EASTERN REGIONAL POWER COMMITTEE

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AGENDA FOR 45th COMMERCIAL SUB-COMMITTEE MEETING OF ERPC SCHEDULED TO BE HELD ON 03.03.2022 (THURSDAY) AT 11:00 HRS THROUGH ONLINE MICROSOFT TEAMS PLATFORM

ITEM NO. A1: Confirmation of the minutes of the 44th Commercial Sub-Committee meeting held on 07.07.2021

The minutes of the 44th Commercial Sub-Committee meeting were uploaded on ERPC website.
No request for amendment has been received by ERPC Secretariat.

Members may confirm the minutes of the 44th Commercial Sub-Committee Meeting.

PART B: ITEMS FOR DISCUSSION

ITEM NO. B.1: Technical minimum schedule support to ISGS plants of Eastern Region by availing URS power of surrendered beneficiaries

As per prevailing practice in Eastern Region, ISGS stations are provided with Technical Minimum schedule support. In the event where sum of requisition from all the beneficiaries falls below technical minimum, the beneficiary schedule is jacked up to provide technical minimum schedule to the generators.

However, in the light of CERC Order on Petition No: 60/MP/2019, the practice of jacking up surrendered schedule of beneficiaries shall be withdrawn, except in cases as mandated in Section 5.7 of detailed Reserve Shutdown Procedure (RSD) (CERC Order No. - L-1/219/2017-CERC), which states:

Quote

RLDC shall Suo-moto revise the schedule of any generating station as per clauses 6.5.14 and 6.5.20 of the Grid Code to operate at or above technical minimum in the ratio of under-requisitioned quantum (with respect to technical minimum) in the interest of smooth system operation under the following conditions:

- ✓ *Extreme variation in Weather Conditions*
- ✓ *High Load Forecast*
- ✓ *To maintain reserves on regional or all India basis*
- ✓ *Network Congestion*

✓ *Any other event which in the opinion of RLDC/NLDC shall affect the grid security.*

While doing so, it is possible that the requisition of some beneficiaries may go up to ensure technical minimum. In this case, SLDCs may surrender power from some other inter-State generating station(s) or intra-State generating station(s) based on merit order. The concerned RLDC shall issue R-1 schedule accordingly and this shall be intimated to the concerned generating station, through the scheduling process."

Unquote.

In the 184th OCC meeting, after detailed deliberation, OCC opined that:

- The existing practice would be continued until a decision is taken.

- In the meantime, Odisha would submit a detailed proposal along with the WRPC's decision before the next OCC for further deliberation on the matter.

In the 185th OCC meeting, ERPC representative briefly explained the issue stating that whenever the sum of the requisitions given by the beneficiaries fall below the technical minimum, to keep the generator on bar RLDC jacks up the schedule, because of which some of the beneficiaries are being scheduled against their zero requisition. It was also stated that as per the CERC order on Petition No: 60/MP/2019, the jacking up of the schedule is to be discontinued except on some special occasions. Further, as per the discussions in the CERC meeting with RPCs held on 17.11.2021 regarding the agenda "Issue related to Reserve Shutdown (RSD) of ISGS station", it was informed that necessary amendment in the IEGC Grid Code shall be incorporated by Hon'ble CERC to address this issue.

ERPC representative further submitted that until such amendment in the IEGC, the above issue may be addressed in 3 ways.

1. Generator may go on RSD and in that case, it may take considerable amount of time to revive the unit and in case beneficiaries need any power they would have to approach the market.

2. Continuation of the existing practice of jacking up of the schedule.

3. A mutual agreement may be worked out in which the beneficiary(s) who are ready to avail the URS power to keep the generator on bar, may be incentivised by waiving off the fixed charges up to the technical minimum schedule.

After detailed deliberation OCC opined that since the above issue involves some commercial implications, therefore it may be deliberated further in a separate forum to reach a final consensus. OCC advised all the Constituents to forward their views and comments to ERPC Secretariat within 10 days.

In the 186th OCC meeting, after detailed deliberation and also considering the seriousness of the issue OCC opined that a special meeting may be convened on 30th Dec 2021 to deliberate further on this matter and come to a collaborative solution.

In the special meeting dated 30.12.2021, after detailed deliberation the followings were decided:

1. A working Committee may be formed consisting of the representatives from West Bengal, Odisha, Bihar, NTPC, ERLDC and ERPC for detailed study of the methodology devised in Western Region and formulation of similar methodology pertaining to Eastern Region.
2. A mutual agreement may be worked out in which the beneficiary(s) who are ready to avail the URS power to keep the generator on bar, may be incentivised by waiving off the fixed charges up to the technical minimum schedule.
3. Beneficiaries to bear a certain percentage (e.g. 100%, 75%, 50%, 0% etc) of fixed charge(FC) of the URS availed by the availing beneficiary/beneficiaries up to the technical minimum. This FC waive off % to be finalized by the beneficiaries.
4. NTPC to continuously display the cost of the URS power available at the discounted rate. Beneficiaries participating in the scheme shall avail the URS power based on their MoD.
5. The devised methodology would be put up before the next TCC/ERPC Meeting for necessary approval.
6. ERLDC to continue the prevailing practice of jacking up of schedule till 31st January 2022.

In the Working Committee meeting dated 10.02.2022, Member Secretary informed that in line with the decision taken in the special meeting held on 30.12.2021, ERLDC has stopped jacking up the schedule of the beneficiaries for providing technical minimum schedule to the generators if the sum of requisition by beneficiaries falls short of Technical Minimum schedule w.e.f 1st February 2022 as per CERC Order in Petition No: 60/MP/2019. He apprised the committee that NTPC vide mail dated 04th February 2022 had informed that many of their stations were scheduled below the technical minimum of the units during the lean period in most of the days.

ERLDC representative gave a brief presentation highlighting the behaviour of concerned beneficiaries of ER Thermal Power Plants during the lean period of the day from 1st February'2022 onwards. It was observed that the beneficiaries of Northern region are giving zero schedule during off-peak hours and as a result the generators are getting schedule below Technical Minimum on most of the days.

After detailed deliberation, the following decisions were taken:

1. Beneficiaries would try their best to give the schedule up to technical minimum to keep the units on bar enabling the thermal power plants to avoid going for RSD. Further, beneficiaries would do the realistic assessment of their demand and submit their requisition accordingly so that sufficient time is available to Generators and other beneficiaries to explore other options (like selling in RTM etc).

2. Waiver of Fixed Cost for Scheduling up to technical minimum: West Bengal, Odisha, Bihar agreed for 100% FC waive off and DVC agreed for 50% FC waive off. Jharkhand representative was not present in the meeting. However, as per the comment received from Jharkhand, they would inform about FC waive off in the upcoming Commercial Committee Meeting (CCM). It was observed that for time being 0% FC waive off may be considered for Sikkim considering its insignificant share in NTPC Stations as compared to other beneficiaries of ER. It was also emphasised that for successful implementation of the mechanism a uniform % of FC waiver would need to be adopted. The same shall be further deliberated in forth coming CCM.

3. NTPC would develop the Software and a portal for displaying the cost of the URS power available at the discounted rate up to the Technical Minimum of their station wise generating units within 15 days. NTPC would further expedite the implementation of the software for adoption of the agreed methodology.

4. In case, no beneficiary comes forward to avail the power at discounted rate as reflected in NTPC portal, then NTPC would participate in Real-Time Market of Power Exchange for achieving Technical Minimum Schedule to keep the units on bar.

5. ERPC would place this issue as an agenda item for discussion in the upcoming NPC Meeting for including beneficiaries of other regions under this methodology.

In light of the above, for giving technical minimum schedule support to ISGS stations of Eastern Region, *Jharkhand and Sikkim* may give their consent for Fixed Cost waive off for better implementation of the scheme finalised in the working committee meeting.

Members may discuss. Jharkhand and Sikkim may update their FC waive off plan status.

ITEM NO. B.2: Declaration of Peak Season for Hydro-generating Stations for calculation of Regional Transmission Deviation Accounts.

Clause No. 12 (1) (a) of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations'2020 states that,
"For a generating station, net metered ex-bus injection, in a time block in excess of the sum of Long-Term Access, Medium Term Open Access and Short-Term Open Access: Provided that for a hydro-generating station, overload capacity of 10% during peak season shall be taken into account."

Point No. 43.3.10 of SoR issued by Hon'ble CERC vide No. L-1/250/2019/CERC dated 10th August'2020 states that:

"Regarding hydro generating stations' overload capacity of 10%, the Regulation has been modified to include that such exemption/ consideration shall be applicable only during high inflow period."

The above clause of the Sharing Regulation'2020 and Statements of Reason reveals that for hydro-generating stations, an overload capacity of 10% can be considered during peak season for the calculation of RTDA accounts. As per the CERC Tariff Regulations 2019-24, the peak season for hydro-generating stations should be considered based on the high inflow season. In this regard, the high inflow season may vary depending upon the geographical location of the hydro generators.

In this context, proper guidelines and Nodal Agency are required for declaring the peak seasons for each hydro generating station.

In the 3rd Meeting of the Hon'ble CERC with Chairperson and Member Secretary of RPCs dated 17.10.2021, the following decision was taken after detailed deliberation:

a) ERPC has raised the issue regarding special dispensation to hydro generating stations where, in RTDA (regional transmission deviation account), the capacity of hydro station during peak season is calculated at over and above 10% of such generating station's capacity. ERPC has requested that there should be proper guidelines for declaration of peak season (in respect of hydro-generating stations) by the Implementing Agency (NLDC) for the purpose of the Sharing Regulations.

b) Member Secretary (ERPC) stated that RPCs decide the peak demand season and communicate the same to the Commission as per the 2019 Tariff Regulations. But in this case, the Implementing Agency (NLDC) is required to make such declaration. Sh. Kejriwal SE(ERPC) stated that under the 2019 Tariff Regulations, ERPC is finalising high demand season and low demand season for thermal power generating stations after discussing in the RPC and the same is communicated to all.

c) Member (ISJ) observed that RPC is the agency that may be entrusted with declaration of peak season for hydro-generating stations too. ***Chairperson, CERC observed that same formulation, as provided in the 2019 Tariff Regulations, can be extended for declaration of peak season for the purpose of the Sharing Regulations for the hydro-generating stations also i.e. RLDC in consultation with RPC.***

In light of the above decision, Peak season for Hydro Generating stations shall be decided in the OCC forum of ERPC.

Members may note for compliance.

ITEM NO. B.3: Anticipated power supply position during March 2022

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of March 2022 were prepared by ERPC Secretariat on the basis of LGBR for 2021-22 and feedback of constituents, keeping in view that the units are available for generation and expected load growth etc.

In the 188th OCC meeting, Jharkhand representative informed that their Peak demand for March'2022 is around 1700 MW, their generation target is around 1500 MW, and there will be a shortfall of around 200-300 MW in the peak demand for the month of March'2022. During deliberation, it has also emerged that Jharkhand is doing load shedding due to the inability to meet the peak demand of the state.

Jharkhand may explain. Members may discuss.

ITEM NO. B.4: Demolition and reconstruction of residential Quarters at Rourkela S/S under O&M ADD-CAP 2019-24 block under Kahalgaon Transmission System (KHTL)

A. Under the Kahalgaon Transmission System (KHTL), Rourkela S/S in Odisha was constructed and is in operation since 1993. The station has already completed more than 28 years of service.

B. As part of this project, in addition to S/S equipment, Residential Buildings were also constructed at Rourkela S/S for the accommodation of employees to look after O&M of substation and were allotted to employees in these years. These residential buildings have already completed more than 28 years of life.

C. In spite of regular maintenance, due to ageing these residential buildings are in dilapidated condition i.e. cracks in roof, walls, and floors, seepage in roofs and walls, wear and tear of window/doors, cisterns etc. have developed. The structural condition assessment of the building has been carried out through NIT, Rourkela. As per the assessment report, these buildings have exceeded the desired strength and serviceability limit states under gravity loading. It does not have sufficient strength and stiffness against minimum lateral loading and it appears insufficient to consider the repair and rehabilitation of these buildings.

D. Further, as Rourkela S/S is a vital node in Eastern Grid, staff quarters are very much essential considering reliable operation of this vital Sub-station and Grid security aspects.
In view of the facts mentioned above, it is proposed for reconstruction of staff quarters which are in uninhabitable and unsafe condition. Tentative estimated cost for the said work comes to ₹ 8 crores.

E. Petition for the above work was already filed with CERC for approval under O&M ADD-CAP 2019-24 under KHTL project. During the hearing, CERC has advised POWERGRID to obtain approval of RPC and consent of beneficiaries for additional capital expenditure against these buildings and submit the same at the time of truing up for consideration of the instant case.

Powergrid may explain. Members may discuss.

ITEM NO. B.5: Demolition and Reconstruction of Residential / Non-residential Buildings under O&M ADD-CAP 2019-24 block for Farakka Transmission System at Biharsharif & Jamshedpur S/S and Chukha project at Purnea s/s.

Under the Farakka Transmission System, Biharsharif & Jamshedpur S/S were constructed and are in operation since 1989. The stations have already completed more than 32 years of service.

Under the Chukha Transmission System, 220/132kV Purnea S/S was constructed and is in operation since 1985.The station has already completed more than 36 years of service. As part of above projects at Biharsharif, Jamshedpur and Purnea , in addition to S/S equipment, Residential Buildings were also constructed for accommodation of employees to look after O&M of Sub-station and were allotted to employees in these years. These residential buildings have already completed more than 32 years of life.

In spite of regular maintenance, due to ageing, these buildings are in dilapidated condition i.e. cracks in roof, walls and floors, seepage in roofs and walls, wear and tear of windows/doors, cisterns etc have developed. The existing buildings were constructed as per load bearing type structure (non-RCC framed structure). It is worth to mentioned here that some of the above location falls under high seismic zone (Purnea: Seismic zone-V, Biharsharif: Seismic zone-IV)

The structural condition assessment of the buildings at Jamshedpur , Biharsharif and Purnea has been carried out through NIT Patna. The reports submitted by NIT Patna. As per the assessment report, these buildings have exceeded the desired strength and serviceability limit states under gravity loading, does not have sufficient strength and stiffness against minimum lateral loading. Also these buildings are highly distressed and design of building is also deficient in resisting earthquake. The vertical load carrying structures are found with voids and degradation ,badly damaged with visible cracks and there is no benefit to carry these structures with repair or retrofitting.

As per the techno economic feasibility, these existing buildings should be demolished and reconstruction with disaster resilient features as per NBC 2016 and relevant byelaws is suggested.

Further, as all 03 substations i.e. Jamshedpur , Biharsharif and Purnea are critical and very important substations of Eastern Grid. Staff quarters for round the clock manning and O&M is vital for reliability of these substations and Grid security.

In view of the above facts, it is proposed for reconstruction of these buildings which are in uninhabitable and unsafe condition. The tentative estimated cost for demolition & construction of new residential / Non-residential buildings at all 04 locations shall be approx. Rs 19.0 Crores.

Petition for the Farakka Transmission System work were already filed with CERC for approval under O&M ADD-CAP 2019-24 and order has been issued on 18.10.2021. As per the order, CERC has advised POWERGRID to obtain approval of beneficiaries in RPC meeting for additional capital expenditure against these buildings and submit a separate petition for ADD-CAP towards “building and civil works” for consideration by the Commission.

Petition for the CHUKHA project was already filed with CERC for approval under O&M ADD-CAP 2019-24 and order received on 09.08.2021. In the tariff order, CERC directed POWERGRID to obtain approval of RPC and file a separate petition for the ACE towards “building and civil works” for consideration by the Commission.

Agenda is put up for kind consent of ER constituents for demolition of existing residential /non-residential buildings and construction of new building as per requirement of the system for smooth O&M activities.

Powergrid may explain. Members may discuss

ITEM NO. B.6: Energy accounting of tertiary at 400/220 kV Keonjhar Substation of POWERGRID.

The energy consumption at substation through tertiary of 315MVA ICT#1 is being calculated and charged to POWERGRID w.e.f. 23rd Oct 2017. Now DISCOMs under Odisha have started raising invoices for the drawl of auxiliary power through tertiary. After receipt of Arrear Bill from TPNODL for drawl of Auxiliary Power through Tertiary Winding of 315MVA ICT#1 at POWERGRID, Keonjhar S/S, the bills were verified at site, and during cross checking it was found that, the energy consumption is showing abnormally high value. Upon thorough analysis, it is found that the CT/PT ratio has been erroneously considered as 50/300, whereas the actual CT /PT ratio is 1000/3.7727. Matter discussed with ERLDC commercial team and the CT/PT ratio was changed to 1000/3.7727 w.e.f. 30-Aug-2021.

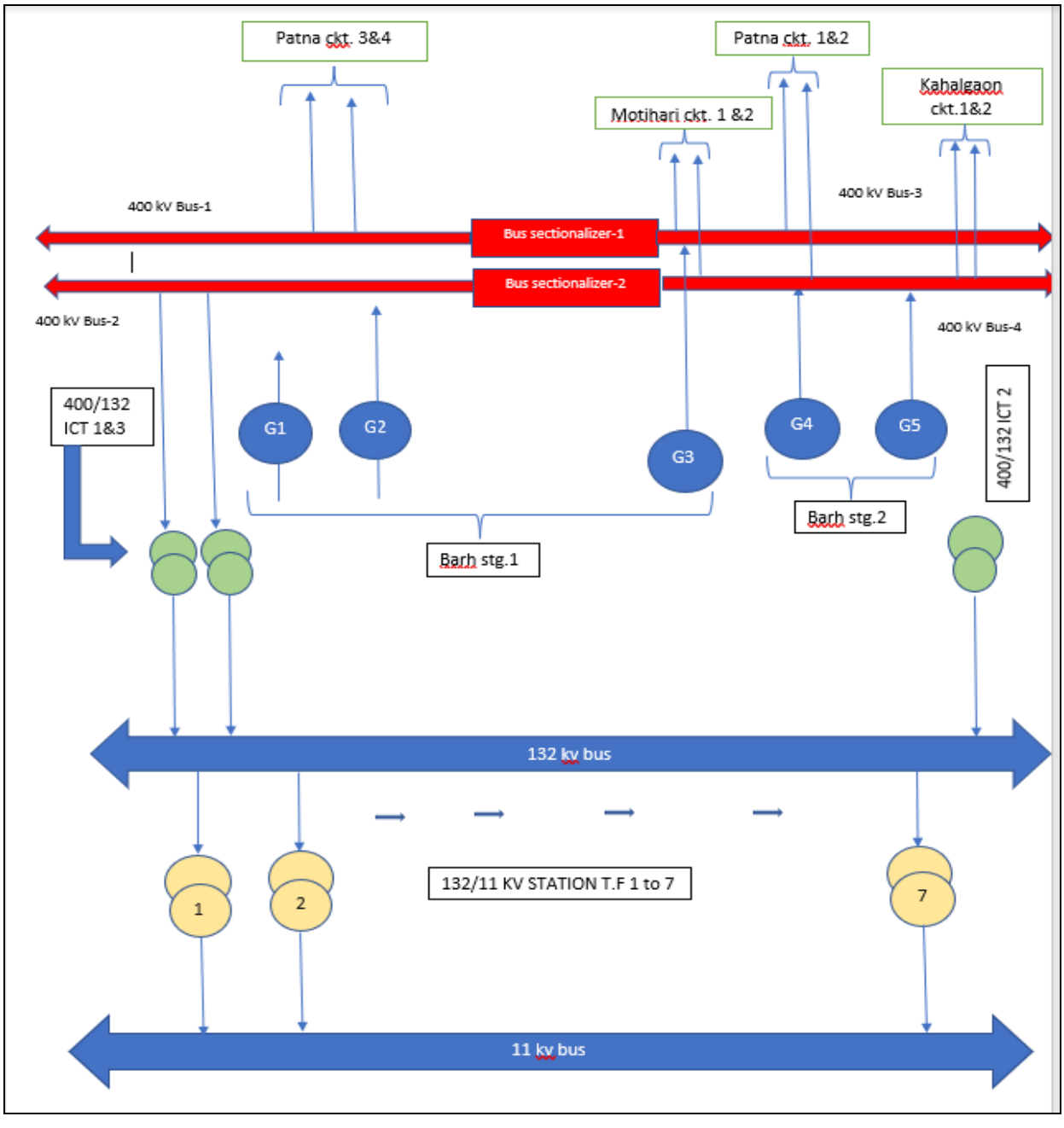
In view of this, the tertiary energy drawl at POWERGRID, Keonjhar S/S for the period from 23.10.2017 to 30.08.2021 may be revised considering the actual CT/PT ratio so that the payment to the DISCOM can be released at the earliest.

Powergrid may explain. Members may discuss.

ITEM NO. B.7: Segregation of Actual Generation of Barh Stage-I & II

As per Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006; main meters and check meters are installed at outgoing feeders of generating stations. Net injection of a generating station is computed as summation of main meters at all outgoing feeders.

The Barh Stage-I comprises of three nos. of units as G-1, G-2 & G-3, but Unit G-3 is physically connected at Barh stage-II. Stage-II comprises of two nos. of Units i.e G-4 & G-5. Barh Stg-I and Barh stg-II are two different control areas bound by meters; both the stages have different % share of allocations and beneficiaries. Scheduling of the two stages are done separately. Accordingly actual injection of both the stages has to be computed separately and properly segregated. The SLD of Barh (both stages) with sectionalizer is shown as below:



The net generation of both the stages should be computed as below-

Stage-I Net Injection (with Units G-1, G-2 & G-3 at one side at stage-I) = Σ (Outgoing feeders connected to stg-I) + (Bus-sectionaliser-1) + (Bus-sectionaliser-2).
Stage-II Net Injection (with Units G-4 & G-5 at one side of stage-II) = Σ (Outgoing feeders connected to stg-II)-(Bus-sectionaliser-1)-(Bus-sectionaliser-2).

There are 03 Nos. of 400/132 kV ICTs commissioned at Barh. As the 200 MVA 400/132 kV ICT-1 & 3 are connected at stage-I and the auxiliary power is being drawn by both Stage-1&2 from the said ICTs through station transformers; the segregation of net injection of both the stages is not possible by using the bus-sectionaliser.
The matter was also informed to Barh NTPC and at present the following methodology has been adopted for calculating net injection of both stages of Barh.-

Stage-I Net Start up drawl (for Unit-2) = – ST2

Stage-I Net Firm generation = (GT#1 – ST#1) - ST#3 +ST#2

Stage- II Net Firm generation = (Summation of all outgoing feeders) – (Stage-I Net Firm Generation)

NTPC Barh may explain. Members may discuss.

ITEM NO. B.8: Bypassing CT input in Rangit GT Meters

Interface Meters (Special Energy Meters) have been installed by CTU at the points of interconnection with Inter-State Transmission System (ISTS) for energy accounting and billing as per Central Electricity Authority (CEA) notification no. 502/70/CEA/DP & D dated 17.03.2006. As per said CEA metering Regulation clause 7(1), no licensee should change the location of meters unless permitted by the authority. The relevant portion of the CEA regulations is stated below-

Quote….

7. Locations of meters. -

(1) ……..

The location of main, check, and standby meters installed at the existing generating stations shall not be changed unless permitted by the Authority.

……..Unquote.

In Rangit HEP, NHPC generating station three SEM's are installed (GT#1- NP-5919-A; GT#2 - NP-5920-A & GT#3 NP-5921-A) in HV side of Generator Transformer. As per IEGC 6.4.22 RLDC is responsible for the computation of actual net injection/drawl of regional entities. ERLDC during the weekly validation observed that the GT meter data is being received but the energy meter data is showing zero. ERLDC has also communicated to Rangit HEP several times to examine the same, but no communication has been received. Finally, on dated 29.01.2022 Rangit HEP intimated that CT connections were kept open since Dec-21 due to panel up-gradation work. This matter was not prior-intimated by Rangit HEP to ERLDC.

However, during this period the energy meter validation was done through line meters. This practice is against the above said CEA metering regulations and it may hamper the entire validation process of net injection of Rangit HEP.

Rangit HEP, NHPC may explain. Members may discuss.

ITEM NO. B.9: Proposal of setting up a Backup/Redundant SDH (Coriant Make) at ERLDC

Presently, all the station data & voice reporting at ERLDC including from Bhutan and Nepal & ICCP links is through Coriant SDH at ERLDC. The bandwidth utilization of the existing SDH is

almost 90%. To ensure redundancy of system and expansion of bandwidth, there is requirement of installation of redundant SDH on priority as failure of existing SDH may lead to entire data outage at ERLDC. It is proposed for setting up a redundant Coriant SDH at ERLDC under Fiber Optic Expansion Project (additional Requirement) Project in Eastern Region. Approx. Cost is Rs. 90 Lakhs. Schematic Diagram is enclosed in Annexure-B9. Powergrid may explain. Members may discuss.

In the 10the TeST meeting, Powergrid representative informed that in order to ensure redundancy of system there is requirement of installation of redundant SDH on priority at ERLDC as failure of existing SDH may lead to entire data outage at ERLDC. He further informed that bandwidth utilization of the existing SDH is almost 90% so expansion of bandwidth could be done with help of setting up redundant Coriant SDH. He also added that redundant SDH can be installed under Fiber Optic Expansion Project (additional Requirement) in Eastern Region.

On query about shifting some of the load to ECI SDH, Powergrid representative submitted that some of the load to the extent possible had already been shifted to ECI SDH. Even after shifting of some of the loads to the ECI SDH, bandwidth utilization of existing Coriant SDH is almost 90%.

TeST Committee opined that since the bandwidth utilization of the existing SDH is almost 90% so if another SDH of same capacity is installed then on failure of existing SDH entire load would come on redundant Coriant SDH and it might fail too because its bandwidth utilization would also be more than 90%. In view of the above the Committee advised Powergrid to install the redundant Coriant SDH having higher bandwidth capacity than that of the existing one.

TeST Committee gave a go-ahead for this project and referred the same to Commercial Committee meeting for further necessary approval.

Members may discuss.

ITEM NO. B.10: Shifting of SEMs from LV to HV side of Tertiary Transformer at PGCIL Substations in ER

Auxiliary consumption of PGCIL is met through tertiary winding (as alternate supply for reliability). In 35th CCM, it was decided that the drawal of auxiliary power from tertiary winding by Powergrid substations would be treated as state drawl for inter-regional accounting. Powergrid and the states would make back-to-back commercial arrangements for this power. As per the discussion in 138th OCC at ERPC, drawl through PGCIL Tertiary has been accounted in respective state drawl wef 23.10.17. In Eastern Region there are total 52 nos of meters which are installed at PGCIL Tertiary Transformers, out of those, 37 SEMs are installed at HV side of Tertiary Transformer and remaining 15 meters are installed at LV side (i.e 415 or 400 V side). These LV side meters needs to be shifted to HV side of Tertiary transformers. The details are as below:

S. No	METER NO.	CTR	PTR	PLACE OF INSTALLATION	Remarks
1	ER-1452-A	1200	3.6363636	400 V SIDE OF 800 KVA AUX TRSF(TERT OF BARIPADA)	
2	NP-7462-A	1000	3.7727272	415 V SIDE OF 33/0.415 PANDIABILI TERTIARY.	
3	ER-1019-A	1000	3.7727272	415 V SIDE OF 33/0.415 SUNDERGARH(PG) TERT TRF(PG)	
4	NP-7951-A	1000	3.7727272	415 V SIDE OF 33/0.415 BOLANGIR(PG) TERT TRF(PG)	
5	ER-1020-A	200	3.7727272	415 V SIDE OF 33/0.415 RENGALI(PG) TERT TRF(PG)	
6	ER-1899-A	1000	3.9363636	433 V SIDE OF 33/0.433 JEYPORE(PG) TERTIARY TRF(PG)-1	Odisha (7)
7	NP-7921-A	1000	3.7727272	415 V SIDE OF 33/0.415 KEONJHAR(PG) TERTIARY TRF(PG)	
8	ER-1105-A	1000	3.7727272	415 V SIDE OF 33/0.415 SUBHASGRAM(PG) TERT(PG) ICT-1	
9	ER-1081-A	1000	3.7727272	415 V SIDE of MALDA(PG) TERTIARY-1(500MVA ICT#3)	
10	NP-6024-B	200	3.7727272	415 V SIDE OF 33/0.415 DURGAPUR(PG) TERT TRF(PG)	
11	ER-1670-A	1000	3.7727272	415 V SIDE OF 33/0.415 MAITHON(PG) TERT TRF(PG)	West Bengal (5)
12	NP-5880-A	1000	3	440 V SIDE BINAGURI(PG) TERTIARY TRANSFORMER	
13	ER-1265-A	1000	3.7727272	415 V SIDE OF 33/0.415 BIHARSHARIFF(PG) TERT TRF(PG)	
14	NP-6016-B	20	3.7727272	415 V SIDE OF 11/0.415 PUSAULI(PG) 63 KVA(ST LIGHT) T/F -1	
15	NP-5231-A	1000	3.7727272	415 V SIDE OF 33/0.415 MUZAFFARPUR(PG) TERT TRF(PG)	Bihar (3)

Members may discuss.

ITEM NO. B.11: Status of Non-communication of meters in AMR:

Presently **163 Locations with 1228 meters are connected through AMR** system in ER. ERLDC is receiving data from **146 locations** out of total 163 locations through AMR. The status of data receipt from the locations as on 15.02.2022 is as below:

Status Report of PGCIL AMR AMC (Phase I , II & III)	
Summary	
Total Substation	163
Communicating Sub Station	146
Non-communicating Sub Station	17
Total Meter	1228
Communicating meter	1135
Non-communicating Meter	93

There have been issues with the GPRS communication/DCU/Meter replacement for around **17 locations having 93 meters** as mentioned above. The details of Non communicating substations along with probable reasons are attached in **Annexure-B.11.**

POWERGRID may further update the latest status of implementation.

ITEM NO. B.12: Implementation of 4th phase AMR:

As per 4th phase AMR implementation project, 200 meters and 25 DCUs have to be synchronized with AMR in 36 locations of Eastern Region. Details of the meters covered under phase-4 is attached in ***Annexure-B.12***.

