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Sanjeev Motagi				
Approved	Checked	Date	Rev	Reference
		23-01-2020	Ver1.0	

MOP of RF Reflected Power High Alarm for Ericsson Site

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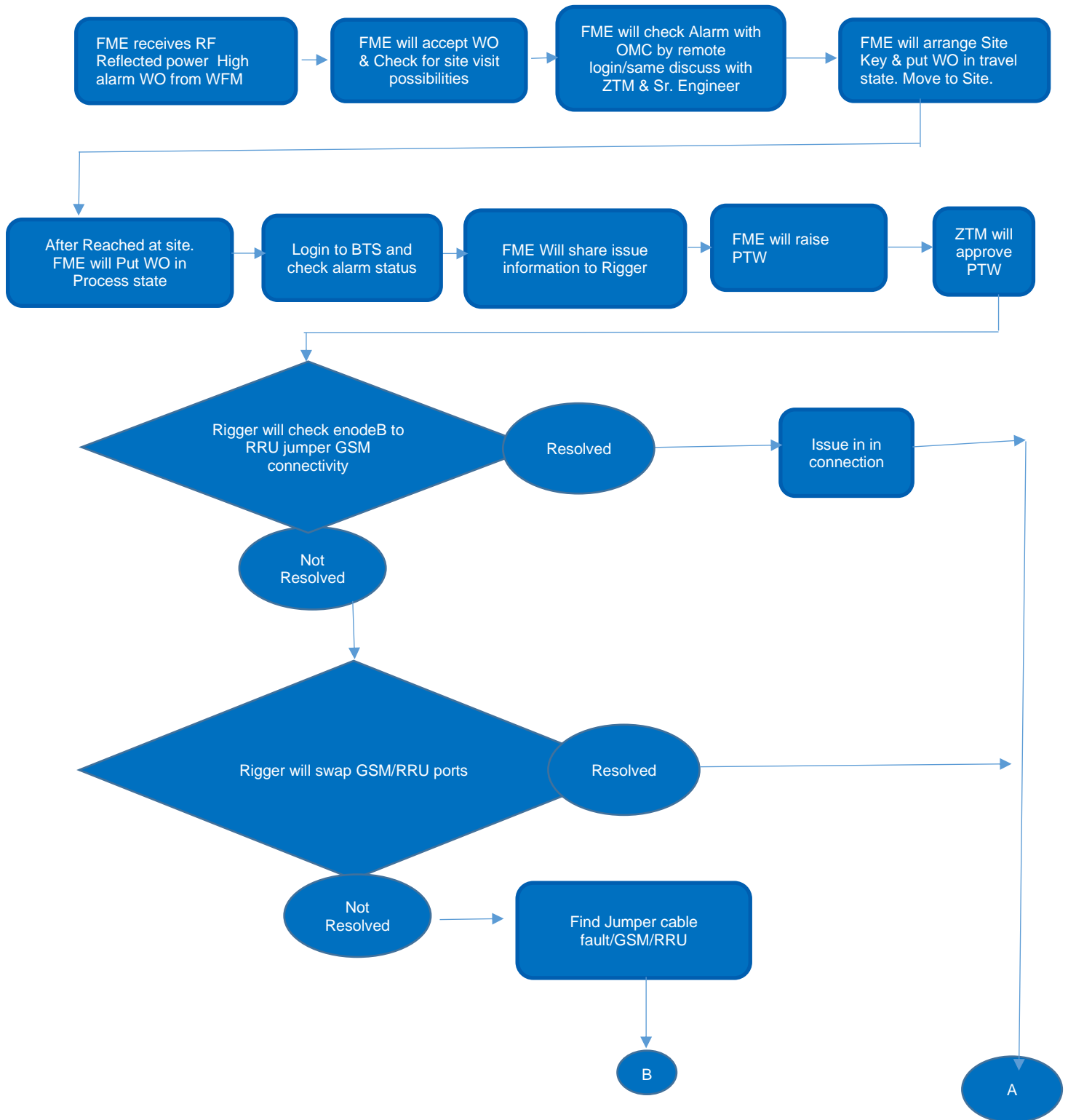| Prepared (also subject responsible if other)		No.		
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Activity Description

This activity is for E2E troubleshooting and Clearance of RF Reflected Power High alarms 4G cell/ site.

