# MINUTES OF DISCUSSION IN 67<sup>th</sup> POWER SYSTEM OPERATIONAL COORDINATION MEETING HELD ON 14.11.2012 AT POWER TRAINING CENTRE, CHANDAKA, BHUBANESWAR

List of participants enclosed at Annexure-A

The meeting was chaired by Director (Commercial), GRIDCO.

Sr.G.M (PS) welcomed all the participants to the 67<sup>th</sup> Power System Operational Coordination meeting.

General Manager (GO) took the agenda items for discussion.

The review proceeded as follows:

# Item No.1-Confirmation of the minutes of 66<sup>th</sup> PSOC meeting held on 30.03.12 at PTC, Chandaka, Bhubaneswar.

Since Members have no comments on the minutes of 66<sup>th</sup> PSOC meeting, the minutes of the meeting was confirmed.

#### Item No. 2- Review of Grid performance for the month of September & October 2012.

#### Item No. 2 (A) – Frequency

The one-minute instantaneous System frequency for the month of October'2012 was reviewed. It was noticed that 90.7 % of times the frequency remained in the band of 49.50 Hz–50.20 Hz (IEGC band) in comparison to 81.09 % during the month September'12. The maximum and minimum System frequency during the month of October'12 was 50.67 Hz & 49.39 Hz respectively. The monthly frequency profile & Standard Deviation for the month of October'12 was reviewed. The frequency profile during the month has been improved comparing to the previous month.

#### Item No. 2 (B) – Grid demand

Grid demand for the month of October'12 was reviewed. The maximum System demand of 3334 MW occurred on 06.10.12 at 21:00 Hrs and minimum demand of 1916 MW occurred on 18.10.12 at 14:00 Hrs. The hourly demand profile for the month of October'12 was reviewed.

It is observed that, the peak demand during the month of **October' 12** has been reduced by 94 MW from that of **September'12**. The energy consumption during the month has decreased by 131 **MU** in comparison to **September'12** and increased by **70.00 MU** in comparison with October'11.

#### **Deliberation in the meeting**

SLDC stated that the Discoms are furnishing drawal schedule to the tune of 57-58 MU against approval of 63 MU. The Dicsoms are requested to furnish their drawal in a

realistic manner.

Director Commercial advised that, the discoms should not be encouraged to over draw power irrespective of frequency as, ERLDC is not allowing to over draw at higher frequency. Further SLDC should not implement demand regulation from their end.

CESU representative stated that they are not able to predict the drawal of bulk consumers SLDC may display the drawal of such consumers in its site on real time basis.

SLDC stated that the Discoms may approach to GCC for revision of the dash board format, which has been approved earlier. Further the Discoms may ask the bulk consumers to furnish their day ahead drawal schedule to them for realistic demand prediction.

Director (Commercial) suggested for deputation of CESU executives at SLDC for effective monitoring of their drawal.

#### Item No. 2(C) – Voltage Profile of important Sub Stations in OPTCL System.

The Voltage profile at different 220 kV buses in OPTCL system during the month of October'12 was reviewed. It is noticed that Jayanagar 220 kV bus has experienced a maximum voltage of 251 kV on 13.10.12 at 07:00 Hrs and minimum Voltage of 197 kV has been experienced at **Mendhasal** 220 kV bus on 14.10.12 at 18:00 Hrs. The maximum voltage at Jaynagar was occurred due to under loading of long transmission lines & VAr flow from Jeypore PG end. The minimum Voltage at Mendhasal has occered due to shut down of 400 kV Meramundali-Mendhasal line.

JSL stated that Voltage profile at Duburi Grid S/S remains high most of the times, for which they are facing problem for synchronizing their units. Var absorption by JSL is also being restricted due to tripping of their feeder on O/C. It was decided to examine the relay setting at Duburi S/S by O&M. CGM (O&M) stated that this would be analyzed and precautionary measures shall be taken.

CESU representative stated that persistence low Voltage is being experienced at Khurda 33 kV bus.

