

North Eastern Regional Power Committee

Agenda For

139th OCC Sub-Committee Meeting

Time of meeting : 10:00 Hrs.

Date of meeting : 19th December, 2017 (Tuesday)

Venue : "Hotel Nandan", Guwahati.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 138th MEETING OF OPERATION SUB-COMMITTEE OF NERPC.

The minutes of 138th meeting of Operation Sub-committee held on 24th November, 2017 at Guwahati were circulated vide letter No. NERPC/SE (O)/OCC/2016/4556-4591 dated 04th December, 2017.

NERLDC vide mail dtd. 11.12.2017 sought the following modifications:

Deviation outstanding payable by Assam:

NERLDC made a presentation (attached at **Annexure-X**) on sustained overdrawal by Assam and huge outstanding deviation charges payable by Assam (enclosed). It was explained that such sustained overdrawal is not permissible and any entity has to maintain its actual close to schedule.

Regarding outstanding deviation charges, it was advised that Assam should clear the outstanding payable of Rs. 25 Crores by one time payment and then current dues should be paid on regular basis.

APDCL representative agreed to do the needful.

Item No. D.14: Transformer Tap optimization:

Status as recorded: DGM(MO),NERLDC opined that changing tap position at present based on scenario for February, 2018 would be inappropriate.

To be Recorded: "NERLDC proposal regarding tap changing as per February 2018 scenario load flow case was discussed and it was felt that tap changing study should be based on seasonal pattern considering high-normal-low hydro, summer, winter seasons etc., and preferably study may be on quarterly basis. NERLDC was advised to look into it."

The Sub-committee may confirm the minutes of 138th OCCM of NERPC as no comments/observations were received from the constituents.

ITEMS FOR DISCUSSION

B.1. ACTION TAKEN:

1. IMPLEMENTATION OF PROJECTS FUNDED FROM PSDF:

The status as informed in 138th OCC:

State	Protection System	ADMS	Capacitor Installation	SAMAST**
Arunachal Pradesh	Tendering in process.	DPR preparation stage.	-	SLDC to apprise SERC of the project.
Nagaland	Work under execution. Completion by 31.12.17.	Under scrutiny of Techno-Economic Sub-group.	Under process of approval. To submit undertaking and other required documents.	Documents and relevant papers have been furnished to Nagaland SERC as desired by Chairperson, SERC. SERC has requested for a presentation at Kohima/Nagaland by the SAMAST group
Mizoram	Main Equipment and Diagnostic Tools LOA issued. Civil Works LOA by 14.12.17	To be further examined by Techno-Economic Sub-group after interaction with consultant.	Proposal on hold. To be considered upon funds being available.	To furnish action plan.
Manipur	By Sept'17 all tenders to be completed. By Sept-Oct'17 all LOAs' to be issued.	Pilot project under scrutiny of Techno-Economic Sub-group. To submit clarification.	-	NERPC/NERLDC members to meet SERC /MSPCL higher officials to enable take-off of the project.
Tripura	LOAs' completed. MI complete by Nov'17.	Submitted to NPC/NLDC.	Under Study stage**	NERPC/NERLDC members to meet TSERC /TSECL higher officials to enable take-off of the project.
Assam	Remaining tenders by 1 st week of Dec'17.	Under scrutiny of Techno-Economic Sub-group.	-	Joint meeting of Assam, Meghalaya, NERLDC & NERPC to be held at Kahelipara on 22.09.17 for finalization of DPR.

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Meghalaya	MePTCL –Only 10% Communication Equipment LOA remaining. To be completed by 14.12.17. MePGCL – 2 remaining items LOA by Nov'17	DPR submitted to CEA & NLDC	-	Draft submitted. DPR
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The status of implementation of the above schemes (physical as well as financial progress) may please be reviewed and the entities are requested to expedite implementation of the schemes. The entities may also be advised to furnish status as per format by first week of every month on regular basis to Member Convener, PSDF Project Monitoring Group (AGM, NLDC, POSOCO) with a copy to NPC & NERPC. The LOAs of R&M Scheme are to be furnished to NERLDC/NERPC regularly.

States may please intimate the latest status.

2. Long Outage of Important Grid Elements:

Name of the Element	Name of Utility	Status as informed in 138th OCC	Latest status
63MVAR Reactor at Byrnihat to replaced with 80MVAR Reactor	MePTCL	DPR complete. Board approval awaited.	
400KV 80MVAR Bus Reactor at Palatana	OTPC	04 Nos bushing to be replaced. Work would be completed by OTPC itself. Tentative completion 31.12.2017.	
132 kV Jiribam – Rengpang S/C	MSPCL	Line charged from Rengpang. The 132/33kV, 20MVA transformer at Jiribam (MA) charged on 25.10.2017.	
132 kV Mariani (AEGCL) – Mokokchung (DoP, Nagaland) S/C	DoP Nagaland & AEGCL	Line cannot be charged due to low insulation. RCE of ₹ 43 lakhs to be sanctioned by Nov'17.	
132 kV P K Bari – Silchar I & II	NERTS	Ckt#I on ERS w.e.f.16.11.2017. Both circuits on permanent structure by Dec'17.	

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132 kV Dimapur - Dimapur I	NERTS	Bay work at Dimapur(PG) completed by NERTS. Nagaland has to charge from their end. To be dropped.	
132 kV Hailakandi – Dullavcherra	AEGCL	By Dec'17.	

Utilities may please intimate the latest status.