In 44th CCM, Powergrid representative informed that currently in the 4th Phase AMR implementation project, 127 SEMs out of 200 SEMs and 2 DCUs out of 25 DCUs have been integrated in the Eastern Region.

POWERGRID may further update the latest status of implementation.

ITEM NO. B.13: Replacement of GPRS communication with Optical Fiber for AMR

In ER, approximately 80% meters are connected in Automated Meter Reading (AMR). At present the communication system mainly 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.

In 44th TCC, Sikkim submitted that three nos. of locations in Sikkim had been finalized for implementation of optical fiber-based connectivity with AMR. The locations are Melli, Gangtok & Sagbari. Powergrid representative informed that 12 locations at DVC, 2 locations at NHPC/NTPC have already been completed. They further submitted that the work of 11 locations in Jharkhand & Bihar will be completed by next week and the work at remaining locations would be completed by Dec'2021. TCC advised Powergrid to furnish the updated location details to ERPC secretariat at the earliest. The details of the same is attached in **Annexure-B.13**. In 4th phase AMR implementation project, 200 meters from 36 locations also need to be connected with optical fiber.

Powergrid may please further update the latest status.

ITEM NO. B.14: Settlement Nodal Agency for Cross Border Transactions:

NVVN has been nominated as Settlement Nodal Agency (SNA) vide MoP order dated 26th Nov,2019 as per the clause 8.8 of the Guidelines for Import/Export (Cross Border) of Electricity 2018.

In 42nd CCM ERPC, Commercial Sub-Committee advised NVVN to enter into necessary agreement with TPTCL to take over all the responsibilities of nodal agency from TPTCL for Dagachhu HEP transactions. NVVN was also advised to complete the necessary registration process with ERLDC (POSOCO). After this, all matters pertaining to scheduling, payment & settlement shall be taken care of by NVVN.

In 44th TCC/ERPC, NVVN informed that they have written a letter to Bhutan and TPTCL and reply from them is awaited in this regard.

NVVN may update the latest status.

ITEM NO. B.15: SCHEDULING OF CHUZACHEN HEP AND TASHIDING HEP

Scheduling of Chuzachen HEP and Tashiding HEP is carried out by ERLDC, as per Indian Electricity Grid Code Clause 6.4.3. The clause 6.4.3 states

Quote...

"There may be exceptions with respect to above provisions, for reasons of operational expediency, subject to approval of CERC. Irrespective of the control area the jurisdiction, if a generating station is connected both to the ISTS and the STU, the load dispatch centre of the control area under whose jurisdiction the generating station falls, shall take into account grid security implication in the control area of the other load dispatch centre. "

...Unquote

Presently for net injection of Chuzachen, Gangtok(PG) and Rangpo(PG) end meters are used and for Tashiding net injection , New Melli(PG) and Rangpo(PG) end meters are being used.

In 135th OCC it was decided that related issues of control area jurisdiction, scheduling, etc may be discussed in a separate meeting. A meeting was also held in this regard with ERPC and ERLDC on 04.09.2017.

In 36th TCC, Sikkim agreed to issue the NoC for scheduling of Tashiding HEP by ERLDC. It was also decided in the 36th TCC/ERPC meeting that Tashiding would approach CERC and obtain the approval from Hon'ble commission regarding scheduling of Tashiding HEP by ERLDC. Tashiding HEP and Chuzachen HEP are yet to approach CERC for the said approval.

In 37th CCM, the following was decided:

i) The metering points for Chuzachen and Tashiding HEPs would be at CTU end.

ii) As Chuzachen and Tashiding HEPs are embedded generators of Sikkim, both need to seek approval from CERC regarding scheduling by ERLDC.

38th TCC further advised Chuzachen and Tashiding HEP to file petition with CERC for obtaining NOC for scheduling of generation by ERLDC. The accounting of power shall conform to the methodology listed in the agenda.

In 44th TCC/ERPC Meeting, Tashiding and Chuzachen representatives informed that they had filed their respective petitions before CERC on 23.07.2021 & 16.07.2021 respectively.

Meanwhile, Sikkim has given fresh NoC dated 23.12.2021 for scheduling of Chuzachen by ERLDC till the end of 2021-22.

Members may discuss. Tashiding & Chuzachen may please update the latest Status.

ITEM NO. B.16: Replacement of Non-functioning/Defective Meter

i) Erroneous reading ER-I-PG:

a. 400kV end of 765/400kV ICT#2 (ER1338-A) at New Ranchi. The meter is frozen; no more recording any data.

b. ER-1897-A installed at Duburi end of 400 KV DUBURI(GRIDCO)-PANDIABILI(PG) is showing erroneous reading due to huge time-drift since first week of Dec-2021. The issue has been intimated and reminded numerous times without any effective action from GRIDCO.

c. ER-1198-A installed at Daltonganj(Jharkhand) end of 132 KV DALTONGANJ(JUVNL)-DALTONGANJ(PG)-1 is recording less. It was also found that the polarity of the mentioned meter is also reversed.

d. Following erroneous readings were observed at various locations of BSPTCL:

1. Reverse polarity issue in meter no ER-1225-A in 220 KV LAUKAHI(BSPHCL)-DARBHANGA(DMTCL) LINE-2 at BSPTCL end.
2. Reverse polarity issue in meter no ER-1315-A in 220 KV FATUA (BSPHCL) - PATNA(PG) at BSPTCL end.
3. Reverse polarity issue in meter no ER-1224-A in 220 KV DARBHANGA(BSPTCL)-DARBHANGA(DMTCL)LINE-2 at BSPTCL end.
4. Reverse polarity issue in meter no NP-8748-A in 132 KV BANKA(BSPHCL)-BANKA(PG)-2.
5. Less reading observed in meter no NP-6052-A in 132 KV ARAH (BSPHCL) - ARAH (PG) as compared to the stand-by meter at ARAH(PG) end. Kindly confirm the CTR and PTR for this circuit.
6. Less reading observed in meter no NP-6067-A in 132 KV DUMRAON (BSPHCL) - ARAH (PG) as compared to the stand-by meter at ARAH(PG) end. Kindly confirm the CTR and PTR for this circuit.
7. Less reading observed in meter no ER-1958-A in 220 KV KHAGAUL(BSPHCL)-PATNA(PG)-1 and meter no ER-1961-A in 220 KV KHAGAUL(BSPHCL)-PATNA(PG)-2 as compared to the stand-by meters at PATNA(PG) end. Kindly confirm the CTR and PTR for this circuit.

iii) Defective Meter

a. SEM no NP-5986-A at OPTCL end of 220 KV RENGALI (GRIDCO)-TALCHER (NTPC) to be replaced by new Genus meter. As per information received, Rengali substation received the new Genus meter ER-1898-A as early as in September,2021 but replacement is yet to be done. Reminders from ERLDC have been given several times both by mail and by telephonic conversation.

b. NP-6502-A at OPTCL end of 220 KV JINDAL (OPTCL)-JAMSHEDPUR (DVC) to be replaced by new Genus meter. Already the new Genus meter has been collected by Odhisa from Keonjhar (PG) substation a few weeks ago. However, replacement is yet to be done.

c. The SEM installed at 400 kV side of KHSTPP GT-6 (NP-5852-A) is neither reporting to AMR nor being sent by NTPC regularly for some weeks. This meter data is used for validation of Kahalgaon Stg- II Actual generation. Further it was also proposed by ERLDC to replace the existing meter by new Genus meter. But the replacement is yet to be done.

Concerned may please update the status

ITEM NO. B.17: Replacement of meter due to time drift

Few L&T make main meters installed at different locations of utilities are heavily time drifted and affect the accounting process. It is very difficult to correct the time drift of L&T makes meters due to lack of support service from L&T side and also a time taking job to correct the meter fully. In view of the above, it is proposed to replace at all drifted L&T make meters with Genus makes meter as enclosed in **Annexure- B.17**.

ERLDC has provided a list of 41 SEMs to be replaced as per Annexure-B.17 of 44th CCM,. Out of 41 SEMs **only 18** has been replaced by new Genus meters. Additionally, 27 more meters have been found to be time-drifted. Therefore, there remains **total 50 SEMs** that are critically time-drifted and require replacement.

Constituents/Powergrid may please update the latest status.

ITEM NO. B.18: Non-Receipt/Late Receipt of SEM data from Various Locations

As per IEGC (effective from 3.5.2010) Sub-clause-22 of Clause-6.4 (demarcation of responsibilities), all concerned utilities in whose premise's 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. In 40th CCM, all were requested to adhere to the schedule as per IEGC.

i) Late receipt of SEM data: ERLDC is receiving the weekly SEM data by Tuesday noon from maximum locations. However, data is received on Wednesday or later from BSPTCL (Baisi, Barsoi, Khagaria); GRIDCO(Mendhasal, New Dubri, Mukhigoda); WBSETCL (Alipurduar, Bantala, Jeerat)

ii) Non-receipt:
West Bengal : Rammam, Kalimpong.
Sikkim: Ravangla
Bihar: Karamnasa new; Biharsharif (NP-5841-A); Arah
Gridco: 220 KV TTPS (GRIDCO)-TALCHER (NTPC) (NP-0553-A)

iii) No meter data is being received from 2 locations of Bhutan: **Motanga** and **Malbase** .

iv) In the following 2 cases absence of SEM data is causing difficulty in data validation:
a. Sagbari end meter data is not being received for 132 KV RANGIT (NHPC) - SAGBARI (SIKKIM) line, which is causing difficulty in pair-checking.

b. There is no meter installed at WB end of 132 KV KOLAGHAT(DVC) - KOLAGHAT (WBSETCL)

WBSETCL, GRIDCO, BSPTCL & Sikkim may update the status.

ITEM NO. B.19: Opening of LC by ER constituents for DSM payments

Clause 10 (4) of CERC Deviation Settlement Mechanism and related matters Regulations, 2014 vide notification No. L-1/132/2013/CERC dated 6th 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 favour 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 2021-22 by ER constituents is given in ***Annexure - IX*****.** Letters to this effect was issued by ERLDC to the defaulting entities.

In 43rd TCC, GRIDCO had informed that they would open the LC in due course. BSPHCL was also informed by ERLDC to open LC in favour of DSM Pool A/C in SBI instead of Axis Bank. However, LC is not opened till now. Further 44th Commercial Sub-Committee advised all the constituents to open the required LC in time. 43rd & 44th TCC advised all the concerned constituents to open requisite LC at the earliest.

At present there is no valid LC i.r.o BSPHCL, DVC, GRIDCO, WEST BENGAL SIKKIM, NPGC, JLHEP and TASHIDING.

Opening of LC is the regulatory requirement as per provision of CERC DSM regulations for defaulting members. Defaulting members may please intimate the latest status of opening of LC.

ITEM NO. B.20: Opening of LC for late payment of deviation charge-Agenda by GRIDCO

GRIDCO has been regularly making its deviation charges payment to the ER pool account. Similarly, in FY 2020 – 21, GRIDCO has made all the payments regarding the deviation charges within the allowed period of 12 days, thereby avoiding any penalty, in spite of the difficulties faced during the COVID-19 pandemic situation and GRIDCO has no outstanding dues with respect to the deviation charges. The aforesaid may be substantiated from the Q1, Q2, Q3 & Q4 Reconciliation Statements of GRIDCO for FY 2020-21. The Q4 Reconciliation Statement for FY 2020-21 is attached as **Annexure B.20** for reference. However, ERLDC vide its letter dated 23/04/2021 O/o CGM (MO), ERLDC has requested GRIDCO to open LC during FY 2021-22 due to delays on occasions during FY 2020-21, as per the norms laid down in the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2014, amended from time to time.

It is to be noted that the Clause 10(4) of the said CERC regulation states the following regarding opening of LC:

Quote
All regional entities which had at any time during the previous financial year failed to make payment of Charges for Deviation including Additional 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 favour of the concerned RLDC within a fortnight from the date these Regulations come into force.
Unquote

The above Clause states that a regional entity is required to open a LC if it fails to make its deviation charges payment within the “time specified” in the regulation during the previous financial year. Thus it is unclear whether the regulation is referring to the “time specified” in Clause 10 (1), i.e. 10 days from the date of issuance of deviation statement or to the time period Check Point Threat Extraction secured this document Get Original Check Point Threat Extraction secured this document Get Original mentioned in Clause 10 (2), i.e. 12 days from the date of issuance of the statement. Nevertheless, the dilemma regarding the “time specified” is subsequently clarified in the Clause 10 (5) which states that:

Quote
In case of failure to pay into the “Regional Deviation Pool Account Fund” within the specified time of 12 days from the date of issue of statement of charges for Deviations, the RLDC shall be entitled to encash the LC of the concerned constituent to the extent of the default and the concerned constituent shall recoup the LC amount within days.
Unquote

Thus, it is evident from the above Clause that the “time specified” mentioned in the Clause 10 (4) of regulation refers to the time period of 12 days from the date of issue of the deviation statement. And in FY 2020-21, GRIDCO has made all its payment within 12 days from the date of issuance of the deviation statement. Therefore, GRIDCO does not require to open LC for FY 2021-22. In this regard, GRIDCO vide its letter no.: Sr. GM – PP -90/ 2018/ 196 dated 22/07/2021 had also

requested ERLDC to exempt GRIDCO from opening of LC for FY 21-22, however GRIDCO is yet to receive any response from ERLDC

GRIDCO may explain. Members may discuss.

ITEM NO. B.21: Outstanding dues of Sikkim i.r.o Chukha HEP Transaction

PTC has been supplying power from Chukha HEP, Bhutan to Energy and Power Department of Sikkim. However, Energy and Power Department of Sikkim is irregular in making payment to PTC. The energy bills have not been paid since Nov, 2019. Sikkim has made payments for two recent energy bills of Nov,2021 and Dec, 2021 whereas the bills from Nov, 2019 to Oct, 2021 remain unpaid.

It is to mention that since it is a cross-border transaction involving Royal Government of Bhutan and Government of India, PTC is making regular payments to the generating company namely Druk Green Power Corporation Limited irrespective of receipt of payments from Sikkim. For this purpose, PTC has to mobilise additional resources for the working capital mismatch and continued delays are causing liquidity crunch to PTC.

Following payments are outstanding as on 31.01.2022

Sl. No.	Name of the State Utility/Discom	Energy Outstanding dues for power supply from Chukha HEP	Late Payment Surcharge	Total
1.	Energy and Power Department of Sikkim(Sikkim)	20.14 Cr.(outstanding since Nov 2019)	Rs. 4.86 Cr.	Rs. 24.82 Cr.
	Total	Rs. 20.14 Cr.	Rs. 4.86 Cr.	Rs. 24.82 Cr.

The above agenda was also discussed in the 44th Meeting of TCC and ERPC Meetings held on 29th & 30th September, 2021 wherein Energy and Power Department of Sikkim's response was as follows: (Excerpts from the MOM dated 21.10.2021)

"SIKKIM representative informed that they are already pursuing with Govt. of Sikkim for necessary budgetary support for liquidation of outstanding dues. Sikkim further informed that they will start liquidating the outstanding dues from next month onwards and the entire outstanding dues shall be cleared by December'2021."

Despite the assurance from Sikkim representatives, we have not received the outstanding amount except for payment of Rs 33.31 Lakhs against the total outstanding of Rs 24.82 Cr. We have also requested Member Secretary, ERPC to explore the reallocation of Energy and Power Department of Sikkim's share of power from Chukha HEP to other beneficiaries of Chukha HEP power as per the Agreement dated 21.08.2002 vide our letter dated 17.12.2021.

In view of above, it is requested ERPC may advice Energy and Power Department of Sikkim to liquidate the outstanding, make regular payments and open LCs as per the

agreement or else PTC will be left with no other option but to request ERPC for reallocation of power as per the provisions of the agreement dated 21.08.2002.

In this regard, ERPC vide letter No.ERPC/Com-I/2021/1306-07 dated 29.12.2021 had sent letter to Sikkim, but no communication received from Sikkim, so far.

Sikkim may update their action plan on the liquidation of outstanding dues.

ITEM NO. B.22: Outstanding dues of JBVNL (Jharkhand Bijlee Vitran Nigam Limited) against power supplied by NVVN

NVVN supplied 50 MW power each from NTPC Farakka III & Korba III from January 2017 to May 2017 to JBVNL. This power supplied against emergent requirement of Jharkhand, as it was facing power shortage during this period.

NVVN supplied power under short term bilateral trade and accordingly raised the bill for payment. However, NVVN has received an amount of Rs. 64.45 Crore in instalments against total billed amount of Rs. 115.21 Crores.

NVVN has been following up regarding the release of payment for the last four years.

The balance amount of **Rs. 50.76 Crores** is still pending for **more than four years,** to be paid by JBVNL.

Outstanding payment beyond 60 days from the due date of payment shall attract surcharge as per the CERC regulation which as on date is amounting to approximately Rs. 34 Cr.

Jharkhand may update their action plan to the liquidation of outstanding dues.

ITEM NO. B.23: Payment of Deviation Charge – Present Status.

A. Payment of Deviation Charge – Present Status

Deviation Pool Account Fund of ER is being maintained & operated by ERLDC, in accordance with the CERC Regulations. As per Regulations 10 (1) of "Deviation Settlement Mechanism and related matters" the payment of charges for Deviation shall have a high priority and the concerned constituents shall pay the indicated amounts within 10 days of issue of statement of Charges for Deviation including Additional Charges for Deviation by the Secretariat of the respective Regional Power Committee in to the "Regional Deviation Pool Account Fund" of the concern region.

The status of Deviation Charge payment as on 15.02.2022 is enclosed at ***Annexure – B.23.A***. The current principal outstanding Deviation Charge of BSPHCL, JUVNL and SIKKIM is **₹ 91.57 Cr, ₹ 66.82 Cr, & ₹ 22.21 Cr** respectively considering bill up to 30.01.2022. ERLDC is

regularly giving reminders to BSPHCL, JUVNL & SIKKIM and others defaulting entity to liquidate the outstanding Deviation charges.
In 44th TCC/ERPC held in Sep'2021, Bihar representative informed that they had liquidated Rs. 50 crore as on 29.09.2021 and the rest amount would be cleared by December'2021.
Jharkhand representative informed that payments have been delayed due to Covid-19 pandemic and outstanding dues will be liquidated within a month. Sikkim representative informed that outstanding dues will be liquidated from next month onwards and by December'2021 the entire outstanding dues shall be cleared.

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

B. Interest due to delayed payment of deviation charges/RRAS

Due to delayed payment of deviation charges in DSM Pool interest was computed for all the DSM Pool Members. The statement of interest amount as on 31.03.21 is enclosed in **Annexure-B.23.B**.

44th CCM advised all the constituents to liquidate the payment at the earliest. DVC, Jorethang, GMR, NVVN-Bangladesh & OPGC (Gridco) are yet to clear outstanding Interest.

Constituents, who are in payable mode, may please confirm the program for payment of Interest.

C. Reactive Energy Charges – Present Status.

As per decision taken in 43rd TCC/ERPC the methodology of Reactive energy billing has been revised and is implemented w.e.f. 05.04.2021 and bills are being issued to recipient states as well. The status of Reactive Energy Charges in the pool as on 15.02.2022 considering bill up to 30.01.2022 is indicated in ***Annexure – B.23.C***. The total outstanding receivable on account of Reactive charges from Bihar, JUVNL & Sikkim is **₹ 4.46 Cr, ₹ 6.18 Cr & 0.63 Cr** respectively. WBSETCL and GRIDCO are regularly paying the reactive charges.

Bihar, JUVNL & Sikkim may confirm the program for payment of outstanding dues.

D. 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 of 15.02.2022 (considering bill up to 30.01.2022) is indicated in **Annexure – B.23.D**. Total receivable by the pool is **₹145.86 Cr** and the total payable by the pool is **₹165.60 Cr** as of 15.02.2022 (considering bill up to 30.01.2022).

This is for information to the members.

E. AGC Account ----Present Status.

The updated position of Payments to the AGC Provider(s) from the DSM pool and Payments by the AGC Provider(s) to the DSM pool as on 15.02.2022 (considering bill up to 30.01.22) is indicated in ***Annexure – B.23.D.*** Total receivable by the pool is **₹26.29 Cr** and the total payable by the pool is **₹5.22 Cr** as of 15.02.2022 (considering bill up to 30.01.2022).

This is for information to the members.

F. Status of PSDF

An amount of total **₹ 185.09 Cr** from Reactive account (**26.62 Cr.**) & DSM Account (**158.47 Cr**.) has been transferred to PSDF after 44th Commercial sub-committee meeting held on 07.07.2021. With this the total amount of **₹ 1521.32 Cr** has been transferred to PSDF so far. The breakup details of fund transferred to PSDF (till 15.02.22) is enclosed in ***Annexure B.23.F.***

This is for information to the members.

ITEM NO. B.24: Reconciliation of Pool accounts

i. Deviation Account

At the end of 3rd quarter of 2021-22, the reconciliation statement (Period: 01.10.21 to 31.12.21) has been issued by ERLDC on 11.01.22 and statements had been sent to the respective constituents and also uploaded the same at ERLDC website at https://erldc.in/market-operation/dsmreconcilation/ The constituents were requested to verify /check the same & comment (if any) to ERLDC at the earliest. The status of reconciliation is enclosed in ***Annexure-B.24.i****.*

No constituents except MPL have reconciled the Deviation statement and it is pending for more than one quarter.

All above constituents are requested to update the status of reconciliation.

ii. Reactive Account

At the end of 3rd quarter of 2021-22, the reconciliation statement (Period: 01.10.21 to 31.12.21) has been issued by ERLDC on 11.01.22 and statements had been sent to the respective constituents and also uploaded the same at ERLDC website at link https://erldc.in/market-operation/reactivereconcilation/. Constituents were requested to verify /check the same & comments if any to be reported to ERLDC. The status of reconciliation is enclosed in ***Annexure-B.24.ii***.

BSPHCL, JUVNL, DVC, West Bengal & SIKKIM have not reconciled the reactive account for one or more quarters.

All above constituents are requested to update the status of reconciliation.

iii. RRAS & AGC Account

At the end of 3rd quarter of 2021-22, the reconciliation statement (Period: 01.10.21 to 31.12.21) has been issued by ERLDC on 11.01.22 and statements had been sent to the respective constituents and also uploaded the same at ERLDC website at link https://erldc.in/market-operation/rrasreconcilation/.

NTPC, BRBCL, KBUNL, NPGC and MPL have not reconciled the RRAS account for one or more quarters. The status of reconciliation is enclosed in ***Annexure-B.24.ii.***

All above constituents are requested to update the status of reconciliation.

iv. Short Term Open Access

a. For STOA payments made to SLDC / STU:

The reconciliation statements of STOA payments for the period of Apr'18 to Dec'21 have been sent to the DVC, OPTCL, BSPTCL, Jharkhand and WBSETCL for checking at their end and confirmation from their side. WBSLDC has confirmed up to Q-2 of 2020-21. WBSETCL has confirmed up to Q-2 of 2019-20. BIHAR SLDC & STU have confirmed for the entire period except Q-1 of 2021-22. OPTCL has confirmed up to Sep'19. ODISHA SLDC has confirmed for the entire period except Q-1 of 2021-22. DVC SLDC & STU has confirmed up to Q-1 of 2020-21.

b. For payments made to STOA applicants:

The reconciliation statements of STOA payments for the period of Apr'18 to Dec'21 have been sent to the CESC, JITPL, JBVNL, BSPHCL, NHPC, GRIDCO and WBSEDCL for checking at their end and confirmation.

NHPC is yet to confirm for Q4 of 2018-19. BSPHCL is yet to confirm for Q-1 & Q-2 of 2020-21. JBVNL is yet to confirm for the period from Q-2 of 2020-21. WBSEDCL is yet to confirm for the period from Q-4 of 2020-21, Q-1, Q-2 of 2021-22.

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-B.24.iv.***

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.

ITEM NO. B.25: Agenda item by POWERGRID/CTU

a) Non Opening of requisite amount of LC :

(i) Following constituents are required to enhance/ extend LC towards Payment Security Mechanism, as per CERC Regulations:

Amount (in Cr.)

Sl No	Name of DIC's	Present Value of LC	Value of LC Required
(i)	North Bihar Power Distribution Company Limited(NBPDCL)	**9.73**	**67.63**
(ii)	South Bihar Power Distribution Company Limited(SBPDCL)	**15.27**	**79.39**
(iii)	Jharkhand Bidyut Vitran Nigam Ltd (JBVNL)	**11.52**	**27.42**
(iv)	South Eastern Railway(SER)	**--**	**4.90**
(v)	East Central Railway(ECR)	**--**	**42.49**
(vi)	Sikkim	**--**	**4.05**
(vii)	Nabinagar Power Generating Company Pvt. Ltd. (NPGCPL)	**--**	**4.48**
(viii)	DANS Energy Ltd.	**--**	**5.40**
(ix)	SHIGA Energy Ltd.	**--**	**5.51**

- Letter of Credit (LC) to be opened in favour of ***CTUIL*** **for POC** ***& POWERGRID*** towards ***Non-POC*** Billing**.**

This is for your information to Members.

b) MOP Guideline vide letter no. 40/1/2021-R&R dated 18th March,2021 (enclosed as ***Annexure-B.25.b*****) on payment security mechanism for payment of dues by Discoms to Gencos and Transcos.**

c) BCD Procedure as per Clause 3 of Regulation 23 of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020

- Regarding Standard Terms & Conditions of Letter of Credit as per ***Annexure-8*** of 8.2 of Para 8.0 of BCD Procedure established by DIC towards Payment Security Mechanism.

- Regarding furnishing the TDS certificates as per 5.5 of Para 5.0 of BCD Procedure & TDS Certificates in the name of POWERGRID (to the extent of POWERGRID Share) and balance in the name of ISTS Licensees/CTUIL as the ratio communicated to the corresponding month.

d) Payment of Outstanding dues more than 45 days :

Amount (in Cr.)

Sl No	Name of DIC's	Total Outstanding dues	Outstanding due more than 45 days
(i)	Ind-Barath Energy (Utkal) Limited	**220.54**	**220.54**
(ii)	West Bengal State Electricity Distribution Company Ltd.(WBSEDCL)	**111.67**	**18.62**
(iii)	GRIDCO Ltd	**23.26**	**23.26**
(iv)	TeestaValley Power Transmission Ltd(TPTL)	**5.75**	**5.75**
(v)	Teesta Urja Limited(TUL)	**8.55**	**8.55**
(vi)	Power Deptt. Govt. of Sikkim	**25.83**	**22.32**
(vii)	Jharkhand Bijli Vitran Nigam Limited(JBVNL)	**43.68**	**16.09**
(viii)	North Bihar Power Distribution Company Limited(NBPDCL)	**208.18**	**133.24**
(ix)	South Bihar Power Distribution Company Limited(SBPDCL)	**244.08**	**156.11**
(x)	Jharkhand Urja Sancharan Nigam Limited (JUSNL)	**19.54**	**18.55**
(xi)	Odisha Power Generation Company Limited (OPGCL)	**18.93**	**18.93**
(xii)	Odisha Power Transmission Company Limited (OPTCL)	**55.24**	**55.24**
	Total	**985.25**	**697.20**

Remarks of above:

(i) Ind-Barath Energy (Utkal) Limited:- Matter in NCLT.

(ii) The outstanding still pertaining to WBSEDCL (Bill # 4 @ Rs. 1.20 Cr). WBSEDCL has not admitted Rs. 1.20 Cr towards Bill # 4 long pending outstanding.

(iii) The outstanding pertaining to GRIDCO (Surcharge @ Rs. 23.26 Cr).

This is for information to Members.

e) Non-payment of RTDA bills :

The following DIC's have not paying RTDA bills:

Sl No	Name of DIC's	Outstanding dues	Remarks
(i)	West Bengal State Electricity Distribution Company Ltd.(WBSEDCL)	**1.20 Cr.**	Payment of Rs. 1.79 Cr. has been made by WBSEDCL against RTDA bills. However, The outstanding dues of Rs. 1.20 Cr. against RTDA bills is still pending to WBSEDCL despite of several follow up regarding this.

ITEM NO. B.26: Additional Agenda, if any.

PART C: ITEMS FOR INFORMATION

ITEM NO. C.1: STU and SLDC Transmission & Operating charges.

1. State Transmission Utility Charges and Losses applicable for STOA of FY 2021-22

Name of STU	Intra-State Transmission Charges	TRANSMISSION LOSS (For Embedded entities)
WBSETCL	Rs. 243.92 /MWh	3.10%
DVC	Rs. 143.7 / MWh	2.28%
OPTCL	Rs. 280 / MWh	3.00%
JUSNL	*	#
BSPTCL	Rs. 263 / MWh	3.00%
SIKKIM	*	#

N.B:

* 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.

2. State Load Despatch Centre Operating Charges for STOA for FY 2021-22

Name of SLDC	SLDC Operating Charge
West Bengal	**
DVC	**
Odisha	Rs. 2000
Jharkhand	**
Bihar	**
SIKKIM	**

N.B:

** 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 tr ansaction for each of the Regional Load Despatch 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 and any discrepancy may be reported.

ITEM NO. C.2: Status of Start-up power drawl, infirm injection and CoD Declaration

Updated Status of Start-up power drawl, infirm injection and CoD Declaration of Generator as Reginal entity and Pool member in last Quarter is as follows:

1. Start Up power

S. No	Generator	Date of start-up Power Drawl
1.	NPGC(2X660MW) Unit-3	28.03.2021
2.	Barh Stg-I(3X660MW) U-2	18/01/2022

2. Infirm Power

S. No	Generator	Infirm Injection Started From	6 month period would end by	Extension granted by CERC
1	NPGC(2X660MW) Unit-3	28/03/2021	27/09/2021	Extension allowed Upto 27/09/2022
2.	Barh Stg-I(3X660MW) U-2	Not Started Yet		

Members may note.

ITEM NO. C.3: Bhutan Accounting:

Bhutan is under the ambit of DSM accounting & settlement w.e.f 01.01.2022 as per Designated Authority, CEA approval for import of Power by Bhutan. Till the signing of the SNA agreement between NVVN and Bhutan, PTC shall settle all the grid related charges including Deviation Settlement Mechanism (DSM) on behalf of Bhutan. (DA, CEA letter attached at Annexure-C.3)

This is for the information of all members.

