

This chapter gives a description, severity, and troubleshooting procedure for each commonly encountered Cisco ONS 15454 SDH alarm and condition. Tables [2-1](#) through [2-5](#) provide lists of ONS 15454 SDH alarms organized by severity. [Table 2-6](#) provides a list of alarms organized alphabetically. [Table 2-7](#) gives definitions of all ONS 15454 SDH alarm logical objects, which are the basis of the alarm profile list in [Table 2-8](#). For a comprehensive list of all conditions, refer to the *Cisco ONS 15454 SDH and Cisco ONS 15600 SDH TL1 Reference Guide*. For instructions on using Transaction Language One (TL1) commands, refer to the *Cisco ONS 15454 SDH and Cisco ONS 15600 SDH TL1 Command Guide*.

An alarm's troubleshooting procedure applies to both the Cisco Transport Controller (CTC) and TL1 version of that alarm. If the troubleshooting procedure does not clear the alarm log into the Technical Support Website at <http://www.cisco.com/techsupport> for more information or log into <http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml> to obtain a directory of toll-free Technical Support numbers for your country.

More information about alarm profile information modification and downloads is located in the "Manage Alarms" chapter of the *Cisco ONS 15454 SDH Procedure Guide*.

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## Alarm Index by Default Severity

The following tables group alarms and conditions by their default severities in the ONS 15454 SDH system. These severities are reported in the CTC Alarms window severity (SEV) column.

**Note:** The CTC default alarm profile contains some alarms or conditions that are not currently implemented but are reserved for future use.

The following tables group alarms and conditions by the severity displayed in the CTC Alarms window in the severity (SEV) column. All severities listed in this manual are the default profile settings. Alarm severities can be altered from default settings for individual alarms or groups of alarms by creating a nondefault alarm profile and applying it on a port, card, or shelf basis. All settings (default or user-defined) that are Critical (CR) or Major (MJ) are demoted to Minor (MN) in situations that do not affect service.

**Note:** The CTC default alarm profile in some cases contains two severities for one alarm (for example, MJ/MN). The ONS 15454 SDH platform default severity comes first (in this example, MJ), but the alarm can be demoted to the second severity in the presence of a higher-ranking alarm.

### Critical Alarms (CR)

[Table 2-1](#) alphabetically lists ONS 15454 SDH Critical (CR) alarms.

**Table 2-1: ONS 15454 SDH Critical Alarm List**

|                         |                         |                       |
|-------------------------|-------------------------|-----------------------|
| ADD-OPWR-HFAIL (OCH)    | ILK-FAIL (TRUNK)        | MFGMEM (AICI-AEP)     |
| ADD-OPWR-LFAIL (OCH)    | IMPROPRMVL (EQPT)       | MFGMEM (AICI-AIE)     |
| AU-LOF (VCTRM-HP)       | IMPROPRMVL (PPM)        | MFGMEM (BPLANE)       |
| AU-LOP (VCMON-HP)       | LINK-KEEPALIVE (ML1000) | MFGMEM (FAN)          |
| AU-LOP (VCTRM-HP)       | LINK-KEEPALIVE (ML100T) | MFGMEM (PPM)          |
| AUTOLSROFF (STMN)       | LINK-KEEPALIVE (MLFX)   | OPWR-HFAIL (AOTS)     |
| AWG-FAIL (OTS)          | LINK-KEEPALIVE (MLMR)   | OPWR-HFAIL (OCH)      |
| AWG-OVERTEMP (OTS)      | LOA (VCG)               | OPWR-HFAIL (OMS)      |
| BKUPMEMP (EQPT)         | LOF (DS3)               | OPWR-HFAIL (OTS)      |
| COMIOXC (EQPT)          | LOF (E4)                | OPWR-LFAIL (AOTS)     |
| CONTBUS-DISABLED (EQPT) | LOF (STM1E)             | OPWR-LFAIL (OCH-TERM) |
| CTNEQPT-PBPROT (EQPT)   | LOF (STMN)              | OPWR-LFAIL (OCH)      |
| CTNEQPT-PBWORK (EQPT)   | LOF (TRUNK)             | OPWR-LFAIL (OMS)      |
| EQPT (AICI-AEP)         | LOM (TRUNK)             | OPWR-LFAIL (OTS)      |
| EQPT (AICI-AIE)         | LOM (VCMON-HP)          | OTUK-LOF (TRUNK)      |
| EQPT (EQPT)             | LOS (2R)                | OTUK-TIM (TRUNK)      |
| EQPT (PPM)              | LOS (DS3)               | PORT-FAIL (OCH)       |
| EQPT-DIAG (EQPT)        | LOS (E3)                | PLM-P (STSMON)        |
| EQPT-MISS (FAN)         | LOS (E4)                | PLM-P (STSTRM)        |
| FAN (FAN)               | LOS (ESCON)             | RS-TIM (STMN)         |
| GAIN-HFAIL (AOTS)       | LOS (ISC)               | SQM (VCTRM-HP)        |

|                              |                              |                      |
|------------------------------|------------------------------|----------------------|
| GAIN-LFAIL (AOTS)            | LOS (OTS)                    | SWMTXMOD-PROT (EQPT) |
| GE-OOSYNC (FC)               | LOS (STM1E)                  | SWMTXMOD-WORK (EQPT) |
| GE-OOSYNC (GE)               | LOS (STMN)                   | TIM (STMN)           |
| GE-OOSYNC (ISC)              | LOS (TRUNK)                  | TIM (TRUNK)          |
| GE-OOSYNC (TRUNK)            | LOS-P (OCH)                  | VOA-HFAIL (AOTS)     |
| HITEMP (NE)                  | LOS-P (OMS)                  | VOA-HFAIL (OCH)      |
| HP-ENCAP-MISMATCH (VCTRM-HP) | LOS-P (OTS)                  | VOA-HFAIL (OMS)      |
| HP-PLM (VCMON-HP)            | LOS-P (TRUNK)                | VOA-HFAIL (OTS)      |
| HP-PLM (VCTRM-HP)            | LP-ENCAP-MISMATCH (VCTRM-LP) | VOA-LFAIL (AOTS)     |
| HP-TIM (VCTRM-HP)            | MEA (BIC)                    | VOA-LFAIL (OCH)      |
| HP-UNEQ (VCMON-HP)           | MEA (EQPT)                   | VOA-LFAIL (OMS)      |
| HP-UNEQ (VCTRM-HP)           | MEA (FAN)                    | VOA-LFAIL (OTS)      |
| I-HITEMP (NE)                | MEA (PPM)                    | -                    |

### Major Alarms (MJ)

Table 2-2 alphabetically lists ONS 15454 SDH Major (MJ) alarms.

**Table 2-2: ONS 15454 SDH Major Alarm List**

|                      |                           |                              |
|----------------------|---------------------------|------------------------------|
| APSCNMIS (STMN)      | GFP-EX-MISMATCH (FCMR)    | RCVR-MISS (DS1)              |
| AUTONEG-RFI (ML1000) | GFP-EX-MISMATCH (GFP-FAC) | RCVR-MISS (E1)               |
| BAT-FAIL (PWR)       | GFP-LFD (CE1000)          | RSV-RT-EXCD-RINGLET0 (RPRIF) |
| CARLOSS (CE1000)     | GFP-LFD (CE100T)          | RSV-RT-EXCD-RINGLET1 (RPRIF) |
| CARLOSS (CE100T)     | GFP-LFD (CEMR)            | RING-ID-MIS (OSC-RING)       |
| CARLOSS (CEMR)       | GFP-LFD (FCMR)            | RING-ID-MIS (STMN)           |
| CARLOSS (E1000F)     | GFP-LFD (GFP-FAC)         | RING-MISMATCH (STMN)         |
| CARLOSS (E100T)      | GFP-LFD (ML1000)          | RPR-PEER-MISS (RPRIF)        |
| CARLOSS (EQPT)       | GFP-LFD (ML100T)          | RPR-PROT-CONFIG-MISM (RPRIF) |
| CARLOSS (FC)         | GFP-LFD (MLFX)            | RPR-RI-FAIL (RPRIF)          |
| CARLOSS (G1000)      | GFP-LFD (MLMR)            | RPR-SPAN-MISMATCH (ML1000)   |
| CARLOSS (GE)         | GFP-NO-BUFFERS (FCMR)     | RPR-SPAN-MISMATCH (ML100T)   |
| CARLOSS (ISC)        | GFP-NO-BUFFERS (GFP-FAC)  | RPR-SPAN-MISMATCH (MLFX)     |
| CARLOSS (ML1000)     | GFP-UP-MISMATCH (CE1000)  | RPR-SPAN-MISMATCH (MLMR)     |
| CARLOSS (ML100T)     | GFP-UP-MISMATCH (CE100T)  | SHELF-COMM-FAIL (SHELF)      |
| CARLOSS (MLFX)       | GFP-UP-MISMATCH (CEMR)    | SIGLOSS (ESCON)              |
| CARLOSS (MLMR)       | GFP-UP-MISMATCH (FCMR)    | SIGLOSS (FC)                 |
| CARLOSS (TRUNK)      | GFP-UP-MISMATCH (GFP-FAC) | SIGLOSS (FCMR)               |

|                           |                          |                      |
|---------------------------|--------------------------|----------------------|
| DATA-CRC (CE100T)         | GFP-UP-MISMATCH (ML1000) | SIGLOSS (GE)         |
| DATA-CRC (ML1000)         | GFP-UP-MISMATCH (ML100T) | SIGLOSS (ISC)        |
| DATA-CRC (ML100T)         | GFP-UP-MISMATCH (MLFX)   | SIGLOSS (TRUNK)      |
| DATA-CRC (MLFX)           | GFP-UP-MISMATCH (MLMR)   | SQM (VCTRM-LP)       |
| DBOSYNC (NE)              | INVMACADR (BPLANE)       | SYNCLOSS (FC)        |
| DSP-COMM-FAIL (TRUNK)     | LASERBIAS-FAIL (AOTS)    | SYNCLOSS (FCMR)      |
| DSP-FAIL (TRUNK)          | LOF (DS1)                | SYNCLOSS (GE)        |
| DUP-SHELF-ID (SHELF)      | LOF (E1)                 | SYNCLOSS (ISC)       |
| EHIBATVG (PWR)            | LOM (VCTRM-HP)           | SYNCLOSS (TRUNK)     |
| ELWBATVG (PWR)            | LOM (VCTRM-LP)           | SYNCPRI (NE-SREF)    |
| E-W-MISMATCH (STMN)       | LOS (DS1)                | SYSBOOT (NE)         |
| EXTRA-TRAF-PREEMPT (STMN) | LOS (E1)                 | TIM (STM1E)          |
| FC-DE-NES (FC)            | LP-PLM (VCMON-LP)        | TPTFAIL (CE1000)     |
| FC-DE-NES (FCMR)          | LP-PLM (VCTRM-LP)        | TPTFAIL (CE100T)     |
| FC-DE-NES (TRUNK)         | LP-TIM (VCMON-LP)        | TPTFAIL (CEMR)       |
| FC-NO-CREDITS (FC)        | LP-TIM (VCTRM-LP)        | TPTFAIL (FCMR)       |
| FC-NO-CREDITS (FCMR)      | LP-UNEQ (VCMON-LP)       | TPTFAIL (G1000)      |
| FC-NO-CREDITS (TRUNK)     | LP-UNEQ (VCTRM-LP)       | TPTFAIL (ML1000)     |
| FEC-MISM (TRUNK)          | MAX-STATIONS (RPRIF)     | TPTFAIL (ML100T)     |
| GFP-CSF (CE1000)          | MEA (SHELF)              | TPTFAIL (MLFX)       |
| GFP-CSF (CE100T)          | MEM-GONE (EQPT)          | TPTFAIL (MLMR)       |
| GFP-CSF (CEMR)            | MSSP-OOSYNC (STMN)       | TRMT (DS1)           |
| GFP-CSF (FCMR)            | ODUK-TIM-PM (TRUNK)      | TRMT (E1)            |
| GFP-CSF (GFP-FAC)         | OUT-OF-SYNC (FC)         | TRMT-MISS (DS1)      |
| GFP-CSF (ML1000)          | OUT-OF-SYNC (GE)         | TRMT-MISS (E1)       |
| GFP-CSF (ML100T)          | OUT-OF-SYNC (TRUNK)      | TU-LOP (VCMON-LP)    |
| GFP-CSF (MLFX)            | PORT-MISMATCH (CEMR)     | TU-LOP (VCTRM-LP)    |
| GFP-CSF (MLMR)            | PORT-MISMATCH (MLMR)     | UT-COMM-FAIL (TRUNK) |
| GFP-DE-MISMATCH (FCMR)    | PRC-DUPID (STMN)         | UT-FAIL (TRUNK)      |
| GFP-DE-MISMATCH (GFP-FAC) | PROV-MISMATCH (TRUNK)    | WVL-MISMATCH (TRUNK) |
| GFP-EX-MISMATCH (CE1000)  | PTIM (TRUNK)             | -                    |

### Minor Alarms (MN)

Table 2-3 alphabetically lists ONS 15454 SDH Minor (MN) alarms.

**Table 2-3: ONS 15454 SDH Minor Alarm List**

|                         |                     |                    |
|-------------------------|---------------------|--------------------|
| ADD-OPWR-HDEG (OCH)     | HI-LASERTEMP (STMN) | LO-TXPOWER (ESCON) |
| ADD-OPWR-LDEG (OCH)     | HI-RXPOWER (2R)     | LO-TXPOWER (FC)    |
| APC-CORR-SKIPPED (AOTS) | HI-RXPOWER (ESCON)  | LO-TXPOWER (GE)    |
| APC-CORR-SKIPPED (OCH)  | HI-RXPOWER (FC)     | LO-TXPOWER (ISC)   |
| APC-CORR-SKIPPED (OMS)  | HI-RXPOWER (GE)     | LO-TXPOWER (PPM)   |
| APC-CORR-SKIPPED (OTS)  | HI-RXPOWER (ISC)    | LO-TXPOWER (STMN)  |

Table 2-2: ONS 15454 SDH Major Alarm List

|                             |                            |                            |
|-----------------------------|----------------------------|----------------------------|
| APC-OUT-OF-RANGE (AOTS)     | HI-RXPOWER (STMN)          | LO-TXPOWER (TRUNK)         |
| APC-OUT-OF-RANGE (OCH)      | HI-RXPOWER (TRUNK)         | MEM-LOW (EQPT)             |
| APC-OUT-OF-RANGE (OMS)      | HITEMP (EQPT)              | MS-EOC (STMN)              |
| APC-OUT-OF-RANGE (OTS)      | HI-TXPOWER (2R)            | MSSP-SW-VER-MISM (STMN)    |
| APSB (STMN)                 | HI-TXPOWER (EQPT)          | OPWR-HDEG (AOTS)           |
| APSCDFLTK (STMN)            | HI-TXPOWER (ESCON)         | OPWR-HDEG (OCH-TERM)       |
| APSC-IMP (STMN)             | HI-TXPOWER (FC)            | OPWR-HDEG (OCH)            |
| APSCINCON (STMN)            | HI-TXPOWER (GE)            | OPWR-HDEG (OMS)            |
| APSCM (STMN)                | HI-TXPOWER (ISC)           | OPWR-HDEG (OTS)            |
| APSIMP (STMN)               | HI-TXPOWER (PPM)           | OPWR-LDEG (AOTS)           |
| APS-INV-PRIM (STMN)         | HI-TXPOWER (STMN)          | OPWR-LDEG (OCH-TERM)       |
| APS-PRIM-SEC-MISM (STMN)    | HI-TXPOWER (TRUNK)         | OPWR-LDEG (OCH)            |
| AUTORESET (EQPT)            | HP-TIM (VCMON-HP)          | OPWR-LDEG (OMS)            |
| AWG-DEG (OTS)               | ISIS-ADJ-FAIL (STMN)       | OPWR-LDEG (OTS)            |
| CASETEMP-DEG (AOTS)         | ISIS-ADJ-FAIL (TRUNK)      | OTUK-IAE (TRUNK)           |
| COMM-FAIL (EQPT)            | KBYTE-APS-CHAN-FAIL (STMN) | PEER-NORESPONSE (MLMR)     |
| CONTBUS-A-18 (EQPT)         | LASERBIAS-DEG (AOTS)       | PROTNA (EQPT)              |
| CONTBUS-B-18 (EQPT)         | LASERBIAS-DEG (OTS)        | PROV-MISMATCH (PPM)        |
| CONTBUS-IO-A (EQPT)         | LASERTEMP-DEG (AOTS)       | PWR-FAIL-A (EQPT)          |
| CONTBUS-IO-B (EQPT)         | LMP-FAIL (CTRL)            | PWR-FAIL-B (EQPT)          |
| DATAFLT (NE)                | LMP-FAIL (GE)              | PWR-FAIL-RET-A (EQPT)      |
| DCU-LOSS-FAIL (OTS)         | LMP-FAIL (STMN)            | PWR-FAIL-RET-B (EQPT)      |
| DUP-IPADDR (NE)             | LMP-FAIL (TLINK)           | ROUTE-OVERFLOW (NSA)       |
| DUP-NODENAME (NE)           | LMP-SD (GE)                | RS-EOC (STMN)              |
| RS-EOC (TRUNK)              | LMP-SD (STMN)              | SFTWDOWN (EQPT)            |
| EOC-L (TRUNK)               | LMP-SF (GE)                | SH-IL-VAR-DEG-HIGH (OTS)   |
| ERROR-CONFIG (EQPT)         | LMP-SF (STMN)              | SH-IL-VAR-DEG-LOW (OTS)    |
| EXCCOL (EQPT)               | LOF (BITS)                 | SNTP-HOST (NE)             |
| EXT (ENVALRM)               | LO-LASERBIAS (EQPT)        | SPANLEN-OUT-OF-RANGE (OTS) |
| FAPS-CONFIG-MISMATCH (EQPT) | LO-LASERBIAS (PPM)         | SSM-FAIL (BITS)            |
| FEPLRF (STMN)               | LO-LASERBIAS (STMN)        | SSM-FAIL (E1)              |
| FIBERTEMP-DEG (AOTS)        | LO-LASERTEMP (EQPT)        | SSM-FAIL (STMN)            |
| FP-LINK-LOSS (EQPT)         | LO-LASERTEMP (PPM)         | SSM-FAIL (TRUNK)           |
| GAIN-HDEG (AOTS)            | LO-LASERTEMP (STMN)        | SYNCPRI (EXT-SREF)         |
| GAIN-LDEG (AOTS)            | LO-RXPOWER (2R)            | SYNCSEC (EXT-SREF)         |
| GCC-EOC (TRUNK)             | LO-RXPOWER (ESCON)         | SYNCSEC (NE-SREF)          |
| HELLO (STMN)                | LO-RXPOWER (FC)            | SYNCTHIRD (EXT-SREF)       |
| HELLO (TRUNK)               | LO-RXPOWER (GE)            | SYNCTHIRD (NE-SREF)        |
| HI-LASERBIAS (2R)           | LO-RXPOWER (ISC)           | TIM-MON (STMN)             |
| HI-LASERBIAS (EQPT)         | LO-RXPOWER (STMN)          | TIM-MON (TRUNK)            |
| HI-LASERBIAS (ESCON)        | LO-RXPOWER (TRUNK)         | VOA-HDEG (AOTS)            |

Table 2-3: ONS 15454 SDH Minor Alarm List

|                      |                   |                 |
|----------------------|-------------------|-----------------|
| HI-LASERBIAS (FC)    | LOS (BITS)        | VOA-HDEG (OCH)  |
| HI-LASERBIAS (GE)    | LOS (FUDC)        | VOA-HDEG (OMS)  |
| HI-LASERBIAS (ISC)   | LOS (MSUDC)       | VOA-HDEG (OTS)  |
| HI-LASERBIAS (PPM)   | LOS-O (OCH)       | VOA-LDEG (AOTS) |
| HI-LASERBIAS (STMN)  | LOS-O (OMS)       | VOA-LDEG (OCH)  |
| HI-LASERBIAS (TRUNK) | LOS-O (OTS)       | VOA-LDEG (OMS)  |
| HI-LASERTEMP (EQPT)  | LO-TXPOWER (2R)   | VOA-LDEG (OTS)  |
| HI-LASERTEMP (PPM)   | LO-TXPOWER (EQPT) | -               |

**Not Alarmed Conditions (NA)**

Table 2-4 alphabetically lists ONS 15454 SDH Not Alarmed (NA) conditions.

