



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

उत्तर क्षेत्रीय विद्युत समिति

Northern Regional Power Committee

सं. उक्षेविस/ वाणिज्यिक/ 209/ आर पी सी (66वीं)/2023/5588-5635

दिनांक: 25.05.2023

सेवा में / To,

उ.क्षे.वि.स. के सभी सदस्य (संलग्न सूचीनुसार)
Members of NRPC (As per List)

विषय: उत्तर क्षेत्रीय विद्युत समिति की 66^{वीं} बैठक की कार्यसूची ।

Subject: Agenda for 66th meeting of Northern Regional Power Committee-reg

महोदय / Sir,

उत्तर क्षेत्रीय विद्युत समिति की 66^{वीं} बैठक दिनांक **30.05.2023 (11:00 AM)** को वीडियो कॉन्फ्रेंसिंग के माध्यम से आयोजित की जाएगी। बैठक की कार्यसूची संलग्न है। कृपया उपस्थिति सुनिश्चित करें। मीटिंग लिंक अलग से साझा किया जाएगा।

The 66th meeting of Northern Regional Power Committee (NRPC) will be held on **30.05.2023 (11:00 AM)** via video conferencing. Agenda for the same is attached.

It is requested to attend the same. Meeting link shall be shared separately.

भवदीय

Yours faithfully,

25.05.2023
(वी. के. सिंह)

(V. K. Singh)

सदस्य सचिव

Member Secretary

प्रतिलिपि: मोहम्मद शायिन, एमडी, एचवीपीएनएल एवं अध्यक्ष, एनआरपीसी (md@hvpn.org.in)

NRPC Members for FY 2023-24

S. No.	NRPC Member	Category	Nominated Member	E-mail
1	Member (GO&D), CEA	-	-	member.god.cea@gov.in
2	CTUIL	Central Transmission Utility	Chief Operating Officer	pcgarg@powergrid.in
3	PGCIL	Central Government owned Transmission Company	Director (Operations)	tyagir@powergrid.in
4	NLDC	National Load Despatch Centre	Executive Director	scsaxena@grid-india.in
5	NRLDC	Northern Regional Load Despatch	Executive Director	rk.porwal@grid-india.in
6	NTPC	Central Generating Company	Director (Finance)	jaikumar@ntpc.co.in
7	BBMB		Chairman	cman@bbmb.nic.in
8	THDC		ED (PSP&APP)	ljoshi@thdc.co.in
9	SJVN		CMD	sectt.cmd@sjvn.nic.in
10	NHPC		Director (Technical)	ykchaubey@nhpc.nic.in
11	NPCIL		Director (Finance)	df@npcil.co.in
12	Delhi SLDC	State Load Despatch Centre	General Manager	gmsldc@delhisldc.org
13	Haryana SLDC		Chief Engineer (SO&C)	cesocomm@hvpn.org.in
14	Rajasthan SLDC		Chief Engineer (LD)	ce.ld@rvpn.co.in
15	Uttar Pradesh SLDC		Director	directorsldc@upsldc.org
16	Uttarakhand SLDC		Chief Engineer	anupam_singh@ptcul.org
17	Punjab SLDC		Chief Engineer	ce-sldc@punjabslcdc.org
18	Himachal Pradesh SLDC	Chief Engineer	cehpsldc@gmail.com	
19	DTL	State Transmission Utility	CMD	cmd@dtl.gov.in
20	HVPNL		Managing Director	md@hvpn.org.in
21	RRVNL		CMD	cmd.rvpn@rvpn.co.in
22	UPPTCL		Managing Director	md@upptcl.org
23	PTCUL		Managing Director	md@ptcul.org
24	PSTCL		CMD	cmd@pstcl.org
25	HPPTCL	State Generating Company	Managing Director	md.tcl@hpmail.in
26	IPGCL		Managing Director	md.ipgpp@nic.in
27	HPGCL		Managing Director	md@hpgcl.org.in
28	RRVUNL		CMD	cmd@rrvun.com
29	UPRVUNL		Managing Director	md@uprvunl.org
30	UJVNL		Managing Director	md@ujvnl.com
31	HPPCL	Managing Director	md@hppcl.in	
32	PSPCL	State Generating Company & State owned Distribution Company	CMD	cmd-pspcl@pspcl.in
33	DHBVN	State owned Distribution Company (alphabetical rotational basis/nominated by state govt.)	Director (Projects)	directorprojects@dhbvn.org.in
34	Jaipur Vidyut Vitran Nigam Ltd.		Managing Director	md@jvnl.org
35	Madhyanchal Vidyut Vitaran Nigam Ltd.		Managing Director	mdmvnl@gmail.com
36	UPCL		Managing Director	md@upcl.org
37	HPSEB		Managing Director	md@hpseb.in
38	Prayagraj Power Generation Co. Ltd.	IPP having more than 1000 MW installed capacity	Head (Commercial & Regulatory)	sanjay.bhargava@tatapower.com
39	Aravali Power Company Pvt. Ltd.		CEO	SRBODANKI@NTPC.CO.IN
40	CLP Jhajar Power Ltd.,		CEO	rajneesh.setia@apraava.com
41	Talwandi Sabo Power Ltd.		COO	Vibhav.Agarwal@vedanta.co.in
42	Nabha Power Limited		CEO	sk.narang@larsentoubro.com
43	Lanco Anpara Power Ltd		President	sudheer.kothapalli@lancogroup.com
44	Rosa Power Supply Company Ltd		Station Director	Hriday.tomar@relianceada.com
45	Lalitpur Power Generation Company Ltd		Managing Director	yksbankoti@bajajenergy.com
46	MEJA Urja Nigam Ltd.		CEO	hopmeja@ntpc.co.in
47	Adani Power Rajasthan Limited		COO, Thermal, O&M	jayadeb.nanda@adani.com
48	JSW Energy Ltd. (KWHEP)		Head Regulatory & Power Sales	jyotiprakash.panda@jsw.in
49	RENEW POWER	IPP having less than 1000 MW installed capacity (alphabetical rotational basis)	CEO	sumant@renew.com
50	UT of J&K	From each of the Union Territories in the region, a representative nominated by the administration of the Union Territory concerned out of the entities engaged in generation/ transmission/ distribution of electricity in the Union Territory.	Chief Engineer, JKPTCL	sojpd@gmail.com
51	UT of Ladakh		Chief Engineer, LPDD	cepdladakh@gmail.com
52	UT of Chandigarh		Executive Engineer, EWEDC	elop2-chd@nic.in
53	BYPL	Private Distribution Company in region (alphabetical rotational basis)	CEO	Amarjeet.Sheoran@relianceada.com
54	Bikaner Khetri Transmission Limited	Private transmission licensee (nominated by central govt.)	Vice-President	nihar.raj@adani.com
55	Adani Enterprises	Electricity Trader (nominated by central govt.)	Head Power Sales & Trading	anshul.garg@adani.com

Special Invitees: RE Generators in NR (willing utilities may ask meeting link from NRPC Sectt.)

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उत्तरी क्षेत्रीय विद्युत समिति की 66^{वीं} बैठक

66th MEETING OF NORTHERN REGIONAL POWER COMMITTEE

Time & Date of meeting: 30th May 2023

Venue: Video-conferencing

AGENDA

A.1 Approval of MoM of 65th NRPC meeting

A.1.1 Minutes of 65th NRPC meeting (held on 21.04.2023) has been issued vide letter dtd. 18.05.2023. No comments have been received till the date.

Members may kindly approve.

A.2 Recommendation for PSDF fund for replacement of ACSR Panther conductor in 132KV Sitarganj (PGCIL)- ELDECO Sitarganj single circuit line (22.0 Kms) and 132 KV Sitarganj –Kichha line (31.5Kms) with HTLS conductor (Agenda by PTCUL)

A.2.1 PTCUL has submitted that there are mainly two sources of power in Kumaon region, one is from 400 kV PGCIL Lines connected to 400 kV S/s Kashipur and the other is 220 kV Pantnagar –Bareilly Line which is connected to 220 kV Pantnagar S/s. PGCIL lines cater approximately 60 % load of Kumaon and partial load of Garhwal region also.

A.2.2 Due to exponential growth in power demand of Kichha and ELDECO Sitarganj region, the existing line is unable to cater power demand of above region. It is also to be noted that there is no possibility of erecting new line due to non-availability of ROW (Right of Way). Therefore, replacement of ACSR Panther conductor in 132KV Sitarganj (PGCIL)- ELDECO Sitarganj single circuit line (22.0 Kms) and 132 KV Sitarganj –Kichha line (31.5Kms) with HTLS conductor is the only possible option to reduce the over loading of existing line and also to improve the reliability of the evacuation of power to cater the increased load demand in Kichha, ELDECO and nearby area through 132 KV Substation, Kichha and ELDECO. This Line is the only gateway of power from 220kV PGCIL substation Sitarganj thereby it justifies the existence of 220 kV PGCIL S/s and provides stability to the grid by evacuating power from aforementioned PGCIL S/s.

A.2.3 NLDC-PSDF in its 72nd TESSG meeting, held on 18.01.2023 raised input/ observation that “Recommendation of NRPC is required”.

A.2.4 PTCUL presented the same in 64th NRPC meeting (held on 24.03.2023) and accordingly it was decided that study done by PTCUL need to be examined by CEA and CTU.

A.2.5 Study of PTCUL has been examined by CEA in congruence with CTU and has been found in order vide CEA letter dtd. 09.05.2023 (**Annexure-I**).

A.2.6 PTCUL has requested that the above proposal is eligible for 100 % funding from PSDF and has requested NRPC forum to recommend for PSDF grant.

Members may kindly deliberate.

A.3 Replacement of existing 220/132kV 100 MVA ICT at Sitarganj with Regional Spare 220/132kV 160MVA ICT with provision of the LT Auxiliary supply from the tertiary (agenda by POWERGRID)

A.3.1 POWERGRID has submitted that as per 47th NRPC Meeting approval, 01 No. 220/132kV, 160MVA ICT at Sitarganj has been commissioned as Regional Spare ICT at Sitarganj Substation of NR-3 (DOCO 05.07.2022) under the project **“Provision for Spare ICTs in Northern Region”**.

A.3.2 Presently, at 220/132kV Sitarganj Substation, 03 Nos. 100MVA 220/132kV ICTs are commissioned, all of which do not have tertiary winding for the provision of taking auxiliary supply for the systems installed at Sitarganj Substation.

A.3.3 Further, there are 02 Nos. 11kV UPCL LT Supply Feeder sources available at Sitarganj Substation to cater the requirement of auxiliary supply of Sitarganj substation. Both UPCL LT feeders are not reliable in operation and there are frequent interruptions of the supply (especially during the summer season) due to fault in the 11kV feeders which causes frequent switching of the auxiliary supply at Sitarganj substation. Reliable auxiliary supply is the prime requirement for reliable and secure grid operation. The details of the tripping/switching of the 11kV UPCL LT feeders are as presented below: -

SI. No.	Month and Year (April 2022-March 2023)	No. of Tripping/switching of LT Feeder of Sitarganj
1	April 2022	39
2	May 2022	120
3	June 2022	194
4	July 2022	244
5	August 2022	182
6	September 2022	97
7	October 2022	45
8	November 2022	22
9	December 2022	34
10	January 2023	61
11	February 2023	31
12	March 2023	27

A.3.4 Therefore, for reliable auxiliary supply at Sitarganj substation, following is proposed by POWERGRID to mitigate the above problem: -

- i. Replacement of existing 01no. 100MVA 220/132kV ICT at Sitarganj with Regional Spare 160MVA 220/132kV ICT (having the provision of the LT Auxiliary Supply from the tertiary) and keeping the replaced 100 MVA220/132 ICT as regional spare.
- ii. Reimbursement of the cost to be incurred in the replacement of the 100MVA 220/132kV ICT at Sitarganj with Regional Spare ICT along with the cost for the provision of necessary tertiary bay equipment & protection system for using the tertiary winding for station auxiliary power supply. Total erection and commissioning cost towards replacement of ICT and providing tertiary bay equipment will be approx 1.25 Cr excluding Taxes.
- iii. Required outage for the above replacement may be considered as deemed available in view of the system improvement and reliable grid operation.

