



Minutes
of
1st TeST Meeting

Date: 21.11.2019
Eastern Regional Power Committee
14, Golf Club Road, Tollygunge
Kolkata: 700 033

EASTERN REGIONAL POWER COMMITTEE

MINUTES OF 1ST TELECOMMUNICATION, SCADA AND TELEMETRY SUB-COMMITTEE MEETING HELD AT ERLDC, KOLKATA ON 24.10.2019 (THURSDAY) AT 11:00 HOURS

List of participants is at **Annexure-A**.

ITEM NO. A: Confirmation of minutes of 24th SCADA O & M meeting held on 14.08.2019

The minutes of 24th SCADA O & M meeting were uploaded in ERLDC website and circulated vide letter dated 23.09.2019 to all the constituents.

Members may confirm the minutes of 24th SCADA O & M meeting.

Deliberation in the meeting

Members confirmed the minutes of 24th SCADA O & M meeting.

PART – A : ITEMS FOR DISCUSSION

ITEM NO. A.1: SCADA/EMS System Installed in Eastern Region:

- **Software Related**

Eastern Regional Utilities are facing followings software related issue in their SCADA/EMS system installed in Eastern Region:-

- I. Improper modeling of TCSC, FSC & HVDC**
- II. Incorporation of STATCOM modeling**
- III. Non functionality of STLF application since 13th April 2018**
- IV. Integration with WAMS**

These matters were discussed with M/s OSI & M/s Chemtrols through conference calls on 20th August 2018 & 12th April 2019 and also discussed in several forums including 4th Special SCADA meetings held on 31st July, 2019 at ERLDC, Kolkata. The same are yet to be resolved.

Chemtrols informed vide their letter ref no: UEX130005/SBU5/POSOCO/002/2019 dated 13.06.19 that these points could not be addressed properly due to lack of necessary support from OSI. The same were once again discussed in 4th Special SCADA meeting held on 31.07.19 wherein it was emphasized to call OSI in the 24th SCADA O & M meeting so that these points could be deliberated and attended.

- **Software Licenses Related**

Eastern Regional Utilities are in need of getting the following licenses which are required to run the system smoothly:-

- I. Cost implication of three (3) nos SCADA software licenses at ERLDC system**
- II. Cost implication of additional licenses of 8,000 analog & 12,000 status points in OPTCL SCADA system**

III. Necessity of OSI software license (key) in spare server available at all Eastern Regional Control Centres at different locations : could not able to build the system in case of any hardware failure and / or the backup restoration testing could not be completed due to non-availability of necessary software license in the spare server.

In 24th SCADA O & M meeting, it was decided that OSI technical team will visit ERLDC, on 20th August 2019, to discuss on various software and software license related matter.

Accordingly, a meeting was held at ERLDC in presence of Director, International Operations, M/S OSI. It was decided that EMS team of OSI will be deputed at ERLDC for resolution of EMS related matters but till date no further action being taken about the resolution of above listed EMS related matters.

In context of Software license, M/S OSI informed in that meeting that they will come up with cost estimates for the listed additional requirements.

M/s Chemtrols / M/s OSI may update.

Deliberation in the meeting

OSI representative was not present to discuss the agenda points. Members made serious concern about this.

POWERGRID ERTS – 2 has been requested to call a separate meeting with OSI & Chemtrols higher authorities within 15 days so that these points could be taken up and resolved at the earliest. POWERGRID ERTS – 2 ULDC agreed for the same.

ERPC also raised concern for not getting proper support from OSI and stated that these agenda points would be placed in upcoming TCC/ERPC meeting if resolution from OSI is not received.

ITEM NO. A.2: Replacement of old RTU in Eastern Region for reporting of RTU / SAS to back-up Control Centre

The matter for replacement of old RTU in Eastern Region for reporting to back up control centre has been finalized and approved in 36th TCC/ERPC board meeting held on 13th / 14th September 2017 at Bhubaneshwar.

In 37th TCC/ERPC board meeting held on 16th / 17th March 2018 at Goa, cost approval was accorded to POWERGRID for the said work.

In 39th ERPC Meeting, it was decided that, ERPC approved the proposal of POWERGRID for replacement of the old RTUs in the Eastern Region for reporting of RTU / SAS to backup control centres at an estimated cost of Rs.88.57 Crore with an implementation time of 36 months.

In 24th SCADA O & M meeting, POWERGRID informed that they have placed the proposal to PSDF monitoring committee on 22.07.2019 for necessary approval for PSDF funding. Thereafter as per NLDC communication, ref - , PSDF committee denied due to non-availability of scope for such approval from PSDF.

The PSDF Committee has not found the aforementioned proposal suitable for PSDF funding and returned the said proposal vide its letter ref: NLDC-PSDF/TEG-51st meeting/ 2019-20/ 143 dated 18.09.2019.

Present status of RTU/SAS replacement / up-gradation:-

Utility	Status	Deliberation in the meeting	Target
NHPC (Teesta – V & Rangit)	Pending	NHPC representative was absent during the discussion.	
POWERGRID	Pending	DPR submitted to PSDF monitoring committee on 22nd July 2019.	
Maithon Right bank (MPL)	RTU/SAS Upgraded	Completed, Testing pending	
New Farakka (Stage III)	Completed	Testing pending.	
NTPC, Farakka (Stage I & II)	Pending	LOA will place by 1st week of October 2019	
Barh	Completed		
Talcher STPS	RTU Upgraded	Dual reporting is yet to be completed. NTPC Talcher is taking the matter with Vendor.	
Kahalgaon STPS	Pending	LOA for replacement has been placed.	---
Chuzachen HEP	Pending	SAS up-gradation is in process and would be completed by July 2019	With the availability of OPGW between Chuzachen - Rangpo.
DMTCL Motihari	Pending	DMTCL representative was absent during the discussion.	OPGW not available
APNRL	Completed		
JITPL	Pending	POWERGRID informed that OPGW work will completed by Feb-2020	February-2020
GMR	Pending	POWERGRID informed that OPGW work will completed by Feb-2020	February-2020
BRBCL Nabinagar	Pending	DMTCL representative was absent during the discussion.	OPGW not available
Teesta – III	Pending	Teesta III representative was absent during the discussion.	OPGW not available
Dikchu	Pending	Dikchu representative was absent during the discussion.	OPGW not available
Jorethang	Pending	Jorethang representative was absent during the discussion.	OPGW not available
OPTCL	Pending	OPTCL informed that LOA for replacement / up-gradation of old RTUs (78Nos) will be awarded by September'2019.	
WBSETCL	Pending	WBSETCL informed that they got approval for PSDF funding, tendering expected by September-2019	
JUSNL	Pending	JUSNL informed that LOA was already awarded in June 2019.	

Members may deliberate for further necessary action plan.

Deliberation in the meeting

As per directive received from 39th ERPC meeting, POWERGRID has explore the possibility of getting PSDF funding for financing of the above project to NLDC (nodal agency for PSDF) vide letter no C/LD&C/PSDF/19-20/1 dated 22.07.2019. However, NLDC has intimated vide letter ref. NLDC-PSDF/TESG-51st meeting/2019-20/143 dated 18.09.2019 regarding non-availability of PSDF Fund for projects of this nature.

As per directive received from 39th ERPC meeting, the project is now agreed to be funded through tariff route.

POWERGRID intimated that process for placement of LoA has already been started and informed that NIT would be floated by November, 2019.

ERLDC informed that SAS system at MPL is upgraded but reporting to ERLDC BCC is yet to be done and hence, requested MPL to call their vendor so that configuration at their end could be done properly for its dual reporting. MPL agreed for the same.

NTPC Farakka Stage III informed that work for dual reporting has been completed at their end but testing is pending which will be done shortly. NTPC further informed that LoA for replacement of RTU at Farakka Stage #1 & #2 and Kahalgaon would be placed by December, 2019 and November, 2019, respectively.

NTPC Talcher Stage #1 informed that they have made a plan for dual reporting of their SAS to ERLDC and to SRLDC also. ERLDC informed that they need two separate channels of reporting of real time SCADA data, one at ERLDC MCC and another at ERLDC BCC. ERLDC further advised if this plan suffixes our requirement then they can go ahead and implement this.

Chuzachen HEP informed that they are up-grading their system by January 2020.

POWERGRID informed that OPGW works from JITPL & GMR to nearest POWERGRID S/S would be completed by February 2020.

OPTCL informed that they are going to place the LoA for replacement of 78 Nos. of RTU by November, 2019 and the same would be completed within a year from the date of placement of the award.

WBSETCL informed that they are going to place the order shortly with an implementation schedule of 2 years (1809 km OPGW laying works & 35 Nos. of RTU replacement works).

JUSNL informed that their RTU replacement of 21 Nos. of RTU would be completed by March 2020.

ITEM NO. A.3: Redundancy of communication links for ICCP between control centres

The matter for providing communication link for ICCP from ERLDC / backup ERLDC to all control centres was discussed in a special project review meeting held on 14th February 2017 at ERPC, 35th TCC/ERPC meeting held on 24th / 25th February 2017 & several SCADA O & M meeting

including 21st & 22nd SCADA O & M meeting held on 19th June 2018 and 30th October 2018 respectively.

