भारत सरकार
विद्युत मंत्रालय
पूर्वी क्षेत्रीय विद्युत समिति
GOVERNMENT OF INDIA
MINISTRY OF POWER
EASTERN REGIONAL POWER COMMITTEE

No: ERPC/TCC&ERPCCOMMITTEE/2021/ 972 Date: 21.10.2021

To:

As per List

Sub: Minutes of the 44th TCC Meeting-reg

Sir,

The Minutes of the 44th TCC Meeting held on 29th September'2021 in Kolkata has been issued and uploaded on www.erpc.gov.in . As per the decision of ERPC, distribution of Hard copies of the Minutes of the Meeting has been discontinued as Go-Green initiative.

Yours faithfully,

21/10/2021

(N. S. Mondal)
Member Secretary

Encl: As above

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3. Director (Project), South Bihar Power Distribution Company Limited, Vidyut Bhavan, Bailey Road, Patna-800001.
4. Director (Project), Jharkhand Urja Sancharan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
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23. Executive Director (ER-II), Power Grid Corporation of India Ltd, CF-17, Action Area-I, Newtown, Rajarhat, Near Axis Mall, Kolkata-700091.
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25. Executive Director, ERLDC, POSOCO, 14 Golf Club Road, Kolkata –700 033.
26. Executive Director, National Load Dispatch Center, POSOCO, B-9 Qutab Institutional Area, Katwaria Sarai,New Delhi-110016.
27. Executive Director (Marketing), PTC India Ltd., NBCC Tower, 15 Bhikaji Cama Place, New Delhi-110066.
28. Chief General Manager, NTPC Vidyut Vyapar Nigam Limited, SCOPE Complex, Core-3, 7th Floor, Lodhi Road, New Delhi-110003.
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Minutes

of

44th TCC Meeting

of

EASTERN REGIONAL POWER COMMITTEE

Date: 29th September, 2021

Time: 11:00 Hrs

The Vedic Village, Kolkata

Index

EASTERN REGIONAL POWER COMMITTEE, KOLKATA
MINUTES OF 44th TCC MEETING

Date: 29th Sept, 2021(Wednesday), at 11:00 Hrs **The Vedic Village, Kolkata**

ITEM NO.A1:	**CONFIRMATION OF THE MINUTES OF 43rd TCC MEETING**

The minutes of the 43rd TCC meeting held on 23rd March, 2021 through MS Teams Platform was circulated vide letter no. ERPC/TCC&COMMITTEE/2020-2021/44 dated 9th April, 2021.

Members may confirm the minutes of 43rd TCC meeting.

Deliberation in the 44th TCC meeting:

Members confirmed the minutes of 43rd TCC meeting.

PART B: ITEMS FOR DISCUSSION

ITEM NO. B1:	**Categorization of Thermal Power Plants as per the new MOEF&CC notification dated 31.03.2021 for implementation of new emission norms.**

As per new MoEF & CC Gazette Notification dated 31.03.2021 regarding Amendment to Environment (Protection) Rules, 1986 wherein thermal power plants have been categorized into A, B & C categories on the basis of their location from nearest Million plus population city, critically polluted areas and Non-attainment city for implementation of new emission norms as notified in 2015. To comply with the emission norms, time limit is as follows:

Sl.	Category	Location/Area	Non-retiring Units	Retiring Units
1.	Category-A	Within 10 km radius of cities having Million plus Population	Upto 31st Dec, 2022	Upto 31st Dec, 2022
2.	Category-B	Within 10 km radius of Critically Polluted Areas or Non-attainment Cities	Upto 31st Dec, 2023	Upto 31st Dec, 2025
3.	Category-C	Other than those included in Category A & B	Upto 31st Dec, 2024	Upto 31st Dec, 2025

As per the Notification, after the time limit, there shall be levied environment compensation based on per unit electricity generated on the non-retiring thermal power plant.
In Eastern Region, plants fall under Category-A & B are:
Category-A: APNRL (2x270 MW), Jojobera TPS (2x120 MW),Dishergarh TPS (1*12 MW), Southern TPS (2x 67.5 MW), Titagarh TPS (4x60 MW).
Category-B: KBUNL (2x110 MW + 2x 195 MW), GMR (3x 350 MW), Durgapur Steel TPS (2x500 MW), Waria TPS (1x 210 MW), Hiranmayee TPS (2x150 MW), DPL (1x300+1x250 MW).

Thermal power stations may expedite the installation of FGD to avoid any financial penalty.

Members may note for compliance.

Deliberation in the 44th TCC meeting:

MS, ERPC sensitized the issue of categorization of Thermal Power Plants as per the new MOEF&CC for implementation of new emission norms.

Members noted for compliance.

ITEM NO. B2:	**Inadequate coal stock in most of the Thermal Power Plants in ER**

Since the month of August, 2021, it is observed that many thermal units of the country have been forced to shut down due to inadequate coal stock which led to extreme low frequency operation in Indian Grid. Such low frequency makes the grid vulnerable and it became utmost important to bring maximum possible units on bar to ensure resource adequacy and to maintain adequate spinning reserve.

Inadequate coal stock was also observed in most of the Thermal Power Plants of Eastern Region which resulted into forced shutdown and later forced to go for unscheduled annual overhauling.

Thermal power stations should ensure coal stock as per the norms, i.e. 15 days coal stock for pit head plants and 20 days coal stock for load centred plants.

Members may deliberate.

Deliberation in the 44th TCC meeting:

MS, ERPC informed that the Thermal Power Plants of Eastern Region are running with coal stock of 5-7 day at present. He further added that the coal supply scenario has not improved in recent times. Due to festive season, the power demand of ER including that of West Bengal is going to increase further and the coal companies may be impressed upon to supply adequate quantity of coal wherever there is shortage of coal in Eastern Region.

After detailed deliberation TCC observed that it is a perennial type of situation during every monsoon season. Some technical solutions need to be evolved to address the situation such as better storage facility of coal at both generators' and mines' ends, better logistics arrangements for transportation of coal etc. The matter may be taken up with Ministry of coal through Ministry of Power for a workable solution by taking a resolution at ERPC forum.

TCC referred the issue to ERPC for further guidance.

ITEM NO. B3:	Governor Response of State Control Area Generating units and Frequency Response Characteristics of SLDC

It has been observed that few generating units of State Control Area are being run at more than MCR on various occasions. Those units are not able to provide adequate primary frequency response due to the unavailability of PFR margin. As per IEGC section 5.2 (h), generating units are to run by ensuring adequate PFR margin.

In this regard a meeting was convened on 31.08.2021 wherein it was suggested that generating units must avoid running units in VWO mode or without PFR margin.

ERPC secretariat advised that each SLDC must ensure the monitoring of generating units to avoid any over generation and utilization of primary response margin.

TCC may advise state generators for necessary compliance**.**

Deliberation in the 44th TCC meeting:

TCC advised concerned SLDC to ensure the monitoring of generating units to avoid any over generation and utilization of primary response margin.

*TCC further advised state generators for necessary compliance**.***

ITEM NO. B4:	Implementation of Islanding Schemes in Eastern Region

In the meeting held on 28th December 2020 and chaired by the Hon'ble Minister of State (IC) it was directed that islanding schemes should be implemented for all major cities of the country considering all the strategic and essential loads. Subsequently, in line with the direction given in the meeting, the subject matter was discussed in PCC meeting of ERPC and it was finalized that new islanding scheme would be implemented for capital city of Patna & Ranchi.

1. Patna Islanding Scheme

In the special meeting held on 06.08.2021, it was decided that Patna islanding scheme would be designed considering two unit of Nabinagr STPP(2*660 MW) of NPGCL as participating generator and loads of in and around Patna city. The provision of island formation with one unit of NPGC with corresponding load is also to be included in the island logic.
The islanding frequency & logic will be finalized based on the result of dynamic study to be carried out by SLDC Bihar/ERLDC.

The following timelines were decided:

1. Submission of requisite information by SLDC, Bihar: 2nd week of Aug' 2021.
2. Completion of Islanding simulation study by ERLDC: 4th Week of Aug' 2021
3. Review of islanding study & designing of the logic: By September'2021
4. Implementation & Operationalization of the Islanding Schemes: By March'2022

In 106th PCC meeting held on 16.09.2021 it was informed that the requisite information had already been shared by SLDC Bihar and the study is under progress by ERLDC. Further

SLDC Bihar was advised to prepare the DPR by September'2021 for PSDF funding, if required.

BSPTCL may update.

Deliberation in the 44th TCC meeting:

BSPTCL updated that preparation of DPR for PSDF funding is under process and the same would be completed within 15 days.

TCC stressed on the fact that this issue is being regularly monitored by MoP and advised BSPTCL for timely implementation of the Islanding Scheme.

2. Ranchi Islanding Scheme

In the special meeting held on 06.08.2021, it was decided that Ranchi islanding scheme would be formed with one unit of Tenughat TPS(150-160 MW average generation) & Inland IPP(50-55 MW average generation) as participating generator & essential/critical loads of Ranchi to the tune of 180 MW. The islanding frequency & logic will be finalized based on the result of dynamic study to be carried out by SLDC Jharkhand/ERLDC.

The following timelines were decided:

1. Submission of requisite information by SLDC, Jharkhand: 2nd week of Aug' 2021.
2. Completion of Islanding simulation study by ERLDC: 4th Week of Aug' 2021
3. Review of islanding study & designing of the logic: By September'2021
4. Implementation & Operationalization of the Islanding Schemes: By February'2022

In 106th PCC meeting held on 16.09.2021 it was informed that the requisite information had already been shared by SLDC Jharkhand and the study is under progress by ERLDC. Further SLDC Jharkhand was advised to prepare the DPR by September'2021 for PSDF funding, if required.

JUSNL may update.

Deliberation in the 44th TCC meeting:

JUSNL updated that preparation of DPR for PSDF funding is under process and the same would be completed within 15 days.

TCC stressed on the fact that this issue is being regularly monitored by MoP and advised JUSNL for timely implementation of the Islanding Scheme.

In addition to above new islanding schemes, the following schemes have already been finalized and under different stage of implementation.

3. Chandrapura Islanding Scheme

The scheme detail in brief is as follows:

- The CTPS-B islanding scheme is to de designed with two units of CTPS-B (2x250 MW) generating station as participating generator and connected loads at CTPS, Putki, Biada, Nimiaghata&Patherdih. The estimated off-peak and peak load in the

proposed islanding system is 280 MW & 420 MW respectively.

- The islanding frequency for CTPS-B islanding system was decided as 48.4 Hz.

In special meeting held on 06.08.2021, following deliberations took place –
Representative of SPE wing of DVC updated that necessary discussion for implementation of the scheme at CTPS-B is going on with M/s GE for finalization of the scope of work & other modalities. He submitted that the tender process for implementation of islanding scheme would be initiated within two weeks.

DVC was advised to prepare the detail action plan for implementation of the scheme along with time line for each milestone and submit it to ERPC secretariat within fortnight. They were also advised to take all measures in expediting the implementation work.
The time line for implementation of Chandrapura Islanding Scheme is March-22.

DVC may update.

Deliberation in the 44th TCC meeting:

DVC representative informed that the work order for implementation of Chandrapura Islanding Scheme would be placed by March-2022 and the same would be implemented within 6 months.

4. KBUNL Islanding Scheme

In special meeting held on 08.06.2021, following deliberations were made:

1. KBUNL Islanding scheme would be designed considering both units of KBUNL stage-II (2x195 MW) as participating generator and connected radial loads at Gopalganj along with in-house load of KBUNL.

2. The islanding frequency will be at 48.6 Hz and this is subject to revision based on the suggestion received from KBUNL/OEM on under frequency settings of the generator units.

3. KBUNL would expedite the construction work related to implementation of Islanding scheme in switchyard. They would also take up with concerned OEM for testing and commissioning of islanding relay panel at their end.

In 106th PCC Meeting following deliberations were took place -
Regarding bay construction work at KBUNL switchyard, NTPC informed that civil work would be completed by October-21 & further testing & commissioning would be completed by January-21.

ERPC secretariat informed that time line for implementation of KBUNL islanding scheme had been decided as December-21 and advised NTPC to complete the bay construction work as well as other pending works related to implementation of the islanding scheme at the earliest.

KBUNL may update.

Deliberation in the 44th TCC meeting:

NTPC representative informed that the Islanding Scheme would be implemented by February-2022.

TCC advised NTPC representative to share the detailed timelines for completion of the remaining work to ERPC.

TCC further advised NTPC to implement the KBUNL Islanding Scheme as per the timeline.

5. IB-TPS Islanding Scheme

The scheme was finalized in the special Meeting on Islanding Scheme of IB-TPS held at ERPC, Kolkata on 12th December 2018.

In special meeting held on 06.08.2021, OPGC representative informed that work order had been placed on OEM (M/s BHEL) for implementation of the Islanding scheme at IB TPS units.

OPGC was also advised to take up the issue with their highest authority as well as with the OEM for expediting the implementation of islanding scheme.
The target date for implementation of the islanding scheme is April-22.

OPGC may update.

Deliberation in the 44th TCC meeting:

OPGC representative informed that IB TPS Islanding Scheme would be implemented as per the given timeline i.e. April-22.

ITEM NO. B5:	**Reliable Power Supply to Lalmatia/Godda/Dumka areas of JUSNL**

B5.1: Restoration of 220kV Farraka-Lalmatia S/C line

The 220 kV Farakka-Lalmatia S/C was out of service since April 2021 due to tower collapse. The 220/132/33 kV Lalmatia substation is relying on only 132 kV lines. At present the local load at 220 kV Dumka and Godda S/S were being radially fed from 400/220 kV Maithon S/S through 220 kV Maithon-Dumka D/C and 220 kV Dumka-Godda D/C.

In the meeting held on 10th August 2021 by the Hon'ble Secretary, Ministry of Power, Government of India, ECL was directed to handover the FLTS assets on "as is where is basis" to JUSNL, the Operation and Maintenance whereof as was with the NTPC is also to be transferred to the JUSNL without any further delay and latest by 20th August 2021. Further JUSNL was directed to comply with all other directions of the CERC's order dated 21.07.2020, after the transfer of the FLTS from ECL.

In the 182nd OCC meeting, JUSNL representative submitted that the tripartite agreement for taking over of FLTS as well as O&M of FLTS is in process and the same would be done after getting the consent from the competent authority by 4th week of August'2021.

ERLDC representative advised JUSNL for putting 220kV Lamatia-Godda line into service. JUSNL representative informed that they had tried to charge the line once but due to voltage rise at Lalmatia end, they had to open the line.

In the 183rd OCC Meeting, JUSNL representative updated that the proposal has been placed before the BoD of JUSNL. Taking over of the FLTS system would be completed after getting necessary approval from BoD of JUSNL.

JUSNL may update.

Deliberation in the 44th TCC meeting:

JUSNL representative informed that the proposal has already been placed before the BoD of JUSNL and the necessary approval is awaited.

JUSNL representative further informed they had approached State Govt. for necessary funding.

TCC advised JUSNL to resolve the issue at the earliest.

B5.2: Status of O & M agreement for bay equipments at Maithon end of 220 kV D/C Maithon-Dumka Lines with Powergrid

In 103rd PCC meeting, during discussion of tripping of 220 kV Maithon-Dumka line-2 on 15/05/21, it was informed that the auto-recloser in the said line is not in operation due to some issues in PLCC. It was also come to notice that there was no formal agreement between JUSNL &Powergrid for O & M of the bay equipment at Maithon end. As a result, bay equipment at Maithon end for 220 kV Maithon-Dumka D/C lines are not being maintained properly.

In 181st OCC Meeting, Jharkhand representative submitted that some queries along with few finance observations had been raised to Powergrid in this regard. However, complete reply from Powergrid side is yet to be received and as soon as they receive the response from Powergrid, they would proceed for the agreement. However, in principle they are ready for the agreement.

ERPC opined that as Farakka-Lalmatia line is not in service at present, Maithon-Dumka line is of vital importance and healthiness of PLCC at both ends is to be ensured.

OCC advised Jharkhand to take up the necessary rectification work for ensuring the healthiness of the PLCC. In this regard, Powergrid has also given consent to Jharkhand for the necessary PLCC work at Maithon end.

Jharkhand representative assured that the PLCC would be restored by 15th August 21.

In the 182nd OCC meeting, JUSNL representative submitted that Powergrid had submitted the revised estimate and the same is in the process for approval by competent authority. He further informed that it would be completed by 1st week of September'2021.

In 183rd OCC Meeting, JUSNL representative submitted that in principle approval for the above agreement had already been accorded and signing of the agreement would be completed by 30th September'2021.

JUSNL may update.

Deliberation in the 44th TCC meeting:

JUSNL and Powergrid representatives confirmed that the agreement has already been finalized and the same would be signed within a week.

ITEM NO. B6:	**Frequent Tripping of 400 kV Baripada-Kharagpur line.**

It has been observed that 400 kV Baripada-Kharagpur line had tripped multiple times in recent months mostly on single phase to earth fault. Details of line tripping for 2019-2021 is attached at **Annexure**. As per relay indications from Baripada end, 57 out of 58 instances of tripping occurred in West Bengal jurisdiction. Number of tripping with distance from Baripada is summarised below where it can be observed that repeated fault is occurring at same location:

Distance from Baripada (Km)	No. of trippings
0-10	1
30-40	2
40-50	11
50-60	10
60-75	7
75-85	14
90-100	10
More than 100	3

In 106th PCC meeting, it was observed that most of the trippings had occurred within section of 40-60 Km & 75-100 Km of the line.

WBSETCL representative informed that the tripping of the line in their control area is due to vegetation issue & mainly on account of eucalyptus tree. They further informed that they are facing local issues in clearing the tree/vegetation in the concerned section of the line.
They added that they are planning to resolve the issue in coordination with district administration.

PCC advised WBSETCL to take up the issue with local district administration and referred this to forthcoming TCC meeting.

WBSETCL may update.

Deliberation in the 44th TCC meeting:

WBSETCL representative informed that they have taken up the issue with the local administration and the same would be resolved shortly.

ITEM NO. B7:	Implementation of AGC as a pilot project in West Bengal

SLDC, West Bengal representative informed that for implementation of AGC among state generators there are two parts to sort out.

Firstly, a quantum of DC of WBPDCL plants has to be kept as a hot spinning reserve out of 100% allotment to WBSEDCL for utilization under AGC. In present regime, the capacity charge of the plants for that quantum spinning reserve cannot be claimed from WBSEDCL. So, there should be a regulation of WBERC to cover these financial settlements of state generators scheduled to its beneficiary and actually declared by the plant under AGC after implementation of AGC as per direction of WBERC.
Secondly, the capital cost involved to implement AGC in different state generators and in SLDC should be approved by WBERC to adjust in tariff.

Accordingly, necessary orders /regulations need to be issued by WBERC to cover the above points. After detailed deliberation it was decided that the matter would be placed in forthcoming TCC meeting.

SLDC, West Bengal may update on the status.

Deliberation in the 44th TCC meeting:

SLDC, West Bengal representative informed that necessary orders /regulations need to be issued by WBERC in this regard.

ERPC Secretariat informed that the matter would be placed in upcoming "Meeting of CERC with RPC" scheduled to be held on 07.10.2021.

ITEM NO. B8:	Procurement of 01 No, 105 MVA, 400/220/33 KV Spare Single-phase ICT for Rangpo S/S

400/220/132 KV Rangpo is one of the most important and critical substation of Eastern region –II. It is the gateway between all hydel generations of Sikkim to rest of India. This station has either direct or indirect connectivity with Teesta-III, Teesta-V, Rangit, Dikchu, Tashiding, JLHEP, Rangnichu & Chuzachen.

Total 5 nos. 400/220 KV 315 MVA (3*105MVA) ICT and four nos 220/132KV 100MVA ICTs are present at Rangpo. During hydel, all these ICTs are considerably loaded.

All 400/220/33 KV, 315 MVA units are Single phase units (3 X 105 MVA) and total 15 Units (05 X 03) No's are in service. Overall for total 15 Units only 01 spare units (Cold spare) are earlier considered for Rangpo SS.

Already due to internal problem one unit of ICT-4 has been taken out in August-20 and presently under repairing. Further the only spare has been utilized as Y-Phase of ICT-4 in last year. As the spare unit at Rangpo itself is a cold spare, putting it in the service includes dragging of the unit and afterwards includes complete commissioning activity.
Further, if we go by construction of Rangpo SS it can be seen that, entire SS built in 05 different layers. Even in 400 KV level itself, there are 02 different levels and transportation of

spare unit from lower level to higher level itself require complete transportation arrangement as considerable slope is present.

A bird's eye view of Rangpo SS is given for reference:-

Any kind of transport of heavy consignments takes long time due to limited accessibility of road, frequent landslide, non-availability of strong bridges for heavy consignment etc. In case of any element outage, like transformer/Reactor for major repairing works, transportation time is much larger due to all above mentioned constraints.

Reference picture of road conditions around Rangpo and in general Sikkim stretches are given below for reference:-

From the above pictures it is evident that in case of any major repairing and subsequent Transportation involved it may take enormous time in view of prevailing road conditions. Rather, keeping another spare unit is much preferable for the activity.

In view of the above, to ensure maximum grid availability, to enhance the flexibility towards the beneficiaries, to provide ease operation of grid in critical area, one more spare unit of same capacity is required at Rangpo.

Total financial implications excluding Freight, Insurance and GST is around **Rs. 4.50 Crores**, as per offer received from OEM.

In view of above, it is proposed for in-principle approval for procurement of 01 No spare single phase, 400/220/33 KV, 105 MVA ICT at Rangpo SS, considering the difficulty for transportation at hilly areas, as Cold Spare to meet any exigency and enhancing reliability of the grid.

In 183rd OCC Meeting, Powergrid representative explained the need for 400/220/33 KV Spare Singlephase ICT for Rangpo Substation citing the limited accessibility of road, frequent landslide, non-availability of strong bridges for heavy consignment etc. He added that the 400 kV GIS switchyard is spread over two different spatial levels due to hilly terrain which makes it difficult to shift the spare ICT from one level to another. Further on query he informed that the only spare ICT is being under repair on site.

After detailed deliberation OCC felt the necessity of additional one no. spare single phase 105 MVA ICT in case of any exigency to enhance the reliability of the Grid. The matter was referred to TCC for further concurrence.

Members may discuss.

Deliberation in the 44th TCC meeting:

Powergrid representative explained the reasons for requirement of additional one no. spare single phase 105 MVA ICT keeping in view of the physical constraints as expressed in their plea.

Sikkim representative agreed that due to geographical constraints procurement of additional one no. of single phase spare ICT may be considered.

SLDC, West Bengal representative submitted that as of now the available ICTs of Rangpo S/s are not adequately loaded. Hence the requirement of an additional single phase spare ICT needs to be examined keeping that in view also.

Bihar representative opined that in view of two levels of GIS substation and the constraints faced by Rangpo S/s, the proposal may be agreed upon and the two spares of ICT may be kept at two different level.

