usually, no action is required. If this trap occurs repeatedly, either because different processes exit or because the same process exits multiple times, contact your customer service representative.

Trap Name	NDD_7
Trap Text	`Line Card Control Process for <node name: slot#>` `exited unexpectedly (status <value>).`
Description	This trap is provided for information only. The LCC process on the specified card exited unexpectedly. The process will be restarted automatically by NDD.
Action	Usually, no action is required. However, if this trap occurs repeatedly, either because different processes exit or because the same process exits multiple times, contact your customer service representative.

Trap Name	NDD_8
Trap Text	`Network Processor <node name: slot#> rebooting` `(detected failure of primary NP)`
Description	In a switch with two NPs, this trap is generated by the backup NP when it notices that the primary, or active, NP is no longer available. After issuing this trap, the backup NP reboots, then returns to service as the node's new primary NP. This is generally followed by an NDD_1 trap.
Action	Troubleshoot the NP that failed. (See the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for instructions.)

Trap Name	NDD_10
Trap Text	`Mismatch between programmed chassis id (<ID# from eeprom>) and configured chassis id (<ID# from configuration>)`
Description	This trap indicates that the MIB variable chassisId does not match the chassis ID programmed in EEPROMs on the midplane. The chassis ID is programmed into two EEPROMs on the midplane as part of the manufacturing process; the same ID is stored in the configuration database for the chassis.
Causes	The chassis ID has not been configured correctly in the database, or the midplane has been replaced and the correct chassis ID has not been programmed into the midplane EEPROM.
Procedure	1 If you are just starting a new system, verify the chassis ID in the midplane, using the CLI command **show tcs <SA | SB> midplane.** Change the value of the Chassis ID attribute and update the node. (You can change the attribute using the CLI or the LightStream 2020 configurator. See the *LightStream 2020 CLI Reference Manual* or the *LightStream 2020 Configuration Guide* for information on changing the Chassis ID attribute.)
	2 If you have replaced the midplane, verify that the chassis ID for the replacement midplane has been set to the same value as the chassis ID in the original midplane. (To set the chassis ID in the EEPROM, enter **set tcs <SA | SB> midplane nodeaddress <chassis ID>.** The chassis ID is stored in *two* EEPROMs on the midplane and they *must* match. Issue the command twice, once for SA and once for SB. If you have only one switch card, you must issue the command for the slot in which the switch card resides, then move the card to the other slot and issue the command again. (A detailed procedure for setting chassis IDs is provided in the *LightStream 2020 Hardware Reference & Troubleshooting Guide*.)

Trap Name	NDD_11
Trap Text	`Mismatch between programmed midplane chassis IDs in redundant switches (<chassis ID in slot A> versus <chassis ID in slot B>)`
Description	This trap indicates that the two EEPROMs on the midplane contain different chassis ID numbers. It can occur only in a node with two switch cards. The chassis IDs in the two EEPROMs must be identical (but otherwise unique) within the LightStream 2020 network. Cisco Systems, Inc. assigns a chassis ID to every LightStream 2020 chassis. The chassis ID is written to the two EEPROMs in the factory. One EEPROM is connected to and accessible from the switch card in slot A; the other EEPROM is connected to and accessible from the switch card in slot B.
Action	Determine the correct chassis ID and change one or both of the chassis IDs in the EEPROMs so that the two IDs match. For detailed instructions, refer to the *LightStream 2020 Hardware Reference & Troubleshooting Guide*.

NPIP Traps

This section lists traps for the Network Processor Internet Protocol (NPIP) module that provides IP service.

Trap Name	NPIP_3
Trap Text	`configuration error: the internal IP network overlaps with the Ethernet IP network`
Description	This trap indicates that a configuration error has been made: the *network* numbers of the LS2020's Primary IP Address and the NP Ethernet IP Address are the same.
Action	Check the settings for the Primary IP Address, NP IP Mask, NP IP Address, and NP IP Mask attributes. Refer to the *LightStream 2020 Configuration Guide* for information on correctly setting these attributes. Fix the appropriate attribute values and update the node's configuration.