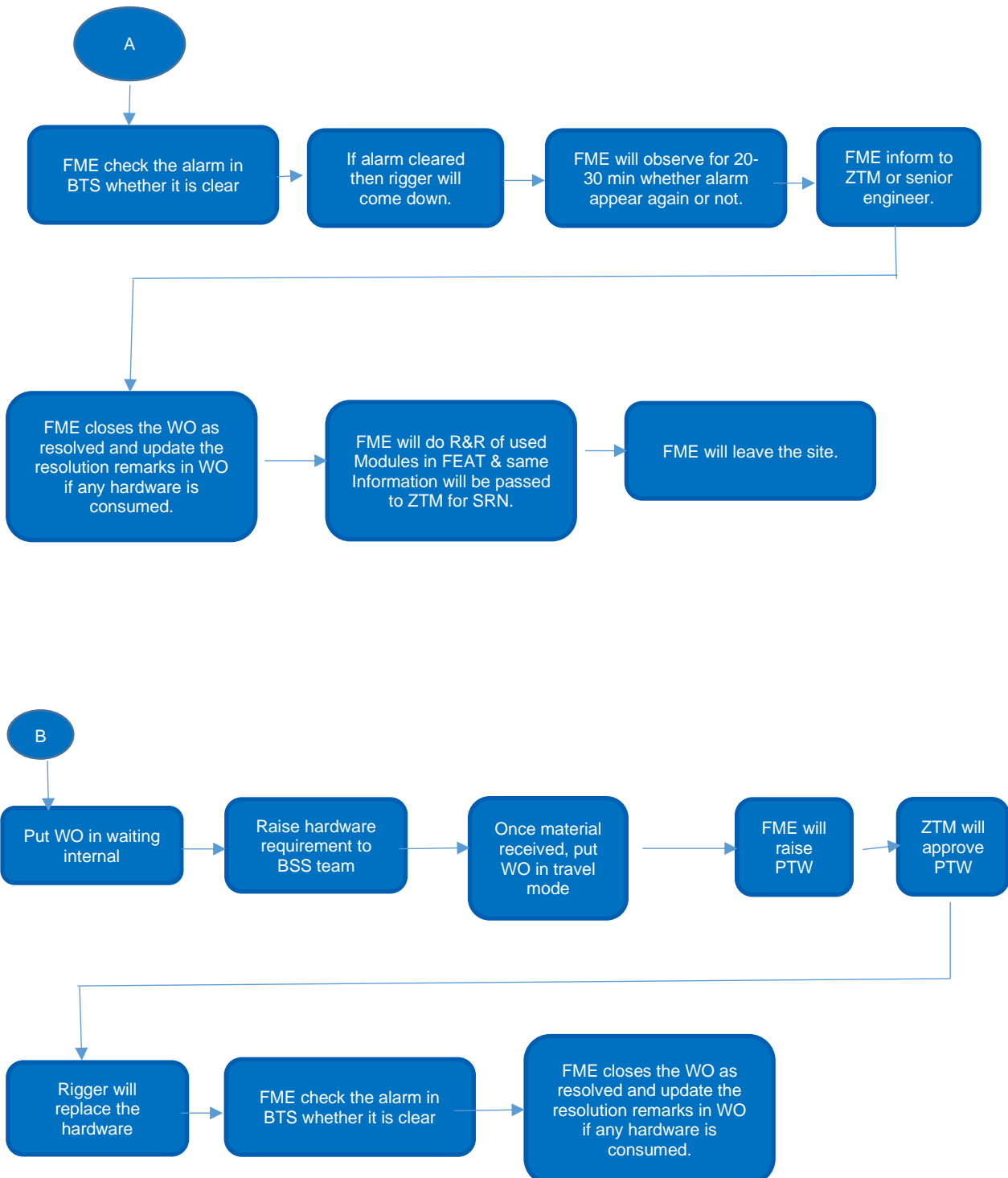Attached are the details to be followed by RAN Team. As this need to be followed as guideline.

Alarm Name	RF REFLECTED POWER HIGH at ONE FM end
Alarm Description	RF REFLECTED POWER HIGH alarm due issue at RRU / GSM Port and Jumper Cable between RRU and GSM
Possible Causes	1. GSM or RRU Port 2. Jumper Cable fault

Flow Chart

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┌─────────────────┐    ┌─────────────────┐    ┌─────────────────┐    ┌─────────────────┐
│ FME receives RF │───▶│ FME will accept │───▶│ FME will check  │───▶│ FME will arrange│
│ Reflected power │    │ WO & Check for  │    │ Alarm with OMC  │    │ Site Key & put  │
│ High alarm WO   │    │ site visit      │    │ by remote       │    │ WO in travel    │
│ from WFM        │    │ possibilities   │    │ login/same      │    │ state. Move to  │
│                 │    │                 │    │ discuss with    │    │ Site.           │
│                 │    │                 │    │ ZTM & Sr. Eng.  │    │                 │
└─────────────────┘    └─────────────────┘    └─────────────────┘    └─────────────────┘
```

- After Reached at site. FME will Put WO in Process state
- Login to BTS and check alarm status
- FME Will share issue information to Rigger
- FME will raise PTW
- ZTM will approve PTW

Rigger will check enodeB to RRU jumper GSM connectivity
- Resolved → Issue in connection
- Not Resolved

Rigger will swap GSM/RRU ports
- Resolved
- Not Resolved → Find Jumper cable fault/GSM/RRU

B

A

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Ericsson Internal

A

FME check the alarm in BTS whether it is clear

If alarm cleared then rigger will come down.