However, in light of constraints being faced by Rangpo S/s due to its geographical location, TCC was of the view that the proposal of Powergrid may be considered and referred to ERPC for decision.

ITEM NO. B9:	**Commissioning of Elements by PMTL under ERSS XXI affected due to failure of 132 kV Bus extension module at DMTCL Motihari Sub-station**

315 MVA, 400/132 kV ICT-III at Motihari S/s was charged at no load on 18.04.2021 and first time loaded from 132 kV side through Bus-1 on 21.04.2021 at 19:00:09 Hrs. At 19:01:02:971 Hrs on the same day, 132 kV Bus-1 got tripped due to internal flashover in 132 kV Bus-1 extension module of DMTCL used for connecting new GIS Bus and ICT-III side 132 KV bay. During the incident all lines/ ICT connected to Bus 1 tripped.

315 MVA, 400/132 kV ICT-III at Motihari S/s, which is out since failure of 132kV Bus-1 on dtd 21.04.2021. The repair of failed extension module and restoration of 132KV Bus-1 has not been done till date by DMTCL. It may be mentioned that the failed 132KV Bus Bar extension module was supplied for future extension as part of original package for construction of 400/132KV substation of M/S DMTCL.

Till date neither any action for repair of 132KV Bus-1 has been taken nor permission has been given for charging of PMTL 400/132KV ICT-III through 132KV Bus-II until 132KV Bus-1 is restored.

Matter may be deliberated for an early resolution for re-charging of 315 MVA, 400/132 kV ICT-III at Motihari S/S and putting it in service.

Members may discuss.

Deliberation in the 44th TCC meeting:

ERPC Secretariat informed that in 105th PCC Meeting, PMTL representative had informed that they had received two offers from OEM i.e. M/s TBEA and the same is under examination.

PMTL further informed that since all materials required for restoration work are to be imported from China, it would take around 2 months for restoration after placing the work order.

POWERGRID representative opined that 400/132 kV ICT-III may be charged through 132KV Bus- II till 132KV Bus-I is rectified.

BSPTCL representative submitted that as the peak demand period has already been passed, the said ICT should be charged after rectification of the Bus-1extension module. He apprehended that in case of any eventuality while charging 400 /132KV ICT-III through Bus-II, as opined by Powergrid, may aggravate the situation further since the root cause analysis report of the failed elements have not been submitted by Powergrid till date.

TCC advised PMTL to complete the rectification of Bus-I and submission of the root cause analysis report at the earliest. TCC referred the issue to ERPC for further guidance.

ITEM NO. B10:	**Renewal of Contract for all installed SEMs of Phase-1 & 2 including AMR of Eastern Region.**

Existing AMC contract period for all installed SEMs of Phase-1 and Phase-2 including AMR has expired on 30-Jun-2020. Total 656 SEMs and 120 locations (129 DCU) are out of AMC scope since 30.06.2020. Currently, maximum SEMs are out of AMC support (66% SEM, out of AMC). On a special request from PGCIL, TCS is continuing the AMC support for all 656 SEMs till now but further contract is required to be renewed.

Considering the lockdown period since the end of March-2020, maximum possible support has been provided by TCS and there is no disruption in weekly data availability of SEM.

TCS has submitted a techno-commercial proposal for renewal of their AMC Contract for another 5 years. Proposal value is total 4.98 Cr. This proposal includes 5 years of comprehensive AMC support for all 656 meters and 129 DCUs including DCU replacement in 60 Locations. As currently there is no active contract present with TCS for the AMC support, placing of AMC renewal LOA needs to be completed on priority basis. Based on the offer price submitted by TCS, now it is proposed to finalise the AMC contract on single tender basis with M/S. TCS.

Brief Scope of Work:

1. Comprehensive AMC support for the meters (656 SEM and 129 DCU) which have been installed in AMR Phase1 and Phase2.
2. AMC support includes replacement of Hardware which are installed at various Sub Stations (like DCU, Cables, PVC pipes, MOXA converters etc). Hardware replacement will be done as and when required.
3. As all DCU have already covered the service period (05 years plus), DCU replacement will be required. 60 numbers of DCUs have been considered for replacement in this proposal. (By considering the present scenario and future planning for faulty DCU replacement).
4. If more DCUs are required, then separate proposal will be submitted for the DCU replacement.
5. Connection of replaced meters will be done.

In view of the above, the proposed value of AMC contract is ₹ 4.98 Cr which includes

- 5 years of comprehensive AMC support for all 656 meters and
- 129 DCUs including DCU replacement in 60 Locations

In 170th OCC in-principle agreed for renewal of contract for all installed SEMs of Phase-1 and 2 including AMR since it is very much required in the interest of grid maintenance.

In 43rd CCM Powergrid representative informed that the existing contract period for Support of AMR/AMC of Phase-1 and Phase-2 has been completed on 30-Jun-2020. All 656 SEM and120 locations (129 DCU) are out of AMC scope since 30.06.2020.

Further, he added that offered price of AMC amounting ₹ 4.98 Cr maybe negotiated and the final price would be intimated to ERPC Secretariat.

Members of Commercial Sub-Committee recommended for financial approval and alsoadvised POWERGRID to place the revised value of AMC contract after negotiation before ERPC Secretariat.

43rd TCC/ERPC agreed to the proposal of POWERGRID for AMC contract of

1) 5 years of comprehensive AMC support for AMR of 656 meters and

2) AMC support for 129 DCUs including DCU replacement in 60 Locations.

43rd TCC advised POWERGRID to pursue with the concerned vendor proactively and intimate the final negotiated cost in the forthcoming ERPC meeting. 43rd ERPC accorded in-principal approval for the above AMC contract as per the decision of TCC and directed Powergrid to expedite the price negotiation.

In 44th CCM, PowerGrid representative informed that the LOA for the AMC contract has already been placed with M/s TCS and the same is valid till 31st March 2026. The value of the contract has been negotiated to ₹ 4.77 crores (excluding GST) from the pre-negotiated value of **₹ 4.98 crores** (excluding GST). Hence, the total value of the AMC contract is **₹ 5,63,01,576/-** including GST.

POWERGRID may further update the latest status.

Powergrid may update.

TCC may approve.

Deliberation in the 44th TCC meeting:

Powergrid informed that the final value of AMC contract after negotiation is ₹ 5,63,01,576/- including GST.

TCC approved and referred to ERPC for further concurrence.

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

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

smoothly reporting to AMR system after connecting with PGCIL LAN. The proposed network will not only provide better communication but also reduce the cost of GSM.

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

In 40th CCM, POWERGRID requests all the constituents to share the available optical fiber network connectivity for further configuration to Optical connectivity. This will also help to reduce the maintenance cost of AMR, as recurring cost towards SIM cards may be avoided in that case.

POWERGRID also informed that optical fiber for AMR has been implemented for 38 locations out of 40 and rest would be completed by August'19. However, M/s TCS has confirmed that total 35 locations out of 40 was connected with LAN.

In 41st CCM, BSPTCL representative informed the required details of optical fiber network connectivity have been shared to POWERGRID for configuration AMR Optical connectivity. POWERGRID informed that they have not received any response from other constituents on this matter. All the constituents were advised to explore the possibility of Optical fiber network connectivity instead of GPRS for communication AMR system as this will significantly enhance the reliability of the system.
In 42nd TCC Meeting, TCC advised all the other constituents to share the details of optical fiber in TeST Meeting scheduled to be held on 20th December 2019, so that Powergrid could carry out the configuration of AMR connectivity.

In 42nd CCM, POWERGRID informed that the cost estimate for AMR implementation of BSPTCL system has been received. POWERGRID representative intimated that the cost estimate needs to be further updated.

All other constituents were again advised to explore the possibility of Optical fiber network connectivity instead of GPRS for communication with AMR system as this will significantly enhance the reliability of the system.

POWERGRID was advised to submit the updated status in the upcoming TCC.

Thereafter, the required details of optical fiber network connectivity have been received from OPTCL and DVC for configuration AMR Optical connectivity.

However, M/s TCS has confirmed that LAN connection has been done at 40 locations.

In the 8thTeST meeting ERLDC informed that necessary details have been received from all the state utilities except for Sikkim.

In 43rd TCC/ERPC, POWERGRID informed that necessary details from all the state utilities except for Sikkim have been received for 69 locations. POWERGRID was requested to share the details of 69 locations to ERPC.

TCC advised Sikkim to share the necessary details at the earliest. Further 43rd TCC/ERPC also approved the proposal of replacement of GPRS communication with Optical Fiber for AMR with estimated cost of **Rs. 10.73 lakhs** (excl. GST) for 69 locations (except Sikkim).

In 44th CCM, the Committee expressed serious concern over non-receipt of location details from Sikkim despite repeated persuasion from various forum of ERPC. Sikkim representative agreed to send the details by 15th July,2021. The Committee advised Powergrid to coordinate with Sikkim on this issue.

Powergrid informed that they have already started the work experimentally at Jeerat S/s and are initially planning to complete the work in the locations of West Bengal and nearby areas of Odisha and Jharkhand in the month of July,2021. Subsequently, the locations in DVC and Bihar would be completed by the end of August,2021.

Powergrid and Sikkim may update.

Deliberation in the 44th TCC meeting:

Sikkim submitted that three nos. of locations in Sikkim had been finalised for implementation of optical fibre-based connectivity for 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.

ITEM NO. B12:	**Proportionate cost sharing by substation bays owners (M/s PMTL and ATL) for boundary wall work carried out by Darbhanga substation owner(DMTCL)**

As appraised by DMTCL to ERPC Secretariat in various monthly OCC meetings that the boundary wall work has been completed by DMTCL at Darbhanga Substation as directed by ERPC & other substation bay owners to avoid the situation experienced in the monsoon of 2020. Initially upon receipt of instructions from EPRC & other authorities, DMTCL already informed to all the authorities that there are 02 more no. of stake holders i.e. M/s ATL & M/s PMTL who are having their assets within the premises of Darbhanga substation from whom DMTCL requested for their co-operation in terms of taking up this work jointly. DMTCL tried their best to pursue and involve M/s ATL & M/s PMTL from design stage itself so that work could be completed with full co-ordination and consensus with all 03 parties. However, both-M/s ATL & M/s PMTL did not supported DMTCL by any means and indicated their inability for this.
As the cost of the above boundary wall is significantly high and it is difficult for any single stakeholder, who is operating transmission asset under TBCB- Tariff Based Competitive Bidding mode, to bear the entire cost. Hence, DMTCL request intervention at TCC level to coordinate among all the stakeholders of DMTCL Darbhanga Substation for bearing the proportionately cost of the substation boundary wall work. Committee to note that the construction of same has been completed in June 2021 by DMTCL at their own without waiting for the support from other bay owners.

DMTCL may explain.

Deliberation in the 44th TCC meeting:

DMTCL representative informed that the cost incurred for the construction of flood protection wall with a pumping arrangement is Rs 3.25 crore and submitted that since ATL & PMTL have their assets within the premises of Darbhanga S/s, they are also liable to share the cost.

Both ATL & PMTL representatives submitted that there is no such clause in the TSA for cost sharing of this boundary wall construction.

TCC felt that the construction of boundary wall was very important as a flood prevention measure and all the licences are likely to be equally impacted in the event of Flood.

After detailed deliberation, TCC opined that all three concerned transmission licensees need to adopt a flexible approach to resolve such types of issues. Further, TCC recommended for formation of a committee comprising of members from STUs of Bihar, Jharkhand, West Bengal and Odisha to examine all the aspects of this issue.

DMTCL, ATL & PMTL were advised to cooperate with the Committee as required.

ITEM NO. B13	**Requirement of additional MiP-PSCT License key with Laptop**

JUSNL vide email dated 16/09/21 intimated that only 02 (two) nos. of Mi-PSCT license has been provided to them under the scope of protection database project. They informed that as JUSNL transmission network is consistently expanding day by day, they would require additional 04 (four) nos. of Mi-PSCT license with Laptop under the project “creation and maintenance of web-based protection database management system and power system calculation tool for eastern region Grid” for system study i.e. load flow analysis, relay coordination, DR file analysis etc.

JUSNL may elaborate. Members may discuss.

Deliberation in the 44th TCC meeting:

JUSNL informed that additional number of MiP-License is required for each of their five transmission zones. Extensive Training on the use of the software may also be included in the scope of work.
After detailed deliberation, TCC advised all the utilities of ER including JUSNL to furnish their requirement, if any, for additional MiP-PSCT license to ERPC Secretariat citing proper justification.
Further TCC advised ERPC secretariat to prepare a DPR for additional MiP-PSCT license as per the requirement of ER utilities.

ERPC may authorize ERPC secretariat to prepare a DPR and submit to PSDF nodal agency.

ITEM NO. B14:	**Extension of support period for the project "Creation & Maintaining a web-based Protection database and desktop based Protection setting calculation tool for Eastern Regional Grid"**

The PSDF funded project of ERPC "*Creation & Maintaining a web-based Protection database and Desktop based Protection Setting calculation tool for Eastern Regional Grid"* was implemented and declared Go-line on 31.10.2017. Presently 4th year support period is in progress. As per the contract of the project, the support service will be provided for 5 yrs after declaration of the Go-Live of the project which is till 31.10.2022.

The online database(PDMS) as well as the offline PSCT tool are being utilized by all utilities of ER for analysing the grid disturbances, carrying out various studies i.e. load flow, short circuit, relay coordination, DR analysis etc. , sharing the disturbance report/DR/EL through online portal for compliance etc.

It is proposed to extend the AMC/support service of the project for further period of 5 yrs starting from 31.10.2022. For funding of the above requirement, a proposal may be submitted to PSDF secretariat for consideration of the same and approval.

Members may discuss.

Deliberation in the 44th TCC meeting:

ERPC secretariat informed that as per the contract of the project, the support service of the PSDF funded project of ERPC "Creation & Maintaining a web-based Protection database and Desktop based Protection Setting calculation tool for Eastern Regional Grid" is for 5 yrs. Presently the 4th year of support period is in progress and the support service would be active till 31.10.2022.

Therefore, for future updation of Protection Database, the support service needs to be continued. Hence it is proposed that a DPR for support service for another 5 years in this regard may be prepared and submitted for funding through PSDF.

TCC agreed to the proposal and referred it to ERPC.

ITEM NO. B15:	**Draft CERC (DSM & Related matters) Regulations'2021**

Draft DSM Regulation, 2021 was circulated by Honorable CERC on 08th Sept, 2021 for wider publication and stakeholder's comments by 08th October'2021 for implementation in Pan India. The provisions of this regulation are completely changed from the existing DSM mechanism in place.

ERPC Secretariat shall give a brief presentation on the various provisions of the draft DSM Regaultion'2021.

Deliberation in the 44th TCC meeting:

ERPC secretariat gave a brief presentation on Draft DSM Regaultion'2021.

TCC advised ER constituents to submit their comments on draft regulation to CERC.

ITEM NO. B16:	Non-Payment of Outstanding dues in respect of Bhutan Transaction

PTC India Limited (PTC) has been designated as the nodal agency by Ministry of Power, GoI for supply of surplus power from the four hydroelectric power stations in Bhutan namely Chukha HEP, Tala HEP, Kurichhu HEP and Mangdechhu HEP. These HEPs have been setup under the Inter-Government Agreements between the Royal Government of Bhutan and the Government of India. Power supply from these HEPs to the Indian beneficiaries takes place as per the allocations and tariff decided by the Ministry of Power.

However, the beneficiaries of Eastern Region namely Bihar and Sikkim are irregular in making payment to PTC. It is to mention that since these are cross border transactions 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 the Procurer(s). For this purpose, PTC has to mobilise additional resources for the working capital mismatch and continued delays are causing liquidity crunch to PTC.

As on 31st Aug, 2021, the following payments are outstanding:

s. No.	Name of the State Utility/ Discom	Energy Outstanding dues for power supply from Chukha HEP	Energy Outstanding dues for power supply from Tala HEP	Energy Outstanding dues for power supply from Mangdechhu HEP	Total
	NBPDCL (Bihar)	Rs 29.30 Cr. (Outstanding since May 2021)	Rs 35.64 Cr. (Outstanding since June 2021)	Rs 110.43 Cr. (Outstanding since May 2021)	Rs 175.37 Cr.
2.	SBPDCL (Bihar)	Rs 37.91 Cr. (Outstanding since May 2021)	Rs 50.54 Cr. (Outstanding since May 2021)	Rs 138.69 Cr. (Outstanding since Apr 2021)	Rs 227.14 Cr
3.	Energy and Power Department of Sikkim (Sikkim)	Rs 16.94 Cr. (Outstanding since Nov 2019)			Rs 16.94 Cr.
	Total	Rs 84.15 Cr.	Rs 86.18 Cr.	Rs 249.12 Cr.	

The agreements for sale of power by PTC to utilities provide for reallocation of power if the

bills remain unpaid for 7 days in case of Chukha and Tala HEP and 30 days in case of Mangdechhu HEP. Excerpts from the agreements are as below:

- Chukha HEP: As per clause 8.7 of the agreement, "If any bill remains unpaid for a period exceeding 7(seven) days from the date of presentation of bill, Member Secretary, EREB may reallocate the share of power of such Bulk Power Customer(s) if so advised by PTC. "
- Tala HEP: As per clause 7.2 of this agreement, "If any bill remains unpaid for a period exceeding 7(seven) days from the date of presentation of bill, Member Secretary, ERPC may reallocate the share of power of such Bulk Power Customer(s) if so advised by PTC. "
- Mangdechhu HEP: As per clause No. 7.2 of this agreement, "If any bill remains unpaid for a period exceeding 30(thiåy) days from the date of presentation of bill, Member Secretary, ERPC may reallocate the share of power of such Bulk Power Customer(s) if so advised by PTC".

Agreements between PTC and beneficiaries for Chukha HEP, Tala HEP and Mangdechhu HEP have provisions to open Letter of Credits (LCS) for the transactions and reallocation of power in case beneficiaries fail to do so.

Chukha HEP: As per Article 8.6 of the Agreement: "In the event of failure to establish LC within 1 (one) month after the signing of this agreement, or issue of Govt. of India order assigning trading for Chukha power to PTC, whichever is later, Member Secretary, EREB may reallocate share of the defaulting state to some other state if so advised by PTC. "
Mangdechhu HEP: As per Article 6.6 of the Agreement: "In the event of failure to establish LC within 2 (two) weeks after the signing of this agreement, Member Secretary, ERPC may reallocate share of the defaulting state to some other state as may be advised by PTC. "

Though NBPDCL and SBPDCL have provided LC information for Chukha HEP and Tala HEP, however, these are not operative as PTC has not received copy of the LCS. Also, the LCS are of insufficient value. NBPDCL and SBPDCL have not provided LC for Mangdechhu HEP. Energy and Power Department of Sikkim has not provided LC for Chukha HEP.
In view of above, it is requested ERPC may advice NBPDCL, SBPDCL and Energy and Power Department of Sikkim to liquidate the outstanding, make regular payments and open LCS as per the agreements or else PTC will be left with no other option but to request ERPC for reallocation of power as per the provisions of the agreements dated 21.08.2002, 27.09.2006 and 30.08.2019 respectively."

NBPDCL, SBPDCL & Sikkim may update their action plan to liquidate the outstanding dues.

TCC may discuss.

Deliberation in the 44th TCC meeting:

PTC representative informed that they had received substantial amount on 28.09.2021 and rest would be liquated shortly as assured by Bihar. PTC also requested Bihar to open the LC in respect of Tala, Chukka & Mangdechhu HEP energy.

PTC representative also informed that Sikkim had not paid any dues since Nov'2019.

Bihar representative informed that they are in the process of revalidating the LC and it would be done shortly.

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.

ITEM NO. B17:	**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 meter is used and for Tashiding net injection , New Melli(PG) and Rangpo(PG) end meter is 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 the scheduling of Tashiding HEP by ERLDC. Tashiding HEP and Chuzachen HEP are yet to approach CERC for the said approval.

In 37th CCM, the followings were 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 CCM, Chuzachen representative informed that they are under the process of filing the petition with CERC and the same will be done by 17th July 2021.Further, he added that due to Covid-19 pandemic and nationwide lockdown they could not file the petition on time.

Tashiding representative informed that they would also file the petition with CERC by 14th July 2021. The Committee expressed serious concern over the issue and advised Chuzachen and Tashiding to intimate ERPC and ERLDC after filing the petition. It was also decided to place this agenda in the forthcoming TCC meeting.

Tashiding & Chuzachen may please update the latest Status.

TCC may discuss.

Deliberation in the 44th TCC meeting:

Tashiding and Chuzachen representatives informed that they had filed their respective petitions before CERC on 23.07.2021 & 16.07.2021 respectively.

ITEM NO. B18:	**Nomination of 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 guide lines for Import/Export (Cross Border) of Electricity 2018.

It is primarily for settlement of Grid operation related charges with neighboring countries like Bangladesh, Nepal, Bhutan and Myanmar. However, the functions of Nodal agency and modalities of settlements has not yet been finalized.

In 42nd CCM, NVVN representative was present in the meeting. He drew the attention of the members in the meeting regarding the order issued by MoP, GoI wherein NVVN has been designated as Settlement Nodal Agency for import and export(Cross Border) of power. In this connection he informed that NVVN is already a nodal agency as far as Bangladesh and Nepal transactions are concerned. Further, in case of Bhutan, the hydro stations like Tala, Chukha, and Kurichhu & Mangdechhu do not come under DSM regulations. However, Dagachhu HEP is included within the ambit of DSM with TPTCL acting as the nodal agency.

Based on the MoP order, NVVN proposed to become the nodal agency for Dagachhu transactions w.e.f. 01.04.2020 and take up the scheduling and accounting responsibility w.r.t. Dagachhu HEP.

The proposal of NVVN was discussed in the 42nd Commercial sub-Committee meeting. 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. It was decided to place this agenda in forthcoming TCC meeting for further approval.

However, on request of NVVN-SNA-Bhutan, ERLDC has registered them and issued acceptance letter on 13.05.2020.

As per the decision taken in 43rd CCM, MS, ERPC wrote a letter dated 07.10.2020 to NVVN for updating the status of agreement with TPTCL to ERPC secretariat.

NVVN vide letter dated 10.03.2021 to TPTCL has sought confirmation for execution of revised SNA Agreement. The same is placed at **Annexure-.**

In 43rd TCC/ERPC, NVVN informed that they had received a letter from CEA, wherein CEA enquired about the status of revised SNA agreement from NVVN.

TCC opined that CEA is the designated authority for cross border power transactions and the matter is already being dealt with by CEA. Therefore, it would be appropriate for NVVN to approach CEA for resolution of the issue.

In 44th CCM, NVVN representative informed that the matter was already taken up with CEA. As advised by CEA, NVVN is in the process of signing SNA agreement with TPTCL for Dagachhu HEP transactions.

Further, it was informed by NVVN, they have written a letter to Bhutan and TPTCL and reply from them is awaited in this regard. CCM advised NVVN to update any progress in this regard to ERPC and ERLDC.