ITEM NO. C.4: List of Assets Commissioned during April'21 to December'2021 of Eastern Region (ER)

A	***Eastern Region Strengthening Scheme-XX***	**DOCO**	**Remarks**	**Region**
1	765 KV, 80 MVAR (Single Phase) Spare Reactor Unit" at Ranchi (New) 765/400 kV S/S	02/04/21	DOCO Letter Dtd. 12.04.2021 enclsoed.	ER I
B	***"Transmission System Stengthening in Indian System for Transfer of Power from Mangdechu HEP in Bhutan"***	**DOCO**	**Remarks**	**Region**
1	"Alipurduar-Jigmelling 400 kV D/C (Quad) line (Indian Portion) and 2 nos 400 kV line bays at Alipurduar."	24/06/21	DOCO Letter Dtd. 24.06.2021 enclsoed.	ER II
C	***Eastern Region Strengthening Scheme-XV***	**DOCO**	**Remarks**	**Region**
1	LILO of Sagardighi-Subhasgram 400 kV S/C line at Jeerat and 2 nos 400 kV GIS line bays at Jeerat S/S of West Bengal.	23/06/21	DOCO Letter Dtd. 23.06.2021 enclsoed.	ER II
D	***Eastern Region Strengthening Scheme-XVII (Part-B)***	**DOCO**	**Remarks**	**Region**
1	315 MVA, 400/220 KV ICT-3 (In Parallel to ICT-I) at Jeypore S/S.	19/04/21	DOCO Letter Dtd. 23.06.2021 enclsoed.	Odisha Proj

E	***Eastern Region Strengthening Scheme-XVII (Part-B)***	**DOCO**	**Remarks**	**Region**
1	315 MVA, 400/220 KV ICT-IV (In Parallel to ICT-II) at Jeypore Substation.	01/11/21	DOCO Letter Dtd. 01.12.2021 enclsoed.	Odisha Proj
F	***Communication System Under Eastern Region Fibre Optic Expansion Project (Additional Requirment)***	**DOCO**	**Remarks**	**Region**
1	400kV Baripada-Duburi-Pandiabili OPGW Link along with 1 no SDH equipment with SFP & 48V DC Power Supply at Duburi (OPTCL), SFP at Baripada & Pandiabili Substation (316.060 Km)	11/07/21	DOCO Letter Dtd. 14.09.2021 enclsoed.	Odisha Proj

This is for the information of all members.

ITEM NO. C.5: List of Assets of POWERGRID MITHILANCHAL TRANSMISSION LIMITED (PMTL) Commissioned:

1	Establishment of new 400/220/132 kV, 2x500 MVA+2x200MVA S/s at Saharsa (New)	17/10/2021	DOCO Letter Dtd. 18.10.2021 enclsoed./ **(15.48%)**	ER-I/ PMTL
2	Lilo of both circuits of Kishanganj-Patna 400 kV D/C (Quad Moose) line of POWERGRID at Saharsa (New)		DOCO Letter Dtd. 18.10.2021 enclsoed./ **(14.09%)**	

This is for the information of all members.

ITEM NO. C.6: 3rd interaction of the Commission with Chairpersons and Member Secretaries of RPCs.

The 3rd interaction meeting of the commission with Chairpersons and Member Secretaries of RPCs held on 17.11.2021 through Microsoft MS Team platform, wherein the agenda items of ERPC as well as other RPCs were discussed in detailed. Hon'ble CERC vide letter dated 04.01.2022 issued the minutes of the meeting. The agenda items and minutes of the meeting are enclosed at **Annexure- C.6** for your information and compliance.

Members may note for compliance.

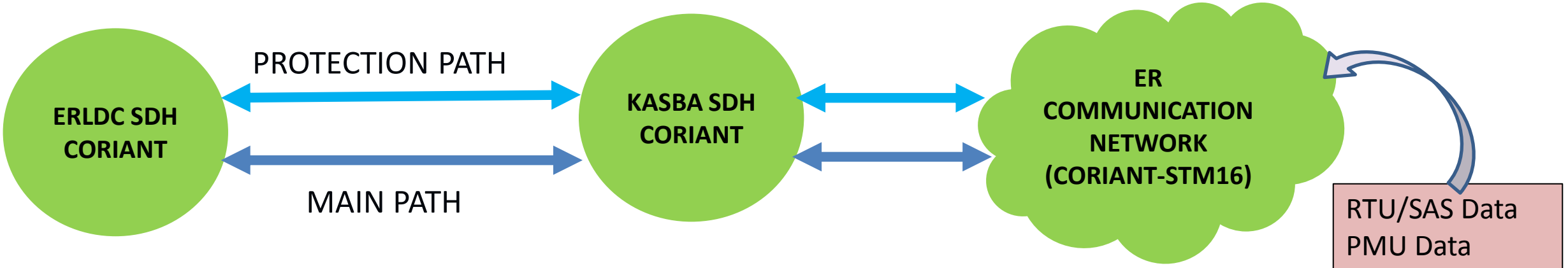
ITEM NO. C.7: New regulations/Orders of MoP/CEA/CERC

1. **Central Electricity Regulatory Commission (Ancillary Services) Regulations, 2022**
   CERC vide notification dated 31.01.2022 had issued Ancillary Service regulation'2022 and directed the Nodal Agency (NLDC) for preparing detailed procedure after stakeholders' consultation within a period of 3 months of notification of these regulations and submit the same for information to the Commission.

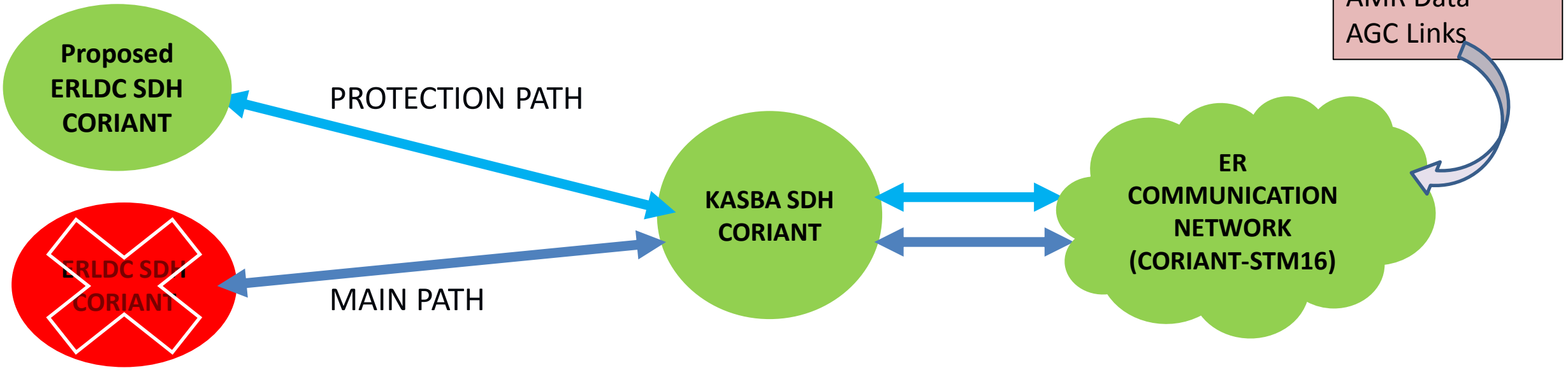
2. **Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2021**
   CERC vide notification dated 07th September'2021 had issued Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2021 and requested to furnish the comments/ suggestions/objections on the above Draft Regulations on or before 22nd October, 2021. Public Hearing was held on 24.11.2021.

3. **Draft Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2021**
   CERC vide notification dated 16.12.2021 had issued the Draft Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2021 and requested to furnish the comments/ suggestions/objections from the stakeholders and interested persons on the above Draft Regulations on or before 25th February'2022. CERC had organized Workshops/Discussion on Draft Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2021 for Eastern Region beneficiaries on 14.02.2022.
   PPT attached at **Annexure-C.7** for your information.

Equipment Connectivity at Present



Equipment Connectivity Proposed



Annexure- B.11

Status Report of PGCIL AMR AMC (Phase I , II & III)	Date: 15-Feb-2022
Summary	
Total Substation	163
Communicating Sub Station	146
Non-communicating Sub Station	17
Total Meter	1228
Communicating meter	1135
Non-communicating Meter	93

Details of Non-communicating Sub Stations

SNO	Utility Name	Substation Name	Total Meter	Probable issue
1	BIHAR	ARAH(ARB)	1	GPRS issue.
2	POWERGRID	ANGUL(AGL)	8	Meters are replaced, AMC work for meter integration will be done soon.
3	NTPC	DARLIPALLI	4	GPRS issue. Need PGCIL LAN provision .
4	GRIDCO	INDRAVATI(IND)	1	GPRS issue.
5	SIKKIM	DIKCHU	5	GPRS issue. Poor network connectivity.
6	BIHAR	FATUA(FAT)	1	Meter RS-485 port issue. Request to replace the meter.
7	IPPR	IND-BARATH(IBR)	6	Unable to communicate with substation regarding AMC work .
8	SIKKIM	JORTHANG	6	GPRS issue.
9	BIHAR	KISHANGANJ(KSN)	2	Meter RS-485 port issue. Request to replace the meter.
10	DVC	KALYANESWARI	2	Meter faulty. Request to replace the meter.
11	NTPC	FARAKKA	38	Replaced meter. Substation did not allow for meter integration work due to COVID-19 restrictions.
12	WB	RAMMAM(RMM)	1	GPRS issue.
13	IPPR	STERLITE(SEL)	10	Unable to communicate with substation regarding AMC work
14	NTPC	TALCHER SOLAR(TLS)	6	TCS will visit there and will do necessary AMC work shortly.
15	DVC	BARHI(BAR)	1	Meter faulty. Request to replace the meter.
16	DVC	TISCO(TIS)	2	Replaced meter. Substation did not allow for meter integration work due to COVID restrictions.
17	SIKKIM	RAVANGLA(RVG)	1	GPRS issue.
		Total Non Comm	**93**	

Annexure-B.12

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)	133	GENUS	ER-1135-A	BERHAMPORE(PG)
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	
9	GENUS	ER-1433-A		141	GENUS	ER-1015-A	ANGUL(PG)
10	GENUS	ER-1346-A		142	GENUS	ER-1016-A	
11	GENUS	ER-1104-A	ALIPURDUAR(PG)	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	
16	GENUS	ER-1004-A		148	GENUS	ER-1110-A	BIRPARA(PG)
17	GENUS	ER-1044-A		149	GENUS	ER-1041-A	
18	GENUS	ER-1047-A		150	GENUS	ER-1415-A	CHAIBASA(PG)
19	GENUS	ER-1048-A		151	GENUS	ER-1420-A	
20	GENUS	ER-1049-A		152	GENUS	ER-1079-A	BIRPARA(WB)
21	GENUS	ER-1465-A		153	GENUS	ER-1594-A	BARIAPDA(PG)
22	GENUS	ER-1463-A		154	GENUS	ER-1446-A	BARH(NTPC)
23	GENUS	ER-1469-A		155	GENUS	ER-1220-A	JAMSHEDPUR(PG)
24	GENUS	ER-1467-A		156	GENUS	ER-1468-A	RANGPO(PG)
25	GENUS	ER-1473-A		157	GENUS	ER-1153-A	KISHANGANJ(PG)
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	
33	GENUS	ER-1046-A		165	GENUS	ER-1531-A	MALDA(PG)
34	GENUS	ER-1088-A		166	GENUS	ER-1536-A	
35	GENUS	ER-1089-A		167	GENUS	ER-1008-A	MEJIA(DVC)
36	GENUS	ER-1233-A	NPGC(NTPC)	168	GENUS	ER-1031-A	
37	GENUS	ER-1240-A		169	GENUS	ER-1122-A	MPL
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	
41	GENUS	ER-1219-A		173	GENUS	ER-1418-A	NABINAGAR(BRBCL)
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	DARLIPALLI(NTPC)	176	GENUS	ER-1299-A	
45	GENUS	ER-1097-A		177	GENUS	ER-1292-A	
46	GENUS	ER-1091-A		178	GENUS	ER-1294-A	
47	GENUS	ER-1095-A		179	GENUS	ER-1461-A	NEW MELLI(PG)
48	GENUS	ER-1025-A		180	GENUS	ER-1470-A	
49	GENUS	ER-1024-A		181	GENUS	ER-1491-A	DURGAPUR(PG)

50	GENUS	ER-1295-A	KISHANGANJ(BSPTCL)
51	GENUS	ER-1158-A	
52	GENUS	ER-1156-A	
53	GENUS	ER-1157-A	
54	GENUS	ER-1001-A	NEW TOWN(WB)
55	GENUS	ER-1009-A	KLC BANTALA(WB)
56	GENUS	ER-1052-A	OPGC
57	GENUS	ER-1027-A	
58	GENUS	ER-1112-A	
59	GENUS	ER-1026-A	
60	GENUS	ER-1030-A	
61	GENUS	ER-1053-A	
62	GENUS	ER-1066-A	
63	GENUS	ER-1068-A	
64	GENUS	ER-1060-A	
65	GENUS	ER-1456-A	
66	GENUS	ER-1541-A	TEESTA-III
67	GENUS	ER-1542-A	
68	GENUS	ER-1546-A	
69	GENUS	ER-1543-A	
70	GENUS	ER-1519-A	
71	GENUS	ER-1545-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	BETIAH(BSPTCL)
88	GENUS	ER-1173-A	
89	GENUS	ER-1116-A	BHOGRAI(GRIDCO)
90	GENUS	ER-1114-A	JALESWAR(GRIDCO)
91	GENUS	ER-1127-A	SUBHASHGRAM(WBS)
92	GENUS	ER-1003-A	
93	GENUS	ER-1131-A	SAGARDIGHI(WB)
94	GENUS	ER-1132-A	
95	GENUS	ER-1134-A	
96	GENUS	ER-1520-A	
97	L&T	LT-0312-A	

29 NEW LOCATIONS WITH 132 METERS

182	GENUS	ER-1496-A	DURGAPUR(PG)
183	GENUS	ER-1298-A	AMCHANDARPUR(JUSN
184	GENUS	ER-1020-A	RENGALI(PG)
185	GENUS	ER-1402-A	RANCHI(PG)
186	GENUS	ER-1083-A	BIDHANAGAR(WB)
187	GENUS	ER-1012-A	SUNDERGARH(PG)
188	GENUS	ER-1093-A	
189	GENUS	ER-1100-A	
190	GENUS	ER-1019-A	
191	GENUS	ER-1118-A	
192	GENUS	ER-1022-A	
193	GENUS	ER-1062-A	
194	GENUS	ER-1023-A	
195	GENUS	ER-1117-A	
196	GENUS	ER-1119-A	
197	GENUS	ER-1021-A	
198	GENUS	ER-1067-A	
199	GENUS	ER-1061-A	
200	GENUS	ER-1070-A	
201	GENUS	ER-1065-A	
202	GENUS	ER-1064-A	
203	GENUS	ER-1500-A	SILIGURI(PG)
204	GENUS	ER-1493-A	
205	GENUS	ER-1217-A	PUSAULI(PG)
206	GENUS	ER-1218-A	
207	GENUS	ER-1318-A	
208	GENUS	ER-1319-A	
209	GENUS	ER-1372-A	RANCHI NEW(PG)
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	
216	GENUS	ER-1371-A	PURNEA(PG)
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	
223	GENUS	ER-1231-A	PATNA(PG)
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	

25 OLD LOCATIONS WITH 124 METERS

98	GENUS	ER-1451-A	
99	GENUS	ER-1453-A	RAJARAHAT(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)

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

Annexure-B.13

List of Substation Connected with PGCIL Intranet connection(LAN)			
Sl No.	**Substation name**	**Uitility**	**LAN Integration Date**
1	Power Grid	Subhashgram	15-Jun-17
2	Power Grid	Binaguri	20-Jul-17
3	Power Grid	Malda	06-Jun-18
4	Power Grid	Kishanganj	15-Jul-18
5	Power Grid	Siliguri	12-Sep-18
6	Power Grid	Gangtok	15-Sep-18
7	Power Grid	Rourkela	03-Oct-18
8	Power Grid	Gaya	25-Dec-18
9	Power Grid	Biharshariff	27-Dec-18
10	Power Grid	Arah	29-Oct-18
11	Power Grid	Jamshedpur	02-Nov-18
12	Power Grid	Rangpo	05-Dec-18
13	Power Grid	Durgapur	07-Dec-18
14	Power Grid	Jeypore	10-Dec-18
15	Power Grid	Maithon	11-Dec-18
16	Power Grid	Pusaul	19-Dec-18
17	Power Grid	Muzaffarpur	20-Dec-18
18	NTPC	Barh	21-Dec-18
19	NTPC	Kahalgaon	21-Dec-18
20	Power Grid	Purnea	24-Dec-18
21	Power Grid	Banka	27-Dec-18
22	NHPC	Teesta	01-Jan-19
23	NHPC	Rangit	02-Jan-19
24	Power Grid	Baripada	15-Nov-18
25	Power Grid	Ranchi	10-Jan-19
26	NTPC	Talcher	16-Jan-19
27	NTPC	Farakka	22-Jan-19
28	Power Grid	Chaibasa	28-Jan-19
29	Power Grid	Dalkhola	28-Jan-19
30	Power Grid	Birpara	29-Jan-19
31	Power Grid	Rajarhat	18-Apr-19
32	NTPC	Kanti	28-May-19
33	Power Grid	Patna	20-Sep-19
34	PGCIL	Behrampore	18-Nov-19
35	PGCIL	Pandiabil	30-Jan-20
36	DVC	Mejia	30-Sep-20
37	DVC	RTPS	25-Feb-21
38	PGCIL	Bolangir	26-Feb-21
39	PGCIL	New Melli	04-Mar-21
40	PGCIL	Sundergarh	12-Mar-21
41	DVC	DSTPP (AND)	28-Jul-21
42	DVC	JAMSHEDPUR (JAM)	31-Aug-21

43	DVC	KALNESHWARI (KAR)	03-Aug-21
44	DVC	KODERMA (KOD)	05-Aug-21
45	DVC	KOLAGHAT (KGT) DVC	27-Jul-21
46	DVC	MAITHON (MAI)	03-Aug-21
47	DVC	MANIQUE (MNQ)	01-Sep-21
48	DVC	WARIA (WAR)	28-Jul-21
49	DVC	DHANBAD	04-Aug-21
50	DVC	PARULIA	29-Jul-21
51	DVC	PATRATU	07-Aug-21
52	DVC	BARHI	06-Aug-21
53	PGCIL	Medinipur	06-Sep-21
54	PGCIL	Alipurduar	23-Sep-21
55	WBSEB	Jeerat	12-Jul-21
56	BSEB	Bodhgaya	26-Oct-21
57	BSEB	Hajipur	26-Oct-21
58	BSEB	Lakhisarai	25-Oct-21
59	BSEB	Sipara	26-Oct-21
60	PGCIL	Sitamari PG	09-Oct-21
61	WBSEB	Malda	08-Nov-21
62	WBSEB	Dalkhola	10-Nov-21
63	WBSEB	Birpara	08-Nov-21
64	WBSEB	Subhasgram	02-Nov-21
65	WBSEB	New Town	01-Nov-21
66	WBSEB	Kharagpur	12-Nov-21
67	WBSEB	PPSP-New	11-Nov-21
68	WBSEB	Bidhannagar (220KV and 400KV)	18-Nov-21
69	Sikkim	Melli	22-Nov-21
70	WBSEB	NJP	30-Nov-21
71	WBSEB	NBU	12-Nov-21
72	PGCIL	Saharsha	30-Nov-21
73	BSEB	Biharshariff	08-Dec-21
74	BSEB	Nalanda	08-Dec-21
75	BSEB	Jamui	08-Dec-21
76	BSEB	Khagaul	09-Dec-21
77	BSEB	Sultanganj	09-Dec-21
78	BSEB	Sabour	09-Dec-21
79	BSEB	Jagadispur	11-Dec-21
80	BSEB	Sonnenagar New	11-Dec-21
81	BSEB	Dumraon	14-Dec-21
82	BSEB	Madhepura	14-Dec-21
83	BSEB	Dehri	15-Dec-21
84	BSEB	Sonnenagar	16-Dec-21
85	JSEB	Chaibasa 220KV	16-Dec-21
86	JSEB	Tenughat	18-Dec-21

87	BSEB	Karmanasha	18-Dec-21
88	JSEB	Ramchandrapur	23-Dec-21
89	JSEB	Hatia	29-Dec-21
90	OPTCL	Meramumdali	03-Jan-22
91	OPTCL	Budhipadar	03-Jan-22
92	BSEB	Fathua	04-Jan-22
93	OPTCL	Tarkera	08-Jan-22
94	OPTCL	Balasore	10-Jan-22
95	BSEB	Kishanganj	10-Jan-22
96	OPTCL	Baripada	11-Jan-22
97	OPTCL	Jeynagar	11-Jan-22
98	PGCIL	Indravati	12-Jan-22
99	PGCIL	Daltongonj	08-Jan-22
100	OPTCL	Bolangir	13-Jan-22
101	OPTCL	Joda	20-Jan-22
102	BSEB	Banka	27-Jan-22
103	OPTCL	Katapali	28-Jan-22
104	BSEB	Mohania	28-Jan-22
105	JSEB	Lalmatia	29-Jan-22
106	OPTCL	New Dubri	02-Feb-22
107	PGCIL	Rengali	02-Feb-22
108	BSEB	Rajgir	03-Feb-22
109	PGCIL	Mendashal	03-Feb-22

List of Drifted Main Meters to be replaced : ER

(time drift available in AMR system as on 01.02.2022)

Annexure-B.17

UTILITY	SNO	LOCATION ID	FEEDER NAME	METER NO	TIME DIFFER(min)	Pending
BIHAR	1	BI-57	220 KV BIHARSHARIFF (BSPHCL) - TENUGHAT (JSEB)	NP-5844-A	7	
	2	BI-13	220 KV KHAGAUL(BSPHCL) - ARAH (PG)-1	NP-8641-A	-21	
	3	BI-14	220 KV KHAGAUL(BSPHCL) - ARAH (PG)-2	NP-6060-A	6	
	4	BI-33	220 KV NADHOKHAR(BSPHCL)- PUSAULI (PG)-2	NP-8665-A	-14	
	5	BI-21	132 KV BAISI(BSPHCL) - DALKHOLA (WBSETCL)	NP-6085-A		
	6	BI-09	132 KV KAHALGAON(BSPHCL) - LALMATIA(JSEB)	NP-6071-A	23	
	7	BI-61	132 KV SULTANGANJ (BSPHCL) - DEOGARH (JSEB)	NP-7400-A	25	Total=14
Newly Added	8	ER-01	400KV SIDE OF BIHARSARIF (PG) 400/220 KV ICT-1	NP-6063-A	18	
	9	ER-02	400KV SIDE OF BIHARSARIF (PG) 400/220 KV ICT-2	NP-6069-A	19	
	10	ER-03	400KV SIDE OF BIHARSARIF (PG) 400/220 KV ICT-3	NP-6068-A	8	
	11	BI-63	132 KV KARMANASHA(BSPHCL) - CHANDAULI (UPSEB)	NP-6017-B	37	
	12	BI-64	132 KV KARMANASHA(BSPHCL) - SAHUPURI(UPSEB)	NP-6018-B	12	
	13	BI-60	132 KV SONENAGAR (BSPHCL)- JAPLA (JSEB)	NP-6015-B	31	
	14	BI-66	132 KV SONENAGAR(BSPHCL) - NAGARUNTARI(JSEB)	NP-6013-B	30	
JHARKHAND	1	JS-51	220 KV RAMCHANDRAPUR (JSEB) - JODA (GRIDCO)	NP-6102-A	16	
	2	JS-57	220 KV CHANDIL (JSEB) - SANTALDIH (WBSETCL)	NP-7436-A	31	
	3	JS-62	220 KV TENUGHAT (JSEB) - BIHARSHARIFF (BSPHCL)	NP-6115-A	21	
	4	JS-52	132 KV KENDOPOSI (JSEB) - JODA (GRIDCO)	NP-6117-A	replaced	
	5	JS-50	132 KV KENDOPOSI(JSEB)-JODA(GRIDCO) TRANSFER BUS	NP-8644-A	replaced	
	6	JS-63	132 KV LALMATIA (JSEB) - KAHALGAON (BSPHCL)	NP-6107-A	23	
	7	JS-64	132 KV JAPLA(JSEB) - SONENAGAR (BSPHCL)	NP-6112-A	-6	
	8	JS-66	132 KV JAMTARA (JSEB) - MAITHON (DVC)	NP-6110-A	35	Total=14
Newly Added	9	ER-17	400 KV SIDE OF JAMSHEDPUR(PG) 400/220 KV 315MVA ICT-1	NP-6106-A	12	
	10	ER-18	400 KV SIDE OF JAMSHEDPUR(PG) 400/220 KV 315MVA ICT-2	NP-6105-A	10	
	11	EM-44	220 KV RANCHI(PG) - HATIA (JSEB)-2	NP-5879-A	20	
	12	EM-45	220 KV RANCHI(PG) - CHANDIL (JUVNL)-1	NP-5874-A	16	
	13	EM-49	220 KV RANCHI(PG) - HATIA (JUVNL)-3	NP-7880-A	20	
	14	JS-55	132KV PATRATU (JSEB)-RAMGARH (DVC)-TR.BUS	NP-6003-B	19	
	15	JS-40	132KV PATRATU (JSEB) - PATRATU (DVC) -2	NP-6005-B	26	
	16	JS-54	132KV PATRATU (JSEB) - PATRATU (DVC) -1	NP-8610-B	-3	
DVC	1	DV-20	400 KV KODERMA (DVC) - BIHARSHARIFF(PG)-I	NP-7831-A	replaced	
	2	DV-21	400 KV KODERMA (DVC) - BIHARSHARIFF(PG)-II	NP-7830-A	replaced	
	3	DV-40	400 KV KODERMA(DVC)-GAYA(PG) LINE-I(MAIN)	NP-7891-A	replaced	
	4	DV-42	400 KV KODERMA(DVC)-GAYA(PG) LINE-II(MAIN)	NP-7890-A	replaced	
	5	DV-10	400 KV DSTPS(DVC)-JAMSHEDPUR-I(MAIN)	NP-6524-A	replaced	Total=02
	6	DV-06	400 KV DSTPS(DVC)-JAMSHEDPUR(PG)-II(MAIN)	NP-6522-A	replaced	
Newly Added	7	DV-53	132 KV PATRATU (DVC)-PATRATU(JSEB)-1&2(SUM)	NP-6006-B	11	
	8	DV-61	132 KV KOLAGHAT(DVC) - KOLAGHAT (WBSETCL)	NP-6558-B	-17	
	9	DV-55	132KV MANIQUE (DVC) - CHANDIL (JSEB)	NP-6011-B	33	
GRIDCO	1	OR-21	400 KV MENDHASAL (GRIDCO)- PANDIABIL(PG)-1	NP-5980-A	replaced	
	2	OR-20	400 KV MENDHASAL (GRIDCO)- PANDIABIL(PG)-2	NP-7498-A	replaced	
	3	OR-22	400 KV DUBURI (GRIDCO)- BARIPADA(PG)	NP-7916-A	replaced	
	4	OR-23	400 KV DUBRI(GRIDCO)-PANDIABIL(PG)	NP-7915-A	replaced	
	5	OR-53	220 KV JODA (GRIDCO)-RAMCHANDRAPUR (JSEB)	NP-5937-A	replaced	
	6	OR-54	220 KV JINDAL (GRIDCO)-JAMSHEDPUR (DVC)	NP-6502-A		Total=01
	7	OR-52	132 KV JODA (GRIDCO)-KENDPOSI (JSEB)	NP-5939-A	replaced	
	8	OR-56	220 KV BUDHIPADAR (GRIDCO) - RAIGARH (PG)	NP-5940-A	replaced	
	9	OR-57	220 KK BUDHIPADAR (GRIDCO)-KORBA(MPEB)-2	NP-5941-A	replaced	
	10	OR-59	220 KK BUDHIPADAR (GRIDCO)-KORBA(MPEB)-3	NP-5944-A	replaced	
WEST BENGAL	1	WB-29	400 KV KHARAGPUR(WB)-CHAIBASA(PG)-2	NP-8720-A	-4	
	2	WB-30	400 KV KHARAGPUR(WB)-CHAIBASA(PG)-1	NP-8731-A	34	
	3	WB-53	220 KV SANTALDIH (WBSETCL) - CHANDIL(JSEB)	NP-7942-A	replaced	
	4	WB-57	132 KV KURSEONG(WBSETCL)-RANGIT(NHPC)	NP-7541-A	26	
	5	WB-58	132 KV KURSEONG(WBSETCL)-SILIGURI(NHPC)	NP-7542-A	16	
	6	WB-52	132 KV DALKHOLA (WBSETCL)-BAISI(BSPHCL)	NP-8741-A	-2	Total=10
	7	WB-59	66 KV KALIMPONG (WBSETCL) - MELLI (SIKKIM)	NP-5994-A		
Newly Added	8	WB-12	400 KV SAGARDIGHI(WB) - FARAKKA (NTPC)-1(MAIN)	NP-6482-A		
	9	WB-25	400 KV SAGARDIGHI(WB)-BERHAMPORE(PG) LINE-2(MAIN)	NP-8724-A		
	10	WB-27	400 KV SAGARDIGHI(WB)-BERHAMPORE(PG) LINE-1(MAIN)	NP-8723-A		
	11	WB-11	132 KV RAMMAM (WBSETCL) - RANGIT (NHPC)	NP-5917-A		
SIKKIM	1	SM-51	66 KV MELLI (SIKKIM) - KALIMPONG (WBSETCL)	NP-5849-A	24	
	2	SM-01	66 KV RAVANGLA (SIKKIM) - RANGIT (NHPC)	NP-6481-A		Total=04
Newly Added	3	SM-03	132KV MELLI (SIKKIM) - RANGPO (PG)	NP-8770-A	-8	
	4	SM-02	132KV MELLI (SIKKIM) - SILIGURI (PG)	NP-8771-A	10	
INTER REGIONAL						
Newly added	1	EM-21	400KV BIHARSHARIFF(ER)-BALIA (NR)-1	NP-6061-A	17	Total=03
	2	EM-47	400 KV RANCHI(PG)-SIPAT-1 (WR)	NP-5835-A	19	
	3	EM-48	400 KV RANCHI(PG)-SIPAT-2 (WR)	NP-5836-A	17	

