



# MINUTES OF THE 40<sup>TH</sup> COMMERCIAL SUB COMMITTEE MEETING OF ERPC

**Eastern Regional Power Committee**  
**14, Golf Club Road, Tollygunge**  
**Kolkata-700033**

# **EASTERN REGIONAL POWER COMMITTEE**

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## **MINUTES OF THE 40<sup>th</sup> COMMERCIAL SUB-COMMITTEE MEETING OF ERPC HELD ON 02.07.2019 (TUESDAY) AT 11:00 HRS AT ERPC, KOLKATA**

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

### **PART B: ITEMS FOR DISCUSSION**

#### **ITEM NO. B1: Implementation of DSM (5<sup>th</sup> amendment) Regulations, 2019 of CERC - ERPC Agenda**

DSM (5<sup>th</sup> Amendment) Regulations, 2019 was notified by Honorable CERC on 28<sup>th</sup> May, 2019. The said amendment has been implemented w.e.f 3<sup>rd</sup> June, 2019. Accordingly, DSM account is being prepared and issued by ERPC Secretariat as per 5<sup>th</sup> Amendment Regulations.

ERPC Secretariat shall give a brief presentation on new DSM regulation, 2019 (5<sup>th</sup> Amendment) and the performance of various constituents after the implementation of new regulations.

*Members may discuss.*

#### **Deliberation in the Meeting:**

*ERPC Secretariat gave a brief presentation on the DSM (5<sup>th</sup> amendment) Regulations'2019.*

*During the presentation, the impact of implementation of the regulations on sign change violation, grid frequency profile and DSM pool balance scenario of Eastern Region was highlighted. The comparative analysis of 5<sup>th</sup> amendment with previous 3<sup>rd</sup> and 4<sup>th</sup> amendments was also shown. (Copy of presentation enclosed at Annexure –B1).*

*Members appreciated and took note of the changes made in DSM (5<sup>th</sup> amendment) Regulations'2019.*

#### **ITEM NO. B2: Agenda items by GRIDCO**

**B2.1: Revision of DSM accounts of GRIDCO from 04.05.2016 to 02.12.2018, due to erroneous less Energy reported at Bolangir (PGCIL) end SEM of 220kV Bolangir (PG) –Katapalli line (Copy of letter enclosed at Annexure-B2.1 ).**

Bolangir (PGCIL) end SEM of 220kV Bolangir (PG) –Katapalli line (OPTCL) tie line was reporting erroneous energy as compared to Katapalli (OPTCL) end SEM bearing meter no NP-7561A from 04.05.2016 to 02.12.2018. Being a tie line, SEM at Bolangir (PG) is used for energy calculation at ERPC, Kolkata. There is a huge difference of energy data of both end meters and the net energy difference is calculated to be **97281.8 MWH** for the period from 04.05.2016 to

02.12.2018. The net energy comparison sheet of both side SEM data for all the above weeks and 15 minutes energy data of Katapalli (OPTCL) end SEM for the period has been attached.

Further, SEMs at ICT end at Bolangir (PGCIL) have been considered for energy accounting at ERPC, Kolkata from 02.12.2018 onwards and above energy data was rectified after engagement of the above ICTs SEM at Bolangir PGCIL.

***GRIDCO and PGCIL may elaborate. Members may discuss.***

**Deliberation in the Meeting:**

***Members took serious view of the issue of erroneous metering at Bolangir(PG) end of 220kV Bolangir (PG) – Katapalli (OPTCL) line that involves a significant time period of almost 2.5 years (for the period from 04.05.2016 to 02.12.2018).***

***Members pointed out that GRIDCO/OPTCL should have been vigilant enough to bring this issue to the notice of ERPC/ERLDC when it started occurring. However, after a lapse of a period of about 2.5 years the metering issue is reported to have been resolved.***

***It was intimated by GRIDCO representative that the metering issue got rectified after subsequent restoration of line after availing shutdown. During discussion, members could not ascertain the reasons for problem in the metering and subsequent resolution of the same.***

***Hence it was decided to constitute a committee comprising of SE, ERPC (as Convener) and one representative each from ERLDC, GRIDCO/OPTCL & PGCIL (Odisha Projects) as Members of the committee. Concerned organizations were requested to nominate their representative and intimate the same to ERPC Secretariat within 15 days. The committee would:***

- 1. Ascertain the reasons for problem in the meter at Bolangir (PG) end of 220kV Bolangir (PG) – Katapalli (OPTCL) line.***
- 2. Rectification of the issue after restoration of line subsequent to availing S/D***
- 3. Modalities for energy accounting, if any.***

***Further, MS, ERPC opined that the regulations may not allow for revision of commercial accounts on retrospective basis. It was suggested that the committee report shall be put up before the upcoming 41<sup>st</sup> TCC/ERPC Meetings for further guidance.***

**B2.2: Revision of Plant Availability Factor for Month (PAFM) for the month of April, 2019 in respect of TSTPS-I and TSTPS-II stations of NTPC – GRIDCO Agenda (Copy enclosed at Annexure-B2.2)**

From the REA account issued by ERPC and SRPC for the month of April 2019, it is observed that PAFM corresponding to the declared capacities of TSTPS-I and TSTPS-II stations for the said month are 85.045% and 94.955%. In order to achieve the above Plant availability factors there is total requirement of **15, 46,218 MT** of coal. However, it is observed from Form-15 submitted by NTPC with respect to TSTPS-I and TSTPS-II for April' 2019 that only **12, 52,680 MT** of coal, inclusive of coal in stock, was available. It is a matter of fact that availability of coal is a prime factor for declaration of plant availability factor of generating station for a particular month.

Hence, it appears that NTPC have not considered the availability of coal while declaring day ahead schedule of TSTPS-I and TSTPS-II April 2019.

The availability of coal at TSTPS-I and TSTPS-II for April'2019 corresponds to only 79% PAFM which is far below the normative level of 85%, for recovery of full fixed charges. However, based on the PAFM percent in the REA for April 2019, NTPC have claimed full monthly fixed charges. In view of the above, it is requested to consider the availability of coal while calculating PAFM (%). A detailed calculation of availability and requirement of coal is furnished at **Annexure-B2.2** for reference.

Accordingly, ERPC Secretariat wrote a letter to NTPC vide ERPC/SE-Comm/NTPC-REA/2019-20/2813-2815 dated 12.06.2019 seeking their views on this issue. However, no response has been received from NTPC.

***GRIDCO & NTPC may explain.***

**Deliberation in the Meeting :**

***GRIDCO representative elaborated that the actual coal stock availability as maintained at TSTPS-I & II of NTPC Ltd. for the month of April, 19 (as reflected in Form-15 submitted by NTPC) is not commensurate with the quantum of coal required to generate electricity corresponding to the PAFM (Availability) as declared by TSTPS-I and TSTPS-II for the month. Hence to that extent NTPC has recovered excess fixed charges from the beneficiaries of TSTPS-I & II for the month of April, 2019.***

***NTPC representative informed, the sufficient coal stock was available for April' 2019 to generate electricity corresponding to the PAFM (Availability) declared by TSTPS-I & II for the month of April, 2019. However, inadvertently the same was not reflected properly in Form-15. NTPC representative submitted that Form-15 for the month of April, 2019 shall be revised accordingly and assured that such lapses would not occur in future.***

***With this, it was decided to close the issue.***

**ITEM NO. B3: Mismatch in the SCADA data and SEM data – BSPHCL Agenda  
(Copy of letter enclosed at Annexure-B3)**

Despite all efforts being taken by DISCOMs to avoid deviation from schedule, there are episodes of DSM violation on many occasions mainly due to factors beyond control like sudden change in weather conditions, breakdown of transmission/sub-transmission lines, tripping of generating units, over delay on the part of generators in bringing back the unit after any tripping etc. This causes very dearly due to prevailing stringent norms for DSM violation. .

In course of analyzing the DSM violation during the period from 16.03.2019 to 21.03.2019 for BSPHCL, a lot of mismatch has been observed in quantum of power (MW) and frequency as per SCADA data and SEM data. A calculation sheet for the above period is enclosed at **Annexure-B3**.



Bihar SLDC manages the scheduling as per SCADA data available before them and hence a mismatch with SEM data (discovered later through DSM bill submitted by ERPC) results in large violation of DSM.

*BSPHCL may explain and ERLDC may respond.*

**Deliberation in the meeting:**

*BSPHCL representative explained that their control room personnel take operational decision based on the SCADA data which is reflected at their end from various drawal points. However, when SEM readings are received based on which DSM accounting is done, it is found that there is significant mismatch of SCADA data with that of SEM data. This is resulting in imposition of huge amount of sign change violation penalty for no fault of theirs.*

*ERLDC informed that the, the no of samples collection in SEM data are more than SCADA data for reading the energy data, Moreover, SCADA data is passing through the various paths which may leads to time lagging/driftng issues.*

*MS, ERPC opined that for a state like Bihar which has large nos. of drawl points, the aggregated drawl (as per SCADA) from all the drawl points is liable for a greater mismatch with that of aggregated SEM readings. He further explained that in the 5<sup>th</sup> amendment to DSM Regulations, 2019 a band of +/- 20MW with reference to schedule has been provided for to take care of this issue. BSPHCL was advised to take up this issue with their concerned vendor so as to match the data with SEM data with least % error.*

**ITEM NO. B4: COD of Mangdechhu HEP (4 X180 MW) in Bhutan**

As per the information received from PTC, one unit (180MW) of Mangdechhu HEP has already been synchronized with the grid and is generating infirm power. The COD of the unit is going to be declared shortly. **Ministry of Power, Govt. of India** has allocated MHEP power among the states of Eastern and North Eastern Region. The allocation letter is enclosed at **Annexure-B4**. The tariff and other terms and conditions for sale of power will be mutually determined by Govt. of India & Royal Govt. of Bhutan.

As per the inter-government agreement between Govt. of India & Royal Govt. of Bhutan, PTC India Ltd. & DGPC have been designated as nodal agency in India & Bhutan respectively for the inter-country sale of Mangdechhu power.

**Metering issue raised by ERLDC:** For Mangdechhu (4X180MW) energy calculation total 16 (sixteen) nos. of SEMs are installed at different locations of Bhutan (Mangdechhu, Jigmelling & Yumro). Mangdechhu has injected infirm power on 16/06/19 to India through 400kV Alipurduar-Jigmeling-2 feeder. SEM data of Mangdechhu, Jigmeling and Yumro is not received by ERLDC till date. Due to non-receipt of data, validation and meter healthiness is not yet been checked at ERLDC.

For Mangdechhu energy calculation, Jigmeling end SEM for 400kV Jigmeling-Alipurduar SEMs are considered.

*Members may discuss. ERLDC/DGPC may update the status.*

**Deliberation in the meeting:**

*DGPC representative was not present in the meeting.*

*ERLDC informed that one unit of Mangdechu HEP is injecting infirm power w.e.f 16.06.2019.*

*Member Secretary, ERPC opined that the metering issue for Mangdechhu shall be deliberated upon only after finalization of energy accounting methodology based on the PPA between PTC and Bhutan and also on further direction received from Ministry of Power, Govt. of India.*

*It was decided to place the agenda in the upcoming 41<sup>st</sup> TCC meeting.*

**ITEM NO. B5: Cost recovery from different constituents involving AMR implementation in different phases. —POWERGRID Agenda**

For implementation of AMR in different constituents area in principle approval accorded in 18th & 19th ERPC meetings & afterwards POWERGRID in through different LOA has implemented AMR in three phases till now and also some new S/S or elements are under integration in 4th phases.

Till now total 165 No of locations and 1019 no's of SEM are integrated in AMR. Apart from integration of or implementation of AMR, the integrated system also comes under comprehensive AMC till date. Final payments of initial package is almost completed and subsequent packages are on the verge of completion.

For data transmitting to ERLDC server generally SIM are used and for that also POWERGRID has to enter with the contract with Telecom service providers namely Airtel, BSNL & Vodafone. However, lately (Since last one year) most of the POWERGRID/NTPC S/S are transmitting data through available OPGW network instead of SIM.

Total cost for implementation and AMC comes to ₹ 3,87,31,776/- including implementation cost for TCS and cost for telecom service provider, but excluding consultancy charges. As per minutes of 19th ERPC the recovery mode of AMR will be like mechanism followed for SEM procurement. As such, considering the same methodology, including consultancy charges (@ 15%), total cost comes to ₹ 4,45,41,543/-. (Rs. Four crore forty five lacs forty one thousand five hundred forty three only).

All necessary payments are getting verified by the statute auditor and certified for acceptance. Now it is proposed to recover the cost incurred for the implementation of AMR from available constituents as per earlier minutes. However, for recovery purpose, complete installation base against constituents wise are given below for reference:

SL NO	Name of the constituents	Number of SEM Installed (NO'S)
01.	BIHAR	81
02.	CESC	04
03.	DMTCL	30
04.	DVC	45
05.	OPGC	10
06.	JHARKHAND	30
07.	NHPC	21

08.	NTPC	120
09.	SIKIM	20
10.	WEST BENGAL	29
11.	ADHUNIK	04.
12.	CHUZACHEN	07.
13.	IND-BHARATH	06.
14.	JINDAL	04.
15.	MPL	12.
16.	STERLITE	14.
17.	PGCIL	544.

It is proposed, to recover the incurred cost, mentioned above, by the ratio of allocation of LTA among the DIC's of Eastern Region.

In 158<sup>th</sup> OCC Meeting held on 27.06.19, Powergrid informed that all works of three phases of AMR implementation have been completed. OCC referred the issue to Commercial Sub-Committee for concurrence.

*Members may discuss.*

**Deliberation in the meeting:**

*The update list of no of substations and no of SEMs installed by utility wise has been provided by the POWERGRID is shown below and the details of OPTCL and IPPs substations are at Annexure- B5.*

SL NO	Utility	Total No.of Substations	Number of SEM Installed
1	PG (ER-I)	13	218
2	PG (ER-II)	13	176
3	PG (Odisha)	11	112
4	NTPC	7	155
5	NHPC	2	21
6	BSEB	28	81
7	JSEB	15	30
8	WB	13	29
9	SIKKIM	4	20
10	DMTCL	2	29
11	CESC	2	4
12	DVC	13	43
13	OPTCL	16	30
14	GMR	1	7
15	JINDAL	1	1
16	IPPR	11	57
	<b>Total</b>	<b>152</b>	<b>1013</b>

*POWERGRID informed that AMR implementation work (till 3rd Phase) has been fully completed and AMC portion also entirely completed for 1st phase. As such till now, for execution of entire project (till 3rd Phase), total expenditure of ₹ 4,45,41,543/- (Rs. Four crore forty five*

*lacs forty one thousand five hundred forty three only) has been incurred. Again, the cost includes implementation and maintenance cost of TCS & different mobile network providers.*

*Commercial Sub-Committee, in principle, approved the cost.*

*As proposed by POWERGRID in the meeting, members of Commercial Sub-Committee decided that the cost incurred would be apportioned among the beneficiaries and the IPPs on the basis of LTA and ex-bus capacity respectively.*

*Members referred the issue to forthcoming TCC meeting further approval.*

**ITEM NO. B6: Payment/Receipt Status from various pool accounts in ER – ERLDC Agenda**

**B6.1: Payment of Deviation Charge – Present Status.**

The status of Deviation Charge payment as on 19.06.2019 is enclosed at **Annexure-B6.1**. The current principal outstanding Deviation Charge of BSPHCL & JBVNL is ₹ 36.88 Cr & ₹ 28.39 Cr respectively considering bill up to 02.06.2019. ERLDC is regularly giving reminders to BSPHCL & JBVNL to liquidate the outstanding Deviation charges.

Further SIKKIM is not paying DSM charges in Pool since last few years and waiting for adjustment with the receivable amount.

SIKKIM may please pay the Payable amount as per bill within due date instead of waiting for adjustment. Total outstanding as on date of Sikkim is ₹ 4.77 Cr.

*ERLDC may please update.*

*BSPHCL, JUVNL & SIKKIM may confirm the program for payment of outstanding dues.*

**Deliberation in the meeting:**

*ERLDC informed that BSPHCL has liquidated the amount ₹ 5 Cr on 01.07.19. Further, BSPHCL and Sikkim informed that the balance amount will be liquidated at the earliest.*

*JBVNL representative was not present in the meeting.*

*It was decided that ERPC secretariat would write a letter to respective constituents to liquidate their outstanding dues.*

**B6.2: Interest due to delayed payment of deviation charges**

Due to delayed payment of deviation charges in DSM Pool in FY 2018-19, Interest was computed for all the DSM Pool Member. ERLDC vide letter No. संदर्भ : पूक्षेभारप्रेके./एम.ओ/यू-11 /1148 dated 24.06.19 was issued the interest statement for FY 2018-19.