3. Furnishing of various data for reliable grid operation:

Data regarding	Status as of 138 th OCC		Latest Status
DAS output for FRC calculation	Mail sent to ISGS on 23.11.17 for furnishing DAS output for tripping of TPCIL on 30.08.17 at 21:37 Hrs and Talwandi Sabo on 12.11.17 at 07:14 Hrs Data received from Ranganadi, Khandong and Kopili Stg II.		
Furnishing Geographic co-ordinates of nodes	DoP, Arunachal Pradesh, AEGCL, DoP Nagaland yet to submit the data.		
Report on VDI/FDI	Submitted by SLDC of Assam (Daily Basis & Monthly), Meghalaya (Monthly Basis), P & ED Mizoram and DoP, Nagaland (Monthly Basis)		
DG healthiness report	Kopili, DoP Nagaland, P&E, Mizoram and OTPC submitted for Nov'17		
Operating Procedures.	Items	Data submitted by	
	OP of States	Submitted only by AEGCL and MePTCL	
	OP of HVDC	Not Submitted	
	OP of Transmission System	Not submitted by any constituents	
	OP of Generating Stations	Not submitted by any generators	
	OP of GIS	Not submitted by any constituents	
Data related to Power Map.	Items	Data submitted by	
	Communication (PLCC/OPGW/ GPRVSAT/ Satellite)	Not submitted by any constituents	

Data related to Single Line Diagram.	State SEM Location	Not submitted by any constituents	

Status on submission of Data during 138th OCC*				
Station	Water level (12 hours basis)	Inflow	Discharge	Gate Opening
Kopili	Daily Basis	Not giving	Daily Basis	Daily Basis
Khandong	Daily Basis	Not giving	Daily Basis	Daily Basis
Ranganadi	Monthly basis upto Oct'17	Daily Basis	Daily Basis	Not giving
Doyang	Daily Basis	Not giving	Monthly Basis upto Oct'17	Monthly Basis upto Oct'17
Loktak	Monthly Basis upto Oct'17	Monthly Basis upto Oct'17	Monthly Basis upto Oct'17	Monthly Basis upto Oct'17
Nagaland	Monthly Basis upto Oct'17	Monthly Basis upto Oct'17	Monthly Basis upto Oct'17	Not giving
Meghalaya	Monthly Basis upto Oct'17	Not giving	Not giving	Monthly Basis upto Oct'17
Assam	Not giving	Not giving	Not giving	Not giving
Tripura	Not giving	Not giving	Not giving	Not giving

NERLDC has also requested that Water level, inflow details, discharge quantity & Number of Gate opening (in case of spillage) of Hydro Plants be recorded on a 12 hour basis (2 entries in a day) and to be submitted to NERPC & NERLDC on a monthly basis for proper operational planning.

NERLDC may please inform the status.

B.2. OPERATIONAL PERFORMANCE AND GRID DISCIPLINE DURING NOVEMBER, 2017

As per the data made available by NERLDC, the grid performance parameters for November, 2017 are given below:

NER PERFORMANCE DURING NOVEMBER, 2017

States	Energy Met (MU)		w.r.t. Oct,17 % inc (+) /dec (-)	Energy Reqr. (MU)		w.r.t. Oct,17 % inc (+) /dec (-)	% inc (+) /dec (-) of energy reqr vs met. In Nov,17
	November-17	October-17		November-17	October-17		
Ar. Pradesh	69.09	72.27	-4.40	70.14	73.59	-4.69	-1.50
Assam	696.69	843.29	-17.38	712.58	872.23	-18.30	-2.23
Manipur	68.84	66.96	2.81	69.89	68.39	2.19	-1.50
Meghalaya	135.42	127.88	5.90	135.42	127.88	5.90	0.00
Mizoram	39.53	39.98	-1.13	40.43	41.10	-1.63	-2.23
Nagaland	58.70	68.60	-14.43	59.73	69.78	-14.40	-1.72
Tripura	104.60	126.46	-17.29	105.56	128.18	-17.65	-0.91
Region	1172.86	1345.44	-12.83	1193.75	1381.15	-13.57	-1.75

States	Demand Met (MW)		w.r.t. Oct,17 % inc (+) /dec (-)	Demand in (MW)		w.r.t. Oct,17 % inc (+) /dec (-)	% inc (+) /dec (-) of Demand vs met. In Nov,17
	Nov-17	Oct-17		Nov-17	Oct-17		
Ar. Pradesh	136	139	-2.16	144	145	-0.69	-5.56
Assam	1478	1745	-15.30	1515	1822	-16.85	-2.44
Manipur	178	170	4.71	180	174	3.45	-1.11
Meghalaya	339	300	13.00	339	300	13.00	0.00
Mizoram	90	86	4.65	95	88	7.95	-5.26
Nagaland	132	135	-2.22	132	137	-3.65	0.00
Tripura	240	291	-17.53	240	303	-20.79	0.00
Region	2380	2499	-4.76	2443	2596	-5.89	-2.58

REGIONAL GENERATION & INTER-REGIONAL EXCHANGE IN MU

Month---->	Nov-17	Oct-17
Total Generation in NER (Gross)	1362.689	1627.573
Total Central Sector Generation (Gross)	1043.830	1213.062
Total State Sector Generation (Gross)	318.859	414.511
Inter-Regional Energy Exchange		
(a) NER-ER	0.00	4.12
(b) ER-NER	335.56	380.18
(c) NER-NR	441.40	483.06
(d) NR-NER	0.00	0.00
© Net Import	-105.84	-107.00

AVERAGE FREQUENCY (Hz)

Month---->	Nov-17	Oct-17
	% of Time	% of Time
Below 49.9 Hz	16.91	13.60
Between 49.9 to 50.05 Hz	73.53	77.21
Above 50.05 Hz	9.56	9.19
Average	49.97	49.97
Maximum	50.27	50.20
Minimum	49.62	49.65

C. OLD ITEMS

1. Status of Generating Units, Transmission Lines in NER:

During 138th OCC meeting, the status as informed by different beneficiaries is as follows:

SN	Items	Status as given in 138 th OCC Meeting	Latest Status
a. New Projects			
1	400/220kV, 315 MVA ICT-1 of NTPC at Bongaigaon	ICT-1 - Mar'18	
2	Kameng HEP of NEEPCO two units (2 x 150 MW) Next two units (2x150 MW)	Delay in dam construction. First unit by early 2018.	
3	Pare HEP of NEEPCO (2 x 55 MW)	Delay in dam construction. First unit by early 2018.	
4	400 kV D/C Silchar - Melriat line of PGCIL	March, 2018.	
5	220kV Rangia - Salakati of AEGCL	March, 2018.	
6	132kV Monarchak – Surjamaninagar D/C of TSECL	Extension required. Letter to be sent to NERPC.	
7	400kV D/C Balipara – Kameng	Combined Studies to be conducted in detail by NERLDC and NERPC and to be reviewed in next OCCM	
8	RHEP 80 MVAR Bus Reactor	Ar. Pradesh, Nagaland- Mar'18 Manipur, Mizoram - CoD	
9	SLDCs (Ar. Pradesh, Manipur, Mizoram, Nagaland)	March, 2018.	
10	400/220 kV 315 MVA ICT-II at Bongaigaon	ICT-II: delayed	
11	220/132 kV, 2x160	March, 2018.	

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	MVA ICTs at Balipara		
12	220/132 kV, 1x160 MVA ICT with GIS Bay at Kopili	March, 2018.	
13	400/132 kV, 1x315 MVA ICT-III at Silchar	March, 2018.	
14	Replacement of 2x315 MVA ICTs with 2x500 MVA ICTs at Misa (PG)	2019	
15	400 kV Silchar – Misa D/C	March, 2018(LOA date).	
16	1x125 MVAR Bus Reactor at 400 kV at Balipara	March, 2018(LOA date).	
17	1x125 MVAR Bus Reactor at 400 kV Bongaigoan	DoCO 16.11.2017. To be dropped.	
18	Bays at Hailakandi & 132V Silchar-Hailakandi	Unit #I -Trial run completed Unit #II - Dec'2017	
19	Tuirial HEP of NEEPCO	Nov'17	
20	400 kV, 63 MVAR Bus Reactor #II at Biswanath Chariali	Nov'17	
21	33kV bay at 220kV Mariani(AS) S/Sn	Metering issues to be taken up with APDCL by NERTS	
22	33kV Tezu-Tezu(AP)	-	
23	33kV bay for 132kV Badarpur(PG) S/Sn	APDCL to revert back with status.	
b. Elements under breakdown/ upgradation			
24	Up-gradation of 132 kV Lumshnong-Panchgram line	DPR already submitted to NERPC/NLDC.	
25	Switchable line Reactors at 400kV Balipara & Bongaigoan	CSD to be procured. Bongaigaon-Dec'17	
26	PLCC Panels at Loktak end of Loktak – Ningthoukhong 132 kV feeder and Loktak - Rengpang 132 kV feeder	May'2018	

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27	LILO of 132kV Ranganadi – Nirjuli at Pare of NEEPCO by PGCIL	LILO completed. Two towers to be diverted. Complete by Dec'17.	
28	LILO of 132kV Ranganadi – Itanagar (Chimpu) at Pare of Ar. Pradesh	-	
29	LILO portion of 132kV Ranganadi – Nirjuli(diversion work) at Lekhi by DoP Ar. Pradesh	-	
30	Replacement of Main-I relay for 400kV Silchar-Byrnihat at Byrnihat S/Sn	By second week of Dec'17.	
31	Re-conductoring of 132kV Umiam Stg#III - Umtru	DPR prepared. Submitted for approval.	

Concerned constituents may kindly intimate the status.

D. NEW ITEMS

D.1 Generation Planning (ongoing and planned outages)

NEEPCO & NHPC may kindly intimate the availability for hydro stations:

Generating Station	Units running	MW	MU	Reservoir
Khandong				
Kopili				
Kopili-II				
Ranganadi			Subject to inflow	
Doyang				
Loktak				
AGBPP	-	-	-	-
AGTPP	-	-	-	-

The outage of other generating stations may be approved considering the present water levels in reservoirs.

The Committee may discuss and approve the proposed shutdown by Generating Stations.

D.2 Outage Planning Transmission elements

It was agreed in the 99th OCC meeting that shutdown will be availed only after approval is given by the OCC forum. It was also agreed that deferment/revision of outages elements other than already approved in OCC will be henceforth put/displayed in the website of NERPC (**under Operational Activities/OCC Approved shutdown**) as per CERC regulations/ CEA guidelines etc for ensuring smooth & secure grid operation.

Furnishing request of shut down of the element, which was approved by NERPC, by Indenting Agency (ISTS licensees/STUs/Generating Companies) to NERLDC: Planned shutdown approved by NERPC shall be considered for implementation by NERLDC on D-3 basis. If an outage is to be availed on say 10th of the month, the shutdown availing agency would reconfirm to NERLDC on 7th of the month by 10:00 Hr. This practice is necessary to ensure optimal capacity utilization and the time required for associated system study/coordination by/amongst RLDC/NLDC.

In 130th OCCM, Member Secretary opined strongly about non commitments of earlier decision by the constituents and stated that all proposed plan shutdowns and agenda for the next OCC meeting should be sent to NERPC Secretariat latest by 5th day of next month. He directed SE(C&O) that the decision should be strictly adhere to and no shutdowns or agenda will be entertained after that stipulated date.

In 134th OCCM, it was decided that all communication related shutdown be approved in OCC forum only.

In 138th OCCM, SE(C&O), NERPC advised the forum that all proposed plan shutdowns for the next OCC meeting should be sent to NERPC Secretariat at least five days in advance of next OCC meeting. Any shutdown sent after D-6 will not be considered. It was also decided that OCC Meeting notice will be given 10 days in advance.