Annexure -B.19

Current Status of Letter of Credit (LC) amount against DSM charges for ER constituents

Figures in Lacs of Rupees

Sl No	ER Constituents	No. of weeks in which Deviation Charge payable	No of times payment was delayed during 2020-21	Total Deviation charges payable to pool during 2020-21	Average weekly Deviation Charge liability (C)/52 weeks	LC Amount 110% of (B)	Defaulting Weeks	Due date of expiry	Remarks
		(A)	(B)	(C)	(D)	(E)	(G)	(F)	(G)
1	Bihar State Power Holding Corporation Limited / बिहार	44	44	15486.42	297.82	327.60	All Weeks	No Valid LC	
2	Jharkhand State Electricity Board / झारखंड	29	29	3249.42	62.49	68.74	All Weeks	22-11-2022	
3	Damodar Valley Corporation / डीवीसी	39	10	5182.62	99.67	109.63	Week-1,5,6,7,10,19	No Valid LC	
4	Gridco Limited / ग्रिडको	19	16	1491.45	28.68	31.55	Week-3,6,7	No Valid LC	
5	SLDC - UI FUND - WBSETCL / पश्चिम बंगाल	49	8	15847.85	304.77	335.24	Week-40,45	No Valid LC	
6	Power Deptt, Govt. of Sikkim / सिक्किम	17	17	316.51	6.09	6.70	Week-1,14,15,26	No Valid LC	
7	DANS Energy Private Limited - Operation Retention Account / डेन्स ऊर्जा	50	35	896.76	17.25	18.97	Week-10,19,21,23	No Valid LC	Existing LC of 1.88477 Lac expired on 16.06.21
8	Powergrid Corporation Of India Limited-Sasaram / सासाराम	16	7	13.28	0.26	0.28	Week-19,20,21,27,28	31-03-2022	
9	Sneha Kinetic Power Projects Pvt. Ltd./ दिकचू	13	6	94.76	1.82	2.00	Week- 5,28,44	12-05-2022	Rs 2.01000 Lac Opened
10	Jindal India Thermal Power Ltd. / जिंदल	34	20	771.66	14.84	16.32	Week-5,11,18	31.03.2022	LC existing of 20.67845 Lac
11	PGCIL-Alipurduar / अलीपुरदुआर	24	24	6.92	0.13	0.15	Week-3,4,5,15	31.12.2022	
12	Shiga Energy Private / शिगा ऊर्जा	40	35	435.95	8.38	9.22	Week-4,10,19,22	No Valid LC	
13	Kanti BijleeUtpadan Nigam Limited-MTPS-Stg-II / कांति बीजली	46	3	453.16	8.71	9.59	Week-32	28.09.2022	
14	NABINAGAR POWER GENERATING CO. PVT LTD. / नबीनगर	37	1	3620.30	69.62	76.58	Week-32	No Valid LC	LC Expired on 14/01/2022

Deviation Reconciliation for Q4 of FY 2020-21

(All Fig is in Rs Lacs)

GRIDCO-R1

WEEK	ERPC Bill Statement/ Transaction Date	Date	Due date of payment	Amount Receivable by Pool	Amount Received by pool	Amount Payable by Pool	Amount Paid by pool	Outstanding Amount Receivable(+Ve) / Payable by pool(-Ve)
Balance from previous Qtrs						380.52461		-380.52461
	01-Jan-2021			0.00000	45.65002	0.00000	0.00000	-426.17463
	04-Jan-2021			0.00000	0.00000	0.00000	100.34155	-325.83308
W-39	05-Jan-2021	21-Dec-20 to 27-Dec-20	15-Jan-2021	54.15829	0.00000	0.00000	0.00000	-271.67479
	06-Jan-2021			0.00000	0.00000	0.00000	71.86233	-199.81246
	06-Jan-2021			0.00000	0.00000	0.00000	229.55824	29.74578
	13-Jan-2021			0.00000	0.00000	0.00000	25.87636	55.62214
W-40	13-Jan-2021	28-Dec-20 to 03-Jan-21	23-Jan-2021	102.07951	0.00000	0.00000	0.00000	157.70165
W-40	13-Jan-2021	* 28-Dec-20 to 03-Jan-21	23-Jan-2021	0.00000	0.00000	99.93576	0.00000	57.76589
	15-Jan-2021			0.00000	54.15829	0.00000	0.00000	3.60760
	25-Jan-2021			0.00000	102.07951	0.00000	0.00000	-98.47191
W-41	25-Jan-2021	04-Jan-21 to 10-Jan-21	04-Feb-2021	208.06746	0.00000	0.00000	0.00000	109.59555
W-42	28-Jan-2021	11-Jan-21 to 17-Jan-21	07-Feb-2021	93.04347	0.00000	0.00000	0.00000	202.63902
W-43	03-Feb-2021	18-Jan-21 to 24-Jan-21	13-Feb-2021	50.78452	0.00000	0.00000	0.00000	253.42354
	05-Feb-2021			0.00000	210.23498	0.00000	0.00000	43.18856
	09-Feb-2021			0.00000	93.04347	0.00000	0.00000	-49.85491
W-44	10-Feb-2021	25-Jan-21 to 31-Jan-21	20-Feb-2021	57.35784	0.00000	0.00000	0.00000	7.50293
W-44	10-Feb-2021	* 25-Jan-21 to 31-Jan-21	20-Feb-2021	0.00000	0.00000	69.40294	0.00000	-61.90001
	11-Feb-2021			0.00000	0.00000	0.00000	2.16752	-59.73249
	12-Feb-2021			0.00000	50.78452	0.00000	0.00000	-110.51701
W-45	15-Feb-2021	01-Feb-21 to 07-Feb-21	25-Feb-2021	24.31229	0.00000	0.00000	0.00000	-86.20472
	22-Feb-2021			0.00000	57.35784	0.00000	0.00000	-143.56256
	24-Feb-2021			0.00000	0.00000	0.00000	99.93576	-43.62680
	25-Feb-2021			0.00000	24.31229	0.00000	0.00000	-67.93909
W-46	25-Feb-2021	08-Feb-21 to 14-Feb-21	07-Mar-2021	0.00000	0.00000	57.70263	0.00000	-125.64172
W-46 (R-1)	26-Feb-2021	08-Feb-21 to 14-Feb-21	08-Mar-2021	0.00000	0.00000	0.00000	0.00000	-125.64172
W-47	01-Mar-2021	15-Feb-21 to 21-Feb-21	11-Mar-2021	28.13995	0.00000	0.00000	0.00000	-97.50177
	08-Mar-2021			0.00000	0.00000	0.00000	57.70263	-39.79914
W-48	11-Mar-2021	22-Feb-21 to 28-Feb-21	21-Mar-2021	34.40010	0.00000	0.00000	0.00000	-5.39904
W-48	11-Mar-2021	* 22-Feb-21 to 28-Feb-21	21-Mar-2021	1.82255	0.00000	0.00000	0.00000	-3.57649
	12-Mar-2021			0.00000	28.13995	0.00000	0.00000	-31.71644
W-49	19-Mar-2021	01-Mar-21 to 07-Mar-21	29-Mar-2021	0.00000	0.00000	20.58714	0.00000	-52.30358
	22-Mar-2021			0.00000	0.00000	0.00000	69.40294	17.09936
	23-Mar-2021			0.00000	34.40010	0.00000	0.00000	-17.30074
	23-Mar-2021			0.00000	1.82255	0.00000	0.00000	-19.12329
	25-Mar-2021			0.00000	0.00000	0.00000	20.58714	1.46385
W-50	26-Mar-2021	08-Mar-21 to 14-Mar-21	05-Apr-2021	0.00000	0.00000	42.50755	0.00000	-41.04370
DSM interest receivable by MPL as reflected in Q1 of FY 19-20 is shifted in the interest table as below				0.00520	0.00000	0.00000	0.00000	-41.03850
Total				**654.17118**	**701.98352**	**670.66063**	**677.43447**	**-41.03850**

DSM interest till 31.03.21

Balance from previous Qtrs					14.44234		-14.44234
	22-Feb-21	DSM interest of FY 19-20 shifted from DSM table to interest table				14.44234	0.00000
	31-Mar-2021	DSM interest for FY 20-21 till 31.03.21			0.0052		-0.00520
Total					2.78945		-2.79465
			0.00000	**0.00000**	**17.23699**	**14.44234**	**-2.79465**

Maker

Pinki Debnath
Manager (M.O)
E.R.L.D.C
POSOCO
33 / Kolkata 33

Checker

MANAS DAS
CM (MO)
E.R.L.D.C
POSOCO
33 / Kolkata 33

On behalf of GRIDCO

AGM (Trading)
GRIDCO Ltd.
Bhubaneswar

DGM (F), PP
GRIDCO Limited
Bhubaneswar

N.B.

* Marked mentioned period are meant for Bhutan DSM for the months of Dec'20, Jan'21 & Feb'21.

Annexure-B.23

SUMMARY OF DEVIATION CHARGE RECEIPT AND PAYMENT STATUS

BILL UPTO 30-01-2022 (W-44 of 2021-2022)
Last Payment Disbursement Date - 14-02-2022

Figures in Rs. Lakhs

CONSTITUENTS	Net outstanding for 2020-21	Receivable	Received	Payable	Paid	Outstanding for 2021-22	Total Outstanding
BSPTCL	0.00000	21,932.76427	11,160.78734	1,614.96127	0.00000	9,157.01566	9,157.01566
JUVNL	103.38490	7,052.12230	0.00000	472.67272	0.00000	6,579.44958	6,682.83448
DVC	0.00000	13,444.26899	13,444.26899	3,030.58604	3,030.58604	0.00000	0.00000
GRIDCO	0.00000	3,201.84137	3,177.91146	4,010.49067	4,010.49067	23.92991	23.92991
WBSETCL	0.00000	15,898.89341	15,770.17071	151.13891	256.67742	234.26121	234.26121
Sikkim	100.49308	2,660.47106	0.00000	539.34334	0.00000	2,121.12772	2,221.62080
NTPC	0.00000	5,872.38893	5,730.42703	4,702.87541	4,702.87541	141.96190	141.96190
NHPC	0.00000	13.97527	13.97527	983.90789	983.90789	0.00000	0.00000
MPL	0.00000	134.71130	134.71130	638.11567	638.11567	0.00000	0.00000
APNRL	0.00000	322.86508	267.48485	325.19831	310.45789	40.63981	40.63981
CHUZACHEN	0.00000	33.65615	33.65615	117.91435	117.91435	0.00000	0.00000
NVVN-BD	0.00000	490.34036	490.34036	373.87821	373.87821	0.00000	0.00000
GMR	0.00000	42.36335	42.36335	1,253.98858	1,253.98858	0.00000	0.00000
JITPL	0.00000	1,062.52958	1,062.52968	101.42267	101.42267	-0.00010	-0.00010
TPTCL (Dagachu)	0.00000	2,079.27038	2,052.23154	0.00000	0.00000	27.03884	27.03884
JLHEP	0.00000	953.23996	934.38499	14.87015	14.87015	18.85497	18.85497
NVVN-NEPAL	0.00000	5,206.51383	5,140.56959	2,240.50396	2,240.50396	65.94424	65.94424
IBEUL	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
BRBCL	0.00000	549.34388	549.34388	393.14350	393.14350	0.00000	0.00000
PGCIL SASARAM	0.00000	21.97438	21.97438	25.28378	25.26692	-0.01686	-0.01686
TUL (Teesta-III)	0.00000	791.27800	790.90491	42.47726	42.47726	0.37309	0.37309
NERLDC	0.00000	1,04,707.48568	1,05,588.33164	23,528.44638	21,447.28319	-2,962.00915	-2,962.00915
WRLDC	0.00000	14,325.90702	14,368.65026	5,79,201.93464	5,78,035.23683	-1,209.44105	-1,209.44105
NRLDC	0.00000	1,38,299.13451	1,33,694.95428	43,867.44685	43,867.44685	4,604.18023	4,604.18023
SRLDC	0.00000	3,79,747.72942	3,58,129.45203	857.43235	857.43235	21,618.27739	21,618.27739
VAE	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Dikchu	0.00000	79.25582	78.63660	176.15406	176.15406	0.61922	0.61922
PGCIL-Alipurduar	0.00000	41.01513	37.53862	14.58911	11.11260	0.00000	0.00000
Tashiding(THEP)	0.00000	750.27593	734.33944	46.09542	46.09542	15.93649	15.93649
OPGC	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
KBUNL	0.00000	345.61347	345.61347	250.57643	250.57643	0.00000	0.00000
NPGC	0.00000	607.86277	584.99414	556.05882	556.05882	22.86863	22.86863
NPGC-Infirm	0.00000	1,012.38503	1,012.38503	3,236.95858	3,236.95858	0.00000	0.00000
RONGNICHU	0.00000	110.01692	105.13606	165.13737	160.51440	0.25789	0.25789
BRBCL_U4_Infirm	0.00000	65.02918	65.02918	640.63616	640.63616	0.00000	0.00000
PTC Bhutan	0.00000	177.27031	168.84143	0.00000	0.00000	8.42888	8.42888
Total	**203.87798**	**7,22,033.79304**	**6,75,731.93796**	**6,73,574.23886**	**6,67,782.08228**	**40,509.69850**	**40,713.57648**

Receivable: Receivable by ER Payable: Payable by ER POOL
Received: Received by ER P Paid: Paid by ER POOL
'- ve' Payable by ER pool '+ ve' Receivable by ER pool

Deviation Interest Bill due to delay payment

Annexure-

All figs in Rupees.

Sl No.	Constituent Name	Interest outstanding till Q4_2020-21	Interest Received by Pool against outstanding	Interest Paid by pool against Outstanding	Net Interest outstanding till Q4_2020-21
1	BSPTCL	91,05,608	91,05,608		0
2	DVC	23,718			23,718
3	GRIDCO	-2,79,466		2,79,466	0
4	JUVNL	4,34,61,973	4,34,61,973		0
5	Sikkim	11,76,865	11,76,865		0
6	WBSETCL	21,415	21,415		0
7	NHPC	-54,745		54,745	0
8	NTPC	0			0
9	APNRL	11,33,748	11,33,748		0
10	BRBCL	-1,316		1,316	0
11	JLHEP	1,28,853	1,15,968		12,885
12	CHUZACHEN	-3,119		3,119	0
13	GMR	1,73,96,828			1,73,96,828
14	IBEUL	26,75,383			26,75,383
15	JITPL	8,589	8,589		0
16	KBUNL	40	40		0
17	MPL	-33,428		33,428	0
18	NPGC-Infirm	0			0
19	NPGC	-10,953		10,953	0
20	NVVN-BD	24,603			24,603
21	NVVN-NEPAL	0			0
22	OPGC	24,209			24,209
23	PGCIL-Alipurduar	1,72,257	1,72,258		-1
24	PGCIL SASARAM	1,686	1,686		0
25	Tashiding(THEP)	1,57,661	1,57,661		0
26	Dikchu	28,701	28,701		0
27	TPTCL (Dagachu)	0			0
28	TUL (Teesta-III)	-1,134		1,134	0

'- ve' Payable by ER pool

'+ ve' Receivable by ER pool

Note: Ind-bharath interest is calculated till 29.05.2019

RRAS interest details

Constituents	Amount in ₹ Lacs	Interest Paid in 1st Quarter 2021-22	Balance	Payment Date
NTPC	-4.85430	4.85430	0.00000	16.06.2020
BRBCL	-0.60400	0.60400	0.00000	16.06.2020
KBUNL	-3.22746	3.22746	0.00000	16.06.2020
MPL	-2.22505	2.22505	0.00000	16.06.2020
NPGC	-0.79683	0.79683	0.00000	16.06.2020
Total	-11.70764	11.70764		

Annexure - B.23.C

STATUS OF REACTIVE CHARGES

AS ON 15.02.22

Name of Parties	Receivable Amount by pool	Received Amount by pool	Payable Amount by pool	Paid Amount by pool	Outstanding Amount Receivable(+Ve) / Payable by pool(-Ve)
BSPHCL	88925476	37904316	38338891	31945318	44627587
JUVNL	83988448	21430845	782704	0	61774899
DVC	51252778	50118411	15149935	14015568	0
GRIDCO	183816263	183816263	18660309	18660309	0
SIKKIM	7708688	334815	1638282	545890	6281481
WBSETCL	48115315	44206634	5737146	5737146	3908681

Receivable: Receivable by ER POOI 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 - B.23.D

SUMMARY OF RRAS CHARGE RECEIPT AND PAYMENT STATUS

BILL UPTO 30-01-2022 (W-44 of 2021-2022)

Last Payment Disbursement Date -14.02.22

Figures in Rs. Lakhs

CONSTITUENTS	Receivable	Received	Payable	Paid	Outstanding
NTPC	8566.95076	4823.92009	10292.56815	6574.19552	24.65804
MPL	1902.81449	1192.8315	1573.72855	870.895	7.14944
BRBCL	2972.17259	2275.64992	1034.99758	338.47495	4E-05
KBUNL	512.08504	138.04919	1908.88417	1511.3693	-23.47902
NPGC	632.45923	360.20533	1749.59092	1467.27688	-10.06014
TOTAL	**14586.48211**	**8790.65603**	**16559.76937**	**10762.21165**	**-1.73164**

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 AGC CHARGE RECEIPT AND PAYMENT STATUS

BILL UPTO 30-01-2022 (W-44 of 2021-2022)

Last Payment Disbursement Date - 14-02-2022

Figures in Rs. Lakhs

CONSTITUENTS	Receivable	Received	Payable	Paid	Outstanding
NTPC	831.25294	831.25294	370.70112	325.26306	**-45.43806**
NHPC	5.76945	5.76945	43.75030	43.47644	**-0.27386**
MPL	1685.58839	1619.35747	89.07641	89.07641	**66.23092**
NPGC	106.77146	102.50803	18.91501	18.91501	**4.26343**
TOTAL	**2629.38224**	**2558.88789**	**522.44284**	**476.73092**	**24.78243**

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 - B.23.F

DETAILS OF DISBURSEMENT TO POWER SYSTEM DEVELOPMENT FUND

Sl No	Nature of Amount	Amount transferred to PSDF (Rs in Lac)	Date of Disbursement		Remarks
1	**Opening Balance (upto 31.03.2019)**	**95896.17**			
2	Reactive Energy Charge	105.79	04.04.19		Reactive Charges_18-19
3	Reactive Energy Charge	287.48	03.05.19		Reactive Charges_18-19 & 19-20
4	Reactive Energy Charge	129.70	03.06.19		Reactive Charges_19-20
5	Reactive Energy Charge	207.84	04.07.19		Reactive Charges_19-20
6	Reactive Energy Charge	94.92	02.08.19		Reactive Charges_19-20
7	Reactive Energy Charge	188.54	02.09.19		Reactive Charges_19-20
8	Surplus DSM amount transferred	32210.52	24.09.19		DSM Charges_19-20
9	Reactive Energy Charge	173.06	01.10.19		Reactive Charges_19-20
10	Reactive Energy Charge	273.15	01.11.19		Reactive Charges_19-20
11	Reactive Energy Charge	401.10	04.12.19		Reactive Charges_19-20
12	Reactive Energy Charge	252.54	02.01.20		Reactive Charges_19-20
13	Reactive Energy Charge	148.66	07.02.20		Reactive Charges_19-20
14	Reactive Energy Charge	205.22	04.03.20		Reactive Charges_19-20
15	Bank interest from Reactive acct	0.22	03.04.20		Bank interest from Reactive acct
16	Reactive Energy Charge	843.03	03.06.20		Reactive Charges_19-20 & 20-21
17	Reactive Energy Charge	507.80	07.07.20		Reactive Charges_17-18,18-19 & 20-21
18	Reactive Energy Charge	309.41	06.08.20		Reactive Charges_17-18,18-19 & 20-21
19	Reactive Energy Charge	83.24	02.09.20		Reactive Charges_19-20 & 20-21
20	Bank interest of DSM A/C-TDS portion	251.65	18.09.20		Bank interest TDS portion transferred from POSOCO,CC
21	Bank interest of DSM A/C-TDS portion	15.65	22.09.20		Bank interest TDS portion transferred from POSOCO,CC
22	Reactive Energy Charge	118.86	06.10.20		Reactive Charges_ 20-21
23	Reactive Energy Charge	101.43	04.11.20		Reactive Charges_ 20-21
24	Reactive Energy Charge	82.35	04.12.20		Reactive Charges_ 20-21
25	Reactive Energy Charge	500.95	06.01.21		Reactive Charges of 19-20 & 20-21
26	Reactive Energy Charge	92.51	03.02.21		Reactive Charges of 19-20 & 20-21
27	Reactive Energy Charge	50.23	04.03.21		Reactive Charges of 19-20 & 20-21
28	Reactive Energy Charge	32.15	07.04.21		Reactive Charges of 19-20 & 20-21
29	Reactive Energy Charge	39.60	05.05.21		Reactive Charges of 19-20 & 20-21
30	Reactive Energy Charge	18.96	01.06.21		Reactive Charges of 20-21 & 21-22
31	Reactive Energy Charge	392.25	12.07.21		Reactive Charges of 20-21 & 21-22
32	Reactive Energy Charge	214.22	22.07.21		Reactive Charges 20-21
33	Addl. Dev	392.94	25.08.21		DSM Charges of 19-20 received from Jharkhand
34	Addl. Dev	5.99	03.09.21		DSM Charges of 19-20 received from Jharkhand
35	Reactive Energy Charge	330.73	09.09.21		Reactive Charges 21-22
36	Addl. Dev	1334.98	23.09.21		DSM Charges of 20-21 received from Bihar
37	Addl. Dev	500.00	27.09.21		DSM Charges of 20-21 received from Bihar
38	Addl. Dev	1500.00	29.09.21		DSM Charges of 20-21 received from Bihar
39	Addl. Dev	500.00	01.10.21		DSM Charges of 20-21 received from Bihar
40	Addl. Dev	1000.00	05.10.21		DSM Charges of 20-21 received from Bihar
41	Addl. Dev	402.60	05.10.21		DSM Charges of 20-21 received from Jharkhand
42	Reactive Energy Charge	131.06	07.10.21		Reactive Charges 21-22
43	Addl. Dev	1000.00	22.10.21		DSM Charges of 20-21 received from Bihar
44	Addl. Dev	1000.00	26.10.21		DSM Charges of 20-21 received from Bihar
45	Addl. Dev	539.21	28.10.21		DSM Charges of 20-21 received from Bihar
46	Reactive Energy Charge	224.71	03.11.21		Reactive Charges 21-22
47	Reactive Energy Charge	366.26	03.12.21		Reactive Charges 21-22
48	Reactive Energy Charge	5.34	09.12.21		Interest Amount received in Reactive Account
49	Addl. Dev	489.57	04.01.22		DSM Charges of 20-21 received from Jharkhand
50	Reactive Energy Charge	449.70	04.01.22		Reactive Charges 21-22
51	Reactive Energy Charge	547.41	04.02.22		Reactive Charges 21-22
52	Addl. Dev	7182.01	08.02.22		Excess amount after clearing Wk-43
	Total	**152131.70**			

DSM account Reconciliation Status of ER constituents and Inter Regional Annexure-B.24.i

	2019-20				2020-21				2021-22		
Name of The Utility	**Q1(17.07.19)**	**Q2(21.10.19)**	**Q3(13.01.20)**	**Q4(15.04.20)**	**Q1(15.07.20)**	**Q2(23.10.20)**	**Q3(20.01.21**	**Q4(28.04.21)**	**Q1(06.07.21)**	**Q2(07.10.21)**	**Q3(11.01.22)**
Inter Regional											
WR	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
SR	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO
NER	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES	YES
NR	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Intra Regional											
BSPHCL	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO
JUVNL	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
DVC	YES	YES	YES	YES	YES	NO	YES	NO	NO	NO	NO
GRIDCO	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	NO
WBSETCL	YES	YES	YES	YES	YES	NO	NO	YES	YES	NO	NO
SIKKIM	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NTPC	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	NO
NHPC	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO
MPL	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
KBUNL	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO
APNRL	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
CHUZACHEN(GATI)	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO
NVVN(Ind-Bng)	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
NVVN(Ind-Nep)	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
GMR	YES	YES	YES	YES	NO	NO	NO	YES	NO	NO	NO
JITPL	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO
TPTCL (DAGACHU)	YES	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES
JLHEP(DANS ENERGY)	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO
BRBCL	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO	YES
POWERGRID (ER-I)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO
POWERGRID (ER-II)	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO
TUL (TEESTA-III)	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES
DIKCHU	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
SHIGA (TASHIDING)	YES	YES	YES	YES	YES	NO	NO	YES	YES	NO	NO
OPGC	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NPGC	YES	YES	YES	YES	YES	NO	YES	YES	YES	NO	NO
Rongnichu								NO	NO	NO	YES

(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

Annexure-B.24.ii

	2019-20				2020-21				2021-22		
	Reactive account Reconciliation Status of ER constituents										
Name of The Utility	**Q1(17.07.19)**	**Q2(21.10.19)**	**Q3(13.01.20)**	**Q4(15.04.20)**	**Q1(15.07.20)**	**Q2(23.10.20)**	**Q3(20.01.21)**	**Q4(28.04.21)**	**Q1(06.07.21)**	**Q2(07.10.21)**	**Q3(11.01.22)**
Intra Regional											
BSPHCL	YES	NA	YES	YES	YES	YES	YES	YES	YES	NO	NO
JUVNL	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
DVC	YES	N/A	N/A	N/A	YES	NO	NO	NO	NO	NO	NO
GRIDCO	YES	YES	YES	YES	YES	YES	YES	NO	NO	YES	NO
WBSETCL	YES	YES	NO	NO	YES	NO	NO	YES	YES	NO	NO
SIKKIM	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

RRAS Account Reconciliation_Status

	2019-20				2020-21				2021-22		
	RRAS account Reconciliation Status										
Name of The Utility	**Q1(17.07.19)**	**Q2(21.10.19)**	**Q3(13.01.20)**	**Q4(15.04.20)**	**Q1(15.07.20)**	**Q2(23.10.20)**	**Q3(20.01.21)**	**Q4(28.04.21)**	**Q1(06.07.21)**	**Q2(07.10.21)**	**Q3(11.01.22)**
NTPC	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO
BRBCL	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO	YES
KBUNL	YES	YES	NO	NO	YES	NO	NO	NO	NO	NO	NO
NPGC	NA	NA	YES	YES	YES	NO	YES	NO	YES	NO	NO
MPL	NA	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO

AGC Account Reconciliation_Status

	2019-20				2020-21				2021-22		
Name of The Utility	**Q1(17.07.19)**	**Q2(21.10.19)**	**Q3(13.01.20)**	**Q4(15.04.20)**	**Q1(15.07.20)**	**Q2(23.10.20)**	**Q3(20.01.21)**	**Q4(28.04.21)**	**Q1(06.07.21)**	**Q2(07.10.21)**	**Q3(11.01.22)**
(NTPC)	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES	NO
MPL										YES	YES
NHPC										NO	NO
NPGC											NO

Annexure-B.24.iv.

Reconciliation Between Open Access department of ERLDC and SLDCs, STUs

Sl. No.	STUs / SLDCs Name	Quarter-I (2018-19)	Quarter-II (2018-19)	Quarter-III (2018-19)	Quarter-IV (2018-19)	Quarter-I (2019-20)	Quarter-II (2019-20)	Quarter-III (2019-20)	Quarter-IV (2019-20)	Quarter-I (2020-21)	Quarter-II (2020-21)	Quarter-III (2020-21)	Quarter-IV (2020-21)	Quarter-I (2021-22)	Quarter-II (2021-22)	Quarter-III (2021-22)
	Date of Issuance	16-07-2018	15-10-2018	18-01-2019	18-04-2019	15-07-2019	16-10-2019	16-01-2020	16-04-2020	15-07-2020	14-10-2020	12-01-2021	13-04-2021	13-07-2021	11-10-2021	17-01-2022
1	West Bengal - SLDC and STU	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO
2	DVC - SLDC	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	NO	NO	NO	NO
3	OPTCL-SLDC and STU	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES
4	Bihar-SLDC and STU	NA	NA	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES

Reconciliation Between Open Access department of ERLDC and Applicants

Sl. No.	Applicants Name	Quarter-I (2018-19)	Quarter-II (2018-19)	Quarter-III (2018-19)	Quarter-IV (2018-19)	Quarter-I (2019-20)	Quarter-II (2019-20)	Quarter-III (2019-20)	Quarter-IV (2019-20)	Quarter-I (2020-21)	Quarter-II (2020-21)	Quarter-III (2020-21)	Quarter-IV (2020-21)	Quarter-I (2021-22)	Quarter-II (2021-22)	Quarter-III (2021-22)
	Date of Issuance	25-07-2018	15-10-2018	17-01-2019	12-04-2019	11-07-2019	15-10-2019	16-01-2020	16-04-2020	14-07-2020	14-10-2020	12-01-2021	13-04-2021	13-07-2021	08-10-2021	17-01-2022
1	Bihar State Power Holding Company Limited	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA
2	Calcutta Electric Supply Company	YES	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	GRIDCO Ltd	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO	NA	NA
4	Jindal India Thermal Power Limited	YES	YES	YES	YES	YES	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Jharkhand Bijli Vitaran Nigam Limited	YES	YES	YES	YES	YES	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO
6	NHPC Limited	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	West Bengal State Electricity Distribution Company Limited	YES	YES	NO	NA	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO	YES

No. 40/1/2021-R&R
Government of India
Ministry of Power
***

Shram Shakti Bhawan, Rafi Marg,
New Delhi, 18th March, 2021

To

CMD

NTPC, NHPC, DVC, NLC, SECI

PGCIL, POSOCO, SJVN, NEEPCO, THDC

Subject: Review of payment security mechanism for payment of dues by Discoms to Gencos and Transcos.

