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

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

**No: ERPC/TCC&ERPC COMMITTEE/2023/** 79 **Date: 17.04.2023**

**To:**

**As per list**

**Sub: Minutes of 49th ERCC Meeting held on 24th March'2023 at Gangtok-reg.**

Sir/Madam श्री/श्रीमती,

The minutes of 49th ERPC Meeting held on 24.03.2023 at Chintan Bhawan, Gangtok, Sikkim, has been issued and uploaded on ERPC website (erpc.gov.in). As per decision of ERPC, distribution of hard copies of the minutes of the meeting has been discontinued as Go-green initiative.

24.03.2023 को चिंतन भवन, गंगटोक, सिक्किम में आयोजित 49वें ईआरपीसी सम्मेलन की विवरण सूची (मिनट्स) जारी की गई और ईआरपीसी वेबसाइट (erpc.gov.in) पर अपलोड की गई है। ईआरपीसी के निर्णय के अनुसार, सम्मेलन के मिनट्स की हार्ड कॉपियों का वितरण Go-Green उपक्रम के तहत बंद कर दिया गया है।

Yours faithfully,

एन. एस. मंडल
17.4.2023

**(N. S. Mondal/** एन एस मोंडल**)**
**Member Secretary/ सदस्य सचिव**

**Encl: As above**

## Distribution: ERPC Members

1. Chairperson, ERPC & Chairman-cum-Managing Director, Jharkhand Urja Vikas Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
2. Chairman-cum-Managing Director, Jharkhand Urja Utpadan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
3. Managing Director, Jharkhand Urja Sancharan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
4. Managing Director, Jharkhand Bijli Vitaran Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi- 834004.
5. Managing Director, Tenughat Vidyut Nigam Ltd., Hinoo, Doranda, Ranchi – 834002
6. Chairman-cum- Managing Director, Bihar State Power Holding Company Ltd., Vidyut Bhavan, Bailey Road, Patna-800001.
7. Managing Director, Bihar State Power Transmission Company Limited, Vidyut Bhavan, Bailey Road, Patna- 800001.
8. Managing Director, South Bihar Power Distribution Company Limited, Vidyut Bhavan, Bailey Road, Patna- 800001.
9. Chairman & Managing Director, West Bengal State Electricity Distribution Company Ltd., Vidyut Bhavan, 7th Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091.
10. Managing Director, West Bengal State Electricity Transmission Company Ltd., Vidyut Bhavan, 8th Floor, Block- DJ, Sector-II, Bidhannagar, Kolkata-700091.
11. Chairman & Managing Director, West Bengal Power Development Corporation Ltd., Bidyut Unnayan Bhavan, 3/C, Block LA, Sector-III, Bidhannagar, Kolkata-700098.
12. Managing Director, Durgapur Projects Ltd., Administrative Building, Durgapur-713201, West Bengal.
13. Principal Chief Engineer-cum-Secretary, Energy & Power Department, Govt. of Sikkim, Kazi Road, Gangtok – 737101, Sikkim.
14. Chairman-cum-Managing Director, Odisha Power Transmission Corporation Ltd., Janpath, Bhubaneswar- 751022.
15. Chairman, GRIDCO Ltd., Janpath, Bhubaneshwar-751022.
16. Chairman-cum-Managing Director, OHPC Ltd., Orissa State Police Housing & Welfare Corporation Bldg. Vanivihar, Janpath, Bhubaneswar- 751022.
17. Managing Director, OPGC Ltd., Zone-A, 7th Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar-751023.
18. Chairman, Damodar Valley Corporation, DVC Towers, VIP Road, Kolkata -700054.
19. Member (GO&D), Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
20. Director (Commercial), NTPC Ltd., Core-7, SCOPE Complex, Lodhi Road, New Delhi -110003.
21. Director (Technical), NHPC Ltd., NHPC Office Complex, Sector-33, Faridabad, Haryana-121003.
22. Director (Operations), Power Grid Corporation of India Ltd., Saudamini, Plot No. 2,Sector-29, Gurgaon-122001.
23. COO, CTUIL, Saudamini, 1st Floor, Plot-1, Sector-29, Gurgaon-122001
24. Executive Director, ERLDC, POSOCO, 14 Golf Club Road, Tollygunge, Kolkata – 700033.
25. Chairman-cum- Managing Director, POSOCO, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016
26. Director (C&O), PTC India Ltd., 2nd floor, NBCC Tower,15 Bhikaji Cama Place, New Delhi- 110066.
27. Chief Executive Officer, NTPC Vidyut Vyapar Nigam Limited, SCOPE Complex, Core-3, 7th Floor, Lodhi Road, New Delhi-110003.
28. Managing Director, Tata Power Trading Company Limited, B12/13, 2nd Floor, Shatabdi Bhavan, Sector-4, Noida-201301, Uttar Pradesh.
29. Managing Director (Generation), CESC Ltd., CESC House, 1 Chowringhee Square, Kolkata- 700001.
30. Chief Executive Officer, Maithon Power Ltd., Village-Dambhui, P.O. Barbindia, Dist.-Dhanbad, Jharkhand- 828205.
31. VP(Plant Head), GMR Kamalanga Energy Ltd., AT/PO-Kamalanga, PS-Kantabania, Via- Meramundali, Dist.- Dhenkanal, Odisha-759121.
32. Chief Executive Officer, Jindal India Thermal Power Limited, Plot No-12, Sector-B1, Local Shopping Complex, Vasant Kunj, New Delhi-110070.
33. Managing Director, Teesta Urja Limited, 2nd Floor, Vijaya Building, 17 Barakhamba Road, New Delhi- 110001.
34. CEO, Alipurdar Transmission Limited, 101, Part-III, G.I.D.C Estate, Gandhinagar, Gujrat-382028
35. CEO, BRBCL, Nabinagar, Dist- Aurangabad, Bihar-82430
36. Head (Procurement & Sale), IPCL, Salt Lake, Kolkata-700091
37. Managing Director (Generation), Haldia Energy Limited

## Distribution: TCC Members

1. Chairperson, TCC & Managing Director, Jharkhand Urja Sancharan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
2. Executive Director (Tech),, Jharkhand Urja Utpadan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
3. Director (Project), Jharkhand Urja Sancharan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi- 834004.
4. Chief Engineer (S&D-JBVNL), Jharkhand Urja Vikas Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
5. Chief Engineer (S&D), Jharkhand Bijli Vitaran Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
6. General Manager, Tenughat TPS, Lalpania, Dist- Bokaro, Jharkhand-829149.
7. Director (Tech.), Bihar State Power Generation Company Limited, Vidyut Bhavan, Bailey Road, Patna-800001.
8. Chief Engineer (Commercial), Bihar State Power Holding Company Ltd., Vidyut Bhavan, Bailey Road, Patna-800001.
9. Director (Project), South Bihar Power Distribution Company Limited, Vidyut Bhavan, Bailey Road, Patna-800001.
10. Director (Operations), West Bengal State Electricity Transmission Company Ltd., Vidyut Bhavan, 8th Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091.
11. Director (R&T), West Bengal State Electricity Distribution Company Ltd., Vidyut Bhavan, 7th Floor, Block- DJ, Sector-II, Bidhannagar, Kolkata-700091.
12. Director (O&M), WBPDCL, Bidyut Unnayan Bhavan, 3C, Block-LA, Sector-III, Bidhannagar, Kolkata- 700098.
12. General Manager (Technical), Durgapur Projects Ltd., Administrative Building, Durgapur, West Bengal- 713201.
13. Principal Chief Engineer-II, Energy & Power Dept., Govt. of Sikkim, Kazi Road, Gangtok-737101.
14. Director (Operation), Odisha Power Transmission Corporation Ltd., Janpath, Bhubaneswar - 751022.
15. Managing Director, GRIDCO Ltd., Janpath, Bhubaneswar-751022.
16. Director (Operation), Orissa Power Generation Corporation Ltd, Zone-A, 7th floor, Fortune Towers, Chandrasekharpur, Bhubaneswar-751023.
17. Director (Operation), Orissa Hydro Power Corporation Ltd, Orissa State Police Housing & Welfare Corporation Building, Vanivihar Chowk, Janpath, Bhubaneswar-751022.
18. Executive Director (Commercial), Damodar Valley Corporation, DVC Tower, VIP Road, Kolkata-700054.
19. Chief Engineer (GM), CEA, Sewa Bhawan, R.K. Puram, New Delhi-110066.
20. Regional Executive Director (ER-I), NTPC Ltd., 2nd floor, Lok Nayak Jai Prakash Bhawan, Dak Bunglow Chowk, Patna-800001.
21. Regional Executive Director (ER-II), NTPC Ltd., 3rd Floor, OLIC Building, Plot No.N-17/2, Nayapalli, Bhubaneswar-751012.
22. COO, CTUIL, Saudamini, 1st Floor, Plot-1, Sector-29, Gurgaon-122001
23. Executive Director (O&M), NHPC Ltd., NHPC Office Complex, Sector-33, Faridabad-121003, Haryana.
24. Executive Director (ER-I), Power Grid Corporation of India Ltd, Board Colony, Shastri Nagar, Patna- 800023.
25. Executive Director (ER-II), Power Grid Corporation of India Ltd, CF-17, Action Area-I, Newtown, Rajarhat, Near Axis Mall, Kolkata-700091.
26. Executive Director (Odisha Project), Power Grid Corporation of India Ltd, Plot No-4, Unit 41, Niladri Vihar, Chandrasekharpur, Bhubaneswar, Odisha-751021.
27. Executive Director, ERLDC, POSOCO, 14 Golf Club Road, Kolkata –700 033.
28. Executive Director, National Load Dispatch Center, POSOCO, B-9 Qutab Institutional Area, Katwaria Sarai,New Delhi-110016.
29. Executive Director (Marketing), PTC India Ltd., NBCC Tower, 15 Bhikaji Cama Place, New Delhi-110066.
30. Chief General Manager, NTPC Vidyut Vyapar Nigam Limited, SCOPE Complex, Core-3, 7th Floor, Lodhi Road, New Delhi-110003.
31. Head (Marketing), Tata Power Trading Company Limited, B-12/13, 2nd Floor, Shatabdi Bhavan, Sector-4, Noida-201301, Uttar Pradesh.
32. Vice President (System Operation), CESC Ltd, CESC House, 1 Chowringhee Square, Kolkata-700001.
33. Station Head & General Manager (O&M), Maithon Power Ltd., Village-Dambhui, P.O. Barbindia, Dist.- Dhanbad, Jharkhand-828205.
34. GM (Head-Electrical
35. ), GMR Kamalanga Energy Ltd., AT/PO-Kamalanga, PS-Kantabania, Via-Meramundali, Dist.- Dhenkanal, Odisha-759121.
36. Chief Operating Officer, Jindal India Thermal Power Limited, Plot No-12, Sector-B1, Local Shopping Complex, Vasant Kunj, New Delhi-110070.
37. Managing Director, Teesta Urja Limited, 2nd Floor, Vijaya Building, 17 Barakhamba Road, New Delhi- 110001.
38. CEO, Alipurdar Transmission Limited, 101, Part-III, G.I.D.C Estate, Gandhinagar, Gujrat-382028
39. Head (Comml), IPCL, Salt Lake, Kolkata-700091
40. Managing Director (Generation), Haldia Energy Limited

## Distribution: Others

1. Member Secretary, NRPC, New Delhi-110016.
2. Member Secretary, WRPC, Mumbai-400093
3. Member Secretary, SRPC, Bangalore-560009
4. Member Secretary, NERPC, Shillong-793006
5. Member Secretary, NPC, CEA, New Delhi- 110066.
6. Chief Engineer, TPRM Division, CEA, Sewa Bhawan, R.K. Puram, New Delhi-110066
7. Chief Engineer, IT Division, CEA, Sewa Bhawan, R.K. Puram, New Delhi-110066
8. Director, Ministry of Coal, Govt. of India, New Delhi
9. Director (Marketing), Coal India Limited, Coal Bhawan, Kolkata-700156
10. Director General, Department of Hydropower & Power Systems, Ministry of Economic Affairs, Post Box No.106, Thimpu, Bhutan
11. Managing Director, DGPC, Thimpu, Bhutan
12. Managing Director, DANS Energy Pvt Ltd, DLF Cyber City, Phase-II, GURGAON – 122 002
13. Director, Shiga Energy Pvt. Ltd., 5th Floor, DLF Building No. 8, Tower-C, DLF Cyber City, Phase-II, Gurgaon – 122002
14. CEO, Sneha Kinetic Power Projects Pvt.Ltd. #31 -A, National Highway, Behind SNOD building, Deorali, Gangtok, Sikkim-737102
15. CEO, Rongnichu HEP, MBPCL, Sikkim-737102
16. CEO, DMTCL, Sekura Energy Limited, Mumbai-400098
17. Senior Vice President, Teesta Valley Power Transmission Limited, New Delhi-110066
18. CEO, IndiGrid Limited, Mumbai-400079
19. CEO, Cross Boarder Power Transmission Limited, Ambience Mall Complex, Gurgaon, Haryana-122001
20. CEO, Powerlinks Transmission Limited
21. Managing Director, Adhunik Power & Natural Resources Ltd., Lansdowne Towers, 5th Floor, 2/1A Sarat Bose Road, Kolkata-700020.

# Minutes

# of

# 49th Meeting

# of

# EASTERN REGIONAL POWER COMMITTEE

**Date: 24th March'2023**

**Time: 10:00 Hrs**

**Chintan Bhawan, Gangtok, Sikkim**

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# EASTERN REGIONAL POWER COMMITTEE

## AGENDA FOR THE 49TH MEETING
## OF
## EASTERN REGIONAL POWER COMMITTEE

**Date: 24.03.2023 at 10: 00 Hrs** **Place: Chintan Bhawan, Gangtok, Sikkim**

**In Chair: Shri Ganesh Chettri, PCE cum Secretary, Power Dept., Govt of Sikkim** (Due to pre-occupation Shri A. Kumar, IAS Chairperson, ERPC & CMD, JUVNL could not be present in the meeting)

**Host:** Power Department, Govt of Sikkim and Sikkim Urja Ltd.

Meeting was convened physically at Chintan Bhawan, Gangtok, Sikkim.

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

Member Secretary, ERPC in his welcome address expressed his gratitude to Shri Ganesh Chettri, PCE cum Secretary, Power Dept., Govt of Sikkim, for sparing his valuable time and for being present in the meeting despite his busy schedule. He further thanked the entire team of Power Dept, Govt of Sikkim and Sikkim Urja Limited for making such excellent arrangements for hosting this meeting at Gangtok. He also thanked other ERPC Members, TCC members and other participants present in the meeting. He

Shri Ganesh Chettri, PCE cum Secretary, Power Dept., Govt of Sikkim in his keynote address welcomed all the delegates to the 49th ERPC Meeting of the Eastern Regional Power Committee, organized by Power Department, Govt of Sikkim and Sikkim Urja Ltd. 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 47th & 48th ERPC MEETING** |

The minutes of the 47th ERPC meeting held on 26th November, 2022 at Kolkata was circulated vide letter no. ERPC/TCC&COMMITTEE/2022/1167 dated 13.12.2022 and the minutes of 48th ERPC meeting held on 20.02.2023 through virtual mode was circulated vide letter no. ERPC/TCC&COMMITTEE/2023/1513 dated 22.02.2023.

Members may confirm the minutes of 47th & 48th ERPC meeting.

**Deliberation in the 49th ERPC Meeting**

*ERPC confirmed the minutes of 47th & 48th ERPC Meetings with the following modifications in the MoM of 47th ERPC Meeting:*

**Item No B1.4**

**B) Teesta-III Node:**

**Deliberation in the 47th TCC Meeting:**

CTU representative informed that at present condition, Teesta III is connected through Teesta III – Rangpo PLCC link. First fiber path is under implementation through Teesta III – Rangpo -2. He further added that since Teesta III – Rangpo -1 is LILOed at Dikchu, redundant path for Teesta III connectivity may be planned through LILO of Teesta III – Rangpo -1 for which OPGW installation is required for Teesta III – Dikchu portion (approval required) having length of approximately 26 km.

Regarding Dikchu– Rangpo portion, he informed that OPGW had already been approved.

TCC concurred and referred it to ERPC for approval.

**Deliberation in the 47th ERPC Meeting:**

*ERPC approved.*

**PART B: ITEMS FOR DISCUSSION**

**ITEM NO. B1: Issues referred to ERPC during the TCC meeting held on 23.03.2023.**

## B1.1 Surplus Power Portal (PUShP)

PUShP portal (For Flexibilisation of PPA for Optimal Utilisation of Resources & Reduction in cost of Power for Consumers) has been launched on 09th March, 2023 by Hon'ble Minister of Power and NRE.
The Portal would be a single window system providing services to diverse domains of all the entities involved and to reallocate and transfer the power in minimum time from one surplus entity to deficit entity. In recent past years, difficulties are observed in meeting the demand and some states do resort to power cuts, especially during the April, May, September and October months the crisis is observed while other states have surplus power capacity. The States which have surplus power continue to bear the fixed charge burden without using it which leads to high cost of power to the consumers. Regional diversity makes some states surplus. Like Peak in Northern region is during summer whereas Peak in Southern region is during winter. Similarly, there is diversity in the time at which the peak occurs in the States. Such regional diversity in the load demand was not able to address even though the generation capacity is available in the country. The reasons behind were many like one to one Power Purchase Agreements, some procedural constraints, non-availability of easy match making arrangements etc.

This portal will provide a platform for optimal utilization of generating capacity and will resolve the above issues. The scheme will not disturb the existing arrangements rather an additional avenue shall be provided to stakeholders for optimal use of generating capacity. The scheme envisages paperless working for temporary allocation/transfer of power from surplus (Seller) entity to deficit (buyer) entity. The benefits of the portal also includes Flexibilisation of Power Purchase Agreement, Availability of power to DISCOMs, reduction in power cuts, reduction in fixed charge burden on the states having surplus power, Allocation /Transfer of Power at regulated tariff in a minimum time.

Key Benefits of the schemes:-

i. Flexibilisation of Power Purchase Agreement
ii. Optimal Utilisation of Power due to Regional diversity and their increased availability.
iii. Availability of power to DISCOMs improves and reduction in power cuts.
iv. Meet the power demand of the country especially during the crisis situation in the month of April, May, September and October.
v. Reduction in fixed charge burden on the states having surplus power.
vi. Allocation /Transfer of Power at regulated tariff.
vii. Reallocation of power in minimum time with automated process.
viii. The scheme envisages a paperless working.
ix. None of the existing arrangements shall be disturbed, rather an additional avenue has been provided.
x. The portal envisages temporary allocation/transfer of power; subjected to willingness of seller and Buyer, confirmation of transmission corridor by concerned agencies and confirmation of payment security on portal by the new Buyer/Gencos before scheduling of such power.

**Deliberation in the 49th TCC Meeting:**

Representative of ERPC briefly explained the key features of the scheme.

The following deliberations took place in the meeting:

1. TCC advised all the utilities to go through the presentation attached (**Annexure-B1**) in the agenda so as to get familiarized with the working of the portal.
2. A workshop on Surplus Power Portal (PUShP) may be organized by ERPC. Hands-on training of the portal may also be provided in the workshop. The date and venue of the workshop will be intimated in due course.
3. URJA portal will also continue to be in service.

TCC referred the issue to ERPC for information.

ERPC may note.

**Deliberation in the 49th ERPC Meeting**

*ERPC noted.*

## B1.2 Preparation for Uninterrupted Power Supply During High Demand Period 2023-24

As the Country approaches the high demand period of 2023-24, various measures have been taken to ensure reliable power supply. On 10th March 2023, under the Chairmanship of Hon'ble Minister for Power & NRE, a special meeting was also taken for Uninterrupted Power Supply During High Demand Period. During the meeting following load projections were shown for April & May 23.

| | Apr-23 | | May-23 | |
|---|---|---|---|---|
| | **Solar** | **Non-Solar** | **Solar** | **Non-Solar** |
| **Peak Demand(a) (incl ISTS loss)** | **231.9** | **216.9** | **216.4** | **208.4** |
| **Time of Occurrences** | **15:00** | **23:00** | **15:00** | **23:00** |
| Nuclear Generation ( b ) | 3.6 | 3.6 | 3.9 | 3.9 |
| Gas Generation* ( c ) | 4.2 | 7.0 | 3.5 | 7.0 |
| Hydro Generation ( d ) | 14.8 | 23.5 | 16.9 | 24.9 |
| Wind ( e ) | 4.7 | 8.0 | 12.5 | 15.2 |
| Solar ( f ) | 34.4 | 0.0 | 33.5 | 0.0 |
| Other RES (g) | 2.0 | 2.0 | 2.0 | 2.0 |
| Ex-bus Thermal requirement (h = a- b-c-d-e-f-g) | 168.2 | 172.8 | 144.2 | 155.4 |
| **Gross Thermal requirement (i = h*1.03/.92)** | **188.3** | **193.5** | **161.4** | **174.0** |
| **Expected Shortage** | **-0.7** | **-5.1** | **0** | **0** |

During the meeting, measures taken to increase the availability from the Gas and Thermal generators were also highlighted.

- Measures taken for ensuring more power from Gas based power plants.
  - Operationalization of 5000MW power from NTPC plants:
    - Total NTPC Gas Capacity 6511 MW (4017 MW own +2494 MW JV & Subsidiary)
    - For 18 days during crunch period (Apr-May 23) is approved by MoP on 15th November 2022.
    - Plants will run 8 hours-Full load, 16 hours-Technical minimum.
    - Gas supply agreed to by GAIL.
  - Bidding Scheme for 4000 MW gas-based capacity (other than NTPC):
    - During the crunch period (Apr-May 23) proposed through bidding.
    - Nodal Agency - NVVN
    - Operation of the selected power plants will be similar to NTPC plants
- Measures taken for enhancing the availability of thermal power plants.
  - No Planned Maintenance for coal based power plants during the crunch period
  - Ministry of Power directed Gencos to import coal @ 6% of their requirement for April to September, 2023.
  - Ministry of Railways requested to ensure the availability of rakes.
  - 14.2 GW of Imported Coal Based power plant is envisaged to be available Out of 17.3 GW
  - 201 MT coal available against 222 MT of domestic Coal required by thermal power plant from April-June 2023.

- Introduction of HP- DAM
    - Seller with Variable Cost > Rs 12/Units
    - Range :- 0 to Rs 50 per Unit
    - Price discovery for HP-DAM will be Double-Side Closed Auction (Same as DAM, RTM, and G-DAM)
- Secondary Reserve Ancillary Service – SRAS
    - As per the estimate of Nodal Agency total 4500 MW of Secondary reserved required at all India level.
    - At present Maximum 800-900 MW Secondary reserve available at Pan India level
    - More State generator needs to be brought under SRAS purview.
        - Input submitted by WBSLDC to WBSERC for SRAS implementation in state.
        - Implementation in Odisha and DVC is also under discussion
- Tertiary Reserve Ancillary Service-TRAS
    - Will commence from 1st April 2023
    - A draft detailed procedure has been formulated by NLDC and has been circulated among the stakeholders. https://posoco.in/wp-content/uploads/2023/02/Consolidated_Draft_Detailed_Procedure_TRAS_Nodal_Agency_Stakeholder_Consultation_20Feb2023.pdf
    - 10130 MW of TRAS Reserve required at all India level for Q-1 of FY 2023-24 published by NLDC https://posoco.in/download/publishing-of-quantum-of-reserves-of-sras-and-tras-at-regional-level-for-q-1-of-fy-2023-24/?wpdmdl=50185
- Eastern Region perspective
    - Summer preparedness meeting held on 11th March 2023
    - Expected regional peak demand of 28500 MW in the month of April 2023

| | April-2023 | | | | | | |
|---|---|---|---|---|---|---|---|
| Constituent | Expected Peak Demand | Own Generation | ISGS Allocation (Considering 80% Availability) +IPP | ISGS Hydro (100 % peaking support) + Bhutan (20%) | LTA from Wind Plant (70%) | Export Commitment (if any) | Dependency on Market |
| Bihar | 6955 | 741 | 4920 | 201 | 509 | 0 | 584 |
| Jharkhand | 1800 | 415 | 704 | 78 | 210 | 0 | 393 |
| DVC | 3300 | 5738 | 407 | 63 | 0 | 2778 | 0# |
| Odisha | 6146 | 4100 | 1578 | 115 | 164 | 0 | 189* |
| West Bengal | 10450 | 6804 | 1343 | 167 | 18 | 0 | 2118** |
| Sikkim | 110 | 0 | 22 | 76*** | 0 | 0 | 12 |

# DVC has excess generation capacity of 130 MW.
* Also depends on the Unit availability at SEL or other CPPs
** Last year WB Purchased a Maximum 3155 MW with an average of 2359 MW from the market.
*** Excluding state-free power from Hydro IPPs in the state, which Sikkim avails as per requirement

**Deliberation in the 49th TCC Meeting:**

ED, ERLDC made a brief presentation (attached at Annexure-B1.2) highlighting the following

points with respect to Eastern Region.

1. Expected regional peak demand would be 28500 MW in the month of April'2023.
2. Owing to the market volatility, utilities having shortfall should not be solely dependent on market for procurement of power. Proper planning and tie up power should be in place.
3. More reserve (secondary as well as tertiary) should be there which will help in stabilizing frequency variation.

MS ERPC opined that all the states may take appropriate actions and do proper planning to meet their future demand growth in the coming years too. He also requested concerned utilities to update their status of ongoing projects.

Representative of DVC apprised the forum that the expected peak demand of DVC would be around 3400 MW. So, excess generation capacity of 130MW may not be available.

TCC referred the issue to ERPC for information.

ERPC may note/discuss.

**Deliberation in the 49th ERPC Meeting**

*ERPC advised all the concerned utilities to do proper planning and take necessary measures as mentioned, in order to meet the anticipated peak demand in the coming months. State utilities were also advised to explore other options e.g. PUShP portal for power procurement apart from power market. ERPC further advised all the generators to take necessary actions in order to ensure the availability of their generating units during the crunch period.*

## B1.3 Urgent Requirement of One Reserve 400/220 KV Interconnecting Transformer (ICT) available in Eastern Region for 400/220 KV GSS at Patratu (JUSNL)

The 400/220 KV Grid Sub-Station at Patratu of JUSNL was commissioned on dated 29.12.2021 with 2X315 MVA 400/220 KV ICTs. This Grid Sub-station has constructed by M/s Powergrid Corporation of India under Jharkhand Consultancy Project.

**Events of ICTs Failure after Commissioning:**

I. ICT-1, 315 MVA 400/220 KV tripped on 30.04.22, 21.07.22, & 01.08.22 Buchholz relay. After tripping, an internal inspection was carried out by M/s CGL Transformer Division Bhopal Team and it was found that the due to damage of Tertiary bottom lead. Therefore, the said Transformer has been shifted to workshop of M/s CGL Bhopal in the month of Dec'2022 for carry out rectification work.

II. ICT-2, 315 MVA 400/220 KV tripped on 12.09.2022 & 13.09.2022 respectively due to moisture found in OSR at B-phase. The said Transformer has been taken into precautionary shut down on 27.09.2022 due to alarming high value of formation of dissolved gases as per DGA test report.

After conducting various test like DFRA, SFRA, Tan Delta etc. and inspection done by M/s CGL Team on said Transformer, it has been reported that ICT-2 also required to shift to workshop of M/s CGL Bhopal for carry out rectification work.

Present Status of failed ICTs are as follows:

ICT-1: The current status of ICT-1 is that the un-tanking of the active part and top yoke removal have been completed. The winding removal from the core coil assembly is -in progress and is expected to be completed by end of April'2023. After that, it will be dispatched from M/s CG Power Works in Mandideep.

ICT-2: ICT-2 is under dismantling and the same will be sent to M/s CG Power works on priority, once repair bay/berth is available over there.

Urgency of Installation of ICT from Eastern Region Grid

i. Reliable power supply to Ranchi

The urgency of installing ICTs at the 400/220 kV Patratu substation is due to the fact that the GSS is not operational, as both ICTs at this substation have been taken offline and are undergoing rectification. This has result in the shifting of loads back to the ICTs at the Ranchi substation. This has led to the entire Ranchi City demand being fed by 2X315 MVA ICTs at the Ranchi (PG) substation.

Currently, the loading of the Ranchi ICTs is between 160-190 MW/ICT. In this network configuration, the outage sensitivity of the other ICT at Ranchi is more than 90%. Therefore, it is essential to install at least one ICT at the 400/220 kV Patratu substation in order to ensure reliable power supply to Ranchi.

ii. Providing startup power for Construction of 3x800 MW PUVNL Super _Thermal Power Plant JUSNL has planned for providing startup power through following network:-

a. 400 KV Quad Moose PUVNL - Patratu Transmission Line: - The Construction work of this line is under progress and expected to be completed by July 2023, although startup power is required by May-2023.

b. 400 kV TTPS-PTPS Transmission Line: - Presently this line is charged at 220 kV Voltage level. In order to provide start up power to PUVNL, modification work as well as termination arrangement at PUVNL end & Tenughat end are under construction.

Since, unmodified arrangement facilitate about 50-60 MW power to Ranchi & Patratu area. Therefore, modification or shutdown of the line is not allowed by Outage coordination Meeting held on 13/01/2023 until the 400/220 kV Patratu ICTs are restored.

As per the meeting with PGCIL dated 22 /02/2023, Powergrid intimated that both the transformers are within defects liability period (DLP) and the same will be repaired and re-commissioned as per contract by the agency at the earliest possible time i.e, till 15.06.2023 for ICT-1. POWERGRID further suggested that due to delay in repair, re-erection & re-commissioning of the ICTs at Patratu GSS, utilization of reserve transformer available in Eastern Region during the said outage period

may be taken up with ERPC by JUSNL till at least one ICT is re-commissioned.

In 201st OCC meeting, the issue was deliberated as follows:

- Expected timeline for revival of 400kV/220kV 315MVA ICT-1 At Patratu is June'2023.
- Expected timeline for transporting 400kV/220kV 315MVA ICT-2 at Patratu is April'2023.
- Powergrid representative submitted that the spare ICT at Muzaffarpur is of same make. MS ERPC advised Powergrid to submit a detailed report regarding feasibility of getting the spare ICT of Muzaffarpur to be installed at Patratu. The matter was referred to TCC Meeting for further discussion.

**Deliberation in the 49th TCC Meeting:**

The following deliberations took place:

1. Representative of Powergrid informed that:
   a. 315 MVA ICT-1 would be ready for testing by 18th April'2023.
   b. By 28th April'2023 it would be dispatched.
   c. By 15th May'2023 the ICT will be available at site.
   d. By end of May'2023 the said ICT will be put in service.
2. TCC advised Powergrid to carry out necessary activities at Patratu end to make the site ready for installation of the ICT. TCC further advised Powergrid to provide weekly progress report to ERPC, ERLDC and Jharkhand.
3. TCC also advised Powergrid to arrange for transport of ICT-2 in such a way that once the bay at M/s CGL workshop in Bhopal gets empty after shifting of ICT-1 to Patratu, rectification work of the ICT-2 may be started.
4. Representative of DVC apprised the forum that early restoration of the ICTs is also essential for enabling Jharkhand to provide power assistance of around 30-35 MW through 132 KV Tie line Patratu (JUSNL) - Patratu (DVC) for reconductoring work of 132 kV D/C Ramgarh - Patratu line.
5. Representative of NTPC submitted that start-up power for 3*800 MW PUVNL Super Thermal Power Plant would be required by May-2023. Early restoration of 2*315MVA 400/220kV ICTs is required so that s/d of 400kV TTPS-PTPS may be facilitated which is currently charged at 220KV voltage level and to be charged at 400kV level (after necessary modification) to provide start-up power to PUVNL.

TCC referred the issue to ERPC for information.

ERPC may note/discuss.

**Deliberation in the 49th ERPC Meeting**

*ERPC noted and advised Powergrid to strictly follow the timelines as assured. ERPC further advised JUSNL to extend necessary support to Powergrid for the said work.*

**B1.4 Renovation of 220 kV switchyard Equipment of 220/132 kV Purnea SS commissioned in the year of 1985 under Chukha Transmission projects**

A. Assets Detail at Purnea ss:

| Sr. No | Asset Detail | Year of Commissioning | Remarks |
|---|---|---|---|
| 1 | 220 kV Purnea-Dalkhola Ckt-I & II- | 1985 | Chukha Project |
| 2 | 220 kV Purnea-New Purnea ckt-I & II | 2002 | |
| 3 | 132 kV GIS | 2018 | |
| 5 | 03 nos. 220/132 kV ,160 MVA ICT | 2014, 2015 & 2016 | All 03 ICTs replaced with 160 MVA |

B. Sub-Station Transmission Assets replaced till date:

a) 220/132 kV ICT-I, II & III upgraded from 100 MVA to 160 MVA as mentioned above under ATCE (Augmentation of transformer capacity in Eastern Region) and ERSSXII.

b) Complete 132 kV AIS system converted to GIS system in the year of 2018 under ERSS XII.

C. Issues being faced at Purnea ss:

a) C1. The control room of the substation is in dilapidated conditions. Structural deformation of control room building being observed. In order to assess healthiness of the building, structural audit of the building was carried from NIT Patna. NIT Patna has suggested to re-construct the building as it is not safe for system. Structural deformation of control room building has also been pointed out by CEA during routine audit.

b) C2. C&R panels are quite old and obsolete. control and power cables become brittle due to ageing which cause frequent earth fault in the system.

c) C3. CEA has also observed that the villagers have constructed houses very close to boundary wall near to the sub-station Gantry and therefore boundary wall near the gantry needs to be raised in order to protect houses in case of failure of LAs.

d) C4. Base structure of switchyard equipment also getting weaken due to ageing of approx. 38 years of service life. Strengthening of base structure of some equipment have been carried out to withstand the load of the equipment. However, for smooth operation of sub-station, the base structure of switchyard equipment needs to be replaced due to ageing of structures.

e) C5. The sub-station is most vulnerable in respect to earthquake as it falls under Seismic zone 5.

D. In view of above, followings are proposed for renovation /replacement/upgradation under O&M addcap for smooth operation of sub-station:

a) Re-construction of Control Room/Panel Room.

b) Replacement of aged CT, CVT and isolators along with support structure and foundation for Dalkhola-I &II, Bus Coupler and Transfer Bus bays.

c) Uprating of isolators of 220 kV Purnea-New Purnea-I & II at both ends due to replacement of conductor from Zebra to HTLS.

d) Replacement/Renovation of C&R panels of 220 kV system.

e) Replacement of ACDB and DCDB panels.

f) Raising height of boundary wall near the sub-station Gantry.

g) Renovation of switchyard drainage system and cable trench.

In 201st OCC Meeting, Representative of Powergrid delivered a brief presentation on the asset details, upgradation/replacement of transmission assets done till date and the issues being faced at Purnea S/s. OCC advised Powergrid to:

a) Submit the cost estimate of the said renovation project.
b) Submit the study report by NIT Patna and also the report of CEA.
c) Submit the relevant pics/videos of Purnea S/s.

The issue is referred to TCC for further deliberation.

**Deliberation in the 49th TCC Meeting:**

Following deliberations took place:

1. Representative of Powergrid apprised the forum about the necessity of renovation of 200kV switchyard equipment of 220/132kV Purnea S/s which was commissioned in the year of 1985 under Chukha Transmission projects.
2. He submitted that the estimated cost of Civil work would be 415.33 lakhs and the same for Electrical work would be 554.27 lakhs. So total cost would be around 969.55 lakhs.
3. He further intimated that the cost would be recovered as ADD-CAP through tariff.
4. TCC advised Powergrid to optimize the cost to the extent possible.

TCC concurred and referred it to ERPC for approval.

ERPC may approve.

**Deliberation in the 49th ERPC Meeting:**

*ERPC approved the proposal for renovation of 220 kV switchyard Equipment of 220/132 kV Purnea SS with a cost estimate of Rs 969.55 lakhs.*

## B1.5 Restoration of 220KV Farakka-Lalmatia S/C Line

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

In 200th OCC meeting, representative of Jharkhand submitted foundations for 17 nos of tower have been completed. Foundation of 2 towers is under progress. Foundations for 3-4 towers are left. Stringing and erection activities to commence after 10th March. OCC advised JUSNL to complete the work by May’23.

**Deliberation in the 49th TCC Meeting:**

The following deliberations took place:

1. Representative of JUSNL assured that erection and stringing of the line would be completed by May'2023.
2. TCC advised JUSNL to provide weekly update along with photographs to ERPC and ERLDC.
3. On query, representative of JUSNL informed that security personnel have been deployed in the theft prone areas of the said line.

TCC referred the issue to ERPC for information.

ERPC may note/discuss.

**Deliberation in the 49th ERPC Meeting:**

*ERPC noted and advised JUSNL to complete the erection and stringing work of 220KV Farakka-Lalmatia S/C Line by May'2023.*

*JUSNL was advised to provide weekly update along with photographs to ERPC and ERLDC.*

## B1.6 Restoration of 132kV Sagbari–Melli.

Sikkim vide mail dated 09.06.2021 updated the following status:

1. In loc 82,83 & 84 we have low ground clearance which need hill cutting but if needed TL can be charged after putting temporarily barbed wire fencing.

2. In loc 98-99 a house had been constructed just below the line and warning had been issued to the owner for not to do vertical extension of the house till any such arrangement is made.
3. In loc 116 &117 land owner demanding for intermediate tower and not allowing for us to clear the jungles.

4. Loc 128 is in dilapidated condition due to sinking effect posing threat to lives and properties.
5. Local public are asking to shift the tower in safe place before restoration of supply in the TL.

6. 80% of jungle clearance has been completed and remaining 20% is in Forest area most of it is under west district and waiting for permission from Forest department. The delay in obtaining permission for following trees in forest land is that it cannot be ascertained whether FCA clearance during construction of TL was obtained as the record is not available either in power department or in DFO Office. Regarding this it had been told by ERPC that once obtaining environment clearance at the time of construction there need not to take permission for further clearance of ROW from Forest dept and this matter is been conveyed to the Forest

department but they informed us as per Forest Act of Sikkim state permission has to be obtained for fresh felling with payment of compensation. File for approval is being send to conservator of Forest from DFO on 16.06.2021

In the 196th OCC Meeting, representative of Sikkim briefly explained the issue and highlighted the reasons behind delaying of the project. He submitted that the expected timeline for restoration is November'2022.

Representative of Sikkim was not available during 197th, 198th, 199th, 200th and 201st OCC Meeting.

**Deliberation in the 49th TCC Meeting:**

Representative of Sikkim assured that the said line would be restored by 15th April'2023.

TCC referred the issue to ERPC for information.

ERPC may note/discuss.

**Deliberation in the 49th ERPC Meeting:**

*ERPC noted and advised Sikkim to restore 132kV Sagbari–Melli by 15th April 2023.*

## B1.7 Installation of Transmission Line Arrestor in 220kV Lines in North Bengal.

220kV D/C Siliguri-Kishanganj TL (erst 220kV D/C Siliguri-Dalkhola TL), 220kV D/C Birpara-Chukha TL, 220kV D/C Birpara-Alipurduar TL (erst 220kV D/C Birpara-Salakati TL) and 220kV S/C Birpara-Malbase TL were commissioned in the year 1986 under Chukha Transmission System.
All the above-mentioned lines are located in the Himalayan Foothills and encounter severe lightning incidents during the monsoon period starting from April-Oct. As stated by NASA, The Himalayan Foreland is declared as Principal Lightening Hotspot zone.4

Due to lightening frequent de-capping/failure of installed Porcelain insulators were occurring in above mentioned lines. Subsequently in order to prevent repeated de-capping, in the year 2018 the earlier installed Porcelain insulators were replaced with Polymer Insulators. After replacement of Porcelain insulators there was a considerable reduction in Auto-reclosures and tripping incidents but still the tripping/AR rate is quite high. This season several instances of tripping/Auto-reclosures have occurred in those lines. This repeated Auto-reclosures/tripping is not only creating disturbance for the Grid but also putting stress on connected terminal equipment.
A year wise tripping & Auto-reclosure incidents in above mentioned lines w.e.f. 01.04.2017 till date are as per the following:

**220kV D/C Siliguri-Kishanganj TL (erst 220kV D/C Siliguri-Dalkhola TL):-**

| 2017-18 | | 2018-19 | | 2019-20 | | 2020-21 | | 2021-22 | | 2022-23 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AR | Trip | AR | Trip | AR | Trip | AR | Trip | AR | Trip | AR | Trip |
| 1 | 4 | 0 | 1 | 0 | 1 | 7 | 1 | 7 | 1 | 15 | 3 |

**220kV D/C Birpara-Chukha TL:-**

| 2017-18 | | 2018-19 | | 2019-20 | | 2020-21 | | 2021-22 | | 2022-23 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AR | Trip | AR | Trip | AR | Trip | AR | Trip | AR | Trip | AR | Trip |
| 2 | 8 | 0 | 6 | 1 | 2 | 1 | 2 | 4 | 4 | 11 | 14 |

**220kV D/C Birpara-Alipurduar TL (erst 220kV D/C Birpara-Salakati TL):-**

| 2017-18 | | 2018-19 | | 2019-20 | | 2020-21 | | 2021-22 | | 2022-23 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AR | Trip | AR | Trip | AR | Trip | AR | Trip | AR | Trip | AR | Trip |
| 0 | 6 | 1 | 3 | 2 | 0 | 2 | 3 | 2 | 1 | 4 | 7 |

**220kV S/C Birpara-Malbase TL:-**

| 2017-18 | | 2018-19 | | 2019-20 | | 2020-21 | | 2021-22 | | 2022-23 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AR | Trip | AR | Trip | AR | Trip | AR | Trip | AR | Trip | AR | Trip |
| 0 | 7 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 3 | 0 | 5 |

TFR measurement were carried out on the towers as well as section of line identified during Post Fault Tripping Analysis. Tower Footing Impedance measurement shows high values in most of the tower locations in the said lines.

All the above-mentioned lines were commissioned under CTS scheme and all tower earthing were done as per prevailing earthing practice viz. counter-poise earthing, additional earthing after 7-8 KM span etc. But considering changes in weather conditions over the years, lightning phenomenon have now increased drastically in North-Bengal. Several newspaper publication also justifies severity of lightning in North-Bengal.It seems that the prevailing earthing design used in the towers are not sufficient to arrest the frequent tripping/auto-reclosures.
It has been felt necessary to adopt installation of Transmission Line Arresters as per latest practices adopt world wide in certain stretches of lines where instances of auto-reclosures and tripping are high. Independent studies carried out by Technical Institutions in North-Bengal have also suggested for installing lightening arrestors as weather pattern changes.

| Sl No. | Name of Line | Total Tower considered for TL LA | Total No of TL Las proposed |
|---|---|---|---|
| 1 | 220 KV D/C Siliguri Kishanganj TL | 132 | 500 |
| 2 | 220 D/C KV Birpara-Chukha TL | 40 | 136 |
| 3 | 220 D/C KV Birpara-Alipurduar TL | 36 | 118 |

| | | | |
|---|---|---|---|
| 4 | 220 S/C KV Birpara-Malbase TL | 38 | 76 |
| | TOTAL | 246 | 830 |

The tentative cost estimate for installation of 830 Nos. of Transmission Line Arrestors in 246 Nos. of Towers of said lines shall be around 6.5 Crores incl GST.

Considering the increase in lightning phenomenon over North-Bengal area, it seems that existing Tower Earthing system seems not sufficient and as such as a system improvement measure it is requested to kindly consider the TL LA installation as per above at an estimated cost in the ongoing ADDCAP 2019-2024 tariff block of Chukha Transmission System. On approval same shall be produced before truing up petition.

Powergrid representative submitted a report highlighting the relevance of installation of Lightning Arrestors in minimizing tripping due to severe lightning and requested for approval for installation of TLA in 220 KV lines in North Bengal.

Upon enquiring whether Powergrid was planning to install TLA elsewhere except the above-mentioned 4 lines, it was informed that studies related to tripping phenomenon have been carried out for lines in North Bengal with severe lightning phenomenon. The locations identified for installation of LA were chosen based on the IEEE 81 2012 guidelines and incidents of repeated trippings. Moreover, in these locations no scope of improvement in TFR value was possible through additional earthing or chemical earthing except for installation of TLA.

ERLDC representative advised Powergrid to submit the detailed list of considerations while identifying the locations for installation of TLA.

OCC agreed to the proposal and advised Powergrid to submit the detailed list of locations to ERPC and ERLDC. Further, OCC referred the above issue to the upcoming CCM meeting of ERPC.

In 48th CCM, Powergrid representative highlighted the relevance of installation of Lightning Arrestors in minimizing tripping due to severe lightning in the transmission lines located in the Himalayan Foothills under Chukha Transmission System and in these locations no scope of improvement in TFR value was possible through additional earthing or chemical earthing except for installation of TLA.

Further he informed that the location details have already been shared with ERPC and ERLDC on 1st Feb'2023.

After detailed deliberations, CCM approved the cost of Rs 6.5 crores for installation of 830 Nos. of Transmission Line Arrestors in 246 Nos. of Towers location on above transmission lines and referred the issue to upcoming TCC/ERPC for approval.

**Deliberation in the 49th TCC Meeting:**

TCC agreed and referred it to ERPC for approval.

ERPC may approve.

**Deliberation in the 49th ERPC Meeting:**

*ERPC approved the cost of Rs 6.5 crores for installation of 830 Nos. of Transmission Line Arrestors in 246 Nos. of Towers location on the said transmission lines.*

## B1.8 Man-day rates to be charged to various utilities for installation of Interface Energy Meters by Powergrid on behalf of CTUIL.

This is in reference to the agreement signed between CTUIL and Powergrid on 09.02.2022 for Powergrid services to carry out the procurement and installation of IEMs and accessories on behalf of CTUIL.