Till date NERPC have not received any propose shutdown for December, 2017 - January, 2018 from any of the constituents.

D.3 Estimated Transmission Availability Certificate (TAC) for the month of July, 2017& August, 2017:

NETC and POWERGRID have submitted the outage data for the month of July 2017 & August 2017. So the attributability of outage of the said elements may please be finalized.

Members may please discuss.

D.4 Assessment of Total Transfer Capability (TTC), Transmission Reliability Margin (TRM) and Available Transfer Capability (ATC) by SLDC on respective Inter-State Transmission Corridor

Updated PSS/E Base Cases have been **mailed to all the SLDCs on 01.12.17**. All SLDCs are requested to assess the Total Transfer Capability (TTC), Transmission Reliability Margin (TRM) and Available Transfer Capability (ATC) for the month of

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Jan'18 using these cases, and submit the study cases and results to NERLDC by **25.12.17**.

NERLDC has assessed the state control area wise, state subsystem wise and group of control-area wise TTCs for NER Grid, on behalf of SLDCs of NER. The study results will be presented in the meeting. SLDCs are requested to check the TTC of their control areas as computed by NERLDC and **give comments, if any, by 25.12.17**.

If no comments received from any SLDCs of NER, TTC, ATC & TRM figures of State control area and group of control areas as assessed by NERLDC will be considered as final and may be uploaded on website.

As per discussions in 122nd OCC meeting of NERPC, all SLDCs of NER may host the assessed TTC / ATC / TRM figures on their website for information dissemination.

Members may discuss.

D.5. Implementation of SPS for transfer of 160 MW power to Bangladesh through Tripura-Bangladesh link:

In Special Meeting on SPS, UFR etc. held on 23.06.17, Chief Manager, NERTS, POWERGRID presented the draft scheme to implement the suggested SPS for transfer of 160 MW power to Bangladesh through Tripura-Bangladesh link. The Sub-Committee discussed the suggested schemes in detail and agreed in principle to implement the schemes.

The forum requested NERPC to take up the matter with CEA/CTU/NLDC for implementation at the earliest after vetting in OCC forum.

In 138th OCCM, S.E. (C&O), NERPC informed that a meeting in Bangladesh would be convened very soon and exact date would be intimated in Dec'17.

NERPC may please intimate the status.

D.6. Modus-Operandi for SPS mock testing:

The 138th OCC forum requested NERTS to prepare a draft sequence of operation for each SPS and present in next OCC for ratification. The date for SPS 2 and SPS 3 mock testing will also be finalized in next OCC Meeting.

NERTS may please intimate the status.

D.7. Submission of the Annual Load Generation Balance Report (LGBR) for Peak as well as Off-peak scenarios and the Annual outage plan for 2018-19 by 31.10.17 as per IEGC

- a) As per IEGC, each SLDC shall submit LGBR for its control area, for peak as well as off-peak scenario, **by 31st October for the next financial year**, to respective RPC Secretariat. The annual plans for managing deficits/surpluses in respective control areas shall clearly be indicated in the LGBR submitted by SLDCs.

- b) As per IEGC, all SEBs/STUs, Transmission Licensees, CTU, ISGS, IPPs, MPPs and other generating stations shall provide to the respective RPC Secretariat their proposed outage plan in writing for **the next financial year by 31st October of each year**. These shall contain identification of each generating unit/transmission line/ICT etc., the preferred date for each outage and its duration and where there is flexibility, the earliest start date and latest finishing date.

AEGCL & P&E, Mizoram already submitted the data.

In 138th OCCM, SE(C&O), NERPC requested all the utilities to submit data by 30.11.2017 so that LGBR may be prepared and finalized by Dec'17. The forum requested NERPC to consider only generation capacity that will be able to generate in FY17-18 rather than the entire Installed Capacity for accurate projections.

AEGCL informed the forum that Adamtilla and Baskhandi generating station have been decommissioned. TSECL informed that some units of Rokhia and Baramura have also been decommissioned. SE(C&O), NERPC directed AEGCL and TSECL to write letter to CEA regarding the same.

NERPC/NERLDC may please intimate the status.

D.8. Voltage Deviation Index of PALATANA and BgTPP:

As per VDI reports issued by NERLDC and uploaded in website, the voltage at 400 kV BgTPP and 400 kV Palatana buses are found to be going out of IEGC band (above 420 kV) for considerable time on regular basis as shown below.

Date	Time in Hrs	
	BGTPP	PALATANA
11-11-2017	3.58	3.43
12-11-2017	3.8	4.05
13-11-2017	6.4	5.1
14-11-2017	2.9	1.39
15-11-2017	6.13	5.1

Being generator buses, the voltages are supposed to be controlled by varying the MVAR injection / drawal and maintaining the same inside IEGC band at all times.

The 138th OCC forum requested BgTPP and Palatana GBPP to conduct Internal study and revert back to the forum.

NTPC/OTPC may please intimate the results.

D.9. Transformer Tap optimization:

System study was conducted by NERLDC considering load, generation and network pattern of November, 2017 during Peak & Off Peak periods. Suggested taps position of important transformers in NER for maintaining bus voltages within permissible limit as well as to minimize system losses.

In 138th OCCM, NERLDC informed that they are conducting tap optimisation studies on half yearly basis considering lean and high hydro scenario. NERLDC showed the study results of Tap optimization for transformers in NER Grid for February 2018 scenario which represents lean hydro period and suggested that voltage profile is improved most in Byrnihat after changing tap from their present setting. NERLDC also highlighted that due to the inter-connected system, tap has to be changed in other transformers as well to attain the voltage profile within IEGC band as highlighted in study result.

SE(C&O), NERPC once again re-iterated that NERLDC has to write to Director(Tech.), MePTCL. DGM(MO),NERLDC opined that changing tap position at present based on scenario for February, 2018 would be inappropriate. The forum requested NERLDC to present details of tap-position required for particular periods and also frequency of change.

