



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत् मंत्रालय

Ministry of Power

पूर्वी क्षेत्रीय विद्युत् समिति

Eastern Regional Power Committee



सत्यमेव जयते

ONE EARTH • ONE FAMILY • ONE FUTURE

सं./No: ERPC/TCC&ERPCCOMMITTEE/2023/ 754

Date: 29.08.2023

सेवा में /To:

As per List

विषय:/Sub: Minutes of the 50th ERPC Meeting held on 11th August 2023 at Lonavala-reg

Sir/Madam,

The Minutes of the 50th ERPC Meeting held on 11th August'2023 at Aamby Valley City, Lonavala has been issued and uploaded on ERPC website(www.erpcc.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.

11 अगस्त, 2023 को आम्बी वैली सिटी, लोनावाला में आयोजित 50वीं ईआरपीसी बैठक का कार्यवृत्त जारी किया गया है और ईआरपीसी वेबसाइट (www.erpcc.gov.in) पर अपलोड किया गया है। ईआरपीसी के निर्णय के अनुसार, गो-ग्रीन पहल के रूप में बैठक के कार्यवृत्त की हार्ड प्रतियों का वितरण बंद कर दिया गया है।

Encl: As above

भवदीय Yours faithfully,

(एन.एस.मंडल)

29.8.2023

(एन.एस.मंडल)/ (N. S. Mondal)

सदस्य सचिव Member Secretary

ERPC Members

1. Chairperson, ERPC & Chairman, GRIDCO Ltd., Janpath, Bhubaneswar-751022.
2. Chairman-cum-Managing Director, Odisha Power Transmission Corporation Ltd., Janpath, Bhubaneswar- 751022.
3. Chairman-cum-Managing Director, OHPC Ltd., Orissa State Police Housing & Welfare Corporation Bldg. Vanivihar, Janpath, Bhubaneswar- 751022.
4. Managing Director, OPGC Ltd., Zone-A, 7th Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar-751023.
5. Chairman-cum-Managing Director, Jharkhand Urja Vikas Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
6. Chairman-cum-Managing Director, Jharkhand Urja Utpadan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
7. Managing Director, Jharkhand Urja Sancharan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
8. Managing Director, Jharkhand Bijli Vitaran Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi- 834004.
9. Managing Director, Tenughat Vidyut Nigam Ltd., Hinoo, Doranda, Ranchi – 834002
10. Chairman-cum- Managing Director, Bihar State Power Holding Company Ltd., Vidyut Bhavan, Bailey Road, Patna- 800001.
11. Managing Director, Bihar State Power Transmission Company Limited, Vidyut Bhavan, Bailey Road, Patna- 800001.
12. Managing Director, North Bihar Power Distribution Company Limited, Vidyut Bhavan, Bailey Road, Patna- 800001.
13. Chairman & Managing Director, West Bengal State Electricity Distribution Company Ltd., Vidyut Bhavan, 7th Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091.
14. Managing Director, West Bengal State Electricity Transmission Company Ltd., Vidyut Bhavan, 8th Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091.
15. Chairman & Managing Director, West Bengal Power Development Corporation Ltd., Bidyut Unnayan Bhavan, 3/C, Block LA, Sector-III, Bidhannagar, Kolkata-700098.
16. Principal Chief Engineer-cum-Secretary, Energy & Power Department, Govt. of Sikkim, Kazi Road, Gangtok – 737101, Sikkim.
17. Member (Finance), Damodar Valley Corporation, DVC Towers, VIP Road, Kolkata -700054.
18. Member (GO&D), Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
19. Director (Commercial), NTPC Ltd., Core-7, SCOPE Complex, Lodhi Road, New Delhi -110003.
20. Director (Technical), NHPC Ltd., NHPC Office Complex, Sector-33, Faridabad, Haryana-121003.
21. Director (Operations), Power Grid Corporation of India Ltd., Saudamini, Plot No. 2, Sector-29, Gurgaon-122001.
22. Executive Director, ERLDC, GRID-INDIA, 14 Golf Club Road, Tollygunge, Kolkata – 700033.
23. Chairman-cum- Managing Director, GRID-INDIA, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016
24. COO, CTUIL, Saudamini, 1st Floor, Plot-1, Sector-29, Gurgaon-122001
25. Director (C&O), PTC India Ltd., 2nd floor, NBCC Tower, 15 Bhikaji Cama Place, New Delhi- 110066.
26. Chief Executive Officer, NTPC Vidyut Vyapar Nigam Limited, SCOPE Complex, Core-3, 7th Floor, Lodhi Road, New Delhi-110003.
27. Managing Director, Tata Power Trading Company Limited, B12/13, 2nd Floor, Shatabdi Bhavan, Sector-4, Noida-201301, Uttar Pradesh.
28. Managing Director (Generation), CESC Ltd., CESC House, 1 Chowringhee Square, Kolkata- 700001.
29. Chief Executive Officer, Maithon Power Ltd., Village-Dambhui, P.O. Barbindia, Dist.-Dhanbad, Jharkhand- 828205.
30. VP(Plant Head), GMR Kamalanga Energy Ltd., AT/PO-Kamalanga, PS-Kantabania, Via- Meramundali, Dist.- Dhenkanal, Odisha-759121.
31. Chief Executive Officer, Jindal India Thermal Power Limited, Plot No-12, Sector-B1, Local Shopping Complex, Vasant Kunj, New Delhi-110070.
32. Managing Director, Teesta Urja Limited, 2nd Floor, Vijaya Building, 17 Barakhamba Road, New Delhi- 110001.
33. CEO, BRBCL, Nabinagar, Dist- Aurangabad, Bihar-82430
34. CEO, Cross Boarder Power Transmission Limited, Ambience Mall Complex, Gurgaon, Haryana-122001
35. MD, Tata Steel UISL, Jamshedpur, Jharkhand-831001

TCC Members

1. Chairperson, TCC & Managing Director, GRIDCO Ltd., Janpath, Bhubaneswar-751022.
2. Director (Operation), Odisha Power Transmission Corporation Ltd., Janpath, Bhubaneswar - 751022.
3. Director (Operation), Orissa Power Generation Corporation Ltd, Zone-A, 7th floor, Fortune Towers, Chandrasekharpur, Bhubaneswar-751023.
4. Director (Operation), Orissa Hydro Power Corporation Ltd, Orissa State Police Housing & Welfare Corporation Building, Vanivihar Chowk, Janpath, Bhubaneswar-751022.
5. Executive Director (Tech), Jharkhand Urja Utpadan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
6. Director (Project), Jharkhand Urja Sancharan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
7. Chief Engineer (S&D-JBVNL), Jharkhand Urja Vikas Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
8. Chief Engineer (S&D), Jharkhand Bijli Vitaran Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
9. General Manager, Tenughat TPS, Lalpania, Dist- Bokaro, Jharkhand-829149.
10. Director (Tech.), Bihar State Power Generation Company Limited, Vidyut Bhavan, Bailey Road, Patna-800001.
11. Chief Engineer (Commercial), Bihar State Power Holding Company Ltd., Vidyut Bhavan, Bailey Road, Patna-800001.
12. Director (Project), North Bihar Power Distribution Company Limited, Vidyut Bhavan, Bailey Road, Patna-800001.
13. Director (Operations), West Bengal State Electricity Transmission Company Ltd., Vidyut Bhavan, 8th Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091.
14. Director (R&T), West Bengal State Electricity Distribution Company Ltd., Vidyut Bhavan, 7th Floor, Block- DJ, Sector-II, Bidhannagar, Kolkata-700091.
15. Director (O&M), WBPDC, Bidyut Unnayan Bhavan, 3C, Block-LA, Sector-III, Bidhannagar, Kolkata-700098.
16. Principal Chief Engineer-II, Energy & Power Dept., Govt. of Sikkim, Kazi Road, Gangtok-737101.
17. Executive Director (Commercial), Damodar Valley Corporation, DVC Tower, VIP Road, Kolkata-700054.
18. Chief Engineer (GM), CEA, Sewa Bhawan, R.K. Puram, New Delhi-110066.
19. Regional Executive Director (ER-I), NTPC Ltd., 2nd floor, Lok Nayak Jai Prakash Bhawan, Dak Bunglow Chowk, Patna-800001.
20. Regional Executive Director (ER-II), NTPC Ltd., 3rd Floor, OLIC Building, Plot No.N-17/2, Nayapalli, Bhubaneswar-751012.
21. Executive Director (O&M), NHPC Ltd., NHPC Office Complex, Sector-33, Faridabad-121003, Haryana.
22. Executive Director (ER-I), Power Grid Corporation of India Ltd, Board Colony, Shastri Nagar, Patna-800023.
23. Executive Director (ER-II), Power Grid Corporation of India Ltd, CF-17, Action Area-I, Newtown, Rajarhat, Near Axis Mall, Kolkata-700091.
24. Executive Director (Odisha Project), Power Grid Corporation of India Ltd, Plot No-4, Unit 41, Niladri Vihar, Chandrasekharpur, Bhubaneswar, Odisha-751021.
25. Executive Director, ERLDC, GRID-INDIA, 14 Golf Club Road, Kolkata-700033.
26. Executive Director, National Load Dispatch Center, GRID-INDIA, B-9 Qutab Institutional Area, Katwaria Sarai, New Delhi-110016.
27. COO, CTUIL, Saudamini, 1st Floor, Plot-1, Sector-29, Gurgaon-122001
28. Executive Director (Marketing), PTC India Ltd., NBCC Tower, 15 Bhikaji Cama Place, New Delhi-110066.
29. Chief General Manager, NTPC Vidyut Vyapar Nigam Limited, SCOPE Complex, Core-3, 7th Floor, Lodhi Road, New Delhi-110003.
30. Head (Marketing), Tata Power Trading Company Limited, B-12/13, 2nd Floor, Shatabdi Bhavan, Sector-4, Noida-201301, Uttar Pradesh.
31. Vice President (System Operation), CESC Ltd, CESC House, 1 Chowringhee Square, Kolkata-700001.
32. Station Head & General Manager (O&M), Maithon Power Ltd., Village-Dambhui, P.O. Barbindia, Dist.-Dhanbad, Jharkhand-828205.
33. GM (Head-Electrical), GMR Kamalanga Energy Ltd., AT/PO-Kamalanga, PS-Kantabania, Via-Meramundali, Dist.-Dhenkanal, Odisha-759121.
34. Chief Operating Officer, Jindal India Thermal Power Limited, Plot No-12, Sector-B1, Local Shopping Complex, Vasant Kunj, New Delhi-110070.
35. Managing Director, Teesta Urja Limited, 2nd Floor, Vijaya Building, 17 Barakhamba Road, New Delhi-110001.
36. CEO, BRBCL, Nabinagar, Dist- Aurangabad, Bihar-82430
37. CEO, Cross Boarder Power Transmission Limited, Ambience Mall Complex, Gurgaon, Haryana-122001
38. MD, Tata Steel UISL, Jamshedpur, Jharkhand-831001

Non-Member Participants

1. Managing Director, DANS Energy Pvt Ltd, DLF Cyber City, Phase-II, GURGAON – 122 002
2. Director, Shiga Energy Pvt. Ltd., 5th Floor, DLF Building No. 8, Tower-C, DLF Cyber City, Phase-II, Gurgaon – 122002
3. CEO, Sneha Kinetic Power Projects Pvt.Ltd. #31 -A, Behind SNOD building, Deorali, Gangtok, Sikkim-737102
4. CEO, Rongnichu HEP, MBPCL, Sikkim-737102
5. Managing Director, Adhunik Power & Natural Resources Ltd., Lansdowne Towers, 5th Floor, 2/1A Sarat Bose Road, Kolkata-700020.
6. CEO, DMTCL, Sekura Energy Limited, Mumbai-400098
7. Senior Vice President, Teesta Valley Power Transmission Limited, New Delhi-110066
8. CEO, IndiGrid Limited, Mumbai-400079
9. CEO, Powerlinks Transmission Limited
- 10.CEO, Alipurdar Transmission Limited, 101, Part-III, G.I.D.C Estate, Gandhinagar, Gujrat-382028
- 11.CEO, SJVN Thermal Pvt Ltd, 169. Pataliputra Colony, Patna-800013
- 12.CEO, Ind-Bharath Energy (Utkal) Ltd, Jharsguda, Odisha-768211
- 13.Managing Director (Generation), Haldia Energy Limited

Special Invitee(s)

1. Shri. Chowna Mein, Hon'ble Dy. Chief Minister and I/C Power, Govt. of Arunachal Pradesh, Block No.2 5th Floor, A.P. Civil Secretariat, Itanagar-791111
2. Shri Ginko Lingi, Chairman, TCC, NERPC & Chief Engineer (P), TPMZ , Department of Power, Govt. of Arunachal Pradesh, Vidyut Bhawan, zero Point, Itanagar-791111
3. Shri K Vijayanand, Chairperson, SRPC, Chairman & Managing Director , Transmission Corporation of Andhra Pradesh Limited, Vidyut Soudha, Gunadala, Eluru Rd, Vijayawada, Andhra Pradesh 520004
4. Shri AKV Bhaskar, Chairperson TCC, Director (Transmission & Grid Management), Transmission Corporation of Andhra Pradesh Limited, Vidyut Soudha, Gunadala, Eluru Rd, Vijayawada, Andhra Pradesh 520004.
5. Mohammed Shayin, IAS, Chairperson, NRPC, Managing Director, HVPNL, Shakti Bhawan, C-4, sector-6, Panchkula-134109
6. Shri Sanjay Dubey, Chairman WRPC & Principal Secretary(Energy), Govt of M.P, 2, Vallabh Bhawan Annex, Mantralaya, Bhopal-462001
7. Shri Raghuraj Rajendran, Chairman-TCC & Managing Director MPPMCL, Block No-15, Shakti Bhawan, Vidyut Nagar, Rampur, Jabalpur-482008
8. Shri V.K.Singh, Member Secretary, NRPC, 18-A, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-110066
9. Shri Deepak Kumar, Member Secretary, WRPC, Plot No- F-3, MIDC Area, Marol, Opp. SEEPZ, Central Road, Andheri (East), Mumbai-40093
10. Shri Asit Singh, Member Secretary, SRPC, No.29, Race Course Cross Road, Bengaluru-560009.
11. Shri K B Jagtap, Member Secretary, NERPC, NERPC Complex, Dong Parmaw, Lapalang, Shillong-793006
12. Smt. Rishika Sharan, Member Secretary, NPC, CEA, New Delhi- 110066.
13. Chief Engineer, IT Division, CEA, Sewa Bhawan, R.K. Puram, New Delhi-110066
14. Director General, Department of Hydropower & Power Systems, Ministry of Economic Affairs, Post Box No.106, Thimpu, Bhutan
15. Managing Director, DGPC, Thimpu, Bhutan
16. CEO, Adani Power Jharkhand Limited, Adani House, Ahmedabad-382421
17. Shri B. B. Mehta, Director, SLDC, Bhubaneswar, Odisha
18. Smt Rita Chakraborty, Chief Engineer, SLDC, West Bengal
19. Shri A. K. Chaudhary, Chief Engineer, SLDC, Bihar
20. Shri D. P. Puitandi, GM, SLDC, DVC
21. Shri Arun Kumar, GM, SLDC, Jharkhand
22. Smt. Shova Thapa, Chief Engineer, SLDC, Sikkim



Government of India
Ministry of Power
Eastern Regional Power Committee

Minutes
of
50th Meeting
of
EASTERN REGIONAL POWER COMMITTEE

Date: 11.08.2023
Aamby Valley City, Lonavala,
Maharashtra

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EASTERN REGIONAL POWER COMMITTEE

MINUTES OF THE 50TH MEETING OF EASTERN REGIONAL POWER COMMITTEE

Date: 11.08.2023 at 10: 00 hrs

Place: Aamby Valley City, Maharashtra

In Chair: Shri Nikunja B. Dhal, IAS, Additional Chief Secretary, Department of Energy, Govt. of Odisha

Meeting was convened physically at Aamby Valley City, Lonavala, Maharashtra

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

Member Secretary, ERPC in his welcome address expressed his gratitude to Shri Nikunja B. Dhal, IAS, Additional Chief Secretary, Department of Energy, Govt. of Odisha for sparing his valuable time and for being present in the meeting despite his busy schedule. He further thanked the entire team of ERPC Secretariat for making such excellent arrangements for organizing the meeting at Lonavala. He also thanked other ERPC Members, TCC members, Special Invitees and other participants present in the meeting.

Shri Nikunja B Dhal, IAS, Additional Chief Secretary, Department of Energy, Govt of Odisha in his keynote address welcomed all the delegates to the 50th ERPC Meeting of the Eastern Regional Power Committee. He further extended his sincere gratitude to all the participants for their valuable contributions towards the development of the power sector in the region. He emphasized that through this meeting, various issues and challenges faced by the power sector can be resolved with viable solutions that can benefit all the stakeholders.

ITEM NO. A1:	CONFIRMATION OF THE MINUTES OF 49th ERPC MEETING
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The minutes of the 49th ERPC meeting held on 24th March, 2023 at Gangtok, Sikkim was circulated vide letter no. ERPC/TCC&COMMITTEE/2023/79 dated 17.04.2023.

SJVN Thermal Pvt Ltd (STPL) vide letter dated 07.07.2023 intimated that in the MoM of 49th ERPC, membership of SJVNL has been approved in place of STPL and requested that under Item no. B.14 of MoM, SJVNL may be replaced with STPL.

Members may confirm the minutes of 49th ERPC Meeting.

Deliberation in the 50th ERPC Meeting

Members confirmed the minutes of 49th ERPC Meeting along with the proposed changes requested by STPL.

PART B: ITEMS FOR DISCUSSION

ITEM NO. B1: Issues referred to ERPC during the TCC meeting held on 10.08.2023.

B1.1: CERC IEGC Regulation 2023

CERC vide Gazette notification dated 11.07.2023 had published Indian Electricity Grid Code Regulation 2023 and directed the concerned agencies (NLDC, RLDCs, RPCs & SLDCs etc.) for preparing detailed procedure after stakeholders' consultation. Further, CERC vide notification dated 03.08.2023, notified the date of implementation of IEGC regulation w.e.f 01.10.2023.

ERPC secretariat will give a brief presentation on CERC (IEGC) Regulation 2023.

Deliberation in the 50th TCC Meeting

ED, ERLDC made a presentation on IEGC 2023 and highlighted the major changes that have been incorporated in new IEGC which is to be in effect from 01.10.2023.

Representative from ERPC made a brief presentation highlighting the roles and responsibilities of RPCs & RLDCs under the new IEGC.

On the provision of IEGC 2023 regarding scheduling of DVC stations by ERLDC, DVC representative shared a brief presentation highlighting the following:

- 1. The existing procedure of scheduling of DVC stations by SLDC DVC is continuing in line with the MoM of special meeting dated 09.07.2012.*
- 2. The proposed scheduling of DVC stations by ERLDC would be difficult to implement as there is no PPA between DVC generators and the DVC DISCOM.*
- 3. He submitted that the unbundling process of DVC has been started and requested that till that time the existing procedure of scheduling may be allowed.*

TCC opined that as the scheduling procedure of DVC Generators has already been notified in final IEGC 2023 which is going to be implemented w.e.f. 01.10.2023, DVC may approach Hon'ble CERC for exemption/clarifications in this regard.

Further to implement the above IEGC provision on DVC, TCC decided that a committee may be formed with concerned stakeholders to discuss and resolve the related issues.

After detailed deliberation following was decided:

- 1. Cyber Security Coordination Forum in Eastern Region may be formed in ERPC in line with the direction in the IEGC Regulation 2023 to coordinate and deliberate on the cyber security challenges and gaps in Eastern Region. This is referred to ERPC for approval.*

2. *A working group may be formed by ERPC secretariat consisting of members from SLDCs, transmission utilities, generators & ERLDC for smooth implementation of the various clauses of IEGC.*
3. *TCC recommended for constitution of a committee comprising of members from ERPC, ERLDC, DVC, CEA & CTU to discuss and resolve the challenges likely to be encountered in implementation of the provisions pertaining to the Scheduling and metering of DVC Generators.*
4. *ERPC and ERLDC will jointly conduct workshop on CERC IEGC Regulation 2023 shortly.*

Deliberation in the 50th ERPC Meeting

Member Secretary, ERPC apprised the forum that CERC IEGC Regulation 2023 has been notified by Hon'ble commission and same would be implemented w.e.f 01.10.2023 and also highlighted about important clauses of this regulation and further he informed that ERPC will play important role for implementation of this regulation in Eastern Region. In this regard TCC forum already recommended a working group for smooth implementation of IEGC regulation 2023 in Eastern Region.

On the issue of scheduling of DVC Generators, ERPC approved constitution of a committee as recommended by TCC, if required.

Chairperson, ERPC appraised that the necessity of Cyber security Coordination forum at regional level to coordinate and deliberate on the cyber security challenges and gaps in Eastern Region.

After detailed deliberation, ERPC approved the formation of Cyber Security Coordination forum.

Further, the forum approved the formation of working group for implementation of IEGC regulation.

B1.2: Development of Common Accounting Software for RPCs

Commercial settlement mechanism plays a crucial role in the progress of any market in the world. The power sector is no more exception. A transparent, time-bound, grievance-oriented commercial settlement mechanism helps in the progress of the Power system in India. Since RPCs are impartial and neutral entities and the sole purpose of RPCs is to bring cooperation among the entities, the responsibility of commercial settlements among the different entities in the Power systems is assigned to RPCs.

RPC secretariats are issuing energy Accounts such as Deviation Account, SRAS, TRAS, Reactive Energy account, Regional Energy Accounts, Security Constrained Economic Despatch, Ramping

Performance, Compensation Account, Regional Transmission Account, Regional Transmission Deviation Account etc. At present all RPCs are following different approaches for accounting though same regulations applicable for all.

In the 13th NPC Meeting held on 05th July 2023 deliberation under agenda item no-10, **Chairperson CEA has directed all the RPCs for standardization of formats and software for all commercial accounts issued by RPCs.**

As per Annexure-7: ACCOUNTING AND POOL SETTLEMENT SYSTEM of Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulation 2023

"The settlement system shall be transparent, robust, scale-able (multi buyer/seller, inter connection with lower and upper pool systems) and dispute-free with integrity and probity and usage of state-of-the-art techniques. The settlement computation details, applicable charges and operation of different regulatory Pool Accounts shall be in accordance with various regulations of the Commission. RPCs shall standardise the formats of various accounts...."

In line with the mandate given in the CERC IEGC Regulation 2023 and direction of Chairperson, NPC under the agenda item no-10 of the 13th NPC meeting, ERPC secretariat has prepared a concept paper for the development of Common Accounting Software for all RPCs and same has been shared with NPC division, CEA and all RPCs. (Annexure-B2)

Advantages of Common accounting Software:

Technical consideration:

- 1) Incorporating features of Modern software in Commercial accounting using state of the art techniques.
- 2) Role based user access can be granted at any level including MoP/CEA/ NPC Division/
- 3) RPCs/ All Users (CGS, ISGS, Beneficiaries, Cross Border Entity, IPPs etc).
- 4) Uniform interpretation and faster implementation of Regulations.
- 5) Error free logic implementation uniformly across all the region.
- 6) Easy implementation of 5 min block accounting in future.
- 7) API integration with WBES system, AMR system or other utilities such as PXs, Regional Entities for seamless data transfer.

Economical Consideration:

- 1) Cost optimization for development and AMC.
- 2) Easy understanding of the accounting system among officers while inter-RPC transfer or between CEA/NPC & RPC transfer.
- 3) Manual work will be reduced and improvement of the work efficiency of the organization.
- 4) Manpower will be utilized for new energy technologies i.e. Power market, storage technology, green hydrogen, RE integration, Focused analysis of data etc.

Regulatory Consideration:

- 1) Standardization of input and output format will help the utilities operating across all the regions.
- 2) Timely issuance of error free accounts and revision accounts.
- 3) Reduction of time for implementation of new as well as amended regulations.
- 4) Better Coordination among RPCs in inter regional settlements.
- 5) Complete digitization of Regional Accounting settlement system with Less human interference by complete automation of accounts.

Deliberation in the 50th TCC Meeting

ERPC Secretariat representative briefly explained about the common accounting software and further he informed that as per the mandate given in the CERC IEGC Regulation 2023 and direction of Chairperson, NPC under the agenda item no-10 of the 13th NPC meeting, ERPC secretariat had prepared a concept paper for the development of Common Accounting Software for all RPCs and same was shared with NPC division, CEA and all RPCs.