**Table 2-4: ONS 15454 SDH Not Alarmed Conditions List**

|                       |                          |                         |
|-----------------------|--------------------------|-------------------------|
| ALS (2R)              | FORCED-REQ-SPAN (GE)     | PARAM-MISM (OCH-TERM)   |
| ALS (AOTS)            | FORCED-REQ-SPAN (ISC)    | PARAM-MISM (OCH)        |
| ALS (ESCON)           | LPBKFACILITY (DS1)       | PARAM-MISM (OMS)        |
| ALS (FC)              | FORCED-REQ-SPAN (STMN)   | PARAM-MISM (OTS)        |
| ALS (GE)              | FORCED-REQ-SPAN (TRUNK)  | PMI (OMS)               |
| ALS (ISC)             | FRCDSWTOINT (NE-SREF)    | PMI (OTS)               |
| ALS (STMN)            | FRCDSWTOPRI (EXT-SREF)   | PORT-MISMATCH (FCMR)    |
| ALS (TRUNK)           | FRCDSWTOPRI (NE-SREF)    | RAI (DS1)               |
| ALS-DISABLED (EQPT)   | FRCDSWTOSEC (EXT-SREF)   | RAI (DS3)               |
| AMPLI-INIT (AOTS)     | FRCDSWTOSEC (NE-SREF)    | RAI (E1)                |
| APC-DISABLED (AOTS)   | FRCDSWTOTHIRD (EXT-SREF) | RING-SW-EAST (STMN)     |
| APC-DISABLED (EQPT)   | FRCDSWTOTHIRD (NE-SREF)  | RING-SW-WEST (STMN)     |
| APC-DISABLED (NE)     | FRNGSYNC (NE-SREF)       | ROLL (VCMON-HP)         |
| APC-DISABLED (OCH)    | FSTSYNC (NE-SREF)        | ROLL (VCMON-LP)         |
| APC-DISABLED (OMS)    | FTA-MISMATCH (EQPT)      | ROLL (VCTRM-HP)         |
| APC-DISABLED (OTS)    | FULLPASSTHR-BI (STMN)    | ROLL (VCTRM-LP)         |
| APC-DISABLED (SHELF)  | HLDOVRSYNC (NE-SREF)     | ROLL-PEND (VCMON-HP)    |
| APC-END (NE)          | HP-DEG (VCMON-HP)        | ROLL-PEND (VCMON-LP)    |
| APC-WRONG-GAIN (AOTS) | HP-DEG (VCTRM-HP)        | ROLL-PEND (VCTRM-LP)    |
| APS-PRIM-FAC (STMN)   | HP-EXC (VCMON-HP)        | RPR-PASSTHR (RPRIF)     |
| AS-CMD (2R)           | HP-EXC (VCTRM-HP)        | RPR-PROT-ACTIVE (RPRIF) |
| AS-CMD (AOTS)         | IDLE (DS1)               | RPR-SD (ML1000)         |
| AS-CMD (BPLANE)       | INC-ISD (DS3)            | RPR-SD (ML100T)         |
| AS-CMD (CE1000)       | INC-ISD (E3)             | RPR-SD (MLFX)           |
| AS-CMD (CE100T)       | INHSWPR (EQPT)           | RPR-SD (MLMR)           |
| AS-CMD (CEMR)         | INHSWWKG (EQPT)          | RPR-SF (ML1000)         |
| AS-CMD (DS1)          | INTRUSION-PSWD (NE)      | RPR-SF (ML100T)         |
| AS-CMD (DS3)          | IOSCFGCOPY (EQPT)        | RPR-SF (MLFX)           |
| AS-CMD (E1000F)       | KB-PASSTHR (STMN)        | RPR-SF (MLMR)           |
| AS-CMD (E100T)        | LAN-POL-REV (NE)         | RPRW (ML1000)           |

|                  |                               |                            |
|------------------|-------------------------------|----------------------------|
| AS-CMD (E1)      | LASER-APR (AOTS)              | RPRW (ML100T)              |
| AS-CMD (E3)      | LCAS-CRC (VCTRM-HP)           | RPRW (MLFX)                |
| AS-CMD (E4)      | LCAS-CRC (VCTRM-LP)           | RUNCFG-SAVENEED (EQPT)     |
| AS-CMD (EQPT)    | LCAS-RX-DNU (VCTRM-HP)        | SD (DS1)                   |
| AS-CMD (ESCON)   | LCAS-RX-DNU (VCTRM-LP)        | SD (DS3)                   |
| AS-CMD (FC)      | LCAS-RX-FAIL (VCTRM-HP)       | SD (STM1E)                 |
| AS-CMD (FCMR)    | LCAS-RX-FAIL (VCTRM-LP)       | SD (TRUNK)                 |
| AS-CMD (G1000)   | LCAS-RX-GRP-ERR<br>(VCTRM-HP) | SD-L (TRUNK)               |
| AS-CMD (GE)      | LCAS-RX-GRP-ERR<br>(VCTRM-LP) | SF (DS1)                   |
| AS-CMD (GFP-FAC) | LCAS-TX-ADD (VCTRM-HP)        | SF (DS3)                   |
| AS-CMD (ISC)     | LCAS-TX-ADD (VCTRM-LP)        | SF (TRUNK)                 |
| AS-CMD (ML1000)  | LCAS-TX-DNU (VCTRM-HP)        | SF-L (TRUNK)               |
| AS-CMD (ML100T)  | LCAS-TX-DNU (VCTRM-LP)        | SHUTTER-OPEN (OTS)         |
| AS-CMD (MLFX)    | LKOUTPR-S (STMN)              | SPAN-NOT-MEASURED<br>(OTS) |
| AS-CMD (MLMR)    | LMP-UNALLOC (GE)              | SPAN-SW-EAST (STMN)        |
| AS-CMD (NE)      | LMP-UNALLOC (STMN)            | SPAN-SW-WEST (STMN)        |
| AS-CMD (OCH)     | LOCKOUT-REQ (2R)              | SQUELCH (STMN)             |
| AS-CMD (OMS)     | LOCKOUT-REQ (EQPT)            | SQUELCHED (2R)             |
| AS-CMD (OTS)     | LOCKOUT-REQ (ESCON)           | SQUELCHED (ESCON)          |
| AS-CMD (PPM)     | LOCKOUT-REQ (FC)              | SQUELCHED (FC)             |
| AS-CMD (PWR)     | LOCKOUT-REQ (GE)              | SQUELCHED (GE)             |
| AS-CMD (SHELF)   | LOCKOUT-REQ (ISC)             | SQUELCHED (ISC)            |
| AS-CMD (STM1E)   | LOCKOUT-REQ (STMN)            | SQUELCHED (STMN)           |
| AS-CMD (STMN)    | LOCKOUT-REQ (TRUNK)           | SQUELCHED (TRUNK)          |
| AS-CMD (TRUNK)   | LOCKOUT-REQ (VCMON-HP)        | SSM-DUS (BITS)             |
| AS-MT (2R)       | LOCKOUT-REQ (VCMON-LP)        | SSM-DUS (DS1)              |
| AS-MT (AOTS)     | LPBKCRS (VCMON-HP)            | SSM-DUS (E1)               |
| AS-MT (CE1000)   | LPBKCRS (VCTRM-HP)            | SSM-DUS (STMN)             |
| AS-MT (CE100T)   | LPBKDS1FE-CMD (DS1)           | SSM-DUS (TRUNK)            |
| AS-MT (CEMR)     | LPBKDS3FEAC (DS3)             | SSM-LNC (BITS)             |
| AS-MT (DS1)      | LPBKDS3FEAC-CMD (DS3)         | SSM-LNC (NE-SREF)          |
| AS-MT (DS3)      | LPBKDS3FEAC-CMD (E3)          | SSM-LNC (STMN)             |
| AS-MT (E1)       | LPBKE1FEAC (E3)               | SSM-LNC (TRUNK)            |
| AS-MT (E3)       | LPBKE3FEAC (E3)               | SSM-OFF (BITS)             |
| AS-MT (E4)       | LPBKFACILITY (CE1000)         | SSM-OFF (DS1)              |
| AS-MT (EQPT)     | LPBKFACILITY (CE100T)         | SSM-OFF (E1)               |
| AS-MT (ESCON)    | LPBKFACILITY (CEMR)           | SSM-OFF (STMN)             |
| AS-MT (FC)       | LPBKFACILITY (DS3)            | SSM-OFF (TRUNK)            |
| AS-MT (FCMR)     | LPBKFACILITY (E1)             | SSM-PRC (BITS)             |
| AS-MT (G1000)    | LPBKFACILITY (E3)             | SSM-PRC (NE-SREF)          |
| AS-MT (GE)       | LPBKFACILITY (E4)             | SSM-PRC (STMN)             |

Table 2-4: ONS 15454 SDH Not Alarmed Conditions List

|                              |                       |                      |
|------------------------------|-----------------------|----------------------|
| AS-MT (GFP-FAC)              | LPBKFACILITY (ESCON)  | SSM-PRC (TRUNK)      |
| AS-MT (ISC)                  | LPBKFACILITY (FC)     | SSM-PRS (E1)         |
| AS-MT (ML1000)               | LPBKFACILITY (FCMR)   | SSM-PRS (TRUNK)      |
| AS-MT (ML100T)               | LPBKFACILITY (G1000)  | SSM-RES (DS1)        |
| AS-MT (MLFX)                 | LPBKFACILITY (GE)     | SSM-RES (E1)         |
| AS-MT (MLMR)                 | LPBKFACILITY (ISC)    | SSM-RES (TRUNK)      |
| AS-MT (OCH)                  | LPBKFACILITY (MLMR)   | SSM-SDH-TN (BITS)    |
| AS-MT (OMS)                  | LPBKFACILITY (STM1E)  | SSM-SDH-TN (NE-SREF) |
| AS-MT (OTS)                  | LPBKFACILITY (STMN)   | SSM-SDH-TN (STMN)    |
| AS-MT (PPM)                  | LPBKFACILITY (TRUNK)  | SSM-SDH-TN (TRUNK)   |
| AS-MT (SHELF)                | LPBKTERMINAL (CE1000) | SSM-SETS (BITS)      |
| AS-MT (STM1E)                | LPBKTERMINAL (CE100T) | SSM-SETS (NE-SREF)   |
| AS-MT (STMN)                 | LPBKTERMINAL (CEMR)   | SSM-SETS (STMN)      |
| AS-MT (TRUNK)                | LPBKTERMINAL (DS1)    | SSM-SETS (TRUNK)     |
| AS-MT-OOG (VCTRM-HP)         | LPBKTERMINAL (DS3)    | SSM-SMC (E1)         |
| AS-MT-OOG (VCTRM-LP)         | LPBKTERMINAL (E1)     | SSM-SMC (TRUNK)      |
| AUD-LOG-LOSS (NE)            | LPBKTERMINAL (E3)     | SSM-ST2 (E1)         |
| AUD-LOG-LOW (NE)             | LPBKTERMINAL (E4)     | SSM-ST2 (TRUNK)      |
| AUTOSW-LOP-SNCP (VCMON-HP)   | LPBKTERMINAL (ESCON)  | SSM-ST3 (E1)         |
| AUTOSW-LOP-SNCP (VCMON-LP)   | LPBKTERMINAL (FC)     | SSM-ST3 (TRUNK)      |
| AUTOSW-PDI-SNCP (VCMON-HP)   | LPBKTERMINAL (FCMR)   | SSM-ST3E (E1)        |
| AUTOSW-PDI-SNCP (VCMON-LP)   | LPBKTERMINAL (G1000)  | SSM-ST3E (TRUNK)     |
| AUTOSW-SDBER-SNCP (VCMON-HP) | LPBKTERMINAL (GE)     | SSM-ST4 (DS1)        |
| AUTOSW-SDBER-SNCP (VCMON-LP) | LPBKTERMINAL (ISC)    | SSM-ST4 (E1)         |
| AUTOSW-SFBER-SNCP (VCMON-HP) | LPBKTERMINAL (MLMR)   | SSM-ST4 (STMN)       |
| AUTOSW-SFBER-SNCP (VCMON-LP) | LPBKTERMINAL (STM1E)  | SSM-ST4 (TRUNK)      |
| AUTOSW-UNEQ-SNCP (VCMON-HP)  | LPBKTERMINAL (STMN)   | SSM-STU (BITS)       |
| AUTOSW-UNEQ-SNCP (VCMON-LP)  | LPBKTERMINAL (TRUNK)  | SSM-STU (E1)         |
| AWG-WARM-UP (OTS)            | LP-DEG (VCMON-LP)     | SSM-STU (NE-SREF)    |
| CLDRESTART (EQPT)            | LP-DEG (VCTRM-LP)     | SSM-STU (STMN)       |
| CPP-INCAPABLE (MLMR)         | LP-EXC (VCMON-LP)     | SSM-STU (TRUNK)      |
| CTNEQPT-MISMATCH (EQPT)      | LP-EXC (VCTRM-LP)     | SSM-TNC (NE-SREF)    |
| DS3-MISM (DS3)               | MAN-REQ (EQPT)        | SSM-TNC (STMN)       |
| ETH-LINKLOSS (NE)            | MAN-REQ (ML1000)      | SSM-TNC (TRUNK)      |
| EXERCISE-RING-FAIL (STMN)    | MAN-REQ (ML100T)      | SW-MISMATCH (EQPT)   |
| EXERCISE-SPAN-FAIL (STMN)    | MAN-REQ (MLFX)        | SWTOPRI (EXT-SREF)   |
| FAILTOSW (2R)                | MAN-REQ (MLMR)        | SWTOPRI (NE-SREF)    |
| FAILTOSW (EQPT)              | MAN-REQ (VCMON-HP)    | SWTOSEC (EXT-SREF)   |
| FAILTOSW (ESCON)             | MAN-REQ (VCMON-LP)    | SWTOSEC (NE-SREF)    |

