

MPS Logic:  
9999-99-99-z

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## 1 Ignored when PR10241 Is In

### 1.1 Bunch Length Monitor 3014 Position

Name	B	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Moving	F	F	0 Hz	0 Hz	-	-	-	-	-
Out	F	T	30 Hz	30 Hz	-	-	-	-	-
In	T	F	30 Hz	30 Hz	-	-	-	-	-
Broken	T	T	0 Hz	0 Hz	-	-	-	-	-

Where

A = BLEN\_LI20\_3014\_OUT\_LMTSW\_STATE,

B = BLEN\_LI20\_3014\_IN\_LMTSW\_STATE

### 1.2 EPS Summary Fault

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not OK	F	0 Hz	0 Hz	-	-	-	-	-
OK	T	30 Hz	30 Hz	-	-	-	-	-

Where

A = EXPT\_LI20\_1\_STATUS\_STATE

### 1.3 Oven BeWindow Position

Name	B	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Moving	F	F	0 Hz	0 Hz	-	-	-	-	-
Open	F	T	30 Hz	30 Hz	-	-	-	-	-
Closed	T	F	30 Hz	30 Hz	-	-	-	-	-
Broken	T	T	0 Hz	0 Hz	-	-	-	-	-

Where

A = VVPG\_LI20\_3208\_OPEN\_STATE,

B = VVPG\_LI20\_3208\_CLOSED\_STATE

## 1.4 Plasma Oven Position

Name	B	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Moving	F	F	0 Hz	0 Hz	-	-	-	-	-
Out	F	T	30 Hz	30 Hz	-	-	-	-	-
In	T	F	30 Hz	30 Hz	-	-	-	-	-
Broken	T	T	0 Hz	0 Hz	-	-	-	-	-

Where

A = OVEN.LI20\_3185\_OUT.LMTSW.STATE,

B = OVEN.LI20\_3185\_IN.LMTSW.STATE

## 1.5 PMON Position Position

Name	B	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Moving	F	F	0 Hz	0 Hz	-	-	-	-	-
Out	F	T	30 Hz	30 Hz	-	-	-	-	-
In	T	F	30 Hz	30 Hz	-	-	-	-	-
Broken	T	T	0 Hz	0 Hz	-	-	-	-	-

Where

A = PROF.LI20\_45\_OUT.LMTSW.STATE,

B = PROF.LI20\_45\_IN.LMTSW.STATE

## 1.6 Sector 20 Beam Dump Shutter Position

Name	B	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Moving	F	F	0 Hz	0 Hz	-	-	-	-	-
Out	F	T	30 Hz	30 Hz	-	-	-	-	-
In	T	F	30 Hz	30 Hz	-	-	-	-	-
Broken	T	T	0 Hz	0 Hz	-	-	-	-	-

Where

A = LI20\_MPS\_14\_DUMPSHTR.OUT.STATE,

B = LI20\_MPS\_14\_DUMPSHTR.IN.STATE

## 1.7 VVFS LI20 1986 Position

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Open	F	0 Hz	0 Hz	-	-	-	-	-
Open	T	30 Hz	30 Hz	-	-	-	-	-

Where

A = VVFS.LI20\_1986\_POSITION.STATE

## 1.8 VVPG LI20 3076 Position

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Open	F	0 Hz	0 Hz	-	-	-	-	-
Open	T	30 Hz	30 Hz	-	-	-	-	-

Where

A = VVPG.LI20\_3076\_POSITION.STATE

## 1.9 VVPG LI20 3160 Position

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Open	F	0 Hz	0 Hz	-	-	-	-	-
Open	T	30 Hz	30 Hz	-	-	-	-	-

Where

A = VVPG.LI20\_3160\_POSITION.STATE

## 1.10 VVPG LI20 3250 Position

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Open	F	0 Hz	0 Hz	-	-	-	-	-
Open	T	30 Hz	30 Hz	-	-	-	-	-

Where

A = VVPG.LI20\_3250\_POSITION.STATE

## 2 Always Evaluated

### 2.1 Bypass Recover

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not recovered	F	0 Hz	0 Hz	-	-	-	-	-
Ok	T	30 Hz	30 Hz	-	-	-	-	-