Settlement of delayed payment Interest for 2018-19 for the recipient constituents has been done on 31.05.19. SIKKIM & IBEUL has yet to clear the outstanding Interest amount of 2017-18. Outstanding amount of Interest i.r.o IBEUL is ₹ 25, 96,599/- and Sikkim is ₹ 13, 29,261/- for 2017-18. However the statement of interest amount is enclosed in **Annexure-B6.2**

*IBEUL & SIKKIM may please confirm the program for payment of Interest on account of delayed payment for FY 2017-18.*

**Deliberation in the meeting:**

*Sikkim representative informed that the interest amount will be liquidated at the earliest. IBEUL was not present.*

**B6.3: Reactive Energy Charges --- Present Status.**

The updated position of Receipt/Payment of Reactive Energy Charges in the pool as on 19.06.2019 (considering bill up to 02.06.2019) is indicated in **Annexure-B6.3**. The total outstanding receivable on account of Reactive charges from West Bengal is ₹ 1.16 Cr. & from JUVNL is ₹ 33.18 Lacs Reactive Charge receivable from SIKKIM is ₹ 3.6 Lacs SIKKIM has not paid the Reactive energy Charges since 2017. WBSEDCL is regularly paying the reactive charges.

*SIKKIM & JUVNL may confirm the program for payment of outstanding dues*

**Deliberation in the meeting:**

*Sikkim has informed that the reactive energy charges will be liquidated at the earliest. JUVNL representative was not present.*

**B6.4: Outstanding reactive energy charge against WBSEDCL**

Reactive amount receivable from WBSEDCL prior to 04.01.2016 was ₹ 1.82 Cr (prior to Suo-moto order dated 21.07.2016 of the Hon'ble WBERC in the matter of case no: SM-14/16-17) which was long pending. WBSEDCL has liquidated the entire outstanding amount by the end of April'2019.

*This is for information.*

**Deliberation in the meeting:**

*Members Noted.*

**B6.5: RRAS Account ----Present Status.**

The updated position of Payments to the RRAS Provider(s) from the DSM pool and Payments by the RRAS Provider(s) to the DSM pool as on 24.06.2019 (considering bill up to 06.02.2019) is indicated in **Annexure -B6.5**. So far ₹ 4.56 Cr have been settled under RRAS in ER during FY 2019-20.

*This is for information.*

**Deliberation in the meeting:**

*Members Noted.*

**B6.6: FRAS Account ----Present Status**

The updated position of Payments to the FRAS Provide (i.e. NHPC) from the DSM pool and Payments by the FRAS Provider to the DSM pool as on 24.06.2019 (considering bill up to 06.02.2019) is indicated in **Annexure-B6.6**. So far ₹ 1.27 Lacs have been settled under FRAS in ER during FY 2019-20.

*This is for information.*

**Deliberation in the meeting:**

*Members Noted.*

**B6.7: Congestion account - Present Status**

No Congestion in ER is imposed since 06.12.2012. The status of congestion charge payment after full settlement is enclosed at **Annexure-B6.7**.

*This is for information.*

**Deliberation in the meeting:**

*Members Noted.*

**B6.8: Status of PSDF**

An amount of ₹ 7.56 Cr from Reactive account have been transferred to PSDF after 39th Commercial sub-committee meeting held on 18.02.19. With this the total amount of ₹ 964.2 Cr has been transferred to PSDF so far. No amount from Deviation pool has been transferred to PSDF A/c since 29.06.16 and surplus amount in deviation pool is being utilized for settlement of RRAS & FRAS Bill. The break up details of fund transferred to PSDF (till 03.06.19) is enclosed in **Annexure-B6.8**.

*This is for information.*

**Deliberation in the meeting:**

*Members Noted.*

**ITEM NO. B7: Reconciliation of Commercial Accounts – ERLDC Agenda**

**B7.1: Reconciliation of Deviation Accounts**

At the end of 4th quarter of 2018-19, the reconciliation statement (Period: 01.01.19 to 31.03.19) has been issued by ERLDC on 18.04.19 and statements had been sent to the respective constituents and also uploaded the same at ERLDC website at <https://erldc.in/market-operation/dsmreconciliation/> The constituents were requested to verify /check the same &

comments if any to be reported to ERLDC at the earliest. The status of reconciliation is enclosed in **Annexure-B7.1**.

IBEUL have not reconciled the statement for last 2 years.

DIKCHU has not signed reconciliation statement for last 2 quarters.

BSPHCL, JUVNL, SIKKIM, NTPC, BRBCL, POWERGRID(ER-I & ER-II), TUL, DIKCHU, OPGC & NPGC have not signed reconciliation statement for 4th quarter of 2018-19.

Above constituents are once again requested to submit the signed reconciliation statement at the earliest. If the confirmation is not received within 2 weeks from the date of issuance of the letters, the statements issued by ERLDC shall be deemed to have been reconciled.

*Concerned members may update.*

**Deliberation in the meeting:**

*ERLDC informed that NTPC, BRBCL, TUL, NPGC and POWERGRID (ER-II) have reconciled their statements.*

*BSPHCL & SIKKIM informed that the reconciliation would be done shortly.*

*JUVNL, DIKCHU & OPGC representatives were not present in the meeting.*

**B7.2: Reconciliation of Reactive Account**

At the end of 4th quarter of 2018-19, the reconciliation statement (Period: 01.01.19 to 31.03.19) has been issued by ERLDC on 18.04.19 and statements had been sent to the respective constituents and also uploaded the same at ERLDC website at link <https://erldc.in/market-operation/reactivereconciliation/>. Constituents were requested to verify /check the same & comments if any to be reported to ERLDC. The status of reconciliation is enclosed in **Annexure-B7.2**.

BSPHCL & DVC have not reconciled the account for 3rd quarter of FY 18-19.

BSPHCL, JUVNL & SIKKIM have not reconciled the account of last quarter.

*Constituents may please reconcile the Reactive account.*

**Deliberation in the meeting:**

*BSPHCL & Sikkim informed the reconciliation would be done at the earliest.*

*DVC & JUVNL were not present in the meeting.*

**B7.3: Reconciliation of RRAS & FRAS Account**

At the end of 4th quarter of 2018-19, the reconciliation statement (Period: 01.01.19 to 31.03.19) for RRAs and FRAS has been issued by ERLDC on 18.04.19 and statements had been sent to the respective constituents (i.e. NTPC, KBUNL, BRBCL and NHPC) and also uploaded the same at

ERLDC website at link <https://erlhc.in/market-operation/rrasreconciliation/>. All have reconciled the RRAS and FRAS Account.

*This is for information to the members.*

**Deliberation in the meeting:**

*Members noted.*

**B7.4: Reconciliation for STOA payments made to SLDC / STU:**

The reconciliation statements of STOA payments for the period of Apr'18 to Mar'19 have been sent to the DVC, OPTCL and WBSETCL for checking at their end and confirmation from their side. WBSETCL is yet to confirm for the period Jul'18 to Sep-18.

*DVC, OPTCL and WBSETCL may update.*

**Deliberation in the meeting:**

*DVC, OPTCL & WBSETCL were not present.*

**B7.5: Reconciliation for payments made to STOA applicants:**

The reconciliation statements of STOA payments for the period of Apr'18 to Mar'19 have been sent to the CESC, JITPL, JBVNL and WBSEDCL for checking at their end and confirmation.

CECSC and JITPL have confirmed for the above period. WBSEDCL is yet to confirm for the period Jul-18 to Dec-18. JBVNL is yet to confirm for the period Jan-19 to Mar-19.

As per clause 15.1 of CERC approved STOA bilateral procedure, since the confirmations have not been received within 2 weeks from the date of issuance of the letters, the statement issued by ERLDC have been deemed to be reconciled. The details are attached in the **Annexure-B7.5**.

**Since there is a serious audit objection on non-signing of DSM, Congestion and STOA reconciliation statement it is once again requested that all regional pool members may check and sign the statement sent by ERLDC.**

*Members may take necessary action for signing the statements at the earliest.*

**Deliberation in the meeting:**

*WBSEDCL confirmed in the meeting that the reconciliation of STOA payments shall be done shortly.*

*JBVNL representative was not present in the meeting.*

**B7.6: Opening of LC by ER constituents for DSM payments – ERLDC Agenda**

Clause 10 (4) of CERC Deviation Settlement Mechanism and related matters Regulations, 2014 vide notification No. L-1/132/2013/CERC dated 6<sup>th</sup> January, 2014 to be implemented from 17.02.2014 is reproduced below:



### ***Quote***

*All regional entities which had at any time during the previous financial year failed to make payment of Charges for Deviation including Additional Deviation Charges for Deviation within the time specified in this regulations shall be required to open a Letter of Credit (LC) equal to 110% of its average payable weekly liability for Deviations in the previous financial year, in favor of the concerned RLDC within a fortnight from the date these Regulations come into force.....*

*.....Provided further that LC amount shall be increased to 110% of the payable weekly liability in any week during the year, if it exceeds the previous LC amount by more than 50%.*

### ***Unquote***

The details of LC amount required to be opened in 2019-20 by ER constituents is given in **Annexure-B7.6**. Letters to this effect has been issued by ERLDC to the defaulting entities.

BSPHCL, DVC, GRIDCO, SIKKIM, NTPC, KBUNL, GATI, NVVN (NEPAL & BD), GMR, IBEUL, BRBCL, POWERGRID(ER-I & ER-II), DIKCHU, TASHIDING and NPGC has not yet opened/renewed LC.

***Defaulting constituents may update.***

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

***ERLDC informed that GMR and Tashiding (Shiga) have been opened the required LC.***

***BSPHCL, GRIDCO, Sikkim and POWERGRID (ER-I & ER-II) informed that required LC will be opened shortly.***

### **ITEM NO. B8: Meter related issues – ERLDC Agenda**

#### **B8.1: Replacement of Non-functioning/defective Meters**

##### **B8.1.1: Installation of standby meter at Rourkela(PG)**

For 400kV Talcher-Rourkela D/C, both main and check meters are installed at Talcher (NTPC) end whereas, no standby meters are available for these feeders. In absence of Talcher end SEM data, there is no backup meter for accounting.

***POWERGRID is requested to take necessary action for installation of Meter at Rourkela.***

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

***PGCIL informed that the standby meters would be installed at the earliest.***

##### **B8.1.2: Less reading recorded at BRBCL end**

Check meter (NP-8701-A) installed at BRBCL end for 400kV BRBCL-Sasaram-2 is recorded 1/3<sup>rd</sup> reading compare to main meter (NP-8700-A) for the same feeder. In case of any fault in main meter, check meter data is to be used for accounting. Healthiness of check meter may be confirmed by BRBCL.

***BRBCL may please update the status.***

**Deliberation in the meeting:**

***BRBCL was not present in the meeting and ERLDC informed the issue has been resolved.***

**B8.1.3: Less reading recorded at Darbhanga HV side ICT**

Meter (ER-1275-A) installed at HV side of 500 MVA ICT#2 at Darbhanga end is showing less reading compare to LV side SEM of the same ICT. Matter is already informed to Darbhanga (DMTCL) and was rectified on 07/06/19. Same problem again starts from 10/06/19 and still persists.

***DMTCL may update the status.***

**Deliberation in the meeting:**

***DMTCL representative was not present in the meeting.***

**B8.2: Non Receipt of SEM data from various locations**

As per IEGC, weekly SEM data has to be sent by respective utilities by every Tuesday to the concerned RLDC. Weekly SEM data from following locations are not being submitted to ERLDC since long.

**B8.2.1: Arah, Dehri & Sipara BSPHCL**

Ara (BSPTCL) end meter data of 132 KV Ara (PG) Line and Dehri(BSPTCL) end of 220 kV Pusauli (PG)- Dehri & 220kV Gaya(PG) - Dehri D/C line is not being received by ERLDC due to AMR related Issue. SEM data of the above locations were downloaded by ERLDC from AMR. Now, due to AMR problem at Ara and Dehri BSPTCL was requested to send the data of meter from above 02 locations by downloading at their end till restoration of AMR. M/s TCS has informed verbally that due to network failure, data is not available with AMR.

Again, three (3) nos of SEM are installed at Sipara end for 220KV Patna (PG)-Sipara feeders. Out of three, only one meter is reporting to AMR. Rest two meters data was requested to BSPTCL for sending the data manually but data is not received.

***BSPHCL may please respond and POWERGRID may update the program AMR rectification***

**Deliberation in the meeting:**

***BSPHCL representative assured that they would send the required SEM data to ERLDC, till the AMR restoration issue is being resolved.***

***Further, POWERGRID informed that this matter would be taken up with TCS at the earliest.***

**B8.2.2: Hatia and Dumka in JUVNL**

Hatia (JUVNL) end meter data of 220 KV Ranchi(PG)-Hatia D/C and Dumka(JUVNL) end meter for 220kV Maithon (PG)-Dumka D/C is not being received by ERLDC since last 2 months. Earlier data from these two locations were downloaded through AMR and due to some network

issue; data is not available with AMR. JUVNL was requested to download the data manually and send it to ERLDC but data is not received by ERLDC.

*JUVNL may please respond and POWERGRID may update the program AMR rectification*

**Deliberation in the meeting:**

*JUVNL representative was not present in the meeting.*

*It was decided that ERPC secretariat would write a letter to respective constituents to resolve their pending issues.*

**B8.2.3: Reverse polarity issue of Energy Meter at NPGC**

NPGC injection/start-up power calculation, four (2 main and 2 check) nos of SEMs is installed at outgoing feeder of 400kV NPGC-Gaya-D/C. It is observed that all the SEM installed at outgoing feeder of NPGC is showing reading with sign reversal. Matter is already informed verbally as well as through e-mail with raw and processed data. Value of SEM data of NPGC end is matching with Gaya end data except the sign reversal issue.

*NPGC/POWERGRID may update the status.*

**Deliberation in the meeting:**

*NPGC representative was not present in the meeting.*

**ITEM NO. B9: Trans-national (Bhutan) metering issue.**

**B9.1: Reverse polarity of SEM at Deothang and Silicon Factory**

As per 157th OCC Meeting of ERPC, shutdown was approved to Motanga S/s subject to availability of SEMs at Deothang and Silicon Factory. Accordingly, SEM of Motanga was shifted to Deothang end and new SEM is installed at Silicon factory. 132kV Deothang - Rangia feeder and 132kV Silicon feeder has been charged successfully through ERS tower at 11.43Hrs on June 02, 2019. SEM data of both ends are available with ERLDC and it is observed that both SEMs are connected with reverse polarity since 02.06.19.

Matter is communicated to NLDC, Bhutan and no corrective action is taken.

*Bhutan may please update.*

**Deliberation in the meeting:**

*BHUTAN representative was not present in the meeting.*

**B9.2: Less reading at Alipurduar end**

Mangdechhu will inject power to India through 400kV Jigmeling (Bhutan)-Alipurduar(India) D/C. Accordingly, SEM are installed at Alipurduar as well as Jigmeling end of Bhutan.

Alipurduar has received power for 1st time on 16/06/19 and meter data is available with ERLDC for that week. While data processing, it is observed that SEM installed at Alipurduar end for 400kV Alipurduar-Jigmeling is showing 2/3rd reading compare to Jigmeling end SEM. As this is a trans-national tie-line, meter issue with Jigmeling end will affect the energy calculation of Mangdechhu. This issue is already informed to Powergrid.

***POWERGRID may update the status***

**Deliberation in the meeting:**

***ERLDC informed that the issue with Jigmeling end has been resolved.***

**ITEM NO. B10: Implementation of 4<sup>th</sup> phase AMR including requirement of AMR data for SCADA Comparison – ERLDC Agenda**

Presently 150 Locations with 998 meters are connected through AMR system in ER. ERLDC is receiving data from 123 locations out of total 150 locations through AMR. The status of data receipt from the locations as on **21.06.2019** is as below:

Status Report of PGCIL AMR	
Summary	
Total Substation	150
Communicating Sub Station	123
Non-communicating Sub Station	27
Total Meter	998
Communicating meter	865
Non-communicating Meter	133

There have been issues with the GPRS communication/DCU/Meter replacement for around 27 locations having 133 meters as mentioned above. The details of Non communication substations along with probable reason are attached in **Annexure-B10**.