Trap Name	NPIP_4
Trap Text	`configuration error: the internal IP network address is the same as the ethernet IP address`
Description	This trap indicates that the following configuration error has been made: the internal IP network address and the Ethernet IP address have been configured to the same value.
Procedure	1 Check the Primary IP address and the NP IP Address attributes. Refer to the *LightStream 2020 Configuration Guide* for information on correctly setting these attributes. 2 Fix the appropriate attribute value and update the node's configuration.

Trap Name	NPIP_5
Trap Text	`configuration error: the default router is not on the same IP network as the ethernet interface`
Description	This trap indicates that the following configuration error has been made: the default router has not been configured correctly.
Procedure	1 Check the Default Router attribute. Refer to the *LightStream 2020 Configuration Guide* for information on correctly setting this attribute. 2 Fix the attribute value and update the node's configuration.

Trap Name	NPIP_6
Trap Text	`configuration error: the primary and secondary NP IP addresses are not on the same IP network`
Description	This trap indicates that the following configuration error has been made: the primary and secondary NP IP addresses have not been configured correctly.
Procedure	1 Check the Primary IP Address and the Secondary IP address attribute values. Refer to the *LightStream 2020 Configuration Guide* for information on correctly setting these attributes. 2 Fix the appropriate attribute value and update the node's configuration.

NPTMM Traps

This section lists traps for the NP TCS Monitoring Module (NPTMM).

Trap Name	NPTMM_2
Trap Text	`Bulk Power Supply <A or B> has been removed`
Description	This trap is provided for information only. It indicates that one of the bulk power supplies has been removed.
Action	No action is required; however, the node will be without power supply redundancy until the supply is replaced.

Trap Name	NPTMM_6

Trap Text	`<parameter name> of card <slot#> is outside of the normal range`
	where:
	`<parameter name> = TEMPERATURE#1`
	`TEMPERATURE#2`
	`TCS VCC VOLTAGE`
	`VCC VOLTAGE`
	`SCSI VOLTAGE (FOR NP)`
	`VEE VOLTAGE`
	`VPP VOLTAGE`
	`PADDLE CARD TEMPERATURE#1`
	`PADDLE CARD TEMPERATURE#2`
	`BULK VOLTAGE`

Description	The specified value, monitored by the TCS, is outside of its normal range.
Procedure	1 For the temperature-related traps, verify that the ambient temperature in the room is within the range specified in the *LightStream 2020 Site Planning and Cabling Guide*. Verify that the blowers are operating properly and that the air intakes on the LightStream 2020 chassis are not blocked. Also verify that all cards, bulkheads, filler panels, covers, and components are in place, as required for proper operation of the cooling system. See the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for more troubleshooting information. 2 For the voltage-related traps, contact your customer support representative.

Trap Name	NPTMM_8
Trap Text	`Card <slot#> POST Failed; Download Is Not Initiated`
Description	This trap indicates that the power-on self test (POST) failed. This indicates there might be a hardware problem.
Procedure	1 Review the results of the POST. (See the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for instructions.) 2 Reset the specified card and rerun the POST. 3 If the problem persists, run diagnostics on the specified card. If the card fails or will not come up, replace it. (See the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for replacement instructions.) 4 If the card passes POST and diagnostics (but you get this trap), contact your customer support representative.

Trap Name	NPTMM_9
Trap Text	`Card <slot#> Download Failed More Than <number of times download failed, default=2> Times; New Download Is Not Initiated`
Description	This trap indicates the download of the specified card has failed multiple times. This indicates there may be a hardware problem.
Action	Run diagnostics on the specified card. If the diagnostics fail or if the card will not come up, replace the card. (See the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for instructions.) If the card passes diagnostics (but you get this trap), contact your customer support representative.

