

EASTERN REGIONAL POWER COMMITTEE
14, GOLF CLUB ROAD, TOLLYGUNG
KOLKATA-700033

**MINUTES OF THE 29th OCC MEETING HELD AT ERPC, KOLKATA
ON 19.08.2008 (TUESDAY) AT 11:00 HRS**

List of participants is enclosed at Annexure-I.

Shri R.K.Grover, Member Secretary, ERPC chaired the meeting. While welcoming the delegates in the 29th OCC meeting he expressed concern over the generation loss to the tune of 4460 MW due to inadequate supply of coal. He requested the OCC members to inform ERPC/ERLDC about the major grid incidences immediately after the occurrence, particularly grid incidences involving financial implication & arrange for site visit, as in the case of Teesta – V, for its prolonged outage, members from the different constituents would be visiting the site shortly.

Thereafter, he requested Shri S. N. Kayal, SE to take up the agenda points for discussion.

ITEM NO. 1 CONFIRMATION OF THE MINUTES OF THE 28TH OCC MEETING OF ERPC HELD AT ERPC, KOLKATA ON

The minutes were circulated vide letter no. ERPC / SE (OPRN)/ OPERATION /2008/2532-77 dated 7th/12th.08.2008.

No comment is received from any of the constituents. If there are no comments, the minutes of the above meeting may please be confirmed.

ITEM NO. 2 REVIEW OF THE GRID PERFORMANCE DURING JULY, 2008

2.1 POWER SUPPLY POSITION :

The power supply position of Eastern Region for the months of July'08 & June' 08' is indicated at Annexure-I.

- From comparison of the generation figures of July' 08 with June' 08, it is observed that the net energy generation (MU) in Eastern Region (including contribution of Bhutan) has marginally decreased on per day average basis.
- The net peak demand met has increased from 10513 MW to 10700 MW.
- The demand met during July'08 has increased by 187 MW, as compared to June' 08. The percentage of Peak shortage of ER has reduced marginally.

The above variations are considered normal.

Members noted the above.

2.2 FREQUENCY:

The frequency profile of ER for the month of July' 08 and for the months of June' 08 & July' 07 (for comparison) is tabulated below :

Month	% of time of the month frequency remained			
	<49.0 Hz	49.0-50.5 Hz	50.5-51 Hz	>51.0 Hz
June' 08	4.90	95.03	0.07	0.00
July'08*	9.25	90.75	0.00	0.00
July,07	1.55	98.42	0.03	0.00

* Maximum (Inst.) Frequency : **50.51Hz** on 14.07.08 at 05:06Hrs
27.07.08 at 16:04Hrs
Minimum (Inst.) Frequency : **48.67Hz** on 15.07.08 at 20:30 Hrs
24.07.08 at 02:04 Hrs

From the above table following may be observed:

- o The percentage of time frequency profile in the IEGC band (i.e. 49.0 to 50.5 Hz.) during the month of July'08 has reduced marginally as compared to the previous month i.e. June'08 & the corresponding month of the previous year (i.e. July'07).
- o The percentage of time frequency below 49.0 Hz has increased to 9.25 % in the month of July' 08, as compared to 4.9 % in June'08 & 1.55 % the corresponding month of the previous year (i.e. July'07).
- o The percentage of time frequency remained above 50.50 Hz in both the months of June'08 & July'08 is insignificant.

The detailed daily frequency for the month of July' 08 is enclosed at Annexure-II.

ERLDC may please comment on frequency profile observed during July' 08.

Members noted the above.

2.3 ACTUAL DRAWAL VIS-À-VIS DRAWAL SCHEDULE

The constituent wise actual drawal as against the drawal schedule for the month of July'08 is given below:

Constituent/ System	Drawal Schedule (MU)	Actual Drawal (MU)	Total Over drawal (+) /Underdrawal (-) (MU)
BSEB	758	709	-49
JSEB	208	154	-54
GRIDCO	533	432	-101
DVC	96	37	-59
SIKKIM	54	18	-36
WEST BENGAL	597	471	-126
SR	-38	178	216
NER	45	-291	-335
WR	105	90	-15
NR	549	1122	573

All drawal schedules are arrived at considering bilateral export

Members noted the above.