In 39th TCC/ERPC Meeting, it was agreed to implement 4th Phase AMR at a cost of Rs 1.75 Cr in place of Rs 93.56 Lakhs approved earlier considering the added requirement of metres, Locations, additional functionality, AMCs etc. ERPC suggested that Powergrid should ensure reliability in data transmission by implementing LAN connectivity through OPGC Network wherever feasible.

In 153rd OCC, Powergrid informed that Works had been awarded to M/s TCS on 23rd December 2018 at a cost of Rs 1.69 Cr after negotiation. Powergrid further added that work would be completed by October 2019. List of 256 Meters and 29 New Locations for 4th Phase AMR is enclosed in **Annexure-B10**.

In 39th CCM, Powergrid informed that LOA for 4th phase has been placed. Powergrid further informed that Phase wise expiry of AMC is commencing from June 2019 onward and Comprehensive AMC plan is being prepared and the same shall be put up separately.

Regarding data integration for SCADA, M/s TCS has informed the status as on 21.06.19 as below:

- Development work as per the original requirement of ERLDC SCADA team has been completed.
- AMR database has been updated as per the latest master file shared by ERLDC.
- Testing and data validation from ERLDC-SCADA team is going on.

***POWERGRID may further update the latest status of implementation.***

**Deliberation in the meeting:**

***POWERGRID requested all the constituents to share the available optical fiber network connectivity details for further configuration to Optical connectivity to avoid communication problems through GPRS and for much more reliable transmission of SEM data to ERLDC server.***

***POWERGRID further informed that Phase wise expiry of AMC is commencing from June 2019 onward and Comprehensive AMC plan is being prepared and the same shall be placed at the earliest.***

**ITEM NO. B11: Replacement of GPRS communication with Optical Fiber for AMR – ERLDC Agenda**

In ER, approximately 80% meters are connected through Automated Meter Reading (AMR). At present the communication system used for data transfer from each location is GPRS. It has been observed that many locations are not communicating with AMR system due to poor/no GPRS signal. Many substations have their own optical fiber which is also used for the LAN network of respective stations. TCS has successfully connected 02 locations (Subhasgram-PG and Bin aguri-PG) in ER-II with PGCIL intranet and these two locations are smoothly reporting to AMR system after connecting with PGCIL LAN. The proposed network will not only provide better communication but also reduce the cost of GSM.

In 39th CCM, Powergrid requested other utilities to share their Fiber details to explore possibilities of using their own optical fiber network, wherever it is available, for communicating with AMR for smooth functioning of AMR.

In 156th OCC, Powergrid informed that optical fiber for AMR had been implemented at 35 locations and rest of the locations would be completed by May 2019. However M/s TCS has confirmed that total 33 locations out of 40 has been connected with LAN and the status is enclosed in **Annexure-B11**.

***POWERGRID may please further update the latest status.***

**Deliberation in the meeting:**

***POWERGRID informed that the most of the stations of POWERGRID are now communicating to ERLDC SEM server, through available optical Fibre network. This provides much reliable and low cost solution compared to conventional data transfer through GPRS.***

***For much more reliable transmission of SEM data to ERLDC server, POWERGRID, requests all the constituents to share the available optical fibre network connectivity for further configuration to Optical connectivity. This will also help to reduce the maintenance cost of AMR, as recurring cost towards SIM cards may be avoided in that case.***

*Further, POWERGRID informed that optical fiber for AMR has been implemented for 38 locations out of 40 and rest of the locations would be completed by August 2019*

*Members noted.*

**ITEM NO. B12: Procurement of new SEMs – ERLDC Agenda**

In 30th ERPC meeting procurement of 965 no of SEM's and 110 nos of Laptop/DCD (in 111th OCC meeting) was approved. Further 31st TCC/ERPC approved the cost sharing mechanism of expenditure on SEM's and DCD/Laptops along with POWERGRID overhead charges @ 15% to be shared by the beneficiaries constituents of Eastern Region in proportional to the share allocation for the month in which the proposal was approved in the ERPC meeting.

In 35th CCM held at ERPC on 02.08.17, PGCIL informed that in 1st phase, 300 meters and 40 laptops with software had been supplied by M/s Genus so far.

In 145th OCC, PGCIL informed that 300 meters of 2nd lot has been supplied. Time drifted meters are being replaced by Genus meters phase wise.

In 38th CCM, PGCIL informed that remaining 364 nos. of meters have been delivered.

***POWERGRID may update the Stock of meters as well as status of delivery of remaining meters.***

**Deliberation in the meeting:**

***POWERGRID representative informed the entire lot of the ordered SEM has been supplied and based on earlier experience apprehended that entire stock of SEMs may be exhausted by end of current year. Hence POWERGRID suggested that further procurement of new SEMs may be taken care of accordingly.***

***POWERGRID requested the ERLDC to provide the list of required anticipated new connections and they will place the cost estimate accordingly.***

***POWERGRID representative informed that the details of stock of SEM meters would be provided at the earliest.***

**ITEM NO. B13: Non-submission of weekly SEM readings by Tuesday noon from non-AMR Locations/ faulty AMR locations/ Genus meter locations – ERLDC Agenda**

As per IEGC (effective from 3.5.2010) Sub-clause-22 of Clause-6.4 (demarcation of responsibilities), all concerned utilities in whose premises SEMs are installed shall take weekly meter readings and transmit the same to RLDC by Tuesday noon for timely issuance of Deviation account Bill. Significant improvement in timely receipt of SEM data has been seen after AMR implementation at various locations and most of the meter data is being received by **Tuesday**. Genus meters are installed at many locations in Eastern Region and data of Genus meters from those locations which are yet to be integrated in AMR are being sent manually and getting delayed in sending to ERLDC. It was also gathered that if concerned person responsible for data downloading is on Leave or not available, meter data is not being sent from those substations.

However general trend of receipt of meter data in last one month is as below:

By Wednesday or later: Durgapur (PG), Patna (PG), BSPTCL ( Sonnagar New, Biharshariff), WBSETCL (North Bengal) & SIKKIM

***POWERGRID, BSPTCL, WBSETCL & SIKKIM are again requested to please adhere to the schedule as per IEGC.***

**Deliberation in the meeting:**

***POWERGRID, BSPTCL & SIKKIM are again requested to please adhere to the Schedule as per IEGC.***

***WBSETCL was not present in the meeting.***

**ITEM NO. B14: Agenda items by NHPC**

**B14.1: Signing of reconciliation statement**

The reconciliation statements of IV quarter of F.Y 2018-19 stands submitted to all the beneficiaries on dated 29.04.2019 which are required to be signed on priority in respect of DVC, WBSEDCL, NBPDC and SBPDCL.

***DVC, WBSEDCL, NBPDC & SBPDCL may respond.***

**Deliberation in the meeting:**

***DVC, NBPDC & SBPDCL were not present in the meeting. WBSEDCL informed the reconciliation would be done at the earliest.***

***It was decided that ERPC secretariat would write a letter to respective constituents to resolve the pending issue.***

**B14.2: Outstanding dues against Sikkim Power Department**

The payment against supply of energy from Teesta-V and Rangit Power stations is pending since January, 2019 despite regular follow up by NHPC. As on date an amount of ₹ 4.01 Crs. has been accumulated as outstanding dues. The same is required to be released by Sikkim Power Department to avoid further levy of LPS on the more than 45 days at the earliest.

***SIKKIM May please respond.***

**Deliberation in the meeting:**

***Sikkim informed the outstanding dues would be liquidated at the earliest.***

### **ADDITIONAL AGENDA:**

#### **ITEM NO. B15: Procurement of WEB-NET-USE software for ER constituents –GRIDCO agenda**

The PoC Inter-State Transmission Charges and losses are published by CERC on Quarterly basis. A better understanding of the PoC Charges can be developed using "WEB-NET-USE" software which is developed by IIT Mumbai. GRIDCO, Odisha has contacted IIT Mumbai for procurement of the software. It is learnt that this software could be procured from I.I.T. Mumbai at the rate of Rs 32.2Lakhs plus applicable Taxes, per year, up to 10 logins. Thus 10 DICs can use the software simultaneously.

CTU is presently raising PoC Bills to all beneficiaries every month. Since the said software is highly essential for developing the understanding of the Transmission charges Bills raised to DICs PoC regime, GRIDCO has suggested that the same should be procured at ERPC level for distribution among the beneficiaries of Eastern Region.

The matter was discussed in 38<sup>th</sup> TCC meeting dated 29.06.2018 & as decided in the said meeting, the two process has been completed i.e., a workshop on PoC has been convened by ERPC & One presentation by NLDC officials has been conducted at ERPC. Hence now it is proposed to procure the WEBNET-USE Software at ERPC level for better understanding of PoC at DIC level.

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

*GRIDCO representative requested for procurement of WEB-NET-USE software from IIT Mumbai at the annual cost of ₹ 32 Lacs and proposed that ERPC Secretariat centrally procure the software for the willing constituents of Eastern Region and centrally administer the contract. GRIDCO requested ERPC Secretariat to explore the possibility.*

*Member Secretary, ERPC noted that ERPC Secretariat might be agreeing to take up this extra responsibility after scrutinizing the legal aspect of undertaking this work. Further, in case ERPC Secretariat undertakes this work, the annual maintenance cost for the software is paid in advance by the concerned constituents of Eastern Region to ERPC Secretariat.*

*This would be referred to forth coming TCC meeting.*

### **PART C: ITEMS FOR INFORMATION**

#### **ITEM NO. C1: Actual Generation Segregation methodology of NTPC Kahalgaon Stage-I & II after Bus Splitting Scheme – ERLDC Agenda**

The bus splitting scheme of Kahalgaon (NTPC) 400/132 was discussed and agreed in principle in 11<sup>th</sup> Standing Committee meeting of Eastern region held on 20<sup>th</sup> Sep 2010 and completion of Bus splitting scheme is expected during Feb 2019.

In 39<sup>th</sup> CCM, It was decided that a committee with members from ERPC, ERLDC, NTPC & PGCIL will be formed to finalize the methodology to be adopted for Kahalgaon NTPC stage wise AG Segregation. Accordingly Committee finalized the methodology and the same was implemented w.e.f 22.04.19.

*This is for Information.*



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

*Members noted.*

#### **ITEM NO. C2: Non-payment of Deviation Charges by IBEUL**

IBEUL is not paying Deviation charges in ER DSM Pool since 12.04.2017 (almost 2 years) and present outstanding amount payable by M/s IBEUL towards principal deviation charges is ₹ **112.50429 Lac** considering bill up to 02.06.2019 (However, there is no power flow in the circuits) and ₹ **26.75 Lac** against the delayed payment interest of deviation charges till 31.05.19.

A petition in CERC had been filed in July, 2018 by ERLDC against M/s IBEUL for violation of Regulation 10 of DSM regulations 2014. Hon'ble commission directed in order against petition no. 230/MP/2018 dated 16.04.2019 that the Petitioner is at liberty to approach NCLT (National Company Law Tribunal) for appropriate directions in accordance with law. Further, ERLDC has filed a claim in NCLT on 31.05.2019.

*This is for information.*

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

*Members noted.*

#### **ITEM NO. C3: STU and SLDC Transmission & Operating charges.**

##### **C3.1: State Transmission Utility Charges and Losses applicable for STOA for FY 2019-20**

As available with ERLDC the STU charges and losses to be considered for STOA for FY 2019-20 are as follows:

<b>Name of STU</b>	<b>Intra-State Transmission Charges</b>	<b>TRANSMISSION LOSS (For Embedded entities)</b>
WBSETCL	*	3.10%
DVC	Rs. 143.7 / MWh	2.68%
OPTCL	Rs. 62.5 / MWh	3.00%
JUSNL	*	#
BSPTCL	*	#
SIKKIM	*	#

\* Indicates rates yet to be furnished by concerned State Utilities. Transmission Charges for use of state network shall be Payable @ Rs.80 per MWh as per subsequent Amendment regulation 2009-dated 20.05.2009.

# Not yet intimated by the State Utility.

##### **C3.2: State Load Despatch Centre Operating Charges for STOA for FY 2018-19**

<b>Name of SLDC</b>	<b>SLDC Operating Charge</b>
West Bengal	**
DVC	**

Odisha	Rs. 2000
Jharkhand	**
Bihar	**
SIKKIM	**

\*\* Indicates rates yet to be furnished by concerned State Utilities. Operating charges at the rate of Rs 1000/-, per day or part of the day for each bilateral transaction for each of the Regional Load Dispatch Centre involved and at the rate of Rs 1000/- per day or part of the day for each State Load Despatch Centre involved shall be payable by the applicant as per subsequent Amendment regulation 2009-dated 20.05.2009.

*This is for information to the members.*

**Deliberation in the meeting:**

*Members noted.*

**ITEM NO. C4: Information of Deviation/reactive payment in ER pool account**

Constituents of Eastern region are making payment of Deviation charge, Reactive Charge, RAAS in ER Pool Accounts. However ERLDC is not getting details of payment made in ER pool account from all constituents. In 31<sup>st</sup> and subsequent CCM, all the ER pool members were requested to send the details of payment in the format to ERLDC in the email account at [erldcomm1@posoco.in](mailto:erldcomm1@posoco.in). WBSETCL, NTPC, APNRL, DANS Energy, Shiga Energy, TPTCL and MPL are sending the details. DVC is sending through Hard Copy. Other constituents viz BSPHCL, JUVNL, GRIDCO, SIKKIM, PGCIL (HVDC), may also furnish the details of payment made in ER Pool.

S.No	Name of Utility	Amount	DSM/Reactive Account Week No	Date	Cheque No	Mode of Payment

*Members may note for compliance.*

**Deliberation in the meeting:**

*Members noted.*

**ITEM NO. C5: Updating of CT/PT Ratio**

The meter details along with the CT/PT ratio has been uploaded at ERLDC website at link <https://erldc.in/market-operation/meter/>. The constituents are requested to check CT/PT ratios being used. Comments/discrepancies, if any, on the same may please be communicated to ERLDC at the earliest. Recently, it is observed that CT ratio id being changed at Biharshariff (BSPTCL) end and no communication is received from BSPTCL end.

It is once again requested to the constituents/PGCIL to verify the Meter serial No, CT/PT ratio and also inform to ERLDC whenever any modification is done at site.

*Members may please note.*

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

*Members noted.*

#### **ITEM NO. C6: Submission of SEM data to ERLDC prior & after 6 hr of first time charging of new element**

Before first time charging of any new element in the Grid, SEM details along with meter dummy data is being submitted by respective utility to ERLDC. The purpose of meter reading without power flow was to ensure its compatibility with RLDCs software and purpose of meter reading with power flow was to ensure its healthiness, correct connections of CT/PT and correct CT ratio.

Correctness of SEM readings is important for computing of drawl/Injection of a control area and inter-regional/trans-national energy flows as various accounts/billings are based on it. In view of the above, meter readings after six(6) hrs of power flow must be sent by the utilities to ERLDC before start of trial operation. Further the 24 hour trial operation would be assumed complete only when the both end meter readings for this period are correct.

*It has been observed that SEM data is not being sent after 6 hrs of first time charging of new element. The issue was raised in 39<sup>th</sup> CCM also.*

*Members may please comply the same.*

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

*Members noted.*

#### **ITEM NO. C7: Non-submission of weekly SEM readings by Tuesday noon from non- AMR Locations/ faulty AMR locations/ Genus meter locations**

As per IEGC (effective from 3.5.2010) Sub-clause-22 of Clause-6.4 (demarcation of responsibilities), all concerned utilities in whose premises SEMs are installed shall take weekly meter readings and transmit the same to RLDC by Tuesday noon for timely issuance of Deviation account Bill. Significant improvement in timely receipt of SEM data has been seen after AMR implementation at various locations and most of the meter data is being received by Tuesday. *Genus meters are installed at many locations in Eastern Region and data of Genus meters from those locations which are yet to be integrated in AMR are being sent manually and getting delayed in sending to ERLDC.* It was also gathered that if concerned person responsible for data downloading is on Leave or not available, meter data is not being sent from those substations.