FME will observe for 20-30 min whether alarm appear again or not.

FME inform to ZTM or senior engineer.

FME closes the WO as resolved and update the resolution remarks in WO if any hardware is consumed.

FME will do R&R of used Modules in FEAT & same Information will be passed to ZTM for SRN.

FME will leave the site.

B

Put WO in waiting internal

Raise hardware requirement to BSS team

Once material received, put WO in travel mode

FME will raise PTW

ZTM will approve PTW

Rigger will replace the hardware

FME check the alarm in BTS whether it is clear

FME closes the WO as resolved and update the resolution remarks in WO if any hardware is consumed.

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Activity Summary

1	Corrective WO RF Reflected Power High alarm is received on WFM portal
2	FME will Accept the WO
3	Put WO in travel
4	After reaching site - put WO in process
5	Login the BTS & Check alarm status
6	Raise PTW to ZTM
7	PTW Approval done by ZTM
8	Rigger will Check possible reasons : RRU / GSM Port and Jumper Cable between RRU and GSM
9	FME will check in BTS (Alarm cleared or not)
10	If cleared, then Put WO in closed state
11	If not cleared, then check RRU to GSM Connections (Jumper fault, Damage) and Ports @ RRU / GSM
12	Put Work order in Waiting internal if any HW required at site
13	Raise request for Hardware to BSS Team
14	Once Material received again put WO in Travel mode
15	After reaching site - put WO in process
16	Raise PTW to ZTM
17	PTW Approval done by ZTM
18	Replace the hardware
19	Check from BTS Login that alarm cleared or not after hardware replaced
20	Once Alarm Cleared
21	FME will close the WO as resolved

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Activity Details

Pre requisites:

1) SVD WO for Time Sync Reference Failed alarm.
2) Alarm on OneFM /WFM.

   When RF Reflected Power High Alarms reflects,
   Below the activities need to be done step by step to clear the alarm

   a) Login in 4G BB/ eNodeB as per RAN MOP via LMT OEMS connect using LAN cable
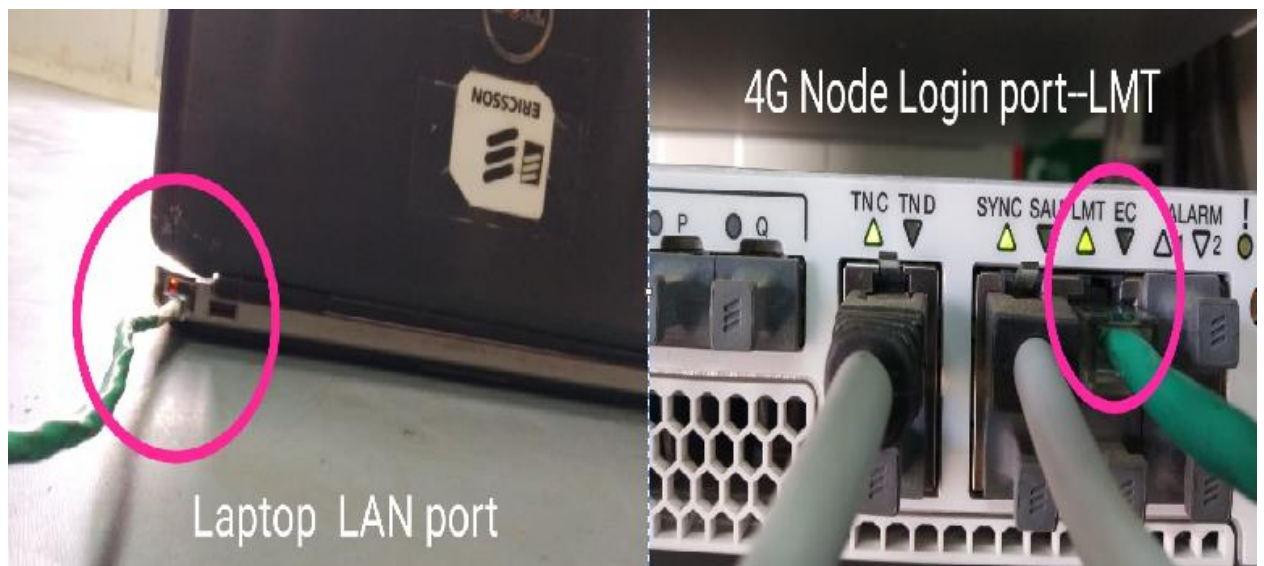
Change the Laptop IP
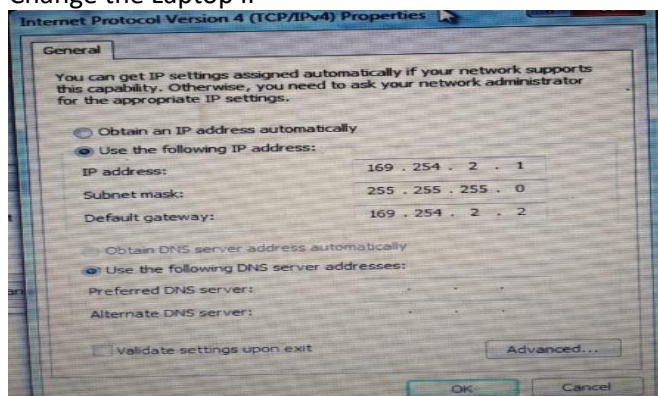
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Login the NodeB