In 200th OCC Meeting, representative of Powergrid apprised the forum that it is always advisable to install the energy meters by the utilities themselves. However, if Powergrid does the installation of IEMs at the premises of the utilities (non-Powergrid ISTS points) on behalf of CTUIL, it'll be on chargeable basis. The details of man-day charges are given in **Annexure-B1.8.**

On query, representative of ERPC informed the forum that the methodology, as given in Annexure-B1.8, is being followed in all the regions.

OCC advised all the concerned utilities to follow the methodology as mentioned in Annexure-B1.8 and approach CTUIL to explore the possibility of price negotiations, if any.

In 201st OCC Meeting, Representative of NTPC submitted that installation of meters by Powergrid on behalf of CTU should not be on chargeable basis. He further added that the same is in violation to Grid Code/Regulations.

OCC opined that the agenda may be referred to TCC for further deliberation.

**Deliberation in the 49th TCC Meeting:**

The following deliberations took place:

1. Representative of NTPC submitted that as per regulations, installation of SEMs at all interconnection points between regional entities and at other identified points is the responsibility of CTUIL. However, there is no provision for billing the charges to regional entities for installation of SEMs.
2. Representative of CTU submitted the following:
    a. Although the existing regulation does not mention regarding the charges of IEM installation but service charges for installing the same shall be recovered from all generators & ISTS licensees. The same has been identified, quantified and brought out by CTUIL in the methodology as deliberated in all RPC forums, subsequent to CTUIL formation.
    b. Upon formation of CTUIL, procurement & installation of IEM need to be carried out by CTUIL and this being a crucial & high importance activity for sectoral development, timely installation & smooth DOCO, clarity has been brought through the methodology. As CTUIL does not have regional manpower/ setup for procurement and installation across the regions, it has entered into an agreement with POWERGRID and has requested POWERGRID to continue to procure and install IEMs with necessary hardware/software & AMR facility, for and on behalf of CTUIL, on chargeable basis.
    c. The methodology is an interim measure and has been shared across the regions at RPC forums and the utilities are following the same, hence the same may be continued.

d. They will also take up the matter with CERC and would give their input to draft IEGC for bringing more clarity in regulations on IEM installation charges & its recovery. CTUIL also requested RPC forum to take up with CEA & CERC for necessary amendments in metering regulations for IEM installation charges & its recovery.

3. TCC opined that the submissions by CTUIL need further deliberation.
4. However, clarification regarding the man-day rates to be charged to various utilities for installation of Interface Energy Meters by Powergrid on behalf of CTUIL may be obtained from appropriate authority. After getting the necessary clarification, the charges for installation of SEMs would be reimbursed to Powergrid.
5. TCC was of the view that existing practice of SEMs installation in Eastern Region may be continued by Powergrid without any installation charges w.e.f 01.04.2023.

TCC referred the issue to ERPC for further deliberation/guidance.

ERPC may guide.

**Deliberation in the 49th ERPC Meeting:**

*The following deliberation took place in the meeting:*

1. *Representative of Powergrid informed that SEMs installation by Powergrid on behalf of CTUIL would be on chargeable basis. He further added that as replacement/installation of IEMs is crucial for Grid operation point of view, either Powergrid can install the meter on behalf of CTUIL on chargeable basis or the utilities can themselves install the meter after collecting the same from Powergrid.*

2. *Representative of NTPC submitted that if the utilities install the meters by themselves, certification either by Powergrid or CTU is necessary after the installation of SEMs at the premises of the utilities.*

3. *SE(Commercial), ERPC Secretariat stressed upon the fact that early installation of IEMs is very crucial in order to avoid any discrepancies in commercial accounting in case any of the main/standby/check meters fails.*

*After detailed deliberation ERPC opined that:*

1. *The submissions made by CTUIL in TCC and suggestions of Powergrid need further deliberation in Sub-Committees of ERPC.*
2. *In the meantime, CTU may approach appropriate authority (CERC/CEA) seeking clear guidelines regarding installation charges of IEMs.*
3. *Till any clear guidelines from Appropriate Authority come or any decision arrives at ERPC fora, utilities may approach Powergrid for installation of IEMs.*

## B1.9 Issues related to OPGW installation in 132 kV Rangpo - Chuzachen Line

Power Grid had been entrusted with establishing Fiber Optic network (OPGW) over 132 kV Rangpo - Chuzachen TL of EPDS, Sikkim under Eastern Region Fibre Optic Expansion Project

(Additional Requirement) for smooth communication of Chuzachen HEP power generating station to Regional Load Dispatch Centre (ERLDC) at Kolkata. The ownership of said transmission line 132 kV Rangpo - Chuzachen TL belongs to Energy & Power Dept., Govt of Sikkim. Out of 20.727 km of scope of work, Fiber Optic Installation of 17.912 km had been completed till April 2020 after which work had been stopped by villagers of village Kamarey Bhasmey, Pendam, East Sikkim. The ROW details in between T.no. 37 to 42 falling under Kamarey village is tabulated below.

List of Agitating Landowners in Kamarey village with details:

| S.No | Name & Contact of Landowner | Location No. details |
|---|---|---|
| 1 | Name: Ashok chettri S/o L.t. shiva lall chettri<br>Contact.No: 9593223955 | Village kamarey PW<br>PO & PS - Rangpo, Pendam<br>East Sikkim-737132 |
| 2 | Name: Nandu kumarpradhan<br>Contact.No: 9635686942 | |
| 3 | Name: kumar chetari Contact.no: 9635664370 | |
| 4 | Name: Mani Kr. Pradhan | |
| 5 | Name: Mangal Singh<br>S/o Singh Bir Tamang | |
| 6 | Name: Tularam Sharma<br>S/o Gauri Shankar | |
| 7 | Name: Dili Ram<br>S/o Lt. Pushpa Lall Khatiwara | |
| 8 | Name: Dhan Maya<br>W/o Chandra Bahadur Tamang | |
| 9 | Name: Bharat Laxuman | |
| 10 | Name: Dhiraj Sharma<br>S/o Tika Ram Sharma | |

After multiple meeting with District Authorities and local villagers of Kamarey, work finally resumed in January 2023 with help and support of Energy & Power Dept., Govt of Sikkim. After completing 19.327 **km** OPGW installation, work was again stopped in Padamchay village due to public complaint over induction problem faced between tower no. 35 and 36 of 132 kV Rangpo-Chuzachen TL due to very ground low clearance issue. The list of agitating landowner in Padamchay village is tabulated below.

List of Agitating Landowners in Padamchay village with details

| I.No. | ROW Person details | ROW Issue |
|---|---|---|
| 1. | Bishnu Lall Sharma | Low ground clearance from conductors in between T.no. 35 and 36 of 132 kV Rangpo-Chuzachen TL. |
| 2. | Punya Pd. Sharma | |
| 3. | Bharat Kumar Sharma | |
| 4. | Yogendra Sharma | |
| 5. | Ram Pd. Sharma | |
| 6. | Gyan Pd. Sharma | |

The matter was informed to Energy & Power Dept., Govt of Sikkim. The Officials of Energy & Power Dept., Govt of Sikkim held meeting with local landowners and public representatives to resolve the issue. However, matter is yet to be resolved.

In this regard, it is requested that, Energy & Power Dept., Govt of Sikkim (being owner of the line) may provide necessary support for resolving the ROW issue. It may be noted that now only 1.4 km OPGW installation is pending in the said Link.

**Deliberation in the 49th TCC Meeting:**

The following deliberations took place:

1. Representative of Powergrid apprised the forum that 19.327km OPGW installation work out of total 20.727km has been completed. However, due to severe RoW issue, 1.4km OPGW installation work is still pending. He further submitted that as the owner of the said line is Energy & Power Dept., Govt of Sikkim, necessary support may be provided by them in resolving the RoW issue.
2. Representative of Sikkim submitted that the OPGW installation work has stopped in Padamchay village due to public complaint over induction problem being faced between tower no. 35 and 36 of 132kV Rangpo-Chuzachen TL due to very low ground clearance.
3. He further added that conductor snapping has also occurred in the same span. Considering the above, rerouting of the line has to be done. DPR regarding the same has also been prepared and put up for approval to Govt. of Sikkim.
4. TCC advised Sikkim to expedite the installation of OPGW after meeting with local landowners and public representatives. Line diversion work, as approved by Govt. of Sikkim, may be taken up subsequently.

TCC referred the issue to ERPC.

ERPC may discuss.

**Deliberation in the 49th ERPC Meeting:**

*ERPC advised representative of Sikkim to take up the matter with Govt. of Sikkim and expedite tower diversion as well as OPGW installation work.*

**B1.10 Removal of Internet Connectivity from AMR Server at ERLDC as per compliance against Cyber Security guidelines.**

Presently total 163 No's SS are connected in AMR system, and total 142 No's stations are now communicating over LAN, and remaining 21 No stations are communicating over GPRS which require internet connectivity at AMR server at ERLDC.

As per CEA directive, segregation to be done between IT/OT network for cyber security compliance and to maintain that Public IP based internet connectivity (Very much vulnerable) to be removed immediately from AMR server.
If all the stations are communicating over LAN then there is no requirement of internet connection at AMR server but following locations are either not having OPGW connection or not shared the port details yet for further actions: -

| SL NO | UTILITY NAME | NAME OF SS | REMARKS |
|---|---|---|---|
| 1 | IPP | CHUZACHEN | OPGW WORK GOING ON BUT HAVING HUGE ROW ISSUES & LIKELY TO BE TAKE MORE THAN 3-4 MONTHS TO COMPLETE. |
| | | DIKCHU | PRESENTLY NO OPGW LAYED. |
| | | JITPL (Jindal) | PRESENTLY NO OPGW LAYED. |
| | | STERLITE (SEL) | PRESENTLY NO OPGW LAYED. |
| 2 | SIKKIM | RAVANGLA | PORT NOT SHARED BY SIKKIM. |
| 3 | JHARKHAND | GARWA(GAR) | PRESENTLY NO OPGW LAYED. |
| | | JAMTARA(JMT) | PRESENTLY NO OPGW LAYED. |
| | | JAPLA(JAP) | PRESENTLY NO OPGW LAYED. |
| | | KENDOPOSI(KEN) | PRESENTLY NO OPGW LAYED. |
| | | NAGARUNTARI | PRESENTLY NO OPGW LAYED. |
| | | DEOGARH | PRESENTLY NO OPGW LAYED. |
| | | PATRATU(PTJ) | PRESENTLY NO OPGW LAYED. |
| 4 | NTPC | NABINAGAR | PRESENTLY NO OPGW LAYED. |
| | | TALCHER SOLAR | NO INFORMATION ABOUT PORT AVAILABILITY OR OPGW AVAILABILITY. |
| 5 | GRIDCO | JINDAL (JIN) | PRESENTLY NO OPGW LAYED. |
| | TOTAL | 15 | |

Recently Port details shared & LAN configuration U/P:-

1. DLATONGANJ- JHARKHAND. (LAN ACTIVITY U/P).
2. TISCO- DVC. (LAN ACTIVITY U/P).
3. BANGRIPOSI/BALASORE/GMR- GRIDCO. (FOTE AT GMR YET TO BE COMMISSIONNED). PORT SHARED IN LAST TEST MEETTING.
4. ADHUNIK (APNRL)- (LAN ACTIVITY U/P).

In view of above, for compliance of CEA directive, it is proposed to remove GPRS connectivity from above locations and alternative data sending method (Through VSAT, as already proposed in last TeST meeting or manual sending through mail) to ERLDC may be discussed.
In 201st OCC meeting the followings were deliberated:

1. Data would be sent parallelly through GPRS as well as through mail from 15.04.2023-30.04.2023.

2. Hands-on training for sending the data through mail would be provided to the concerned utilities latest by 15.04.2023.
3. The internet connectivity from AMR Server would be disconnected w.e.f 01.05.2023.
4. All the concerned utilities are advised to send the weekly meter data strictly by Tuesday for corresponding week.

**Deliberation in the 49th TCC Meeting:**

TCC approved and referred to ERPC for information.

ERPC may note.

**Deliberation in the 49th ERPC Meeting:**

*ERPC noted and advised all the concerned utilities to send the weekly meter data strictly by Tuesday for the corresponding week.*

## B1.11 Taking over of assets associated with CSSTDS in Sikkim by Energy & Power Dept, Sikkim

As on date 06 elements under CSSTDS have already been charged as per availability of charging voltages and further 13 elements are targeted to be charged at rated voltage. Power Dept Sikkim is requested to takeover these elements for regular operation and maintenance works.

The list of elements with charging/ proposed charging date is attached for ready reference.

| S.no | Name of element | Charging date | Remarks |
|---|---|---|---|
| 1 | 220kV D/c New Melli -Legship Pool TL | 12-10-2017 | Line is under operational |
| 2 | 220kV New Melli Bay Extn | 20-02-2021 | Operational |
| 3 | 66/11kV Sichey SS (Bay Extn.) | 16-11-2021 | Test charged |
| 4 | 66/11kV Mamring Bay Extn | 01-11-2022 | Test charged |
| 5 | 66 KV D/C Rorathang LiLo Point on Pakyong- Rongli Line | 10-12-2023 | Test charged once with Rorathang ss |
| 6 | 66/11kV Rorathang SS | 10-12-2023 | Test charged. |

**Deliberation in the 49th TCC Meeting:**

Representative of Sikkim apprised the forum that for taking over the above mentioned assets, additional manpower would be required. The proposal for the same has been put up before Govt of Sikkim and some time would be required in getting the approval.

TCC referred the issue to ERPC.

ERPC may discuss.

**Deliberation in the 49th ERPC Meeting:**

*Representative of Powergrid requested Sikkim to provide a timeline for taking over the said elements for regular operation and maintenance works.*

*Representative of Sikkim apprised the forum that they are facing acute shortage of manpower for carrying out such activities. However, proposal for providing adequate manpower is already in process and they will be ready to take over the assets by 2nd quarter of F.Y. 2023-24.*

*ERPC advised Sikkim to expedite the process of taking over the said assets.*

## B1.12 Status of SAMAST, ABT implementation and certification of system operators in states.

Implementation of SAMAST and ABT in all the states is a prerequisite for improving the reliability of grid considering the complexities involved in managing the large interconnected Indian grid. Further skilled, certified manpower is the key to operate the grid safely and securely. Various initiatives are being taken mutually by ERLDC and the states for successful implementation of the SAMAST/ABT in the states.
The status of SAMAST, ABT implementation and certification of system operator of various states of eastern region is given below:

| Name of the state | Status of implementation of SAMAST | Number of Certified Operator |
|---|---|---|
| **Bihar** | Completed | 4 |
| **Jharkhand** | | Nil |
| **Odisha** | | 11 |
| **DVC** | | Nil |
| **West Bengal** | | 2 |
| **Sikkim** | | 1 |

**Deliberation in the 49th TCC Meeting**

TCC referred the issue to ERPC.

Members may update the present status.

**Deliberation in the 49th ERPC Meeting**

*The status of SAMAST implementation and certification of system operator of various states of Eastern Region, as updated by respective utilities in the 49th ERPC Meeting, is given below:*

| ***Name of State*** | ***Status of implementation of SAMAST*** | ***Number of Certified Operator*** |
|---|---|---|
| ***Bihar*** | *Completed* | *4+(1 appearing in the exam in March'23)* |

| | | |
|---|---|---|
| ***Jharkhand*** | *A grant of ₹ 10.71 Cr has been received from PSDF. Tender would be floated by May'2023.* | *2* |
| ***Odisha*** | *Consultant has been appointed. Tender would be floated by April'23* | *11* |
| ***DVC*** | *DPR would be finalized by 1st week of April'2023.* | *50% of the operators will appear for the certification exam by Sep'23* |
| ***West Bengal*** | *By 1st May'2023* | *2* |
| ***Sikkim*** | *DPR submitted for PSDF funding* | *14 nos. system operators will be appearing for certification exam in March'2023* |

## B1.13 Manpower availability at SLDCs for Cyber Security activities

Dedicated manpower availability at SLDCs is crucial for carrying out the activities related to Cyber Security. Presently SLDCs are operating with very skeletal manpower for Cyber Security activities as can be seen from given details-

| Constituents | CISO | Alt. CISO | Number of Manpower dedicatedly engaged for cyber security related works (other than CISO/Alt CISO) |
|---|---|---|---|
| Bihar | Sh. Nishant Kumar Singh | Rahul Kumar | 1 |
| Jharkhand | Sh. Arun Kumar | Sh. Ashish Kumar | 0 |
| Odisha | Sh. K.T. R. Achari | Mr. Prasanta Kumar Beura | 0 (5 manpower with additional responsibility) |
| West Bengal | Sh. Sandip Basak | Sh. B. Mohanta | 0 |
| DVC | Sh. Manowar Ismail | Shri Abhijit Chakraborty | 0 |
| Sikkim | Sh. Sonam Wongchuk | Sh. Ravi Pradhan | 0 |

**Deliberation in the 49th TCC Meeting:**

Representative of NPTI may deliver a brief presentation on the status and future plan regarding cyber security training of RLDC and SLDC officers of Eastern Region.

TCC referred the issue to ERPC.

ERPC may discuss.

**Deliberation in the 49th ERPC Meeting:**

*Representative of NPTI delivered a brief presentation (**Annexure-B1.13**) on Cyber Security Training and Certification Program (CSTCP) for officials of Power sector utilities (Generation, Transmission & Distribution) and Load Despatch Centres.*

*She apprised the forum that as per Article 8 of CEA (Cyber Security in Power Sector) Guidelines,2021 all Personnel engaged in O&M of IT & OT Systems shall mandatorily undergo courses on cyber security of Power Sector from any of the training institute designated by CEA, immediately within 90 days from the notification of CEA Guidelines on Cyber Security in Power Sector.*

*MS ERPC suggested NPTI to regularly update the database of training courses w.r.t. Eastern Region and circulate among the utilities of ER for proper coordination.*

## B1.14 Default details of Deviation Pool Account/ Reactive Pool Account etc.

The details of major defaulters as on 13.03.2022 considering the bill up to 19.02.2023 for DSM charges and up to 05.02.2023 for Reactive charges are tabulated below-

**Bihar:**

| | BSPTCL |
|---|---|
| **DSM (in Cr)** | ₹ 39.22 Cr /- |
| **Reactive (in Cr)** | ₹ 6.87 Cr /- |

**Jharkhand:**

| | JUVNL |
|---|---|
| **DSM (in Cr)** | ₹ 70.38 Cr /- |
| **Reactive (in Cr)** | ₹ 7.22 Cr /- |

**Sikkim:**

| | Sikkim |
|---|---|
| **DSM (in Cr)** | ₹ 8.09 Cr /- |
| **Reactive (in Cr)** | 0 |

Further, the details of other pool members are enclosed as **Annexure-B1.14A**.

Members may update the latest status.

**Deliberation in the 49th TCC Meeting**

TCC referred the issue to ERPC.

**Deliberation in the 49th ERPC Meeting**

*Bihar and Jharkhand assured that they would clear the outstanding due at the earliest. Further, Sikkim informed that they would clear the outstanding amount by April 2023*

## B. Interest due to delayed payment of deviation charges

Due to the delayed payment of deviation charges in the DSM Pool, interest was computed for all the DSM Pool Members for FY 2020-21. The major outstanding is GMR of ₹ 173.96 lakhs.

Further, the details of other pool members are enclosed as **Annexure-B1.14B**.

Members may update the latest status.

**Deliberation in the 49th TCC Meeting**

TCC referred the issue to ERPC.

**Deliberation in the 49th ERPC Meeting**

*GMR assured that they would clear the outstanding amount by May'2023*

## B1.15 Support Service for the project "Creation & Maintaining a web-based Protection database and desktop based Protection setting calculation tool for Eastern Regional Grid"

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

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

44th ERPC authorized ERPC Secretariat to prepare a DPR for support service for future updation of the Protection Database for another 5 years and place it for PSDF funding. In 45th ERPC meeting, it was noted that the DPR for additional MiP-PSCT licenses was submitted to nodal agency on 22.03.2022 for PSDF funding. The techno-economic subgroup (TESG) of PSDF discussed the DPR in its 63rd meeting held on 10.06.2022 & 67th meeting held on 12.10.2022.

In 47th TCC & ERPC Meeting, the proposal of continuing support service with the original vendor was discussed. It was clarified that the proposal under discussion was for an interim period till the time the outcome of PSDF decision on funding of support service is known. After the final decision of PSDF on funding of the DPR, the matter will be again placed before ERPC to decide further course of action. ERPC approved the proposal for interim period of one year with the estimated cost of Rs. 50 lakh (including GST) as one year support service charges.

The one-year support service of protection database has been started from Jan-23.

The nodal agency of PSDF vide letter dated 12.01.2022 intimated that the as per the decision of 27th meeting of Appraisal Committee of PSDF, the DPR of ERPC on "Procurement of additional PSCT License and Updation & support service for web-based Protection Database" has been deemed-returned. The letter is enclosed at **Annexure-B1.15**.

**Deliberation in the 49th TCC Meeting**

Representative of PRDC may deliver a brief presentation on "Protection Database System" in ERPC meeting.

TCC noted and referred to ERPC.

PRDC may present. ERPC may note.

**Deliberation in the 49th ERPC Meeting**

*MS, ERPC apprised the forum that the nodal agency of PSDF vide letter dated 12.01.2022 intimated that the as per the decision of 27th meeting of Appraisal Committee of PSDF, the DPR of ERPC on "Procurement of additional PSCT License and Updation & support service for web-based Protection Database" has been deemed-returned.*

*Further, representative of PRDC delivered a brief presentation on "Software based services for secured operation of Protection System." MS ERPC opined that the same would be first discussed in lower forum.*

## B1.16 Renovation & Augmentation of Transmission & Distribution system of DVC

DVC has submitted a DPR for renovation & augmentation of their transmission & distribution system to CEA for review & consideration.

CEA vide letter dated 23.11.2022 intimated that the proposal regarding R &A of transmission & distribution system of DVC are in order and they have suggested few points to include in the final DPR. The letter of CEA along with the proposed list of transmission & distribution system is enclosed at **Annexure-B1.16**.

DVC has asked for concurrence of ERPC on the above proposal.

**Deliberation in the 49th TCC Meeting:**

Representative from BSPTCL submitted that as per decision of 45th ERPC meeting, proposal related to renovation & establishment of new substation of intra-state system of Bihar has been submitted to ERPC secretariat for discussion in ERPC sub-committee eon transmission planning & approval.

Member Secretary informed that as per the communication issued by CEA vide letter dated 25.10.2022(copy enclosed at Annexure-B1.16A), CEA has constituted standing committee for ensuring coordinated planning and development of Inter-state and Intra-state transmission network. Accordingly, all the proposal of intra-state transmission system shall be submitted to CEA for study & consideration.

TCC agreed and referred to ERPC for information.

ERPC may note.

**Deliberation in the 49th ERPC Meeting:**

*ERPC noted.*

## ITEM NO. B2: Strengthening of State Load Despatch Centers (SLDC)

In the 46th ERPC meeting, the necessity of strengthening of State Load Dispatch Centres (SLDC) was emphasized through induction of appropriate manpower in line with CABIL recommendations. The need for strengthening SLDCs was appreciated by most members, and it was agreed that all States including DVC would do the needful in this direction.

In 47th ERPC Meeting, the matter was again discussed and of a committee was formed comprising members from all SLDCs and representatives from ERPC & ERLDC with terms of reference as below:

- Analysing the existing manpower strength of each SLDC and working out the number required in line with CABIL recommendations.
- Explore the possibilities of maintaining dedicated cadres for SLDC Operation.
- Examine the need for training of personnel in activities like real-time grid operation, IT - cyber security, post-despatch analysis, outage coordination analysis, forecasting, operational feedback, Market operation, Big Data Analytics, etc.

The committee was constituted vide letter dated 21.12.2022 under chairmanship of Director (SLDC), Odisha.

The report of the committee is enclosed at **Annexure- B2.**

ERPC may discuss.

**Deliberation in the 49th ERPC Meeting:**

*Director, SLDC Odisha briefly explained the recommendation of the committee as outlined in the committee report* ***(Attached at Annexure-B2).***

*ERPC accepted the recommendations of the committee and advised all the concerned SLDCs to ensure early implementation of these recommendations. The progress of implementation shall be subsequently reviewed in OCC meeting of ERPC.*

**ITEM NO. B3: Sponsorship in National Workshop on "Pumped Storage (Hydro) Plant-Enabling Energy Transition" in association with ERPC from 2-3 March 2023 at Purulia (West Bengal)**

In 47th ERPC Meeting, the proposal of NPTI Durgapur to organize a National Workshop(Residential) on "Pumped Storage(Hydro) Plant Enabling Energy Transition" In association with ERPC from 2-3 March 2023 at Purulia (West Bengal) was discussed. ERPC approved the proposal with the estimated cost of Rs 22,59,200/- (Rs Twenty- two lakhs fifty-nine thousand and two hundred only) for sponsorship of 40 delegates.

The said workshop was organized successfully by NPTI. Advance payment of Rs. 13,32,928 /- was made to NPTI before the training programme. The final bill is yet to be received from NPTI.

As intimated by NPTI, the approved cost was not inclusive of GST. Further the final bill amount may vary depending on the actual delegates sponsored by ERPC.

In view of above, it is proposed that approval may be given for reimbursement of the cost to NPTI based on the final bill.
The actual expenditure so incurred will intimated to ERPC in next meeting.

ERPC may approve.

**Deliberation in the 49th ERPC Meeting:**

*ERPC approved the reimbursement of the cost to NPTI based on the final bill.*

**ITEM NO. B4: Amendment in ERPC(Conduct of Business Rules) 2022 & ERPC Funds Regulation**

In 47th ERPC Meeting held on 26.11.2022, the draft ERPC(CBR) 2022 & other associated regulations were approved. Subsequently, MoP vide its letter dated 27.03.2023(letter enclosed at **Annexure-B4**) intimated that CTUIL has been exempted from reimbursement of annual expenditure of RPC secretariat.
In view of above, the following amendment is hereby proposed in the CBR & its associated regulation:

| Clause | Existing Regulation | Proposed Amendment |
|---|---|---|
| Clause 34(i) of Conduct & Business | *All members except CEA, NLDC and ERLDC shall contribute to* | *All members except CEA,* ***CTU,*** *NLDC and ERLDC shall contribute* |

| | | |
|---|---|---|
| Rules of ERPC, 2022. | *'ERPC Establishment Fund', 'ERPC Fund' and any other fund created by ERPC as per the regulations of respective funds.* | *to 'ERPC Establishment Fund, 'ERPC Fund' and any other fund created by ERPC as per the regulations of respective funds* |
| Clause(3) of ERPC Establishment Fund Regulation | *All members and non-regular members of ERPC except CEA, NLDC and ERLDC shall contribute on annual basis as per the decision of ERPC. Contribution shall be sent through any electronic mode.* | *All members and non-regular members of ERPC except CEA,* ***CTU,*** *NLDC and ERLDC shall contribute on annual basis as per the decision of ERPC. Contribution shall be sent through any electronic mode.* |
| Clause(3) of ERPC Fund Regulation | *All members and non-regular members of ERPC except CEA shall contribute on annual basis as per the decision of ERPC. Contribution shall be sent through any electronic mode.* | *All members and non-regular members of ERPC except CEA, CTU, NLDC, ERLDC shall contribute on annual basis as per the decision of ERPC. Contribution shall be sent through any electronic mode.* |

ERPC may approve the above amendments.

**Deliberation in the 49th ERPC Meeting:**

*ERPC approved the above amendments in ERPC (Conduct of Business Rules) 2022 & ERPC Funds Regulation.*

## ITEM NO. B5: Audit Observation on ERPC Funds.

The Draft Books of Accounts of ERPC Funds has been prepared by the consultant CA firm engaged by ERPC Secretariat. As per ERPC CBR-2022 under clause no.9 & 7 of ERPC Establishment Fund and ERPC Fund Regulations-2022, *"the statement(s) of the fund shall be verified by three officers, one 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. The Member Secretary, ERPC will approve the statement of the fund before placing the same to the auditor."*

The draft Books of Accounts has been checked and verified by the Audit officers nominated from Jharkhand and Bihar and the same is being placed before the ERPC for approval. Details provided at **Annexure-B5**.

ERPC may approve.

**Deliberation in the 49th ERPC Meeting:**

*ERPC approved the audit report of the Books of Accounts of ERPC Funds prepared for the FY-2021-22 by a CA firm.*

*The Audit observations, if any, shall be placed in the next meeting.*

## ITEM NO. B6: Reporting of expenditures from ERPC funds.

Expenditures from ERPC Establishment Fund and ERPC Fund are made as per the approved regulations on the funds. However, the following expenditures have been made which are placed for approval/information of ERPC:

**Expenditures incurred out of sanctioned amount from ERPC Establishment Fund and Total Estimated Budget for FY 2023-24 – For information and approval of ERPC.**

| Sl. No | Heads of Expenditure | Description | Previous Year Expenditure (unaudited) (FY:2022-23) (in Rs.) | Total Estimated Budget (FY: 2023-24) (In Rs.) | Remarks |
|---|---|---|---|---|---|
| 1 | **Manpower Services** | For Deployment of Manpower for Office assistant, Electrician, MTS, Security and House keeping | ₹ 1,35,96,861.00 | ₹ 1,58,00,000.00 | For Period Mar'23 to Feb'24. (It is to note that for FY-2022-23 the budget was accounted for the period from Feb'22 to Dec'22 but now the estimated budget proposed for the period from Mar'23 to Feb'24) |
| 2 | **Horticulture** | Maintenance charges of fountains and Garden area including weeding, trimming, cutting, lawn mowing, watering, applying of medicine, removal of residue as and when required including all labour & materials at ERPC Office & ERPC Residential Complex. | ₹ 4,88,520.00 | ₹ 6,00,000.00 | For Period Mar'23 to Feb'24 |

| | | | | | |
|---|---|---|---|---|---|
| 3 | **Maintenance of 02 nos. ERPC Office Vehicle.** | Maintenance of 02 nos. ERPC office vehicle which includes Fuel, Insurance along with servicing of the vehicle.<br>(This includes cost for: -<br>* Fuel/Hiring of Vehicle/Outsourcing of Driver/Insurance/FasTag/ Road Tax/Repair and Maintenance of Vehicles.) | ₹ 3,48,908.00 | ₹ 4,00,000.00 | |
| 4 | **Consultant** | Appointment of consultant related to Preparation of Books of Accounts of ERPC, Filing of Income Tax, consultation in respect to Taxes from a CA firm. Appointment of Auditor (CA Firm) for Auditing the Books of Accounts of ERPC. | ₹ 1,00,000.00 | ₹ 2,00,000.00 | |
| 5 | **Elevator** | For renovation of 02 no's elevator at ERPC residential building and AMC of elevators at office and qtr. | ₹ 3,00,000.00 | ₹ 20,00,000.00 | From previous year approved budget of Rs.25Lakhs an amount of Rs.15Lakhs has been booked against placement of order of renovation of 01 no. lift. |
| 6 | **IT (Services & Procurement)** | For taking up any new IT works along with AMC of ERPC Website, security audit, AMS, DMS. Maintenance of computer and LAN connection, Purchase of Computer and its accessories, Server, Firewall etc. Engaging man power as IT expert. | ₹ 13,37,757.00 | ₹ 38,00,000.00 | Additional exp. Envisaged due to audit of cyber security, hiring of manpower as IT / programming experts. |

| | | | | | |
|---|---|---|---|---|---|
| **7** | **Office Expenditure (Additional to GoI budget)** | This includes payment of Electricity and Telephones bills of ERPC office and Qtrs. In excess to OE approved budget by Govt. of India. For purchase of Furniture for office use (if necessary). Maintenance of AC (VRF) systems installed at ERPC office and other electricals equipment along with purchase of necessary materials for the said. | ₹ 5,14,350.00 | ₹ 13,00,000.00 | Addition due to service tax of quarter building. |
| **8** | **Operationalization of ERPC Guest House** | For purchase of various items for Guest House of ERPC | ₹ 3,05,524.00 | ₹ 3,00,000.00 | Purchase of TV and misc. items. |
| **9** | **Repair and Maintenance of ERPC Office building/Residential Complex of ERPC.** | In order to carry out the works for Repair and Maintenance of ERPC office building and ERPC Staff Quarters which includes major works including both Civil and Electrical. This will also include the balance renovation work of the 4th floor of ERPC office building. Work for Fire Alarm system of office building. | ₹ 11,60,443.00 | ₹ 50,00,000.00 | Health assessment of the office building was carried out by Jadavpur University and recommended for strengthening of the uildingg structure. |
| **10** | **Reimbursement to Govt of India.** | Estimated expenditure to be incurred by the office of the ERPC Secretariat from last Qtr-4 of FY-2022-23 to the 3rd Qtr-3 of FY-2023-24 | ₹ 2,51,20,706.00 | ₹ 3,00,00,000.00 | Increase in wages and posting of additional man power |
| **11** | **Misc. Expenditure** | Misc. works | ₹ 3,82,041.00 | ₹ 4,00,000.00 | |
| **12** | **Welfare & Recreation** | | | ₹ 2,00,000.00 | |
| | | **Total Estimated Expenditure** | **₹ 4,36,55,110.00** | **₹ 6,00,00,000.00** | |

The above proposals are being placed before ERPC for approval.

**<u>Deliberation in the 49th ERPC Meeting:</u>**

*ERPC approved the expenditure of ₹ 4,36,55,110.00 incurred for the FY-2022-23 from ERPC Establishment Fund on account of various heads.*

*Further, ERPC approved the budget of ₹ 6,00,00,000.00 for FY-2023-24 to be met from ERPC Establishment Fund on account of various heads.*

**ITEM NO. B7: ERPC Establishment Fund Status for FY 2022-2023 up to (20th March 2023)**

| Contribution Received | Contribution yet to be received | Expenditure made | Balance in Bank | Remarks |
|---|---|---|---|---|
| Rs.6,45,00,000/-* | Rs. 2,77,50,000/-* | Rs. 4,36,55,110.00/-* | Rs 9,06,65,223/-* | |

*Figures are unaudited.

ERPC may note.

**Deliberation in the 49th ERPC Meeting:**

*ERPC noted.*

**ITEM NO. B8: Contribution to ERPC Establishment Fund for Year 2023-24.**

For the year 2022-23 contribution of Rs.15 Lakh per member was approved by ERPC. It is proposed to keep the contribution unchanged for the year 2023-24 i.e., Rs 15 Lakh per member. The fund is utilized for reimbursement of ERPC Secretariat expenditures to the Govt. of India and any other expenditures as per the approval of ERPC.

Members may approve contribution of Rs.15 Lakh per member for the year 2023-24.

**Deliberation in the 49th ERPC Meeting:**

*ERPC approved the contribution of Rs. 15 Lakh per member for the year 2023-24 for ERPC Establishment Fund.*

**ITEM NO. B9: Contribution to ERPC Fund for the Year 2023-24.**

For the year 2022-23 contribution of Rs.1 Lakh per member was approved by ERPC. It is proposed to keep the contribution unchanged for the year 2023-24 i.e., Rs. 1 Lakh per member. The fund is utilized for holding various meetings, workshops, seminars etc. at the Secretariat and any other expenditures as per the approval of ERPC.

Members may approve contribution of Rs. 1 Lakh per member for the year 2023-24.

**Deliberation in the 49th ERPC Meeting:**

*ERPC approved the contribution of Rs. 1 Lakh per member for the year 2023-24 for ERPC Fund.*

## ITEM NO. B10: Participation Fee for non-members of ERPC for the Year 2023-24.

In the 33rd ERPC meeting held on 25th June 2016 it was decided that apart from Members, all other Users/Utilities intending to avail services of ERPC has to pay 'Participation Fee' by contributing to 'ERPC Establishment Fund' and 'ERPC Fund' at an equal yearly contribution fixed for ERPC Members.

As of now, the Users/Utilities, who are not the members of ERPC, but utilizing the services of ERPC, are also contributing to ERPC Establishment Fund and ERPC Fund at par with the constituent members of ERPC.

In this regard, it is to submit that ERPC secretariat has received several requests from the Users/Utilities who are not the members of ERPC to waive off the participation fee in view of their distressed financial condition.

In 43rd ERPC meeting, Based on requests from the Users/Utilities who were not the members of ERPC to waive off the participation fee in view of their distressed financial condition, 43rd ERPC approved that participation fee for non-members of ERPC for the year 2021-22 was fixed as follows:

(a) **ERPC Establishment Fund**: 50% of the contribution amount of the members of ERPC i.e., Rs.7.5 Lakhs

(b) **ERPC Fund**: At par with the contribution amount of the members of ERPC i.e., Rs.1 Lakh.

As such, it is proposed to keep the contribution unchanged for the year 2023-24 i.e., Rs.7.5 Lakhs and Rs. 1 Lakh per member for ERPC Establishment Fund and ERPC Fund respectively.

Members may approve participation fee for Users/Utilities who are not members of ERPC for the year 2023-24 as proposed above.

**Deliberation in the 49th ERPC Meeting:**

*ERPC approved the above proposal of participation fee for non-members of ERPC for the year 2023-24.*

## ITEM NO. B11: 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 49th ERPC Meeting:**

*IBEUL has total outstanding amount of Rs.81 Lakhs from FY-2017-18 to FY-2022-23. Representative of IBEUL apprised the forum that assets of IBEUL have been acquired by JSW Energy Ltd.in the month of Dec'22 after undergoing the insolvency proceedings. He expressed his willingness to make annual contribution, as Participating Member, from FY-2022-23 onwards.*

*ERPC observed that since the assets of IBEUL has been acquired by JSW Energy Ltd., the claim of outstanding dues from FY-2017-18 to 2021-22 needs to be examined.*

*ERPC recommended for constitution of a committee to examine the issue of outstanding dues and submit the report in the next meeting.*

## ITEM NO. B12: Membership of ERPC on annual basis for the year 2023-24.

**12.1 Membership of Private Distribution Company:** As per GoI 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.

IPCL has taken the membership of ERPC for the FY 2022-23.

For the year 2023-24, ERPC Secretariat may pursue with Private Distribution Companies for membership of ERPC.

**Deliberation in the 49th ERPC Meeting:**

*As per the roster, ERPC Secretariat was advised to approach JUSCO for Membership of ERPC as Private Distribution Co. for FY-2023-24.*

**12.2 Membership of Private Generating Company (I.C.1000 MW & less):** As per GoI Resolution on ERPC one generating company having installed capacity 1000 MW & less out of the GENCOs functioning in the region (other than central & state generating companies and IPPs having installed capacity more than 1000 MW) is eligible by alphabetical rotation to become member on yearly basis.

In the above category the following IPPs are operating in the region:

i) Dans Energy Private Limited (Jorthang Loop HEP, 2X48 MW)
ii) Gati Infrastructure Private Limited (Chuzachen HEP, 2X55MW)
iii) Haldia Energy Limited (2x300 MW)
iv) Shiga Energy Private Limited (Tashiding HEP, 2x48.5 MW)

v) Sneha Kinetic Power Projects Private Limited (Dikchu HEP, 3x32 MW)
vi) Madhya Bharat Power Corporation Limited(Rongnichu HEP, 2X56.5)

For the FY-2022-23 Haldia Energy Ltd. (HEL) became the member of ERPC.

Shiga Energy Private Limited (Tashiding HEP, 2x48.5 MW) shall be approached to take the membership for the FY 2023-24.

For the year 2023-24, ERPC Secretariat may pursue with Private Generating Companies for membership of ERPC.

**Deliberation in the 49th ERPC Meeting:**

*As per the roster, ERPC Secretariat was advised to approach Shiga Energy Pvt. Ltd. for Membership of ERPC as Private Generating Co. for FY-2023-24.*

### 12.3 Membership of Electricity Trader:

As per GoI Resolution on ERPC, one electricity trader is eligible to become member of ERPC representing electricity traders in the region on yearly basis. As per existing practice, CEA recommends the name of the trader. CEA vide letter dated 06.02.2023 has nominated **Tata Power Trading Company Limited (TPTCL)** as member of ERPC for the year 2023-24.

Members may approve the above proposal.

**Deliberation in the 49th ERPC Meeting:**

*ERPC approved the nomination of Tata Power Trading Company Limited (TPTCL), as Electricity Trader, for Membership of ERPC for the FY-2023-24.*

## ITEM NO. B13: Membership of IBEUL in ERPC

Ind-Barat Energy(Utkal) Ltd.(IBEUL) plant was not operational for a long time and reportedly under liquidation. The said plant has now been taken over by JSW Energy Limited and the revival of the plant is under process. IBEUL has now shown interest to be a member of the ERPC forum.

IBEUL may respond. ERPC may decide.

**Deliberation in the 49th ERPC Meeting:**

*Representative of IBEUL requested for participation in ERPC, as participating member, from FY-2022-23. He also expressed his willingness to make annual contribution, as Participating Member, from FY-2022-23 onwards.*

*ERPC approved the participation of IBEUL as Participating Member in ERPC from FY-2022-23 onwards.*

## ITEM NO. B14: Membership of SJVN Thermal Pvt Ltd(STPL) in ERPC

SJVN Ltd has signed an MoU with BSPHCL to develop Buxar Thermal Power Project(2 x 660 MW) on Build, Operate, Own, Maintain(BOOM) basis. The project is being developed through its wholly-owned subsidiary named SJVN Thermal Pvt. Ltd. (STPL). The power is to be evacuated through STU lines of Bihar.

STPL vide letter dated 27.12.2022 has requested for membership of ERPC as ISGS. The letter received from STPL is enclosed at **Annexure-B14**.

ERPC may discuss.

**Deliberation in the 49th ERPC Meeting:**

*ERPC approved the participation of SJVNL as Participating Member in ERPC from FY-2023-24 onwards.*

## ITEM NO. B15: Nomination of Chairperson, ERPC for the year 2023-2024.

The incumbent Chairperson, ERPC i.e., Chairman-cum-Managing Director, Jharkhand Urja Vitaran Nigam Ltd. will complete his tenure on 31st March 2023.

As per GoI Resolution **"***Chairperson of ERPC would represent the States of the region by rotation in alphabetical order. Members of ERPC from the State would nominate the Chairperson of ERPC from amongst themselves. Term of Chairperson would be for a period of one year.***"**

The names of the States in alphabetical order are Bihar, Jharkhand, Odisha, Sikkim & West Bengal. Now it is the turn of Odisha. The following designated officers are the member of ERPC from Odisha:

1. Chairman, GRIDCO Ltd., Janpath, Bhubaneshwar-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.

A letter in this regard has been sent to Energy dept, Govt of Odisha requesting to nominate Chairperson of ERPC for the year 2023-24. Nomination is yet to be received from Govt of Odisha.

Therefore, the members of ERPC from Odisha are requested to nominate the Chairperson, ERPC for the year 2023-24.

**Deliberation in the 49th ERPC Meeting:**

*ERPC Secretariat has already sent a request to Govt. of Odisha vide letter no.369 dated 13th Mar'23 for nomination of Chairperson of ERPC for the FY-2023-24.*

*ERPC advised Odisha to nominate Chairperson, ERPC for the year 2022-23 who in turn would nominate Chairperson, TCC.*

## ITEM NO. B16: Nomination of Chairperson, TCC for the year 2023-2024.

The incumbent Chairperson, TCC i.e., Managing Director, Jharkhand Urja Vitaran Nigam Ltd. will complete his term on 31st March 2023.

As per TCC regulations, Chairperson, ERPC shall nominate the Chairperson, TCC from the TCC members from the same State for a period of one year.

Accordingly, the new Chairperson, ERPC, nominated for the year 2023-24 as above, may nominate the Chairperson, TCC for the year 2023-24.

**Deliberation in the 49th ERPC Meeting:**

*ERPC advised Odisha to nominate Chairperson, ERPC for the year 2022-23 who in turn would nominate Chairperson, TCC.*

## ITEM NO. B17: 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<br>- hosted 31st ERPC Mtg. on 14.11.2015 |
| 2 | JHARKHAND<br>- hosted 32nd ERPC Mtg. on 20.02.2016 |
| 3 | BIHAR<br>- hosted 33rd ERPC Mtg. on 25.06.2016 |
| 4 | CESC<br>- hosted 34th ERPC Mtg. on 19.11.2016 |
| 5 | TPTCL<br>- hosted 35thERPC Mtg. jointly on 25.02.2017 |

| | |
|---|---|
| 6 | MPL<br>- hosted 35th ERPC Mtg. jointly on 25.02.2017 |
| 7 | GMRKEL<br>-hosted 36th ERPC Mtg. on 26.08.2017 |
| 8 | POWERGRID<br>- hosted 37th ERPC Mtg. on 17.06.2018 |
| 9 | DVC<br>-hosted 38th ERPC Mtg. on 30.06.2018 |
| 10 | NVVN<br>- hosted 39th ERPC Mtg. Om 17.11.2018 |
| 11 | NHPC<br>- hosted 40th ERPC Mtg. on 16.03.2019 |
| 12 | NTPC<br>- hosted41st ERPC Mtg. on 27.03.2019 |
| 13 | PTC<br>- hosting42nd ERPC Mtg. on 13.12.2019 |
| 14 | ERPC Sectt. hosted 43rd, 44th, 45th & 47th ERPC Mtg. |
| 15 | WEST BENGAL hosted 46th ERPC Mtg. |
| 16 | JITPL<br>- yet to host ERPC Mtg. |
| 17 | **Sikkim Urja Ltd. and Power Dept, Sikkim**<br>**- is hosting 49th ERPC Mtg.** |

It is proposed that ERPC Secretariat may host the 50th TCC & ERPC Meeting tentatively in the month of July'2023.

Members may finalize.