However general trend of receipt of meter data in last one month is as below:

By Wednesday or later: Sasaram(PG), Patna(PG), BSPTCL( Sonnagar New), WBSETCL (North Bengal) & SIKKIM

***POWERGRID, BSPTCL, WBSETCL & SIKKIM are again requested to adhere to the schedule as per IEGC.***

**ITEM NO. C8: Status of Start-up power drawl, infirm injection and CoD**

Status of Start-up power drawl, infirm injection and CoD Declaration of Generator as Regional entity and Pool member is as follows:

**1. Start Up power**

S. No	Generator	Startup power granted	
		From	To
1.	OPGC(2x660MW)	15.01.2018	31.05.2019
2.	NPGC(2X660 MW)	10.05.2018	31.12.2019
3.	NTPC, Darlipalli(2X800MW)	31.05.2018	30.09.2019
4.	BRBCL U#3(250 MW)	14.09.2018	31.03.2019

**2. Infirm Power**

S. No	Generator	Infirm Injection Started From	6 month period would end by	Extension granted by CERC
1.	OPGC(2x660MW) Unit-4	23.01.2019	22.07.2019	NIL
2.	NPGC(2X660 MW) Unit-1	14.01.2019	13.07.2019	NIL
3.	NTPC, Darlipalli(2X800MW)	NIL	NIL	NIL
4.	BRBCL U#3(250 MW)	01.01.2019	30.06.2019	NIL

**3. COD Declared: NIL**

*Members may please note.*

**Deliberation in the meeting:**

*Members noted.*

\*\*\*\*\*

# **ANNEXURES**

# ERPC::KOLKATA

Annexure-A

## ATTENDANCE SHEET

### 40<sup>th</sup> COMMERCIAL SUB-COMMITTEE MEETING

VENUE: ERPC CONFERENCE ROOM, KOLKATA

TIME: 11:00 HRS

DATE: 02.07.2019 (TUESDAY)

Sl. No.	Name	Designation & Organisation	Contact Number	E-mail Id	Signature
1	J. BANDYOPADHYAY	MS, ERPC	9432326351	mserpc-power@gov.in	
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3	S. Kujriwal	SE, ERPC	9831919509	shyam.kujriwal@gov.in	
4	D. K. Bauri	EE (Comd), ERPC	9883617236	ee.comd, erpc@gov.in	
5	S.P. BARNWAL	GM, ERLDC	9433041812	spbarnwal@posoco.in	
6	S. Sahan a	Manager, powergrid	9434748024	satyabansahana@powergridindia.com	
7	P. Chhuron	Ch. Mgr, ER-II	943444223		
8	R K SOOD	GM (C) NTPC ER-II BBSR	9650990616	rsood@ntpc.co.in	
9	ROHIT CHHABRA	AGM, NTPC Corp. Centre	9650993063	rohitchhabra@ntpc.co.in	
10	SUNIT KUMAR	AGM, NTPC, ER-II PATNA	7091091020	Sunit.kumar@ntpc.co.in	
11	KALLOL SARKAR	AGM (Comd), NTPC, Kolkata	8902499534	kallo/sarkar@ntpc-co.in	
12	G.P. SHARMA	A.E. (POWER SYSTEM)	9933865137	cp.su109@golark.co	
13	KAMAL SAPKOTA	JE (POWER, SIKIM)	8670903306	karabloggerkamal@gmail.com	
14	A. De.	AEE (ERPC)	9681932906	alix.erpc@gov.in	
15	Lenin-B	AEE (ERPC)	8235805377	lenin-mt@gov.in	
16	Pinki Debnath	Mgr, ERLDC	9007079914	pinkidebnath@posoco.in	
17	Shabari Pramanick	Dy. Mgr, ERLDC	9007058764	shabari.pramanick@posoco.in	
18	Nadim Ahmed	CM (MO) ERLDC	9432351831	nadim@posoco.in	
19	MANAS DAS	CM (MO), ERLDC	9007070925	manasdas@posoco.in	
20	S. P. Datta.	AGM, ERPC	94433067022	spdatta@rediffmail.com	
21	P. K. DE	AS, ERPC	9831620142	pradef@gnail.com	
22	B. SARKHEL	Consultant ERPC	9433060724		
23	S.M. Jha	Consultant ERPC	6289127726	erpcjha@yahoo.co.in	



Sl. No.	Name	Designation & Organisation	Contact Number	E-mail Id	Signature
24	S.K. Pradhan	AD, ERPC	8249244719	Shishir.1505@gmail.com	Spradhan
25	RAJDEEP BHATTACHARJEE	RE, BSPHCL, Kolkata	9830380689	rekolbbspchl@gmail.com	rajdeep
26	Jayant Kr. Dubey	ESE(PMC), BSPHCL	7320920591	powermanagementcell2018@gmail.com	Jaykr
27	Abhijit Chakrabarty	Sr. Mgr(R&D)-WBSEDCL	7449300220	cebpfb.wbsedcl@gmail.com	Abhijit
28	Santanu Sarkar	CE(PTP), WBSEDCL	7449300215	-do-	Santanu
29	Sacendrayya Pattanayak	SLDC, Odisha	9438907245	2#-Skpattangyal@gmail.com	SOP
30	Harapriya Behera	AGM, GRIDCO	9438907021	hp.gridco@gmail.com	HP
31	Deep Mukherjee	AM, IPCL	3073003635	deep.mukherjee@sptcl.in	DM
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## DSM 5<sup>th</sup> Amendment

1. Cap Rate for All Generators are fixed at 303.04 Paisa/KWH
2. ADC for OI/UD by buyer/seller when grid frequency is 50.10Hz and above @ACP or cap rate 303.04 paisa/kwh whichever is lower”.
3. Allowable nos. of time blocks for sustained deviation increased to 12
4. Band of +/- 20MW with reference to schedule

ERPC, KOLKATA

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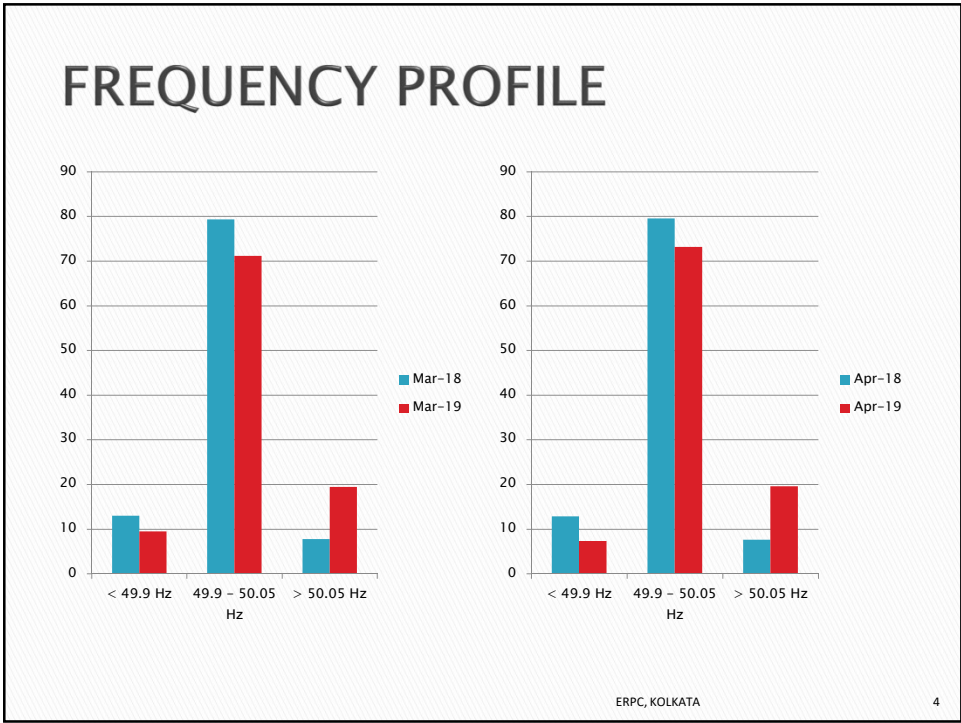
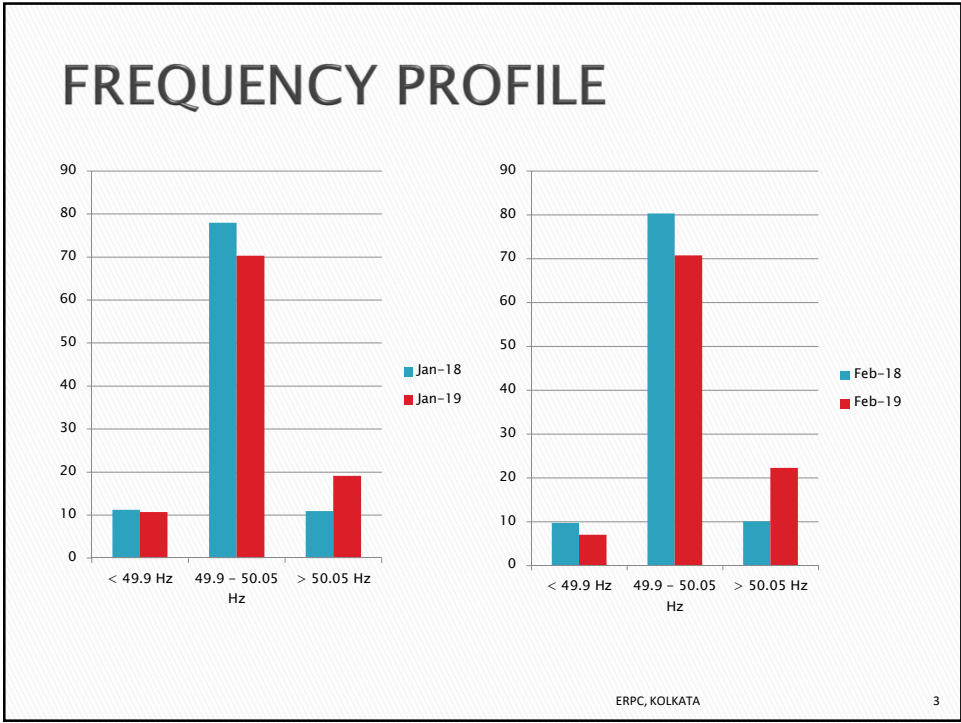
## Sign Change requirement shall not applicable for

1. *renewable energy generators which are regional entities*
2. *run of river projects without pondage*
3. *any infirm injection of power by a generating station prior to CoD of a unit during testing and commissioning activities, in accordance with the Connectivity Regulations.*
4. *any drawl of power by a generating station for the start-up activities of a unit.*
5. *any inter-regional deviations.*
6. *forced outage of a generating station in case of collective transactions on Power Exchanges.*

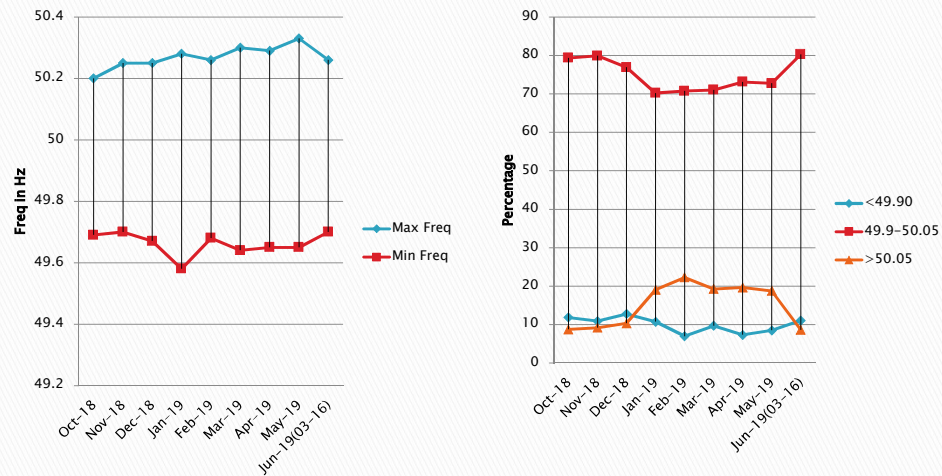
ERPC, KOLKATA

2





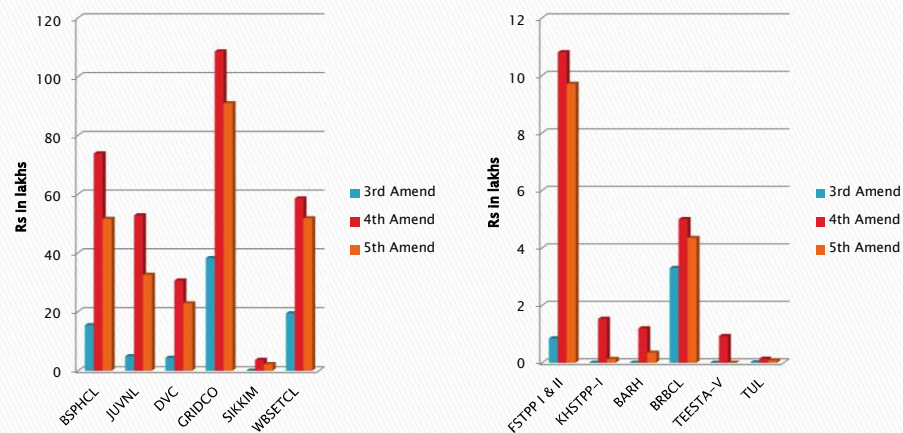
## FREQUENCY PROFILE OCT-18 to JUN-19(16<sup>th</sup>)



ERPC, KOLKATA

5

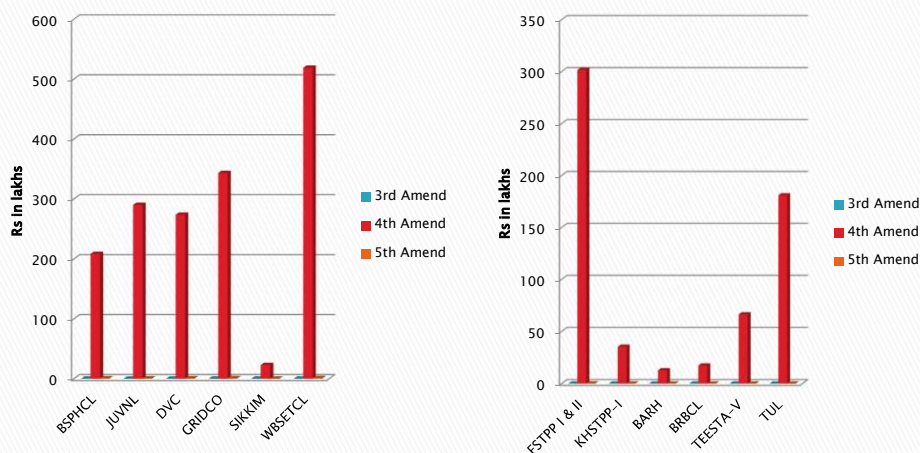
## Blockwise violation Penalty 030619-090619



ERPC, KOLKATA

6

## Sign Change Violation Penalty 030619-090619



ERPC, KOLKATA

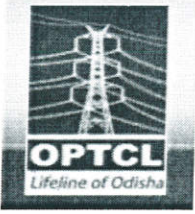
7

## Comparative DSM Pool A/c of Eastern Region for 030619-090619

	3rd Amend	4th Amend	5th Amend
Payable to the Pool	7893.52737	12577.26744	12618.2275
Receivable from the Pool	7407.50545	12005.50262	12053.82217
Diff amt due capping of Gen Stations	486.02193	571.76482	564.40534
ADC due to Blockwise Violation	111.56569	406.90576	315.96729
ADC due to sign change Violation	0	2803.27726	3.48223
<b>POOL BALANCE(ER)</b>	597.58762	3781.94784	883.85486
Payable to RRAS Provider	547.09461	547.09461	547.09461
Receivable from RRAS Provider	70.69858	70.69858	70.69858
Payable to FRAS Provider	0.00875	0.00875	0.00875
<b>TOTAL POOL BALANCE(ER)</b>	<b>121.18284</b>	<b>3305.54306</b>	<b>407.45008</b>

ERPC, KOLKATA

8



# ରାଜ୍ୟ ବିଦ୍ୟୁତ୍ ଭାର ପ୍ରେରଣ କେନ୍ଦ୍ର

## OFFICE OF THE CHIEF LOAD DESPATCHER, SLDC

### ODISHA POWER TRANSMISSION CORPORATION LIMITED

GRIDCO Colony, P.O.- Mancheswar Rly. Colony, Bhubaneswar-751017, FAX-0674- 2748509

CIN – U40102OR2004SGC007553

SGM(PS)-PL-419/2016/

1137<sup>(5)</sup>

Dtd...15/4/19

From

The Chief Load Despatcher,

SLDC, OPTCL Bhubaneswar-17

TO

THE MEMBER SECRETARY,

ERPC, Kolkata.