Members may kindly deliberate.

A.4 System Protection Scheme (SPS) for BARA TPS (agenda by UPSLDC)

- A.4.1 UPSLDC has submitted that 1500 MVA, 765/400 kV ICT-II has been commissioned on 31.03.2023 at Bara TPS. Following the commissioning of aforementioned ICT, SPS installed at Bara TPS needs to be revised (scheme attached as **Annexure-II**).
- A.4.2 Discussion on revised SPS scheme at Bara TPS was held in 206th & 207th OCC meeting of NRPC and a special meeting held on subject 12.05.2023.
- A.4.3 Scheme is submitted for approval of NRPC forum.

Members may kindly deliberate.

A.5 System Protection Scheme (SPS) for Jawaharpur TPS (agenda by UPSLDC)

- A.5.1 UPSLDC has submitted that evacuation of power from JawaharpurTPS is to be done through 765kV Jawaharpur-Gr. Noida line, 765kV Jawaharpur-Mainpuri line and 2*1500 MVA ICT at Jawaharpur. At present only 765kV Jawaharpur-Gr. Noida line and 765kV Jawaharpur-Mainpuri line are commissioned. UPSLDC representative also briefed about the logic of SPS at Jawaharpur TPS. Due to availability of Single ICT of 1000 MVA at 765kV S/S Mainpuri, power from Jawaharpur TPS cannot be evacuated if 765kV Jawaharpur-Gr. Noida line is not available. Therefore, SPS has been proposed by UPSLDC.

A.5.2 Scheme has been discussed in meeting held on 23.05.2023 (minutes attached as **Annexure-III**). As per decision taken in meeting, approval of NRPC forum is required for proposed SPS.

Members may kindly deliberate.

A.6 Clarifications on schemes viz. OPGW on 400kV Agra – Ballabgarh & 400kV Kishenpur – Wagoora line recommended in the 58th NRPC and approved by NCT (agenda by CTU)

A.6.1 CTU has submitted that vide MoM of 58th NRPC (held on 30.09.2022), following two no. of schemes were recommended:

- (a) OPGW Replacement on 400kV Agra – Ballabgarh (Length:181km)
- (b) OPGW Replacement on 400kV Kishenpur – Wagoora line (Length:183km)

A.6.2 This agenda was initially put up by POWERGRID in the 20th TeST meeting of NRPC. Subsequently the agenda was approved in the TeST meeting and NRPC requested CTU to put the agenda in the upcoming TCC/RPC meeting for review before putting it to NCT for approval. As per this, the agenda was put up in 11th NCT meeting and was approved under RTM mode to POWERGRID.

A.6.3 However, after information gathered from POWERGRID, it is understood that above two nos. of OPGW links awarded to POWERGRID for replacement were not originally implemented under ISTS schemes but by PowerTel. It is also understood that these links are partially being used in sharing mode for ISTS purpose.

A.6.4 Accordingly, the above schemes need to be modified as follows.

- (a) Supply & Installation of OPGW on 400kV Agra – Ballabgarh (Length:181km)
- (b) Supply & Installation of OPGW on 400kV Kishenpur – Wagoora line (Length:183km)

A.6.5 Further after implementation of the above schemes, the shared usage of the existing PowerTel links for ISTS purpose shall be discontinued and PowerTel usage for the new ISTS OPGW links, if any, shall be governed by CERC norms.

A.6.6 Accordingly, the above two schemes need to be modified in the NCT after deliberation in the NRPC. Upon recommendation of NRPC on the above, same shall be taken up in the NCT for modification of approval.

Members may kindly deliberate.

A.7 Low voltage related issues in Rajasthan during high wind scenario (during solar hours) (agenda by NRLDC)

- A.7.1 Renewable generation (RE) close to ~12GW has been integrated in Inter-state network of Rajasthan system and ~ 8 GW (Solar: 4.1 GW & Wind: 4.3 GW) is connected at intra-state network of Rajasthan control area. In coming years, RE generation would increase manifold in both ISTS & Intra-state level of Rajasthan in NR. With the existing RE generation being nearly 20 GW in Rajasthan, various operational challenges are being faced during peak RE generation.
- A.7.2 Recently, on 15th May 2023, both Solar (ISTS) and Wind (intra-state) generation were high during solar hours in Rajasthan. Due to high solar & wind generation in this pocket, low voltage were observed at RE pooling stations especially at Intra-state pool stations. Consequently, frequent oscillation (large voltage fluctuation) were observed at all RE pooling & nearby station in Rajasthan from 1000 hrs onwards. Voltage was fluctuating in range of 25-40kV at RE & nearby pooling stations. During the oscillations, bus voltages of RVPN sub-stations near RE pockets were low and fluctuating a lot. High MVAR drawl by RVPN substations such as 400/220kV Kankani, Akal, Ramgarh, Jodhpur, Barmer etc. was observed during this scenario. SCADA & PMU Plots attached at **Annexure-IV**.
- A.7.3 Analysis of above events is being carried out based on PMU data available at NRLDC and performance of RE plants at ISTS is being studied. SLDC, Rajasthan is also requested to study this events and share the report to NRPC/NRLDC along with the mitigation measures to curb such voltage fluctuations/low voltage/high MVAR drawal during peak solar hours.

Members may kindly deliberate.

A.8 PMU Data of RVPN substations (agenda by NRLDC)

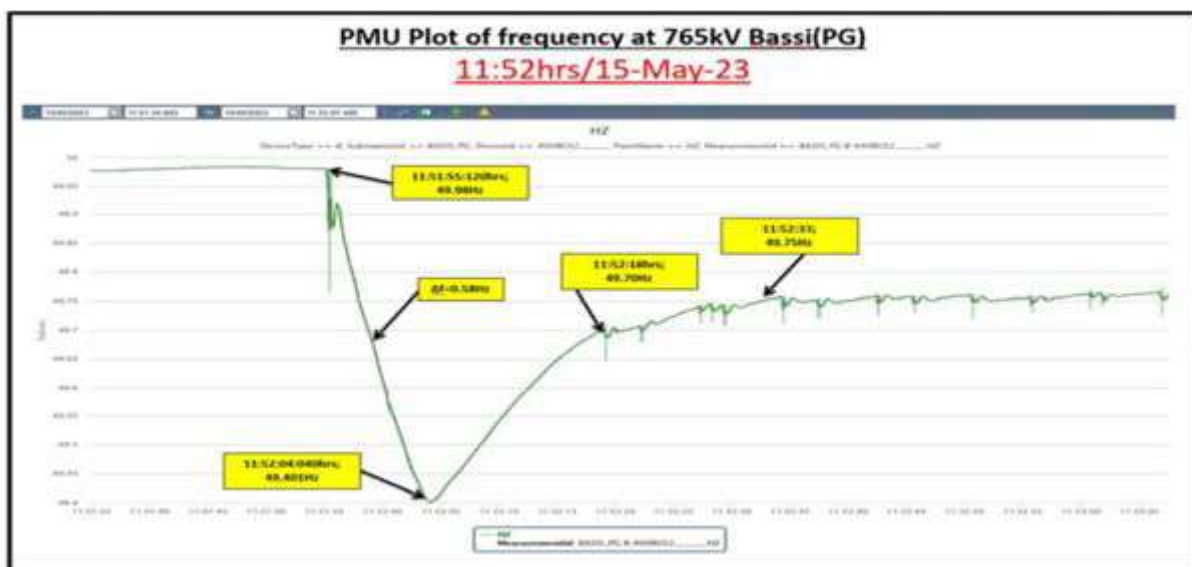
- A.8.1 Integration of PMU installed under Smart Transmission Network & Asset Management System (STNAMS) was discussed in detail in 64th NRPC Meeting held on 24th March 2023 wherein it was recorded that:
- “RRVPNL representative stated that PMUs has started reporting at their control centres. However, prior to integration with Rajasthan PDC, cybersecurity audit was to be completed. He further informed that Cyber security audit has been completed and they are in the process of closure of Cyber Security points. On closure of Cyber Security points, they will start the process of integration of PDC. He confirmed that integration work would be completed by 30th April 2023.”*
- A.8.2 PMU data is very important to analyse transient/dynamic behaviour on fault/switching. Moreover, it is also important to analyse the recent oscillations observed in RE complex.

However, data of PMUs installed in RVPN stations is still not reporting to Rajasthan SLDC/ NRLDC control room.

Members may kindly deliberate.

A.9 Multiple element tripping event in Rajasthan RE Complex (agenda by NRLDC)

- A.9.1 On 15th May 2023, at 11:51:55 hrs, 765kV Bhadla-Bikaner ckt-1 tripped on Y-B phase to phase fault during inclement weather condition (wind/dust storm), fault distance was ~111.6km from Bikaner end (line length is ~169km).
- A.9.2 On this fault, during voltage dip, significant dip in RE generation was observed. Due to significant dip in RE generation and de-loading of 765kV EHV lines (as RE generation failed to recover 90% of pre-fault active power within 1 sec), over voltage (>1.1pu at 765kV & 400kV level at RE Pooling stations) scenario was triggered immediately after the fault that led to multiple element tripping in the RE complex.
- A.9.3 As per PMU & SCADA data, total drop in RE generation was approx. 7120MW (~6410MW ISTS RE generation and ~710MW Rajasthan RE generation). Due to significant dip in RE generation, frequency dropped by 0.58Hz (from 49.98Hz to 49.4Hz). As frequency touched 49.40Hz, load relief of approx. 1500MW (NR) and 4000MW (All India) was observed on UFR operation.



- A.9.4 After the fault, following 765 & 400 kV lines in RE complex tripped on high voltage:
- 765kV Fatehgarh2-Bhadla ckt-1
 - 765kV Bhadla2-Bikaner ckt-1
 - 765kV Ajmer-Phagi ckt-1
 - 765kV Fatehgarh2-Bhadla2 ckt-1
 - 765kV Bhadla-Bikaner ckt-2

- f) 400kV Fatehgarh1-Fatehgarh2 ckt-1
- g) 400kV Bhadla-Bhadla2 ckt-1&2
- h) 400kV Bhadla-Bhadla_Raj ckt-1&2
- i) 400kV Bhadla-Merta ckt
- j) 400kV Bhadla-Jodhpur ckt
- k) 400kV Bhadla-Ramgarh ckt-1&2

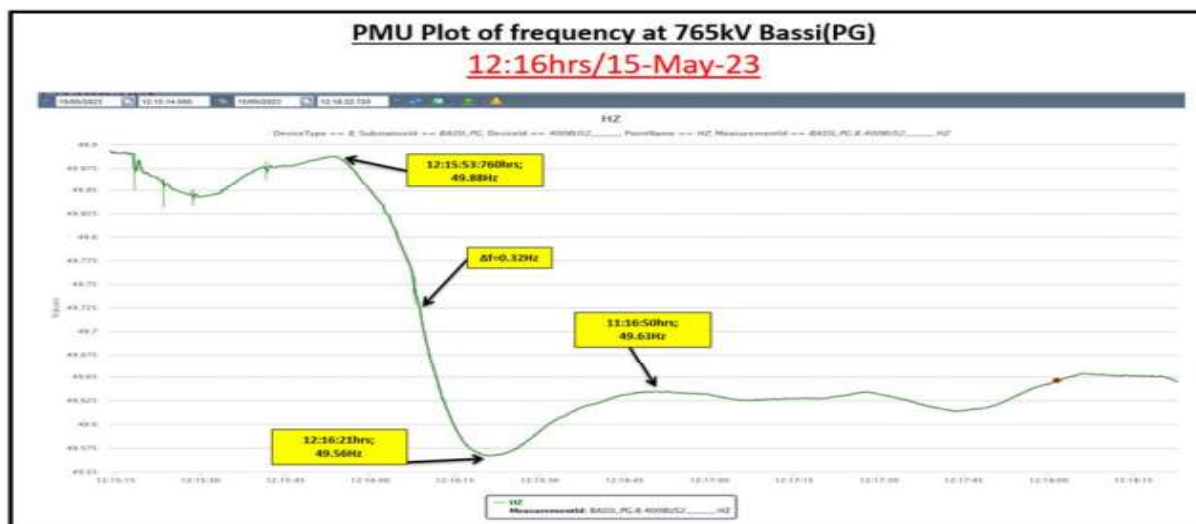
Various 220kV lines dedicated to RE stations also tripped on over voltage during the above event.