NVVN & TPTCL may update the status.

Deliberation in the 44th TCC meeting:

NVVN representative informed that they have not received any reply from Bhutan or TPTCL.

ITEM NO. B19:	**Provisioning of STM-16 Channel between Darbhanga (ATL-Coriant) – Darbhanga (PMTL-ECI)- Muzaffarpur (PG-Coraint) Equipment**

A redundant path of Malda- Farakka was provisioned by POWERGRID as per advice of the forum, in the form of Kishanganj (PG-Coriant) - Darbhanga (ATL- Coriant) STM-16 link and Darbhanga (ATLCoriant) - Muzaffarpur (PG-Coriant) STM-4 link. An SLD of OPGW Connectivity is attached at Annexure-. The capacity of STM-4 provisioned between Darbhanga (ATL- Coriant) - Muzaffarpur (PG Coriant) & Kishanganj (PG-Coriant)- Dalkhola (PG-Coraint) is becoming a bottleneck in utilization of optimum capacity of Kishanganj (PG-Coriant)-Darbhanga (ATL- Coriant) STM-16 link and providing redundancy with optimum capacity. It is proposed to provision a new STM-16 Connectivity between Darbhanga (ATL-Coriant)-Darbhanga (PMTL-ECI) - Muzaffarpur (PG-Coraint) Equipment & Kishanganj (PG-Coriant)-Dalkhola (PGCoraint) STM-4 link may be upgraded to STM-16, which will enable use of the network for redundancy purpose at optimum capacity i.e.STM-16. A revised schematic of the proposed Upgradation is shown at **Annexure**-. The tentative cost of the proposed Upgradation will be **₹ 3.5 Lacs approx**.

9th TeST committee approved the proposal and referred it to the Commercial Committee meeting.

In 44th CCM Meeting, PowerGrid representative informed that in principle agreed in the 9th Test meeting for the proposal for STM-16 Channel between Darbhanga (ATL-Coriant) – Darbhanga (PMTL-ECI)- Muzaffarpur (PG-Coraint).

The estimated expenditure for the proposed upgradation work will be ₹ 3.5 Lacs approx. has been agreed by the Commercial Committee.

The matter was referred to forthcoming TCC meeting for concurrence.

TCC may concur.

Deliberation in the 44th TCC meeting:

TCC concurred and referred it to ERPC.

ITEM NO. B20:	Payment/receipt status from various pool accounts in ER

1) 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 15.09.2021 is enclosed at **Annexure-**.The current principal outstanding Deviation Charge of BSPHCL, JUVNL and SIKKIM is **₹ 218.84 Cr, ₹ 35.81 Cr, & ₹ 4.48 Cr** respectivelyconsidering bill up to 05.09.2021. ERLDC is regularly giving reminders to BSPHCL, JUVNL & SIKKIM and others defaulting entity to liquidate the outstanding Deviation charges.

In 44th CCM, Bihar representative informed that due to Covid Pandemic they were facing severe financialcrisis. He informed that the outstanding charges would be liquidated by September 2021. JUVNL informed that they would liquidate the charges by the end of July 2021.

TheCCM Committee advised the respective constituents to liquidate the dues at the earliest.

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

Deliberation in the 44th TCC meeting:

Bihar representative informed that due to acute financial crisis and technical issues, they could not follow the payment schedule.

Bihar further informed that they had liquidated Rs. 50 crore as on 29.09.2021 and the rest amount would be cleared by December'2021.

SLDC, Bihar representative requested for waiver of Additional Deviation charge due to sign change violation in DSM statement issued for the period 12.04.2021 to 25.04.2021 attributed to huge over drawl during second wave of covid Pandemic.

ERPC secretariat informed that as per the prevailing CERC DSM regulation there is no provision for addressing this issue.

TCC advised that ERPC secretariat may flag this issue in the upcoming "CERC meeting with RPCs" scheduled to be held on 07.10.2021.

Jharkhand representative informed that the payments have been delayed due to Covid-19 pandemic and they would liquidate the outstanding dues within a month.

Sikkim representative informed that they would liquidate the outstanding dues from next month onwards and by December'2021 the entire outstanding dues shall be cleared.

TCC advised the defaulting constituents to clear the outstanding dues at the earliest.

2) Interest due to delayed payment of deviation charges/RRAS

a) 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-II**. DVC, Jorethang, GMR, KBUNL, NVVN-Bangladesh, PGCIL (HVDC Alipurduar), OPGC (Gridco), PGCIL (HVDC Sasaram) are requested to clear the dues.

b) CERC has approved detailed procedure for Ancillary Services Operations vide ref no.: 1/10/2012- Reg. Aff.(REC-Gen.)/CERC dtd 21st November, 2016. As per para 13.9 & 13.10 of detailed procedure Interest for delay payment for RRAS Providers has been calculated upto 31st March, 2021. An amount of ₹ 11.70764 lacs was payable towards RRAS interest upto 31.03.2021 and the same has been disbursed to the constituents on 16.06.2021.The details are enclosed in **Annexure-II**.

44th CCM advised all the constituents to liquidate the payment at the earliest.

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

Deliberation in the 44th TCC meeting:

TCC advised the defaulting constituents to clear the outstanding dues at the earliest.

3) 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 15.09.2021 considering bill up to 29.08.2021 is indicated in **Annexure – III**. The total outstanding receivable on account of Reactive charges from JUVNL is **₹2.80 Cr.** WBSETCL, DVC and GRIDCO are regularly paying the reactive charges. Sikkim and BSPHCL have cleared its long pending reactive charge outstanding.

In 44th CCM, Jharkhand informed that the Reactive Energy Charges shall be paid within a week.

JUVNL may confirm the program for payment of outstanding dues.

Deliberation in the 44th TCC meeting:

JUVNL representative informed that the outstanding dues would be cleared within two weeks.

ITEM NO. B21:	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 -.** Letters to this effect has been issued by ERLDC to the defaulting entities.

At present there is no valid LC i.r.o BSPHCL, JUVNL, DVC, GRIDCO, WEST BENGAL SIKKIM,NVVN Bangladesh, TPTCL, POWERGRID(ER-I & ER-II), JITPL, KBUNL, JLHEP and TASHIDING. Dikchu has opened LC but original document yet to be received from the bank.

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. TCC advised all the concerned constituents to open requisite LC at the earliest.

Further 44th Commercial Sub-Committee advised all the constituents to open the requisite LC in time.

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.

TCC may guide.

Deliberation in the 44th TCC meeting:

TCC advised all the constituents to open the requisite LC as per the provision of CERC DSM regulation.

ITEM NO. B22:	Default in payment of outstanding dues by beneficiaries

B22.1 The total outstanding dues of ER beneficiaries towards POWERGRID portion as on 17.09.2021 are detailed below. Please note that these figures include both PoC as well as non-PoC outstanding amounts.

Rs. in Crores.

Sl No.	DIC	Total dues	>45 Days dues
1	SOUTH BIHAR (SBPDCL)	246.67	180.54
2	NORTH BIHAR (NBPDCL)	221.06	163.14
3	JHARKHAND	67.13	45.53
4	BANGLADESH	28.18	12.83
5	SIKKIM	14.25	11.31
6	DVC	9.73	0.11
7	WEST BENGAL	83.27	0.00
8	DANS ENERGY	1.08	0.00
9	ECR	2.25	0.00
10	SER	0.24	0.00
11	SHIGA ENERGY	1.21	0.00
12	JUSNL *	11.96	11.96
13	OPTCL *	55.24	55.24
14	ODISHA	19.79	19.79
15	OPGC *	18.91	18.91
16	TEESTA URJA LIMITED *	8.50	8.50
17	TEESTA VALLEY *	5.75	5.75
18	ENICL*	0.53	0.53
	Total	**795.75**	**534.14**

* Non PoC only

DICs may update.

Deliberation in the 44th TCC meeting:

TCC advised all the defaulting beneficiaries to liquidate the outstanding dues at the earliest.

B22.2 Opening of Letter of Credit

The following beneficiaries have to open/enhance LC as listed below:

(Rs in Crores)

DIC Name	LC Required	LC Available
East Central Railways-BRBCL	42.48	0.00
GRIDCO	59.29	0.00
South Eastern Railway_RGPPL	4.89	0.00
SOUTH BIHAR	72.91	15.27
NORTH BIHAR	62.11	9.73
JHARKHAND	14.66	11.52

SIKKIM	3.97	2.92

LC required values indicated above is as per CERC Sharing Regulation 2020 which came into effect w.e.f 01.11.2020. As per the Sharing Regulation 2020, generator billing shifted to DISCOMs for the tied-up portion. Opening/Enhancement of LCs are being continuously pursued with the DICs.
The beneficiaries may renew LC for the requisite amount in favor of CTUIL.

DICs may update.

Deliberation in the 44th TCC meeting:

TCC advised all the above constituents to renew the requisite LC amount at the earliest.

ITEM NO. B23:	**Additional Agenda**

B23.1 RTA for the period from 15.11.2014 to 07.03.2016 issued vide ERPC letter No. ERPC/COM-I/REA/2018/3780-3798 dated 11/12.01.2018

Revised RTA for the period from 15.11.2014 to 07.03.2016 has been issued by ERPC in view of the Hon'ble CERC order dated 20.09.2016 in Pet. No. I 30/MP/2015 along with I.A. No. 67/2017 where Hon'ble Commission has set aside the COD of 15.11.2014 as declared by NTPC in respect of unit-IV of Barh Super Thermal Power Station Stage-II (660 MW) and has fixed 08.03.2016 as the revised date of COD of Unit-IV NTPC Barh- II.
From the said revised RTA, it is observed that the amount for transmission charges to be refunded to Bihar for the respective months/period do not match with the transmission charges mentioned in the original monthly RTA issued by ERPC considering 15.11.2014 as the COD of Unit-IV of NTPC Barh-II. Due to this mismatch, differential amount for the transmission charges is to be refunded in addition to the revised RTA to Bihar Discoms on account which may be due to the following points observed from the Revised RTA.

1. Withdrawal charge is not considered to calculate refundable Transmission charges to Bihar from the month of November-14 to April-15 and only injection charge is considered for the same.
2. Latest revision of RTA and POC slab rate approved by Hon'ble CERC applicable for the month of May-15, June-15, Jan-16, Feb-16 and March-16 has not been considered.

BSPHCL may explain.

Deliberation in the 44th TCC meeting:

ERPC secretariat representative informed that the necessary RTA accounts would be checked and revised accordingly within 15 days.

B23.2 Unintentional overdrawal caused to West Bengal on 15.09.21 and 16.09.2021

WBSEDCL vide letter dated 27.09.2021 submitted the following:

Agenda :

At 11.00Hrs of 16.09.2021 WBSEDCL has come to know that on 15.09.2021 at around 12.00Hrs the Jeerat - Midnapore 765KV line was charged by Power Grid & started power flow towards West Bengal through Jeerat(PG) - Jeerat (WBSETCL) 400KV double circuits . After exploring the SCADA data history , it was then noticed that since charging of the said tie lines , West Bengal has been drawing around 150MW (75MW/Ckt.) from Jeerat(PG) & the same is not reflecting in the total drawl of West Bengal from ISTS . Upon enquiry , it was further come to the surface that the said lines were charged without integrating the data of the same in the drawl summation figure of West Bengal based on which real time balancing operation in compliance with prevailing DSM Regulation has already been done by the West Bengal Grid members . At around 13.00hrs. of 16.09.2021 the new tie line data was incorporated in the total drawl figure of West Bengal . Hence, for last 25Hrs. there was an unintentional over drawl of West Bengal from grid & the huge DSM burden on account of such over drawl with sign change violation will be impacted mainly on WBSEDCL as WBSEDCL is the only DIC Discom of the state. In backdrop of above the additional DSM burden for which WBSEDCL is not at all responsible , should be waived from West Bengal DSM account for the interest of end consumers of the state.

Members may discuss.

Deliberation in the 44th TCC meeting:

ERPC Secretariat informed that the issue was already discussed in 183rd OCC meeting held on 20.09.2021 wherein it was deliberated in detail. OCC opined that the DSM charges including the additional DSM charges are being levied as per the CERC Regulations. Under the prevalent CERC Regulations, there is no provision for waiver off of DSM charges under such circumstances. OCC advised ERPC Secretariat to place the issue in upcoming "CERC Meeting with RPCs" scheduled to be held on 07.10.2021.

After detailed deliberation, TCC agreed with the decision taken in the OCC Meeting and decided to flag the issue in upcoming CERC meeting scheduled to be held on 07.10.2021.

PART C: ITEMS FOR INFORMATION

The following items are placed before TCC for noting and compliance:

ITEM NO. C1 :	**Performance of ER grid during April-21 to August-21**

A) Real time operation:

During the period under review, power supply position in the region was as under:

	Apr-20	**May-20**	**Jun-20**	**Jul-20**	**Aug-20**	**Apr-21**	**May-21**	**Jun-21**	**Jul-21**	**Aug-21**
Avg Freq. (Hz)	50.01	50.01	50.01	50.00	50.00	50.00	50.00	50.01	50.01	50.00
Peak Demand (MW)	17424	20596	21931	22914	23645	24656	24347	23504	24733	23737
Energy Consumption (MU/day)	321	357	422	445	445	492	425	456	496	492
ISGS Gen (MU)	4205	4286	4267	4606	4061	5345	5131	5238	5164	5453
Regional Gen including Bhutan Injection (MU)	12700	15161	17020	18932	18047	18361	17974	18944	19735	20055
% increase in Regional Gen.						44.6	18.6	11.3	4.2	11.1

All India COVID related lockdown was in place from 24th March 2020 – 31st May 2020. Subsequently phased wise unlock started from 1st June 2020

B) System Operational Discipline during the period from APR-21 to AUG-21:

i) The month-wise energy drawls of ER constituents were as given hereunder:

Constituent	**Apr-21**		**May-21**		**Jun-21**		**Jul-21**		**Aug-21**	
	SCH	ACT	SCH	ACT	SCH	ACT	SCH	ACT	SCH	ACT
BSPHCL	2928	2995	2760	2795	2981	2980	3554	3572	3442	3450
JUVNL	698	705	675	663	706	701	760	755	723	733
DVC	-1448	-1435	-1378	-1374	-1251	-1248	-1286	-1301	-1009	-968
OPTCL	1276	1284	995	992	1083	1093	1207	1221	976	982
WBSETCL	1257	1262	970	967	1107	1133	1524	1565	1677	1699
SIKKIM	45	45	41	45	36	42	43	45	43	44

C) Frequency & Voltage:

Frequency profile for the period during **APR-21 to AUG-21** is given hereunder. The frequency mostly remained within the allowable range for the entire period

Month	% of time for which frequency			
	<49.9	**49.9-50.05**	**> 50.05**	**IEGC band 49.9-50.05**

Apr-21	7.97	75.06	16.97	75.06
May-21	6.64	74.50	18.86	74.50
Jun-21	6.10	74.53	19.37	74.53
Jul-21	5.35	75.05	19.60	75.05
Aug-21	7.68	76.92	15.40	76.92

Maximum and minimum voltages recorded at some important 765 KV and 400 kV sub-stations were as follows:

SUB-STATION/ POWER STN.	Apr-21		May-21		Jun-21		Jul-21		Aug-21	
	MAX. (KV)	MIN (KV)	MAX. (KV)	MIN (KV)	MAX. (KV)	MIN (KV)	MAX. (KV)	MIN (KV)	MAX. (KV)	MIN (KV)
ANGUL-765 KV	796	743	798	749	800	746	798	758	797	755
JHARSUGUDA-765 KV	803	773	804	775	801	769	801	770	801	771
NEW RANCHI-765 KV	789	759	803	762	794	762	791	752	791	759
GAYA-765 KV	785	747	787	746	785	743	794	744	782	744
SASARAM-765 KV	793	737	792	739	809	741	800	741	784	742
DARLIPALLI-765 KV	791	766	792	768	792	759	791	765	789	768
MIDNAPORE-765KV	774	747	785	743	790	740	789	740	785	740
BERHAMPORE - 400KV	419	400	420	401	418	405	420	404	419	405
BIHARSARIFF - 400KV	419	398	420	389	413	388	414	388	411	389
BINAGURI - 400KV	422	399	421	399	418	398	418	390	417	400
DURGAPUR - 400KV	413	399	413	391	405	391	404	388	406	391
MUZAFFARPUR - 400KV	418	389	418	388	419	387	419	387	417	389
RANGPO - 400KV	423	393	423	398	419	397	413	394	413	398
JAMSHEDPUR - 400KV	404	392	412	396	410	394	411	394	408	391
JEERAT - 400KV	420	390	422	389	421	392	420	394	418	393
JEYPORE - 400KV	421	403	422	400	417	396	418	400	418	397
MAITHON-A - 400KV	416	401	417	396	413	396	417	396	413	400
ROURKELA - 400KV	414	401	414	396	407	397	407	395	407	395
MERAMUNDALI - 400KV	418	401	424	395	420	402	421	403	420	402
SASARAM - 400KV	409	386	405	378	418	387	417	387	413	387
SUBHASHGRAM - 400KV	418	381	421	383	420	386	418	387	416	384

D) Constituent-wise demand met is given below:

		Apr-20	**May-20**	**Jun-20**	**Jul-20**	**Aug-20**	**Apr-21**	**May-21**	**Jun-21**	**Jul-21**	**Aug-21**
BSPHCL	AVG MAX DMD(MW)	4327	4877	5291	5496	5582	5611	5262	5786	6345	6023
	MU/DAY	77	89	100	105	109	109	95	107	121	117
JUVNL	AVG MAX DMD(MW)	1243	1299	1339	1375	1447	1564	1410	1483	1536	1459
	MU/DAY	22	23	25	26	27	29	25	27	29	29

DVC	AVG MAX DMD(MW)	1532	2306	2813	2922	2916	3187	2939	3128	3033	3081
	MU/DAY	30	48	60	63	63	69	62	66	64	66
ODISHA	AVG MAX DMD(MW)	3344	3805	3995	4229	4253	5056	4820	4774	5537	5245
	MU/DAY	69	78	84	88	85	105	98	100	110	109
W. BENGAL	AVG MAX DMD(MW)	6140	6191	7583	7858	7976	8814	7652	7784	8366	8341
	MU/DAY	121	118	152	161	160	179	145	155	168	170

E) Inter-regional energy exchange during the review period were as follows: (Figures in MU)

Region	Apr-21		May-21		Jun-21		Jul-21		Aug-21	
	SCH	ACT	SCH	ACT	SCH	ACT	SCH	ACT	SCH	ACT
NER	327	34	124	-65	-81	309	-172	371	-200	155
SR	1725	2164	707	1888	745	1461	-396	878	55	1334
WR	-1643	-1283	105	-769	723	-952	617	-1110	997	-540
NR	1858	1205	2460	2235	2546	3022	3171	3184	2860	2731
TOTAL	**2267**	**2120**	**3396**	**3290**	**3933**	**3841**	**3219**	**3323**	**3712**	**3681**

F) Reservoir levels of important hydro stations in ER during **APR-21 to AUG-21**(as on last day of the month) is given below:

STATION	MDDL/ FRL	**APR-21**	**MAY-21**	**JUN-21**	**JUL-21**	**AUG-21**
BURLA	590/630 FT	607.15	604.21	605.91	605.23	619.79
BALIMELA	1440/ 1516 FT	1465.1	1463.7	1463.1	1465.8	1467.8
RENGALI	109.7/ 123.5 MTR	114.18	114.4	115.4	116.97	121.34
U. KOLAB	844/ 858 MTR	845.92	845.72	846.66	846.06	847.83
INDRAVATI	625/ 642 MTR	631.9	630.18	630.1	630.1	631.53
MACHKUND	2685/ 2750 FT	2725.7	2718.85	2718.3	2713.4	2715.05

G) New Element Charging:

Apr-21:

Sl No	Element Name	Owner	Charging Date	Charging Time	Remarks
1	220KV/132KV 100 MVA ICT 4 AT RANGPO	PGCIL	1/4/2021	17:39	
2	400KV-SITAMARHI-MOTIHARI-2	PMTL	2/4/2021	14:22	
3	400KV-SITAMARHI-DARBHANGA (DMTCL)-2	PMTL	2/4/2021	15:29	
4	400KV-SITAMARHI-MOTIHARI-1	PMTL	3/4/2021	17:51	

5	220KV/11KV 10 MVA ST AT RONGNICHU	MBPCL	4/4/2021	13:49	
6	125MVAR 400KV B/R-1 AT SITAMARHI	PMTL	4/4/2021	16:34	
7	220KV-DARBHANGA(DMTCL)-LAUKAHI-2	BSPTCL	6/4/2021	13:43	
8	400KV/220KV 500 MVA ICT 2 AT SITAMARHI	PMTL	8/4/2021	18:25	
9	400KV/220KV 500 MVA ICT 1 AT SITAMARHI	PMTL	8/4/2021	17:25	
10	220KV/132KV 200 MVA ICT 2 AT SITAMARHI	PMTL	9/4/2021	18:01	
11	220KV/132KV 200 MVA ICT 1 AT SITAMARHI	PMTL	10/4/2021	17:15	
12	220KV-SITAMARHI-MOTIPUR-2	BSPTCL	12/4/2021	17:01	
13	400KV/220KV 315 MVA ICT 3 AT JEYPORE	PGCIL	16/4/2021	16:55	
14	765KV 240 MVAR BR 1 AT DARLIPALI (DSTPS) along with Bays	NTPC Darlipali	22/4/2021	10:28	
15	400KV/220KV 315 MVA ICT 1 AT DSTPS(ANDAL)	DVC	23/4/2021	17:58	
16	33KV/0.415KV 0.630 MVA ICT 2 AT ROURKELA	PGCIL	28/4/2021	12:14	Tertiary transformer of 400/220 kV ICT 2 at Rourkela

May-21:

Sl No	Element Name	Owner	Charging Date	Charging Time	Remarks
1	220KV-SITAMARHI-MOTIPUR-1	BSPTCL	19/5/2021	12:28	Synchronised at Sitamarhi end.