Ref.: - 1) This office letter No. SGM(PS)-PL-419/2016-1649 (5) dated 30/05/2018.

**Sub: Regarding revision of weekly Deviation charge energy accounting of GRIDCO , due to erroneous less energy data reported at Bolangir PGCIL end SEM of 220kV Bolangir(PG)-Katapali line for the period from 04/05/2016 to 02/12/2018.**

Sir,

With reference to the subject cited above, it was previously intimated to you that, the Bolangir PGCIL end SEM of 220kV Bolangir(PG)-Katapali(OPTCL) tie line was reported erroneous energy data as compared to Katapali(OPTCL) end SEM bearing SL.No. NP7561A from 04/05/2016 to 02/12/2018. Being a tie line, SEM at Bolangir(PG) is used for energy calculation at ERPC, Kolkata. There is a huge difference of energy data of both end meters and the net energy difference is calculated to **be 97281.8 MWh** approximately during the period from 04/05/2016 to 02/12/2018. The net energy comparison sheet of both side of SEM data for all the above weeks and 15 minutes energy data of Katapali OPTCL end SEM for the above period are attached herewith for your ready reference.

Further, it has been observed that the ICTs SEM at Bolangir PGCIL end are considered for energy accounting at ERPC, Kolkata from 02/12/2018 onwards and the above energy data was rectified after engagement of the above ICTs SEM at Bolangir PGCIL.

It is therefore requested to resolve the above matter on next OCC meeting at ERPC, Kolkata.

Encl: As above

Yours faithfully

*[Signature]*  
15/4/19

CHIEF LOAD DESPATCHER  
SLDC, BHUBANESWAR

CC to :

- GM, ERLDC, Kolkata for information and necessary action.
- Director (Commercial), GRIDCO, Bhubaneswar
- Chief General Manager (PP), GRIDCO, Bhubaneswar
- Chief General Manager (O&M), OPTCL, Bhubaneswar





# GRIDCO Limited

(A Govt. of Odisha Undertaking)  
Office of the Senior General Manager (Power Procurement)  
Regd. Office: Janpath, Bhubaneswar, Odisha, PIN-751022  
Tel: 0674-2545308, Fax: 0674-2547180, E-mail: [sgm.pp@gridco.co.in](mailto:sgm.pp@gridco.co.in)  
CIN- L40109OR1995SGC003960

No DC-CGM (PP)-77/2019/

2238 (8)

Dated.

10/6/19

To

The Member Secretary ERPC,  
14, Golf Club Road, Tollygunge,  
Kolkata-700033,  
Fax:-033-24239652  
The Member Secretary SRPC,  
152, Madhava Nagar, Gandhi Nagar,  
Bengaluru, Karnataka-560001

**Sub: Revision of Plant Availability Factor for the Month (PAFM) for April, 2019 with respect to TSTPS-I & TSTPS-II stations of NTPC.**

- Ref: i) Provisional Regional Energy Accounting (REA) of Eastern Region for the month of April'2019 dated 03.05.2019 issued by ERPC.  
ii) Provisional Regional Energy Accounting (REA) of Southern Region for the month of April'2019 dated 03.05.2019 issued by SRPC.  
iii) NTPC invoice dated 06.05.2019 w.r.t TSTPS-I & II Stations.

Sir,

Kind attention is drawn to the REAs issued by ERPC and SRPC for the month of April, 2019 as mentioned under ref.(i) and (ii) above. It is observed from the same that the Plant Availability Factors corresponding to the Declared Capacities of TSTPS-I & TSTPS-II for the said month are 85.045% and 94.955% respectively. In order to achieve the above Plant Availability Factors there is a total requirement of 15,46,218 MT of coal. However, it is observed from the Form-15 submitted by NTPC w.r.t. TSTPS-I & TSTPS-II for April, 2019 that only 12,52,680 MT of coal, inclusive of coal in stock, was available. A detailed calculation of availability and requirement of coal is furnished at **Annexure** for reference. It is a matter of fact that availability of coal is a prime factor for declaration of Plant Availability Factor of a generating station for a particular month. Hence, it appears that NTPC have not considered the availability of coal while declaring day ahead schedule of TSTPS-I & TSTPS-II for April, 2019.

The availability of coal at TSTPS-I & TSTPS-II for April, 2019 correspondence to PAFM% of only 79%, which is far below the Normative level of 85% for recovery of full fixed charges,. However, based on the PAFM% in the REA for April, 2019, NTPC have claimed full monthly fixed charges. In view of the above, it is requested to consider the availability of coal which calculating PAFM%. Accordingly, it is further requested to revise the PAFM% of TSTPS-I & TSTPS-II considering the coal stock availability in the month of April, 2019 for further revision of fixed charges by NTPC for the said month.

Thanking You.

Yours faithfully,

*[Signature]*  
10/06/19  
Chief General Manager (PP)

P.D. back to MS  
*[Signature]*  
21/6/19

Agenda  
for  
Commercial  
Committee  
Mtg.

13/6/19

SE (Kefri coal)

Union (AEE)

*[Signature]*  
22/6/19



**Bihar State Power (Holding) Company Limited, Patna**

Power Management Cell

(Regd. Office: VidyutBhawan, Bailey Road, Patna)

Email: - pmc@bsphcl.co.in

Letter No: 174 /Patna  
H.I.S cell-1113/18 (Part)Dated: 29/05/2019

From;

**Arun Kumar Sinha**  
Director (Technical)

To,

**The Member Secretary,**  
14 Golf Club Road, Tollygunge,  
Kolkata-700033  
mserpc-power@nic.in**Sub:** Mismatch in the SCADA data and SEM data**Ref:** DSM Regulation and its amendments

Sir,

It may be aware that notwithstanding the fact that all efforts are taken by Discoms to avoid deviation from schedule, there are episodes of DSM violation on many occasions mainly due to factors beyond our control like sudden change in weather conditions, breakdown of transmission/sub-transmission lines, tripping of generating units, over delay on the part of generators in bringing back the unit after any tripping etc. This causes very dearly due to prevailing stringent norms for DSM violation.

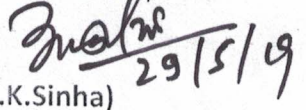
In course of analysing the DSM violation during the period from 16.03.2019 to 21.03.2019 for BSPHCL, a lot of mismatch has been observed in quantum of power (MW) and frequency as per SCADA data and SEM data. A calculation sheet for the above period is enclosed for reference.

You may agree that the Bihar SLDC manages the scheduling as per SCADA data available before them and hence a mismatch with SEM data (discovered later through DSM bill submitted by ERPC), lands us in a situation where we appear to have done large violation of DSM whereas as per our data it was not so.

It is therefore requested that a meeting may be arranged with ERLDC officials at Kolkata on any date of convenience to sort out the issue and to find a way to minimize the problem.


**Encl:** As stated.

Yours faithfully

  
(A.K. Sinha)

EE (Law)


Pl. discuss -

  
21/6/19

...

Speed post

PD 2 back.

  
21/6/19

Date	DSM Amount (As per ERPC)	DSM Amount (As per SCADA)	Difference (Rs.)	Error %
16-03-2019	₹ -58,10,436.56	₹ -54,13,655.47	₹ 3,96,781.09	-6.83%
17-03-2019	₹ -64,62,211.12	₹ 6,198.74	₹ 64,68,409.86	-100.10%
18-03-2019	₹ -40,18,141.08	₹ -15,76,975.58	₹ 24,41,165.50	-60.75%
19-03-2019	₹ 3,62,283.87	₹ 12,92,052.68	₹ 9,29,768.80	256.64%
20-03-2019	₹ -8,48,810.27	₹ 18,65,775.95	₹ 27,14,586.22	-319.81%
21-03-2019	₹ -24,28,394.50	₹ 49,14,846.35	₹ 73,43,240.86	-302.39%
Total	₹ -192,05,709.66	₹ 10,88,242.67	₹ 202,93,952.33	-105.67%



No. 5-11/7/2017-BBMB (MoP)  
Government of India  
Ministry of Power

Shram Shakti Bhawan, Rafi Marg  
New Delhi, Dated the 7<sup>th</sup> March, 2019

To,  
The Chairperson, CEA, New Delhi  
The Secretary, CERC, New Delhi  
The Member Secretary, ERPC, Kolkata  
The Member Secretary, NERPC, Shillong

**Subject: Allocation of Power from Mangdechhu Hydro Electric Project (720 MW), Bhutan to the States of Northern Eastern Region (NER) and Eastern Region (ER).**

Sir/Madam,

I am directed to refer to this Ministry's letter No. 5-11/7/2017-BBMB(MoP) dated 20.12.2018 on the subject mentioned above (copy enclosed) and to say that as Govt. of Sikkim has denied for the power allocated to them and Govt. of Jharkhand has not conveyed their acceptance for allocation of power, therefore, it has been decided that the power allocated to Sikkim and Jharkhand, which is 25.97 MW and 73.44 MW, respectively, is to be reallocated to West Bengal and Bihar in the same proportion, i.e., 20.89 : 23.96, respectively.

2. Accordingly, in supersession of this Ministry's earlier allocation letter No. 5-11/7/2017-BBMB(MoP) dated 20.12.2018, fresh allocation of Power from Mangdechhu Hydro Electric Project (720 MW) in Bhutan after its commissioning, is hereby made, to the States of Northern Eastern Region (NER) and Eastern Region (ER) as under:

Total Power to be allocated from Mangdechhu HEP	-	720 MW
Unallocated Power (15%)	-	108 MW
Balance Power	-	612 MW

The balance Power of 612 MW from Mangdechhu HEP may be allocated to the constituents of the Northern Eastern Region and Eastern Region as under:

Sl. No.	State	% Share	Maximum Allocation (MW)
1	Assam	17.01	122.50
2	Bihar	31.34	225.64
3	Odisha	9.33	67.15
4	West Bengal	27.32	196.71
	TOTAL	85.00	612

*See*  
7/3/19



-2-

3. The actual energy generated by the project, after taking into account the auxiliary consumption, will be distributed among the beneficiaries as indicated above. As and when, a part of the Mangdechhu HEP power is utilized by the Bhutan for its own use, the allocation to the Indian States shall also be revised in the above proportion accordingly.
4. Tariff and other terms and conditions for the sale of power will be mutually determined by Government of India and Royal Government of Bhutan at the time of commissioning of the project as per the provisions of Inter Government Agreement between the two countries.
5. The above allocation will further be subject to the following conditions:
  - I. The beneficiary States/UTs/Entities will open Letter of Credits (LCs) of requisite amount to ensure timely payment for the power supplied and will also sign bulk power supply agreements.
  - II. The beneficiaries will ensure compliance with the directives/guidelines on the subject issued by the Government from time to time.
  - III. The allocations/entitlements offered to beneficiary States/UTs/Entities will also be subject to entering into suitable power purchase agreement by these States/UTs/Entities.
6. It is further stipulated that Power allocated from Mangdechhu Hydro Electric Project (720 MW) in Bhutan should be utilized mainly in rural areas.
7. This issues with the approval of Hon'ble Minister of State for Power & NRE.

Yours faithfully,

  
(Kundan Kumar)


Under Secretary to the Govt. of India

Telefax: 23766242

E-mail: kundan.k@nic.in

Copy to:

1. Addl. Chief Secretary (Power), Government of West Bengal, Kolkata
2. Secretary (Power), Government of Bihar, Patna
3. Principal Secretary (Power), Government of Jharkhand
4. Principal Secretary, Department of Energy, Government of Odisha
5. Addl. Chief Secretary (Power), Government of Assam
6. Secretary (Power), Government of Sikkim
7. Member (GO&D)/Member (PS)/Member (Hydro), CEA, New Delhi
8. Joint Secretary (North), MEA, South Block, New Delhi
9. PS to Minister of State (I/C) for Power & NRE.
10. PPS to Secretary (P)/PS to All Joint Secretaries/Director (OM)/Director (Trans)/DS(H-II), Ministry of Power.

  
3/3/19

276538/2018/BBMB SECTION

No. 5-11/7/2017-BBMB (MoP)

Government of India

Ministry of Power

Shram Shakti Bhawan, Rafi Marg, New Delhi

Dated the 20<sup>th</sup> December, 2018

To,

The Chairperson, CEA, New Delhi

The Secretary, CERC, New Delhi

The Member Secretary, ERPC, Kolkata

The Member Secretary, NERPC, Shillong

**Subject: Allocation of Power from Mangdechhu Hydro Electric Project (720 MW), Bhutan to the States of Northern Eastern Region (NER) and Eastern Region (ER).**

Sir/Madam,

I am directed to refer to this Ministry's letter No. 11/01/2008-BBMB(Vol.VII) dated 24 July 2015 regarding allocation of Power from Punatsangchhu-I (1200 MW), Punatsangchhu-II (1020 MW) and Mangdechhu (720 MW) HEPs in Bhutan to the constituents of Northern Eastern Region (NER) and Eastern Region (ER) constituent States and to say that Punatsangchhu-I and Punatsangchhu-II HEPs in Bhutan have been delayed and at present only Mangdechhu Hydro Electric Project is expected to come up by Jan' 2019. Therefore, the matter has been considered in this Ministry and it was decided that fresh allocation of Power may be made to the States of Northern Eastern Region (NER) and Eastern Region (ER) considering the Power only from Mangdechhu Hydro Electric Project (720 MW) in Bhutan, in supersession of this Ministry's earlier allocation made vide letter No. 11/01/2008-BBMB(Vol.VII) dated 24 July 2015.

2. Availability of Power from Mangdechhu Hydro Electric Project (720 MW) in Bhutan would be as follows:

Total Power to be allocated from Mangdechhu HEP – 720 MW

Unallocated Power (15%) – 108 MW

Balance Power – 612 MW

3. It has been decided with the approval of Competent Authority that the balance Power of 612 MW from Mangdechhu Hydro Electric Project, after its commissioning, may be allocated to the constituents of the Northern Eastern Region and Eastern Region as under:

Sl. No.	State	% Share	Maximum Allocation (MW)
1	Assam	17.01	122.50
2	Bihar	23.96	172.53
3	Odisha	9.33	67.15
4	West Bengal	20.89	150.41
5	Sikkim	3.61	25.97
6	Jharkhand	10.20	73.44
	TOTAL	85.00	612





276538/2018/BBMB SECTION

-2-

4. The actual energy generated by the project, after taking into account the auxiliary consumption, will be distributed among the beneficiaries as indicated above. As and when, a part of the Mangdechhu HEP power is utilized by the Bhutan for its own use, the allocation to the Indian States shall also be revised in the above proportion accordingly.
5. Tariff and other terms and conditions for the sale of power will be mutually determined by Government of India and Royal Government of Bhutan at the time of commissioning of the project as per the provisions of Inter Government Agreement between the two countries.
6. The above allocation will further be subject to the following conditions:
  - I. The beneficiary States/UTs/Entities will open Letter of Credits (LCs) of requisite amount to ensure timely payment for the power supplied and will also sign bulk power supply agreements.
  - II. The beneficiaries will ensure compliance with the directives/guidelines on the subject issued by the Government from time to time.
  - III. The allocations/entitlements offered to beneficiary States/UTs/Entities will also be subject to entering into suitable power purchase agreement by these States/UTs/Entities.
6. It is further stipulated that Power allocated from Mangdechhu Hydro Electric Project (720 MW) in Bhutan should be utilized mainly in rural areas.
7. This issues with the approval of Hon'ble Minister of State for Power & NRE.

Yours faithfully,

(Kundan Kumar)

Under Secretary to the Govt. of India

Telefax: 23766242

E-mail: kundan.k@nic.in

Copy to:

1. Addl. Chief Secretary (Power), Government of West Bengal, Kolkata
2. Secretary (Power), Government of Bihar, Patna
3. Principal Secretary (Power), Government of Jharkhand
4. Principal Secretary, Department of Energy, Government of Odisha
5. Secretary/Commissioner (Power), Government of Manipur
6. Commissioner & Secretary (Power), Government of Nagaland
7. Addl. Chief Secretary (Power), Government of Assam
8. Secretary (Power), Government of Sikkim
9. Member (GO&D)/Member (PS)/Member (Hydro), CEA, New Delhi
10. Joint Secretary (North), MEA, South Block, New Delhi
11. PS to Minister of State (I/C) for Power & NRE.
12. PPS to Secretary (P)/PS to All Joint Secretaries/Director (OM)/Director (Trans)/DS(H-II), Ministry of Power.