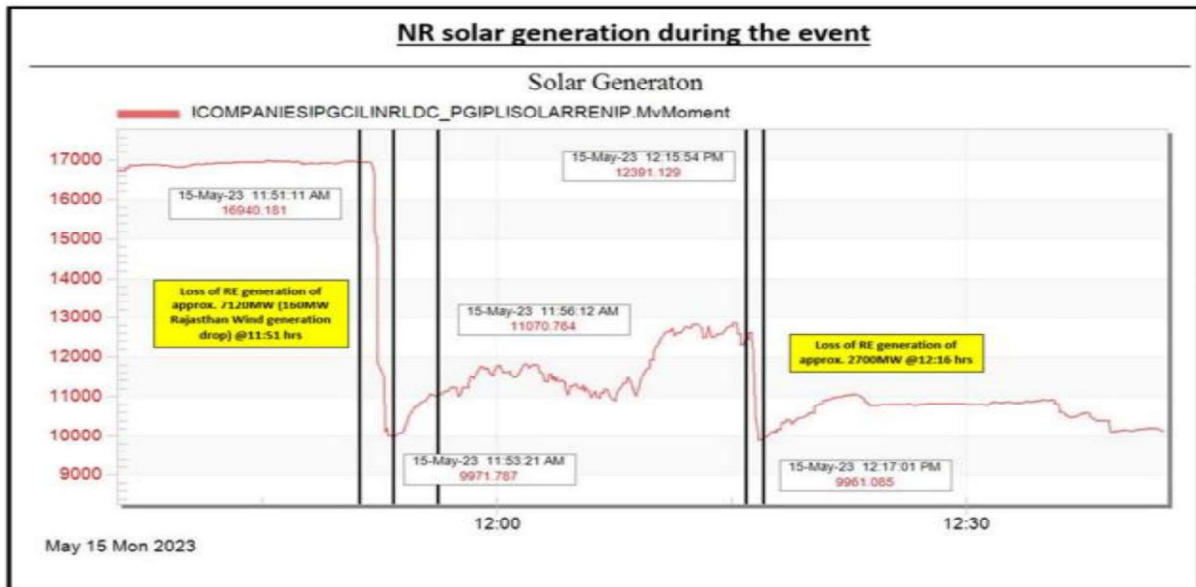
A.9.5 Further at 12:08 hrs, 765kV Fatehgarh2-Bhadla2 ckt-1 was charged. At 12:16hrs, charging attempt of 765kV Bhadla-Bikaner ckt-2 was taken from Bhadla end however, line couldn't hold and again over voltage (>1.1pu at 765kV & 400kV level at RE Pooling stations) scenario was triggered in RE complex.

On this over voltage following 765 & 400 kV lines in RE complex tripped:

- a) 765kV Bhadla-Fatehgarh2 ckt-2
- b) 765kV Bhadla2-Fatehgarh2 ckt-1
- c) 400kV Fatehgarh1-AFSPS ckt-1 & 2
- d) 400kV Bhadla2-Kolayat ckt

A.9.6 Multiple 220kV lines dedicated to RE stations also tripped on over voltage during same time. Further, 765kV Bhadla-Fatehgarh2 ckt-2 and 400kV Fatehgarh1-AFSPS ckt-1 & 2 tripped followed by blackout at 765/400/220kV Bhadla (PG) & 400/220kV ADANI Fatehgarh Solar park. As per PMU & SCADA data, total drop in RE generation was approx. 2700MW. Due to significant dip in RE generation frequency dropped by 0.25Hz (from 49.88Hz to 49.63Hz).

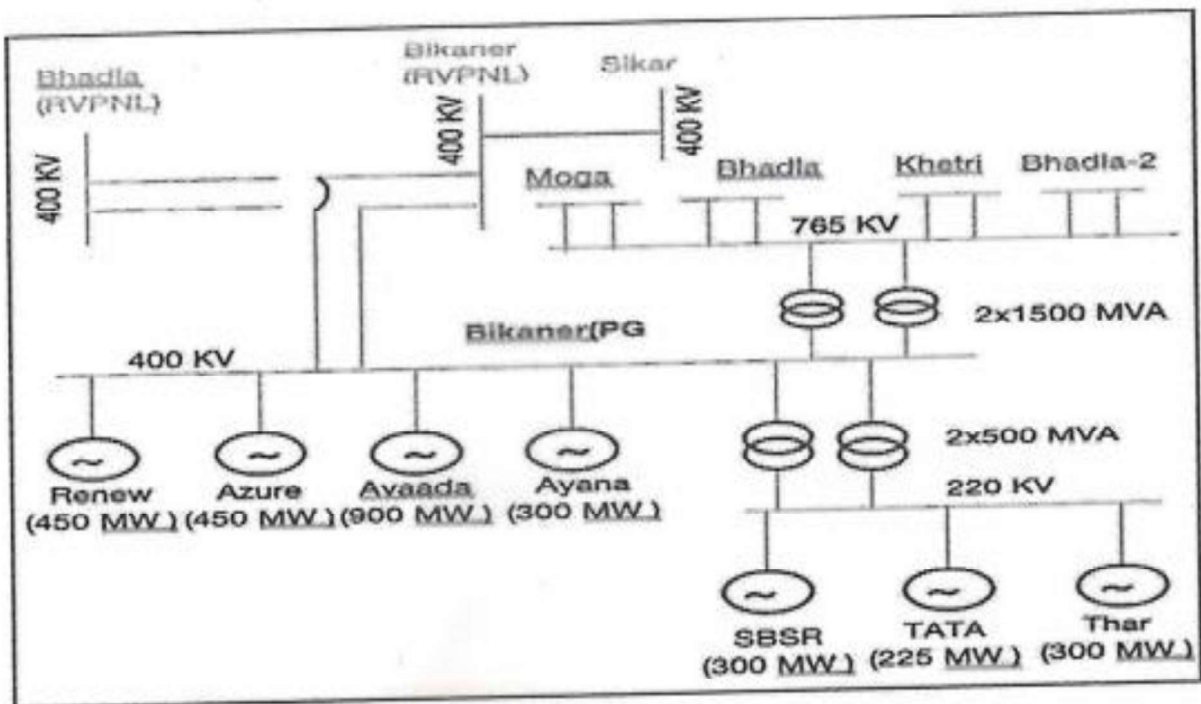




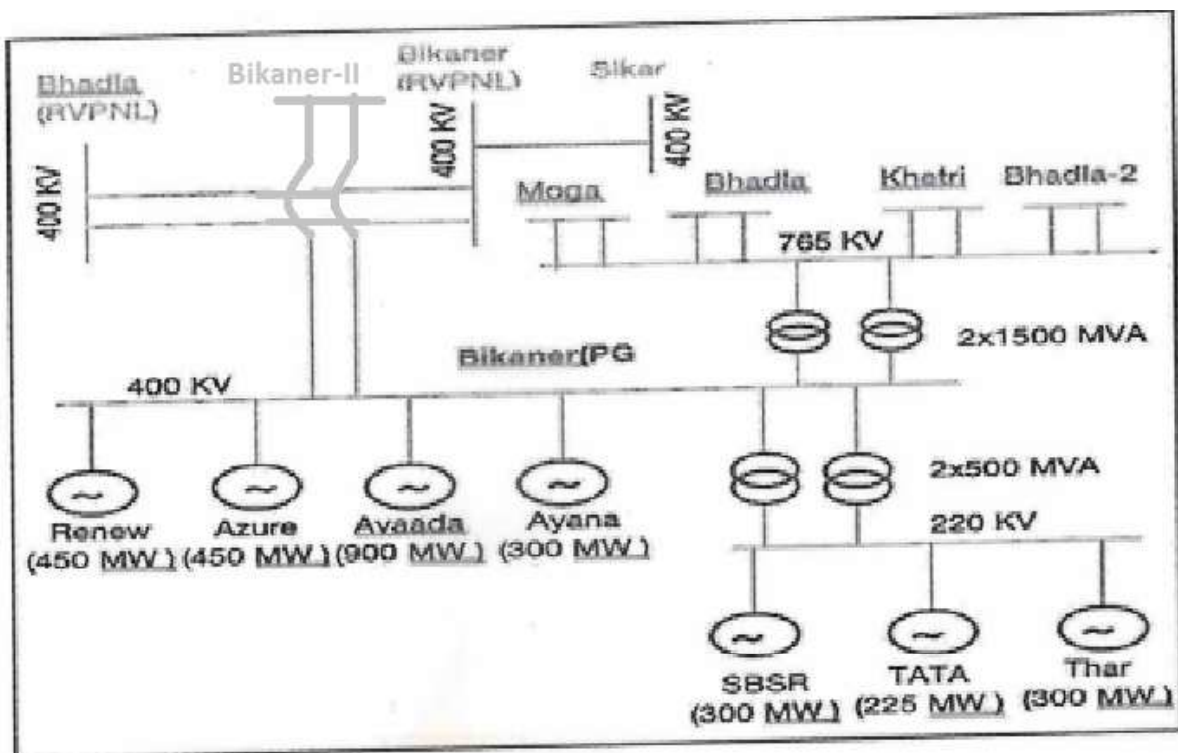
- A.9.7 From the PMU data available at NRLDC, it is seen that only 9 out of 45 plants were LVRT/ HVRT compliant w.r.t active power recovery after fault (**Annexure-V**).
- A.9.8 All RE generators have been enquired to submit plant/inverter level high resolution data to analyse the event in detail vide NRLDC email dated 15.05.2023 & letter dated 18.05.2023.

Members may kindly deliberate.

- A.10 Revival of 400kV Bhadla(RVPN)- Bikaner(RVPN) and 400kV Bhadla(RVPN)-Bikaner(PG) (agenda by NRLDC)**
- A.10.1 As agreed in 202nd OCC meeting held in Dec 2022, an interim arrangement was done wherein both ckts. of 400kV Bhadla(RVPN)-Bikaner(RVPN) D/C lines were connected as 400kV Bikaner(PG)-Bikaner(RVPN) till commissioning of Bikaner-II substation.
- A.10.2 Recently, POWERGRID has informed that 400kV Bikaner-II S/s is expected to be commissioned shortly. For the commissioning works of the substation, 400kV Bikaner(PG)-Bikaner(RVPN) both ckts need to be disconnected and extended from Bikaner(PG) to Bikaner-II S/s so as to form 400kV Bikaner(PG)-Bikaner II D/C lines whereas 400kV Bhadla(RVPN)-Bikaner(RVPN) D/C lines would be restored back.