**<u>Deliberation in the 49th ERPC Meeting:</u>**

*It was decided that ERPC Secretariat would host the 50th TCC & ERPC Meetings tentatively in the month of July-23. However, the exact date & venue would be intimated in due course.*

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A to H

24th March 2023

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | Shri Nihar Raj | Vice President O&M | Alipurduar Transmission Limited | 9724334162 | nihar.raj@adani.com | | |
| 2 | Shri Nitesh Ranjan | Associate Vice President – O&M | Alipurduar Transmission Limited | 9050009692 | nitesh.ranjan@adani.com | | |
| 3 | Mr. Sonam Phuntsho | Chief Engineer | Bhutan Power Coprporation Limited | +975-77204412 | sonamphuntsho@bpc.bt | | |
| 4 | Ms. Tshering Choden | Senior Engineer | Bhutan Power System Operator, Thimpu | +975-17411806 | tsheringchoden@bpso.bt | | |
| 5 | Shri Kumar Prasant | CE / P&E | Bihar State Power Transmission Company Limited (BSPTCL) | 7763817730 | KPrasantbsptcl@gmail.com abhishek.bsptcl@hotmail.com | | |
| 6 | Shri Arun Kumar Chaudhary | CE (SO) | Bihar State Power Transmission Company Limited (BSPTCL) | 7763817733 | so.dept@bsptel.bihar.gov.in, ce.sysop@gmail.com | | |
| 7 | Shri Satya Narayan Kumar | CE (O&M) | Bihar State Power Transmission Company Limited (BSPTCL) | 776381 7721 | cetransom1.bsptcl@gmail.com | | |
| 8 | Shri A. Basu | AEE | BSPTCL (Posted at ERPC) | 7033091492 | abasu.14bsptcl@gmail.com | | |
| 9 | Shri Sandip Pal | Sr. Vice President - System Operation | CESC Limited | 9831054651 | sandip.pal@rpsg.in | | |
| 10 | Shri Koushik Banerjee | Dy. General Manager - System Control | CESC Limited | 9831003281 | koushik.banerjee@rpsg.in | | |
| 11 | Smt. Nutan Mishra | Sr. GM | CTUIL | 9873918449 | nutan@powergrid.in | | |
| 12 | Shri Ajay Upadhyay | DGM | CTUIL | 8826896875 | ajayupadhyay@powergrid.in | | |
| 13 | Shri Arup Sarkar | Member Finance | Damodar Valley Corporation (DVC) | 9425294115 | | | |
| 14 | Shri Asim Nandi | Executive Director | Damodar Valley Corporation (DVC) | 9432165236 | asim.nandy@dvc.gov.in | | |
| 15 | Shri Subrata Ghoshal | Principal Chief Engineer | Damodar Valley Corporation (DVC) | 9432677003 | subrata.ghosal@dvc.gov.in | | |
| 16 | Shri Jayanta Dutta, | Chief Engineer | Damodar Valley Corporation (DVC) | 9431515717 | jayanta.dutta@dvc.gov.in | | |

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 17 | Shri D. P. Puitandi | Chief Engineer SLDC | Damodar Valley Corporation (DVC) | 9434745905 | deliprasad.puitandi@dvc.gov.in | | |
| 18 | Shri Shishir Sharma | Vice President | Dans Energy | 9871177212 | shishir.sharma@dansenergy.com | | |
| 19 | Shri Neeraj Kumar Verma | DGM - Sekura | Darbanga-Motihari Transmission Power Ltd. | 9599221848 | neeraj.verma@energy-sel.com | | |
| 20 | Shri Nishant Kumar | AGM | Darbanga-Motihari Transmission Power Ltd. | 7987210324 | nishant.kumar@energy-sel.com | | |
| 21 | Mr. Kencho Gyeltshen | Head - O&M, SC | Druk green Power Corporation Limited | +975-17902947 | k.gyeltshen780@drukgreen.bt | | |
| 22 | Mr. Younten Jamtsho | Head - THP | Druk green Power Corporation Limited | +975-17609242 | y.jamtsho784@drukgreen.bt | | |
| 23 | Shri Rajib Sutradhar | Executive Director | Eastern Regional Load Dispatch Centre (ERLDC) | 9436302714 | rajibsutradhar@grid-india.in | | |
| 24 | Shri Ankit Jain | Chief Manager | Eastern Regional Load Dispatch Centre (ERLDC) | 9436335381 | ankitjain@grid-india.in | | |
| 25 | Shri Alok Pratap Singh | Manager | Eastern Regional Load Dispatch Centre (ERLDC) | 9007285390 | apsingh@grid-india.in | | |
| 26 | Shri N.S. Mondal | Member Secretary | ERPC | 9958389967 | mserpc-power@nic.in | | |
| 27 | Shri S. Kejriwal | Director | ERPC | 9831919509 | shyam.kejriwal@gov.in | | |
| 28 | Shri S. Mukherjee | Dy. Director | ERPC | 8794277306 | srijit.mukherjee@gov.in | | |
| 29 | Shri P. P. Jena | Dy. Director | ERPC | 9776198991 | ppjena.erpc@gov.in | | |
| 30 | Shri A. Das | Dy. Director | ERPC | 9681214774 | anup.das0007@gmail.com | | |
| 31 | Shri S. K. Pradhan | Dy. Director | ERPC | 8249244719 | sk.pradhan15@gov.in | | |
| 32 | Shri A. De | Dy. Director | ERPC | 9681932906 | alik.erpc@gov.in | | |

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 33 | Shri Manoj Mishra | Plant - Head | GMR Kamalanga Energy Ltd. | 8550953421 | manoj.mishra@gmrgroup.in | | |
| 34 | Shri Pradeep Kumar Mohanty | General Manager | GMR Kamalanga Energy Ltd. | 7894450332 | pradeep.mohanty@gmrgroup.in | 24/3/23 | |
| 35 | Shri Prashant Kumar Das | CGM | GRIDCO Limited | 9438907408 | prashantk_das@yahoo.co.in | | |
| 36 | Shri Srikanta Kumar Sahoo | Sr. GM | GRIDCO Limited | 9438030016 | srikantakumarsahoo@grid-india.in, srikanta.gridco@gmail.com | | |
| 37 | Ms. Susmita Mohanty | DGM | GRIDCO Limited | 9437232456 | susmitamohanty@grid-india.in, ele.smohantygridco.co.in | | |
| 38 | Shri Susobhan Patra | General Manager | Haldia Energy Limited | 9007008219 | susobhan.patra@rpsg.in | | |
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I to O

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 39 | Shri Indu Bhusan Chakraborty | Sr. Vice President | India Power Corporation Limited | 9836384567 | indu.chakraborty@indiapower.com | | |
| 40 | Shri Amit Prakash | Vice President | India Power Corporation Limited | | amit.prakash@indiapower.com | | |
| 41 | Shri Arun Kumar | GM - SLDC | Jharkhand SLDC | 7070816390 | sldcranchi@gmail.com | | |
| 42 | Shri M K Karmali | Director - Projects | Jharkhand Urja Sancharan Nigam Limited | 8987581081 | dir.p.jusnl@gmail.com | | |
| 43 | Shri Praween Kumar | GM (C&M) | Jharkhand Urja Sancharan Nigam Limited | 8987421011 | praween.jseb@gmail.com | | |
| 44 | Shri Umesh Prasad Singh | GM - CRITL | Jharkhand Urja Sancharan Nigam Limited | 8987634706 | cecritl.jusnl@rediffmail.com | | |
| 45 | Sri Shailesh Pathak | CA Manager (F&A) | Jharkhand Urja Vikas Nigam Ltd. | 9934597346 | shlshpathak@gmail.com | | |
| 46 | Shri Vijay Bhaskar Reddy | Chief Executive Officer | Jindal India Thermal Power Limited | 9701008282 | Vijayabhaskar.d@Jindalgroup.com) | | |
| 47 | Shri Shubhang Nandan | Head, Power Sales and Regulatory | Jindal India Thermal Power Limited | 9931842606 | head.powersales@Jindalgroup.com | | |
| 48 | Shri Sanjay Mittal | Director, Power Sales & Regulatory | Jindal India Thermal Power Limited | 9811314080 | sanjay_mittal@Jindalgroup.com | | |
| 49 | Shri Kumud Ranjan Sinha | GM Technical | JUUNL | 8210263836 | kumudranjansinha@grid-india.in, kumud5374@gmail.com | | |
| 50 | Shri Krishnendu Chakraborty | Asst. Vice President (Plant Head) | Madhya Bharat Power Corporation Ltd. | 7477793179 | kchakraborty@mbpcl.co.in | | |
| 51 | Shri Gulsan Kumar Singh | Dy. Manager (O&M, Commercial) | Madhya Bharat Power Corporation Ltd. | 8016889840 | gkumar@mbpcl.co.in | | |
| 52 | Shri Sudip Kumar Dash | Head - Commercial & Regulation | Maithon Power Ltd. | 9204652869 | sudipdash@tatapower.com | | |
| 53 | Shri Suraj Dhiman | General Manager (O&M) | NHPC | 9816502062 | surajdhiman@nhpc.nic.in | | |
| | Shri S.K.Srivastava | Director | NPTI (ER) | 9434537001 | Sksrivastava.npti.gov.in | | |

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 55 | Dr. Manju Mam | Principal Director | NPTI CO | 9313354788 | manju.npti@gov.in | | |
| 56 | Shri G C Mohapatra | AGM (Comml), ER-IIHQ | NTPC Ltd, Bhubaneswar | 9437049372 | gcmohapatra@ntpc.co.in | | |
| 57 | Shri Prashant Chaturvedi | AGM | NTPC Ltd., Delhi | ~~9650993493~~ 9650998653 | pchaturvedi02@ntpc.co.in | | |
| 58 | Shri Manish Jain, | Head of Commercial, Eastern Region-1 | NTPC Ltd. Patna | 9650993493 | manishjain02@ntpc.co.in | | |
| 59 | Shri Lakshmi Nrusingha Padhy | Sr. GM | Odisha Hydro Power Corporation | 7328840167 | lakshmi.padhy163@gmail.com | | |
| 60 | Shri Amiya Kumar Mohanty | GM (El) | Odisha Hydro Power Corporation | 7328840019 | akm_676@yahoo.co.in | | |
| 61 | Shri Manas Ranjan Rout | Director-Operations | Odisha Power Generation Corporation (OPGC) | 9777296075, 8080383303 | manas.rout@opgc.co.in | | |
| 62 | Shri Krushna Chandra Samantray | AGM - Elec | Odisha Power Generation Corporation (OPGC) | 9338715428 | krushna.samantray@opgc.co.in | | |
| 63 | Shri Pradeep Kumar Mahapatra | General Manager | Odisha Power Generation Corporation (OPGC) | 9338715401 | pradeep.mahapatra@opgc.co.in | | |
| 64 | Shri Santosh Kumar Das | DGM - Elec | Odisha Power Transmission Corporation Litd. | 9438907316 | ele.santoshdas@optcl.co.in | | |
| 65 | Shri Chitta Ranjan Mishra | DGM - Elec | Odisha Power Transmission Corporation Litd. | 9438907305 | ele.crmishra@optcl.co.in | | |
| 66 | Shri Prasanta Kumar Satapathy | Sr. General Manager | Odisha SLDC | | | | |
| 67 | Shri Subas Chandra Dash | General Manager | Odisha SLDC | | | | |
| 68 | Shri B. B. Mehta | Director | Odisha SLDC | 879200736 / 9438907008 | bbm31162@hotmail.com | | |
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P to Z

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 69 | Shri A Barat | Executive Director, ER - II | Power Grid Corporation India Ltd. | 9434735952 | abarat@powergrid.in | | |
| 70 | Shri M Thirumala Reddy | Chief GM (AM), CC | Power Grid Corporation India Ltd. | 9594061764 | thirumalareddy@powergrid.in | | |
| 71 | Shri R. Wadhwa | Chief GM (AM), ER - I | Power Grid Corporation India Ltd. | 9873549054 | r_wadhwa@powergrid.in | | |
| 72 | Smt. Nandita Chakraborty | Resident Manager (ER & NER) | PTC India Limited | 9831630072 | nandita.chakraborty@ptcindia.com | | |
| 73 | Shri Ganesh Chettri | PCE Cum Secretary | Sikkim Power Department | | | | |
| 74 | Shri Dilip Sharma | Principal Chief Engineer | Sikkim Power Department | | | | |
| 75 | Shri Sunil Rai | Chief Engineer | Sikkim Power Department | | | | |
| 76 | Smt Shova Thapa | Chief Engineer | Sikkim Power Department | | | | |
| 77 | Shri Bikash Deokata | Chief Engineer | Sikkim Power Department | | | | |
| 78 | Shri Dinesh Prasad Bhargava | Managing Director | Teesta Urja Limited | 9958833995 | dpbhargava@teestaurja.com | | |
| 79 | Shri Yogendra Kumar | ED cum President | Teesta Urja Limited | 9910401388 | ykumar@teestaurja.com | | |
| 80 | Shri Satyan Sood | ED - Project & Contracts | Teesta Urja Limited | 9899580257 | satyan@teestaurja.com | | |
| 81 | Shri Jaideep Lakhatiya | Company Secretary | Teesta Urja Limited | 9810519283 | jaideep.l@teestaurja.com | | |
| 82 | Shri Ratish Kumar | Director ( TUL) | Teesta Urja Limited | 9810345492 | ratishkumar@teestaurja.com | | |
| 83 | Shri Swapan Kumar Bhowmick | Advisor | Teestavalley Power Transmission Limited | 9958008265 | swapan.b@tvptl.com | | |
| 84 | Shri Prabhat Kumar | General Manager | Teestavalley Power Transmission Limited | 9431241313 | prabhat@tvptl.com | | |

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 85 | Shri Anil Kumar Sharma | Managing Director | Tenughat Vidyut Nigam Limited, Ranchi | 9031051155 | | | |
| 86 | Shri Ashish Kumar Sharma | ESE | Tenughat Vidyut Nigam Limited, Ranchi | 9031049922 | ashish.sharma@tvnl.in | | |
| 87 | Shri Preetam Banerjee | Superintending Engineer (ALDC) | WBSEDCL | 7003871189 / 9432140765 | preeban72@gmail.com | | |
| 88 | Shri Santanu Roy | Superintending Engineer (ALDC) | WBSEDCL | 9733256232 | santanu.engr@yahoo.co.in | | |
| 89 | Shri Kausik Shaw | Superintending Engineer (PTP) | WBSEDCL | 9475216491 | sahoo.kausik@gmail.com | | |
| 90 | Shri Sabyasachi Roy | Director(Operations) | WBSETCL | 9432316727 | sabya_60@yahoo.com | | |
| 91 | Shri Debashis Chaki | C.E., CPD | WBSETCL | 9434910019 | cpd.wbsetcl@gmail.com | | |
| 92 | Shri Goutam Nayak | C.E., SLDC | WBSETCL | 9434910030 | ce.wbsldc@gmail.com | | |
| 93 | Shri Subhasis Ghosh | Advisor (O&M) | West Bengal Power Development Copr (WBPDCL) | 9073900831 | s.ghosh03@wbpdcl.co.in | | |
| 94 | Shri Kausik Datta | Executive Director (OS) | West Bengal Power Development Copr (WBPDCL) | 8336903895 | kdatta@wbpdcl.co.in | | |
| 95 | Shri Manoj Podder | DGM (OS) | West Bengal Power Development Copr (WBPDCL) | 8336904077 | mpodder@wbpdcl.co.in | | |
| 96 | Debarati Ram | PRD Ex. Director | PRDC | 9903010713 | [illegible] | | |
| 97 | B. B Sharma | P-D ACE | P.D. of Sikkim. | 8016430780 | | | |
| 98 | | | | | | | |
| 99 | | | | | | | |
| 100 | | | | | | | |

A to H

24th March 2023

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | Shri Nihar Raj | Vice President O&M | Alipurduar Transmission Limited | 9724334162 | nihar.raj@adani.com | | |
| 2 | Shri Nitesh Ranjan | Associate Vice President – O&M | Alipurduar Transmission Limited | 9050009692 | nitesh.ranjan@adani.com | | |
| 3 | Mr. Sonam Phuntsho | Chief Engineer | Bhutan Power Coprporation Limited | +975-77204412 | sonamphuntsho@bpc.bt | | |
| 4 | Ms. Tshering Choden | Senior Engineer | Bhutan Power System Operator, Thimpu | +975-17411806 | tsheringchoden@bpso.bt | | |
| 5 | Shri Kumar Prasant | CE / P&E | Bihar State Power Transmission Company Limited (BSPTCL) | 7763817730 | KPrasantbsptcl@gmail.com abhishek.bsptcl@hotmail.com | | |
| 6 | Shri Arun Kumar Chaudhary | CE (SO) | Bihar State Power Transmission Company Limited (BSPTCL) | 7763817733 | so.dept@bsptel.bihar.gov.in, ce.sysop@gmail.com | | |
| 7 | Shri Satya Narayan Kumar | CE (O&M) | Bihar State Power Transmission Company Limited (BSPTCL) | 776381 7721 | cetransom1.bsptcl@gmail.com | | |
| 8 | Shri A. Basu | AEE | BSPTCL (Posted at ERPC) | 7033091492 | abasu.14bsptcl@gmail.com | | |
| 9 | Shri Sandip Pal | Sr. Vice President - System Operation | CESC Limited | 9831054651 | sandip.pal@rpsg.in | | |
| 10 | Shri Koushik Banerjee | Dy. General Manager - System Control | CESC Limited | 9831003281 | koushik.banerjee@rpsg.in | | |
| 11 | Smt. Nutan Mishra | Sr. GM | CTUIL | 9873918449 | nutan@powergrid.in | | |
| 12 | Shri Ajay Upadhyay | DGM | CTUIL | 8826896875 | ajayupadhyay@powergrid.in | | |
| 13 | Shri Arup Sarkar | Member Finance | Damodar Valley Corporation (DVC) | 9425294115 | | | |
| 14 | Shri Asim Nandi | Executive Director | Damodar Valley Corporation (DVC) | 9432165236 | asim.nandy@dvc.gov.in | | |
| 15 | Shri Subrata Ghoshal | Principal Chief Engineer | Damodar Valley Corporation (DVC) | 9432677003 | subrata.ghosal@dvc.gov.in | | |
| 16 | Shri Jayanta Dutta, | Chief Engineer | Damodar Valley Corporation (DVC) | 9431515717 | jayanta.dutta@dvc.gov.in | | |

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 17 | Shri D. P. Puitandi | Chief Engineer SLDC | Damodar Valley Corporation (DVC) | 9434745905 | deliprasad.puitandi@dvc.gov.in | | |
| 18 | Shri Shishir Sharma | Vice President | Dans Energy | 9871177212 | shishir.sharma@dansenergy.com | | |
| 19 | Shri Neeraj Kumar Verma | DGM - Sekura | Darbanga-Motihari Transmission Power Ltd. | 9599221848 | neeraj.verma@energy-sel.com | | |
| 20 | Shri Nishant Kumar | AGM | Darbanga-Motihari Transmission Power Ltd. | 7987210324 | nishant.kumar@energy-sel.com | | |
| 21 | Mr. Kencho Gyeltshen | Head - O&M, SC | Druk green Power Corporation Limited | +975-17902947 | k.gyeltshen780@drukgreen.bt | | |
| 22 | Mr. Younten Jamtsho | Head - THP | Druk green Power Corporation Limited | +975-17609242 | y.jamtsho784@drukgreen.bt | | |
| 23 | Shri Rajib Sutradhar | Executive Director | Eastern Regional Load Dispatch Centre (ERLDC) | 9436302714 | rajibsutradhar@grid-india.in | | |
| 24 | Shri Ankit Jain | Chief Manager | Eastern Regional Load Dispatch Centre (ERLDC) | 9436335381 | ankitjain@grid-india.in | | |
| 25 | Shri Alok Pratap Singh | Manager | Eastern Regional Load Dispatch Centre (ERLDC) | 9007285390 | apsingh@grid-india.in | | |
| 26 | Shri N.S. Mondal | Member Secretary | ERPC | 9958389967 | mserpc-power@nic.in | | |
| 27 | Shri S. Kejriwal | Director | ERPC | 9831919509 | shyam.kejriwal@gov.in | | |
| 28 | Shri S. Mukherjee | Dy. Director | ERPC | 8794277306 | srijit.mukherjee@gov.in | | |
| 29 | Shri P. P. Jena | Dy. Director | ERPC | 9776198991 | ppjena.erpc@gov.in | | |
| 30 | Shri A. Das | Dy. Director | ERPC | 9681214774 | anup.das0007@gmail.com | | |
| 31 | Shri S. K. Pradhan | Dy. Director | ERPC | 8249244719 | sk.pradhan15@gov.in | | |
| 32 | Shri A. De | Dy. Director | ERPC | 9681932906 | alik.erpc@gov.in | | |

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 33 | Shri Manoj Mishra | Plant - Head | GMR Kamalanga Energy Ltd. | 8550953421 | manoj.mishra@gmrgroup.in | | |
| 34 | Shri Pradeep Kumar Mohanty | General Manager | GMR Kamalanga Energy Ltd. | 7894450332 | pradeep.mohanty@gmrgroup.in | 24/3/23 | |
| 35 | Shri Prashant Kumar Das | CGM | GRIDCO Limited | 9438907408 | prashantk_das@yahoo.co.in | | |
| 36 | Shri Srikanta Kumar Sahoo | Sr. GM | GRIDCO Limited | 9438030016 | srikantakumarsahoo@grid-india.in, srikanta.gridco@gmail.com | | |
| 37 | Ms. Susmita Mohanty | DGM | GRIDCO Limited | 9437232456 | susmitamohanty@grid-india.in, ele.smohantygridco.co.in | | |
| 38 | Shri Susobhan Patra | General Manager | Haldia Energy Limited | 9007008219 | susobhan.patra@rpsg.in | | |
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I to O

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 39 | Shri Indu Bhusan Chakraborty | Sr. Vice President | India Power Corporation Limited | 9836384567 | indu.chakraborty@indiapower.com | | |
| 40 | Shri Amit Prakash | Vice President | India Power Corporation Limited | | amit.prakash@indiapower.com | | |
| 41 | Shri Arun Kumar | GM - SLDC | Jharkhand SLDC | 7070816390 | sldcranchi@gmail.com | | |
| 42 | Shri M K Karmali | Director - Projects | Jharkhand Urja Sancharan Nigam Limited | 8987581081 | dir.p.jusnl@gmail.com | | |
| 43 | Shri Praween Kumar | GM (C&M) | Jharkhand Urja Sancharan Nigam Limited | 8987421011 | praween.jseb@gmail.com | | |
| 44 | Shri Umesh Prasad Singh | GM - CRITL | Jharkhand Urja Sancharan Nigam Limited | 8987634706 | cecritl.jusnl@rediffmail.com | | |
| 45 | Sri Shailesh Pathak | CA Manager (F&A) | Jharkhand Urja Vikas Nigam Ltd. | 9934597346 | shlshpathak@gmail.com | | |
| 46 | Shri Vijay Bhaskar Reddy | Chief Executive Officer | Jindal India Thermal Power Limited | 9701008282 | Vijayabhaskar.d@Jindalgroup.com) | | |
| 47 | Shri Shubhang Nandan | Head, Power Sales and Regulatory | Jindal India Thermal Power Limited | 9931842606 | head.powersales@Jindalgroup.com | | |
| 48 | Shri Sanjay Mittal | Director, Power Sales & Regulatory | Jindal India Thermal Power Limited | 9811314080 | sanjay_mittal@Jindalgroup.com | | |
| 49 | Shri Kumud Ranjan Sinha | GM Technical | JUUNL | 8210263836 | kumudranjansinha@grid-india.in, kumud5374@gmail.com | | |
| 50 | Shri Krishnendu Chakraborty | Asst. Vice President (Plant Head) | Madhya Bharat Power Corporation Ltd. | 7477793179 | kchakraborty@mbpcl.co.in | | |
| 51 | Shri Gulsan Kumar Singh | Dy. Manager (O&M, Commercial) | Madhya Bharat Power Corporation Ltd. | 8016889840 | gkumar@mbpcl.co.in | | |
| 52 | Shri Sudip Kumar Dash | Head - Commercial & Regulation | Maithon Power Ltd. | 9204652869 | sudipdash@tatapower.com | | |
| 53 | Shri Suraj Dhiman | General Manager (O&M) | NHPC | 9816502062 | surajdhiman@nhpc.nic.in | | |
| | Shri S.K.Srivastava | Director | NPTI (ER) | 9434537001 | Sksrivastava.npti.gov.in | | |

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 55 | Dr. Manju Mam | Principal Director | NPTI CO | 9313354788 | manju.npti@gov.in | | |
| 56 | Shri G C Mohapatra | AGM (Comml), ER-IIHQ | NTPC Ltd, Bhubaneswar | 9437049372 | gcmohapatra@ntpc.co.in | | |
| 57 | Shri Prashant Chaturvedi | AGM | NTPC Ltd., Delhi | ~~9650993493~~ 9650998653 | pchaturvedi02@ntpc.co.in | | |
| 58 | Shri Manish Jain, | Head of Commercial, Eastern Region-1 | NTPC Ltd. Patna | 9650993493 | manishjain02@ntpc.co.in | | |
| 59 | Shri Lakshmi Nrusingha Padhy | Sr. GM | Odisha Hydro Power Corporation | 7328840167 | lakshmi.padhy163@gmail.com | | |
| 60 | Shri Amiya Kumar Mohanty | GM (El) | Odisha Hydro Power Corporation | 7328840019 | akm_676@yahoo.co.in | | |
| 61 | Shri Manas Ranjan Rout | Director-Operations | Odisha Power Generation Corporation (OPGC) | 9777296075, 8080383303 | manas.rout@opgc.co.in | | |
| 62 | Shri Krushna Chandra Samantray | AGM - Elec | Odisha Power Generation Corporation (OPGC) | 9338715428 | krushna.samantray@opgc.co.in | | |
| 63 | Shri Pradeep Kumar Mahapatra | General Manager | Odisha Power Generation Corporation (OPGC) | 9338715401 | pradeep.mahapatra@opgc.co.in | | |
| 64 | Shri Santosh Kumar Das | DGM - Elec | Odisha Power Transmission Corporation Litd. | 9438907316 | ele.santoshdas@optcl.co.in | | |
| 65 | Shri Chitta Ranjan Mishra | DGM - Elec | Odisha Power Transmission Corporation Litd. | 9438907305 | ele.crmishra@optcl.co.in | | |
| 66 | Shri Prasanta Kumar Satapathy | Sr. General Manager | Odisha SLDC | | | | |
| 67 | Shri Subas Chandra Dash | General Manager | Odisha SLDC | | | | |
| 68 | Shri B. B. Mehta | Director | Odisha SLDC | 879200736 / 9438907008 | bbm31162@hotmail.com | | |
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P to Z

# ATTENDANCE SHEET - ERPC MEETING, GANGTOK, 24RD MARCH 2023

| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 69 | Shri A Barat | Executive Director, ER - II | Power Grid Corporation India Ltd. | 9434735952 | abarat@powergrid.in | | |
| 70 | Shri M Thirumala Reddy | Chief GM (AM), CC | Power Grid Corporation India Ltd. | 9594061764 | thirumalareddy@powergrid.in | | |
| 71 | Shri R. Wadhwa | Chief GM (AM), ER - I | Power Grid Corporation India Ltd. | 9873549054 | r_wadhwa@powergrid.in | | |
| 72 | Smt. Nandita Chakraborty | Resident Manager (ER & NER) | PTC India Limited | 9831630072 | nandita.chakraborty@ptcindia.com | | |
| 73 | Shri Ganesh Chettri | PCE Cum Secretary | Sikkim Power Department | | | | |
| 74 | Shri Dilip Sharma | Principal Chief Engineer | Sikkim Power Department | | | | |
| 75 | Shri Sunil Rai | Chief Engineer | Sikkim Power Department | | | | |
| 76 | Smt Shova Thapa | Chief Engineer | Sikkim Power Department | | | | |
| 77 | Shri Bikash Deokata | Chief Engineer | Sikkim Power Department | | | | |
| 78 | Shri Dinesh Prasad Bhargava | Managing Director | Teesta Urja Limited | 9958833995 | dpbhargava@teestaurja.com | | |
| 79 | Shri Yogendra Kumar | ED cum President | Teesta Urja Limited | 9910401388 | ykumar@teestaurja.com | | |
| 80 | Shri Satyan Sood | ED - Project & Contracts | Teesta Urja Limited | 9899580257 | satyan@teestaurja.com | | |
| 81 | Shri Jaideep Lakhatiya | Company Secretary | Teesta Urja Limited | 9810519283 | jaideep.l@teestaurja.com | | |
| 82 | Shri Ratish Kumar | Director ( TUL) | Teesta Urja Limited | 9810345492 | ratishkumar@teestaurja.com | | |
| 83 | Shri Swapan Kumar Bhowmick | Advisor | Teestavalley Power Transmission Limited | 9958008265 | swapan.b@tvptl.com | | |
| 84 | Shri Prabhat Kumar | General Manager | Teestavalley Power Transmission Limited | 9431241313 | prabhat@tvptl.com | | |

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| Sl. No. | Name | Designation | Company Name | Mobile No. | Email ID | Signature | Remarks |
|---|---|---|---|---|---|---|---|
| 85 | Shri Anil Kumar Sharma | Managing Director | Tenughat Vidyut Nigam Limited, Ranchi | 9031051155 | | | |
| 86 | Shri Ashish Kumar Sharma | ESE | Tenughat Vidyut Nigam Limited, Ranchi | 9031049922 | ashish.sharma@tvnl.in | | |
| 87 | Shri Preetam Banerjee | Superintending Engineer (ALDC) | WBSEDCL | 7003871189 / 9432140765 | preeban72@gmail.com | | |
| 88 | Shri Santanu Roy | Superintending Engineer (ALDC) | WBSEDCL | 9733256232 | santanu.engr@yahoo.co.in | | |
| 89 | Shri Kausik Shaw | Superintending Engineer (PTP) | WBSEDCL | 9475216491 | sahoo.kausik@gmail.com | | |
| 90 | Shri Sabyasachi Roy | Director(Operations) | WBSETCL | 9432316727 | sabya_60@yahoo.com | | |
| 91 | Shri Debashis Chaki | C.E., CPD | WBSETCL | 9434910019 | cpd.wbsetcl@gmail.com | | |
| 92 | Shri Goutam Nayak | C.E., SLDC | WBSETCL | 9434910030 | ce.wbsldc@gmail.com | | |
| 93 | Shri Subhasis Ghosh | Advisor (O&M) | West Bengal Power Development Copr (WBPDCL) | 9073900831 | s.ghosh03@wbpdcl.co.in | | |
| 94 | Shri Kausik Datta | Executive Director (OS) | West Bengal Power Development Copr (WBPDCL) | 8336903895 | kdatta@wbpdcl.co.in | | |
| 95 | Shri Manoj Podder | DGM (OS) | West Bengal Power Development Copr (WBPDCL) | 8336904077 | mpodder@wbpdcl.co.in | | |
| 96 | Debarati Ram | PRD Ex. Director | PRDC | 9903010713 | [illegible] | | |
| 97 | B. B Sharma | P-D ACE | P.D. of Sikkim. | 8016430780 | | | |
| 98 | | | | | | | |
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# Workshop on PUShP Portal

# Flexibilisation of PPA for Optimal Utilisation of Resources & Reduction in Cost of Power for Consumers

NATIONAL POWER COMMITTEE

# Working of the Portal

i. Flowcharts and Timelines.

ii.Roles and Responsibilities.

iii.Terms and Conditions.

# Flowcharts and Timelines:

## i. For temporary reallocation of power of CGS

## ii. For transfer of power of ISGS, IPPs and States through match making.

- For **longer duration (more than a day)-**process initiate on day of Application
- For **short term (one day)-** process initiate either on D-2 or D-3 day:
  - D-2 day: buyer confirms **advance payment** at the time of requisition
  - D-3 day: in the absence of advance payment.

# For temporary reallocation of power of CGS for longer duration

| Day | Timings (hrs) | Activity |
|---|---|---|
| A | Up to 08:00 | **Declaration of surplus power** by Original Beneficiary |
| | 08:00-18:00 | **Requisition** from new beneficiary. |
| A+1 | By 11:00 | **Consent of CGS for availability of Unit** for requested time period |
| | 12:00-16:00 | **Application of Criteria** for allocation by CEA |
| A+2 | 10:00-14:00 | **Transmission availability checking** by NLDC |
| | 14:00-16:00 | **Final Allocation** of power by CEA |
| A+3 to D-2 | Upto 18:00 | Arrangement of PSM by New Beneficiaries. |
| | 18:00 to 08:00 | New Contract creation in WBES at each RLDCs. |
| D-1 | By 08:00 | Confirmation of PSM from CGS at PSA portal |
| | 08:00 | Publication of entitlement for scheduling on day ahead basis |
| D | | Commencement of delivery |

*A-Application Day*
*D-Delivery Day*

# Timeline for temporary reallocation of power of CGS for short term (in absence of advance payment)

| Day | Timings(hrs) | Activity |
|---|---|---|
| D-3 | Up to 08:00 | **Declaration of surplus power** by Original Beneficiary |
| | 08:00-10:00 | **Requisition** from new beneficiary |
| | 10:00-11:00 | **Consent of CGS for availability of Unit** for requested time period |
| | 11:00-12:00 | **Application of Criterion** for allocation by CEA |
| | 12:00-14:00 | **Transmission availability check** by NLDC |
| | 14:00-16:00 | **Final Allocation** of power by CEA. |
| D-2 | Window for -<br>I. New Contract creation in WBES at each RLDCs.<br>II. Arrangement of PSM by new beneficiaries. | |
| D-1 | By 08:00 | Confirmation of PSM from CGS at PSA portal |
| | 08:00 | Publication of entitlement for scheduling on day ahead basis |
| D | 00:00 | Commencement of delivery |

*D-Delivery Day*

# Timeline for temporary reallocation of power of CGS for short term (in presence of advance payment)

| Day | Timings(hrs) | Activity |
|---|---|---|
| D-2 | Up to 08:00 | **Declaration of surplus power** by Original Beneficiary |
| | 08:00-10:00 | I. **Requisition** from new beneficiary<br>II. Confirmation of arrangement of **PSM** by new beneficiary |
| | 10:00 to 11:00 | **Consent of CGS for availability of Unit** for requested time period |
| | 11:00-12:00 | **Application of criterion** for allocation by CEA |
| | 12:00-14:00 | **Transmission availability check** by NLDC |
| | 14:00-15:00 | **Final Allocation** of power by CEA |
| | 15:00 onwards | Window for - New Contract creation in WBES at each RLDCs. |
| D-1 | By 08:00 | Confirmation of PSM from CGS at PSA portal |
| | 08:00 | Publication of entitlement for scheduling on day ahead basis |
| D | 00:00 | Commencement of delivery |

*D-Delivery Day*

# Flowcharts and Timelines:

## i. For transfer of power of ISGS, IPPs and States:

- For **longer duration (more than a day)-**process initiate on day of Application
- For **short term (one day)-** process initiate either on D-2 or D-3 day:
  - D-2 day: buyer confirms **advance payment** at the time of requisition
  - D-3 day: in the absence of advance payment.

# Timeline for temporary transfer of power of ISGS/IPP/State Gencos for longer duration (more than one day):

| Day | Time | Activity |
|---|---|---|
| A | 00 - 10:00 hrs. | Information of availability of surplus power by **GENCOs (States in case of State GENCOs)** on portal after confirmation of the checklist. |
| | 10:00 to 18:00 hrs. | **(i) Requisition** from new buyers on portal<br>**(ii) Initial match making** on portal. |
| A+1 | 00 to 0800 Hrs. | **GENCOs consent on portal for transfer of surplus power to new buyers** |
| | 0800 to 24:00 hrs. | Confirmation of **payment security** by respective new buyers & GENCOs on portal |
| A+2 | 00 to 2400 hrs. | **Confirmation of availability of Transmission** by concerned Agency on portal. |
| A+3 to D-2 | New Contract creation in WBES at each RLDCs. | |
| D-1 | By 8: 00 Hrs. | Confirmation of PSM at PSA portal |
| | 8:00 Hrs. | Publication of entitlement for scheduling. |
| D | | Commencement of delivery |

*A-Application Day*
*D-Delivery Day*

# Timeline for temporary transfer of power of ISGS/IPP/State Gencos for short term (in absence of advance payment):

| Day | Time | Activity |
|---|---|---|
| D-3 | 00 to 10:00 hrs. | Information of availability of **surplus power by GENCOs (States in case of State GENCOs)** on portal after confirmation of the checklist |
| | 1000 to12:00 hrs. | (i)**Requisition** from new buyers on portal<br>(ii) Initial **match-making** on the portal |
| | 1200 to 14:00 Hrs. | **GENCOs consent for transfer of surplus power** to new buyers on portal |
| | 1400 to 18:00 hrs. | Confirmation of **payment security** by new buyers & GENCOs on portal |
| | 1800 to 24:00 hrs. | Confirmation of **availability of Transmission** by concerned Agency on portal. |
| D-2 | New Contract creation in WBES at each RLDCs. | |
| D-1 | | Publication of entitlement for scheduling. |
| D | | Commencement of delivery |

*D-Delivery Day*

# Timeline for temporary transfer of power of ISGS/IPP/State Gencos for short term (in presence of advance payment):

| Day | Time | Activity |
|---|---|---|
| D-2 | By 8:00 hrs. | Information of **availability of surplus power by GENCOs** (State in case of State GENCOs) on portal after confirmation as per the checklist |
| | 0800 to 10:00 hrs. | **(i) Requisition** from new buyers on portal<br>(ii) Initial **match making** on the portal |
| | 1000 to 12:00 Hrs. | **GENCOs consent for transfer of surplus power** to new buyers on portal along with confirmation for advance payment. |
| | 1200 to 14:00 hrs. | Confirmation of **availability of Transmission** by concerned Agency on portal. |
| | 1400 to 24:00 | New Contract creation in WBES at each RLDCs |
| D-1 | | Publication of entitlement for scheduling. |
| D | | Commencement of delivery |

*D-Delivery Day*

# Roles and Responsibilities

## Roles of original beneficiary:

1. submit the surplus quantum (MW), duration (block-wise) on the portal.
2. pay the FC and VC after **reinstatement of the allocated power**.

## Roles of new beneficiary/buyer:

1. Requisition for availing the surplus power.
2. Pay both variable charge (VC) and fixed cost (FC) for temporary allocation/transfer of Power.
3. Shall comply the PSM as agreed and **Confirmation of PSM on portal**.
4. Shall make its own arrangements such as open access approvals and any other approvals, if applicable.
5. Shall **not surrender the surplus power again**, once allocated from original beneficiary, through portal.

# Roles and Responsibilities

**Roles of CGS:**

- fill the **FC and VC details** at the first time of logging and shall update it by 8th of every month or as and when required.
- **verify details/data** related to their Gencos on portal at the first time/subsequent loggings.
- **confirm availability of units** during the period of requisition on the portal.
- confirm the availability of **payment security** before scheduling of surplus power.
- keep **updated status of generating units under reserve shutdown and planned shutdown** at the portal so that buyers may submit requisition bids accordingly.

# Roles and Responsibilities

**Role of ISGS/IPP/States (in case of state Gencos)**

- The **Surplus power** shall be entered by Gencos (state PPC/LDCs in case of state Gencos) on portal after confirmation of the checklist.
- Shall submit the surrendered quantum (MW), duration (block-wise) on the portal.
- **GENCOs consent on portal for transfer of surplus power** to new buyers
- Confirmation of **payment security** by GENCOs on portal.

# Roles and Responsibilities

**Roles of NPC/CEA (For short term allocations):**

NPC/CEA shall allocate surplus power on portal to willing new beneficiaries based on criteria as per approved scheme.

**Roles of GM/CEA (for long term allocations):**

GM/CEA shall allocate surplus power on portal to willing new beneficiaries based on criteria as per approved scheme.

# Roles and Responsibilities

**Roles of NLDC:**

- check **availability of margins in the transmission** network and confirm the same on portal.
- NLDC shall intimate that whether the allocated/transfer of power has been started scheduling for report creation on the portal.

**Roles of RLDC:**

- RLDC shall **check availability of margins in the transmission** network and confirm the same on portal
- The concerned **RLDC shall schedule the surplus power** as per the final allocations.
- Shall incorporate the temporary allocation in their daily schedule as per practice.
- Shall update the allocation and provide input to NTPC through API for updation on National portal.
- RLDC shall intimate that whether the allocated/transfer of power has been started scheduling for report creation on the portal.

# Roles and Responsibilities

## Roles of SLDC/PPC:

- Information of **availability of surplus power by SLDC/PPC in case of State GENCOs** on portal after confirmation of the checklist.
- SLDC shall **check availability of margins** in the transmission network and confirm the same on portal
- SLDC shall intimate that whether the allocated/transfer of power has been started scheduling for report creation on the portal.
- SLDC/PPC in case of State GENCOs **consent on portal for transfer of surplus power** to new buyers.
- **Confirmation of payment security** by SLDC/PPC in case of State GENCOs on portal.

# Roles and Responsibilities

**Roles of RPC:**

Concerned RPC will prepare the **REAs (Regional Energy Accounts)** and other accounts for Payment settlement.

**Roles of developers of the portal (NTPC):**

- Provide solution to the problem raised through customer support at the earliest in consultation with CEA and Grid India.
- NTPC shall provide the AMC of the portal 24x7 basis.

# Terms and Conditions

**The T & C are in line the approved scheme by MoP.**

- **General T & C of the scheme (displayed at the time of login and shall be mandatory to accept these terms and conditions for login the portal)**
- **T & C to be accepted by Original Beneficiary (in case of CGS allocation) before surrender of power.**
- **T & C to be accepted by New Beneficiary or buyer for requisition of surplus power.**
- **T & C to be accepted by IPP/ISGS/State PPC/LDC (in case of State Gencos) before surrender of power.**

# General T & C of the scheme

- The temporary allocation/transfer of power is **subject** to **willingness** of seller and Buyer, availability of **transmission corridor** and confirmation of **payment security** before scheduling of such power.
- Generating station whose tariff comes under section 62 and 63 of the Electricity Act 2003 with details as under:
    - For surplus power with **CGS, ISGS (excluding CGS), States/Distribution companies (whether state owned or private), IPPs.**
- The surplus power shall be **allocated/transferred as per the scheme.**
- The power shall be **bought/sold at the tariff** as determined by the Appropriate Commission.
- The **transmission charges** shall be paid as applicable to the concerned transmission service providers (CTU or STU or as the case may be).
- **PSM or PPA-** as per the **mutually** agreed terms & condition and the same shall be **confirmed** by the Gencos and the new buyer on the portal.

# General T & C of the scheme

- The new buyer or beneficiary liable to pay both VC and FC,
- original beneficiary shall have **no right to recall** as entire FC liability is shifted to the new beneficiary because power being temporarily reallocated/transferred to them.
- The financial liability of new buyer or beneficiary shall be **limited to quantum of temporarily allocated/transferred power**.
- The nodal officers of CGS, ISGS, IPPs, State Power Purchasing Cell/ SLDC shall ensure following on the portal:
    - Shall fill the Fixed charge and Variable charge details of their generating stations.
    - Shall verify details/data related to their Gencos on portal at the first time/subsequent loggings.
    - availability of units of CGS during the period of requisition on the portal.
- In case of allocation of power of CGS, for both short term and long term temporary allocation, the surrender of surplus power and requisition will be done as per the approved scheme i.e. in terms of quantum (MW), duration (block-wise). However, **final allocation of power to the new buyer shall be only in percentage of installed capacity.**

# T & C for Original Beneficiary (in case of CGS allocation) before surrender of power

- **Surplus power will remain with original beneficiary** if power is not allocated to new Buyer or beneficiary due to any reason.

- **Fixed cost and variable charges will be transferred to new Buyer or beneficiary** only if the power is allocated to new Buyer or beneficiary, otherwise it will be remained with the original beneficiary.

- The original beneficiary **cannot claim the declared surplus power** once it is allocated to a new Buyer or beneficiary for the period of temporary allocation.

- The original allocation will be **reinstated** after the expiry of the temporary allocation period and liability of FC and VC shall be as per original scheme.