**Details of Substations in AMR project for IPPs and OPTCL:**

<b>Substations under IPPR</b>	
<b>Substation Name</b>	<b>Total Meter</b>
ADHUNIK(APNRL)	2
ADHUNIK(APNRL)	2
CHUZACHEN(CZN)	7
IND-BARATH(IBR)	6
JINDAL	4
MAITHON POWER LTD (MRB)	10
MAITHON POWER LTD (MRB)	2
STERLITE(SEL)	6
STERLITE(SEL)	4
STERLITE(SEL)	4
OPGC	10
<b>11</b>	<b>57</b>

<b>Substations under OPTCL</b>	
<b>Substation Name</b>	<b>Total Meter</b>
BALASORE(BLS)	2
BANGRIPOSHI	1
BARHI(BAR)	1
BARIPADA(BAR)	1
BUDHIPADAR(BUD)	3
INDRAVATI(IND)	1
JEYNAGAR(JYN)	2
JODA(JOD)	3
KATAPALLI(KTP)	1
MENDHASAL(MEN)	2
MIRMUNDALI(MML)	5
NEW DUBRI(DBR)	2
RENGALI(REG)	2
ROURKELA(ROU)	1
SADEIPALI	1
TARKERA	2
<b>16</b>	<b>30</b>



## SUMMARY OF DEVIATION CHARGE RECEIPT AND PAYMENT STATUS

BILL from 18-19 upto 02.06.19 (upto Week -9 of 2019 - 20)

Last Payment Disbursement Date - 24.06.19

Figures in Rs. Lakhs

CONSTITUENTS	Receivable	Received	Payable	Paid	Outstanding
WR	223.81598	173.67688	328163.11156	334081.90313	5968.93067
SR	153576.85032	150169.15669	10953.53349	10981.39400	3435.55414
NER	77036.85655	71792.76945	63197.27067	62740.58813	4787.40456
NR	144184.56387	132766.38568	47131.59387	36008.10867	294.69299
BSPHCL	9709.08755	5067.06622	954.38564	0.00000	3687.63569
JUVNL	14969.89991	12091.90273	38.35578	0.00000	2839.64140
DVC	21576.65567	21247.03926	745.74214	743.35204	327.22631
GRIDCO	24808.05633	24450.37112	111.32422	111.32422	357.68521
WBSETCL	24620.16066	24589.44081	260.84409	277.27518	47.15094
SIKKIM	984.06277	0.00000	761.27369	254.38587	477.17495
NTPC	8938.62338	8398.32665	180.29189	4.37476	364.37960
NHPC	129.62515	46.04945	2631.89362	2548.31792	0.00000
MPL	235.04361	242.30562	336.56733	343.82934	0.00000
MTPS STG-II	2040.97910	2021.74026	19.23884	0.00000	0.00000
APNRL	608.15907	204.84088	258.50165	0.00000	144.81654
CHUZACHEN (GATI)	151.02066	126.39402	431.17550	407.62851	1.07965
NVVN (IND-BNG)	3515.29355	3202.36255	180.95715	180.95715	312.93100
JITPL	476.43336	468.95791	362.26213	362.26213	7.47545
GMR	2062.22724	1668.94983	30.99791	30.99791	393.27741
IND BARATH	5.26491	0.00000	0.00000	0.00000	5.26491
TPTCL(DAGACHU)	4817.68973	4790.79189	250.61610	251.31409	27.59583
JLHEP (DANS ENERGY)	380.66485	345.59939	309.77283	309.77283	35.06546
BRBCL(NABINAGAR)	652.18269	625.87764	668.89401	663.58945	21.00049
NVVN (IND-NEPAL)	4490.60347	4454.73199	182.58880	182.58880	35.87148
HVDC SASARAM	62.39090	43.54631	153.72946	153.72946	18.84459
HVDC-ALIPURDUAR	122.36113	100.01590	207.58822	208.51625	23.27326
TEESTA-III(TUL)	541.11275	542.24026	1347.84586	1348.97337	0.00000
DIKCHU	102.65992	29.55136	64.25582	81.49213	90.34472
Tashiding (THEP)	462.90047	444.68103	456.59364	460.15071	21.77651
OPGC	1292.53008	1292.53004	296.74936	296.74936	0.00004
NPGC	1620.62899	1620.62899	598.32310	598.32310	0.00000
<b>TOTAL</b>	<b>504398.40462</b>	<b>473017.93081</b>	<b>470977.17940</b>	<b>454516.30197</b>	

% Realization

93.78

As on

24.06.19

Receivable:

Receivable by ER POOL

Payable

Payable by ER POOL

Received

Received by ER POOL

Paid

Paid by ER POOL

"- ve" Payable by ER pool

"+ ve" Receivable by ER pool

## Annexure-B6.2

### Deviation Interest Bill due to delay payment during FY 2018-19

As on  
31.05.2019

Sl No.	Name of Constituents	Interest amt payable by party (in ₹)	Amount paid/recovered by party(in ₹)	Interest amt received by party(in ₹)	Amt paid to the party(in ₹)	Outstanding Interest as on 24.06.19
1	BSPHCL	11958502	0	0	0	11958502
2	JUVNL	29993506	29939285	0	0	54221
3	DVC	170088	0	0	0	170088
4	GRIDCO	0	0	520	0	-520
5	WBSETCL	0	0	1199	1199	0
6	SIKKIM	0	0	590704	0	-590704
7	NTPC	35493	0	0	0	35493
8	NHPC	0	0	23828	23828	0
9	MPL	0	0	8387	7596	-791
10	APNRL	270694	270694	0	0	0
11	CHUZACHEN	9527	0	0	0	9527
12	NVVN(IND-BD)	0	0	1659	1659	0
13	JITPL	58	0	0	0	58
14	GMR	1021705	0	0	0	1021705
15	IND BARATH	78784	0	0	0	78784
16	TPTCL(DAGACHU)	61182	0	0	0	61182
17	JLHEP	12876	0	0	0	12876
18	BRBCL	7602	0	0	0	7602
19	NVVN(IND-NEP)	8314	0	0	0	8314
20	TUL(TEESTA-III)	0	0	17676	17676	0
21	DIKCHU	7180	0	0	0	7180
22	HVDC-PSL	11696	0	0	0	11696
23	HVDC-ALPD	0	0	5659	0	-5659
24	TASHIDING	119055	0	0	0	119055
25	OPGC	0	0	0	0	0
26	NPGC	77385	0	0	0	77385
27	KBUNL	24623	21715	0	0	2908
28	WR	0	0	68986972	18923552	-50063420
29	SR	0	0	99259	0	-99259
30	NR	118477440	0	0	0	118477440
31	NER	1284917	0	0	0	1284917
	<b>Total</b>	<b>163630627</b>	<b>30231694</b>	<b>69735863</b>	<b>18975510</b>	<b>82638580</b>

### **Annexure - B6.3**

## **STATUS OF REACTIVE CHARGES**

RECEIVABLE IN ER POOL AS PER PUBLISHED A/C FROM 01.04.19 TO 02.06.19(2019 -20)  
AS ON 19.06.19

CONSTITUENT	AMOUNT RECEIVABLE IN THE POOL (Rs.)	AMOUNT RECEIVED IN THE POOL (Rs.)	OUTSTANDING (Rs.)
WBSETCL	393115405	377088963	16026442
DVC	2135995	2135995	0
BSPHCL	4631550	4631550	0
SIKKIM	360499	0	360499
JUVNL	3538309	219632	3318677
GRIDCO	70038097	70038097	0
TOTAL	473819855	454114237	19705618

**Annexure - B6.5 & B6.6**

**SUMMARY OF RRAS CHARGE RECEIPT AND PAYMENT STATUS**

**BILL from 01.04.19 TO 02.06.19(upto Week -9 of 2019 - 20)**

**Last Payment Disbursement Date -24.06.19**

**Figures in Rs. Lakhs**

CONSTITUENTS	Receivable	Received	Payable	Paid	Outstanding
FSTPP STG-I & II	294.76049	269.02470	311.62233	273.75911	-12.12743
FSTPP STG-III	89.13611	83.33996	111.22023	102.61341	-2.81066
KhSTPP STG-I	175.45688	160.14901	107.00387	104.48078	12.78478
KhSTPP STG-II	115.00961	105.60255	147.70481	143.90009	5.60234
TSTPP STG-I	43.48483	39.68200	16.69078	16.28451	3.39657
BARH STG-II	193.65926	177.41474	107.74692	91.65348	0.15109
BRBCL (Nabinagar)	94.15409	94.15412	420.86991	420.86991	0.00000
KBUNL (MTPS-II)	115.32677	115.32679	354.33272	354.33271	0.00000
<b>TOTAL</b>	<b>1120.98804</b>	<b>1044.69386</b>	<b>1577.19157</b>	<b>1507.89400</b>	<b>6.99663</b>

**As on**

**24.06.19**

Receivable:

Receivable by ER POOL

Payable

Payable by ER POOL

Received

Received by ER POOL

Paid

Paid by ER POOL

"- ve" Payable by ER pool

"+ ve" Receivable by ER pool

**SUMMARY OF FRAS CHARGE RECEIPT AND PAYMENT STATUS**

**BILL from 01-Apr-19 TO 6-Jun-19 (upto Week - 9 of 2019 - 20)**

**Last Payment Disbursement Date -24.06.19**

**Figures in Rs. Lakhs**

CONSTITUENTS	Receivable	Received	Payable	Paid	Outstanding
NHPC	0.00000	0.00000	1.27341	1.27341	0.00000
<b>TOTAL</b>	<b>0.00000</b>	<b>0.00000</b>	<b>1.27341</b>	<b>1.27341</b>	<b>0.00000</b>

**As on**

**24.06.19**

Receivable:

Receivable by ER POOL

Payable

Payable by ER POOL

Received

Received by ER POOL

Paid

Paid by ER POOL

"- ve" Payable by ER pool

"+ ve" Receivable by ER pool



**Annexure - B6.7**

**SUMMARY OF CONGESTION CHARGE RECEIPT AND PAYMENT STATUS**

**Bill upto 07.01.2013  
Last Payment Disbursement Date - 13.05.2013**

**Figures in Rs. Lakhs**

CONSTITUENTS	Receivable	Received	Payable	Paid	Outstanding
BSEB	0.67823	0.67823	0.39118	0.39118	0.00000
JSEB	16.37889	16.37889	2.61323	2.61323	0.00000
DVC	0.00000	0.00000	6.24040	6.24040	0.00000
GRIDCO	5.34488	5.34488	0.00000	0.00000	0.00000
WBSETCL	0.00000	7.42249	4.32834	11.75083	0.00000
SIKKIM	0.65609	6.20909	0.00000	5.55300	0.00000
NTPC	6.93152	6.93152	7.42249	7.42249	0.00000
NHPC	0.70445	0.70445	0.05875	0.05875	0.00000
MPL	4.81694	4.81694	0.85169	0.85169	0.00000
STERLITE	7.70504	7.70504	0.00000	0.00000	0.00000
Pool Balance	0.00000	0.00000	21.30996	21.30996	0.00000
<b>TOTAL</b>	<b>43.21604</b>	<b>56.19153</b>	<b>43.21604</b>	<b>56.19153</b>	<b>0.00000</b>

**% Realization**

Receivable: Receivable by ER POOL

Received: Received by ER POOL

"- ve" Payable by ER pool

**As on 31.05.2015**

Payable: Payable by ER POOL

Paid: Paid by ER POOL

"+ ve" Receivable by ER pool

<b>DETAILS OF DISBURSEMENT TO POWER SYSTEM DEVELOPMENT FUND</b>
---

SI No	Nature of Amount	Amount transferred to PSDF (Rs in Lac)	Date of Disbursement	Remarks
1	Opening Balance (upto 31.03.16)	86464.58111		
2	Addl. Dev	83.33978	01.04.16	Addl Dev Charge 15-16
3	Addl. Dev	43.77416	05.04.16	Addl Dev Charge 15-16
4	Addl. Dev	31.83984	07.04.16	Addl Dev Charge 15-16
5	Addl. Dev	52.08622	11.04.16	Addl Dev Charge 15-16
6	Addl. Dev	107.23773	13.04.16	Addl Dev Charge 15-16
7	Addl. Dev	220.15330	19.04.16	Addl Dev Charge 15-16
8	Addl. Dev	76.84824	21.04.16	Addl Dev Charge 15-16
9	Addl. Dev	20.84026	26.04.16	DSM Interest 2014-15(Paid by APNRL)
10	Addl. Dev	10.01920	26.04.16	Addl Dev Charge 16-17
11	Addl. Dev	432.25696	28.04.16	Addl Dev Charge 16-17
12	Addl. Dev	117.08707	02.05.16	Addl Dev Charge 16-17
13	Addl. Dev	41.65418	04.05.16	Addl Dev Charge 16-17
14	Addl. Dev	9.17422	06.05.16	Addl Dev Charge 16-17
15	Addl. Dev	105.15627	06.05.16	Addl Dev Charge 15-16
16	Deviation Interest	38.50018	06.05.16	Deviation Interest
17	Addl. Dev	35.54178	10.05.16	Addl Dev Charge 16-17
18	Addl. Dev	448.87953	31.05.16	Addl Dev Charge 16-17
19	Addl. Dev	170.51274	29.06.16	Addl Dev Charge 16-17
20	Reactive Energy Charge	530.57497	28.09.16	Reactive Charges_15-16
21	Reactive Energy Charge	1000.00000	26.12.16	Reactive Charges_16-17
27	Reactive Energy Charge	248.26904	31.07.17	Reactive Charges_17-18
28	Reactive Energy Charge	128.44284	29.08.17	Reactive Charges_17-18
29	Reactive Energy Charge	103.22685	26.09.17	Reactive Charges_17-18
30	Reactive Energy Charge	249.14078	31.10.17	Reactive Charges_17-18
31	Reactive Energy Charge	172.20693	30.11.17	Reactive Charges_17-18
32	Reactive Energy Charge	200.00000	15.12.17	Reactive Charges_17-18
33	Reactive Energy Charge	100.00000	05.01.18	Reactive Charges_17-18
34	Reactive Energy Charge	558.45339	06.02.18	Reactive Charges_17-18
35	Reactive Energy Charge	171.95546	06.03.18	Reactive Charges_17-18
36	Reactive Energy Charge	129.35497	04.04.18	Reactive Charges_17-18
37	Reactive Energy Charge	126.21494	07.05.18	Reactive Charges_18-19
38	Reactive Energy Charge	183.31081	06.06.18	Reactive Charges_18-19
39	Reactive Energy Charge	215.58816	05.07.18	Reactive Charges_18-19
40	Reactive Energy Charge	176.54245	03.08.18	Reactive Charges_18-19
41	Reactive Energy Charge	39.54556	06.09.18	Reactive Charges_18-19
42	Reactive Energy Charge	34.03973	01.10.18	Reactive Charges_18-19
43	Reactive Energy Charge	74.57236	05.11.18	Reactive Charges_18-19
44	Reactive Energy Charge	40.66623	04.12.18	Reactive Charges_18-19
45	Reactive Energy Charge	236.89035	02.01.19	Reactive Charges_18-19 & 15-16
46	Reactive Energy Charge	300.04546	05.02.19	Reactive Charges_18-19 & 15-16
47	Reactive Energy Charge	233.27998	05.03.19	Reactive Charges_18-19
48	Reactive Energy Charge	105.79202	04.04.19	Reactive Charges_18-19
49	Reactive Energy Charge	287.48448	03.05.19	Reactive Charges_18-19
50	Reactive Energy Charge	129.69559	03.06.19	Reactive Charges_18-19
	<b>Total</b>	<b>96419.13889</b>		

## Annexure-B7.1

	2017-18				2018-19			
DSM account Reconciliation Status of ER constituents and Inter Regional								
Name of The Utility	Q1(04.07.17)	Q2(09.10.17)	Q3(08.01.18)	Q4(09.04.18)	Q1(19.07.18)	Q2(08.10.18)	Q3(09.01.19)	Q4(18.04.19)
Inter Regional								
WR	NO	NO	NO	NO	NO	NO	NO	NO
SR	YES	NO	NO	NO	YES	YES	NO	NO
NER	YES	NO	YES	NO	YES	NO	NO	NO
NR	NO	NO	YES	NO	NO	NO	NO	NO
Intra Regional								
BSPHCL	YES	YES	YES	YES	YES	YES	YES	NO
JUVNL	YES	YES	YES	YES	YES	YES	YES	NO
DVC	YES	YES	YES	YES	YES	YES	YES	YES
GRIDCO	YES	YES	YES	YES	YES	YES	YES	YES
WBSETCL	YES	YES	YES	YES	YES	YES	YES	YES
SIKKIM	YES	YES	YES	YES	YES	YES	YES	NO
NTPC	YES	YES	YES	YES	YES	YES	YES	NO
NHPC	YES	YES	YES	YES	YES	YES	YES	YES
MPL	YES	YES	YES	YES	YES	YES	YES	YES
KBUNL	N/A	N/A	N/A	N/A	YES	YES	YES	YES
APNRL	YES	YES	YES	YES	YES	YES	YES	YES
CHUZACHEN(GATI)	YES	YES	YES	YES	YES	YES	YES	YES
NVVN(Ind-Bng)	YES	YES	YES	YES	YES	YES	YES	YES
NVVN(Ind-Nep)	YES	YES	YES	YES	YES	YES	YES	YES
GMR	YES	YES	YES	YES	YES	YES	YES	YES
JITPL	YES	YES	YES	YES	YES	YES	YES	YES
INBEUL	NO	NO	NO	NO	NO	NO	NO	NO
TPTCL (DAGACHU)	YES	YES	YES	YES	YES	YES	YES	YES
JLHEP(DANS ENERGY)	YES	YES	YES	YES	YES	YES	YES	YES
BRBCL	YES	YES	YES	YES	YES	YES	YES	NO
POWERGRID (ER-I)	YES	YES	YES	YES	YES	YES	YES	NO
POWERGRID (ER-II)	N/A	N/A	YES	YES	YES	YES	YES	NO
TUL (TEESTA-III)	YES	YES	YES	YES	YES	YES	YES	NO
DIKCHU	YES	YES	YES	YES	YES	YES	NO	NO
SHIGA (TASHIDING)	N/A	N/A	YES	YES	YES	YES	YES	YES
OPGC	N/A	N/A	N/A	YES	YES	YES	YES	NO
NPGC	N/A	N/A	N/A	N/A	YES	YES	YES	NO

Note:

(1)The dates in the bracket indicates the date of sending the Reconciliation statements by ERLDC to utilities.