Where

A = LP\_BYPASS\_RECOVER

### 2.2 Gun RF Peak Power 10-2

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Fault	F	0 Hz	0 Hz	-	-	-	-	-
Ok	T	30 Hz	30 Hz	-	-	-	-	-

Where

A = KLYS.LI10\_21\_PEAPOWER\_STATE

### 2.3 Gun Waveguide Vacuum Summary

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Ok	F	0 Hz	0 Hz	-	-	-	-	-
Ok	T	30 Hz	30 Hz	-	-	-	-	-

Where

A = MKSU.LI10\_61\_WGVACSUM\_STATE

### 2.4 IOC-IN10-MP01 MPS Support IOC Heartbeat

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Ok	F	0 Hz	0 Hz	-	-	-	-	-
Ok	T	30 Hz	30 Hz	-	-	-	-	-

Where

A = IOC\_IN10\_MP01\_HEARTBEATSUM\_STATE

## 2.5 MPS Beam Permit: Gun RF

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Permitted	F	0 Hz	-	-	-	-	-	-
Permitted	T	30 Hz	-	-	-	-	-	-

Where

A = LP\_ALLOWS\_BEAM\_POCKELS\_CELL

## 2.6 MPS Beam Permit: Mechanical Shutter

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Permitted	F	-	0 Hz	-	-	-	-	-
Permitted	T	-	30 Hz	-	-	-	-	-

Where

A = LP\_ALLOWS\_BEAM\_MECH\_SHUT

## 2.7 MPS Mechanical Shutter Inconsistent State

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Readback Does Not Match	F	0 Hz	0 Hz	-	-	-	-	-
Ok	T	30 Hz	30 Hz	-	-	-	-	-

Where

A = SHUT\_LT10\_950\_FAULT\_STATE

## 2.8 MPS Mechanical Shutter Position

Name	B	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Moving	F	F	0 Hz	-	-	-	-	-	-
Out	F	T	30 Hz	-	-	-	-	-	-
In	T	F	30 Hz	-	-	-	-	-	-
Broken	T	T	0 Hz	-	-	-	-	-	-

Where

A = SHUT\_LT10\_950\_OUT\_POSITION,  
B = SHUT\_LT10\_950\_IN\_POSITION

## 2.9 PLC-IN10-MP01 MPS Support PLC Heartbeat

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Ok	F	0 Hz	0 Hz	-	-	-	-	-
Ok	T	30 Hz	30 Hz	-	-	-	-	-

Where

A = PLC\_IN10\_MP01\_HEARTBEATSUM\_STATE

## 2.10 Rate Request: Gun RF 1 Hz

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Requested	F	30 Hz	-	-	-	-	-	-
Requested	T	1 Hz	-	-	-	-	-	-

Where

A = LP\_MAX\_RATE\_PC\_1\_HZ

## 2.11 Rate Request: Gun RF 10 Hz

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Requested	F	30 Hz	-	-	-	-	-	-
Requested	T	10 Hz	-	-	-	-	-	-

Where

A = LP\_MAX\_RATE\_PC\_10\_HZ

## 2.12 VVPG IN10 155 Position

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Out	F	0 Hz	0 Hz	-	-	-	-	-
Out	T	30 Hz	30 Hz	-	-	-	-	-



Where

A = VVPG\_IN10\_155\_POSITION\_STATE

## 2.13 VVPG IN10 215 Position

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Not Out	F	0 Hz	0 Hz	-	-	-	-	-
Out	T	30 Hz	30 Hz	-	-	-	-	-

Where

A = VVPG\_IN10\_215\_POSITION\_STATE

## 2.14 YAG IN10 241 Position

Name	B	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Moving	F	F	0 Hz	0 Hz	-	-	-	-	-
Out	F	T	30 Hz	30 Hz	-	-	-	-	-
In	T	F	10 Hz	10 Hz	-	-	-	-	-
Broken	T	T	0 Hz	0 Hz	-	-	-	-	-

Where

A = YAGS\_IN10\_241\_OUT\_LIMSW\_POSITION,

B = YAGS\_IN10\_241\_IN\_LIMSW\_POSITION

### 3 Ignore Logic

#### 3.1 PR10241 Is In

Name	A	GUNL	MS	BYKIK	LHS	GUNH	GUNS	BYKIKS
Is In	T	-	-	-	-	-	-	-

Where

A = YAGS.IN10\_241.IN.LIMSW.POSITION