Table 2-4: ONS 15454 SDH Not Alarmed Conditions List



|                            |                         |                           |
|----------------------------|-------------------------|---------------------------|
| FAILTOSW (FC)              | MANRESET (EQPT)         | SWTOTHIRD (EXT-SREF)      |
| FAILTOSW (GE)              | MANSWTOINT (NE-SREF)    | SWTOTHIRD (NE-SREF)       |
| FAILTOSW (ISC)             | MANSWTOPRI (EXT-SREF)   | SYNC-FREQ (DS1)           |
| FAILTOSW (STMN)            | MANSWTOPRI (NE-SREF)    | SYNC-FREQ (E1)            |
| FAILTOSW (TRUNK)           | MANSWTOSEC (EXT-SREF)   | SYNC-FREQ (STMN)          |
| FAILTOSW-PATH (VCMON-HP)   | MANSWTOSEC (NE-SREF)    | SYNC-FREQ (TRUNK)         |
| FAILTOSW-PATH (VCMON-LP)   | MANSWTOTHIRD (EXT-SREF) | TEMP-MISM (NE)            |
| FAILTOSWR (STMN)           | MANSWTOTHIRD (NE-SREF)  | TRAIL-SIGNAL-FAIL (OCH)   |
| FAILTOSWS (STMN)           | MANUAL-REQ-RING (STMN)  | TRAIL-SIGNAL-FAIL (TRUNK) |
| FAPS (FCMR)                | MANUAL-REQ-SPAN (2R)    | TX-IDLE (DS1)             |
| FAPS (TRUNK)               | MANUAL-REQ-SPAN (ESCON) | TX-RAI (DS1)              |
| FDI (OCH-TERM)             | MANUAL-REQ-SPAN (FC)    | TX-RAI (E1)               |
| FDI (OCH)                  | MANUAL-REQ-SPAN (GE)    | TX-RAI (E3)               |
| FE-AIS (E3)                | MANUAL-REQ-SPAN (ISC)   | UNC-WORD (TRUNK)          |
| FE-E1-MULTLOS (E3)         | MANUAL-REQ-SPAN (STMN)  | VCG-DEG (VCG)             |
| FE-E1-NSA (E3)             | MANUAL-REQ-SPAN (TRUNK) | VCG-DOWN (VCG)            |
| FE-E1-SA (E3)              | MS-DEG (E1)             | VOLT-MISM (PWR)           |
| FE-E1-SNGLLOS (E3)         | MS-DEG (E3)             | WKSWPR (2R)               |
| FE-E3-NSA (E3)             | MS-DEG (E4)             | WKSWPR (EQPT)             |
| FE-E3-SA (E3)              | MS-DEG (STM1E)          | WKSWPR (ESCON)            |
| FE-EQPT-NSA (E3)           | MS-DEG (STMN)           | WKSWPR (FC)               |
| FE-FRCDWKSWBK-SPAN (STMN)  | MS-EXC (E1)             | WKSWPR (GE)               |
| FE-FRCDWKSWPR-RING (STMN)  | MS-EXC (E3)             | WKSWPR (ISC)              |
| FE-FRCDWKSWPR-SPAN (STMN)  | MS-EXC (E4)             | WKSWPR (STMN)             |
| FE-IDLE (E3)               | MS-EXC (STM1E)          | WKSWPR (VCMON-HP)         |
| FE-LOCKOUTOFPR-SPAN (STMN) | MS-EXC (STMN)           | WKSWPR (VCMON-LP)         |
| FE-LOF (E3)                | MS-SQUELCH-HP (STMN)    | WTR (2R)                  |
| FE-LOS (E3)                | MS-SQUELCH-LP (STMN)    | WTR (EQPT)                |
| FE-MANWKSWBK-SPAN (STMN)   | MT-OCHNC (OTS)          | WTR (ESCON)               |
| FE-MANWKSWPR-RING (STMN)   | NO-CONFIG (EQPT)        | WTR (FC)                  |
| FE-MANWKSWPR-SPAN (STMN)   | OCHNC-INC (OCHNC-CONN)  | WTR (GE)                  |
| FORCED-REQ (EQPT)          | OCHTERM-INC (OCH-TERM)  | WTR (ISC)                 |
| FORCED-REQ (ML1000)        | ODUK-SD-PM (TRUNK)      | WTR (ML1000)              |
| FORCED-REQ (ML100T)        | ODUK-SF-PM (TRUNK)      | WTR (ML100T)              |
| FORCED-REQ (MLFX)          | OOU-TPT (VCTRM-HP)      | WTR (MLFX)                |
| FORCED-REQ (MLMR)          | OOU-TPT (VCTRM-LP)      | WTR (MLMR)                |
| FORCED-REQ (VCMON-HP)      | OSRION (AOTS)           | WTR (STMN)                |
| FORCED-REQ (VCMON-LP)      | OSRION (OTS)            | WTR (TRUNK)               |
| FORCED-REQ-RING (STMN)     | OTUK-SD (TRUNK)         | WTR (VCMON-HP)            |
| FORCED-REQ-SPAN (2R)       | OTUK-SF (TRUNK)         | WTR (VCMON-LP)            |
| FORCED-REQ-SPAN (ESCON)    | OUT-OF-SYNC (ISC)       | -                         |
| FORCED-REQ-SPAN (FC)       | PARAM-MISM (AOTS)       | -                         |

Table 2-4: ONS 15454 SDH Not Alarmed Conditions List

## Not Reported Conditions (NR)

Table 2-5 alphabetically lists ONS 15454 SDH Not Reported (NR) conditions.

**Table 2-5: ONS 15454 SDH Not Reported Conditions List**

|                            |                       |                      |
|----------------------------|-----------------------|----------------------|
| AIS (BITS)                 | HP-RFI (VCTRM-HP)     | ODUK-OCI-PM (TRUNK)  |
| AIS (DS1)                  | LP-RFI (VCMON-LP)     | OTUK-AIS (TRUNK)     |
| AIS (DS3)                  | LP-RFI (VCTRM-LP)     | OTUK-BDI (TRUNK)     |
| AIS (E1)                   | MS-AIS (STM1E)        | RFI (TRUNK)          |
| AIS (E3)                   | MS-AIS (STMN)         | RFI-L (TRUNK)        |
| AIS (E4)                   | MS-RFI (STM1E)        | ROLL-PEND (VCTRM-HP) |
| AIS (FUDC)                 | MS-RFI (STMN)         | TU-AIS (VCMON-LP)    |
| AIS (MSUDC)                | NON-CISCO-PPM (PPM)   | TU-AIS (VCTRM-LP)    |
| AIS (TRUNK)                | ODUK-1-AIS-PM (TRUNK) | TX-AIS (DS1)         |
| AIS-L (TRUNK)              | ODUK-2-AIS-PM (TRUNK) | TX-AIS (DS3)         |
| AU-AIS (VCMON-HP)          | ODUK-3-AIS-PM (TRUNK) | TX-AIS (E1)          |
| AU-AIS (VCTRM-HP)          | ODUK-4-AIS-PM (TRUNK) | TX-AIS (E3)          |
| AUTOSW-AIS-SNCP (VCMON-HP) | ODUK-AIS-PM (TRUNK)   | TX-LOF (DS1)         |
| AUTOSW-AIS-SNCP (VCMON-LP) | ODUK-BDI-PM (TRUNK)   | TX-LOF (E1)          |
| HP-RFI (VCMON-HP)          | ODUK-LCK-PM (TRUNK)   | UNQUAL-PPM (PPM)     |

## Alarms and Conditions Listed By Alphabetical Entry

Table 2-6 alphabetically lists all ONS 15454 SDH alarms and conditions.

**Table 2-6: ONS 15454 SDH Alarm and Condition Alphabetical List**

|                      |                           |                      |
|----------------------|---------------------------|----------------------|
| ADD-OPWR-HDEG (OCH)  | GFP-LFD (FCMR)            | ODUK-OCI-PM (TRUNK)  |
| ADD-OPWR-HFAIL (OCH) | GFP-LFD (GFP-FAC)         | ODUK-SD-PM (TRUNK)   |
| ADD-OPWR-LDEG (OCH)  | GFP-LFD (ML1000)          | ODUK-SF-PM (TRUNK)   |
| ADD-OPWR-LFAIL (OCH) | GFP-LFD (ML100T)          | ODUK-TIM-PM (TRUNK)  |
| AIS (BITS)           | GFP-LFD (MLFX)            | OOU-TPT (VCTRM-HP)   |
| AIS (DS1)            | GFP-LFD (MLMR)            | OOU-TPT (VCTRM-LP)   |
| AIS (DS3)            | GFP-NO-BUFFERS (FCMR)     | OPWR-HDEG (AOTS)     |
| AIS (E1)             | GFP-NO-BUFFERS (GFP-FAC)  | OPWR-HDEG (OCH)      |
| AIS (E3)             | GFP-UP-MISMATCH (CE1000)  | OPWR-HDEG (OCH-TERM) |
| AIS (E4)             | GFP-UP-MISMATCH (CE100T)  | OPWR-HDEG (OMS)      |
| AIS (FUDC)           | GFP-UP-MISMATCH (CEMR)    | OPWR-HDEG (OTS)      |
| AIS (MSUDC)          | GFP-UP-MISMATCH (FCMR)    | OPWR-HFAIL (AOTS)    |
| AIS (TRUNK)          | GFP-UP-MISMATCH (GFP-FAC) | OPWR-HFAIL (OCH)     |
| AIS-L (TRUNK)        | GFP-UP-MISMATCH (ML1000)  | OPWR-HFAIL (OMS)     |
| ALS (2R)             | GFP-UP-MISMATCH (ML100T)  | OPWR-HFAIL (OTS)     |
| ALS (AOTS)           | GFP-UP-MISMATCH (MLFX)    | OPWR-LDEG (AOTS)     |
| ALS (ESCON)          | GFP-UP-MISMATCH (MLMR)    | OPWR-LDEG (OCH)      |

|                          |                              |                        |
|--------------------------|------------------------------|------------------------|
| ALS (FC)                 | HELLO (STMN)                 | OPWR-LDEG (OCH-TERM)   |
| ALS (GE)                 | HELLO (TRUNK)                | OPWR-LDEG (OMS)        |
| ALS (ISC)                | HI-LASERBIAS (2R)            | OPWR-LDEG (OTS)        |
| ALS (STMN)               | HI-LASERBIAS (EQPT)          | OPWR-LFAIL (AOTS)      |
| ALS (TRUNK)              | HI-LASERBIAS (ESCON)         | OPWR-LFAIL (OCH)       |
| ALS-DISABLED (EQPT)      | HI-LASERBIAS (FC)            | OPWR-LFAIL (OCH-TERM)  |
| AMPLI-INIT (AOTS)        | HI-LASERBIAS (GE)            | OPWR-LFAIL (OMS)       |
| APC-CORR-SKIPPED (AOTS)  | HI-LASERBIAS (ISC)           | OPWR-LFAIL (OTS)       |
| APC-CORR-SKIPPED (OCH)   | HI-LASERBIAS (PPM)           | OSRION (AOTS)          |
| APC-CORR-SKIPPED (OMS)   | HI-LASERBIAS (STMN)          | OSRION (OTS)           |
| APC-CORR-SKIPPED (OTS)   | HI-LASERBIAS (TRUNK)         | OTUK-AIS (TRUNK)       |
| APC-DISABLED (AOTS)      | HI-LASERTEMP (EQPT)          | OTUK-BDI (TRUNK)       |
| APC-DISABLED (EQPT)      | HI-LASERTEMP (PPM)           | OTUK-IAE (TRUNK)       |
| APC-DISABLED (NE)        | HI-LASERTEMP (STMN)          | OTUK-LOF (TRUNK)       |
| APC-DISABLED (OCH)       | HI-RXPOWER (2R)              | OTUK-SD (TRUNK)        |
| APC-DISABLED (OMS)       | HI-RXPOWER (ESCON)           | OTUK-SF (TRUNK)        |
| APC-DISABLED (OTS)       | HI-RXPOWER (FC)              | OTUK-TIM (TRUNK)       |
| APC-DISABLED (SHELF)     | HI-RXPOWER (GE)              | OUT-OF-SYNC (FC)       |
| APC-END (NE)             | HI-RXPOWER (ISC)             | OUT-OF-SYNC (GE)       |
| APC-OUT-OF-RANGE (AOTS)  | HI-RXPOWER (STMN)            | OUT-OF-SYNC (ISC)      |
| APC-OUT-OF-RANGE (OCH)   | HI-RXPOWER (TRUNK)           | OUT-OF-SYNC (TRUNK)    |
| APC-OUT-OF-RANGE (OMS)   | HITEMP (EQPT)                | PARAM-MISM (AOTS)      |
| APC-OUT-OF-RANGE (OTS)   | HITEMP (NE)                  | PARAM-MISM (OCH)       |
| APC-WRONG-GAIN (AOTS)    | HI-TXPOWER (2R)              | PARAM-MISM (OCH-TERM)  |
| APSB (STMN)              | HI-TXPOWER (EQPT)            | PARAM-MISM (OMS)       |
| APSCDFLTK (STMN)         | HI-TXPOWER (ESCON)           | PARAM-MISM (OTS)       |
| APSC-IMP (STMN)          | HI-TXPOWER (FC)              | PEER-NORESPONSE (MLMR) |
| APSCINCON (STMN)         | HI-TXPOWER (GE)              | PLM-P (STSMON)         |
| APSCM (STMN)             | HI-TXPOWER (ISC)             | PLM-P (STSTRM)         |
| APSCNMIS (STMN)          | HI-TXPOWER (PPM)             | PMI (OMS)              |
| APSIMP (STMN)            | HI-TXPOWER (STMN)            | PMI (OTS)              |
| APS-INV-PRIM (STMN)      | HI-TXPOWER (TRUNK)           | PORT-FAIL (OCH)        |
| APS-PRIM-FAC (STMN)      | HLDOVRSYNC (NE-SREF)         | PORT-MISMATCH (CEMR)   |
| APS-PRIM-SEC-MISM (STMN) | HP-DEG (VCMON-HP)            | PORT-MISMATCH (FCMR)   |
| AS-CMD (2R)              | HP-DEG (VCTRM-HP)            | PORT-MISMATCH (MLMR)   |
| AS-CMD (AOTS)            | HP-ENCAP-MISMATCH (VCTRM-HP) | PRC-DUPID (STMN)       |
| AS-CMD (BPLANE)          | HP-EXC (VCMON-HP)            | PROTNA (EQPT)          |
| AS-CMD (CE1000)          | HP-EXC (VCTRM-HP)            | PROV-MISMATCH (PPM)    |
| AS-CMD (CE100T)          | HP-PLM (VCMON-HP)            | PROV-MISMATCH (TRUNK)  |
| AS-CMD (CEMR)            | HP-PLM (VCTRM-HP)            | PTIM (TRUNK)           |
| AS-CMD (DS1)             | HP-RFI (VCMON-HP)            | PWR-FAIL-A (EQPT)      |
| AS-CMD (DS3)             | HP-RFI (VCTRM-HP)            | PWR-FAIL-B (EQPT)      |
| AS-CMD (E1)              | HP-TIM (VCMON-HP)            | PWR-FAIL-RET-A (EQPT)  |

Table 2-6: ONS 15454 SDH Alarm and Condition Alphabetical List

|                  |                            |                              |
|------------------|----------------------------|------------------------------|
| AS-CMD (E1000F)  | HP-TIM (VCTRM-HP)          | PWR-FAIL-RET-B (EQPT)        |
| AS-CMD (E100T)   | HP-UNEQ (VCMON-HP)         | RAI (DS1)                    |
| AS-CMD (E3)      | HP-UNEQ (VCTRM-HP)         | RAI (DS3)                    |
| AS-CMD (E4)      | IDLE (DS1)                 | RAI (E1)                     |
| AS-CMD (EQPT)    | I-HITEMP (NE)              | RCVR-MISS (DS1)              |
| AS-CMD (ESCON)   | ILK-FAIL (TRUNK)           | RCVR-MISS (E1)               |
| AS-CMD (FC)      | IMPROPRMVL (EQPT)          | RSV-RT-EXCD-RINGLET0 (RPRIF) |
| AS-CMD (FCMR)    | IMPROPRMVL (PPM)           | RSV-RT-EXCD-RINGLET1 (RPRIF) |
| AS-CMD (G1000)   | INC-ISD (DS3)              | RFI (TRUNK)                  |
| AS-CMD (GE)      | INC-ISD (E3)               | RFI-L (TRUNK)                |
| AS-CMD (GFP-FAC) | INHSWPR (EQPT)             | RING-ID-MIS (OSC-RING)       |
| AS-CMD (ISC)     | INHSWWKG (EQPT)            | RING-ID-MIS (STMN)           |
| AS-CMD (ML1000)  | INTRUSION-PSWD (NE)        | RING-MISMATCH (STMN)         |
| AS-CMD (ML100T)  | INVMACADR (BPLANE)         | RING-SW-EAST (STMN)          |
| AS-CMD (MLFX)    | IOSCFGCOPY (EQPT)          | RING-SW-WEST (STMN)          |
| AS-CMD (MLMR)    | ISIS-ADJ-FAIL (STMN)       | ROLL (VCMON-HP)              |
| AS-CMD (NE)      | ISIS-ADJ-FAIL (TRUNK)      | ROLL (VCMON-LP)              |
| AS-CMD (OCH)     | KB-PASSTHR (STMN)          | ROLL (VCTRM-HP)              |
| AS-CMD (OMS)     | KBYTE-APS-CHAN-FAIL (STMN) | ROLL (VCTRM-LP)              |
| AS-CMD (OTS)     | LAN-POL-REV (NE)           | ROLL-PEND (VCMON-HP)         |
| AS-CMD (PPM)     | LASER-APR (AOTS)           | ROLL-PEND (VCMON-LP)         |
| AS-CMD (PWR)     | LASERBIAS-DEG (AOTS)       | ROLL-PEND (VCTRM-HP)         |
| AS-CMD (SHELF)   | LASERBIAS-DEG (OTS)        | ROLL-PEND (VCTRM-LP)         |
| AS-CMD (STM1E)   | LASERBIAS-FAIL (AOTS)      | RPR-PASSTHR (RPRIF)          |
| AS-CMD (STMN)    | LASERTEMP-DEG (AOTS)       | RPR-PEER-MISS (RPRIF)        |
| AS-CMD (TRUNK)   | LCAS-CRC (VCTRM-HP)        | RPR-PROT-ACTIVE (RPRIF)      |
| AS-MT (2R)       | LCAS-CRC (VCTRM-LP)        | RPR-PROT-CONFIG-MISM (RPRIF) |
| AS-MT (AOTS)     | LCAS-RX-DNU (VCTRM-HP)     | RPR-RI-FAIL (RPRIF)          |
| AS-MT (CE1000)   | LCAS-RX-DNU (VCTRM-LP)     | RPR-SD (ML1000)              |
| AS-MT (CE100T)   | LCAS-RX-FAIL (VCTRM-HP)    | RPR-SD (ML100T)              |
| AS-MT (CEMR)     | LCAS-RX-FAIL (VCTRM-LP)    | RPR-SD (MLFX)                |
| AS-MT (DS1)      | LCAS-RX-GRP-ERR (VCTRM-HP) | RPR-SD (MLMR)                |
| AS-MT (DS3)      | LCAS-RX-GRP-ERR (VCTRM-LP) | RPR-SF (ML1000)              |
| AS-MT (E1)       | LCAS-TX-ADD (VCTRM-HP)     | RPR-SF (ML100T)              |
| AS-MT (E3)       | LCAS-TX-ADD (VCTRM-LP)     | RPR-SF (MLFX)                |
| AS-MT (E4)       | LCAS-TX-DNU (VCTRM-HP)     | RPR-SF (MLMR)                |
| AS-MT (EQPT)     | LCAS-TX-DNU (VCTRM-LP)     | RPR-SPAN-MISMATCH (ML1000)   |
| AS-MT (ESCON)    | LINK-KEEPALIVE (ML1000)    |                              |