CGM (O&M) stated that 220/33kV, 20 MVA transformer is scheduled to be commissioned at Mendhasal Grid before the ensuing summer. Jatni area load from Khurda Grid S/S will be diverted to Mendhasal Grid. CESU may take action for upgrading the conductor of the existing 33 kV feeder used for power supply to Mendhasal Grid at present.

[Action: CESU/ O&M, OPTCL]

#### Item No. 2 (D) – Energy Generation / import during the month of October'12 was reviewed

The total quantum of energy drawn from all the generation sources including Central Sector Share and CGP support during the month of October, 2012 was 2014.441MU.

#### Item No. 2 (E) – DISCOM Drawal during the month of October'12

The quantum of energy drawn by Discoms for the month of October'12 was reviewed.

#### **Deliberation in the meeting**

It is noticed that WESCO & SOUTHCO have over drawn 26.078 MU and 11.556 MU of energy beyond their schedule respectively where as CESU and NESCO have under drawan 18.504 & 30.159 MU respectively. As per earlier discussion the discoms are yet to furnish their monthly energy drawal forecast to SLDC/Gridco for monthly generation planning.

Director Commercial stated that the Discoms should not furnish low drawal schedule deliberately. If at all they overdraw, SLDC may isolate the feeders identified by them to bring their drawal as per the schedule.

All DISCOMs are requested to remain in schedule irrespective of frequency.

[Action:-All Discoms]

#### Item No. 2 (F) – Major Events in the month of September & October 2012.

Major events in OPTCL System during the month of September and October 2012 were reviewed. The following are the major events during the month:-

- 07.09.12: 132/33kV, 20 MVA 3rd transformer charged at Chhatrapur Grid sub-station enhancing the capacity to 60MVA.
- 19.09.12: 132/33kV, 40 MVA BHEL make transformer charged at Balasore Grid substation enhancing the capacity to 120MVA.
- 17.10.12: 4<sup>th</sup> unit of M/s JSPL of 135 MW capacity synchronized to OPTCL system at 19:18 Hr
- 26.10.12: 100 MVA NGEF make Auto transformer at Tarkera grid sub station was commissioned and loaded at 16:56 Hrs. replacing 4<sup>th</sup> AT for impedance matching.

#### Item No. 2 (G) - UFR Operation in OPTCL System in the month of October'12

There was no UF Relay operation occurred during the month of October'12, since the frequency did not fall beyond 48.5 Hz during the month. As decided in the special protection committee meeting of ERPC held on dtd. 11.10.12, the audit committee shall visit the constituent's Grid sub stations for physical verification of UF relay setting /

operation. C.G.M.(O & M) was requested to keep all the UF relays in operating condition as per list furnished to ERPC.

#### Item No. 2 (H) – Important Grid incidents

#### **Deliberation in the meeting**

There was no major Grid incidents occurred during the month of October, 2012.

### Item No. 2 (I) Outage of Major Transmission Lines / Elements during the month of October'12 was reviewed.

Outage of Major Transmission Lines / Elements during the month of October'12 for more than 10 hours was reviewed. It is noticed that most of the outages are due to snapping of conductor/jumpers.

#### **Deliberation** in the meeting

C.G.M. (O & M) stated that the delay in restoration of lines was due to the following reasons.

- 1. 132 kV Burla Sambalpur line: Due to dislocation in planning and outsourcing activity.
- 2. 220 kV TTPS Kaniha and New Duburi Balasore line: Delay was due to time taken for detailed line patrolling, as the fault was transient.
- 3. 132 kV Joda- polasponga line: Patrolling in forest area delayed, However Polasponga was getting power supply from other end.
- 4. Paradeep- IFFCO Ckt.I: Replacement of existing insulators by long rod insulators and conductor replacement work completed. No such problem will arise in future.
- 5 Breaker problem at Balasore was rectified.
- 6 220 kV TVL Indravati Ckt.I: The damaged section of conductors will be replaced soon to prevent clearance problem in future.
- 7 220 kV Budhipadar Katapali Ckt : Insulators will be repliced soon by long rod insulators.