MS, ERPC informed the forum about the urgent requirement of common accounting software for all RPCs due to frequent changes in the regulation and vast handling of data. Further, he highlighted the advantages of common accounting software in terms of technical as well as economical aspect such as uniform logic implementation with error free timely issuance of accounts and further informed that earlier the number of entities were few, now the number of entities have increased exponentially due to allocation through PUSHp Portal. Therefore, it is need of hour for a unified accounting software for all RPCs.

MS NPC, CEA informed that as per the direction of Chairperson, CEA in the 13th NPC meeting for standardization reports and accounting software's of RPCs, subgroup meeting was conducted on 08th August 2023, where it was decided for standardization of output format first and all the RPCs will share accounting statement reports with ERPC secretariat and subsequently ERPC secretariat will compile and submit before sub-group for further discussion. Further, she informed that CEA would form a committee comprising all the RPCs for implementation of the scheme at the earliest.

MS, NRPC informed that suggestion of ERPC for common software for commercial accounting settlement is a welcome step. Further, he requested NPC division to take a lead on this proposal for early implementation.

On the query regarding funding for implementation of the scheme of common accounting software, Member Secretary, NPC informed that as per the clause no 5.3 of PSDF fund regulation there is scope of funding for common accounting software from PSDF fund. Further, she informed that it will take considerable time as per the procedure PSDF regulation.

MS, NPC Division suggested to explore funding for development of the Common accounting software for all RPCs in line with funding for PUSHp portal development through NTPC. RED, ER-II assured to look into the issue.

After detailed deliberation followings are

1. *It is noted that the structure of common format for the output report shall be finalized by the sub-group under NPC Division within August'23.*
2. *TCC agreed to the proposal of common accounting software for all RPCs and requested NPC division, CEA to coordinate with other RPCs and take the matter forward for early implementation of the proposal submitted by ERPC secretariat.*
3. *TCC suggested to take up the standardisation of output as well as input formats and development of software should be taken up simultaneously for early implementation of the same.*
4. *TCC suggested that the development of the software may be funded through PSDF and also to explore funding through NTPC or any other option.*

This is referred to ERPC meeting for further deliberation.

Deliberation in the 50th ERPC Meeting

MS, ERPC briefly explained about the necessity of Common Accounting Software for all RPCs and further highlighted the decision taken in the TCC meeting and requested the NPC division to coordinate with all RPCs for early implementation of the proposal submitted by ERPC secretariat.

MS NPC, CEA informed that in the 13th NPC meeting Chairperson, CEA directed for standardization reports and accounting software of RPCs. Subsequently, the subgroup meeting was conducted on 08th August 2023, wherein standardization of accounting and reporting formats were being discussed. Further, she informed that CEA would form a committee comprising all the RPCs for implementation of the scheme at the earliest.

It was also informed that funding through PSDF may take a considerable amount of time as due procedures have to be followed for PSDF funding.

ERPC opined that NPC division, CEA may take the lead in implementation of Common Accounting Software for all RPCs by co-ordinating with them. After detailed deliberation:

1. ***ERPC agreed to the proposal of common accounting software for all RPCs and requested NPC division, CEA to coordinate with all RPCs and take the matter forward for early implementation of the proposal submitted by ERPC secretariat.***
2. ***NPC division, CEA to take up the standardisation of output as well as input formats and development of software to be taken up simultaneously for early implementation of the same.***
3. ***ERPC suggested that the development of the software may be funded through PSDF or by NTPC but the ownership of the software as well as the database will lie with the RPCs.***

B1.3: PUSHP portal (For Flexibilization of PPA for Optimal Utilization of Resources & Reduction in Cost of Power for Consumers)

In the 13th NPC meeting held on 05th July 2023 at Kolkata, the following was deliberated:

MS NPC informed that the Portal was launched on 9th March, 2023, and the transaction on the portal was started w.e.f. 3rd April, 2023. She further informed that currently, 17 States are utilizing the portal. However, there is a lack of participation from the states of NR, ER, and limited requisition to avail the surplus power available on the portal from all regions. She informed that 14 requests have been processed completely, and the power has been re-allocated to new beneficiaries.

Chairperson, CEA briefly explained the concept of the portal and highlighted the need for states to utilize power supply avenues other than PPAs and bilateral arrangements. He emphasized the PUSHP portal is a platform to facilitate the flexibilisation of the PPAs and the surplus power of CGS, ISGS, SGS and IPPs and they can be declared and requisition both in long term and short term. The power available on the portal is at regulated tariff determined by the concerned regulatory commission. He appreciated the states like Telangana, Assam & Punjab for availing the power from the portal. He also appreciates the states of UP, Kerala & Mizoram for declaring surplus power on portal and reducing their fixed charge burden. He suggested that surplus power from SGS and IPPs should also be declared on the portal for optimal utilization of generation capacity. He also stated that levying some penalty/incentives on fixed cost for units under RSD may also be think of in future.

Chairperson, TCC (SR) informed that the surplus power of SGS could not be declared due to the contractual obligation. Chairperson, CEA clarified that the contractual obligation could not be a limitation since the norms regarding payment settlement has been established as per the approved scheme and other extant rules and regulations.

Chairperson, NRPC appreciated the PUSHP Portal and mentioned that DISCOMs hesitate to sell power in the open market due to PPA restrictions. He informed that last year, Haryana DISCOMs began making profits and started buying power from the open market, resulting in State Generating Stations (SGS) units with sufficient coal storage remaining under Reserve shut down (RSD) due to low scheduling, as cheaper power is available in the open market. These SGS units with sufficient coal storage, under RSD, could be made to assist in meeting the peak demand of other states and national grid. Chairperson, CEA suggested that such SGS can declare their surplus power on the PUSHP Portal and, these plants can be revived from reserve shutdown to meet the demand of other states/regions of the country.

Director SLDC (Odisha) suggested to have right to recall facility so that the unforeseen demand can be met.

It was also suggested that buyers may be able to put their requirements on the portal.

Chairperson, CEA requested RPCs to suggest improvements in the portal to make it more attractive in terms of providing incentives to both buyers and sellers.

Decisions:

- i. The provisions may be made to allow buyers to put their requirements on the portal.
- ii. RPCs may provide suggestions for improving the portal to make it more attractive in terms of offering incentives to buyer and seller, especially for the units under RSD and intimate to NPC for taking up with MoP for modification in scheme.
- iii. ERPC, NRPC may encourage the states to maximum utilise the PUSHp portal.
- iv. Generating Units of CGS, ISGS, SGS and IPPs that are currently under RSD due to low schedule/demand can declare their surplus power on the PUSHp Portal and such plants may be revived from reserve shutdown to meet the demand of the other states/ regions of the country.

Deliberation in the 50th TCC Meeting

MS, NPC, CEA informed the following to the forum:

1. *In the 13th NPC meeting, Chairperson, CEA advised the states for maximum utilization of the portal for reduction of cost of power by surrendering surplus power.*
2. *Bihar & Odisha are using PUSHp portal but other states of Eastern region are not using the portal.*
3. *NPC division is writing letter to SERC's for advising the utilities to participate in the PUSHp portal for optimization of the fixed cost by surrendering surplus power.*
4. *Since the implementation of this scheme of flexibilization PPAs, the Fixed Cost liability of beneficiaries have been reduced by around 1 Crore.*

West Bengal representative informed that the surplus power is available in the portal mostly during solar hours when cheaper power is available in the market.

Odisha representative informed that there should be the provision for buy bid and right to recall for surrendering beneficiaries to incentivise the participation of states.

NTPC representative requested ER beneficiaries to participate in the URJA portal which was developed for availing power upto Technical Minimum at the Variable cost and keeping the units on bar.

After Detailed deliberation, TCC advised all the states of Eastern Region to actively participate in the PUSHp portal for optimization of resources and flexibilization for PPAs for reduction of cost to the end consumers.

This is for information to ERPC.

Deliberation in the 50th ERPC Meeting

MS, ERPC briefly explained about the PUSHp portal for Flexibilization of PPA for Optimal Utilization of Resources & Reduction in Cost of Power for Consumers.

MS, NPC division, CEA informed that ER constituents are not utilizing PUSHp portal in an optimal way and further, she requested for ER constituents to participate in the PUSHp portal by surrendering surplus power and reduction in the fixed cost of power and overall reduction of the cost of power to end consumers.

After detailed deliberation, ERPC requested:

- 1. NPC division, CEA to conduct a workshop for widespread awareness and larger participation of constituents in the PUSHp Portal.***
- 2. ER constituents to participate in the PUSHp portal for Optimal Utilization of Resources & Reduction in Cost of Power for Consumers.***

B1.4: Disaster Management Plan for Power Sector-Eastern Region

As per section 37 of the Disaster Management Act 2005, each Ministry is required prepare a Disaster Management plan related to their sector. Accordingly, MoP in association with CEA has prepared a Disaster Management Plan for Power Sector and the same is available at CEA website.

In the plan, a four-tier institutional structure has been envisaged i.e. at central level, regional level, state level, and local unit/plant level to effectively deal with disaster situations in power sector. The group at regional level has to be constituted under the chair of Member Secretary with the responsibilities are as follows:

Regional Level Disaster Management Group (RDMG)

Composition:

- a) Member Secretary (RPC) - Chairman
- b) Representative of Secretary in-charge of Rehabilitation and Relief of the affected State of the Region
- c) Representatives of each State Civil Defence
- d) Regional HODs CPSUs (NTPC, NHPC, PGCIL etc.)
- e) CMDs State TRANSCOs/Power Departments
- f) SLDC in charge of each state.
- g) Chief Engineer, Central Water Commission (CWC), for floods related early warnings.
- h) Deputy Director-General, Indian Metrological Department (IMD), for Earthquake, and Cyclone related early warnings.
- i) Group Head, Ocean Information and Forecast Services Group (ISG), for Tsunami related early warnings.
- j) Head of RLDC

Responsibilities:

- a) To interact with CDMG for proper coordination.
- b) To ensure that disaster management plans are in place.
- c) To provide inter-state emergency & start-up power supply
- d) To coordinate the early restoration of the regional grid.

- e) To participate in damage assessment.
- f) To facilitate resource movement to affected state (s) from other regional states

Similarly, a group at each state level and plant level is to be formed as per Disaster Management Plan for Power Sector.

Deliberation in the 50th TCC Meeting

Representative of ERPC Secretariat highlighted the provision of constitution of Regional Disaster Management Group under Disaster Plan prepared by CEA and intimated that the same would be formed for Eastern Region with the members as mentioned above.

TCC noted and referred to ERPC for information.

Deliberation in the 50th ERPC Meeting

MS, ERPC briefly explained about the provisions of constitution of Regional Disaster Management Group under Disaster Plan prepared by CEA and intimated that the same would be formed for Eastern Region with the members as mentioned above. Further he requested for representation of each member may be intimated to ERPC secretariat.

Chairperson, ERPC observed that disaster management in power sector needs to be integrated with overall disaster management plan of the states and the country. He suggested that, ERPC Secretariat may take up the matter with the Inter-state Council Secretariat for discussion in the meeting of Eastern Zonal Council.

After detailed deliberation:

- 1. ERPC requested the members to send their nomination to ERPC secretariat as per the composition of the Regional Level Disaster Management Group (RDMG)***
- 2. ERPC secretariat was advised to take follow up action on the observation of Chairperson.***

B1.5: Establishment of 400/132kV, 2x315MVA New Laxmikantpur substation of WBSETCL under intra-state scheme through LILO of one circuit of Jeerat New (PMJTL) Subhasgram (POWERGRID) 400KV D/C (Quad) line

Establishment of New Laxmikantpur 400/132kV, 2x315MVA GIS substation through LILO of both circuits of Haldia (CESC) - Subhasgram (POWERGRID) 400KV D/c line at New Laxmikantpur was agreed for implementation under intra-state scheme by WBSETCL in the 2nd meeting of erstwhile ERSCT held on 05-07-2019.

WBSETCL vide letter dated 20-05-2022 had submitted the proposal of establishment of New Laxmikantpur S/s through LILO of one circuit of under construction Jeerat New (PMJTL) Subhasgram (POWERGRID) 400KV D/C (Quad) line and LILO of one circuit of existing Haldia (CESC) - Subhasgram (POWERGRID) 400KV D/C line, in view of anticipated more reliability and stronger source at Jeerat New 765kV.

In the 15th CMETS-ER held on 27-01-2023, following was agreed about establishment of New Laxmikantapur S/s under intra-state:

- A. A committee meeting with officials from ERPC, CTUIL, ERLDC, CESC, HEL and WBSETCL would be held to finalise the modalities of connectivity for New Laxmikantapur 400/132kV S/s and based on the discussion in the meeting, outcomes may be shared by WBSETCL and HEL in the CMETS-ER.
- B. WBSETCL and HEL along with CESC would take up regulatory, commercial and legal matters with WBSERC on the modalities of connectivity for New Laxmikantapur 400/132kV S/s.

Based on the recommendation of the committee, the following scope of works was agreed under intra-state scheme to be implemented by WBSETCL in the 20th CMETS Meeting:

- a. Establishment of New Laxmikantapur 400/132kV, 2x315MVA GIS substation along with associated bays.
- b. LILO of one circuit of Jeerat New - Subhashgram 400kV Die (Quad) line at New Laxmikantapur substation.
- c. 420kV, 125MVA_r bus reactor along with associated bay: 1 no.
- d. 400kV line bays: 2 no. (for termination of LILO)
- e. 132kV line bays: 10 nos.
- f. Space for future provisions:
 - 2x315MVA along with associated bays or Replacement of present 2x315MVA with 2x500MVA + 1x500MVA 3rd ICT
 - 2x125MVA_r along with associated bays
 - 400kV line bays: at least 6 no.
 - 132kV line bays: at least 6 no.

1.3. In the 20th CMETS-ER meeting, WBSETCL mentioned that they would require 28 months from the date of LOA for completion of the above agreed intra-state scheme. Further, it was also decided that LILO of Haldia - Subhashgram 400kV D/C line (one circuit or both circuits) may be bilaterally deliberated between WBSETCL and HEL in view of the recommendations of the committee as mentioned above.

1.4. The matter regarding LILO of ISTS lines under intra-state was being deliberated in the 13th meeting of NCT held on 13-05-2023. Therein, it was suggested that LILO of any ISTS line by STU needs to be deliberated in the NCT meeting with observations of concerned RPC.

Deliberation in the 50th TCC Meeting

TCC agreed with the proposal of connectivity of proposed New Laxmikantapur substation through LILO of one circuit of Jeerat New -Subhashgram 400kV D/C (Quad) to be implemented as intrastate system. WBSETCL agreed to comply with connectivity as well as grid standard

regulations of CEA and to ensure proper communication and protection systems for the LILO portion of the line.

The issue was referred to ERPC for concurrence so that the same may be referred to NCT for approval.

Deliberation in the 50th ERPC Meeting

ERPC endorsed the views of TCC and agreed for the proposed LILO of 400 kV New Jeerat-Subhasgram S/C line at New 400/132 kV New Laxmikantpur Substation of West Bengal.

WBSETCL was advised to ensure installation of OPGW in LILO portion of line and installation of necessary communication equipment at their end in coordination with ISTS licensee.

B1.6: Establishment of 765kV substation at Gopalpur under ISTS--Agenda by CTU

To meet the power drawl requirement of upcoming Green Hydrogen and Green Ammonia industries in the Gopalpur area of Odisha, Govt of Odisha has proposed for establishment of 765 kV substation under ISTS. Accordingly, studies were carried out by CTU and an ISTS scheme namely "Eastern Region Expansion Scheme-XXXIX (ERES-XXXIX)" inter alia including establishment of 765kV new substation at Gopalpur was agreed in the 18th Consultation Meeting for Evolving Transmission Schemes in Eastern Region (CMETS-ER) held on 27th April 2023.

Brief scope of works is given below:

Establishment of Gopalpur 765/400kV, 2x1500MVA GIS S/s

- I. Angul (POWERGRID) – Gopalpur 765kV D/c line along with 765kV, 1x330MVA switchable line reactor with 500ohm NGR (with NGR bypass arrangement) at Gopalpur end, one each in both circuits
- II. Gopalpur – Gopalpur (OPTCL) 400kV D/c (Quad) line
- III. 2 nos. 765kV AIS line bays (along with space for future switchable line reactor) along with bus extension in GIS at Angul 765/400kV S/s for termination of Angul (POWERGRID) – Gopalpur 765kV D/c line.
- IV. 2 nos. 400kV GIS line bays at Gopalpur (OPTCL) S/s for termination of Gopalpur – Gopalpur (OPTCL) 400kV D/c (Quad) line

Detailed scope of work is enclosed at **Annexure-B9**.

Deliberation in the 50th TCC Meeting

ERPC secretariat briefly explained the scheme as received from CTU.

On a query from CTU regarding implementation of the scheme, Odisha representative informed that based on the requirement received from various industries, the scheme has been envisaged

to meet RE power demand of Green Hydrogen & Green Ammonia Industries at Gopalpur. They stated that the implementation process may be initiated and subsequently they would take up with the industries for submission of connectivity/GNA application for the required quantum.

TCC agreed to the above proposal of transmission scheme to be implemented under ISTS system and opined that the implementation of the scheme may be taken up delinking it with the receipt of connectivity/GNA applications from the industries and requested Odisha to obtain the connectivity/GNA application from the industries.

TCC referred the issue to ERPC for concurrence.

Deliberation in the 50th ERPC Meeting

ERPC recommended the proposed transmission scheme of establishment of 765/400 kV Gopalpur S/s under ISTS. The implementation of the scheme may be taken up delinking it with the receipt of connectivity/ GNA applications from the industries.

Further, ERPC advised Odisha STU to pursue with concerned industries for submission of connectivity/ GNA application to CTU at the earliest. Odisha agreed to the same.

B1.7: Establishment of 765/400kV, 2x1500MVA S/s at Duburi under intra-state by OPTCL through LILO of Angul (POWERGRID) – Paradeep (ISTS) 765kV D/C ISTS line— Agenda by CTU

NCT in its 12th meeting held on 24-03-2023 recommended establishment of 765/400kV Paradeep ISTS substation through Angul (POWERGRID) – Paradeep 765kV D/c line under TBCB route.

OPTCL had requested CTU for construction of a new 765/400kV S/s at Duburi in Odisha under intra-state scheme through LILO of already approved Angul (POWERGRID) – Paradeep 765kV D/c line to meet the upcoming industrial demand of about 1100MW by 2026-27 and 1430MW (additional) by 2029-30.

Accordingly, establishment of 765/400kV, 2x1500MVA new substation at Duburi was discussed in the 17th CMETS-ER held on 29-03- 2023. Further, the matter regarding LILO of ISTS lines under intra-state was being deliberated in the 13th meeting of NCT held on 13-05-2023. Therein it was informed that recently LILO of Angul (POWERGRID) – Paradeep 765kV D/c ISTS line at Duburi (New) under intra-state has been agreed. In this regard, it was suggested that views of ERPC may be taken on the subject scheme and with views of ERPC the scheme may be forwarded to NCT for deliberation. The communication received from CTUIL in this regard is attached at **Annexure-B10**

NCT has suggested that various aspects of the scheme not limited to following may be deliberated at ERPC level:

- a. LILO of Angul (POWERGRID) – Paradeep 765kV D/c ISTS line at Duburi (New) under intra-state may involve certain operational issues.

- b. The said LILO would result in reduced demand that can be catered at Paradeep under ISTS for Green Hydrogen & Green Ammonia industries as some capacity of the main ISTS line shall be utilised to meet intra-state demand at Duburi. This may necessitate further strengthening in ISTS immediately.
- c. Industries in Duburi area may also require RE power from outside the state of Odisha, similar to industries in Paradeep and Gopalpur area. If any such industry applies for GNA from ISTS, then ISTS infrastructure would have to again created in Duburi area. Creation of parallel systems in ISTS and intra-state may result into a less optimal planning and the same is not desirable. Already 765/400kV ISTS substations (with space provision for 400/220kV level in view of future requirement) are being established at Paradeep and Gopalpur and OPTCL is also implementing 400/220kV substations under intra state. RoW and land optimisation may be considered.

Deliberation in the 50th TCC Meeting

The suggestion of NCT on various aspects of LILO of 765 kV Angul-Paradip D/C line by OPTCL for its 765 kV S/s of Duburi was deliberated as follows:

Regarding operational issue, Odisha representative submitted that there is no such operational issues associated with the proposed scheme. He stated that the matter was already discussed in CMETS meeting and it was opined that the scheme may be implemented as per the given proposal. They clarified that they would take all the necessary measures and extend necessary cooperation for resolving any operational issues if arises in future. OPTCL submitted that they would comply with CEA grid standard and connectivity rules and would ensure proper communication and protection systems for the LILO part of the line.

Regarding capacity utilisation of main ISTS to cater intrastate demand at Duburi, the forum viewed that OPTCL is going to implement 765 kV Kolabira-Duburi D/C line under intrastate system to meet their demand at Duburi. The proposed 765 kV Kolabira-Duburi line would also provide a alternate path for meeting the demand at Paradip.

With above observations, TCC recommended the proposal of OPTCL for LILO of 765 kV Angul-Paradip D/C line at Duburi S/s under intrastate system.

The matter was referred to ERPC for concurrence.

ERPC may discuss.

Deliberation in the 50th ERPC Meeting

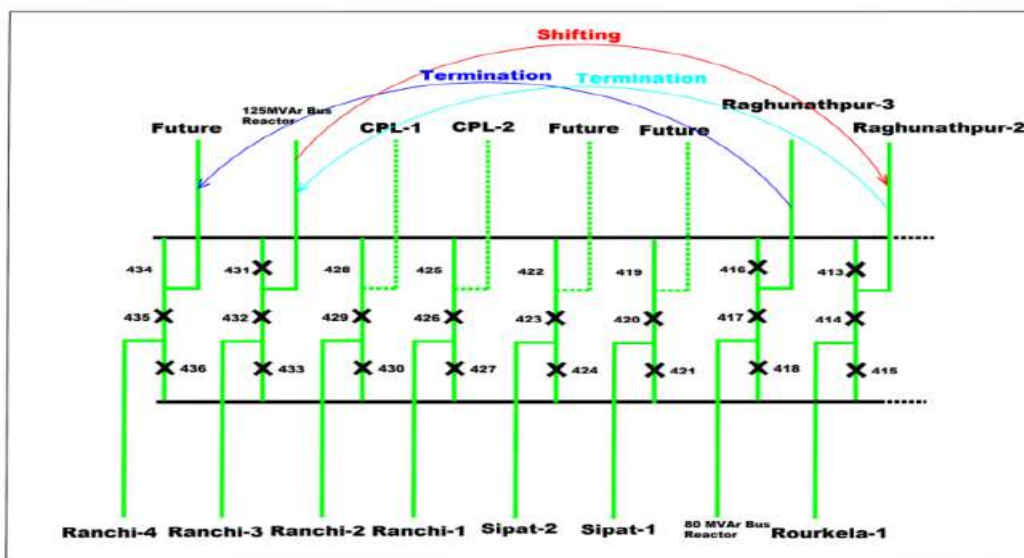
ERPC endorsed the views of TCC on the points raised by NCT regarding LILO proposal of 765 kV Angul-Paradip D/C line at New Duburi S/s of OPTCL and agreed with the above proposal of LILO of ISTS lines at 765 kV New Duburi S/s.

OPTCL was advised to ensure installation of OPGW in LILO portion of line and installation of necessary communication equipment at their end in coordination with ISTS licensee.

B1.8: Eastern Region Expansion Scheme-XXXVIII--Agenda by CTU

The 400 kV bus of Ranchi (POWERGRID) substation is designed for 40 kA and presently fault level of this substation is observed to be about 44 kA and it is expected to further reach to about 51 kA by 2027-28 timeframe. Accordingly, studies were carried out and it is observed that with the rearrangement as proposed below, the fault level of Ranchi (POWERGRID) substation can be brought down to about 39kA from 51kA.

- Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line (of DVC) is to be bypassed from Ranchi (POWERGRID) with any D/c line of Ranchi (POWERGRID) – Ranchi New (POWERGRID) 400kV 2xD/c (Quad) lines (of POWERGRID) to form Ranchi New (POWERGRID) – Raghunathpur (DVC) 400kV (Quad) D/c line.



The implementation of the above arrangement has been agreed in the 19th CMETS-ER meeting as the ISTS scheme ERES-XXXVIII. The scheme detail is enclosed at **Annexure-B11**. Further as the scheme involves dismantling of 1355m section of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC at Ranchi end from location 433 to 438 and scarping of the same which have commercial implication, it was decided in CMETS meeting to deliberate the issue at ERPC level as well.

