Agenda for Special Meeting to be held on 26.04.2022(Tuesday) at 10:30 AM on Issues related to M/S Chemtrols

ITEM NO. B.1: Renewal of expired license in internal and external firewalls in SCADA/ EMS at ERLDC MCC and BCC.

Firewalls, which are installed in SCADA/EMS system, are the key device to protect system from intrusion from cyber space.

Life of the external firewall i.e Check point 4200 is going to end by June 2022. So, the ERLDC SCADA system is going to be highly vulnerable to cyber security threat thereafter. ERLDC is in receipt of high cyber security alert form MHA, as well as recommendation for implementation of various policies from CERT-IN / NCIIPC to safeguard the system from cyber-attack.

On repeated persuasion from our end M/S Chemtrols had proposed PA 440 Firewall which is not meeting the approved DRS.

As per the guidelines of CEA (Cyber Security in Power Sector) Guidelines 2021, an Intrusion Detection System, and Intrusion Prevention System should be capable of identifying behavioral anomaly in both IT as well as OT Systems.

M/S Chemtrols may update.

ITEM NO. B.2: Improper Support from M/S OSI, OEM OF SCADA Application

ERLDC SCADA/EMS system was installed in Eastern Region and OSI Monarch application is being used as core SCADA/EMS applications.

In ERLDC SCADA/EMS system, several functionalities of SCADA/EMS system are not functioning in SCADA/EMS system, for which support is required from OEM i.e. OSI.

Followings are the few lists of such critical functions:

- 1. BMR (bare metal recovery) on Spare server: license is required from OSI.
- 2. Denial of support from OSI support team when it is required to resolve OSI application related issues.
- 3. Restoration of Data archival in HRS application for the period w.e.f 00:00 Hrs dated 01-04-2021 to 03:00 Hrs dated 02-04-2021.

M/S OSI may update.

ITEM NO. B.3: Malfunctioning of RGU: ERLDC

The Report Generation Utility plays a crucial when it comes to historical data extraction and preparation of important reports pertaining to ERLDC System Operation.

The RGU excel add-in provided in the SCADA Consoles of ERLDC Control Room is malfunctioning since last few months which is affecting the post-dispatch report preparation.

The matter has been intimated to the concerned Chemtrols but the issue yet to be resolved.

M/S Chemtrols may update.

ITEM NO. B.4: Nonfunctioning of Deep Security: ERLDC

Trend micro deep security solution is very critical for SCADA system for security in Cyber Space as this is designed to protect External DMZ and Internal DMZ zone. However, Trend Micro Deep security application is not working in ER SCADA/EMS and the matter was taken up with M/S Chemtrols on several occasions bur the matter is yet to be resolved.

M/S Chemtrols may update.

ITEM NO. B.5: Nonfunctioning of Kiwi Syslog Server Application (for centralized log monitoring)

In ERLDC SCADA project, Kiwi Syslog Sever was installed in the system for centralized monitoring of system logs. However, this application is not currently working, and the matter was taken up with M/S Chemtrols on several occasions however this matter is yet to be resolved.

M/S Chemtrols may update.

ITEM NO. B.6: Issues related to M/S Chemtrols - DVC

- As per Cyber security guide lines, biannual cyber audit should be conducted at each SLDC, one by respective SCADA AMC vendor i.e Chemtrols and another by own arrangement of DVC. However due to delayed processing of audit procedures and thereafter delayed compliance of report, the schedule to conduct the second audit could not be finalized. It is hereby informed that last audit was completed on 11/03/22 but till today the audit report had not been submitted by M/S Chemtrols.
- No spares are available for day-to-day maintenance work with M/s Chemtrols. One SMPS for VPS and one SMPS for RVDU at Howrah SLDC are urgently required for which several communications had been made but no fruitful action had been taken by M/S Chemtrols.

M/S Chemtrols may update.

ITEM NO. B.7: Rectification of faulty UPS: JUSNL

Due to fault in UPS at SLDC, SCADA/ EMS system got severely interrupted on several occasions. At present only one UPS (UPS-1) is in working condition and the other UPS (UPS-2) had become faulty and is not in working condition. Several requests have been made to

M/s Chemtrols for its rectification however, neither the issues have been rectified nor any response is being received from M/s Chemtrols.

In 10th TeST Meeting, M/S Chemtrols representative informed that a meeting was held between Managing Director, Chemtrols and Chief Engineer, JUSNL on 28th October 2021 and it was deliberated that faulty UPS would be rectified by December 2021.

JUSNL representative informed that several issues are being faced with SCADA/EMS system due to faulty UPS at SLDC. She requested M/S Chemtrols to rectify faulty UPS by 15th Nov 2021.

TeST Committee advised M/S Chemtrols to expedite the rectification work.

M/S Chemtrols may update.

ITEM NO. B.8: Replacement of Battey Bank.

JUSNL has already given approval to M/s Chemtrols for replacements of battery bank at SLDC vide letter no. 89 SLDC, Ranchi; dated 11.06.2021. In the 9thTeST meeting, M/s Chemtrols assured to replace the battery bank by the end of September 2021. However, replacement has not been done yet. Further, even after several correspondences made vide letters and emails for getting status of replacement work, M/s Chemtrols has not reverted back.

In 10th TeST Meeting, M/S Chemtrols representative informed that the issue got delayed due to insufficient fund, however, it is expected that fund would be received by Nov'2021 and the battery bank would be replaced by Dec 2021.

M/s Chemtrols may update.

ITEM NO. B.9: Non-availability of Spare Materials.

Spare materials required for attending faults at GSS and at SLDC are unavailable with M/s Chemtrols personnel deputed at SLDC Ranchi. In this regard request has been made to M/s Chemtrols vide e-mail dated 28.09.2021 enlisting details pertaining to material requirements at different GSS and at SLDC Ranchi. However, arrangement for making available these materials had not been done yet.