Present arrangement



Proposed arrangement

A.10.3 The above proposal from POWERGRID was discussed in 65th NRPC meeting held on 21.04.2023 & then in separate meeting between NRLDC, POWERGRID, NRPC & CTUIL held on 25.04.2023.

A.10.4 As informed by RVPN on 16.05.2023, 4 no.s of tower (309-312) in 400kV Bhadla-Bikaner (PG) & Bhadla-Bikaner (RVPN) lines which were antitheft charged have collapsed.

- A.10.5 With present ISTS network arrangement in Rajasthan, commissioning of 400kV Bikaner-II S/s is required for allowing further RE generation evacuation from ISTS RE complex. Moreover, as informed by POWERGRID, for commissioning of 400kV Bikaner-II S/s, shutdown of 400kV Bikaner(PG)-Bikaner(RVPN) both ckts. would be required. With present RE generation capacity, if these two lines are taken under shutdown and 400kV Bhadla(RVPN)-Bikaner(RVPN) D/C lines are not available, then nearly 1700-1800MW of ISTS RE curtailment would be required in view of grid safety & security. Further, additional RE generation is also expected to be commissioned in next 1-2 months.
- A.10.6 Therefore, availability of 400kV Bhadla(RVPN)-Bikaner(RVPN) D/C lines is very important considering safe and secure RE evacuation from the grid.
- A.10.7 RVPN to take necessary actions for revival of 400kV Bhadla-Bikaner (PG) & Bhadla-Bikaner (RVPN) lines on priority.

Members may kindly deliberate.

A.11 Despatching of Intra state Gas plants Under RRAS (agenda by NRLDC)

- A.11.1 CERC vide order dated 23rd April, 2023 in Petition No. 06/SM/2023 has expanded the ambit of RRAS Regulation and all regional entity and intra state entity were made eligible to participate in RRAS whose tariff is determined or adopted by respective State Commission or whose tariffs are discovered through a competitive bidding process. The relevant extract is quoted below:
- "7.a. The Eligibility for participation for RRAS referred to in Regulation 5 of the RRAS Regulations, 2015 shall, in addition to the regional entity generating stations whose tariffs are determined or adopted by the Commission, also include the state generating stations whose tariffs are determined or adopted by the State Commission and willing to participate under RRAS; and the generating stations which are mandated by the Central Government to participate under RRAS and whose tariffs are discovered through a competitive bidding process".*
- A.11.2 Gas based generation from GAMA in NR has been tied up through NVVN to harness the gas based generation for meeting the demand during crunch days. NTPC Faridabad in NR is intra state generator whose tariff is determined by CERC and is also eligible to participate in RRAS as per above CERC order.
- A.11.3 The intra state generators have recently participated in the Power Exchanges. Similar Practice would be followed for despatching through RRAS except for directions would be given from NLDC. Scheduling and DSM would be as per the extant practice. Scheduled RRAS power would be settled as per the RRAS accounts issued by RPCs.

A.11.4 Haryana SLDC, Uttarakhand SLDC, GAMA and NTPC Faridabad are requested to extend support for despatch under RRAS and provide their support in required frequency control.

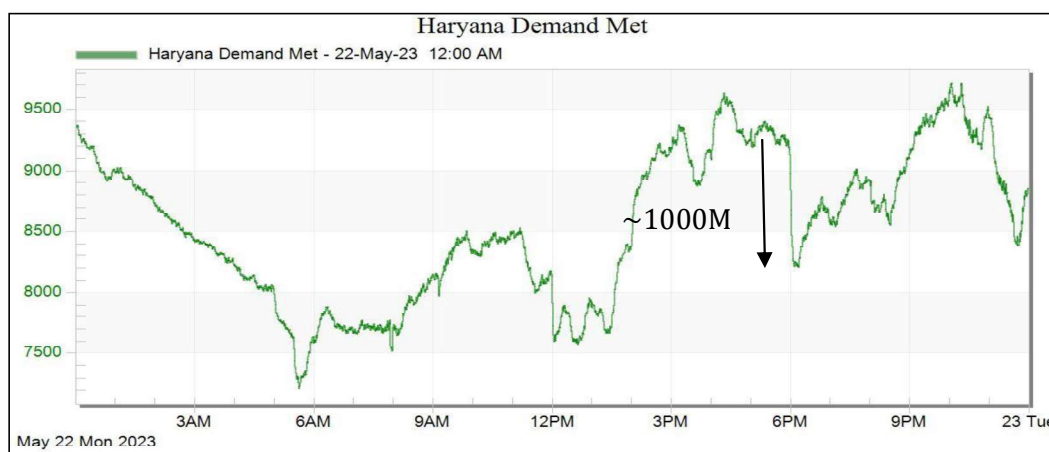
Members may kindly deliberate.

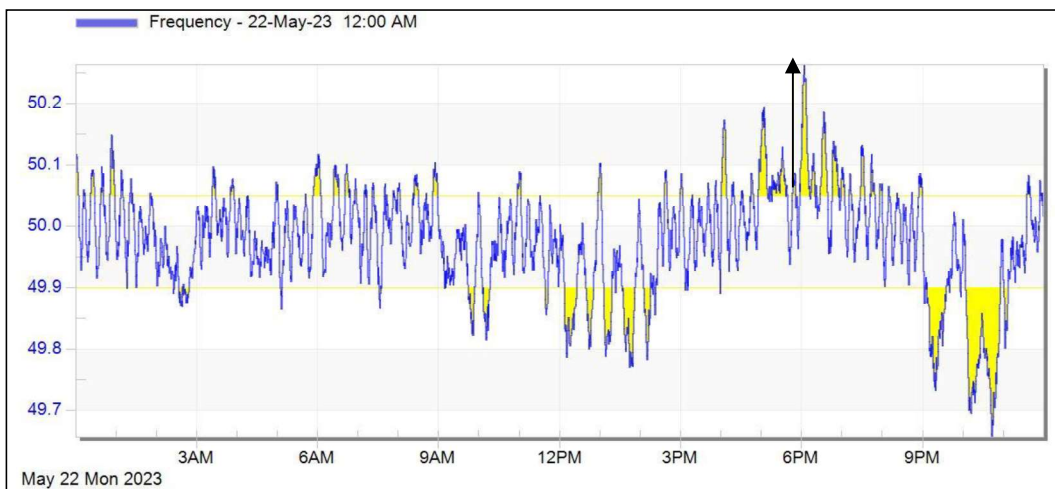
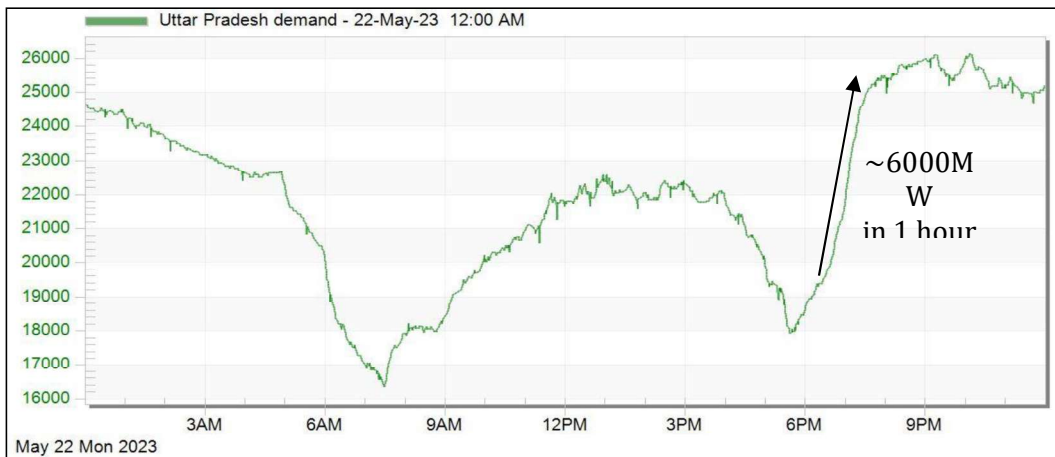
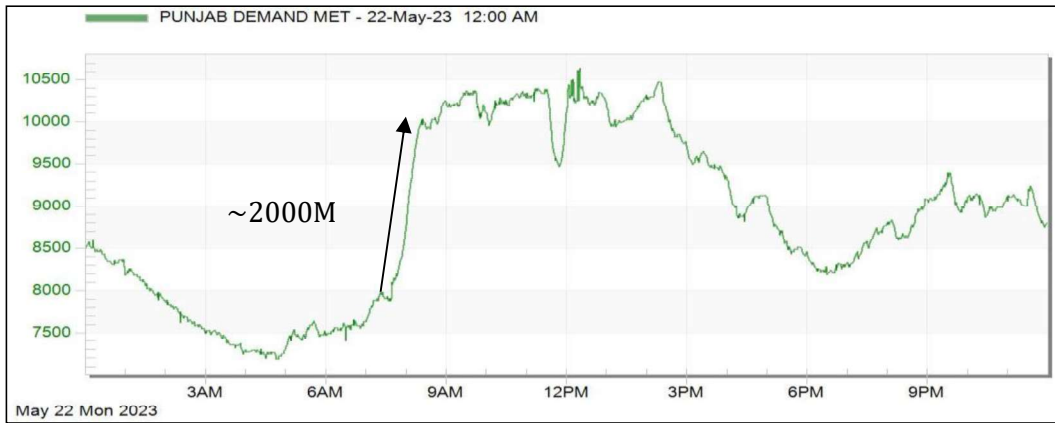
A.12 Minimising demand connection/ disconnection at hourly boundaries (agenda by NRLDC)

A.12.1 As per IEGC Regulation 5.2(j), no User / SEB shall cause a sudden variation in its load by more than one hundred (100 MW) without prior intimation to and consent of the RLDC. Such large sudden load changes may lead to frequency excursions and voltage fluctuations. Due to scheduled / unscheduled power restrictions to groups of loads on rotational basis during the day, these frequency excursions may be seen especially at hourly boundaries. To avoid these excursions, following have been suggested in NRPC OCC meetings:

- a. Avoiding large load changes at hourly boundaries by
 - Creating large number of supply groups (of smaller quantum)
 - Staggering the supply hours (even to sub hourly and 15-minute time blocks).
- b. Flexing the generation adequately during these hours:
 - Taking care of generation in scheduling itself.
 - Ensuring adequate primary frequency response from generating stations under Governor action.

A.12.2 However, it is being observed that demand of some of the states is changing by significant quantum at hourly boundaries as shown below:





A.12.3 It is once again requested that states take proactive measures for arresting sudden connection/disconnection of demand especially at hourly boundaries and provide support in ensuring operation of grid frequency within the IEGC band.

Members may kindly deliberate.

A.13 State-wise transmission constraints anticipated during high demand season (agenda by NRLDC)

A.13.1 The state-wise transmission constraints were discussed in detail in 66 NRPC meeting held in March 2023 wherein utilities were asked to take proactive steps to ensure that

minimal transmission constraints are observed during the high demand season. Statewise issues that need quick actions are listed below:

Commissioning of new elements for Haryana:

- 500MVA ICT at 400/220kV Deepalpur
- 500MVA ICT at 400/220kV Kurukshetra
- 220kV Sec 32 Panchkula and 220kV lines to Panchkula (PG) (expected by Jun 2023 end)
- 220kV lines from Panchkula(PG) to Pinjore (expected by Jun 2023 end)

Commissioning of new elements for Punjab:

- 315MVA to 500MVA ICT at Nakodar (expected by mid Jun 2023)
- 400/220kV Dhanansu S/s with lines at both 220kV & 400kV level
- Capacity augmentation at 400/220kV Nallagarh

Commissioning of new elements for Delhi:

- 315MVA ICT replacement at Mundka

Commissioning of new elements for UP:

- 500MVA ICT at Sohawal(PG)
- Shifting more load onto the recently commissioned substations to relieve loading n-1 non-compliant such as Azamgarh, Obra, Sarnath, Nehtaur, and Gorakhpur

A.13.2 SLDCs to ensure that loading of ICTs and lines are below their N-1 contingency limits. While requisitioning power from various sources, states should take care to limit their scheduled drawl as well as actual drawl in real time within the Available Transfer Capability (ATC) limits assessed by SLDC and NRLDC.