2.4 DETAILS OF POWER EXCHANGE WITH OTHER REGIONS

The detail of net energy exchange of ER with other regions for the month of July' 08 is given below:

NER to ER –	291.43 MU (Export)
ER to SR -	177.94 MU (Export)
ER to WR -	89.57 MU (Export)
ER to NR -	1122.32 MU (Export)

Net export to outside regions 1098.4 MU

Members noted the above.

2.5 VOLTAGE PROFILE OF IMPORTANT SUB-STATIONS IN EASTERN REGION

Name of the sub-station	Maximum Voltage (kV)	Minimum Voltage (kV)
400 kV PURNEA	433	406
400 kV BINAGURI	432	408
400 kV BIHARSHARIFF	431	396
400 kV DURGAPUR	424	409
400 kV PATNA	434	403
400 kV JEERAT	416	381

It may be noted that during the month of July' 08, voltages at Binaguri, Biharshariff, Durgapur, Patna and Purnea s/s remained on higher side, whereas minimum voltage (381KV) at Jeerat s/s was observed on lower side particularly during peak hours.

Members noted the above.

2.6 UFR OPERATION IN ER

As System frequency remained above 48.5 Hz no UFR operation is expected for the month of July'08.

Members noted the above.

SE (operation) requested GM,ERLDC to appraise the OCC members about the important features of grid performance in July'2008.

GM, ERLDC in his opening remarks mentioned that though sufficient capacity addition (to the ER grid) was made in recent time but generation from the new units is not available due to their long outage. He informed that Eastern Region experienced generation loss of about 690 MU in July;08 due to severe coal shortage, frequency profile remained comfortable and net export to other regions increased.

ITEM NO. 3 IMPORTANT EVENTS

I. Sagardighi Unit#2 (300MW) was test synchronized on 20.07.08.

Deliberation in the meeting

Members noted the above.

ITEM NO. 4 MAJOR TRANSMISSION LINES/ELEMENTS OUTAGES IN ER GRID

Sl. No	Description	Date Outage	Reason	Remarks
Lines / Elements under outage				
1.	315 MVA ICT-II at Maithon	16.06.08	Failure of Transformer bushing	<i>Powergrid may please furnish target date of restoration. Expected to be restored by end of November,2008.</i>
2.	220 kV Bakreshwar-Gokarna –I	03.05.08	Tower collapse (2 Nos.)	<i>WBSETCL may please furnish target date of restoration. Line charged on 18-08-2008.</i>
3.	150 MVA ICT-I at Bodhgaya	04.03.08	Fire hazard in Bodhgaya s/s	<i>R & M works of the ICT ordered and expected within 15-24 months. BSEB may please furnish target date of Restoration New 150 MVA ICT-I is under procurement Order has been placed on M/s Areva Expected by Nov,2009.</i>
4.	220 kV Talcher TPS-Joda line-II	26.08.07	CB bursting at Talcher TPS	<i>NTPC may please intimate the present status. Now CB is in position. R& M work of the switchyard by BHEL is in progress, Expected to be completed by October,2008.</i>
Prolonged Outage				
1.	220 kV PTPS-Bodhgaya T/C	2005	Tower collapse and conductor theft	<i>JSEB / Powergrid may please intimate the present status. Powergrid informed that a letter has been issued to JSEB regarding sharing of cost between BSEB & JSEB portion so that cost estimate made by Powergrid may be forwarded to JSEB BSEB & JSEB representative assured to take up the matter with their appropriate authorities and to confirm within 7 days time.</i>
2.	220/132 kV, 100MVA ICT-I at Fatuah	22.04.2002	Problem in transformer winding	<i>BSEB may please indicate the present position. Rewinding work is in progress.</i>

ITEM NO. 5 GRID INCIDENCES IN ER SYSTEM DURING JULY & AUGUST '08

- I. At 04:37 Hrs of 01.08.08 all 220kV lines alongwith 2x315MVA ICTs at Binaguri tripped. It was reported that due to problem at WBSEB end LBB relays of 220kV bus section-I & II at NJP(WBSEB) (which is adjacent to Binaguri and has the 220kV Binaguri bus extended with sectionalizing breakers) had operated but the bus section CBs at Binaguri did not open resulting in operation of LBB relays for both bus sections at 220kV Binaguri also. All tripped lines were normalized by 06:58 Hrs.