(2) YES Indicates that signed reconciliation statement received by ERLDC

(3) NO Indicates that signed reconciliation statement is not received by ERLDC

### Reactive Account Reconciliation Status

	2017-18				2018-19			
Reactive account Reconciliation Status of ER constituents								
Name of The Utility	Q1(04.07.17)	Q2(09.10.17)	Q3(09.01.18)	Q4(09.04.18)	Q1(19.07.18)	Q2(08.10.18)	Q3(09.01.19)	Q4(18.04.19)
Intra Regional								
BSPHCL	N/A	N/A	N/A	N/A	N/A	N/A	NO	NO
JUVNL	N/A	N/A	N/A	N/A	N/A	YES	YES	NO
DVC	N/A	N/A	N/A	N/A	N/A	N/A	NO	YES
GRIDCO	N/A	YES	YES	YES	N/A	N/A	YES	YES
WBSETCL	YES	YES	YES	YES	YES	YES	YES	YES
SIKKIM	N/A	N/A	YES	YES	YES	YES	YES	NO

Note:

(1) The dates in the bracket indicates the date of sending the Reconciliation statements by ERLDC to utilities.

(2) YES Indicates that signed reconciliation statement received by ERLDC

(3) NO Indicates that signed reconciliation statement is not received by ERLDC

### Annexure-B7.5

#### Reconciliation Between Open Access department of ERLDC and SLDCs, STUs

Sl. No.	STUs / SLDCs Name	Quarter-I	Quarter-II	Quarter-III	Quarter-IV
	Date of Issuance	16-07-2018	15-10-2018	18-01-2019	18-04-2019
1	West Bengal - SLDC and STU	YES	NO	YES	YES
2	DVC - SLDC	YES	YES	YES	YES
3	OPTCL-SLDC and STU	YES	YES	YES	YES

#### Reconciliation Between Open Access department of ERLDC and Applicants

Sl. No.	Applicants Name	Quarter-I	Quarter-II	Quarter-III	Quarter-IV
	Date of Issuance	25-07-2018	15-10-2018	17-01-2019	12-04-2019
1	Calcutta Electric Supply Company	YES	NA	NA	NA
2	Jindal India Thermal Power Limited	YES	YES	YES	YES
3	Jharkhand Urja Vitaran Nigam Limited	YES	YES	YES	NO
4	West Bengal State Distribution Company Limited	YES	NO	NO	NA

## Annexure - B7.6

**Current Status of Letter of Credit (LC) amount against DSM charges for ER constituents***Figures in Lacs of Rupees*

SI No	ER Constituents	No. of weeks in which Deviation Charge payable	No of times payment was delayed during 2017-18	Total Deviation charges payable to pool during 2017-18	Average weekly Deviation Charge liability	LC Amount	Due date of expiry	Remarks
					(C)/52 weeks			
		(A)	(B)	(C)	(D)	(E)	(F)	(G)
1	JUVNL	51	51	12409.04823	238.63554	262.49910	12.03.2020	Opened for 221.83872 Lac
2	APNRL	32	32	432.08168	8.30926	9.14019	31.12.2019	Opened for 6.51143 Lacs
3	JITPL	20	1	293.68897	5.64786	6.21265	31.03.2020	Opened for 13.19100 Lac
4	TPTCL(DAGACHU)	49	6	4589.54652	88.26051	97.08656	31.03.2020	Opened for 97.08656 Lacs
5	JLHEP (DANS ENERGY)	25	10	247.86542	4.76664	5.24331	30.11.2019	Opened for 13.79780 Lacs
6	BSPHCL	42	42	7816.20467	150.31163	165.34279	Expired on 16.11.2018	Letter issued
7	SIKKIM	23	23	909.21958	17.48499	19.23349	Expired on 07.03.2018	Letter issued
8	CHUZACHEN (GATI)	20	12	115.63343	2.22372	2.44609	Expired on 31.03.2019	Letter issued
9	GMR	42	15	1494.22674	28.73513	31.60864	Expired on 18.04.2019	Letter issued
10	BRBCL(NABINAGAR)	21	6	248.44057	4.77770	5.25547	Expired on 30.04.2019	Letter issued
11	DIKCHU	19	7	128.3546	2.46836	2.71519	Expired on 20.05.2019	Letter issued
12	DVC	45	4	19887.13946	382.44499	420.68949	Not opened	Letter issued
13	GRIDCO	50	2	22550.74179	433.66811	477.03492	Not opened	Letter issued
14	NTPC	52	4	6247.87876	120.15151	132.16667	Not opened	Letter issued
15	MTPS STG-II	52	4	1785.94282	34.34505	37.77956	Not opened	Letter issued
16	NVVN (IND-BNG)	38	1	1939.58895	37.29979	41.02977	Not opened	Letter issued
17	IND BARATH	N/A	N/A	5.26491	0.10125	0.11137	Not opened	Letter issued
18	NVVN (IND-NEPAL)	43	1	4255.71388	81.84065	90.02472	Not opened	Letter issued
19	HVDC SASARAM	9	4	51.11504	0.98298	1.08128	Not opened	Letter issued
20	HVDC-ALIPURDUAR	7	2	99.14089	1.90656	2.09721	Not opened	Letter issued
21	Tashiding (THEP)	35	23	329.24531	6.33164	6.96480	Not opened	Letter issued
22	NPGC	45	12	1200.2697	23.08211	25.39032	Not opened	Letter issued

## Annexure-B10

Status Report of PGCIL AMR		Date:21-Jun-19
Summary		
Total Substation	150	
Communicating Sub Station	123	
Non-communicating Sub Station	27	
Total Meter	998	
Communicating meter	865	
Non-communicating Meter	133	

Details of Non-communicating Sub Stations				
SNO	Utility Name	Substation Name	Total Meter	Probable issue
1	BIHAR	ARAH(ARB)	1	GPRS issue.
2	WEST BENGAL	BIRPARA(BIR)	2	Both of the meter has been replaced by Genus meter. TCS will visit and connect those Genus meters shortly .
3	NTPC	DARLIPALLI	4	GPRS issue. Need PGCIL LAN provision .
4	BIHAR	DEHRI(DEH)	3	GPRS issue.
5	JHARKHAND	DUMKA(DUM)	2	GPRS issue.
6	BIHAR	FATUA(FAT)	1	Meter RS-485 port issue. Request to replace the meter.
7	BIHAR	HATIA(HAT)	2	One meter is at Hanged condition, need to restart.
8	IPPR	IND-BARATH(IBR)	6	Unable to communicate with substation regarding AMC work .
9	GRIDCO	JODA(JOD)	3	GPRS issue.
10	SIKKIM	JORTHANG	6	GPRS issue.
11	NTPC	KAHALGAON - I(KH1)	48	DC power issue from SS end .This problem is happening very frequently. Already informed ERLDC and Sub Station .
12	WEST BENGAL	KALIMPONG(KLM)	1	GPRS issue.
13	DVC	KALNESHWARI(KAR)	3	GPRS issue.
14	BIHAR	KISHANGANJ(KSN)	2	Meter RS-485 port issue. Request to replace the meter.
15	DVC	KODERMA(KOD)	6	TCS will visit there and will do necessary AMC work shortly.
16	DVC	KOLAGHAT	1	TCS will visit there and will do necessary AMC work shortly.
17	DVC	MANIQUE(MNQ)	1	GPRS issue.
18	SIKKIM	MELLI(MEL)	1	GPRS issue.
19	SIKKIM	MELLI(MEL)	3	GPRS issue.
20	GRIDCO	MENDHASAL(MEN)	2	GPRS issue.
21	GRIDCO	NEW DUBRI(DBR)	2	GPRS issue.
22	POWERGRID	NEW MELLI	2	GPRS issue.
23	POWERGRID	PANDIABIL(PNB)	11	GPRS issue. Need PGCIL LAN provision .
24	WEST BENGAL	RAMMAM(RMM)	1	GPRS issue.
25	BIHAR	SIPARA	3	TCS will visit there and will do necessary AMC work shortly.
26	IPPR	STERLITE(SEL)	10	Unable to communicate with substation regarding AMC work
27	NTPC	TALCHER SOLAR(TLS)	6	TCS will visit there and will do necessary AMC work shortly.

## Annexure-B11

List of Meters and Location for AMR 4th Phase implementation

S.No	MAKE	Meter Serial No	LOCATION		S.No	MAKE	Meter Serial No	LOCATION	
1	L&T	NP-7885-A	LAKHISARAI(PG)	29 NEW LOCATIONS WITH 132 METERS	133	GENUS	ER-1135-A	BERHAMPORE(PG)	25 OLD LOCATIONS WITH 124 METERS
2	L&T	NP-7886-A			134	GENUS	ER-1140-A		
3	L&T	NP-7429-A			135	GENUS	ER-1349-A	BANKA(PG)	
4	L&T	NP-7429-A			136	GENUS	ER-1347-A		
5	L&T	NP-7887-A			137	GENUS	ER-1350-A		
6	L&T	NP-7430-A			138	GENUS	ER-1341-A		
7	L&T	NP-7888-A			139	GENUS	ER-1350-A		
8	L&T	NP-7431-A			140	GENUS	ER-1341-A	ANGUL(PG)	
9	GENUS	ER-1433-A			141	GENUS	ER-1015-A		
10	GENUS	ER-1346-A			142	GENUS	ER-1016-A		
11	GENUS	ER-1104-A	143		GENUS	ER-1085-A			
12	GENUS	ER-1146-A	144		GENUS	ER-1087-A			
13	GENUS	ER-1005-A	145		GENUS	NP-7947-A			
14	GENUS	ER-1006-A	146		GENUS	ER-1554-A			
15	GENUS	ER-1002-A	147		GENUS	ER-1557-A	BIRPARA(PG)		
16	GENUS	ER-1004-A	148		GENUS	ER-1110-A			
17	GENUS	ER-1044-A	149		GENUS	ER-1041-A	CHAI BASA(PG)		
18	GENUS	ER-1047-A	150		GENUS	ER-1415-A			
19	GENUS	ER-1048-A	151		GENUS	ER-1420-A	BIRPARA(WB)		
20	GENUS	ER-1049-A	152		GENUS	ER-1079-A	BARIAPDA(PG)		
21	GENUS	ER-1465-A	153		GENUS	ER-1594-A	BARH(NTPC)		
22	GENUS	ER-1463-A	154		GENUS	ER-1446-A	JAMSHEDPUR(PG)		
23	GENUS	ER-1469-A	155		GENUS	ER-1220-A	RANGPO(PG)		
24	GENUS	ER-1467-A	156		GENUS	ER-1468-A	KISHANGANJ(PG)		
25	GENUS	ER-1473-A	157		GENUS	ER-1153-A			
26	GENUS	ER-1474-A	158		GENUS	ER-1160-A			
27	GENUS	ER-1475-A	159		GENUS	ER-1293-A			
28	GENUS	ER-1476-A	160		GENUS	ER-1296-A			
29	GENUS	ER-1492-A	161		GENUS	ER-1159-A			
30	GENUS	ER-1494-A	162		GENUS	ER-1154-A			
31	GENUS	ER-1532-A	163		GENUS	ER-1437-A			
32	GENUS	ER-1498-A	164		GENUS	ER-1438-A	MALDA(PG)		
33	GENUS	ER-1046-A	165		GENUS	ER-1531-A			
34	GENUS	ER-1088-A	166		GENUS	ER-1536-A	MEJIA(DVC)		
35	GENUS	ER-1089-A	167		GENUS	ER-1008-A			
36	GENUS	ER-1233-A	168		GENUS	ER-1031-A	MPL		
37	GENUS	ER-1240-A	169		GENUS	ER-1122-A			
38	GENUS	ER-1210-A	170		GENUS	ER-1123-A			
39	GENUS	ER-1207-A	171		GENUS	ER-1124-A			
40	GENUS	ER-1216-A	172		GENUS	ER-1129-A	NABINAGAR(BRBCL)		
41	GENUS	ER-1219-A	173		GENUS	ER-1418-A			
42	GENUS	ER-1213-A	174		GENUS	ER-1414-A			
43	GENUS	ER-1214-A	175		GENUS	ER-1281-A			
44	GENUS	ER-1094-A	176		GENUS	ER-1299-A	NEW MELLI(PG)		
45	GENUS	ER-1097-A	177		GENUS	ER-1292-A			
46	GENUS	ER-1091-A	178		GENUS	ER-1294-A	DURGAPUR(PG)		
47	GENUS	ER-1095-A	179		GENUS	ER-1461-A			
48	GENUS	ER-1025-A	180		GENUS	ER-1470-A	RAMCHANDARPUR(JUSNL)		
49	GENUS	ER-1024-A	181		GENUS	ER-1491-A			
50	GENUS	ER-1295-A	182		GENUS	ER-1496-A	RENGALI(PG)		
51	GENUS	ER-1158-A	183		GENUS	ER-1298-A	RANCHI(PG)		
52	GENUS	ER-1156-A	184		GENUS	ER-1020-A	BIDHANAGAR(WB)		
53	GENUS	ER-1157-A	185		GENUS	ER-1402-A			
54	GENUS	ER-1001-A	NEW TOWN(WB)		186	GENUS	ER-1083-A	SUNDERGARH(PG)	
55	GENUS	ER-1009-A	KLC BANTALA(WB)		187	GENUS	ER-1012-A		
56	GENUS	ER-1052-A	OPGC		188	GENUS	ER-1093-A		
57	GENUS	ER-1027-A			189	GENUS	ER-1100-A		
58	GENUS	ER-1112-A			190	GENUS	ER-1019-A		
59	GENUS	ER-1026-A			191	GENUS	ER-1118-A		
60	GENUS	ER-1030-A			192	GENUS	ER-1022-A		
61	GENUS	ER-1053-A			193	GENUS	ER-1062-A		
62	GENUS	ER-1066-A			194	GENUS	ER-1023-A		
63	GENUS	ER-1068-A			195	GENUS	ER-1117-A		
64	GENUS	ER-1060-A			196	GENUS	ER-1119-A		
65	GENUS	ER-1456-A			197	GENUS	ER-1021-A		
66	GENUS	ER-1541-A	198		GENUS	ER-1067-A			
67	GENUS	ER-1542-A	199		GENUS	ER-1061-A			
68	GENUS	ER-1546-A	200		GENUS	ER-1070-A			
69	GENUS	ER-1543-A	201		GENUS	ER-1065-A			
70	GENUS	ER-1519-A	202		GENUS	ER-1064-A			
71	GENUS	ER-1545-A	203		GENUS	ER-1500-A			