Sir,

As you are aware, a payment security mechanism has been operative since 01.08.2019 under which the payment for supply of power or transmission of electricity is secured through the Letter of credit or advance payment. This is required to maintain the viability of the power sector. The onset of Covid-19 pandemic in 2020 has affected the payment mechanism though Liquidity Infusion under Atma Nirbhar Bharat Abhiyan gave a window to Discoms to clear dues by availing loans from PFC/REC.

2. This Ministry has been receiving representations from the Gencos and Transcos with respect to non-payment of dues and accumulation of arrears. Hon'ble MOS(IC) for Power & NRE has reviewed the status of payment security mechanism on 01.03.2021. It was brought to the notice that even the current dues are not getting liquidated in time which is leading to accumulation of dues.

3. The following directions are hereby given to all the Central Gencos and Transcos for strict compliance:-

a) Current bills after 01.02.2021 need to be liquidated in time. For current dues beyond specified number of days i.e. say 45 days, the LC (Letter of Credit) has to be invariably encashed. The power supply shall start only if there is a valid LC or if the advance payment is made by the Discoms.

b) In case of accumulated dues of period before 01.02.2021, the Discoms and Gencos/Transcos must work out an installment plan for payment on monthly/bimonthly basis by the Discoms and any failure on part of DISCOMs/State Government to pay the said installments on time will result in the regulation of power supply and/or invocation of tripartite agreement between the State Government, Ministry of Power and the concerned Gencos/Transcos.

c) Correct information is to be entered on the portal being maintained by POSOCO as per the standard operating procedure for scheduling of power with respect to LC issued by MoP.

d) For regulation of power the Gencos and Transcos must give advance notice to the State Government and release daily Press Note to the general public and consumers to create awareness about the circumstances as stated above to initiate regulation and invokation of tripartite agreement to recover the dues.

4. All Central Gencos and Transcos are required to comply with the orders issued by the Central Government in this regard from time to time.

Yours faithfully,

(D. Chattopadhyay)
Deputy Secretary to the Govt. of India
Tel: 2371 5250
Email Id: debranjan.chattopadhyay@nic.in

Copy to:

i. PS to Hon'ble MoS(IC) for Power and NRE
ii. Sr. PPS to Secretary (Power),
iii. PPS to AS(SKGR), PPS to AS(VKD), PPS to Senior Adviser
iv. All Joint Secretaries/Chief Engineer of MoP
v. CMD PFC, REC,

File No.CEA-PS-12-17(12)/2/2021-PSPA-II Division

I/19586/2021

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत प्रणाली योजना एवं मूल्यांकन प्रभाग-II
Power System Planning & Appraisal Division-II

सेवा में/To

Shri Rajib Kumar Mishra,
Whole Time Director,
PTC India Limited,
2nd Floor, NBCC Tower, 15 Bhikaji Cama Place,
New Delhi – 110066.

विषय/ Sub: Approval of Designated Authority for Import of Power by Bhutan through Power Exchanges(s) -reg.

महोदय/Sir,

This has reference to PTC India Limited (PTCIL) application vide e-mail dated 10.12.2021 seeking approval of Designated Authority (DA) for import of up to 400 MW of power on behalf of Druk Green Power Corporation Limited, Bhutan from Indian Power Exchange(s) - Day Ahead Market & RTM for a period from 1st January, 2022 to 30th June, 2022

1. Key aspects of the proposed transactions are as under:

   (a) Quantum proposed: up to 400 MW

   (b) Time period: 1st January, 2022 to 30th June, 2022

   (c) Drawl point: India-Bhutan Interconnection Point

2. The matter has been examined in accordance with the Guidelines for Import/Export (Cross Border) of Electricity-2018 and Procedure for Approval and facilitating Import/ Export (Cross Border) of Electricity. Accordingly, approval of Designated Authority is hereby conveyed to PTC India Limited (PTCIL) for import of power up to 400 MW on behalf of Druk Green Power Corporation Limited, Bhutan (export from India to Bhutan) through Indian Power Exchange(s) - Day Ahead Market for a period from 01.01.2022 to 30.06.2022.

3. This approval is subject to the following conditions:

(a) Govt. of India reserves the right to import/ export electricity from/ to neighbouring countries for reason of larger policy interests, and same shall be binding on the Participating Entity.

(b) PTC and other participating entities, involved in this transaction, shall comply with the applicable Rules/Guidelines/Regulations/Standards of Government of India/CEA/CERC. The grant of approval by the Designated Authority for participation in Import/Export (Cross Border) of Electricity shall not entitle PTC any rights or extra privileges over and above the applicable laws.

(c) As the import of Power by Bhutan will be governed by Guidelines-2018, all the relevant Regulations/Procedures including DSM regulations of CERC shall be applicable during the period of this transaction.

(d) Druk Green Power Corporation Limited, Bhutan is advised to sign SNA agreement with NVVN, India immediately. Till signing of SNA agreement between NVVN and Bhutan, PTC shall settle all the grid related charges including Deviation Settlement Mechanism (DSM) on behalf of Bhutan.

भवदीय/Yours faithfully,

रवीन्द्र गुप्ता 30/12/21

(रवीन्द्र गुप्ता/Ravinder Gupta)
मुख्य अभियन्ता/Chief Engineer and Nodal Officer to the DA

Copy to:

1. Director (Trans.), Ministry of Power, S S Bhawan, New Delhi
2. Member Secretary, ERPC
3. ED, NLDC
4. CGM, NVVN (as SNA) – for necessary action as per the guidelines and expedite signing of SNA agreement with Bhutan

Agenda for CERC meeting on 07.10.2021 (ERPC)

1. **Interpretation of Hon'ble CERC order dated 04.01.2017 and 06.03.2017 in petition No- 155/MP/2016 in the matter of Petition under Section 79 (1) (f) read with Section 79 (1) (c) of the Electricity Act, 2003 and Patran Transmission Company Limited.**

Extracts of the Point No.17 of the Hon'ble CERC judgement dated 04.01.2017 under the above petition states that:

"The petitioner is directed to provide YTC details of its assets to NLDC and CTU. NLDC shall provide the same to RPC for inclusion in RTAs. The assets shall be billed Order in Petition No. 155/MP/2016 Page 19 of 19 along with bill 1 under the provisions of the Central Electricity Regulatory Commission (Sharing of inter-State Transmission charges and losses), Regulations, 2010 as amended from time to time. ISTS licensees shall forward the details of YTC to be recovered as per formats provided under the Sharing Regulations to NLDC. ISTS licensees shall forward the details of entity along with YTC details from whom it needs to be recovered as per applicable orders of the Commission to NLDC (only in cases of bilateral billing due to non-availability of upstream/downstream system). Based on the input received from respective licensees and the Commission`s order, NLDC shall provide details of billing pertaining to non-availability of upstream/downstream system to respective RPCs for incorporation in RTAs for all cases of bilateral billing. On this basis, CTU shall issue the bills. ***The process given in this para shall be applicable to all future cases of similar nature and all concerned shall duly comply with the same."*** Which was subsequently amended vide dated 06.03.2017 as **'the word "future" in last sentence of para 17 shall stand deleted'.**

In line with the above judgement of Hon'ble CERC, ERPC secretariat after getting input data from NLDC had issued revised RTA statement dated 05.06.2020 for recovery of un-recovered transmission charges under deemed availability of DMTCL for the period 31st Mar 2017 to 15th Apr 2017(16 days) in respect of Bihar (SBPDCL & NBPDCL) as the power flow could not get through despite of readiness of DMTCL Darbhanga element, since the 220 kV downstream BSPTCL network was not ready for charging.

Subsequently, Bihar vide letter No.87 dated 17.03.2021 presented before ERPC forum stating that Hon'ble CERC order dated 04.01.2017, where Bihar Discoms, BSPTCL (STU) or DMTCL itself are not a party(s) in the said petition.

In this context, Hon'ble CERC may guide.

2. **Implementation of AGC in West Bengal**

As per SLDC, West Bengal, implementation of AGC among state generators is lying pending in absence of necessary orders /regulations need to be issued by WBERC.

As per point No 16(b)(iii) of Hon'ble CERC order in Petition No. 11/SM/2015, dated 13.10.2015:

"The Central Commission advises the State Commissions to issue orders for intra-state generators in line with this timeline as AGC is essential for reliable operation of India's large inter-connected grid."

In this context, Hon'ble CERC may advise the state SERCs through Forum of Regulators for early implementation of AGC in the state sector.

3. **Consideration of Peak Season for Hydro-generating Stations while calculation of Regional Transmission Deviation Accounts.**

Clause No. 12 (1) (a) of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations'2020 states that,

"For a generating station, net metered ex-bus injection, in a time block in excess of the sum of Long-Term Access, Medium Term Open Access and Short-Term Open Access:

Provided that for a hydro-generating station, overload capacity of 10% during peak season shall be taken into account."

Point No. 43.3.10 of SoR issued by Hon'ble CERC vide No. L-1/250/2019/CERC dated 10th August'2020 states that:

"Regarding hydro generating stations' overload capacity of 10%, the Regulation has been modified to include that such exemption/ consideration shall be applicable only during high inflow period."

The above clause of the Sharing Regulation'2020 and Statements of Reason reveals that for hydro-generating stations, an overload capacity of 10% can be considered during peak season for the calculation of RTDA accounts. As per the CERC Tariff Regulations 2019-24, the peak season for hydro-generating stations should be considered based on the high inflow season. In this regard, the high inflow season may vary depending upon the geographical location of the hydro generators.

In this context, proper guidelines and Nodal Agency are required for declaring the peak seasons for each hydro generating station.

4. **Levy of DSM charges during some specific Events which is beyond the control of the Regional Entities:**

   a. Treatment of under injection by Hydro generator under forced shutdown to evacuate humans from River Bed on the direction of Local Govt. authorities

   b. Treatment of Over drawl by a state due to sudden charging of a new Transmission element without prior intimation or integration with SCADA.

   c. Waiver of additional Deviation charge due to sign change violation in DSM statement issued attributed to huge over drawl during second wave of covid Pandemic.

5. **Issue related to Reserve Shutdown (RSD) of ISGS station**

It is to submit that whenever an ISGS Unit is taken under RSD, the stakeholders of ISGS Unit, having lower share has to bear huge loss due to the applicability of fixed charges of respective power share quantum allotted to them. In this case, even if the stakeholder with lower share (minority stakeholder) requires its power share quantum, the same cannot be availed as it is not scheduled because of technical minimum generation limit as per the regulations.

In order to fulfill the minority stakeholder requirement, following alternative options are suggested:

i. In case, a Generator Unit has multiple stakeholders and a few majority stakeholders exceeding 45% of power share (either individually or collectively) decides to take this unit under RSD then as per the existing provisions, the unit is put under RSD and those stakeholders who hold less than 45% of power share (either individually or collectively) are made to pay fixed charges without consenting to RSD of the Unit. It is proposed that in such cases the Generator should try to fulfill the requirement of minority stakeholders either by offering the balance quantum (out of technical minimum generation) to the minority stakeholders or to explore the possibility of selling the un-requisitioned quantum (out of technical minimum

generation) in Open Market. If any loss is incurred in this arrangement, it may be realized from those stakeholders who have requested for RSD.

ii. As the unit is taken under RSD at the request of majority stakeholder, the Generator should raise the fixed charges bill of minority stakeholder in the account of majority stakeholder as the minority stakeholder is fulfilling its requirement from other sources and is paying for same.

iii. Majority stakeholder may be offered to buy the quantum of power which enables the Generator to meet the technical minimum generation requirement after accounting for the minority stakeholder for the Unit.

iv. In case the unit is taken under RSD, the Generator should make arrangement to fulfill the share of minority stakeholder from other sources. The beneficiaries shall continue to bear the capacity charges corresponding to Total DC.

In 43rd CCM BSPHCL representative explained the issue faced by Bihar during RSD of a unit where they have minor share allocation. He cited the problem faced by them due to RSD of a unit in FSTPS-I in recent times. He explained that when majority shareholders forgo their entitlement of power from a unit, the unit goes under RSD due to technical minimum requirement. As a result, minority shareholders like Bihar does not get their share of power even if they have put full requisition for their share of entitlement.

He added that in spite of paying the fixed charges and putting requisition for their share of allocated power, they do not get the power which is against principle of natural justice. He proposed a no. of proposals as mentioned in the agenda to address the above issue.

NTPC informed that the fixed charge liability of the beneficiary is due to their longterm contract for power requirement and it is as per the regulation.

NTPC added that whenever the minority shareholder requires power from an RSD unit, they can schedule the power from same RSD unit by giving requisition for power upto the technical minimum quantity provided they have requirement for higher quantity of energy. In this case they do not have to pay any fixed charges for additional power scheduled up to the technical minimum quantity of the unit and the fixed charges for additional share would be payable by original beneficiaries.

ERLDC informed that in case of RSD of the unit, the power requirement of the minority shareholders can be arranged in Real Time Market or through URS provision. They added that whenever the minority shareholder put their full requisition of power from anoff bar unit, the URS power available in the on-bar unit of the same station get automatically allocated to them.

BSPHCL representative informed that URS power is not a reliable option.

WBSEDCL representative proposed that in case any of the units of a Generating Station goes under RSD due to under requisition of a major beneficiary, the entire surrendered entitlement of that major beneficiary should be directly curtailed from its real time entitlement instead of proportionate curtailment which is followed at present. ERLDC responded that according to IEGC scheduling procedure it is not possible.

ERPC Secretariat opined that present scheduling and shutdown procedure is as per the Detailed Procedure which was adopted by the CERC and we don't have any clear guidelines from CERC to address the present issue. Further, it was informed that similar concerns were also raised by the Southern Region beneficiaries. Therefore, the issue is in the knowledge of CERC.

After detail deliberation, Members agreed that the issues faced by minority beneficiaries in case of unit RSD are real and need to be addressed. Members opined that there is a need to review the detailed operating procedure for RSD to suitably address the concerns of minority beneficiaries.

In 43rd TCC meeting, *BSPHCL explained the issue in detail. TCC appreciated the concerns raised by the state utilities on the issue of RSD of ISGS stations.*

TCC felt that in the current regulatory regime it is difficult to address the concerns of the stakeholders on the issue of RSD on account of surrender of share by majority shareholders in a generating station.

Hon'ble CERC may frame appropriate regulation in this regard.

6. Settlement of DSM A/c of IPP stations during Grid Disturbance Period:

Weekly DSM statement is being issued by RPC secretariat as per the CERC (DSM & Related matters) Regulations'2014 & all amendments and Clause 6.5.17 of IEGC Regulation'2010 for Grid Disturbance period of ISGS and Methodology for Settlement Accounts for Bilateral short term & Collective Transactions for the period of Grid Disturbance approved by CERC.

As per clause no. 6.5.17 of IEGC Regulation'2010

"In case of any grid disturbance, scheduled generation of all the ISGSs supplying power under long term / medium term/ shall be deemed to have been revised to be equal to their actual generation and the scheduled drawls of the beneficiaries/ buyers shall be deemed to have been revised accordingly for all the time blocks affected by the grid disturbance. Certification of grid disturbance and its duration shall be done by the RLDC.

The declaration of disturbance shall be done by the concerned RLDC at the earliest. A notice to this effect shall be posted at its website by the RLDC of the region in which the disturbance occurred. Issue of the notice at RLDC web site shall be considered as declaration of the disturbance by RLDC. All regional entities shall take note of the disturbance and take appropriate action at their end.

For Bilateral short term and collective transactions, the methodology of settlement of accounts for the period of Grid Disturbance shall be formulated by National Power Committee (NPC) and same shall be put up to the Commission for approval. The methodology shall cover all possible scenarios with illustrative examples to cover the instances where the Grid disturbance is either partial or it effects only one region."

Methodology of settlement of accounts for bilateral short term and collective transactions, for the period of Grid Disturbance approved by Hon'ble CERC order No. L-1/18/2010-CERC, dated 09.10.2019.

As per Scope of the Methodology of settlement of accounts for bilateral short term and collective transactions, for the period of Grid Disturbance:

"The Methodology shall be applicable to an Inter-State Generating Station (ISGS) which is a regional entity and affected by any category of Grid Disturbance as specified in the Central Electricity Authority (Grid Standard) Regulations 2010. RLDC shall certify the duration (indicating start date/ time block and end date/ time block) of grid disturbance and provide list of ISGS(s) affected by grid disturbance to RPC. Revision of schedule will be done only for ISGS affected by grid disturbance……"

In addition, Hon'ble CERC order dated 19.12.2017 in petition No.-193/MP/2016 in the matter of Thermal Powertech Corporation India Limited gives its judgement for revision of schedule and treatment of generator as per clause 6.5.17 of IEGC Regulation'2010.

In the above context, for better implementation of clause 6.5.17 of IEGC Regulation'2010, it may be clarified whether clause 6.5.17 of IEGC regulation'2010 and Hon'ble CERC order No. L-1/18/2010-CERC, dated 09.10.2019 will be applicable for IPP's during the Grid Disturbance period.

SOUTHERN REGIONAL POWER COMMITTEE

Agenda items for the 3rd interaction meeting of CERC with RPCs

1. Scheduling of ISGS beyond declared ex-power plant MW capability (DC)
2. Revision of compensation due to part load operation of generating stations based on the final/revised Tariff Order issued by CERC.
3. RSD Detailed Procedure
4. Restoration of schedule revision time period to 4 time blocks
5. Reactive power support by generators
6. Issues faced in mandatory Sign Change every 7th Time Block
7. Zero cost for under drawal beyond the limits by Renewable rich state
8. Sharing of SCED benefits to beneficiaries
9. Raigarh – Pugalur - Thrissur HVDC system under "National Component" for sharing the transmission charges.
10. LTA of exempted RE based generation for computation of Transmission Deviation Charges for states.
11. STOA of Generators for computation of Transmission Deviation Charges by Generators.
12. LTA/MTOA of generating station connected to both ISTS and Intra State Transmission System
13. Procedure for determination of YTC for intra state lines carrying inter-state power & Procedure for claiming orders issued by SERCs for Transmission lines for the billing periods before Nov, 2020
14. Ramping Performance of Thermal ISGS & Impact of AGC
15. Norms for imported coal based plants to blend the domestic coal
16. Deemed availability certificate for the shutdown period availed by transmission licensees for shifting of their transmission lines for National Highway Authority of India (NHAI) projects.
17. Term Ahead Market transactions-Receipt of negative amount by Sellers

Details/ Categorisation of the Agenda items

a) IEGC related issues:

SN	Details	
1	**Regulation:**	**5.2 (h)**
	Issue:	**Scheduling of ISGS beyond declared ex-power plant MW capability (DC)**
	Observation / Comments / Suggestion	**SRPC Secretariat:** i. In the OCC meetings, SRLDC had informed the following three

		reasons for schedule beyond DC: 1) DC revision for the day ahead, 2) Power exchange sale/RTM and 3) Unit tripping. ii. SRLDC had also appraised the following in OCC meeting: a) When CGS is selling the state surrendered power in Power Exchange and the beneficiaries requisition their full share, schedule may go beyond DC SRLDC suggests generators for keeping sufficient margins before selling in the day ahead PX. b) SRLDC had stated that Schedule beyond DC is inevitable due Unit tripping. c) SRLDC to schedule as per the contracts between the seller and buyer. Here the revisable contracts are LTA and MTOA. Power Exchange is a binding contract where SRLDC don't have any control. Due to the above, the Regulation 5.2(h) is being violated. **Suggestion:** ✓ **DC should be restricted to normative DC.** ✓ **A Procedure needs to be developed by POSOCO for complying the Regulations in this regard.**
2	**Regulation**	**6.3B**
	Issue:	**Revision of compensation due to part load operation based on the revised Tariff Order.**
	Observation / Comments / Suggestion	**SRPC Secretariat:** i. The issue of revision of compensation for degradation of parameters due to part load operation based on the revised Tariff Order came up in case of Kudgi STPS and deliberated in the Commercial Sub-Committee Meetings. **ii.** The following were deliberated in the Commercial Sub-Committee Meetings: a) Part load compensation is according to fourth amendment of IEGC Regulations and is not a part of Tariff or CERC (Terms and condition of Tariff) Regulations. b) In RRAS, SCED Regulations, it is clearly mentioned that no retrospective settlement is allowed whereas the same is not mentioned in IEGC fourth amendment Regulations/ Mechanism for Compensation. c) Intent of RRAS/SECD Regulations is analogous to the IEGC Fourth amendment Regulations/Mechanism for Compensation as in all these Regulations, decisions are to be carried out based on the Merit Order Despatch (MOD) of generators during the time of scheduling. MOD is prepared by the Discoms/states based on the ECR of

		Generators. High ECR generator is scheduled low due to less requisition by its beneficiaries. At later date, if the Station Heat Rate/normative parameters of a generator is/are revised, ECR would get changed and the MoD that was considered earlier may go wrong. Hence the revision of compensation due to part load operation considering the revised normative parameters used for the purpose of tariff determination may not be appropriate, as the decisions taken by the beneficiaries during that period (during real time scheduling) were based on the ECR furnished by the generators. **Suggestion:** ✓ It may be clearly mentioned in the Regulations that whether compensation degradation of parameters due to part load operation to be revised based on the revised Tariff Order.
3	**Regulation**	**6.3B**
	Issue:	**RSD Detailed Procedure-5.10**
	Observation / Comments / Suggestion	Clause 5.10 of procedure *When the machine is going under RSD :* *i. In case the total requisitioned power can be supplied through other units in the same generating station on bar,* ***the generator shall be scheduled according to the requisitions received.*** *ii. In case total requisitioned power cannot be supplied through other units in the same generating station on bar, the requisition from the beneficiaries shall be reduced in the ratio of requisitioned power.* *iii. In the special case of a generating station where the only running machine is going under RSD, the beneficiaries who have requisitioned power will not get any power from that generating station. In such cases, the beneficiaries may make arrangement from alternative sources.* **SRPC comments:** SRPC letter dated 31.07.2020 to CERC & NLDC are enclosed as **Annexure-RSD.** When the machine is going under RSD : i. Entitlement of beneficiaries ii. Ensuring Technical Minimum iii. Sharing of Compensation for Part Loading **TSTRANSCO comments:** TSTRANSCO vide letter dated 20.09.2021 (**Annexure-TSTRANSCO**)(Item no.1) has highlighted the implementation of the CERC Order dated 04.02.2020 and consideration of SRPC forum

		recommendations dated 25.02.2020 on resolving practical issues in scheduling especially station wise scheduling instead of unit wise scheduling (DoP on RSD) and calculation of compensation amount for part load operation. **Suggestion:** This has been a major contentious issue among beneficiaries as the power is scheduled as per On bar DC as per original share allocation. ✓ **Scheduling of power after RSD or unit was retained on bar by providing technical minimum schedule vis-à-vis the present practice of entitlements on bar capacity w.r.t. to share allocation needs to be examined.**
4	**Regulation:**	**6.5.18**
	Issue	**Restoration of schedule revision time period to 4 time blocks**
	Observation / Comments / Suggestion	**TSTRANSCO comments:** TSTRANSCO vide letter dated 20.09.2021 (Refer Annexure-TSTRANSCO) (Item no.2) has requested the restoration of schedule revision time period to 4 time blocks instead of 7^{th} /8^{th} time blocks w.r.t. CGS units.
5	**Regulation:**	**6.6**
	Issue:	**Reactive power support by generators**
	Observation / Comments / Suggestion	Relevant Regulation *6. The ISGS and other generating stations connected to regional grid shall generate/absorb reactive power as per instructions of RLDC, within capability limits of the respective generating units, that is without sacrificing on the active generation required at that time. No payments shall be made to the generating companies for such VAr generation/absorption.* **SRPC comments:** The need of reactive support from Generators including RE has come up more significantly with high RE penetration. **Suggestion:** ✓ **Generators are not supporting the grid as required** ✓ **RE generators reactive capability needs to be utilized** ✓ **Incentive/disincentive scheme needs to be implemented for desired reactive support from generators/RE generators** ✓ **Present reactive billing needs to be relooked. Differential payments to and from pool could also be considered.**

b) DSM related issues

6	**Regulation :**	**7(10) (b)**
	Issue:	**4th /5th Amendment -Sign Change** **Issues faced in mandatory Sign Change every 7th Time Block**
	Observation/ Comments / Suggestion	**SRPC Secretariat:** Chairperson SRPC letter dated 29.12.2020 is enclosed as **Annexure-Sign Change**. **Issues:** i. No value addition in Grid Operation due to the implementation of 6 Time Block Sign Change other than additional financial burden on the financially stressed DISCOMs**.** ii. Some time contradictory action w.r.t. grid requirements is taken by grid operators just to comply to mandatory sign change**.** iii. With the implementation of AGC, regional ACE is getting corrected automatically hence mandatory sign change is not required**.** iv. On implementation of Intra-state AGC, state ACE will be corrected automatically**.** v. With High RE ingress, it would be inevitable to curtail RE to comply to mandatory sign change**.** **KPTCL Comments:** KPTCL vide letter dated 06.09.2021 (**Annexure-KPTCL**) has requested the following for kind perusal of CERC: i. When the frequency goes below 49.85 Hz mandatory sign change shall be suspended for those who are supporting the grid. ii. When the state is injecting (under drawing) more than 250 MW in a block when system frequency is below 49.85 Hz, DSM shall be calculated for all the quantum of power injected to support the improvement in frequency. iii. Sign change Regulation is neither technically supporting the grid nor improving any of the system parameters but only threatening the grid security iv. Hence the mandatory sign change may be reverted to 12 time blocks instead of the current 6 time blocks. **Suggestion:** **Mandatory Sign Change every 7th Time Block may be reviewed / removed.**
7	**Regulation :**	**5.1(iii)**
	Issue:	**Zero cost for under drawal beyond the limits by Renewable rich state**
	Observation / Comments / Suggestion	PCKL vide letter dated 21.09.2021 (**Annexure-PCKL**)(Item No.2) has requested the following: i. In the renewable energy rich states, due to must run status of the renewables the generation cannot be curtailed hence only option

		available is to sell in the Real Time Market. In the Real time Market also, if the sell volume is more than buy volume, the probability of sell quantum getting cleared is less and price is less than the actual power purchase cost. ii. Further under drawls exceeding the limit are settled at zero cost. Which is causing huge burden on the DISCOMs. Hence, suitable mechanism shall have to be put in place for balancing renewables and to recover the purchase cost of the renewables.

c) Security Constrained Economic Despatch (SCED) related issues

8	**CERC Order:**	**Order in Petition No. 03/SM/2021 (Suo-Motu) dated 31st of March, 2021**
	Issue:	**Sharing of 100% SCED benefits to beneficiaries**
	Observation / Comments / Suggestion	**SRPC Secretariat:** In the meetings of Commercial Sub-Committee of SRPC, the issue of sharing of 100% SCED benefits accrued to beneficiaries had been deliberated. After deliberation, it was decided that beneficiaries may approach Hon'ble CERC for reviewing the SCED benefit sharing. Since the Generators are compensated in many ways (heat rate compensation, part load compensation, etc.), the SCED benefits accrued to be shared among the beneficiaries only. **Suggestion:** **SCED benefit sharing may please be reviewed.**

d) Sharing of ISTS charges and losses Regulations related issues

9	**Regulation:**	**5 & 6**
	Issue:	**+/- 800 kV WR-SR 6000 MW HVDC Raigarh (Chhatisgarh) – Pugalur (TN) HVDC System & 2000 MW Pugalur (TN)-Trissur (KER) VSC Based HVDC system as 'National Component'**
	Observation / Comments / Suggestion	Chairperson SRPC letter dated 07.01.2021 (**Annexure-HVDC**) to Secretary (Power), MoP for declaration of Raigarh – Pugalur - Thrissur HVDC link as a National project in line with Biswanath Chariali – Agra and Mudra –Mohindergarh HVDC bipole systems. MoP letter dated 18.03.2021 (**Annexure-MoP**) had replied to Chairperson, SRPC and it was stated that sharing of ISTS charges is a regulatory issue and within the jurisdiction of CERC. Chairperson SRPC letter dated 22.03.2021 to CERC is enclosed as (**Annexure-HVDCCERC**) Comments: i) The Hon'ble Central Commission had exercised its powers to declare the two such HVDC bipole transmission systems as national assets viz.

		part capacity of Mundra – Mohindergarh HVDC system (1005 MW out of 2500 MW through the 3rd amendment of Sharing Regulations 2010) and Biswanath Chariali-Agra HVDC system(through the order dated 08.01.2016 in petition No.67/TT/2015). ii) The charges of these transmission assets are recovered through National component under the new Sharing Regulations 2020. iii) The characteristics of the Raigarh – Pugalur - Thrissur HVDC system is similar to BNC-Agra HVDC system and is being used for evacuation of RE power from Southern Region to rest of the country. **Suggestion:** **+/- 800 kV Raigarh – Pugalur - Thrissur HVDC system may be declared as asset of National and strategic importance and included in National Component for sharing transmission charges.**
10	**Regulation:**	**12(1)**
	Issue:	**LTA of exempted RE based generation for computation of Transmission Charges for states.**
	Observation / Comments / Suggestion	**SRPC Secretariat:** i. SRPC Secretariat letter dated 16.02.2021 (**Annexure-RTDACERC**) sought the advice of CERC. ii. LTA being considered by IA for computation of RTA does not include LTA of exempted RE generation. iii. There is no mention of the LTA of exempted RE generation in the Sharing Regulations, for computation Transmission Deviation. iv. However, for the purpose of RTDA computation, LTA of exempted RE generation is added to the respective state. LTA details of exempted RE generation is furnished by IA along with the notification. v. By this, LTA quantum being considered for RTA and RTDA are different. **Suggestion:** LTA of exempted RE generation may be mentioned in the Sharing Regulations for Computation of Transmission Deviation.
11	**Regulation:**	**12(1)**
	Issue:	**STOA of Generators for computation of Transmission Charges for Generators.**

	Observation / Comments / Suggestion	**SRPC Secretariat:** i. Based on the NoC from their beneficiaries, Central Generating Stations carry out the transactions through STOA/Power Market. ii. However, sometimes the total schedule from the CGS is going beyond the Normative DC/ Normative Ex bus margin. iii. Hence for computation of Transmission deviation, LTA+MTOA+STOA quantum may be restricted to Normative Ex- bus margin for CGS since the total contracts are limited to Normative Ex bus. iv. Also, the approved STOA quantum may not be scheduled always due to grid conditions. Hence the scheduled STOA is different from approved STOA. SRPC is considering the approved STOA quantum for Transmission deviation computation for the Generators. **Suggestion:** ✓ **In view of the above, it may be mentioned in the Regulations that LTA+MTOA+STOA quantum for CGS shall be restricted to Normative Ex bus margin.**
12	**Regulation:**	**13(11)**
	Issue:	**LTA/MTOA quantum for generating stations connected to both ISTS and intra-state transmission system**
	Observation / Comments / Suggestion	Relevant Regulation: *Where a generating station is connected to both ISTS and intra-State transmission system, only ISTS charges and losses shall be applicable on the quantum of Long Term Access and Medium Term Open Access corresponding to capacity connected to ISTS.* Accordingly in the NLDC Procedure the following is mentioned: *5.12 Where a generating station is connected to both ISTS and intra-State transmission system,* ***only ISTS charges and losses shall be applicable on the quantum of Long Term Access and Medium Term Open Access corresponding to capacity connected to ISTS****. CTU shall furnish the details of all such generating stations along with details of LTA/MTOA break-up as per the procedure for collection of data and information.* **SRPC Secretariat:** i. The details of generating stations connected to both ISTS & intra-state transmission system along with details of LTA/MTOA break-up as per the NLDC Procedure for collection of data and information needed to be furnished by CTU to Implementing Agency. ii. However, it is observed from monthly notifications of

transmission charges by Implementing Agency, the total quantum of LTA/MTOA of generating station connected to both ISTS and Intra State Transmission System is being considered for sharing the transmission charges among DICs which is not in line with the Regulations.