Director Commercial stated that, frequent tripping of feeders / units at Burla Power was noticed in the past due to tripping of adjacent lines. This was due to mal functioning of relay at Burla Power house. To prevent such tripping OPTCL has spared the required relay for installation at Burla power house. Installation and commissioning of the relay is yet to be taken up by OHPC. CGM (O&M) advised OHPC to come forward with any problem relating to commissioning of the relay.

#### Item No. 3 – Drawal of Machhakund Power.

The hourly drawal of Machhakund power during the month of October'12 was reviewed. The average drawal from Machhkund PH during the month of October'12 was 22.4 MW.

#### **Deliberation in the meeting;**

SLDC stated that due to failure of RTU at Machhkund PH, it is not possible to monitor Machhkund generation on real time basis. As decided in earlier meetings, the RTU has to be procured and installed by APGENCO which is yet to be done. Director (Commercial) stated that since the matter has been delayed considerably, let OPTCL/ OHPC procure the RTU and install at Machhkund PH. The cost will be deducted from OHPC bill.

OHPC stated that, they will write to Machhkund authority for installation of the RTU within a specified time, otherwise the RTU will be procured by OPTCL and the cost will be debited to OHPC.

Regarding convening of Machhkund co-ordination committee meeting, it was decided that GRIDCO shall co-ordinate with OHPC and convene Machhkund co-ordination committee meeting

[Action:- GRIDCO/OHPC]

#### Item No.4–Review of Outage Programme of State Generators for the month of Nov & Dec'12.

Tentative Outage programme for State Generators for the month of **November & December'12** are as follows:

Sl.	Station	Unit	Nov'12		Dec'12	
1	Burla	# 1	05.11.12 to 28.11.12	Annual maintenance		
		# 5	15.11.12 to 14.12.12	Breaker problem		
2	Chiplima	# 3	NIL	NIL	15.11.12 to 14.12.12	Annual Maintenance
3	Balimela		NIL	NIL		
4	U.kolab	# 4	10.11.12 to 31.12.12	Annual maintenance	10.11.12 to 31.12.12	Annual maintenance
5	Rengali	# 3	27.10.12 to 22.11.12	Annual maintenance		
6	U. Indravati	# 1	15.11.12 to 10.12.12	Annual maintenance		

#### **ITEM NO: 5** Generation Program for the month of November & December'12.

Generation schedule for the month of **November & December'12** furnished by OHPC are as tabled.

Name of Hydro Gen. Station	Generation Programme (MW)		Reservoir Level as on 01.10.12	Reservoir Level as on 01.11.12	MDDL	High Flood Reservoir Level
	Nov'12 1 <sup>st</sup> fortnight	Nov'12 2 <sup>nd</sup> fortnight				
HPS, Burla	40+30	40+30	629.97 ft	629.37 ft	590 ft.	630 ft.
Balimela	135	40	1496.10 ft	1503.20 ft	1440 ft.	1516 ft.
Rengali	50	50	123.33	122.95mtr	109.2mtr	123.5 mtr.
U.Kolab	70	70	856.54	856.54 mtr	844 mtr	858 mtr.
U.Indravati	150	150	640.31	639.60 mtr	625mtr	642 mtr
MKD (O/D)	30	30	2748.20 ft	2748.35 ft	2685 ft.	2750 ft.
TOTAL	505	410				

#### Deliberation in the meeting.

SLDC stated that # 7 & # 8 of Balimela and # 7 of Burla are not capable of generating as per the declare capacity. Also OHPC stations are taking considerable time to bring their units and Balimela is not responding to SLDC instruction for backing down of generation from unit # 7 & # 8.

Director Commercial stated that OHPC should declare the unit capacity as per their actual capability. SLDC may monitor the generation capability for assessment of the capacity charges.

[Action:-OHPC/SLDC]

#### Item No. 6 - NALCO issues

As indicated by NALCO regarding time synchronization of energy meters at Damanjodi and Angul, O & M stated that the time synchronization will be done by NALCO as the meters belong to them. Other issues raised by NALCO shall be discussed in the next meeting as NALCO representatives were not available in the meeting.