Redundancy of ICCP communication links from all state control centre including their back-up to Main ERLDC are already implemented. Redundancy of ICCP communication links from all state control centers except DVC-MCC (Andul Road) & WBSETCL-BCC (Abhikshan Bhawan) to back-up ERLDC located at NLDC, New Delhi is yet to be provided.

1. DVC MCC located at Andul Road to ERLDC BCC at New Delhi

In 22nd SCADA O & M meeting, DVC informed that they will give consent to utilize Andul Road – Kharagpur OPGW link by the end of November-2018. POWERGRID informed that they will be able to establish the communication path from DVC MCC located at Andul Road to ERLDC BCC at New Delhi once consent received from DVC.

In 24th SCADA O & M meeting, DVC agreed to explore the possibilities of 02 nos. fiber between Howrah (WB) to Howrah (DVC).

DVC may update.

Deliberation in the meeting

DVC intimated that no party is responding for providing leased link of such small length. As an alternative, POWERGRID requested ERLDC to provide space for installation of ULDC equipment at Backup ERLDC (NLDC) so that link may be configured in ULDC network. ERLDC agreed for expediting the resolution of the issue and necessary support for installation of the equipment at Backup ERLDC.

DVC further requested to include underground OFC in Howrah (WB) to Howrah (DVC) under the scope of upcoming project – ‘Strengthening of Inter-regional & Intra-regional OPGW Communication Links for Strengthening of Eastern Region’ and also requested WBSETCL to provide necessary permission & space for laying of Underground OFC and terminal equipment. WBSETCL agreed for the same.

POWERGRID intimated that for further DVC data transmission from WBSETCL, Howrah to New Delhi, bandwidth provision either through POWERTEL or combination of WBSETCL and POWERGRID may be explored and finalized by DVC. DVC agreed for the same.

2. WBSETCL MCC Andul road to ERLDC BCC located at New Delhi

In 22nd SCADA O & M meeting, POWERGRID requested WBSETCL to provide 02 nos. of fiber core between Kasba and Abhikshan Bhawan so that ICCP communication link from WBSETCL MCC Andul road to ERLDC BCC located at New Delhi could be established. WBSETCL informed they will reply by 10th of November 2018. Till date the communication link yet to be established.

In 24th SCADA O & M Meeting, WBSETCL requested POWERGRID to submit a letter indicating the requirements of 02 nos. of fiber core between Kasba and Abhikshan Bhawan to establishment of the communication path from WBSETCL MCC Andul road to ERLDC BCC located at New Delhi.

POWERGRID/WBSETCL may update.

Deliberation in the meeting

WBSETCL intimated that spare fiber is not available in Kasba-Saltlake link and also there is space constraint at Abhikshan Bhawan. As an alternative, POWERGRID requested ERLDC to provide space for installation of ULDC equipment at Backup ERLDC (NLDC) so that link may be configured in ULDC network. ERLDC agreed for expediting the resolution of the issue and necessary support for installation of the equipment at Backup ERLDC.

ERLDC informed that floor renovation at NLDC is going on and hence, requested POWERGRID to wait for 2-3 months for the suitable space at ERLDC BCC located at NLDC, New Delhi.

3. Fiber redundancy in Central Sector OPGW link

There are few paths (especially last mile) where there is no fiber redundancy. Following are the sections where fiber laying is to be done/under implementation:

Farakka to Jeerat

POWERGRID informed that presently, FO link connectivity is available between Farakka to Jeerat through Behrampur which doesn't have route diversity. POWERGRID further informed that route diversity for redundancy would be available after commissioning of OPGW link from Farakka to Jeerat through Gokarna, Rajarhat & Subhashgram.

In the 22nd SCADA O&M meeting held on 30th October 2018 at ERLDC, POWERGRID informed that ROW issue of 400kV Rajarhat-Gokarna line is yet to be resolved. The same would be implemented once the ROW issue resolved.

In Special SCADA meeting and 23rd SCADA O&M meeting, held on 24th April 2019 at ERLDC, Kolkata, POWERGRID confirmed that Backup/protection path already established through POWERTEL network which is in operational. POWERGRID also intimated that OPGW work is going on in under-construction 400KV Rajarhat - Gokarna TL as per readiness of OPGW stretch. POWERGRID further informed that the said OPGW link along with communication equipment is expected to be commissioned by July-2019.

In 24th SCADA O & Meeting, a joint visit of WBSETCL with POWERGRID was planned, for assessment of space availability at 400kV Gokarna S/S, for installation of necessary communication equipment.

POWERGRID may also update about pending 10 km OPGW work of Gokarna- Rajarhat line, which is delayed due to the ROW issue.

POWERGRID & WBSETCL may update.

Deliberation in the meeting

WBSETCL intimated that permission has been given to POWERGRID for installation of communication equipment at Gokarna S/S on 22.10.2019 and the site survey was also completed on 23.10.2019.

POWERGRID intimated that OPGW in Rajarhat-Farakka link will be completed along with the transmission line.

4. Fiber redundancy in OPTCL Sector

Rourkela to Bhubaneswar SLDC

POWERGRID informed that presently, FO link connectivity between Rourkela to Bhubaneswar SLDC is available through TSTPS, Meeramundali & Mendhasal which doesn't have route diversity.

OPTCL informed in the 20th SCADA O&M meeting that the protection path between Meeramundali to SLDC, Bhubaneswar via Duburi OLD, Duburi New, Paradeep, Jagatsingpur, Cuttak, Phulnakhra station would be completed latest by March 2018 as per schedule. OPTCL further informed that OPGW laying work at Bhabanipatna S/S would be started from 22nd December 2017 and will be completed by the end of January 2018.

POWERGRID agreed that they will start installation work of the repeater station at Bhabanipatna S/S after completion of OPTCL work.

OPTCL informed in the 22nd SCADA O&M meeting those materials for establishing OPGW communication links are at site but work could not be started due to poor site condition developed because of heavy rain. OPTCL further informed that they could able to start the work by December 2018 and the communication link between Paradeep to Bhubaneswar would be completed by 15th February 2019.

OPTCL informed in the 23rd SCADA O&M meeting that they have already completed the work between Meeramundali to Paradeep and Bhubaneswar SLDC to Jagatsinghpur. OPTCL further informed that pending work between Jagatsinghpur to Paradeep would be completed by end of the March -2019.

In 24th SCADA O & Meeting, OPTCL informed that Jagatsinghpur to Paradeep OPGW is pending due to Tower shifting work, which is the requirement of Indian Railways. Once the tower shifting work will be completed by Indian Railways, OPTCL will start their work. OPTCL expected to complete by September-2019.

OPTCL may update.

Deliberation in the meeting

OPTCL informed that 17 Nos. of towers are being diverted and same would expected to get completed by May, 2020.

5. Fiber redundancy in JUSNL Sector

Ranchi 400 kV (PG) to JUSNL SLDC (Kushai Colony)

POWERGRID informed that presently, FO link connectivity between Ranchi 400 kV (PG) to JUSNL SLDC is available through Hatia 220 kV which doesn't have route diversity.

POWERGRID further informed that route diversity for redundancy between Ranchi 400 kV (PG) to JUSNL SLDC (Kushai Colony) could not be achieved until unless OPGW connectivity from Chandil to JUSNL SLDC through Namkum (132 kV) i.e. 95 Km could be completed. POWERGRID further informed redundant fiber route is to be explored and implemented by JUSNL.

In the 20th SCADA O&M Meeting, JUSNL informed that they have already applied for getting PSDF fund in August 2017 for providing protection channel for redundancy between Chandil to JUSNL SLDC (Kushai Colony).

In the 21st and 22nd SCADA O&M Meeting, JUSNL informed that the application of getting PSDF fund is with Appraisal Committee. POWERGRID informed that AMC of leased fiber between Hatia 132 kV to SLDC, Ranchi would not be extended further after completion of the existing AMC. ERLDC requested JUSNL to find alternate path for this before expiry of the AMC.

Implementation status may please be furnished.

JUSNL informed in special SCADA meeting and 23rd SCADA O&M meeting that their application of getting PSDF fund has been cleared with Appraisal Committee and the same is pending with PSDF monitoring committee. The same would be completed within 36 months once approved by PSDF committee.

In 24th SCADA O & Meeting, JUSNL informed that they have received approval for PSDF funding but their Cabinet approval is pending.

JUSNL may update.

Deliberation in the meeting

JUSNL informed that they are yet to receive their cabinet approval (50:50 basis).

ITEM NO. A.4: URTDSM Project installed in Eastern Region

The URTDSM project is installed and being used by ERLDC RTSD operators since January 2019. Few observations need to be attended for better utilization of the system:-

- A. **Negative latency:** It has been observed several times that time synchronization problem with single PMU causes outage of all PMUs data at ERLDC (data loss of all PMUs at ERLDC on 26-04-2019 at 02:05 Hrs due to negative latency with Mejia B PMU).
- B. **Playback Application:** Playback application in E-terra Vision is not running properly. While running playback feature in E-terra Vision application, it is observed that critical feature; like color contour display based on frequency, is not working.
- C. **POWERGRID analytics application:** POWERGRID analytical application software, which was supposed to be installed under URTDSM project, is yet to be made functional at SLDCs.
- D. **E Phasor analytics:** E-phasor analytics application is not running properly. While using this application, operators are facing difficulties in comprehending the error message being shown by the application. This matter was informed to GE through mail dated 06.05.19 but solution is yet to be provided.
- E. **Integration with SCADA over IEC 104:** Data export to SCADA from URTDSM system is not working properly.