NERLDC may please intimate the status.

AGENDA ITEM FROM NERLDC:

D.10. HYDRO Generation planning during lean season:

Water levels of all reservoir based hydro generating stations of NER have started depleting and for next 4-5 months we have to manage our demand with the energy available corresponding to water content. So proper planning is very much essential for management of NER load during lean season. Current water level and corresponding MUs of hydro stations are as shown below.

Reservoir Parameters						
Reservoir	Parameters		Present Parameters (11.12.17)		Last Year	
	FRL (m)	MDDL (m)	Level (m)	Energy (mu)	Level (m)	Energy (mu)
Khandong	719.30	704.26	713.65	14.49	715.40	17.08
Kopili	609.60	597.24	607.26	83.70	606.75	78.50
Loktak	769.00	767.95	768.60	250.00	768.62	250.00
Umium	978.88	958.45	976.70	33.38	965.67	7.71
Gumti	93.55	83.60	92.80	27.00	92.00	23.83
Doyang	333.00	306.00	319.65	24.30	319.90	24.30
Ranganadi	567.00	560.00	565.29	N/A	565.08	N/A

Members may please discuss.

D.11. Revision of Restoration Procedures of NER 2017:

System Restoration procedure of NER Grid was last updated in December'2016. Since then changes have been taken place in the NER network and the procedure needs to be revised. As per discussion in the last OCC meeting and feedback received from Meghalaya we have revised the "RESTORATION PROCEDURE OF NER" and sent to all concerned utilities of NER.

All concerned are requested to please go through the draft restoration procedure 2017 and give comments, if any, within 25th December'17 so that we can publish it by 31st December'17.

Members may please send their comments

D.12. Revision of draft NER REACTIVE POWER MANAGEMENT MANUAL 2017.

NERLDC is preparing NER REACTIVE POWER MANAGEMENT MANUAL every year. Like earlier years this year also we have prepared draft NER REACTIVE MANUAL and sent it to all concerned over mail.

All concerned are requested to please go through the draft reactive manual 2017 and give comments if any within 25th December'17 so that we can publish it by 31st December'17.

Members may please send their comments

D.13. Recording of operational instructions over VOIP in RLDC:

As per last OCC discussion establishment of recording system for all real time instructions and conversations thro' VOIP network was supposed to be established within 1 month. Till today no visible action is noticed. It is very important to establish the recording system at the earliest as all verbal communication/ conversations among RLDCs, SLDCs and stations are getting lost.

POWERGRID may please intimate the latest status.

D.14. Real-time Scheduling issues:

Like growing complexities of real time operation real time scheduling of energy is also getting complex day by day. Energy scheduling process is a very important function in real time system operation and flawless scheduling is very much essential. Post-facto revision is not acceptable in scheduling process. So correctness of scheduling is our topmost target. Despite of utmost care during scheduling some inadvertent errors take place. Hence to make the scheduling error free, following actions are suggested to all concerned.

- a) All utilities must check revision no '0' (Zero) which is uploaded at 18:00Hrs of D-1 and in case of any discrepancy; the same must be intimated to NERLDC control room before issues of R-1 at 23:00Hrs.
- b) All constituents must continuously check their schedule in real time and in case of any discrepancy; the same must be intimated to NERLDC control room in real time basis

- c) All constituents should apply for partial requisition in standard format which will be circulated by NERLDC.
- d) In case of partial requisition from ER_ISGS, all the constituents should intimate NERLDC Control room through mail along with phone call apart from punching the partial requisition in ERLDC WBES.
- e) In case of URS requisition from ER_ISGS, all the constituents should apply for the same to NERLDC Control room through mail along with phone call. NERLDC would forward the same to ERLDC for implementation.
- f) In both the cases of (d) and (e), the constituents must check the ERLDC WBES for verification of implementation partial or URS requisitions. In addition to these if any other changes are observed scheduling in ERLDC WBES, the same must be intimated to NERLDC Control room.

Members are requested to please co-operate.

D.15. Telemetry and Voice Communication problem:

- 1. **Telemetry problem: Annexure (D.18) attached in tabular format.**
- 2. **Voice Communication problem:**

Dedicated voice communication links and its availability is one of the key requirements for efficient grid management. But it is observed that non availability of adequate communication links with many stations affecting grid operation seriously.

VOIP system not installed.

- 1. NTPC, BgTPP (Even no BSNL or Mobile)
- 2. OTPC, PALATANA
- 3. 400 kV BYRNIHAT/KILLING.
- 4. 400 kV AZARA.
- 5. 400 kV SILCHAR.
- 6. SURJYAMANINAGAR (International Link)/KUMILLA.
- 7. Zero, Roing, Tezu and Pasighat

VOIP phones are not working

- 1. Mariani(POWERGRID)
- 2. Mokokchung
- 3. Kumarghat.
- 4. Khandong.
- 5. Doyang
- 6. Nirjuli
- 7. Kohima
- 8. Kathalguri
- 9. Jiribam
- 10. Kolasib

Following SLDCs do not have ULDC phones:

1. SLDC Imphal
2. SLDC Aizawl
3. SLDC Itanagar

- b. Most of the POWERGRID stations are connected through only one dedicated voice link.

Minimum two nos of dedicated links need to be established at the earliest. In earlier (PUNWARE system) there were 2 nos of dedicated voice communication channel with every stations but in VOIP system only one no of link is established.

Members may please deliberate for resolution of the issue.

METERING RELATED ITEMS

D.16. Update on Real Time Energy Assessment for Effective Grid Management:

As decided in 137th. OCC meeting, the matter regarding visit of CDAC to NERLDC was pursued and CDAC representative visited NERLDC on 16.11.2017. Complete details of Meters pertaining to all NER States as sought by CDAC was handed over to them. There are total existing 76 SEMs which would cover computation of drawal by seven States. A list of projected future meters is also given in the statement for integration as and when commissioned.