TANGEDCO's grievance:

TANGEDCO vide letters dt. 24.03.2021 30.03.2021, 04.05.2021, 17.05.2021 and 19.08.2021 (Refer Annexure- TANGEDCO) has requested the following:

i. A quantum of 711.603MW (MAPS-296.105MW+NLCTSII-Stage I-167.051MW and Stage II- 248.447 MW) of LTA has been included in the computation of ISTS transmission charges and losses. The power from these stations to TANGEDCO is evacuated through the STU network owned , operated and maintained by TANTRANSCO and ISTS network is not used. There is no LTA agreement between PGCIL and TANGEDCO in respect of these Stations.

ii. Regulation 13 (11) provides that where a generating station is connected to both ISTS and infra-State transmission system, only ISTS charges and losses shall be applicable on the quantum of Long Term Access and Medium Term Open Access corresponding to capacity connected to ISTS.

iii. In the letter dt.19.08.2021 addressed to POSOCO with a copy marked to SRPC, TANGEDCO has stated that taking into consideration of transfer capacity of the STU lines connected to the four IGS stations viz. MAPS,NLCTPS-II, NTECL Vallur TPS and Kudankulam APS, TANGEDCO is incurring additional financial burden to a tune of Rs.46.67 Crore per month due to considering deemed LTA in respect of these four Station and hence, it was requested to revise the LTA quantum based on ISTS connectivity alone as per the Sharing Regulations 2020 and revise the bills.

iv. Hon'ble CERC vide letter dated 11.08.2021 has directed that affected parties may approach CTU for redressal of their grievances.

PCKL comments:

PCKL vide letter dated 21.09.2021 (refer **Annexure-PCKL**)(Item No.1) has requested the following:

i. Regulation 13 (11) provides that where a generating station is

		connected to both ISTS and infra-State transmission system, only ISTS charges and losses shall be applicable on the quantum of Long Term Access and Medium Term Open Access corresponding to capacity connected to ISTS. ii. CERC is requested to direct PGCIL to formulate standard operating procedure to address the issues with such generation sources having both STU and CTU evacuation system and also to revise the LTA quantum as per regulation 13 (11). **Suggestion:** **(i) CTUIL may be directed to furnish the data in line with the provisions of Sharing Regulations 2020 / detailed Procedure of NLDC.** **(ii) NLDC may be directed to act as per the provisions of the Regulations and resolve the issue.**
13	**Regulation:**	**13(13)**
	Issue:	**Procedure for determination of YTC for intra state lines carrying inter-state power & Procedure for claiming orders issued by SERCs for Transmission lines for the billing periods before November 2020**
	Observation / Comments / Suggestion	APTRANSCO vide letter dated 23.09.2021 (**Annexure-APTRANSCO**) has submitted the following: i. Necessary procedure for determination of YTC for intra state lines carrying inter-state power may be incorporated in the New Sharing Regulation, 2020 as the certification of intrastate lines carrying interstate power by RPCs was not envisaged in the new Sharing Regulation,2020. Therefore, AP Transco is unable to file a petition before CERC for claiming YTC on intrastate lines carrying interstate power and facing a considerable impact on the returns. ii. Procedure for claiming orders issued by SERCs for Transmission lines for the billing periods before Nov, 2020 as some of the petitions filed during 2010 regime as per CERC sharing Regulations, 2010 belonging to 3rd control period were/are under process in the SERCs and orders issued in the New Regulation, 2020 regime. Orders issued by APERC to the extent of Rs.395Crores for the FY 2015-17 and FY 2020-21 are pending for including in the PoC mechanism due to lack of clarity.

e) Terms & Conditions of Tariff Regulations, 2019 related issues

14	**Regulation:**	**30 (2) (iii)**
	Issue:	**Ramping assessment**
	Observation / Comments/ Suggestion	**Certification of Ramping Performance of Thermal ISGS** i. NLDC vide letter dated 30.12.2020 had issued Revised detailed

		guidelines for assessment of ramping capability of thermal Interstate generating stations (ISGS). Also NLDC vide e-mail dated 26.03.2021 communicated a change in the ramp logic in respect of 'D-Number of Time Blocks where schedule ramp ≥ 1%/min'. SRPC Secretariat has been issuing the ramp performance of thermal ISGS of Southern Region up to the month w.e.f December 2020. ii. In 47th & 49th Meeting of Commercial Sub-Committee, NTPL had requested to take up the following with CERC in the Interaction meeting: a) As per the revised Guidelines for assessment of ramping capability of thermal ISGS issued by NLDC, the following have been considered: 1) In the blocks where there is change in direction of scheduled ramp rate, even 0.5%/min couldn't be met in actual generation. Hence, those blocks were excluded from D as per the revised guidelines. ('D' - No. of Time Blocks during the computation period when the scheduled ramp is greater than or equal to 1%/min in the net injection schedule). 2) In case of preceding block is less than 0.5%/min, it is difficult to achieve the ramp of 1%/min and hence achieving 0.5%/min ramp in actual generation against 1%/min is considered as achievement for ramp rate assessment. b) However, while computing DSM charges in the above two cases, there is adverse financial impact. Hence, relaxation in computation of DSM charges may be considered for blocks where the scheduled ramp in preceding block was less than 0.5%/min and for blocks where is change in direction of scheduled ramp rate. c) Generators are facing difficulty to achieve the scheduled generation and ramp rates in real time due to AGC signal with the SRLDC scheduling. They were not able to achieve the scheduled generation and scheduled ramp rate in the current and next blocks due to AGC signals. Due to AGC operation, the ramp performance is affected and also resulting in adverse commercial impact on DSM. **Suggestion:** **The impact of Ramping schedules and AGC signal may be taken care while penalizing through Deviation settlement.**
15	**Regulation:**	**40 & 43**
	Issue:	**Norms for imported coal based plants to blend the domestic coal**
	Observation / Comments / Suggestion	PCKL vide letter dated 21.09.2021 (Refer Annexure-PCKL)(Item No.5) has requested that the norms for imported coal based plants to

		blend the domestic coal with imported coal, so as to achieve the motives of Government of India under the Athma Nirbar Scheme to be included in tariff regulation 2019.
16	**Regulation:**	**51 & Appendix -II**
	Issue:	**Deemed availability certificate for the shutdown period availed by transmission licensees for shifting of their transmission lines for National Highway Authority of India (NHAI) projects**
	Observation / Comments / Suggestion	MoP letter dated 31.08.2021 (**Annexure – MoPNHAI**) has requested that CERC (Terms and Conditions of Tariff) Regulations, 2019 may be modified suitably, so that RPC Secretariat can issue deemed availability certificate for the shutdown period availed by transmission licensees for shifting of their transmission lines in NHAI projects, provided that transmission customers are not affected by the shutdown of the line.

f) Power Market Regulations 2021 related issues

17	**Regulation**	**5(3)**
	Issue:	**Term Ahead Market transactions-Receipt of negative amount by Sellers**
	Observation / Comments / Suggestion	PCKL vide letter dated 21.09.2021 (Refer Annexure-PCKL)(Item No.4) has informed that the Term Ahead Market transactions bid can be placed block wise also. However, if the trading happens for limited blocks, seller is receiving negative amount. NLDC may be directed to notify suitable procedure for Term Ahead Market also, so that the amount payable to seller would not be negative.

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Chairperson /SRPC

Agenda Notes from WRPC:

1. **Working Arrangement for commercial settlement of transfer of URS from one constituent to another constituent for Central Sector Stations:**

In order to avoid RSD (during off-peak period thus ensuring availability during peak period) of ISGS due to Technical Minimum (TM) Scheduling of the station, WR beneficiaries agreed to have an arrangement of sharing the Fixed Cost (FC) of the URS power up to TM (i.e. the original beneficiary who is not scheduling his entire entitlement in the station is willing to share some portion or entire FC (50% 100% & 0%) of the URS up to TM).

The above arrangement of sharing FC of the URS by surrendering beneficiary/ies and availing beneficiary/ies results in reduction of the FC for the availing beneficiary/ies. The URS scheduling protocol of POSOCO provides that the URS power is allocated on pro-rata basis and is not willing to schedule the URS on merit order basis, unless there is regulatory framework.

It was suggested in WRPC meeting that the issue of Merit Order allocation of URS be taken up with Hon'ble Commission.

URS of beneficiaries agreeing to bear 100% FC be scheduled first, and then the beneficiary agreeing to bear 50% of FC be scheduled. Last priority be given to the URS of beneficiaries who are not willing to bear FC of their URS.

A brief note on the arrangement is place as **Annexure**.

The Hon'ble Commission may like to examine the suggestion.

2. **Waiving of additional penalties in DSM during local disturbance like Cyclone/Earthquakes etc.**

Cyclone Tauktae hit the states of Goa, Maharashtra and Gujarat from 14th May to 19th May. The cyclone caused damage to the power network of

the States and the load despatchers i.e SLDCs were unable to manage the load due to the sudden crash in demand due to the cyclone as well as trippings/tower collapses.

The cyclone progressed gradually from Goa, Maharashtra and to Gujarat, the effect of the cyclone was localised and the larger grid was intact and therefore, Grid Disturbance provisions of the IEGC could not be invoked. This resulted in DSM mechanism being operational with all its features.

As the DSM mechanism was operational a need is felt that the Additional DSM liabilities applied to the suffering States may be waived off under force majeure / act of god category, when such localised wrath of god is taking place.

It is suggested that the SLDC would intimate the start time and end time of the local disturbance (due to cyclone) to RLDC, which would be vetted by RLDC. Based on the inputs the additional DSM liabilities would be waived of for the declared time blocks in the DSM accounts after Member Secretary of RPC approves the same.

The Hon’ble Commission may like to examine the suggestion.

NRPC Agenda for CERC meeting scheduled on 07.10.2021

1. Issues related to CERC (Sharing of ISTS charges and losses) Regulations 2020

A. Tranisition Period

1.1 As per Regulation 22 of CERC (Sharing of ISTS charges and losses) Regulations, 2020,
"22. Transition period
Notwithstanding anything to the contrary contained in these regulations, bills for the first two billing periods, after these regulations come into force, shall be based on the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010"

1.2 According to above, bill for November, 20 and December, 20 months shall be based on pld sharing regulation i.e. Sharing Regulation 2010. Billing from January, 21 onwards would be based on new sharing regulation 2020. January, 21 bill will be having input data of November, 20, and so on. The methodology followed by CTU was endorsed by the Commission vide their removal of difficulty order dated 14.02.2021. It was stated that since only 12 bills were raised in the year 2020 based on Sharing Regulations 2010 and 12 bills will be raised in the year 2021 based on Sharing Regulations 2021.

1.3 However, certain issues are being faced by utilities on account of this order.

1.4 For example, Western Central Railways had an MToA with JITPL for a period from 01.08.2021 to 19.01.2021 i.e. 5 months and 19 days. It should have been raised 6 bills for the said period, 5 for complete months and 1 based on pro rata MToA for 19 days. However, as per Sharing Regulations following 7 bills would need to be raised:

Billing period	Billing month	Regulation
01.08.20 to 31.08.20	September 2020	Sharing Regulations 2010
01.09.20 to 30.09.20	October 2020	Sharing Regulations 2010
01.10.20 to 31.10.20	November 2020	Sharing Regulations 2010
01.11.20 to 30.11.20	December 2020	Sharing Regulations 2010
01.11.20 to 30.11.20	January 2021	Sharing Regulations 2020
01.12.21 to 31.12.20	February 2021	Sharing Regulations 2020
01.01.21 to 19.01.21	March 2021	Sharing Regulations 2020

1.5 WCR would have had to pay an extra bill if the above methodology was followed, and the last bill would have been raised in the billing month of March 2021. In order to ensure that WCR only pays transmission charges for 5 months and 19 days, the matter was discussed in Commercial sub-committee meeting of NRPC and CTU clarified that it will not raise the bill for the billing month of March 2021, and only partial bill of 19 days for the billing month of February 2021 (i.e. MToA would be deemed to be completed by 19.12.2020 for billing purpose).

1.6 A similar issue is being faced by Auraiya Solar, which is being levied charges as per Regulation 13 (7). A lot of utilities whose MToA began before the changeover period (November 2020) and will expire in the future will also face a similar issue.

1.7 WCR was able to recognize and pin point this issue because they were only dealing with one MToA which expired just after the sharing regulations came were implemented, other utilities having multiple LTAs/MToAs may not recognize that they have paid extra charges corresponding to a single MToA because of this changeover.

1.8 The Commission may look into the above and clarify/endorse methodology adopted by CTU for WCR so that a uniform approach is followed for all such cases.

B. <u>RTDA</u>

1.9 Regulation 12 of CERC Sharing Regulations 2020 provides that

(1) Transmission Deviation, in MW, shall be computed as under:
(a) For a generating station, net metered ex-bus injection, in a time block in excess of the sum of Long Term Access, Medium Term Open Access and Short Term Open Access: Provided that for a hydro-generating station, overload capacity of 10% during peak season shall be taken into account.
(b) For a State net metered ex-bus injection or net metered drawal, in a time block, in excess of the sum of Long Term Access and Medium Term Open Access.
(c) For any drawee DIC, which is a regional entity other than distribution licensees, net metered drawal in a time block in excess of the sum of Long Term Access, Medium Term Open Access and Short Term Open Access.
(2) Transmission Deviation Rate in Rs./MW, for a State or any other DIC located in the State, for a time block during a billing month shall be computed as under:
1.05 X (transmission charges of the State for the billing month in Rs.)/ (quantum in MW of Long Term Access plus Medium Term Open Access of the State for the corresponding billing period X 2880)
(3) The Transmission Deviation charges shall be recovered through the third bill and shall be reimbursed to the DICs in proportion to their share in the first bill in the following billing month.

1.10 Discom/DIC wise RTDA cannot be prepared by RPC Secretariat, since the net meter drawal/injection for states as a whole is available. Bifurcation of this state wise RTDA into various Discoms/DICs of the state needs to be done for raising the Bill 3 against the respective DICs. Currently, CTU is doing this in proportion to DICs' LTA. But, it does not capture drawal beyond LTA by any DIC.

C. <u>Certification of non ISTS lines</u>

1.11 Sharing Regulations have dispensed with the role of RPC Secretariat in providing certification of non ISTS lines carrying ISTS power. Licensees now approach CERC directly in such cases. However, MoP vide their order regarding "Waiver of inter-state transmission charges on

transmission of electricity generated from solar and wind sources of energy- Amendment thereof" dated 21.06.21 have stated that

"4.0 An intra state transmission system which is used for the conveyance of electricity across the territory of an intervening state as well as conveyance within the state which is incidental to such inter state transmission of electricity, shall be included for sharing of inter-state transmission charges. Waiver of inter state transmission charges, that applies to inter state transmission systems shall also be applicable to such parts of the intra state transmission. The transmission charges of such intra state transmission system shall be reimbursed by the CTU as is being done for ISTS system. Concerned Regional Power Committee may through studies identify such lines."

The commission may clarify.

D. <u>Generating stations connected to both ISTS and intra-state transmission system</u>

1.12 Regulation 13(11) of CERC Sharing Regulations provide that
"Where a generating station is connected to both ISTS and intra-State transmission system, only ISTS charges and losses shall be applicable on the quantum of Long Term Access and Medium Term Open Access corresponding to capacity connected to ISTS."

1.13 In the absence of any detailed procedure for identifying such generating stations, several utilities continue to pay ISTS charges and losses for LTA/MToA from generating stations connected through their intra state systems. CTU may be urged to identify such lines and exempt the same as per Sharing Regulations.

2. <u>Issues related to gate closure for RE generators</u>

2.1. As per the Clause 8.6 of "Procedure for implementation of the framework on forecasting, scheduling and imbalance handling for Renewable Energy (RE) Generating Stations, including power parks based on wind and solar at inter-state level" notified by CERC on 03.03.2017,
" The schedule of RE generators or lead generator or principal generator may be revised by giving advance notice to the concerned RLDC as the case may be. Such revision shall be effective from 4th time block, the first being the time-block in which notice was given."

2.2. However, Regulation 6.5 (18) as per IEGC 6th amendment notified by CERC on 12.09.2019 provided that revision in schedule in odd time block shall be effective from 7th time block and any revision in even time block shall be effective from even time block.

2.3. This has led to a situation wherein the schedule of solar/wind plants gets changed within 4 time blocks resulting in Discoms facing the heat since they are left with no time to change their schedule in other plants or place a bid in the RTM, resulting in high DSM penalties.

2.4. It is proposed that CERC's procedure for RE scheduling issued on 03.03.2017 may be suitably aligned with the gate closure, in order to facilitate adequate time for Discoms to correct their schedule in view of revisions in the VRE source's schedule.

3. Issues related to expiry of PPA

3.1. Ministry of Power has notified guidelines for " Enabling the Discoms to either continue or exit from the PPA after completion of the term of the PPA i.e. beyond 25 years or a peiod specified in the PPA and allow flexibility to the Generators to sell power in any mode after State/Discom exit from the PPA" On 22.03.2021.

As per these guidelines, the CGS whose power gets relinquished would be free to sell such relinquished power under the various avenues such as

- Tie up with any other buyer desiring to go for long term/ medium term or short term PPAs.
- Sell power in the power exchanges including Day-ahead, Real-time market and term ahead markets.
- Get the power reallocated to willing buyers, if any, as per extant provision of reallocation of power from CGSs.

3.2. If some beneficiaries of the CGS relinquish their power while others don't, and the CGS decides to sell this power in the power exchange, then it would be mixing of section 62 and merchant; and certain modalities like calculation of plant availability factor (PAF), compensation for part load operation (below 85%), incentives for plant load factor above 85%, etc. would need to be revisited.

4. SCADA vs SEM

4.1. Mismatch in SCADA and SEM values is a long standing issue and has been deliberated upon in various forums. The issue is currently being discussed at the NPC level and possibility of getting SEM values in real time is being explored.

4.2. A specific case took instance took place between 23.07.2021 to 07.08.2021, wherein high UI/ Deviation charges (around 96 crores) have been imposed on Punjab due to erroneous data received from NRLDC end (Moga ICTs). NRLDC while carrying out changes in its SCADA on 23.07.2021, erroneously made some changes in the summation tag of Moga ICTs (400kV tag was changed to 765kV tag) which resulted in incorrect data display at NRLDC control room as well as at Punjab SLDC control room. The error persisted from 23.07.2021 to 07.08.2021, during which there was a difference of around 5-6% between the SCADA drawal data available at Punjab SLDC end and actual SEM based figure. Punjab scheduled its power based on the SCADA data, which was indicating under drawal (due to erroneous figures from Moga ICTs) whereas it was actually overdrawing heavily from the grid. This resulted in huge DSM penalties (96 crores) on Punjab.

4.3. The matter was discussed in a special meeting held on 08.09.21 and subsequently the 49th NRPC meeting held on 27.09.21. In the meeting, NRLDC acknowledged that there was some error in SCADA data at their end due to wrong changes made in the summation tag at Moga ICTs by their engineer. Punjab has also acknowledged that it was totally dependent on calculation of NRLDC SCADA and if it had also calculated drawal based on data available at SLDC end, the error could have been identified earlier.

4.4. Based on the discussion held in the meeting, it was observed that there was underdrawal from the grid by Punjab on all days from 01.07.21 to 22.07.21. From 23.07.21 to 07.07.21 however, the pattern changed completely and Punjab resorted to overdrawal on all days (except 28.07 and 29.07). In terms of daily DSM charges, Punjab was receivable on most days between 01.07.21 to 22.07.21, whereas from 23.07.21 to 07.07.21, huge penalties were levied on Punjab on account of overdrawal, sometimes to the tune of 12-13 crore. This change in trend can be attributable to the erroneous SCADA data being received by Punjab.

4.5. Based on discussions held in the 49th NRPC, the Committee decided that additional and sustained deviation charged levied on Punjab for the period where it was receiving erroneous data may be waived off. Only base deviation charges may be levied for the said period.

4.6. The committee further expressed serious concern regarding the matter as it could have led to some serious grid incident. NRLDC was advised to put in place robust internal systems, with proper checks and balances, so that such incidents do not take place in the future. Punjab SLDC was also advised to build its drawal calculation system at 220kV level as double check so that errors like this one can be easily identified and rectified immediately.

The Commission may consider this incident for suitable instructions to RLDCs and Beneficiaries.

5. Deemed Availability for shifting of towers to facilitate construction of projects of NHAI.

5.1. In Northern Region, outages taken by transmission companies for facilitating diversion works / construction of the projects of NHAI/DFCC/DMRC/UPEDC/ Railways were not considered as deemed available for the purpose of calculation of Transmission System Availability and transmission companies were asked to recover charges on account of such outages, only from the concerned agencies.

5.2. Further, above action was in line with Appendix-II of CERC (Terms and Conditions of Tariff) Regulations, 2019 which stipulates that transmission element may be considered deemed available only under following conditions:

i. Shut down availed for maintenance of another transmission scheme or construction of new element or renovation/upgradation/additional capitalization in existing system approved by the Commission. If the other transmission scheme belongs to the transmission licensee, the Member- Secretary, RPC may restrict the deemed availability period to that considered reasonable by him for the work involved.

ii. Switching off of a transmission line to restrict over voltage and manual tripping of switched reactors as per the directions of concerned RLDC.

5.3. A meeting was held on 11.08.2021 under the Chairmanship of Secretary, Power, wherein following decisions were taken:

i. In case of NHAI projects, RPC Sectt would provide deemed availability certificate for shutdown period availed by the transmission licensee for shifting their transmission lines, provided that transmission customers are not affected by the shutdown of these lines.

Shutdown charges should be computed by CEA as per the standard norms and would be included in the cost estimate to be provided to NHAI for shifting of lines.

ii. CERC has also been requested to suitably modify their regulations so that RPC Sectt can issue deemed availability certificate for the shutdown period availed by transmission licensees for shifting of their lines in NHAI projects, provided that transmission customers are not affected by the shutdown of the line.

iii. CEA shall standardize the shutdown period required for such shifting works, so that deemed availability period is not utilized for other than intended purpose.

iv. The shutdown period required for such shifting works shall be standardized.

5.4. In 46th TCC/49th NRPC meeting held on 23-24 Sept, 2021 and 27th Sept, 2021, the matter was discussed as under:

i In view of MoP meeting dt. 11.08.2021, POWERGRID requested to issue Transmission availability certificates by considering deemed availability for the shutdown period availed by them for shifting of their transmission lines in NHAI projects as NHAI is not agreeing to reimburse the availability loss.

ii NRLDC, Punjab, U.P., and Rajasthan submitted that deemed availability for the shutdown period availed by transmission licensees for shifting of their transmission lines in NHAI projects may be provided, only after suitable amendment in the extant CERC (Terms and Conditions of Tariff) Regulations.

iii It was finally decided that Provisional Transmission availability certification may be done till Commission takes final call on Tariff Regulations. Based on the decision of the Commission on the applicable Regulations, provisional certificate(s) may be later reviewed.

The Commission may kindly discuss the matter.

6. Incentive to generators for Synchronous operation

6.1. High voltages are more prevalent in NR during winter season due to less demand, low loading of long EHV lines & long UG cables, inadequate dynamic reactive support by Generators, etc. High voltage problem is more prevalent in Punjab, Haryana, Delhi, some pockets of Uttar Pradesh, Hydro stations in Himachal Pradesh. As per NRPC Reactive energy account, Delhi & Punjab are mostly payable to the regional reactive pool account during winter period. Apart from dynamic voltage support, the generators can provide additional inertia to the grid and can strengthen the short circuit capacity while operating in synchronous condenser mode.

6.2. In previous OCC/TCC meetings of NR, it was stressed that to contain high voltage situations during winter nights, when all the reactive resources are exhausted, synchronous condenser operation of non-running/idle hydro & gas units can provide MVAr support during such lean load hours, which would definitely help the grid to control the high voltage. Last winter, only Tehri units could be operated in synchronous condenser mode for 14.25 hours. It was urged that more and more units should volunteer for trial test for condenser mode operation so that such units can operate during hours of need and help control the high voltage situation.

6.3. Generators like NTPC's Koldam HEP, NHPC's stations other than Chamera-II, Alaknanda Hydro Power's Srinagar Hydro Electric Plant, Vishnuprayag HEP have confirmed that they don't have the provision for Synchronous Condenser mode operation since inception. NTPC, Uttarakhand and Delhi have informed that due to technical issues, their Anta, Auraiya, Dadri, Shravanti, Bawana gas stations are not capable of running in Condenser mode.

6.4. Moreover, following hydro stations of NR have been identified for synchronous condenser operation in NR during winter:

- Pong HEP
- Tehri HEP
- Karcham Wangtoo HEP
- Baspa HEP
- Larji HEP
- Chamera-II

6.5. Generator connected to the grid can provide active as well as reactive power support as per its capability curve. As per the CEA (Technical Standards for Connectivity to Grid) Regulations, hydro generators of 50MW and above shall have desirable feature of condenser operation. However, due to additional auxiliary consumption, other related issues and lack of incentive, reluctance on part of generators to operate their machine in synchronous condenser mode is generally observed.

6.6. In view of the above, Commission may like to consider incentivizing the generators operating their machines as synchronous condenser.

CENTRAL ELECTRICITY REGULATORY COMMISSION
3rd & 4th Floor, Chanderlok Building, 36, Janpath, New Delhi-110001

E-3587/Engg-17/4/2019-CERC Dated: 04.01.2022

To,

Chairperson
Southern Regional Power Committee
Central Electricity Authority
Mo. 29 Race Course Cross Road,
Banglore-560009

Chairperson
Northern Regional Power Committee,
18A, Qutab Institutional Area,
Shaheed Jeet Singh Marg,
Katwaria Sarai, New Delhi 110016

Chairperson
Western Regional Power Committee,
F-3, MIDC Area, Marol, Opp. SEEPZ,
Central Road, Andheri (East),
Mumbai 400093

Chairperson
Eastern Regional Power Committee
14, Golf Club Road,
Tollygunj, Kolkata-700033

Chairperson
North Eastern Regional Power Committee,
NERPC Complex,
Dong Parmaw Lapalamg, Shillong 793009

Sub: Minutes of 3rd meeting (through video conferencing) of the Commission with Chairperson and Member Secretary of RPCs held on 17.11.2021 -Reg.

Sir,

Please find enclosed herewith minutes of meeting of Commission with Chairperson and Member Secretary of RPCs held on 17.11.2021 through video conferencing for information and necessary action.

This issues with the approval of competent authority

(Abhishek Rohilla)
Dy. Chief (Engg.)

Copy to:

1. Member Secretary, Southern Regional Power Committee
2. Member Secretary, Northern Regional Power Committee
3. Member Secretary, Western Regional Power Committee
4. Member Secretary, Eastern Regional Power Committee
5. Member Secretary, North Eastern Regional Power Committee

Record notes of the 3rd interaction (through video conferencing) of the Commission with Chairpersons and Member Secretaries of RPCs held on 17.11.2021 at 10.30 AM

1. List of participants is enclosed as Annexure-A.

2. At the outset, Joint Chief (Engineering), CERC welcomed the participants and stated that the objective of such interactions with RPCs is to get the first-hand experience and feedback from RPCs and appreciate any new issues coming up in the power sector.

3. Chairperson, CERC observed that such periodic interactions with RPCs not only enables CERC to understand various operational difficulties, but also provides an opportunity to RPCs to flag various issue. He stated that CERC values the inputs and feedbacks received from RPCs. He requested the Chairpersons of RPCs to give their opening remarks before the formal agenda is taken up for discussions.

4. Chairperson, SRPC observed that such interactions provide a good opportunity for RPCs to share their views. He thanked CERC for organising such interactions where various issues are discussed and resolved without having to go through the process of litigation and adjudication.