The estimated cost of the scheme is expected to be about INR 42 Cr. excluding the scrap value. The following matters may be deliberated:

- Dismantling of 1355m section of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC at Ranchi end from location 433 to 438 and scarping of the same under the ISTS scheme, as dismantling of line section shall vacate the line corridor for future.
- The scrap value of the tower members, ACSR conductor, auxiliaries etc. of dismantled assets shall be deducted by the ISTS licensee as per prevailing scrap value to arrive at the final cost of the project. As the scrap value of dismantled assets (about 1355m of line) is already being adjusted against the project cost of this new scheme, tariff of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC shall remain unaffected.

Deliberation in the 50th TCC Meeting

The matter regarding dismantling and scraping of line section of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC as part of the scheme to control fault level at Ranchi S/s was deliberated and TCC agreed with the proposal of deducting the scrap value from final cost of the scheme which is to be implemented by ISTS licensee.

TCC referred the issue to ERPC for approval.

Deliberation in the 50th ERPC Meeting

After discussion, ERPC approved the following:

- ***Dismantling and scraping of 1355m section of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC at Ranchi end from location 433 to 438 under ERES-XXXVIII to control the fault level at 400 kV Ranchi S/s.***
- ***The scrap value of dismantled assets is to be deducted from final cost of the scheme which is to be implemented by ISTS licensee and accordingly, the tariff of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC will remain unaffected.***

B1.9: Renovation of control room of 400/220 kV Biharsharif ss and 400/220 kV Jamshedpur ss.—Agenda by Powergrid

400/220 kV Biharsharif and 400/220 kV Jamshedpur sub-stations were commissioned in 1991 under Kahalgaon Transmission projects. Both said sub-stations are most critically important for smooth and reliable supply to the downstream transmission lines as well as for smooth evacuation of power from important generating plants of Eastern Region. It is to mention that under ADDCAP tariff block 2019-24 works e.g. replacement of CB, Isolator, FF renovation, AC renovation switchyard PCC have been carried out. However, some works which have not been taken up in previous ADDCAP block, but now important are to be carried out for smooth functioning of sub-stations such as complete renovation of control and protection system.

Assets details of both sub-stations are as below.

Jamshedpur ss:

- 1) 02 Nos of 400 kV Main Bus
- 2) 26 nos. of 400 KV bays
- 3) 03 nos. of 400/220/33KV 315 MVA ICT
- 4) 03 nos. of Bus Reactor i.e. 50 MVAR B/R-1, 125MVAR B/R-2, 125 MVAR B/R-3

Assets completing/completed 25 years' service life:

Sl. No.	Name of Bay/Line/ICT	Make	DOCO
1	400/220/33KV 315MVA ICT 1	BHEL	03.08.1993

2	400/220/33KV 315MVA ICT 2	BHEL	29.12.1993
3	400KV 16.7 X 3 MVAR BUS REACTOR – 1	CGL	30.07.1993
4	400KV Chaibasa Line -2		17.02.2002
5	415V MSB & ACDB		30.07.1993
6	220V DCDB		30.07.1993

Biharsharif ss:

- 1) 04 Nos of 400 kV Main bus with 02 nos. of Bus Sectionalizer
- 2) 46 nos. of 400 KV bays
- 3) 03 nos. of 315 MVA ICT & 01 no. 500 MVA ICT
- 4) 04 nos. of Bus Reactor i.e 50 MVAR B/R-1, 80MVAR B/R-2, 125 MVAR B/R-3 & 4
- 5) 05 nos. of Line Reactor i.e 50 MVAR LKS-2, 50 MVAR VNS-1, 50 MVAR VNS-2, 80 MVAR PRN-1, 80 MVAR PRN-2

Assets completing/completed 25 years' service life:

Sl. No.	Name of Bay/Line/ICT	Make	DOCO
1	50MVAR SAS-1 LINE REACTOR	CGL	09.08.1991
2	50MVAR LKS-2 LINE REACTOR	CGL	07.12.1991
3	50MVAR BUS REACTOR-1	CGL	24.09.1992
4	315MVA ICT-2	BHEL	14.07.1992
5	BSF-LKS LINE-1	-	23.10.1992
6	BSF-LKS LINE-2	-	09.08.1991
7	BSF-SAS LINE-1	-	01.08.2002
8	BSF-SAS LINE-2	-	24.11.2002

Further, additional assets under various projects had been added since commissioning, which cause the suppression of old cables to the beneath of cable trench. Furthermore, due to ageing of cables, faults in cable are being observed on regular basis which leads to unwarranted tripping of transmission elements and damages healthy cables also. Further, it is to mention that cables trenches are full of cables and therefore identification of fault and laying of new cable is very difficult.

Further, it is pertinent to mention that the existing sub-station is of conventional type and old electromechanical relays are used for protection system. And therefore, lots of upgradation and modification in existing C&R panels and switchyard equipment are being carried out which involves laying of extra cables from switchyard to control room as well as inter panel cabling but due to space constraints in cable vault room, now it is almost impossible to place new cable.

Keeping in view of above constraints, a small new panel room has been constructed for newly commissioned ICT at Biharsharif ss and KIOSK was proposed for upcoming 125 MVAR Bus Reactor.

In view of above, it is proposed for construction of KIOSK for bays which have completed 30 years

of service life at Jamshedpur and Biharsharif ss to mitigate the above-mentioned issues and to avoid any major outage of sub-station due to fire /faults in aged cables. Accordingly, an exercise has been carried out to arrive cost for construction of 05 nos. KIOSK in each sub-station. Total estimated cost for conversion of existing system to KIOSK system will come to Rs. 10.0 Cr (approx) for each sub-station.

Proposed for in-principle approval from OCC/ERPC for conversion of exiting conventional system to SAS system along with construction of KIOSK, Power & control cables and electro mechanical relays etc.

In the 204th OCC meeting, Powergrid ER-I representative delivered a detailed presentation on present unhealthy condition of hydraulic circuit breakers at 400/220 KV Muzaffarpur S/S, whose maloperation or delayed operation was responsible for frequent bus tripping at the substation. Powergrid ER-I representative also submitted that adequate OEM support is also not available for maintaining these CBs in healthy condition as manufacturing of these old model CBs is discontinued. This presentation also included details of conventional cable trenches posing inconvenience in day-to-day operation as well as dilapidated condition of control rooms at 400/220 KV Biharsarif S/s and 400/220 KV Jamshedpur S/S, whose old control panels need immediate replacement. Assessing the merit of the proposal, OCC gave in-principle approval of various modernization works at 400/220 KV Muzaffarpur S/S, 400/220 KV Biharsarif S/s and 400/220 KV Jamshedpur S/S.

OCC referred the agenda to upcoming Commercial sub-committee meeting for deliberation on financial aspects.

In 49th CCM, Powergrid was advised to submit item-wise proposal along with the cost estimates in the upcoming TCC/ERPC.

Deliberation in the 50th TCC Meeting

The item wise cost details for renovation of control rooms of 400/220 kV Substations and 400/220 kV Jamshedpur S/s, as updated by representative of Powergrid, are given below:

For Biharsharif S/s:

Description	Supply	Erection	Total (INR)
<i>Relay Panels (With Automation)</i>	2,23,54,948.00	1,73,040.00	2,25,27,988.00
<i>Complete Substation Automation System/ Augmentation substation Automation system including hardware and software</i>	96,43,101.00	82,147.00	97,25,248.00
<i>Power & Control Cables</i>	2,86,57,674.00	29,51,598.00	3,16,09,272.00

<i>Kisok, Civil works, Earthmat & other Misc</i>	39,13,570.00	97,35,201.25	1,36,48,771.25
<i>Sub Total</i>	6,45,69,293.00	1,29,41,986.25	7,75,11,279.25
<i>F&I @8%</i>			51,65,543.44
<i>Mandatory Spare</i>			0.00
Total			8,26,76,822.69
Total incld. GST			9,75,58,650.77

For Jamshedpur S/s:

Description	Supply	Erection	Total (INR)
<i>Relay Panels (With Automation)</i>	2,43,55,179.00	1,90,535.00	2,45,45,714.00
<i>Complete Substation Automation system/ Augmentation substation Automation system including hardware and software</i>	1,03,84,878.00	88,466.00	1,04,73,344.00
<i>Power & Control Cables</i>	2,89,30,659.00	30,02,005.00	3,19,32,664.00
<i>Kisok, Civil works, Earthmat & other Misc</i>	48,96,875.00	96,06,401.25	1,45,03,276.25
<i>Sub Total</i>	6,85,67,591.00	1,28,87,407.25	8,14,54,998.25
<i>F&I @8%</i>			54,85,407.28
<i>Mandatory Spare</i>			9,67,487.00
Total			8,79,07,892.53
Total incld. GST			10,37,31,313.19

TCC accorded the above proposal and referred ERPC for approval.

Deliberation in the 50th ERPC Meeting

ERPC approved the above proposal with the cost details as deliberated in 50th TCC Meeting.

B1.10: Retrofitting of 15 nos. BHEL make 420 kV CB installed at 400/220 kV Muzaffarpur ss.—Agenda by Powergrid

400/220 kV Muzaffarpur sub-station was constructed in the year 2006. Following assets were commissioned under initial construction project:

Sr. No	Asset Detail	Year of Commissioning
1	400 kV Muzaffarpur-New Purnea D/C line along with L/R	2006
2	400 kV Muzaffarpur-Gorakhpur D/C line along with L/R	2006
3	400 kV Muzaffarpur-Biharsharif D/C line	2006
4	400/220 kV, 315 MVA ICT-I & II	2006
5	400kV, 63 MVAR Bus Reactor-I	2006

BHEL make CBs are used in the bay of 400 KV Muzaffarpur-Gorakhpur D/C lines, 400 KV Muzaffarpur-New Purnea D/C line, 400/220 kV 315 MVA ICT-I & II and 63 MVAR Bus Reactor-I. In total ,15 nos. BHEL make CBs (08 nos. PIR type and 07 nos. without PIR type) installed in 2006 at Muzaffarpur ss.

The said BHEL make CBs are having hydraulic type operating mechanism. In BHEL make CB, there is chronic issue of accumulator failure, leakage from pilot valve, drift in open & close time. In recent days, issues in main and arcing contacts have also been observed during routine maintenance.

To attend the above-mentioned issues, the BHEL make CB needs frequent maintenance for reliable operation of the circuit breaker. Till now, it is being maintained by spare and service support of M/s BHEL.

In past few years we, had witnessed three Bus tripping at Muzaffarpur ss due to non-operation / delay operation of BHEL make CBs.

Further, it to mention that we have been facing difficulties in maintaining CBs for a long time due to a delay in service support as well as the long delivery time (approx. 24 months) for the supply of spares.

Now, M/s BHEL has completely stopped manufacturing and supplying switchgear spares for all three models (125 kV, 245 kV & 42 kV) of SF6 Circuit Breakers (Communication mail enclosed).

Keeping in view of above, the installed 15 nos. BHEL make CBs needs to be replaced on priority though it has completed 17 years of service life only for reliability and stability of the grid.

Total estimated cost for replacement of 15 nos. BHEL make CB will come to Rs.7.81 Cr (Approx).

In 49th CCM, after deliberation, CCM agreed and referred to upcoming TCC/ERPC for approval.

Deliberation in the 50th TCC Meeting

TCC agreed with the proposal for replacement of 15 nos. BHEL make Circuit Breakers at a cost of Rs Rs.7.81 Cr(approx.) and referred to ERPC for further approval.

Deliberation in the 50th ERPC Meeting

ERPC approved the proposal for replacement of 15 nos. BHEL make Circuit Breakers at 400/ 220 kV Muzaffarpur S/s at a cost of Rs Rs.7.81 Cr (approx.).

B1.11: Cost recovery against AMR expenditure/SEM related costs in ER-II from 01.03.2019 to 15.07.2023 for various phases of implementation and associated activities pertaining to Software/Hardware refreshment and upgradation of AMR.

POWERGRID is entrusted for implementation and subsequent maintenance/troubleshooting of AMR system in entire Eastern Region. For implementation of various phases of AMR and further H/W software refreshment program and migration from GPRS to LAN as per cyber security guidelines, multiple LOAs placed by POWERGRID. On 19.06.2023, updated AMR system with Software/Hardware refreshment, done completely with all necessary cyber security compliances. Moreover, now all concerned sites are connected with LAN only which is as per cyber security guideline.

For conversion of old architecture to new model along with, AMC of in-built system and associated structure/Software's, with cost for GPRS communication certain amount of expenditure incurred for the time frame given.

As POWERGRID has already incurred the expenditures or provisioned for subject heads (LOA placed and liability created), entire amounts to be recovered for budget balancing.

Details of expenditures done in phased manner are given below: -

SL NO	PROJECT NAME	LOA/PO Details	Cost Involvement	Remarks
01.	AMR Phase 1 & 2 (Balance amount from 01.03.19 to 30.06.20)	ER-II/ KOL/ C&N/I-582/P-747/870/3676 Dated: 06-Nov-2012 /ER-II/ KOL/C&N/P-747/ AMEND-IV/748/ 2425 Dated: 02-Sep-2014 (SAP PO-9000007968 & 5200022239).	21,77,392/-	Already earlier consumed value approved in 40th CCM & 30th ERPC (From Initial to 28.02.2019).
02.	AMR Phase-3 (Balance amount from 01.03.19 to 30.06.22)	ER-II/KOL/CS/I-1358/P-1398 Dated: 27-Oct-2016. ER-II/KOL/CS/I-1358/P-1398/ AMEND-III/442. Dated: 10-Jul-2018 (SAP PO- 5100014415).	39,87,747/-	Balance amount claimed now.
03.	AMR Phase-4 (From 01.07.20 to	ER-II/KOL/CS/I-2446/P-2420/ 1929 Dated: 20-Jul-		Approved in 153rd OCC

	31.03.22). All supply/Erection cost included but AMC as per original LOA & QV excluded.	2020. ER-II/KOL/CS/I-2446/P-2420/AMEND-II/4374 Dated: 05-Jul-2021/ER-II/ KOL /CS/I-2446/P-2420/AMEND-III /6493 Dated: 07-Jun-2022 (SAP PO-5100032889).	1,30,19,265/-	& 39th ERPC meeting.
04.	AMR Phase-1&2 AMC renewal (From 01.04.2021 to 30.06.2023)	ER-II/KOL/CS/I-2724/P-2702/4285 Dated: 02-Jun-2021 (SAP PO-5100035446).	2,56,33,881/-	Approved in 170th OCC, 44th CCM, 43rd ERPC.
05.	AMR Data Centre HWSW Refreshment (Full PO).	ER-II/KOL/CS/I-3370/P-3289/6577 dated 24.06.2022 (SAP PO-5100041788).	2,13,31,973/-	191th OCC & 46th ERPC.
06.	AMR LAN Integration work (From 01.09.2022 to 30.06.2023).	ER-II/KOL/CS/I-3499/P-3414/6841 dated 01.09.2022 (SAP PO-5100043386).	27,40,552/-	190th OCC, 46th CCM.
07.	AMR Phase-3 AMC renewal for 249 SEM (01.09.22 to 30.06.2023)	ER2/NT/S-AMC /DOM /E00/22 /00692/ 1000000986/I-3645/P-3556 /8045 Dated 29.12.2022 (SAP PO- 5200059035)	27,21,270/-	195th OCC, 47th ERPC.
08.	Transportation of Special Energy Meter to Binaguri for various constituents (Full PO)	SAP PO- 4800017144	23,000/-	As per requirement and discussion with ERLDC/ERP C.
09.	Mobile data for AMR	SAP PO- 5200033984	1,44,997/-	For AMR data transmission through GPRS.
10.	Mobile data for AMR	SAP PO- 5200037273	1,91,054/-	
11.	Mobile data for AMR	SAP PO-5200054713	2,57,832/-	
12.	Mobile data for AMR	SAP PO-5200054715	2,05,724/-	
13.	TOTAL		7,24,34,687/-	
14.	CONSULTANCY FEES	@15% ON SUB-TOTAL	1,08,65,203/-	
15.	GST ON CONSULTANCY FEES	@18% ON CONSULTANCY	19,55,737/-	
16.	GRAND TOTAL		8,52,55,626/-	

As per above list, total Rs. 8,52,55,626/- (Rs. Eight crore fifty two lacs fifty five thousand six hundred twenty six only) required to be recovered from ER constituents against expenditure done till 15.07.2023.

It is proposed to approve the recovery amount and recovery may be done from concerned beneficiaries (DIC's) w.r.t RTA billing for the month of August-2023.

Members may approve please.

In the 49th CCM, after detailed deliberation, CCM advised the following to Powergrid:

1. To submit package wise details in respect of total cost, cost recovered if any and methodology of cost sharing.
2. To revisit its claim of consultancy charges against various packages.
3. To submit a comprehensive proposal along with all the details for consideration in the upcoming TCC/ERPC meetings.

Deliberation in the 50th TCC Meeting

Powergrid updated the followings:

- I. Details cost expenditure up to June-2023 (Last quarter ended) is Rs. 6,01,20,823/-. The detail sheet is attached **at Annexure B1.11**. The earlier proposed value was expenditure upto 15.07.2023, but as the auditor certificate issued on quarter basis, the expenditure calculation has been restricted up to June-23 only.*
- II. All cost of TCS & Airtel applicable upto June-23 is attached.*
- III. Consultancy charges @15% are standard for Powergrid and in 30th ERPC the same has been recovered earlier. The same methodology applied in the instant case also.*
- IV. Powergrid will further submit auditor certificate for actual billing purpose. For sharing of total cost, they requested to consider LTA ratio of last month, i.e, July-2023.*

TCC accorded the above expenditure of Rs. 6,01,20,823/- and referred it to ERPC for approval.

Deliberation in the 50th ERPC Meeting

ERPC approved the above proposal with cost expenditure of Rs. 6,01,20,823/- inclusive of GST.

B1.12: Replacement of old static LBB Relays in ER-II on account of enhancement of Reliability of Protective system –Agenda by Powergrid.

Under various Transmission scheme implemented in Eastern Region earlier, everywhere Static LBB relays are used only. The static relay model comprises RAICA (From ABB) & CTIG (From GE)/ MCTI4 (From AREVA). In many occasions, it is observed that due to maloperation of Static Relay & its auxiliary system, entire Bus & associated elements got tripped.

In addition to that as those Relays are Static in nature analysis of various events, post fault is very difficult. Replacement of those Static LBB relays by available Numerical Relays are only possible

solution to avoid such malfunctions. Moreover, in latest Numerical relays, additional Re-Trip function (Opening of self CB after 100 ms) is available which gives additional flexibility in protective system.

Under ADDCAP 2019-24 Tariff block, all old protection system of Chukha TS (Namely Birpara/Siliguri/Dalkhola/Malda) are taken for complete upgradation and this upgradation is included the replacement of LBB relays also. However, stations namely Maithon (KTPS) & Binaguri are also fitted with old static type LBB relays, which require complete replacement.

A list of such LBB Relays mainly installed at Maithon & Binaguri SS are attached for reference (**Annexure B16**). Total 58 No's Relay require complete replacement and tentative Cost estimate comes to Rs. 2.0 Crores Including all applicable Taxes and duties.

Considering the criticality for continuing of such elements, it is proposed to provide in-principle approval for replacement of such old Static Relays, necessary cost shall be booked in ADDCAP 2019-24 tariff block and actual expenditure shall be placed during truing up.

In the 202nd OCC meeting, Representative of Powergrid submitted that the static relays to be changed in Dalkhola had already been supplied and the work is scheduled to start in the month of May 2023 subjected to availability of shutdown. Replacement work in Birpara and Binaguri is planned to be carried out in the month of July 2023 and August 2023 respectively.

He further submitted that the static LBB relays (58 nos.) at Maithon & Binaguri SS may also be allowed to be replaced with an estimated cost of Rs. 2 crores. The tendering activities would be started once the technical approval is provided. The materials would be procured by the end of September 2023 and the replacement work may be scheduled in the month of November & December 2023.

OCC gave the in-principle approval for the replacement of 58 nos. of static LBB relays (58 nos.) at Maithon & Binaguri SS.

Further, OCC referred the agenda to upcoming Commercial Sub Committee Meeting.

As per discussion in 202nd OCC of ER, it has been finalised to procure 58 No's numerical LBB Relay for Binaguri & Maithon SS for upgradation from conventional static Relays to enhance reliability. It is to be updated, that, vide GeM LOA Ref No:- GEMC-511687755886209 dated 22.06.2023, POWERGRID has placed LOA for procurement of the same to M/S. GE T&D, with time line for completion within 17.02.2024. Total cost implication for procurement and installation of 58 No's Numerical Relay comes to Rs. 2,49,74,783/- (Rs. Two Crore forty-nine lacs seventy-four thousand seven hundred eighty-three only) including all.

In the 49th CCM, Powergrid representative explain the requirement of 58 Nos numerical LBB Relay for Binaguri & Maithon SS for upgradation from conventional static Relays to enhance reliability. Further, he informed that the total cost implication for procurement and installation of 58 No's Numerical Relay comes to Rs. 2,49,74,783/- (Rs. Two Crore forty-nine lacs seventy-four thousand seven hundred eighty-three only) including all.

After detailed deliberation, CCM approved the cost of Rs 2,49,74,783/- including taxes for procurement and installation of 58 Nos numerical LBB Relay for Binaguri & Maithon SS for upgradation from conventional static Relays to enhance reliability and referred the issue to TCC/ERPC meeting for further approval.

Deliberation in the 50th TCC Meeting

TCC approved the cost of Rs 2,49,74,783/- including taxes for procurement and installation of 58 nos numerical LBB Relay for Binaguri & Maithon SS and referred to ERPC for further approval.

ERPC may approve.

Deliberation in the 50th ERPC Meeting

ERPC approved the cost of Rs 2,49,74,783/- including taxes for procurement and installation of 58 nos numerical LBB Relay for Binaguri & Maithon SS.

B1.13: Inclusion of Workstation Console in UNMS Project Scope including AMC for ER UNMS systems - Agenda by CTU.

Inclusion of Workstation Console in UNMS Project Scope including AMC for ER UNMS systems is required at following locations:

- a) At CTUIL Hq, Gurgaon
- b) At ERLDC, Kolkata

Following additional scope for inclusion in the UNMS Project cost for ER UNMS scheme can be amended in the existing contracts:

1. The BOQ of Workstation Console along and other associated software and hardware such as firewall, router, switch, furniture etc.
2. Bandwidth connectivity & its recurring charges for CTUIL HQ Office.

In view of the above, it is requested to consider the additional scope for the above-mentioned requirement as an amendment to the approved ER UNMS project. The tentative BOQ and the cost (Supply & Service) of the additional scope shall be as below

Sl. No.	Description	CTUIL (Qty)	Cost (Supply & Service)	RLDC (Qty)	Cost (Supply & Service)
1	Workstation Console with one monitor along with Furniture	1 set	2.5 lakh	1 set	2.5 lakh

PS:

1. Associated HW/ SW; As applicable- WAN ROUTERS, Internal Firewall & L3 Lan Switch (1 Set)- 42 Lacs (approx.)
2. This cost excludes AMC Charges, Bandwidth Charges and Applicable Taxes.

Deliberation in the 50th TCC Meeting

TCC recommended the above requirement of workstation console at CTU & ERLDC with the total cost of having Rs 5 lakh and referred to ERPC for approval.

ERPC Secretariat representative submitted that as per the MoM of special meeting on Communication systems of ER held on 25.05.2023, a UNMS remote console has to be installed at ERPC secretariat also.

Deliberation in the 50th ERPC Meeting

ERPC approved the above requirement of workstation console at CTU & ERLDC with the total cost of having Rs 5 lakh and also to install remote console at ERPC Secretariat.

B1.14: Sharing of Transmission cost of Raigarh-Pugalur-Trissur HVDC Transmission System—Agenda by GRIDCO

+/- 800kV, 6000MW Raigarh-Pugalur-Trissur HVDC Transmission System has been planned to facilitate Power flow between Chhattisgarh (WR) and Kerala (SR). Due to bi-directional power flow in the Transmission System, it is beneficial for both WR and SR constituents. The HVDC Transmission System has been commissioned from Sept 2020 – Oct 2021.