CDAC would install the AMR system to compute net drawal by each State on every 15 minute time block basis and schedule vs actual as well as computed Deviation charges would be displayed in a server in each SLDC, NERLDC and NERPC secretariat.

As all required data has been handed over, CDAC was advised to start work on the project at the earliest. CDAC need to chalk out an action plan and intimate time bound plan to NERPC so that progress can be monitored in each OCC meeting. It was suggested that work on a particular State at a time may be commenced and completed in time bound target.

The 138th OCC forum was informed about the correspondence with CDAC in the subject matter. It was explained that all SEMs at ISTS in NER are with propriety protocol which would be shared by meter manufacturer with AMR provider.

TSECL representative stated that in a meeting with CDAC, they had intimated that CDAC should prepare a scheme which would be compatible with meters installed in NER ISTS. As meter manufacturer would share the protocol, CDAC should be able to execute the project.

SE (C&O), NERPC stated that some way out should be found out to enable execution of the project by CDAC with existing ISTS meters as it involves GOI grant.

After detailed deliberation, it was decided that CDAC should provide the mechanism (e.g. Converter, driver etc.) to make the existing meter compatible with their protocol so that the project can be implemented at the earliest. The forum requested NERPC to take up the matter with CDAC and find out the cost of converter, drivers etc.

Further details related to the project to be furnished to CDAC is as below:

1. Total no. of SEMs for computation of drawal of States: **77 existing + 36 future**

One SEM in case of Meghalaya was inadvertently missed in earlier list, hence total meters including future would be 113 nos.

2. Total no. of metering locations : **37 existing + 5 future**

List of locations are enclosed at **Annexure D.16.**

3. Meters are L&T and Elster make at present.
4. Meters provide 15 minute time block data, not real time data.
5. The proposed project would be an integrated one for all seven States where schedule vs actual drawal, computed deviation charges would be displayed in servers provided in SLDCs, NERLDC and NERPC secretariat.
6. The above takes care of complete meter details of all seven states of NER.

NERPC may please intimate the status.

D.17. Procurement of additional 70 Laptops:

Target as intimated by NERTS in 138th. OCC:

- i. e-RA : 01.12.2017
- ii. LOA : 15.12.2017
- iii. Material Dispatch: 31.01.2018

NERTS may intimate status.

D.18. Installation of new L&T SEMs in NER:

Following installations are to be done urgently:

1. Replacement of Elster Meters at Azara and Agia
2. Installation of two SEMs at 400/220 KV ICT at Bongaigaon
3. Installation of SEMs at Pare HEP
4. Installation of check meters at Loktak and Ranganadi HEP.

NERTS may intimate status and update regarding other installations.

D.19. AMR in NER:

The tender for AMR scheme could not be published as the cost estimate approved was of pre-GST regime. Finance Deptt recommended to frame fresh estimate with GST before tendering process. Accordingly for framing cost estimate offer from parties viz. Valiant Communications, AMI Tech, TCS were fetched. Out of these parties, received offer only from M/s Valiant communications amounting to Rs. 4.95 Crore. POWERGRID proposed to wait for 1 / 2 weeks time for receiving offer from other

parties for finalization of cost estimate based on minimum offer of at least three different vendors (subject to availability).

In 138th OCC, NERTS intimated that no further offers have been received; OCC advised NERTS to proceed based on the single offer from M/s Valiant communications.

NERTS may intimate status.

D.20. Testing of SEMs at accredited laboratory:

NERTS stated that fresh offer was received only from a single party viz. M/s Yadav Measurements Pvt. Limited. As per Offer of M/s YMPL, the estimated cost is Rs.12,55,500.00 excluding GST @18% plus boarding/lodging /local transportation extra. POWERGRID proposed to go ahead to frame cost estimate based on single offer. Metering Committee agreed.

In 138th OCC, NERTS intimated that tendering would be tentatively by 31st Dec'17.

NERTS may update status.

D.21. Other Metering issues:

SN	LOCATION	LOC. ID	METER NO	FEEDER NAME	REMARKS
1	IMPHAL (MN)	ZZ-01	NP-8374-A	IMPHAL(MN) END OF IMPHAL(PG) II	IMPHAL (MN) END READING 10% LOWER THAN IMPHAL(PG) END
2	IMPHAL(MN)	MN-01	NP-6950-A	IMPHAL(MN) END OF IMPHAL(PG) I	REVERSE POLARITY & READING HIGHER BY 12% OF IMPHAL(PG) END
3	NINGTHOUKONG	MN-17	NP-4498-A	NINGTHOUKONG(MN) END OF IMPHAL(PG)	NINGTHOUKONG END SHOWING REVERSE POLARITY & READING ONLY 12% OF THE OTHER END.

NERTS may update.

D.22. Procurement of DCD:

At present there are only 6 DCDs are available in stock. Although Laptops are being procured, DCDs are required to be kept as back-up and also for providing time correction command to SEMs.

Hence it is suggested that POWERGRID-NERTS may initiate action for procurement of 25 DCDs on repeat order.

OCC may approve.

AGENDA ITEM FROM NEEPCO:

D.23. Issues with newly supplied L&T meters at KHEP

The installation of new L&T make special energy meter started at KHEP by PGCIL. The following issues are required to resolve before dis-connection of old L&T energy meters.

1. The old L&T meters data are collected through **Vincom** software but for new L&T meters Vincom plus software is required. The Software is not working properly in Windows 10 – 64 bit OS. Matter already communicated in NER Metering Group in WhatsApp
2. The existing L&T meters data are directly collected through a central PC and thus requested to configure the new meters also so that shift engineers can directly collect the data in the same PC.
3. The Analogics DCD meter may be kept as standby in case of failure of direct connectivity from central PC.
4. We are calculating station Ex-bus through our SEMDBASE software. So, SEMDBASE software modification is required to facilitate the energy calculation for commercial purpose.