In 24th SCADA O & Meeting, POWERGRID informed that they have referred it to GE R&D team. POWERGRID further informed that GE R&D team is on the job and the same is expected to resolve by September -2019.

POWERGRID further informed that one model of Analytics application is yet to be installed and they will provide the necessary documents to ERLDC & ER constituents.

POWERGRID may update.

Deliberation in the meeting

POWERGRID intimated that GE R&D team has come out with a solution for Negative latency issue (S. No.- A) and Playback Application Issue (S .No.- B) which will be implemented shortly after successful testing.

E-phasor analytics (S. No.- D) and Integration with SCADA over IEC 104 (S. No.- E) is still under R&D team of M/s. GE and the issues will be addressed after solution provided by GE R&D team which is expected by November, 2019.

Regarding POWERGRID analytics application (S. No.- C), POWERGRID has completed the implementation of all the analytical application modules at ERLDC and OPTCL except one module which is under development with POWERGRID and IIT-Bombay. POWERGRID will also complete the installation of the analytical application modules at DVC (Howrah) and WBSETCL (Howrah) within December-2019. Training program has also been conducted at ERLDC by POWERGRID (Smart Grid Dept.) and IIT-Bombay and all relevant documents have been provided to all participants of ERLDC as well as constituents.

ERPC mentioned that issues pertaining to URTDSM are quite serious and hence, advised POWERGRID to bring GE representative in next TeST sub-committee meeting if the same is not resolved by November, 2019.

Non availability of data telemetry and Voice communication at ERLDC:

ERLDC has taken up with all concerned about non-availability of elementary data from few stations. Further, it has also emphasized by ERLDC that provision of RTU/SAS and integration of the data as well as voice in parallel with the substation commissioning, must be ensured for all up-coming locations and this regulatory requirement also.

- **URTDSM Data Summary:-**

Central Sector: Prolonged outage of 15 Nos of PMUs and Intermittent data from 8 Nos of PMUs. Integration of PMUs are pending at Kahalgaon STPS (5 Nos), Talcher STPS, Sterlite (3 Nos), Patratu TPS (3 Nos), Tenughat TPS (2 Nos), JITPL (2 Nos).

State Sector: Bakreswar (WB) – 4 Nos PMU, Mejia B (DV) – 2 Nos PMU (Intermittent), Koderma TPS (DV) – 1 Nos PMU. Frequent failure has been observed between SLDC and ERLDC PDC-PDC communication.

In 24th SCADA O & M Meeting, followings were discussed –

Kahalgaon STPS:- POWERGRID informed that they will depute M/s GE engineer after getting written confirmation from NTPC regarding completion of the CT/PT termination at their C/R panel and issuance of Gate pass.

Sterlite:- ERLDC requested POWERGRID to take this matter with Odisha and Sterlite for completion of pending integration work since Sterlite is now under Odissa jurisdiction.

Talcher STPS:- Communication establishment and Status point integration is pending. In 24th SCADA O & M meeting, NTPC agreed to complete pending status point integration work. NTPC further informed, vide email dated 12-October-2019, that they are unable to do the wiring work due to non-availability of drawing at NTPC end.

Redundant communication link in URTDSM project:- Considering the importance of PMUs data, POWERGRID agreed to implement redundant communication link in URTDSM project in order to prevent PMUs data intermittency and repetitive failure between PDC-PDC communication between ERLDC and SLDCs.

Others PMUs non-availability:- POWERGRID may provide action plan.

POWERGRID, NTPC and OPTCL may update

Deliberation in the meeting

POWERGRID informed that non-reporting PMUs of Bakreshwar (WB), Mejia B (DVC) has already been rectified.

POWERGRID further intimated that the visit of GE engineer has been scheduled to various sites for rectification of PMUs which are not reporting at ERLDC. However, these being O&M issues, POWERGRID intimated that GE is facing difficulty in carrying out maintenance activities as the DLP is yet to commence due to incompleteness of all the scope of work which primarily includes the battery-bank commissioning at ERLDC (pending due to non-availability of space at ERLDC).

Towards, non-commissioning of PMUs at KhSTPP, ERPC expressed their dissatisfaction to NTPC over compliance of previous commitment by NTPC in 24th SCADA O & M meeting. NTPC assured full-cooperation and requested POWERGRID to re-mobilisation of erection team to which POWERGRID agreed as a final attempt. ERPC advised ERLDC to monitor the day-to-day progress during the visit of erection team and also to arrange necessary shutdown on urgency basis, if required. NTPC shall arrange for gate-pass and execution of the CT/PT work in PMU including arrangement of shutdown for completion of the PMU work.

ERLDC informed that presently, Sterlite is under OPTCL control area and hence, requested POWERGRID to report the same to OPTCL URTDSM system first and ERLDC would get the data through PDC to PDC. OPTCL agreed to provide required communication link so that the same could be integrated and URTDSM data could be reported to OPTCL system.

POWERGRID informed that PMU integration at Tacher STPS would be completed by November, 2019 once the status point integration by NTPC is completed. POWERGRID agreed to provide the drawing so that NTPC would complete their work.

With regard to non-commissioning of PMUs at various IPPs and locations which are not ready (Total 12 PMUs: 1 each at Monnet & Ind-Bharat, 2 PMUs each at Tenughat TPS & JITP and 3 PMUs each at Sterlite & Patratu TPS), POWERGRID requested to consider for short-closing of the contract with as-is-where-is basis (excluding erection cost, wherever applicable). ERPC advised POWERGRID to discuss the issue at next OCC meeting for a concrete decision in this regard.

POWERGRID agreed to provide redundant communication links between control centres in URTDSM project by 30th November, 2019.

- **SCADA Data Summary :-**

Central Sector: Highly intermittent SCADA data from Baharampur, Kishanganj.

POWERGRID may update.

State Sector: Following are the deliberations regarding data non availability of state sector stations:-

AOR	Station	Status	Deliberation in the meeting
WBSETCL	TLDP 4 220kV	Not Available	POWERGRID informed that OPGW is planned to be installed in NJP – TLDP line, WB need to extent consent
	Dharampur 220kV	Yet to be integrated	
	Egra 220	Yet to be integrated	
	Bantala 220kV	Not Available	Up-gradation work in under progress
	Alipurduar 220kV	Yet to be integrated	OPGW not available. ERLDC advised WBSETCL to integrate data on PLCC till OPGW will be available.
	Rishra 220kV	Not Available	Rishra data integrated.
BSPTCL	Motipur 220kV	Data not available	
JUSNL	Hatia New 220	Not Available	
	Jamtara 132kV	Not Available	
	Garwa 132kV	Yet to be integrated	
	Deoghar 132kV	Not Available	
	Kendposi 132 kV	Not Available	
OPTCL	JSPL 400kV	Most of the data not available	
	Nalco 220kV	Most of the data not available	
	Narsingpur 220kV	Station commissioned at 220kV without data telemetry	
	Bargarh 220	Station commissioned at 220kV without data telemetry	

Members may update.

Deliberation in the meeting

POWERGRID intimated that the data reporting from Berhampore is healthy at present.

WBSETCL informed that they are getting Egra 220 kV data and hence requested ERLDC to configure it at their end.

ERLDC requested WBSETCL to make the data available of TLDP 4 220kV, Dharampur 220kV, Bantala 220kV, Alipurduar 220kV.

JUNSL informed that by March, 2020 they will make available all the data in their jurisdiction.

OPTCL informed that by June, 2020 they will make available all the data in their jurisdiction.

ITEM NO. A.5: Non-functioning of codec HDMI port of VC system installed at Sikkim Monitoring Center (SMC)

Codec HDMI port of VC system, installed at SMC, is not functioning since long. Matter was discussed several forums including 4th Special SCADA meeting held at ERLDC, Kolkata on 31.07.2019 where in M/s Chemtrols informed that they are taking up the matter with OEM and the same would be resolved by 16th August 2019.

In 24th SCADA O & M meeting, M/S Chemtrols informed that they have initiated procurement of Codec HDMI port of VC system same would be installed by 31st August 2019.

M/S Chemtrols & Sikkim may update.

Deliberation in the meeting

M/s Chemtrols informed that work of HDMI port of VC system installed at Sikkim has been completed.

ITEM NO. A.6: Issuance of Commissioning Certificate/ Trail Operation Certificates (TOC) of 12 Nos. OPGW Links along with its Communication Equipments and Auxiliary Power Supply system implemented under SCADA/EMS Upgradation package of BSPTCL

POWERGRID has applied for issuance of TOC of 12 Nos. OPGW links (282.42 km) and 15 Nos. SDH MUX, 18 Nos. PDH MUX, 7 Nos. Charger & 7 Nos. Battery Banks, vide letter ref: ER-I/PT/ULDC/BSPTCL/3578 dtd. 25.06.2019.