Jun-21:

Sl No	Element Name	Owner	Charging Date	Charging Time	Remarks

1	400kV JEERAT - SAGARDIGHI- 2	PGCIL	21/06/21	20:27	LILO of 400 kV Subhasgram - Sagardighi S/C at Jeerat Substation
2	400kV JEERAT - SUBHASGRAM- 2	PGCIL	20/06/21	21:28	LILO of 400 kV Subhasgram - Sagardighi S/C at Jeerat Substation
3	132kV SITAMARHI - RUNNISAIDPUR- 2	BSPTCL	17/06/21	13:52	Bay at Sitamarhi end was charged on 11.04.21.
4	132kV SITAMARHI - RUNNISAIDPUR- 1	BSPTCL	17/06/21	13:50	Bay at Sitamarhi end was charged on 11.04.21.
5	400kV BAHRAMPUR - BHERAMERA- 3	PGCIL	14/06/21	18:02	
6	400kV ALIPURDUAR - JIGMELLING 2	PGCIL	18/06/21	18:06	Link is direct circuit besides the alternative circuit through Punatsangchhu
7	400kV ALIPURDUAR - JIGMELLING 1	PGCIL	22/06/21	12:19	Link is direct circuit besides the alternative circuit through Punatsangchhu

Jul-21:

Sl No	Element Name	Owner	Charging Date	Charging Time	Remarks
1	220KV-JAYNAGAR-JEYPORE-3	OPTCL	01.07.2021	21:39	
4	220KV-JAYNAGAR-JEYPORE-4	OPTCL	08.07.2021	20:36	
5	132KV-NAGARUNTARI-SONENAGAR-1 (LILO of 132 KV RIHAND-SONENAGAR CKT-1 AT NAGARUNTARI)	JUSNL	14.07.2021	18:12	
6	132KV-NAGARUNTARI-RIHAND-1 (LILO of 132 KV RIHAND-	JUSNL	14.07.2021	20:02	First time loaded 17:12 hrs on 28-07-2021

	SONENAGAR CKT-1 AT NAGARUNTARI TSS)				
7	400KV-DHANBAD-RANCHI-1 (LILO OF 400 KV RANCHI-MAITHON RB D/C)	NKTL	21.07.2021	13:42	
8	400 KV MAIN BUS I AT DHANBAD	NKTL	21.07.2021	13:42	
9	400 KV MAIN BUS II AT DHANBAD	NKTL	21.07.2021	14:34	
10	125 MVAR Bus Reactor-1 AT DHANBAD	NKTL	21.07.2021	14:47	
11	400KV-DHANBAD-MAITHON RB-1 (LILO OF 400 KV RANCHI-MAITHON RB D/C)	NKTL	23.07.2021	18:48	
12	400KV-BAHARAMPUR-BHERAMARA-4	PGCIL	25.07.2021	11:32	Line was charged from Baharampur up to termination tower of Bheramara
13	125 MVAR Bus Reactor-2 AT DHANBAD	NKTL	25.07.2021	15:12	
14	400KV-DHANBAD-RANCHI-2 (LILO OF 400 KV RANCHI-MAITHON RB D/C)	NKTL	27.07.2021	13:37	
15	400KV-DHANBAD-MAITHON RB-2 (LILO OF 400 KV RANCHI-MAITHON RB D/C)	NKTL	27.07.2021	19:46	
16	400KV-JEERAT-NEW JEERAT-1	PMJTL	31.07.2021	12:30	Line was charged along with 400 kV Bus 2 at New Jeerat
17	220 KV MAIN BUS II AT DHANBAD	NKTL	31.07.2021	12:30	
18	400KV-JEERAT-NEW JEERAT-2	PMJTL	31.07.2021	14:12	Line was charged along with 400 kV Bus 2 at New Jeerat

19	400 KV MAIN BUS II AT NEW JEERAT	PMJTL	31.07.2021	14:12	
20	400/220 kV 500 MVA ICT 2 AT DHANBAD	NKTL	31.07.2021	18:25	ICTs are charged on no-load as no downstream line commissioned yet.
21	220 KV MAIN BUS I AT DHANBAD	NKTL	31.07.2021	18:27	
22	400/220 kV 500 MVA ICT 1 AT DHANBAD	NKTL	31.07.2021	20:56	ICTs are charged on no-load as no downstream line commissioned yet.

Aug-21:

Sl No	Element Name	Owner	Charging Date	Charging Time	Remarks
1	132 kV BARIPADA-BANGIRPOSHI-2	OPTCL	14.08.2021	14:36	Idle Charged from Bangirposhi end up to gantry of Baripada
2	220 kV-RANCHI-RAMGARH-1	DVC	21.08.2021	14:55	
3	220 kV-RANCHI-MTPS(DVC)-1	DVC	24.08.2021	13:59	Anti-theft charged up to 57.9 km from Ranchi end.
4	50 MVAr Line Reactor of 400 kV Maithon-Gaya 1 AT MAITHON	PGCIL	27.08.2021	20:06	LR replaced with Natural Easter Oil Reactor keeping rating same

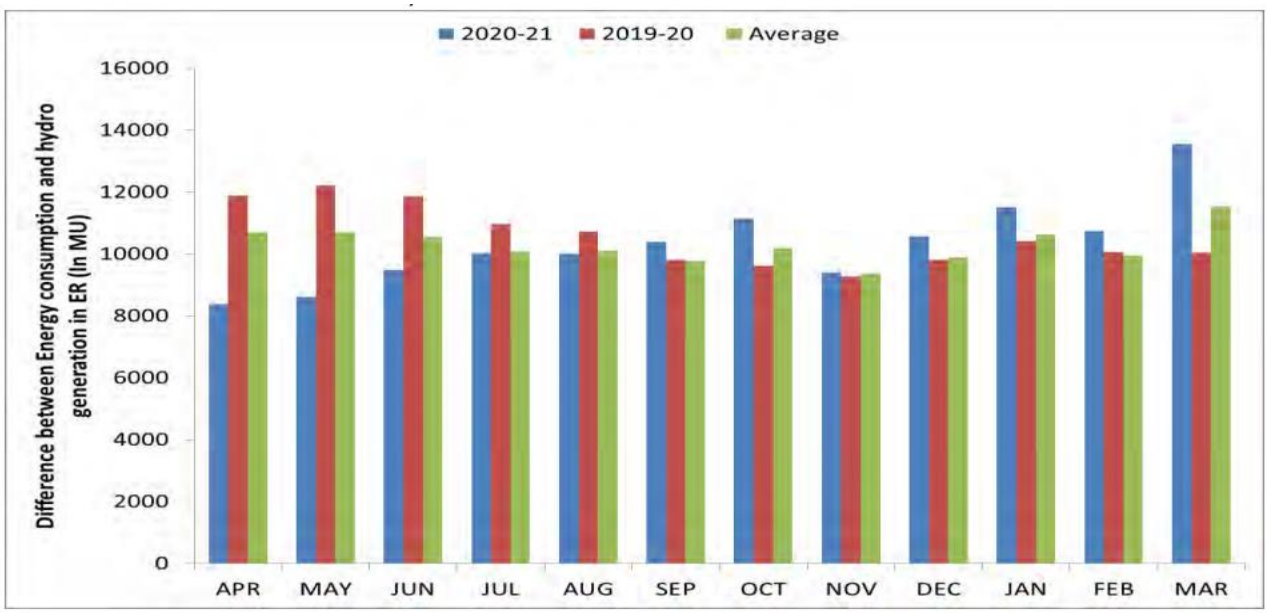
Deliberation in the 44th TCC meeting:

TCC noted.

ITEM NO. C2 :	Declaration of high demand/low demand season for 2022-23

During 182nd ER OCC meeting, ERLDC presented energy consumption by Eastern Region in past five years along with hydro generation during same period. It was shown that monthly average difference between energy consumption and hydro generation in Eastern Region was high during the month of March, April and May.

As advised by ERPC the exercise was conducted again and the graph is attached below. It's reconfirmed that the high/peak demand period may be considered during April 2022 & May 2022 and March 2023.



As per above chart, difference between energy consumption and hydro generation in Eastern Region was high during following months

- **2019-20***: April-19, May-19 and June-19
- **2020-21*:** Oct-20, Jan-21, Mar-21
- **Average of last five years**: March, April and May

*Due to COVID related lockdown, energy consumption was low during March – June 2020
As per trend in previous five years, difference between energy consumption and hydro generation in Eastern Region was high during March, April and May as demand was in higher side with less support from hydro generation.

Hence April-2022, May-2022 and March -2023 may be considered high demand seasons for 2022-23.

In 183rd OCC meeting, after detailed deliberation it was decided that **April-2022, May-2022 and June-2022** are to be considered as high demand seasons for 2022-23.

TCC may note.

Deliberation in the 44th TCC meeting:

TCC Noted.

ITEM NO. C3 :	Updated Operating Procedure of Eastern Region, 2021

The Operating Procedure of Eastern Regional power system, developed and maintained by ERLDC in accordance with section 5.1(f) of the IEGC, has been updated in line with discussions taken place during special meeting as well as earlier OCC meetings.
180thOCC advised ERLDC to publish the final Operating Procedure for Eastern Region – 2021 and share it with all the stakeholders of Eastern Region. In compliance of same updated operating procedure was published on 20th July 2021, and it is available at ERLDC website. It can be directly accessed from following link:
https://app.erldc.in/Content/Upload/System%20Study/Operating%20Procedure/2021%20-Operating%20Procedure%20of%20Eastern%20Region.pdf

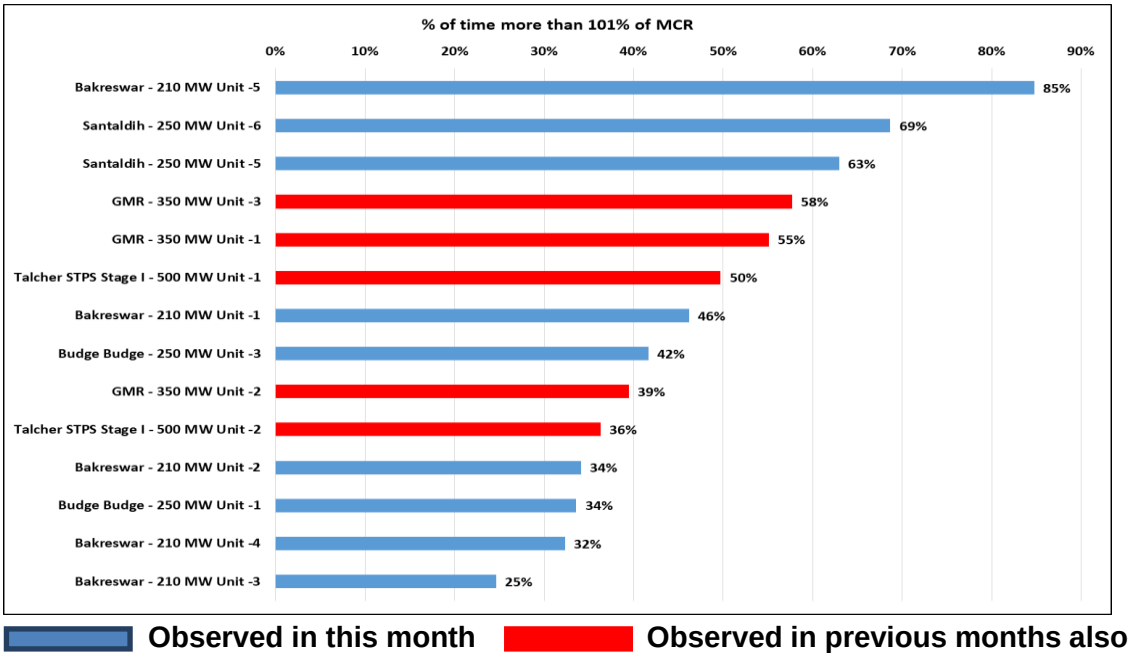
Members may note.

Deliberation in the 44th TCC meeting:

TCC Noted.

ITEM NO. C4 :	Running Generating units at more than MCR

Since 180th ER OCC meeting, ERLDC highlighted the issue of over injection by generating units at more than MCR at every OCC meeting. Due to running unit at more than MCR, margin for primary frequency response gets exhausted and machine cannot provide sufficient primary frequency response during the event of sudden frequency change. As per ERLDC SCADA data, following thermal generating units generated at more than 101% of MCR (1% margin is considered to offset SCADA measurement error) for significant amount of time during August 2021.



Generation duration curve for above mentioned generating stations as per ERLDC SCADA data are shown in **Annexure-**. Vide email dated 03rd September 2021 and 06th September 2021, WBSLDC/WBPDCL/CESC, GMR/Odisha SLDC, Talcher STPS & GMR have been requested have been advised to avoid over injection in order to maintain margin for PFR. Issue of over injection at Talcher STPS and GMR TPS is being highlighted since 180th OCC meeting.

In 183rd OCC Meeting, OCC advised all the concerned generators to comply with the requirements for satisfactory performance of the primary frequency response.

Generators may note for compliance.

Deliberation in the 44th TCC meeting:

Generators noted for compliance.

ITEM NO. C5 :	**Status of Primary Frequency Response Testing of ISGS/IPP Generating Units**

The Hon'ble Central Electricity Regulatory Commission (CERC), vide notification dated 12th April 2017, had notified Indian Electricity Grid Code (Fifth Amendment) Regulations, 2017. As per this notification, following provision has been added at the end of Regulation 5.2 (g) of Part 5 of the Principal Indian Electricity Grid Code (IEGC) Regulations: "Provided that periodic checkups by third party should be conducted at regular interval once in two years through independent agencies selected by RLDCs or SLDCs as the case may be.
In line with same 36 numbers of ISGS/IPP units located in Eastern region were selected for PFR testing in first phase. Out of these 36 Units PFR testing of 25 numbers of units is already completed.
Details of PFR testing is given at **Annexure**:

TCC may note.

Deliberation in the 44th TCC meeting:

TCC noted.

ITEM NO. C6 :	**Review of the PSS Tuning of Generators in Eastern Region**

The PSS tuning activity is mandatory in line with IEGC and CEA regulations. The Procedure of PSS tuning for helping utilities in getting this activity carried out has been approved in 171st OCC Meeting and shared with all concerned utilities.

In the 182nd OCC meeting, WBPDCL representative informed that PSS tuning for Sagardighi unit#2 PSS tuning had been done on 21st Aug'21. OCC advised WBPDCL to share the report of the same to ERLDC & ERPC.

CESC representative submitted that PSS tuning for Budge Budge unit#1 & 2 was done on 16th& 17th Aug'21 respectively.

ERLDC representative informed that PSS tuning for Mejia unit#4, Mangdechu unit#3 & 4, DPL unit#7 and Kahalgaon unit#2 was done satisfactorily. However PSS tuning for APNRL was not successful.

DGPC Bhutan representative submitted that for Chuka, Tala and Mangdechu they had shared their report to ERPC.

In 183rd OCC Meeting, ERLDC informed that PSS tuning for NPGC Unit 2, Talcher St-II units and KTPS Unit I has been completed.

The updated schedule for PSS tuning of the units is attached at **Annexure-**.

TCC may note.

Deliberation in the 44th TCC meeting:

TCC noted.

ITEM NO. C7 :	**Payment/receipt status from various pool accounts in ER**

1) RRAS Account :Present Status.

The updated position of Payments to the RRAS Provider(s) from the DSM pool and Payments by the RRAS Provider(s) to the DSM pool as on 15.09.2021 (considering bill up to 05.09.2021) is indicated in **Annexure – IV.**

This is for information to the members.

2) AGC Account : Present Status.

The updated position of Payments to the AGC Provider (i.e Barh) from the DSM pool and Payments by the AGC Provider to the DSM pool as on 15.09.2021 (considering bill up to 05.09.21) is indicated in **Annexure – IV.**

This is for information to the members.

3) Status of PSDF

An amount of ₹ 13.36 Cr from Reactive account & DSM account has been transferred to PSDF from the period 01.07.2021 to 15.09.2021. With this the total amount of ₹ 1349.59 Cr has been transferred to PSDF so far. The break up details of fund transferred to PSDF (till 15.09.21) is enclosed in **Annexure V.**

4) State Transmission Utility Charges and Losses applicable for STOA for FY 2021-22

Name of STU	Intra-State Transmission Charges	TRANSMISSION LOSS (For Embedded entities)
WBSETCL	Rs. 258.12 /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.

5) 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 transaction 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.

Deliberation in the 44th TCC meeting:

TCC noted.

Meeting ended with vote of thanks to the Chair.

****

Annexure I

LIST OF PARTICIPANTS FOR 44TH TCC ON 29.09.21 AT THE VEDIC VILLAGE, KOLKATA					
Sl.No.	Name	**Designation**	**Organization**	**Mobile No.**	**Email ID**
1	Arun Kumar Sinha	Director (Tech.) BSPGCL & Chairperson TCC	BSPHCL	7763813856	dtbspgcl@gmail.com
2	Bhaskar Sharma	Consultant	BSPTCL	9771496900	
3	Uttam Kumar	Director (Op)	BSPTCL	9264477220	
4	Rambaboo Singh	ESE	BSPTCL	7763817723	
5	Rajdeep Bhattacharjee	Resident Engineer	BSPHCL	9477345084	
6	Sudip Dash	Head Commercial & Regulations	MPL	9204652869	sudipdash@tatapower.com
7	Harish Saran	Executive Director	PTC	9810394429	harishsaran@ptcindia.com
8	Yogendra Kumar	ED - Coordination & President	Teesta Urja Ltd	9910413388	ykumar@teestaurja.com
9	Ratish Kumar	E & M Consultant	Teesta Urja Ltd	9810345492	ratishkumar@teestaurja.com
10	P K Satapathy	Sr GM	SLDC Odisha	9438907410	ele.pksatpathy@sldcorissa.org.in
11	S C Dash	GM	SLDC Odisha	9438907966	ele.scdash@optcl.co.in
12	Sandip Pal	VP (SO)	CESC	9831045651	sandip.pal@rpsg.in
13	Anurava Sengupta	GM (SO)	CESC	9831802682	arunava.gupta@rpsg.in
14	Nimish Sheth	COO-Sekura	DMTCL	7042879619	Nimish.sheth@sekura.in
15	Vijayanand Semletty	Associate Director-Sekura	DMTCL	9987134392	vijayanand.semletty@sekura.in
16	AMIYA KUMAR PARHI	General Manager	NTPC, ER-II HQ	9650993331	akparhi@ntpc.co.in

17	S. K. Pradhan	Additional General Manager	NTPC, ER-II HQ	9437049168	skpradhan02@ntpc.co.in
18	Kallol Sarkar	AGM (Commercial) & I/C	NTPC, ER-I	9650991574	kallolsarkar@ntpc.co.in
19	U K Pati	Dir. (Op)	OPTCL	9438907780	dir.operation@optcl.co.in
20	S K Das	DGM (Electrical)	OPTCL	9438907316	ele.santoshdas@optcl.co.in
21	C R Mishra	DGM (Electrical)	OPTCL	9438907305	ele.crmishra@optcl.co.in
22	Prashant Kumar Das	CGM (PP)	GRIDCO	9438907408	sgm.pp@gridco.co.in
23	Anirudha Sethi + Family	Manager (Electrical)	GRIDCO	9438506354	sethianirudha@gmail.com
24	Manoj Kumar Karmali	ED	JUSNL	8987581081	edoperationjusnl@gmail.com
25	Vidya Sagar Singh	GM,SLDC	JUSNL	9934169984	sagarjseb@gmail.com
26	Santanu Sarkar	Chief Engineer(PTP)	WBSEDCL	8900793210	ceptp.wbsedcl@gmail.com
27	Rajeev Nandan Sinha	Addl Chief Engineer (PTP)	WBSEDCL	8900793211	rndsinha@gmail.com
28	Preetam Banerjee	Superintending Engineer	WBSEDCL	8900793215	preeban72@gmail.com
29	A. K. Pandey	Director (R & T)	WBSEDCL		
30	Sabyasachi Roy	Director (OP)	WBSETCL		
31	Sri Sukanta Biswas	CE-CPD	WBSETCL		
32	Sri Dilip Das	CE-CTD	WBSETCL		
33	Chinmay Kumar Haldar	CE-SLDC	WBSETCL		

34	Krishnendu Chakraborty	GM (OS)	WBPDCL	8336903962	
35	M. C. Rakshit	ED(Commercial)	DVC	9831783054	
36	D. P. Pitandi	Dy. CE(Comercial)	DVC	9434745905	
37	Dinesh Kharel	Chief Engineer (Transmission)	Power Department, Sikkim	9883902286	dkharel64@gmail.com
38	Namgyal Tashi	Executive Engineer (SLDC)	Power Department, Sikkim	7797672743	namgyaltashi26@gmail.com
39	Ashish Lamichaney	Assistant Engineer(Transmission)	Power Department, Sikkim	9615878284	alamichaney@gmail.com
40	D.K. Jain	Executive Director, ERLDC	ERLDC		
41	G. Mitra	CGM (PP)	ERLDC		
42	R. Sutradhar	CGM	ERLDC		
43	S. Konar	GM (SO)	ERLDC		
44	D. Biswas	DGM	ERLDC		
45	N. Ahmed	DGM	ERLDC		
46	S. Sahay	CM	ERLDC		
47	N. S. Mondal	Member Secretary	ERPC		
48	S. Kejriwal	Superintending Engineer	ERPC		
49	D. K. Bauri	Superintending Engineer	ERPC		
50	S. Roy	Superintending Engineer	ERPC		
51	A. De	Executive Engineer	ERPC		

52	P.P. Jena	Executive Engineer	ERPC		
53	S. Sarvesh	Assistant Executive Engineer	ERPC		
54	S. K. Pradhan	Assistant Executive Engineer	ERPC		
55	S.R. Swain	Assistant Engineer	ERPC		
56	K. Satyam	Assistant Engineer	ERPC		
57	S. M. Jha	Consultant	ERPC		
58	Anjali Lal	JTO	ERPC		
59	A. Basu	Assistant Executive Engineer	BSPTCL		
60	D. K. Javeri	CGM	PGCIL, ER-II		
61	H. K. Ghosh	LO	GRIDCO		