# Terms and Conditions for New Beneficiary or buyer for requisition of surplus power

- For requisition of power of CGS
  - Requested power will be allocated to new beneficiary only after **order matching and Transmission corridor checking.**
  - **Liability of Fixed cost and Variable cost** shall shift to the new beneficiary/buyer once power is allocated by CEA.
  - After the expiry of the temporary allocation, original allocation of Power will be **reinstated**.
  - New beneficiary must submit the PSM to CGS for allocation of power. **Without PSM submission as per timeline, Schedule of power shall not be possible.**

- For requisition of power of IPP/ISGS/States(in case of State Gencos)
  - The **consent of Gencos (states in case of state Gencos)** on portal for transfer of surplus power to new buyer is necessary

# Terms and Conditions for IPP/ISGS/State PPC/LDC (in case of State Gencos) before declaration of surplus power

- The Surplus capacity shall be entered by **Gencos (state PPC/LDCs** in case of state Gencos) on portal after confirmation of the **checklist.**

# THANK YOU

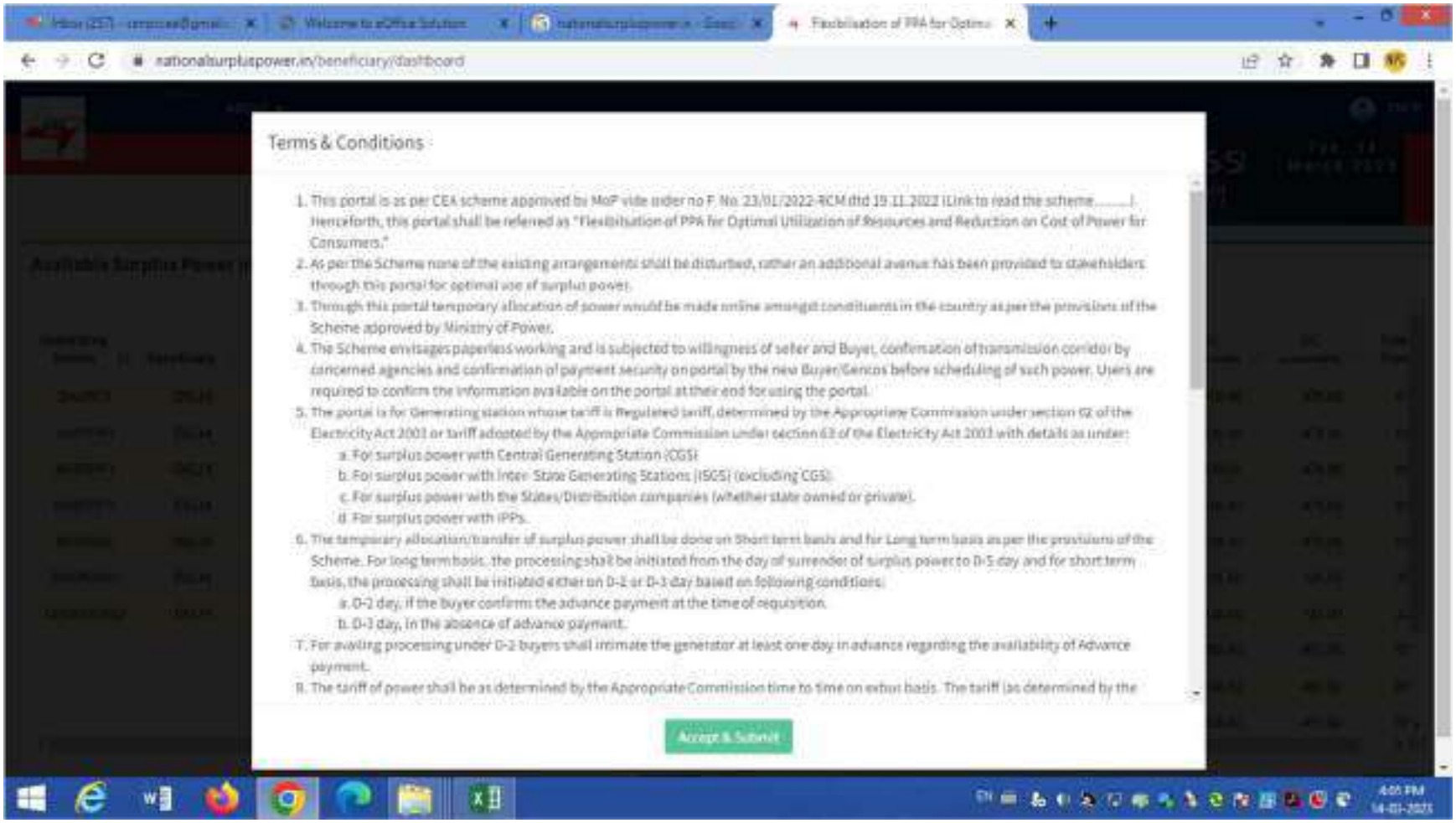
# Working of the Portal

## Case study for surrendering-requisition of Power of Central Generating Stations (CGSs)

# First Page of the Portal:

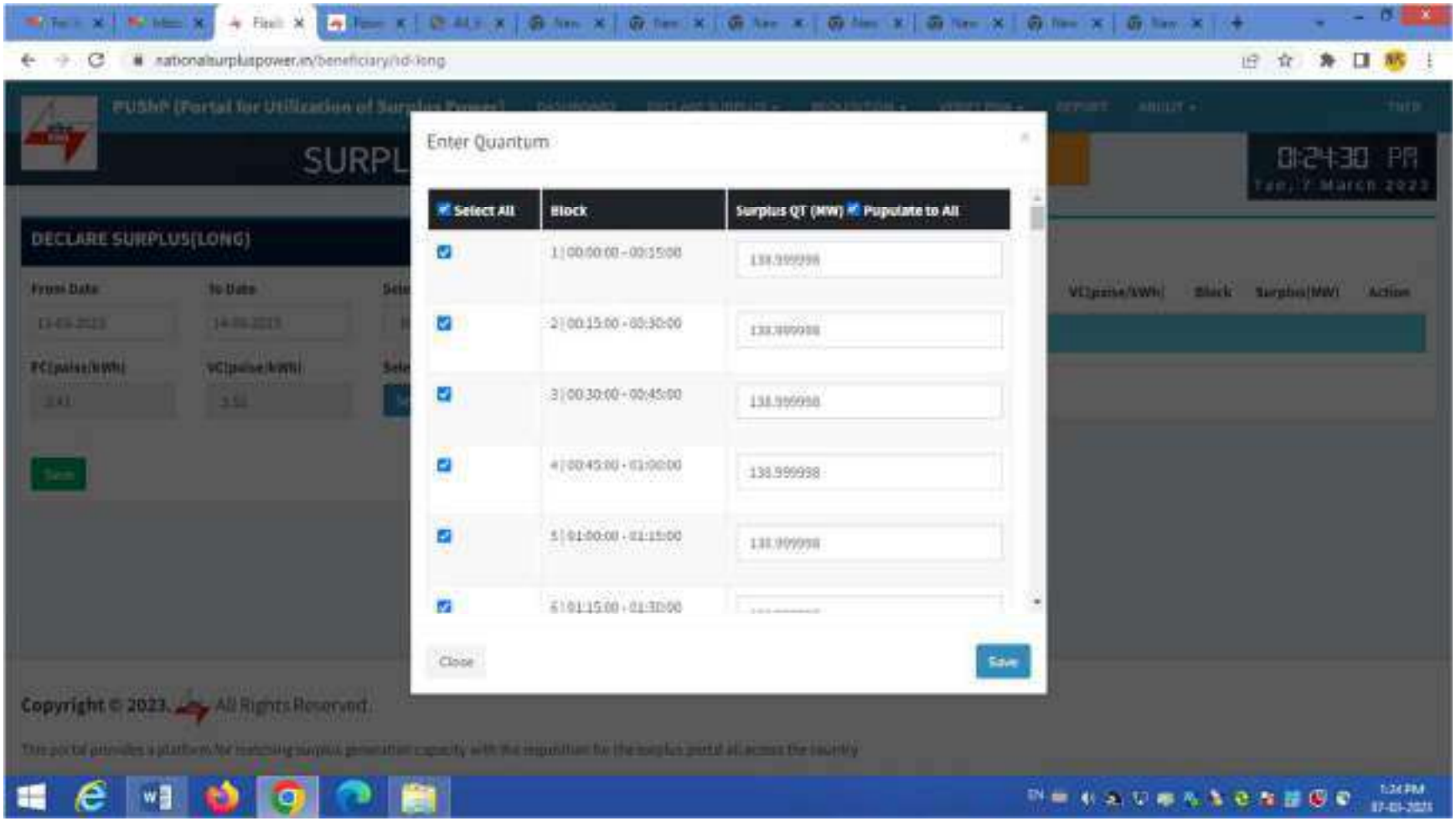
# General Terms and Condition for beneficiaries:

Beneficiaries should read the terms and conditions carefully and they have to give their consent for further proceedings.

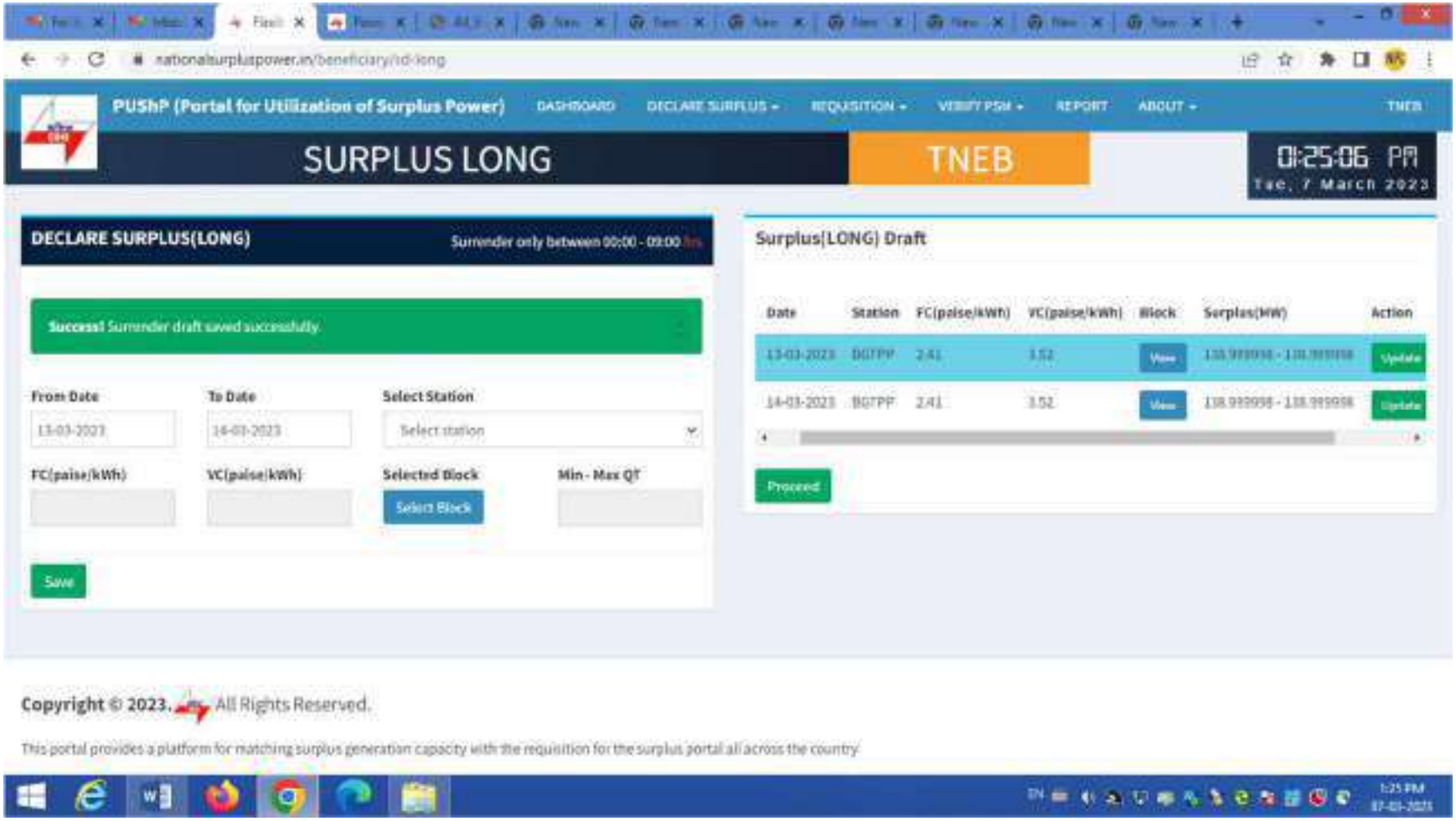


# Block-wise Surrender of Power by beneficiary (Long or Short)

Suppose, Tamilnadu has surrendered the power of Bongaigaon Thermal Power Plant of NTPC for 13th March, 2023 and 14th March, 2023 and quantum of surrendered power for both the day is 139 MW.



# Surrender of Power by beneficiary

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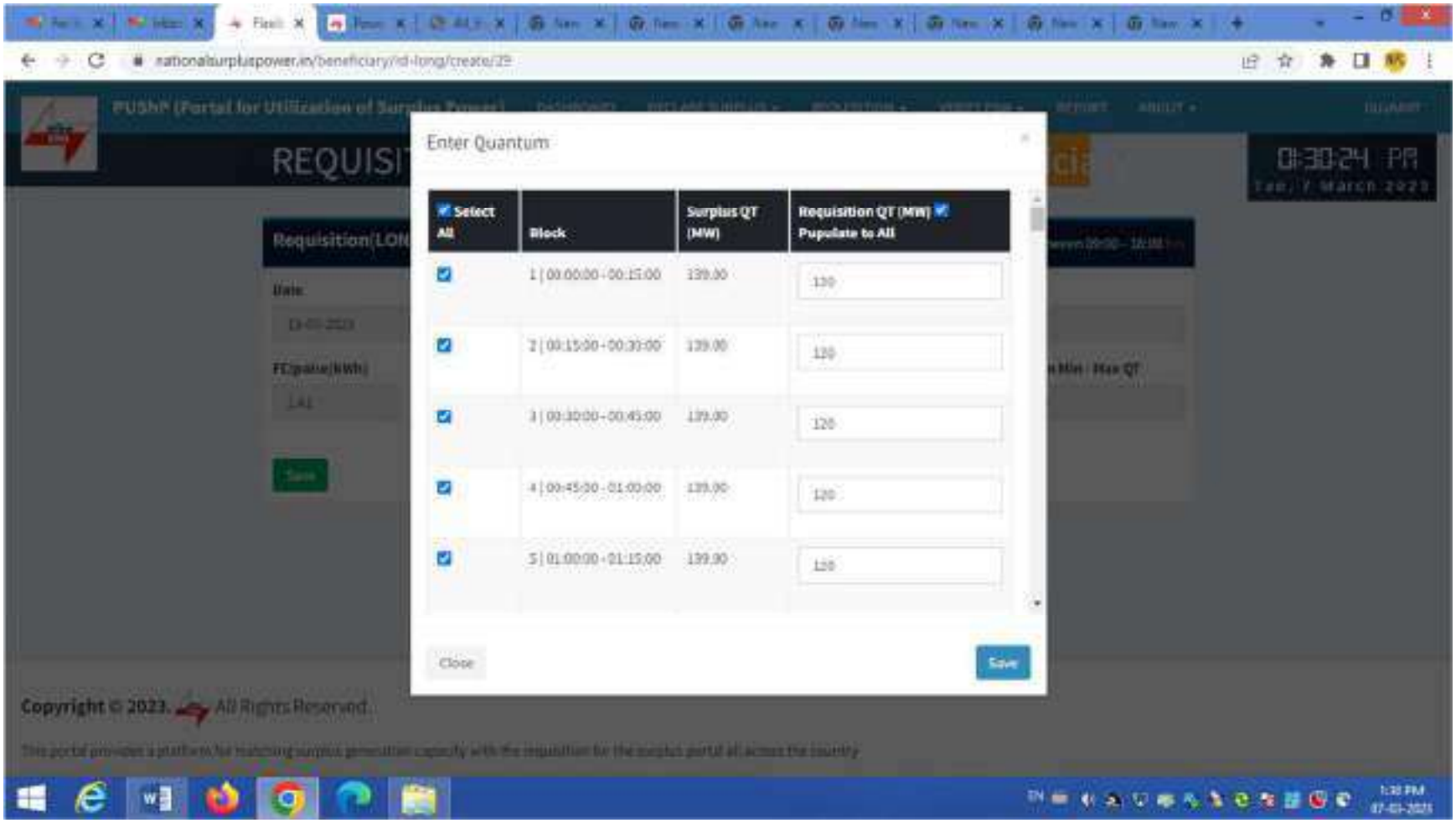
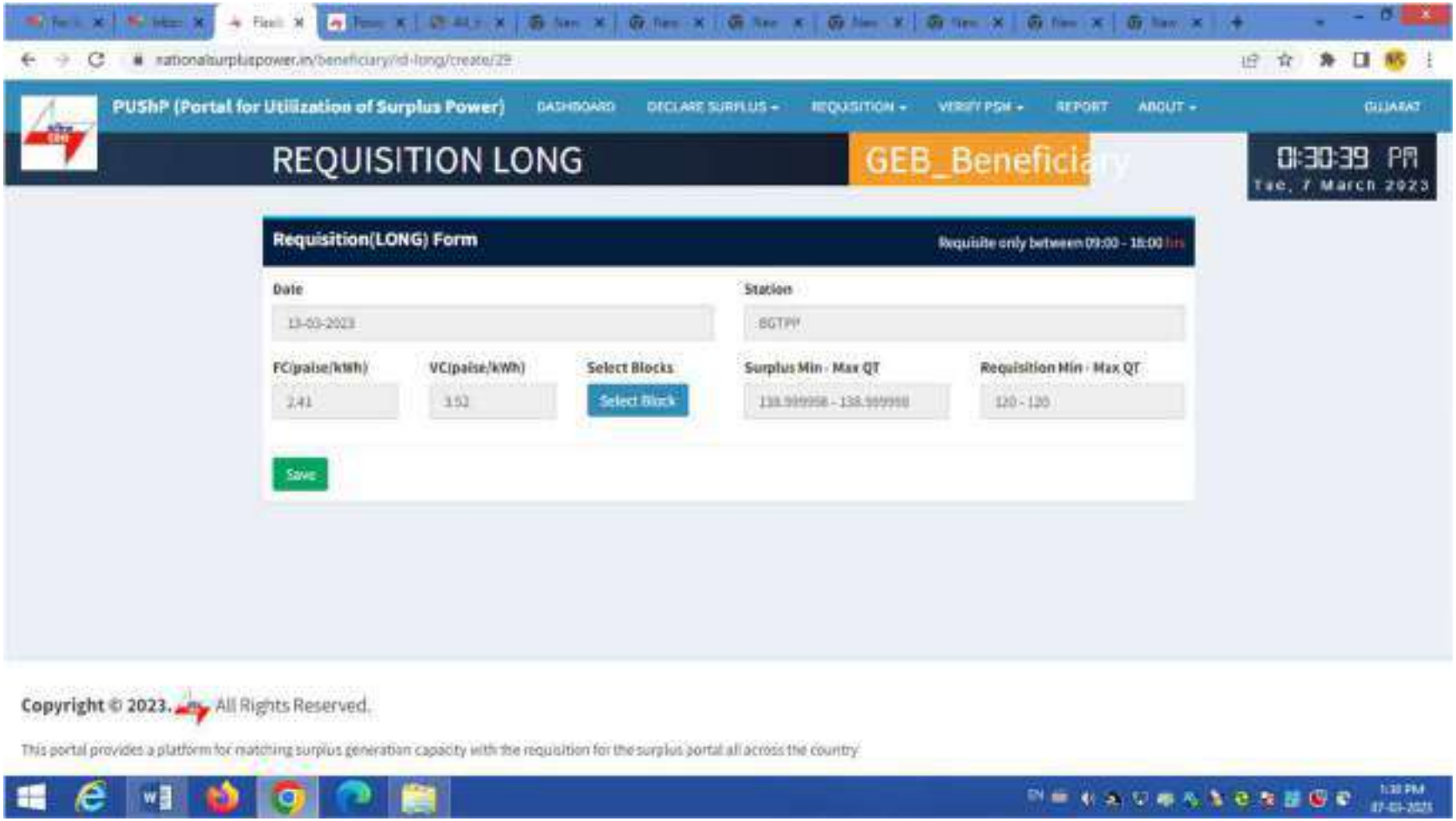
This portal provides a platform for matching surplus generation capacity with the requisition for the surplus portal all across the country

# Requisition of Power by new beneficiary

Suppose, GUJARAT has requisitioned the 120 MW for 13th March, 2023 for each 96 block of 15 minutes.



# Requisition of Power by new beneficiary

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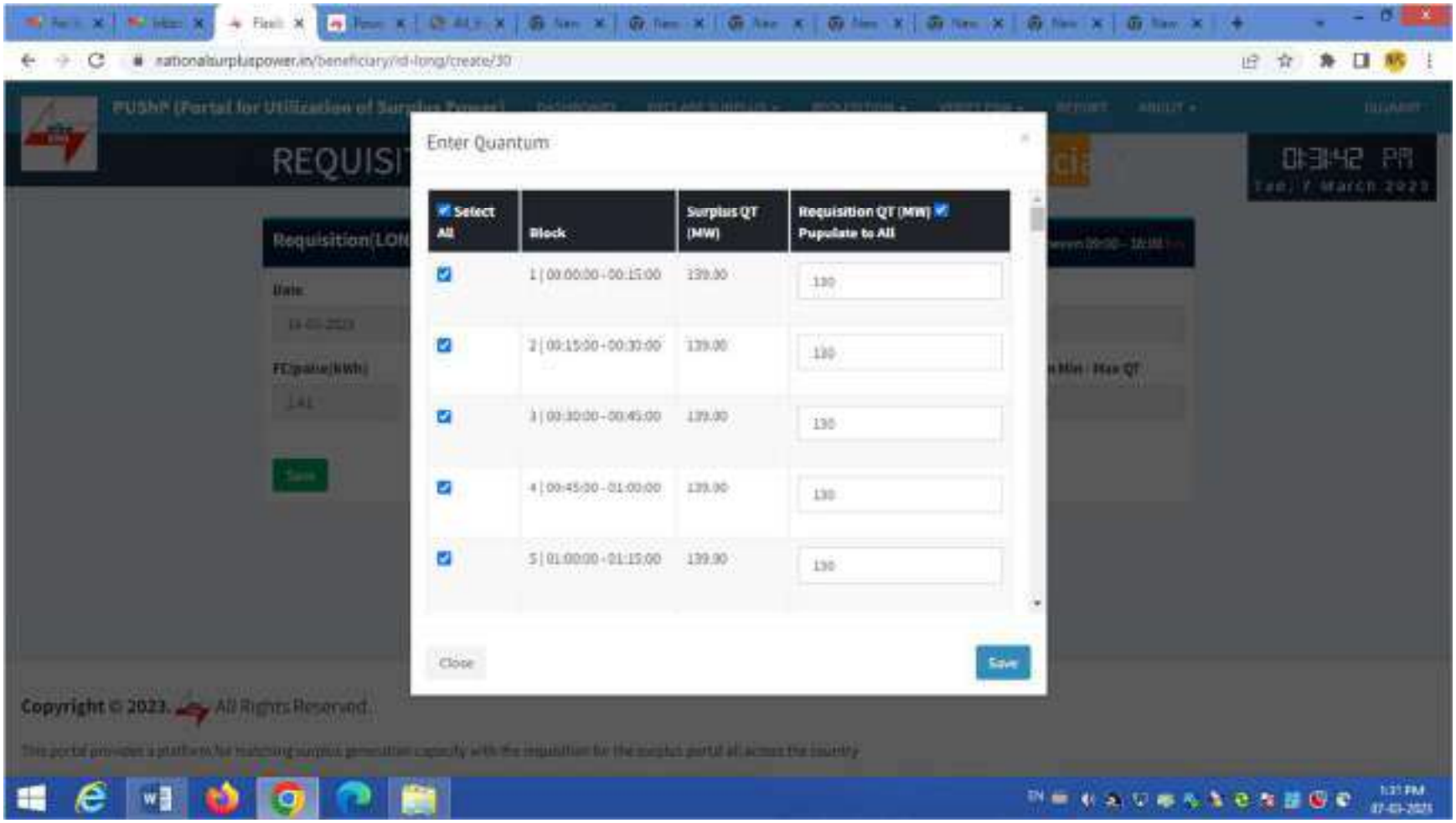
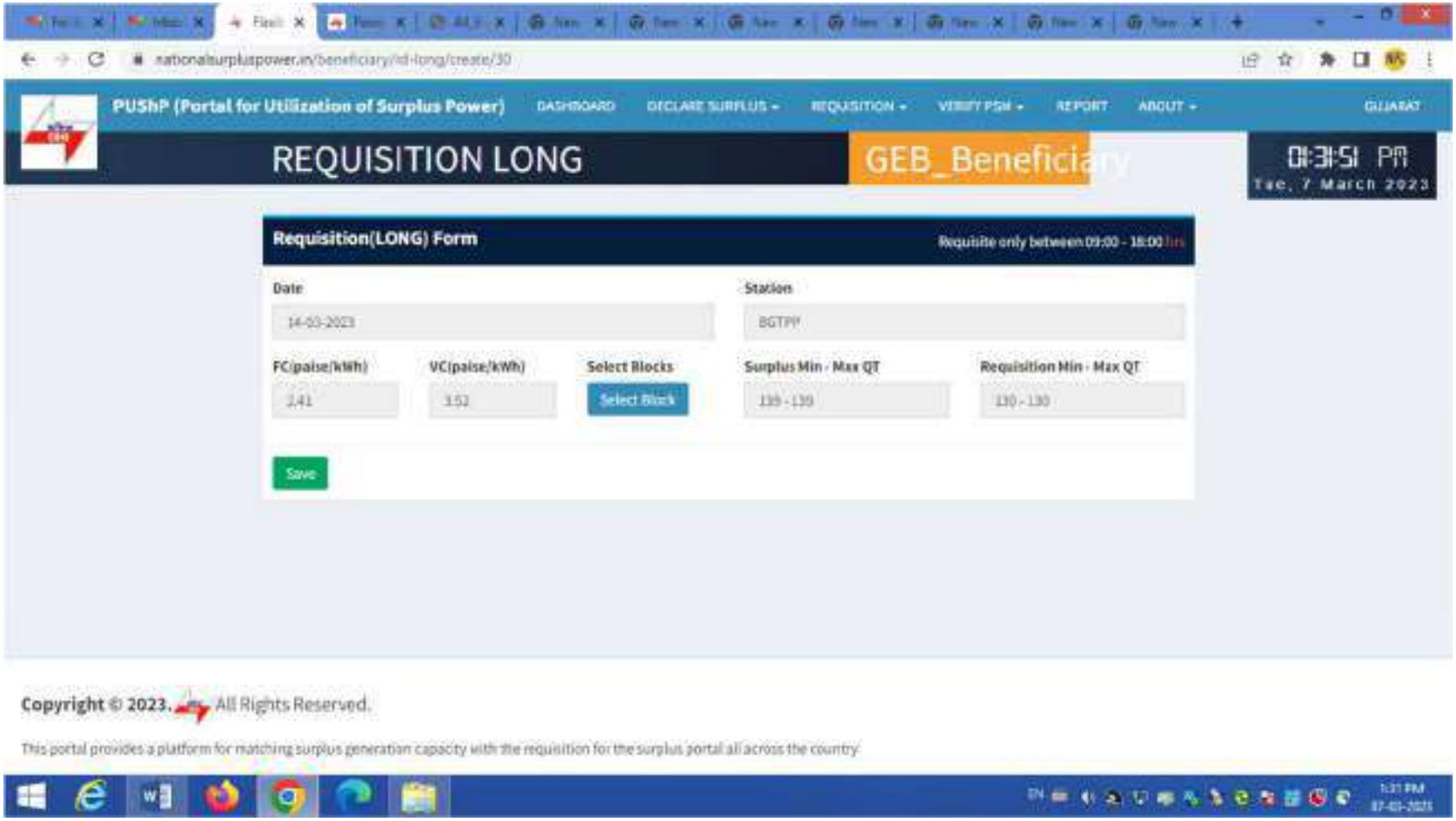
This portal provides a platform for matching surplus generation capacity with the requisition for the surplus portal all across the country

# Requisition of Power by new beneficiary

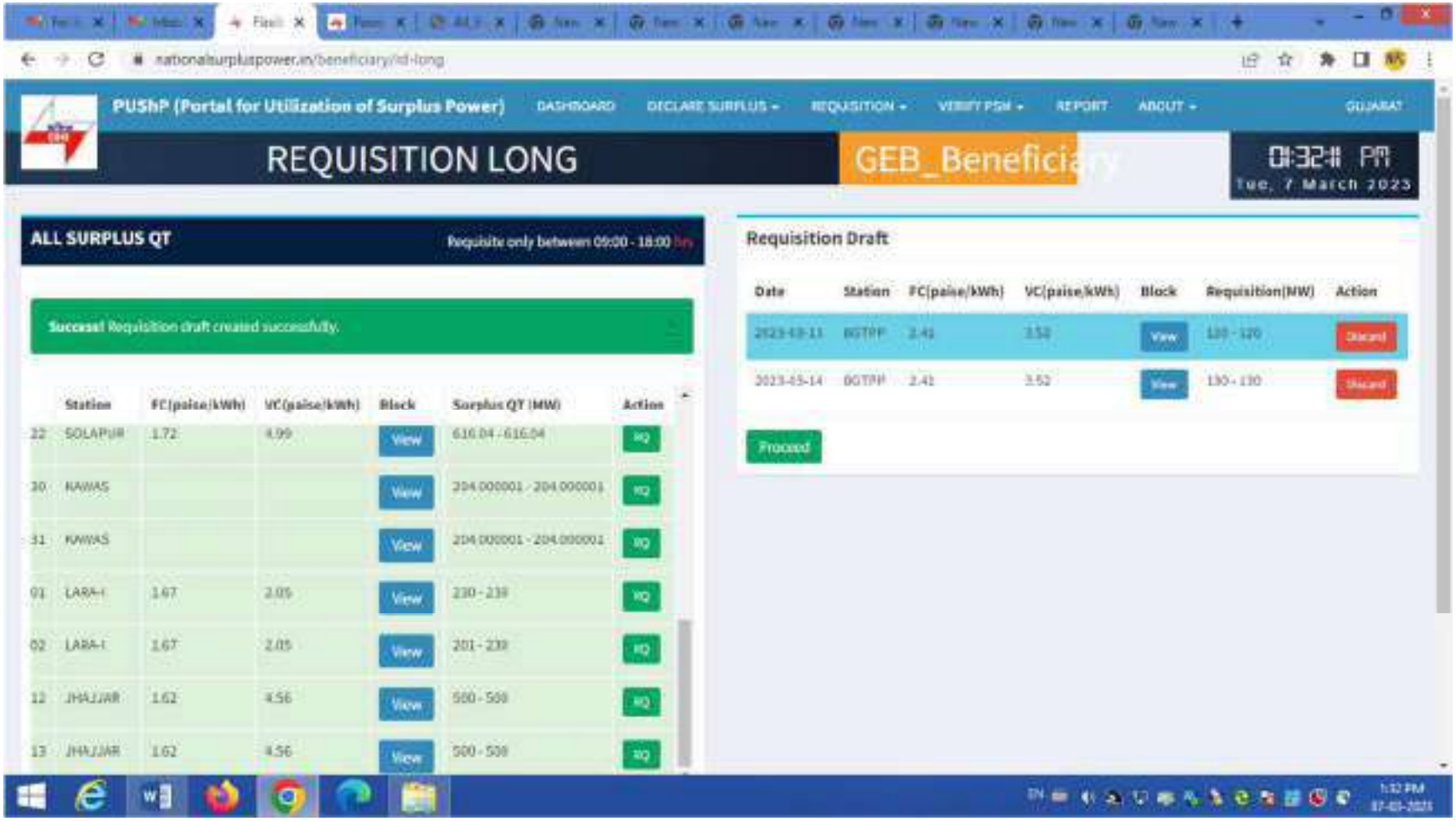
Suppose, GUJARAT has requisitioned the 130 MW for 14th March, 2023 for each 96 block of 15 minutes.



# Requisition of Power by new beneficiary

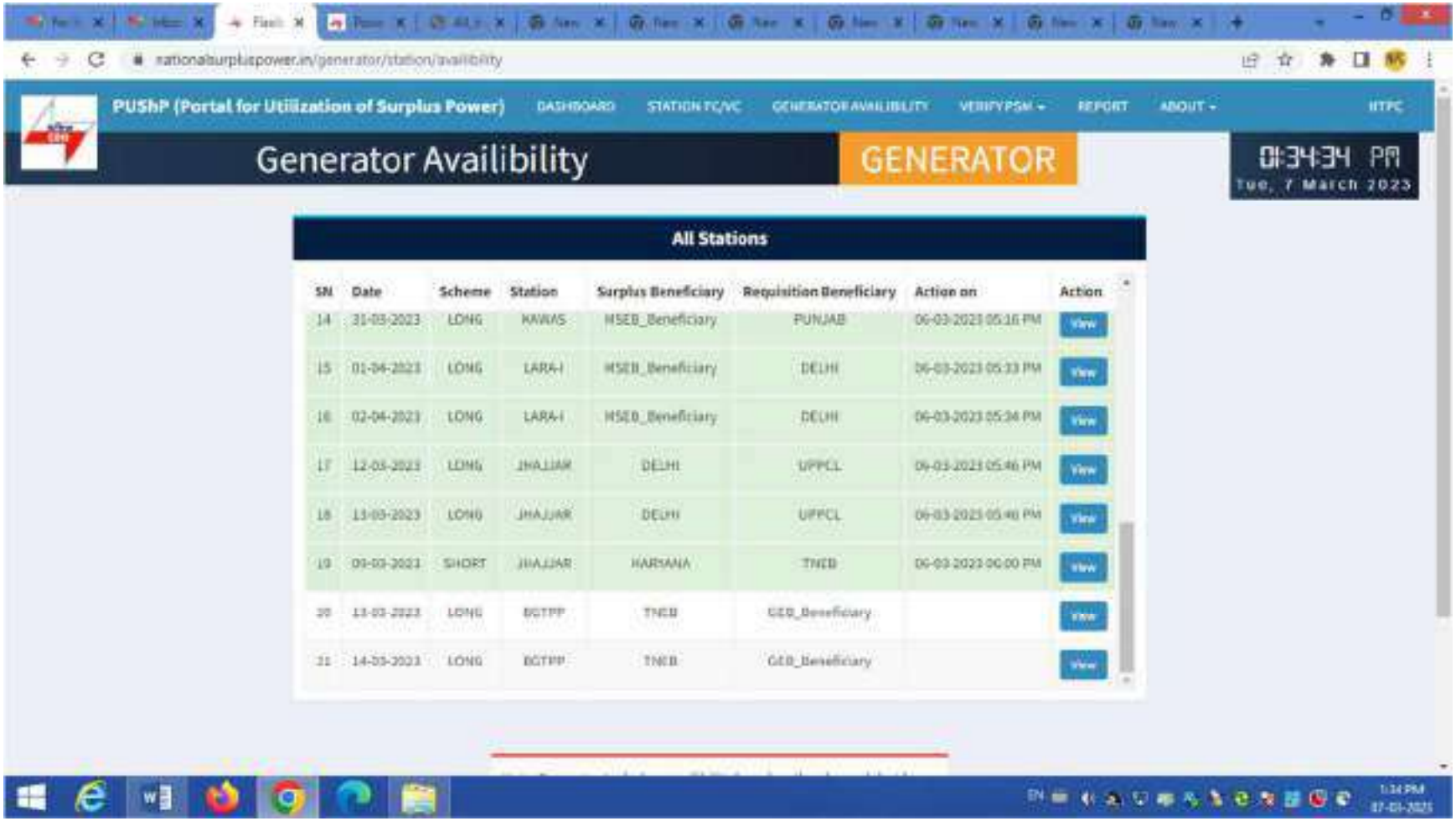


# Requisition of Power by new beneficiary



# Confirmation of availability of Plant by the Generator

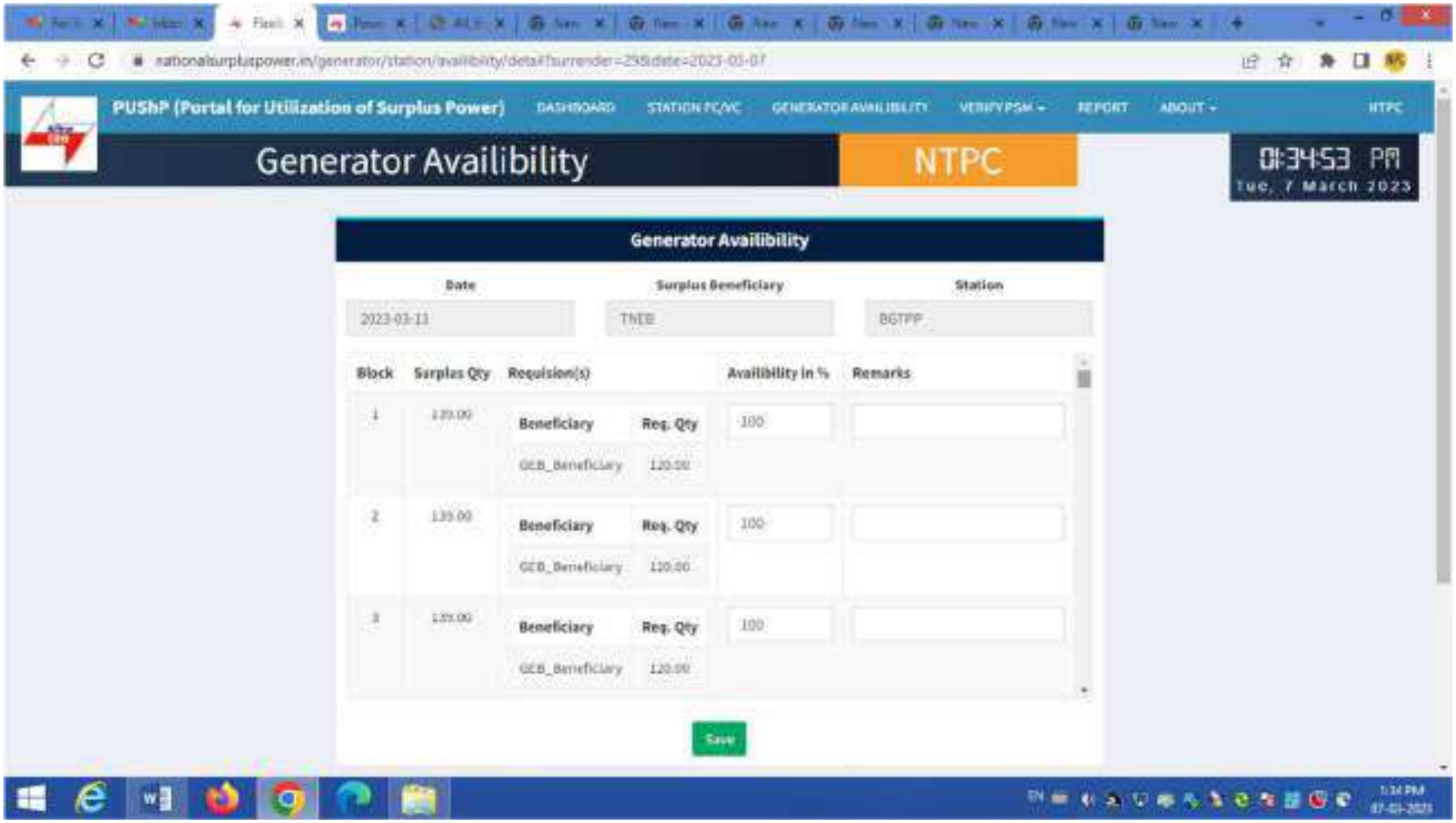
White Color shows that generator has to show its availability for these new entries.




| SN | Date | Scheme | Station | Surplus Beneficiary | Requisition Beneficiary | Action on | Action |
|---|---|---|---|---|---|---|---|
| 14 | 31-03-2023 | LONG | KAWAS | MSEB_Beneficiary | PUNJAB | 06-03-2023 05:16 PM | View |
| 15 | 01-04-2023 | LONG | LARA-I | MSEB_Beneficiary | DELHI | 06-03-2023 05:33 PM | View |
| 16 | 02-04-2023 | LONG | LARA-I | MSEB_Beneficiary | DELHI | 06-03-2023 05:34 PM | View |
| 17 | 12-03-2023 | LONG | JHAJJAR | DELHI | UPPCL | 06-03-2023 05:46 PM | View |
| 18 | 13-03-2023 | LONG | JHAJJAR | DELHI | UPPCL | 06-03-2023 05:46 PM | View |
| 19 | 09-03-2023 | SHORT | JHAJJAR | HARYANA | TNEB | 06-03-2023 06:00 PM | View |
| 20 | 13-03-2023 | LONG | BGTPP | TNEB | GEB_Beneficiary | | View |
| 21 | 14-03-2023 | LONG | BGTPP | TNEB | GEB_Beneficiary | | View |

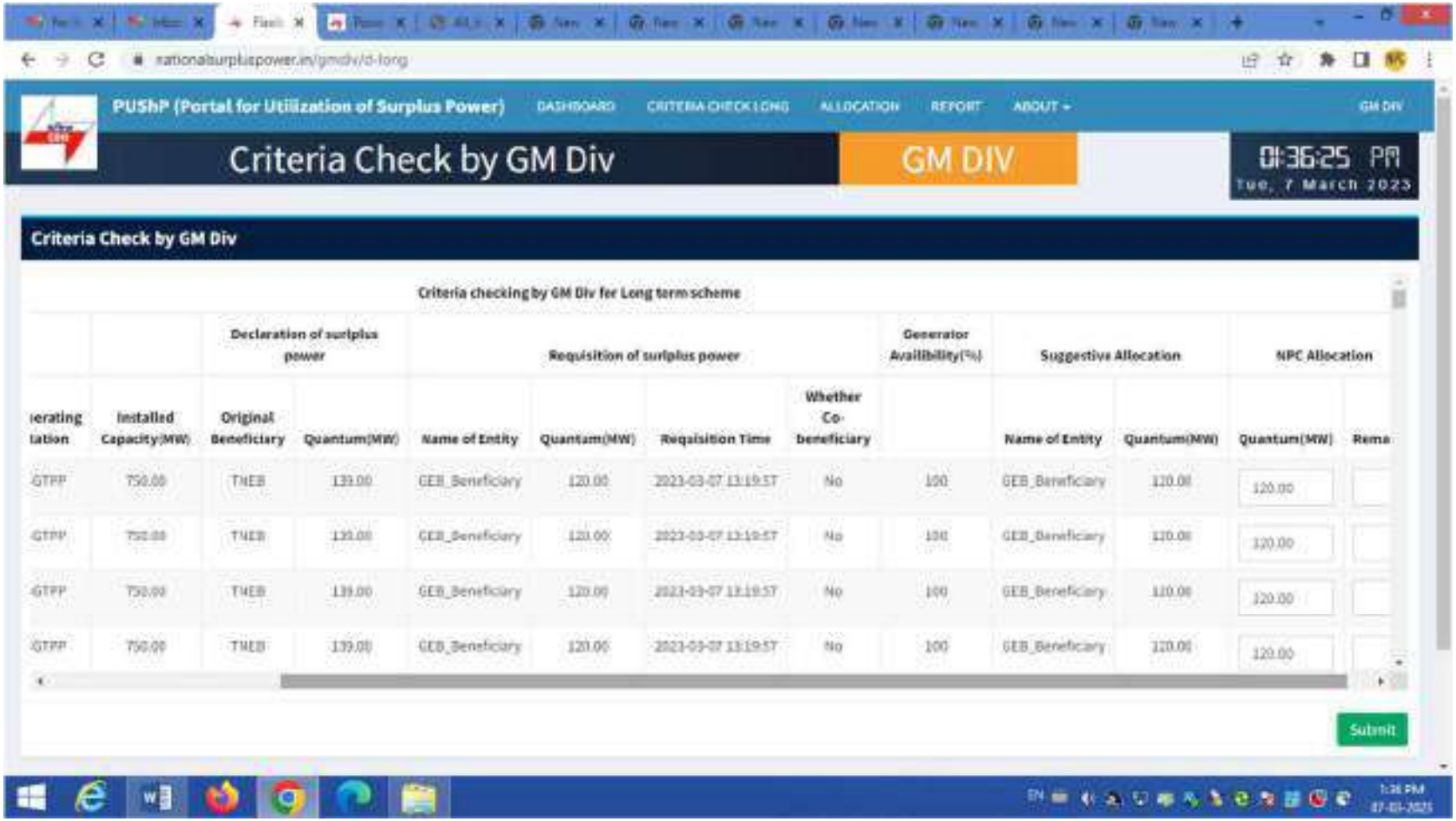
# Confirmation of availability of Plant by the Generator

Generator (here NTPC) has to show whether the Bongaigaon plant is available for the 13th March and 14th March, 2023 or not.