A.13.3 Punjab, Haryana, HP, Uttarakhand & UP are communicating with NRLDC regularly regarding ATC/TTC assessment for summer/monsoon 2023. However, other states such as Delhi, Rajasthan and J&K are yet to provide their ATC/TTC assessments for summer/monsoon 2023.

A.13.4 Punjab, Haryana and UP have shared their ATC/TTC assessment considering number of transmission elements that were anticipated to be commissioned. Based on actually commissioned transmission elements, these states are requested to review and submit their ATC/TTC for summer/monsoon 2023 at the earliest.

Members may kindly deliberate.

A.14 Regarding procurement of additional SEMs in Northern region (agenda by NRLDC)

- A.14.1 In line with Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and subsequent amendment thereof, Interface Energy Meter (IEM) is used for accounting and billing of electricity, connected at the point of interconnection between electrical systems of generating company, licensee and consumers, directly connected to the Inter-State Transmission System (ISTS).
- A.14.2 Delay in replacement of i.) Faulty meters and ii.) Meters with high time drift is a matter of concern as it creates issue in data validation and account preparation as well as error in Pool Loss calculation. Presently there are approx. 2700 SEMs installed in NR region. To ensure timely replacement of faulty meters and replacement of old meters where calibration has not been done for a long time, it is required to maintain sufficient reserve of meters around 10% of total available meters i.e. 270. Additionally, considering the upcoming projects within the next one year, as per data obtained from CTUIL website, it is anticipated that additional 300 SEMs (**Annexure-VI**) may be required for installation. Adequate number of Data Collecting Devices (DCDs) alongside the SEMs also may be procured.
- A.14.3 It is proposed to procure 500 SEMs and 50 DCDs.

Members may kindly deliberate.

A.15 Budgetary provisions of RPCs (agenda by NRPC Sectt.)

- A.15.1 Central Electricity Authority vide letter dtd. 01.05.2023 (attached as **Annexure-VII**) has issued Standard Operating Procedure (SOP) in view of meeting taken by Chairperson, CEA on 06.04.2023 for streamlining the process of fund utilization/budgetary provisions of all RPCs.
- A.15.2 As per above SOP, all expenditure of Salary head shall be met by budget provided by CEA. The same shall be reimbursed from RPC fund to CEA quarterly. All expenditure from other head shall be met by RPC fund.

Members may kindly deliberate.

A.16 Replacement of 02 Nos. lifts installed at NRPC office building with new lifts and comprehensive maintenance of two Nos. lifts for a period of five years through CPWD (agenda by NRPC Sectt.)

- A.16.1 It is submitted that 02 Nos. of lifts as per following details were installed by CPWD at NRPC office since commissioning of the office:

a) UT make Lift (Passenger elevator), Type: Motor traction, No. of Floors: 4, Door type: Automatic, speed: 1.0 mps.

b) OTIS make Lift (Passenger elevator), Type: Hydraulic traction, No. of Floors: 4, Door type: Automatic, speed: 0.63 mps.

A.16.2 NRPC requested CPWD vide letter dated 20.07.2022 for carrying out inspection of both the lifts at NRPC Sectt. and providing necessary cost estimates for lift maintenance and installation of new lifts.

A.16.3 CPWD has mentioned in their proposal that the existing two Nos. lifts (OTIS and UT make) have completed its useful life as per CPWD specification. Currently these lifts are not in working condition since one year and in this condition the maintenance cost becomes high. Therefore it is suggested by CPWD to replace both these lifts for smooth running.

A.16.4 Further, CPWD has submitted initial cost estimate amounting to Rs 66,93,398/- (vide letter dated 27.04.2023 (attached as **Annexure-VIII**) for replacement of two Nos. lifts and comprehensive AMC of these lifts for a period of five years.

A.16.5 As per SOP for RPCs issued vide CEA letter dtd. 01.05.2023, non-recurring expenditure of more than Rs. 25 Lac can be done after approval in RPC meeting.

A.16.6 Accordingly, forum may approve above proposal.

Members may kindly deliberate.

A.17 Status of contribution fee of FY 2022-23 (agenda by NRPC Sectt.)

A.17.1 During 63rd meeting of NRPC (held on 24.02.2023), NRPC members agreed to contribute a sum of Rs.10 Lakh per member as contribution towards annual expenditure of NRPC secretariat for F.Y. 2022-23. It was also decided that in case of payment beyond 31.03.2023, 1% simple interest per month on late payment shall be levied. For eg. 1% interest upto 30.04.23 for April month, and so on. Payment made during the month would also invite 1% interest.

A.17.2 Accordingly, 43 Nos. constituents were requested vide NRPC letter dated 28.02.2023 to make payments by 31.03.2023. The status of payment received (as on 22.05.2023) is attached as **Annexure-IX**.

A.17.3 Following 05 Nos. constituents have not paid contribution amount till the date, who have been issued reminder- II vide letter dated 10.05.2023 for the revised contribution amount of Rs 10,20,000/- in lieu of late payment:

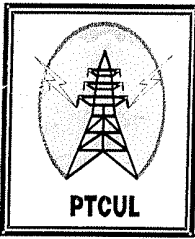
S. No.	Name of Constituents who were issued Reminder-II	Status of revised payment (Rs 10,20,000/-)
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1	Dakshinanchal Vidyut Vitran Nigam Limited	Amount not received
2	HPSEB. Ltd.	Amount not received
3	Ajmer Vidyut Vitran Nigam Ltd.	Amount not received
4	Jammu Kashmir Power Development Corporation Ltd.	Amount not received

A.17.4 UPPTCL has not paid due penalty amount of Rs 10,000/-.

A.17.5 APCPL and NHPC have requested for waiver of INR 10,000/- (1% penalty).

Members may kindly deliberate.



पावर ट्रान्समिशन कारपोरेशन ऑफ उत्तराखण्ड लिमिटेड

(उत्तराखण्ड सरकार का उपक्रम)

Annexure-I

मुख्य अभियन्ता (परिचालन एवं अनुरक्षण) कार्यालय

कुमायूँ क्षेत्र, 220केवी0 उपसंस्थान परिसर, कमलुवागाँजा, पो0आ0- कमलुवागाँजा, हल्द्वानी (नैनीताल)-263139

Email -ce_oandmk@ptcul.org, Mob No. -7088117917

पत्रांक 996 / मु0अभि0(परि0 एवं अनु0) / पिटकुल /

दिनांक 15/05/23

Subject :- Regarding additional agenda for 66nd NRPC meeting.

Director (Projects)

Vidyut Bhawan

PTCUL

Dehradun.

By Email

Sir,

In reference to above mentioned subject, It is bring to your kind information that Superintending Engineer, O&M Circle, Haldwani vide his letter No. 878/SE(O&M)/PTCUL/ H/ HTLS Dated 15/05/2023 has submitted the additional agenda which is to be put up in the upcoming 66nd as per recommendations from TESS member-NLDC in 72nd TESS meeting held on dated 18/01/2023.

It is also bring to your kind information that at present SLDC is the only member of OCC not the NRPC, so it is therefore requested to kindly arrange to send the additional agenda for 66nd NRPC meeting.

Submitted for your kind information.

Encl. :- As above


(Hitendra Singh Hyanki)
Chief Engineer (O&M)

Copy to:-

1. PS to MD, PTCUL, Dehradun for kind information of Managing Director Sir.
2. Director (Operation), Vidyut Bhawan, PTCUL, Dehradun.
3. Superintending Engineer (O&M), PTCUL, Haldwani in reference to his above referred letter.


Additional Agenda for 66th NRPC Meeting
“Load flow analysis of transmission lines of PTCUL.”

As it is known to your goodself, There are mainly two sources of power in Kumaon region one is from 400 kV PGCIL Lines connected to 400 kV S/s Kashipur and the other is 220 kV Pantnagar –Bareilly Line which is connected to 220 kV Pantnagar S/s. PGCIL lines cater approximately 60 % load of Kumaon and partial load of Garhwal region also. Due to exponential growth in power demand of Kichha and ELDECO Sitarganj Region, the existing Line is unable to cater power demand of above region. It is also to be noted that there is no possibility of erecting new line due to non-availability of ROW (Right of Way). Therefore, replacement of ACSR Panther conductor in 132KV Sitarganj (PGCIL)- ELDECO Sitarganj single circuit line (22.0 Kms) and 132 KV Sitarganj –Kichha line (31.5Kms) with HTLS conductor is the only possible option to reduce the over loading of existing line and also to improve the reliability of the evacuation of power to cater the increased load demand in Kichha, ELDECO and nearby area through 132 KV Substation, Kichha and ELDECO. This Line is the only gateway of power from 220kV PGCIL substation Sitarganj thereby it justifies the existence of 220 kV PGCIL S/s and provides stability to the grid by evacuating power from aforementioned PGCIL S/s.

NLDC-PSDF in 72nd TEGS meeting held on dated 18.01.2023 raised input /observation that **“Recommendation of NRPC is Required”** following which PTCUL presented the same in 66th NRPC meeting wherein NRPC stated that **“the system study done by PTCUL need to be examined by CEA and CTU, hence it may be submitted to them for further scrutiny”**. The system study submitted by PTCUL for aforesaid mentioned project has been examined by CEA in congruence with CTU and found generally in order as per CEA letter no. CEA-PS-11-21(24)/1/2018-PSPA-I Divison dated 9.5.2023 (Copy enclosed).

In the above context, it is to apprise that above proposal is eligible for 100 % funding from PSDF.Hence it is requested to put agenda for load flow analysis of 132KV Sitarganj (PGCIL)- ELDECO Sitarganj single circuit line (22.0 Kms) and 132 KV Sitarganj –Kichha line (31.5Kms) in upcoming 66th NRPC meeting.

Submitted for kind perusal and necessary action in the matter.