#### Item No. 7 Compliance of the decisions of ERPC meeting

### (a) Issues raised in the 78<sup>th</sup> OCC meeting of ERPC ERPC, Kolkata

In the 78<sup>th</sup> OCC meeting of ERPC held on 12.10.2012 at Kolkata, it has been decided to shift some load relief from Stage-II to Stage-III to match the agreed load relief i.e. 208 MW, which has already been intimated to the C.G.M. (O&M) vide letter no 2412<sup>(3)</sup> dated 20.10.12. Action taken in this regard may be deliberated.

#### **Deliberation** in the meeting.

O & M representative stated that revision of load relief by re arranging feeders as decided in the ERPC meeting will be done within a month.

(b) Issues raised in 12th Protection sub-Committee of ERPC held on 26.03.12.

Item No. 8 ZONE - 3 SETTINGS OF TRANSMISSION LINE

For some of the important lines Zone-3 settings have to be reviewed so that this would not conflict with emergency loading of the lines. The emergency load capability would give the Operator sufficient time to take corrective action, but if such loading can lead to load encroachment of Distance Relays in Zone-3, the emergency situation would worsen and may lead to cascading of outages. Further, power swing blocking philosophy also needs to be revisited in the light of recent grid disturbances. Constituents were requested to submit protection settings of transmission elements of important grid elements and the sample format prepared by ERLDC was given for submission.

The sample format has been forwarded to C.G.M. (O&M).

#### Deliberation in the meeting.

O & M representative stated that the details of protection settings as sought will be furnished within 15 days.

#### Item No.11 ISLANDING SCHEME OF IB TPS UNITS

- On the request of OPGC, the islanding scheme of IBTPS has been agreed mutually by OPTCL and OPGC in a meeting held on 30-09-11.
- The scheme and feeder wise bus arrangement was agreed upon as:
- i) For 220kV Bus I- The feeder 1,2,3 & 4 of IB TPS, ATR-I,ATR-II, Katapalli-I & II ii) For 220kV Bus—II- Vedanta—I & II, Korba- II & III, Tarkera-I & II, Raigarh, SPS, Bhusan- I & II with bus coupler being in closed condition.

It was decided that the above islanding scheme for IB TPS may be implemented and continued.

#### **Deliberation** in the meeting.

O & M representative stated that the scheme need to be re examined in view of commissioning of 400 kV Bolangir PG substation.

(c) Issues raised in 20<sup>th</sup> Commercial sub-Committee meeting of ERPC held on 27.03.12.

## Item No.25 ERRONEOUS READINGS OF SEM AT RENGALI SY END OF 220 KV RENGALI - RENGALI LINE -I

As per the SEM data received from Rengali (GRIDCO) S/S, It is observed that meter (NP-5984-A) installed at Rengali(GRIDCO) end of 220 KV Rengali (GRIDCO) – Rengali (PG) line-I is showing erroneous readings since 09.04.2009. Several telephonic intimation regarding above has already been done with the officials of Rengali (PG) as well as Rengali (GRIDCO) S/S. Letter to this effect was also issued to GRIDCO dated 19.06.09. Again reminder letter was issued to the above on 21.12.2011. Presently Energy accounting of GRIDCO is done considering main meter i.e. Rengali (PG) end and is dependent on Rengali (PG) end data.

#### **Deliberation in the meeting.**

O & M representative stated that the energy meter has already been commissioned on 17.08.12.

#### ITEM NO:8 Commissioning of 220kV bus at Rengali Switchyard Sub-station.

While conducting the mock black start exercise of Rengali PH on 09.02.2012, it was noticed that the isolators of different feeders connected to 220kV main bus-II of Rengali Switchyard sub-station are not functioning properly. Due to which, the island could not

be formed by providing matching load to Rengali unit. It was learnt that the above bus is yet to be commissioned.

#### **Deliberation in the meeting**

O & M representative stated that, the Bus section at Rengali switch yard has already been made operational since 05.10.12

#### ITEM NO:9 Communication issues

#### (I) Installation of RTU and associated equipments for RSP.

#### **Deliberation in the meeting**

RSP representa tives stated that RTU has already been installed at RSP end. G.M. (telecom) stated that the data reporting is not as per the approved single line diagram. Director (Engg) stated that the communication link of RSP should be either through OPGW or underground cable. The ADSS cable used at present should be removed.