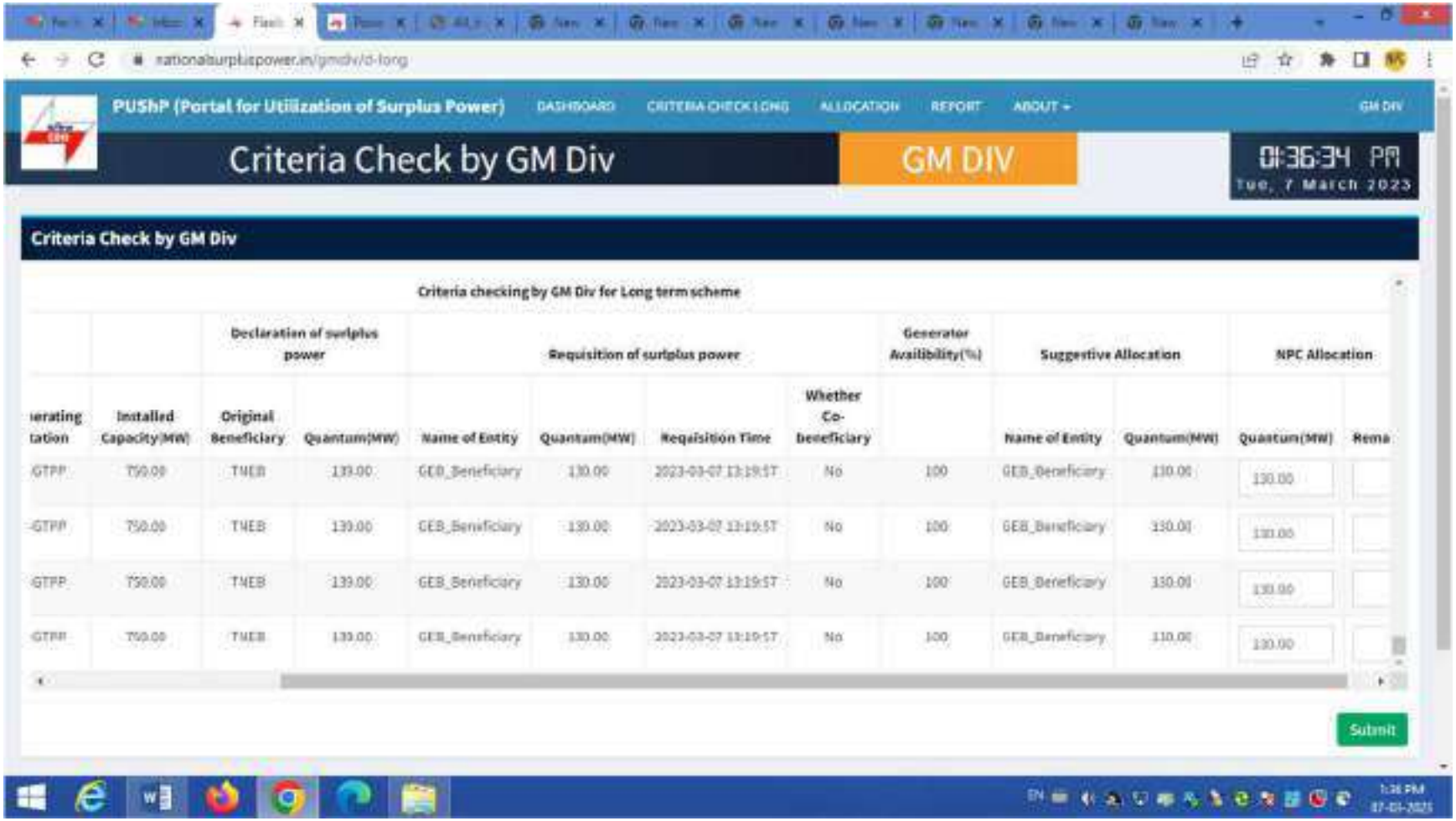
# Criteria check by CEA

Criteria check for 13th march, 2023



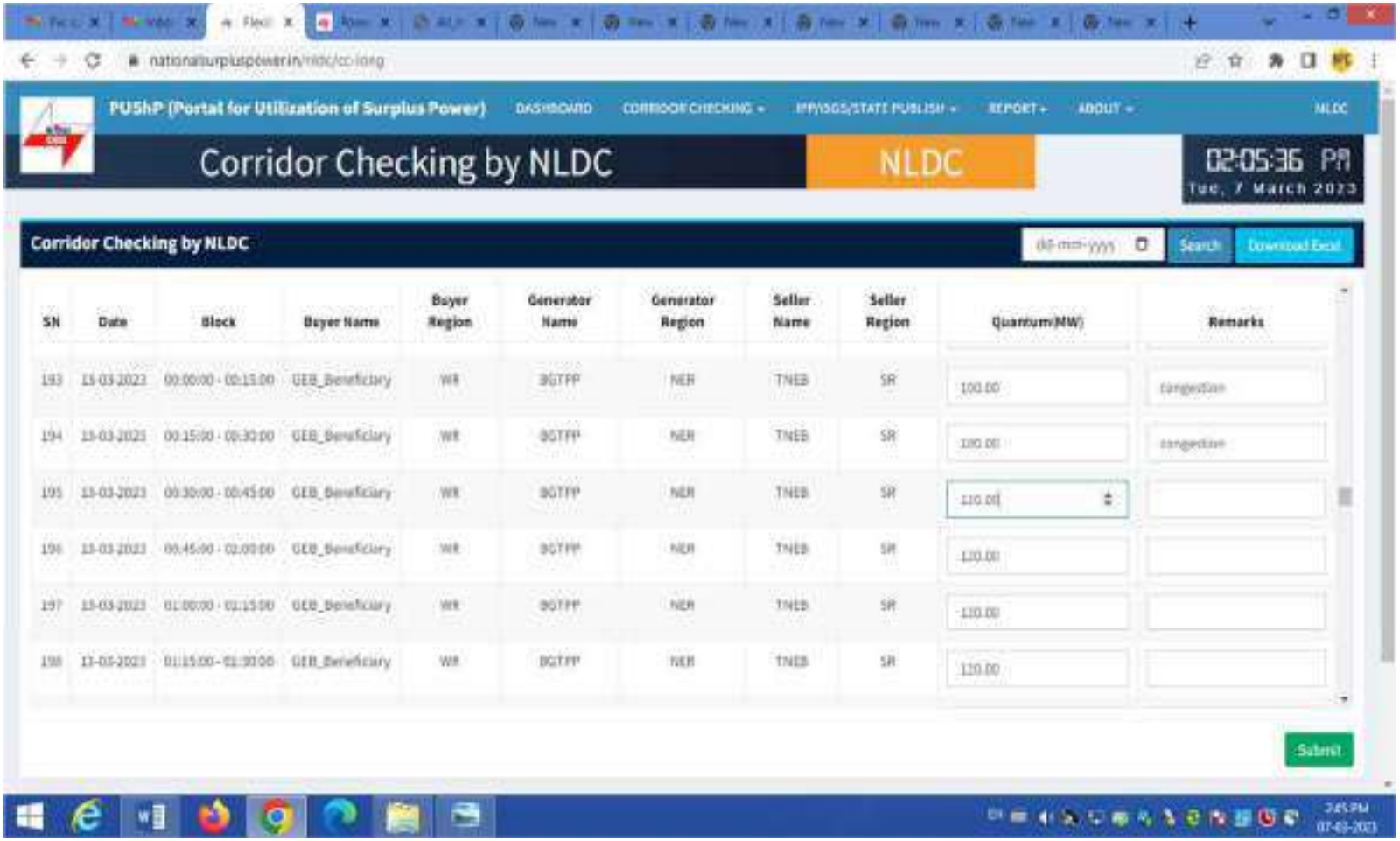
# Criteria check by CEA

Criteria check for 14th March, 2023



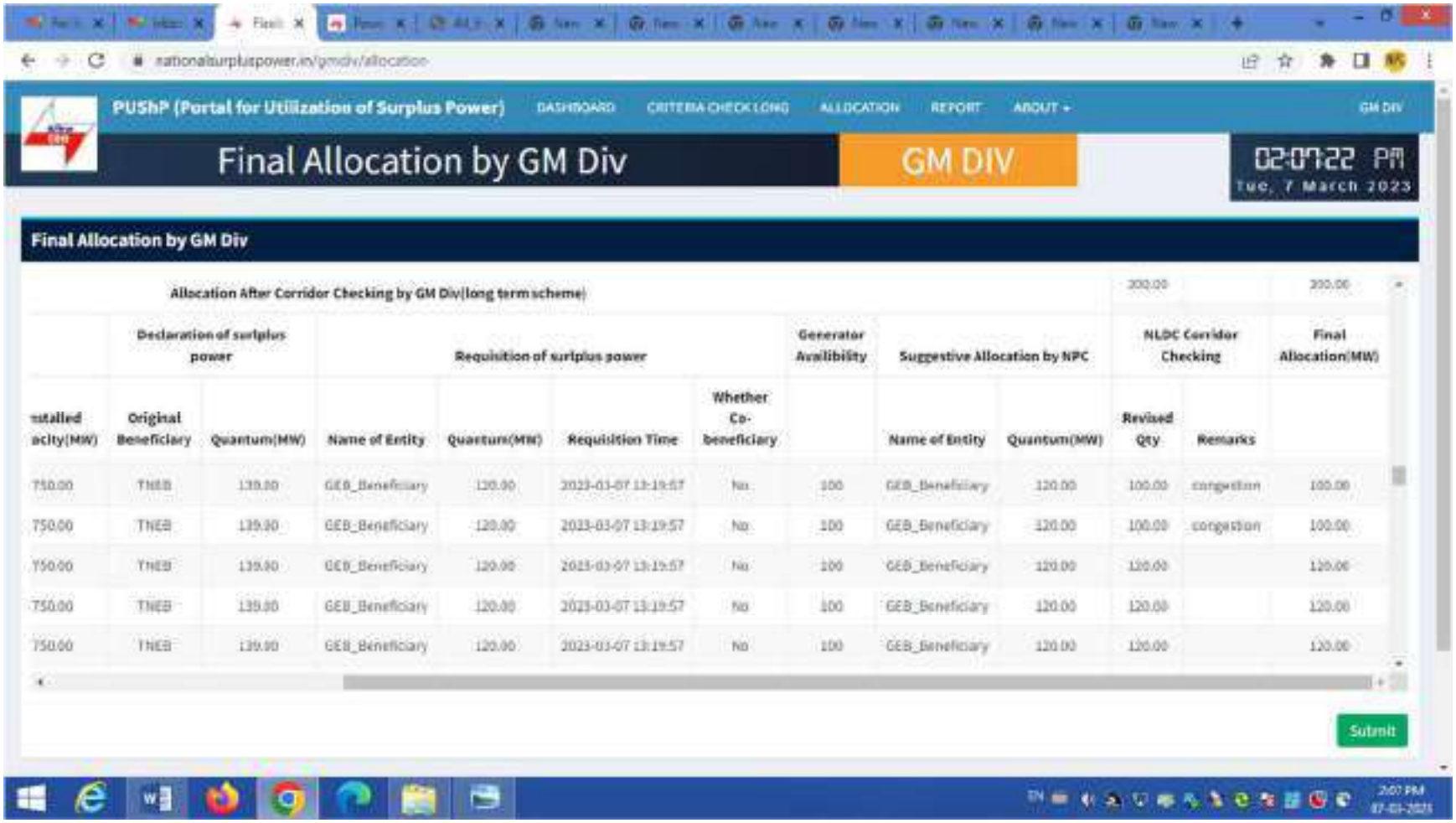
# Transmission Corridor checking by NLDC

NLDC will check whether corridor is available or not. If not available, NLDC will restrict the power for that day or for those blocks. Suppose there is a congestion on 13th March, 2023 for first two block, therefore, NLDC has restricted the power to 100 MW instead of 120 MW for initial two blocks of 13th March, 2023.



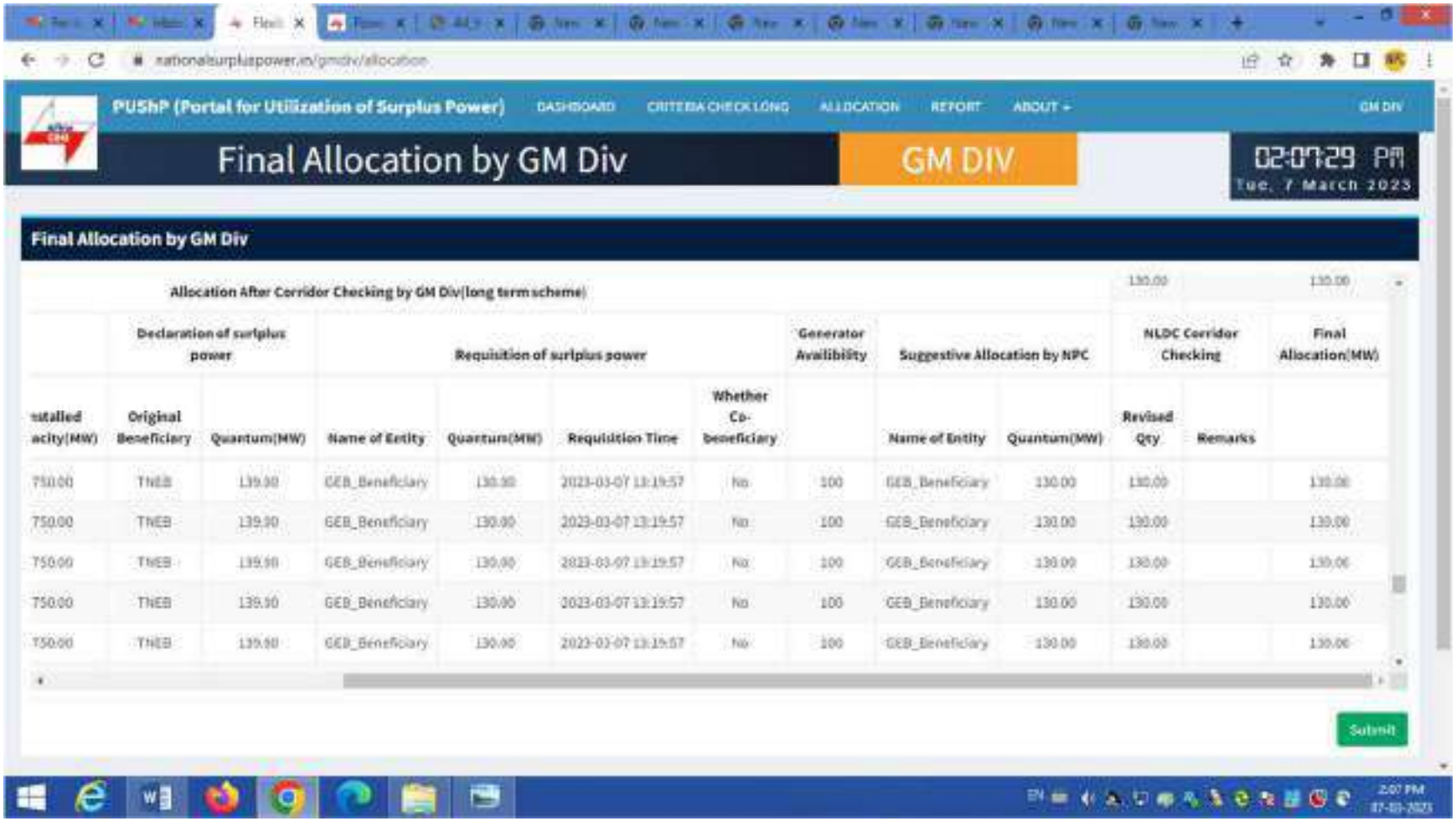
# Final Allocation by CEA

Final allocation of 120 MW for 13th March, 2023 (except initial two block where 100 MW was allocated due to congestion).



# Final Allocation by CEA

Final allocation of 130 MW for 14th March, 2023.



PUShP (Portal for Utilization of Surplus Power) DASHBOARD CRITERIA CHECK LONG ALLOCATION REPORT ABOUT GM DIV

Final Allocation by GM Div

GM DIV

02:07:29 PM
Tue, 7 March 2023

Final Allocation by GM Div

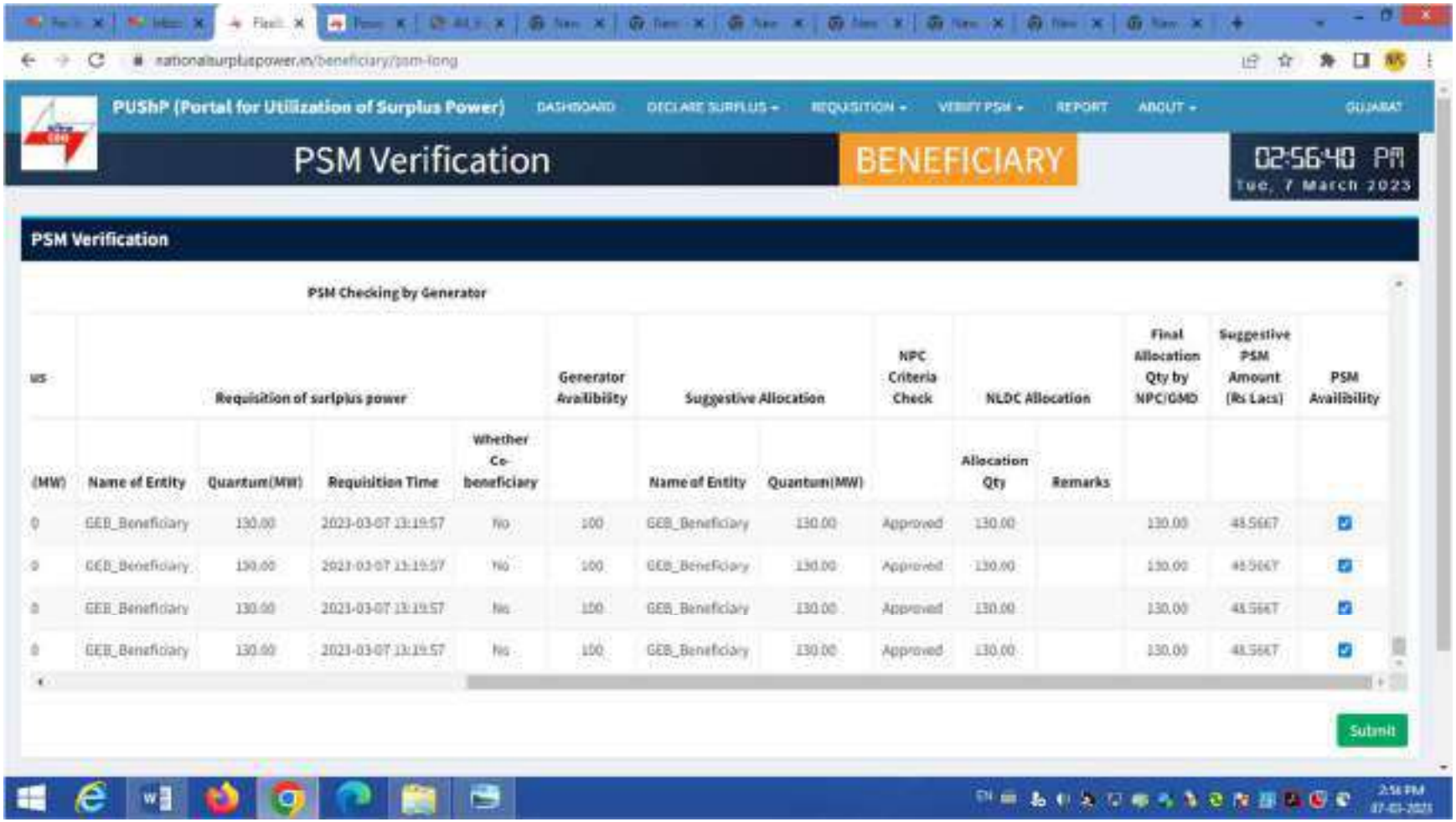
Allocation After Corridor Checking by GM Div(long term scheme)

| | Declaration of surlplus power | | Requisition of surlplus power | | | | Generator Availibility | Suggestive Allocation by NPC | | NLDC Corridor Checking | | Final Allocation(MW) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| stalled acity(MW) | Original Beneficiary | Quantum(MW) | Name of Entity | Quantum(MW) | Requisition Time | Whether Co-beneficiary | | Name of Entity | Quantum(MW) | Revised Qty | Remarks | |
| 750.00 | TNEB | 139.90 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | 130.00 | | 130.00 |
| 750.00 | TNEB | 139.90 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | 130.00 | | 130.00 |
| 750.00 | TNEB | 139.90 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | 130.00 | | 130.00 |
| 750.00 | TNEB | 139.90 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | 130.00 | | 130.00 |
| 750.00 | TNEB | 139.90 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | 130.00 | | 130.00 |

Submit

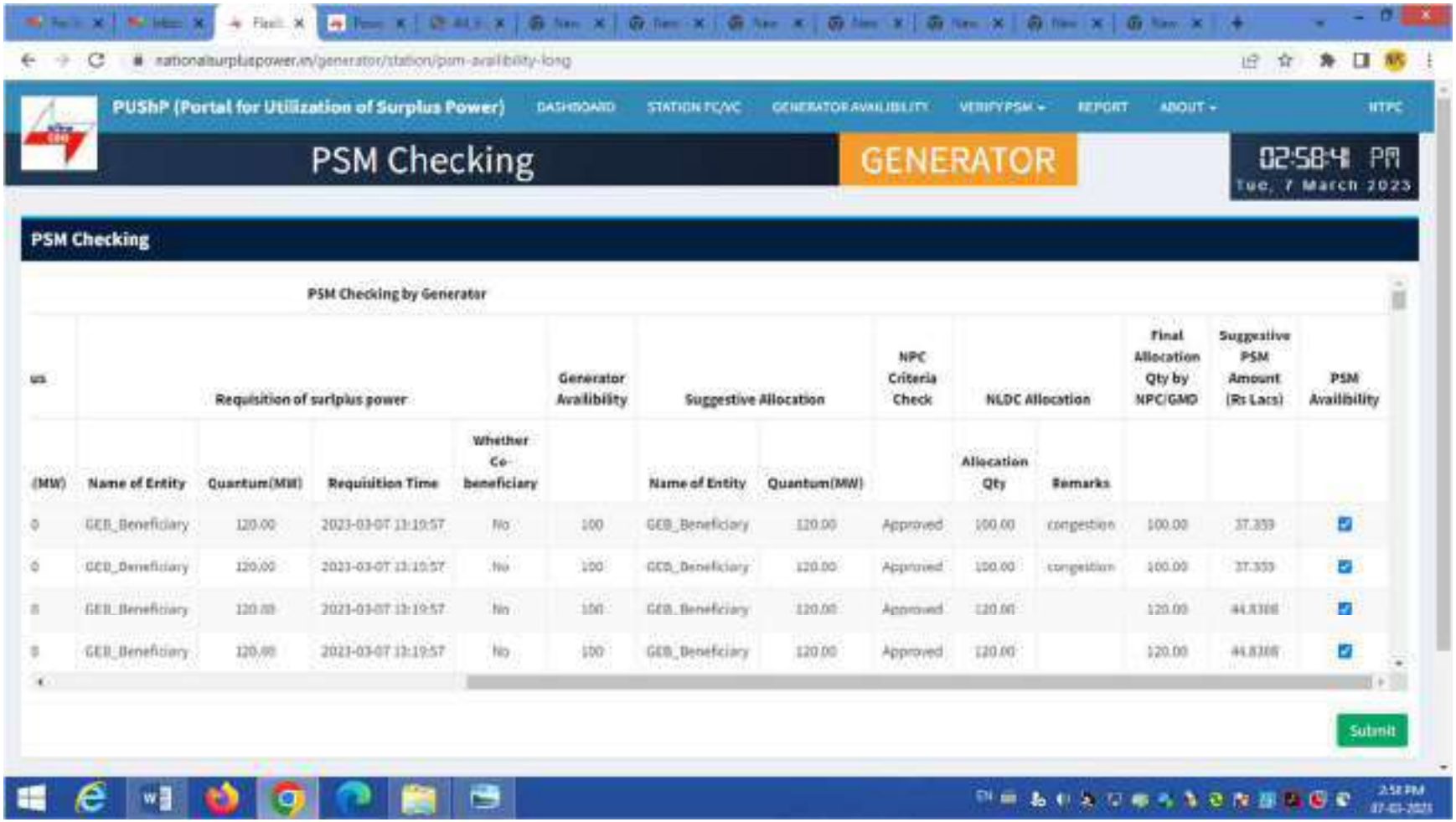
# PSM verification by New Beneficiary-:

After arranging the PSM, New Beneficiary will verify the same on the Portal.



# PSM confirmation by Generator-:

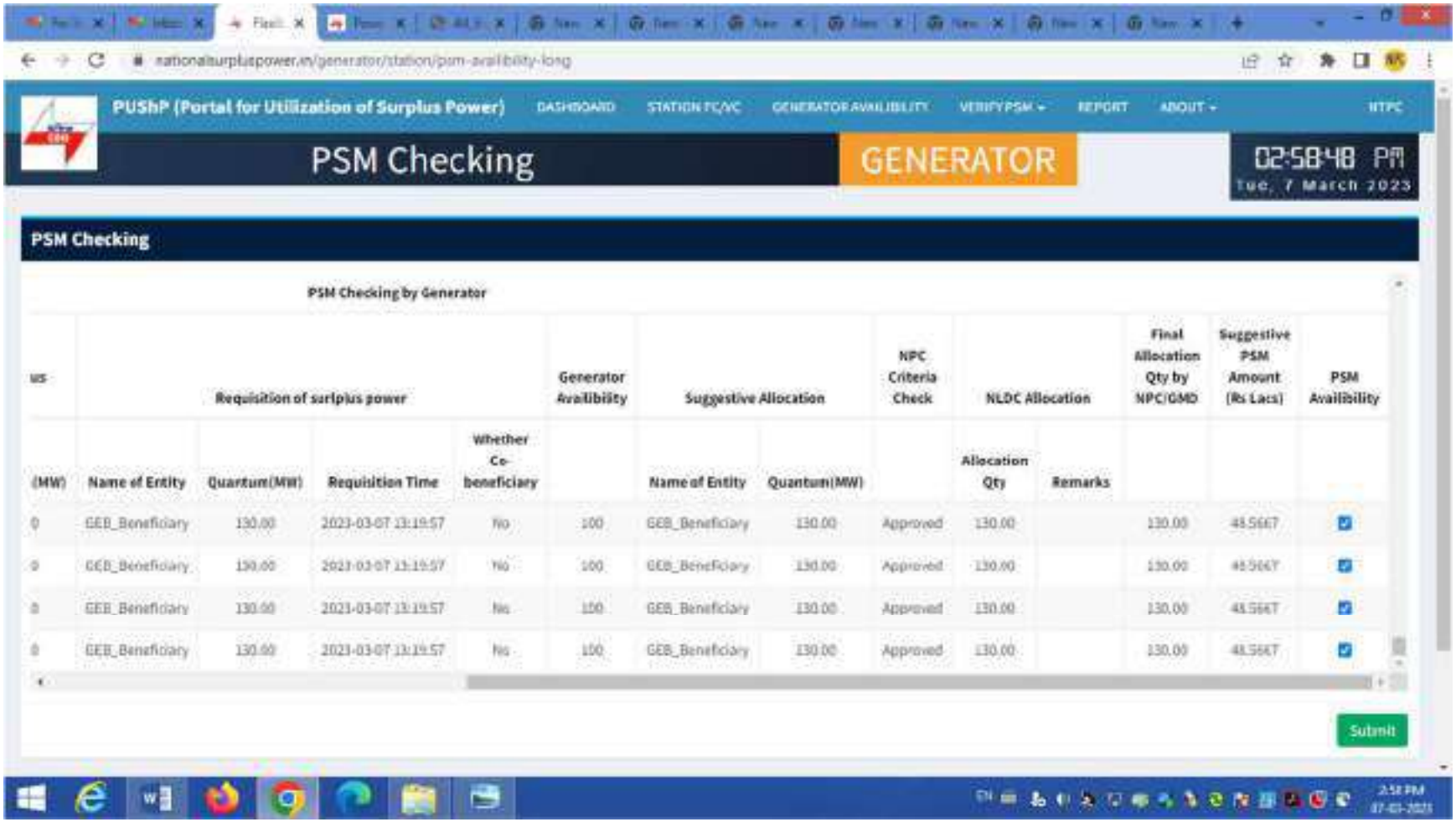
Generator will confirm the PSM for both day (here 13th March, 2023).




| Sn | Requisition of surlplus power | | | | Generator Availibility | Suggestive Allocation | | NPC Criteria Check | NLDC Allocation | | Final Allocation Qty by NPC/GMD | Suggestive PSM Amount (Rs Lacs) | PSM Availibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (MW) | Name of Entity | Quantum(MW) | Requisition Time | Whether Co-beneficiary | | Name of Entity | Quantum(MW) | | Allocation Qty | Remarks | | | |
| 0 | GEB_Beneficiary | 120.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 120.00 | Approved | 100.00 | congestion | 100.00 | 37.359 | ☑ |
| 0 | GEB_Beneficiary | 120.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 120.00 | Approved | 100.00 | congestion | 100.00 | 37.359 | ☑ |
| 0 | GEB_Beneficiary | 120.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 120.00 | Approved | 120.00 | | 120.00 | 44.8308 | ☑ |
| 0 | GEB_Beneficiary | 120.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 120.00 | Approved | 120.00 | | 120.00 | 44.8308 | ☑ |

# PSM confirmation by Generator-:

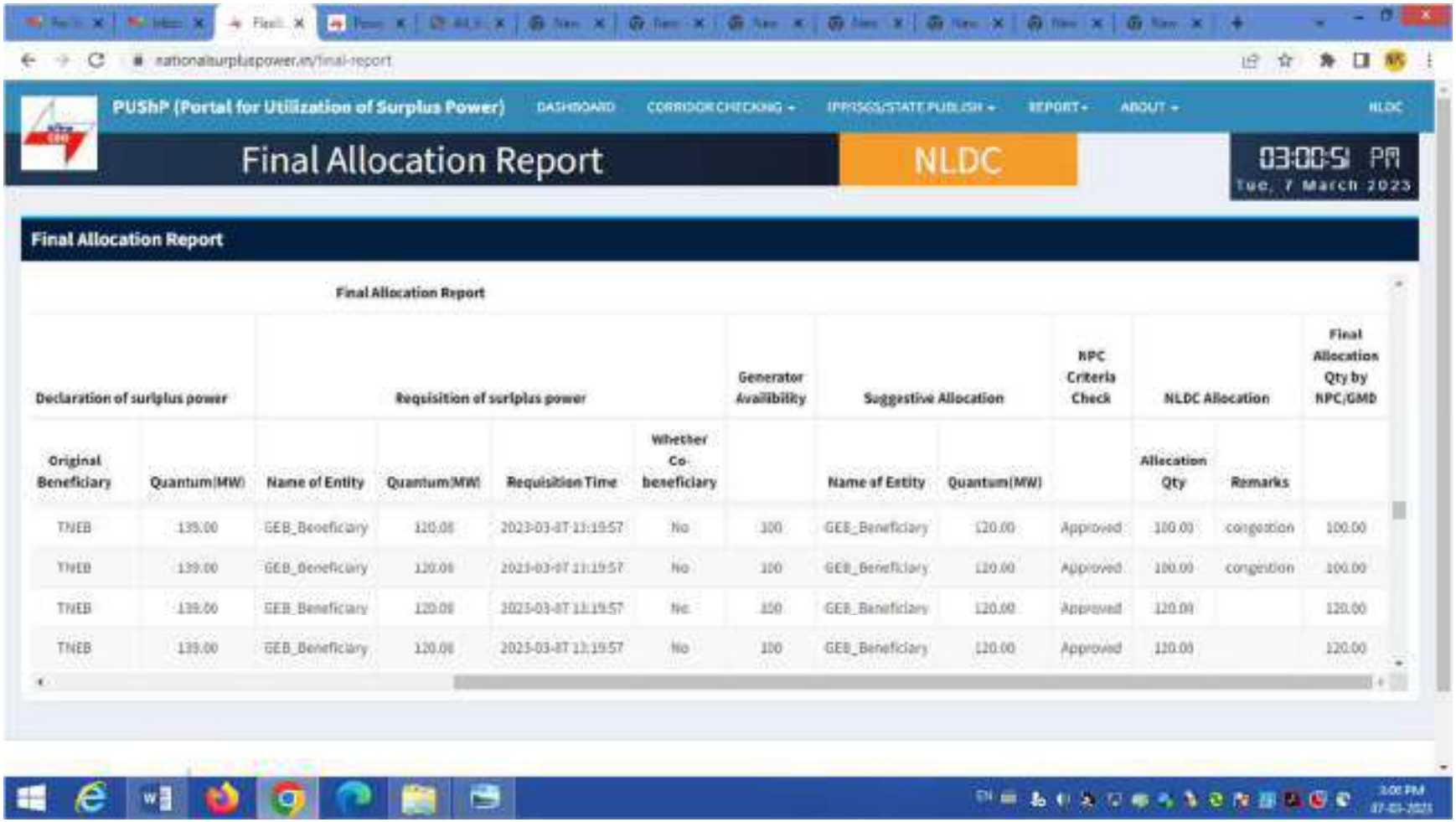
Generator will confirm the PSM for both day (here 14th March, 2023).




| SR | Requisition of surlplus power | | | | Generator Availibility | Suggestive Allocation | | NPC Criteria Check | NLDC Allocation | | Final Allocation Qty by NPC/GMD | Suggestive PSM Amount (Rs Lacs) | PSM Availibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (MW) | Name of Entity | Quantum(MW) | Requisition Time | Whether Co-beneficiary | | Name of Entity | Quantum(MW) | | Allocation Qty | Remarks | | | |
| 0 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | Approved | 130.00 | | 130.00 | 48.5667 | ☑ |
| 0 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | Approved | 130.00 | | 130.00 | 48.5667 | ☑ |
| 0 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | Approved | 130.00 | | 130.00 | 48.5667 | ☑ |
| 0 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | Approved | 130.00 | | 130.00 | 48.5667 | ☑ |

# Final Allocation Report-:

Here, it is being shown the initial 4 blocks of 13th March, 2023.

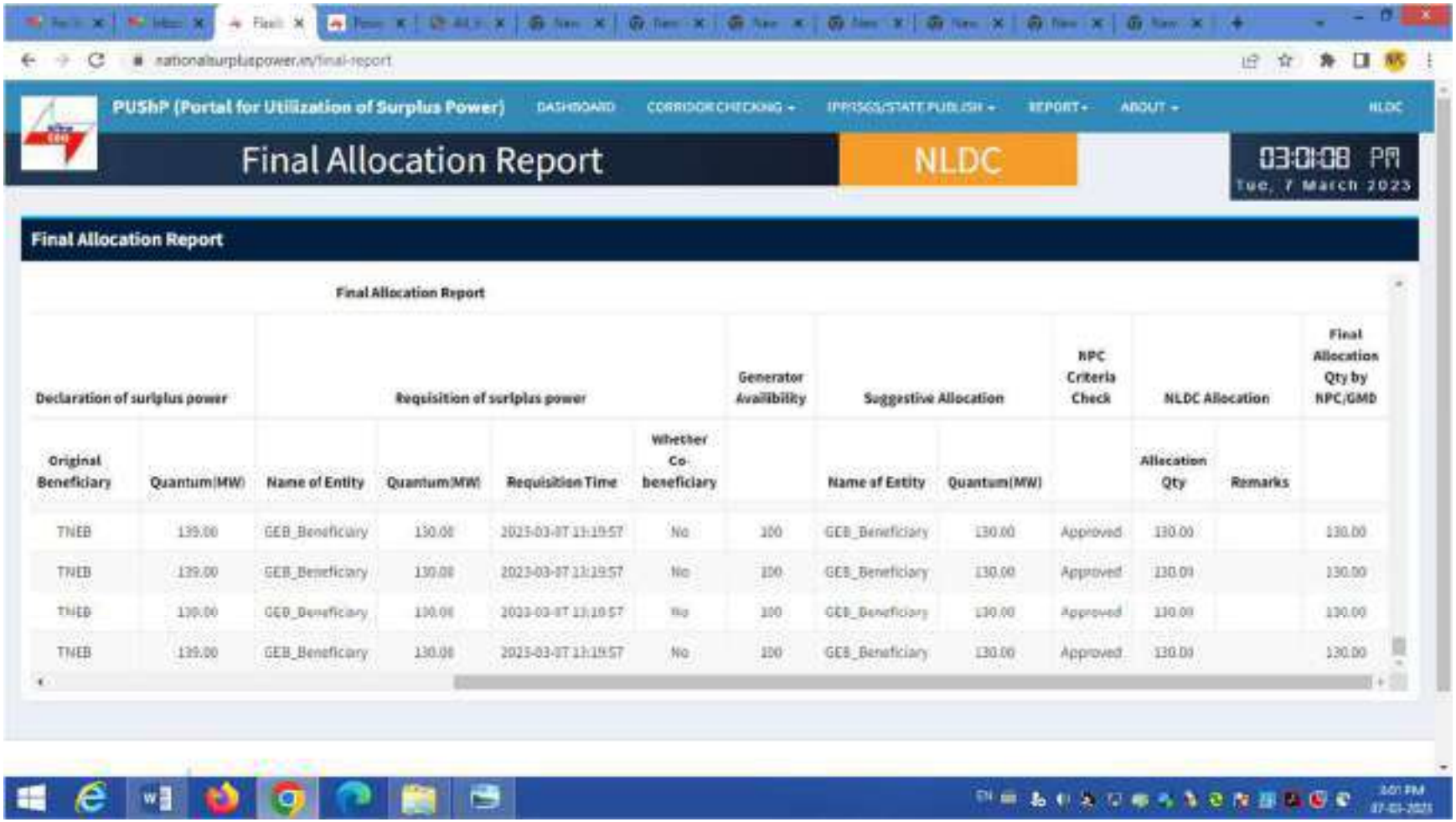



Final Allocation Report

| Declaration of surlplus power | | Requisition of surlplus power | | | | Generator Availibility | Suggestive Allocation | | NPC Criteria Check | NLDC Allocation | | Final Allocation Qty by NPC/GMD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Original Beneficiary | Quantum(MW) | Name of Entity | Quantum(MW) | Requisition Time | Whether Co-beneficiary | | Name of Entity | Quantum(MW) | | Allocation Qty | Remarks | |
| TNEB | 139.00 | GEB_Beneficiary | 120.00 | 2023-03-07 11:19:57 | No | 100 | GEB_Beneficiary | 120.00 | Approved | 100.00 | congestion | 100.00 |
| TNEB | 139.00 | GEB_Beneficiary | 120.00 | 2023-03-07 11:19:57 | No | 100 | GEB_Beneficiary | 120.00 | Approved | 100.00 | congestion | 100.00 |
| TNEB | 139.00 | GEB_Beneficiary | 120.00 | 2023-03-07 11:19:57 | No | 100 | GEB_Beneficiary | 120.00 | Approved | 120.00 | | 120.00 |
| TNEB | 139.00 | GEB_Beneficiary | 120.00 | 2023-03-07 11:19:57 | No | 100 | GEB_Beneficiary | 120.00 | Approved | 120.00 | | 120.00 |

# Final Allocation Report-:

Here, it is being shown the last 4 blocks of 14th March, 2023.




Final Allocation Report

| Declaration of surlplus power | | Requisition of surlplus power | | | | Generator Availibility | Suggestive Allocation | | NPC Criteria Check | NLDC Allocation | | Final Allocation Qty by NPC/GMD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Original Beneficiary | Quantum(MW) | Name of Entity | Quantum(MW) | Requisition Time | Whether Co-beneficiary | | Name of Entity | Quantum(MW) | | Allocation Qty | Remarks | |
| TNEB | 139.00 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | Approved | 130.00 | | 130.00 |
| TNEB | 139.00 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | Approved | 130.00 | | 130.00 |
| TNEB | 130.00 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | Approved | 130.00 | | 130.00 |
| TNEB | 139.00 | GEB_Beneficiary | 130.00 | 2023-03-07 13:19:57 | No | 100 | GEB_Beneficiary | 130.00 | Approved | 130.00 | | 130.00 |

# Thank You

Annxure-B1.2

# 49th TCC PRESENTATION

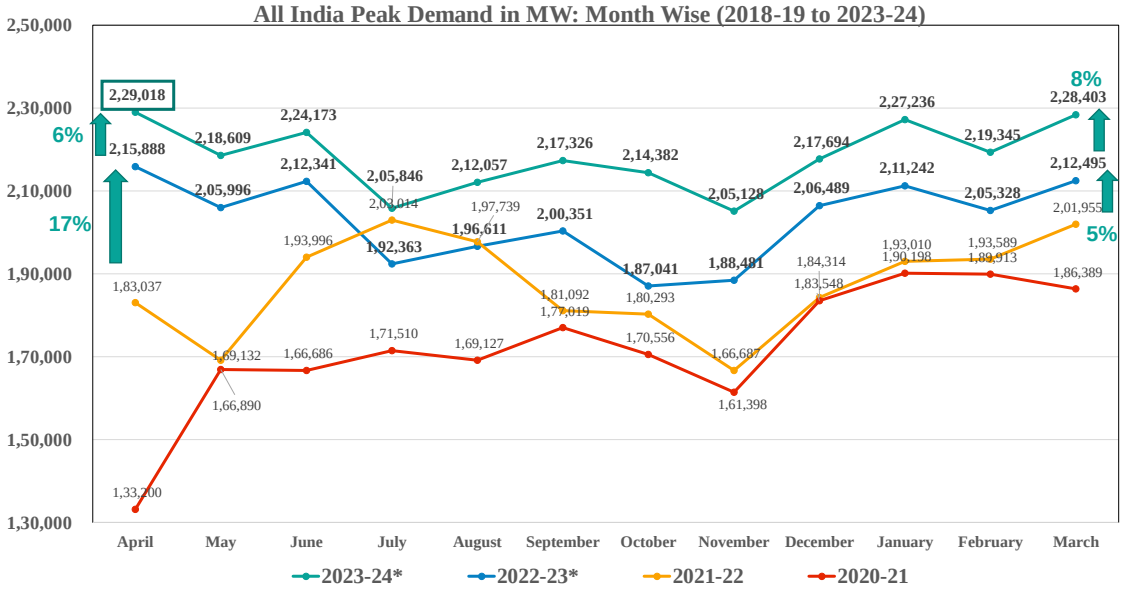
ग्रिड-इंडिया
GRID-INDIA

## Coverage

- Demand Management during crunch period
- Measures for Mitigation
- Reserve Requirement
- Eastern Region Prospective
- Way Forward

# Demand Management during crunch period

## All India Peak Demand




* All figures are in MW

## All India Power Requirement
## (April & May'23 for Solar & Non-Solar Hours)

| | Apr-23 | | May-23 | |
|---|---|---|---|---|
| | **Solar** | **Non-Solar** | **Solar** | **Non-Solar** |
| **Peak Demand(a) (incl ISTS loss)** | **231.9** | **216.9** | **216.4** | **208.4** |
| **Time of Occurrences** | **15:00** | **23:00** | **15:00** | **23:00** |
| Nuclear Generation ( b ) | 3.6 | 3.6 | 3.9 | 3.9 |
| Gas Generation* ( c ) | 4.2 | 7.0 | 3.5 | 7.0 |
| Hydro Generation ( d ) | 14.8 | 23.5 | 16.9 | 24.9 |
| Wind ( e ) | 4.7 | 8.0 | 12.5 | 15.2 |
| Solar ( f ) | 34.4 | 0.0 | 33.5 | 0.0 |
| Other RES (g) | 2.0 | 2.0 | 2.0 | 2.0 |
| Ex-bus Thermal requirement (h = a- b-c-d-e-f-g) | 168.2 | 172.8 | 144.2 | 155.4 |
| **Gross Thermal requirement (i = h*1.03/.92)** | **188.3** | **193.5** | **161.4** | **174.0** |

On 10th March 2023, under the Chairmanship of Hon'ble Minister for Power & NRE, a special meeting was also taken for Uninterrupted Power Supply During High Demand various Measures taken to increase the availability from the Gas and Thermal generators .