Trap Name	**NPTMM_10**
Trap Text	```Chassis ID inconsistency [FATAL error] (switch <A or B> programmed to <configured chassis ID> instead of expected <EEPROM chassis ID>)```
Description	This trap indicates that the configured value for the chassis ID does not match the value stored in the EEPROM on the midplane. A system reboot immediately follows this error.
Causes	An incorrect value may have been entered during configuration. The EEPROM on the midplane may be faulty.
Procedure	1 Check the value of the chassisID MIB object, using either the CLI or the configurator. See the *LightStream 2020 CLI Reference Guide* for information on using the CLI. See the *LightStream 2020 Configuration Guide* for information on using the configurator. 2 Determine the value in the midplane EEPROM by using the **sysver** command, as described in the *LightStream 2020 Hardware Reference & Troubleshooting Guide*. 3 If the configured value doesn't match the EEPROM value, then enter the correct chassis ID through the configurator or the CLI. 4 If the two chassis IDs match, contact your customer support representative because the EEPROM may be damaged or corrupted.

Trap Name	**NPTMM_11**
Trap Text	```PROCESS FATAL ERROR: <code>```
Description	This trap indicates that a fatal software error has occurred.
Action	Contact your customer support representative.

Trap Name	**NPTMM_14**
Trap Text	```Bulk Power Supply <A or B> Failed```
Description	One of the bulk power supplies failed. Your node will be without power supply redundancy until the failed supply is replaced.
Action	No action is required; however, the node will be without power supply redundancy until the failed power supply is replaced. To remove and replace the failed power supply, see the *LightStream 2020 Hardware Reference & Troubleshooting Guide*. One power supply can completely power the LightStream 2020 switch.

Trap Name	**NPTMM_16**
Trap Text	`Cannot support fast cutover with swaccdrvr version # <version>, rebooting`
Description	This trap indicates that the cutover is going to cause a system reboot because the version of the SWACC driver on the NP can't cutover to the backup switch card without rebooting the system. This message is logged after an NPTMM_23 trap.
Causes	The NP kernel is out of date.
Action	None. However, if you want to upgrade the NP kernel, call your customer support representative.

Trap Name	**NPTMM_17**
Trap Text	`Assuming unsynced environment for cutover to switch <A or B>, rebooting...`
Description	This trap indicates that the NP has to reboot the system in order to perform the cutover. This message can be logged after an NPTMM_22 trap.
Causes	You may have a Release 1 switch card. Release 1 switch cards don't have clock synchronization circuitry. (You always receive this trap message when cutover involves a Release 1 switch card.) If your system contains one or more Release 2 switch cards, there may be a problem with the clock synchronization circuitry.
Action	If you have a Release 1 switch card, no immediate action is required. After it reboots, your system should function properly. However, in order to restore redundancy of your switch cards, you must troubleshoot your other switch card. If problems persist after the reboot, troubleshoot the switch cards. For information on troubleshooting, refer to the *LightStream 2020 Hardware Reference & Troubleshooting Guide*.

Trap Name	**NPTMM_18**
Trap Text	Attempted illegal operator-initiated cutover to switch <A or B>
Description	This trap indicates that the planned cutover could not be performed because there was a problem with the backup switch card.
Causes	The backup switch card may have a clock problem. The backup switch card may have been removed from the slot.
Action	If the backup switch card is present, see the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for troubleshooting and replacement instructions.

Trap Name	**NPTMM_19**
Trap Text	Can't alter b-is-primary bit on Switch B
Description	This trap indicates that the NP could not change a bit on the backup switch card used by the function cards to determine which switch is active. Therefore, the backup switch card cannot be used as the active switch card. This message occurs in conjunction with switch cutover messages, such as NPTMM_23.
Causes	There is a hardware problem on switch B.
Action	Troubleshoot (and replace if necessary) the switch cards. Refer to the *LightStream 2020 Hardware Reference & Troubleshooting Guide*.