(Hitendra Singh Hyanki)
Chief Engineer (O&M)
Haldwani



भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युत प्रणाली योजना एवं मूल्यांकन-I प्रभाग

Power System Planning & Appraisal-I Division

सेवा में / To,

Managing Director

Power Transmission Corporation of Uttarakhand Limited,

Vidhyut Bhawan, Near ISBT Crossing,

Saharanpur Road, Majra,

Dehradaun- 248002

No. 986 CE (O&M)/PTCUL/HLDI Dated 15/05/23
 SECO 201
 Holawan

Please provide
 charges for work
 as discussed
 15/5/23

विषय/Sub: PTCUL's proposal for replacement of ACSR Panther conductors in 132 kV /
 Sitarganj (PGCIL)- ELDECO Sitarganj S/c line (22 kms) and 132 kV Sitarganj-
 Kichha S/c line (31.5 kms) with HTLS conductor

संदर्भ /Reference

- (i) PTCUL letter no. 685/SE (O&M)/PTCUL/H/Time Ext./HTLS dated 17.04.2023
- (ii) CEA email dated 18.04.2023
- (iii) PTCUL letter no. 809/SE (O&M)/PTCUL/H/HTLS dated 28.04.2023

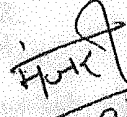
Madam/ Sir,

PTCUL vide letter dated 17.04.2023 has submitted the proposal for replacement of ACSR Panther conductors in 132 kV Sitarganj (PGCIL) - ELDECO Sitarganj S/c line (22 kms) and 132 kV Sitarganj- Kichha S/c line (31.5 kms) with HTLS conductor. CEA vide email dated 18.04.2023 has sought certain clarifications regarding the proposal which has been furnished by PTCUL vide letter dated 28.04.2023. PTCUL's proposal has been examined and CEA observations are as follows:

- (i) As per the data furnished by PTCUL, peak loading observed in 132 kV Sitarganj- Kichha S/c line (31.5 kms) is 91 MW i.e. the said line is critically loaded and loading on the line would further increase in future with increase in the load growth. In view of this, PTCUL's proposal for replacement of ACSR Panther conductor in 132 kV Sitarganj- Kichha S/c line (31.5 kms) with HTLS conductor is generally in order.
- (ii) Peak loading observed in 132 kV Sitarganj (PGCIL) - ELDECO Sitarganj S/c line (22 kms) is 69 MW. PTCUL has envisaged new load of 20 MW for Plastic Park at ELDECO Sitarganj substation and has carried out load flow studies for the same. As per the load flow studies, 132 kV Sitarganj (PGCIL) - ELDECO Sitarganj S/c line (22 kms) is critically loaded. Therefore, PTCUL's proposal for replacement of ACSR Panther conductor in 132 kV Sitarganj (PGCIL) - ELDECO Sitarganj S/c line (22 kms) with HTLS conductor is generally in order.

- (iii) Sitarganj (PGCIL) - ELDECO Sitarganj 132 kV S/c line is N-1 non-compliant as no source would be available for ELDECO Sitarganj 132 kV substation with outage of this line. Therefore, PTCUL is requested to expedite the construction of Kichha - ELDECO Sitarganj 132 kV S/c line to make the transmission system 'N-1' compliant.
- (iv) As per the load flow studies submitted by PTCUL, Rudrapur- Kichha 132 kV S/c line may become critically loaded under 'N-1' contingency, with outage of Sitarganj-Kichha 132 kV S/c line. It is suggested to plan remedial measures for the same.
- (v) With the proposed reconductoring of 132 kV Sitarganj- Kichha S/c line (31.5 kms), loading on Sitarganj (PGCIL)- Sitarganj 132 kV D/c line would increase and it may become critically loaded under 'N-1' contingency with outage of one circuit. It is suggested to monitor the loading on the line and plan suitable measures for the same.

भवदीय / Yours faithfully,


9/5/2023

(मंजरी चतुर्वेदी/Manjari Chaturvedi)
निदेशक/Director

उत्तर प्रदेश राज्य मार प्रषण कन्द्र

उ०प्र०पॉवर ट्रांसमिशन कारपोरेशन लि०

(उत्तर प्रदेश सरकार का उपक्रम)

यू०पी०एस०एल०डी०सी० परिसर, विभूति खण्ड- II

गोमती नगर, लखनऊ-226010

ई-मेल : cepso@upsldc.org

sera@upsldc.org



U.P. State Load Despatch Centre

U.P. Power Transmission Corporation Ltd.

(A U.P. Govt. Undertaking)

UPSLDC Complex, Vibhuti Khand – II

Gomti Nagar, Lucknow- 226010

E-mail: cepso@upsldc.org

sera@upsldc.org

Annexure-II

No: - 2063 /SE(R&A)/EE-II/SPS

Dated: - 16/05/2023

Member Secretary, NRPC,

18 – A, SJSS Marg, Katwaria Sarai,

New Delhi, 110016.

Subject - Regarding revision of System Protection Scheme (SPS) at Bara TPS.

It is to inform you that 1500MVA, 765/400kV ICT-II has been commissioned on 31.03.2023 at Bara TPS. Following the commissioning of aforementioned ICT, SPS installed at Bara TPS needs to be revised. Discussion on revised SPS scheme at Bara TPS was held in 206th OCC meeting of NRPC and the special meeting held on subject issue on dated 12.05.2023. Based on discussion in the aforesaid meetings the revised logic has been finalized by UPSLDC which is enclosed herewith.

It is requested to kindly include this proposal as agenda in 207th OCC meeting of NRPC so that the same may be discussed and approved.

Encl: - As above

Arshad Jamal Siddiqui
Superintending Engineer (R&A)

No: - 2063 /SE(R&A)/EE-II/SPS

Dated: - 16/05/2023

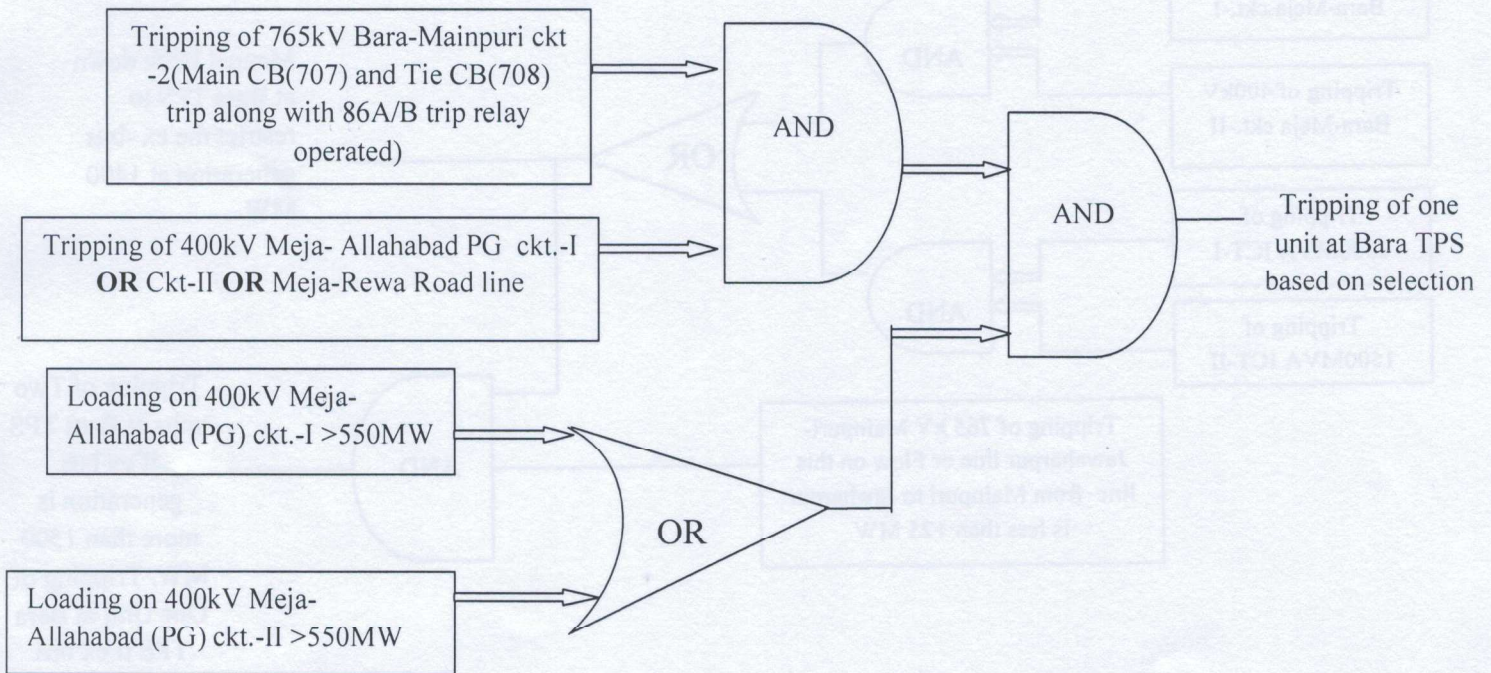
Copy forwarded to following for kind information and necessary action:-

1. Director, UPSLDC, Vibhuti Khand – II, Gomti Nagar, Lucknow.
2. Director (Operation), UPPTCL, 11th Floor, Shakti Bhawan Extn., Lucknow.
3. Chief Engineer (PSO), UPSLDC Vibhuti Khand – II, Gomti Nagar, Lucknow.
4. General Manager, NRLDC18-A, SJSS Marg, Katwaria Sarai, New Delhi – 110016.
5. President, M/s Prayag Raj Thermal Power Plant, Village-Khansemra, PO-Lohgara, Tehsil-Bara, Distt-Allahabad 212107.

(Arshad Jamal Siddiqui)
Superintending Engineer (R&A)