Sl No	Description	Event Start		Event End		Fault Distance
1	400 KV Baripada-Kharagpur AR Successful	30-08-2021	10:08:59	30-08-2021	10:09:00	400KV BPD KGP AR Sucessfull on 300821 at 10:08:59Hrs from BPD End. M-I-Z2 Carier aided trip,F/L-81.44KM,IR-3.905KA M-II-Z2 carier aided trip,F/L-80.91KM ,IR-3.326 KA
2	400 KV Baripada-Kharagpur Trip	24-08-2021	11:16:59	24-08-2021	11:43:00	400KV BPD-KGP AR Trip on 240821 at 11:16:59 Hrs due to fault persists in reclaim time. MAIN-I Z-2 Aided trip(Y-G),IY-3.07KA,F/L-77.37KM From BPD End M-II Z-2 Aided trip(Y-G),IY-3.11,F/L-78.61KM From BPD End
3	400 KV Baripada-Kharagpur AR Successful	23-08-2021	10:06:20	23-08-2021	10:06:21	400KV BPD KGP AR ucessfull on 230821 at 10:06:20 Hrs M-I-Carrier Aided Trip,F/L-84.32KM,BPH-N,IB-3.989KA M-II-Carrier Aided Trip,F/L-82.59KM,BPH-N,IB-3.05KA
4	400 KV Baripada-Kharagpur AR Successful	14-08-2021	12:41:59	14-08-2021	12:42:00	400kV Baripada-Kharagpur line auto reclose successful due to Y phase to Ground transient fault. Fault details: Main-1: Y ph to G, Zone-1, Iy-4.133kA, Fault Distance-49.27 km Main-2: Y ph to G, Zone-1, Iy-4.067kA , Fault Distance-47.80 km
5	400 KV Baripada-Kharagpur Trip	13-08-2021	11:56:01	13-08-2021	12:14:00	400kV Baripada-Kharagpur line Triped due to subsequent fault within reclaim time. Fault details: Main-1 : R ph to G, Zone-1, Ir-3.304 kA, Fault Distance-75.05 km Main-2: R ph to G, Zone-1, Ir-3.224 kA,
6	400 KV Baripada-Kharagpur AR Successful	07-08-2021	11:07:37	07-08-2021	11:07:38	AR successful with R/I at Baripada MAIN-I FAULT DETAILS: B PH TO G, ZONE-1, FL-45.94 KM, If-4.382 KA MAIN-II FAULT DETAILS: B PH TO G, ZINE-I, FL-45.40 KM, If-4.376 KA
7	400 KV Baripada-Kharagpur AR Successful	07-07-2021	18:57:26	07-07-2021	18:57:27	400KV BPD-KGP AR Sucessfull on 07.07.21 M-I-R-G,Z1,Ir-4.002KA,F/L-48.69KM From BPD End. M-II-R-G,Z1,Ir-3.716KA,F/L-49.5KM From BPD End.
8	400 KV Baripada-Kharagpur AR Successful	26-06-2021	14:47:12	26-06-2021	14:47:13	400kV Baripada-Kharagpur line auto reclose successful at 14:47:12 hours of 26.06.2021 due to Y phase to Ground single phase transient fault in Zone-1, 64.42 km from Baripada end with fault current-3.096 kA.
9	400 KV Baripada-Kharagpur AR Successful	07-06-2021	14:38:20	07-06-2021	14:38:21	400kV Baripada-Kharagpur Line auto reclose successful at 14:38:20 hours of 07.06.2021 due to Y phase to ground transient fault with fault current Iy-3.759 kA, Fault distance-53.84 km from Baripada end. Line belongs to WBSETCL.
10	400 KV Baripada-Kharagpur AR Successful	23-05-2021	11:12:00	23-05-2021	11:12:01	400KV BPD-KGP AR on 23052021 at 11:12:00Hrs M-I-z1,BPH-N,Ib-4.063KA,F/L-49.17KM from BPD End
11	400 KV Baripada-Kharagpur AR Successful	03-05-2021	19:33:22	03-05-2021	19:33:23	400KV BPD-KGP Line AR on 030521 at 19:33:22 Hrs M-I- R-N,Z-1,IR-2.474KA,F/L-58.30KM From BPD End M-II-R-N,Z-1,IR-3.835KA,F/L-58.37KM From BPD End
12	400 KV Baripada-Kharagpur AR Successful	03-05-2021	19:21:14	03-05-2021	19:21:15	400KV BPD-KGP Line AR on 030521 at 19:21:14 Hrs From BPD End. M-I-Z-1-IR-3.71KA,F/L-58.63KM From BPD End.
13	400 KV Baripada-Kharagpur AR Successful	03-05-2021	19:20:26	03-05-2021	19:20:27	400KV BPD-KGP Line AR on 030521 at 19:20:26Hrs From BPD End M-I-Z1,R-N,IR-3.812KA,F/L-59.71KM From BPD End.
14	400 KV Baripada-Kharagpur AR Successful	03-05-2021	19:14:31	03-05-2021	19:14:32	400KV BPD-KGP Line AR on 030521 at 19:14 M-I-Z1,R-N,IR-3.867KA,F/L-58.32KM From BPD End
15	400 KV Baripada-Kharagpur Trip	02-05-2021	16:23:48	02-05-2021	16:59:00	400KV BPD-KGP Line Tripped on 02052021 due to Fault persists in Reclaim time. 1st Fault-16:23:48 Hrs Z-1,R-G,IR-3.84KA,F/L-65.43KM From BPD end. 2nd Fault-16:23:58 Hrs Z-1,R-G,IR-3.98KA,F/L-58.54KM From BPD end.
16	400 KV Baripada-Kharagpur Trip	28-02-2021	12:13:21	28-02-2021	19:27:00	Auto reclose unsuccessful in 400KV Baripada-Kharagpur line due to subsequent fault within reclaim time and line tripped. FD-56.3 KM from Baripda, FC-3.467 KA
17	400 KV Baripada-Kharagpur AR Successful	28-02-2021	11:38:33	28-02-2021	11:38:34	Auto reclose successful in 400KV Baripada-Kharagpur line due to transient single phase Y to ground fault. Auto reclose successful in both main & tie CB. FD-48.030 KM from Baripada, Fc-3.984 KA

Sl No	Description	Event Start		Event End		Fault Distance
18	400 KV Baripada-Kharagpur AR Successful	25-02-2021	03:28:38	25-02-2021	03:28:39	400KV BPD-KGP Line A/R Sucessfull from BPD end at 03:28:38Hrs Fault Details; M-I-B PH-N(Carrier Aided Trip Z1),IB-4.12KA,F/L-85.143KM From BPD end M-II-B PH-N(Carrier Aided Trip Z1),IB-3.509KA,F/L-85.05KM From BPD End.
19	400 KV Baripada-Kharagpur AR Successful	16-02-2021	12:00:52	16-02-2021	12:00:52	400KV BPD-KGP AR Sucessfull on 16.02.2020 at 12:00:52 Hrs due to Y-G Faults,Z-1,IY-3.48KA,Fault Distance-56.44KM from Baripada end.
20	400 KV Baripada-Kharagpur AR Successful	14-02-2021	13:12:00	14-02-2021	13:12:01	400KV BPD-KGP AR Sucessfull to Y-Ph-N on 140221 at 13:12:00Hrs Fault Details Main-I-Z-1,IY-3.762KA,Fault Distance-50.59KM KM From BPD End. Main-II-Z-1,IY-3.482KA,Fault Distance-51.22KM KM From BPD End.
21	400 KV Baripada-Kharagpur AR Successful	31-01-2021	05:47:29	31-01-2021	05:47:30	Auto reclose operated successfully in 400KV Baripada-Kharagpur line, B-phase to ground fault occured at a distance of 84 km from Baripada end. Fc-4.120 KA
22	400 KV Baripada-Kharagpur AR Successful	16-11-2020	11:11:29	16-11-2020	11:11:30	400KV BPD-KGP AR on sucessfull on 161120 at 11:11:29Hrs From BPD end sucessfully. Fault Details; Y-N,Z2 Carrier aided trip.IY-3.725KA,F/D-93.45KM(MAIN-I) Y-N,Z2 Carrier aided trip,IY-2.949KA,F/D-92.00KM(MAIN-II)
23	400 KV Baripada-Kharagpur AR Successful	06-11-2020	11:13:52	06-11-2020	11:13:53	400KV BPD-KGP AR sucessfull on 06112020 at 11:13:52Hrs from Baripada End. Fault Details M-I Z-2 Carrier Aided trip,Y-N,IY-3.782KA,F/D-95.74KM M-II Z-2 Carrier Aided trip,Y-N,IY-2.803KA,F/D-96.38KM
24	400 KV Baripada-Kharagpur AR Successful	27-10-2020	13:25:27	27-10-2020	13:25:28	400KV BPD-KGP Line AR sucessfull on 27102020 at 13:25:27Hrs from Baripada end.Fault Details Z-1,R-N.IR-5.158KA,Fault Distance-35.72KM from Baripada end.
25	400 KV Baripada-Kharagpur Trip	10-10-2020	13:04:05	10-10-2020	13:29:00	400KV BPD-KGP Line Tripped on 10102020 at Baripada End due to Fault persists on reclaim time. Fault Details Y-N,Z1,IY-3.523KA,F/L-42.32KM From BPD End.
26	400 KV Baripada-Kharagpur AR Successful	19-09-2020	12:00:49	19-09-2020	12:00:50	400KV BPD-KGP Line AR on 190920 at 12:00:49 Hrs from Main & Tie Bay at Baripada SS. Fault Details R-N,Z2 Carriear Aided Trip,iR-3.948KA,Fault Dist-82.82KM From Baripada End.
27	400 KV Baripada-Kharagpur Trip	18-09-2020	05:47:36	18-09-2020	07:03:00	400KV BPD-KGP Line Trip on 180920 at 05:47 Hrs due to fault persists in reclaim time. Fault details 05:47:36 Hrs -Y-N,Z1,IY-3.533KA,Fault Distance-78.79KM from Baripada end 05:47:37 Hrs -Y-N,Z1(Carriear Aided Trip)IY-155A,F/ Distance-81.09KM
28	400 KV Baripada-Kharagpur AR Successful	18-09-2020	05:44:09	18-09-2020	05:44:10	400KV BPD-KGP Line AR sucessfulon 18.09.20 at 05:44:09 Hrs from Baripada end. Fault Details Y-N,Z-1,IY-3.43KA,Fault Distance-79.44KM from Baripada end.
29	400 KV Baripada-Kharagpur AR Successful	17-09-2020	03:51:39	17-09-2020	03:51:40	400KV BPD-Kharagpur AR Sucessful on 17.09.20 at 03:51:39 Hrs. Fault Details Ir-5.986KA,Fault Distance-31.96KM From Baripada End.
30	400 KV Baripada-Kharagpur AR Successful	08-09-2020	16:14:06	08-09-2020	16:14:07	400KV BPD-KGP Line AR Sucessfull from Main & Tie CB at 16:14:06Hrs on 08092020. Fault Details Y-N,Z-1,Iy-3.554KA,Fault Distance-77.02KM From Baripada end.
31	400 KV Baripada-Kharagpur Trip	22-08-2020	12:31:18	22-08-2020	12:59:00	400KV BPD-KGP Line Tripped on 220820 at 12:31:18 Hrs due to Fault persists in Reclaim Time. 1stFault-Z1,R-N Ir-3.286KA,Fault-Distance-44.83KM From BPD End(12:31:16} 2nd Fault-Z1,R-N Ir-3.504KA,Fault Distance-45.73 KM From BPD End(12:31:18)
32	400 KV Baripada-Kharagpur AR Successful	19-08-2020	13:12:14	19-08-2020	13:12:15	400KV BPD-KGP AR Sucessfull on 190820 at 13:12:14Hrs Fault Details Y-N,Z-1,Iy-2.926KA,Fault Distance-42.86KM From Baripada End.
33	400 KV Baripada-Kharagpur Trip	16-08-2020	13:54:21	16-08-2020	17:16:00	400KV BPD-Kharagpur Trip on 16082020 at 13:54:21 due to Y-B-N Fault in Z-1,Iy-2.139KA,Ib-316.0A. FD-40.60 KM

Sl No	Description	Event Start		Event End		Fault Distance
34	400 KV Baripada-Kharagpur AR Successful	12-07-2020	13:54:14	12-07-2020	13:54:15	400KV BPD-Kharagpur AR sucessfull on 12.07.20 at 13:54:14 (Z-2 Carrier aided trip)IFl-90.27KM & IR-3.142KA from Baripada End.
35	400 KV Baripada-Kharagpur Trip	30-06-2020	12:20:46	30-06-2020	20:31:00	400KV BPD-Kharagpur Trip on 30.06.2020 due to fault persists on reclaim time.Fault Details; R-N,(Z-2 Carrier aided trip)IR-2.204KA Fault distance-80.43KM from BPD end.
36	400 KV Baripada-Kharagpur AR Successful	30-06-2020	11:22:15	30-06-2020	11:22:16	400KV BPD-Kharagpur AR sucessfull on 30.06.2020 at 11:22:15 Hrs from both Main & Tie CB at Baripada end. Fault Details M-I Y-N(z-2 Carrier Aided Trip) IY-3.516KA & Dist-77.34KM M-II Y-N(z-2 Carrier Aided Trip) IY-3.462KA & Dist-75.52KM
37	400 KV Baripada-Kharagpur AR Successful	09-05-2020	13:19:57	09-05-2020	13:19:58	400KV BPD-Kharagpur AR on 09.05.2020 at 13:19:57 with fault current 3.041 & a distance of 90.25KM
38	400 KV Baripada-Kharagpur AR Successful	05-05-2020	09:45:45	05-05-2020	09:46:45	KGP AR on 05052020 at 09:45:45 Hrs due to RPH-N with fault current 2.774KA & distance of 47.09KM.
39	400 KV Baripada-Kharagpur AR Successful	01-05-2020	15:57:33	01-05-2020	15:58:33	400KV BPD-Kharagpur AR on 01.05.2020 FD-90.90 KM,FC- 3.312 KA
40	400 KV Baripada-Kharagpur AR Successful	10-04-2020	13:21:55	10-04-2020	13:21:56	400KV BPD-Kharagpur AR on 10.04.2020 BN, FD-90.70 KM, FC-1.2 KA
41	400 KV Baripada-Kharagpur AR Successful	10-04-2020	13:12:15	10-04-2020	13:12:16	400kV BPD-KGP AR on 13:12 of 10.04.2020 YN, FD-95, FC-2.63 KA
42	400 KV Baripada-Kharagpur AR Successful	06-04-2020	10:44:45	06-04-2020	10:45:45	KGP AR successfully on 06042020 at 10:44 Hrs from BPD end.Z2 Carriear aided trip with Fault current 2.989 KA & 90.99KM from Bpd End.
43	400 KV Baripada-Kharagpur AR Successful	20-03-2020	13:46:07	20-03-2020	13:46:08	400KV BPD-Kharagpur AR on 20.03.2020 YN, FD-80.180, FC-2.82 KA
44	400 KV Baripada-Kharagpur AR Successful	10-03-2020	12:33:35	10-03-2020	12:34:35	400KV BPD-Kharagpur AR sucessfull on 10032020 at 12:35 Hrs of both main & Tie bay from Baripada SS. YN, FD-88 KM, FC-1 KA
45	400 KV Baripada-Kharagpur AR Successful	02-03-2020	12:34:01	02-03-2020	12:34:02	Auto reclose of 400kV Baripada-Kharagpur Line on dated 02.03.2020 RN, FD-53.280, FC-3.037 KA
46	400 KV Baripada-Kharagpur AR Successful	19-02-2020	12:28:53	19-02-2020	12:29:53	FD-98.10, FC-3.665 KA, YN
47	400 KV Baripada-Kharagpur AR Successful	16-01-2020	11:51:06	16-01-2020	11:51:07	400 KV BPD-KGP Line A/R on 16.01.2020 FD-64.90, FC-3.301, YN fault
48	400 KV Baripada-Kharagpur AR Successful	13-01-2020	12:12:16	13-01-2020	12:12:17	400KV BPD-Kharagpur AR on 130012020 at 12:12:16 Hrs due to RPH-N distance 62.34 KM from Baripada End & Fault Current-3.414 KA
49	400 KV Baripada-Kharagpur Trip	03-01-2020	04:01:17	03-01-2020	04:01:20	400 KV BPD-KGP Line Trip on 03012020 at 04:00:53 Hrs Due to Fault persists on reclaim time Line tripped at 04:01:17 Hrs. FD-1 KM, FC-11.620 KA, BN Insulator decapping at loc. No-46 and cross arm bend at loc. No-45
50	400 KV Baripada-Kharagpur AR Successful	20-11-2019	11:28:02	20-11-2019	11:28:03	400KV BPD-Kharagpur AR Successfull at 11:28:02 Hrs n 20.11.2019 FD-104.70, FC-1.560 KA, RN Fault
51	400 KV Baripada-Kharagpur Trip	15-11-2019	11:20:04	15-11-2019	11:55:00	FD-63.60 KM, FC-4.430 KA, YN Fault
52	400 KV Baripada-Kharagpur Trip	05-10-2019	11:12:10	05-10-2019	11:38:00	400KV KHARAGPUR Line Tripped due to persitence earth fault in R-Phase during reclaim time. FD-70.3 KM, FD-3.53 KA, RN Fault
53	400 KV Baripada-Kharagpur Trip	21-09-2019	12:20:23	21-09-2019	19:10:00	400kV Baripada- Kharagpur Line tripped 2nd time on 21.09.2019 due to R-Phase to Earth fault due to persitence earth fault within Reclaim Time. FD-67.650 KM, FC-3.103 Ka
54	400 KV Baripada-Kharagpur Trip	21-09-2019	10:31:13	21-09-2019	10:49:54	400KV Baripada-Kharagpur Line Tripped on 21.09.2019 due to persistence of fault within reclaim time. FD-69.070 KM, FC-4.035, RN Fault
55	400 KV Baripada-Kharagpur AR Successful	10-08-2019	12:08:04	10-08-2019	12:08:05	Z2, FD-112.9 KM, FC-3.561 KA

Sl No	Description	Event Start		Event End		Fault Distance
56	400 KV Baripada-Kharagpur AR Successful	04-05-2019	01:27:34	04-05-2019	01:27:34	400kV Baripada-Kharagpur Line A/R Successful on 04/05/2019 at 01:27 Hrs. the fault was in R-Phase with a distance of about 90 KM from Baripada end. FC-3.413 KA
57	400 KV Baripada-Kharagpur AR Successful	28-04-2019	14:43:31	28-04-2019	14:43:31	400kV Baripada-Kharagpur Line Auto Reclosure Successful on 28/04/2019 at 14:43Hrs. The fault was R-N, at a distance of 105.8 KM from Baripada end with fault current of 1.4KAmp.
58	400 KV Baripada-Kharagpur Trip	02-04-2019	12:26:33	02-04-2019	12:49:00	400 kV Baripada-Kharagpur line tripped due to persistence of Y-N fault within reclim time at 12:26 hrs on 02.04.2019. FD-43.5, FC-2.349, UYN Fault

Annexure B18

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
पूर्वी क्षेत्रीय विद्युत समिति
Eastern Regional Power Committee
14, गोल्फ क्लब रोड, टालीगंज, कोलकाता-700033
14 Golf Club Road, Tollygunj, Kolkata-700033

Tel No.: 033-24239651,24239658 FAX No.:033-24239652, 24239653 Web: **www.erpc.gov.in**

No. ERPC/ COM-I/CCM/2020-21/ 5122 Date: 07.10.2020

To

The General Manager (BD & PS)
NTPC Vidyut Vyapar Nigam Ltd.
7th Floor, Core-3, SCOPE Complex
Lodhi Road, New Delhi- 110003

Sub: Settlement Nodal Agency for Dagachu HEP of Bhutan

Sir,

Please refer to the agenda item No. B6 of the 42nd Commercial Sub- Committee Meeting of ERPC held on 25.02.2020 in reference to the aforesaid subject. In the meeting, NVVN was advised 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).

Subsequent to this in the 43rd Commercial Committee Meeting held on 21.09.2020 ERLDC informed that on request of NVVN, they have registered NVVN and acceptance letter was issued on 13.05.2020.

However, the status of the necessary agreement with TPTCL to take over all the responsibilities of nodal agency from TPTCL for Dagachhu HEP transactions has not been communicated to us till date. NVVN representative was not present in the 43rd Commercial Committee Meeting.

In view of above, it is requested to intimate the status of the aforesaid agreement with TPTCL to us at the earliest.

Thanking You,

Yours faithfully,
Mondal
07.10.2020
(N.S. Mondal)
Member Secretary

एनटीपीसी विद्युत व्यापार निगम लिमिटेड
(एनटीपीसी लिमिटेड की पूर्ण स्वामित्व वाली सहायक कम्पनी)

NTPC Vidyut Vyapar Nigam Limited
(A Wholly Owned Subsidiary of NTPC Limited)

केन्द्रीय कार्यालय/Corporate Centre

Ref. No.: NVVN/BD-7/S-1/TPTCL/01/

10th March '2021

To,
Shri. Bikram Singh
Head Revenue & Marketing
Tata Power Trading Company Ltd

Subject: Agreement between TPTCL and NVVN as Settlement Nodal Agency for Dagachu HEP of Bhutan

Ref: Email dated 15th Dec 2020 & 10th Feb 2021 for signing of SNA agreement between NVVN & TPTCL

Dear Sir,

This is in reference to 42nd & 43rd Commercial Committee Meeting held by ERPC dated 25.02.2020 & 21.09.2020 respectively. In the meeting NVVN was advised to enter into necessary agreement with TPTCL to take over all the responsibilities of nodal agency from TPTCL for Dagachu HEP transactions.

In view of this NVVN vide email dated 15th Dec 2020 has submitted Settlement Nodal Agency (SNA) agreement to TPTCL for further finalisation and execution with NVVN.

Further, to the "Guidelines for Import / Export (Cross Border) of Electricity-2018" issued by MoP, Procedure for approval and facilitating Import/Export (Cross Border) of Electricity by the Designated Authority (DA), has been issued on 26.02.2021. In line with this, the SNA agreement submitted earlier by NVVN has been revised (Clause 2(h) added) to include the responsibilities to be performed by NVVN as a Settlement Nodal Agency under the DA Procedure issued by CEA on 26.02.2021.

We request you to kindly confirm for further execution of SNA Agreement at the earliest.