Trap Name	NPTMM_20
Trap Text	FATAL ERROR: Secondary switch clock bad, cutover failed, rebooting...
Description	This trap indicates that the NP could not perform an unplanned cutover because it detected a problem on the backup switch card. This message is followed by a system reboot.
Causes	This is one of the messages that can follow an NPTMM_25 trap. When it occurs in conjunction with that message, it means that both switch cards have a problem.
	The backup switch card may have a hardware problem with its clock signal. Either the signal is intermittent or not present.
	The backup switch card may have been removed from its slot.
Action	Troubleshoot (and replace if necessary) the switch cards. Refer to the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for instructions.
	If the switch cards do not appear to be the problem, troubleshoot the NP. Refer to the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for instructions.

Trap Name	NPTMM_21
Trap Text	FATAL ERROR: Secondary switch clock is bad, can't cutover, rebooting...
Description	This trap indicates that the NP could not perform an unplanned cutover because it detected a problem on the backup switch card. This message is followed by a system reboot.
	This is one of the messages that can follow an NPTMM_26 trap. When it occurs in conjunction with that message, it means that both switch cards have a problem.
Causes	The backup switch card may have a hardware problem with its clock signal - either the signal is intermittent or not present.
	The backup switch card may have been removed from its slot.
Action	Troubleshoot (and replace if necessary) the switch cards. Refer to the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for instructions.

Trap Name	**NPTMM_22**
Trap Text	`Initiating unplanned cutover to switch <A or B>`
Description	This trap indicates that the NP has initiated an unplanned cutover to the backup switch card because it could not access certain TCS registers. This is one of the messages that can follow an NPTMM_26 trap. This message can occur in conjunction with an NPTMM_17 message.
Action	None.

Trap Name	**NPTMM_23**
Trap Text	`Initiating planned NP lossless cutover to switch <A or B>`
Description	This trap indicates that the NP is initiating cutover to the backup switch card in response to an operator request. This trap indicates that the request occurred when the switch clocks were synchronized. After this message is logged, one of the following trap messages is logged: NPTMM_16 or NPTMM_27.
Action	None.

Trap Name	**NPTMM_24**
Trap Text	`NP TCS SLAVE version cannot support fast Switch cutover`
Description	This trap indicates that the version of the TCS slave on the NP cannot support unplanned cutover without rebooting the system. (The message is displayed only during system initialization.)
Action	None. However, if you want the newer version of the TCS slave, call your customer service representative.

Trap Name	NPTMM_25
Trap Text	`NP Switch clock loss from switch <A or B> detected`
Description	This trap indicates that the NP has detected that there is a problem with the clock signal received from the active switch card. After this trap message is logged, one of the following three trap messages will be logged: NPTMM_20, NPTMM_31, or NPTMM_32.
Action	See the action required for the associated trap: NPTMM_30, NPTMM 31, or NPTMM_32.

Trap Name	NPTMM_26
Trap Text	`NP detected action register failure while on switch <A or B>`
Description	This trap indicates that the NP could not read or write a TCS register during normal operations. After this trap message is logged, one of the following trap messages is logged: NPTMM_21, NPTMM_22, or NPTMM_17.
Causes	There may be a hardware or firmware problem in the TCS system.
Action	See the action required for the associated trap: NPTMM_17, NPTMM_21, or NPTMM_22.

Trap Name	NPTMM_27
Trap Text	`Planned lossless cutover failed due to ioctl error`
Description	This trap indicates that the planned cutover failed due to a problem on the active NP.
Causes	This message is logged after an NPTMM_23 trap.
Action	Contact your customer support representative.