Further, subsequent to the discussions held in 24th SCADA O&M meeting held on 14th August, 2019, POWERGRID has again applied for issuance of Commissioning Certificate/ TOC of 12 Nos. OPGW links (282.42 km) along with its Communication & Auxiliary Supply Equipments vide letter ref: ER-I/PT/ULDC/BSPTCL/5390 dtd. 10.10.2019 (copy attached at **Annexure-A6**). However, the same is yet to be issued by BSPTCL.

BSPTCL may expedite the issuance of Commissioning Certificate/ TOC of 12 Nos. OPGW links (282.42 km) along with 15 Nos. SDH MUX, 18 Nos. PDH MUX, 7 Nos. Charger & 7 Nos. Battery Banks.

Further, POWERGRID shall be shortly submitting the request for issuance of Commissioning Certificate of another 24 OPGW links of BSPTCL, commissioned along with Communication and Auxiliary Power Supply Equipment.

BSPTCL may update.

Deliberation in the meeting

POWERGRID informed that they have received the required certificate.

ITEM NO. A.7: Issuance of Commissioning Certificate/ Trail Operation Certificates (TOC) of 50 Nos. PLCC Links and associated Auxiliary Power Supply System implemented under SCADA/EMS Upgradation package of BSPTCL

POWERGRID has applied for issuance of TOC of 50 Nos. PLCC links along with 23 Nos. Charger & 23 Nos. Battery Banks, vide letter ref: ER-I/PT/ ULDC/BSPTCL/3579 dtd. 25.06.2019.

Further, subsequent to the discussions held in 24th SCADA O&M meeting held on 14th August, 2019, POWERGRID has again applied for issuance of Commissioning Certificate/ TOC of 50 Nos. PLCC links and 23 Nos. Charger & 23 Nos. Battery Banks, vide letter ref: ER-I/PT/ ULDC/BSPTCL/5391 dtd. 10.10.2019. However, the same is yet to be issued by BSPTCL.

The list of PLCC links commissioned under the instant scope is attached at **Annexure-A7**.

BSPTCL may expedite the issuance of Commissioning Certificate/ TOC of 50 Nos. PLCC links along with 23 Nos. Charger & 23 Nos. Battery Banks.

BSPTCL may update.

Deliberation in the meeting

POWERGRID informed that they have received the required certificate.

ITEM NO. A.8: Site access issue at NTPC Kahalgaon for completion of balance OPGW Installation in Kahalgaon NTPC - Kahalgaon (BH) Link under SCADA/EMS Upgradation package of BSPTCL

One span OPGW Installation (200 mtrs, being carried out by M/s PPCL) is pending inside NTPC Kahalgaon premises along with installation of Approach Cable, HDPE Duct & FODP and termination of the same for 132 kV Kahalgaon (BH) – Kahalgaon (NTPC) T/L of BSPTCL since 11.07.2019, for want of Entry Permission at NTPC Kahalgaon end.

The matter was discussed in the 24th SCADA O&M meeting and NTPC agreed to resolve the Entry Permission issue at Kahalgaon STPP and intimate regarding site access with a week's time. However, such intimation is still awaited from NTPC.

NTPC may please expedite issuance of Entry Permission to M/s PPCL.

NTPC may update.

Deliberation in the meeting

NTPC, Kahalgaon informed that they will provide the necessary site access required for carried out the said work.

ITEM NO. A.9: Site access issue at NTPC Kahalgaon for completion of balance interfacing works in the PMU installed under URTDSM Project

The termination of CT/PT connections of the feeders at PMU (under URTDSM Project, being implemented by M/s GE) is pending since past one year due to site access issue at NTPC Kahalgaon end.

The matter was discussed in the 24th SCADA O&M meeting and NTPC agreed to complete the pending termination of CT/PT of all feeders at respective TBs on its own. It was informed that POWERGRID will depute M/s GE to complete interfacing work at PMU end and reporting of the signals to ERLDC, subsequent to written confirmation from NTPC regarding completion of the CT/PT termination and issuance of Gatepass.

NTPC may update the status of CT/PT terminations of the feeders at NTPC Kahalgaon.

NTPC may update.

Minutes of 1st TeST meeting

Deliberation in the meeting

The agenda point is already discussed in ITEM NO. A.4.

ITEM NO. A.10: OPGW related matters of BSPTCL

As per 24th SCADA MOM Powergrid informed to mobilize the team on 19th August 2019 to resolve the following points:-

SAT of OPGW - M/S PPCL has given the program of SAT nine months back. They have carried out SAT of 132 KV MTPS-Motihari & Motihari-Betia line. Losses found in said line which is yet to be corrected as SAT of future line are pending since long.

132 KV Kahalgaon(BH)-Kahalgaon(NTPC)- Installation work of OPGW taken up for 132 KV Kahalgaon(BH)-Kahalgaon(NTPC) T/L but not completed yet.

POWERGRID may update.

Deliberation in the meeting

POWERGRID informed that they will depute the team by November, 2019 and requested BSPTCL and NTPC for necessary site access at their location for carrying out the said work. BSPTCL and NTPC agreed for the same.

ITEM NO. A.11: Instability of Data

SDH- The improper maintenance of communication equipments and lack of manpower for communication equipments like SDH (Fibcom) and frequent failure of cards (E1/Ethernet) at different GSSs.

PDH- Even after issuance of TOC of PDH (Tejas) provided under scheme of SCADA Upgradation, PDH system is leading to untimely hanging and intermittent data to SLDC and failure of 64 Kbps data cards at different GSSs.

POWERGRID may update.

Deliberation in the meeting

POWERGRID informed that the response from Fibcom is not satisfactory. POWERGRID further informed that they will once again take up the matter with Fibcom so that the same could be addressed soon.

ITEM NO. A.12: Reporting of BTPS Old Data

Data of BTPS Old is not reporting to SLDC since long. NTPC may be requested to rectify the issue.

NTPC may update.

Deliberation in the meeting

NTPC informed that they will look into the matter to resolve it at the earliest.

ITEM NO. A.13: Extension of OPGW fibre for AGC Communication

AGC communication will be through OPGW fiber, presently terminated at switch yard control room. Four cores from this cable will be extended to MPL Main Control Room.

Members may deliberate.

Deliberation in the meeting

ERLDC informed that providing the communication links (two channels) from unit control room to nearest POWERGRID hub for AGC is the responsibility of the generators. ERPC advised the forum to call NLDC in the next TeST sub-committee meeting so that all AGC related queries would be addressed properly. All constituents agreed for the same.

ITEM NO. A.14: Permission for OPGW laying in TLDP-NJP OPGW link under Fiber Optic Expansion Project (Additional Requirement)

In 27th ERPC meeting, OPGW laying on TLDP-NJP was approved based on advice of NLDC. Accordingly, tendering has been carried out and work order has been placed on party by POWERGRID. Tower schedule of 220KV TLDP-NJP TL has been provided by WBSETCL.

However, they are yet to confirm towards the starting of work, permission of laying OPGW on 220KV TLDP-NJP TL & nomination of WBSETCL representative to issue the PTW.

The matter was also discussed in 24th SCADA O&M held on 14.08.2019 wherein WBSETCL intimated that they will look into the matter. But till date no response received from WBSETCL. WBSETCL to extend co-ordination in line with the agreement and approvals in ERPCs.

WBSETCL may update.

Deliberation in the meeting

WBSETCL intimated that they will convey POWERGRID regarding the issue within a week.

ITEM NO. A.15: Readiness of UPS Room for Backup NLDC Control Center under URTDSM Project

Backup NLDC Control Center under URTDSM Project could not be commissioned due to non-readiness of UPS room at ERLDC. In 23rd SCADA O&M ERLDC intimated that the renovation work will be completed by July-2019.

Further, ERLDC vide letter dated 30.05.2019 and in 24th SCADA O&M meeting held on 14.08.2019, intimated that the renovation work will be completed by November-2019. ERLDC to kindly expedite the renovation work so that the space is ready by November-2019 and Backup NLDC Control Center is commissioned at the earliest.

In continuation to above, a temporary space is required for keeping the Auxiliary power supply equipments and charging of the battery banks. ERLDC is requested to allot a suitable temporary space till readiness of UPS room.

ERLDC may update.

Deliberation in the meeting

ERLDC informed that the contract for finalization of the work of renovation of UPS room, committed earlier for November, 2019, may take longer period and will be completed in the next 3-4 months i.e by February, 2020.

POWERGRID informed that delay in first charging of battery bank may affect the performance of the individual cells and the executing agency, M/s GE, may not be held responsible for the performance of battery bank during commissioning or warranty period.

ERPC requested ERLDC to expedite the renovation work of UPS/Battery room and look for a suitable alternative temporary place for charging of the battery bank on urgent basis, as earlier suggested by POWERGRID. ERLDC agreed for the same.

PART – B : ANY OTHER ITEMS

ITEM NO. B.1: Status of OPGW links under SCADA/EMS Upgradation package of BSPTCL

SCADA/EMS Upgradation Package of ER is being implemented by POWERGRID, wherein 40 OPGW links (1272 kms approx) along with Communication & Auxiliary Power Supply Equipments were envisaged in the instant package scope for BSPTCL sector.

The present Installation & Commissioning status of the links under the scope of the package is mentioned at **Annexure-B1**.