Thanking You,

Yours faithfully,

(Shyam Kumar) 10/03/2021

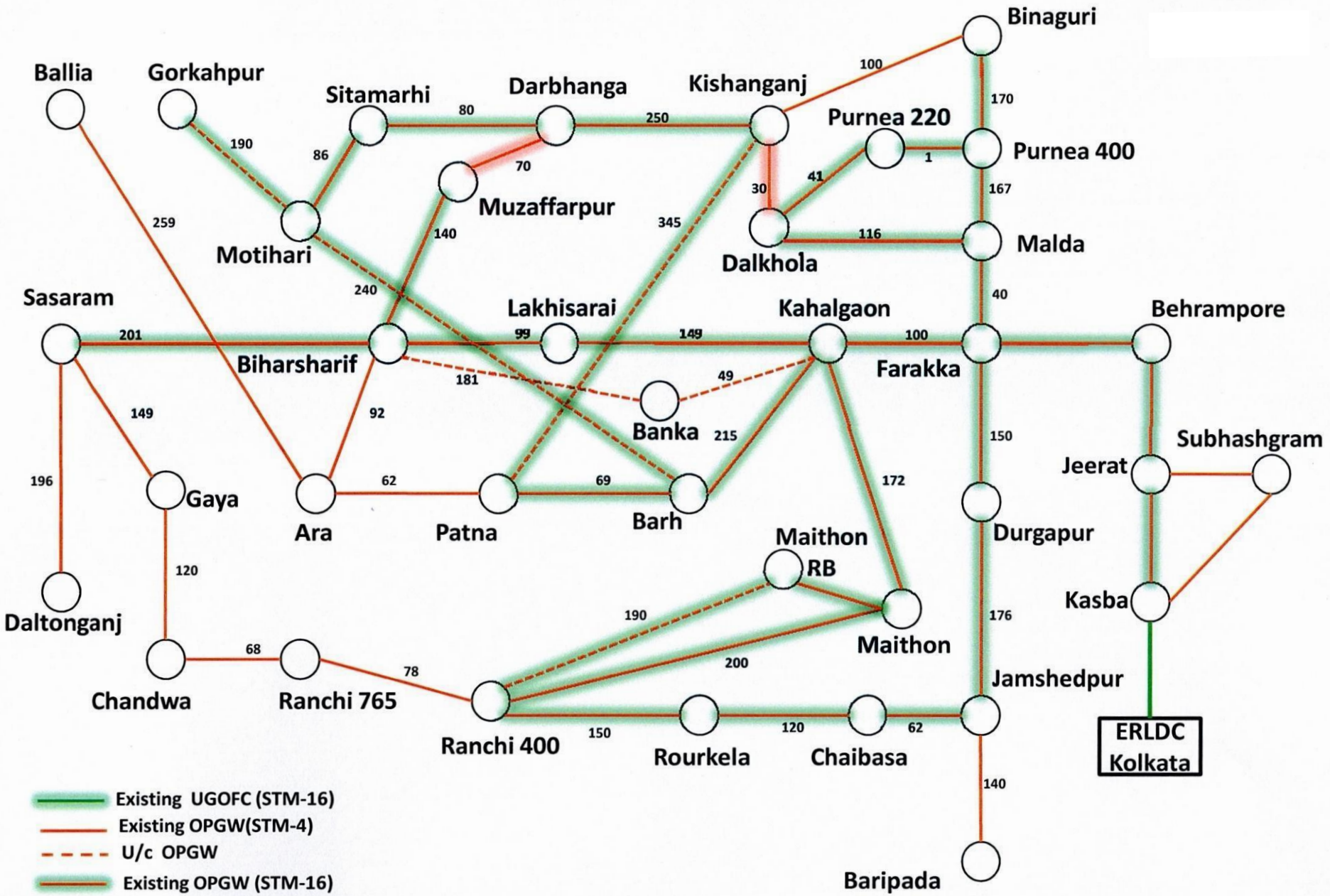
General Manager, BD

Cc:

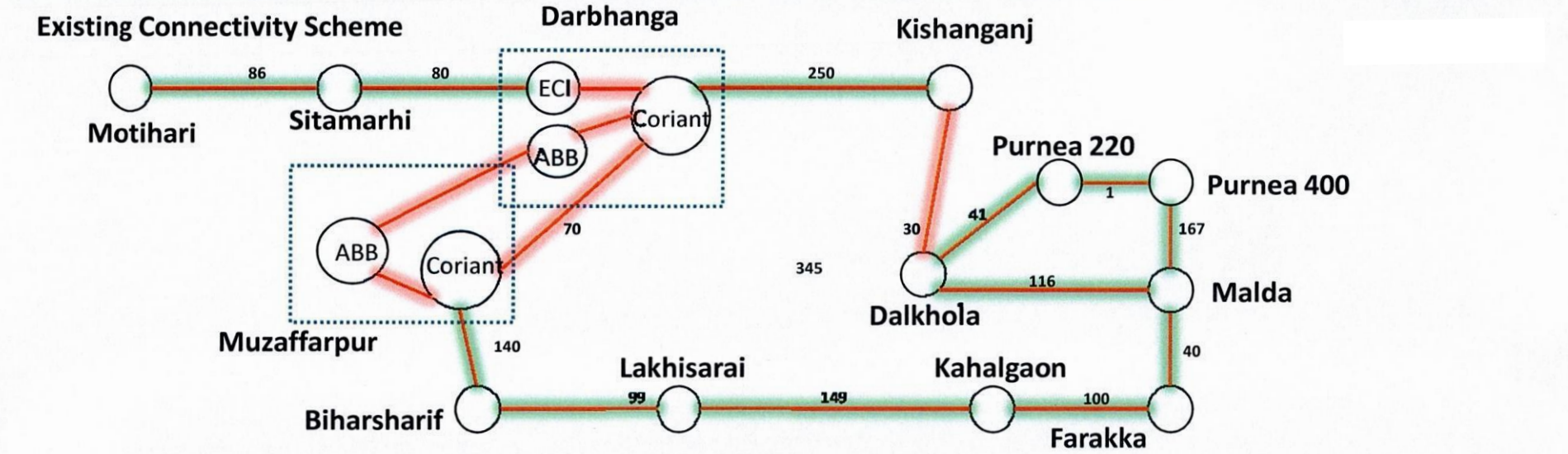
1. Member Secretary, ERPC
2. Chief Engineer, CEA
3. CEO, TPTCL

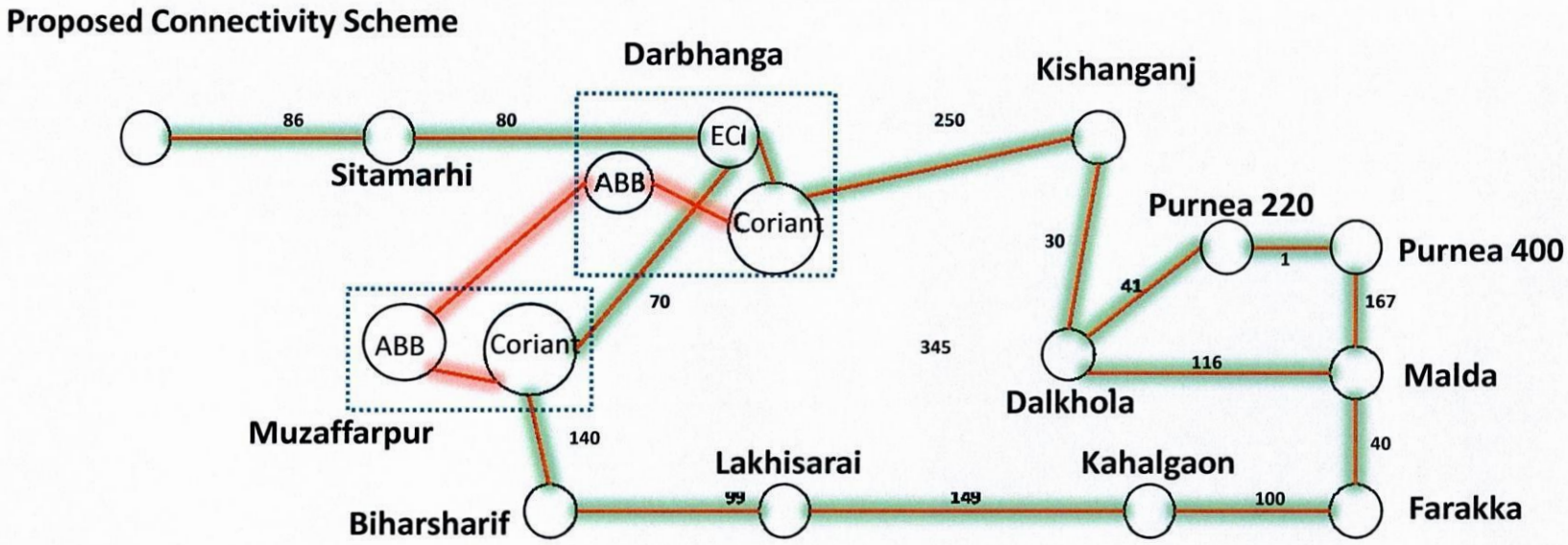
15/3 SE (Comml.) Pradhan (BEE)

SLD of OPGW Connectivity of ERTS-I Stations



Proposed Provisioning/Upgradation





Annexure-B20.1

SUMMARY OF DEVIATION CHARGE RECEIPT AND PAYMENT STATUS

BILL UPTO 05-09-2021 (W-23 of 2021-2022)
Last Payment Disbursement Date - 16-09-2021

Figures in Rs. Lakhs

CONSTITUENTS	Net outstanding for 2020-21	Receivable	Received	Payable	Paid	Outstanding for 2021-22	Total Outstanding
BSPTCL	7,539.21266	15010.7423	0	665.57371	0	14345.16859	**21,884.38125**
JUVNL	995.55299	2919.91444	0	334.24768	0	2585.66676	**3,581.21975**
DVC	0.00000	5075.63239	3409.86384	868.28382	868.28382	1665.76855	**1,665.76855**
GRIDCO	1.59243	1589.15774	1531.36136	2437.54286	2242.41391	-137.33257	**-135.74014**
WBSETCL	0.00000	7345.12157	6657.52228	105.53851	211.07702	793.1378	**793.13780**
Sikkim	100.49308	616.78283	0	268.51298	0	348.26985	**448.76293**
NTPC	0.00000	3688.06461	3536.66922	2689.97798	2456.59047	-81.99212	**-81.99212**
NHPC	0.00000	13.97527	13.97527	523.83079	504.69623	-19.13456	**-19.13456**
MPL	0.00000	108.48732	108.48732	205.10017	187.35984	-17.74033	**-17.74033**
APNRL	0.00000	215.32935	92.90845	279.54514	195.86008	38.73584	**38.73584**
CHUZACHEN	0.00000	18.77954	18.77954	62.21836	57.72322	-4.49514	**-4.49514**
NVVN-BD	0.00000	469.32547	469.32547	103.18574	90.88708	-12.29866	**-12.29866**
GMR	0.00000	42.36335	42.36335	772.64178	729.79371	-42.84807	**-42.84807**
JITPL	0.00000	383.60061	257.31567	84.15197	84.15197	126.28494	**126.28494**
TPTCL (Dagachu)	0.00000	1115.59231	1106.71803	0	0	8.87428	**8.87428**
JLHEP	0.00000	450.5715	338.7007	14.87015	14.87015	111.8708	**111.87080**
NVVN-NEPAL	0.00000	4558.76911	4558.76911	435.54902	289.39016	-146.15886	**-146.15886**
IBEUL	0.00000	0	0	0	0	0	**0.00000**
BRBCL	0.00000	515.43566	515.43566	94.19806	83.51982	-10.67824	**-10.67824**
PGCIL SASARAM	0.00000	16.88473	15.44172	4.15723	4.15723	1.44301	**1.44301**
TUL (Teesta-III)	0.00000	406.98808	319.69094	37.59267	37.59267	87.29714	**87.29714**
NERLDC	0.00000	45650.30766	33861.07488	17356.19479	17825.17612	12258.21411	**12,258.21411**
WRLDC	0.00000	14325.90702	14368.65026	201117.4338	175234.3119	-25925.86509	**-25,925.86509**
NRLDC	0.00000	27930.65901	28018.45644	39992.21981	40221.47654	141.4593	**141.45930**
SRLDC	0.00000	163506.7199	139707.3203	857.43235	857.43235	23799.39959	**23,799.39959**
VAE	0.00000	0	0	0	0	0	**0.00000**
Dikchu	0.00000	41.65839	41.65839	123.17898	121.0799	-2.09908	**-2.09908**
PGCIL-Alipurduar	0.00000	4.86114	0	4.3956	1.60673	2.07227	**2.07227**
Tashiding(THEP)	0.00000	359.3843	288.40031	46.09542	46.09542	70.98399	**70.98399**
OPGC	0.00000	0	0	0	0	0	**0.00000**
KBUNL	0.00000	189.74595	143.77282	174.75043	174.75043	45.97313	**45.97313**
NPGC	0.00000	358.51846	358.51846	164.37581	156.45208	-7.92373	**-7.92373**
NPGC-Infirm	0.00000	513.47235	505.41988	2937.80708	2937.80708	8.05247	**8.05247**
RONGNICHU	0.00000	80.04924	61.57116	120.69316	116.07019	13.85511	**13.85511**
Total	**8,636.85116**	**2,97,522.80160**	**2,40,348.17084**	**2,72,881.29580**	**2,45,750.62612**	**30,043.96108**	**38,680.81224**

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

Deviation Interest Bill due to delay payment

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**
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			**1,72,257**
24	PGCIL SASARAM	1,686			**1,686**
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-B20.3

STATUS OF REACTIVE CHARGES (All amount in Rs)

AS ON 15.09.21

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	42460884	37904316	29972935	25416367	**0**
JUVNL	50217703	21430845	782704	0	**28004154**
DVC	17809284	14692466	14606738	13555441	**2065521**
GRIDCO	57350286	53841798	18660309	18660309	**3508488**
SIKKIM	413675	334815	413716	334856	**0**
WBSETCL	28851850	27602512	3665833	2761233	**344738**

Annexure -B21

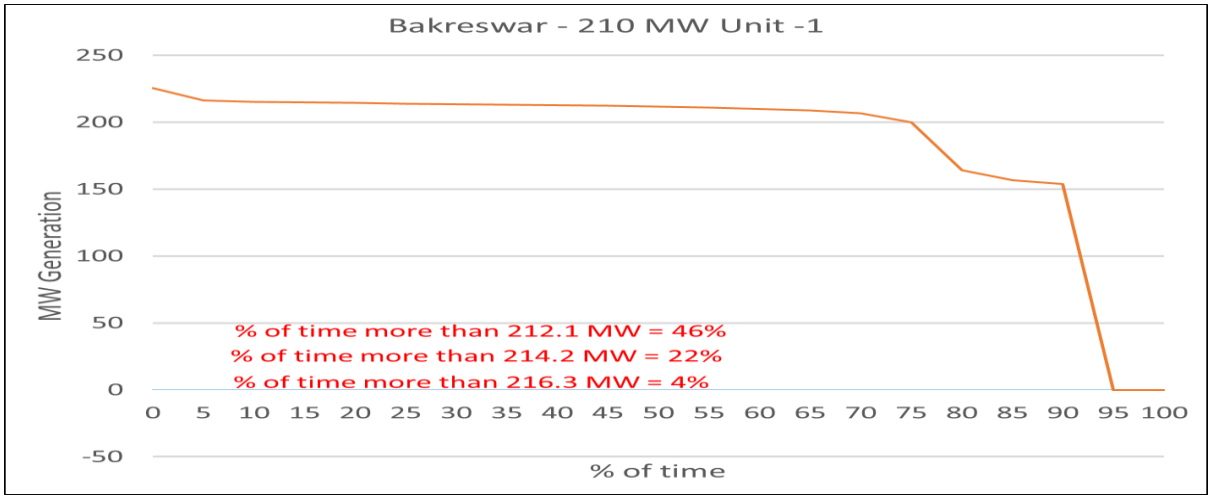
Current Status of Letter of Credit (LC) amount against DSM charges for ER constituents

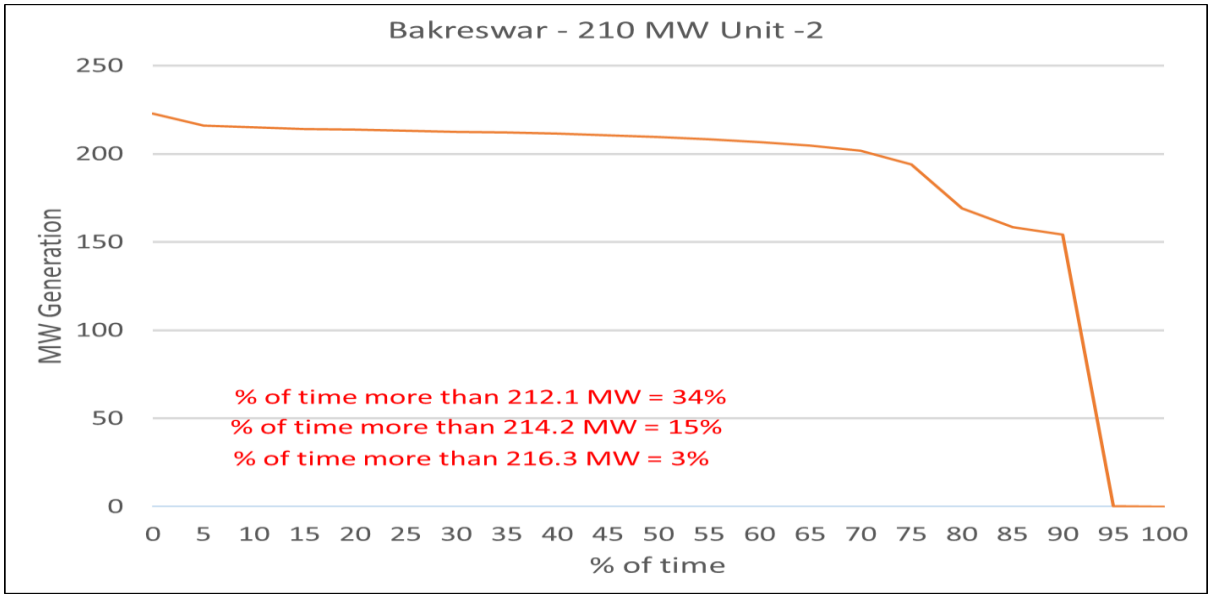
Figures in Lacs of Rupees

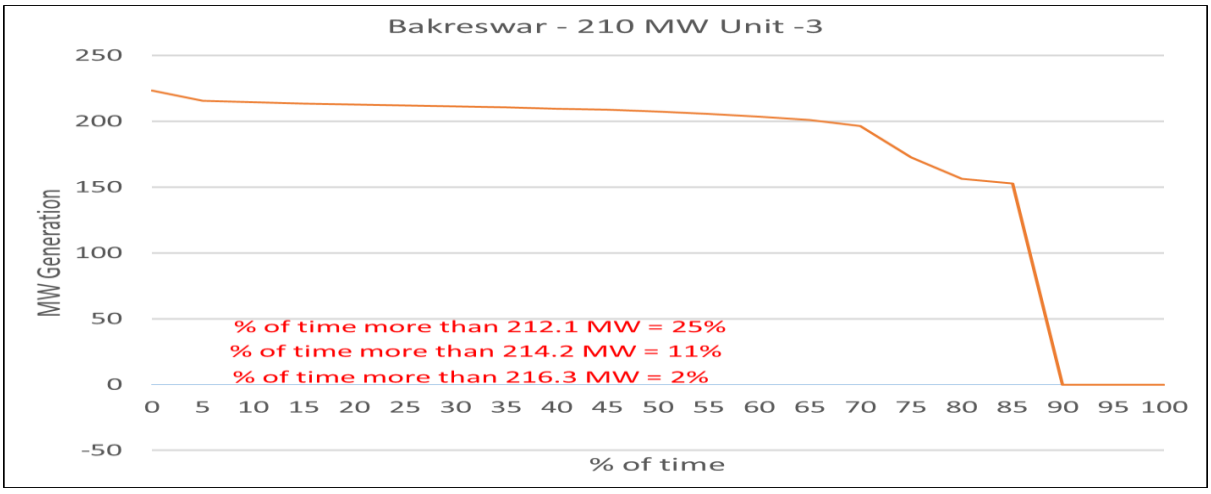
Sl No	ER Constituents	No. of weeks in which Deviation Charge payable	No of times payment was delayed during 2020-21	Total Deviation charges payable to pool during 2020-21	Average weekly Deviation Charge liability	LC Amount	Defaulting Weeks	Due date of expiry	Remarks
					(C)/52 weeks	110% of (B)			
		(A)	(B)	(C)	(D)	(E)	(G)	(F)	(G)
1	Bihar State Power	44	44	15486.42232	297.81581	327.59740	All Weeks		Not opened
2	Jharkhand State	29	29	3249.42448	62.48893	68.73783	All Weeks		Not opened
3	Damodar Valley	39	10	5182.62395	99.66585	109.63243	Week-		Not opened
4	Gridco Limited / ग्रिडको	19	16	1491.44787	28.68169	31.54986	Week-3,6,7		Not opened
5	SLDC - UI FUND -	49	8	15847.84952	304.76634	335.24297	Week-40,45		Not opened
6	Power Deptt, Govt. of	17	17	316.50994	6.08673	6.69540	Week-1,14,15,26		Not opened
7	NTPC Vidyut Vyapar	49	3	1678.7775	32.28418	35.51260	Week-32		Not opened
8	Tata Power Trading Co. Ltd / डागाचु	50	1	1846.83267	35.51601	39.06761	Week-16		Letter given to waive off charges
9	DANS Energy Private	50	35	896.75536	17.24530	18.96982	Week-10,19,21,23		Not opened
10	Powergrid Corporation	16	7	13.28148	0.25541	0.28095	Week-		Not opened
11	Sneha Kinetic Power	13	6	94.76031	1.82231	2.00455	Week- 5,28,44	12-05-2022	Rs 2.01000 Lac Opened
12	Jindal India Thermal	34	20	771.65579	14.83953	16.32349	Week-5,11,18	expired on 30.06.21	Not renewed
13	PGCIL-Alipurduar /	24	24	6.91552	0.13299	0.14629	Week-3,4,5,15		Not opened
14	Shiga Energy Private /	40	35	435.95072	8.38367	9.22203	Week-4,10,19,22		Not opened
15	Kanti BijleeUtpadan	46	3	453.16224	8.71466	9.58612	Week-32		Not opened

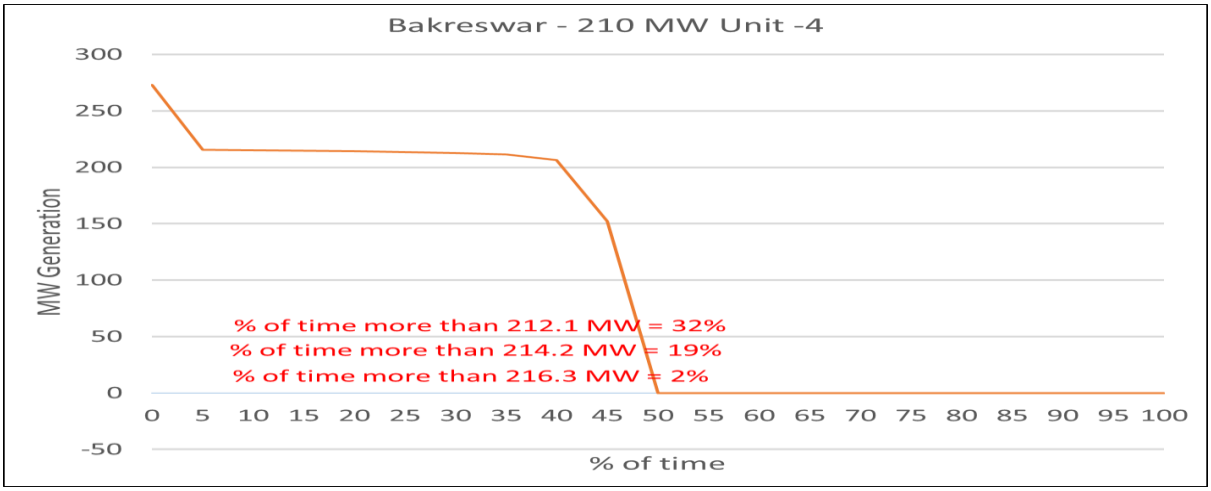
Annexure-C4

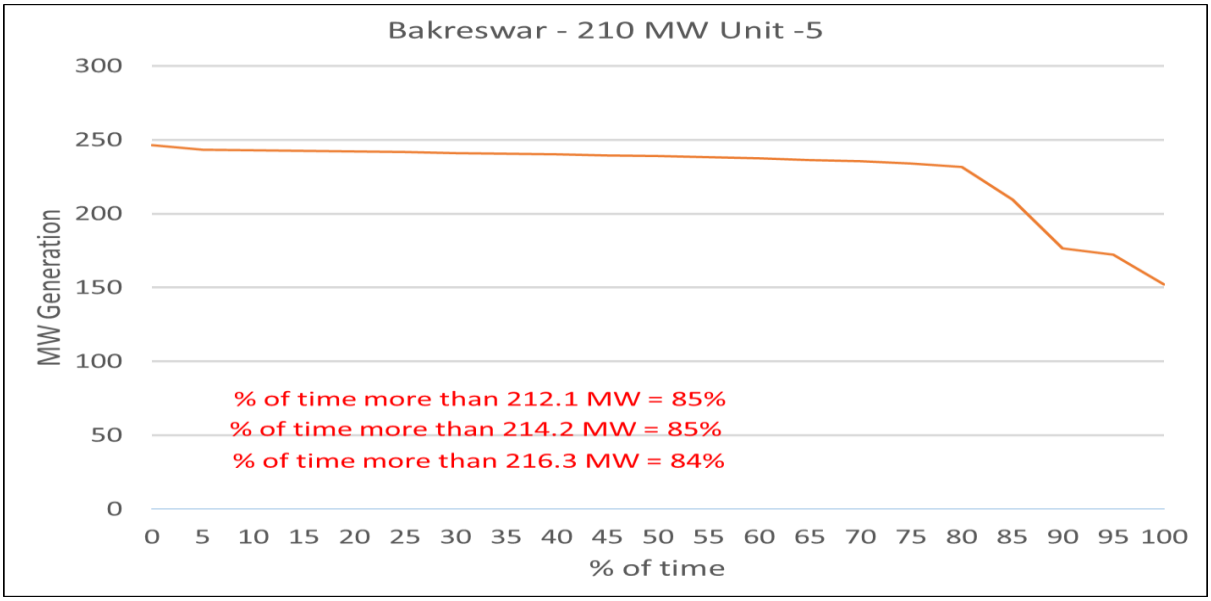
Generating units at more than MCR during August 2021