Trap Name	**NPTMM_28**
Trap Text	`Planned cutover to switch <A or B> requested in unsync environment, rebooting...`
Description	This trap indicates that the NP couldn't perform the planned cutover to the backup switch card because it detected that the switch card clocks were not synchronized. This message is followed by a system reboot.
Causes	You may have a Release 1 switch card. Release 1 switch cards do not have clock synchronization circuitry. (You always receive this trap message when cutover involves a Release 1 switch card, even if the other switch card is a Release 2 version.) There may be a problem with the clock synchronization circuitry on a Release 2 switch card.
Action	If the chassis contains at least one Release 1 switch card, no action is required. After the system reboots itself, it should function properly. However, in order to restore redundancy of your switch cards, you need to troubleshoot your other switch card. If problems persist after the reboot, troubleshoot the switch cards. For information on troubleshooting, refer to the *LightStream 2020 Hardware Reference & Troubleshooting Guide*.

Trap Name	**NPTMM_29**
Trap Text	`Slot state rx message too small`
Description	This trap indicates that an internal software error has occurred.
Action	Call your customer service representative.

Trap Name	**NPTMM_30**
Trap Text	`Unable to determine an available Switch (<error code>)`
Description	This trap indicates that the NP could not determine which switch card is active, based on a periodic query of several hardware and firmware resources on the switch cards.
Causes	The TCS system may have a problem. One of the switch cards may have a problem.
Action	Contact your customer service representative with the error code.

Trap Name	NPTMM_31
Trap Text	Unplanned, lossy cutover to switch <A or B> occurred
Description	This trap indicates that the NP has successfully completed an unplanned cutover, caused by a problem on the active switch card, to the backup switch card. This is one of the messages that can follow an NPTMM_25 trap. When it occurs in conjunction with that message, it means that you have a new active switch card and that your other switch card needs to be fixed.
Action	No action is required; however, in order to restore redundancy of your switch cards, you need to troubleshoot your other switch card. Refer to the *LightStream 2020 Hardware Reference & Troubleshooting Guide*.

Trap Name	NPTMM_32
Trap Text	Unplanned cutover to switch <A or B> occurred in unsync environment, rebooting...
Description	This trap indicates that the NP could not perform an unplanned cutover to the backup switch card because it detected that the switch card clocks were not synchronized. This message is followed by a system reboot. This is one of the messages that can follow an NPTMM_25 trap. When it occurs in conjunction with that message, it means that you have a new active switch card and that your other switch card needs to be fixed.
Causes	You may have a Release 1 switch card. Release 1 switch cards do not have clock synchronization circuitry. (You always receive this trap message when cutover involves a Release 1 switch card.) There may be a problem with the clock synchronization circuitry on a Release 2 switch card.
Action	No action is required. After the system reboot, your system should function properly. However, in order to restore redundancy of your switch cards, you need to troubleshoot your other switch card. Refer to the *LightStream 2020 Hardware Reference & Troubleshooting Guide*.

Trap Name	**NPTMM_33**
Trap Text	`Slot <slot#> State Changed From <state> To <state>`
Description	This trap indicates that the switch card in the specified slot has changed from one state to another. The possible states are EMPTY, FAILED, UP, and DOWN.
Causes	A card changes to the EMPTY state if it is removed from the slot. A card changes to the FAILED state if it can't communicate over the TCS. A card changes to the UP state if it becomes operational and to the DOWN state if it ceases to be operational. If there is a change to the FAILED state, the trap occurs with the NPTMM_26 or NPTMM_30 trap.
Action	If the state has changed to FAILED or DOWN, investigate and if necessary troubleshoot the switch card. See the *LightStream 2020 Hardware Reference & Troubleshooting Guide* for details. Also see the action required for the associated traps: NPTMM_26 or NPTMM_30.

Watchdog Traps

This section lists traps for the NP Watchdog Timer Manager (watchdog) process.

Trap Name	**WATCHDOG_1**
Trap Text	`Neighborhood discovery daemon failure,` `rebooting system.`
Description	This trap indicates that NDD has failed and that the watchdog process is rebooting the system to restart NDD. Once NDD is restarted, all other processes are restarted by NDD. The NDD process monitors all processes in the network and restarts them automatically when necessary. The watchdog process is used to monitor the status of NDD itself and determine when NDD needs to be restarted.
Action	Normally, no action is required. If this trap occurs repeatedly, contact your customer support representative.