Table 2-6: ONS 15454 SDH Alarm and Condition Alphabetical List

|                            |                         |                            |
|----------------------------|-------------------------|----------------------------|
|                            |                         | RPR-SPAN-MISMATCH (ML100T) |
| AS-MT (FC)                 | LINK-KEEPALIVE (ML100T) | RPR-SPAN-MISMATCH (MLFX)   |
| AS-MT (FCMR)               | LINK-KEEPALIVE (MLFX)   | RPR-SPAN-MISMATCH (MLMR)   |
| AS-MT (G1000)              | LINK-KEEPALIVE (MLMR)   | RPRW (ML1000)              |
| AS-MT (GE)                 | LKOUTPR-S (STMN)        | RPRW (ML100T)              |
| AS-MT (GFP-FAC)            | LMP-FAIL (CTRL)         | RPRW (MLFX)                |
| AS-MT (ISC)                | LMP-FAIL (GE)           | RS-EOC (STMN)              |
| AS-MT (ML1000)             | LMP-FAIL (STMN)         | RS-TIM (STMN)              |
| AS-MT (ML100T)             | LMP-FAIL (TLINK)        | RUNCFG-SAVENEED (EQPT)     |
| AS-MT (MLFX)               | LMP-SD (GE)             | SD (DS1)                   |
| AS-MT (MLMR)               | LMP-SD (STMN)           | SD (DS3)                   |
| AS-MT (OCH)                | LMP-SF (GE)             | SD (STM1E)                 |
| AS-MT (OMS)                | LMP-SF (STMN)           | SD (TRUNK)                 |
| AS-MT (OTS)                | LMP-UNALLOC (GE)        | SD-L (TRUNK)               |
| AS-MT (PPM)                | LMP-UNALLOC (STMN)      | SF (DS1)                   |
| AS-MT (SHELF)              | LOA (VCG)               | SF (DS3)                   |
| AS-MT (STM1E)              | LOCKOUT-REQ (2R)        | SF (TRUNK)                 |
| AS-MT (STMN)               | LOCKOUT-REQ (EQPT)      | SF-L (TRUNK)               |
| AS-MT (TRUNK)              | LOCKOUT-REQ (ESCON)     | SFTWDOWN (EQPT)            |
| AS-MT-OOG (VCTRM-HP)       | LOCKOUT-REQ (FC)        | SHELF-COMM-FAIL (SHELF)    |
| AS-MT-OOG (VCTRM-LP)       | LOCKOUT-REQ (GE)        | SH-IL-VAR-DEG-HIGH (OTS)   |
| AU-AIS (VCMON-HP)          | LOCKOUT-REQ (ISC)       | SH-IL-VAR-DEG-LOW (OTS)    |
| AU-AIS (VCTRM-HP)          | LOCKOUT-REQ (STMN)      | SHUTTER-OPEN (OTS)         |
| AUD-LOG-LOSS (NE)          | LOCKOUT-REQ (TRUNK)     | SIGLOSS (ESCON)            |
| AUD-LOG-LOW (NE)           | LOCKOUT-REQ (VCMON-HP)  | SIGLOSS (FC)               |
| AU-LOF (VCTRM-HP)          | LOCKOUT-REQ (VCMON-LP)  | SIGLOSS (FCMR)             |
| AU-LOP (VCMON-HP)          | LOF (BITS)              | SIGLOSS (GE)               |
| AU-LOP (VCTRM-HP)          | LOF (DS1)               | SIGLOSS (ISC)              |
| AUTOLSROFF (STMN)          | LOF (DS3)               | SIGLOSS (TRUNK)            |
| AUTONEG-RFI (ML1000)       | LOF (E1)                | SNTP-HOST (NE)             |
| AUTORESET (EQPT)           | LOF (E4)                | SPANLEN-OUT-OF-RANGE (OTS) |
| AUTOSW-AIS-SNCP (VCMON-HP) | LOF (STM1E)             | SPAN-NOT-MEASURED (OTS)    |
| AUTOSW-AIS-SNCP (VCMON-LP) | LOF (STMN)              | SPAN-SW-EAST (STMN)        |
| AUTOSW-LOP-SNCP (VCMON-HP) | LOF (TRUNK)             | SPAN-SW-WEST (STMN)        |
| AUTOSW-LOP-SNCP (VCMON-LP) | LO-LASERBIAS (EQPT)     | SQM (VCTRM-HP)             |
| AUTOSW-PDI-SNCP (VCMON-HP) | LO-LASERBIAS (PPM)      | SQM (VCTRM-LP)             |

Table 2-6: ONS 15454 SDH Alarm and Condition Alphabetical List

|                              |                     |                      |
|------------------------------|---------------------|----------------------|
| AUTOSW-PDI-SNCP (VCMON-LP)   | LO-LASERBIAS (STMN) | SQUELCH (STMN)       |
| AUTOSW-SDBER-SNCP (VCMON-HP) | LO-LASERTEMP (EQPT) | SQUELCHED (2R)       |
| AUTOSW-SDBER-SNCP (VCMON-LP) | LO-LASERTEMP (PPM)  | SQUELCHED (ESCON)    |
| AUTOSW-SFBER-SNCP (VCMON-HP) | LO-LASERTEMP (STMN) | SQUELCHED (FC)       |
| AUTOSW-SFBER-SNCP (VCMON-LP) | LOM (TRUNK)         | SQUELCHED (GE)       |
| AUTOSW-UNEQ-SNCP (VCMON-HP)  | LOM (VCMON-HP)      | SQUELCHED (ISC)      |
| AUTOSW-UNEQ-SNCP (VCMON-LP)  | LOM (VCTRM-HP)      | SQUELCHED (STMN)     |
| AWG-DEG (OTS)                | LOM (VCTRM-LP)      | SQUELCHED (TRUNK)    |
| AWG-FAIL (OTS)               | LO-RXPOWER (2R)     | SSM-DUS (BITS)       |
| AWG-OVERTEMP (OTS)           | LO-RXPOWER (ESCON)  | SSM-DUS (DS1)        |
| AWG-WARM-UP (OTS)            | LO-RXPOWER (FC)     | SSM-DUS (E1)         |
| BAT-FAIL (PWR)               | LO-RXPOWER (GE)     | SSM-DUS (STMN)       |
| BKUPMEMP (EQPT)              | LO-RXPOWER (ISC)    | SSM-DUS (TRUNK)      |
| CARLOSS (CE1000)             | LO-RXPOWER (STMN)   | SSM-FAIL (BITS)      |
| CARLOSS (CE100T)             | LO-RXPOWER (TRUNK)  | SSM-FAIL (E1)        |
| CARLOSS (CEMR)               | LOS (2R)            | SSM-FAIL (STMN)      |
| CARLOSS (E1000F)             | LOS (BITS)          | SSM-FAIL (TRUNK)     |
| CARLOSS (E100T)              | LOS (DS1)           | SSM-LNC (BITS)       |
| CARLOSS (EQPT)               | LOS (DS3)           | SSM-LNC (NE-SREF)    |
| CARLOSS (FC)                 | LOS (E1)            | SSM-LNC (STMN)       |
| CARLOSS (G1000)              | LOS (E3)            | SSM-LNC (TRUNK)      |
| CARLOSS (GE)                 | LOS (E4)            | SSM-OFF (BITS)       |
| CARLOSS (ISC)                | LOS (ESCON)         | SSM-OFF (DS1)        |
| CARLOSS (ML1000)             | LOS (FUDC)          | SSM-OFF (E1)         |
| CARLOSS (ML100T)             | LOS (ISC)           | SSM-OFF (STMN)       |
| CARLOSS (MLFX)               | LOS (MSUDC)         | SSM-OFF (TRUNK)      |
| CARLOSS (MLMR)               | LOS (OTS)           | SSM-PRC (BITS)       |
| CARLOSS (TRUNK)              | LOS (STM1E)         | SSM-PRC (NE-SREF)    |
| CASETEMP-DEG (AOTS)          | LOS (STMN)          | SSM-PRC (STMN)       |
| CLDRESTART (EQPT)            | LOS (TRUNK)         | SSM-PRC (TRUNK)      |
| COMIOXC (EQPT)               | LOS-O (OCH)         | SSM-PRS (E1)         |
| COMM-FAIL (EQPT)             | LOS-O (OMS)         | SSM-PRS (TRUNK)      |
| CONTBUS-A-18 (EQPT)          | LOS-O (OTS)         | SSM-RES (DS1)        |
| CONTBUS-B-18 (EQPT)          | LOS-P (OCH)         | SSM-RES (E1)         |
| CONTBUS-DISABLED (EQPT)      | LOS-P (OMS)         | SSM-RES (TRUNK)      |
| CONTBUS-IO-A (EQPT)          | LOS-P (OTS)         | SSM-SDH-TN (BITS)    |
| CONTBUS-IO-B (EQPT)          | LOS-P (TRUNK)       | SSM-SDH-TN (NE-SREF) |
| CPP-INCAPABLE (MLMR)         | LO-TXPOWER (2R)     | SSM-SDH-TN (STMN)    |

Table 2-6: ONS 15454 SDH Alarm and Condition Alphabetical List

|                           |                       |                      |
|---------------------------|-----------------------|----------------------|
| CTNEQPT-MISMATCH (EQPT)   | LO-TXPOWER (EQPT)     | SSM-SDH-TN (TRUNK)   |
| CTNEQPT-PBPROT (EQPT)     | LO-TXPOWER (ESCON)    | SSM-SETS (BITS)      |
| CTNEQPT-PBWORK (EQPT)     | LO-TXPOWER (FC)       | SSM-SETS (NE-SREF)   |
| DATA-CRC (CE100T)         | LO-TXPOWER (GE)       | SSM-SETS (STMN)      |
| DATA-CRC (ML1000)         | LO-TXPOWER (ISC)      | SSM-SETS (TRUNK)     |
| DATA-CRC (ML100T)         | LO-TXPOWER (PPM)      | SSM-SMC (E1)         |
| DATA-CRC (MLFX)           | LO-TXPOWER (STMN)     | SSM-SMC (TRUNK)      |
| DATAFLT (NE)              | LO-TXPOWER (TRUNK)    | SSM-ST2 (E1)         |
| DBOSYNC (NE)              | LPBKCRS (VCMON-HP)    | SSM-ST2 (TRUNK)      |
| DCU-LOSS-FAIL (OTS)       | LPBKCRS (VCTRM-HP)    | SSM-ST3 (E1)         |
| DS3-MISM (DS3)            | LPBKDS1FE-CMD (DS1)   | SSM-ST3 (TRUNK)      |
| DSP-COMM-FAIL (TRUNK)     | LPBKDS3FEAC (DS3)     | SSM-ST3E (E1)        |
| DSP-FAIL (TRUNK)          | LPBKDS3FEAC-CMD (DS3) | SSM-ST3E (TRUNK)     |
| DUP-IPADDR (NE)           | LPBKDS3FEAC-CMD (E3)  | SSM-ST4 (DS1)        |
| DUP-NODENAME (NE)         | LPBKE1FEAC (E3)       | SSM-ST4 (E1)         |
| DUP-SHELF-ID (SHELF)      | LPBKE3FEAC (E3)       | SSM-ST4 (STMN)       |
| EHIBATVG (PWR)            | LPBKFACILITY (CE1000) | SSM-ST4 (TRUNK)      |
| ELWBATVG (PWR)            | LPBKFACILITY (CE100T) | SSM-STU (BITS)       |
| RS-EOC (TRUNK)            | LPBKFACILITY (CEMR)   | SSM-STU (E1)         |
| EOC-L (TRUNK)             | LPBKFACILITY (DS1)    | SSM-STU (NE-SREF)    |
| EQPT (AICI-AEP)           | LPBKFACILITY (DS3)    | SSM-STU (STMN)       |
| EQPT (AICI-AIE)           | LPBKFACILITY (E1)     | SSM-STU (TRUNK)      |
| EQPT (EQPT)               | LPBKFACILITY (E3)     | SSM-TNC (NE-SREF)    |
| EQPT (PPM)                | LPBKFACILITY (E4)     | SSM-TNC (STMN)       |
| EQPT-DIAG (EQPT)          | LPBKFACILITY (ESCON)  | SSM-TNC (TRUNK)      |
| EQPT-MISS (FAN)           | LPBKFACILITY (FC)     | SW-MISMATCH (EQPT)   |
| ERROR-CONFIG (EQPT)       | LPBKFACILITY (FCMR)   | SWMTXMOD-PROT (EQPT) |
| ETH-LINKLOSS (NE)         | LPBKFACILITY (G1000)  | SWMTXMOD-WORK (EQPT) |
| E-W-MISMATCH (STMN)       | LPBKFACILITY (GE)     | SWTOPRI (EXT-SREF)   |
| EXCCOL (EQPT)             | LPBKFACILITY (ISC)    | SWTOPRI (NE-SREF)    |
| EXERCISE-RING-FAIL (STMN) | LPBKFACILITY (MLMR)   | SWTOSEC (EXT-SREF)   |
| EXERCISE-SPAN-FAIL (STMN) | LPBKFACILITY (STM1E)  | SWTOSEC (NE-SREF)    |
| EXT (ENVALRM)             | LPBKFACILITY (STMN)   | SWTOTHIRD (EXT-SREF) |
| EXTRA-TRAF-PREEMPT (STMN) | LPBKFACILITY (TRUNK)  | SWTOTHIRD (NE-SREF)  |
| FAILTOSW (2R)             | LPBKTERMINAL (CE1000) | SYNC-FREQ (DS1)      |
| FAILTOSW (EQPT)           | LPBKTERMINAL (CE100T) | SYNC-FREQ (E1)       |
| FAILTOSW (ESCON)          | LPBKTERMINAL (CEMR)   | SYNC-FREQ (STMN)     |
| FAILTOSW (FC)             | LPBKTERMINAL (DS1)    | SYNC-FREQ (TRUNK)    |
| FAILTOSW (GE)             | LPBKTERMINAL (DS3)    | SYNCLOSS (FC)        |
| FAILTOSW (ISC)            | LPBKTERMINAL (E1)     | SYNCLOSS (FCMR)      |
| FAILTOSW (STMN)           | LPBKTERMINAL (E3)     | SYNCLOSS (GE)        |
| FAILTOSW (TRUNK)          | LPBKTERMINAL (E4)     | SYNCLOSS (ISC)       |
| FAILTOSW-PATH (VCMON-HP)  | LPBKTERMINAL (ESCON)  | SYNCLOSS (TRUNK)     |
| FAILTOSW-PATH (VCMON-LP)  | LPBKTERMINAL (FC)     | SYNCPRI (EXT-SREF)   |

Table 2-6: ONS 15454 SDH Alarm and Condition Alphabetical List

|                             |                              |                           |
|-----------------------------|------------------------------|---------------------------|
| FAILTOSWR (STMN)            | LPBKTERMINAL (FCMR)          | SYNCPRI (NE-SREF)         |
| FAILTOSWS (STMN)            | LPBKTERMINAL (G1000)         | SYNCSEC (EXT-SREF)        |
| FAN (FAN)                   | LPBKTERMINAL (GE)            | SYNCSEC (NE-SREF)         |
| FAPS (FCMR)                 | LPBKTERMINAL (ISC)           | SYNCTHIRD (EXT-SREF)      |
| FAPS (TRUNK)                | LPBKTERMINAL (MLMR)          | SYNCTHIRD (NE-SREF)       |
| FAPS-CONFIG-MISMATCH (EQPT) | LPBKTERMINAL (STM1E)         | SYSBOOT (NE)              |
| FC-DE-NES (FC)              | LPBKTERMINAL (STMN)          | TEMP-MISM (NE)            |
| FC-DE-NES (FCMR)            | LPBKTERMINAL (TRUNK)         | TIM (STM1E)               |
| FC-DE-NES (TRUNK)           | LP-DEG (VCMON-LP)            | TIM (STMN)                |
| FC-NO-CREDITS (FC)          | LP-DEG (VCTRM-LP)            | TIM (TRUNK)               |
| FC-NO-CREDITS (FCMR)        | LP-ENCAP-MISMATCH (VCTRM-LP) | TIM-MON (STMN)            |
| FC-NO-CREDITS (TRUNK)       | LP-EXC (VCMON-LP)            | TIM-MON (TRUNK)           |
| FDI (OCH)                   | LP-EXC (VCTRM-LP)            | TPTFAIL (CE1000)          |
| FDI (OCH-TERM)              | LP-PLM (VCMON-LP)            | TPTFAIL (CE100T)          |
| FE-AIS (E3)                 | LP-PLM (VCTRM-LP)            | TPTFAIL (CEMR)            |
| FEC-MISM (TRUNK)            | LP-RFI (VCMON-LP)            | TPTFAIL (FCMR)            |
| FE-E1-MULTLOS (E3)          | LP-RFI (VCTRM-LP)            | TPTFAIL (G1000)           |
| FE-E1-NSA (E3)              | LP-TIM (VCMON-LP)            | TPTFAIL (ML1000)          |
| FE-E1-SA (E3)               | LP-TIM (VCTRM-LP)            | TPTFAIL (ML100T)          |
| FE-E1-SNGLLOS (E3)          | LP-UNEQ (VCMON-LP)           | TPTFAIL (MLFX)            |
| FE-E3-NSA (E3)              | LP-UNEQ (VCTRM-LP)           | TPTFAIL (MLMR)            |
| FE-E3-SA (E3)               | MAN-REQ (EQPT)               | TRAIL-SIGNAL-FAIL (OCH)   |
| FE-EQPT-NSA (E3)            | MAN-REQ (ML1000)             | TRAIL-SIGNAL-FAIL (TRUNK) |
| FE-FRCDWKSWBK-SPAN (STMN)   | MAN-REQ (ML100T)             | TRMT (DS1)                |
| FE-FRCDWKSWPR-RING (STMN)   | MAN-REQ (MLFX)               | TRMT (E1)                 |
| FE-FRCDWKSWPR-SPAN (STMN)   | MAN-REQ (MLMR)               | TRMT-MISS (DS1)           |
| FE-IDLE (E3)                | MAN-REQ (VCMON-HP)           | TRMT-MISS (E1)            |
| FE-LOCKOUTOFPR-SPAN (STMN)  | MAN-REQ (VCMON-LP)           | TU-AIS (VCMON-LP)         |
| FE-LOF (E3)                 | MANRESET (EQPT)              | TU-AIS (VCTRM-LP)         |
| FE-LOS (E3)                 | MANSWTOINT (NE-SREF)         | TU-LOP (VCMON-LP)         |
| FE-MANWKSWBK-SPAN (STMN)    | MANSWTOPRI (EXT-SREF)        | TU-LOP (VCTRM-LP)         |
| FE-MANWKSWPR-RING (STMN)    | MANSWTOPRI (NE-SREF)         | TX-AIS (DS1)              |
| FE-MANWKSWPR-SPAN (STMN)    | MANSWTOSEC (EXT-SREF)        | TX-AIS (DS3)              |
| FEPRLF (STMN)               | MANSWTOSEC (NE-SREF)         | TX-AIS (E1)               |
| FIBERTEMP-DEG (AOTS)        | MANSWTOTHIRD (EXT-SREF)      | TX-AIS (E3)               |
| FORCED-REQ (EQPT)           | MANSWTOTHIRD (NE-SREF)       | TX-IDLE (DS1)             |
| FORCED-REQ (ML1000)         | MANUAL-REQ-RING (STMN)       | TX-LOF (DS1)              |