MoP, GoI vide letter dated 30.05.2022 has requested CERC to consider the Transmission Charges of the above System under NC (National Component) while determining the Tariff of the said HVDC Transmission System as per CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 (Sharing Regulations, 2020, in short). CERC vide order dated 29.09.2022 in Petition No. 685/TT/2020 has directed that, 30% of YTC (Yearly Transmission Charges) shall be under NC and 70% of YTC under RC (Regional Component). The National component shall be shared by all the beneficiaries of the Nation as per the Sharing Regulations, 2020. However, the above order of CERC was challenged by Tamil Nadu before APTEL in Appeal No. 433 of 2022. APTEL vide order dated 18.07.2023 has set aside the Order of CERC and directed to pass fresh order considering the letter dated 30.05.2022 of MoP. Extract of APTEL order:

‘xxxxx

33. We, therefore, find it appropriate to set aside the Impugned Order and direct the Central Commission to pass fresh order in the light of the observations recorded in the foregoing paragraphs and also duly consulting the statutory authorities i.e. CEA, CTU and POSOCO in the matter and also considering the aforementioned MoP’s letter dated 30.05.2022.

xxxxx’

It may be noted that the ER constituents were not impleaded neither in the Petition filed by PGCIL nor in the Appeal filed by Tamil Nadu.

The above HVDC System (Length of Line is about 1838 Km) has been implemented by PGCIL with a huge investment of about Rs.20,000 Crore, as per the statement of the Appellant (Tamil Nadu) in the above APTEL Order. If the HVDC System shall be treated under NC, the constituents of ER shall have to bear Transmission Charges, as shown in **Annexure-B1.14**. For Odisha the

impact shall be roughly about Rs. 2 Crore/month. On the contrary, if 30% of Transmission Tariff of the above HVDC system shall be treated under NC and 70% under RC, the Transmission Charges to be recovered from the constituents of ER, are also shown in the attached **Annexure**. In that case Odisha has to bear Rs. 0.6 Crore/month (approx).

Since SR and WR constituents are the beneficiaries of the above HVDC System, it is requested that the Transmission Charges be shared between the beneficiaries of these two Regions only.

Deliberation in the 50th TCC Meeting

GRIDCO representative explained the matter in brief. He informed that ER constituents have to bear additional transmission charges if the YTC of the above project will be considered under National Component. Further, it was informed that ER constituents were not impleaded neither in the Petition filed by PGCIL nor in the Appeal filed by Tamil Nadu.

TCC referred the issue to ERPC for further discussion.

Deliberation in the 50th ERPC Meeting

GRIDCO representative informed the forum that ER constituents have to bear additional transmission charges if the YTC of the entire project is considered under National Component.

DICs of ER, seconding the opinion of GRIDCO, further expressed that Raigarh-Pugalur-Trissur HVDC Transmission System had been planned to facilitate power flow between Chhattisgarh (WR) and Kerala (SR) only.

ERPC Secretariat explained that CERC has issued draft Sharing of ISTS Charges & Losses(3rd Amendment), Regulations wherein provisions for sharing of transmission charges of inter-regional HVDC transmission system have been proposed. ER constituents were requested to submit the comments, if any.

ERPC advised all the concerned DICs of ER as well as ERPC Secretariat to flag the issue before Hon'ble CERC.

ITEM NO. B2: Outstanding Deviation Charges of IBEUL

Ind-Barath Energy (Utkal) Ltd (IBEUL) was a persistent defaulter against the payment of the deviation charges and also failed to open the Letter of Credit (LC) for default in payment of deviation charges, violating Regulation 10(4) of the DSM Regulation. The matter was discussed in various Commercial Sub-Committee meetings (CCM) at ERPC. In the 43rd CCM dated 21.09.2020, it was noted that the final principal outstanding of ₹ 112.50429 lakh and interest calculated up to 29.05.2019 is of ₹ 26.67585 lakh i.e., total ₹ 139.18014 lakh.

A petition in CERC had been filed in July 2018 by ERLDC against M/s IBEUL for outstanding dues pertaining to DSM & ERLDC Fees & Charges. Hon'ble Commission directed in order against

petition no. 230/MP/2018 dated 16.04.2019 that the Petitioner (ERLDC) is at liberty to approach NCLT (National Company Law Tribunal) for appropriate directions in accordance with the law. Further, ERLDC filed a claim in NCLT on 31.05.2019 through Interim Resolution Professional/ Resolution Professional i.e., Ms. Sumedha Management Solutions Private Limited and the same is admitted by NCLT.

Hon'ble National Company Law Tribunal, Hyderabad Bench, vide its order dated July 25, 2022 had, inter alia, approved the resolution plan submitted by JSW Energy Ltd. in the corporate insolvency resolution process of Ind-Barath Energy (Utkal) Limited ("IBEUL").

On dated 29.12.2022 two amounts were credited in ERLDC establishment account, one is against ERLDC Fees & Charges outstanding and the other is against the DSM charges. Amount of ₹ 349096.89 as mentioned in the table pertains to the DSM charges.

The details of the statement is tabulated below-

Date (Value Date)	Narration	Debit	Credit
29-Dec-2022 (29-Dec-2022)	BY TRANSFER NEFT*ICIC0000105*ICIJ223630001 133*INDBARATH ENERGY		1,54,897.96
29-Dec-2022 (29-Dec-2022)	BY TRANSFER RTGS UTR NO: ICICR42022122900102439 INDBARATH ENERGY UTKAL LIMITED CIRP		3,49,096.89

The amount of Rupees 349096.89 received against DSM outstanding in the ERLDC establishment account is to be transferred to the ER Deviation and Ancillary Services Pool account. The balance/un-settled amount of Rupees 135.689 lakhs may be write-off.

In the 49th CCM, ERLDC representative informed that they have received an amount of Rs 349096.89 against total DSM outstanding of Rs 139.17996 lakhs of Ind-Barath in the ERLDC establishment account and same needs to be transferred to the ER Deviation and Ancillary Services Pool account. He also suggested that the balance/un-settled amount of Rupees 135.689 lakhs may be written-off.

After detailed deliberation, CCM agreed that amount of Rs 349096.89 against DSM outstanding in the ERLDC establishment account may be transferred to the ER Deviation and Ancillary Services Pool account at the earliest. Further for waiver off of outstanding DSM dues of Rs 135.689 lakhs, CCM referred the issue to ERPC for guidance.

Deliberation in the 50th ERPC Meeting

ERLDC submitted that NLDC had filed a Petition(Petition No.-28/MP/2022) seeking necessary directions of the Commission in the matter of dealing with persistent default in payment of DSM charges by the regional entities under the provisions of the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 ('DSM Regulations').

The matter was heard on 03.08.2023 and Hon'ble Commission directed to submit the updated default list. NLDC further pointed out the list of persistently defaulting entities. NLDC also submitted that, keeping in view that some of these entities are already the subject matter of insolvency proceedings under IBC 2016, and the IBEUL case was also intimated.

After detailed deliberation, it was decided that ERLDC would transfer Rs 349096.89 as received against DSM outstanding in the ERLDC establishment account to ER Deviation and Ancillary Services Pool account at the earliest.

Further, for remining outstanding deviation charges of IBEUL of Rs 135.689 lakhs, ERLDC may approach Ministry of Power for necessary clarification/ guidance.

ITEM NO. B3: Continuation of Scheme for Operationalization of the Power System Development Fund(PSDF)

MoP vide letter dated 04.07.2023 conveyed for continuation of scheme "Operationalization of the Power System Development Fund(PSDF)" for the 15th Finance Commission cycle from FY 2021-22 to FY 2025-26. An outlay of Rs 11,000 Cr has been approved to facilitate execution of projects through PSDF from FY 2021-22 to FY 2025-26. The letter is enclosed at **Annexure B3**.

ERPC may note.

Deliberation in the 50th ERPC Meeting

A brief presentation on status of PSDF Funding in ER was made by ERPC Secretariat. The same is enclosed at Annexure.

MS, NPC opined that some of the ER constituents are not availing the PSDF fund optimally, as is being done by other constituents, especially in Southern and Western regions.

ERPC took note of the new areas/categories of schemes which are eligible for PSDF Funding and advised all state utilities to explore availing PSDF funding optimally for the eligible projects.

ITEM NO. B4: Strengthening of State Load Despatch Centers (SLDC)

Based on the decision of 47th ERPC Meeting, a committee was formed comprising members from all SLDCs and representatives from ERPC & ERLDC to deliberate on the issue.

In 49th ERPC, the committee report was submitted and the recommendation of the committee is given below in brief:

- I. Dedicated Cadre for SLDC Operation and virtual ring-fencing of SLDC within the parent company.
- II. Representation of SLDC head on the Board of the Parent company or as a special invitee.
- III. Minimum Manpower requirement in line with CaBIL report to take care of functions of SLDCs has been explored and recommended in the report.
- IV. Training-For Advance topics like IT Cyber security, Big Data Analysis, Forecasting & Market operations etc for which LDC staff needs to be facilitated to take up higher studies. Collaboration with eminent colleges like Kharagpur IIT needs to be encouraged.
- V. Additional topic like Real-time grid operation, Outage coordination analysis, Operation feedback, and post-despatch analysis etc NPTI Durgapur may be approached with proper infrastructure modification.
- VI. Respective SLDCs to take initiative to sign MoUs with IITs & premier institutions for training, capacity building for mutual benefits.
- VII. Transco/parent organization may empower head of SLDCs to retain the trained employee (through LDC Development fund under NPTI/PSTI refreshers training program) for a considerable period of time within SLDCs.
- VIII. All SLDCs to take up with their management for early implementation of the above recommendations.

49th ERPC accepted the recommendations of the committee and advised all the concerned SLDCs to ensure early implementation of these recommendations.

Members may update. ERPC may discuss.

Deliberation in the 50th ERPC Meeting

ED, ERLDC made a brief presentation in this regard.

It was informed that the SLDCs have embarked on a concerted path of augmenting their competencies, involving advanced training for employees in critical domains such as IT Cyber Security. Furthermore, SLDCs have proactively nominated their personnel for specialized training at NPTI Durgapur, covering pivotal areas such as Real Time Grid Operation, Outage Coordination Analysis, and Operation Feedback, as opposed to the earlier practice of sending individuals to NPTI Bangalore and Faridabad.

ERLDC representative emphasized on collaborations between SLDCs and prestigious institutions, including IITs, through the formulation of MoUs, thereby fostering a nurturing environment conducive to knowledge exchange and growth. Additionally, the significance of retaining skilled employees within the SLDCs, aligned with the corporate policies of respective organizations, was highlighted.

While substantial steps have been achieved in terms of training and MoU engagements across the spectrum of SLDCs, it was noted that the states of Jharkhand and Sikkim are yet to fulfil these obligations. Further, he highlighted crucial issue like minimum manpower requirement in line with CaBIL which need to be expedited.

Regarding the representation of SLDC heads on the Board, it was communicated that this implementation is currently in effect for Odisha, although pending for other states.

The Chairperson of ERPC, concurring with the observations and recommendations made by ED, ERLDC, emphasized the specialized nature of SLDC functions, thus calling upon all States to actively take up capacity-building endeavors, essential for the robust strengthening of SLDCs. He further emphasized the need of taking up automation activities in SLDCs by strengthening IT department.

ITEM NO. B5: Capacity Building Program of Eastern Region funded through PSDF

Ministry of Power, GOI had granted a sanction from PSDF fund for the following capacity building programs for the Eastern Region:

- 1) Training for Power System Engineers
- 2) Training on Power Market Trading at NORD POOL Academy for Power System Engineers of Eastern Regional Constituents

Subsequently, Agreement with Nodal Agency (i.e. NLDC have been signed for both the projects in September, 2018 and both the projects are being executed by ERPC Secretariat.

A. Training for Power System Engineers of various constituents of Eastern Region.

This program is basically meant for young entry level engineers working in State Load Despatch centres, State Transmission Utilities, State Gencos, ISGS, DISCOMS & others in Eastern Region, ERLDC, ERPC, CEA, MoP. A sanction of Rs. 61 lacs has been granted from PSDF for this project.

Total 8 nos. of programs each consisting of five days are to be conducted during the duration of two years. Each batch will comprise of 30-40 nos. of participants.

The program is to be executed by Eastern Regional Power Committee (ERPC) in consultation with Asia Institute of Power Management (AIPM), CESC Ltd.

The 7th batch of training programme on the topic “Enhancing Managerial Skills for Changing Power Sector” was organized from 24.07.2023 to 28.07.2023 at Power Training Centre, OPTCL, Bhubaneshwar.

ERPC may note.

Deliberation in the 50th ERPC Meeting

ERPC noted.

B. Training on power market trading at NORD POOL Academy for Power System Engineers of Eastern Regional Constituents

A sanction of Rs. 5.46 Crore has been granted from PSDF for this project. This capacity building program was meant to contribute towards capacity building and assist the development of a commercially viable and vibrant power market in India. It will also give an unique opportunity to the Indian participants to learn from the best industry practices and most enriching experiences of Nordic countries in running one of the most successful power exchanges in the world. It would benefit the participants from the State Transmission Utilities (STUs), Distribution Companies, State Load Despatch Centres (SLDCs), Generators (including ISGS), ISTS Licensees in Eastern Region, Power System Operation Corporation (POSOCO) and Eastern Regional Power Committee (ERPC) Secretariat.

The program is being executed by Eastern Regional Power Committee (ERPC) in consultation with partner M/s PTC and Nord Pool Consulting.

The first two batches of training programme were completed in the year 2019 and the third batch training programme was completed in Sep-2022. Total 40 participants attended the study programme in last three batches.

4th(Final) batch of training programme has now been scheduled in consultation with PTC/NORD POOL from 23rd Sep 2023 to 01st Oct 2023(including the journey period).

ERPC may note.

Deliberation in the 50th ERPC Meeting

ERPC noted.

ITEM NO. B6: Proposal for Sponsorship in National Workshop on "Shaping Sustainable Future with Green Power" to be organized by NPTI
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NPTI is going to organize a two day National Conference(Residential) on "Shaping Sustainable Future with Green Power" in association with ERPC tentatively in 2nd week of January 2024 at a suitable location mutually agreed by both organization. The total expected delegates in residential mode may be 100 out of which 40 delegates from different constituents of ER may be sponsored by ERPC and rest 60 delegates may be invited from other related organizations outside ER.

The proposal letter received from NPTI is attached at Annexure- B6. Estimated delegate fee will be @Rs 75, 000/- + GST as applicable.

The total sponsorship amount for 40 delegates of ERPC towards participation In the conference shall be Rs 30 lakhs(Rupees Thirty Lakhs) + GST as applicable.

ERPC may discuss and approve.

Deliberation in the 50th ERPC Meeting

ERPC approved the proposal with the estimated cost of Rs 30,00,000 /-(Rs Thirty Lakhs only) plus GST as applicable for sponsorship of 40 delegates of ER constituents.

ITEM NO. B7: Streamlining the Process of Fund Utilisation/ Budgetary Provisions of ERPC

In view of the Audit paras in respect of self-financing of RPCs, CEA vide order dated 02.01.2023 has constituted a committee for streamlining the process of fund utilization/budgetary provision of all RPCs. A meeting on 06.04.2023 was taken by the Chairperson of CEA in this regard wherein the Standard Operating Procedure (SOP) for budgeting and expenditure of RPCs prepared by the Committee constituted by CEA was finalised and approved. The same is enclosed at **Annexure-B7**. The salient points in the Standard Operating Procedure (SOP) for budgeting and expenditure of RPCs are as follows:

- (i) RPCs shall decide and collect contribution amount from their member organisations after approval in the RPC meeting.
- (ii) RPCs shall finalise its annual Internal Budget (except salary head) and get its approval in committee meeting. Quarterly expenditure from “RPCs Internal Budget” shall be put up for intimation/approval in concerned RPC meeting.
- (iii) CEA shall provide budget to RPCs for “Salary” head only. All expenditure of “Salary” head shall be met from the budget provided by CEA and the same shall be reimbursed to CEA by RPCs quarterly.
- (iv) All expenditure of heads other than “Salary” shall be met from concerned RPC Fund.
- (v) Any other fund for any specific purpose may be created by RPCs with the approval of RPC Committee.
- (vi) Amendment of the SOP, if any, shall be carried out after conducting joint discussion among all the Member Secretaries and Chairperson, CEA’s approval is to be obtained.

The matter was discussed in sub-committee meeting on ERPC Establishment Fund held on 31.07.2023 and it was decided that to implement the above guidelines of CEA, the following changes need to be carried out in ERPC Establishment Fund Regulations.

Clause 4 of ERPC Establishment Fund Regulations	Existing	Operation: The fund shall be operated by a group of three officers from member constituents of ERPC, preferably posted in Kolkata as nominated by Member Secretary, ERPC. Bank account shall be opened in the name of the fund in a scheduled bank and officers nominated as above shall be given the cheque drawing authority. The tenure of each nominated officer will be three years which can be further extended up to two years at the sole discretion of Member Secretary, ERPC
	<i>Proposed</i>	<i>The fund shall be operated by either of two officers, Assistant Secretary(Head of Office) or DDO of ERPC Secretariat.</i>

Clause 7 of ERPC Establishment Fund Regulations	Existing	Expenditure against approved budget, as per para (6), can be made with the approval of Member Secretary, ERPC			
	<i>Proposed as 7(a)</i>	<i>Expenditure against approved budget, as per para (6), can be made with the approval of Member Secretary, ERPC</i> <i>(i) Member Secretary, ERPC shall have the following financial powers of expenditure.</i> <table border="1"><tr><td><i>Recurring Expenditure</i></td><td><i>upto 10 lakh(per case)</i></td></tr><tr><td><i>Non-recurring Expenditure</i></td><td><i>upto 25 lakh(per case)</i></td></tr></table> <i>(ii) For amount more than mentioned above, Member Secretary may incur after prior discussion and approval of ERPC.</i> <i>(iii) All kinds of new construction/project, intended for long duration(such as construction of new building) shall be done after approval of CEA/MoP. For all kind of maintenance work, it shall be done with approval of Member Secretary, ERPC.</i>	<i>Recurring Expenditure</i>	<i>upto 10 lakh(per case)</i>	<i>Non-recurring Expenditure</i>
<i>Recurring Expenditure</i>	<i>upto 10 lakh(per case)</i>				
<i>Non-recurring Expenditure</i>	<i>upto 25 lakh(per case)</i>				
	<i>New Clause on Procurement Policy: 7(b)</i>	<i>Procurement from “ERPC Establishment Fund” shall be done from ‘GeM Portal’ only. Any relaxation of Gem portal may be permissible in accordance with government order / rules only.</i>			
	<i>New Clause: 7(c)</i>	<i>Any expenditure from “ERPC Establishment Fund” shall be done as per the General Financial Rules, 2017, amended time to time, other applicable rules, guidelines, manuals of Central Government, Delegation of Financial Power etc.</i>			
Clause 9 of ERPC Establishment Fund Regulations	Existing	The statement(s) of the fund shall be verified by three officers; One officer nominated by incumbent Chairperson from his own organization & Second officer nominated by the Chairperson of previous year from his own organization and third officer nominated by Member Secretary, ERPC. The officers nominated as above shall be other than the officers nominated as per para-4 above. The Member Secretary, ERPC will approve the statement of the fund before placing the same to auditor.			
	<i>Proposed</i>	<i>Internal audit of the “ERPC Establishment Fund” shall be carried out every year by a team of three officers; one officer nominated by incumbent Chairperson from his own organization, second officer nominated by Chairperson of previous year from his own organization and third officer to be nominated by Member Secretary, ERPC from ERPC Secretariat at Director level who is not dealing with any administration matter of ERPC Secretariat.</i>			

ERPC may approve.

Deliberation in the 50th ERPC Meeting

Member Secretary, ERPC explained the matter in brief and stated that in order to implement the SOP on “budgeting and expenditure of RPCs” issued by CEA vide dated 01/05/2023, the amendments in ERPC Establishment Fund rules as given in the above table has been proposed. Further he informed that the proposed amendment in clause 4 of ERPC Establishment Fund Rule will be effective from next Financial Year i.e. 1st April 2024 and all other amendments as proposed with immediate effect.

ERPC approved the proposed amendments in Establishment Fund Rules.

ITEM NO. B8: Late Payment Surcharge for delay in reimbursement of membership/participation Fees.

Erstwhile budgetary support from CEA was available at the start of the financial year. Now since the expenditure need to be incurred from ERPC Establishment Fund, timely payment of the membership/participation fees is required therefore mechanism for Late Payment surcharges have to be introduced.

The matter was also discussed in the sub-committee meeting on ERPC Establishment Fund held on 31.07.2023 and the committee agreed with the proposal of introduction of late payment surcharge for ERPC Establishment Fund starting from FY 2024-25. It was decided that the following clause may be added to the ERPC Establishment Fund Regulation:

“If payment for reimbursement of membership/participation fees is not received by 30th June, 1 % per month or part thereof Late Payment Interest would be charged from 1st July onwards till payment”.

Deliberation in the 50th ERPC Meeting

Chairperson, ERPC enquired about the status of pending dues by the constituent members/participants of ERPC. ERPC Secretariat informed that barring few of the utilities, most of the members/participants cleared their dues within time.

Chairperson, ERPC opined that as number of defaulting utilities are few, Secretariat may approach them individually and pursue the matter to clear the pending dues within time. He stated that at present the provision of late payment surcharge may not be required and requested all the members to clear the dues of ERPC Secretariat within the schedule time for smooth functioning of Secretariat.

ITEM NO. B9: ERPC Secretariat Internal Budget for FY 2023-24

In 49th ERPC Meeting, approval under the head “Reimbursement to Govt” was granted for an amount of Rs. 3,00,00,000 /-. The budget estimate has been revised considering additional manpower posted during this year, service charge bill of KMC and other associated office expenditures.

The additional budget requirement of ERPC secretariat for FY 2023-24 was deliberated in the sub-committee meeting held on 31.07.2023. The head wise budget approved by CEA vis-à-vis revised estimate is given in below table:

Amount in Rupees			
Sl. No.	Objective Head	Budget Allocated by CEA 2023-24	Revised Budget Estimate 2023-24
1	Salaries	1,45,00,00	1,57,50,000
2	Allowance	1,14,00,00	1,15,00,000
3	Reward	50,000	50,000
4	LTC	5,50,000	5,50,000
5	Medical Treatment	3,00,000	3,00,000
6	Training Expenses	5,00,000	5,00,000
7	DTE	7,00,000	10,00,000
8	OE	8,00,000	22,80,000
9	RENT, RATES & TAXES	2,00,000	10,00,000
10	Printing & Publication	3,50,000	50,000
11	Digital Equipment	5,00,000	2,00,000
12	Material & Supplies	80,000	80,000
13	Minor Works	3,00,000	3,00,000
14	Repair & Maintenance	11,00,000	11,00,000
15	Other Revenue Exp.	4,00,000	4,00,000
16	Information & ICT	2,00,000	3,00,000
17	Furniture & Fixtures	2,00,000	10,00,000
	Total	₹ 3,52,00,000	₹ 3,63,60,000

	Already approved in 49th ERPC under the head reimbursement to Central Govt	₹ 3,00,00,000
	Shortfall	₹ 63,60,000

ERPC may approve the additional budget requirement.

Deliberation in the 50th ERPC Meeting

ERPC approved the additional budget requirement of Rs. 63,60,600 /- for ERPC Secretariat for the Financial Year 2023-24.

ITEM NO. B10: Arrear Service Charges of Kolkata Municipal Corporation in respect of ERPC Office Complex and ERPC Staff Qtrs

Kolkata Municipal Corporation (KMC) had raised bills in the month of Nov-22 towards arrear payment of Service Charges for ERPC Residential Complex and ERPC Office Complex as per following details.

SL No.	Description	Period	Amount
1	Arrear payment of Service Charges for ERPC Residential Complex	F.Y.1997-1998 (since handing over the building from CPWD) to F.Y. 2022-2023 (26 years)	Rs.6,07,330.00x26=Rs.1,57,90,580.00
2	Arrear payment of Service Charges for ERPC Office Complex at 1A,CIT.Scheme (14, Golf Club Road), Tollygunge,Kolkata-700033	F.Y.2010-2011 to F.Y. 2022-2023 (13 years)	Rs.3,94,000.00x13=Rs.51,22,000.00
Total Amount Payable to KMC			Rs.2,09,12,580.00

The bills could not be processed in FY 2022-23 due to insufficient budget in relevant head i.e. Rent, Rates & Taxes. A letter was written to CEA for budgetary allocation of the fund under the head RRT to process the bills. However, no budgetary allocation was received in RE of FY 2022-23 as well as BE of FY 2023-24.