This is for information of the forum and record please.

Members may note.

Deliberation in the meeting

Members noted.

ITEM NO. B.2: Status of various projects undertaken by M/S Chemtrols in Eastern Region

Sr. no	POSO / Constituent	Status on 07.06.19	Proposed completion date	Status on 31.07.19	Proposed completion date
ERLDC Portion					
a)	Improper modeling of TCSC, FSC & HVDC in SCADA system	Chemtrols informed that these points are beyond the scope of the contract as per OSI and OSI agreed to resolve this on chargeable basis. ERLDC informed that these pending issues are being taken up since inception and hence, requested Chemtrols to resolve the matter with OSI. Chemtrols informed that discussion with OSI is going on and would be	15.7.19	Director Chemtrols informed that they are not getting necessary support from OSI to attend this issue hence requested ERLDC & ERPC to mediate in this matter for early resolution. MS ERPC mentioned that to resolve these points OSI support is required so he advised ERLDC to invite OSI for attending the upcoming 24th SCADA O&M	---
b)	STATCOM Modeling not incorporated in SCADA system		15.7.19		
c)	Integration with WAMS		15.7.19		
d)	Non functionality of STLF features in SCADA system since 13th April 2018		30.6.19		

		resolved.		meeting to be held on 14th August 2019 at ERLDC,Kolkata. ERLDC agreed for the same.	
e)	HRS data storage and retrieval related issue for 04th & 05th December 2018	Chemtrols informed that OSI is working on the issue.	30.6.19	Completed	
f)	Compliance of Cyber Security Audit conducted during March 2018 not completed	Chemtrols informed that they have submitted the compliance report. ERLDC informed that this report has been finalised without discussion with ERLDC and hence requested Chemtrols to finalise this after discussion with user.	30.6.19	Chemtrols informed that they have already submitted the compliance report. ERLDC informed that compliance was not completed as per the scope of the contract. ERLDC further informed that compliance is being carried out by ERLDC with the help of Chemtrols and the same would be completed by 10.08.19. M/s Chemtrols informed that the same would be replicated to all other control centres by 31st August 2019. M/s Chemtrols further informed that they would plan to carried out cyber security audit for 2019 from October 2019.	31.08.19
g)	Mic cable connecting Mic with Codec unit (02 nos.) in VCS installed at ERLDC First floor is not communicating since last 1 month. Also, high Noise observed in the display controller of same VCS unit due to problem in cooling fan	Mic cable problem resolved. Delta person will visit ERLDC to rectify the high noise in the display controller.	15.6.19	Delta person will visit ERLDC to rectify the high noise in the display controller by 10th August 2019	10.08.19
h)	Document Feeder of One no. Multi-function Printer (MP 2553) supplied is not working	To be replaced.	30.6.19	Completed	
i)	PM not being carried out by M/s Chemtrols through OEM	Procurement of spares like Server FAN & HDD etc are in progress.	15.06.19	M/s Chemtrols informed that they have already procured server FANs for all sites. They further informed that server HDD procurement is under process and the same is expected to be completed by 15th	15.09.19

				September 2019.	
j)	Pending Payment to Third Party leading to extremely poor service during rectification of any Hardware	Payment to Delta has been made. Jaikar techno and Garuda power payment is in process.	15.06.19	Payment to Jaikar techno had been made and Payment to Garuda power is in process and the same would be completed by 14th August 2019.	14.08.19
k)	Pending/delayed monthly salary to deployed Chemtrols Engineers	March & April - 19 salary by 15.06.19 regularisation by June end.	30.6.19	Salary has been regularised.	
l)	Implementation of Automatic Demand Management Scheme (ADMS) in Bihar & Jharkhand	Chemtrols informed that they have not received confirmation from BSPTCL for deploying this in main system. BSPTCL informed that they will complete the testing of the same by 20.06.19. Chemtrols informed that they will deploy this on main system by 30.6.19. BSPTCL informed that they need clarification on ₹ 4 Lakhs (Exclusive of all taxes) charges which is quoted by Chemtrols for implementation of ADMS. MS, ERPC informed that this is approved in the 40th ERPC board meeting and if BSPTCL & JUSNL wants any clarification, they can approach ERPC in this regard. JUSNL also requested Chemtrols to implement this by 30.6.19 as being done for BSPTCL. Chemtrols agreed for the same.	30.6.19	JUSNL informed that ADMS testing has been completed but they are waiting for clearance from their DISCOMs for final implementation of ADMS in their system. BSPTCL informed that they have communicated implementation of ADMS to their DISCOM & SLDC but they are yet to receive communication from them. ERPC informed that this is long pending agenda and it should get resolved as soon as possible otherwise the same would again be forwarded to OCC / ERPC for further deliberation or advise.	---
m)	Failure of Input ACDB connector at ERLDC on 24.07.19:C3 connector (Model No: LC1F1504) in input ACDB is burnt which need to be replaced immediately.			M/s Chemtrols informed that they have already procured the required ACDB connector, the same would be installed at ERLDC.	10.08.19

n)	Preventive Maintenance of DG Sets: Scheduled Preventive Maintenance of both DG Sets for Quarter II of 2019 (April-June 2019) are yet to be conducted. The Q1 AMC were conducted during March 2019 (against initial schedule of Jan 2019). Several correspondences have been made with the party to conduct the PM in equal interval which is seldom maintained.			ERLDC informed that Preventive Maintenance of DG Sets for Quarter -II is yet to be conducted. M/S Chemtrols informed that they will conduct the Preventive Maintenance for DG Sets once they are able to renew the contract with M/s Garuda Power. ERLDC informed that 12V Battery Set-2 is getting over-heated during operation of DG set & Fuel Injector coil not working properly and needs to be replaced immediately.	16.08.19
o)	Repair / Replacement of faulty SMPS of Ground floor VCS Controller: One no. SMPS of the Ground floor VCS Controller has been detected faulty and has been taken out for repair / replacement. However, the same is yet to be retrofitted. Matter may be expedited.			Completed	
p)	VGA port of 1 No. Laptop fails to support CODEC. The Laptop also do not give any battery backup. Out of the 2 laptops supplied against the VC System 1 No Laptop do not support connectivity with CODEC through VGA Port. The same has been identified during PM and need to be resolved. The reported to have no battery backup. Replacement of the Battery may be taken up.			Chemtrols informed that they would resolve the VGA port problem in laptop by 16.08.19.	16.08.19
q)	Daily SOE from all constituent to ERLDC is not getting generated automatically.			ERLDC informed that presently, SOE files are not getting generated automatically and hence requested Chemtrols to look into the matter and resolve the same at the earliest. M/S Chemtrols agreed to resolve the same.	16.08.19

DVC Portion					
a)	Spares for workstation and system accessories (e.g. Fans, SMPS, RAM, Mouse, Keyboard etc) are not available.	Order for required spares placed on vendor	30.06.19	M/s Chemtrols informed that they have already procured server FANS for all sites. They further informed that server HDD procurement is under process and the same is expected to be completed.	15.09.19
b)	Cyber security audit report is not submitted by M/s Chemtrols even for the last year conducted on 23.02.2018.	Chemtrols informed that they have submitted the compliance report. DVC informed that this report has been finalised without discussion with DVC and hence requested Chemtrols to finalise this after discussion with user.	30.6.19	Chemtrols informed that they have already submitted the compliance report. M/s Chemtrols further informed that they would be able to replicate the compliance to other control centres including DVC by 31st August 2019. M/s Chemtrols again informed that they would plan to carry out cyber security audit for 2019 from October 2019.	31.08.19
c)	Problems related with RTU maintenances are accumulated due to non-rectification of any issue on time.	Order for required spares placed on vendor.	30.06.19	DVC informed that problems related with RTU are accumulated due to poor maintenance of RTU & non-rectification of issue in time. M/S Chemtrols informed that RTU maintenance would be carried out as and when their engineer is visiting site for attending the problem. DVC further requested M/s Chemtrols to share the RTU maintenance report and M/s Chemtrols agreed for the Same.	
d)	(i) Server fan 09 nos out since last 06 months. Not yet rectified.	Order for required spares placed on vendor.	30.06.19	Completed	
	(iv) 19 nos MFM and 01 (one) Node are faulty – to be rectified.	DVC requested Chemtrols to visit DVC, Maithon to resolve all these issues.		Chemtrols informed that they will take up the matter and resolve few MFMs as they are not getting support from OEM.	
	(v) LDMS at different stations out of order – total 07 nos.	DVC requested Chemtrols to visit DVC, Maithon to resolve all		Chemtrols confirmed that they would resolve the issue at the earliest.	16.08.19