5. He flagged the issue pertaining to generating stations whose power are being evacuated through the State transmission network or through both State transmission network and ISTS (inter-State transmission system), but are being loaded with ISTS charges considering full capacity as deemed LTA (long term access) by CTU (Central Transmission Utility), causing a heavy burden on such generating stations.

6. Chairperson, WRPC stated that looking at the dynamic nature of the power sector, such interactions are very important.

7. Chairperson, ERPC stated that during the Covid-19 pandemic, there have been changes in the demand profiles due to which there have been deviations from schedule and, therefore, penalty has been imposed under Deviation Settlement Mechanism Regulations. He suggested that there should be some mechanism to take care of such extraordinary events in the Regulations.

8. After the opening remarks, the formal agenda was taken up for discussion.

9. **Reserve Shutdown (RSD)**

a) Member Secretary (ERPC) stated that in a scenario where a generating station/ unit goes under RSD due to less requisition by majority shareholder, the minority shareholders are required to buy power from the market at a higher rate despite bearing fixed cost for such unit under RSD. He suggested that guideline may be issued to protect the interest of minority shareholders in those generating stations/ units.

b) Member Secretary (WRPC) stated that WRPC has devised a mechanism of shifting schedule for such minority shareholders to next cheaper

generating station available. For example, if Mauda generating station of NTPC is under Reserve Shut Down, the minority shareholders of Mauda generating station who want to schedule power can be given schedule from Sipat generating station of NTPC. He, at the same time, observed that if a generating station/ unit goes under RSD due to less schedule during off-peak hours, the same generating station is not available for peak hours also. He suggested that if power from such generating station in off-peak hours is scheduled to some other constituents who agree to bear the fixed cost, the station may not go under RSD. Such URS (un-requisitioned surplus) power may be allocated in the priority of % of fixed cost agreed to be borne by such constituents i.e. those agreeing to a higher fixed cost liability will have priority over other constituents who are willing for lower fixed cost liability. He stated that this issue was discussed in WRPC meeting and was agreed to, but the mechanism requires regulatory facilitation for implementation as there is a need to have provisions in regulations for doing away with pro-rata allocation of URS.

c) Chief (RA), CERC requested the participants to provide suggestions on whether under Regulation 6(3) of Power Market Regulations, which states that in the event of a forced outage of a generating station or unit thereof, or any other event as may be notified by the Commission, wherein the obligation of the generating station to supply electricity continues under an existing contract, such generating station may fulfil its obligation by entering into Day Ahead Contracts and Real-time Contracts or Intraday Contracts and Contingency Contracts or Term Ahead Contracts.

d) Member Secretary (NRPC) agreed with suggestion of Chief (RA) and stated that merely by going under the Reserve Shut down, the generator cannot run away from its obligation to supply power to the minority shareholders. He further stated that the Power Market Regulations can resolve the issue where volume is less. However, where the volume is large, it may not be possible for the generator to arrange power under existing provisions of the Power Market Regulations. Therefore, the present issue should be resolved in a holistic manner and should be addressed when amendment to the Grid Code is taken up.

e) Shri N.R.L.K. Prasad, SE (SRPC) stated that, to address the issue, SRPC has finalised revised RSD Procedure and has sent the same to CERC. He stated that the detailed implementation guidelines are also available on SRPC website.

f) Chairperson, CERC stated that this issue is under active consideration of CERC and will be addressed in the amendments to the Grid Code.

10. **Scheduling of ISGS beyond declared ex-power plant MW capability**

a) Shri N.R.L.K. Prasad, SE (SRPC) stated that Regulation 5.2(h) of the Grid Code provides that a generating station shall not be scheduled beyond ex-bus generation corresponding to 100% of the installed capacity of the generating station for the purpose of ensuring providing primary response. However, this is not happening in few cases. The schedule of generating stations participating in the day ahead market in power exchanges whose volumes are cleared, cannot be revised. However, if the beneficiary of that

generating station revises its schedule to take back the surrendered power, schedule for such generating station becomes more than the declared capacity. RLDCs have opined that they do not have any control over the transactions at power exchanges and they are obliged to schedule the power as requested by the beneficiaries. Due to this, the margins expected from the generators to support the ancillary services are often not available. He suggested that POSOCO should be asked to issue specific direction to generating stations to comply with the provisions of the Grid Code.

b) Chairperson, SRPC stated that MoP has issued guidelines, according to which the generators are entitled to sell their power to power exchange on day ahead basis. But under the Grid Code, the schedule can be changed from $7^{th}/8^{th}$ time blocks, which is resulting in over-scheduling. He added that they have requested MoP that the generators should be allowed to sell power to the power exchange only on real-time basis, which will solve the issue.

c) Joint Chief (Engg), CERC clarified that the last amendment to the Grid Code provides that generators can sell power in the day ahead market only after obtaining consent from their beneficiaries. If a beneficiary of a generating station has given consent to the generator for selling URS power in power exchange, and if the same gets cleared, then that beneficiary should not revise its schedule to take that power back. Therefore, the issue has relevance only in cases where power is sold by a generating station without consent of the beneficiaries.

d) Sh. P.D. Lone, WRPC suggested that the capacity charges which are borne by the beneficiaries should be waived off so that the beneficiaries will not have incentive to revise their schedule to take back the power which has been sold in the power exchange by the generators.

e) Chairperson, CERC acknowledged the issue and agreed that schedule should not be more than the declared capacity. He also agreed that either the generators should sell power in the power exchange on real time basis or beneficiaries should not be allowed revise such schedule if they have given consent.

f) Member (ISJ), CERC requested SRPC to send specific cases so that the issue may be looked into in detail.

11. **Implementation of AGC**

a) Member Secretary (ERPC) stated that AGC has been implemented in some of the Central generating stations and private sector power plants but yet to be implemented in the generating stations of the States. The matter was discussed at ERPC forum where WBSLDC highlighted the CERC order dated 13.10.2015. The said order states, *"The Central Commission advises the State Commissions to issue orders for intra-state generators in line with this timeline as AGC is essential for reliable operation of India's large inter-connected grid."* WBSLDC pointed out that State Commissions have not issued any direction in this regard and compensation for the AGC implementation is also not clear.

MS, ERPC requested that the Commission may advise the State Regulators especially WBERC to issue direction to SLDC in this regard.

b) Chairperson, CERC stated that the matter will be taken up in the Forum of Regulators. The Commission has mandated ISGS to be AGC-enabled and has also advised the generating stations of the Sate to be AGC-enabled. Such generating stations are free to participate in providing Ancillary Services and other services. He further observed that since more and more renewable energy-based power plants are coming up, it is necessary to address the issue of reserves and more generating stations are required to participate in providing Ancillary Services and other services. The funding issue for implementation of AGC in State-owned generating stations can be handled by the State Regulators.

12. **Restoration of schedule revision time period to 4 time-blocks**

a) Shri N.R.L.K. Prasad, SE (SRPC) stated that TSTRANSCO has made specific request for restoration of provision related schedule revision from 7^{th}/8^{th} time blocks to 4 time-blocks.

b) Member Secretary (NRPC/SRPC) stated that RE generating stations can revise the schedule from 4^{th} time block which is earlier than the time allowed for revising schedule by Discoms i.e. 7^{th}/8^{th} time block. In such a situation, the Discoms are forced to purchase power from the market to meet their demand.

c) Chairperson, SRPC stated that the aforesaid problem is more acute in Telangana, Tamil Nadu and in the places where generation from wind resources is high such as Gujarat. The problem occurs only for 2-3 months in a year. Inconsistency between the State Grid Code and the Grid Code (specified by CERC) is one of the reasons behind this. The actual reason is unpredictability and lack of accurate forecasting of power from wind plants.

d) Chief (RA) stated that the need for alignment of revision in time period of RE generators and conventional generators was highlighted by the stakeholders while the Commission was finalising amendments for the purpose of introducing RTM (real-time market). However, he clarified that there is a difference between the 4 time-blocks flexibility given to RE Generators and the 4 time-blocks flexibility which was available with the Discoms. The 4 time-blocks flexibility in case of Discoms during the day implies that the schedule can be revised by the Discoms 24 times in a day, while the RE generators can revise their schedule only once over 1.5 hours, which means the maximum number a RE generator can revise its schedule is 16 times in a day. However, he observed that there is need for alignment of provision related to revision of schedule in case of all the generators and that can be taken care of in the amendments to the Grid Code.

e) Chairperson, CERC stated that CERC acknowledges this issue and that it will be addressed in the amendments to the Grid Code.

13. **SCED (Security Constrained Economic Despatch)**

a) Shri N.R.L.K. Prasad, SE (SRPC) stated that the issue of sharing full benefits of SCED to beneficiaries has been raised by many SR constituents in various commercial sub-committee meetings. The general perception is that since the generators are already getting compensated through part-load compensation, heat rate compensation and O & M expenses compensation which are also indirectly borne by beneficiaries, the full benefits of SCED should be shared only amongst the beneficiaries.

b) Member Secretary (NRPC) stated that ISGS are getting their full cost recovered through the Regulations framed by this Commission and therefore, there is no necessity to further incentivise ISGS for selling full power. It should be made part of their obligations that they should endeavour to sell all the remaining power.

c) Chairperson, CERC and Member (ISJ) observed that compensation to generators for participation in SCED is already limited to only 7 paise and therefore, if the same is removed, there may not be any incentive left for the generators to participate in SCED.

14. **Reactive power support**

a) Member Secretary (NRPC) stated that some of the generating stations are giving reactive power support while others do not do so under one pretext or other. During winter season, when the reactive power support is much needed, NRPC is disconnecting 50-60 lines every night and re-connecting them in the morning since there is not enough reactive power support. With the integration of more renewable power in the grid, there is a need to address this issue. He suggested that there is need to incentivise the RE generating stations for this purpose since 50 MW of RE generating station can absorb 16 MVAR i.e. 1500 MW can absorb about 400 MVAR which shall result into voltage control of 7-8 kV. He further stated that it is more economical to incentivise RE generating stations compared to installing reactive power control devices such as STATCOMs.

b) Member Secretary (WRPC) stated that the generators should generate their power at the rated voltage and as instructed by RLDC. In such a case, the reactive power will be taken care automatically.

c) Shri N.R.L.K. Prasad, SE (SRPC) stated that the solar generators generate active power only during the day time while high voltage phenomenon is witnessed during the night hours. A study has been carried out by SRPC and POSOCO that suggests that solar power inverters can be used during night to absorb reactive power. A pilot study has been taken up at Anantpuram Solar Park in this regard. Therefore, he suggested that some incentive may be given to solar power stations for giving reactive support because using solar power inverters during night time decreases their longevity. He further added that SRPC is finalizing the report of the pilot study soon.

d) Chairperson, CERC and Member (ISJ), CERC requested SRPC to submit the report of their pilot study of using the solar power inverters for reactive power control as that will help making appropriate provisions for the same in the Grid Code.

e) Member Secretary (SRPC) assured that SRPC shall share the report of the pilot study as soon as the same is finalized.

15. **SCADA vs. SEM**

a) Member Secretary (NRPC) stated that NRLDC engineers did some tuning in the RTU in SCADA and by mistake tagged 400 kV Moga ICT as 765 kV, which resulted in wrong visibility for Punjab. It appeared to Punjab & NRLDC that Punjab was under-drawing from the grid whereas, Punjab was actually overdrawing at that time. Since both NRLDC and Punjab SLDC were under the impression that Punjab was under-drawing, Punjab kept on increasing load to maintain the schedule and this continued for a number of days. Later, when the DSM (deviation settlement mechanism) accounts were prepared, it revealed that Punjab was overdrawing and, on account of the said overdrawal, Punjab was levied penalty of approximately Rs.90 crore. NRPC Secretariat analysed the issue and found about the wrong tagging of Moga ICT and reported to RLDC and the same was corrected. Punjab protested the levy of the penalty on account of DSM contending that wrong visibility on account of wrong tagging of Moga ICT due to which power was overdrawn was not Punjab's fault. In this case, Punjab did not use its own meters to cross check its drawal and relied solely on the SCADA reading of NRLDC. The issue was discussed in the TCC board meeting also and since Punjab had already consumed the power, it was decided that Punjab should pay Rs.45 crore and the balance penalty towards this deviation was waived off. It was also deliberated in the TCC board meeting that the incident and action taken by NRPC i.e. waiving off a part of the penalty should be informed to the Commission. Member Secretary, NRPC also clarified that such incident occurred only once in NR.

b) Member Secretary (NRPC) stated that the issue of mismatch between energy readings from SCADA and SEM is now gradually become rare.

c) Member Secretary (ERPC) stated that similar problem of overdrawal occurred in Eastern region just after first-time charging of a newly commissioned transmission line. West Bengal overdrew since SCADA data was not integrated and West Bengal SLDC could not visualise the power flows. WBSEDCL had approached OCC forum seeking relief from DSM due to same.

d) Sh. P. D. Lone, WRPC stated that States are willing to install their own meters but transmission licensees are not allowing it. Only Gujarat has been allowed to install its own meters. He further added that it should be allowed because States are bearing the cost of metering and trying to minimize their deviation. He requested that there should be provisions in the Regulations regarding the same.

e) Responding to Member (ISJ), CERC's query as to which meter shall be used for billing and accounting of DSM in such a case - whether States' own

meters or SEM – Member Secretary (NRPC) stated that States can use their meters for monitoring their drawl from the grid while accounting should be done as per the SEM only. He stated that in this proposal, no commercial mechanism is proposed to be changed.

f) Responding to Member (ISJ), CERC's further query as to which agency has issues with installation of meter by States - CTU or PGCIL - Member Secretary (NRPC) clarified that PGCIL cited apprehensions regarding likely issues that may come up with CT/PT.

g) Member Secretary (WRPC) stated that with Automatic Meter Reading (AMR), this problem will get resolved. However, since full AMR installation may take two or more years, for the time being, if some State wants to install its own meters, it should be allowed.

h) Chairperson, CERC stated that the issue of Punjab (relaxation in DSM penalty by NRPC) has been taken note of. He also stated that in his view, SCADA/ SEM mismatch issues have largely been addressed. He further stated that the suggestion of WRPC regarding installation of meters by States have been noted and that the same will be discussed with CTU/POSOCO to decide the future course of action.

16. **Sharing Regulations**

a) ERPC has raised the issue regarding special dispensation to hydro-generating stations where, in RTDA (regional transmission deviation account), the capacity of hydro station during peak season is calculated at over and above 10% of such generating station's capacity. ERPC has requested that there should be proper guidelines for declaration of peak season (in respect of hydro-generating stations) by the Implementing Agency (NLDC) for the purpose of the Sharing Regulations.

b) Member Secretary (ERPC) stated that RPCs decide the peak demand season and communicate the same to the Commission as per the 2019 Tariff Regulations. But in this case, the Implementing Agency (NLDC) is required to make such declaration. Sh. Kejriwal SE(ERPC) stated that under the 2019 Tariff Regulations, ERPC is finalising high demand season and low demand season for thermal power generating stations after discussing in the RPC and the same is communicated to all.

c) Member (ISJ) observed that RPC is the agency that may be entrusted with declaration of peak season for hydro-generating stations too. Chairperson, CERC observed that same formulation, as provided in the 2019 Tariff Regulations, can be extended for declaration of peak season for the purpose of the Sharing Regulations for the hydro-generating stations also i.e. RLDC in consultation with RPC.

17. **LTA/ MTOA quantum for generating stations connected to both ISTS and intra-State transmission system**

a) Shri N.R.L.K. Prasad, SE (SRPC) stated that under the erstwhile Sharing Regulations, 2010, the transmission charges were levied on the basis

of usage of transmission asset. However, under the present Sharing Regulations, 2020, the majority of charges are based on sum of LTA and MTOA quantum of the DICs. Therefore, it has become important to determine the correct sum of LTA and MTOA of the DICs, otherwise DICs will be liable to pay more transmission charges. At present, there are 29 Central Generating Stations which are connected to both ISTS and intra-State transmission system and where CTU has no LTA agreement in place. NLDC (Implementing Agency under the Sharing Regulations, 2020) has also mentioned in its procedure that CTU shall provide details of such LTA. Therefore, it is necessary to exclude LTA corresponding to the power drawn through State network in respect of such generating stations. TANGEDCO has raised this issue for four generating stations (MAPS, NTECL Vallur TPS, NLC TPS Stage-II and Kudankulam) on the ground that CTU & NLDC have been considering full quantum of LTA for power drawn from these generating stations. Since CTU also does not have any methodology to identify breakup of such LTA, CTU and TANGEDCO had requested SRPC to convene a special TCC meeting. In that meeting, a sub-committee has been constituted to formulate a methodology and general philosophy that needs to be followed in such cases.

b) Member (ISJ), CERC observed that genesis of the transmission line at time of planning is to be seen and not the power flow in such transmission lines, which is a dynamic thing. The Sharing Regulations, 2020 provides for sharing charges of transmission system that is planned and constructed for evacuation of power from a particular generating station. Therefore, if for a generating station, a transmission system is planned and constructed for evacuation of power from such generating station, yearly transmission charges for such transmission system should be included for calculation of transmission charges in terms of the Sharing Regulations, 2020. However, sometimes, despite availability of ISTS, a State constructs intra-State transmission system for its drawal of power. In such cases, it cannot be considered that such State is using its own intra-State transmission system for drawal of power and that it should not pay for the ISTS.

c) Chairperson, SRPC stated that the CTU is not following the said principle. For example, for MAPS and KAPS generating stations, power was planned to be evacuated from the intra-State transmission lines but the LTA is being loaded on Tamil Nadu. Tamil Nadu has given up claim in Kudankulam, but CTU is still continuing with the LTA. In a meeting at SRPC, CTU stated that the if transmission charges for LTA in respect of these generating stations is not loaded on to Tamil Nadu, the same will have to be recovered from other States. The stand taken by CTU is not correct and that it should take the decision in accordance with the principles of the Sharing Regulations, 2020. He requested that if Commission convenes a meeting in this regard with CTU/ POSOCO, SRPC may also be invited for the meeting.

d) Member Secretary (NRPC) stated that there is a lack of co-ordination between NLDC and CTU. The transmission system of old intra-State generating stations like Unchahar and Narora is with them only. Their transmission systems are being considered as deemed LTA and they are being made liable to pay the applicable charges. The issue can be sorted out easily as the Regulations are clear and there is no ambiguity therein.

e) Chairperson, CERC stated that a group may be formed involving CTU, WRPC, SRPC, NLDC and others under chairmanship of Member (ISJ), CERC to solve the issue.

18. **LTA of exempted RE-based generation for computation of transmission charges for States**

a) Shri N.R.L.K. Prasad, SE (SRPC) stated that LTA being considered for computation of RTA (regional transmission accounts) does not include LTA of exempted RE generation. However, for the purpose of RTDA (regional transmission deviation accounts) computation, LTA of exempted RE generation is added to the LTA of respective States. Thus, LTA quantum being considered for RTA and RTDA are different.

b) Chairperson, SRPC stated that LTA of exempted RE generation may be mentioned in the Sharing Regulations for computation of transmission deviation.

c) Member (ISJ), CERC stated that this issue has arisen due to waiver of transmission charges available to certain categories of RE generation. Due to such waiver, corresponding LTA from these generating stations is not considered in RTA. However, while calculating transmission deviation the LTA quantum cannot be excluded because States are entitled to draw power from these stations.

d) Joint Chief (Engg), CERC suggested that a solution could be that while finalising RTDA, the schedule from only those RE generating stations for which transmission charges are waived off may be considered rather than LTA.

e) Member (ISJ), CERC requested Chairperson, SRPC to submit the proposal of SRPC with respect to this issue.

f) MS (NRPC) raised the issue that RTDA is issued for State as a whole, and the same is being divided among the constituents/ entities in the State by CTU on pro-rata basis in proportion to their LTA. He stated that this is not justified as all Discoms may not have over-drawn/ under-drawn power.

g) Member (ISJ), CERC suggested that SLDC is the right body that can give such data on how to distribute RTDA. MS (NRPC) agreed to suggestion of Member (ISJ), CERC and stated that CTU should get inputs from SLDC before billing the entities within the States by dividing the deviation amount. Member (ISJ), CERC observed that RPCs can suggest the solution and this issue can also be addressed in the meeting of CTU and RPCs. Joint Chief (Engg), CERC requested all RPCs to give details for States in their respective region as available with respective SLDC.

19. **Intra-State lines carrying inter-State power**

a) Shri N.R.L.K. Prasad, SE (SRPC) stated that in previous Sharing Regulations, 2010, there was provision for certification of RPCs with regard to intra-State lines carrying inter-State power. However, there is no such provision in the present Sharing Regulations, 2020. He stated that STUs also have the webnet software and can themselves do the study and identify if the lines carry inter-State power and, thereafter, approach Commission for tariff determination and inclusion as ISTS.

b) Shri N.R.L.K. Prasad, SE (SRPC) further stated that APTRANSCO has got certain intra-State lines whose tariff has been approved by APERC for period before November 2020 and order was issued in 2021. For these intra-State transmission lines, it is unable to claim the tariff as approved by APERC since there is no provision in the Sharing Regulations, 2020.

c) Member (ISJ), CERC stated that to determine whether a transmission line can be termed ISTS, one needs to go to the genesis of the transmission line i.e. how planning was done. If due to change in power flow, a transmission line carries more inter-State power, it should not mean that such a transmission line is to be considered ISTS. Similarly, by virtue of LILO, an intra-State transmission line should not be claimed as inter-State line.

d) Joint Chief (Engg), CERC stated that the Sharing Regulations, 2020 provides that only those transmission systems shall be considered as ISTS whose tariff is determined by this Commission. The Sharing Regulations, 2010, on the other hand, provided that tariff determined by State Commission was also to be considered.

e) Member Secretary (NRPC) referred to an order of MoP regarding "Waiver of inter-state transmission charges on transmission of electricity generated from solar and wind sources of energy" which states that certification of intra-State lines as ISTS may be done by RPC and that there have been communications from Rajasthan and other State requesting to certify certain intra-State transmission lines as ISTS. NRPC has communicated to them that there is no such provision of certifying the transmission lines by RPC in the Sharing Regulations, 2020 and that they can approach CERC for determination of tariff for such lines.

f) Chairperson, CERC stated that under the Sharing Regulations, 2020 anybody can approach the Commission for determination of tariff for intra-State transmission lines that carry inter-State power. The Commission can refer such cases to RPCs for system study analysis.

g) Chairperson, SRPC stated that he will try to resolve the issue of APTRANSCO at RPC level.

20. **Transition Period Billing**

a) Member Secretary (NRPC) stated that as per Regulation 22 of the Sharing Regulations, 2020, bill for months of November 2020 and December 2020 have to be as per the Sharing Regulations, 2010 while billing from January 2021 onwards would be based on the Sharing Regulations, 2020. Bill issued in the month of January 2021 will be based on data of November 2020 and so on. However, an issue came up in respect of Western Central Railways

(WCR) that had MTOA of 5 months and 19 days and, therefore, it was supposed to be billed for 5 months and 19 days. However, due to transition period related issues, 7 bills were raised on WCR. In order to ensure that WCR pays transmission charges only for 5 months and 19 days, the matter was discussed in Commercial sub-committee meeting of NRPC where CTU clarified that it will not raise the bill for the billing month of March 2021, and only partial bill of 19 days for the billing month of February 2021 (i.e. MToA would be deemed to be completed by 19.12.2020 for billing purpose). Member Secretary (NRPC) requested that the Commission may look into the issue and clarify/ endorse the methodology adopted by CTU for WCR so that a uniform approach is followed for all such cases.

b) Sh. P. D. Lone (SE), WRPC stated that this may happen in other cases also where MTOA had started before the transition period of the Sharing Regulations, 2020 and in such cases, CTU may be advised to bill only for period of MTOA.

c) Member (ISJ), CERC stated that all such cases should be referred to CTU. Member (AG) stated that since CTU has sorted out the issue of WCR, and removal of difficulty order is also clear, if there is apprehension that there might be other similar cases, CTU may suggest the solution.

d) Chairperson, ERPC stated that Bihar has also been billed twice for the same billing period - one under the Sharing Regulations, 2010 and another under the Sharing Regulations, 2020 for which payments have been made under protest.

e) Joint Chief (Engg.), CERC stated that officials of CERC had discussed the matter with CTU and it was assured by CTU that entities shall be billed for their period of access only.

f) Chairperson, CERC, acknowledging the concern of Bihar, directed staff of the Commission to discuss the matter with CTU and resolve the issue in accordance with removal of difficulty order.

21. **Levy of DSM charges during specific events beyond the control of the Regional Entities**

a) Member Secretary (WRPC) stated that even during unforeseen situations such as cyclones, the entities have to pay DSM and penalties if they deviate from their schedule. He further stated WRPC has devised a mechanism in the OCC meetings to tackle this issue wherein SLDC declares the cyclone period, the same is vetted by RLDC and, thereafter, it is submitted to Member Secretary (WRPC). The affected entity honours the DSM bills but additional penalties are waived of.

b) Member Secretary (ERPC) stated that the same issue has been faced by constituents of ER also. He narrated an incidence wherein some people were stranded in the lower part of a dam and upon the instruction of the local administration, the generating station was directed to be shut down. However, the penalty was imposed under the DSM mechanism, though there was no fault on the part of the generator. Therefore, there should be some mechanism to

waive DSM charges in such instances. Also, during COVID-19 period, some Discoms were forced to draw above their schedule. He requested that such situations should be accounted for in the DSM Regulations and appropriate relief may be provided.

c) Chief (RA), CERC stated that any change in the regulations will not be applicable retrospectively. CERC will consider the suggestions while issuing the new DSM Regulations. However, any such issue related to extra-ordinary/ force majeure event should be dealt with on case to case basis and not on the basis of generic rule.

d) Member Secretary (ERPC) agreed that relief from penalties should be given for limited period only.

e) Member (ISJ), CERC observed that if such unforeseen event continues for 10-15 days, why any entity would continue to deviate from its schedule when it can revise its schedule under the Grid Code.

f) Member Secretary (WRPC) stated that during cyclone, the situation does not come under control for 2-3 days as the restoration work of towers takes time.

g) Member (AG), CERC stated that sometimes events such as these are subjective and in such cases waiver of penalties should be exercised with caution.

h) Chairperson, ERPC stated that event of COVID may be looked at differently because the demand profile had changed and load shedding was not an option with the Discoms as they had to supply power 24x7. In this background, penalties under DSM may need to be relooked.

i) Member Secretary (NRPC) stated that RPCs can resolve these issues at their level with consensus of the constituents and intimate the Commission. If no resolution is reached at the RPC level, then aggrieved entity or RPC may approach the Commission.

j) Member (ISJ), CERC stated that limits and penalties provided in the DSM Regulations have been included to ensure that entities do not deviate so that the grid remains safe.

k) Chairperson, CERC stated that the concerns and suggestions have been noted and the same shall be considered while finalising the new DSM Regulations.

22. **Zero cost for underdrawal beyond the limits by Renewable rich state**

a) Chairperson, SRPC stated that as per draft DSM Regulations, underdrawal limit for 250 MW has been removed, and it is a major concern for RE-rich States. He further stated that there are many issues specific to RE-rich States, a detailed note on which can be shared if the Commission permits.

b) Chief (RA), CERC clarified that limit of 250 MW has not been withdrawn in the draft DSM Regulations. He further clarified that for underdrawal, it is proposed that there will be no payment.

c) Chairperson, CERC stated that during the past 3-4 years, forecasting technologies have improved and if the range of permissible deviations is not narrowed, there will be no incentive for the entities to invest in technology for better forecasting and controllability.

d) Chairperson, SRPC stated that every State doesn't have balancing reserve and if like SCED, balancing is done at national level, many issues of RE-rich States may get resolved. He stated that SRPC has written to Ministry of Power regarding the same.

e) Chief (RA) clarified that energy balancing and system balancing are different. This kind of balancing requirements i.e. last mile energy balancing and system balancing which is handled by system operator are there in all power systems in the world. In Indian power market, the Real Time Market (RTM) needs to increase in terms of depth. Prior to 2021, India did not have organised platform to schedule energy balancing requirements close to real time, but with RTM, it is possible now. The possible answer lies in maintaining appropriate reserves rather than allowing unscheduled interchange of 200-250 MW, thereby endangering grid security.

f) Chairperson, CERC stated that the Commission has been working on energy balance, system balance, reserves and role of system operator. With increasing RE integration with grid, there will be problems if these issues are not addressed appropriately.

23. **Term Ahead Market transactions and Receipt of negative amount by Sellers**

a) Shri N.R.L.K. Prasad, SE (SRPC) stated that there have been instances of negative payment to sellers due to proportionately higher transaction costs such as operating charges/ transmission charges/ application fees. The same happens when transaction is for a small quantum of energy. The Commission may like to take a note and resolve the issue.

b) Chairperson, CERC stated that the issue has been noted and will be dealt with while taking up amendments to Regulations.

24. **Deemed availability certificate for the shutdown period availed by transmission licensees for shifting of transmission lines for National Highway Authority of India (NHAI) projects**

a) Member Secretary (NRPC) stated that the Tariff Regulations, 2019 provides that if an entity asks for shutdown of any transmission line for undertaking some work on the transmission line, then such entity has to compensate for the non-availability of the transmission line to the transmission licensee. When NHAI wanted shutdown of some transmission lines and POWERGRID claimed charge, NHAI did not agree to pay the charges and the

issue was raised before the Ministry of Power. During a meeting taken by Secretary (Power), it was deliberated that generally customers of transmission lines are not affected by shutdown of a particular transmission line, due to redundancy in the transmission system and NHAI projects are of national importance. Therefore, it was decided in that meeting that in case of NHAI projects, RPC secretariat would provide deemed availability certificate for the shutdown period availed by transmission licensees for shifting of their transmission lines, provided that transmission customers are not affected by the shutdown of the line. Also, Director, Ministry of Power sent a letter to CERC to incorporate such provision in the Tariff Regulations, 2019. This issue was explained to the constituents in TCC board meeting also where NRLDC and a few constituents said that it can be applicable only when CERC amends the Tariff Regulations, 2019. Member Secretary (NRPC) further added that provisional deemed availability can be given because there is no impact on any beneficiaries and the availability can be revised based on CERC's directions. He requested that Tariff Regulations, 2019 may be amended so that RPC Secretariat can issue deemed availability certificate for the shutdown period availed by transmission licensees for shifting of their transmission lines for NHAI projects, provided that transmission customers are not affected by the shutdown of the line.

b) Chairperson, CERC requested NRPC to send the communications referred by them, so that a view can be taken.

c) Member Secretary (NRPC) assured that NRPC will share the formulations and relevant documents with CERC.