CEA vide email dated 20.07.2023 intimated that the above expenditure may be booked from ERPC Establishment fund in line with the recent guidelines on self-financing of RPCs.

In the sub-committee meeting held on 31.07.2023, members suggested that considering the nature of the fees as statutory, the arrear fees in respect of ERPC Office Complex & ERPC Residential Complex for the period 2010-11 to 2022-23 may be paid to KMC. However, for the bills pertaining to Residential Complex for the period prior to 2010-11 i.e. (1997-98 to 2009-10) , ERPC

Secretariat may approach KMC for one time settlement on the corresponding fees. Based on the replay received from KMC, the subsequent action may be decided by ERPC forum.

ERPC may discuss and approve the above expenditure.

Deliberation in the 50th ERPC Meeting

ERPC accepted the suggestion of the sub-committee with regard to clearing the arrear dues of KMC. The arrear fees in respect of ERPC Office Complex & ERPC Residential Complex for the period 2010-11 to 2022-23 would be paid to KMC in first instance. For the fees of remaining period of ERPC Residential Complex (1997-98 to 2009-10), matter to be taken up with KMC for one time settlement of the fees. Based on the outcome of the discussion with KMC, the rest amount would be released to them.

ITEM NO. B11: Opening of new Bank Account for smooth operation of ERPC Canteen
--

A canteen named ERPC CAFÉ has been operationalized at ERPC office premises. For smooth operation of ERPC CAFÉ a bank account has been opened with the members of ERPC Canteen Committee as its signatory.

ERPC may approve.

Deliberation in the 50th ERPC Meeting

ERPC accorded post-facto approval of opening of new bank account for ERPC CAFÉ.

ITEM NO. B12: Expenditure for hosting of 50th TCC & ERPC Meeting

An initial approval of Rs. 70 lakhs were taken from Chairperson, ERPC towards expenditure for hosting the 50th TCC & ERPC Meeting. However, in view of increased number of participations in the meeting in the last moment, it is estimated that the total expenditure on account of hosting 50th TCC & ERPC Meeting would be around Rs. 1 crore.

ERPC may approve.

Deliberation in the 50th ERPC Meeting

ERPC approved Rs 1 crore towards expenditure for hosting 50th TCC & ERPC Meeting by ERPC Secretariat.

ITEM NO. B13: Outstanding contribution to ERPC Funds

All the utilities who have not cleared the outstanding dues yet are requested to clear the same at the earliest.

Concerned members may update.

Deliberation in the 50th ERPC Meeting

ERPC advised secretariat to take up the matter with the concerned utilities for clearing of the outstanding dues at the earliest.

ITEM NO. B14: Membership of ERPC on annual basis for the year 2023-24.

12.1 Membership of Private Distribution Company: As per Gol Resolution on ERPC, one Distribution Company by alphabetical rotation out of the private distribution companies functioning in the region is eligible to become new member on yearly basis. The private distribution companies functioning in the region are IPCL in West Bengal, TPCODL, TPNODL, TPSODL & TPWODL in Odisha and JUSCO in Jharkhand. The names of the private distribution companies in alphabetical order are IPCL, JUSCO, TPCODL, TPNODL, TPSODL & TPWODL. In the 35th ERPC meeting held on 25.02.2017 it was decided that all the Discoms would be approached for membership of ERPC. Discoms willing to become member will be nominated by alphabetical order on yearly basis.

For FY 2023-24, Tata Steel Utilities & Infrastructure Services Limited (TSUISL), formerly JUSCO has become member of ERPC.

ERPC may note.

Deliberation in the 50th ERPC Meeting

ERPC noted.

12.2 Proposal of IPCL as permanent member of ERPC

India Power Corporation Limited (IPCL) is a distribution licensee in the State of West Bengal for supply of electricity in Asansol-Raniganj belt of the State. They were a member of ERPC for FY 2022-23 by alphabetical rotation.

Vide communication dated 19.07.2023, IPCL has requested permanent membership in ERPC.

ERPC may discuss.

Deliberation in the 50th ERPC Meeting

Chairperson, ERPC opined that for membership criteria, the relevant clauses of Gol resolution on formation of RPCs shall be followed. As per the Gol resolution, one private distribution company out of all the private discoms operating in the region is eligible for membership of RPC on alphabetical rotation basis. Accordingly, ERPC decided to follow the rotation basis membership for private distribution companies.

ITEM NO. B15: Finalisation of dates and venue for the next ERPC & TCC meetings.

The roster for hosting of ERPC meetings is given below:

Sl. No	Host Organization
1	ODISHA - hosted 31 st ERPC Mtg. on 14.11.2015
2	JHARKHAND - hosted 32 nd ERPC Mtg. on 20.02.2016
3	BIHAR - hosted 33 rd ERPC Mtg. on 25.06.2016
4	CESC - hosted 34 th ERPC Mtg. on 19.11.2016
5	TPTCL - hosted 35 th ERPC Mtg. jointly on 25.02.2017
6	MPL - hosted 35 th ERPC Mtg. jointly on 25.02.2017
7	GMRKEL -hosted 36 th ERPC Mtg. on 26.08.2017
8	POWERGRID - hosted 37 th ERPC Mtg. on 17.06.2018
9	DVC -hosted 38 th ERPC Mtg. on 30.06.2018
10	NVVN - hosted 39 th ERPC Mtg. Om 17.11.2018
11	NHPC - hosted 40 th ERPC Mtg. on 16.03.2019
12	NTPC - hosted 41 st ERPC Mtg. on 27.08.2019
13	PTC

	- hosting 42 nd ERPC Mtg. on 13.12.2019
14	ERPC Sectt. hosted 43 rd , 44 th , 45 th ERPC Mtg.
15	WEST BENGAL hosted 46 th ERPC Mtg.
16	ERPC Sectt. hosted 47 th & 48 th (Online) ERPC Mtg.
17	Power Dept, Sikkim & Sikkim Urja Limited jointly hosted 49 th ERPC Meeting on 24 th March 2023
18	ERPC Sectt. hosted 50 th ERPC Mtg on 11 th August-2023
19	JITPL - yet to host ERPC Mtg.

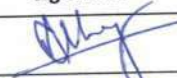



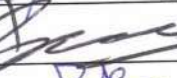



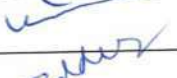

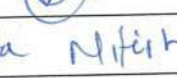
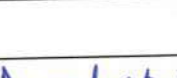
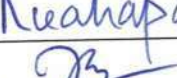


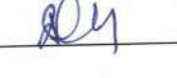


ERPC may finalize.

Deliberation in the 50th ERPC Meeting

Member from Bihar intimated that they are willing to host next TCC& ERPC Meeting tentatively in the month of Nov-23. ERPC decided that the next meeting will be hosted by Bihar and the exact date and venue will be intimated in due course.

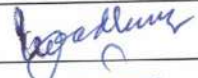


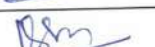
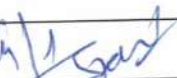

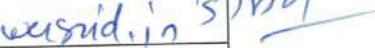



Participants List of 50th ERPC Meeting						
Sl.No.	Name	Designation	Organization Name	Mobile No.	Email ID	Signature
1	Vijay Bhaskar Reddy	Chief Executive Officer	JITPL	9701008282	Vijayabhaskar.d@Jindalgroup.com	
2	Shubhang Nandan	Head Powersales & Regulatory	JITPL	9931842606	head.powersales@Jindalgroup.com	
3	Nimish Sheth	Chief Operating Officer	DMTCL	7042879619	Nimish.Sheth@SEKURA.IN	for Nimish
4	Avinash Rao	CEO	DMTCL	7400054387		
5	M.K. Karmali	Director (Project)	JUSNL	8987581081	dir.p.jusnl@gmail.com	LC
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7	Arun Kumar	GM (SLDC)	SLDC, Jharkhand	7070816390	sldcranchi@gmail.com	
8	A.K. Bhartiya	GM (Engineering)	JUSNL	7033991202	gmengineering.jusnl@gmail.com	
9	Sudip Kumar Dash	Head (Commercial & Regulation)	MPL	9204652869	sudipdash@tatapower.com	
10	N. S Mondal, IES	Member Secretary	ERPC	9958389967	mserpc-power@nic.in	
11	S. Kejriwal, IES	Director	ERPC	9831919509	shyam.kejriwal@gov.in	
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20	S. K. Das	DGM (Electrical)	OPTCL	9438907316	ele.santoshdas@optcl.co.in	

Sl.No.	Name	Designation	Organization Name	Mobile No.	Email ID	Signature
21	C. R. Mishra	DGM (Electrical)	OPTCL	9438907305	ele.crmishra@optcl.co.in	<i>C. R. Mishra</i>
22	P. K. Mohanty	GM	GMRKEL	7894450332	pradeep.mohanty@gmrgroup.in	<i>P. K. Mohanty</i>
23	Basudev Swain	AGM	GMRKEL	9178462815	basudev.swain@gmrgroup.in	<i>Basudev Swain</i>
24	D N Patra	GM	OHPC	7328840020	dnpatra.ohpc@gmail.com	<i>D N Patra</i>
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**PROPOSAL FOR “UNIFIED NATIONAL ACCOUNTING SOFTWARE FOR REGIONAL
POWER COMMITTEES (UNASR)”**

I. Role of Regional Power Committees

Since independence Indian Power system has evolved progressively and became one of the largest integrated, state-of-the-art, robust networks in the world. This transformation was mainly backed by the Electricity Act 2003, in which the role and responsibilities of different entities are clearly defined. Since electricity is in the concurrent list in schedule VII of the Indian constitution, both the Central and States can have different entities for strengthening the associated Power system independently. Regional Power Committees (RPCs) are formulated with the objective of facilitating the integrated operation of the Power systems among the different entities involved in the operation and maintenance of Power systems in that specific region. The role and responsibilities of RPCs as mandated in the Electricity Act 2003 and CERC regulations are as follows:

As per section 2(55) of the Electricity Act 2003

“Regional Power Committee” means a committee established by resolution by the Central Government for a specified region for facilitating the integrated operation of the power systems in that region....”

As per section 29(4) of Electricity Act 2003: (Compliance of directions)

“The Regional Power Committee in the region may, from time to time, agree on matters concerning the stability and smooth operation of the integrated grid and economy and efficiency in the operation of the power system in that region....”

As per clause no-2.4.5 of CERC(IEGC) Regulation 2010:

*“....RPC Secretariat or any other person as notified by the Commission from time to time, **shall prepare monthly Regional Energy Account, weekly unscheduled interchange account, reactive energy account and congestion charge account**, based on data provided by RLDC and renewable regulatory charge account based on data provided by SLDC/ RLDC of the State/Region in which wind generator is located and any other charges specified by the Commission for the purpose of billing and payments of various charges....”*

As per CERC(IEGC) Regulation 2023

*“Accounting and pool settlement system metering, accounting and settlement system: (a) At the Inter State Transmission System (ISTS) level, the basic principle followed is that all settlements for the energy scheduled before the fact are done directly between the sellers and the buyers, with the **Regional Power Committee issuing the Accounts specifying the quantum of energy scheduled**. All deviations from the schedule are settled through a regulatory Pool Account*

*maintained by RLDCs where only the deviation payments are handled. (b) **The settlement system shall be transparent, robust, scale-able (multi buyer/seller, inter connection with lower and upper pool systems) and dispute-free with integrity and probity and usage of state of the art techniques**. The settlement computation details, applicable charges and operation of different regulatory Pool Accounts shall be in accordance with various regulations of the Commission. **RPCs shall standardise the formats of various accounts.** “*

With consistent progress over a period of time, at present India is having five regional grids which were integrated into National Grid. In each region, one Regional Power Committee has been established by the Ministry of Power, Govt of India vide Resolution dated 03rd December 2021 & Corrigendum dated 17th December 2021 for integrated operation of the power system.

II. Commercial settlement responsibilities entrusted to RPCs

Commercial settlement mechanism plays a crucial role in the progress of any market in the world. The power sector is no more exception. A transparent, time-bound, grievance-oriented commercial settlement mechanism helps in the progress of the Power system in India. Since RPCs are impartial and neutral entities and the sole purpose of RPCs is to bring cooperation among the entities, the responsibility of commercial settlements among the different entities in the Power systems is assigned to RPCs.

Different regulations and the relevant clauses which mandates RPCs to issue commercial statements are as follows:

<i>Regulation</i>	<i>Clause</i>
<i>As per clause no-2.4.5 of CERC(IEGC) Regulation 2010:</i>	<i>“....RPC Secretariat or any other person as notified by the Commission from time to time, <u>shall prepare monthly Regional Energy Account, weekly unscheduled interchange account, reactive energy account and congestion charge account</u>, based on data provided by RLDC and renewable regulatory charge account based on data provided by SLDC/ RLDC of the State/Region in which wind generator is located and any other charges specified by the Commission for the purpose of billing and payments of various charges....”</i>

<p><i>Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2022;</i></p>	<p>“9. Accounting of Charges for Deviation and Ancillary Service Pool Account (1) By every Thursday, the Regional Load Despatch Centres shall provide the data for deviation calculated as per Regulation 6 of these regulations, for the previous week ending on Sunday mid-night to the Secretariat of the respective Regional Power Committees. (2) After receiving the data for deviation from the Regional Load Despatch Centre, the Secretariat of the <u>Regional Power Committee shall prepare and issue the statement of charges for deviation prepared for the previous week, to all regional entities by ensuing Tuesday</u></p> <p>Provided that transaction-wise DSM accounting for intra-State entities shall not be carried out at the regional level. (3) <u>Separate books of accounts shall be maintained for the principal component and interest component of charges for deviation by the Secretariat of the Regional Power Committees.</u> “</p>
<p><i>Central Electricity Regulatory Commission (Ancillary Services) Regulations, 2022</i></p>	<p><i>Part IV Accounting and Settlement of SRAS and TRAS</i></p> <p>“21. Accounting and Settlement of SRAS and TRAS (1) <u>Accounting of SRAS shall be done by the Regional Power Committee on a weekly basis,</u> based on SCADA data. (2) <u>Accounting of TRAS shall be done by the Regional Power Committee on a weekly basis,</u> based on interface meter data and schedules. “</p>
<p><i>Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020</i></p>	<p>“14. Accounting (1) The Implementing Agency shall publish transmission charges payable by drawee DICs and injecting DICs with untied LTA for the billing month in Rupee terms. (2) <u>Regional Transmission Accounts and Regional Transmission Deviation Accounts for the billing month for the DICs shall be prepared by the Secretariat of the respective Regional Power Committee</u> on the basis of: (a) DIC-wise transmission charges for the billing month, as furnished by the Implementing Agency; and (b) Meter readings of all Special Energy Meters for computation of Transmission Deviations for every time block of the corresponding billing period, as furnished by respective RLDCs.”</p>

Regulations mandate RPCs to issue the commercial accounts **using sophisticated technologies/soft-wares in a transparent and time bound manner** (i.e., weekly and monthly, Annually). These commercial accounts issued by RPCs acts as a binding reference document for the entities to settle the bills. For example, the monthly Regional Energy Account (REA) issued by RPCs will be considered by the ISGS/Central Generating stations/IPP's to raise the invoices for the settlement of Monthly fixed charges and Energy charges with the tied beneficiaries. Regional Transmission account (RTA) issued by the RPCs will be considered by the CTU to settle the monthly transmission charges among the beneficiaries for utilizing the inter-state transmission network. The mandate/time frame given by various regulations to RPCs in respect of commercial settlements and the objective of each commercial statement/account are as follows:

Weekly Accounts				
Sl No.	Account	Regulation	Objective of account	Entities involved
1	Deviation Settlement Mechanism (DSM) account	CERC(Deviation Settlement Mechanism and related matters) Regulations, 2022	For facilitating the incentives and dis incentives as mandated by regulation there by enabling the Grid discipline.	Beneficiaries, CGS, ISGS, IPPs, Cross Border Entity, RE Generators
2	Secondary Reserve Ancillary Service(SRAS) account	CERC (Ancillary Services) Regulations, 2022	For providing incentives to the Generators in supporting the Grid, through automatic generation control	Generators & Discoms
3	Tertiary Reserve ancillary service(TRAS) account	CERC (Ancillary Services) Regulations, 2022	Commercial support to the Generators for supporting the grid, in the case of contingencies	Generators & Discoms
4	Reactive Energy account	CERC, IEGC 2010 Or CERC IEGC 2023	Providing compensation mechanism for providing reactive power support to the Grid	1.Beneficiaries only (as per Reg-2010) 2. Beneficiaries & Generators
Monthly Accounts				
1	Regional Energy Account (REA)	CERC, Tariff Regulations	For settlement of monthly Capacity charges and Energy charges	CGS, Beneficiaries
2	Regional Transmission Account(RTA)	CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020	For settlement of Transmission charges on monthly basis among the beneficiaries	Transmission Utilities, Designated ISTS Customers, Generators
3	Regional Transmission Deviation Account (RTDA)	CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020	For settlement of Transmission deviation charges on monthly basis among the beneficiaries	Transmission Utilities, Designated ISTS Customers, Generators
4	Security Constrained Economic Despatch(SCED) Account	CERC Suo moto order	For improving the economy of the Generators	Beneficiaries, CGS, ISGS
5	Compensation Account	CERC orders	Part load compensation accounts	Beneficiaries, CGS, ISGS
6	DC Certification of IPPs	CERC orders	For settlement of monthly Capacity charges and Energy charges	ISGS, IPPs, Beneficiaries
7	Ramping Performance of thermal generators	CERC, IEGC 2010	To certify the Ramping Performance of thermal generators	CGS, Beneficiaries
8	Interest Accounts	CERC(Deviation Settlement Mechanism and related matters) Regulations, 2022	Interest calculation of Weekly commercial accounts	Beneficiaries, CGS, ISGS, IPPs, Cross Border Entity, RE Generators

III. Present methodology adopted by the RPCs

Based on data provided by RLDC/NLDC/PXs/Regional Entities, RPC secretariat prepares commercial accounts as per prevailing CERC Regulations. In this regard, every region has a different approach to accounting and settlement though the same logic is applicable to all regions

or all regional Entities. At present, the practices followed in different RPCs for preparation of Commercial Accounts are as follows:

ERPC:	Commercial Accounting software(.php) developed by M/s VS & Tower Pvt ltd. Some accounts through Excel based. (i.e. Compensation A/c)
WRPC:	Commercial Accounting Software(.php) developed by M/s VS & Tower Pvt ltd. Some accounts through Excel based. (i.e. RTDA A/c, Compensation A/c)
SRPC:	In house accounting software(.php) developed by SRPC Secretariat. Some accounts through Excel based. (Oil Compensation A/c)
NRPC:	Commercial Accounting software developed by M/s Kreate. Some accounts through Excel based. (i.e Compensation A/c)
NERPC:	Commercial Accounting software developed by M/s PWC. Some accounts through Excel based. (i.e Compensation A/c)

It is also to be noted the regulations are applicable to all the regions in a similar manner, however, the accounts issued by RPCs are not uniform in all the regions. Many times, it has been observed that the regulations had been implemented in different regions with different interpretations and the utilities who have a presence in all the regions are raising the issues of different accounting approaches among RPCs for the same situations and also accounting is not robust, scalable or standardized.

Further accounts issued by RPCs form the basics for all data submitted to CEA, MoP, CERC, inputs to the Ministry of Power on Parliament Questions, Committees of the Parliament and VIP references etc. However, at presents the accounts are not being stored in a structured database and thus cannot be easily referenced.

IV. Proposed Common Accounting Software for RPCs

“UNIFIED NATIONAL ACCOUNTING SOFTWARE FOR RPCs - UNASR”

In the 13th NPC meeting, S. R. Narasimhan, CMD, Grid-India informed that Grid-India is developing a Centralized Web Based Energy Scheduling software(C-WBES) for scheduling and despatch of electricity and same will be implemented throught out india within 6 months.

Similarly, as per Annexure-7: ACCOUNTING AND POOL SETTLEMENT SYSTEM of Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulation 2023

“The settlement system shall be transparent, robust, scale-able (multi buyer/seller, inter connection with lower and upper pool systems) and dispute-free with integrity and probity and usage of state-of-the-art techniques. The settlement computation details, applicable charges and operation of different regulatory Pool Accounts shall be in accordance with various regulations of the Commission. RPCs shall standardise the formats of various accounts....”

Therefore, it is high time for RPCs to develop Common Accounting software using of state-of-the-art techniques as directed in CERC IEGC Regulation 2023. The importance of common accounting software for RPCs will help in the **reduction of time for implementation of new as well as amended regulations, better interpretation of regulations, error-free accounting by incorporating modern software technologies, easy accessibility of data & data analysis and standardization of reports for easy understandability of the utilises**. The advantage of developing Common Accounting software for all the RPCs in the different perspectives are summarised below:

Technical consideration:

1. Incorporating features of Modern software in Commercial accounting using state of the art techniques.

Feature	Present	Proposed
User Interface (UI)	Not Available or Rugged UI with no features	Modular, Configurable
Database	Not Availabale or Primitive & does not support all types query, features.	National database with integration of all Region and Back up database.
Integration	Not Available	Full featured back-end integration among all applications.

It is proposed to implement “UNIFIED NATIONAL ACCOUNTING SOFTWARE FOR RPCs – UNASR**” in a cloud environment as per Ministry of Electronics and Information Technology (MeITY) empanelled Cloud service Provider (CSP).*

2. Secure programming language and cyber security complaint.
3. Role based user access can be granted at any level including MoP/CEA/ NPC Division/ RPCs/ All Users (CGS, ISGS, Beneficiaries, Cross Border Entity, IPPs etc).

The data for cross checking/tallying can be easily accessed with role defined in the softwar. Further any user can easily download particular blockwise data for any end use.

4. Better and uniform interpretation of Regulations.
5. Easy and faster implementation of Regulations/Amendment Regulations.
6. Error free logic implementation uniformly across all the region.
7. Better handling of grievance of Regional Entities.
8. Easy implementation of 5 min block accounting in future.
9. API integration with WBES system, AMR system or other utilities such as Power Exchanges, Regional Entities for seamless data transfer.

Economical Consideration:

1. Cost optimization for development and AMC.
2. Reduction of major and minor charges for implementaion of CERC amendment regulations.
3. Easy understanding of the accounting system among officers while inter-RPC transfer or between CEA/NPC & RPC transfer.
4. Manual work will be reduceed and improvement of the work efficiency of the organization.
5. Manpower will be utilized for new emerging technologies i.e., Power market, storage technology, green hydrogen, RE integration, Focused analysis of data etc.

Regulatory Consideration:

1. The settlement system shall be transparent, robust, scale-able (multi buyer/seller, inter connection with lower and upper pool systems) and dispute-free with integrity and probity and usage of state of the art techniques. The settlement computation details, applicable charges and operation of different regulatory Pool Accounts shall be in accordance with various regulations of the Commission. RPCs shall standardise the formats of various accounts.
2. Easy and faster settlement of disputes.
3. Standardization of input and ouput format will helps the utilities operating across all the regions.
4. Timely issuance of error free accounts and revision accounts.

5. Reduction of time for implementation of new as well as amended regulations.
6. Better Coordination among RPCs in inter regional settlements.
7. Complete digitization of Regional Accounting settlement system.
8. Less human interference by complete automation of accounting system.

One of the objectives of RPCs is to improve the “economy and efficiency” in the Power sector and to act as a catalyst in the development of the nation. To achieve these objectives, RPCs must transform themselves from the state of **“Data Repository”** to **“Data Enablers”**. This can only be possible if the RPC's existing infrastructure is transformed on par with the current technological up-gradations and considering the future requirements. **Considering these facts and the future course of RPCs, it is requested to NPC Division, CEA takes the lead on the above proposal for the implementation of Common National Accounting Software for RPCs using state of art technologies across all the regions using single vendor (Example: Centralized WBES developed by Grid-India for RLDCs).**

V. BUDGETARY SUPPORT/FUNDING

In view of the considerable cost for implementation of **“UNIFIED NATIONAL ACCOUNTING SOFTWARE FOR RPCs – UNASR”**, it is proposed that the same may be funded through PSDF funding from the Ministry of Power, Government of India. The designated implementation agency shall submit DPR to MoP for PSDF funding.

सेंट्रल ट्रांसमिशन यूटिलिटी ऑफ इंडिया लिमिटेड

(पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड के स्वामित्व में)

(भारत सरकार का उदयम)

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

(A wholly owned subsidiary of Power Grid Corporation of India Limited)

(A Government of India Enterprise)

Ref: CTU/E/00/ERPC

Date: 05-06-2023

Member Secretary

Eastern Regional Power Committee (ERPC)

14, Golf Club Road, Tollygunge

Kolkata-700033

Subject: Views of ERPC on the new ISTS in ER – reg.