72	GENUS	ER-1547-A	
73	GENUS	ER-1450-A	
74	GENUS	ER-1549-A	
75	GENUS	ER-1548-A	
76	GENUS	ER-1250-A	MOTIHARI(BSPTCL)
77	GENUS	ER-1245-A	
78	GENUS	ER-1286-A	MOTIPUR(BSPTCL)
79	GENUS	ER-1288-A	
80	GENUS	ER-1111-A	ATRI(GRIDCO)
81	GENUS	ER-1007-A	
82	GENUS	ER-1248-A	RAXAUL(BSPTCL)
83	GENUS	ER-1249-A	
84	GENUS	ER-1113-A	SAMANGARA(GRIDCO)
85	GENUS	ER-1073-A	
86	GENUS	ER-1223-A	SAMASTIPUR(BSPTCL)
87	GENUS	ER-1227-A	
88	GENUS	ER-1173-A	BETIAH(BSPTCL)
89	GENUS	ER-1116-A	BHOGRAI(GRIDCO)
90	GENUS	ER-1114-A	JALESWAR(GRIDCO)
91	GENUS	ER-1127-A	
92	GENUS	ER-1003-A	SUBHASHGRAM(WBS)
93	GENUS	ER-1131-A	
94	GENUS	ER-1132-A	
95	GENUS	ER-1134-A	
96	GENUS	ER-1520-A	
97	L&T	LT-0312-A	SAGARDIGHI(WB)
98	GENUS	ER-1451-A	
99	GENUS	ER-1453-A	RAJARAHAH(PG)
100	GENUS	ER-1253-A	
101	GENUS	ER-1409-A	LAUKAHI(BSPHCL)
102	GENUS	ER-1373-A	
103	GENUS	ER-1377-A	KHIZIRSARAI(BSPHCL)
104	GENUS	ER-1584-A	
105	GENUS	ER-1592-A	KEONJHAR(GRIDCO)
106	GENUS	ER-1138-A	
107	GENUS	ER-1133-A	GOKARNA(WB)
108	GENUS	ER-1222-A	
109	GENUS	ER-1224-A	DARBHANGA(BSPTCL)
110	GENUS	ER-1195-A	
111	GENUS	ER-1192-A	
112	GENUS	ER-1197-A	
113	GENUS	ER-1196-A	
114	GENUS	ER-1199-A	
115	GENUS	ER-1193-A	
116	GENUS	ER-1191-A	
117	GENUS	ER-1155-A	
118	GENUS	ER-1206-A	
119	GENUS	ER-1152-A	
120	GENUS	ER-1201-A	
121	GENUS	ER-1205-A	
122	GENUS	ER-1202-A	
123	GENUS	ER-1204-A	
124	GENUS	ER-1434-A	
125	GENUS	ER-1431-A	
126	GENUS	ER-1432-A	
127	GENUS	ER-1203-A	
128	GENUS	ER-1435-A	DALTONGANJ(PG)
129	GENUS	ER-1198-A	
130	GENUS	ER-1194-A	DALTONGANJ(JUVNL)
131	GENUS	ER-1344-A	
132	GENUS	ER-1342-A	BEGUSARAI(BSPTCL)

204	GENUS	ER-1493-A	SILIGURI(PG)
205	GENUS	ER-1217-A	
206	GENUS	ER-1218-A	
207	GENUS	ER-1318-A	
208	GENUS	ER-1319-A	PUSAULI(PG)
209	GENUS	ER-1372-A	
210	GENUS	ER-1379-A	
211	GENUS	ER-1378-A	
212	GENUS	ER-1236-A	
213	GENUS	ER-1237-A	
214	GENUS	ER-1221-A	
215	GENUS	ER-1230-A	RANCHI NEW(PG)
216	GENUS	ER-1371-A	
217	GENUS	ER-1355-A	
218	GENUS	ER-1358-A	
219	GENUS	ER-1436-A	
220	GENUS	ER-1359-A	
221	GENUS	ER-1351-A	
222	GENUS	ER-1352-A	PURNEA(PG)
223	GENUS	ER-1231-A	
224	GENUS	ER-1232-A	
225	L&T	NP-8862-A	
226	GENUS	ER-1311-A	
227	GENUS	ER-1407-A	
228	GENUS	ER-1314-A	
229	GENUS	ER-1408-A	PATNA(PG)
230	GENUS	ER-1098-A	
231	GENUS	ER-1591-A	
232	GENUS	ER-1583-A	
233	GENUS	ER-1586-A	PANDIABILI(PG)
234	GENUS	ER-1587-A	
235	GENUS	ER-1588-A	
236	GENUS	ER-1590-A	
237	GENUS	ER-1552-A	
238	GENUS	ER-1551-A	KEONJHAR(PG)
239	GENUS	ER-1263-A	
240	GENUS	ER-1170-A	
241	GENUS	ER-1262-A	
242	GENUS	ER-1261-A	
243	GENUS	ER-1375-A	
244	GENUS	ER-1380-A	
245	GENUS	ER-1163-A	
246	GENUS	ER-1416-A	
247	GENUS	ER-1419-A	
248	GENUS	ER-1411-A	
249	GENUS	ER-1448-A	
250	GENUS	ER-1449-A	
251	GENUS	ER-1442-A	
252	GENUS	ER-1447-A	GAYA(PG)
253	GENUS	ER-1582-A	
254	GENUS	ER-1575-A	
255	GENUS	ER-1573-A	
256	GENUS	NP-7919-A	BOLANGIR(PG)
TOTAL METERS = 256			

## AMR Phase-1 AMC Details of all Sub Stations

Annexure-B11

SL No	State	Sub Station	Utilities	TOC Date	TOC Month	AMC End Date	Total Meter
1	West Bengal	DSTPS	DVC	15-Mar-14	Mar-14	Mar-19	78
2	Jharkhand	Jamshedpur	PG	30-Mar-14	Mar-14	Mar-19	
3	West Bengal	Jeerat	WBSEB	15-Mar-14	Mar-14	Mar-19	
4	West Bengal	K'neswari	DVC	30-Mar-14	Mar-14	Mar-19	
5	West Bengal	Kolaghat	DVC	15-Mar-14	Mar-14	Mar-19	
6	West Bengal	Maithon	DVC	24-Mar-14	Mar-14	Mar-19	
7	West Bengal	Maithon	PG	30-Mar-14	Mar-14	Mar-19	
8	West Bengal	Malda	WBSEB	30-Mar-14	Mar-14	Mar-19	
9	West Bengal	Mejia	DVC	30-Mar-14	Mar-14	Mar-19	
10	Jharkhand	Ramchandrapur	JSEB	30-Mar-14	Mar-14	Mar-19	
11	West Bengal	Siliguri	PG	31-Mar-14	Mar-14	Mar-19	
12	West Bengal	Subhasgram	PG	30-Dec-13	Mar-14	Mar-19	
13	West Bengal	Waria	DVC	30-Mar-14	Mar-14	Mar-19	
14	Jharkhand	Barhi	DVC	30-Apr-14	Apr-14	Apr-19	89
15	Odisha	Baripada	PG	15-Apr-14	Apr-14	Apr-19	
16	West Bengal	Bidhannagar	WBSEB	15-Apr-14	Apr-14	Apr-19	
17	West Bengal	Binaguri	PG	15-Apr-14	Apr-14	Apr-19	
18	West Bengal	Birpara	WBSEB	15-Apr-14	Apr-14	Apr-19	
19	West Bengal	Birpara	PG	15-Apr-14	Apr-14	Apr-19	
20	Jharkhand	Chandil	JSEB	30-Apr-14	Apr-14	Apr-19	
21	Jharkhand	Garwa	JSEB	30-Apr-14	Apr-14	Apr-19	
22	Jharkhand	Hatia	JSEB	30-Apr-14	Apr-14	Apr-19	
23	Jharkhand	Jamshedpur	DVC	30-Apr-14	Apr-14	Apr-19	
24	West Bengal	Kalimpong	WBSEB	30-Apr-14	Apr-14	Apr-19	
25	West Bengal	Maithon RB	MPL	30-Apr-14	Apr-14	Apr-19	
26	Jharkhand	Manique	DVC	30-Apr-14	Apr-14	Apr-19	47
27	SIKKIM	Melli	SIKKIM	30-Apr-14	Apr-14	Apr-19	
28	West Bengal	NBU	WBSEB	15-Apr-14	Apr-14	Apr-19	
29	West Bengal	Sagardihi	WBSEB	15-Apr-14	Apr-14	Apr-19	
30	West Bengal	Teesta	NHPC	30-Apr-14	Apr-14	Apr-19	
31	West Bengal	Dalkhola	WBSEB	30-May-14	May-14	May-19	
32	Jharkhand	Deogarh	JSEB	15-May-14	May-14	May-19	
33	Jharkhand	Dhanbad	DVC	15-May-14	May-14	May-19	
34	Jharkhand	Jamtara	JSEB	15-May-14	May-14	May-19	
35	Odisha	Joda	GRIDCO	30-May-14	May-14	May-19	
36	Bihar	Kishanganj	BSEB	30-May-14	May-14	May-19	
37	West Bengal	Parulia	DVC	30-May-14	May-14	May-19	
38	Jharkhand	Patratu	DVC	15-May-14	May-14	May-19	67
39	Bihar	Purnea	BSEB	30-May-14	May-14	May-19	
40	Bihar	Purnea	PG	30-May-14	May-14	May-19	
41	West Bengal	Rammam	WBSEB	30-May-14	May-14	May-19	
42	SIKKIM	Rangit	NHPC	30-May-14	May-14	May-19	
43	West Bengal	Santalidih	WBSEB	30-May-14	May-14	May-19	
44	Jharkhand	Tenughat	JSEB	15-May-14	May-14	May-19	
45	Odisha	Jindal	GRIDCO	30-May-14	May-14	May-19	
46	Jharkhand	Japla	JSEB	15-May-14	May-14	May-19	
47	Bihar	Arah	BSEB	15-Jun-14	Jun-14	Jun-19	
48	Bihar	Arah	PG	15-Jun-14	Jun-14	Jun-19	
49	Odisha	Baripada	GRIDCO	30-Jun-14	Jun-14	Jun-19	
50	Odisha	Budhipadar	GRIDCO	15-Jun-14	Jun-14	Jun-19	
51	Bihar	Dumraon	BSEB	15-Jun-14	Jun-14	Jun-19	67
52	West Bengal	Malda	PG	30-Jun-14	Jun-14	Jun-19	
53	Odisha	Mendashal	GRIDCO	15-Jun-14	Jun-14	Jun-19	
54	Odisha	M'mundali	GRIDCO	15-Jun-14	Jun-14	Jun-19	
55	Odisha	Rengali	GRIDCO	15-Jun-14	Jun-14	Jun-19	
56	Odisha	Rengali	PG	15-Jun-14	Jun-14	Jun-19	
57	Odisha	Rourkela	GRIDCO	15-Jun-14	Jun-14	Jun-19	
58	Odisha	Rourkela	PG	15-Jun-14	Jun-14	Jun-19	
59	Odisha	Sterlite	IPPR	15-Jun-14	Jun-14	Jun-19	
60	Odisha	Tarkera	GRIDCO	15-Jun-14	Jun-14	Jun-19	
61	Bihar	Biharshariff	BSEB	15-Jul-14	Jul-14	Jul-19	
62	Bihar	Dehri	BSEB	15-Jul-14	Jul-14	Jul-19	
63	Jharkhand	Goelkera	JSEB	30-Jul-14	Jul-14	Jul-19	
64	Bihar	Kahalgaon	BSEB	30-Jul-14	Jul-14	Jul-19	
65	Bihar	Mohania	BSEB	15-Jul-14	Jul-14	Jul-19	
66	Bihar	Rajgir	BSEB	15-Jul-14	Jul-14	Jul-19	
67	Bihar	Sabour	BSEB	15-Jul-14	Jul-14	Jul-19	

68	Bihar	Sonengar	BSEB	15-Jul-14	Jul-14	Jul-19
69	Bihar	Sultanganj	BSEB	15-Jul-14	Jul-14	Jul-19
70	Jharkhand	Kendoposi	JSEB	30-Jul-14	Jul-14	Jul-19
71	Bihar	Khagaul	BSEB	15-Jul-14	Jul-14	Jul-19
72	Bihar	Kanti	BSEB	15-Jul-14	Jul-14	Jul-19
73	Odisha	Bolangir	PG	30-Aug-14	Aug-14	Aug-19
74	Odisha	Indravati P/H	GRIDCO	15-Aug-14	Aug-14	Aug-19
75	Odisha	Indravati	PG	15-Aug-14	Aug-14	Aug-19
76	Odisha	Jeypore	GRIDCO	15-Aug-14	Aug-14	Aug-19
77	Odisha	Jeypore	PG	15-Aug-14	Aug-14	Aug-19
78	Odisha	Keonjhar	PG	30-Aug-14	Aug-14	Aug-19
79	Jharkhand	Lalmatia	JSEB	15-Aug-14	Aug-14	Aug-19
80	Odisha	Rairangpur	GRIDCO	15-Aug-14	Aug-14	Aug-19
81	Odisha	Talcher	NTPC	15-Sep-14	Sep-14	Sep-19
82	West Bengal	Durgapur	PG	30-Nov-14	Nov-14	Nov-19
83	Odisha	Balasore	GRIDCO	30-Dec-14	Dec-14	Dec-19
84	Bihar	Barh	NTPC	30-Dec-14	Dec-14	Dec-19
85	Bihar	Biharshariff	PG	15-Dec-14	Dec-14	Dec-19
86	West Bengal	Farakka	NTPC	31-Dec-14	Dec-14	Dec-19
87	Sikkim	Gangtok	PG	30-Dec-14	Dec-14	Dec-19
88	Bihar	Gaya	PG	30-Dec-14	Dec-14	Dec-19
89	Bihar	Kahalgaoan	NTPC	30-Dec-14	Dec-14	Dec-19
90	Bihar	Karmanasha	BSEB	15-Dec-14	Dec-14	Dec-19
91	Bihar	Mzaffarpur	PG	30-Dec-14	Dec-14	Dec-19
92	Bihar	Patna	PG	30-Dec-14	Dec-14	Dec-19
93	Jharkhand	Patratu	JSEB	15-Dec-14	Dec-14	Dec-19
94	Jharkhand	Ranchi	PG	30-Dec-14	Dec-14	Dec-19
95	Bihar	Pusauli	PG	21-Jan-15	Jan-15	Jan-20
96	West Bengal	Berhampore	PG	30-May-15	May-15	May-20
97	West Bengal	Dalkhola	PG	30-May-15	May-15	May-20
98	Bihar	Fatua	BSEB	30-May-15	May-15	May-20
99	Bihar	Hajipur	BSEB	30-May-15	May-15	May-20
100	Bihar	Jagdishpur	BSEB	30-May-15	May-15	May-20
101	Bihar	Sipara	BSEB	30-May-15	May-15	May-20
102	Odisha	Adhunik	IPPR	30-Jun-15	Jun-15	Jun-20
103	Odisha	Angul	PG	30-Jun-15	Jun-15	Jun-20
104	Bihar	Banka	BSEB	30-Jun-15	Jun-15	Jun-20
105	Bihar	Bodhgaya	BSEB	30-Jun-15	Jun-15	Jun-20
106	Sikkim	Chuzachen	IPPR	30-Jun-15	Jun-15	Jun-20
107	Odisha	GMR	GRIDCO	30-Jun-15	Jun-15	Jun-20
108	Odisha	Jindal	IPPR	30-Jun-15	Jun-15	Jun-20
109	West Bengal	Kharagpur	WBSEB	30-Jun-15	Jun-15	Jun-20
110	Jharkhand	Koderma	DVC	30-Jun-15	Jun-15	Jun-20
111	West Bengal	Kurseong	WBSEB	30-Jun-15	Jun-15	Jun-20
112	Bihar	Madhepura	BSEB	30-Jun-15	Jun-15	Jun-20
113	Sikkim	Ravangla	SIKKIM	30-Jun-15	Jun-15	Jun-20
114	Odisha	RTPS	DVC	30-Jun-15	Jun-15	Jun-20
115	Odisha	Sundergarh	PG	30-Jun-15	Jun-15	Jun-20
116	Jharkhand	TISCO	DVC	30-Jun-15	Jun-15	Jun-20