Table 2-6: ONS 15454 SDH Alarm and Condition Alphabetical List



|                           |                         |                      |
|---------------------------|-------------------------|----------------------|
| FORCED-REQ (ML100T)       | MANUAL-REQ-SPAN (2R)    | TX-LOF (E1)          |
| FORCED-REQ (MLFX)         | MANUAL-REQ-SPAN (ESCON) | TX-RAI (DS1)         |
| FORCED-REQ (MLMR)         | MANUAL-REQ-SPAN (FC)    | TX-RAI (E1)          |
| FORCED-REQ (VCMON-HP)     | MANUAL-REQ-SPAN (GE)    | TX-RAI (E3)          |
| FORCED-REQ (VCMON-LP)     | MANUAL-REQ-SPAN (ISC)   | UNC-WORD (TRUNK)     |
| FORCED-REQ-RING (STMN)    | MANUAL-REQ-SPAN (STMN)  | UNQUAL-PPM (PPM)     |
| FORCED-REQ-SPAN (2R)      | MANUAL-REQ-SPAN (TRUNK) | UT-COMM-FAIL (TRUNK) |
| FORCED-REQ-SPAN (ESCON)   | MAX-STATIONS (RPRIF)    | UT-FAIL (TRUNK)      |
| FORCED-REQ-SPAN (FC)      | MEA (BIC)               | VCG-DEG (VCG)        |
| FORCED-REQ-SPAN (GE)      | MEA (EQPT)              | VCG-DOWN (VCG)       |
| FORCED-REQ-SPAN (ISC)     | MEA (FAN)               | VOA-HDEG (AOTS)      |
| FORCED-REQ-SPAN (STMN)    | MEA (PPM)               | VOA-HDEG (OCH)       |
| FORCED-REQ-SPAN (TRUNK)   | MEA (SHELF)             | VOA-HDEG (OMS)       |
| FP-LINK-LOSS (EQPT)       | MEM-GONE (EQPT)         | VOA-HDEG (OTS)       |
| FRCDSWTOINT (NE-SREF)     | MEM-LOW (EQPT)          | VOA-HFAIL (AOTS)     |
| FRCDSWTOPRI (EXT-SREF)    | MFGMEM (AICI-AEP)       | VOA-HFAIL (OCH)      |
| FRCDSWTOPRI (NE-SREF)     | MFGMEM (AICI-AIE)       | VOA-HFAIL (OMS)      |
| FRCDSWTOSEC (EXT-SREF)    | MFGMEM (BPLANE)         | VOA-HFAIL (OTS)      |
| FRCDSWTOSEC (NE-SREF)     | MFGMEM (FAN)            | VOA-LDEG (AOTS)      |
| FRCDSWTO THIRD (EXT-SREF) | MFGMEM (PPM)            | VOA-LDEG (OCH)       |
| FRCDSWTO THIRD (NE-SREF)  | MS-AIS (STM1E)          | VOA-LDEG (OMS)       |
| FRNGSYNC (NE-SREF)        | MS-AIS (STMN)           | VOA-LDEG (OTS)       |
| FSTSYNC (NE-SREF)         | MS-DEG (E1)             | VOA-LFAIL (AOTS)     |
| FTA-MISMATCH (EQPT)       | MS-DEG (E3)             | VOA-LFAIL (OCH)      |
| FULLPASSTHR-BI (STMN)     | MS-DEG (E4)             | VOA-LFAIL (OMS)      |
| GAIN-HDEG (AOTS)          | MS-DEG (STM1E)          | VOA-LFAIL (OTS)      |
| GAIN-HFAIL (AOTS)         | MS-DEG (STMN)           | VOLT-MISM (PWR)      |
| GAIN-LDEG (AOTS)          | MS-EOC (STMN)           | WKSWPR (2R)          |
| GAIN-LFAIL (AOTS)         | MS-EXC (E1)             | WKSWPR (EQPT)        |
| GCC-EOC (TRUNK)           | MS-EXC (E3)             | WKSWPR (ESCON)       |
| GE-OOSYNC (FC)            | MS-EXC (E4)             | WKSWPR (FC)          |
| GE-OOSYNC (GE)            | MS-EXC (STM1E)          | WKSWPR (GE)          |
| GE-OOSYNC (ISC)           | MS-EXC (STMN)           | WKSWPR (ISC)         |
| GE-OOSYNC (TRUNK)         | MS-RFI (STM1E)          | WKSWPR (STMN)        |
| GFP-CSF (CE1000)          | MS-RFI (STMN)           | WKSWPR (VCMON-HP)    |
| GFP-CSF (CE100T)          | MSSP-OOSYNC (STMN)      | WKSWPR (VCMON-LP)    |
| GFP-CSF (CEMR)            | MSSP-SW-VER-MISM (STMN) | WTR (2R)             |
| GFP-CSF (FCMR)            | MS-SQUELCH-HP (STMN)    | WTR (EQPT)           |
| GFP-CSF (GFP-FAC)         | MS-SQUELCH-LP (STMN)    | WTR (ESCON)          |
| GFP-CSF (ML1000)          | MT-OCHNC (OTS)          | WTR (FC)             |
| GFP-CSF (ML100T)          | NO-CONFIG (EQPT)        | WTR (GE)             |
| GFP-CSF (MLFX)            | NON-CISCO-PPM (PPM)     | WTR (ISC)            |
| GFP-CSF (MLMR)            | OCHNC-INC (OCHNC-CONN)  | WTR (ML1000)         |
| GFP-DE-MISMATCH (FCMR)    | OCHTERM-INC (OCH-TERM)  | WTR (ML100T)         |

Table 2-6: ONS 15454 SDH Alarm and Condition Alphabetical List

|                           |                       |                      |
|---------------------------|-----------------------|----------------------|
| GFP-DE-MISMATCH (GFP-FAC) | ODUK-1-AIS-PM (TRUNK) | WTR (MLFX)           |
| GFP-EX-MISMATCH (CE1000)  | ODUK-2-AIS-PM (TRUNK) | WTR (MLMR)           |
| GFP-EX-MISMATCH (FCMR)    | ODUK-3-AIS-PM (TRUNK) | WTR (STMN)           |
| GFP-EX-MISMATCH (GFP-FAC) | ODUK-4-AIS-PM (TRUNK) | WTR (TRUNK)          |
| GFP-LFD (CE1000)          | ODUK-AIS-PM (TRUNK)   | WTR (VCMON-HP)       |
| GFP-LFD (CE100T)          | ODUK-BDI-PM (TRUNK)   | WTR (VCMON-LP)       |
| GFP-LFD (CEMR)            | ODUK-LCK-PM (TRUNK)   | WVL-MISMATCH (TRUNK) |

## Alarm Logical Objects

The CTC alarm profile list organizes all alarms and conditions according to the logical objects they are raised against. These logical objects represent physical objects such as cards, logical objects such as circuits, or transport and signal monitoring entities such as the SDH or ITU-T G.709 optical overhead bits. One alarm can appear in multiple entries. It can be raised against multiple objects. For example, the loss of signal (LOS) alarm can be raised against the optical signal (STM-N) or the optical transport layer overhead (OTN) as well as other objects. Therefore, both STM-N: LOS and OTN: LOS appear in the list (as well as the other objects).

Alarm profile list objects are defined in [Table 2-7](#).

**Note:** Alarm logical object names can appear as abbreviated versions of standard terms used in the system and the documentation. For example, the "STMN" logical object refers to the STM-N signal. Logical object names or industry-standard terms are used within the entries as appropriate.

**Table 2-7: Alarm Logical Object Type Definitions**

| Object Type     | Definition   |
|-----------------|--|
| <b>2R</b>       | Reshape and retransmit (used for transponder [TXP] cards). For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> . |
| <b>AICI-AEP</b> | Alarm Interface Controller-International-Alarm expansion panel.  |
| <b>AICI-AIE</b> | Alarm Interface Controller-International/Alarm Interface Extension. A combination term that refers to this platform's AIC-I card.  |
| <b>AIP</b>      | Alarm Interface Panel.   |
| <b>AOTS</b>     | Amplified optical transport section. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .                       |
| <b>BIC</b>      | Backplane interface connector.   |
| <b>BITS</b>     | Building integrated timing supply incoming references (BITS-1, BITS-2).  |
| <b>BPLANE</b>   | The backplane.   |
| <b>CE1000</b>   | CE-1000-4 card.  |
| <b>CE100T</b>   | CE-100T-8 card.  |
| <b>CEMR</b>     | CE-MR-10 card.   |
| <b>CTRL</b>     | Control channel.   |
| <b>DS1</b>      |  |

|                 |  |
|-----------------|--|
|                 | A DS-1 line on a DS-1 or DS-3 electrical card (DS1-14, DS3N-12E, DS3XM-6, DS3XM-12).   |
| <b>DS3</b>      | A DS-3 signal on a DS3i-N-12 card.   |
| <b>E1</b>       | E1-42 card.  |
| <b>E3</b>       | E3-12 card.  |
| <b>E4</b>       | Line type supported by the STM1E card.   |
| <b>E1000F</b>   | An E1000-2-G card.   |
| <b>E100T</b>    | An E100T-G card.   |
| <b>ENVALRM</b>  | An environmental alarm port.   |
| <b>EQPT</b>     | A card, its physical objects, and logical objects as they are located in any of the eight noncommon card slots. The EQPT object is used for alarms that refer to the card itself and all other objects on the card including ports, lines, STM, and VC.  |
| <b>ESCON</b>    | Enterprise System Connection fiber optic technology, referring to the following TXP cards: TXP_MR_2.5G, TXPP_MR_2.5G. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .  |
| <b>EXT-SREF</b> | BITS outgoing references (SYNC-BITS1, SYNC-BITS2).   |
| <b>FAN</b>      | Fan-tray assembly.   |
| <b>FC</b>       | Fibre Channel data transfer architecture, referring to the following muxponder (MXP) or TXP cards: MXP_MR_2.5G, MXPP_MR_2.5G, TXP_MR_2.5G, TXPP_MR_2.5G, TXP_MR_10E. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> . |
| <b>FCMR</b>     | An FC_MR-4 Fibre Channel card. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .   |
| <b>FUDC</b>     | SDH F1 byte user data channel for ONS 15454 SDH ML-Series Ethernet cards.  |
| <b>G1000</b>    | The ONS 15454 SDH G-Series card.   |
| <b>GE</b>       | Gigabit Ethernet, referring to the following MXP or TXP cards: MXP_MR_2.5G, MXPP_MR_2.5G, TXP_MR_2.5G, TXPP_MR_2.5G, TXP_MR_10E, TXP_MR_10G. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .                         |
| <b>GFP-FAC</b>  | Generic framing procedure facility port, referring to all MXP and TXP cards. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .   |
| <b>ISC</b>      | Inter-service channel referring to MXP and TXP cards. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .  |
| <b>ML1000</b>   | The ONS 15454 SDH ML1000-2 card.   |
| <b>ML100T</b>   | The ONS 15454 SDH ML100T-2 or ML100T-8 card.   |
| <b>MLFX</b>     | An MLFX Ethernet card.   |
| <b>MLMR</b>     | ML-MR-10 Ethernet card.  |
| <b>MSUDC</b>    | Multiplex section user data channel.   |
| <b>NE</b>       | The entire network element.  |
| <b>NE-SREF</b>  | The timing status of the NE.   |
| <b>OCH</b>      | The optical channel, referring to dense wavelength division multiplexing (DWDM) cards. For more information about most of the alarms on this object, refer to the "Alarm   |

Table 2-7: Alarm Logical Object Type Definitions

|                     |   |
|---------------------|---|
|                     | Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .   |
| <b>OCH-TERM</b>     | The optical channel termination node, referring to DWDM cards. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .  |
| <b>OCHNC-CONN</b>   | The optical channel network connection, referring to DWDM cards. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .  |
| <b>OMS</b>          | Optical multiplex section. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .  |
| <b>OSC-RING</b>     | Optical service channel ring. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .   |
| <b>OTS</b>          | Optical transport section. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .  |
| <b>PWR</b>          | Power equipment.  |
| <b>PPM</b>          | Pluggable port module (PPM), referring to all MXP and TXP cards, MRC-12 cards, and OC192-XFP/STM64-XFP cards. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> . |
| <b>RPRIF</b>        | Resilient Packet Ring (RPR) Interface.  |
| <b>SHELF</b>        | The shelf assembly. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .   |
| <b>STMIE</b>        | Synchronous transfer mode 1 (speed) electrical interface  |
| <b>STMN</b>         | An STM-N line on an STM-N card.   |
| <b>!TLINK</b>       | Traffic engineering (TE) link correlation.  |
| <b>' VCTRM-HP '</b> | VT alarm detection at termination (downstream from the cross-connect).  |
| <b>TRUNK</b>        | The optical or DWDM card carrying the high-speed signal; referring to MXP, TXP, or ML-Series cards. For more information about most of the alarms on this object, refer to the "Alarm Troubleshooting" chapter of the <i>Cisco ONS 15454 DWDM Troubleshooting Guide</i> .           |
| <b>UCP-CKT</b>      | Unified control plane circuit.  |
| <b>UCP-IPCC</b>     | Unified control plane IP control channel.   |
| <b>UCP-NBR</b>      | Unified control plane neighbor.   |
| <b>VCG</b>          | ONS 15454 SDH virtual concatenation group of virtual tributaries (VT).  |
| <b>VCMON-HP</b>     | High-order path virtual concatenation monitoring.   |
| <b>VCMON-LP</b>     | VT1 alarm detection at the monitor point (upstream from the cross-connect).   |
| <b>VCTRM-HP</b>     | High-order path concatenation termination monitoring.   |
| <b>VCTRM-LP</b>     | VC alarm detection at termination (downstream from the cross-connect).  |

## Alarm List by Logical Object Type

Table 2-8 lists all ONS 15454 SDH Release 8.5 alarms and logical objects as they are given in the system alarm profile. The list entries are organized by logical object name and then by alarm or condition name. Where appropriate, the alarm entries also contain troubleshooting procedures.

**Note:** In a mixed network containing different types of nodes (such as ONS 15310-CL, ONS 15454 SDH, and ONS 15600), the initially displayed alarm list in the Provisioning > Alarm Profiles > Alarm Profile Editor tab lists all conditions that are applicable to all nodes in the network. However, when you load the default severity profile from a node, only applicable alarms will display severity levels. Nonapplicable alarms can display "use default" or "unset."