NEEPCO may please deliberate.

D.24. Revalidation of approved Shutdowns in Last OCC Meeting:

Kopili U# 4 03/01/2018 to 23/01/2018 (For Annual Planned Maintenance)
Kopili U# 3 25/01/18 to 14/02/18 (For Annual Planned Maintenance)
Khandong U# 1 = 27/12/2017 to 27/02/2018 (For APM and Penstock repairing)

NEEPCO may please deliberate.

Any other item:

Date and Venue of next OCC

It is proposed to hold the 140th OCC meeting of NERPC on second week of January, 2018. The date & exact venue will be intimated in due course.

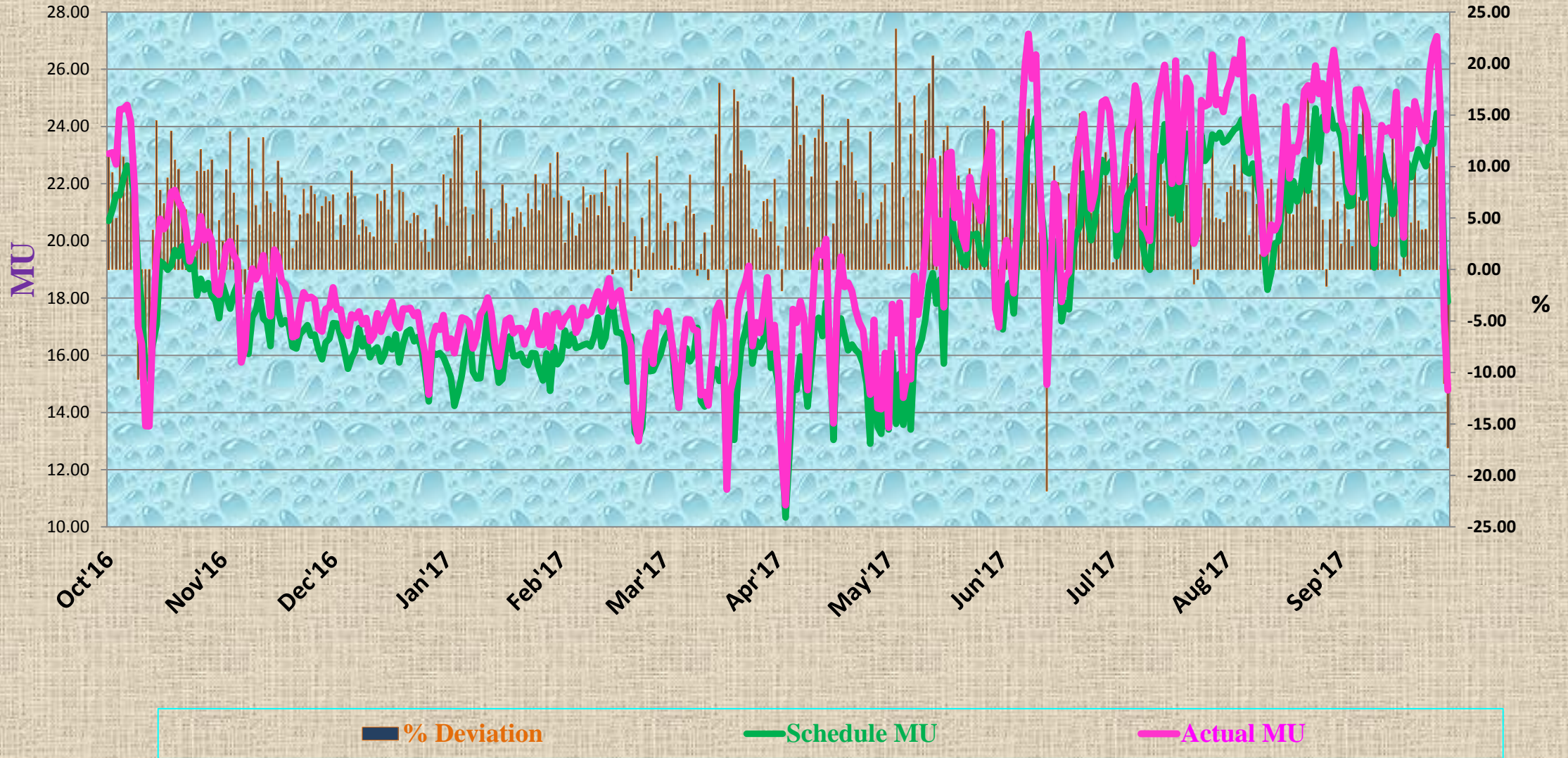
Sustained overdrawal by Assam and Outstanding Deviation charges