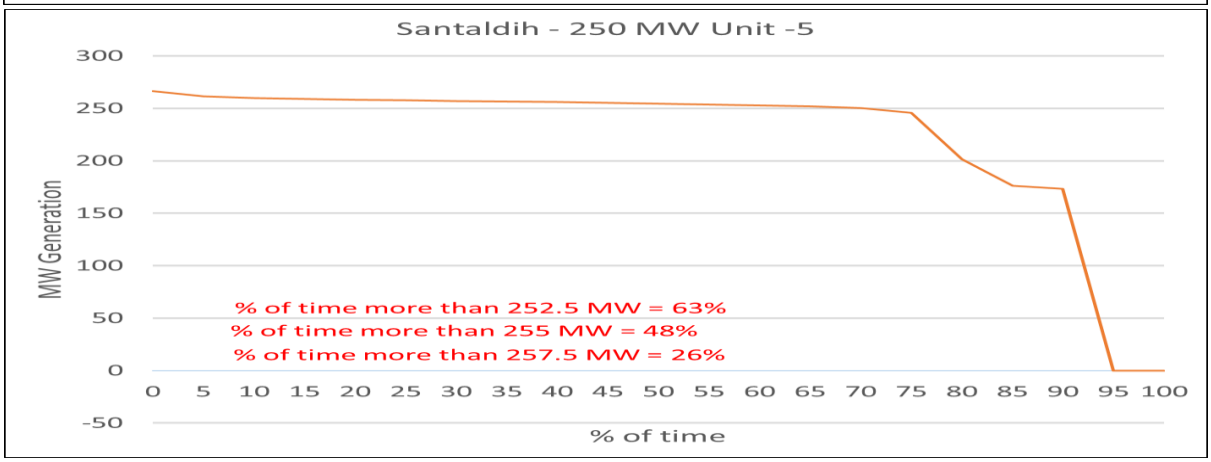


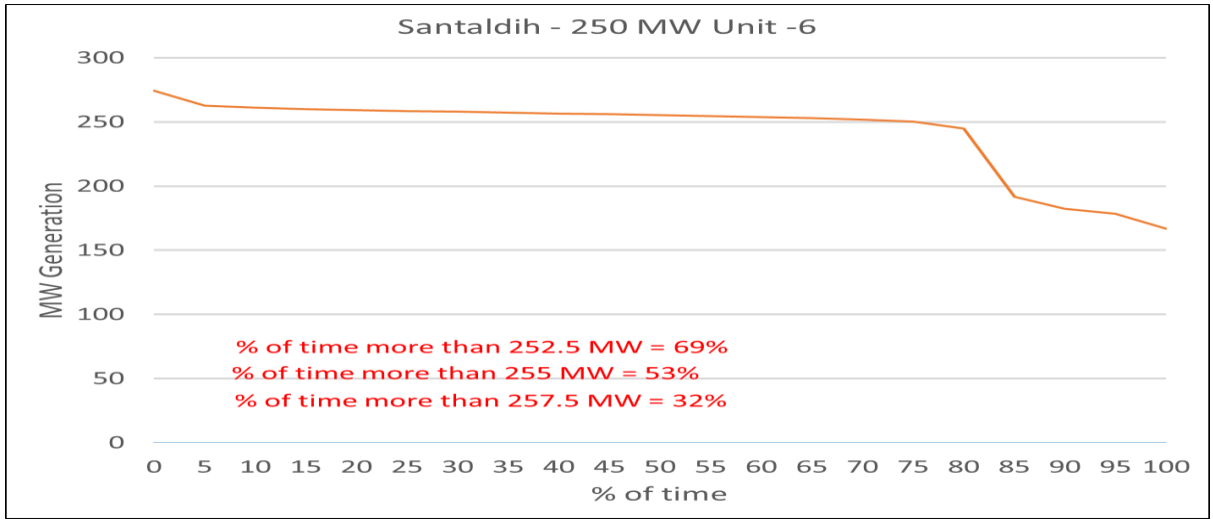


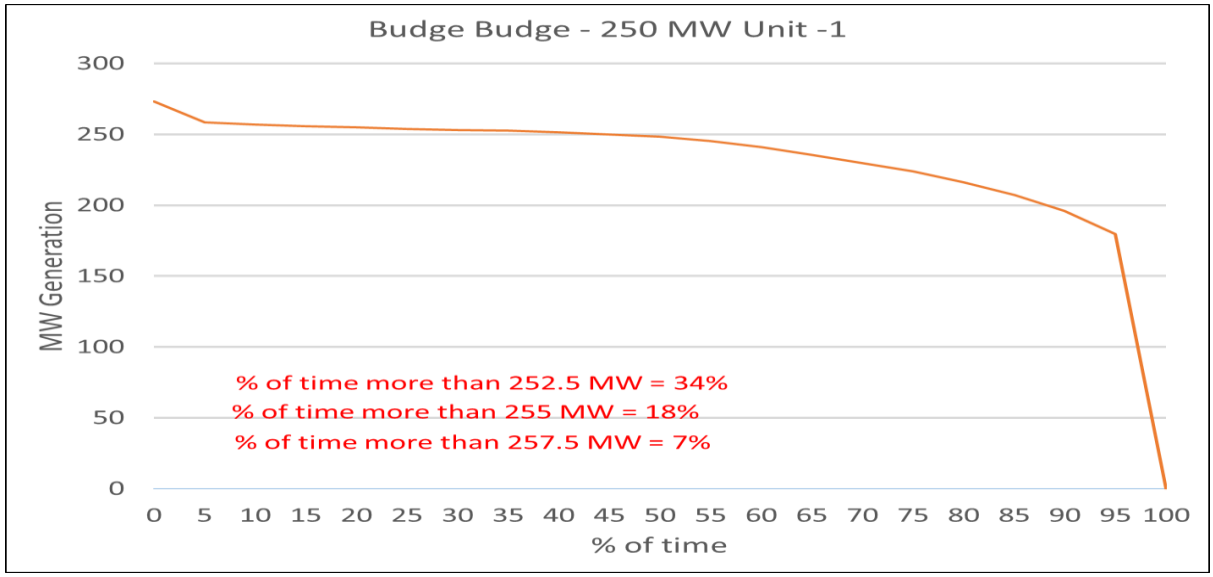


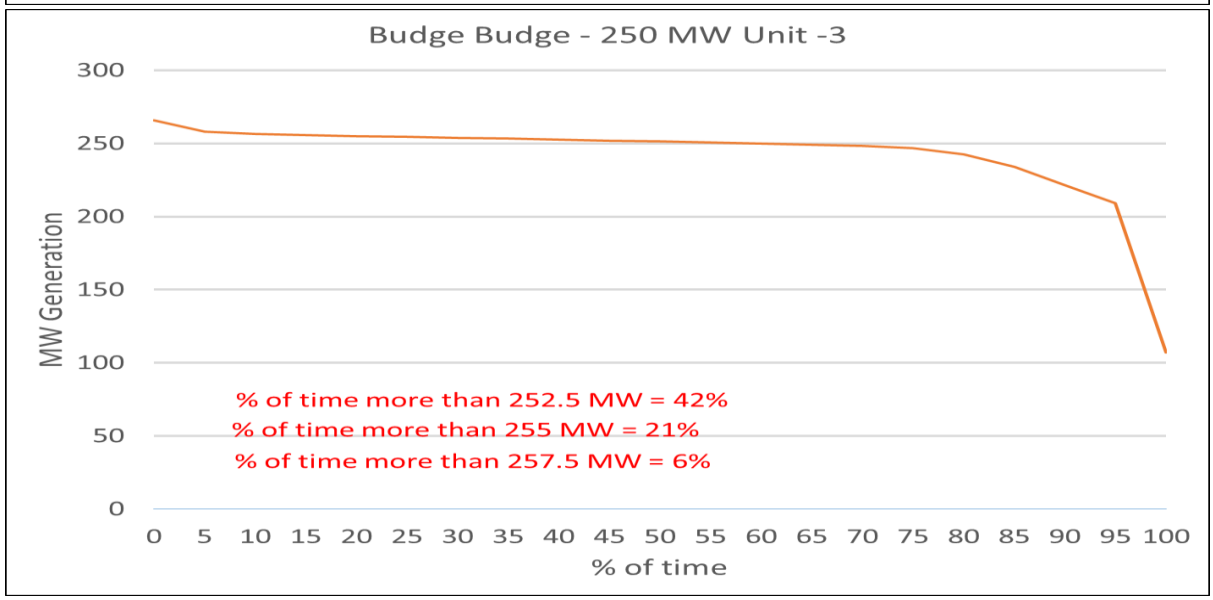

Bakreswar - 210 MW Unit -4
MW Generation
% of time
% of time more than 212.1 MW = 32%
% of time more than 214.2 MW = 19%
% of time more than 216.3 MW = 2%

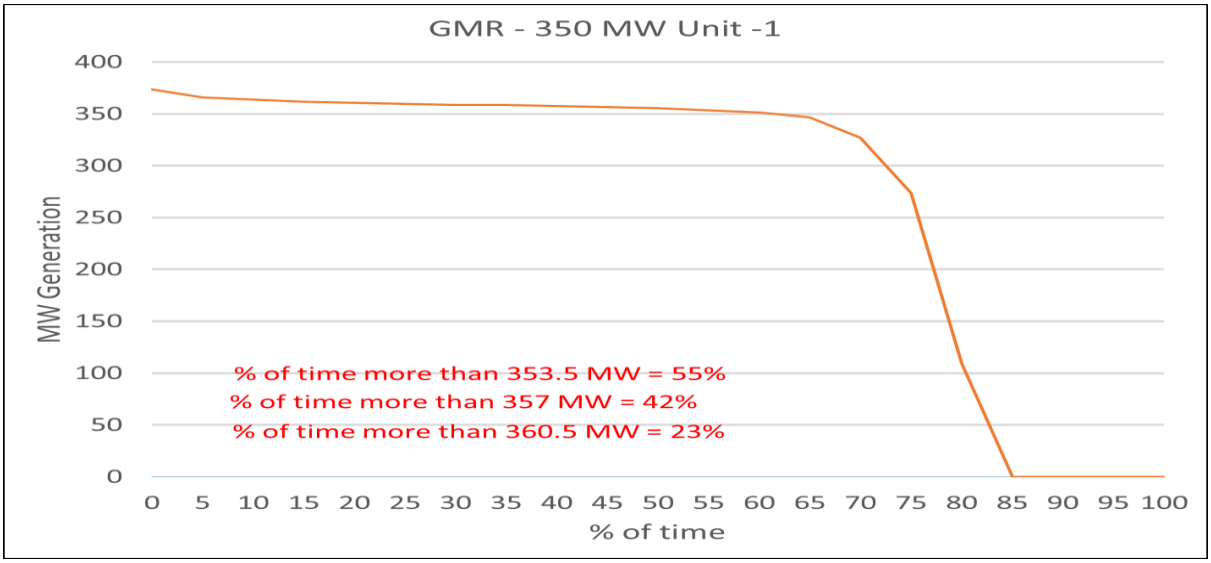

Bakreswar - 210 MW Unit -5
MW Generation
% of time
% of time more than 212.1 MW = 85%
% of time more than 214.2 MW = 85%
% of time more than 216.3 MW = 84%

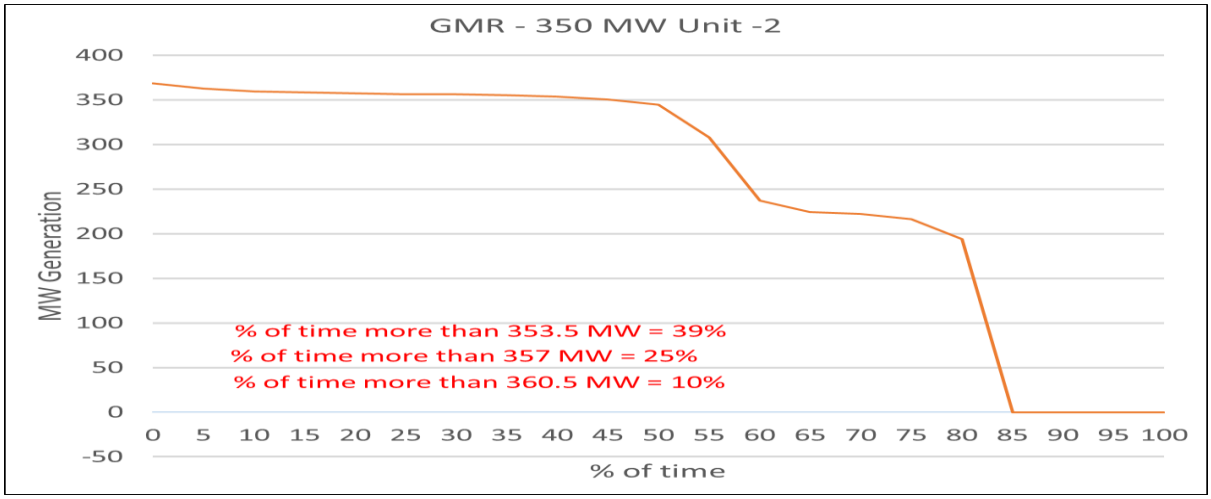

Santaldih - 250 MW Unit -5
MW Generation
% of time
% of time more than 252.5 MW = 63%
% of time more than 255 MW = 48%
% of time more than 257.5 MW = 26%

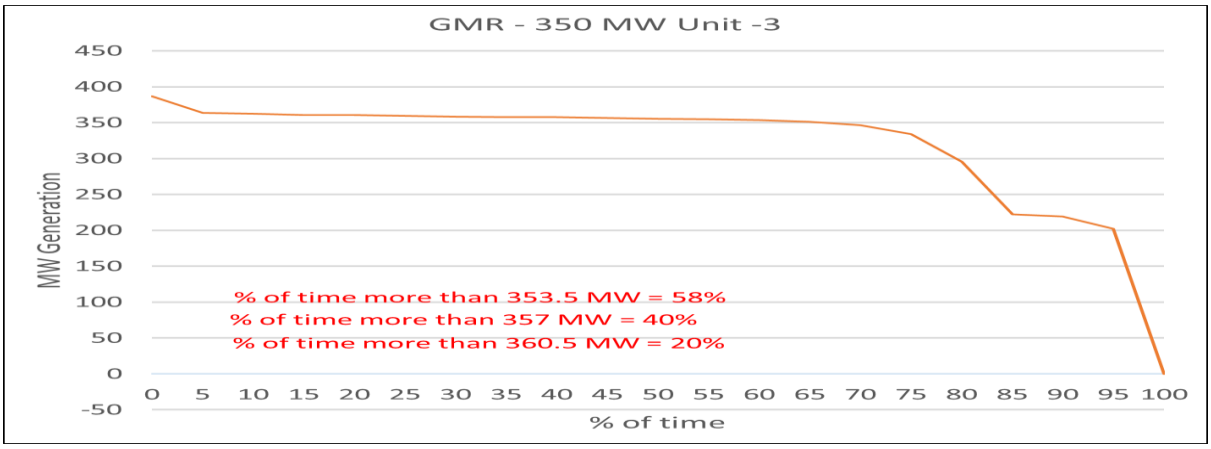

Santaldih - 250 MW Unit -6
MW Generation
300
250
200
150
100
50
0
% of time more than 252.5 MW = 69%
% of time more than 255 MW = 53%
% of time more than 257.5 MW = 32%
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
% of time

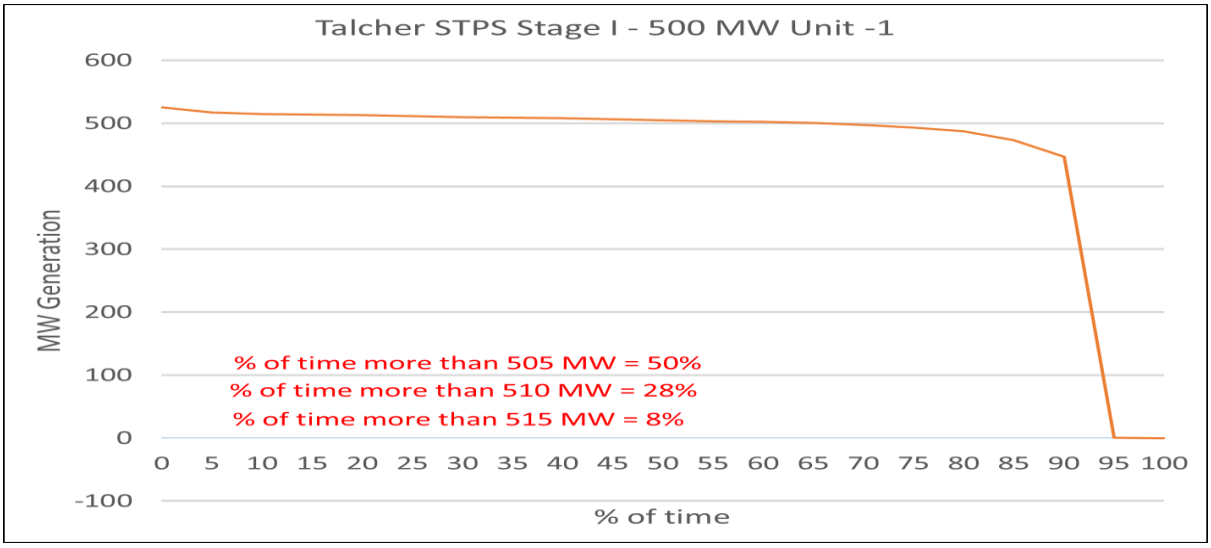

Budge Budge - 250 MW Unit -1
MW Generation
300
250
200
150
100
50
0
% of time more than 252.5 MW = 34%
% of time more than 255 MW = 18%
% of time more than 257.5 MW = 7%
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
% of time

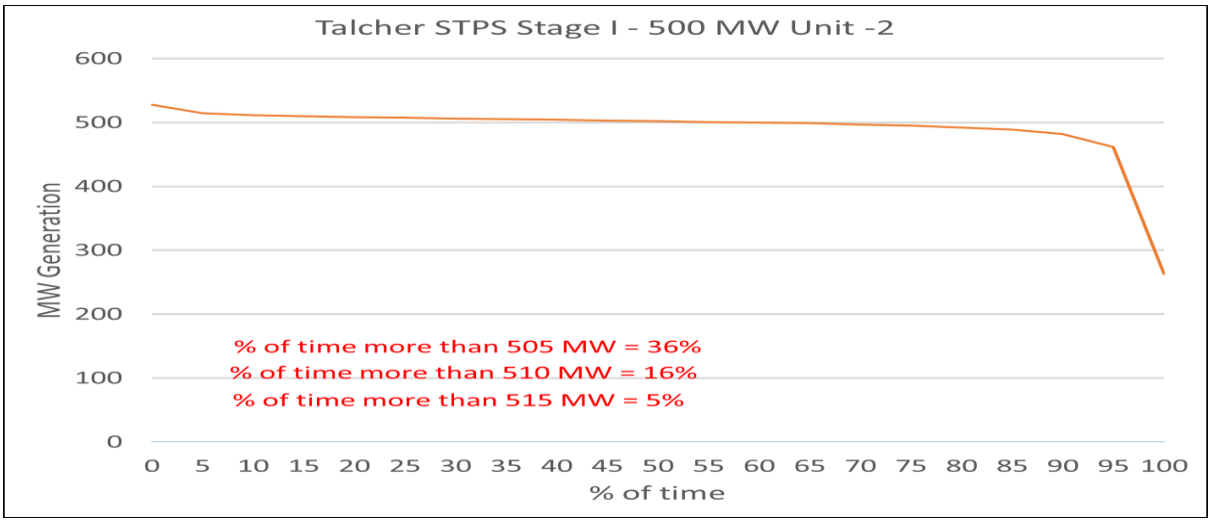

Budge Budge - 250 MW Unit -3
MW Generation
300
250
200
150
100
50
0
% of time more than 252.5 MW = 42%
% of time more than 255 MW = 21%
% of time more than 257.5 MW = 6%
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
% of time


GMR - 350 MW Unit -1
MW Generation
400
350
300
250
200
150
100
50
0
% of time more than 353.5 MW = 55%
% of time more than 357 MW = 42%
% of time more than 360.5 MW = 23%
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
% of time


GMR - 350 MW Unit -2
MW Generation
400
350
300
250
200
150
100
50
0
-50
% of time more than 353.5 MW = 39%
% of time more than 357 MW = 25%
% of time more than 360.5 MW = 10%
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
% of time


GMR - 350 MW Unit -3
MW Generation
450
400
350
300
250
200
150
100
50
0
-50
% of time more than 353.5 MW = 58%
% of time more than 357 MW = 40%
% of time more than 360.5 MW = 20%
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
% of time


Talcher STPS Stage I - 500 MW Unit -1
MW Generation
% of time
% of time more than 505 MW = 50%
% of time more than 510 MW = 28%
% of time more than 515 MW = 8%


Talcher STPS Stage I - 500 MW Unit -2
MW Generation
% of time
% of time more than 505 MW = 36%
% of time more than 510 MW = 16%
% of time more than 515 MW = 5%