The following needs to be discussed w.r.t the above incident :

- 1. Details of incidents leading to operation of LBB at NJP(WBSEB)**
- 2. Operation of LBB at 220kV Binaguri side due to non opening of sectionalizing breakers**

Deliberation in the meeting

After deliberation on the above incidence a committee was formed to look into the protection aspects of the above incidence. The committee will report its findings in the next OCC meeting.

- II. At 18:46 Hrs of 06.08.08 CT bursting at Ramchandrapur end of 220kV Joda-Ramchandrapur occurred leading to tripping of 220kV Ramchandrapur-Joda. Simultaneously, 220kV Ramchandrapur-Chandil, 2x315MVA ICTs at Jamshedpur, 220kV STPS-Chandil, 400kV Jamshedpur-Rourkella-II tripped. All tripped lines were restored by 19:50 Hrs of same day. 220kV Ramchandrapur-Joda was restored on 08.08.08.

The following may be discussed w.r.t the above incident:

- 1. Tripping of 2x315MVA ICTs at Jamshedpur and 400kV Jamshedpur-Rourkella-II.**
- 2. Tripping of 220kV STPS-Chandil.**

Members may please discuss.

Deliberation in the meeting

Powergrid intimated that after blasting of B phase CT of Joda Line – I at Ramchandrapur Sub station, the protection had operated, but the breaker did not operate, resulting into feeding fault current. This initiated tripping of 220 KV Back up O/C protection of both 315 MVA ICTs and tripping of ICTs at Powergrid JamshedpurS/Stn.. ICT # I was charged at 19:30 Hrs & ICT # II at 19:38 Hrs.

At the instance there was a D.C earth fault (D.C. source –I) resulting in malfunctioning of the mastertrip relay of J – R line – II at Jamshedpur end only. The line was charged from Rourkela end. The line was synchronized at 19:16 Hrs. D.C fault was identified and rectified.

- III. At 14:23 Hrs of 06.08.08 all three 220/132kV ICTs at Purnea s/s tripped resulting in disruption of North Bihar loads being fed radially. It was reported that a R-Ph fault in 132kV Purnea-Kishanganj line was not cleared by O/C & E/F relays at Purnea end and was consequently cleared at 220kV side of the ICTs.

Powergrid may discuss regarding non clearance of the line fault by Purnea end breakers.

Deliberation in the meeting

Powergrid intimated that there was 110 V DC fuse failure of 132 KV Kishanganj feeder resulting into non-operation of the feeder CB. The same has been rectified. All ICTs normalized at 14:40 Hrs on 06.08.08. Powergrid stated that tripping of 132 KV Kishanganj feeder is a frequent event. It tripped on 07.08.08 (on R phase fault), 15.08.08 (Y phase fault) and on 17.08.08 (Y phase fault) and all fault cleared by Powergrid O/C relay. These relays are old and being augmented with putting distance protection relay.

Powergrid informed that 'R' phase conductor of the said line between dead end tower to Gantry is damaged and hanging on steel portion only. This conductor needs to be replaced immediately by BSEB.

Powergrid opined that BSEB should check the line to stop frequent tripping.

- IV. At 22:51 Hrs of 06.08.08 HVDC Talcher-Kolar bipole carrying around 1280MW power tripped. It was reported that tripping was initiated due to Auxiliary supply problem at HVDC Kolar end. Pole-I and II were deblocked at 23:05 Hrs and 23:06 Hrs of same day.

Powergrid may furnish further details and remedial measures taken if any.

Deliberation in the meeting

It was reported that after failure of auxiliary power at HVDC Kolar end DG came into operation but failed. OCC opined that DG at Kolar end should be maintained in order to avoid such occurrence in future.

- V. At 16:37 Hrs of 07.08.08 220kV Budhipadar-Raigarh and 220kV Budhipadar-Korba-III tripped on distance protection. At the time of the event power was flowing from Korba(WR) to Budhipadar. At 17:00 Hrs 220/132kV ATR-I & II at Budhipadar tripped due to snapping of jumper of R-Ph CT(132kV side). Immediately both running units IBTPs tripped. At Burla units #3 and #4 and all running units at Chiplima tripped. Consequent to above trippings power flow through 220kV Rourkella(PG)-Tarkera D/C increased and at 17:05 Hrs the line was switched off on observation of sparking of B-Ph CT jumper of circuit-I. At 17:20 Hrs 220kV Budhipadar-

Katapalli D/C tripped and power flow through 220kV Budhipadar-Tarkera D/C became nil. All tripped lines/ICTs were restored by 08.08.08.