#### (II) Installation of communication equipment by CGPs / Industries.

The real time data from the following major CGPs / Industry are yet to be displayed at SLDC control room due to which a substantial quantum of generation/ drawal remains unmonitored.

#### **Deliberation in the meeting**

G.M (Telcom) stated that data acquisition from some of the CGP/IPPs has already done. The communication status of CGPs are as follows.

SL. No.	Name of CGP	Present status		
1	M/s Aryan Ispat Ltd.	Reporting		
2	M/s FACOR Power Limited	Revised BOM submitted on 15.09.12		
3	M/s Orissa Sponge Iron Limited	Exempted (33 kV)		
4	M/s Pattaniak Steels & Alloys Ltd	Exempted (33 kV)		
5	M/s Rathi Steels & Power Limited	Exempted (33 kV)		
6	M/s Shree Ganesh Metalicks Ltd	Time extended by OERC upto 21.01.12 & disconnection notice issued on 23.03.12		
7	M/s Tata Sponge & Iron Limited	Reporting		
8	M/s Yazdani Steel & Power Limited	Exempted (33 kV)		
9	M/s Hind Metals, Meramunduli	Supply Disconnected		
10	M/s SEL, Jharsuguda	OPGW work in progress.		
11	M/s VAL, Lanjigarh	Reporting		
12	M/s Shalivahan Green Energy Ltd.	Letter issued on 18.07.12		
13	M/s HINDALCO, Hirakud	Communicate through PLCC on Connecting through 220 kV.		

14	M/s IFFCO, Paradeep	To be done on deposit work.
15	M/s IMFA, Choudwar	Commissioning under Progress.
16	M/s Maheshwary Ispat Limited	Plant closed.
17	M/s NALCO, Angul	Work order awarded.
18	M/s MSP Mettalicks	Database prepared.
19	M/s Narbheram	BOQ issued on 06.07.12
20	M/s NINL, Duburi	Not responding to telecom letter
21	M/s Shyam Mettalicks	Reporting

#### (III) Displaying of Aarati IPP data

The injection data of Aarati Steel (IPP) is not available at SLDC.

#### **Deliberation in the meeting**

GM (Telcom) stated that displaying Aarti CGP and IPP data separately is being examined.

{Action:-GM(Telcom)}

#### (IV) Communication Facility to major Grid sub-stations and power stations.

Due to non-functioning of communication system to different grid sub-stations as well as power stations, real time operation becomes difficult. Telecommunication wing of OPTCL should keep a vigilant watch on the PUNCOM service. In the last meeting G.M (Telcom) assured to intimate PUMCOM for providing FAX facility in the PUNCOM phone. It was also decided to move a proposal for the above to Director(Engg) It was also decided to provide mobile sets to all hydro stations by OHPC. le phones.

#### **Deliberation in the meeting**

G.M. (Telecom) stated that providing Fax facility in PUNCOM phones is not possible, as the PLCC bandwidth is not sufficient to accommodate more data. After establishment of optical fibre link such facility is possible through wide band communication system.

#### (V)Tele-metering of Station data from CGP / IPP.

As requested by the G.M., ERLDC, Kolkata the real time information like the status of units, MW / MVAr values of units, major load drawal, bus voltage, frequency, breaker status, exchange figures etc. in respect of major CGP / IPPs like NALCO, JSPL, VAL, Jharsuguda should be available for safe monitoring of the system. This issue was discussed in the 12<sup>th</sup> SCADA O&M meeting held at ERLDC, Kolkata on 18.10.12. Action taken on these issues discussed in the above meeting may please be deliberated.

#### **Deliberation in the meeting**

G.M. (Telecom) stated that necessary action in this regard will be taken.

#### ITEM NO:12 Operational Constraints.

#### Stringing of earth wire in 220 kV Theruvali-Bhanjanagar line

#### **Deliberation in the meeting**

C.G.M (O&M) stated that the work will be completed by end of January 2013.