**Note:** In some cases this list does not follow alphabetical order, but it does reflect the order shown in CTC.

**Table 2-8: Alarm List by Logical Object Type in Alarm Profile**

|                             |                            |                                     |
|-----------------------------|----------------------------|-------------------------------------|
| 2R: ALS (NA)                | FC: HI-TXPOWER (MN)        | PWR: VOLT-MISM (NA)                 |
| 2R: AS-CMD (NA)             | FC: LO-RXPOWER (MN)        | RPRIF: MAX-STATIONS (MJ)            |
| 2R: AS-MT (NA)              | FC: LO-TXPOWER (MN)        | RPRIF:<br>RSV-RT-EXCD-RINGLET0 (MJ) |
| 2R: FAILTOSW (NA)           | FC: LOCKOUT-REQ (NA)       | RPRIF:<br>RSV-RT-EXCD-RINGLET1 (MJ) |
| 2R: FORCED-REQ-SPAN (NA)    | FC: LPBKFACILITY (NA)      | RPRIF: RPR-PASSTHR (NA)             |
| 2R: HI-LASERBIAS (MN)       | FC: LPBKTERMINAL (NA)      | RPRIF: RPR-PEER-MISS (MJ)           |
| 2R: HI-RXPOWER (MN)         | FC: MANUAL-REQ-SPAN (NA)   | RPRIF: RPR-PROT-ACTIVE (NA)         |
| 2R: HI-TXPOWER (MN)         | FC: OUT-OF-SYNC (MJ)       | RPRIF:<br>RPR-PROT-CONFIG-MISM (MJ) |
| 2R: LO-RXPOWER (MN)         | FC: SIGLOSS (MJ)           | RPRIF: RPR-RI-FAIL (MJ)             |
| 2R: LO-TXPOWER (MN)         | FC: SQUELCHED (NA)         | SHELF: APC-DISABLED (NA)            |
| 2R: LOCKOUT-REQ (NA)        | FC: SYNCLOSS (MJ)          | SHELF: AS-CMD (NA)                  |
| 2R: LOS (CR)                | FC: WKSWPR (NA)            | SHELF: AS-MT (NA)                   |
| 2R: MANUAL-REQ-SPAN (NA)    | FC: WTR (NA)               | SHELF: DUP-SHELF-ID (MJ)            |
| 2R: SQUELCHED (NA)          | FCMR: AS-CMD (NA)          | SHELF: MEA (MJ)                     |
| 2R: WKSWPR (NA)             | FCMR: AS-MT (NA)           | SHELF: SHELF-COMM-FAIL (MJ)         |
| 2R: WTR (NA)                | FCMR: FAPS (NA)            | STM1E: AS-CMD (NA)                  |
| AICI-AEP: EQPT (CR)         | FCMR: FC-DE-NES (MJ)       | STM1E: AS-MT (NA)                   |
| AICI-AEP: MFGMEM (CR)       | FCMR: FC-NO-CREDITS (MJ)   | STM1E: LOF (CR)                     |
| AICI-AIE: EQPT (CR)         | FCMR: GFP-CSF (MJ)         | STM1E: LOS (CR)                     |
| AICI-AIE: MFGMEM (CR)       | FCMR: GFP-DE-MISMATCH (MJ) | STM1E: LPBKFACILITY (NA)            |
| AOTS: ALS (NA)              | FCMR: GFP-EX-MISMATCH (MJ) | STM1E: LPBKTERMINAL (NA)            |
| AOTS: AMPLI-INIT (NA)       | FCMR: GFP-LFD (MJ)         | STM1E: MS-AIS (NR)                  |
| AOTS: APC-CORR-SKIPPED (MN) | FCMR: GFP-NO-BUFFERS (MJ)  | STM1E: MS-DEG (NA)                  |
| AOTS: APC-DISABLED (NA)     | FCMR: GFP-UP-MISMATCH (MJ) | STM1E: MS-EXC (NA)                  |
| AOTS: APC-OUT-OF-RANGE (MN) | FCMR: LPBKFACILITY (NA)    | STM1E: MS-RFI (NR)                  |
| AOTS: APC-WRONG-GAIN (NA)   | FCMR: LPBKTERMINAL (NA)    | STM1E: SD (NA)                      |
| AOTS: AS-CMD (NA)           | FCMR: PORT-MISMATCH (NA)   | STM1E: TIM (MJ)                     |

|                           |                          |                                |
|---------------------------|--------------------------|--------------------------------|
| AOTS: AS-MT (NA)          | FCMR: SIGLOSS (MJ)       | STMN: ALS (NA)                 |
| AOTS: CASETEMP-DEG (MN)   | FCMR: SYNCLOSS (MJ)      | STMN: APS-INV-PRIM (MN)        |
| AOTS: FIBERTEMP-DEG (MN)  | FCMR: TPTFAIL (MJ)       | STMN: APS-PRIM-FAC (NA)        |
| AOTS: GAIN-HDEG (MN)      | FUDC: AIS (NR)           | STMN: APS-PRIM-SEC-MISM (MN)   |
| AOTS: GAIN-HFAIL (CR)     | FUDC: LOS (MN)           | STMN: APSB (MN)                |
| AOTS: GAIN-LDEG (MN)      | G1000: AS-CMD (NA)       | STMN: APSC-IMP (MN)            |
| AOTS: GAIN-LFAIL (CR)     | G1000: AS-MT (NA)        | STMN: APSCDFLTK (MN)           |
| AOTS: LASER-APR (NA)      | G1000: CARLOSS (MJ)      | STMN: APSCINCON (MN)           |
| AOTS: LASERBIAS-DEG (MN)  | G1000: LPBKFACILITY (NA) | STMN: APSCM (MN)               |
| AOTS: LASERBIAS-FAIL (MJ) | G1000: LPBKTERMINAL (NA) | STMN: APSCNMIS (MJ)            |
| AOTS: LASERTEMP-DEG (MN)  | G1000: TPTFAIL (MJ)      | STMN: APSIMP (MN)              |
| AOTS: OPWR-HDEG (MN)      | GE: ALS (NA)             | STMN: AS-CMD (NA)              |
| AOTS: OPWR-HFAIL (CR)     | GE: AS-CMD (NA)          | STMN: AS-MT (NA)               |
| AOTS: OPWR-LDEG (MN)      | GE: AS-MT (NA)           | STMN: AUTOLSROFF (CR)          |
| AOTS: OPWR-LFAIL (CR)     | GE: CARLOSS (MJ)         | STMN: E-W-MISMATCH (MJ)        |
| AOTS: OSRION (NA)         | GE: FAILTOSW (NA)        | STMN: EXERCISE-RING-FAIL (NA)  |
| AOTS: PARAM-MISM (NA)     | GE: FORCED-REQ-SPAN (NA) | STMN: EXERCISE-SPAN-FAIL (NA)  |
| AOTS: VOA-HDEG (MN)       | GE: GE-OOSYNC (CR)       | STMN: EXTRA-TRAF-PREEMPT (MJ)  |
| AOTS: VOA-HFAIL (CR)      | GE: HI-LASERBIAS (MN)    | STMN: FAILTOSW (NA)            |
| AOTS: VOA-LDEG (MN)       | GE: HI-RXPOWER (MN)      | STMN: FAILTOSWR (NA)           |
| AOTS: VOA-LFAIL (CR)      | GE: HI-TXPOWER (MN)      | STMN: FAILTOSWS (NA)           |
| BIC: MEA (CR)             | GE: LMP-FAIL (MN)        | STMN: FE-FRCDWKSWBK-SPAN (NA)  |
| BITS: AIS (NR)            | GE: LMP-SD (MN)          | STMN: FE-FRCDWKSWPR-RING (NA)  |
| BITS: LOF (MN)            | GE: LMP-SF (MN)          | STMN: FE-FRCDWKSWPR-SPAN (NA)  |
| BITS: LOS (MN)            | GE: LMP-UNALLOC (NA)     | STMN: FE-LOCKOUTOFPR-SPAN (NA) |
| BITS: SSM-DUS (NA)        | GE: LO-RXPOWER (MN)      | STMN: FE-MANWKSWBK-SPAN (NA)   |
| BITS: SSM-FAIL (MN)       | GE: LO-TXPOWER (MN)      | STMN: FE-MANWKSWPR-RING (NA)   |
| BITS: SSM-LNC (NA)        | GE: LOCKOUT-REQ (NA)     | STMN: FE-MANWKSWPR-SPAN (NA)   |
| BITS: SSM-OFF (NA)        | GE: LPBKFACILITY (NA)    | STMN: FEPRLF (MN)              |
| BITS: SSM-PRC (NA)        | GE: LPBKTERMINAL (NA)    | STMN: FORCED-REQ-RING (NA)     |
| BITS: SSM-SDH-TN (NA)     | GE: MANUAL-REQ-SPAN (NA) | STMN: FORCED-REQ-SPAN (NA)     |
| BITS: SSM-SETS (NA)       | GE: OUT-OF-SYNC (MJ)     | STMN: FULLPASSTHR-BI (NA)      |
| BITS: SSM-STU (NA)        | GE: SIGLOSS (MJ)         | STMN: HELLO (MN)               |

Table 2-8: Alarm List by Logical Object Type in Alarm Profile

|                              |                               |                                   |
|------------------------------|-------------------------------|-----------------------------------|
| BPLANE: AS-CMD (NA)          | GE: SQUELCHED (NA)            | STMN: HI-LASERBIAS (MN)           |
| BPLANE: INVMACADR (MJ)       | GE: SYNCLOSS (MJ)             | STMN: HI-LASERTEMP (MN)           |
| BPLANE: MFGMEM (CR)          | GE: WKSWPR (NA)               | STMN: HI-RXPOWER (MN)             |
| CE1000: AS-CMD (NA)          | GE: WTR (NA)                  | STMN: HI-TXPOWER (MN)             |
| CE1000: AS-MT (NA)           | GFP-FAC: AS-CMD (NA)          | STMN: ISIS-ADJ-FAIL (MN)          |
| CE1000: CARLOSS (MJ)         | GFP-FAC: AS-MT (NA)           | STMN: KB-PASSTHR (NA)             |
| CE1000: GFP-CSF (MJ)         | GFP-FAC: GFP-CSF (MJ)         | STMN:<br>KBYTE-APS-CHAN-FAIL (MN) |
| CE1000: GFP-EX-MISMATCH (MJ) | GFP-FAC: GFP-DE-MISMATCH (MJ) | STMN: LKOUTPR-S (NA)              |
| CE1000: GFP-LFD (MJ)         | GFP-FAC: GFP-EX-MISMATCH (MJ) | STMN: LMP-FAIL (MN)               |
| CE1000: GFP-UP-MISMATCH (MJ) | GFP-FAC: GFP-LFD (MJ)         | STMN: LMP-SD (MN)                 |
| CE1000: LPBKFACILITY (NA)    | GFP-FAC: GFP-NO-BUFFERS (MJ)  | STMN: LMP-SF (MN)                 |
| CE1000: LPBKTERMINAL (NA)    | GFP-FAC: GFP-UP-MISMATCH (MJ) | STMN: LMP-UNALLOC (NA)            |
| CE1000: TPTFAIL (MJ)         | ISC: ALS (NA)                 | STMN: LO-LASERBIAS (MN)           |
| CE100T: AS-CMD (NA)          | ISC: AS-CMD (NA)              | STMN: LO-LASERTEMP (MN)           |
| CE100T: AS-MT (NA)           | ISC: AS-MT (NA)               | STMN: LO-RXPOWER (MN)             |
| CE100T: CARLOSS (MJ)         | ISC: CARLOSS (MJ)             | STMN: LO-TXPOWER (MN)             |
| CE100T: DATA-CRC (MJ)        | ISC: FAILTOSW (NA)            | STMN: LOCKOUT-REQ (NA)            |
| CE100T: GFP-CSF (MJ)         | ISC: FORCED-REQ-SPAN (NA)     | STMN: LOF (CR)                    |
| CE100T: GFP-LFD (MJ)         | ISC: GE-OOSYNC (CR)           | STMN: LOS (CR)                    |
| CE100T: GFP-UP-MISMATCH (MJ) | ISC: HI-LASERBIAS (MN)        | STMN: LPBKFACILITY (NA)           |
| CE100T: LPBKFACILITY (NA)    | ISC: HI-RXPOWER (MN)          | STMN: LPBKTERMINAL (NA)           |
| CE100T: LPBKTERMINAL (NA)    | ISC: HI-TXPOWER (MN)          | STMN: MANUAL-REQ-RING (NA)        |
| CE100T: TPTFAIL (MJ)         | ISC: LO-RXPOWER (MN)          | STMN: MANUAL-REQ-SPAN (NA)        |
| CEMR: AS-CMD (NA)            | ISC: LO-TXPOWER (MN)          | STMN: MS-AIS (NR)                 |
| CEMR: AS-MT (NA)             | ISC: LOCKOUT-REQ (NA)         | STMN: MS-DEG (NA)                 |
| CEMR: CARLOSS (MJ)           | ISC: LOS (CR)                 | STMN: MS-EOC (MN)                 |
| CEMR: GFP-CSF (MJ)           | ISC: LPBKFACILITY (NA)        | STMN: MS-EXC (NA)                 |
| CEMR: GFP-LFD (MJ)           | ISC: LPBKTERMINAL (NA)        | STMN: MS-RFI (NR)                 |
| CEMR: GFP-UP-MISMATCH (MJ)   | ISC: MANUAL-REQ-SPAN (NA)     | STMN: MS-SQUELCH-HP (NA)          |
| CEMR: LPBKFACILITY (NA)      | ISC: OUT-OF-SYNC (NA)         | STMN: MS-SQUELCH-LP (NA)          |
| CEMR: LPBKTERMINAL (NA)      | ISC: SIGLOSS (MJ)             | STMN: MSSP-OOSYNC (MJ)            |
| CEMR: PORT-MISMATCH (MJ)     | ISC: SQUELCHED (NA)           | STMN: MSSP-SW-VER-MISM (MN)       |
| CEMR: TPTFAIL (MJ)           | ISC: SYNCLOSS (MJ)            | STMN: PRC-DUPID (MJ)              |
| CTRL: LMP-FAIL (MN)          | ISC: WKSWPR (NA)              | STMN: RING-ID-MIS (MJ)            |

Table 2-8: Alarm List by Logical Object Type in Alarm Profile

|                           |                                |                           |
|---------------------------|--------------------------------|---------------------------|
| DS1: AIS (NR)             | ISC: WTR (NA)                  | STMN: RING-MISMATCH (MJ)  |
| DS1: AS-CMD (NA)          | ML1000: AS-CMD (NA)            | STMN: RING-SW-EAST (NA)   |
| DS1: AS-MT (NA)           | ML1000: AS-MT (NA)             | STMN: RING-SW-WEST (NA)   |
| DS1: IDLE (NA)            | ML1000: AUTONEG-RFI (MJ)       | STMN: RS-EOC (MN)         |
| DS1: LOF (MJ)             | ML1000: CARLOSS (MJ)           | STMN: RS-TIM (CR)         |
| DS1: LOS (MJ)             | ML1000: DATA-CRC (MJ)          | STMN: SPAN-SW-EAST (NA)   |
| DS1: LPBKDS1FE-CMD (NA)   | ML1000: FORCED-REQ (NA)        | STMN: SPAN-SW-WEST (NA)   |
| DS1: LPBKFACILITY (NA)    | ML1000: GFP-CSF (MJ)           | STMN: SQUELCH (NA)        |
| DS1: LPBKTERMINAL (NA)    | ML1000: GFP-LFD (MJ)           | STMN: SQUELCHED (NA)      |
| DS1: RAI (NA)             | ML1000: GFP-UP-MISMATCH (MJ)   | STMN: SSM-DUS (NA)        |
| DS1: RCVR-MISS (MJ)       | ML1000: LINK-KEEPALIVE (CR)    | STMN: SSM-FAIL (MN)       |
| DS1: SD (NA)              | ML1000: MAN-REQ (NA)           | STMN: SSM-LNC (NA)        |
| DS1: SF (NA)              | ML1000: RPR-SD (NA)            | STMN: SSM-OFF (NA)        |
| DS1: SSM-DUS (NA)         | ML1000: RPR-SF (NA)            | STMN: SSM-PRC (NA)        |
| DS1: SSM-OFF (NA)         | ML1000: RPR-SPAN-MISMATCH (MJ) | STMN: SSM-SDH-TN (NA)     |
| DS1: SSM-RES (NA)         | ML1000: RPRW (NA)              | STMN: SSM-SETS (NA)       |
| DS1: SSM-ST4 (NA)         | ML1000: TPTFAIL (MJ)           | STMN: SSM-ST4 (NA)        |
| DS1: SYNC-FREQ (NA)       | ML1000: WTR (NA)               | STMN: SSM-STU (NA)        |
| DS1: TRMT (MJ)            | ML100T: AS-CMD (NA)            | STMN: SSM-TNC (NA)        |
| DS1: TRMT-MISS (MJ)       | ML100T: AS-MT (NA)             | STMN: SYNC-FREQ (NA)      |
| DS1: TX-AIS (NR)          | ML100T: CARLOSS (MJ)           | STMN: TIM (CR)            |
| DS1: TX-IDLE (NA)         | ML100T: DATA-CRC (MJ)          | STMN: TIM-MON (MN)        |
| DS1: TX-LOF (NR)          | ML100T: FORCED-REQ (NA)        | STMN: WKSWPR (NA)         |
| DS1: TX-RAI (NA)          | ML100T: GFP-CSF (MJ)           | STMN: WTR (NA)            |
| DS3: AIS (NR)             | ML100T: GFP-LFD (MJ)           | STSMON: PLM-P )CR)        |
| DS3: AS-CMD (NA)          | ML100T: GFP-UP-MISMATCH (MJ)   | STSTRM: PLM-P (CR)        |
| DS3: AS-MT (NA)           | ML100T: LINK-KEEPALIVE (CR)    | TLINK: LMP-FAIL (MN)      |
| DS3: DS3-MISM (NA)        | ML100T: MAN-REQ (NA)           | TRUNK: AIS (NR)           |
| DS3: INC-ISD (NA)         | ML100T: RPR-SD (NA)            | TRUNK: AIS-L (NR)         |
| DS3: LOF (CR)             | ML100T: RPR-SF (NA)            | TRUNK: ALS (NA)           |
| DS3: LOS (CR)             | ML100T: RPR-SPAN-MISMATCH (MJ) | TRUNK: AS-CMD (NA)        |
| DS3: LPBKDS3FEAC (NA)     | ML100T: RPRW (NA)              | TRUNK: AS-MT (NA)         |
| DS3: LPBKDS3FEAC-CMD (NA) | ML100T: TPTFAIL (MJ)           | TRUNK: CARLOSS (MJ)       |
| DS3: LPBKFACILITY (NA)    | ML100T: WTR (NA)               | TRUNK: DSP-COMM-FAIL (MJ) |
| DS3: LPBKTERMINAL (NA)    | MLFX: AS-CMD (NA)              | TRUNK: DSP-FAIL (MJ)      |
| DS3: RAI (NA)             | MLFX: AS-MT (NA)               | TRUNK: RS-EOC (MN)        |
| DS3: SD (NA)              | MLFX: CARLOSS (MJ)             | TRUNK: EOC-L (MN)         |
| DS3: SF (NA)              | MLFX: DATA-CRC (MJ)            | TRUNK: FAILTOSW (NA)      |
| DS3: TX-AIS (NR)          | MLFX: FORCED-REQ (NA)          | TRUNK: FAPS (NA)          |