OPTCL / Powergrid may furnish further details.

Deliberation in the meeting

OPTCL submitted first information report with all the relay indications. (copy of the report enclosed in Annexure – v) Detailed report from OPTCL is awaited. In the last few months similar incidences, related to power evacuation from Budhipadar S/Stn., occurred and hence OCC felt that in order to avoid such incidences power evacuation from Budhipadar in the present scenario should be looked into.

ITEM NO. 6 OPERATIONAL PLANNING

(A) REVIEW OF SHUTDOWN PROPOSALS, AS APPROVED IN LAST (28TH) OCC MEETING OF ERPC vis-à-vis ACTUAL SHUTDOWN/ NORMALISATION OF THE TRANSMISSION SYSTEM FOR JULY' 2008

The actual shutdown as availed by the constituents on the basis of finalised programme during the month of July '08 as well as planned / emergency shutdown as received from ERLDC is indicated at Annex-III A.

Members may please note and also furnish the additional / missing information, if any.

Deliberation in the meeting

Members noted the above. The actual shut down as availed by the constituent is depicted in Annexure – III A.

(B) SHUTDOWN PROPOSAL OF TRANSMISSION LINES AND GENERATING UNITS FOR THE MONTH OF AUGUST'08.

The shut down proposals which are received by ERPC for the month of September' 08 are given at Annexure – III B.

Members may please discuss and finalize the proposed programme.

Deliberation in the meeting

All the shutdown proposals as approved after deliberation in the meeting for the month of September,2008 are depicted in Annexure – III B.

(C) LGBR FOR THE MONTH OF AUGUST & SEPTEMBER (FOR THE YEAR 2008-09)

Anticipated Peak Demand (MW) and Energy Requirement (MU) for the months of August & September '08

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the months of August &

September'08 has been prepared by ERPC Secretariat on the basis of finalized LGBR for 2008-09, keeping in view that the units are available for generation and expected load growth etc. The details are shown at Annexure-IV.

Members may please note and indicate any discrepancy of the figures arrived at.

Deliberation in the meeting

Members were requested to indicate any change in the peak (MW) and energy (MU) figures of requirement and availability and corresponding surplus / deficit of their respective system for the month of August & September'2008 within 10 days. If no feedback is received from any of the constituents, the figures indicated in annexure - IV would be treated as final.

ITEM NO. 7 ISSUE RAISED BY

POWERGRID

AUGMENTATION OF TRANSFORMATION CAPACITY OF 220/132kV BIRPARA IN ER-II

Presently, the transformation capacity of 220/132kV Birpara S/S is 150MVA (1x50MVA & 1x100 MVA). From the load pattern of both ICTs, it has been observed that the power flow through both the transformers exceeds more than 90-100MW during peak hours and it is clear that with the same transformation capacity of 150MVA available at Birpara, and considering the rate of rise of demand per year (more than 20%), the full load of WBSETCL cannot be met in near future. Further, due to non-availability of alternate source at Birpara, WBSETCL has to resort load shedding in case of outage of any one of ICT. As such the augmentation of transformation capacity at Birpara S/S is required immediately to have sufficient margin to take care of load growth in future.

It was suggested that the transformation capacity of 220/132 KV Birpara S/S may be enhanced to 2X160 MVA.

NHPC

On 1st April,2008, one unit of Rangit power station, which was in operation, tripped at 02:17 Hrs on account of no evacuation path. Other two units were already under shutdown at that time due to less availability of water. Accordingly, NHPC requested ERLDC for schedule revision for block 10 to 16 as per actual vide message no.L-249 dated 01.04.08. (copy enclosed).

The details of tripping were submitted by NHPC in 25th OCC meetings and the matter was discussed in length in the said meeting at Point No. 5-VIII. During the discussion, it was pointed out there are number of T-

connections in Siliguri-Melli-/Rangit-Melli transmission lines causing frequent /illogical tripping of lines. But as per MOM of the said meeting (Point 5-VIII), NHPC & Powergrid are to take up the matter with Govt. of Sikkim to resolve the issues of numerous T- connections.