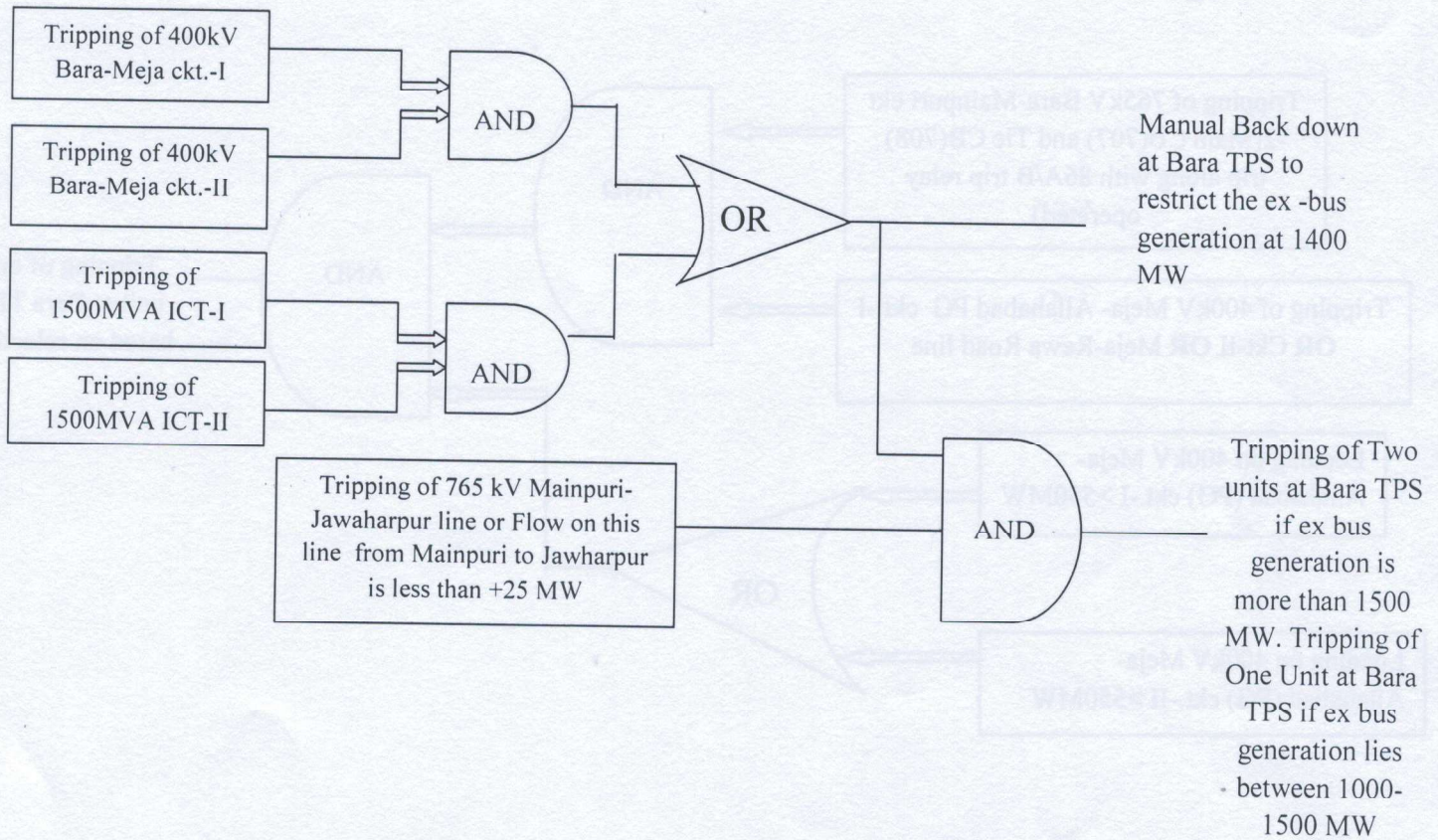
Revised logic for SPS at Bara TPS

Logic-1



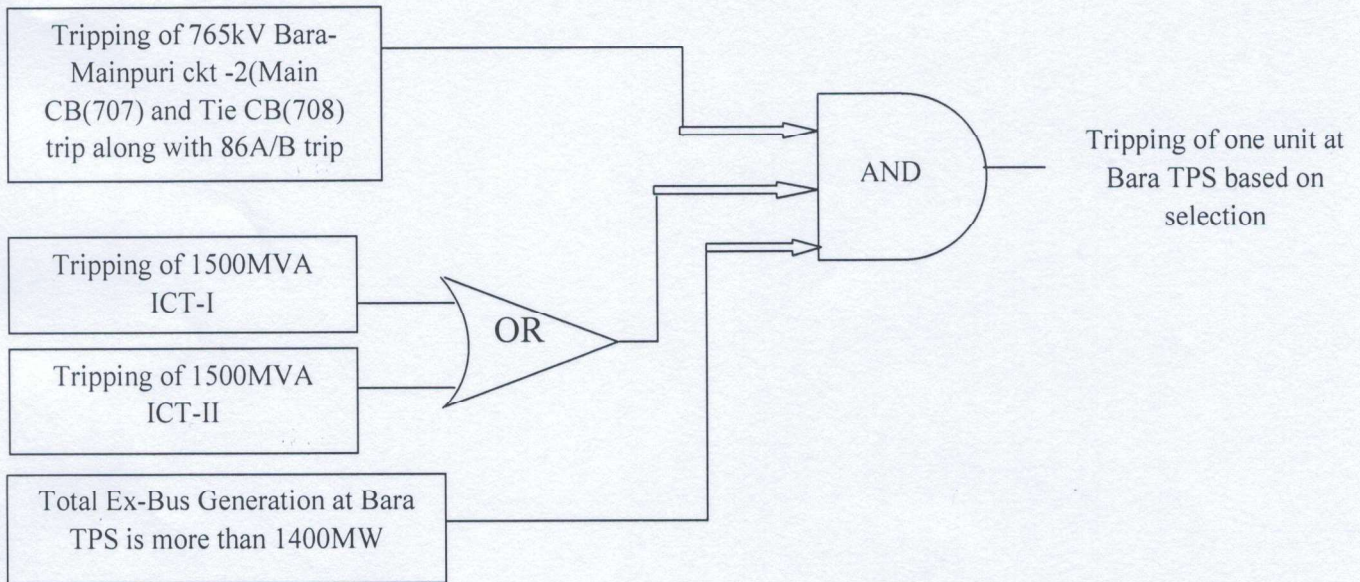
Note- To avoid the loading on 400kV Meja- Allahabad PG ckt.-I &II to go beyond 650 MW following the tripping of 765 kV Bara-Mainpuri Ckt -II ,as a Standard Operating Procedure, control room operator shall take action to bring down generation at Bara TPS to restrict the loading on 400kV Meja- Allahabad PG ckt.- I &II below 550 MW

Logic-2



Note- As a SOP, Bara TPS shall ensure that selection of Unit for tripping is done in such a way that Unit with highest generation gets tripped.

Logic-3



उत्तर प्रदेश राज्य भार प्रेषण केन्द्र

उ०प्र०पॉवर ट्रांसमिशन कारपोरेशन लि०

(उत्तर प्रदेश सरकार का उपक्रम)

यू०पी०एस०एल०डी०सी० परिसर, विभूति खण्ड- II

गोमती नगर, लखनऊ-226010

ई-मेल : cepso@upsldc.org

sera@upsldc.org



U.P. State Load Despatch Centre

U.P. Power Transmission Corporation Ltd.

(A U.P. Govt. Undertaking)

UPSLDC Complex, Vibhuti Khand – II

Gomti Nagar, Lucknow- 226010

E-mail: cepso@upsldc.org Annexure-III

sera@upsldc.org

No: - 2182/SE(R&A)/EE-II/SPS/ Jawaharpur

Dated: - 23.05. 2023

Member Secretary, NRPC,

18 – A, SJSS Marg, Katwaria Sarai,

New Delhi, 110016.

Subject – Agenda for 66th NRPC meeting regarding System Protection Scheme at Jawaharpur TPS.

A meeting to discuss SPS scheme for safe evacuation of power from Jawaharpur TPS was held on 23.05.2023 with representative from NRPC, NRLDC and Jawaharpur TPS (Minutes of Meeting is enclosed). Based on the discussion in the said meeting, the logic for SPS has been finalised by UPSLDC which is enclosed.

It is requested to kindly include the logic for SPS at Jawaharpur TPS as an agenda in the 66th NRPC meeting scheduled on 30.05.2023 for the discussion and approval.

Encl: - As above

Risingh
for Superintending Engineer (R&A)

No: - /SE(R&A)/EE-II/SPS/ Jawaharpur

Dated: - 2023

Copy forwarded to following for kind information and necessary action:-

1. Director, UPSLDC, Vibhuti Khand – II, Gomti Nagar, Lucknow.
2. Director (Operation), UPPTCL, 11th Floor, Shakti Bhawan Extn., Lucknow.
3. Director (Technical), UPRVUNL, 8thFloor, Shakti Bhawan Extn., Lucknow.
4. Chief Engineer (PSO), UPSLDC Vibhuti Khand – II, Gomti Nagar, Lucknow.
5. Chief Engineer, Jawaharpur Power Station Malawan village, Distt- Etah, Uttar Pradesh.
(gm.jawaharpur1@uprvunl.org).
6. General Manager, NRLDC18-A, SJSS Marg, Katwaria Sarai, New Delhi – 110016.

Superintending Engineer (R&A)

उत्तर प्रदेश राज्य भार प्रेषण केन्द्र

उ०प्र०पॉवर ट्रांसमिशन कारपोरेशन लि०

(उत्तर प्रदेश सरकार का उपक्रम)

यू०पी०एस०एल०डी०सी० परिसर, विभूति खण्ड- II

गोमती नगर, लखनऊ-226010

ई-मेल : cepso@upsldc.org

sera@upsldc.org



U.P. State Load Despatch Centre

U.P. Power Transmission Corporation Ltd.

(A U.P. Govt. Undertaking)

UPSLDC Complex, Vibhuti Khand – II

Gomti Nagar, Lucknow- 226010

E-mail: cepso@upsldc.org

sera@upsldc.org

No: - 2181 / SE(R&A)/EE-II/Meeting

Dated: - 23.05.2023

To,

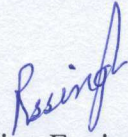
As per distribution list.

(Through E-mail)

Subject:- Minutes of Meeting regarding System Protection Scheme at Jawaharpur TPS.

A meeting to discuss System Protection Scheme at Jawaharpur TPS held on 23.05.2023. vide letter no. 2154/SE(R&A)/EE-II/SPS dated 20.05.2023. Copy of the Minutes of Meeting is enclosed for further necessary action.

Encl: As above.


Superintending Engineer (R&A)

No: - / SE(R&A)/EE-II/Meeting

Dated: - 2023

Copy forwarded for kind information and necessary action to the following:-

1. Director, UPSLDC, Vibhuti Khand – II, Gomti Nagar, Lucknow.
2. Director (Operation), UPPTCL, 11th Floor, Shakti Bhawan Extn., Lucknow.
3. Director (Technical), UPRVUNL, 8th Floor, Shakti Bhawan Extension, Lucknow.
4. Chief Engineer (PSO), UPSLDC, Vibhuti Khand – II, Gomti Nagar, Lucknow.

Superintending Engineer (R&A)

Distribution List

1. Member Secretary, NRPC, 18 – A, SJSS Marg, Katwaria Sarai, New Delhi, 110016.
2. Chief Engineer, (Commercial), UPRVUNL, Shakti Bhawan, Lucknow.
3. Chief Engineer, Jawaharpur Power Station Malawan village, Distt- Etah, Uttar Pradesh.
(gm.jawaharpur1@uprvunl.org).
4. SE (Operations), 18 – A SJSS Marg, Katwaria Sarai, New Delhi, 110016.(seo-nrpc@nic.in)
5. General Manager, NRLDC18-A, SJSS Marg, Katwaria Sarai, New Delhi – 110016.
6. Superintending Engineer (System Control), UPSLDC, Vibhuti Khand – II, Gomti Nagar,
Lucknow.
7. Superintending Engineer, Jawaharpur Power Station, Distt- Etah, Uttar Pradesh.

Minutes of Coordination Meeting held on 23.05.2023

A meeting to discuss proposed SPS scheme for Jawaharpur TPS was held via Google Meet on 23.05.2023. The list of the participants are as follows:-

NRPC Secretariat

1. Shri V.K Singh, Member Secretary, NRPC.
2. Shri Santosh Kumar, Superintending Engineer (Operation), NRPC.

NRLDC

1. Shri Gaurav Malviya, Manager, NRLDC.

UPSLDC

1. Shri A.J. Siddiqui, Superintending Engineer, (R&A), UPSLDC.
2. Shri Ram Sharan Singh, Executive Engineer, (R&A), UPSLDC.
3. Shri Mohsin Khan, Assistant Engineer, (R&A), UPSLDC.

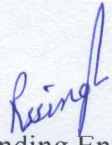
Jawaharpur TPS & UPRVUNL

1. Shri Atul Kumar, Chief Engineer (Commercial), UPRVUNL.
2. Shri Shyam ji Mishra, Superintending Engineer, Jawaharpur TPS, UPRVUNL.
3. Shri Abu Zar, Executive Engineer, Jawaharpur TPS, UPRVUNL.
4. Shri Gyanesh Sharma, Executive Engineer, Jawaharpur TPS, UPRVUNL.
5. Shri, B. Benerji, M/s Doosan.