	(vi) 2 (two) nos. faulty MFM – not yet returned. (Since 28/11/2018).	these issues.		Chemtrols confirmed that they would resolve the issue at the earliest.	16.08.19
	(vii) Analog and Digital Data from Jamshedpur S/S for 33 KV JUSCO line is not available.			Chemtrols informed that they would be visiting DVC, Maithon to resolve the issue.	
	(viii) At ALDC Maithon VGA port of controller of VCS not working since 08/06/2018.			Chemtrols confirmed that they would resolve the issue at the earliest.	16.08.19
e)	Data Reporting Issues:				
	(i) Mosaboni S/S – Analog and Digital Data from all 33 KV Bays.				
	(ii) Kolaghat S/S - Analog Data for 132 KV Howrah Bay, Kharagpur Bay, Kolaghat (WB) bay				
	(iii) Nimiaghat S/S - Both Analog and Digital Data from all 33 KV Bays				
	(iv) Putki S/S - Analog and Digital Data for Line # 47 (132 KV Putki - Nimiaghat line)	DVC requested Chemtrols to visit DVC, Maithon to resolve all these issues.		Chemtrols informed that they would be visiting DVC, Maithon to resolve the issue.	
	(v) CTPS B: Analog data of LV side from Gen # 7 & 8.				
	(vi) MTPS A: Analog data of LV side from Generator # 6.				
	(vii) Biada S/S: Both Analog and Digital Data for all 33 KV Bays and Digital for all 132 KV bays.				
f)	switch of RACK-1 along with the KVM monitor is out of order since 14.05.2019.	Problem already informed to Chemtrols.	20.06.19	Completed	
g)	05 nos. rectifier modules of Charger of the UPS system become faulty since 05.03.2019.	Problem already informed to Chemtrols.	30.06.19	Chemtrols confirmed that they would resolve the issue at the earliest.	31.08.19
h)	PM of DG is never carried out since installation	Chemtrols informed that they will engage the OEM	30.06.19	M/S Chemtrols informed that they will conduct the Preventive Maintenance for DG Sets once they are able to renew the contract with M/s Garuda Power.	16.08.19
j)	PM of UPS system is not conducted by OEM	Chemtrols informed that they will engage the OEM	30.06.19	Chemtrols informed that the same would be completed at the earliest.	16.08.19
k)	Three (3) nos. faulty Terminal Servers to be			Chemtrols informed that the same would be	30.09.19

	repaired			completed at the earliest.	
JUSNL Portion					
a)	LDMS of Japla & Daltonganj GSSs in faulty condition	Order for required spares placed on vendor.	30.06.19	Completed	
b)	LDMS inverter of Latehar GSS in faulty condition	Order for required spares placed on vendor.	30.06.19	Completed	
d)	AMC cost including implementation of ADMS charged by M/s Chemtrols			Delibration mentioned in first page.	
e)	CPU of LDMS of Japla, Latehar, Daltonganj and Kanke are not working			Chemtrols informed that the same would be completed at the earliest.	31.08.19
f)	Maintenance related with B-check for 125 KVA DG Set installed at SLDC :			ERLDC informed that clarification regarding B-check consumable is already given in 3rd Special SCADA meeting held on 07.06.19. ERLDC advised JUSNL to go through the MOM for clarification. JUSNL agreed for the same.	
g)	Requirement of Anti-virus for DTS Workstations			Chemtrols informed that DTS workstation is not in SCADA LAN and hence, client based anti-virus could not be configured. So, requested JUSNL to arrange for the same. JUSNL agreed for the same.	
OPTCL Portion					
a)	For SCADA system at Bhubaneswar, allotted OSI licenses are as mentioned below	Requested OSI to provide the quotation so that the same could be done.	30.06.19	OPTCL informed that they have requested Chemtrols several times for providing additional 12000 Analog & 8000 Status points liceses in their SCADA system installed at Bhubaneswar. Chemtrols informed that they are unable to take any solution for this and hence, requested ERLDC/ERPC to take up the matter directly with OSI. ERPC advise ERLDC to take up this agenda also with OSI in 24th SCADA O & M meeting proposed to be held on 14.08.19 at ERLDC.	
BSPTCL Portion					

a)	Isolation Transformer breakdown since 18.08.18	Finding it difficulties in finding the vendor at Patna. BSPTCL informed that this issue is pending since last 10 months and hence, requested Chemtrols to rectify at the earliest. Chemtrols agreed for the same.	15.07.19	BSPTCL informed that they are yet to get any resolution plan from Chemtrols. Chemtrols informed that they found the vendor at Patna to resolve the issue and the same would be completed at the earliest.	15.09.2019
b)	RTU Issues: LDMS issue at 24 locations	Order for required spares placed on vendor.	30.06.19	Chemtrols informed that the same would be completed at the earliest.	31.08.19
d)	DG set battery issue 07.01.19	Chemtrols informed that they are suspecting card failure and pursuing the matter with powerica for rectification. Chemtrols also informed that B-check will also be carried out after receiving the consumable from BSPTCL.	20.6.19	BSPTCL informed that they are yet to get any solution from Chemtrols. ERLDC advised Chemtrols to call OEM (POWERICA) so that problem could be identified and addressed properly. Chemtrols informed that POWERICA engineer will visit the site at the earliest.	10.08.19
e)	MP 2553 RICOH Printer defective	Taking up the matter with Ricoh for rectification.	15.06.19	BSPTCL requested Chemtrols to raised the bill separately so that the same could be processed at BSPTCL end for processing & release of payment.	10.08.19
f)	Integration of new bay	Procurement of material for new bay integration is in progress	30.06.19	BSPTCL informed that integration of new bays is pending from Chemtrols since long. Chemtrols informed that integration of new bays will start once cable laying at site is completed by BSPTCL. ERLDC informed that in a special SCADA meeting held on 08.05.17, POWERGRID clarified that supply & laying of required cable for integration of bays is not in the scope of LoA.	31.08.19
WBSETCL Portion					
a)	Chemtrols RTU is not integrated through IEC-104 protocol though communication link is ready	WBSETCL would share the list by 20.06.19. Chemtrols informed that they need 1 month time to implement this.	31.07.19	Chemtrols informed that they will provide the schedule by next week and requested WBSETCL to confirm the	10.08.19

				availability of communication link so that the same could be completed at the earliest. WBSETCL agreed for the same.	
b)	LDMS problems are logged through online portal of M/S Chemtrols but they remain unattended. Immediate Rectification of faulty LDMS shall be planned.	Order for required spares placed on vendor.	30.06.19	Chemtrols informed that they will provide the schedule by next week. Chemtrols further informed that the same would be completed at the earliest.	31.08.19
c)	Improper maintenance of DG systems installed at SLDC	B-check consumable to be provided by customer as being done for ERLDC & BSPTCL. B-check will be completed consumables provided by WBSETCL.		M/S Chemtrols informed that they will conduct the Preventive Maintenance for DG Sets once they are able to renew the contract with M/s Garuda Power.	16.08.19
d)	Both UPS installation at Howrah SLDC (MCC) is not working since 05:56 Hrs of 10.04.19	Chemtrols informed that they have already released payment to Delta and hence, it will be rectified soon.	15.6.19	Completed	
Sikkim Portion					
a)	Non-functional of codec HDMI port of VC system	Chemtrols informed that they are taking up the matter with OEM.	31.07.19	Chemtrols informed that the same would be completed at the earliest.	16.08.19
b)	Non-functional of one no. Work station and Laptop each	work in progress	20.06.19	Chemtrols informed that work station problem resolved. Chemtrols further informed that laptop problem will be rectified at the earliest.	10.08.19
c)	Non reporting of 66kv Melli RTU for the past 3 months.			Chemtrols informed this issue surfaced due to GPS week roll issue at Melli 66 kV RTU. Chemtrols informed that it will be upgraded soon. ERLDC mentioned that Melli 66 kV RTU could be reported directly to Sikkim MC and time could be synchronised with control centre for data reporting if communication link is available between Melli 66 kV & Sikkim MC. Chemtrols agreed to direct the Melli 66 kV data to SMC once link is available.	14.08.19

M/S Chemtrols and Members may update.

Deliberation in the meeting

*M/S Chemtrols updated the members on above projects. The current status is **Annexure-B2**.*

ITEM NO. B.3: Information regarding 'Upgradation of SCADA/RTUs/SAS in the Central sector stations and strengthening of OPGW network in Eastern Region

In 39th ERPC meeting held on 17th November, 2018, it was recorded that-

- a) Power Grid shall place a proposal before PSDF Committee for financing the above project from PSDF.
- b) In case of non- availability of required funding from PSDF, the project shall be implemented by Powergrid and the cost shall be recovered by Power Grid through tariff.

Accordingly POWERGRID applied for financing of the above project through PSDF vide letter no C/LD&C/PSDF/19-20/1 dated 22.07.2019. Subsequently, NLDC (nodal agency for PSDF) has intimated vide letter ref. NLDC-PSDF/TEG-51st meeting/2019-20/143 dated 18.09.2019 regarding non-availability of PSDF Fund for the above project.

Hence, it may be kindly recorded that POWERGRID has already initiated the Placement of LOA and execution of the project through tariff basis. This is for kind information of all the members.

Members may note.

Deliberation in the meeting

Members noted and suggested that the above item shall be placed in next ERPC meeting for record.