Table 2-8: Alarm List by Logical Object Type in Alarm Profile



|                        |                              |                             |
|------------------------|------------------------------|-----------------------------|
| E1000F: AS-CMD (NA)    | MLFX: GFP-CSF (MJ)           | TRUNK: FC-DE-NES (MJ)       |
| E1000F: CARLOSS (MJ)   | MLFX: GFP-LFD (MJ)           | TRUNK: FC-NO-CREDITS (MJ)   |
| E100T: AS-CMD (NA)     | MLFX: GFP-UP-MISMATCH (MJ)   | TRUNK: FEC-MISM (MJ)        |
| E100T: CARLOSS (MJ)    | MLFX: LINK-KEEPALIVE (CR)    | TRUNK: FORCED-REQ-SPAN (NA) |
| E1: AIS (NR)           | MLFX: MAN-REQ (NA)           | TRUNK: GCC-EOC (MN)         |
| E1: AS-CMD (NA)        | MLFX: RPR-SD (NA)            | TRUNK: GE-OOSYNC (CR)       |
| E1: AS-MT (NA)         | MLFX: RPR-SF (NA)            | TRUNK: HELLO (MN)           |
| E1: LOF (MJ)           | MLFX: RPR-SPAN-MISMATCH (MJ) | TRUNK: HI-LASERBIAS (MN)    |
| E1: LOS (MJ)           | MLFX: RPRW (NA)              | TRUNK: HI-RXPOWER (MN)      |
| E1: LPBKFACILITY (NA)  | MLFX: TPTFAIL (MJ)           | TRUNK: HI-TXPOWER (MN)      |
| E1: LPBKTERMINAL (NA)  | MLFX: WTR (NA)               | TRUNK: ILK-FAIL (CR)        |
| E1: MS-DEG (NA)        | MLMR: AS-CMD (NA)            | TRUNK: ISIS-ADJ-FAIL (MN)   |
| E1: MS-EXC (NA)        | MLMR: AS-MT (NA)             | TRUNK: LO-RXPOWER (MN)      |
| E1: RAI (NA)           | MLMR: CARLOSS (MJ)           | TRUNK: LO-TXPOWER (MN)      |
| E1: RCVR-MISS (MJ)     | MLMR: CPP-INCAPABLE (NA)     | TRUNK: LOCKOUT-REQ (NA)     |
| E1: SSM-DUS (NA)       | MLMR: FORCED-REQ (NA)        | TRUNK: LOF (CR)             |
| E1: SSM-FAIL (MN)      | MLMR: GFP-CSF (MJ)           | TRUNK: LOM (CR)             |
| E1: SSM-OFF (NA)       | MLMR: GFP-LFD (MJ)           | TRUNK: LOS (CR)             |
| E1: SSM-PRS (NA)       | MLMR: GFP-UP-MISMATCH (MJ)   | TRUNK: LOS-P (CR)           |
| E1: SSM-RES (NA)       | MLMR: LINK-KEEPALIVE (CR)    | TRUNK: LPBKFACILITY (NA)    |
| E1: SSM-SMC (NA)       | MLMR: LPBKFACILITY (NA)      | TRUNK: LPBKTERMINAL (NA)    |
| E1: SSM-ST2 (NA)       | MLMR: LPBKTERMINAL (NA)      | TRUNK: MANUAL-REQ-SPAN (NA) |
| E1: SSM-ST3 (NA)       | MLMR: MAN-REQ (NA)           | TRUNK: ODUK-1-AIS-PM (NR)   |
| E1: SSM-ST3E (NA)      | MLMR: PEER-NORESPONSE (MN)   | TRUNK: ODUK-2-AIS-PM (NR)   |
| E1: SSM-ST4 (NA)       | MLMR: PORT-MISMATCH (MJ)     | TRUNK: ODUK-3-AIS-PM (NR)   |
| E1: SSM-STU (NA)       | MLMR: RPR-SD (NA)            | TRUNK: ODUK-4-AIS-PM (NR)   |
| E1: SYNC-FREQ (NA)     | MLMR: RPR-SF (NA)            | TRUNK: ODUK-AIS-PM (NR)     |
| E1: TRMT (MJ)          | MLMR: RPR-SPAN-MISMATCH (MJ) | TRUNK: ODUK-BDI-PM (NR)     |
| E1: TRMT-MISS (MJ)     | MLMR: TPTFAIL (MJ)           | TRUNK: ODUK-LCK-PM (NR)     |
| E1: TX-AIS (NR)        | MLMR: WTR (NA)               | TRUNK: ODUK-OCI-PM (NR)     |
| E1: TX-LOF (NR)        | MSUDC: AIS (NR)              | TRUNK: ODUK-SD-PM (NA)      |
| E1: TX-RAI (NA)        | MSUDC: LOS (MN)              | TRUNK: ODUK-SF-PM (NA)      |
| E3: AIS (NR)           | NE-SREF: FRCDSWTOINT (NA)    | TRUNK: ODUK-TIM-PM (MJ)     |
| E3: AS-CMD (NA)        | NE-SREF: FRCDSWTOPRI (NA)    | TRUNK: OTUK-AIS (NR)        |
| E3: AS-MT (NA)         | NE-SREF: FRCDSWTOSEC (NA)    | TRUNK: OTUK-BDI (NR)        |
| E3: FE-AIS (NA)        | NE-SREF: FRCDSWTOHIRD (NA)   | TRUNK: OTUK-IAE (MN)        |
| E3: FE-E1-MULTLOS (NA) | NE-SREF: FRNGSYNC (NA)       | TRUNK: OTUK-LOF (CR)        |

Table 2-8: Alarm List by Logical Object Type in Alarm Profile

|                          |                            |                               |
|--------------------------|----------------------------|-------------------------------|
| E3: FE-E1-NSA (NA)       | NE-SREF: FSTSYNC (NA)      | TRUNK: OTUK-SD (NA)           |
| E3: FE-E1-SA (NA)        | NE-SREF: HLDOVRSYNC (NA)   | TRUNK: OTUK-SF (NA)           |
| E3: FE-E1-SNGLLOS (NA)   | NE-SREF: MANSWTOINT (NA)   | TRUNK: OTUK-TIM (CR)          |
| E3: FE-E3-NSA (NA)       | NE-SREF: MANSWTOPRI (NA)   | TRUNK: OUT-OF-SYNC (MJ)       |
| E3: FE-E3-SA (NA)        | NE-SREF: MANSWTOSEC (NA)   | TRUNK: PROV-MISMATCH (MJ)     |
| E3: FE-EQPT-NSA (NA)     | NE-SREF: MANSWTOTHIRD (NA) | TRUNK: PTIM (MJ)              |
| E3: FE-IDLE (NA)         | NE-SREF: SSM-LNC (NA)      | TRUNK: RFI (NR)               |
| E3: FE-LOF (NA)          | NE-SREF: SSM-PRC (NA)      | TRUNK: RFI-L (NR)             |
| E3: FE-LOS (NA)          | NE-SREF: SSM-SDH-TN (NA)   | TRUNK: SD (NA)                |
| E3: INC-ISD (NA)         | NE-SREF: SSM-SETS (NA)     | TRUNK: SD-L (NA)              |
| E3: LOS (CR)             | NE-SREF: SSM-STU (NA)      | TRUNK: SF (NA)                |
| E3: LPBKDS3FEAC-CMD (NA) | NE-SREF: SSM-TNC (NA)      | TRUNK: SF-L (NA)              |
| E3: LPBKE1FEAC (NA)      | NE-SREF: SWTOPRI (NA)      | TRUNK: SIGLOSS (MJ)           |
| E3: LPBKE3FEAC (NA)      | NE-SREF: SWTOSEC (NA)      | TRUNK: SQUELCHED (NA)         |
| E3: LPBKFACILITY (NA)    | NE-SREF: SWTOTHIRD (NA)    | TRUNK: SSM-DUS (NA)           |
| E3: LPBKTERMINAL (NA)    | NE-SREF: SYNCPRI (MJ)      | TRUNK: SSM-FAIL (MN)          |
| E3: MS-DEG (NA)          | NE-SREF: SYNCSEC (MN)      | TRUNK: SSM-LNC (NA)           |
| E3: MS-EXC (NA)          | NE-SREF: SYNCTHIRD (MN)    | TRUNK: SSM-OFF (NA)           |
| E3: TX-AIS (NR)          | NE: APC-DISABLED (NA)      | TRUNK: SSM-PRC (NA)           |
| E3: TX-RAI (NA)          | NE: APC-END (NA)           | TRUNK: SSM-PRS (NA)           |
| E4: AIS (NR)             | NE: AS-CMD (NA)            | TRUNK: SSM-RES (NA)           |
| E4: AS-CMD (NA)          | NE: AUD-LOG-LOSS (NA)      | TRUNK: SSM-SDH-TN (NA)        |
| E4: AS-MT (NA)           | NE: AUD-LOG-LOW (NA)       | TRUNK: SSM-SETS (NA)          |
| E4: LOF (CR)             | NE: DATAFLT (MN)           | TRUNK: SSM-SMC (NA)           |
| E4: LOS (CR)             | NE: DBOSYNC (MJ)           | TRUNK: SSM-ST2 (NA)           |
| E4: LPBKFACILITY (NA)    | NE: DUP-IPADDR (MN)        | TRUNK: SSM-ST3 (NA)           |
| E4: LPBKTERMINAL (NA)    | NE: DUP-NODENAME (MN)      | TRUNK: SSM-ST3E (NA)          |
| E4: MS-DEG (NA)          | NE: ETH-LINKLOSS (NA)      | TRUNK: SSM-ST4 (NA)           |
| E4: MS-EXC (NA)          | NE: HITEMP (CR)            | TRUNK: SSM-STU (NA)           |
| ENVALRM: EXT (MN)        | NE: I-HITEMP (CR)          | TRUNK: SSM-TNC (NA)           |
| EQPT: ALS-DISABLED (NA)  | NE: INTRUSION-PSWD (NA)    | TRUNK: SYNC-FREQ (NA)         |
| EQPT: APC-DISABLED (NA)  | NE: LAN-POL-REV (NA)       | TRUNK: SYNCLOSS (MJ)          |
| EQPT: AS-CMD (NA)        | NE: SNTP-HOST (MN)         | TRUNK: TIM (CR)               |
| EQPT: AS-MT (NA)         | NE: SYSBOOT (MJ)           | TRUNK: TIM-MON (MN)           |
| EQPT: AUTORESET (MN)     | NE: TEMP-MISM (NA)         | TRUNK: TRAIL-SIGNAL-FAIL (NA) |
| EQPT: BKUPMEMP (CR)      | OCH: APC-DISABLED (NA)     | TRUNK: UNC-WORD (NA)          |
| EQPT: CARLOSS (MJ)       | OCH-TERM: FDI (NA)         | TRUNK: UT-COMM-FAIL (MJ)      |
| EQPT: CLDRESTART (NA)    | OCH-TERM: OCHTERM-INC (NA) | TRUNK: UT-FAIL (MJ)           |
| EQPT: COMIOXC (CR)       | OCH-TERM: OPWR-HDEG (MN)   | TRUNK: WTR (NA)               |

Table 2-8: Alarm List by Logical Object Type in Alarm Profile

|                                    |                             |                                     |
|------------------------------------|-----------------------------|-------------------------------------|
| EQPT: COMM-FAIL (MN)               | OCH-TERM: OPWR-LDEG (MN)    | TRUNK: WV-L-MISMATCH (MJ)           |
| EQPT: CONTBUS-A-18 (MN)            | OCH-TERM: OPWR-LFAIL (CR)   | VCG: LOA (CR)                       |
| EQPT: CONTBUS-B-18 (MN)            | OCH-TERM: PARAM-MISM (NA)   | VCG: VCG-DEG (NA)                   |
| EQPT: CONTBUS-DISABLED (CR)        | OCH: ADD-OPWR-HDEG (MN)     | VCG: VCG-DOWN (NA)                  |
| EQPT: CONTBUS-IO-A (MN)            | OCH: ADD-OPWR-HFAIL (CR)    | VCMON-HP: AU-AIS (NR)               |
| EQPT: CONTBUS-IO-B (MN)            | OCH: ADD-OPWR-LDEG (MN)     | VCMON-HP: AU-LOP (CR)               |
| EQPT: CTNEQPT-MISMATCH (NA)        | OCH: ADD-OPWR-LFAIL (CR)    | VCMON-HP:<br>AUTOSW-AIS-SNCP (NR)   |
| EQPT: CTNEQPT-PBPROT (CR)          | OCH: APC-CORR-SKIPPED (MN)  | VCMON-HP:<br>AUTOSW-LOP-SNCP (NA)   |
| EQPT: CTNEQPT-PBWORK (CR)          | OCH: APC-OUT-OF-RANGE (MN)  | VCMON-HP:<br>AUTOSW-PDI-SNCP (NA)   |
| EQPT: EQPT (CR)                    | OCH: AS-CMD (NA)            | VCMON-HP:<br>AUTOSW-SDBER-SNCP (NA) |
| EQPT: EQPT-DIAG (CR)               | OCH: AS-MT (NA)             | VCMON-HP:<br>AUTOSW-SFBER-SNCP (NA) |
| EQPT: ERROR-CONFIG (MN)            | OCH: FDI (NA)               | VCMON-HP:<br>AUTOSW-UNEQ-SNCP (NA)  |
| EQPT: EXCCOL (MN)                  | OCH: LOS-O (MN)             | VCMON-HP: FAILTOSW-PATH (NA)        |
| EQPT: FAILTOSW (NA)                | OCH: LOS-P (CR)             | VCMON-HP: FORCED-REQ (NA)           |
| EQPT:<br>FAPS-CONFIG-MISMATCH (MN) | OCH: OPWR-HDEG (MN)         | VCMON-HP: HP-DEG (NA)               |
| EQPT: FORCED-REQ (NA)              | OCH: OPWR-HFAIL (CR)        | VCMON-HP: HP-EXC (NA)               |
| EQPT: FP-LINK-LOSS (MN)            | OCH: OPWR-LDEG (MN)         | VCMON-HP: HP-PLM (CR)               |
| EQPT: FTA-MISMATCH (NA)            | OCH: OPWR-LFAIL (CR)        | VCMON-HP: HP-RFI (NR)               |
| EQPT: HI-LASERBIAS (MN)            | OCH: PARAM-MISM (NA)        | VCMON-HP: HP-TIM (MN)               |
| EQPT: HI-LASERTEMP (MN)            | OCH: PORT-FAIL (CR)         | VCMON-HP: HP-UNEQ (CR)              |
| EQPT: HI-TXPOWER (MN)              | OCH: TRAIL-SIGNAL-FAIL (NA) | VCMON-HP: LOCKOUT-REQ (NA)          |
| EQPT: HITEMP (MN)                  | OCH: VOA-HDEG (MN)          | VCMON-HP: LOM (CR)                  |
| EQPT: IMPROPRMVL (CR)              | OCH: VOA-HFAIL (CR)         | VCMON-HP: LPBKCRS (NA)              |
| EQPT: INHSWPR (NA)                 | OCH: VOA-LDEG (MN)          | VCMON-HP: MAN-REQ (NA)              |
| EQPT: INHSWWKG (NA)                | OCH: VOA-LFAIL (CR)         | VCMON-HP: ROLL (NA)                 |
| EQPT: IOSCFGCOPY (NA)              | OCHNC-CONN: OCHNC-INC (NA)  | VCMON-HP: ROLL-PEND (NA)            |
| EQPT: LO-LASERBIAS (MN)            | OMS: APC-CORR-SKIPPED (MN)  | VCMON-HP: WKSWPR (NA)               |
| EQPT: LO-LASERTEMP (MN)            | OMS: APC-DISABLED (NA)      | VCMON-HP: WTR (NA)                  |
| EQPT: LO-TXPOWER (MN)              | OMS: APC-OUT-OF-RANGE (MN)  | VCMON-LP:<br>AUTOSW-AIS-SNCP (NR)   |
| EQPT: LOCKOUT-REQ (NA)             | OMS: AS-CMD (NA)            | VCMON-LP:<br>AUTOSW-LOP-SNCP (NA)   |