25. **Ramping assessment**

a) Shri N.R.L.K. Prasad, SE (SRPC) stated that NLDC has revised the guidelines for ramping assessment in December 2020, as per which in particular cases, some time-blocks have been exempted from ramping performance assessment. Such particular cases are where there is change in the direction of scheduled ramp rate, or where in preceding block, ramp rate is less than 0.5% per min. Some constituents are requesting relaxation in DSM Regulations for such cases.

b) Chairperson, CERC stated that the issue will be examined.

26. **Norms for imported coal-based plants to blend the domestic coal**

a) Shri N.R.L.K. Prasad, SE (SRPC) requested that the Tariff Regulations, 2019 may incorporate appropriate provisions for blending of domestic coal in the imported coal based generating stations.

b) Chairperson, CERC clarified that there is provision of blending of imported coal in the domestic coal based generating station but the converse provision does not exist. However, the suggestion has been noted.

27. **Issues related to expiry of PPA**

a) NRPC raised the issue relating to guidelines issued by MoP, which enables the Discoms to either continue or exit from the PPA after completion of the term of the PPA i.e. beyond 25 years or a period specified in the PPA. However, due to such exit if 100% power is not tied up, issues like part load compensation, availability factor shall come up.

b) The issue was noted.

28. **Declaring transmission charges for ±800 kV Raigarh-Pugalur-Thrissur HVDC Transmission Line as 'National Component' (SRPC) for purpose of the Sharing Regulations 2020**

a) Chairperson, SRPC stated that Raigarh-Pugalur-Thrissur HVDC Transmission Line may be considered as transmission line of national importance considering the huge surplus RE power that is planned to be transmitted from Southern Region to the rest of country.

b) Member (ISJ), CERC requested SRPC to share the documents to substantiate that the transmission line will carry RE power from SR to rest of the country.

c) Chairperson, CERC observed that already a petition in this regard is pending before CERC and the issue shall be adjudicated in that petition.

29. **Interpretation of order dated 04.01.2017 and 06.03.2017 in Petition No. 155/MP/2016**

a) Member Secretary (ERPC) stated that for delay (beyond control) in commissioning of transmission lines by transmission licensees, they are being compensated. However, when the downstream network of State is delayed, owing to law and order situation, they are not being compensated and rather they are made liable to pay the transmission charges for transmission licensees, till the commissioning of downstream system of the State.

b) Member (ISJ), CERC observed that the liability for the payment in the event of delay in commissioning the transmission system does not go away. For example, if the generating station has been commissioned and the transmission system has not come, the transmission licensee may get extension in COD, but it remains liable to pay compensation to such generating station.

c) Chairperson, CERC stated that CERC has taken a fair and consistent approach in its orders. The party which is causing delay is liable to pay the compensation.

30. **Settlement of DSM accounts of IPP stations during Grid Disturbance Period**

a) Member Secretary (ERPC) stated that it is not clear whether IPPs are covered in the "Methodology of settlement of accounts for bilateral short term and collective transactions, for the period of Grid Disturbance" dated

09.10.2019 issued by the Commission. ERLDC has denied settlement of one such IPP on ground that it is not ISGS. He stated that ERLDC has informed that IPPs are not covered in ISGS definition of the Grid Code because in their PPA/ contract is in MW and not in terms of the percentage shares.

b) Joint Chief (Engg), CERC clarified that the methodology is applicable to IPP as well if it is an ISGS which is a regional entity. She requested ERPC to share the documents/ letter of ERLDC in which they have not accepted treatment of the IPP as ISGS.

c) Member Secretary (ERPC) clarified that the communication was verbal only. He further stated that he will take up the issue at RPC forum.

d) Chairperson, CERC observed that the Commission will discuss the issue with ERLDC.

Concluding Remarks

31. Chairperson, SRPC thanked the Commission and all the participants for their participation and valuable contributions in the discussions. He expressed satisfaction that the issues of RPCs have been heard at length and the concerns have been noted by the Commission. Member Secretary (NRPC) also thanked the Commission and others participants. He stated that such meetings with RPCs provide an effective platform for placing the issues and concerns of RPCs before the Commission.

32. The Commission thanked all the RPCs for their active participation and expressed that such dialogues would continue in the future.

***

Annexure -A

List of Participants

Sr. No.	Name and Designation
CERC	
1.	Shri P.K. Pujari, Chairperson
2.	Shri I.S. Jha, Member
3.	Shri Arun Goyal, Member
4.	Shri Pravas Kumar Singh, Member
5.	Shri Sanoj Kumar Jha, Secretary
6.	Dr. S.K. Chatterjee, Chief (Regulatory Affairs)
7.	Shri Proteek Kumar Chakraborty, Chief (Finance)
8.	Shri T. Rout, Senior Advisor
9.	Ms. Shilpa Agarwal, Joint Chief (Engg.)
10.	Shri Sunil Kumar Jain, Joint Chief (Engg.)
11.	Shri B. SreeKumar, Joint Chief (Legal)
12.	Shri T D Pant, Joint Chief (Legal)
13.	Shri Sreenivas, Dy. Chief (Legal)
14.	Shri Ravi Shankar, Dy. Chief (Engg.)
15.	Shri Abhishek Rohilla, Dy. Chief (Engg.)
16.	Shri Shiva Suman, Dy. Chief (Engg.)
17.	Shri Ravindra Kadam, Advisor
18.	Shri Ramanjaneyulu Gali, Asst. Chief (Engg.)
19.	Shri Surya Kant, Research Officer
ERPC	
1.	Shri Sanjeev Hans, Chairperson (ERPC)-cum-CMD, BSPHCL
2.	Shri A K Sinha, Chairperson TCC & Director, BSPGCL
3.	Shri N. S Mondal, MS, ERPC
4.	Shri S. Kejriwal, Superintending Engineer
5.	Shri Alikpantha De, EE
6.	Shri P.P. Jena, EE
7.	Shri S.K. Pradhan, AEE
8.	Shri S.R. Swain, AE
WRPC	
1.	Shri Prasanna Kumar, Chairperson (WRPC)-cum-MD, GSECL
2.	Shri Satyanarayan S., Member Secretary, WRPC
3.	Shri P.D. Lone, Superintending Engineer
4.	Shri J.K. Rathod, Superintending Engineer
5.	Shri Deepak Gawali, Superintending Engineer
6.	Shri Sachin Bhise, Dy. Dir. WRPC
7.	Shri Deepak Sharma, Executive Engineer
8.	Shri P. Vidya Sagar, Executive Engineer
9.	Shri Vikas Mundotia, Executive Engineer
10.	Shri Karthik Vaghchara, Assistant Director-I
NRPC	
1.	Shri Naresh Bhandari, Member Secretary, NRPC
2.	Shri Saumitra Mazumdar, Superintending Engineer
3.	Shri Vikrant Singh Dhillon, Executive Engineer
4.	Director (Project), PTCUL
SRPC	
1.	Shri Rajesh Lokhani, Chairperson (SRPC)-cum-CMD, TANGEDCO
2.	Shri S. Shanmugam, Chairperson (TCC), Managing Director, TANTRANSCO
3.	Shri Naresh Bhandari Member Secretary (in-charge)
4.	Shri N.R.L.K. Prasad, Superintending Engineer
5.	Shri Meka Ramakrishna, Superintending Engineer
6.	Shri R.P. Madhu, Superintending Engineer
7.	Ms. Anusha Das J., Executive Engineer

Sr. No.	Name and Designation
NERPC	
1.	Shri B. Lyngkhoi, Member Secretary
2.	Shri S.M. Aimol, Director/ Superintending Engineer (Comml.)
3.	Shri Abhijeet Agrawal, Executive Engineer (Comml.)

Annexure-C.7

DRAFT CENTRAL ELECTRICITY REGULATORY COMMISSION (CONNECTIVITY AND GENERAL NETWORK ACCESS TO THE INTER-STATE TRANSMISSION SYSTEM) REGULATIONS, 2021

Transmission Access- Prevailing regime

- Transmission system booking
  - Long term Access (LTA)- 7 years and above
  - Medium term Open Access (MTOA)– 3 months to 5 years
  - Short term Open Access (STOA) - 1 time block to 1 month
    (up to 3 months in advance)
  - Each Access comprise of booking of system from injection point till drawl point

- Availing of the booked transmission system by scheduling
  - Scheduling of power is under contract between buyer and seller
  - LTA – PPA for duration more than one year
  - MTOA and STOA- PPA for the duration of Access to be furnished along with the application

Need for change:

- Realities of procurement of cheaper power
- Requirement of delinking of access to transmission system with fixed contract.
- Schedules under STOA cannot change 2 days hence.
  -Need to review inflexibility raised by stakeholders.
- Streamline relinquishment charges.

Background

- Draft GNA Regulations were notified on 14.11.2017.
- Subsequently few developments have taken place:
  - Requirements of new provisions for connectivity to projects based on renewable sources to inter-State Transmission System.
    - Detailed Procedure – May' 2018, Feb' 2021, 7th Amendment to the 2009 Connectivity Regulations.
  - Upcoming changes in sector
- Draft GNA Regulations 2021- notiifed on 16.12.2021
  - comments invited till 15.02.2022.
- Draft GNA Regulations 2021 consists of broadly three sections:

  (A) Connectivity

  (B) General Network Access (GNA)

  (C) Temporary GNA (T-GNA)

Connectivity

- **Application fees : Rs 5 lakh + taxes / application**
- **Eligible Entities:**
  - Injecting entities who are seeking connectivity to the ISTS
  - Connectivity grantees shall be deemed to have been granted GNA, equal to the quantum of Connectivity from the start date of Connectivity.
  - Minimum quantum to connect to ISTS- Installed capacity of 50 MW individually or collectively through lead generator.

Additional points

- Entities having Connectivity may apply for enhancement of Connectivity of less than 50 MW subject to available capacity in transmission system.
- At a terminal bay already allocated to another Connectivity grantee with an agreement for sharing the terminal bay.
- Through electrical system of a generating station having Connectivity to ISTS with an agreement for sharing.
- Two or more Applicants may apply for grant of Connectivity at a common terminal bay with an agreement for sharing the dedicated transmission lines and the terminal bay.

Connectivity….contd.

- Eligible entities shall seek Connectivity equal to Installed Capacity (IC) subject to following:

Sr. No.	Applicant	Connectivity Quantum
1	Generating Stations including REGS	Equal to Installed Capacity
2	Renewable Hybrid Generating Station	Less than or equal to the installed capacity
3	Captive generating plant	Maximum injection to ISTS
4	Standalone ESS (energy storage system)	Maximum injection to ISTS or proposed maximum drawal from ISTS, whichever is higher
5	Renewable Power Park Developer	Quantum for which it has been authorised by the Central Government or a State Government

- Dual Connectivity: Generating station may be connected to both intra-State transmission system and inter-State transmission system.
  - A generating station, already connected to or intending to connect to intra-State transmission system shall also be eligible for Connectivity to ISTS for a quantum not exceeding the balance of the installed capacity

Grant of Connectivity

- In-principle grant of Connectivity
  - Preliminary intimation seeking to submit Connectivity Bank Guarantees.

    - within 30/60 days (where ATS is required)

- Final Grant of Connectivity
  - On submission of required Connectivity Bank Guarantees

- Grant of Connectivity may have following situations
  - Neither the ISTS bay at which Connectivity is proposed is to be constructed under ISTS, nor any augmentation is required to ISTS-
  - Only terminal ISTS bay is constructed under ISTS or to be constructed under ISTS. No further augmentation of ISTS required
  - Augmentation of ISTS is required along with terminal bay or without terminal bay.

Connectivity Bank Guarantee (Conn-BGs): SHORT IT

- Three parts:
- Conn-BG1 amounting to Rs. 50 lakhs for all applicants.
- Conn-BG2: Towards Terminal Bay as follows (where no ATS)

Voltage level of allocated terminal bay	Conn-BG2 (per terminal bay)
132 kV	Rs. 2 crore
220/230 kV	Rs. 3 crore
400 kV	Rs. 6 crore
765 kV	Rs. 12 crore

- Conn-BG2: Not applicable In case entity (i) proposes to construct the terminal bay(s) on its own or (ii) seeks Connectivity at a terminal bay constructed or being constructed by another Connectivity grantee or (iii) seeks Connectivity through electrical system or switchyard of a generating station
- Conn-BG3: Applicable if Connectivity granted on existing system @ Rs 2 lakhs/MW

Connectivity Bank Guarantee (Conn-BGs)…Contd.

- In case augmentation to ISTS is required to grant Connectivity:
  - Conn-BG2 shall be as per the estimated cost of such Associated Transmission System and terminal bay(s).
  - Nodal Agency within 6 (six) months of furnishing of Conn-BG1 shall intimate

    (i) amount of Conn-BG2 to be furnished towards ATS and terminal bay(s), which shall not exceed the estimated cost intimated

    (ii) the timeline for completion of ATS and terminal bay(s), and

    (iii) firm date of start of Connectivity
- In the event of non-intimation by Nodal Agency within six months, the entity shall have the option of withdrawing the application for Connectivity and in such a case, the Conn-BG1 shall be returned.

Treatment of Conn-BGs:

- Conn-BG1 i.e. Rs 50/Lakh shall be returned within 30 days of COD of full capacity.
  - In case part capacity is relinquished say 200 MW out of 500 MW is relinquished then Conn-BG1 shall be returned after COD of 300 MW.
- Conn-BG2 and Conn-BG3 shall be returned in five equal parts over five years corresponding to the generation capacity which has been declared under commercial operation.
- In case Connectivity is relinquished, subsisting Conn-BG2 shall be encashed corresponding to the ATS and terminal bay(s), construction of which has already been awarded for implementation.
- The proceeds of encashed Conn-BG2 shall be used for reducing Monthly Transmission Charges under the Sharing Regulations

General Network Access (GNA)

- Under the 2009 Connectivity Regulations
  - LTA or MTOA granted to an entity is a right granted to such an entity for transfer of electricity from a specified injection point to a specified drawal point on ISTS.

- Under the Draft GNA Regulations,
  - all grid connected entities i.e. a selling entity or a buying entity shall have GNA.
  - GNA of injecting entities shall be equal to its Connectivity.
  - Buying entities shall seek GNA as per their requirements.
  - Such GNA is not from identified injection point to identified drawal point, rather it is an open access which shall provide flexibility in terms of injection point for a buying entity under different types of contracts.
  - Similarly selling entity has flexibility to sell any buying entity under different types of contracts.

Eligibility for GNA

- State Transmission Utility on behalf of distribution licensees connected to intra-State transmission system and other intra-State entities. No financial liability on STUs.
- A buying entity connected to intra-State transmission system
- A distribution licensee or a Bulk consumer, seeking to connect to ISTS, directly, (50 MW & above)
- Trading licensees (engaged in cross border trade) for drawal and injection into the Grid
- Transmission licensee connected to ISTS for drawal of auxiliary power.

GNA for States:

- Each State shall have a General Network Access (GNA) to ISTS.
- To start with GNA for States shall be specified based on ISTS drawal for last 3 years.
- States shall be able to schedule power under long term or medium term or short term contracts based on its own assessment of merit order on day ahead basis within GNA quantum. This flexibility will help them optimise their overall procurement cost.
- Additional GNA may be sought by State as per their requirement.
- States shall pay transmission charges for GNA quantum in accordance with CERC(Sharing of inter-state transmission charges and losses) Regulations 2020.
- Any drawal beyond GNA shall be with additional charges.
- GNA once granted shall remain valid until relinquished.
- GNA granted to a State may be utilized by another State.
- GNA can be applied for by
  - STU on behalf of intra-state entities or
  - intra-state entity

Grant of GNA

- For the first year GNA for states shall be considered based on historical data of last 3 years for yearly maximum ISTS drawl and daily maximum ISTS drawal.

- GNA shall be the average of 'A' for the financial years 2018-19, 2019-20 and 2020-21:

where,

- 'A' = {0.5 X maximum ISTS drawal in a time block during the year} + {0.5 X [average of (maximum ISTS drawal in a time block in a day) during the year]}

- STU shall be the entity to whom GNA shall be deemed to be granted as per above on behalf of intra state entities. Transmission charges liability shall be with intra-state entities as per prevailing regime.
- STUs within 3 months of coming into force of these regulations, on behalf of intra-state entities, may apply for additional GNA over and above the GNA deemed
- States may apply for additional GNA to be added in next 3 years, every year in September.

National Load Despatch Centre
Total Transfer Capability for April 2022

Issue Date: 28th December, 2021 Issue Time: 1700 hrs Revision No

Corridor	Date	Time Period (hrs)	Total Transfer Capability (TTC)	Reliability Margin	Available Transfer Capability (ATC)	Long Term Access (LTA)/ Medium Term Open Access (MTOA) #	Margin Available for Short Term Open Access (STOA)	Changes in TTC w.r.t. Last Revision
NR-WR*	1st April 2022 to 30th April 2022	00-06	2500	500	2000	628	1372	
		06-18				1856	144	
		18-24				628	1372	
WR-NR*	1st April 2022 to 30th April 2022	00-06	19500 18550**	1000	18500 17550**	11433 10483**	7067	
		06-18	19500 18550**	1000	18500 17550**	11822 10872*	6678	
		18-24	19500 18550**	1000	18500 17550**	11433 10483**	7067	
NR-ER*	1st April 2022 to 30th April 2022	00-06	2000	200	1800	93	1707	
		06-18	2000		1800	1308	492	
		18-24	2000		1800	93	1707	
ER-NR*	1st April 2022 to 30th April 2022	00-24	5900	400	5500	4356	1144	

Concept of ‘within region’ and ‘outside region’.

Grant of GNA…contd.

- GNA deemed to have been granted to STU shall be segregated as (i) GNA within the region and (ii) GNA from outside the region, in proportion to contracts, within the region or outside the region, under Long Term Access and Medium Term Open Access obtained in terms of the Connectivity Regulations.

- Transmission charges are paid by the intra-State entities in the State and, hence, there is a need to segregate GNA quantum for all intra-State entities. Since SLDC of the State has information related to drawal of each intra-State entity, it is proposed that SLDC shall carry out such segregation of GNA quantum of the State into various intra-State entities and intimate the same to STU, CTU and NLDC.

- In case an intra-State entity including a distribution licensee having GNA covered under clause (i) of Regulation 17.1, substitutes GNA with GNA under clause (ii) of Regulation 17.1, GNA for such intra-State entity shall be reduced from the total GNA of STU as held under clause (c) of Regulation 22.1, for the quantum so substituted and for such substituted period.

Grant of additional GNA to STUs

- Deemed GNA computed for a STU ‘A’ is 4000 MW.
- ‘A’ applies for additional GNA for 800 MW within next 3 months which is granted to ‘A’ by CTU,
  - GNA for ‘A’ will become 4800 MW (4000 MW + 800 MW).
- ‘A’ may apply once in every financial year by the month of September for additional GNA for the next 3 financial years indicating the start date for such quantum.

Financial Year	Additional GNA granted in each FY from a specified date	Total GNA after grant of additional GNA
2023-24	200 MW w.e.f. 22.6.2023	5000 MW w.e.f. 22.6.2023
2024-25	100 MW w.e.f. 18.5.2024	5100 MW w.e.f. 18.5.2024
2025-26	300 MW w.e.f. 14.9.2025	5400 MW w.e.f. 14.9.2025

Use of GNA by another GNA grantee

- Any entity having surplus GNA for a period due to reduction in load or seasonal variation, can authorize part of its granted GNA to others with prior approval of CTU. (for period not exceeding 1 year and on mutually agreed terms)
- Liability to pay GNA charges shall be with original GNA grantee
- For example, Punjab may buy GNA capacity for a specific quantum from Delhi/Haryana in case there is diversity in their ISTS drawal requirement and optimise their transmission charges.
- Suppose UP has 10000 MW GNA and in a season, it may not need to draw for 800 MW from ISTS. Punjab may have ISTS drawal requirement additional to its GNA of 8000 MW in that season. Punjab can use GNA of UP as per mutually agreed terms.
- Subject to availability of drawal capacity of the State.
- For the purpose of calculation of transmission deviation charges, GNA of Uttar Pradesh and Punjab shall be considered as 9,200 MW and 8,800 MW respectively for that period.

Temporary GNA (T-GNA)

- Product akin to prevailing STOA.
- Can be availed over and above GNA.
- 1 time block to 11 months.
- Scheduling flexibility on day ahead basis.
- Priority to get corridor allocation after GNA grantees.
- Payment of transmission charges 1 month in advance.

T-GNA

- Applicants- buyers
  - Distribution licensee /bulk consumer/captive generating plant / ESS / generating station for auxiliary/startup
  - Trading license on behalf of buyers
  - Power exchanges

- Application fees- Rs 5000/application
- Bilateral transactions
  - Advance application for grant of T-GNA: For T-GNA starting on or after the (D+3) day- same month or next month starting
  - Exigency application for grant of T-GNA: Application made on (D) day for grant of T-GNA with scheduling for (S) day, which may be (D) day or (D+1) day or (D+2) day, with a minimum start time of 7 (seven) time blocks unless specified otherwise in the Grid Code:
    - Maximum for 1 day

Advance application category:

- Quantum of T-GNA in MW;
- Start time of T-GNA in terms of time-block and date;
- End time of T-GNA in terms of time-block and date;
- Point of injection, if available, or in the absence of the point of injection, the target injection region;

Provided that in case of injection into the Indian grid in the course of cross border trade of electricity in terms of the Cross Border Regulations, point of injection shall be furnished along with the application.

- Point of drawal;

- Standing Clearance of SLDC under whose jurisdiction the point of drawal is located, in case the buyer is an intra-State entity and;

- In case the seller is an intra-State entity and the point of injection is available, Standing Clearance of SLDC under whose jurisdiction the point of injection is located:

Provided that in case the point of injection and corresponding Standing Clearance of SLDC under whose jurisdiction the point of injection is located is not available at the time of making the application, the same shall be submitted along with the scheduling request in terms of Regulation 33 of these regulations;

- In case the seller is a regional entity and the point of injection is not available at the time of making the application, the point of injection shall be submitted along with the scheduling request in terms of Regulation 33 of these regulations.

Exigency application category:

- Contracted quantum of power (MW) to be scheduled at point of injection;
- Start time of T-GNA in terms of time-block and date;
- End time of T-GNA in terms of time-block and date;
- Point of injection;
- Point of drawal;
- Standing Clearance of SLDCs under whose jurisdiction the point of drawal and point of injection are located, in case the buyer or the supplier is an intra-State entity, as applicable.

Declarations at time of Advance application

- That necessary infrastructure for time-block wise metering and accounting and appropriate communication system are in place for the point of drawal and point of injection, if available.

- If the point of injection has not been identified, abovesaid availability of necessary infrastructure for time-block wise metering and accounting and communication system for the point of injection and, the Standing Clearance of SLDC, in case the seller is an intra-State entity, under whose jurisdiction such point of injection is located, shall be submitted along with the scheduling request.

- Applicant indemnifies the Nodal Agency at all times from any and all claims, actions and all other obligations by or to third parties arising out of or resulting from the transactions under T-GNA.

- That there is a valid contract for the proposed scheduling:
  - Same may be provided at time of scheduling request

Processing of applications for T-GNA

- Advance applications - on first-come-first-served basis - processed latest by 23.59 hrs of the (D+1) day, 'D' being the date of making the application.

- Exigency applications for T-GNA with the schedule for (S) day shall be processed as under:
  - Applications received till 1300 hrs of (S-1) day shall be processed after 1300 hrs on (S-1) day on first-come-first-served basis, and shall be finalised by 1400 hrs of (S-1) day.
  - Applications received after 1300 hrs of (S-1) day or in the (S) day shall be processed within 4 time blocks, on first-come-first-served basis.

- T-GNA for collective transactions under day ahead market shall be processed by 1300 hrs of (S-1) day.

- T-GNA for collective transactions under real time market shall be processed within a time block.

Revision of T-GNA

- T-GNA granted under Exigency application category or under Advance application category for a period not exceeding one month cannot be revised.

- T-GNA granted under Advance application category for a period of more than one month may be reduced for the balance period with a prior notice of one (1) month by the T-GNA grantee:

- Provided that applicable T-GNA charges for the quantum of T-GNA granted shall be payable for the notice period of one (1) month.

Scheduling request for power under T-GNA

- Advance application category:

Scheduling request by T-GNA grantees under Advance application category shall be made on day ahead basis before the opening of bidding window for collective transactions under day ahead market, as per provisions of the Grid Code.

- T-GNA granted under Exigency application category shall be considered as schedule, which cannot be revised.

Transmission charges for T-GNA

- Transmission charge rate for T-GNA, in Rs./MW/time block, for a State shall be published for each month by the Implementing Agency in terms of the Sharing Regulations.

- Transmission charges for T-GNA, in case of bilateral and collective transactions, shall be payable only at point of drawal, as per the last published Transmission charge rate for T-GNA for the State where such point of drawal is located:

- Under collective transactions, transmission charges for T-GNA shall be payable for drawal schedules more than GNA quantum or T-GNA quantum or both, as applicable.

- In case any scheduling request under T-GNA is not approved by RLDC on day ahead basis or curtailed for the reasons of transmission constraints or grid security, the transmission charges for such quantum not scheduled or curtailed shall be refunded to the T-GNA grantee.

Transmission charges-T-GNA

- For T-GNA up to one (1) month - within three (3) working days of grant of T-GNA:

  Provided that where T-GNA is starting within next 3 working days, transmission charges for T-GNA shall be deposited before the start date of T-GNA;

- For T-GNA for more than 1 month - charges for the first month, within three (3) working days of grant of T-GNA but before the start date of T-GNA and charges for each subsequent month including part thereof, if any, on rolling basis, one month in advance.

Allocation of Transmission Corridor

- State having GNA, can request scheduling from injection point of its choice as per its contract. The methodology of scheduling and priority of transmission corridor allocation shall be covered under the Grid Code.

- In case the scheduling request of the GNA Grantee cannot be accommodated by RLDC due to constrain in transmission corridor, RLDC shall allocate the available transmission corridor amongst the GNA grantees in proportion to their GNA within the region or from outside region and the GNA grantee shall be eligible to schedule power under any contract within such allocated transmission corridor. In case the revised schedule is not furnished by the GNA Grantee, RLDC shall finalise the schedule for such GNA Grantee by pro rata reduction of schedule under each contract for such constrained transmission corridor.

- Transmission corridor shall be allocated on day ahead basis to GNA grantees and TGNA grantees as per the priority and indicative time-line as indicated in following illustration:

Allocation of Transmission Corridor…contd.

Sr. No.	Activity	Time (By hours in S-1)*
1.	Generating stations to declare DC for "S day"	'T' hours
2.	RLDC to reflect respective share for each beneficiary	'T+1' hours
3.	GNA grantee to give scheduling request within GNA T-GNA grantee to give scheduling request within T-GNA	'T+2' hours
4.	In case demand of corridors is more than availability, RLDC to intimate pro-rata corridor allocation to GNA grantee to enable it to place revised scheduling request	T+2.5 hours
5.	RLDC to confirm schedules for GNA grantees	T+3 hours
6.	RLDC to release balance corridor for scheduling T-GNA requests under Advance Application	T+3 hours
7.	RLDC to process T-GNA scheduling request and confirm schedule for T-GNA grantees	T+3.5 hours
8.	RLDC to release balance corridor for day ahead collective transactions	T+3.5 hours

Allocation of Transmission Corridor…contd.

9.	Bidding window for Day ahead collective transactions	T+4 - T+5.5 hours
10.	Application by Power Exchange(s) for allocation of corridors	T+6 hours
11.	RLDC to confirm scheduling based on corridor availability	T+6.5 hours
12.	RLDC to issue schedule for collective transactions based on final market clearing by exchanges	T+7 hours
13.	RLDC to release balance corridor for Exigency applications received till T+7 hours	T+7 hours
14.	RLDC to process Exigency applications received till T+7 hours	T+8 hours
15.	RLDC to release balance corridor for schedule revision by GNA grantees, Exigency Applications, RTM	T+8 hours

*Indicative timeline to be finalised as per Grid Code

Transition mechanism

- Connectivity, LTA, MTOA
  - Applications yet to be granted, can be withdrawn or converted into applications as made under these Regulations

- LTA granted to a generating station or its identified buyer shall be considered as GNA for the generating station.

- For the Connectivity quantum without any LTA , GNA may be applied by the generating station with submission of Bank Guarantees as per these regulations.

- MTOA of 600 MW is granted for 3 Years but is not yet effective: 600 MW MTOA is deemed converted to GNA for 3 years with start date as the date from which such MTOA was to become effective.

Curtailment

- For the reason of transmission constraints or in the interest of grid security, transactions already scheduled may be curtailed:
  - Transactions under T-GNA shall be curtailed first followed by transactions under GNA.
  - Within transactions under T-GNA, bilateral transactions shall be curtailed first followed by collective transactions under day ahead market followed by collective transactions under real time market.
  - Within bilateral transactions under T-GNA, curtailment shall be on pro rata basis based on T-GNA.
  - Within transactions under GNA, curtailment shall be on pro rata basis based on GNA.

Relinquishment of GNA

- STU may relinquish GNA on behalf of identified Intra-state entity and the concerned Intra-State entity shall pay relinquishment charges that shall be equal to 60 times the transmission charges paid by such intra-State entity for the last billing month, corresponding to the relinquished quantum.

- Intra-State entities granted GNA under the 2021 Draft GNA Regulations may relinquish full or part GNA and shall pay relinquishment charges corresponding to the relinquished quantum for 60 months or balance period of the GNA whichever is lower.

THANK YOU