Dear Sir,

As you are aware, the Govt. of Odisha has proposed for construction of Gopalpur 765kV substation under ISTS in order to meet the power drawl requirement of upcoming Green Hydrogen and Green Ammonia industries in the Gopalpur area of Odisha. Accordingly, studies were carried out and an ISTS scheme namely "Eastern Region Expansion Scheme-XXXIX (ERES-XXXIX)" inter alia including establishment of 765kV new substation at Gopalpur was agreed in the 18th Consultation Meeting for Evolving Transmission Schemes in Eastern Region (CMETS-ER) held on 27th Apr 2023. Details of the said scheme as per requisite format of NCT are annexed herewith as **Annexure-I**.

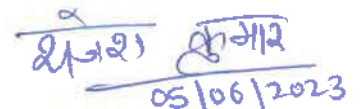
Further, it is to mention that in the 17th CMETS-ER held on 29-03-2023 implementation of Duburi 765/400kV S/s under intra-state scheme has been agreed through LILO of both circuits of under implementation (presently in bidding stage) Angul (ISTS) – Paradeep (ISTS) 765kV D/c line. The scheme may be deliberated at ERPC level in view of LILO of an ISTS line under intra-state scheme. Agenda in this regard is annexed herewith as **Annexure-II**.

It is requested that the said schemes may be taken up for deliberations/ recommendations/ approval, on priority, in the forthcoming meeting of ERPC in line with provisions under MoP's Office Order no. 15/3/2018-Trans-Pt(5) dated 28-10-2021 regarding "Re-constitution of the National Committee on Transmission (NCT) - reg."

Further,

Thanking you,

Yours faithfully,


05/06/2023(Rajesh Kumar)
Senior General Manager

Annexure-I

Agenda for ERPC: Eastern Region Expansion Scheme-XXXIX (ERES-XXXIX)

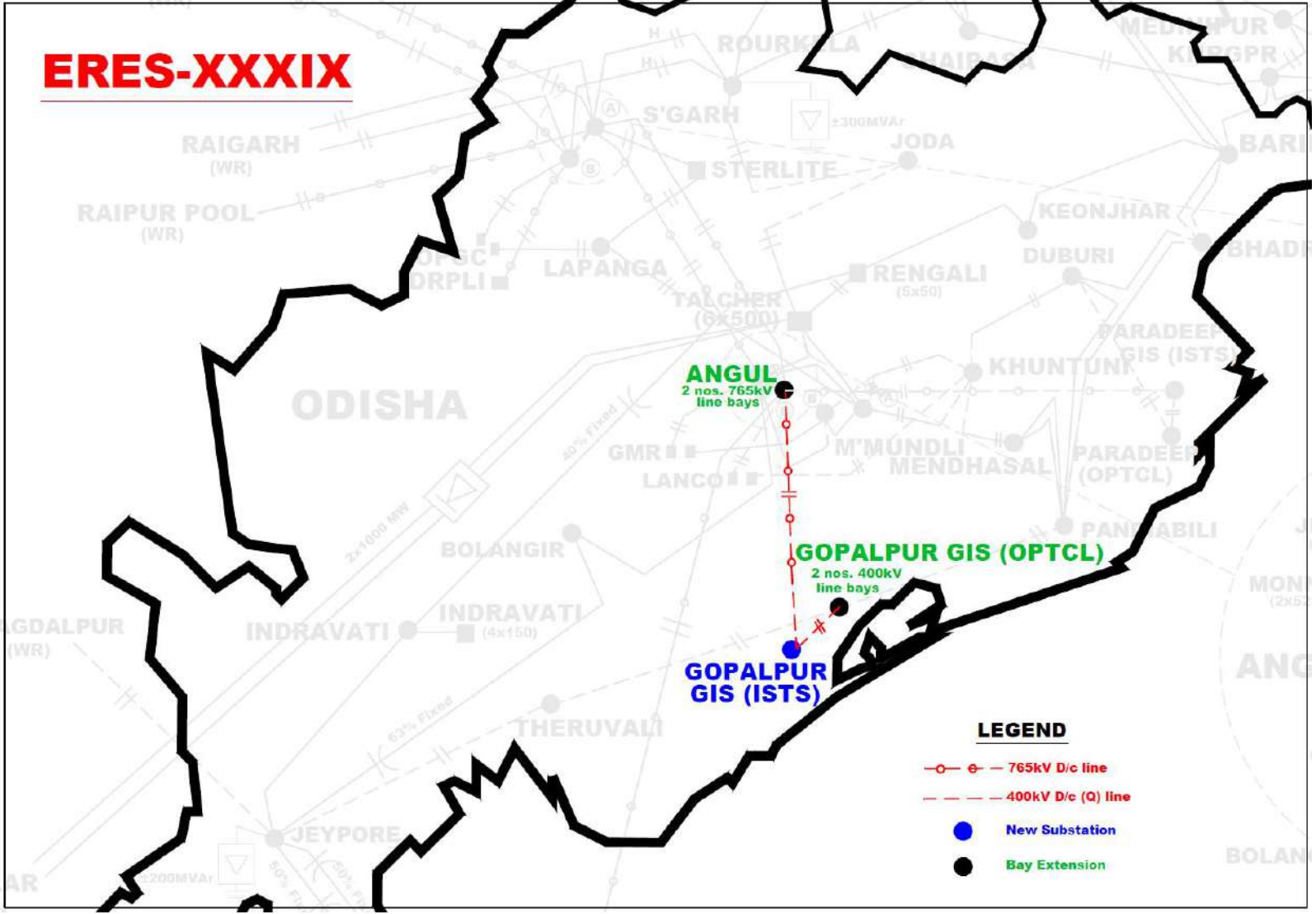
Sl. No.	Items	Details
1.	Name of scheme	Eastern Region Expansion Scheme-XXXIX (ERES-XXXIX)
2.	Scope of the scheme	<p>Brief scope of works is given below. Detailed scope of works is enclosed at Appendix-A.</p> <ol style="list-style-type: none"> i. Establishment of Gopalpur 765/400kV, 2x1500MVA GIS S/s ii. Angul (POWERGRID) – Gopalpur 765kV D/c line along with 765kV, 1x330MVA switchable line reactor with 500ohm NGR (with NGR bypass arrangement) at Gopalpur end, one each in both circuits iii. Gopalpur – Gopalpur (OPTCL) 400kV D/c (Quad) line iv. 2 nos. 765kV AIS line bays (along with space for future switchable line reactor) along with bus extension in GIS at Angul 765/400kV S/s for termination of Angul (POWERGRID) – Gopalpur 765kV D/c line. v. 2 nos. 400kV GIS line bays at Gopalpur (OPTCL) S/s for termination of Gopalpur – Gopalpur (OPTCL) 400kV D/c (Quad) line.
3.	Depiction of the scheme on Transmission Grid Map	Refer Exhibit-1 .
4.	Upstream/downstream system associated with the scheme	Establishment of Gopalpur (OPTCL) 400/220kV S/s by OPTCL. Expected by Mar 2026 (as per OPTCL's email dated 02-06-2023).
5.	Objective / Justification	Additional Chief Secretary to Government, Department of Energy, Govt. of Odisha vide letter dated 08-02-2023 addressed to Secretary (Power), Ministry of Power, Govt. of Odisha has proposed for construction of Gopalpur 765kV substation under ISTS. As per the said inputs, new industrial demand from Green Hydrogen & Green Ammonia industries in the range of about 3GW is expected in Gopalpur area starting from FY 2025-26 onwards. Gopalpur is emerging as Green Hydrogen hub and various

Sl. No.	Items	Details
		<p>industries have expressed investment intentions to set up Green Hydrogen and Green Ammonia plants in Gopalpur due its location advantage.</p> <p>There is a requirement of ISTS corridor to supply RE power from outside Odisha to such industries, to meet the RPO. Thus, keeping in view critical nature of large industrial demand and quantum of power requirement it is essential that Gopalpur substation is feed reliably from ISTS, and with high capacity lines.</p> <p>The quantum of power requirement by some of the industries as informed by OPTCL are Avaada Ventures (700MW), and Ocior Energy (1400MW). In addition to above, additional industries by Renew Power, SMP Energy and WAREE Energy are also envisaged. Accordingly, it is proposed to establish a 765/400kV substation at Gopalpur under ISTS.</p> <p>As Gopalpur is in coastal area and within 60km form coastline, Gopalpur (ISTS) S/s is planned to be implemented in GIS in line with the recommendation of Report of Task Force on Cyclone Resilient Robust Electricity Transmission and Distribution Infrastructure in coastal area published by CEA in May 2021 for construction of new substations upto 60km from the coastline.</p> <p>The present scheme is for establishment of Gopalpur 765/400kV new substation along with Angul – Gopalpur 765kV D/c line & Gopalpur – Gopalpur (OPTCL) 400kV D/c (Quad) line, which has been approved in the 18th CMETS-ER held on 27th Apr 2023.</p> <p>Note:</p> <p><i>(a) OPTCL (STU of Odisha) is yet to confirm (sought more time vide letter dated 26-05-2023) availability of a suitable land parcel in Gopalpur area so that both substations (under ISTS and intra-state) can be co-located and implemented in a contiguous land. This would result in minimal requirement of interconnecting system between the two substations.</i></p> <p><i>If contiguous land can be arranged by OPTCL, then OPTCL to clarify whether they shall be agreeable to</i></p>

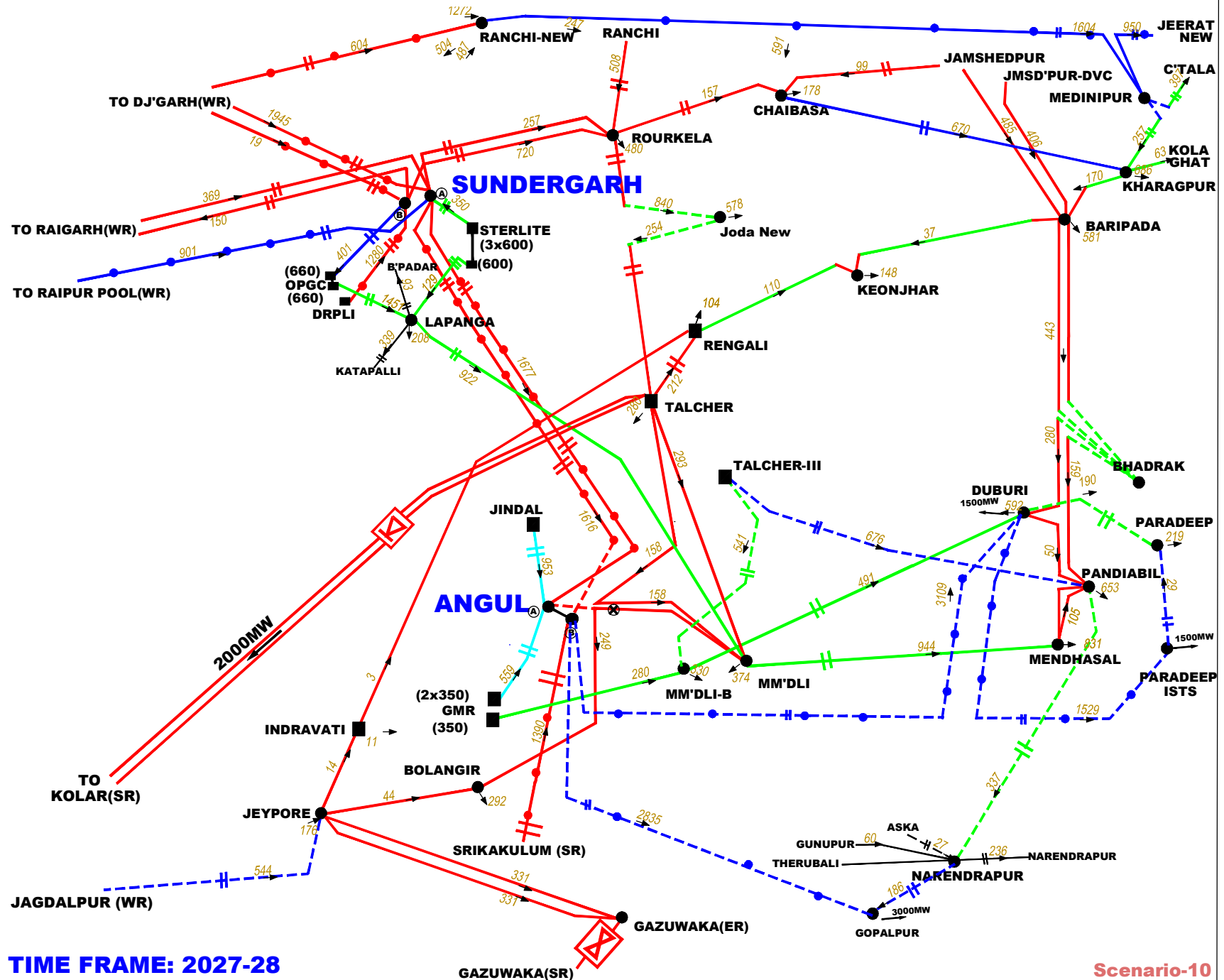
Sl. No.	Items	Details
		<p>procure the entire land for establishment of both substations and can provide land for establishment of ISTS substation to successful ISTS licensee at appropriate cost. Accordingly, the same would need to be incorporated in the scheme.</p> <p>Till the identification of contiguous land by OPTCL the line length of Gopalpur – Gopalpur (OPTCL) line has been considered as 30km, as per OPTCL's letter dated 26-05-2023.</p> <p>(b) As decided in the CMETS-ER the scheme is being taken up for approval at various forums, but implementation activity viz. bidding/allocation would be taken up only after receipt of Connectivity/GNA applications by CTU/OPTCL.</p>
6.	Estimated Cost	INR 2824 Cr.
7.	Impact on the total Annual Transmission Charges in % along with the existing ATC	<p>A. ATC (considering levelized tariff @15% of estimated cost): ₹423.6 Cr.</p> <p>B. Present ATC: ₹45726.66 Cr.*</p> <p>C. A/B: 0.926%</p>
8.	Need of phasing, if any	Nil
9.	Implementation timeframe	24 months
10.	Inclusion of any wild life/protected area along the transmission line route	<p>(a) Angul – Gopalpur: The line may pass through Satkosia Gorge WLS or its buffer zone in the state of Orissa. However, for details of forest/protected areas survey is required to be done.</p> <p>(b) Gopalpur – Gopalpur (OPTCL): No major NP, WLS, other protected areas observed. However, for details of other forest/protected areas, survey is required to be done.</p>
11.	Deliberations with RPC along with their comments	ERPC may add their deliberations here.
12.	System Study for evolution of the proposal	Refer Exhibit-2 .

*Total YTC allowed for April 2023, as per notification of transmission charges payable by DICs for billing month of June 2023 dated 25-05-2023 published on NLDC website (available @ <https://posoco.in/transmission-pricing/notification-of-transmission-charges-for-the-dics/>)

Exhibit-1



System Studies for ISTS in Odisha: Paradeep 765kV, Gopalpur 765kV, Duburi 765kV, Talcher-III



Eastern Region Expansion Scheme-XXXIX (ERES-XXXIX)

Sl. No.	Scope of the Transmission Scheme	Capacity (MVA) / Line length (km)/ Nos.
1.	<p>Establishment of new 765/400kV, 2x1500MVA GIS substation at Gopalpur in Odisha</p> <p>Additional space for future expansion:</p> <ul style="list-style-type: none"> - 765/400kV, 4x1500MVA ICTs (12x500MVA single phase units) along with associated ICT bays at both voltage levels - 400/220kV, 4x500MVA ICTs along with associated ICT bays at both voltage levels - 765kV, 2x330MVA (6x110MVA single phase units) bus reactor along with associated bays - 420kV, 2x125MVA bus reactor along with associated bays - 8 nos. of 765kV line bays (along with space for switchable line reactor) for future lines - 10 nos. of 400kV line bays (along with space for switchable line reactor) for future lines - 12 nos. of 220kV line bays for future lines - 765kV bus sectionaliser bay: 1 set - 400kV bus sectionaliser bay: 1 set - 220kV bus sectionaliser bay :1 set - 220kV bus coupler bay: 2 no. 	<p>765/400kV, 1500MVA ICTs: 2 nos. (7x500MVA single phase units including one spare)</p> <p>765kV ICT bays: 2 nos. 400kV ICT bays: 2 nos.</p> <p>765kV, 330MVA Bus reactor: 2 nos. (7x110MVA single phase units including one spare unit for both bus and line reactors)</p> <p>765kV Bus reactor bays: 2 nos.</p> <p>420kV, 125MVA Bus reactor: 2 nos. 400kV Bus reactor bays: 2 nos.</p> <p>765kV line bays: 2 nos. <i>[for termination of Angul (POWERGRID) – Gopalpur 765kV D/c line along with 765kV, 1x330MVA switchable line reactor at Gopalpur end in both circuits]</i></p> <p>400kV line bays: 2 nos. <i>[for termination of Gopalpur – Gopalpur (OPTCL) 400kV D/c (Quad) line]</i></p> <p>765kV, 330MVA (3x110MVA single phase units) switchable line reactor along with associated bay and 500ohm NGR (with NGR bypass arrangement) <i>[at Gopalpur end in both circuits of Angul (POWERGRID) – Gopalpur 765kV D/c line]</i>: 2 nos.</p>
2.	Angul – Gopalpur 765kV D/c line	205km
3.	Extension at 765kV level at Angul (POWERGRID) S/s including bus extension in GIS	<p>765kV AIS line bays (along with space for future switchable line reactor): 2 nos. <i>[for termination of Angul (POWERGRID) – Gopalpur 765kV D/c line]</i></p> <p>Bus extension in GIS: about 3000m</p>
4.	Gopalpur – Gopalpur (OPTCL) 400kV D/c (Quad) line [@]	@30km

Sl. No.	Scope of the Transmission Scheme	Capacity (MVA) / Line length (km)/ Nos.
5.	Extension at 400kV level at #Gopalpur (OPTCL) GIS S/s	400kV GIS line bays: 2 nos. [for termination of Gopalpur – Gopalpur (OPTCL) 400kV D/c (Quad) line]

Note:

- (a) Implementation of this scheme to be taken up only upon receipt of Connectivity/GNA applications by CTU/OPTCL, as agreed in the 18th CMETS-ER.
- (b) @To be reviewed based on inputs of OPTCL regarding availability of contiguous land for establishment of both 765/400kV (ISTS) and 400/220kV (Intra-state) substations at Gopalpur.
- (c) #The bus scheme of 400kV level at Gopalpur (OPTCL) GIS S/s shall be one and half breaker scheme, 2 nos. full diameter i.e. 4 nos. of GIS bays needs to be implemented in the scheme for requirement of 2 nos. GIS bays for termination of Gopalpur (OPTCL) – Gopalpur 400kV D/c (Quad) line in two different diameters. Utilisation of other 2 nos. GIS bays of these diameters shall be identified in future.
- (d) OPTCL shall provide space at under implementation Gopalpur (OPTCL) 400/220kV GIS S/s for implementation of 2 nos. of 400kV GIS line bays for termination of Gopalpur (ISTS) – Gopalpur (OPTCL) 400kV D/c (Quad) line. 2 nos. full diameter i.e. 4 nos. GIS bays shall be established.
- (e) POWERGRID shall provide space at Angul (POWERGRID) 765/400kV S/s for implementation of 2 nos. of 765kV line bays (along with space for future switchable line reactor) along with bus extension in GIS for termination Angul (POWERGRID) – Gopalpur 765kV D/c line.

Agenda for ERPC: Establishment of 765/400kV, 2x1500MVA S/s at Duburi under intra-state by OPTCL through LILO of Angul (POWERGRID) – Paradeep (ISTS) 765kV D/c ISTS line

1. In the 14th CMETS-ER held on 29-12-2022, establishment of Paradeep 765/400kV substation through Angul (POWERGRID) – Paradeep 765kV D/c line was agreed under the ISTS scheme namely ERES-XXXIV. The same was discussed in the 48th TCC/ERPC meeting held on 17th and 20th Feb 2023. Thereafter, NCT in its 12th meeting held on 24-03-2023 recommended the implementation of the scheme through TBCB route. Ministry of Power, Govt. of India vide Gazette notification dated 12-05-2023 has approved implementation of the scheme through TBCB route and has appointed M/s PFCCL as BPC.
2. OPTCL vide letter dated 06-03-2023 had requested for construction of a new 765/400kV S/s at Duburi in Odisha under intra-state scheme through LILO of already approved Angul (POWERGRID) – Paradeep 765kV D/c line to meet the upcoming industrial demand of about 1100MW by 2026-27 and 1430MW (additional) by 2029-30. Accordingly, establishment of 765/400kV, 2x1500MVA new substation at Duburi was discussed in the 17th CMETS-ER held on 29-03-2023. During the meeting, it was discussed that LILO of ISTS line may be implemented under ISTS so to avoid various operational issues such:
 - (a) Coordination with two different entities during tripping of the lines jointly owned by two utilities.
 - (b) Outage coordination for maintenance of the same transmission lines between two different utilities.
 - (c) Issue in verification of availability during tripping online on fault specially near to LILO portion and checking under whose jurisdiction the reduction in availability will be accounted for.
3. OPTCL and Odisha-SLDC had mentioned in the 17th CMETS-ER that there are various instances where ISTS lines have been LILOed by STU and vice versa. Odisha-SLDC mentioned that they do not face any operational issues with such arrangements.
4. After detailed deliberation, following broad scope of works was agreed to be implemented by OPTCL under intra-state scheme:
 - (a) Establishment of new 765/400kV, 2x1500MVA (7x500MVA single phase units including one spare) substation at Duburi (New)
 - (b) LILO of both circuits of Angul – Paradeep 765kV D/c line at Duburi (New) 765/400kV substation.
 - (c) Duburi (New) – Duburi 400kV D/c (Quad) line

- (d) 765kV, 330MVAR (4x110MVAR single phase units including one spare) bus reactor along with associated bay: 1 no.
- (e) 420kV, 125MVAR bus reactor along with associated bay: 1 no.
- (f) 765kV line bays: 4 nos. for present LILO
- (g) 400kV line bays: 2 nos. of present line
- (h) Space for future provision:
 - 765/400kV, 2x1500MVA (6x500MVA single phase units) ICT along with associated ICT bays at both levels
 - 765kV line bays: 6 nos. for future lines
 - 400kV line bays: 10 nos. for future lines
 - 765kV Bus sectionalizer bay – 1 no.
 - 400kV Bus sectionalizer bay – 1 no.
 - 765kV, 330MVAR (6x110MVAR single phase units) bus reactor along with associated bay: 2 no.
 - 420kV, 125MVAR bus reactor along with associated bay: 2 no.

5. The matter regarding LILO of ISTS lines under intra-state was being deliberated in the 13th meeting of NCT held on 13-05-2023. Therein it was informed that recently LILO of Angul (POWERGRID) – Paradeep 765kV D/c ISTS line at Duburi (New) under intra-state has been agreed. In this regard, it was suggested that views of ERPC may be taken on the subject scheme and with views of ERPC the scheme may be forwarded to NCT for deliberation. NCT has suggested that various aspects of the scheme not limited to following may be deliberated at ERPC level:

- (a) LILO of Angul (POWERGRID) – Paradeep 765kV D/c ISTS line at Duburi (New) under intra-state may involve certain operational issues.
- (b) The said LILO would result in reduced demand that can be catered at Paradeep under ISTS for Green Hydrogen & Green Ammonia industries as some capacity of the main ISTS line shall be utilised to meet intra-state demand at Duburi. This may necessitate further strengthening in ISTS immediately.
- (c) Industries in Duburi area may also require RE power from outside the state of Odisha, similar to industries in Paradeep and Gopalpur area. If any such industry applies for GNA from ISTS, then ISTS infrastructure would have to again created in Duburi area. Creation of parallel systems in ISTS and intra-state may result into a less optimal planning and the same is not desirable. Already 765/400kV ISTS substations (with space provision for 400/220kV level in view of future requirement) are being established at Paradeep and Gopalpur and OPTCL is also implementing 400/220kV substations under intra state. RoW and land optimisation may be considered.