On 26.05.08, one running unit of Rangit power station tripped at 16:02 Hrs on account of no evacuation path. Other two units were already under shutdown at that time due to less availability of water. Accordingly, NHPC requested ERLDC for schedule revision for block 65,66 & 67 as per actual vide message no. L-285 dated 26.05.2008. (copy enclosed).

At Rangit end 66 kV Rangit-Melli was already under shutdown since 11:14 Hrs. On getting it enquired from other end it was learnt that RGR-SLG as well as SLG-Melli tripped from Siliguri end, RGT-Rammam tripped from Rammam end and Gangtok-Melli tripped from Gangtok end. No trippings were observed at Rangit end. All the line breakers at Rangit end opened manually after having no voltage / current in the lines in order to restore the system as per usual practice.

The block wise schedule vis-à-vis actual ex-bus generation during the affected period is as under:

Time Block	Schedule (MW)	Actual Ex-Bus (MW)
65	20.00	3.1392
66	20.00	0.0000
67	20.00	18.4032

Members may please discuss.

Deliberation in the meeting

Members agreed to the revision of schedule for the above blocks.

ITEM NO. 8 MISCELLANEOUS

NON-AVAILABILITY OF TELEMETERED DATA FROM JAYPORE AND INDRAVATI

RTU of Indravati and Jaypore are not reporting to their SCADA master due to outage of communication link. The link was operational through OPGW in Jeypore-Jaynagar section. Subsequently in the month of June'08 the tower diversion work was carried out by OPTCL in Jeypore-Jaynagar section. The OPGW link was discontinued at location no. 2 & 4 in the said line due to stringing of normal ground wire in place of OPGW. The matter was taken up with OPTCL and they have informed vide letter dated 16.07.08 with a request that Powergrid may restore the link and the contractor engaged by OPTCL for restoration/diversion of the line would reimburse the cost of restoration of the link. Restoration work is yet to be started. ERLDC is facing serious problem in monitoring due to absence data from these two critical RTUs.

Powergrid and OPTCL may deliberate on the issue.

Deliberation in the meeting

OPTCL representative assured to take up the matter with its Telecom Department & to get a letter of confirmation for payment to Powergrid in this regard.

ITEM NO. 9 DATE AND VENUE OF THE NEXT (30th) OCC MEETING OF ERPC.

The date & venue of the next OCC (30th) OCC meeting will be intimated shortly.

The meeting ended with a vote of thanks to the Chair.

**LIST OF PARTICIPANTS IN THE 29TH OPERATION COORDINATION COMMITTEE MEETING (OCC)
HELD AT ERPC, KOLKATA ON 19.08.2008**

ORGANISATION	NAME	DESIGNATION
ERPC	Shri R. K. GROVER	MEMBER SECRETARY
ERLDC	Dr. L.HARI	GM
<i>BIHAR</i>		
BSEB	Shri D.K.SINGH	EEE,SLDC
<i>JHARKHAND</i>		
JSEB	Shri D.K.CHAURASIA	ESE/SLDC
	Shri A.KUMAR	EEE
<i>WEST BENGAL</i>		
WBSETCL	Shri D.GANGULY	CE/SLDC
	Shri C.B.DATTA	DY.CE/SLDC
	Shri A.BISWAS	SE/SLDC
WBSEDCL	Shri P.MUKHOPADHYAY	ADDL CE /ALDC
WBPDC	Shri A.K.DE	DGM
	Shri A.GUHATHAKURTA	MGR .(COMM.)
CESC		
	Shri R.CHAKRABORTY	MANAGER (SYS)
DPL	Shri P.K.CHAKRABORTY	SR.MANAGER (OPRN)
<i>ORISSA</i>		
GRIDCO	Shri N.KHAN	LO
OPTCL	Shri B.N.MAHAPATRA	SR.G.M(PS)/SLDC
	Shri S.K.DAS	AGM (E) /SLDC
OHPC	Shri B.C.PADHI	SR.GM (E)
<i>SIKKIM</i>		
	Shri K.PRADHAN	SE/SLDC
	Shri H.B.PRADHAN	EE(EHV/TRANS)
<i>DVC</i>	Shri D.MUKHERJEE	CE (E)
NTPC	Shri S.DASGUPTA	DGM
	Shri RAKESH KUMAR	DGM(OS)
	Shri A.BHUNIA	SR.MGR(OS)