Table 2-8: Alarm List by Logical Object Type in Alarm Profile

|                                |                               |                                     |
|--------------------------------|-------------------------------|-------------------------------------|
| EQPT: MAN-REQ (NA)             | OMS: AS-MT (NA)               | VCMON-LP:<br>AUTOSW-PDI-SNCP (NA)   |
| EQPT: MANRESET (NA)            | OMS: LOS-O (MN)               | VCMON-LP:<br>AUTOSW-SDBER-SNCP (NA) |
| EQPT: MEA (CR)                 | OMS: LOS-P (CR)               | VCMON-LP:<br>AUTOSW-SFBER-SNCP (NA) |
| EQPT: MEM-GONE (MJ)            | OMS: OPWR-HDEG (MN)           | VCMON-LP:<br>AUTOSW-UNEQ-SNCP (NA)  |
| EQPT: MEM-LOW (MN)             | OMS: OPWR-HFAIL (CR)          | VCMON-LP: FAILTOSW-PATH<br>(NA)     |
| EQPT: NO-CONFIG (NA)           | OMS: OPWR-LDEG (MN)           | VCMON-LP: FORCED-REQ (NA)           |
| EQPT: PROTNA (MN)              | OMS: OPWR-LFAIL (CR)          | VCMON-LP: LOCKOUT-REQ<br>(NA)       |
| EQPT: PWR-FAIL-A (MN)          | OMS: PARAM-MISM (NA)          | VCMON-LP: LP-DEG (NA)               |
| EQPT: PWR-FAIL-B (MN)          | OMS: PMI (NA)                 | VCMON-LP: LP-EXC (NA)               |
| EQPT: PWR-FAIL-RET-A (MN)      | OMS: VOA-HDEG (MN)            | VCMON-LP: LP-PLM (MJ)               |
| EQPT: PWR-FAIL-RET-B (MN)      | OMS: VOA-HFAIL (CR)           | VCMON-LP: LP-RFI (NR)               |
| EQPT: RUNCFG-SAVENEED<br>(NA)  | OMS: VOA-LDEG (MN)            | VCMON-LP: LP-TIM (MJ)               |
| EQPT: SFTWDOWN (MN)            | OMS: VOA-LFAIL (CR)           | VCMON-LP: LP-UNEQ (MJ)              |
| EQPT: SW-MISMATCH (NA)         | OSC-RING: RING-ID-MIS (MJ)    | VCMON-LP: MAN-REQ (NA)              |
| EQPT: SWMTXMOD-PROT (CR)       | OTS: APC-CORR-SKIPPED<br>(MN) | VCMON-LP: ROLL (NA)                 |
| EQPT: SWMTXMOD-WORK<br>(CR)    | OTS: APC-DISABLED (NA)        | VCMON-LP: ROLL-PEND (NA)            |
| EQPT: WKSWPR (NA)              | OTS: APC-OUT-OF-RANGE<br>(MN) | VCMON-LP: TU-AIS (NR)               |
| EQPT: WTR (NA)                 | OTS: AS-CMD (NA)              | VCMON-LP: TU-LOP (MJ)               |
| ESCON: ALS (NA)                | OTS: AS-MT (NA)               | VCMON-LP: WKSWPR (NA)               |
| ESCON: AS-CMD (NA)             | OTS: AWG-DEG (MN)             | VCMON-LP: WTR (NA)                  |
| ESCON: AS-MT (NA)              | OTS: AWG-FAIL (CR)            | VCTRM-HP: AS-MT-OOG (NA)            |
| ESCON: FAILTOSW (NA)           | OTS: AWG-OVERTEMP (CR)        | VCTRM-HP: AU-AIS (NR)               |
| ESCON: FORCED-REQ-SPAN<br>(NA) | OTS: AWG-WARM-UP (NA)         | VCTRM-HP: AU-LOF (CR)               |
| ESCON: HI-LASERBIAS (MN)       | OTS: DCU-LOSS-FAIL (MN)       | VCTRM-HP: AU-LOP (CR)               |
| ESCON: HI-RXPOWER (MN)         | OTS: LASERBIAS-DEG (MN)       | VCTRM-HP: HP-DEG (NA)               |
| ESCON: HI-TXPOWER (MN)         | OTS: LOS (CR)                 | VCTRM-HP:<br>HP-ENCAP-MISMATCH (CR) |
| ESCON: LO-RXPOWER (MN)         | OTS: LOS-O (MN)               | VCTRM-HP: HP-EXC (NA)               |
| ESCON: LO-TXPOWER (MN)         | OTS: LOS-P (CR)               | VCTRM-HP: HP-PLM (CR)               |
| ESCON: LOCKOUT-REQ (NA)        | OTS: MT-OCHNC (NA)            | VCTRM-HP: HP-RFI (NR)               |
| ESCON: LOS (CR)                | OTS: OPWR-HDEG (MN)           | VCTRM-HP: HP-TIM (CR)               |
| ESCON: LPBKFACILITY (NA)       | OTS: OPWR-HFAIL (CR)          | VCTRM-HP: HP-UNEQ (CR)              |
| ESCON: LPBKTERMINAL (NA)       | OTS: OPWR-LDEG (MN)           | VCTRM-HP: LCAS-CRC (NA)             |
| ESCON: MANUAL-REQ-SPAN<br>(NA) | OTS: OPWR-LFAIL (CR)          | VCTRM-HP: LCAS-RX-DNU<br>(NA)       |

Table 2-8: Alarm List by Logical Object Type in Alarm Profile

|                             |                                |                                  |
|-----------------------------|--------------------------------|----------------------------------|
| ESCON: SIGLOSS (MJ)         | OTS: OSRION (NA)               | VCTRM-HP: LCAS-RX-FAIL (NA)      |
| ESCON: SQUELCHED (NA)       | OTS: PARAM-MISM (NA)           | VCTRM-HP: LCAS-RX-GRP-ERR (NA)   |
| ESCON: WKSWPR (NA)          | OTS: PMI (NA)                  | VCTRM-HP: LCAS-TX-ADD (NA)       |
| ESCON: WTR (NA)             | OTS: SH-IL-VAR-DEG-HIGH (MN)   | VCTRM-HP: LCAS-TX-DNU (NA)       |
| EXT-SREF: FRCDSWTOPRI (NA)  | OTS: SH-IL-VAR-DEG-LOW (MN)    | VCTRM-HP: LOM (MJ)               |
| EXT-SREF: FRCDSWTOSEC (NA)  | OTS: SHUTTER-OPEN (NA)         | VCTRM-HP: LPBKCRS (NA)           |
| EXT-SREF: FRCDSWTOHIRD (NA) | OTS: SPAN-NOT-MEASURED (NA)    | VCTRM-HP: OOU-TPT (NA)           |
| EXT-SREF: MANSWTOPRI (NA)   | OTS: SPANLEN-OUT-OF-RANGE (MN) | VCTRM-HP: ROLL (NA)              |
| EXT-SREF: MANSWTOSEC (NA)   | OTS: VOA-HDEG (MN)             | VCTRM-HP: ROLL-PEND (NR)         |
| EXT-SREF: MANSWTOHIRD (NA)  | OTS: VOA-HFAIL (CR)            | VCTRM-HP: SQM (CR)               |
| EXT-SREF: SWTOPRI (NA)      | OTS: VOA-LDEG (MN)             | VCTRM-LP: AS-MT-OOG (NA)         |
| EXT-SREF: SWTOSEC (NA)      | OTS: VOA-LFAIL (CR)            | VCTRM-LP: LCAS-CRC (NA)          |
| EXT-SREF: SWTOHIRD (NA)     | PPM: AS-CMD (NA)               | VCTRM-LP: LCAS-RX-DNU (NA)       |
| EXT-SREF: SYNCPRI (MN)      | PPM: AS-MT (NA)                | VCTRM-LP: LCAS-RX-FAIL (NA)      |
| EXT-SREF: SYNCSEC (MN)      | PPM: EQPT (CR)                 | VCTRM-LP: LCAS-RX-GRP-ERR (NA)   |
| EXT-SREF: SYNCTHIRD (MN)    | PPM: HI-LASERBIAS (MN)         | VCTRM-LP: LCAS-TX-ADD (NA)       |
| FAN: EQPT-MISS (CR)         | PPM: HI-LASERTEMP (MN)         | VCTRM-LP: LCAS-TX-DNU (NA)       |
| FAN: FAN (CR)               | PPM: HI-TXPOWER (MN)           | VCTRM-LP: LOM (MJ)               |
| FAN: MEA (CR)               | PPM: IMPROPRMVL (CR)           | VCTRM-LP: LP-DEG (NA)            |
| FAN: MFGMEM (CR)            | PPM: LO-LASERBIAS (MN)         | VCTRM-LP: LP-ENCAP-MISMATCH (CR) |
| FC: ALS (NA)                | PPM: LO-LASERTEMP (MN)         | VCTRM-LP: LP-EXC (NA)            |
| FC: AS-CMD (NA)             | PPM: LO-TXPOWER (MN)           | VCTRM-LP: LP-PLM (MJ)            |
| FC: AS-MT (NA)              | PPM: MEA (CR)                  | VCTRM-LP: LP-RFI (NR)            |
| FC: CARLOSS (MJ)            | PPM: MFGMEM (CR)               | VCTRM-LP: LP-TIM (MJ)            |
| FC: FAILTOSW (NA)           | PPM: NON-CISCO-PPM (NR)        | VCTRM-LP: LP-UNEQ (MJ)           |
| FC: FC-DE-NES (MJ)          | PPM: PROV-MISMATCH (MN)        | VCTRM-LP: OOU-TPT (NA)           |
| FC: FC-NO-CREDITS (MJ)      | PPM: UNQUAL-PPM (NR)           | VCTRM-LP: ROLL (NA)              |
| FC: FORCED-REQ-SPAN (NA)    | PWR: AS-CMD (NA)               | VCTRM-LP: ROLL-PEND (NA)         |
| FC: GE-OOSYNC (CR)          | PWR: BAT-FAIL (MJ)             | VCTRM-LP: SQM (MJ)               |
| FC: HI-LASERBIAS (MN)       | PWR: EHIBATVG (MJ)             | VCTRM-LP: TU-AIS (NR)            |

Table 2-8: Alarm List by Logical Object Type in Alarm Profile

|                     |                    |                       |
|---------------------|--------------------|-----------------------|
| FC: HI-RXPOWER (MN) | PWR: ELWBATVG (MJ) | VCTRM-LP: TU-LOP (MJ) |
|---------------------|--------------------|-----------------------|

## Trouble Notifications

The ONS 15454 SDH system reports trouble by utilizing standard alarm and condition characteristics, and standard severities following the rules in ITU-T x.733, and graphical user interface (GUI) state indicators. These notifications are described in the following paragraphs.

The ONS 15454 SDH uses standard categories to characterize levels of trouble. The system reports trouble notifications as alarms and status or descriptive notifications (if configured to do so) as conditions in the CTC Alarms window. Alarms typically signify a problem that the user needs to address, such as a loss of signal. Conditions do not necessarily require troubleshooting.

### Alarm Characteristics

The ONS 15454 SDH uses standard alarm entities to identify what is causing trouble. All alarms stem from hardware, software, environment, or operator-originated problems whether or not they affect service. Current alarms for the network, CTC session, node, or card are listed in the Alarms tab. (In addition, cleared alarms are also found in the History tab.)

### Condition Characteristics

Conditions include any problem detected on an ONS 15454 SDH shelf. They could include standing or transient notifications. A snapshot of all current raised, standing conditions on the network, node, or card can be retrieved in the CTC Conditions window or using TL1's set of RTRV-COND commands. (In addition, some but not all cleared conditions are also found in the History tab.)

For more information about transient conditions, see [Transient Conditions](#).

**Note:** ONS 15454 SDH condition reporting is not ITU-compliant.

### Severities

The ONS 15454 SDH uses ITU-devised standard severities for alarms and conditions: Critical (CR), Major (MJ), Minor (MN), Not Alarmed (NA), and Not Reported (NR). These are described below:

- A Critical (CR) alarm generally indicates severe, Service-Affecting (SA) trouble that needs immediate correction, such as an LOS on a trunk port or STM signal.
- A Major (MJ) alarm is a serious alarm, but the trouble has less impact on the network. For example, an automatic protection switching (APS) channel mismatch (APSCNMIS) alarm occurs when working and protect channels have been inadvertently switched so that a working channel is expected at the receive end, but a protect channel is received instead.
- Minor (MN) alarms generally are those that do not affect service. For example, the APS byte failure (APSB) alarm indicates that line terminating equipment (LTE) detects a byte failure on the signal that could prevent traffic from properly executing a traffic switch.
- Not Alarmed (NA) conditions are information indicators, such as for a free-running synchronization (FRNGSYNC) state or a forced-switch to primary timing (FRCSWTOPRI) event. They could or could not require troubleshooting, as indicated in the entries.
- Not Reported (NR) conditions occur as a secondary result of another event. For example, the alarm indication signal (MS-AIS), with severity NR, is inserted by a downstream node when an LOS (CR or MJ) alarm occurs upstream. These conditions do not in themselves require troubleshooting, but are to be expected in the presence of primary alarms.

Severities can be customized for an entire network or for single nodes, from the network level down to the port level by changing or downloading customized alarm profiles. These custom severities are subject to the standard severity-demoting rules given in Telcordia GR-474-CORE and shown in the [Alarm Hierarchy](#). Procedures for customizing alarm severities are located in the "Manage Alarms" chapter of the *Cisco ONS 15454 SDH Procedure Guide*.

## Alarm Hierarchy

All alarm, condition, and unreported event severities listed in this manual are default profile settings. However in situations when traffic is not lost, such as when the alarm occurs on protected ports or circuits, alarms having Critical (CR) or Major (MJ) default severities can be demoted to lower severities such as Minor (MN) or Non-Service-Affecting (NSA) as defined in Telcordia GR-474-CORE.

A path alarm can be demoted if a higher-ranking alarm is raised for the same object. For example, If an high-order path trace identifier mismatch (HP-TIM) is raised on a circuit path and then an administrative unit (AU) loss of pointer (LOP) is raised on it, the AU-LOP alarm stands and the HP-TIM closes. The path alarm hierarchy used in the ONS 15454 SDH system is shown in [Table 2-9](#).

**Table 2-9: Path Alarm Hierarchy**

| Priority | Condition Type |
|----------|----------------|
| Highest  | AU-AIS         |
| -        | AU-LOP         |
| -        | HP-UNEQ        |
| Lowest   | HP-TIM         |

Facility (port) alarms also follow a hierarchy, which means that lower-ranking alarms are closed by higher-ranking alarms. The facility alarm hierarchy used in the ONS 15454 SDH system is shown in [Table 2-10](#).

**Table 2-10: Facility Alarm Hierarchy**

| Priority | Condition Type      |
|----------|---------------------|
| Highest  | LOS                 |
| -        | LOF                 |
| -        | MS-AIS              |
| -        | MS-EXC <sup>1</sup> |
| -        | MS-DEG <sup>1</sup> |
| -        | MS-RDI <sup>1</sup> |
| -        | RS-TIM              |
| -        | AU-AIS              |
| -        | AU-LOP              |
| -        | HP-EXC <sup>1</sup> |
| -        | HP-DEG <sup>1</sup> |
| -        | HP-UNEQ             |
| -        | HP-TIM              |
| -        | HP-PLM <sup>1</sup> |
| Lowest   | PLM-P               |

1. This alarm is not currently used in the platform.

Near-end failures and far-end failures follow different hierarchies. Near-end failures stand according to whether they are for the entire signal (LOS, LOF), facility (MS-AIS), path (AU-AIS, etc.) or VT (TU-AIS, etc.). The full hierarchy for near-end failures is shown in [Table 2-11](#). This table is taken from Telcordia GR-253-CORE.

**Table 2-11: Near-End Alarm Hierarchy**

| Priority | Condition Type                                   |
|----------|--|
| Highest  | LOS  |
| -        | LOF  |
| -        | MS-AIS   |
| -        | AU-AIS <sup>1</sup>                              |
| -        | AU-LOP <sup>2</sup>                              |
| -        | HP-UNEQ  |
| -        | HP-TIM   |
| -        | PLM-P  |
| -        | HP-PLM   |
| -        | TU-AIS <sup>1</sup>                              |
| -        | TU-LOP <sup>2</sup>                              |
| -        | LP-UNEQ <sup>3</sup>                             |
| -        | LP-PLM <sup>3</sup>                              |
| Lowest   | DS-N AIS (if reported for outgoing DS-N signals) |

1. Although it is not defined as a defect or failure, all-ones VT pointer relay is also higher priority than AU-LOP. Similarly, all-ones VC pointer relay is higher priority than TU-LOP.

2. AU-LOP is also higher priority than the far-end failure MS-RFI, which does not affect the detection of any near-end failures. Similarly, TU-LOP is higher priority than LP-RF.

3. This alarm is not used in this platform in this release.

The far-end failure alarm hierarchy is shown in [Table 2-12](#), as given in Telcordia GR-253-CORE.

**Table 2-12: Far-End Alarm Hierarchy**

| Priority | Condition Type      |
|----------|---------------------|
| Highest  | MS-RDI <sup>1</sup> |
| -        | HP-RFI              |
| Lowest   | LP-RFI <sup>1</sup> |

1. This condition is not used in this platform in this release.

## Service Effect

The ITU also provides service effect standards. Service-Affecting (SA) alarms—those that interrupt service—could be Critical (CR), Major (MJ), or Minor (MN) severity alarms. Non-Service-Affecting (NSA) alarms always have a Minor (MN) default severity.

## States

The Alarms and History tab State (ST) column indicate the disposition of the alarm or condition as follows:

- A raised (R) event is one that is active.



- A cleared (C) event is one that is no longer active.
- A transient (T) event is one that is automatically raised and cleared in CTC during system changes such as user login, logout, loss of connection to node view, etc. Transient events do not require user action. These are listed in [Transient Conditions](#).

## Safety Summary

This section covers safety considerations designed to ensure safe operation of the ONS 15454 SDH. Do not perform any procedures in this chapter unless you understand all safety precautions, practices, and warnings for the system equipment. Some troubleshooting procedures require installation or removal of cards; in these instances pay close attention to the following caution.

**Caution!** Hazardous voltage or energy could be present on the backplane when the system is operating. Use caution when removing or installing cards.

Some troubleshooting procedures require installation or removal of STM-64 cards. In these instances, pay close attention to the following warnings.

**Warning!** On the OC192 LR/STM64 LH 1550 card, the laser is on when the card is booted and the safety key is in the on position (labeled 1). The port does not have to be in service for the laser to be on. The laser is off when the safety key is off (labeled 0). Statement 293

**Warning!** Invisible laser radiation could be emitted from the end of the unterminated fiber cable or connector. Do not stare into the beam directly with optical instruments. Viewing the laser output with certain optical instruments (for example, eye loupes, magnifiers, and microscopes) within a distance of 100 mm could pose an eye hazard. Statement 1056

**Warning!** Use of controls, adjustments, or performing procedures other than those specified could result in hazardous radiation exposure. Statement 1057

**Warning!** Class 1 laser product. Statement 1008

**Warning!** Class 1M laser radiation when open. Do not view directly with optical instruments. Statement 1053

**Warning!** Do not reach into a vacant slot or chassis while you install or remove a module or a fan. Exposed circuitry could constitute an energy hazard. Statement 206

**Warning!** The power supply circuitry for the equipment can constitute an energy hazard. Before you install or replace the equipment, remove all jewelry (including rings, necklaces, and watches). Metal objects can come into contact with exposed power supply wiring or circuitry inside the DSLAM equipment. This could cause the metal objects to heat up and cause serious burns or weld the metal object to the equipment. Statement 207