सेंट्रल ट्रांसमिशन यूटिलिटी ऑफ इंडिया लिमिटेड

(पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड के स्वामित्व में)

(भारत सरकार का उद्यम)

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

(A wholly owned subsidiary of Power Grid Corporation of India Limited)

(A Government of India Enterprise)

Ref: CTU/E/00/ERPC

Date: 19-07-2023

Member Secretary

Eastern Regional Power Committee (ERPC)

14, Golf Club Road, Tollygunge

Kolkata-700033

Subject: Observations of ERPC on the ERES-XXXVIII – reg.

Dear Sir,

As you are aware, the 400kV bus of Ranchi (POWERGRID) 400/220kV substation is designed for 40kA and presently fault level of this substation is observed to be about 44kA and it is expected to further reach to about 51kA by 2027-28 timeframe. Accordingly, studies were carried out and an ISTS scheme namely "Eastern Region Expansion Scheme-XXXVIII (ERES-XXXVIII)" inter alia including bypassing of one D/c of Ranchi (POWERGRID) – Ranchi New (POWERGRID) 400kV 2xD/c (Quad) line and Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line at Ranchi (POWERGRID) S/s so as to form Ranchi New (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line has been agreed in the 19th CMETS-ER held on 30-05-2023. The said bypassing arrangement includes dismantling of 1355m section of existing Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC at Ranchi end from location 433 to 438 and scraping of the same.

The estimated cost the scheme is about ₹ 42 Cr. As per MoP's Office Order no. 15/3/2018-Trans-Pt(5) dated 28-10-2021 regarding "Re-constitution of the National Committee on Transmission (NCT) - reg.", approval of the scheme is under purview of CTU. However, it was noted in the 19th CMETS-ER that as the matter has commercial implications, the scheme may be deliberated at ERPC level as well. Details of the said scheme are annexed herewith at **Annexure-I**.

In view of the above, it is requested that the said scheme may be taken up for deliberations in the forthcoming meeting of ERPC and observations may be communicated to CTU for further processing of the scheme.

Thanking you,

Yours faithfully,

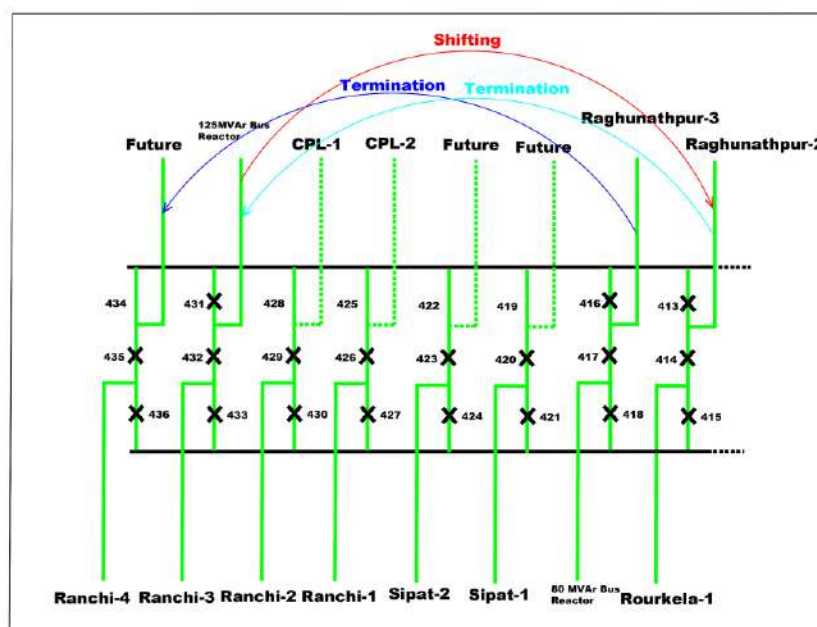

19/07/2023

(Rajesh Kumar)

Senior General Manager

1. Eastern Region Expansion Scheme-XXXVIII (ERES-XXXVIII)

- 1.1. Presently, the fault level at 400kV bus at Ranchi (POWERGRID) 400/220kV S/s is observed to be about 44kA (designed limit is 40kA) which is expected to increase to about 51kA by 2027-28 timeframe.
- 1.2. Studies have been carried out for 2027-28 timeframe and upon detailed analysis it is observed that with the rearrangement as proposed below, the fault level of Ranchi (POWERGRID) substation can be brought down to about 39kA from 51kA.
 - Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line (**of DVC**) is to be bypassed from Ranchi (POWERGRID) with any D/c line of Ranchi (POWERGRID) – Ranchi New (POWERGRID) 400kV 2xD/c (Quad) lines (**of POWERGRID**) so as to form Ranchi New (POWERGRID) – Raghunathpur (DVC) 400kV (Quad) D/c line.
- 1.3. The above arrangement requires following major works:
 - The bus reactor installed in bay 431 needs to be shifted in bay 413 so that adjacent bays viz. 416 and 419 shall be available for termination of a D/c line in future, if required.
 - Shifting of equipment of bay no. 416 [released upon shifting of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV ckt-3] to bay no. 434 for completion/establishment of bay no. 434.
 - Shifting of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line to bays 431 and 434 in diameters 431-432-433 and 434-435-436: about 1.27km new line section





- 1.4. DVC had confirmed that 1355m section of their Ranchi – Raghunathpur 400kV D/c (Quad) line may be dismantled and scraped under ISTS scheme so that tariff of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC shall remain unaffected.
- 1.5. In view of the above, following scope of works of the ERES-XXXVIII scheme to be implemented under ISTS in 24 months time-frame from allocation was agreed in the 19th CMETS-ER:
 - (a) #Shifting of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line to bays 431 and 434 in diameters 431-432-433 and 434-435-436: about 1.27km new line section.
 - (b) \$Dismantling of 1355m section of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC at Ranchi end from location 433 to 438 and scraping of the same.
 - (c) Shifting of 420kV, 125MVar bus reactor installed in bay no. 431 to bay no. 413 [*vacated after shifting of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV ckt-2*].
 - (d) Shifting of equipment of bay no. 416 [*released upon shifting of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV ckt-3*] to bay no. 434 for completion/establishment of bay no. 434.
 - (e) Installation of 420kV, 1x80MVar switchable line reactor, one each in both circuits of Raghunathpur (DVC) – Ranchi-New (POWERGRID) 400kV D/c (Quad) line [*formed after bypassing of Ranchi (POWERGRID) – Raghunathpur (DVC) and Ranchi (POWERGRID) – Ranchi-New (POWERGRID) ckt-3 & 4 400kV D/c (Quad) lines from Ranchi-New through tie circuit breaker in diameters 431-432-433 and 434-435-436*] at Ranchi-New (POWERGRID) end along 400ohm NGR (including NGR bypass scheme).

Note: #*(i) The ISTS licensee shall coordinate with DVC for shifting of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line to bays 431 & 434. Further, ISTS licensee shall also take care of completion of communication link upon line shifting.*

§(ii) The scrap value of the tower members, ACSR conductor, auxiliaries etc. of dismantled assets shall be deducted by the ISTS licensee as per prevailing scrap value to arrive at the final cost of the project. As the scrap value of dismantled assets (about 1355m of line) is already being adjusted against the project cost of this new scheme, tariff of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC shall remain unaffected.

(iii) During the implementation period of the above scheme, ERS can be used for temporary bypassing of Ranchi (POWERGRID) – Raghunathpur (DVC) and Ranchi (POWERGRID) – Ranchi-New (POWERGRID) ckt-3 & 4 lines outside Ranchi S/s so as to facilitate shifting of bus reactor and bay equipment, if required.

(iv) Upon implementation of this scheme, the Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line may be bypassed from Ranchi S/s with Ranchi – Ranchi (New) 400kV D/c line (ckt-3 & ckt-4) through tie circuit breakers (432 & 435) as per system requirement and based on instructions from Grid-India.

- 1.6. Further, it was also agreed in the 19th CMETS-ER that as the ISTS scheme inter alia includes “*Dismantling of 1355m section of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC at Ranchi end from location 433 to 438 and scarping of the same*”, which has commercial implications, the scheme may be deliberated at ERPC level as well.
- 1.7. The estimated cost of the scheme is expected to be about INR 42 Cr. excluding the scrap value, as the scrap value of metals/other elements is highly volatile. The prevailing scrap value during implementation time-frame shall be adjusted in the scheme cost by the implementing ISTS licensee.
- 1.8. The scheme may be deliberated inter alia on following matters:
 - (i) Dismantling of 1355m section of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC at Ranchi end from location 433 to 438 and scarping of the same under the ISTS scheme, as dismantling of line section shall vacate the line corridor for future.
 - (ii) The scrap value of the tower members, ACSR conductor, auxiliaries etc. of dismantled assets shall be deducted by the ISTS licensee as per prevailing scrap value to arrive at the final cost of the project. As the scrap value of dismantled assets (about 1355m of line) is already being adjusted against the project cost of this new scheme, tariff of Ranchi (POWERGRID) – Raghunathpur (DVC) 400kV D/c (Quad) line of DVC shall remain unaffected.

ELECTROMECHANICAL LBB RELAY INSTALLED AT **400/220 KV BINAGURI SUBSTATION**

SL NO.	FEEDER NAME	RELAY MODEL
1	401 TALA-4 MAIN BAY	MCTI
2	402 TALA-3 & 4 TIE BAY	MCTI
3	403 TALA-3 (MALBASE) MAIN BAY	MCTI
4	404 ICT-2 MAIN BAY	MCTI
5	405 TALA-2 & ICT-2 TIE BAY	MCTI
6	406 TALA-2 MAIN BAY	MCTI
7	407 ICT-1 MAIN BAY	RAICA
8	408 TALA-1 & ICT-1 TIE BAY	RAICA
9	409 TALA-1 MAIN BAY	RAICA
10	410 RANGPO-1 MAIN BAY	2DAB
11	411 RANGPO-1 & BONG-1 TIE BAY	RAICA
12	412 BONGAIGAON-1 MAIN BAY	RAICA
13	413 RANGPO-2 MAIN BAY	2DAB
14	414 RANGPO-2 & BONG-2 TIE BAY	MCTI
15	415 BONGAIGAON-2 MAIN BAY	MCTI
16	416 KISHANGANJ-1 MAIN BAY	MCTI
17	417 KISHANGANJ-1 & BR-1 TIE BAY	MCTI
18	418 BUS REACTOR-1 MAIN BAY	MCTI
19	419 KISHANGANJ-2 MAIN BAY	MCTI
20	420 KISHANGANJ-2 & BR-2 TIE BAY	MCTI
21	421 BUS REACTOR-2 MAIN BAY	MCTI
22	422 PURNEA-1 MAIN BAY	MCTI
23	423 PURNRA-1 & ALPD-1 TIE BAY	MCTI
24	425 PURNEA-2 MAIN BAY	MCTI
25	426 PURNRA-2 & ALPD-2 TIE BAY	7SV6001
26	201 ICT-1 220KV SIDE	RAICA
27	203 ICT-2 220 KV SIDE	MCTI
28	205 SILIGURI -1	RAICA
29	206 SILIGURI-2	RAICA
30	207 BUS COUPLER	RAICA
31	208 TRANSFER BUS	RAICA
32	209 BIRPARA -1	RAICA
33	210 BIRPARA-2	RAICA
34	213 M1 BUS SECTION-1	RAICA
35	213 M2 BUS SECTION-2	RAICA

TOTAL QUANTITY OF MCTI RELAY	18
TOTAL QUANTITY OF RAICA RELAY	14
TOTAL QUANTITY OF EASUN REYROLLE RELAY	2

TOTAL QUANTITY OF 7SV6001 RELAY	1
TOTAL	35 NOS

ELECTROMECHANICAL LBB RELAY INSTALLED AT 400/220 KV MAITHON SUBSTATION

SL NO.	FEEDER NAME	RELAY MODEL
1	MAITH-MAIN_BAY_406	VAJSM43SF102B
2	MAITH-MAIN_BAY_407	VAJSM43SF102B
3	MAITH-TIE__BAY_408	RAICA
4	MAITH-MAIN_BAY_409	RAICA
5	MAITH-TIE__BAY_411	RAICA
6	MAITH-MAIN_BAY_412	RAICA
7	MAITH-MAIN_BAY_413	RAICA
8	MAITH-TIE__BAY_414	RAICA
9	MAITH-MAIN_BAY_415	RAICA
10	MAITH-MAIN_BAY_416	RAICA
11	MAITH-TIE__BAY_417	RAICA
12	MAITH-TIE__BAY_420	RAICA
13	MAITH-MAIN_BAY_421	RAICA
14	MAITH-TIE__BAY_423	RAICA
15	MAITH-MAIN_BAY_424	RAICA
16	200KV Maithon-DHN-1_205	RAICA
17	200KV Maithon-DHN-2_204	RAICA
18	500MVA ICT-1_206	RAICA
19	220KV TBC_209	RAICA
20	220KV Bus Coupler_210	RAICA
21	500MVA ICT-2_213	RAICA
22	220KV Kalensawari-1_214	RAICA
23	220KV Kalensawari-2_215	RAICA

TOTAL QUANTITY OF VAJSM RELAY	2
TOTAL QUANTITY OF RAICA RELAY	21
TOTAL	23 NOS

TOTAL	58 NO'S RELAY
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Annexure B-1.11

SL NO	PROJECT NAME	LOA/PO Details	Cost Involvement	Remarks
1	AMR Phase 1 & 2	ER-II/ KOL/ C&N/I-582/P- 747/870/3676	2177392	Already earlier consumed value
2	AMR Phase-3	ER-II/KOL/CS/I-1358/P-	3987747	
3	AMR Phase-4	ER-II/KOL/CS/I-2446/P- 2420/ 1929 Dated:	13019265	Approved in 153rd
4	AMR Phase-1&2	ER-II/KOL/CS/I-2724/P-	25633881	Approved in 170th
6	AMR LAN	ER-II/KOL/CS/I-3499/P-	2740552	190th OCC,
7	AMR Phase-3 AMC	ER2/NT/S-AMC /DOM /E00/22 /00692/	2721270	195th OCC,
8	AIRTEL-1	SAP PO- 5200033984	144997	
9	AIRTEL-2	SAP PO- 5200037273	191054	
10	AIRTEL-3	SAP PO- 5200054713	257832	
11	AIRTEL-4	SAP PO- 5200054715	205724	
	SUB TOTAL		51079714	
	CONSULTANCY @15%		7661957.1	
	GST ON		1379152.278	
	TOTAL		60120823.38	

Transmission Charges to be recovered against Raigarh-Pugalar HVDC Line *

Sl. No.	Constituents of E.R.	LTA (MW)	All-India LTA (MW)	AFC allowed by CERC for 2023-24 (Rs in Lakh)	MTC allowed (Rs in Lakh)	Transmission Charges to be recovered/Month (Rs in Lakh)		Difference (Rs in Lakh)
						Case-1 (30% NC)	Case-2 (100% NC)	
1	Bihar	6548.16	102259.8	129716.75	10809.73	207.66	692.20	484.54
2	W.Bengal	2431.04				77.09	256.98	179.89
3	Odisha	1887.82				59.87	199.56	139.69
4	Jharkhand	892.57				28.31	94.35	66.05
5	DVC	331.06				10.50	35.00	24.50
6	Sikkim	96.91				3.07	10.24	7.17

* Based on the Data of ' Notification of Transmission Charges payable by DICs for the Billing Month of July 2023' uploaded by POSOCO

INTRODUCTION

Brief Introduction

Power System Development Fund (PSDF) has been constituted vide Central Electricity Regulatory Commission (Power System Development Fund) Regulations, 2010 dated 4th June 2010.

Generation of Fund

- Congestion Charges standing to the credit of the "Congestion Charge Account" after release of amounts payable to Regional Entities entitled to receive congestion charges along with interest, if any, in accordance with the Congestion Relief Regulations.
- Congestion amount arising from the difference in the market prices of different regions as a consequence of market splitting in power exchanges in accordance with Power Market Regulations.
- Deviation Settlement Charges standing to the credit of the "Regional Deviation Pool Account Fund" after final settlement of claims in accordance with Deviation Settlement Mechanism Regulations.
- RLDC Reactive Energy charges standing to the credit of Reactive Energy Charges Account in accordance with the Grid Code.
- Additional Transmission Charges arising out of the explicit auction process in STOA Advance Bilateral transactions in accordance with the CERC (Open Access in interstate transmission) Regulations, 2008 and amendments thereof.
- Such other charges as may be notified by the Central Commission from time to time.

1

1

TYPES OF PROJECTS ELIGIBLE UNDER PSDF

Installation of reactive energy generators for improvement of voltage profile in the Grid

Installation of standard and special protection schemes, pilot and demonstrative projects

Renovation and Modernization (R&M) of transmission and distribution system for relieving congestion

Creating necessary transmission system of strategic importance

Any other scheme/project in furtherance of the above objectives, such as conducting technical studies and capacity building, etc

Creating necessary support for integration of Renewable (RE) Energy like solar, wind, hybrid system and creation of adequate energy storage capacity

TYPES OF NEW PROJECTS ELIGIBLE UNDER PSDF

Battery Energy storage system at least till the cost of storage is high

Supporting Renewable Energy project development through market mechanism by national agencies like SECI

Offshore wind project – underwater sea cable transmission portion

SLDC cum REMC at Ladakh, REMCs at 3 more locations & Disaster Recovery Center at RLDC-3 nos. & NLDC-1 no. to be funded through PSDF

Security Operation Centre at SLDCs for real-time cyber security monitoring

Pilot project for dynamic line rating in each region

Communication scheme for AMR and real time telemetry for 100% grid visibility

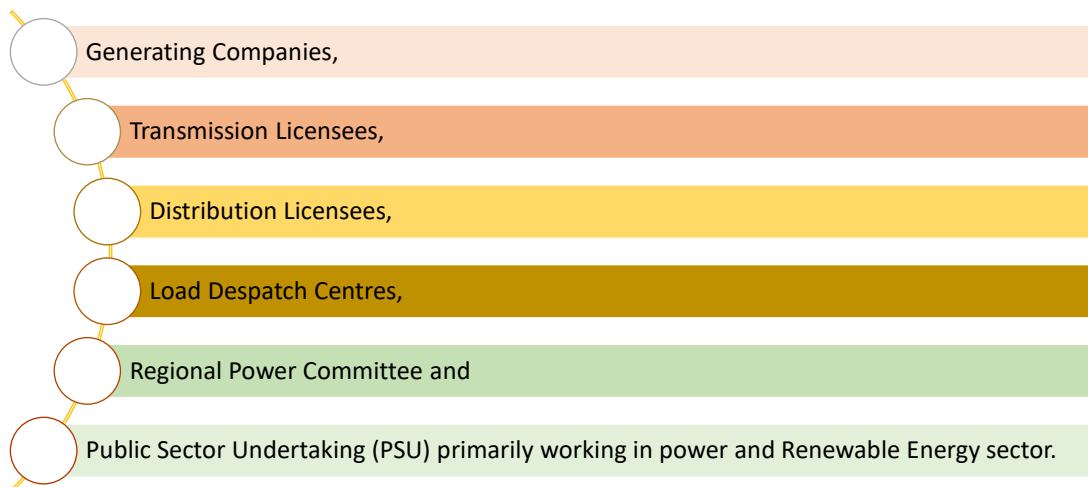
Supporting new technology development needed for power sector

Supporting Grid/feeder monitoring

2

2

ENTITIES ELIGIBLE FOR AVAILING SUPPORT UNDER PSDF



3

3

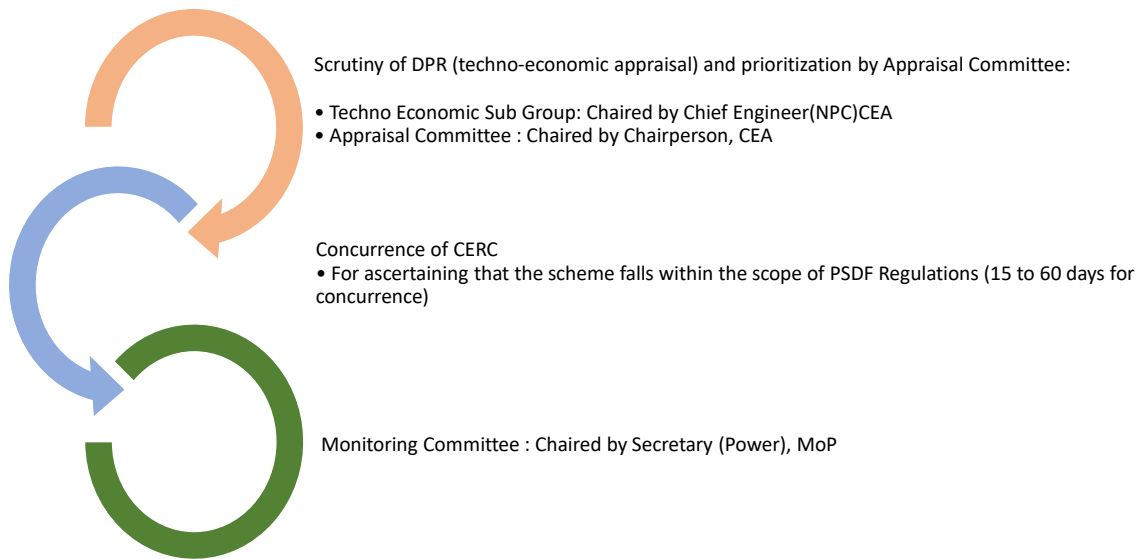
FUNDING PATTERN

Sr. No.	Eligible Schemes	Eligible Grant (% of the Accepted cost)
a.	Creating necessary transmission systems of strategic importance	75%
b.	VAR management for improvement of voltage profile in the Grid	90%
c.	Installation of SPS, pilot and demonstrative projects, R & U of protection systems, communication, Phasor Measurement Units (PMUs) etc.	90%
d.	Renovation and Modernization (R&M) of transmission and distribution systems for relieving congestion	75%
e.	Any other scheme/project in furtherance of the above objectives, such as, conducting technical studies and capacity buildings etc.	100%
f.	Reliable Communication Projects (as per the decision of 11 th Meeting of Monitoring Committee)	50 %

4

4

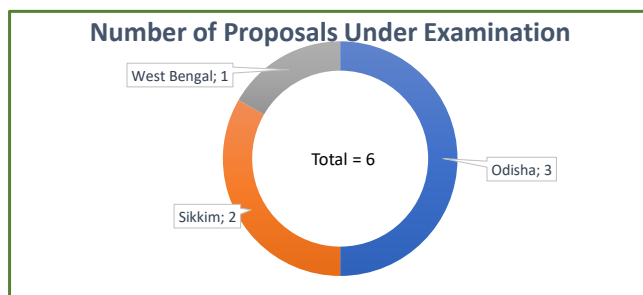
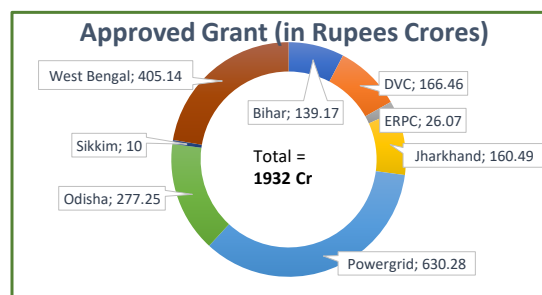
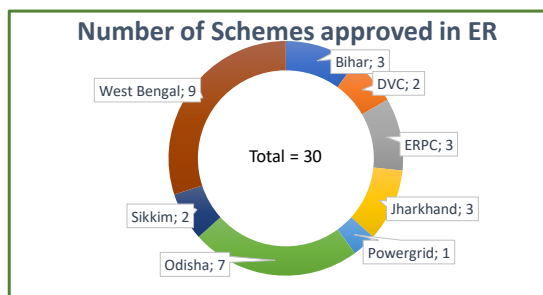
PROCESS OF APPROVAL OF THE SCHEMES