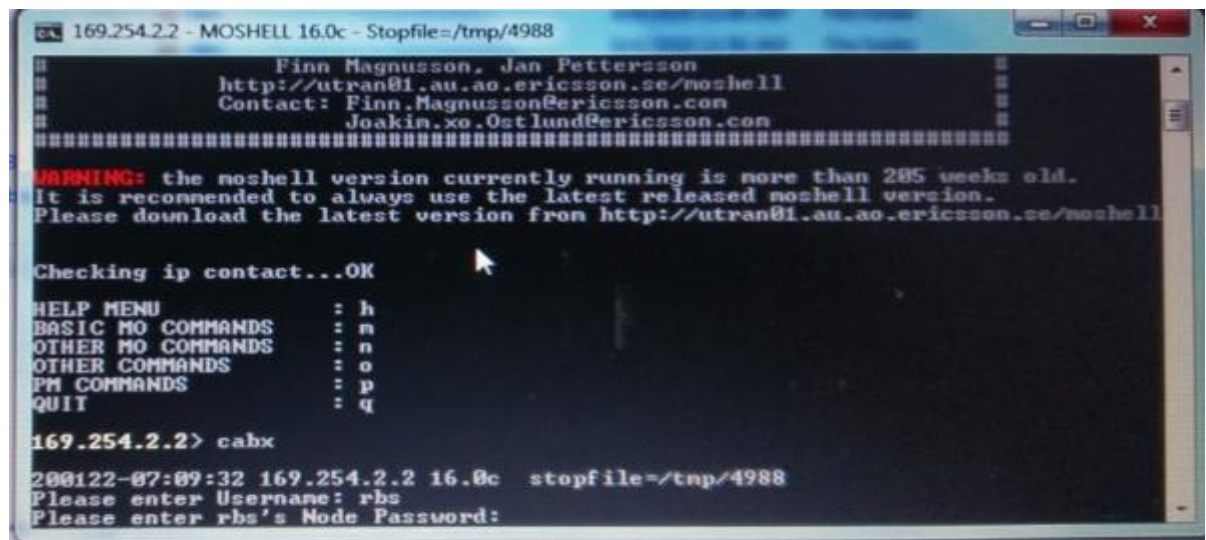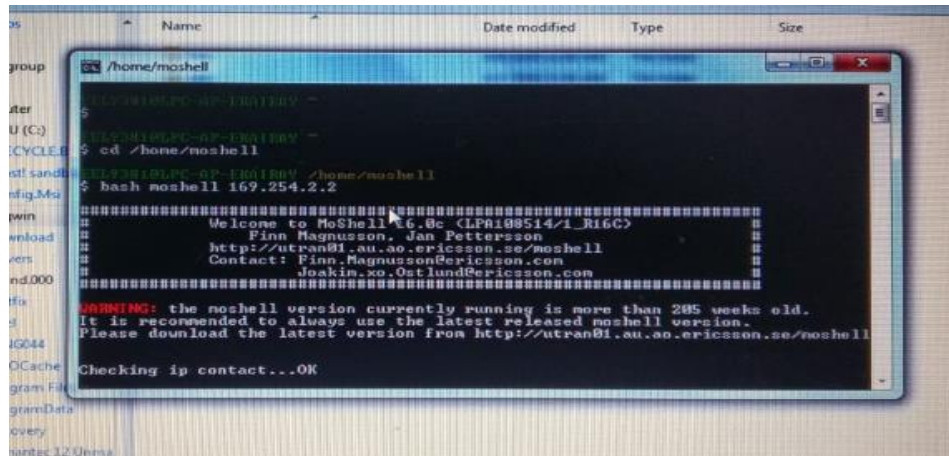
b) Verify the Alarm status : RF Reflected Power High Alarm

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c) Check the RRU to GSM Connectivity from RRU to GSM Antenna (Connectivity Diagram)

Jumper Cable   **RRU**   **GSM Antenna**
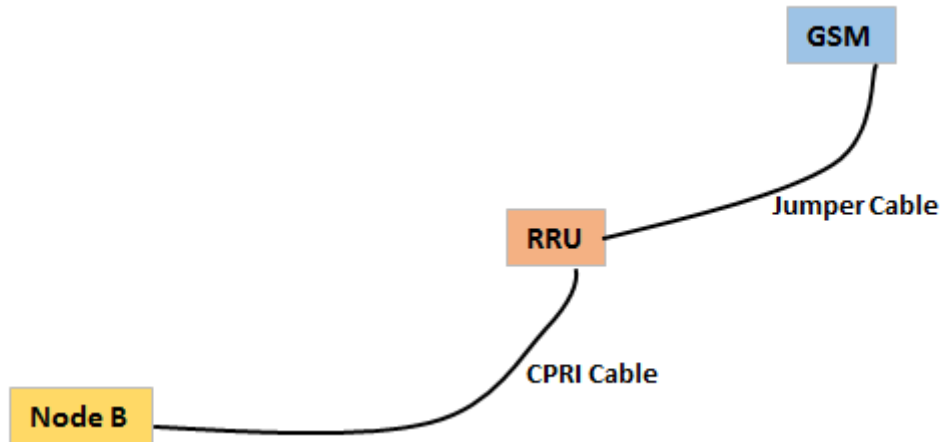
d) Check RRU Port / GSM Port / Jumper cable damage and verify alarm status

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e) If still alarm no cleared, change the Jumper cable and check the Alarm status

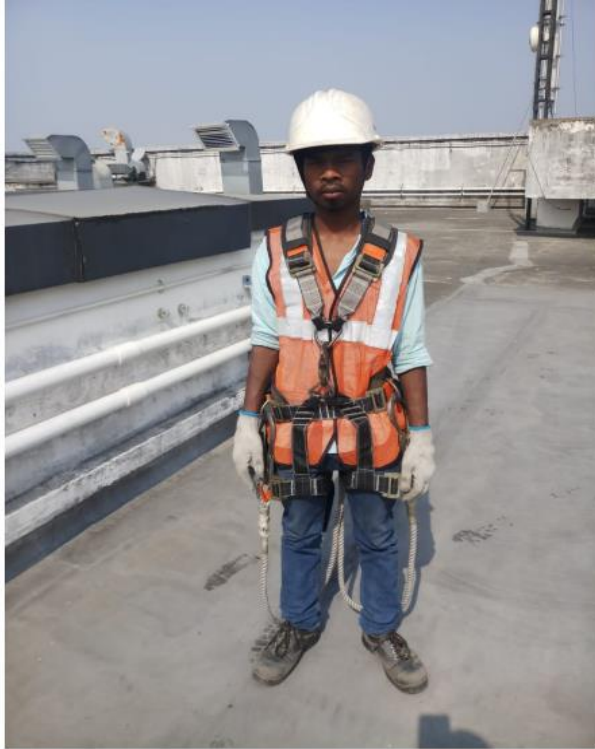f) If still alarm not cleared, Pl Swap RRU / GSM of nearby Sectors.

No Reflected power high alarm

g) Check entire RRU/GSM /Jumper cable , proper routing

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h)   If tower work involves, perform PTW

Post Analysis

Step No.	Step Name/Step Type	Command	Field	Mandatory (Y/N)	Expected Result
1	FME will visit the site after 30 minutes to check	As per MOP and run the alarm check command to confirm its Cleared	RAN	Y	As per MOP
2	BSS Team will check after 24 hrs if alarm has reappeared	As per MOP			