*** 3% Reserve & 08% Auxiliary consumption** * All figures in GW

# Expected Shortage

| | Apr-23 | | May-23 | |
|---|---|---|---|---|
| | **Solar** | **Non-Solar** | **Solar** | **Non-Solar** |
| **Installed Capacity available including ICB (J)** | **205.9** | **205.9** | **205.9** | **205.9** |
| Forced Outage( K) | 16.5 | 16.5 | 16.5 | 16.5 |
| Coal Shortage ( L ) | 1 | 1 | 1 | 1 |
| **Effective capacity( M=J-K-L )** | **188.4** | **188.4** | **188.4** | **188.4** |
| Allowable Planned Outage(N) | 0 | 0 | 0 | 0 |
| **Gross Thermal requirement (i = h*1.03/.92)** | **188.3** | **193.5** | **161.4** | **174.0** |
| **Expected Shortage (O=i-M-N)** | **No Shortage** | **-5.1** | **No Shortage** | **No Shortage** |

*All figures in GW

# Measures for Mitigation

**Support from GAS Plants**

**Operationalization of 5000MW power from NTPC plants.**

- **For 18 days during crunch period (Apr-May 23) .Full load -8Hours ,Tech Min-16 Hours.**

**Bidding Scheme for 4000 MW gas-based capacity (other than NTPC).**

- **During the crunch period proposed through bidding. Nodal :NVVN**

**Ensuring power from Thermal Plants**

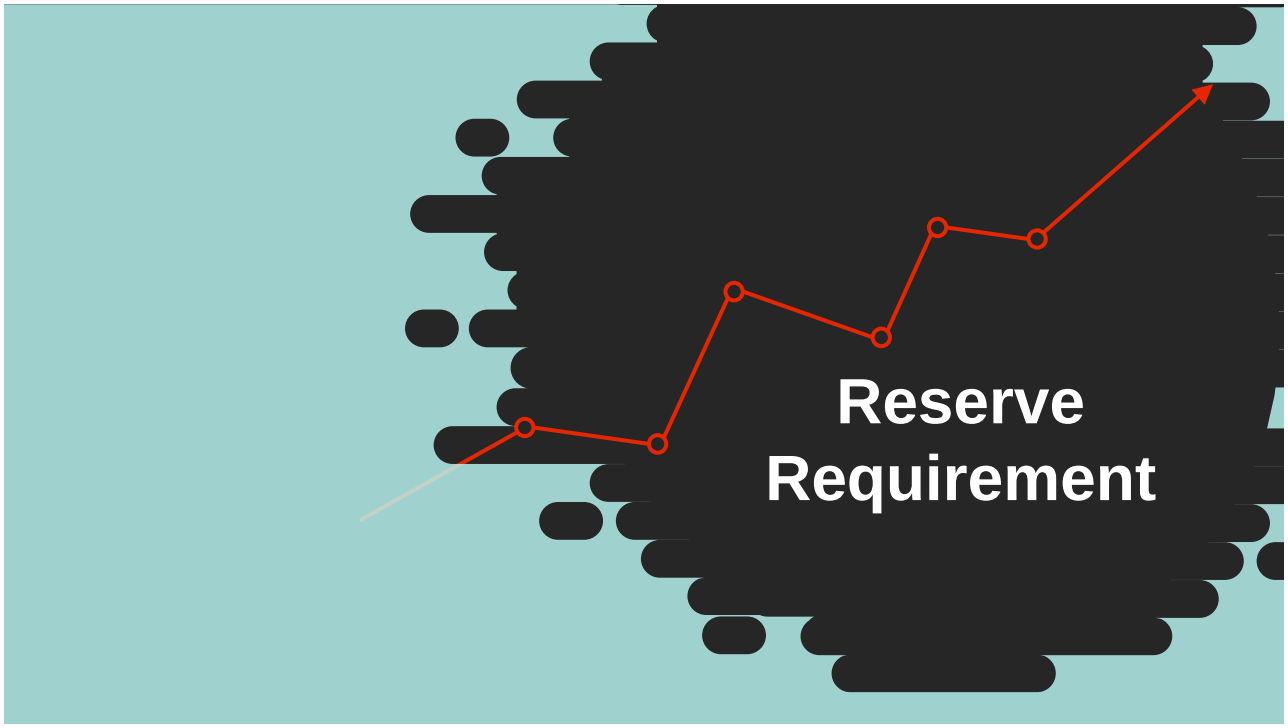
- **No Planned Maintenance for coal based power plants during the crunch period.**
- **GENCO's to import coal @ 6% of their requirement for April to September, 2023.**
- **14.2 GW of ICB plant is envisaged to be available Out of 17.3 GW.**

**HP -DAM**

- **Seller with high Variable Cost > Rs 12/Units.**
- **Range :- 0 to Rs 50 per Unit.**
- **Price discovery on Double-Side Closed Auction**

**PUShP Portal**

- Scheme for **'Flexibilization of PPA for Optimal Utilization of Resources & Reduction in Cost of Power for Consumers'** PUShP Portal launched on 09th March.
- **Online Temporary allocation/transfer of power from surplus entity to deficit entity through portal.**



## ALL India Reserve Estimation

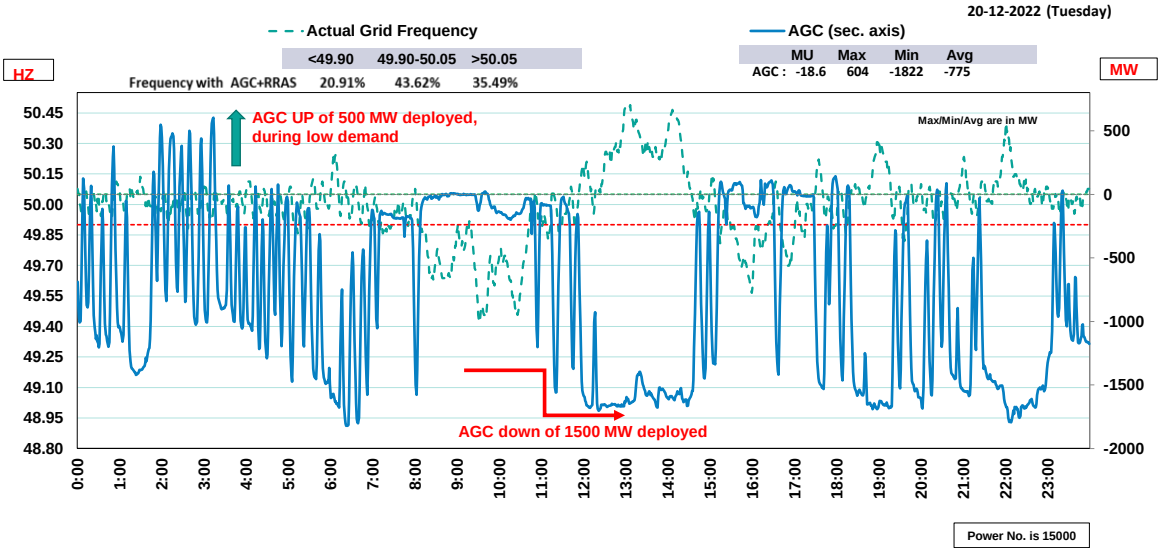
| | Quarter-Ahead ( Apr 2023 - Jun 2023) | | | | | |
|---|---|---|---|---|---|---|
| | Secondary Reserves | | | Tertiary Reserves | | |
| State/ Union Territory UT | Within in ISGS | Within state | Total | Within in ISGS | Within state | Total |
| Northern Region | 576 | 425 | 1001 | 576 | 2037 | 2612 |
| Western Region | 559 | 763 | 1322 | 559 | 2073 | 2632 |
| Southern Region | 616 | 567 | 1183 | 616 | 2132 | 2748 |
| Eastern Region | 398 | 429 | 827 | 398 | 1509 | 1907 |
| North-Eastern Region | 145 | 22 | 167 | 145 | 85 | 230 |
| All India | 2294 | 2207 | 4500 | 2294 | 7836 | 10130 |

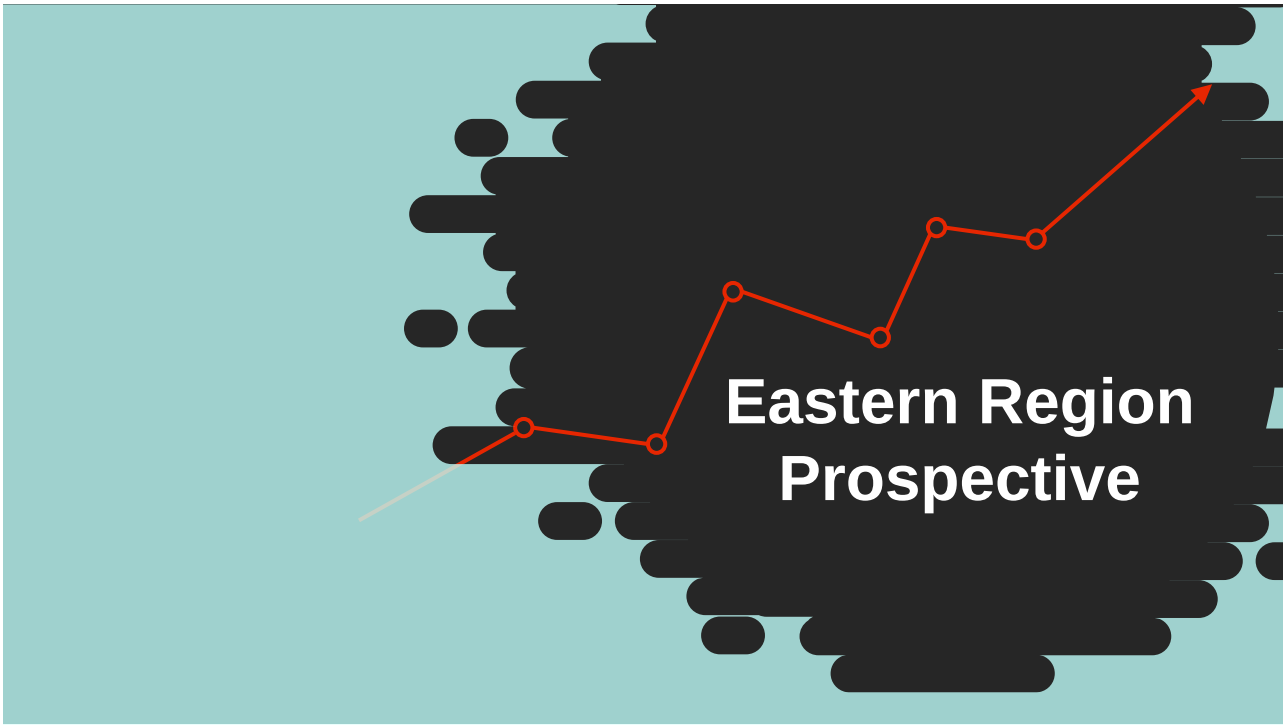
**SRAS Capacity under Eastern Region:**

| Sr.No | Plant Name | Installed Capacity | Max UP* | Max DOWN* |
|---|---|---|---|---|
| 1 | BARH-2 | 1320 | 66 | 66 |
| 2 | MPL | 1050 | 150 | 150 |
| 3 | KHSTPP-2 | 1500 | 75 | 75 |
| 4 | TEESTA V | 510 | 25.5 | 25.5 |
| 5 | RANGIT | 66 | 3.3 | 3.3 |
| 6 | NPGCL | 1980 | 99 | 99 |
| 7 | FARAKKA-III | 1000 | 50 | 50 |
| 8 | FARAKKA-II | 500 | 25 | 25 |
| 9 | MTPS STG-II | 390 | 19.5 | 19.5 |
| 10 | TALCHER -I | 1000 | 50 | 50 |
| 11 | BARH-I | 660 | 33 | 33 |
| | **Total SRAS UP/DOWN** | **9976** | **596** | **596** |

- More State generator needs to be brought under SRAS purview.
- TRAS market-based procurement to be commenced from 1st April 2023.
- Potential for Reserve-DVC ,West Bengal , Odisha , Haldia

# Insufficient Secondary Reserve





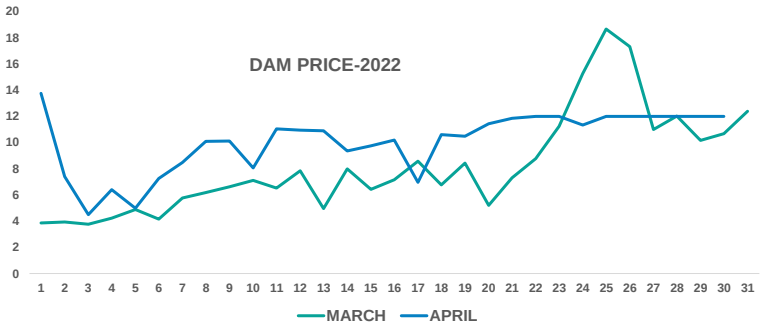

# Eastern Region perspective

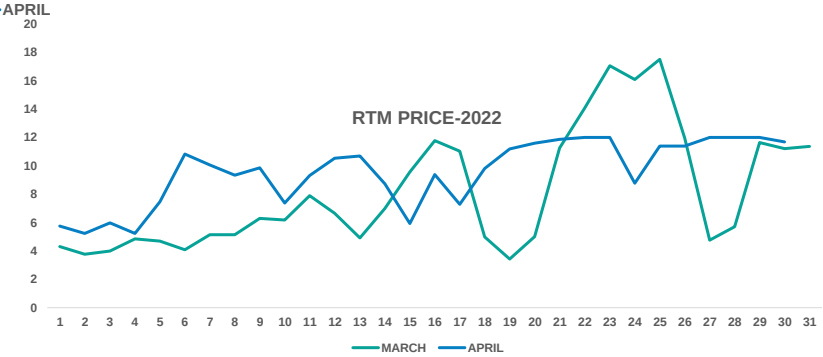
- Summer preparedness meeting held on 11th March 2023
- Expected regional peak demand of 28500 MW in the month of April 2023.

| Constituent | April-2023 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Expected Peak Demand | Own Generation | ISGS Allocation (Considering 80 % Availability) +IPP | ISGS Hydro (100 % peaking support) + Bhutan (20%) | LTA from Wind Plant (70%) | Export Commitment (if any) | Dependency on Market |
| Bihar | 6955 | 741 | 4920 | 201 | 509 | 0 | 584 |
| Jharkhand | 1800 | 415 | 704 | 78 | 210 | 0 | 393 |
| DVC | 3300 | 5738 | 407 | 63 | 0 | 2778 | 0 |
| Odisha | 6146 | 4100 | 1578 | 115 | 164 | 0 | 189* |
| West Bengal | 10450 | 6804 | 1343 | 167 | 18 | 0 | 2118** |
| Sikkim | 110 | 0 | 22 | 76*** | 0 | 0 | 12 |

*Also depends on the Unit availability at SEL or other CPPs
** Last year WB Purchased a Maximum 3155 MW with an average of 2359 MW from the market.
*** Excluding state-free power from Hydro IPPs in the state, which Sikkim avails as per requirement.

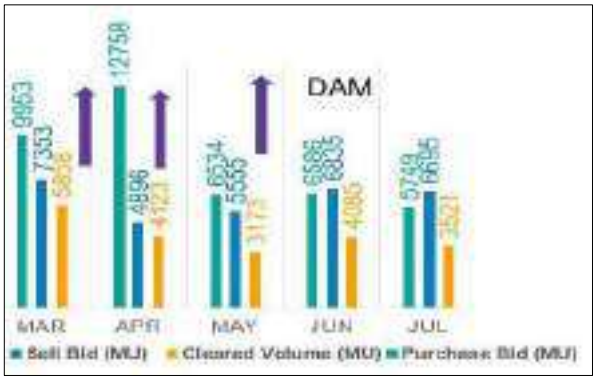
# Market Price trend in Summer

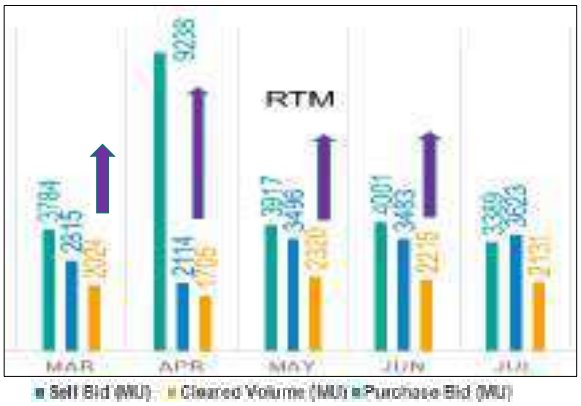



* The Commission vide order dated 1st April 2022 in Petition No. 4/SM/2022 (Suo-Moto) introduced price cap of Rs 12/kWh.

# DAM & RTM Sell & Buy Bid



# Way Forward

- ❑ **More reserve will Help in stabilizing frequency variations.**
- ❑ **Volatility in market expected , states are required to do proper planning and tie up power.**

# Thank You

**Annexure-B1.8**

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: C/CTU/Metering/2022/32** **Dated: 18/08/2022**

**To,**

ED (Asset management),
POWERGRID Corporation of India Ltd,
Plot No#2, Secto-29, Gurgaon-122001
**Kind Attn: Sh. A P Gangadharan**

**Sub: Revision of Man-day Rates to be charges to various utilities for installation of Interface Energy meters by POWERGRID on behalf of CTUIL.**

Dear Sir,

This is in reference to the agreement signed between POWERGRID and CTUIL on 09.02.2022 for POWERGRID services to carry out the procurement and installation of IEMs & accessories on behalf of CTUIL (Copy attached). As per the agreement (clause no 2.1),

***"2.1 WORK TO BE PERFORMED BY POWERGRID:***

*I. Supply / Installation of IEMs and Accessories:*

*Supply & installation of Interface Energy Meters (IEMs), along with accessories and hardware/software/AMR facility, to be carried out, for ISTS points for the purpose of energy accounting/billing as per requirement communicated by CTUIL.*

*The methodology for booking of supply/installation cost & recovery shall be followed uniformly across all regions. The cost covering supply & installation including overheads shall be recovered from all generators & ISTS licensees. In case of POWERGRID ISTS points, the cost for installation shall not be recovered from POWERGRID, as the said installation work is being carried out by POWERGRID itself. The amount shall be recovered from utilities, excluding POWERGRID, as per following.*

***Price to be recovered per IEM/DCDs (X) = IEMs & DCD per unit price as per LOA (A) + Manday Charges for installation of IEMs (B) + Inventory carrying cost including insurances (C) @ 5 % on (A) + Overhead Charges (D) @ 15 % on (A+C) – all taxes/duties at actuals.***

*The amount shall be recovered from POWERGRID as per following.*

***Price to be recovered per IEM/DCDs (X) = IEMs & DCD per unit price as per LOA (A) + Inventory carrying cost including insurances (C) @ 5 % on (A) + Overhead Charges (D) @ 15 % on (A+C) + all taxes/duties at actuals.***

***Manday Charges for installation (B): (Applicable for utilities other than POWERGRID)***

*½ Manday charges for installation of up to 2 no. IEMs per location and 01 Manday charges for Installation of 3 to 5 nos IEMs per location + Travel/transportation expenses per location round trip.*

*Present rate is as follows:*

*01 Manday Charge = Rs.36800 (Manday Charges & other expenses for outstation work), Travel/transportation expenses per location =Rs.15000/- per round trip.*

***These rates shall be revised from time to time based on the prevailing guidelines."***

In this matter, it may be noted that POWERGRID man-day charges have been revised vide IOM dtd. 23rd May 2022 (copy attached) and the revised rates are as below-

| Level | Man-day rates | |
|---|---|---|
| | In-House | Out Station |
| E7 | 18,200 | 26,000 |
| E5 | 11,900 | 17,900 |
| S3 | 7,750 | 10,700 |

However, it has been observed that Invoice are still being generated based on previous man day charges. (A copy of letter dtd 16.08.2022 issued by WR-II to M/s Adani Wind Energy Kutchh One limited is attached for your reference).

You are aware that RPCs had raised concerns regarding installation charges mentioned in the agreement and after due discussion it has been conveyed in RPC Meetings that installation charges shall be according to revised man day rates of POWERGRID considering services of E-5 level for IEM installation.

Accordingly, you are requested to instruct all concerned regional offices to consider the new man day rates of E5 level for installation of IEMs for various agencies.

Thanking you,

Yours faithfully,

Ashok Pal

**(Ashok Pal)**
**Dy Chief Operating Officer**

Copy to:

(i) **Direction (Operations)**, POWERGRID Gurgaon.

(ii) **ED (BDD)**, POWERGRID, Gurgaon.

**Annexure-B1.13**

# National Power Training Institute

**(Ministry of Power, Govt. of India)**

*Welcomes*

The Members of Eastern Region Power Committee

**23-24th March, 2023**

# CEA (Cyber Security in Power Sector) Guidelines,2021

## Article 8. Cyber Security Training

8 d) All Personnel engaged in O&M of IT & OT Systems shall mandatorily undergo courses on cyber security of Power Sector from any of the training institute designated by CEA, immediately within 90 days from the notification of CEA Guidelines on Cyber Security in Power Sector.

8e) The Responsible Entity shall ensure that none of their newly hired or the current Personnel have access to the Critical System, prior to the satisfactory completion of cyber security training programme from the Training Institutes designated in India, except in specified circumstances such as cyber crisis or an emergency.

# Cyber Security Courses

- NPTI has designed 03 courses on Cyber Security for CII including Hands on Training (in consultation with CEA )
- The courses have been approved by PSO Governing Board after incorporating comments from CERT-In, NCIIPC, IIT, VJIT and other stakeholders.
- These courses have been launched on 28th October 2021 by The Secretary, Ministry of Power, Govt. of India during inauguration of one day National Seminar on *"Increasing Cyber Resilience of the Nation"* (jointly organized by NPTI & CEA at NPTI, (CO), Faridabad).

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- Cyber Security Training and Certification Program (CSTCP) are designed for officials of Power sector utilities (Generation, Transmission & Distribution) and Load Despatch Centres.
- These courses have been categorized into:

**Basic Level CSTCP**

**Duration: 2 Weeks**

**Intermediate Level CSTCP**

**Duration: 2 Weeks**

**Advance Level CSTCP**

**Duration: 2 Weeks**

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# NPTI Actions as per CEA-MoP Cyber Security Guidelines, 2021

- Training for thirteen batches has been conducted at NPTI, Faridabad between January, 2022- 10th March, 2023.
- Till date more than 1500 power professionals have been trained from 102 various power sectors stake holders under Basic level (including more than 100 participants from different SLDC/RLDC/NLDC) have been trained PAN INDIA.
- 53 Participants attended the Intermediate Level program conducted on 16th – 27th January, 2023

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# Eastern Region Participation details

| S.No. | State/UT | Utility Name | No of Official Trained |
|---|---|---|---|
| 1 | West Bengal | West Bengal State Electricity Transmission Company Ltd. | 3 |
| 2 | West Bengal | Calcutta Electric Supply Co. Ltd. | 9 |
| 3 | West Bengal | West Bengal State Electricity Distribution Company Ltd. | 12 |
| 4 | West Bengal | Damodar Valley Corporation | 100 |
| 6 | Bihar | Bihar State Power Transmission Company Ltd. | 9 |
| 7 | Odisha | Orissa SLDC | 7 |
| 8 | Odisha | Odisha Hydro Power Corporation Ltd. | 3 |
| 9 | Odisha | Odisha Power Transmission Corporation Ltd. | 2 |
| 10 | Odisha | ORISSA POWER GENERATION CORPORATION LIMITED | 1 |
| 11 | Odisha | TP Central Odisha Distribution Limited (TPCODL) | 2 |
| 12 | Odisha | TPSODL | 2 |
| 13 | Odisha | TP WESTERN ODISHA DISTRIBUTION LIMITED | 2 |
| 14 | Jharkhand | | 0 |
| 15 | Sikkim | | 0 |

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# Tentative Date Schedule For Basic Level Program

| Batch No | Scheduled Training Program | Dates |
|---|---|---|
| Batch 15 | Basic Level Cyber Security Training and Certification Program ( SLDC-01) | 17th April to 28th April 2023 |
| Batch 16 | Basic Level Cyber Security Training and Certification Program | 15th May to 26th May 2023 |
| Batch 17 | Basic Level Cyber Security Training and Certification Program (SLDC-02) | 12th June to 23 June 2023 |
| Batch 18 | Basic Level Cyber Security Training and Certification Program | 10th July to 21st July 2023 |
| Batch 19 | Basic Level Cyber Security Training and Certification Program (SLDC-03) | 07 Aug to 18th Aug 2023 |
| Batch 20 | Basic Level Cyber Security Training and Certification Program | 04th Sep to 15th Sep 2023 |
| Batch 21 | Basic Level Cyber Security Training and Certification Program(SLDC-04) | 03rd Oct to 14th Oct 2023 |
| Batch 22 | Basic Level Cyber Security Training and Certification Program | 30th Oct to 10th Nov 2023 |
| Batch 23 | Basic Level Cyber Security Training and Certification Program(SLDC-05) | 04th Dec to 15th Dec 2023 |
| Batch 24 | Basic Level Cyber Security Training and Certification Program | 08th Jan to 20th Jan 2024 |
| Batch 25 | Basic Level Cyber Security Training and Certification Program(SLDC-06) | 05$^{2h}$ Feb to16th Feb 2024 |
| Batch 26 | Basic Level Cyber Security Training and Certification Program | 04th March to 15th Mar |

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# Tentative Date Schedule For Intermediate Level Program

| **Batch No** | **Scheduled Training Program** | **Dates** |
|---|---|---|
| Batch 02 | Intermediate Level Cyber Security Training and Certification Program | 15th May to 26th May 2023 |
| Batch 03 | Intermediate Level Cyber Security Training and Certification Program | 04th Sep to 15th Sep 2023 |
| Batch 04 | Intermediate Level Cyber Security Training and Certification Program | 22$^{2h}$ Jan to 2nd Feb 2024 |

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# Tentative Date Schedule For Advanced Level

| Batch No | Scheduled Training Program | Dates |
|---|---|---|
| Batch 01 | Advanced Level Cyber Security Training and Certification Program | 12th June to 23 June 2023 |
| Batch 02 | Advanced Level Cyber Security Training and Certification Program | 30th Oct to 10th Nov 2023 |
| Batch 03 | Advanced Level Cyber Security Training and Certification Program | 18th March to 29th March 2024 |

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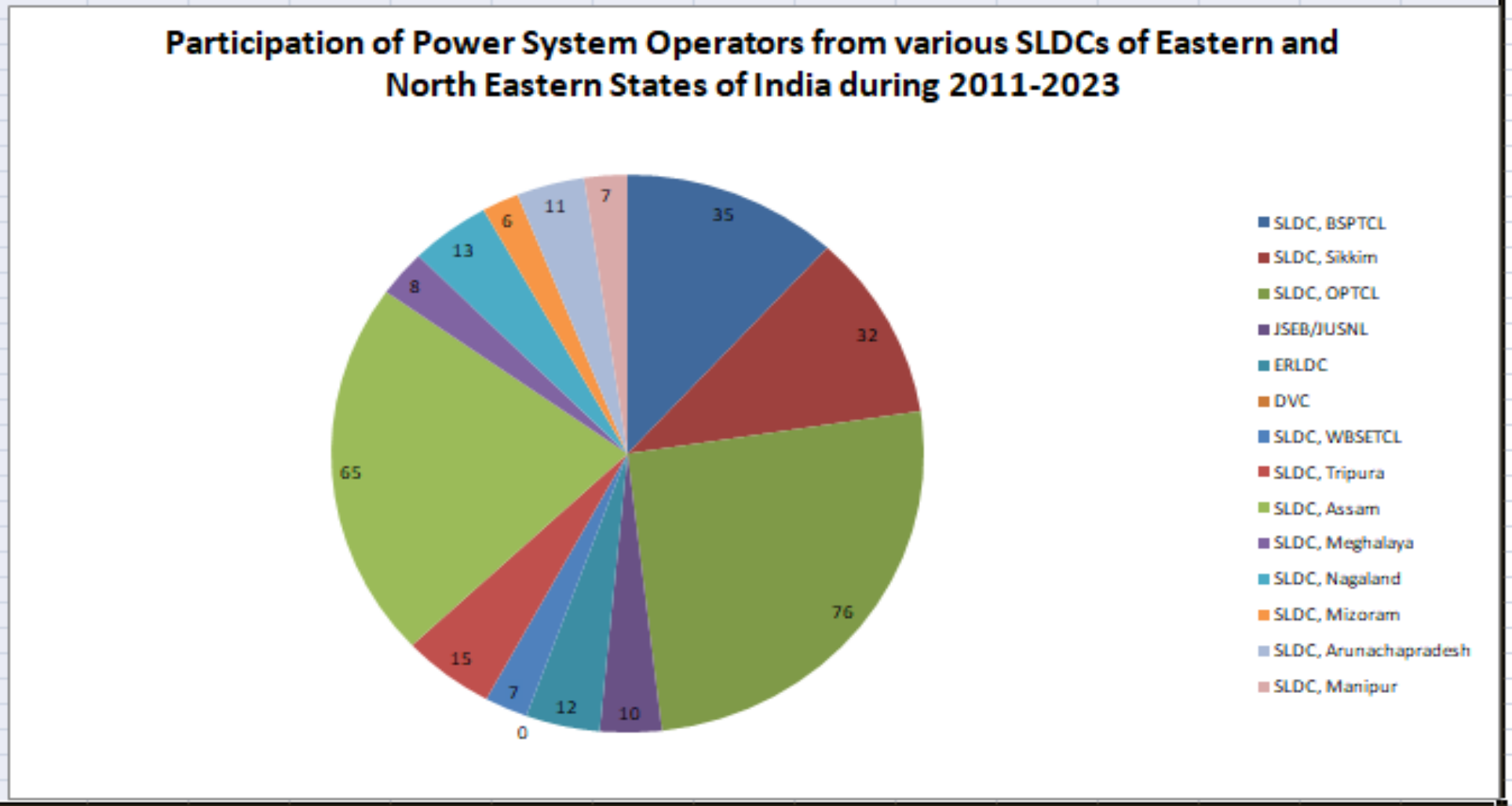
## (ii) Compliance Status of Policy directions / any other major correspondence from the Ministry

- Mandatory Certification for Personnel posted in Load Despatch Centres– As decided by Ministry of Power, Govt. of India that all Load Despatchers must be trained and certified based on their professional assignment in the Load Despatch Centre. Accordingly, NPTI has conducted Training & Certification as under:

| Level | Duration Followed by Certification Exam | No. of Programs | Total Trainees |
|---|---|---|---|
| Basic | 3 Weeks | 70 | 2100 |
| Specialist | 2 Weeks | 35 | 702 |

| Period | SLDC, BSPTCL | SLDC, Sikkim | SLDC, OPTCL | JSEB/JUSNL | ERLDC | DVC | SLDC, WBSETCL | SLDC, Tripura | SLDC, Assam | SLDC, Meghalaya | SLDC, Nagaland | SLDC, Mizoram | SLDC, Arunachapradesh | SLDC, Manipur |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2011-202 | 35 | 32 | 76 | 10 | 12 | 0 | 7 | 15 | 65 | 8 | 13 | 6 | 11 | 7 |



# Basic Level Cyber Security Training & Certification Program:

❖ Duration: Two Weeks – Theory (One Week), Hands On (One Week)

| Theory Topics | |
|---|---|
| Introduction to Cyber Security as Cyber Risk Management, | NESCOR guide to vulnerability assessment |
| Thinking like a Cyber Security Aware Operator | Authentication and Authorization |
| Network Security Fundamentals | Emerging Technology in Cyber Security |
| Network Protocols and their security Issues, | NIST Cyber Security Framework |
| Firewalls, Security Threats to Applications | Risk Assessment |
| Web Application Security Threats and Attacks, | Case Studies |
| **Hands-on Topics** | |
| Hardening Your System | Intrusion Detection Lab |
| Finding Security Flows | Deception Technology Labs |
| Network Security Lab | Organizational Security Policy Lab |

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# Intermediate Level Cyber Security Training & Certification Program

- Duration: Two Weeks – Theory (One week), Hands On (One Week)

| Theory Topics | |
|---|---|
| Risk Driven Cyber Security and Cyber Security Maturity Model | Recovery & Drills for Recovery |
| Risk Driven Protection and Detection Techniques | Detailed Risk Assessment Methodology |
| Risk Driven Response | Need for Organizational Security Policy, Policy Adoption and Policy Implementation |

| Hands-on Topics | |
|---|---|
| Lab On Malware Analysis | Network Security Lab |
| Application Security Lab | Deception Technology Labs and Organizational Security Policy Lab |

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# Advanced Level Cyber Security Training & Certification Program : (scheduled to be started from June 2023)

❖Duration: Two Weeks – Theory (One week), Hands On (One Week)

| Theory Topics | |
|---|---|
| Cyber Security & Protocol Vulnerability | VAPT |
| Standards & Practices | Vulnerability Assessment & Forensic |
| Vulnerability & Malware | ICS/SCADA Security Maturity Model |

| Hands-on Topics | |
|---|---|
| VAPT | Lessons Learned |
| Security Controls | Policy & practices |
| Securing Systems and Brainstorming Policies | Brainstorming on relevance of NIST framework in Indian context esp. For LDCs |

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# THANK YOU

**Annexure-B1.14A**

## SUMMARY OF DEVIATION CHARGE RECEIPT AND PAYMENT STATUS

**BILL UPTO 19-02-2022 (W-47 of 2022-2023)**
**Status AS ON 13.03.23**

Figures in Rs. Lakhs

| CONSTITUENTS | Net outstanding of FY 2021-22 | Receivable | Received | Payable | Paid | Outstanding for 2022-23 | Total Outstanding |
|---|---|---|---|---|---|---|---|
| BSPTCL | 0.00000 | 18,969.58019 | 5,546.03092 | 9,501.10600 | 0.00000 | 3,922.44327 | 3,922.44327 |
| JUVNL | 0.00000 | 16,784.55165 | 7,442.94875 | 2,303.59323 | 0.00000 | 7,038.00967 | 7,038.00967 |
| DVC | 0.00000 | 10,871.92847 | 11,102.34745 | 1,431.74648 | 1,833.14488 | 170.97942 | 170.97942 |
| GRIDCO | 0.00000 | 27,738.94492 | 27,866.96416 | 11,499.11604 | 11,627.13528 | 0.00000 | 0.00000 |
| WBSETCL | 0.00000 | 21,578.94507 | 21,601.81356 | 6,030.53997 | 6,053.40846 | 0.00000 | 0.00000 |
| Sikkim | 0.00000 | 1,732.72079 | 0.00000 | 923.56731 | 0.00000 | 809.15348 | 809.15348 |
| NTPC | 0.00000 | 14,083.75965 | 13,411.46868 | 1.55341 | 25.03150 | 695.76906 | 695.76906 |
| NHPC | 0.00000 | 56.62836 | 56.62836 | 1,791.97988 | 1,791.97988 | 0.00000 | 0.00000 |
| MPL | 0.00000 | 196.35635 | 195.31723 | 792.60060 | 791.56148 | 0.00000 | 0.00000 |
| APNRL | 0.00000 | 1,104.23956 | 1,070.17651 | 132.06886 | 132.06886 | 34.06305 | 34.06305 |
| CHUZACHEN | 0.00000 | 113.94497 | 113.94497 | 164.30673 | 164.30673 | 0.00000 | 0.00000 |
| NVVN-BD | 0.00000 | 407.59331 | 398.85481 | 699.22052 | 699.22052 | 8.73850 | 8.73850 |
| GMR | 0.00000 | 864.85566 | 734.51305 | 216.53274 | 216.95089 | 130.76076 | 130.76076 |
| JITPL | 0.00000 | 1,359.43040 | 1,356.56680 | 404.53298 | 401.66936 | -0.00002 | -0.00002 |
| TPTCL (Dagachu) | 0.00000 | 3,812.86457 | 3,812.68012 | 5.12748 | 5.12748 | 0.18445 | 0.18445 |
| JLHEP | 0.00000 | 1,192.39628 | 1,192.36111 | 120.91596 | 120.88079 | 0.00000 | 0.00000 |
| NVVN-NEPAL | 0.00000 | 9,290.73714 | 9,129.52078 | 1,066.76885 | 1,066.76885 | 161.21636 | 161.21636 |
| IBEUL | 112.50429 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 112.50429 |
| BRBCL | 0.00000 | 1,649.59911 | 1,602.24192 | 118.29758 | 118.29758 | 47.35719 | 47.35719 |
| PGCIL SASARAM | 0.00000 | 30.68423 | 29.34565 | 47.16932 | 47.16932 | 1.33858 | 1.33858 |
| TUL (Teesta-III) | 0.00000 | 932.32712 | 932.30340 | 233.45674 | 233.45674 | 0.00000 | 0.00000 |
| Dikchu | 0.00000 | 122.92821 | 116.53607 | 221.84279 | 222.13371 | 6.68306 | 6.68306 |
| PGCIL-Alipurduar | 0.00000 | 23.13526 | 23.13526 | 17.96622 | 17.96622 | 0.00000 | 0.00000 |
| Tashiding(THEP) | 0.00000 | 393.91452 | 392.77929 | 362.22067 | 362.22067 | 1.13523 | 1.13523 |
| OPGC | 0.00000 | 8.21880 | 8.21880 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| KBUNL | 0.00000 | 364.68275 | 364.68311 | 35.85888 | 35.85888 | -0.00036 | -0.00036 |
| NPGC | 0.00000 | 983.27857 | 983.27857 | 205.73078 | 205.73078 | 0.00000 | 0.00000 |
| NPGC-Infirm | 0.00000 | 298.01341 | 298.01341 | 1,006.41355 | 1,006.41355 | 0.00000 | 0.00000 |
| RONGNICHU | 0.00000 | 42.17384 | 42.17384 | 581.77891 | 581.77891 | 0.00000 | 0.00000 |
| BRBCL_U4_Infirm | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| NVVN Bhutan | 0.00000 | 66.25763 | 66.25763 | 158.48764 | 158.48764 | 0.00000 | 0.00000 |
| **Total** | **112.50429** | **1,35,074.69079** | **1,09,891.10421** | **40,074.50012** | **27,918.76896** | **13,027.83170** | **13,140.33599** |

## STATUS OF REACTIVE CHARGES

**BILL UPTO 05-02-2022 (W-45 of 2022-2023)**
**Status AS ON 13.03.23**

Figures in Rs. Lakhs

| Name of Parties | Receivable Amount by pool | Received Amount by pool | Payable Amount by pool | Paid Amount by pool | Outstanding Amount Receivable(+Ve) / Payable by pool(-Ve) |
|---|---|---|---|---|---|
| BSPHCL | 1,148.09546 | 378.70317 | 179.63568 | 97.12179 | 686.87840 |
| JUVNL | 1,357.33981 | 635.09377 | 0.00000 | 0.00000 | 722.24604 |
| DVC | 370.99588 | 370.99588 | 167.94224 | 167.94224 | 0.00000 |
| GRIDCO | 533.70826 | 557.39418 | 20.83056 | 44.51648 | 0.00000 |
| SIKKIM | 51.50571 | 48.00000 | 25.36720 | 21.86149 | 0.00000 |
| WBSETCL | 605.63772 | 490.74891 | 71.09216 | 40.41768 | 84.21433 |

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

# Deviation Interest Bill due to delay payment

**Annexure-B1.14B**

All figs in Rupees.

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

'- ve' Payable by ER pool

'+ ve' Receivable by ER pool

**Note: Ind-bharath interest is calculated till 29.05.2019**

**GRID CONTROLLER OF INDIA LTD.**
**(Erstwhile POSOCO)**
**National Load Despatch Centre**
**(Designated as Nodal Agency in accordance with Regulation 5 of CERC (PSDF) Regulations, 2014)**
**(PSDF-Secretariat)**

**Office Address: B-9, 1st Floor, Qutub Institutional Area, Katwaria Sarai, New Delhi - 16**
**Fax: 011-26524525, 26536901**
**Website: https://psdfind ia.in/Email psdf@posoco.in ; nldc.psdf2020@gmail.com**

**Ref No. NLDC-PSDF/27-AppCo/letter/2022-23** **Dated: 12th December 2022**

To,

As per the distribution list:

Subject: Proposals Deemed returned by the Appraisal Committee during its 27th Meeting held on 25th November 2022 due to various reasons.

S ir,

The 27th meeting of the Appraisal Committee chaired by the Chairperson, CEA, was held on 25.11.2022 at 05:00 PM 2022 in CEA, Sewa Bhawan, R.K. Puram New Delhi.

During the meeting, Appraisal Committee has directed to return 4-proposal for various reasons. The extract of the relevant portion of the approved MOM of the 27th Meeting of the approval committee is attached in Annexure-I. Accordingly, these proposals are considered as Deemed-Returned.

This is for your kind information, please.

Yours faithfully

Suhas Dambhare
General Manager (PSDF)
NLDC-Grid India

Copy to:

1. Chief Engineer (NPC), CEA
2. Executive Director (NLDC), Grid India

**As Per Distribution List:**

| Sr. No | Name of Entity | Proposal No | Address |
|---|---|---|---|
| 1 | KSEBL, Kerala | 338 | Chief Engineer (Trans) System Operation<br>Kerala State Electricity Board Ltd.<br>State Load Despatch Centre, HMT Colony PO,<br>Kalamassery- 683503, Kerala<br>Email: cesoklsy@gmail.com |
| 2 | Power Grid | 346 | General Manager<br>Power Grid Corporation of India Ltd.<br>"Saudamini" Plot No: 02, Sector-29, Gurgaon-122001, Haryana<br>Email: visha.singh@powergrid.in |
| 3 | MePTCL, Meghalaya | 289 | Chief Engineer (Transmission)<br>Meghalaya Power Transmission Corporation Ltd.<br>MePTCL, Lumjing shai, Short Round Road<br>Shillong-793001<br>Email: cetranzmeptcl@gmail.com |
| 4 | ERPC | 328 | Superintending Engineer<br>Eastern Regional Power Committee<br>14, Golf Club Road, Tallygunge,<br>Kolkatta- 700033<br>Email: shyam.kejriwal@gov.in |

**Annexure-I**

**GRID CONTROLLER OF INDIA LTD.**
**(Formerly POSOCO)**
**National Load Despatch Centre**
**(Designated as Nodal Agency in accordance with Regulation 5 of CERC (PSDF) Regulations, 2014)**
**(PSDF-Secretariat)**

**Office Address: B-9, 1st Floor, Qutub Institutional Area, Katwaria Sarai, New Delhi - 16**
**Fax: 011-26524525, 26536901**
**Website: https://psdfindia.in/. Email psdf@posoco.in ; nldc.psdf2020@gmail.com**

**Ref. No. NLDC-PSDF/ 27th Ac.Co/ 2022-23** **Dated: 12th December 2022**

To,

As per the distribution list

Subject: Minutes of twenty Seventh (27) meeting of the Appraisal Committee of the PSDF held on 25th November 2022.

Sir,

The Twenty Seventh (27th) meeting of the Appraisal Committee of the PSDF chaired by the Chairperson, CEA was held on 25th November 2022 at 05:00 PM 2022 in CEA, Sewa Bhawan, R.K. Puram New Delhi.

The Minutes of the Meeting (MOM), duly approved by the Chairman of the Appraisal Committee, is enclosed herewith.

Thanking you,

Yours faithfully,

12/12/2022

(Suhas Dambhare)
General Manager (PSDF)
NLDC-Grid India

Distribution List:

**Member of the Appraisal Committee:**

1. Chairperson, Central Electricity Authority
2. CMD, Grid-India
3. Secretary, CERC
4. Chief Engineer (OM), Ministry of Power
5. ED-NLDC, Grid India. Member Secretary of the Appraisal Committee

**Co-Opted Members**

1. Member (GO&D), CEA
2. Chief Engineer (NPC), CEA
3. GM (PSDF), NLDC-Grid India
4. Director (NPC), CEA

| | | | | | | |
|---|---|---|---|---|---|---|
| | | avoid overloading of 220kV Nagarjunasagar- Chalalurthy line during full generation at Nagarjunsagar. (Proposal No: 315) | | | | |
| 8 | JUSNL, Jharkhand | Implementation of SAMAST (Scheduling, Accounting, Metering and Settlement of Transactions in Electricity) in JUSNL. [Proposal No: 266]. | 215.89 | 11.91 | 10.72 | 90 % |
| **Total** | | | **710.87** | **333.08** | **243.67** | |

The Examination Report along with the accepted cost estimates of the above recommended Projects for funding through PSDF are enclosed in ***Annexure II.***

**3.0 Proposals proposed for deemed return:**

**3.1 Proposals recommended for deemed return by TESG**

TESG has recommended four (4) proposals for deemed return. The summary of proposals and related extracts from the MOMs of relevant TESG meetings of these proposals are given below:

| Sr. No | Entity Name | Proposal Name (Proposal No) | Estimated Cost Rs. Crore | Observations and Recommendations of TESG |
|---|---|---|---|---|
| 1 | KSEBL | Upgradation / Replacement of SCADA/EMS system at Main and Backup Control Centres of Kerala-SLDC (338). | 70.25 | TESG intimated to KSEBL that at present, TESG don't have any directions for the consideration of the SCADA at present. Hence, this DPR may be considered as deemed return. |
| 2 | POWERGRID | Establishment of State-of-the-Art Unified Centralized Network UNMS for Southern Region ISTS and State Utility Communication Network (346). | 76.20 | TESG informed PGCIL that in the 18th meeting of the Monitoring Committee held on 26.07.2022, the proposal for funding the UNMS projects through PSDF was not accepted. **Therefore, the project is considered as deemed** |

| | | | | |
|---|---|---|---|---|
| | | | | **returned.** |
| 3 | MePTCL, Maghalaya | Up-gradation and Integration of Remote Terminal Units (RTU) for improvement of Real Time Telemetry status of Sub Station in Meghalaya (289). | 2.55 | TESG accepted the request of entity for dropping the proposal and **requested to Nodal agency to put up the same to next Appraisal Committee for consideration as deemed return.** |
| 4 | ERPC | Procurement of additional licenses of Protection Setting Calculation Tool Software (MiP-PSCT) and Updation & Support Service for web-based Protection Database of Eastern Regional Grid (328). | 9.735 | TESG is in view that even though the number of substations have been increased in the Eastern Region but no new entity has been added in the Eastern Region. Therefore, keeping in view that the study is being done at system study wings at corporate/Planning division of the utilities not at substation level and no new addition of any entity in Eastern region, this Proposal of the ERPC is proposed for the **deemed return.** |
| **Total** | | | **158.735** | |

**The Appraisal committee discussed and accepted the recommendations of the TESG for consideration of the deemed return of the above four proposals. The Appraisal Committee advised NLDC to intimate the above decision to the respective project entities.**

### 3.2 <u>Proposals recommended for deemed return because of Long pending inputs:</u>

The Monitoring Committee during its 18th meeting held on 26-07-2022 has directed TESG to give a notice period of two months to all the project entities whose inputs are pending for more than 6 months to submit the inputs. In case no response is received from the project entities, the project may be considered as a deemed return. In line with the above decision, (NPC) CEA vide its letter dated 11-08-2022 sent a final two-month notice to the 11 project Entities. Out of the 11 project entities, the following 7 entities have not yet responded and 1 entity has requested to drop their proposal through a letter. Hence, following eight (8) proposals are proposed for deemed return:

Annexure-B1.16

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

सेवा में / To,

Sh. Sandip Pal,
Chief Engineer,
SPM Section, DVC,
Kolkata-700054
Email:
"sandip.pal@dvc.gov.in"

**विषय/Subject:** Renovation & Augmentation of DVC T&D system (Phase-I) for the time period 2023-26. – reg.

**सन्दर्भ /Reference :**(i) ERPC letter no. ERPC/MS/TP/2022/1096 dated 23.11.2022
(ii) DVC email dated 27.12.2022
(iii) DVC email dated 05.01.2023

महोदय /Sir,

This is with reference to ERPC letter dated 23.11.2022 forwarding therewith the DVC proposal for Renovation and Augmentation (R&A) of T&D systems and subsequent letter of DVC dated 27.12.2022 submitting the DPR for carrying out Renovation and Augmentation (R&A) of DVC's T&D systems- Phase-I. The proposal consisted of following two parts:

**Part A:** R&A of control & Protection system and replacement of age-old equipments of substations and Power House Switchyard. In this proposal, 14 substations were proposed for R&A which have served for more than 35 years.

**Part B:** Augmentation of Transmission lines with Reconductoring with HTLS & Conventional Conductor alongwith strengthening of its towers wherever applicable. In this proposal, sixty-six (66) lines were considered for reconductoring out of which twenty-six (26) are transmission lines of 132 kV and 220 kV level while forty (40) are distribution lines.

2. Proposals regarding R&A of transmission system were examined and it is found to be in generally order. List of transmission system for R&A is enclosed at **Annexure-I**. However, following conditions/suggestions need to be incorporated by DVC in the final DPR:

   (a) The construction/ reconductoring/ augmentation of the subject transmission lines & substations/ Switchyards shall be done in accordance with CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations 2022, as amended from time to time. All electrical clearances including minimum live metal clearance, ground clearance and minimum mid span separation between earth wire and conductor shall be as per Central Electricity Authority (Measures Relating to Safety & Electric Supply) Regulations as amended from time to time and as per relevant IS.

(b) For the execution of projects, the Public procurement (Preference to Make in India) order as amended up to date shall be followed strictly.

(c) In clause No. 1.2 (i), under Brief Scope of Work, at page 129, a specific restriction to use of GAP type HTLS conductor has been placed in the DPR. It is suggested that specific restriction to particular type of HTLS conductor shall not be placed in the DPR. It is informed that Central Electricity Authority had formulated a guideline titled "Guidelines for Rationalized Use of High Performance Conductors" which comprehensively covers the various aspects of High Performance Conductors and attempts to provide technical insight to the utilities and to promote judicious use of these conductors. It is suggested to follow the aforementioned guidelines in letter and spirit for selection of High Performance Conductors. These guidelines are available on CEA website at following link:

https://cea.nic.in/old/reports/others/ps/psetd/guidelines_conductors.pdf.