Annexure-A

Participants in 1st TELECOMMUNICATION, SCADA AND TELEMETRY (TeST) SUB-COMMITTEE Meeting
of ERPC

Venue: ERLDC Conference Hall, Kolkata

Time: 11:00 hrs

Date: 24.10.2019 (Thursday)

Sl. No	Name	Designation/ Organization	Contact Number	Email	Signature
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4	S.K. SAHU	DGM (AM/IT) PGCIL, BBSR	9678883643	SKSahu@Powergridindia. com	
5	MITHUN CHOWDHURY	MGR (ULDC) PGCIL, PATNA	9431815651	MITHUN@POWERGRIDINDIA. com	
6	Pradham Soren	SE (Comm), SLD DVC, Howrah	9434745908	pradham.soren@ dvc.gov.in	
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18	RASHAN JAISWAL	ERLDC	9007184569	rashan.00921@gmail.com	
19	Santosh Jaha	MPL, Tata power	9886808112	santosh.jaha@ tatapower.com	
20	Shambhu Das	EE, SLD DVC, Howrah	7209107373	shambhu.das@dvc. gov.in	

"Coming together is a beginning, staying together is progress, and working together is success." -Henry Ford

Participants in 1st TELECOMMUNICATION, SCADA AND TELEMETRY (TeSt) SUB-COMMITTEE Meeting of ERPC

Venue: ERLDC Conference Hall, Kolkata

Time: 11:00 hrs

Date: 24.10.2019 (Thursday)

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"Coming together is a beginning, staying together is progress, and working together is success." –Henry Ford

SL No	POSOCO / Constituent	Status on 07.06.19	Proposed completion date	Status on 31.07.19	Proposed completion date	Current Status on 24-10-2019
ERLDC Portion						
a)	Improper modeling of TCSC, FSC & HVDC in SCADA system	Chemtrols informed that these points are beyond the scope of the contract as per OSI and OSI agreed to resolve this on chargeable basis. ERLDC informed that these pending issues are being taken up since inception and hence, requested Chemtrols to resolve the matter with OSI. Chemtrols informed that discussion with OSI is going on and would be resolved.	15.7.19	Director Chemtrols informed that they are not getting necessary support from OSI to attend this issue hence requested ERLDC & ERPC to mediate in this matter for early resolution. MS ERPC mentioned that to resolve these points OSI support is required so he advised ERLDC to invite OSI for attending the upcoming 24th SCADA O&M meeting to be held on 14th August 2019 at ERLDC,Kolkata. ERLDC agreed for the		OSI / Chemtrols given proposed for handson training for at OSI Bangalore on chargeble basis. ERLDC informed that OSI person is not present to discuss this point. ERPC requested POWERGRID to coordinate with OSI & Chemtrols to call a meeting at ERPC within 15 days so that these points could be delibrated and resolved. ERPC further informed that points not resolved then the same will be taken to the TCC/ERPC board
b)	STATCOM Modeling not incorporated in SCADA system		15.7.19			
c)	Integration with WAMS		15.7.19			
d)	Non functionality of STLF features in SCADA system since 13th April 2018		15.7.19			
e)	HRS data storage and retrieval related issue for 04th & 05th December 2018	Chemtrols informed that OSI is working on the issue	30.6.19	Completed		

f)	Compliance of Cyber Security Audit conducted during March 2018 not completed	Chemtrols informed that they have submitted the compliance report. ERLDC informed that this report has been finalised without discussion with ERLDC and hence requested Chemtrols to finalise this after discussion with user.	30.6.19	Chemtrols informed that they have already submitted the compliance report. ERLDC informed that compliance was not completed as per the scope of the contract. ERLDC further informed that compliance is being carried out by ERLDC with the help of Chemtrols and the same would be completed by 10.08.19. M/s Chemtrols informed that the same would be replicated to all other control centres by 31st August 2019. M/s Chemtrols further informed that they would plan to carried out cyber security audit for 2019 from October 2019. 31.08.19	31.08.19	completed
g)	Mic cable connecting Mic with Codec unit (02 nos.) in VCS installed at ERLDC First floor is not communicating since last 1 month. Also, high Noise observed in the display controller of same VCS unit due to problem in cooling fan	Mic cable problem resolved. Delta person will visit ERLDC to rectify the high noise in the display controller.	15.6.19	Delta person will visit ERLDC to rectify the high noise in the display controller by 10th August 2019	10.08.19	Mic is working finr.
h)	Document Feeder of One no. Multi-function Printer (MP 2553) supplied is not working	To be replaced.	30.6.19	Completed		

i)	PM not being carried out by M/s Chemtrols through OEM	Procurement of spares like Server FAN & HDD etc are in progress.	15.06.19	M/s Chemtrols informed that they have already procured server FANs for all sites. They further informed that server HDD procurement is under process and the same is expected to be completed by 15th September 2019.	15.09.19	UPS, DG will be done by OEM. Rest PM is carried out by Chemtrols engineers.
j)	Pending Payment to Third Party leading to extremely poor service during rectification of any Hardware	Payment to Delta has been made. Jaikar techno and Garuda power payment is in process.	15.06.19	Payment to Jaikar techno had been made and Payment to Garuda power is in process and the same would be completed by 14th	14.08.19	completed
k)	Pending/delayed monthly salary to deployed Chemtrols Engineers	March & April - 19 salary by 15.06.19 regularisation by June end.	30.06.19	Salary has been regularised.		Salary regularised
l)	Implementation of Automatic Demand Management Scheme (ADMS) in Bihar & Jharkhand	Chemtrols informed that they have not received confirmation from BSPTCL for deploying this in main system. BSPTCL informed that they will complete the testing of the same by 20.06.19. Chemtrols informed that they will deploy this on main system by 30.6.19. BSPTCL informed that they need clarification on ₹ 4 Lakhs (Exclusive of all taxes) charges which is quoted by Chemtrols for implementation of ADMS. MS, ERPC informed that this is approved in the 40th ERPC board meeting and if BSPTCL & JUSNL wants any clarification, they can approach ERPC in this regard. JUSNL also requested Chemtrols to	30.06.19	JUSNL informed that ADMS testing has been completed but they are waiting for clearance from their DISCOMs for final implementation of ADMS in their system. BSPTCL informed that they have communicated implementation of ADMS to their DISCOM & SLDC but they are yet to receive communication from them. ERPC informed that this is long pending agenda and it should get resolved as soon as possible otherwise the same would again be forwarded to OCC / ERPC for further deliberation or advise.		JUSNL completed from our end. Bsptcl final list not provided by BSPTCL

m)	Failure of Input ACDB connector at ERLDC on 24.07.19:C3 connector (Model No: LC1F1504) in input ACDB is burnt which need to be replaced immediately.	M/s Chemtrols informed that they have already procured the required ACDB connector, the same would be installed at ERLDC.	10.08.19			completed
n)	Preventive Maintenance of DG Sets: Scheduled Preventive Maintenance of both DG Sets for Quarter II of 2019 (April-June 2019) are yet to be conducted. The Q1 AMC were conducted during March 2019 (against initial schedule of Jan 2019). Several correspondences have been made with the party to conduct the PM in equal interval which is seldom maintained.	ERLDC informed that Preventive Maintenance of DG Sets for Quarter -II is yet to be conducted. M/S Chemtrols informed that they will conduct the Preventive Maintenance for DG Sets once they are able to renew the contract with M/s GarudaPower. ERLDC informed that 12V Battery Set-2 is getting over-heated during operation of DG set & Fuel Injector coil not working properly and needs to be replaced immediately.	16.08.19			DG Maintenance is going on schedule. Procurement of battery and coil is under process and will be completed by 30th November 2019.
o)	Repair / Replacement of faulty SMPS of Ground floor VCS Controller: One no. SMPS of the Ground floor VCS Controller has been detected faulty and has been taken out for repair / replacement. However, the same is yet to be retrofitted. Matter may be	Completed				completed

p)	VGA port of 1 No. Laptop fails to support CODEC. The Laptop also do not give any battery backup. Out of the 2 laptops supplied against the VC System 1 No Laptop do not support connectivity with CODEC through VGA Port. The same has been identified during PM and need to be resolved. The reported to have no battery backup. Replacement of the Battery	Chemtrols informed that they would resolve the VGA port problem in laptop by 16.08.19.	16.08.19			completed
q)	Daily SOE from all constituent to ERLDC is not getting generated automatically.	ERLDC informed that presently, SOE files are not getting generated automatically and hence requested Chemtrols to look into the matter and resolve the same at the earliest. M/S Chemtrols agreed to	16.08.19			work in progress
DVC						
a)	Spares for workstation and system accessories (e.g. Fans, SMPS, RAM, Mouse, Keyboard etc) are not available.	Order for required spares placed on vendor	30.06.19	M/s Chemtrols informed that they have already procured server FANs for all sites. They further informed that server HDD procurement is under process and the same is expected to be completed.	15.09.19	completed

b)	Cyber security audit report is not submitted by M/s Chemtrols even for the last year conducted on 23.02.2018.	Chemtrols informed that they have submitted the compliance report. DVC informed that this report has been finalised without discussion with DVC and hence requested Chemtrols to finalise this after discussion with user	30.6.19	Chemtrols informed that they have already submitted the compliance report. M/s Chemtrols further informed that they would be able to replicate the compliance to other control centres including DVC by 31st August 2019. M/s Chemtrols again informed that they would plan to carry out cyber security audit for 2019 from October 2019	31.08.19	work in progress. Will be completed by 30.11.19
c)	Problems related with RTU maintenances are accumulated due to nonrectification of any issue on time.	Order for required spares placed on vendor	30.06.19	DVC informed that problems related with RTU are accumulated due to poor maintenance of RTU & non-rectification of issue in time. M/S Chemtrols informed that RTU maintenance would be carried out as and when their engineer is visiting site for attending the problem. DVC further requested M/s Chemtrols to share the RTU maintenance report and M/s Chemtrols agreed for the same.		completed
d)	last 06 months. Not yet rectified.	Order for required spares placed on vendor.	30.06.19	Completed		completed
	(iv) 19 nos MFM and 01 (one) Node are faulty – to be rectified.	DVC requested Chemtrols to visit DVC, Maithon to resolve all these issues.		Chemtrols informed that they will take up the matter and resolve few MFMs as they are not getting support from OEM		MFM will be repaired only on a chargeable basis. Repairing charge quotation will be sent to DVC asap.
	(v) LDMS at different stations out of order – total 07 nos.	DVC requested Chemtrols to visit DVC, Maithon to resolve all these issues.		Chemtrols confirmed that they would resolve the issue at the earliest.		completed