Presented in 138th. OCC meeting

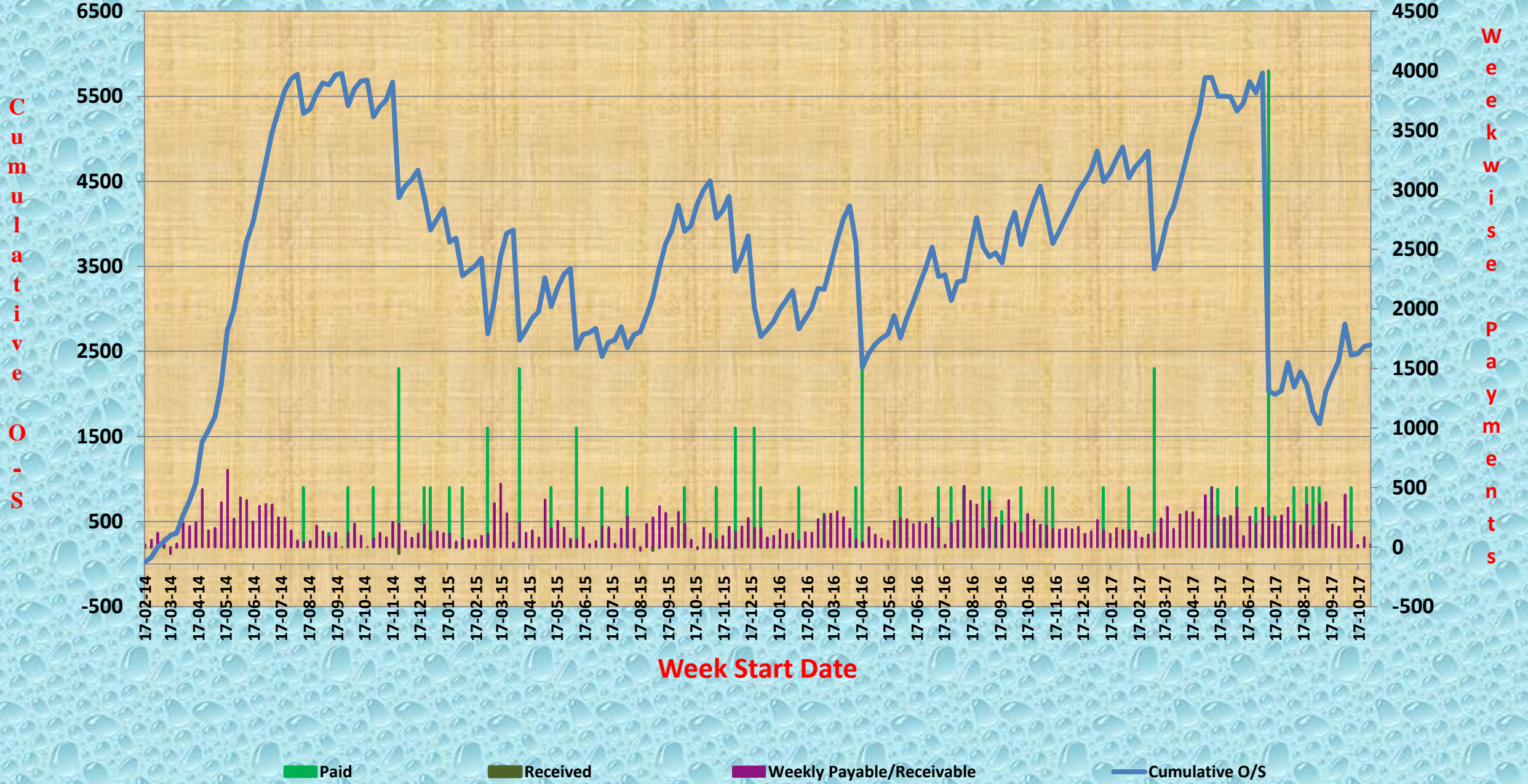
24.11.2017

Schedule vs Actual of Assam

Assam Sched vs. Actual in MU (Oct'16 to Sep'17)



ASSAM DEVIATION PROFILE



Outstanding Deviation charges of Assam

- Liquidating accumulated outstanding by one time payment at the earliest.
- Clearing weekly payables on regular basis.

Details of Special Energy Meters at inlet points of NER States					
SL NO	STATE	LOCATION	EXISTING	FUTURE	TOTAL
1	AR. PRADESH	RANGANADI	3	1	4
2	AR. PRADESH	NIRJULI	1	0	1
3	AR. PRADESH	ITANAGAR	0	2	2
4	AR. PRADESH	PARE	0	3	3
5	ASSAM	AGIA	1	0	1
6	ASSAM	AZARA	2	0	2
7	ASSAM	BNC	2	2	4
8	ASSAM	BALIPARA	3	0	3
9	ASSAM	DULLAVCHERRA	1	0	1
10	ASSAM	HAFLONG	2	0	2
11	ASSAM	KATHALGURI	3	0	3
12	ASSAM	PANCHGRAM	3	0	3
13	ASSAM	MISA	4	2	6
14	ASSAM	SALAKATI	2	0	2
15	ASSAM	RANGIA	1	4	5
16	ASSAM	SILCHAR(PG)	2	0	2
17	ASSAM	SILCHAR(S)	4	0	4
18	ASSAM	KHANDONG	1	0	1
19	ASSAM	MARIANI(S)	3	0	3
20	ASSAM	NTPC	1	1	2
21	ASSAM	MOKOK(S)	2	0	2
22	ASSAM	MARIANI(PG)	0	4	4
23	ASSAM	SONAPUR	0	2	2
24	MANIPUR	IMPHAL	5	2	7
25	MANIPUR	JIRIBAM	3	0	3
26	MANIPUR	LOKTAK	2	2	4
27	MANIPUR	KARONG	1	0	1
28	MANIPUR	THOUBAL	0	2	2
29	MEGHALAYA	UMTRU	4	0	4
30	MEGHALAYA	KHLRT	2	0	2
31	MEGHALAYA	BYRNIHAT	2	0	2
32	MIZORAM	MELRIAT	3	0	3
33	MIZORAM	AIZWAL	1	0	1
34	MIZORAM	KOLASIB	2	0	2
35	NAGALAND	DIMAPUR	4	0	4
36	NAGALAND	DOYANG	2	0	2
37	NAGALAND	NEW KOHIMA	0	2	2
38	TRIPURA	KUMARGHAT	1	0	1
39	TRIPURA	AGTCCPP	2	2	4
40	TRIPURA	PALATANA	2	1	3
41	TRIPURA	SURAJMANI NAGAR	0	2	2
42	TRIPURA	PKBARI	0	2	2
TOTAL METER			77	36	113