(d) It is suggested to ensure that all the transmission lines for which reconductoring has been proposed & life of the line is more than 35 years, health assessment of the associated towers shall be carried out to assess the healthiness of the lines.

(e) It may be ensured that all the terminal equipment of substations at both ends of the transmission lines, considered for increased capacity, have sufficient capacity to cater to the increased power transfer after re-conductoring.

(f) In the system studies carried out for the 2026-27 timeframe, considering peak demand of DVC, it was observed that four lines are not 'N-1' compliant. However, since the lines are older than 35 years and face frequent trippings and breakdowns, the reconductoring may be considered.

(g) We have no objection on the proposals of replacement of shield wire/OPGW.

3. Proposal regarding distribution system (enclosed at **Annexure-II**) were also found to be generally in order subject to the following conditions:

   (a) It must be ensured by DVC to maintain sufficient installation capacity in upstream network i.e., sub-stations (220/132/33 kV) and 220/132 kV lines to meet the expected demand after re-conductoring of the proposed 40 nos. of 33 kV lines with new HTLS/AAAC conductors.

4. Forest/environment clearance, other statutory clearances, as required, from concerned competent authorities, wherever necessary, should be obtained before implementation of the work. There should not be any duplicacy of work with any Government of India/State Government/any other scheme.

भवदीय/Yours faithfully,

25.1.2023

(बी. एस. बैरवा / B.S.Bairwa)
निदेशक/ Director

Annexure-I

Following Transmission system is proposed for R&A by DVC due to service more than 35 years:

**A. Substation-** Renovation & Augmentation of Control & Protection System and Replacement of Ageold Equipments of Substations & Power House Switchyard**:**

| Sl. No. | Substation/Power House S/y | Year of Commissioning | Year in Service |
|---|---|---|---|
| 1 | 132KV/33KV/25KV Kumardhubi S/s | 1961 | 61 |
| 2 | 132KV/25KV Ramkanali S/s | 1960 | 62 |
| 3 | 132KV/33KV Purulia S/s | 1961 | 61 |
| 4 | 132KV/33KV Mosabani S/s | 1961 | 61 |
| 5 | 132KV/33KV Putki S/s | 1954 | 68 |
| 6 | 132KV/33KV/25KV Patherdih S/s | 1968 | 54 |
| 7 | 132KV/33KV Barhi S/s | 1962 | 60 |
| 8 | 132KV/33KV/25KV Koderma S/s | 1962 | 60 |
| 9 | 132KV/33KV Kalipahari S/s | 1955 | 67 |
| 10 | 132KV/33KV ASP (Durgapur) S/s | 1956 | 66 |
| 11 | 132KV/33KV Gola S/s | 1955 | 67 |
| 12 | 220/132/33KV Switchyard associated with Durgapur TPS | 1961 | 61 |
| 13 | 220/132/33KV Switchyard associated with Chandrapura TPS A | 1964 | 58 |
| 14 | 220/132/33KV Switchyard associated with Bokaro TPS B | 1987 | 35 |

**B. Reconductoring of 220 kV and 132 kV lines of DVC with HTLS conductor**

| Sl. No. | Name of Line | Year of Commissioning | Existing conductor | Proposed conductor | Line length |
|---|---|---|---|---|---|
| 1 | L#201&202 (220KV D/C CTPS-Kalyaneshwari upto RTPS only 75km) | 1987 | ACSR Zebra | HTLS | 75 |
| 2 | L#211&212 (220KV D/C DTPS-DSTPS) | 1994 | ACSR Zebra | HTLS | 12 |
| 3 | L#2&3 (132KV D/C Jamshedpur-Mosabani) | 1955 | ACSR Lark | HTLS | 39.3 |

| | | | | | |
|---|---|---|---|---|---|
| 4 | L#14&15 (132KV D/C MHS-Sindri) | 1969 | AAAC Panther | HTLS | 56.4 |
| 5 | L#16 (132KV S/C MHS-Kumardhubi) | 1961 | ACSR Lark | HTLS | 4.9 |
| 6 | L#17 (132KV S/C MHS-PHS) | 1962 | ACSR Lark | HTLS | 14.4 |
| 7 | L#20&21 (132KV D/C DTPS-Kalipahari) | 1961 | ACSR Lark | HTLS | 40.4 |
| 8 | L#22&23 (132KV D/C Burdwan-Belmuri) | 1957 | ACSR Lark | HTLS | 51.5 |
| 9 | L#24&25 (132KV D/C Belmuri-Howrah) | 1957 | ACSR Lark | HTLS | 49.3 |
| 10 | L#43&44 (132KV D/C KTPS-Barhi) | 1962 | ACSR LARK | HTLS | 21.2 |
| 11 | L#45&46 (132KV D/C PHS-Ramkanali) | 1961 | ACSR Lark | HTLS | 15 |
| 12 | L#61 & L#90 (132KV S/C Ramkanali-Jamuria) | 1974 | ACSR Lark | HTLS | 34.7 |
| 13 | L#70 (132KV S/C PHS-Kumardhubi) | 1961 | ACSR Lark | HTLS | 9.6 |
| 14 | L#93&94 (132KV D/C Barhi-Hazaribag) | 1978 | ACSR Lark | HTLS | 36 |
| 15 | L#101&102 (132KV D/C KTPS-Koderma) | 1962 | AAAC Panther | HTLS | 19.3 |

**C. Reconductoring of 132 kV lines of DVC with conventional conductor**

| **Sl. No.** | **Name of Line** | **Year of Commissioning** | **Existing conductor** | **Proposed conductor** | **Line length** |
|---|---|---|---|---|---|
| 1 | L#1&105 (132KV D/C Jamshedpur-Chandil) | 1954 | ACSR Lark | AAAC Panther | 43.7 |
| 2 | L#5&106 (132KV D/C Chandil-Gola) | 1955 | ACSR Lark | AAAC Panther | 99 |

| | | | | | |
|---|---|---|---|---|---|
| 3 | L#6&7 (132KV D/C CTPS-Gola) | 1955 | ACSR Lark | AAAC Panther | 63.3 |
| 4 | L#18&19 (132KV D/C Kalyaneshwari-Kalipahari) | 1957 | ACSR Lark | AAAC Panther | 27.3 |
| 5 | L#26&27 (132KV D/C Howrah-Kolaghat) | 1959 | ACSR Lark | AAAC Panther | 61.6 |
| 6 | L#39&40 (132KV D/C Jamshedpur-Purulia) | 1961 | ACSR Lark | AAAC Panther | 88.4 |
| 7 | L#55&56 (132KV D/C Gola-Ramgarh) | 1956 | ACSR Lark | AAAC Panther | 25.3 |
| 8 | L#58&59 (132KV D/C CTPS-Purulia) | 1961 | ACSR Lark | AAAC Panther | 56 |
| 9 | L#71 & 72 (132KV S/C Kharagpur - Mosaboni) | 1957 | ACSR Lark | AAAC Panther | 93.7 |
| 10 | L#73 & 74 (132KV S/C Kharagpur - Kolaghat) | 1959 | ACSR Lark | AAAC Panther | 69.2 |
| 11 | L#75&76 (132KV D/C DTPS-Burdwan partly 40km) | 1956 | ACSR Lark | AAAC Panther | 40 |

**D. Replacement of Shield Wire**

| **Sl. No.** | **Name of Line** | **Year of Commissioning** | **Existing Earthwire** | **Proposed Earthwire** | **Line length** |
|---|---|---|---|---|---|
| 1 | L-213,214 (220KV D/C Jamshedpur-Bokaro) | 1985 | EW | OPGW | 154 |
| 2 | L#201&202 (220KV D/C CTPS-Kalyaneshwari including RTPS LILO) | 1987 | EW | OPGW | 160 |
| 3 | L#211&212 (220 KV D/C DSTPS LILO portion only) | 2021 | EW | OPGW | 4 |
| 4 | L-113,114 (132KV D/C Dhanbad-Pathardih) | 2013 | EW | OPGW | 35 |

| | | | | | |
|---|---|---|---|---|---|
| 5 | L-13 (132KV D/C Putki-Patherdih) | 1954 | EW | EW | 23 |
| 6 | L-28,29 (132KV D/C Barhi-Biharsharif) | 1959 | EW | EW | 76 |
| 7 | L-35,36 (132KV D/C CTPS-Putki) | 1960 | EW | EW | 29 |

Annexure-II

Following Distribution system is proposed for R&A by DVC due to service more than 35 years:

**A. Reconductoring of 33 kV lines of DVC with HTLS conductor equivalent to Dog:**

| Sl No. | GOMDs: | Line Name/Line No | Year of commissioning | Conductor Type existing | Proposed Conductor | L L (KM) |
|---|---|---|---|---|---|---|
| 1 | GOMD-II | PHS- MKD # 1 & 2 | 1970 | AAAC Dog | HTLS DOG | 15 |
| 2 | GOMD-II | Mugma # 01 & 02 | 1970 | ACSR Dog | HTLS DOG | 7.5 |
| 3 | GOMD-IV | Putki-Godhar Bhuli Line | 1970 | AAAC Dog | HTLS DOG | 12 |
| 4 | GOMD-IV | Patherdih-Govindpur | 1977 | AAAC Dog | HTLS DOG | 20 |
| 5 | GOMD-IV | for Golakdih Loop-In Loop-out at Loc. No-4 and | 1977 | AAAC Dog | HTLS DOG | 4.4 |
| 6 | GOMD-IV | for Koylanogar | 1977 | AAAC Dog | HTLS DOG | 1.1 |
| 7 | GOMD-V | Tilaya no-1 | 1955 | ACSR Dog | HTLS DOG | 9.6 |
| 8 | GOMD-VII | Kathara-1 | 1973 | ACSR Dog | HTLS DOG | 7 |
| 9 | GOMD-VII | Kathara-2 | 1973 | ACSR Dog | HTLS DOG | 7 |
| 10 | GOMD-VII | Kargali-1 | 1975 | ACSR Dog | HTLS DOG | 19 |
| 11 | GOMD-VII | Kargali-2 | 1975 | ACSR Dog | HTLS DOG | 19 |
| 12 | GOMD-VII | Giddi-1 & 2 | 1977 | ACSR Dog | HTLS DOG | 18 |

**B. Reconductoring of 33 kV lines of DVC with HTLS conductor equivalent to Panther:**

| Sl No. | GOMDs: | Line Name/Line No. | Year of commissioning | Conductor Type existing | Proposed Conductor | L L (KM) |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | GOMD-IV | Patherdih-Sudamdih | 1982 | ACSR Lark | HTLS PANTHER | 4.6 |
| 2 | GOMD-IV | Sudamdih-Jealgora | 1975 | ACSR Lark | HTLS PANTHER | 6.2 |
| 3 | GOMD-IV | CTPS-Madhuban D/C | 1980 | ACSR Lark | HTLS PANTHER | 16 |
| 4 | GOMD-VI | Bamunara Fdr# 1&2 | 1996 | ACSR Panther | HTLS PANTHER | 40 |
| 5 | GOMD-VII | West Bokaro-1 | 1972 | ACSR Dog | HTLS PANTHER | 19 |

**C. Reconductoring of 33 kV lines of DVC with AAAC Dog:**

| Sl No. | GOMDs: | Line No | Year of commissioning | Conductor Type existing | Proposed Conductor | L L (KM) |
|---|---|---|---|---|---|---|
| 1 | GOMD-II | CLW # 01 & 02 | 1960 | AAAC Dog | AAAC Dog | 15 |
| 2 | GOMD-II | Dendua Line | 1960 | ACSR Dog | AAAC Dog | 4.5 |
| 3 | GOMD-II | CLW # 03 | 1960 | AAAC Dog | AAAC Dog | 13 |
| 4 | GOMD-II | Kulti #01 & 02 | 1970 | AAAC Dog | AAAC Dog | 9.5 |
| 5 | GOMD-II | Dish # 01 & 02 | 1970 | ACSR Dog | AAAC Dog | 9.3 |
| 6 | GOMD-II | Dish # 03 | 1970 | ACSR Dog | AAAC Dog | 11 |
| 7 | GOMD-II | KMDB # 01 & 02 | 1970 | ACSR Dog | AAAC Dog | 1 |
| 8 | GOMD-II | KMDB-BCCL | 1970 | ACSR Dog | AAAC Dog | 2.5 |
| 9 | GOMD-II | KMDB - NATRAJ | 1970 | ACSR Dog | AAAC Dog | 3 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 10 | GOMD-IV | Putki-Jamadoba Fdr # 1 & 2 | 1971 | AAAC Dog | AAAC Dog | 7.2 |
| 11 | GOMD-IV | Putki-Sendra Bansjora Fdr # 1 & 2 | 1983 | AAAC Dog | AAAC Dog | 4.3 |
| 12 | GOMD-IV | Moonidih Fdr # 1 & 2 | 1978 | AAAC Dog | AAAC Dog | 3.1 |
| 13 | GOMD-IV | South-Loyabad Fdr | 1983 | AAAC Dog | AAAC Dog | 2.5 |
| 14 | GOMD-IV | Paterdih-Santaldih 1&2 | 1972 | AAAC Dog | AAAC Dog | 4.6 |
| 15 | GOMD-IV | Patherdih-digwadih & Tisco Jamadoba | 1968 | AAAC Dog | AAAC Dog | 11 |
| 16 | GOMD-V | DVC KODERMA-JBVNL KODERMA | 1961 | ACSR Dog | AAAC Dog | 9.5 |
| 17 | GOMD-VI | LPR # 1 & 2 | 1956 | ACSR Dog | AAAC Dog | 24 |
| 18 | GOMD-VI | LPR # 3 & 4 | 1968 | ACSR Dog | AAAC Dog | 24 |
| 19 | GOMD-VI | SBR # 1 # 2 | 1955 | ACSR Dog | AAAC Dog | 10 |

**D. Reconductoring of 33KV lines of DVC with AAAC Panther**

| Sl No. | GOMDs: | Line No | Year of commissioning | Conductor Type existing | Proposed Conductor | L L (KM) |
|---|---|---|---|---|---|---|
| 1 | GOMD-IV | Katras Fdr # 1 | 1971 | ACSR Lark | AAAC panther | 8 |
| 2 | GOMD-IV | Katras Fdr # 2 | 1971 | ACSR Lark | AAAC panther | 5.2 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | GOMD-IV | Bhelatand Katras | 1980 | ACSR Lark | AAAC panther | 4.2 |
| 4 | GOMD-IV | CTPS-Dugdha BCCL | 1979 | ACSR Lark | AAAC panther | 5.8 |

Annexure-B1.16A

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

सेवा में / To,

संलग्न सूची अनुसार / As per attached list

**विषय / Subject: Constitution of Standing Committee for ensuring coordinated planning and development of Inter-State and intra-state transmission network.**

महोदया/ महोदय /Madam/Sir,

1. Section 73 of Electricity Act, 2003, provides that CEA shall formulate short-term and perspective plans for development of the electricity system and co- ordinate the activities of the planning agencies for the optimal utilization of resources to subserve the interests of the national economy and to provide reliable and affordable electricity for all consumers.

2. The Electricity (Transmission System Planning, Development and Recovery of Inter-State Transmission Charges) Rules, 2021, notified by Ministry of Power on 1st October 2021, inter-alia provides that;

   *"3(1) The Central Electricity Authority shall draw up short term plan every year on rolling basis for upto next five years and perspective plan every alternate year on rolling basis for next ten years for development of the electricity system and co-ordinate the activities of the planning agencies for the optimal utilization of resources to subserve the interests of the national economy and to provide reliable and affordable electricity in accordance with section 73 of the Act.*

   *3(2) The Central Electricity Authority shall also draw up the perspective plan for development of transmission system after consultation with all the relevant stakeholders such as, Central Transmission Utility, State Transmission Utilities, System Operators, generating and distribution companies, industry associations and the State Governments, etc., and after assessing the rate of growth in demand as well as the growth of generation in different areas of country.*

3. For preparation of short term and perspective plan and for coordinating the activities of planning agencies, five number of regional standing committees namely "**Standing Committee on Short Term & Perspective Power System Planning (SCSTPPSP)**", one for each region is being constituted.

4. Constitution and Terms of Reference (ToR) of the Standing Committee on Short Term & Perspective Power System Planning are as under.

**A. Standing Committee on Short Term & Perspective Power System Planning – Northern Region (SCSTPPSP-NR)**

| | | |
|---|---|---|
| 1. | Member(Power System), Central Electricity Authority (CEA) | Chairperson |
| 2. | Chief Operating Officer, CTUIL | Member |
| 3. | Director(System Operation), POSOCO | Member |
| 4. | Heads of State Transmission Utilities (STUs)/Electricity Departments of UT of Jammu & Kashmir, UT of Ladakh, Himachal Pradesh, Punjab, Haryana, Rajasthan, Delhi, Uttar Pradesh, Uttarakhand, UT of Chandigarh | Member |
| 5. | Member Secretary of Northern Regional Power Committee | Member |
| 6. | CMD/ MD/ Chairman of NTPC, NHPC, SECI, SJVNL, NPCIL, NLC, BBMB | Member |
| 7. | Chief Engineer(PSPA-I/PSPA-II), Central Electricity Authority | Member & Convenor |

**B. Standing Committee on Short Term & Perspective Power System Planning-Western Region (SCSTPPSP-WR)**

| | | |
|---|---|---|
| 1. | Member(Power System), Central Electricity Authority (CEA) | Chairperson |
| 2. | Chief Operating Officer, CTUIL | Member |
| 3. | Director(System Operation), POSOCO | Member |
| 4. | Heads of State Transmission Utilities (STUs)/Electricity Departments of Gujarat, Madhya Pradesh, Chhattisgarh, Maharashtra, Goa, UT of Daman & Diu, UT of Dadra & Nagar Haveli | Member |
| 5. | Member Secretary of Western Regional Power Committee | Member |
| 6. | CMD/ MD/ Chairman of NTPC, SECI, NPCIL, NLC | Member |
| 7. | Chief Engineer(PSPA-I/PSPA-II), Central Electricity Authority | Member & Convenor |

**C. Standing Committee on Short Term & Perspective Power System Planning – Southern Region (SCSTPPSP-SR)**

| | | |
|---|---|---|
| 1. | Member(Power System), Central Electricity Authority (CEA) | Chairperson |
| 2. | Chief Operating Officer, CTUIL | Member |
| 3. | Director(System Operation), POSOCO | Member |
| 4. | Heads of State Transmission Utilities (STUs) of Telangana, Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, UT of Puducherry, UT of Lakshadweep | Member |
| 5. | Member Secretary of Southern Regional Power Committee | Member |
| 6. | CMD/ MD/ Chairman of NTPC, SECI, NPCIL, NLC | Member |
| 7. | Chief Engineer(PSPA-I/PSPA-II), Central Electricity Authority | Member & Convenor |

**D. Standing Committee on Short Term & Perspective Power System Planning – Eastern Region (SCSTPPSP-ER)**

| | | |
|---|---|---|
| 1. | Member(Power System), Central Electricity Authority (CEA) | Chairperson |

| | | |
|---|---|---|
| 2. | Chief Operating Officer, CTUIL | Member |
| 3. | Director(System Operation), POSOCO | Member |
| 4. | Heads of State Transmission Utilities (STUs) of Bihar, Jharkhand, West Bengal, Odisha, Sikkim, UT of Andaman & Nicobar Islands | Member |
| 5. | Member Secretary of Eastern Regional Power Committee | Member |
| 6. | CMD/ MD/ Chairman of NTPC, NHPC, SECI, DVC | Member |
| 7. | Chief Engineer(PSPA-I/PSPA-II), Central Electricity Authority | Member & Convenor |

**E. Standing Committee on Short Term & Perspective Power System Planning-North Eastern Region (SCSTPPSP-NER)**

| | | |
|---|---|---|
| 1. | Member(Power System), Central Electricity Authority (CEA) | Chairperson |
| 2. | Chief Operating Officer, CTUIL | Member |
| 3. | Director(System Operation), POSOCO | Member |
| 4. | Heads of State Transmission Utilities (STUs)/Electricity Departments of Assam, Meghalaya, Nagaland, Arunachal Pradesh, Tripura, Manipur, Mizoram | Member |
| 5. | Member Secretary of North Eastern Regional Power Committee | Member |
| 6. | CMD/ MD/ Chairman of NTPC, NHPC, SECI | Member |
| 7. | Chief Engineer(PSPA-I/PSPA-II), Central Electricity Authority | Member & Convenor |

**5. ToR of the above committees:**

(i) Review the existing and under implementation intra-state and inter-state transmission system in the region.
(ii) Review the operational constraints faced by the system operators in the region.
(iii) Examination of import/export requirement of each State, UT and Region through the ISTS network for the next 5-10 years.
(iv) Examination of new ISTS proposals and proposals from STUs/Electricity Departments for augmentation of intra-state network; assess the transmission system requirement in the near, medium & long term (up to 10 years or more) for each state, UT and region and draw up the transmission schemes to meet these requirements.
(v) Examine the associated transmission system for generating stations.
(vi) Review the status of Connectivity/LTA/GNA granted by CTUIL.

**6.** The Committees may meet at least once in six months, or as per requirement. Joint meeting of Regional committees may be called, if required.

**7.** Based on deliberations in the meetings of the committees, CEA shall prepare the short term and perspective transmission plan on rolling basis.

भवदीय/Yours faithfully,

25.10.2022

(ईशान शरण / Ishan Sharan)
मुख्य अभियंता/ Chief Engineer

## List of addresses

| Sl. No. | Name/ Designation/ Address | e-mail address |
|---|---|---|
| 1. | Member Secretary, NRPC, 18-A Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai, New Delhi - 110016 | ms-nrpc@nic.in |
| 2. | Development Commissioner (Power), JKPDD, Jehangir Complex, Exhibition Grounds, Srinagar | dcpjkpdd@yahoo.com; cesopdd@rediffmail.com; dosokashmir@rediffmail.com; cepdladakh@gmail.com |
| 3. | Director (PP&D) RVPNL, 3rd Floor, Room no 330, Vidhyut Bhawan, Janpath, Jaipur-302005. | cmd.rvpn@gmail.com; dir.tech@rvpn.co.in |
| 4. | Director (Technical) HVPNL Shakti Bhawan, Sector-6 Panchkula-134109 | md@hvpn.gov.in; ceplg@hvpn.org.in |
| 5. | Director (Technical), Punjab State Transmission Corporation Ltd. (PSTCL) Head Office The Mall, Patiala -147001 | cmd@pstcl.org; dir-tech@pstcl.org; se-planning@pstcl.org; ce-tl@pstcl.org |
| 6. | Managing Director, HPPTCL, Barowalias, Khalini Shimla-171002 Fax-0177-2623415 | md.hpptcl@gmail.com; directorpc@hpptcl.in; gmcd@hpptcl.in; sehpsldc@gmail.com |
| 7. | Chief Engineer (Operation) Ministry of Power, UT Secretariat, Sector-9 D Chandigarh - 161009 | seelecty@gmail.com |
| 8. | Director (W &P) UPPTCL, Shakti Bhawan Extn, 3rd floor, 14, Ashok Marg, Lucknow - 226 001 | cmd@upptcl.org ; md@upptcl.org; directer_project@upptcl.org; cecmut@upptcl.org; setppss1@gmail.com; |
| 9. | Director (Projects), PTCUL, Vidhyut Bhawan, Near ISBT Crossing, Saharanpur Road, Majra, Dehradaun- 248002 | md.ptcul@rediffmail.com; Director_Project@ptcul.org |
| 10. | Managing Director, DTL, New Delhi-110002 | md@dtl.gov.in; dgmplanning.dtl@gmail.com; gmplanningdtl2020@gmail.com; dgmplanning.dtl2016@gmail.com |
| | | |
| 11. | Member Secretary, WRPC, F-3, MIDC Area, Andheri (East), Mumbai – 400093 | ms-wrpc@nic.in |
| 12. | Chief Electrical Engineer, Vidyut Bhavan, 3rd Floor, Panaji, Goa – 403001 | cee-elec.goa@nic.in |
| 13. | Managing Director, GETCO, Sardar Patel Vidyut Bhawan, Race Course, Vadodara-390007 | md.getco@gebmail.com; Stu.getco@gebmail.com; desystem@gebmail.com; stu.getco@gmail.com |
| 14. | Managing Director, MPPTCL, Block no -2, Shakti Bhawan, Rampur, Jabalpur – 482008 (M.P) | ce.pnd@mptransco.nic.in; cetc1957@yahoo.com; ceps321@yahoo.com; ceplmpptcl@yahoo.com |

| | | |
|---|---|---|
| 15. | Chairman & Managing Director, MSETCL, Prakashganga, Plot No.C-19, E-Block, Bandra-Kurla Complex, Bandra (E), Mumbai – 400051 | md@mahatransco.in; CESTU@mahatransco.in; cecm@mahatransco.in; cedcm.co@gmail.com |
| 16. | Secretary (Power), Administration of Daman & Diu (U.T.), Fort Area, Moti Daman-396220 | elec-dmn-dd@nic.in |
| 17. | Secretary (Power), UT of Dadra & Nagar Haveli, Secretariat, Amli, Silvassa – 396230 | bb.dnhpdcl@gmail.com; trans.dnh@gmail.com; eeelectdnh@rediffmail.com |
| 18. | Managing Director, CSPTCL, Dangania, Raipur (CG)-492013 | mdtransco@cseb.gov.in; mdtransco@cspc.co.in; cepnp.csptcl@cspc.co.in |
| | | |
| 19. | Member Secretary, Southern Region Power Committee, 29, Race Course Cross Road, Bengaluru- 560 009 | mssrpc-ka@nic.in |
| 20. | Managing Director, Karnataka Power Transmission Corp. Ltd., Cauvery Bhawan, Bengaluru - 560 009. | md@kptcl.com; dt@kptcl.com |
| 21. | Chairman and Managing Director, Transmission Corp. of Andhra Pradesh Ltd., (APTRANSCO) Gunadala, Eluru Road, Vijayawada, Andhra Pradesh | cmd@aptransco.co.in; dir.proj@aptransco.gov.in |
| 22. | Chairman and Managing Director, Transmission Corp. of Telangana Ltd., (TSTRANSCO) Vidyut Soudha, Khairatabad Hyderabad – 500 082. | cmd@tstransco.in; ce.ps@tstransco.in; de.studies2@tstransco.in |
| 23. | Chairman and Managing Director, Kerala State Electricity Board, Vidyuthi Bhawanam, Pattom, Thiruvananthapuram - 695 004. | cmdkseb@kseb.in; dtkseb@kseb.in; ksebdelhi@gmail.com |
| 24. | Chairman and Managing Director, Tamil Nadu Transmission Corporation Ltd (TANTRANSCO), 6th Floor, Eastern Wing, 800 Anna Salai, Chennai - 600002. | mdtantransco@tnebnet.org; dirtp_tantransco@tnebnet.org; dirtp@tnebnet.org; cetr@tnebnet.org; sess@tnebnet.org |
| 25. | Superintending Engineer –I, First Floor, Electricity Department, Gingy Salai, Puducherry – 605 001. | se1ped.pon@nic.in |
| 26. | Executive Engineer, Divisional Office, Lakshadweep Electricity Department, Kavaratti Island, UT of Lakshadweep | lk-ktelect@nic.in |
| | | |
| 27. | Member Secretary, Eastern Regional Power Committee, 14, Golf Club Road, Tollygunge, Kolkata-700033. | mserpc-power@nic.in |
| 28. | Managing Director, Bihar State Power Transmission Company, Vidyut Bhavan (4th floor), Bailey Road, Patna-800021 | md.bsptcl1@gmail .com; mdcellbsptcl@gmail.com; ce.trans664@gmail.com |
| 29. | Chairman-cum-Managing Director, Jharkhand Urja Sancharan Nigam Limited Engineering Building, H.E.C., Dhurwa, Ranchi-834004. | md@jusnl.in; Dir.p.jusnl@gmail.com; cetjusnl@gmail.com; cetrans@jusnl.in |
| 30. | Chairman-cum-Managing Director, Odisha Power Transmission Corporation Ltd, Jan path, Bhubaneshwar-751022. | cmd@optcl.co.in; dir.operation@optcl.co.in; dir.project@optcl.co.in; cgm.con@optcl.co.in |

| | | |
|---|---|---|
| 31. | Principal Chief Engineer cum Secretary, Energy & Power Department Government of Sikkim, Sikkim. | secypower.sikkim@gmail.com |
| 32. | Managing Director, West Bengal State Electricity Transmission Company Ltd, Vidyut Bhavan (8th Floor), A-block, Salt Lake City, Kolkata-700091 | md@wbsetcl.in; cpd.wbsetcl@gmail.com; cped@cd3.vsnl.net.in; ce.corporate@wbsetcl.in |
| 33. | Superintending Engineer, Electricity Department C/O Secretary (GA) Andaman and Nicobar Administration, Secretariat, Port Blair (AN) | seed@and.nic.in ; asga123.and@nic.in; commr.andaman@gmail.com |
| | | |
| 34. | Member Secretary, North Eastern Regional Power Committee(NERPC), Meghalaya State Housing Finance Co-Operative Society Ltd. Building Nongrim Hills, Shillong (Meghalaya) – 793003 | ms-nerpc@gov.in |
| 35. | Managing Director, Assam Electricity Grid Corporation Limited, BijuleeBhawan; Paltan Bazar, Guwahati (Assam) – 781001. | md_aegcl@yahoo.co.in; aegcl.planning@aegcl.co.in |
| 36. | The Chairman-cum-Managing Director, Tripura State Electricity Corporation Limited, Bidyut Bhavan, Banamalipur, Agartala, Tripura. | managing.director@tsecl.in; agmtc11@gmail.com |
| 37. | Chairman-cum-Managing Director, Meghalaya Energy Corporation Limited, Lumjingshai, Short Round Road, Shillong (Meghalaya) – 793001. | cetranzemeptcl@gmail.com |
| 38. | Managing Director, Manipur State Power Company Ltd. (MSPCL), Electricity Complex, Patta No. 1293 under 87(2), Khwai Bazar, Keishampat, District – Imphal West, Manipur – 795001 | md.mspcl@gmail.com; ed.tech.mspcl@gmail.com; |
| 39. | Chief Engineer (Power), Vidyut Bhawan, Department of Power, Zero Point Tinali, Itanagar (Arunachal Pradesh) – 791111. | powerarunachal@rediffmail.com; vidyutarunachal@rediffmail.com |
| 40. | Chief Engineer (T&G), Department of Power, Electricity House, A.G. Colony, Kohima, Nagaland- 797001 | cepower1@gmail.com; cetransgen@gmail.com; |
| 41. | Engineer-in-Chief Power & Electricity Department, Kawlphetha Building, New Secretariat Complex, Khatla, Aizawl Mizoram-796001 | eincplanning@gmail.com; mizoplan@gmail.com |
| | | |
| 42. | COO (CTUIL), POWERGRID, Saudamini, Plot no. 2, Sector -29, Gurgaon-122 001 | pcgarg@powergrid.in; |
| 43. | Director (System Operation), POSOCO B-9, Qutub Institutional Area, Katwaria Sarai New Delhi – 110010 | srnarasimhan@posoco.in |
| 44. | Chairman & Managing Director (NTPC), NTPC Bhawan, SCOPE Complex, Institutional Area, Lodhi Road, New Delhi – 110003 | cmd@ntpc.co.in |
| 45. | Chairman & Managing Director (NHPC), N.H.P.C Office Complex, Sector-33, Faridabad - 121003 (Haryana) | cmd@nhpc.nic.in |

| | | |
|---|---|---|
| 46. | Managing Director (SECI), 1st Floor, D-3, A Wing, Prius Platinum Building District Centre, Saket, New Delhi – 110017 | md@seci.co.in |
| 47. | CMD, SJVN Limited, Shakti Sadan, Coporate Office Complex Shanan, Shimla - 171006 Himachal Pradesh | sjvn.cso@sjvn.nic.in; |
| 48. | Director (Operations), NPCIL, Mumbai | cswtc@npcil.co.in |
| 49. | Chairman cum Managing Director, NLC India Ltd., Block - 1, Cuddalore District, Neyveli - 607 801 Tamil Nadu. | cmd@nlcindia.in, dir.power@nlcindia.in; dpp.co@nlcindia.in |
| 50. | Chairman, BBMB, Chandigarh | secy@bbmb.nic.in |
| 51. | Chairman-cum-Managing Director, Damodar Valley Corporation DVC Towers, VIP Road, Kolkata-700054. | chairman@dvc.gov.in; membertechnical@dvc.gov.in |

Annexure-B2

# REPORT OF THE COMMITTEE ON "STRENGTHENING OF STATE LOAD DESPATCH CENTRES (SLDCS)"

Load despatchers have been playing a critical role in the smooth operation of power systems and electricity markets. An ambitious target of 500GW RE by 2030 and India's pledge to achieve net-zero carbon emission by 2070 led to revamping the power sector. Remarkable changes in the generation mix, rapid increase in the number of grid participants, and introduction of concepts such as prosumers and energy storage increase the complexity of the grid with every passing day. Hence with increase in complexities of the grid the responsibilities of the load despatch centres are expected to rise manifold.

Accordingly, the availability of human resources in the State Load Despatch Centres in terms of the implementation of various regulations and MoP guidelines were discussed in the 46th & 47th TCC/ERPC held on 5th August / 6th August 2022 at Siliguri and 24th /25th November 2022 at Kolkata respectively.

Based on the resolution of the 47th TCC/ERPC, a committee on "Strengthening of SLDCs" was formed vide ERPC order No: ERPC/TCC-ERPC/2022/1207 dtd. 21.12.2022 with members from all SLDCs and representatives from ERPC & ERLDC.

The TOR of the Committee:

1. Analysing the existing manpower strength of each SLDC and working out the number required in line with CABIL recommendations.

2. Explore the possibilities of maintaining dedicated cadres for SLDC Operation.

3. Examine the need for training of personnel in activities like real-time grid operation, IT - cyber security, post-despatch analysis, outage coordination analysis, forecasting, operational feedback, Market operation, Big Data Analytics, etc.

4. To discuss the draft guidelines circulated by MoP on Manpower adequacy of SLDCs & make suggestion/feedback on the draft regulation, if any.

**Committee Members:**

Sh. B.B Mehta, Director (SLDC), Odisha
Sh. Gautam Nayak, C.E. SLDC, WBSETCL
Sh. A.K. Chaudhary, CE(SO), BSPTCL
Sri Arun Kumar, GM(SLDC), JUSNL
Sh. Debi Prasad Puitandi, CE(SLDC), DVC
Mrs. Shova Thapa CE SLDC Sikkim
Sh. Shyamal Konar, GM SO
Sh. S Kejriwal, SE(Comm),ERPC

**Date and Time of Committee Meeting:**

1st meeting of the committee was held at ERLDC on 10th Feb 2023.

**Attendance at Committee Meeting:**

Sh. B.B Mehta, Director (SLDC), Odisha
Sh. Gautam Nayak, C.E. SLDC, WBSETCL
Sh. A.K. Chaudhary, CE(SO), BSPTCL
Sri Arun Kumar, GM(SLDC), JUSNL
Sh. Debi Prasad Puitandi, CE(SLDC), DVC
Sh. Shyamal Konar, GM SO
Sh. S Kejriwal, SE(Comm), ERPC
Sh Manoj Lall Thakur, SE(SLDC), SIKKIM (Attended on behalf of CE, Sikkim)

Special Invitee: Sh. S. K. Soonee, Ex- CEO & Advisor, GRID-INDIA

The following points were discussed in the committee meeting:

- **Dedicated Cadre for SLDC Operation:**

Sh. B. B. Mehta, Chairperson of the committee, proposed a separate cadre of engineers dedicatedly for SLDC. This can preferably be taken up during the recruitment stage of each parent company of SLDCs. In addition, options are to be given to senior & existing employees of SLDCs & other employees of the parent company either to choose the SLDC cadre or the parent company cadre. This will provide the following advantages:

- Virtual ring-fencing to SLDC within the parent company.
- The tenure of a SLDC cadre will be for a considerable period of time for overall growth of the state.
- Frequent transfer of manpower between SLDC & parent company puts hindrance for discharging the responsibility faithfully. SLDC will be served better with trained & experienced manpower.

Sh. A. K. Chaudhary, CE of Bihar SLDC, expressed apprehension about the dedicated cadre for SLDC. He stated that this might create a monotonous work culture, lack of exposure to other verticals of the power system, and lack of empathy for other services regarding the transmission & thus hampering career growth due to the pyramid organizational structure of the SLDC. Similar apprehension was also expressed by CE, West Bengal & DVC.

Sh. A. K. Chaudhary CE, Bihar SLDC, further suggested, introducing some incentives for SLDC personnel who would successfully complete basic certification and give consent for compulsory 3-5 year posting at the entry-level. This will ensure experienced manpower leading the organization. GM, SLDC Sikkim & GM, SLDC Jharkhand seconded the idea of 3-5 years compulsory posting.

Sh. S. Konar, GM (SO), ERLDC expressed concern about the transfer of manpower from SLDC to transmission & vise-versa. If a person serves in a particular vertical for a long service period say 10 years during the initial phase of his/her career, it will be difficult for an employee to get accustomed to the new vertical. So, a separate cadre can overcome this difficulty.

Sh. S. K. Soonee expressed that creating a separate cadre is a long-term solution which needs to be adopted. The complexity of the power system is increasing day by day. System operation requires much more specialization & experience, and these requirements will be increased much more in the future.

Transfer across different verticals will not serve the purpose. With the influx of rooftop solar and segregation of carriage & content, distribution system operation will play a bigger role soon (down the line 15 to 20 years). Top management of those requires qualified system operators. So, a separate cadre idea will be a career opportunity for those employees, not a hindrance. Transfer of employees between SLDC & transmission wing also leads to any conflict of interest and the parent transmission company may exploit those areas. Customer satisfaction, which is the main "*matra*" of this era, maybe got hampers. So, Money & Manpower should be independent of the parent company. Separate revenue collection regulations & separate manpower should be in place to empower the SLDC.

Sh. A. K. Chaudhary & Sh. B. B. Mehta said that Bihar & Odisha have already separated regulations to collect fees & charges for SLDC. It made SLDCs independent of their expenditure. Jharkhand & DVC depends on the parent company for financial allocations. West Bengal also collects fees and charges as per regulation for SLDC. It made WBSLDC independent of their expenditure subject to the approval of the parent company.

In continuation of Sh.S.K. Soonee, Sh. Rajib Sutradhar, ED ERLDC, urged all representatives to visualize the future perspective of the power system instead of an immediate solution. This separate cadre for the SLDC idea will be a game changer to the power system operation. He also suggested sensitizing respective SERCs for drafting regulations for separated fees & charges for SLDCs.

Committee appreciated the requirement of virtual ring-fencing of SLDCs through dedicated cadre and also difficulties involved to implement the same. However, it was agreed to be taken up in phased manner as a part of long-term solution. As an initial step, transfer/posting of existing manpower between the SLDC & parent company may be restricted taking into account minimum period of tenure in SLDC. It is also adopted that suggestions on SERC regulation for fees & charges for SLDCs may include in committee recommendations.

- **Representation of SLDC head on the Board of the Parent company**

To enhance the presence of SLDC at the Board level, Chairperson Sh. B. B. Mehta proposed that the head of SLDCs should be a board member of the parent company to fulfill the requirement of SLDCs. This will enable SLDCs to take all kinds of decisions in quickest and fruitful ways. He stated that same is in place in Odisha.

Sh. Debi Prasad Puitandi, CE SLDC DVC, informed that in case of DVC, SLDC head is directly reporting the head of the organization. For others SLDCs the reporting is with their respective STU head. He suggested to explore the possibility of adopting similar hierarchy in their state.

It was agreed that head of SLDC should either be a board member of Parent company or a special invitee to the board meeting.

- **Manpower requirement in line with functions of SLDCs**

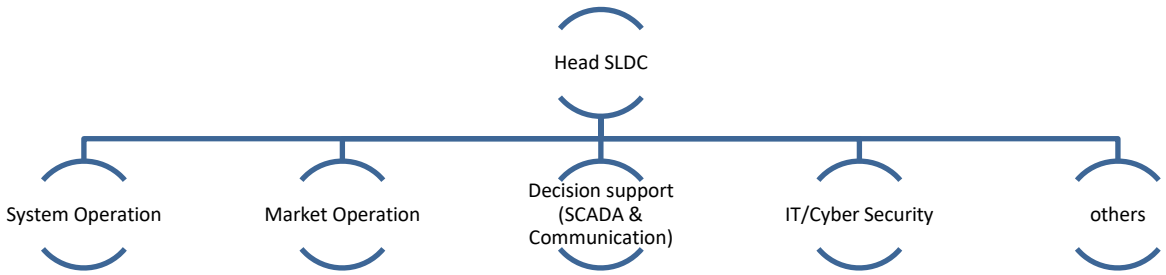
Human resource adequacy in terms of the implementation of various regulations and MoP guidelines is very important across LDCs. Accordingly, the need for adequate manpower at SLDCs in line with CaBIL recommendations to enable the SLDCs to discharge their roles and responsibilities was discussed at length.

In line with the CABIL report and according to the clustering of LDCs into Large, Medium, and small categories, in our region, West Bengal SLDCs fall under the Large LDC category, and Odisha, Bihar, DVC, and Jharkhand belong to Medium LDCs and Sikkim was under Small LDC category.

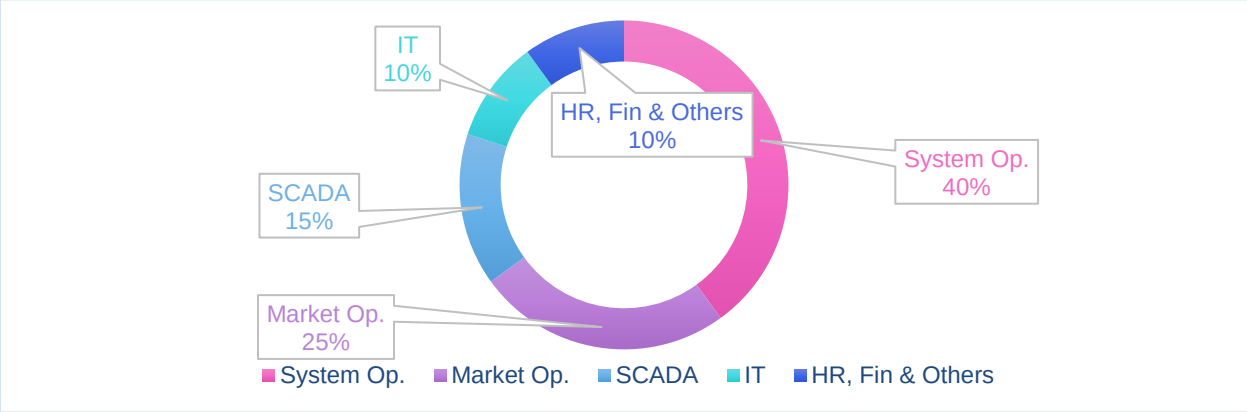
The required manpower in line with the CABIL report would be for Large LDC 100-150 nos, Medium LDC 70-100 nos, and Small LDC 50-70 nos.

The number of activities performed in Large, Medium, and emerging LDCs remains more or less the same, the volume and extent of the activities being carried out differ based on the size of the LDC, hence, the number of personnel differs at each LDC. There are certain statutory activities which will remain the same irrespective of the size of the LDCs and therefore, a minimum number of workforce allocation will be required at each LDC.

Considering the different key functional areas, current & envisaged activities of LDCs, a typical function of a LDC as under




The proportion of executive Staff as recommended in CaBIL as follows:




Existing Manpower distribution of **SLDCs** against CaBIL min recommendation is as follows:

**SLDC Bihar**

| **System Operation** | **Market Operation** | **SCADA** | **IT** | **HR,Fin & Others** | **Total** |
|---|---|---|---|---|---|
| **15**/28 | **8**/18 | **3**/10 | **3**/7 | **17**/7 | **46**/70 |

**SLDC Odisha**

| System Operation | Market Operation | SCADA | IT | HR,Fin & Others | Total |
|---|---|---|---|---|---|
| **20**/28 | **6**/18 | **11**/10 | **1**/7 | **3**/7 | **41**/70 |

**SLDC West Bengal**

| System Operation | Market Operation | SCADA | IT | HR,Fin & Others | Total |
|---|---|---|---|---|---|
| **23**/40 | **10**/25 | ***0**/15 | **2**/10 | 6/10 | **41**/100 |

- SCADA is maintained by our Communication Dept.,WBSETCL

**SLDC DVC**

| System Operation | Market Operation | SCADA | IT | HR, Fin & Others | Total |
|---|---|---|---|---|---|
| **16**/28 | **2**/18 | **1**/10 | **3**/7 | **3**/7 | **25**/70 |

**SLDC Jharkhand**

| System Operation | Market Operation | SCADA | IT | HR, Fin & Others | Total |
|---|---|---|---|---|---|
| **17**/28 | **1**/18 | **5**/10 | **0**/7 | **0**/7 | **23**/70 |

**SLDC Sikkim**

| System Operation | Market Operation | SCADA | IT | HR,Fin & Others | Total |
|---|---|---|---|---|---|
| **12**/20 | **11**/13 | **2**/8 | **0**/5 | **0**/5 | **25**/50 |

Sh. B. B. Mehta raised concern about the present manpower crunch that exists in all SLDCs of the Eastern region. Others echoed the same.

It was agreed that new engineers are required to be recruited as intimated in the creation of separate cadre discussion and sufficient manpower at the senior level is also required to be transferred to SLDCs so that functions of SLDCs can be discharged efficiently. Manpower recommended in CaBIL report can be considered as the reference for manpower allocation in SLDCs. This matter will be raised to concerned authorities such as the board of the parent company, and SERCs of the respective state.