	(vi) 2 (two) nos. faulty MFM – not yet returned. (Since 28/11/2018).		Chemtrols confirmed that they would resolve the issue at the earliest.	16.08.19	completed
	(vii) Analog and Digital Data from Jamshedpur S/S for 33 KV JUSCO line is not available.			16.08.19	
	(viii) At ALDC Maithon VGA port of controller of VCS not working since			16.08.19	completed
e)	Data Reporting Issues:				
	(i) Mosaboni S/S – Analog and Digital Data from all 33 KV Bays.	DVC requested Chemtrols to visit DVC, Maithon to resolve all these issues.	Chemtrols informed that they would be visiting DVC, Maithon to resolve the issue.		
	(ii) Kolaghat S/S - Analog Data for 132 KV Howrah Bay, Kharagpur Bay, Kolaghat (WB) bay				
	(iii) Nimiaghat S/S - Both Analog and Digital Data from all 33 KV Bays				
	(iv) Putki S/S - Analog and Digital Data for Line # 47 (132 KV Putki - Nimiaghat line)				
	(v) CTPS B: Analog data of LV side from Gen # 7 & 8.				
	(vi) MTPS A: Analog data of LV side from Generator # 6.				
	(vii) Biada S/S: Both Analog and Digital Data for all 33 KV Bays and Digital for all 132 KV bays.				

f)	switch of RACK-1 along with the KVM monitor is out of order since 14.05.2019.	Problem already informed to Chemt	20.06.19	Completed		
g)	05 nos. rectifier modules of Charger of the UPS system become faulty since 05.03.2019.	Problem already informed to Chemt	30.06.19	Chemtrols confirmed that they would resolve the issue at the earliest	31.08.19	completed
h)	PM of DG is never carried out since installation	Chemtrols informed that they will engage the OEM		M/S Chemtrols informed that they will conduct the Preventive Maintenance for DG Sets once they are able to renew the contract with M/s Garuda Power	16.08.19	schedule in 06-11-19
i)	PM of UPS system is not conducted by OEM	Chemtrols informed that they will engage the OEM		Chemtrols confirmed that they would resolve the issue at the earliest	16.08.19	completed
j)	Three (3) nos. faulty Terminal Servers to be repaired			Chemtrols informed that the same would be completed at the earliest.	30.09.19	

JUSNL Portion

a)	LDMS of Japla & Daltonganj GSSs in faulty condition	Order for required spares placed on vendor.	30.06.19	Completed		
b)	LDMS inverter of Latehar GSS in faulty condition		30.06.19	Completed		
d)	AMC cost including implementation of ADMS charged by M/s Chemtrols			Delibration mentioned in first page.		
e)	CPU of LDMS of Japla, Latehar, Daltonganj and Kanke are not working			Chemtrols informed that the same would be completed at the earliest.	31.08.19	

f)	Maintenance related with B-check for 125 KVA DG Set installed at SLDC :			ERLDC informed that clarification regarding Bcheck consumable is already given in 3rd Special SCADA meeting held on 07.06.19. ERLDC advised JUSNL to go through the MOM for clarification. JUSNL agreed for the same.		
g)	Requirement of Anti-virus for DTS Workstations			Chemtrols informed that DTS workstation is not in SCADA LAN and hence, client based anti-virus could not be configured. So, requested JUSNL to arrange for the same. JUSNL agreed for the same.		

OPTCL Portion

a)	For SCADA system at Bhubaneswar, allotted OSI licenses are as mentioned below	Requested OSI to provide the quotation so that the same could be done.		OPTCL informed that they have requested Chemtrols several times for providing additional 12000 Analog & 8000 Status points liceses in their SCADA system installed at Bhubaneswar. Chemtrols informed that they are unable to take any solution for this and hence, requested ERLDC/ERPC to take up the matter directly with OSI. ERPC advise ERLDC to take up this agenda also with OSI in 24th SCADA O & M meeting proposed to be held on 14.08.19 at ERLDC		
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BSPTCL Portion

a)	Isolation Transformer breakdown since 18.08.18	Finding it difficulties in finding the vendor at Patna. BSPTCL informed that this issue is pending since last 10 months and hence, requested Chemtrols to rectify at the earliest. Chemtrols agreed for the same.	15.07.19	BSPTCL informed that they are yet to get any resolution plan from Chemtrols. Chemtrols informed that they found the vendor at Patna to resolve the issue and the same would be completed at the earliest.	15.09.19	Procurement Done. By 30.11.19 ISO TRF will be supplied at site
b)	RTU Issues:					
	LDMS issue at 24 locations	Order for required spares placed on vendor.	30.06.19	Chemtrols informed that the same would be completed at the earliest.	31.08.19	completed.
	DG set battery issue 07.01.19	Chemtrols informed that they are suspecting card failure and pursuing the matter with powerica for rectification. Chemtrols also informed that Bcheck will also be carried out after receiving the consumable from BSPTCL.	26.06.19	BSPTCL informed that they are yet to get any solution from Chemtrols. ERLDC advised Chemtrols to call OEM (POWERICA) so that problem could be identified and addressed properly. Chemtrols informed that POWERICA engineer will visit the site at the earliest.	10.08.19	completed
c)	MP 2553 RICOH Printer defective	Taking up the matter with Ricoh for rectification.	15.06.19	BSPTCL requested Chemtrols to raised the bill separately so that the same could be processed at BSPTCL end for processing & release of payment.	10.08.19	Quotation submitted to BSPTCL for Damaged parts

d)	Integration of new bay	Procurement of material for new bay integration is in progress	30.06.19	BSPTCL informed that integration of new bays is pending from Chemtrols since long. Chemtrols informed that integration of new bays will start once cable laying at site is completed by BSPTCL ERLDC informed that in a special SCADA meeting held on 08.05.17, POWERGRID clarified that supply & laying of required cable for integration of bays is not in the scope of LoA	31.08.19	
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WBSETCL Portion

a)	Chemtrols RTU is not integrated through IEC-104 protocol though communication link is ready	WBSETCL would share the list by 20.06.19. Chemtrols informed that they need 1 month time to implement this.	31.07.19	Chemtrols informed that they will provide the schedule by next week and requested WBSETCL to confirm the availability of communication link so that the same could be completed at the earliest. WBSETCL agreed for the same.		Most of the sites has been completed where communication links are healthy. In many S/s we have found that link upto SLDC howrah is not stable or through. We request WBSETCL to share the ping test report of all pending sites
b)	LDMS problems are logged through online portal of M/S Chemtrols but they remain unattended	Order for required spares placed on	30.06.19	Chemtrols informed that they will provide the schedule by next week. Chemtrols further informed that the same would be completed at the earliest.	31.08.19	completed
c)	Improper maintenance of DG systems installed at SLDC	B-check consumable to be provided by customer as being done for ERLDC & BSPTCL. Bcheck will be completed consumables provided by WBSETCL.		M/S Chemtrols informed that they will conduct the Preventive Maintenance for DG Sets once they are able to renew the contract with M/s Garuda Power.	16.08.19	work in progress

d)	Both UPS installation at Howrah SLDC (MCC) is not working since 05:56 Hrs of 10.04.19	Chemtrols informed that they have already released payment to Delta and hence, it will be rectified soon.	15.6.19	Completed		
Sikkim Portion						
a)	Non-functional of codec HDMI port of VC system	Chemtrols informed that they are taking up the matter with OEM. .	31.07.19	Chemtrols informed that the same would be completed at the earliest	16.08.19	completed
b)	Non-functional of one no. Work station and Laptop each	work in progress	20.06.19	Chemtrols informed that work station problem resolved. Chemtrols further informed that laptop problem will be rectified at the earliest.	10.08.19	completed
c)	Non reporting of 66kv Melli RTU for the past 3 months			Chemtrols informed this issue surfaced due to GPS week roll issue at Melli 66 kV RTU. Chemtrols informed that it will be upgraded soon. ERLDC mentioned that Melli 66 kV RTU could be reported directly to Sikkim MC and time could be synchronised with control centre for data reporting if communication link is available between Melli 66 kV & Sikkim MC. Chemtrols agreed to direct the Melli 66 kV data to SMC once link is available.	14.08.19	completed