In 10th TeST Meeting, M/S Chemtrols representative informed that the issue got delayed due to insufficient fund, however, it is expected that fund would be received by Nov'2021 and spare materials would be provided by Dec 2021.

M/s Chemtrols may update.

ITEM NO. B.10: Issues of M/S Chemtrols by BSPTCL

1. Issues Related to M/s Chemtrols

> PENDING CRITICAL ISSUES

- a) Compliance Report of Cyber Security Audit of 2020 is pending.
- b) VCS is not working February 2020.
- c) Battery bank- 2 and display unit of UPS -2 is defective since 24th May 2021.
- d) Both Phase sequence corrector is defective since 19th May 2021 and 4th April 2022.
- e) Charger of battery (150 AH) of DG Set is defective since 15th May 2021.
- f) Both graphic card of controllers of VPS is Defective since 20th April 2021.
- g) One No. of External Firewall SMPS Defective since 15th January 2021.
- h) GPS Antenna is defective since December 2020.
- i) Fifteen no. of Server Fan is defective since August 2020.
- j) One No. of 900 GB SAS card is defective since 15th April 2022.

General/Other ISSUES

a) Integration of new bay:-

As per AMC contracts Chemtrols has to integrate 50 nos. of new bays in to RTU and the work is still pending since long.

- b) The following materials are faulty which are required to be replaced at the earliest:
- MFT 20 pcs
- Node –30 Pcs
- Decode Modem- 10 pcs
- DI Card- 10 Pcs
- DO Card- 03 Pcs
- Ethernet Card- 02 Pcs
- Mini DP to DVI Cable 04 Pcs
- Two No. of Dell Monitor is faulty at GSS Lakhisarai and Masaudhi and handed over to M/s Chemtrols since last one year.
- c) One no. of SCADA Workstation and one no. of DTS Workstation are defective since 05.11.2020.
- d) SCADA Data explorer showing error: "Not connected to Data Explorer Adaptor" since May 2020.
- e) MP 2355 RICOH printer is defective since November 2020.

LDMS- 40 no. of LDMS is not working due to various issues which is attached at **Annexure B10**.

List of defective materials sent to M/s Chemtrols but yet not handed over to BSPTCL:

- Node –17 Pcs
- DI Card- 10 Pcs

- DO Card- 03 Pcs
- Ethernet Card- 02 Pcs
- CPU at GSS Sheikhpura handed over to your representative.

M/S Chemtrols may update.

Issue of LDMS, Inverter in BSPTCL				
S.No.	SITE NAME	ISSUE	REMARKS	
1	Aurangabad	LDMS not getting ON	Inverter and SMPS issue	
2	Banjari	Inverter of LDMS Issue	Invertor Faulty	
3	Banka	LDMS displaying mismatched data.	Meerkat Software Issue	
4	Begusarai	Inverter Issue		
5	Bettiah	Inverter Issue	Inverter faulty	
6	Chapra	Inverter Issue	Inverter faulty	
7	Dalsinghsarai	CPU Issue	inverter and SMPS issue	
8	Dhaka	Meerkat software Issue	Meerkat software Issue	
9	Goh	Meerkat Software Issue. Data is not displaying on SLD	Inverter faulty	
10	Jagdishpur	Power Supply of Inverter not working	Inverter faulty	
11	Jahanabad	Inverter Issue	Inverter faulty	
12	Jainagar	CPU Issue.		
13	Jandaha	LDMS and Inverter issue.	Inverter faulty	
14	Kahalgaon	LDMS and Inverter issue.	Inverter and SMPS issue	
15	Karmanasa	Keyboard and Mouse of LDMS Faulty Modbus faulty only data of 33 KV is reporting.	Node Unhealthy and inverter isssue	
16	Kataiya (kosi)	LDMS Monitor Issue	inverter and SMPS issue	
17	Katihar	Inverter faulty, UPS faulty	inverter and SMPS issue	
18	Kishanganj Old	RTU & SMPS issue	SMPS issue	
19	Kochas (Dinara)	LDMS not getting ON		
20	Kusheshwar Asthan	Inverter Issue		
21	Madhepura	LDMS Issue		
22	Madhubani	Inverter Issue	Inverter Issue	
23	Masaudhi	Meerkat software Issue	Meerkat software Issue	
24	Motihari	Battery Charger Issue	Battery Charger Issue	
25	Pandaul	LDMS software issue	Meerkat corrupted	
26	Phulparas	LDMS and Inverter issue	inverter and SMPS issue	
27	Purnea	System restart with Blue Screen Error		
28	Rafiganj	LDMS monitor not getting ON		
29	Raxaul	Inverter & LDMS Issue	inverter and SMPS issue	
30	Saharsa	Invertor Issue	Invertor Faulty	

Annexure B10

31	Samastipur	Meerket software Corrupted and Inverter Issue	Meerkat Software and Inverter Issue
32	Sheikhpura	HDD faulty, Front panel faulty	CPU handed over to M/s Chemtrols Representative
33	Sipara	Meerkat software Issue	Meerkat sofware Issue
34	Sitamarhi	LDMS CPU and Inverter Issue	Inverter and SMPS issue
35	Siwan	Inverter & LDMS Issue	Inverter and SMPS issue
36	Sonebarsa	CPU Issue	Inverter and SMPS issue
37	Sonenagar	Software not updated	Meerkat Software issue
38	Supaul	Meerkat software Issue	Meerkat software Issue
39	Valmikinagar	CPU issue	Inverter issue
40	Wazirganj	LDMS CPU Issue	LDMS not Starting (SMPS issue)