#### Non-functioning of Circuit Breakers and isolators at Jayanagar Grid S/S.

While conducting the mock black start exercise of Balimela PH on 07.11.2012, it was noticed that some of the circuit breakers at Jayanagar Grid S/S are not functioning properly due pressure development problem. Also the remote operation of the breaker was not functioning, due to which the exercise took four hours to complete. It is requested to maintain the breakers properly to meet any contingent condition.

#### **Deliberation in the meeting**

C.G.M (O&M) stated that the manufacturer has already been contacted for rectification of Breaker problem.

#### ITEM NO:13 Mock Black Start exercise of OHPC stations.

The mock black start exercise of Balimela PH has been successfully carried out on 07.11.2012. Similar exercises for Upper Kolab shall be conducted after commissioning of DG set.

#### **Deliberation in the meeting**

OHPC stated that the proposed mock Black Start exercise will conducted after commissioning of DG set at Upper Kolab, which will take about a month time.

#### ITEM NO:14 Issues raised by SOUTHCO.

- 1. Installation of AMR on each 33 KV feeder in different Grid S/S.
- 2. The Machkund drawal should be adjusted in the UI bill of Southco.
- 3. The SMD claimed by OPTCL and the highest demand claimed by SLDC in the UI bill of corresponding month are not matched.
- 4. Provision of past drawal data in the SLDC website

#### **Deliberation in the meeting**

O & M stated that SOUTHCO may install AMR in OPTCL Grid Substations for monitoring of drawal.

SLDC stated that, metered data of Machhkund drawal has already been collected. UI charges for SOUTHCO will be calculated considering the said data in future weeks.

Director (Commercial) stated that the SMD may not match with the highest demand, as the SMD is recording the instantaneous data where as energy meter is recording in 15 minute average drawal.

SLDC stated that provision of storing past drawal data in SLDC website is being examined.

#### ITEM NO:15 Other issues

#### RSP:

RSP representative stated that 220 kV Tarkera-RSP line is scheduled to be commissioned by January 2013. Tarkera Grid may be instructed to prepare accordingly. The metering issue may also be finalized prior to charging the line.

It was decided that RSP shall convene a meeting with telecom, GRIDCO & O&M at Rourkela to resolve the metering and communication issues and physical verification at Tarkera Grid.

#### TTPS:

SLDC stated that in case of defects noticed in any of the energy meters installed in the interface lines, TTPS is taking considerable time for replacement of those meters. If TTPS will agree OPTCL shall take over the AMC of all the interface meters.

It was decided and agreed by TTPS that they will forward their views in this regard within 15 days to SLDC.

[Action:-TTPS/SLDC]

#### IbTPS-

SLDC stated that there are long pending claims of Ib TPS for deemed generation certification with SLDC. A meeting may be convened by GRIDCO to settle these issues. Gridco agreed to convene a meeting.

[Action:-GRIDCO/ OPGC/SLDC]

#### CESU-

#### **ABT** related issues

- (i) Erroneous data at SLDC web site
- (ii) Display of all feeder data at SLDC site.
- (iii)Display of EHT industry drawal
- (iv)Display of power flow data for all interconnection points of CESU
- (v) Separate UI charge bill for all interconnection points.
- (vi)Deferring commercial implementation of Intra state ABT

#### **Technical issues**

- (i) Overloading of Chandaka-Ransingpur line- up-gradation of conductor
- (ii) Provision of 6 nos additional 33 kV bay at Chandaka to cater future load demand.
- (iii)Low Voltage problem at Khurda Grid upgrading of Khurda-Narendrapur line.
- (iv)Commissioning of New Chandpur Grid S/S to relieve Balunga-Tangi feeder load
- (v) Provision of 3 nos of 33 kV bays at Mendhasal Grid.

#### **Deliberation in the meeting**

In reply to the ABT related issues, SLDC stated that CESU may depute their representative to verify the data displayed at SLDC website with the actual in the field.

The dispute if any may be sorted out. Display of drawal data for all the Grid S/S will be possible only after integration of all the S/S s with SCADA system, for which work order has already been awarded. Display of power flow through inter-connection lines is not possible due to limited capacity of the site. CESU may depute their Engineers to SLDC for monitoring from SCADA. Separate UI Bills for each inter connection points also not possible as it is not as per OERC intra state Regulation. CESU may approach OERC for deferring the commercial implementation of Intra state ABT.