Annexure-C5

Date of PFR testing scheduled /completed for generating stations in ER

Sr. No	Station	Generating Unit	Test schedule	Remarks
1	TALCHER STAGE 2	3	Unit 3 - 5: 23-11-2020 to 28-11-2020	Testing for unit 6 yet to be conducted
2		4		
3		5		
4		6		
5	Farakka	2	01-02-2021 to 10-01-2021	Testing completed
6		3		
7		4		
8		5		
9		6		
10	Kahalgaon	1	August'21	Testing completed for Unit 1
11		5		
12		6		
13		7		
14	Barh	4	18-02-2021 to 21-02-2021	Scheduled
15		5		
16	Teesta V	1	07-01-2021 - 08-01-2021	Testing completed
17	Teesta III	1	30-01-2021 - 10-02-2021	Testing completed
18		2		
19		3		
20		4		
21		5		
22		6		
23	Dikchu	1	Unit#1: 6th & 7th April' 21 Unit#2: 8th & 9th April' 21	Scheduled
24		2		
25	MPL	1	-	Postponed due to some technical issue
26		2		
27	GMR	1	August 21	Testing completed
28		2		
29		3		
30	JITPL	1	August 21	Scheduled
31		2		
32		3		
33	NPGCL	1	August'21	Testing completed
34	BRBCL	2& 3	1st Week of August'21	Testing completed
35	APNRL	1 & 2	July-August'21	Testing completed

Annexure-C6

Power Plant	Unit No	PSS tuned (Yes/No)	PSS in Service (Yes/No)	Last PSS Tuning Date	Whether Done in Last 3 Years	Whether Next to be planned	Planned Next PSS Tuning
West Bengal							
Kolaghat-WBPDCL	1	No	Yes	Long Back	No	Yes	Under retirement
Kolaghat-WBPDCL	2	No	Yes	Long Back	No	Yes	Under retirement
Kolaghat-WBPDCL	3	No	Yes	Long Back	No	Yes	When Unit will be on Bar
Sagardighi-WBPDCL	2	No	No	Long Back	No	Yes	When Unit will be on Bar
Bakreshwar-WBPDCL	2	Yes	Yes	2019	Yes	Yes	Retuning to be done as from plot response is not good
Bakreshwar-WBPDCL	3	Yes	Yes	2019	Yes	Yes	Retuning to be done as from plot response is not good
Bakreshwar-WBPDCL	4	Yes	Yes	2019	Yes	Yes	Retuning to be done as from plot response is not good
Bakreshwar-WBPDCL	5	Yes	Yes	2019	Yes	Yes	Retuning to be done as from plot response is not good
DPL	7	No	No	N.A	No	Yes	Planned in March 2021
DPL	8	No	Yes	No	No Detail	Yes	To be updated by WBPDCL/DPL
PPSP	1	No	Yes	2009	No	Yes	To be updated by WBSEDCL
PPSP	2	No	Yes	2009	No	Yes	To be updated by WBSEDCL
PPSP	3	No	Yes	2009	No	Yes	To be updated by WBSEDCL
PPSP	4	No	Yes	2009	No	Yes	To be updated by WBSEDCL
TLDP III	4 x 33			No Detail	No Detail	Yes	To be updated by WBSEDCL
TLDP IV	4 X 44			No Detail	No Detail	Yes	To be updated by WBSEDCL
CESC							
Budge Budge-CESC	1	Yes	Yes	2015	No	Yes	2021-22
Budge Budge-CESC	2	Yes	Yes	2015	No	Yes	2021-22
DVC							
Bokaro B 210 MW	3				No Detail	Yes	Unit Is out of Service
Mejia-DVC	4	Yes	Yes	2009	No	Yes	Jun-21
Raghunathpur-DVC	1	No	No		No Detail	Yes	Will be done after AOH
Raghunathpur-DVC	2	No	No		No Detail	Yes	Jun-21
Koderma-DVC	1	Yes	Yes	2013	No	Yes	Completed
Waria	4	Yes	Yes	2008	No	Yes	Unit Is out of Service
ISGS							
Kahalgaon NTPC	1	Yes	Yes	2017	Yes	Yes	Apr-21
Kahalgaon NTPC	2	Yes	Yes	2018	Yes	Yes	April 2021 (During AOH)
Kahalgaon NTPC	3	Yes	Yes	2016	Yes	Yes	Jul-21
Kahalgaon NTPC	4	Yes	Yes	2015	No	Yes	Mar-21

Kahalgaon NTPC	6	Yes	Yes	2009	No	Yes	Mar-21
Talcher Stage 2	3	Yes	Yes	2016	Yes	Yes	Completed
Talcher Stage 2	4	Yes	Yes	No Details	No Details	Yes	Completed
Talcher Stage 2	5	Yes	Yes	No Details	No Details	Yes	Completed
Talcher Stage 2	6	Yes	Yes	2016	Yes	Yes	Completed
Barh NTPC	4			2015		Yes	In Next AOH
Barh NTPC	5			During Unit commissioning		Yes	June 2021 (AOH)
Teesta V	1	Yes	Yes	2008	No	Yes	Jun-21
Teesta V	2	Yes	Yes	2008	No	Yes	Jun-21
Teesta V	3	Yes	Yes	2008	No	Yes	Jun-21
BRBCL	1	No	Yes	Vendor to Do	No	Yes	Jun-21
BRBCL	2	Yes	Yes	2019	Yes	Yes	Jun-21
BRBCL	3	No	Yes	Vendor to Do	No	Yes	Jun-21
KBUNL	1	Yes	Yes	2014	No	Yes	2021-22
KBUNL	2	Yes	Yes	2014	No	Yes	2021-22
KBUNL	3	Yes	Yes	Not Available	No	Yes	2021-22
KBUNL	4	Yes	Yes	Not Available	No	Yes	2021-22
Rangit	3 x 20			Not Available	No	Yes	To be updated by NHPC
IPP							
Jorethang	1	Yes	Yes	2015	No	Yes	Apr-21
Jorethang	2	Yes	Yes	2015	No	Yes	Apr-21
ADHUNIK	1	Yes	YES	2013	No	Yes	Aug-21
ADHUNIK	2	Yes	YES	2013	No	Yes	Aug-21
JITPL	1	Yes	Yes	2016	Yes	Yes	Jul-21
JITPL	2	Yes	Yes	2016	Yes	Yes	Jul-21
GMR	1	Yes	Yes	2013	No	Yes	May-21
GMR	2	Yes	Yes	2013	No	Yes	May-21
GMR	3	Yes	Yes	2013	No	Yes	May-21
Orissa							
IB TPS	1	Yes	Yes	2011	No	Yes	Mar'2021
IB TPS	2	Yes	Yes	2012	No	Yes	Mar'2021
Upper Indravati	1	Yes	No	2015	No	Yes	To be updated by OHPC
Upper Indravati	2	Yes	No	2015	No	Yes	To be updated by OHPC
Upper Indravati	3	Yes	No	2000	No	Yes	To be updated by OHPC
Upper Indravati	4	Yes	No	2001	No	Yes	To be updated by OHPC
Balimela	1 (60 MW)			No detail		Yes	To be updated by OHPC
Balimela	2 (60 MW)			No detail		Yes	To be updated by OHPC
Balimela	3 (60 MW)	No	No	Not tuned	No	Yes	To be updated by OHPC
Balimela	4 (60 MW)	No	No	Not tuned	No	Yes	To be updated by OHPC
Balimela	5 (60 MW)	No	No	Not tuned	No	Yes	To be updated by OHPC

Balimela	6 (60 MW)	No	No	Not tuned	No	Yes	To be updated by OHPC
Balimela	7 (75 MW)	No	No	Not tuned	No	Yes	To be updated by OHPC
Balimela	8 (75 MW)	No	No	Not tuned	No	Yes	To be updated by OHPC
Upper Kolab	1	Yes	Yes	2007	No	Yes	To be updated by OHPC
Upper Kolab	2	Yes	Yes	2007	No	Yes	To be updated by OHPC
Upper Kolab	3	Yes	Yes	2007	No	Yes	To be updated by OHPC
Upper Kolab	4	Yes	Yes	2007	No	Yes	To be updated by OHPC
Rengali	1	Yes	Yes	Not tuned	No	Yes	To be updated by OHPC
Rengali	2	Yes	Yes	Not tuned	No	Yes	To be updated by OHPC
Rengali	3	Yes	Yes	Not tuned	No	Yes	To be updated by OHPC
Rengali	4	Yes	Yes	Not tuned	No	Yes	To be updated by OHPC
Rengali	5	No	Yes	Not tuned	No	Yes	To be updated by OHPC
Sterlite	4 X 600			No detail		Yes	To be updated by SLDC Orissa
Jharkhand							
Tenughat	1	Yes	Yes	2017	Yes	Yes	No report has been submitted. So tuning to be planned
Tenughat	2	Yes	Yes	2017	Yes	Yes	No report has been submitted. So tuning to be planned
Subarnrekha	2 X 65					Yes	To be updated
Bihar							
BTPS	6 (110)					Yes	To be updated by BSPGCL
BTPS	7 (110)					Yes	To be updated by BSPGCL
BTPS	8					Yes	To be updated by BSPGCL
BTPS	9					Yes	To be updated by BSPGCL
Bhutan							
Tala	1	No	Yes			Yes	To be updated by BPC
Tala	2	No	Yes			Yes	To be updated by BPC
Tala	3	No	Yes			Yes	To be updated by BPC
Tala	4	No	Yes			Yes	To be updated by BPC
Tala	5	No	Yes			Yes	To be updated by BPC
Tala	6	No	Yes			Yes	To be updated by BPC
Chukha	1	No	Yes	2005	No	Yes	To be updated by BPC
Chukha	2	No	Yes	2005	No	Yes	To be updated by BPC
Chukha	3	No	Yes	2005	No	Yes	To be updated by BPC
Chukha	4	No	Yes	2005	No	Yes	To be updated by BPC
Mangdechu	1	No	Yes			Yes	To be updated by BPC
Mangdechu	2	No	Yes			Yes	To be updated by BPC
Mangdechu	3	No	Yes			Yes	To be updated by BPC
Mangdechu	4	No	Yes			Yes	To be updated by BPC

Annexure - C7.1

SUMMARY OF RRAS CHARGE RECEIPT AND PAYMENT STATUS

BILL UPTO 05-09-2021 (W-23 of 2021-2022)

Last Payment Disbursement Date -15.09.21

Figures in Rs. Lakhs

CONSTITUENTS	Receivable	Received	Payable	Paid	Outstanding
NTPC	4924.41501	3640.41531	2290.43477	967.40031	**-39.03476**
MPL	402.52903	258.60505	611.43813	455.22695	**-12.2872**
BRBCL	958.88074	873.72469	81.22715	17.72635	**21.65525**
KBUNL	372.91767	128.91582	824.17211	555.32384	**-24.84642**
NPGC	358.6367	279.25994	341.60667	229.73287	**-32.49704**
TOTAL	**7017.37915**	**5180.92081**	**4148.87883**	**2225.41032**	**-87.01017**

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

SUMMARY OF AGC CHARGE RECEIPT AND PAYMENT STATUS

BILL UPTO 05-09-2021 (W-23 of 2021-2022)

Last Payment Disbursement Date - 15-09-2021

Figures in Rs. Lakhs

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)
NTPC	299.85455	183.53351	292.90065	292.90065	**116.32104**
NHPC	3.09676	2.77379	3.41016	3.4089	**0.32171**
MPL	408.82206	187.6179	21.84432	21.84432	**221.20416**
TOTAL	**711.77337**	**373.92520**	**318.15513**	**318.15387**	**337.84691**

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

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 31.12.16)**	**90040.05774**		
2	Reactive Energy Charge	248.26904	31.07.17	Reactive Charges_17-18
3	Reactive Energy Charge	128.44284	29.08.17	Reactive Charges_17-18
4	Reactive Energy Charge	103.22685	26.09.17	Reactive Charges_17-18
5	Reactive Energy Charge	249.14078	31.10.17	Reactive Charges_17-18
6	Reactive Energy Charge	172.20693	30.11.17	Reactive Charges_17-18
7	Reactive Energy Charge	200.00000	15.12.17	Reactive Charges_17-18
8	Reactive Energy Charge	100.00000	05.01.18	Reactive Charges_17-18
9	Reactive Energy Charge	558.45339	06.02.18	Reactive Charges_17-18
10	Reactive Energy Charge	171.95546	06.03.18	Reactive Charges_17-18
11	Reactive Energy Charge	129.35497	04.04.18	Reactive Charges_17-18
12	Reactive Energy Charge	126.21494	07.05.18	Reactive Charges_18-19
13	Reactive Energy Charge	183.31081	06.06.18	Reactive Charges_18-19
14	Reactive Energy Charge	215.58816	05.07.18	Reactive Charges_18-19
15	Reactive Energy Charge	176.54245	03.08.18	Reactive Charges_18-19
16	Reactive Energy Charge	39.54556	06.09.18	Reactive Charges_18-19
17	Reactive Energy Charge	34.03973	01.10.18	Reactive Charges_18-19
18	Reactive Energy Charge	74.57236	05.11.18	Reactive Charges_18-19
19	Reactive Energy Charge	40.66623	04.12.18	Reactive Charges_18-19
20	Reactive Energy Charge	236.89035	02.01.19	Reactive Charges_18-19 & 15-16
21	Reactive Energy Charge	300.04546	05.02.19	Reactive Charges_18-19 & 15-16
22	Reactive Energy Charge	233.27998	05.03.19	Reactive Charges_18-19
23	Reactive Energy Charge	105.79202	04.04.19	Reactive Charges_18-19
24	Reactive Energy Charge	287.48448	03.05.19	Reactive Charges_18-19 & 19-20
25	Reactive Energy Charge	129.69559	03.06.19	Reactive Charges_19-20
26	Reactive Energy Charge	207.83840	04.07.19	Reactive Charges_19-20
27	Reactive Energy Charge	94.91703	02.08.19	Reactive Charges_19-20
28	Reactive Energy Charge	188.53681	02.09.19	Reactive Charges_19-20
29	Surplus DSM amount transferred	32210.51998	24.09.19	DSM Charges_19-20
30	Reactive Energy Charge	173.06004	01.10.19	Reactive Charges_19-20
31	Reactive Energy Charge	273.15002	01.11.19	Reactive Charges_19-20
32	Reactive Energy Charge	401.09564	04.12.19	Reactive Charges_19-20
33	Reactive Energy Charge	252.53573	02.01.20	Reactive Charges_19-20
34	Reactive Energy Charge	148.65520	07.02.20	Reactive Charges_19-20
35	Reactive Energy Charge	205.22437	04.03.20	Reactive Charges_19-20
36	Bank interest from Reactive acct	0.21706	03.04.20	Bank interest from Reactive acct
37	Reactive Energy Charge	843.03166	03.06.20	Reactive Charges_19-20 & 20-21
38	Reactive Energy Charge	507.80481	07.07.20	Reactive Charges_17-18,18-19 & 20-21
39	Reactive Energy Charge	309.41068	06.08.20	Reactive Charges_17-18,18-19 & 20-21
40	Reactive Energy Charge	83.23955	02.09.20	Reactive Charges_19-20 & 20-21
41	Bank interest of DSM A/C-TDS por	251.65235	18.09.20	Bank interest TDS portion transferred from POSOCO,CC
42	Bank interest of DSM A/C-TDS por	15.64788	22.09.20	Bank interest TDS portion transferred from POSOCO,CC
43	Reactive Energy Charge	118.85979	06.10.20	Reactive Charges_ 20-21
44	Reactive Energy Charge	101.42971	04.11.20	Reactive Charges_ 20-21
45	Reactive Energy Charge	82.34791	04.12.20	Reactive Charges_ 20-21
46	Reactive Energy Charge	500.95333	06.01.21	Reactive Charges of 19-20 & 20-21
47	Reactive Energy Charge	92.51486	03.02.21	Reactive Charges of 19-20 & 20-21
48	Reactive Energy Charge	50.22963	04.03.21	Reactive Charges of 19-20 & 20-21
49	Reactive Energy Charge	32.15331	07.04.21	Reactive Charges of 19-20 & 20-21
50	Reactive Energy Charge	39.59760	05.05.21	Reactive Charges of 19-20 & 20-21
51	Reactive Energy Charge	18.96069	01.06.21	Reactive Charges of 20-21 & 21-22
52	Reactive Energy Charge	392.24613	12.07.21	Reactive Charges of 20-21 & 21-22
53	Reactive Energy Charge	214.22298	22.07.21	Reactive Charges 20-21
54	Addl. Dev	392.94201	25.08.21	DSM Charges of 19-20 received from Jharkhand
55	Addl. Dev	5.99326	03.09.21	DSM Charges of 19-20 received from Jharkhand
56	Reactive Energy Charge	330.73064	09.09.21	Reactive Charges 21-22
	Total	**134958.85795**		

Draft DSM Regulation'2021

Draft DSM Regulation'2021:

Objective:

- These regulations seek to ensure, through a commercial mechanism that users of the grid do not deviate from and adhere to their schedule of drawl and injection of electricity in the interest of security and stability of the grid.

Scope :

- These regulations shall be applicable to all grid connected regional entities and other entities engaged in inter-state purchase and sale of electricity.

Draft DSM Regulation'2021:

- **Deviation in a time block for general sellers**

Deviation-general seller = [(Actual injection) – (Scheduled generation)]

Deviation(in %) = 100 x [(Actual injection) – (Scheduled generation)] / [(Scheduled generation)].

- **Deviation in a time block for WS sellers:**

Deviation-WS seller (in MWh) = [(Actual Injection) – (Scheduled generation)]

Deviation-WS seller (in %) = 100 x [(Actual Injection) – (Scheduled generation)] / [(Available Capacity)]

- **Deviation in a time block for buyers :**

Deviation- buyer (in MWh) = [(Actual drawal) – (Scheduled drawal)].

Deviation- buyer (in %) = 100 x [(Actual drawal) – (Scheduled drawal)] / [(Scheduled drawal)]

Overview:

- DSM Rate delinked from Frequency of the grid.
- Normal rate for Charges of Deviation linked to blockwise Weighted Avg Ancillary Service for all the regions for that time block.
- For one year, Normal rate of Charge of Deviation will be max(Wt Avg ACP of DAM of all PXs, Wt Avg ACP of RTM of all PXs, Wt Avg Ancillary Service charges of all the Region).
- Volume limit for buyer/seller for block wise violation.
- DSM Charge always payable to Pool.
- Payable for over-drawl by buyer.
- Payable for under-injection/Over Injection by seller.

Provisions of Draft DSM Regulation'2021(1/4):

Entity	Charges for deviation payable to Deviation and Ancillary Service Pool Account	
Seller	Over Injection	Under Injection
For a general seller other than an RoR generating station or a generating station based on municipal solid waste	(i) Zero up to 2% Deviation-general seller (in %); (ii) @ 10% of the normal rate of charges for deviation beyond 2% Deviation-general seller (in %)	(i) @ normal rate of charges for deviation up to 2% Deviation-general seller (in %); (ii) @ 110% of the normal rate of charges for deviation beyond 2% Deviation-general seller (in %).
For a general seller being an RoR generating station	Zero	(i) @ normal rate of charges for deviation up to 12% Deviation-general seller (in %); (ii) @ 110% of the normal rate of charges for deviation beyond 12% Deviation-general seller (in %)

Provisions of Draft DSM Regulation'2021(2/4):

Entity	Charges for deviation payable to Deviation and Ancillary Service Pool Account	
Seller	Over Injection	Under Injection
For a general seller being a generating station based on municipal solid waste	Zero	(i) Zero up to 20% Deviation-general seller (in %); (ii) @ normal rate of charges for deviation beyond 20% Deviation-general seller (in %). limit
For WS seller	Zero	(i) Zero up to 10% Deviation-WS seller (in %); (ii) @ 10% of the normal rate of charges for deviation beyond 10% Deviation-WS seller (in %): Provided that such seller shall pay back to the Deviation and Ancillary Service Pool Account for the total shortfall in energy against its schedule in any time block due to under injection, (a) at the contract rate at which it has been paid based on schedule, or (b) in the absence of a contract rate at the rate of the Area Clearing Price of the Day Ahead Market for the respective time block.

Provisions of Draft DSM Regulation'2021(3/4):

Entity	Charges for deviation payable to Deviation and Ancillary Service Pool Account	
Buyer	Under Drawl	Over Drawl
Buyer (other than the buyer with schedule less than 400 MW and the RE rich State)	Zero	(i) @ normal rate of charges for deviation up to 12% Deviation-buyer (in %) or 150 MW Deviation-buyer (in MWh) in a time block, whichever is lower; (ii) @110% of normal rate of charges for deviation beyond the above limit.
Buyer (with schedule up to 400 MW)	Zero	(i) @ normal rate of charges for deviation up to 12% Deviation-buyer (in %); (ii) @110% of normal rate of charges for deviation beyond the above limit.
Buyer (being an RE Rich State)	Zero	(i) @ normal rate of charges for deviation up to 12% Deviation-buyer (in %) or 250 MW Deviation-buyer (in MWh) in a time block, whichever is lower; (ii) @110% of normal rate of charges for deviation beyond the above limit

Provisions of Draft DSM Regulation'2021(4/4):

Infirm Power & Start Up Power
The charges for deviation for injection of infirm power shall be zero.
The charges for deviation for drawl of start-up power before COD of a generating unit or for drawl of power to run the auxiliaries during shut-down of a generating station shall be payable at the normal rate of charges for deviation.

Inter-Regional/Cross Boarder
The charges for inter-regional deviation and for deviation in respect of cross-border transactions, caused by way of over-drawl or under-injection shall be payable at the normal rate of charges for deviation.

Comparison(1 /2):

	Present DSM Regulation	Proposed DSM Regulation
1. Frequency	Frequency band tightened, range being 49.85 Hz to 50.10 Hz	Frequency is delinked from DSM Rate.
2. DSM rate	DSM rate vector will have a dynamic daily slope due to linking with ACP @50Hz	DSM Rate is linked to Wt. Avg Ancillary Service of all region in given time block.
3. DSM Charge	DSM Charge receivable for Under drawl/Over Injection & Payable for Over drawl/Under Injection	Always payable
4. Cap Rate	Fixed Cap rate of 303.04 paise/Unit for all generating stations.	No cap rate for buyer/seller
5. Additional DSM Charge	ADC for violation of volume limit and Sign clause	Additional charge beyond Volume limit.

Comparison(2/2):

	Present DSM Regulation	Proposed DSM Regulation
6. Sign Clause	ADC for violation of sign clause	No provisions for sign violation
7. Payment Settlement time	Payment to be made within 10 days of issue of statement by RPC with additional 2 days.	Payment to be made within 7 days of issue of statement by RPC.
8. PSDF Fund	Provision for transfer of surplus fund to PSDF fund	No provision for fund transfer.
9. Deficit in Pool Account	No provision	a. To be meet by Surplus of other region. b. RLDC Fees and charges

Thank you