5

5

STATEWISE APPROVED SCHEMES UNDER PSDF



6

6

STATEWISE DETAILS OF APPROVED SCHEMES

Name of Scheme and Unique ID Numbers for WEST BENGAL	Project Cost accepted by Appraisal Committee	Quantum of Funding Recommended by Appraisal Committee	Grant Approved by Monitoring Committee	Date of Issuance of sanction order by MoP
Renovation and Upgradation of protection system of substations (007)	120.67	90	108.60	31-Dec-14
Renovation and Modernization of 220/ 132 kV STPS switch yard and implementation of Substation Automation System (072)	26.09	90	23.48	5-Sept-16
Implementation of Islanding scheme at Bandel Thermal Power Station. (097)	1.54	90	1.39	16-May-17
Installation of switchable reactor & shunt capacitor for voltage improvement. (88)	48.19	90	43.37	22-May-17
Renovation & Modernization of Transmission System for relieving congestion in intra state transmission system by capacity enhancement of existing network. (087)	93.51	75	70.13	22-May-17
Renovation and Modernization of switchyard and related protection system of different power stations (BTPS, BKTPS and KTPS) of WBPDC (155)	50.18	90	45.16	27-Jul-18
Installation of Bus Reactors at different 400kV Substation within the state of West Bengal for reactive power management of the Grid. (210)	79.71	90	71.74	24-May-19
Implementation of Integrated system for Scheduling, Accounting, Metering and Settlement of Transactions (SAMAST) system in West Bengal. (197)	11.20	90	10.08	20-Mar-20

7

7

STATEWISE DETAILS OF APPROVED SCHEMES

Name of Scheme and Unique ID Numbers for ODISHA	Project Cost accepted by Appraisal Committee	Quantum of Funding Recommended by Appraisal Committee	Grant Approved by Monitoring Committee	Date of Issuance of sanction order by MoP
Renovation and Upgradation of protection system of substations (008)	180.56	90	162.50	11-May-15
Renovation and Upgradation of protection and control system of OHPC. (109)	24.83	90	22.35	22-May-17
Implementation of OPGW based reliable communication at 132 kv and above substations. (128)	51.22	50	25.61	15-Nov-17
Installation of 125 MVAR Bus Reactor along with construction of associated by each at 400kV Grid S/S of Mendhasal, Meramundali & New Duburi for VAR control & stabilization of system voltage. (179)	30.26	90	27.23	27-Jul-18
Implementation of Automatic Demand Management System (ADMS) in SLDC, Odisha. (196)	3.26	90	2.93	24-May-19
Protection Upgradation and installation of Substation Automatic System (SAS) for seven nos of 220/132/33kV Substations (Balasore, Bidanasi, Budhipadar, Katapali, Narendrapur, New-Bolangir & Paradeep). (209)	40.70	90	36.63	24-May-19
Implementation of SAMAST (Scheduling, Accounting, Metering & Settlement of Transactions in Electricity) SLDC-Odisha (292)	17.14	90	15.43	24-Mar-22

8

8

STATEWISE DETAILS OF APPROVED SCHEMES

Name of Scheme and Unique ID Numbers for BIHAR	Project Cost accepted by Appraisal Committee	Quantum of Funding Recommended by Appraisal Committee	Grant Approved by Monitoring Committee	Date of Issuance of sanction order by MoP
Renovation and Upgradation of protection system of substations (018)	71.35	90	64.22	11-May-15
Installation of Capacitor bank in 35 Nos of Grid Sub Station (074)	20.98	90	18.88	5-Sep-16
Implementation of Sub-Station Automation System (SAS) for existing 13 no of 220/132/33 KV substation of BSPTCL. (318)	85.95	90	77.36	16-Jan-23

Name of Scheme and Unique ID Numbers for JHARKAND	Project Cost accepted by Appraisal Committee	Quantum of Funding Recommended by Appraisal Committee	Grant Approved by Monitoring Committee	Date of Issuance of sanction order by MoP
Renovation and Upgradation of protection system of substations. (161)	153.48	90	138.13	15-Nov-17
Reliable Communication & Data Acquisition System upto 132kV Substions ER .(177)	44.72	50	22.36	24-May-19
Implementation of SAMAST (Scheduling, Accounting, Metering and Settlement of Transaction of Electricity) at JUSNL. (266)	11.91	90	10.72	16-Jan-23

9

9

STATEWISE DETAILS OF APPROVED SCHEMES

Name of Scheme and Unique ID Numbers for SIKKIM	Project Cost accepted by Appraisal Committee	Quantum of Funding Recommended by Appraisal Committee	Grant Approved by Monitoring Committee	Date of Issuance of sanction order by MoP
Drawing of optical ground wire (OPGW) cables on existing 132kV & 66kV transmission lines and integration of leftover substations with State Load Despatch Centre, Sikkim. (173)	20	50	10	24-May-19
Renovation & Upgradation of Protection System of ENPD, Sikkim. (172)	60.97	100	60.97	31-Mar-21

Name of Scheme and Unique ID Numbers for ERPC	Project Cost accepted by Appraisal Committee	Quantum of Funding Recommended by Appraisal Committee	Grant Approved by Monitoring Committee	Date of Issuance of sanction order by MoP
Creation and Maintenance of web based protection database management (067)	20	100	20	17-Mar-16
Study Programme on power trading at NORD POOL Academy for Power System Engineers of Eastern Region. (122)	5.46	100	5.46	27-Jul-18
Training Program for Power system Engineers of various constituents of Eastern Region. (117)	0.61	100	0.61	27-Jul-18

10

STATEWISE DETAILS OF APPROVED SCHEMES

Name of Scheme and Unique ID Numbers for DVC	Project Cost accepted by Appraisal Committee	Quantum of Funding Recommended by Appraisal Committee	Grant Approved by Monitoring Committee	Date of Issuance of sanction order by MoP
Renovation and Upgradation of the protection and control system of Ramgarh Sub Station. (081)	28.85	90	25.96	2-Jan-17
Renovation and Modernization of control and protection system and replacement of equipment at Parulia, Durgapur, Kalyanewari, Giridhi Jamsedpur, Barjora, Burnpur, Dhanbad and Bundwan substation. (106)	156.11	90	140.50	27-Nov-17

Name of Scheme and Unique ID Numbers for POWERGRID	Project Cost accepted by Appraisal Committee	Quantum of Funding Recommended by Appraisal Committee	Grant Approved by Monitoring Committee	Date of Issuance of sanction order by MoP
Installation of STATCOMs in ER at Ranchi-New, Rourkela, Kishanganj and Jeypore substations of POWERGRID (056)	700.31	90	630.28	5-Jan-16

11

सं. 22/22/2023- ओ एम [268631]

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power

F-Wing, 2nd Floor, Nirman Bhawan,
New Delhi, dated 4th July, 2023

To,

1. Chairperson, Central Electricity Authority, New Delhi.
2. Principal Secretary/Secretary (Energy) of State Governments/UTs.
3. Secretary, Ministry of New and Renewable Energy, CGO Complex, Lodhi Road, New Delhi
4. Secretary, CERC New Delhi.
5. Secretary, State Electricity Regulatory Commissions.
6. Chairman, State Power Utilities/SEBs.
7. Chairman, CPSUs under Ministry of Power.
8. Chairman, CPSUs under Ministry of New and Renewable Energy.
9. Member Secretary, Regional Power Committees
10. CMD, Grid-India, New Delhi.
11. ED, NLDC, New Delhi

Subject: Continuation of Scheme for "Operationalization of the Power System Development Fund (PSDF) for the 15th Finance Commission cycle from FY 2021-22 to FY 2025-26"- reg.

Sir/Madam,

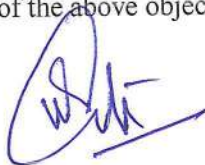
Sanction of the President is conveyed for continuation of scheme for 'Operationalization of the Power System Development Fund (PSDF) for the 15th Finance Commission Cycle from FY 2021-22 to FY 2025-26'. An outlay of Rs.11,000 crores (Rupees Eleven Thousand crores) has been approved to facilitate execution of Projects through PSDF from FY 2021-22 to FY 2025-26. In addition, Rs.2,000 crores (Rupees Two Thousand crores) have been kept for meeting contingent requirements.

2. The objective of the PSDF is to utilize the funds to bring improvement in the Security & Reliability of the Indian Power System. The funding from PSDF will be utilized for the projects which are primarily aimed for maintaining the reliable and secure operation of the grid and for the removal of congestion in the transmission corridors which will finally lead to overall development of the power sector in the country.

3. Following types of the projects will be funded from PSDF :

- (a) Creating necessary support for integration of Renewable (RE) Energy like solar, wind, hybrid system and creation of adequate energy storage capacity;
- (b) Installation of reactive energy generators for improvement of voltage profile in the Grid;
- (c) Installation of standard and special protection schemes, pilot and demonstrative projects;
- (d) Renovation and Modernization (R&M) of transmission and distribution systems for relieving congestion;
- (e) Creating necessary transmission systems of strategic importance; and
- (f) Any other scheme/project in furtherance of the above objectives, such as conducting technical studies and capacity building, etc.

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4. The illustrative list of new projects to be funded from PSDF is as under :

- (a) Battery Energy storage system at least till the cost of storage is high.
- (b) Supporting Renewable Energy project development through market mechanisms by national agencies like SECI.
- (c) Offshore wind project – underwater sea cable transmission portion.
- (d) SLDC cum REMC at Ladakh, REMCs at 3 more locations & Disaster Recovery Center at RLDC-3 nos & NLDC-1 nos to be funded through PSDF.
- (e) Security Operation Centre at SLDCs for real-time cyber security monitoring.
- (f) Pilot project for dynamic line rating in each region
- (g) Communication scheme for AMR and real time telemetry for 100% grid visibility.
- (h) Supporting new technology development needed for power sector.
- (i) Supporting Grid/feeder monitoring

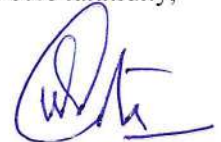
5. Following entities are eligible for availing support under PSDF :

- (a) Generating Companies,
- (b) Transmission Licensees,
- (c) Distribution Licensees,
- (d) Load Despatch Centers and
- (e) Regional Power Committees.
- (f) Public Sector Undertaking (PSUs) primarily working in power and Renewable Energy sector

6. Private Sector Entities are not eligible to avail of this fund.

7. The revised guidelines for implementation of the PSDF scheme will be issued shortly.

Yours faithfully,



(Hausuanthang Guite)

Under Secretary (OM)

Telefax: 23062492

Email : opmonitor-power@nic.in

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Copy to:

1. Secretary, Department of Economic Affairs, Ministry of Finance, North Block, New Delhi.
2. Secretary, Department of Expenditure, Ministry of Finance, North Block, New Delhi.
3. Chief Executive Officer (CEO), Niti Aayog, Sansad Marg, New Delhi.

Copy for information to: PPS to Secretary (Power)/PSO to SS&FA(AU)/Sr. PPS to AS(AT)/All Joint Secretaries/Economic Adviser/Directors/Dy. Secretaries of Ministry of Power.

Copy to: Incharge, NIC, Ministry of Power for uploading the letter on the website of Ministry of Power under 'New Notices' with heading "Continuation of scheme for Operationalization of the Power System Development Fund (PSDF) for the 15th Finance Commission cycle from FY2021-22 to FY2025-26".



(Hausuanthang Guite)
Under Secretary (OM)
Telefax: 23062492
Email : opmonitor-power@nic.in



राष्ट्रीय विद्युत प्रशिक्षण प्रतिष्ठान
National Power Training Institute
An IMS 9001 : 2015 & 14001 : 2015 Organisation
(Ministry of Power, Govt. of India)



Eastern Region, Durgapur (W.B.)

सिटी सेंटर, दुर्गापुर -713216 (पश्चिम बंगाल) दूरभाष : (0343) 2546237, 2545888

City Centre, Durgapur-713216 (WB) Ph : (0343) 2546237, 2545888

E-mail : durgapur.nptier@gmail.com, Website : www.npti.gov.in / www.nptidurgapur.com

NPTI(ER)/BDG/NC-SSFPG-2023/ 2023/1142

Dated: 07-08-2023.

To,
Sh. N.S. Mondal
 Member Secretary
 Eastern Regional Power Committee
 Central Electricity Authority
 14, Golf Club Rd, Golf Gardens, Tollygunge,
 Kolkata, West Bengal 700033

Sub: Proposal for sponsorship in National Conference on “**Shaping Sustainable Future with Green Power**” in association with ERPC-CEA to be conducted in 2nd week of January 2024 (Tentative)

Sir,

This is in reference to discussions the undersigned had with your good self on 03.08.2023 during our visit to ERPC HQ.

As discussed, we propose to organize a 2-day National Conference (Residential) on “**Shaping Sustainable Future with Green Power**” in association with ERPC-CEA. The Conference will cover all components of Green Power e.g. Renewable energy, Green Hydrogen, Electric Vehicle, Hydro Power, Energy Storage System etc. The Conference may be organized in the 2nd week of January 2024 (Tentative) at a suitable location mutually agreed by both organizations. The total expected delegates in residential mode may be 100 (One hundred), out of which 40 delegates from different constituents of Eastern Region may be sponsored by ERPC-CEA and rest 60 delegates may be invited from other related organizations outside Eastern Region. Delegates may be offered Executive Room alongwith food arrangements for 3 Nights (Day-1: Check-in, Day-2 & Day-3: Conference and Day-4: Check-out). Keeping in view all the arrangements to be made in good standard location/Venue with up-to-date amenities, we have estimated the Delegate fee @ Rs 75,000/- per participant + GST as applicable.

Accordingly, the total sponsorship amount for 40 delegates from ERPC towards participation from constituent utilities shall be Rs 30.00 Lakhs /- (Rs Thirty Lakhs only) + GST as applicable. A line of confirmation in this regard will be highly solicited to start necessary actions at this end for smooth conduction of the Conference.

With regards,

Yours Sincerely,

(S.K. SRIVASTAVA)
DIRECTOR





भारत सरकार / Government of India
विद्युत मंत्रालय / Ministry of Power
केन्द्रीय विद्युत प्राधिकरण / Central Electricity Authority
Sewa Bhavan, R.K.Puram, New Delhi-110066

Budget Section

No. 1/1/2023-Bud(CEA)/302-1308

Date: 01/05/2023

To

The Member Secretary, North Eastern Regional Power Committee, NERPC Complex Dong Parmaw Lapalamg, Shillong 793009.	The Member Secretary, Western Regional Power Committee, F-3, MIDC Area, Marol, Opp. SEEPZ, Central Road, Andheri (East), Mumbai 400093
The Member Secretary, Southern Regional Power Committee Central Electricity Authority 29 Race Course Cross Road, Bangalore-560009	The Member Secretary, Eastern Regional Power Committee 14, Golf Club Road, Tollygunj, Kolkata-700033
The Member Secretary, Northern Regional Power Committee, 18A, Qutab Institutional Area, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi 110016	

Subject: - Implementation of the recommendation of streamlining the process of fund utilization/budgetary provisions of all RPCs – Minutes of meeting chaired by Chairperson, CEA on 06.04.2023 -reg.

Sir,

The undersigned is directed to enclose herewith a copy of Standard Operating Procedure (SoP) and Minutes of the Meeting held under the Chairmanship of Chairperson, CEA on 06.04.2023 to streamlining the process of fund utilization/budgetary provisions of all RPCs, for your kind information and further necessary action.

This issues with the approval of Chairperson, CEA.

Encl.: as above.

Yours faithfully,

(Vagicharla Karthik)
Deputy Director (B&A)

Copy for information to: -

1. PPS to Chairperson, CEA.
2. PS to Secretary, CEA.

वागिचर्ला कार्तिक/Vagicharla Karthik
उप निदेशक/Deputy Director
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi-66



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
उत्तर क्षेत्रीय विद्युत समिति
Northern Regional Power Committee

सं. उक्षेविस/प्रशासन/509/2023/4379 - 4386

दिनांक: 24th April, 2023

Sub: Minutes of the meeting taken by Chairperson, CEA for streamlining the process of fund utilization/ budgetary provisions of all RPCs-reg

A meeting was taken by Chairperson, CEA for streamlining the process of fund utilization/ budgetary provisions of all RPCs on 06.04.2023 (10:30 AM) via video-conferencing. Minutes of the same may be found attached.
This issues with approval of Chairperson, CEA.

(Reeturaj Pandey)
Assistant Secretary &
HoO

सेवा में,

1. Member Secretary, WRPC, Mumbai-400093.
2. Member Secretary, SRPC, Bangalore-560009
3. Member Secretary, ERPC, Kolkata-700033.
4. Member Secretary, NERPC, Shillong-793003.
5. Director (B&A), CEA, New Delhi - 110066

Copy for information to: -

1. Chairperson, CEA, Sewa Bhawan, R. K. Puram sector – 1. New Delhi - 66
2. Secretary, CEA, Sewa Bhawan, R. K. Puram sector – 1. New Delhi – 66
3. Member Secretary, NRPC, Katwaria Sarai, New Delhi-16

Minutes of the meeting taken by Chairperson, CEA on 06.04.2023 for streamlining the process of fund utilization/ budgetary provisions of all RPCs

MS, NRPC welcomed Chairperson, CEA, Member Secretaries of RPCs, and Director (B&A), CEA.

List of participants in the meeting is attached as **Annexure-I**.

1. MS, NRPC apprised that Central Electricity Authority (CEA) vide its order no. 17-11/16/2022-Budget/CEA/02-07 dtd. 02.01.2023 constituted the committee consisting of the following officers for streamlining the process of fund utilization/ budgetary provisions of all RPCs:
 - i. Member Secretary, NRPC, *Chairman*
 - ii. Member Secretary, WRPC, *Member*
 - iii. Member Secretary, ERPC, *Member*
 - iv. Member Secretary, SRPC, *Member*
 - v. Member Secretary, NERPC, *Member*
 - vi. Director/DS (B&A), CEA, *Member & Convenor*
2. Committee had meeting on 23.01.2023 under chairmanship of Member Secretary, NRPC. The meeting was attended by all committee members. Recommendation of committee are:
 - i. RPCs budget head of Salary, Leave Encashment, Allowances, LTC, Medical, DTE, and FTE may be taken from CEA as it is done currently. However, expenditure under other heads which do not impact employees salary and allowances directly such as office expenses, procurement, civil and electric works, training, workshop, meetings etc. may be done from RPC Fund.
 - ii. RPCs may formulate PSM (Payment Security Mechanism) by making Late Payment Surcharge (LPS) Rules.
 - iii. RPCs may formulate SOP (Standard Operating Procedure) for expenses to be done from RPCs fund and its audit.
 - iv. NERPC may take up the matter regarding funding of office expenses of NERPC in their board meeting for reconsideration by the constituents.
3. He apprised that draft Report of committee and draft SoP was prepared by NRPC Sectt. and it was circulated to all members of the committee vide mail dtd. 11.02.2023 for comments. Comments received from SRPC, ERPC, and NERPC. No comments received from WRPC, and Director (B&A), CEA.
4. Based on comments received, Report and SOP has been prepared and proposed for approval.
5. MS, NRPC presented SOP in detail.
6. MS, ERPC stated that it shall be made mandatory to take approval of CEA/MoP for capital expenditure. Chairperson, CEA stated that all capital expenditure shall not require approval but expenditure like construction of new building may be done after prior approval of CEA/MoP.
7. MS, NERPC raised concern that their constituents are not contributing for RPC Fund. They contribute only for expenditure of meetings. Chairperson, CEA suggested that

he may take up the matter in their next NERPC meeting for collection of contribution amount.

8. After deliberation, following was decided to be included in SOP:

- i. All expenditure of 'Salary' head shall be met by fund provided by CEA. The same shall be reimbursed by RPCs to CEA quarterly as per existing practice.
- ii. All expenditure of heads other than 'Salary', shall be met by RPC Fund.
- iii. RPCs shall have an standing quarterly agenda in RPC meeting regarding intimation/approval of expenditure from RPC Fund.
- iv. CEA shall be IFD for only those budget heads (Salary) which has been allocated by CEA. For all other expenditure, approvals shall be taken in RPC meeting.
- v. Procurement from RPC Fund shall be done from GeM portal only. Any relaxation of GeM portal may be permissible in accordance with government order/rules only.
- vi. Internal audit shall be done by Director level official(s) (not dealing administration matters) of same RPC.
- vii. External audit shall be done by a CA firm.
- viii. All type of new construction/project, intended for long duration (such as construction of new building), shall be done after approval of CEA/MoP. For all kind of maintenance work, it shall be done with the approval of MS of respective RPC.

9. Final SOP after above inclusion is attached as **Annexure-II**.

Meeting ended with vote of thanks to the Chair.

CEA

1. Sh. Ghanshyam Prasad, Chairperson, CEA
2. Sh. Anand Upadhyay, Director (B&A), CEA

NRPC

1. Sh. Naresh Bhandari, Member Secretary, NRPC
2. Sh. Reeturaj Pandey, Assistant Secretary, NRPC

WRPC

1. Sh. Satya Narayan, Member Secretary, WRPC

SRPC

1. Sh. Asit Singh, Member Secretary, SRPC

ERPC

1. Sh. N. S. Mondal, Member Secretary, ERPC

NERPC

1. Sh. Kishore Jagtap, Member Secretary, NERPC

Standard Operating Procedure (SOP)
For budgeting and expenditure of RPCs

1. Budget of RPCs:

- 1.1 RPCs shall decide and collect contribution amount from their member organizations after approval in committee meeting.
- 1.2 RPCs shall finalize its annual internal Budget (except Salary head) and get its approval in committee meeting. Quarterly expenditure from 'RPCs internal budget' shall be put up for intimation/approval in concerned RPCs meeting.
- 1.3 CEA shall provide budget to RPCs for 'Salary' head only.

2. Expenditure of RPCs:

- 2.1 All expenditure of 'Salary' head shall be met by budget provided by CEA. The same shall be reimbursed by RPCs to CEA quarterly in line with MoP letter no. 6/10/90-Trans dtd. 03.04.2006 (**Annexure-1**).
- 2.2 All expenditure of heads other than 'Salary', shall be met by concerned RPCs Fund.

3. Delegation of Financial Power:

- 3.1 Member Secretary, RPC shall have following financial powers for expenditure:

Recurring Expenditure	Upto 10 Lakh (per case)
Non-Recurring Expenditure	Upto 25 Lakh (per case)

- 3.2 For amount more than mentioned above, Member Secretary may incur after prior discussion and approval in respective RPCs meeting.
- 3.3 All type of new construction/project, intended for long duration (such as construction of new building) shall be done after approval of CEA/MoP. For all kind of maintenance work, it shall be done with the approval of MS of respective RPC.

4. IFD for expenditure:

- 4.1 CEA shall be IFD for only those budget heads (Salary) which has been allocated by CEA. For all other expenditure, approvals shall be taken in RPC meeting only.

5. Compliance of government rules:

- 5.1 Any expenditure from RPCs fund shall be done as per GFR and other applicable rules, guidelines and manuals of Central Government.

6. Mode and payment of procurement:

- 6.1 Procurement from RPC Fund shall be done from GeM portal only. Any relaxation of GeM portal may be permissible in accordance with government order/rules only.

7. Creation of Other Specific Funds:

- 7.1 The RPCs may create any other Fund for any specific purpose with approval of RPC committee.

8. Procedure for audit:

- 8.1 Internal audit shall be done by Director level official(s) (not dealing administration matters) of same RPC.
- 8.2 External audit shall be done from a CA Firm.

9. Amendment in SOP:

- 9.1 Amendment in SOP may be proposed after joint discussion by all Member Secretaries of RPCs for approval of Chairperson, CEA.

F.No.6/10/90-Trans
Government of India
Ministry of Power

True Copy

New Delhi the 3rd April, 2006

To
The Chairperson
Central Electricity Authority,
Sewa Bhawan, R.K.Puram,
New Delhi.

Subject: Reimbursement of expenditure incurred by the Regional Power Committees by their constituents.

Sir,

I am directed to refer to this Ministry's letter of even number dated the 20th March, 2006 and to say that the following may be added at the end of the second paragraph of the said letter:

" For a transition period of six months the establishment expenditure of RPC would be met out of the budget of the CEA and the same will be reimbursed by the constituent members of the RPCs. Meanwhile, the constituents of RPCs will finalise the share of expenditure to be borne by the constituents of RPCs so that the RPCs become self-financing. The expenditure meted out from the budget and contribution of share by the constituent members will be reviewed by the Ministry of Power, every quarter".

2. This issues with the approval of the Internal Finance Vide their Dy. No. 486/DS (F) dated 3.4.2006.

Yours faithfully,
Sd/-

(K.V.Gopala Rao)

Under Secretary to the Government of India
Tel No. 2371-9710

Copy to:

1. Pay & Accounts Officer, Ministry of Power, New Delhi
2. Controller of Accounts, Ministry of Power, New Delhi
3. Member (G & O), Central Electricity Authority, New Delhi
4. Member Secretaries, All RPCs.

Copy also to:

PPS to Secretary (P) / PS to AS (P)/JS (A)/JS (Trans)/ JS (FA)/DS (A), Ministry of Power/US (Budget).