RTCC	Shri M.M.BAIDYA	AGM (TELECOM)
	Shri S.S.CHAUDHURY	CM (TEL)
NHPC	Shri K.MAULIK	CE(O & M
	Shri U.K.NAND	DY.MGR (E)
	Shri S.K.MISHRA	DY.MGR(E)
POWERGRID		
ERTS-I	Shri D.K.SARMA	ADDL.GEN.MGR
	Shri S.PRASAD	AGM
ERTS-II	Shri S.J.LAHIRI	CH.MGR(OS)
	Shri G.P.SINGH	AE
	Shri S.K.SINGH	CH. MANAGER(OS)
<i>BHUTAN</i>		
TALA	Shri CHENI DORJI	AEE (ELEC)
KHPC	Shri T.DORJI	SECTION OFFICER(E)
SAIL	Shri R.PANDEY	SR.MGR
ERLDC	Shri P.MUKHOPADHYAY	DGM
	Shri D.K.SRIVASTAVA	DGM
	Shri S.KONAR	DM
	Shri S.BANERJEE	CM
	Shri S.K.HAZRA	CM
ERPC	Shri J.BANDHOPADHYAY	SE (C)
	Shri S.N.KAYAL	SE (O)
	Shri B.C.MALLICK	SE (PS)
	Shri B.SARKHEL	EE(O)
	Shri A.ROY	EE (C)
	Shri S.S.GHOSH	EE, DDO
	Shri S.K.DEB	EE (TSC)
	Shri S.M.JHA	EE (SPAR)
	Shri P.N.SARKAR	AD-I (SPAR)
LAISION OFFICERS OF JSEB,NVVNL,BSEB	Shri S.K.SENGUPTA	EEE,BSEB
	Shri S.P.DATTA	DGM /NTPC

ANNEXURE- III B

Programme of Maintenance Of Transmission Lines And Generating Units as proposed for the Month Of September' 2008

Organization	Name of the Element	From		To		Remarks
		Date	Time	Date	Time	
FSTPS, NTPC	Unit No-IV (500MW)	06.09.08		30.09.08		Annual Overhauling
KhSTPS, NTPC	Unit No-II	01.09.08		19.09.08		Capital Overhauling
TSTPS, NTPC	Unit No-I	06.09.08		30.09.08		Annual Overhauling
DVC DTPS	Unit#3 140MW)	25.08.08		30 days		Capital Overhauling
MTPS	Unit# 3	25.08.08		35 days		Annual Overhauling
WBDCL						
KTPS	Unit # 1	16.07.08		10.09.08		Annual Maintenance
BkTPP	Unit # III	01.08.08		11.09.08		Annual Maintenance
OHPC Balimela	Unit#1	26.07.08		11.09.08		RLA study -Do-
	Unit# 2	19.08.08		30.09.08		
	400 KV Farakka – Kahalgaon Line - I	24.09.08	09=30	24.09.08	16=30	
	400 KV Kahalgaon – Biharshariff Line 4	02.09.08	09=30	03.09.08	16=30	
	400 KV Kahalgaon – Biharshariff Line - 3	09.11.08	09=30	10.11.08	16=30	
	132 KV Kahalgaon – Lalmatia Line	16.09.08	09=30	17.09.08	16=30	
315 MVA ICT-III at Biharshariff		22.09.08	0800	22.09.08	1700	For yearly & four yearly maintenance
		23.09.08	0800 (ODB)	23.09.08	1700	
80MVAR Bus Reactor of Biharshariff		26.09.08	0800	26.09.08	1700	For yearly maintenance work
HVDC BTB Pusauli		21.08.08	1000	24.08.08	1000	4 days continuous S/D for replacement of thyristors
PROLONGED SHUTDOWN OF UNITS IN THE CONSTITUENT SYSTEMS						
OHPC Chiplima	Unit- III	04.11.06		TO CONTINUE		Abnormal Sound in turbine
JSEB PTPS	Unit-III	01.08.03		TO CONTINUE		Boiler renovation Boiler renovation &TurbineO/H Boiler renovation Capital Maintenance
	Unit –IV	17.09.05		TO CONTINUE		
	Unit- V	23.05.04		TO CONTINUE		
	Unit –VIII,IX,X	17.10.05		TO CONTINUE		

ODB: On daily basis , OCB: On continuous basis