CGM (O&M) may deliberate the technical issues in the next PSOC meeting.

[Action: O&M]

#### LILO of Kalarangi Grid S/S.

CGM O&M stated that CESU is utilizing the 132 kV line of OPTCL meant for LILO connectivity of Kalarangi S/S. The S/S is at present connected to 132 kV Duburi-Kamakshyanagar through "T" arrangement. One of the 132 kV LILO lines is being utilized as a 33 kV feeder by CESU feeding to the 33 kV S/Ss. CESU should make that line free as soon as possible so that Kalarangi S/S will be connected through LILO arrangement enhancing the security and operational flexibility. This issue has already been discussed several times in the past but it seems no action has been initiated by CESU so for. O&M may take follow up action with CESU.

[Action: CESU/O&M]

#### ITEM NO:16 Date and venue of the 68th PSOC meeting.

The 68<sup>th</sup> PSOC meeting will be organized by NESCO in the month of January 2013. The venue and date will be intimated all the members. The meeting was ended with vote of thanks conveyed by G.M, SLDC to all the Members.

### MEMBERS PRESENT

SL.NO	NAME	DESIGNATION
1	Er. P.K. Pradhan	Director (Commercial), GRIDCO
2	Er S.K. Das	Director (Engineering), OPTCL
3	Er. M. K. Mishra	Director (Operation), OHPC
4	Mr.R. Kamila	C.G.M. (O & M), OPTCL
5	Er. Ranjit Das	C.G.M. (PP), GRIDCO
6	Er. Utpal Sinha	C.O.O. CESU
7	Er. P. K. Dash	Sr. G.M. (PS), OPTCL
8	Er. S.K. Das	Tech. Consultant, SLDC
9	Er. S.K. Hota	G.M.(GO), SLDC
10	Er. P. K. Mishra	A.G.M., SLDC
11	Er. Umakanta Sahoo	A.G.M., SLDC
12	Er. P. K. Das	Manager, SLDC
13	Er. Archana Sahoo	Dy.Manager, SLDC
14	Er. B.P. Mishra	G.M., OPTCL
15	Er. B.B. Satapathy	G.M.(Telecom), OPTCL
16	Er. U.C. Mohanty	T.A. to G.M.(Telecom), OPTCL
17	Er. P.C. Tripathy	G.M.(CPC), OPTCL
18	Er. S. K. Panigrahy	Manager (O&M), OPTCL
19	Er. S. K. Das	D.M. (O&M), OPTCL
20	Er. N.K. Mishra	G.M., CESU
21	Er. A.K. Bisri	E.E., BCDD-II, CESU
22	Er. Dipankar Behera	D.G.M.(T), CESU
23	Er. S.K. Swain	SE, BBSR-I,CESU
24	Er. J.K. Mishra	SE, Khurda,CESU
25	Er. S.Rout	SE, CESU
26	Er. P.K. Lenka	Manager, CESU
27	Er. N. Jena	C.C.O., CESU
28	Er. D. Sethy	G. M., OHPC
29	Er. B.N. Nayak	Dy. Manager, OHPC
30	Er. B.P. Gantayat	Dy. Manager, OHPC
31	Er. L. K. Das	D.M., CESU
32	Er. Amit Mitra	G.M., NESCO
33	Er. Sharat Chandra Mahalik	A.G.M., NESCO
34	Er. Jayaram Parida	D.G.M.(ABT), SOUTHCO
35	Ashish Ku. Panda	Manager(ABT), WESCO
36	Er. D.K. Magaraj	D.G.M.(PD), RSP
37	Er. M.K. Das	G.M. (WESCO, NESCO, SOUTHCO)
38	Er. Dibakar Behera	G.M., IMFA
39	Er. S.K.Mishra	D.G.M.(OS), TTPS
40	Er. R.K. Sharma	A.G.M., JSL
41	Er. P.K. Mohapatra	D.G.M.(O&M), OPGC
42	Er. A.Pani	A.V.P., Sterlite Energy Ltd.