- **Need for Training:**

Training and Certification of Operators should come as a culture rather than a mandate. There is a need for ensuring the functional activities of LDCs without compromising on cyber and infrastructural security. 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 local colleges like Kharagpur IIT needs to be encouraged.

Whereas for other 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.

Currently, basic & advanced level training for power system operators is only being conducted by NPTI Bangalore. NPTI Durgapur doesn't have such infrastructure & expertise to organize courses, especially for power system operation.

Respective SLDCs to take initiative to sign MoUs with IITs & premier institutions for training, capacity building for mutual benefits.

As per the undertaking( framed by PSTI in line with CERC order) required to be submitted by SLDC for nomination of employee in refreshers training program being organized by PSTI,Bengaluru, It is mentioned that "whose Basic Level/Specialist Level training is funded through LDC Development Fund shall continue to serve with LDC / STU and shall not be transferred for a period of at least 18 months from the date of completion of the training ". Sh. Debi Prasad Puitandi, CE SLDC DVC expressed concern over submitting the undertaking format of refresher training program as the transfer policy is under the jurisdiction of the HR department of the respective organization and as SLDC for which SLDC head is not empowered to take decisions on this matter. This may be reviewed.

All SLDC representatives & GM of ERLDC agreed to this proposal. NPTI management will be approached to improve the infrastructure to conduct the specialized courses for power system operation.

Further, MOP has notified Mandatory certification for personnel posted in LDCs vide their letter ref no.: 13/03/2019-OM-Part 1 dtd 23/03/2022. Only personnel with at least basic level certification shall be posted in the control room of LDC. The specialist certificate shall also to be obtained within one year to continue his posting in control room. The present status of certified employees of SLDCs in ER:

| **Name of the state** | **Number of Certified Operators** |
|---|---|
| **Bihar** | 4 |
| **Jharkhand** | Nil |
| **Odisha** | 11 |
| **DVC** | Nil |
| **West Bengal** | 2 |
| **Sikkim** | 1 |

- **Website requirement-Uniformity in the display of the website -Harmonization**

The website is the face of any organization, where all relevant information & data are made available. As SLDC is the apex body of any state for power system operation, various data related to system operation such as schedule, STOA, meter data, report of power system parameters & power supply position etc. must have available for stakeholders.

All big system operators across the world have dedicated websites, Vision, mission, and Values. All system operators share operational & market data with stakeholders. On the contrary, SLDC Bihar, Odisha & West Bengal has a dedicated website for SLDC. SLDC Bihar & Odisha intimated that a large variety of data & information related to system operation & power market are available on Website. SLDC, west Bengal intimated that the current website is quite old & currently maintained by WEBEL. They are going to revamp the website with the consultation of IT experts to modernize the website.

SLDC, Sikkim doesn't have a separate website. However, there is a separate page for SLDC on the website of Govt. Of Sikkim with a bare minimum of information. Sikkim SLDC agreed to add more information about SLDC & data related to system operation & market.

SLDC, Jharkhand & DVC also doesn't have any separate website or page on the parent company. They will work to resolve the issue.

It was finally decided that all SLDCs will maintain a separate website with various data & information related to system operation & market for stakeholders.

- **SAMAST implementation**

SLDC Bihar is the only SLDC of the Eastern Region, that has successfully implemented the SAMAST project.

Other SLDCs are in the process to implement the SAMAST project. SLDC Sikkim already finalized the DPR of the SAMAST Project. PSDF fund for SLDC Odisha already approved & tripartite agreement completed. The tendering process for the appointment of a consultant has been completed &order is about to be notified. Jharkhand Head of SLDC intimated that PSDF fund for the State has already been approved & the tripartite agreement is under process.

The project of SLDC West Bengal is already under the implementation stage and is expected to be completed by 31st May 2023. The project of DVC is also in the implementation stage.

It was decided that all SLDCs will take proactive action to expedite the SAMAST project.

**Recommendation of the Committee:**

- Dedicated Cadre for SLDC Operation and virtual ring-fencing of SLDC within the parent company.
- Representation of SLDC head on the Board of the Parent company or as a special invitee.
- Minimum Manpower requirement in line with CaBIL report to take care of functions of SLDCs has been explored and recommended in the report.
- 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.
- 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.

- Respective SLDCs to take initiative to sign MoUs with IITs & premier institutions for training, capacity building for mutual benefits.
- 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.
- All SLDCs to take up with their management for early implementation of the above recommendations.

The Committee thanks all those who contributed in preparation of the report. The committee acknowledges the assistance rendered by ERPC/ERLDC and its functionaries.

XXXXXXX

No. 23/21/2021-R&R
Government of India
Ministry of Power
***

Shram Shakti Bhawan, Rafi Marg,
New Delhi, 27th January, 2023

To,

1. Chairperson,
Central Electricity Authority,
Sewa Bhawan,
R.K. Puram, New Delhi-110066

2. Member (GO&D),
Central Electricity Authority,
Sewa Bhawan,
R.K. Puram, New Delhi-110066

**Subject: Exemption from reimbursement of annual expenditure of RPC Secretariat-reg.**

Sir,

I am directed to refer to Central Transmission Utility of India Ltd. (CTUIL)'s letter dated 11.08.2022 requesting this Ministry for exemption from reimbursement of annual expenditure of RPC Secretariat.

2. The request of CTUIL has been examined in this Ministry and it has been decided to grant exemption to CTUIL from reimbursement of annual expenditure of RPC Secretariats.

3. This issues with the approval of the competent authority.

Yours faithfully,

(Dr. P.K. Sinha)
Deputy Secretary to the Govt. of India
Tel: 2373 6275

**Copy to:**

Chief Operating Officer, Central Transmission Utility of India Ltd., Saudamini, 1st Floor, Plot No.2, Sector. 29, Near IFFCO Chowk, Gurgaon (Haryana) – 122001

**Annexure-B5**

**Minutes of Meeting dated 17.03.2022 on Audit of ERPC Funds for FY-2021-22 maintained under ERPC, Kolkata.**

As per ERPC CBR-2022 under clause no.9 & 7 of ERPC Establishment Fund and ERPC Fund Regulations-2022, *"the statement(s) of the fund shall be verified by three officers, one 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. The Member Secretary, ERPC will approve the statement of the fund before placing the same to the auditor."*

Under this Clause the Auditor(s) from Jharkhand and Bihar has done their verification and accordingly the following observations has been made after verifying the final draft Books of Accounts of ERPC Funds:

1. It is advisable to take expert opinion on GST matters regarding its applicability on Fees & Charges collected from Constituents.
2. It is advisable to file GST return as per applicable GST Laws.
3. It is suggested that Books of Accounts should be maintained in accounting software.
4. It has been noticed that in one case, Income Tax TDS has been deposited late. Hence, ERPC should ensure proper compliance regarding GST, Income Tax and other Statutory Laws.
5. There should be proper voucher regarding transactions of ERPC and same should be approved by the Competent Authority.

As such in view of all above, the draft Books of Accounts of Eastern Regional Power Committee, Kolkata is hereby being recommended for placing the same before the upcoming 49th ERPC meeting scheduled to be held on 24th March'2023 at Gangtok, Sikkim for obtaining approval.

17/03/2023
(CA Shailesh Pathak)
(Manager Finance, JUVNL)

(CA, Ajay Rai) 17/02/23
(Accounts Officer, BSPTCL)

## *EASTERN REGIONAL POWER COMMITTEE - ERPC FUND*

***14, Golf Club Road, Kolkata - 700033***

***Balance Sheet as at 31st March, 2022***

| Liabilities | Amount (Rs) | | Assets | Amount (Rs) |
|---|---|---|---|---|
| *Capital Account* | | 88,90,250.00 | *Current Assets:-* | |
| *As per last A/c* | 79,58,081.00 | | *Deposits (Asset)* | 55,000.00 |
| *Net Surplus for the year* | 9,32,169.00 | | *Sundry Debtors* | 9,97,959.00 |
| | | | *Tax Deducted at Source* | 2,041.00 |
| | | | *Cash-in-hand ERPC* | 35,405.00 |
| *Current Liabilities:-* | | 15,810.00 | *Cash-in-hand (Canteen)* | 1,805.00 |
| *TDS - Payable* | 810.00 | | *Cash at Bank* | 77,87,711.00 |
| *Canteen Deposit* | 15,000.00 | | *Cash at Bank (Canteen)* | 26,139.00 |
| *Total* | | 89,06,060.00 | *Total* | 89,06,060.00 |

***Date:*** ***Signed in terms of our report of even date***

***Place: Kolkata***

***For, Eastern Regional Power Committee - ERPC Fund***

***Secretary,***

***DDO Estt. Fund, ERPC*** ***ERPC***

## *EASTERN REGIONAL POWER COMMITTEE - ERPC FUND*

***14, Golf Club Road, Kolkata - 700033***

***Income & Expenditure A/c. for the year ended 31st March 2022***

| Particulars | Amount (Rs) | Particulars | Amount (Rs) |
|---|---|---|---|
| To Car Expenses | 80,400.00 | By Membership Fees | 42,00,000.00 |
| " Independence Day Celebration | 18,411.00 | " Canteen Sale | 1,59,843.00 |
| " Internet Charges | 9,432.00 | | |
| " Meeting Expenses | 29,05,960.00 | | |
| " Messing Expenses | 38,117.00 | | |
| " Misc. Expenses | 46,542.00 | | |
| " Printing & Stationery | 1,400.00 | | |
| " Refreshment Expenses | 1,14,988.00 | | |
| " Sanitization Expenses | 4,310.00 | | |
| " Staff Welfare | 25,999.00 | | |
| " Travel & Conveyance | 12,716.00 | | |
| " Wages | 14,500.00 | | |
| " Canteen Expenses | 1,54,009.00 | | |
| " Bank Charges | 890.00 | | |
| " Surplus for the year | 9,32,169.00 | | |
| | 43,59,843.00 | | 43,59,843.00 |

***Date:*** ***Signed in terms of our report of even date***

***Place: Kolkata***

***For, Eastern Regional Power Committee - ERPC Fund***

***Secretary,***

***DDO Estt. Fund, ERPC*** ***ERPC***

## *EASTERN REGIONAL POWER COMMITTEE - ERPC FUND*

***14, Golf Club Road, Kolkata - 700033***

***Receipt & Payment A/c. for the year ended 31st March 2022***

| Receipts | Amount (Rs) | Payments | Amount (Rs) |
|---|---|---|---|
| *Opening Balance:-* | | *Car Expenses* | *80,400.00* |
| *Cash at Bank* | *75,22,038.00* | *Independence Day Celebration* | *18,411.00* |
| *Cash in Hand* | *36,043.00* | *Internet Charges* | *9,432.00* |
| | | *Meeting Expenses* | *29,05,960.00* |
| | | *Messing Expenses* | *38,117.00* |
| | | *Misc. Expenses* | *46,542.00* |
| | | *Printing & Stationery* | *1,400.00* |
| | | *Refreshment Expenses* | *1,14,988.00* |
| *Opening Sundry* | *4,00,000.00* | *Sanitization Expenses* | *4,310.00* |
| *Debtors* | | *Staff Welfare* | *25,999.00* |
| *Canteen Deposit* | *15,000.00* | *Travel & Conveyance* | *12,716.00* |
| *TDS - Payable* | *810.00* | *Wages* | *14,500.00* |
| | | *Canteen Expenses* | *1,54,009.00* |
| *Canteen Sale* | *1,59,843.00* | *Bank Charges* | *890.00* |
| *Membership Fees* | *42,00,000.00* | | |
| | | *Advance to Officials* | *55,000.00* |
| | | *Tax Deducted at Source* | *2,041.00* |
| | | *Closing Sundry Debtors* | *9,97,959.00* |
| | | *Closing Balance:-* | |
| | | *Cash at Bank* | *77,87,711.00* |
| | | *Cash at Bank- Canteen* | *26,139.00* |
| | | *Cash in Hand* | *35,405.00* |
| | | *Cash in Hand - Canteen* | *1,805.00* |
| | ***1,23,33,734.00*** | | ***1,23,33,734.00*** |

***Date:***
***Place: Kolkata***

***For, Eastern Regional Power Committee - ERPC Fund***

***DDO Estt. Fund, ERPC***

***DDO Estt. Fund, ERPC***

# *EASTERN REGIONAL POWER COMMITTEE - ESTABLISHMENT FUND*

***14, Golf Club Road, Kolkata - 700033***

***Income & Expenditure A/c. for the year ended 31st March 2022***

| Particulars | | Amount in Rs. | Particulars | | Amount in Rs. |
|---|---|---|---|---|---|
| To | Accounting Charges | 75,000.00 | By | Fees & Charges | 5,32,50,000.00 |
| " | Advertisement | 17,384.00 | | | |
| " | Audit Fees | 10,000.00 | " | Depreciation reversal | 11,62,302.00 |
| " | Bank Charges | 1,504.70 | | | |
| " | Books & Periodicals | 10,000.00 | | | |
| " | Car Expenses | 3,14,313.00 | | | |
| " | Consultancy Charges | 8,70,500.00 | | | |
| " | Cultural Program | 19,824.00 | | | |
| " | Depreciation | 11,62,302.00 | | | |
| " | Electricity Charges | 7,16,306.00 | | | |
| " | Expenses Govt. A/c. | 2,64,84,527.00 | | | |
| " | Gardening Expenses | 3,46,920.00 | | | |
| " | General Expenses | 1,00,504.00 | | | |
| " | Internet Charges | 1,83,700.00 | | | |
| " | Meeting Expenses | 25,59,128.00 | | | |
| " | Parliament Committee Visit Expenses | 4,50,000.00 | | | |
| " | Printing & Stationery | 69,384.00 | | | |
| " | Repair & Maintance | 7,96,602.00 | | | |
| " | Security & Manpower | 1,33,90,301.00 | | | |
| " | Travel & Comveyance | 8,808.00 | | | |
| " | Wages | 3,36,194.00 | | | |
| " | Surplus for the year | 64,89,100.30 | | | |
| | | 5,44,12,302.00 | | | 5,44,12,302.00 |

***Date:***

***Place: Kolkata***

***Signed in terms of our report of even date***

***For, Eastern Regional Power Committee - Establishment Fund***

***DDO Estt. Fund, ERPC***

***Member Secretary, ERPC***

# *EASTERN REGIONAL POWER COMMITTEE - ESTABLISHMENT FUND*

***14, Golf Club Road, Kolkata - 700033***

***Balance Sheet as on 31st March, 2022***

| Liabilities | Amount in Rs. | | Assets | Amount in Rs. |
|---|---|---|---|---|
| ***Capital A/c:-*** | | *8,43,38,966.80* | ***Fixed Assets:-*** | |
| *As per last A/c* | *7,90,30,966.50* | | *As per schedule* | *76,29,762.00* |
| *Capital Expenses made* | *(11,81,100.00)* | | | |
| *Net Surplus for the year* | *64,89,100.30* | | ***Current Assets:-*** | |
| | | | *Tax Deducted at Source* | *15,306.00* |
| | | | *Sundry Debtors* | *1,34,84,694.00* |
| ***Movable Properties Fund:-*** | | *76,29,762.00* | *Bank Accounts* | *7,30,55,593.80* |
| *As per Last A/c.* | *76,10,964.00* | | | |
| *Transfer From Capital Fund* | *11,81,100.00* | | | |
| *Depreciation Expenses Contra* | *(11,62,302.00)* | | | |
| ***Current Liabilities:-*** | | *22,16,627.00* | | |
| *Accounting Charges* | *75,000.00* | | | |
| *Audit Fees* | *10,000.00* | | | |
| *GST Payable* | *63,562.00* | | | |
| *Sundry Creditors - CPWD* | *20,00,000.00* | | | |
| *TDS - Payable* | *68,065.00* | | | |
| **Total** | | **9,41,85,355.80** | **Total** | **9,41,85,355.80** |

***Date:***

***Place: Kolkata*** ***Signed in terms of our report of even da***

***For, Eastern Regional Power Committee - Establishment Fund***

***DDO Estt. Fund, ERPC*** ***Member Secretary, ERPC***

# *EASTERN REGIONAL POWER COMMITTEE - ESTABLISHMENT FUND*

***14, Golf Club Road, Kolkata - 700033***

**FIXED ASSETS AS AT 31ST MARCH,2022**

| *Particulars* | *Opening WDV as on 01.04.2021* | *Addition during the year* | | *Rate* | *Depreciation for the year* | | *Closing WDV as on 31.03.2022* |
|---|---|---|---|---|---|---|---|
| | | *upto 30.09.2021* | *after 30.09.2021* | | *upto 30.09.2021* | *after 30.09.2021* | |
| *Other Equipments* | | *4,96,200.00* | *-* | *10%* | *49,620.00* | *-* | *4,46,580.00* |
| *Office Machinery* | *10,02,534.00* | | *-* | *15%* | *1,50,380.00* | *-* | *8,52,154.00* |
| *Furniture Account* | *51,89,128.00* | *-* | *-* | *10%* | *5,18,913.00* | *-* | *46,70,215.00* |
| *Office Car* | *9,33,950.00* | *-* | *-* | *15%* | *1,40,093.00* | *-* | *7,93,857.00* |
| *Electric Equipment* | | *42,590.00* | *1,57,106.00* | *10%* | *4,259.00* | *7,855.00* | *1,87,582.00* |
| *Computer* | *4,85,352.00* | *-* | *4,85,204.00* | *40%* | *1,94,141.00* | *97,041.00* | *6,79,374.00* |
| *Total* | *76,10,964.00* | *5,38,790.00* | *6,42,310.00* | | *10,57,406.00* | *1,04,896.00* | *76,29,762.00* |

# EASTERN REGIONAL POWER COMMITTEE - ESTABLISHMENT FUND

**14, Golf Club Road, Kolkata - 700033**

**Receipts & Payments A/c for the year ended 31st March 2022**

| Receipts | Amount in Rs. | Payments | Amount in Rs. |
|---|---|---|---|
| To Opening Balance | | By Capital Expenses Made | 11,81,100.00 |
| Bank | 7,42,80,966.50 | | |
| Cash | - | " Tax Deducted at Source | 15,306.00 |
| " Closing Current Laibilities | 23,38,067.00 | " Opening Current Liabilities | 20,00,000.00 |
| " Opening Sundry Debtors | 67,50,000.00 | " Closing Sundry Debtors | 1,34,84,694.00 |
| To Revenue Income | | By Revenue Payments | |
| Fees & Charges | 5,32,50,000.00 | Accounting Charges | 75,000.00 |
| Depreciation Reversal | 11,62,302.00 | Advertisement | 17,384.00 |
| | | Audit Fees | 10,000.00 |
| | | Bank Charges | 1,504.70 |
| | | Books & Periodicals | 10,000.00 |
| | | Car Expenses | 3,14,313.00 |
| | | Consultancy Charges | 8,70,500.00 |
| | | Cultural Program | 19,824.00 |
| | | Depreciation | 11,62,302.00 |
| | | Electricity Charges | 7,16,306.00 |
| | | Expenses Govt. A/c. | 2,64,84,527.00 |
| | | Gardening Expenses | 3,46,920.00 |
| | | General Expenses | 1,00,504.00 |
| | | Internet Charges | 1,83,700.00 |
| | | Meeting Expenses | 25,59,128.00 |
| | | Parliament Committee Visit Expenses | 4,50,000.00 |
| | | Printing & Stationery | 69,384.00 |
| | | Repair & Maintance | 9,18,042.00 |
| | | Security & Manpower | 1,33,90,301.00 |
| | | Travel & Comveyance | 8,808.00 |
| | | Wages | 3,36,194.00 |
| | | By Closing Balance | |
| | | Bank | 7,30,55,593.80 |
| | | Cash | - |
| | 13,77,81,335.50 | | 13,77,81,335.50 |

**Date:**
**Place: Kolkata**

**For, Eastern Regional Power Committee - Establishment Fund**

**DDO Estt. Fund, ERPC** **DDO Estt. Fund, ERPC**

# *EASTERN REGIONAL POWER COMMITTEE*

***14, Golf Club Road, Kolkata - 700033***

***(Consolidated) Balance Sheet as on 31st March, 2022***

| Liabilities | Amount in Rs. | | Assets | Amount in Rs. |
|---|---|---|---|---|
| ***Capital Funds*** | | | ***Fixed Assets:-*** | |
| *Establishment Fund :* | | *8,43,38,966.80* | *As per schedule* | *76,29,762.00* |
| *As per last A/c* | *7,90,30,966.50* | | | |
| *Less :Capital Expenses made* | *(11,81,100.00)* | | ***Investments:-*** | |
| *Add : Net Surplus for the year* | *64,89,100.30* | | *Fixed Deposit* | *2,47,29,865.60* |
| | | | *Interest accrued on FD* | *47,452.18* |
| *Movable Properties Fund:-* | | *76,29,762.00* | | |
| *As per Last A/c.* | *76,10,964.00* | | | |
| *Add :Transfer From Capital Fund* | *11,81,100.00* | | ***Current Assets:-*** | |
| *Less :Depreciation ( Contra )* | *(11,62,302.00)* | | | |
| | | | *Loans and Advances* | *55,000.00* |
| *ERPC Fund* | | *88,90,250.00* | | |
| *As per last A/c* | *79,58,081.00* | | *Sundry Debtors* | *1,44,82,653.00* |
| *Net Surplus for the year* | *9,32,169.00* | | | |
| | | | *Tax Deducted at Sources* | *59,755.50* |
| ***Current Liabilities:-*** | | | | |
| *Unspent Grant-in-Aid* | | | *Cash at Bank* | *8,17,35,357.90* |
| *PRDB-PSDF* | | *75,83,873.38* | | |
| *As per last A/c* | *1,44,86,547.00* | | *Cash in Hand* | *37,210.00* |
| *Net Surplus for the year* | *2,62,277.38* | | | |
| *Less: Utilised during the year* | *71,64,951.00* | | | |
| *PSDF Study Programme Foreign* | | *1,55,28,370.00* | | |
| *As per last A/c* | *1,51,50,258.00* | | | |
| *Net Surplus for the year* | *3,78,112.00* | | | |
| *PSDF Training Programme* | | *25,73,397.00* | | |
| *As per last A/c* | *25,27,424.00* | | | |
| *Net Surplus for the year* | *45,973.00* | | | |
| *Other Liabilities* | | *22,32,437.00* | | |
| *Accounting Charges* | *75,000.00* | | | |
| *Audit Fees* | *10,000.00* | | | |
| *GST Payable* | *63,562.00* | | | |
| *Sundry Creditors - CPWD* | *20,00,000.00* | | | |
| *Canteen Deposit* | *15,000.00* | | | |
| *TDS - Payable* | *68,875.00* | | | |
| **Total** | | **12,87,77,056.18** | **Total** | **12,87,77,056.18** |

*Annexure :Statement of Significant Accounting Policies*

***Date:*** ***Signed in terms of our report of even date***

***Place: Kolkata***

***For, Eastern Regional Power Committee***

***DDO, ERPC*** ***DDO, ERPC***

# EASTERN REGIONAL POWER COMMITTEE

**14, Golf Club Road, Kolkata - 700033**

**(Consolidated) Income & Expenditure A/c. for the year ended 31st March 2022**

| Expenditure | Establishment Fund | ERPC Fund | PRDB PSDF | PSDF Study Programme Foreign | PSDF Training Programme | Amount in Rs. | Income | Establishment Fund | ERPC Fund | PRDB PSDF | PSDF Study Programme Foreign | PSDF Training Programme | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| To Accounting Charges | 75,000.00 | - | - | - | - | 75,000.00 | By Fees & Charges | ############## | 42,00,000.00 | - | - | - | 5,74,50,000.00 |
| " Advertisement | 17,384.00 | - | - | - | - | 17,384.00 | " Canteen sale | - | 1,59,843.00 | - | - | - | 1,59,843.00 |
| " Audit Fees | 10,000.00 | - | - | - | - | 10,000.00 | " Interest on FD | - | - | 2,62,277.38 | 3,78,112.00 | 45,973.00 | 6,86,362.38 |
| " Bank Charges | 1,504.70 | 890.00 | - | - | - | 2,394.70 | " Depreciation Reversa | 11,62,302.00 | - | - | - | - | 11,62,302.00 |
| " Books & Periodicals | 10,000.00 | - | - | - | - | 10,000.00 | " Grant-in-Aid | - | - | 71,64,951.00 | - | - | 71,64,951.00 |
| " Canteen Expenses | - | 1,54,009.00 | - | - | - | 1,54,009.00 | | | | | | | |
| " Car Expenses | 3,14,313.00 | 80,400.00 | - | - | - | 3,94,713.00 | | | | | | | |
| " Consultancy Charges | 8,70,500.00 | - | - | - | - | 8,70,500.00 | | | | | | | |
| " Cultural Program | 19,824.00 | - | - | - | - | 19,824.00 | | | | | | | |
| " Depreciation | 11,62,302.00 | | | | | 11,62,302.00 | | | | | | | |
| " Electricity Charges | 7,16,306.00 | - | - | - | - | 7,16,306.00 | | | | | | | |
| " Expenses Govt. A/c. | 2,64,84,527.00 | - | - | - | - | 2,64,84,527.00 | | | | | | | |
| " Gardening Expenses | 3,46,920.00 | - | - | - | - | 3,46,920.00 | | | | | | | |
| " General Expenses | 1,00,504.00 | 46,542.00 | - | - | - | 1,47,046.00 | | | | | | | |
| " Internet Charges | 1,83,700.00 | 9,432.00 | - | - | - | 1,93,132.00 | | | | | | | |
| " Meeting Expenses | 25,59,128.00 | 29,05,960.00 | - | - | - | 54,65,088.00 | | | | | | | |
| " Messing Expenses | - | 38,117.00 | - | - | - | 38,117.00 | | | | | | | |
| " Parliament Committee Visit Exp | 4,50,000.00 | - | - | - | - | 4,50,000.00 | | | | | | | |
| " Printing & Stationery | 69,384.00 | 1,400.00 | - | - | - | 70,784.00 | | | | | | | |
| " Repair & Maintance | 7,96,602.00 | - | 71,64,951.00 | - | - | 79,61,553.00 | | | | | | | |
| " Refreshment Expenses | - | 1,14,988.00 | - | - | - | 1,14,988.00 | | | | | | | |
| " Sanitation Expenses | - | 4,310.00 | - | - | - | 4,310.00 | | | | | | | |
| " Security & Manpower | 1,33,90,301.00 | - | - | - | - | 1,33,90,301.00 | | | | | | | |
| " Staff Welfare | - | 25,999.00 | - | - | - | 25,999.00 | | | | | | | |
| " Travel & Comveyance | 8,808.00 | 12,716.00 | - | - | - | 21,524.00 | | | | | | | |
| " Wages | 3,36,194.00 | 14,500.00 | - | - | - | 3,50,694.00 | | | | | | | |
| " Independence Day Celebration | - | 18,411.00 | - | - | - | 18,411.00 | | | | | | | |
| " Surplus for the year | 64,89,100.30 | 9,32,169.00 | 2,62,277.38 | 3,78,112.00 | 45,973.00 | 81,07,631.68 | | | | | | | - |
| | 5,44,12,302.00 | 43,59,843.00 | 74,27,228.38 | 3,78,112.00 | 45,973.00 | 6,66,23,458.38 | | 5,44,12,302.00 | 43,59,843.00 | 74,27,228.38 | 3,78,112.00 | 45,973.00 | 6,66,23,458.38 |

**Date:**

**Place: Kolkata**

**Signed in terms of our report of even date**

**For, Eastern Regional Power Committee**

**DDO , ERPC** **DDO , ERPC**

# EASTERN REGIONAL POWER COMMITTEE

**14, Golf Club Road, Kolkata - 700033**

**(Consolidated) Receipts & Payments A/c for the year ended 31st March 2022**

| Receipts | Establishment Fund | ERPC Fund | PRDB PSDF | PSDF Study Programme Foreign | PSDF Training Programme | Total |
|---|---|---|---|---|---|---|
| To Opening Balance | | | | | | |
| Bank | 7,42,80,966.50 | 75,22,038.00 | 1,44,86,547.00 | 1,50,258.00 | 5,27,424.00 | 9,69,67,233.50 |
| Cash | - | 36,043.00 | | | | 36,043.00 |
| | | | | | | - |
| " Closing Current Laibilities | 23,38,067.00 | 810.00 | | | | 23,38,877.00 |
| Canteen Deposit | | 15,000.00 | | | | 15,000.00 |
| " Opening Sundry Debtors | 67,50,000.00 | 4,00,000.00 | | | | 71,50,000.00 |
| Fixed Deposit Maturity | | | 68,58,190.00 | 1,50,00,000.00 | 20,00,000.00 | 2,38,58,190.00 |
| Loans and Advances (Contra) | | | 7,28,639.00 | | | 7,28,639.00 |
| | | | | | | - |
| To Revenue Income | | | | | | - |
| Fees & Charges | 5,32,50,000.00 | 42,00,000.00 | | | | 5,74,50,000.00 |
| Canteen sale | | 1,59,843.00 | | | | 1,59,843.00 |
| Interest on FD | | | 2,62,277.38 | 3,78,112.00 | 45,973.00 | 6,86,362.38 |
| Grant-in-Aid | | | 71,64,951.00 | | | 71,64,951.00 |
| Depreciation reversal | 11,62,302.00 | | | | | 11,62,302.00 |
| | | | | | | - |
| | 13,77,81,335.50 | 1,23,33,734.00 | 2,95,00,604.38 | 1,55,28,370.00 | 25,73,397.00 | 19,77,17,440.88 |

| Payments | Establishment Fund | ERPC Fund | PRDB PSDF | PSDF Study Programme Foreign | PSDF Training Programme | Total |
|---|---|---|---|---|---|---|
| By Capital Expenses Made | 11,81,100.00 | | | | | 11,81,100.00 |
| " Unspent Grant | | | 71,64,951.00 | | | 71,64,951.00 |
| " Tax Deducted at Source | 15,306.00 | 2,041.00 | | 38,304.50 | 4,104.00 | 59,755.50 |
| " Interest accrued on FD | | | 42,842.38 | 4,067.10 | 542.70 | 47,452.18 |
| " Opening Current Liabilities | 20,00,000.00 | | | | | 20,00,000.00 |
| " Advance to Officials | | 55,000.00 | | | | 55,000.00 |
| " Closing Sundry Debtors | 1,34,84,694.00 | 9,97,959.00 | | | | 1,44,82,653.00 |
| " Fixed Deposit made | | | 1,42,80,000.00 | 1,52,71,315.70 | 20,36,739.90 | 3,15,88,055.60 |
| " Loans and Advances (Contra) | | | 7,28,639.00 | | | 7,28,639.00 |
| | | | | | | - |
| By Revenue Payments | | | | | | - |
| Accounting Charges | 75,000.00 | | | | | 75,000.00 |
| Advertisement | 17,384.00 | | | | | 17,384.00 |
| Audit Fees | 10,000.00 | | | | | 10,000.00 |
| Bank Charges | 1,504.70 | 890.00 | | | | 2,394.70 |
| Books & Periodicals | 10,000.00 | | | | | 10,000.00 |
| Canteen Expenses | | 1,54,009.00 | | | | 1,54,009.00 |
| Car Expenses | 3,14,313.00 | 80,400.00 | | | | 3,94,713.00 |
| Consultancy Charges | 8,70,500.00 | | | | | 8,70,500.00 |
| Cultural Program | 19,824.00 | | | | | 19,824.00 |
| Depreciation | 11,62,302.00 | | | | | 11,62,302.00 |
| Electricity Charges | 7,16,306.00 | | | | | 7,16,306.00 |
| Expenses Govt. A/c. | 2,64,84,527.00 | | | | | 2,64,84,527.00 |
| Gardening Expenses | 3,46,920.00 | | | | | 3,46,920.00 |
| General Expenses | 1,00,504.00 | 46,542.00 | | | | 1,47,046.00 |
| Internet Charges | 1,83,700.00 | 9,432.00 | | | | 1,93,132.00 |
| Meeting Expenses | 25,59,128.00 | 29,05,960.00 | | | | 54,65,088.00 |
| Messing Expenses | | 38,117.00 | | | | 38,117.00 |
| Parliament Committee Visit Exp. | 4,50,000.00 | | | | | 4,50,000.00 |
| Printing & Stationery | 69,384.00 | 1,400.00 | | | | 70,784.00 |
| Repair & Maintance | 9,18,042.00 | | 71,64,951.00 | | | 80,82,993.00 |
| Refreshment Expenses | | 1,14,988.00 | | | | 1,14,988.00 |
| Sanitation Expenses | | 4,310.00 | | | | 4,310.00 |
| Security & Manpower | 1,33,90,301.00 | | | | | 1,33,90,301.00 |
| Staff Welfare | | 25,999.00 | | | | 25,999.00 |
| Travel & Comveyance | 8,808.00 | 12,716.00 | | | | 21,524.00 |
| Wages | 3,36,194.00 | 14,500.00 | | | | 3,50,694.00 |
| Independence Day Celebration | | 18,411.00 | | | | 18,411.00 |
| | | | | | | |
| By Closing Balance | | | | | | - |
| Bank | 7,30,55,593.80 | 78,13,850.00 | 1,19,221.00 | 2,14,682.70 | 5,32,010.40 | 8,17,35,357.90 |
| Cash | - | 37,210.00 | - | - | - | 37,210.00 |
| | 13,77,81,335.50 | 1,23,33,734.00 | 2,95,00,604.38 | 1,55,28,370.00 | 25,73,397.00 | 19,77,17,440.88 |

**Date:**

**Place: Kolkata**

**For, Eastern Regional Power Committee**

**DDO Estt. Fund, ERPC**

**DDO Estt. Fund, ERPC**

# EASTERN REGIONAL POWER COMMITTEE

## 14, Golf Club Road, Kolkata - 700033

**Statement of (Consolidated) Cashflow (Indirect Method) for the year ended 31st March, 2022**

| Particulars | For the year ended 31.03.2022 | |
|---|---|---|
| Cash flows from operating activities | | |
| Net profit before taxation, and extraordinary item | 81,07,631.68 | |
| Adjustments for : | | |
| Add: Depreciation | 11,62,302.00 | |
| | 92,69,933.68 | |
| Less: Depreciation (Contra) | 11,62,302.00 | |
| Operating profit before working capital changes | 81,07,631.68 | |
| Increase / (Decrease) in Trade Payable | - | |
| Decrease/ (Increase) in Trade Receivable | -73,32,653.00 | |
| Decrease / (Increase) in Short Term Loans & Advances | -55,000.00 | |
| Increase / (Decrease) in Other Current Liabilities | 2,32,437.00 | |
| Increase / (Decrease) in Unpent Grant-in-Aid | -71,64,951.00 | |
| Cash generated from operations | -62,12,535.32 | |
| Income taxes paid | 59,755.50 | |
| Cash flow before extraordinary item | -62,72,290.82 | |
| Add: Extraordinary Items | - | |
| **Net cash from operating activities** | | -62,72,290.82 |
| Cash flows from investing activities | | |
| Increase in Fixed Assets | -11,81,100.00 | |
| Decrease / (Increase) in Non-Current Investment | -77,77,317.78 | |
| Decrease in Long Term Loans and Advances | | |
| **Net cash from investing activities** | | -89,58,417.78 |
| Cash flows from financing activities | | |
| Increase in Share Capital | | |
| Increase in long-term borrowings | | |
| Interest paid | | |
| Dividends paid | | |
| **Net cash used in financing activities** | | - |
| Net increase in cash and cash equivalents | | -1,52,30,708.60 |
| Cash and cash equivalents at beginning of period | | 9,70,03,276.50 |
| Cash and cash equivalents at end of period | | 8,17,72,567.90 |

*The accompanying Statement of Significant Accounting Policies form an integral part of the financial statements*

*Dated:* *In terms of our report attached.*

*Place: KOLKATA*

***For, Eastern Regional Power Committee***

***DDO, ERPC*** ***DDO, ERPC***

# *EASTERN REGIONAL POWER COMMITTEE*

***14, Golf Club Road, Kolkata - 700033***

**(Consolidated) FIXED ASSETS AS AT 31ST MARCH, 2022**

| *Particulars* | *Opening WDV as on 01.04.2021* | *Addition during the year* | | *Rate* | *Depreciation for the year* | | *Closing WDV as on 31.03.2022* |
|---|---|---|---|---|---|---|---|
| | | *upto 30.09.2021* | *after 30.09.2021* | | *upto 30.09.2021* | *after 30.09.2021* | |
| *Other Equipments* | | *4,96,200.00* | *-* | *10%* | *49,620.00* | *-* | *4,46,580.00* |
| *Office Machinery* | *10,02,534.00* | | *-* | *15%* | *1,50,380.00* | *-* | *8,52,154.00* |
| *Furniture Account* | *51,89,128.00* | *-* | *-* | *10%* | *5,18,913.00* | *-* | *46,70,215.00* |
| *Office Car* | *9,33,950.00* | *-* | *-* | *15%* | *1,40,093.00* | *-* | *7,93,857.00* |
| *Electric Equipment* | | *42,590.00* | *1,57,106.00* | *10%* | *4,259.00* | *7,855.00* | *1,87,582.00* |
| *Computer* | *4,85,352.00* | *-* | *4,85,204.00* | *40%* | *1,94,141.00* | *97,041.00* | *6,79,374.00* |
| *Total* | *76,10,964.00* | *5,38,790.00* | *6,42,310.00* | | *10,57,406.00* | *1,04,896.00* | *76,29,762.00* |

## *EASTERN REGIONAL POWER COMMITTEE - (Proj : PSDF Training Programme)*

***14, Golf Club Road, Kolkata - 700033***

***Receipt & Payment A/c. for the year ended 31st March 2022***

| Receipts | Amount (Rs) | Payments | Amount (Rs) |
|---|---|---|---|
| *Opening Balance:-* | | | |
| *Cash at Bank* | *5,27,424.00* | *Fixed Deposit* | *20,36,739.90* |
| | | *Interest accrued on FD* | *542.70* |
| *Interest on FD* | *45,973.00* | | |
| | | *TDS AY: 2022-23* | *4,104.00* |
| *Fixed Deposit* | *20,00,000.00* | | |
| | | *Closing Balance:-* | |
| | | *Cash at Bank* | *5,32,010.40* |
| | ***25,73,397.00*** | | ***25,73,397.00*** |

***Date:***
***Place: Kolkata***

***For, Eastern Regional Power Committee***

***DDO, ERPC*** ***DDO, ERPC***

## *EASTERN REGIONAL POWER COMMITTEE - (Proj: PSDF Study Programme Foreign)*

***14, Golf Club Road, Kolkata - 700033***

***Receipt & Payment A/c. for the year ended 31st March 2022***

| Receipts | Amount (Rs) | Payments | Amount (Rs) |
|---|---|---|---|
| *Opening Balance:-* | | | |
| *Cash at Bank* | *1,50,258.00* | *Fixed Deposit* | *1,52,71,315.70* |
| | | *Interest accrued on FD* | *4,067.10* |
| *Interest on FD* | *3,78,112.00* | | |
| | | *TDS AY: 2022-23* | *38,304.50* |
| *Fixed Deposit* | *1,50,00,000.00* | | |
| | | *Closing Balance:-* | |
| | | *Cash at Bank* | *2,14,682.70* |
| | ***1,55,28,370.00*** | | ***1,55,28,370.00*** |

***Date:***
***Place: Kolkata***

***For, Eastern Regional Power Committee***

***DDO, ERPC*** ***DDO, ERPC***

## *EASTERN REGIONAL POWER COMMITTEE - (Proj. - PRDB PSDF)*

***14, Golf Club Road, Kolkata - 700033***

***Receipt & Payment A/c. for the year ended 31st March 2022***

| Receipts | Amount (Rs) | Payments | Amount (Rs) |
|---|---|---|---|
| *Opening Balance:-* | | | |
| *Cash at Bank* | *1,44,86,547.00* | *Expenses towards Creation & Maintenance of Web-based* | |
| *Interest on FD* | *2,62,277.38* | *Protection Datatbase* | *71,64,951.00* |
| *Grant-in-Aid* | *71,64,951.00* | | |
| *Fixed Deposit maturity* | *68,58,190.00* | *Fixed Deposit* | *1,42,80,000.00* |
| | | *Interest accrued on FD* | *42,842.38* |
| *GST Deduction* | *1,21,440.00* | *GST Paid* | *1,21,440.00* |
| *TDS made* | *6,07,199.00* | *TDS Paid* | *6,07,199.00* |
| | | *Unspent Grant* | *71,64,951.00* |
| | | *Closing Balance:-* | |
| | | *Cash at Bank* | *1,19,221.00* |
| | ***2,95,00,604.38*** | | ***2,95,00,604.38*** |

***Date:***
***Place: Kolkata***

***For, Eastern Regional Power Committee***

***DDO, ERPC*** ***DDO, ERPC***

**Minutes of Meeting for Audit of ERPC Funds held at ERPC, Kolkata on 23.02.23.**

A. During verification of documents, it was seen that the entity ERPC maintained two Permanent Account Numbers (PAN) viz. one for its Establishment Fund and another for the ERPC Fund. Similarly, it has got two Tax Deduction Account Numbers (TAN) for each such fund. However, till date it has been allotted a single GST Number for its Establishment Fund where as we have been told that a separate application for the ERPC Fund has been made for GST Registration. We are of the opinion that an entity may have "n" number of funds that does not mean that every fund will have a separate PAN, TAN & GSTN etc. under these circumstances we suggest that the entity should maintain a single PAN, a single TAN and a single GSTN.

B. That inpose of our verification we found that the entity has maintained two separate Books of Accounts – One for the "Establishment Fund" and another for the "ERPC Fund". Considering our suggestion in point no A we suggest that although the entity may prepare fund wise financial statement, but it should also prepare consolidated Receipt & Payments Accounts, Income & Expenditure Account, Cash flow Account and Balance Sheet.

C. It is advised to maintain fund wise Fixed Assets Register and consolidated as well.

D. Consolidated Receipt & Payments Accounts, Income & Expenditure Account, Cash flow Account and Balance Sheet should be placed before Board and after adoption of Accounting Policy & Financial statement, it should be placed before Audit.

E. We observe a huge Bank Balance in the Books of Accounts. It is advised to take decision over reduction of Member Fee or introduction of any training program in the benefit of Members as deemed fit by the competent authority.

| | | |
|---|---|---|
| 23/02/2023 | 23/2/23 | 23/02/23 |
| (A Basu) | ( CA, Ajay Kr. Rai) | (Shailesh Pathak) |
| (DDO Estt Fund, ERPC) | (A.O , BSPTCL) | (Manager Fin., JUVNL) |

एसजेवीएन थर्मल (प्रा.) लिमिटेड
**SJVN Thermal (P.) Ltd**
(एसजेवीएन की पूर्ण स्वामित्वाधीन कंपनी)
(A wholly owned subsidiary of SJVN)
1320 मेगावाट बक्सर ताप विद्युत परियोजना
1320 MW Buxar Thermal Power Project
CIN: U31908BR2007PTC017646

Ref: STPL/08/08/01/002/2022- 260

Date: 27/12/2022

To,
The Member Secretary,
Eastern Regional Power Committee
14, Golf Club Road
Tollygunje, Kolkata-700033

Sub: Request for Membership.

Sir,

SJVN Limited, a Mini Ratna, Category-I and Schedule- 'A' CPSE under administrative control of Ministry of Power, Govt. of India, was incorporated on May 24, 1988 as a joint venture of the Government of India (GOI) and the Government of Himachal Pradesh (GOHP). SJVN is now a listed Company having shareholders pattern of 61.93% with Govt. of India, 26.85% with Govt. of Himachal Pradesh and rest of 11.22% with Public.

SJVN Limited signed MOU with Bihar State Power Holding Company Limited (BSPHCL) and BPIC on 17.01.2013 to develop Buxar Thermal Power Project on Build, Operate, Own, Maintain (BOOM) basis subsequently took over the project through its wholly owned subsidiary – SJVN Thermal Pvt. Ltd. (STPL) – in July 2013.

Power Purchase Agreement (PPA) signed with Govt. of Bihar on 05.01.2011 and further reconfirmed on 09.01.2018 for supply of not less than 85% of power. The remaining power is unallocated.

After investment approval from Govt. of India the contract for implementation of main plant works project on EPC basis has been awarded to M/s L&T. Further contract for development of rail infrastructure for transportation of coal has also been awarded to RITES.

The works of the project is in full swing and its transmission line, under construction by Bihar STU, for power evacuation is also on fast track.

पंजीकृत कार्यालय: 169, पाटलीपुत्र कॉलोनी, पटना-800013 (बिहार)
दूरभाष: 0612-2263328
परियोजना कार्यालय: दूसरी मंजिल, नवदुर्गा कॉम्प्लेक्स, कलेक्ट्रेट रोड, अम्बेडकर चौक, बक्सर-802103
दूरभाष: 06183-223105, फैक्स: 06183-223165
ईमेल: ceostpl@gmail.com
www.sjvnthermal.in

Regd. Office : 169, Patliputra Colony, Patna – 800013 (Bihar) Tel : 0612-2263328
Project Office: 2nd Floor, NavDurga Complex, Collectorate Road, Ambedkar Chowk, Buxar – 802103 (Bihar)
Tel:06183-223105, Fax: 06183-223165
E-mail: ceostpl@gmail.com.

Power Evacuation from the project will be done at 400KV and 220 KV level through following lines

- To Naubatpur through 400 KV- Double circuit line
- To Dehri-on-Son through 220 KV- Single circuit line
- To Dumaron through 220 KV- Double circuit line
- To Karmnasa (New) through 220 KV- Double circuit line

In view of above, it is requested to allow STPL the membership of ERPC as ISGS. It is also requested to inform regarding other statutory requirements/formalities so that same can be fulfilled.

Thanking you.

Yours Faithfully

27/12/22

(Manoj Kumar)
Chief Executive Officer
STPL, Buxar