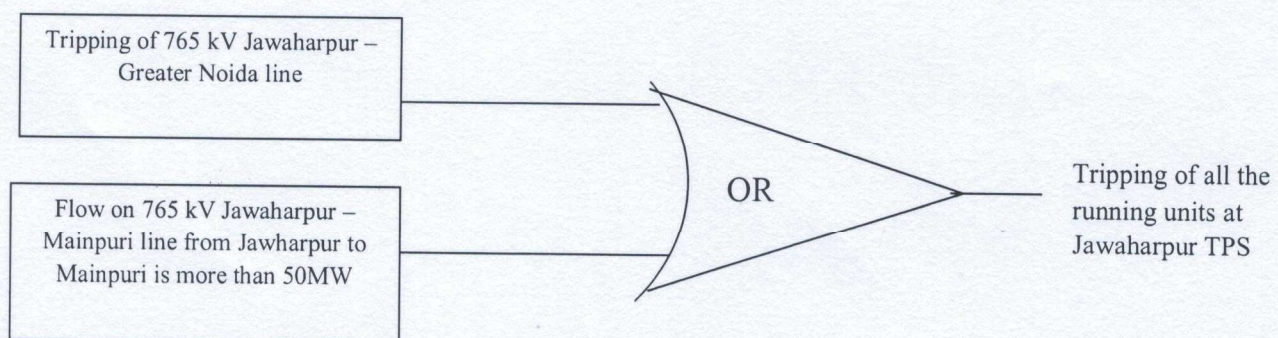
During discussion in the meeting UPSLDC representative informed that evacuation of power from Jawaharpur TPS is to be done through 765kV Jawaharpur-Gr. Noida line, 765kV Jawaharpur-Mainpuri line and 2*1500 MVA ICT at Jawaharpur. At present only 765kV Jawaharpur-Gr. Noida line and 765kV Jawaharpur-Mainpuri line are commissioned. UPSLDC representative also briefed about the logic of SPS at Jawaharpur TPS (enclosed). Discussion during the meeting may be summarized in following points:-

1. Due to availability of Single ICT of 1000MVA at 765kV S/S Mainpuri, power from Jawaharpur TPS can not be evacuated if 765kV Jawaharpur-Gr. Noida line is not available.
2. Therefore, SPS has to be planned for safe evacuation of power from Jawaharpur TPS. The logic for SPS is as follows:-
“With the tripping of 765kV Jawaharpur TPS- Gr.Noida line OR flow on 765kV Jawaharpur-Mainpuri line from Jawaharpur to Mainpuri is more than 50MW, all the running unit at Jawaharpur TPS shall trip”.
3. All the participants in the meeting expressed their consent over the logic. Member Secretary, NRPC directed UPSLDC to submit the SPS logic for Jawaharpur TPS as an agenda in the 66th NRPC meeting to be held on 30.05.2023.
4. Study and SPS logic is attached as Annexure.

Encl: As above.

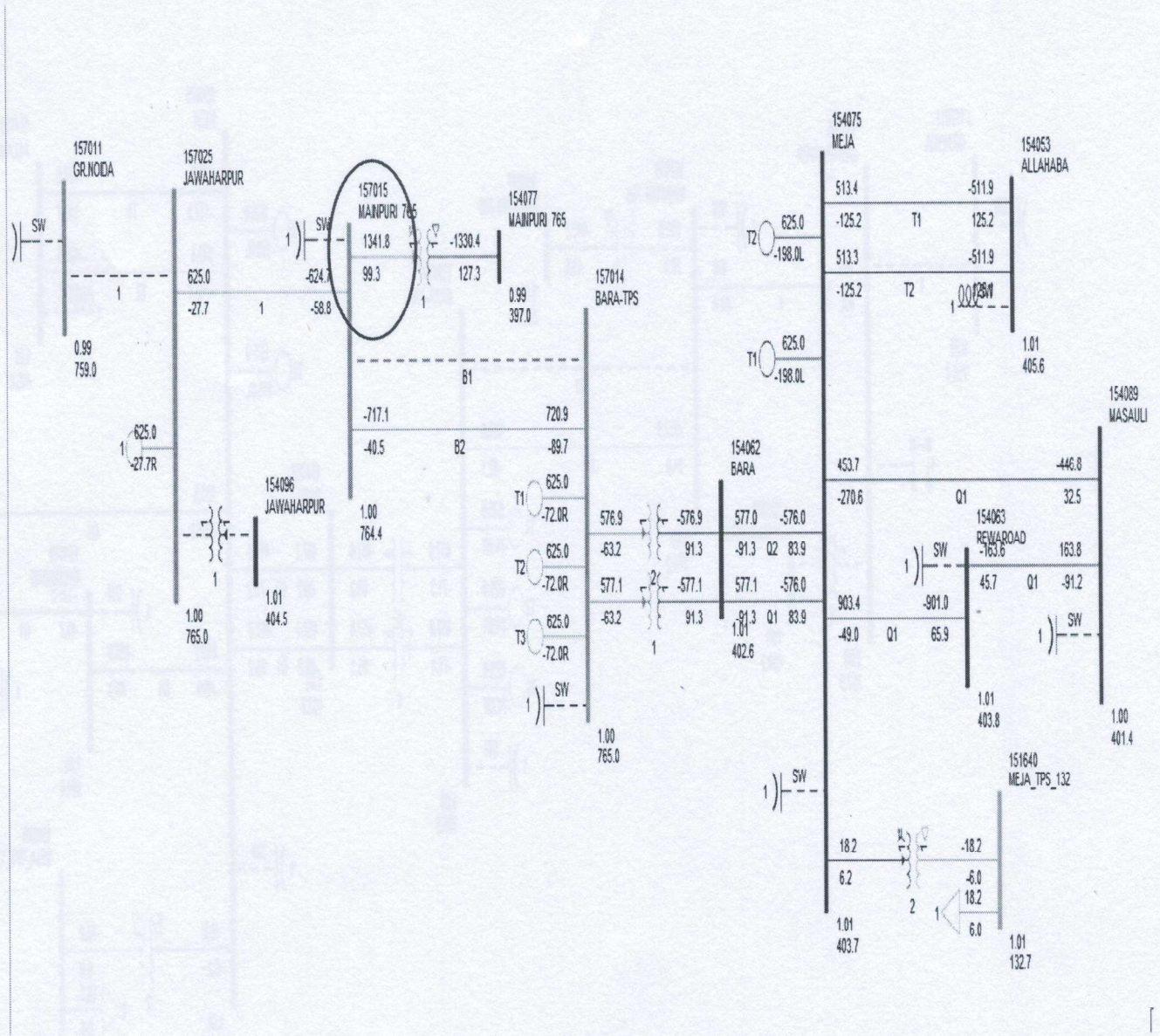

Superintending Engineer (R&A)

Logic for SPS at Jawaharpur TPS

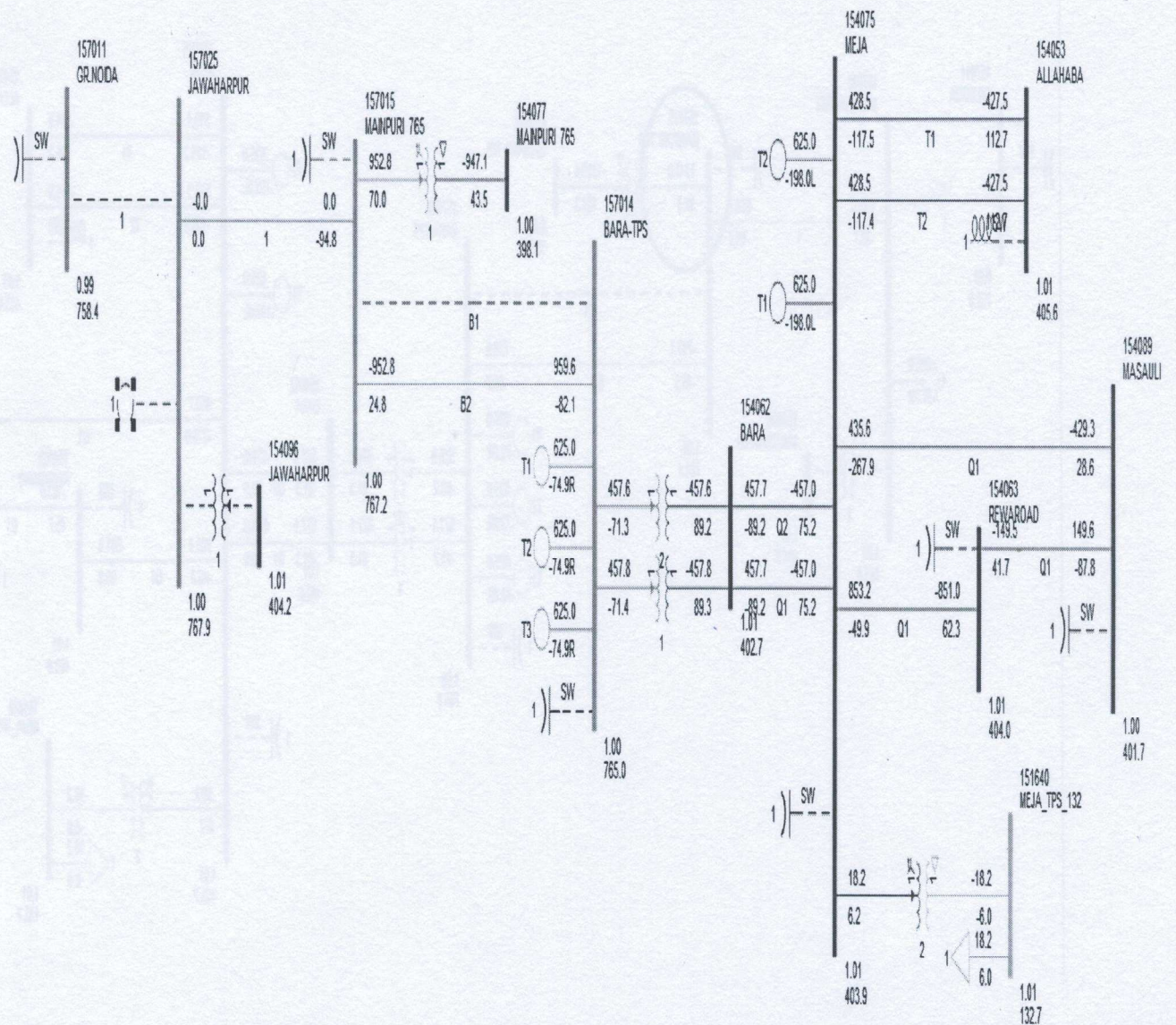


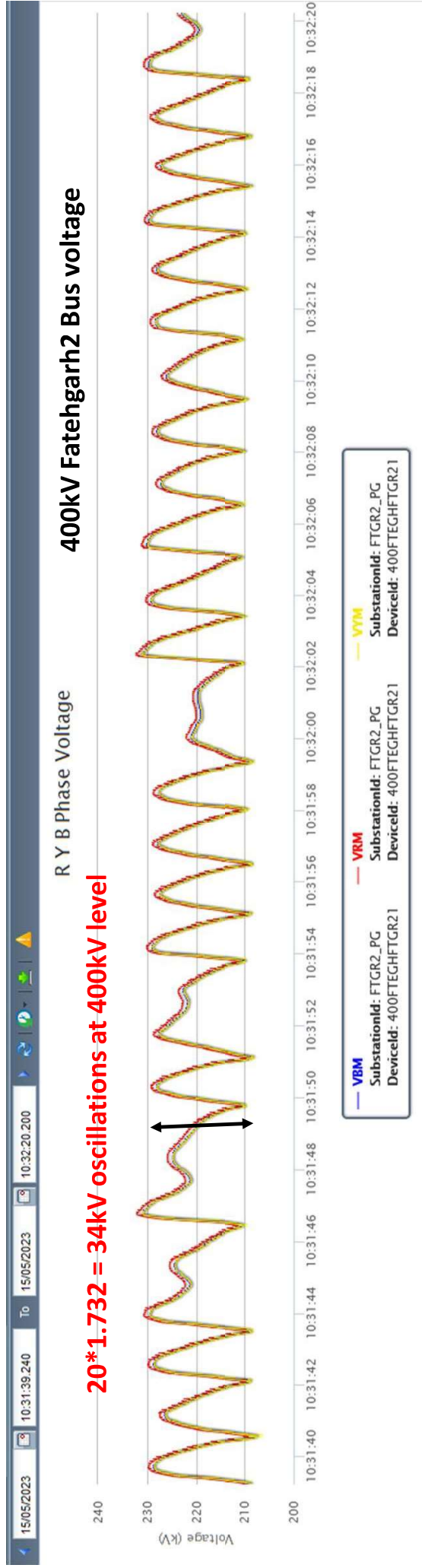
Study and Logic for SPS at Jawaharpur

In case of tripping of 765 kV Jawaharpur-Gr Noida line, there would be transmission constraint in evacuation of power from Jawaharpur TPS as there is single ICT of 1000 MVA capacity at 765 kV substation Mainpuri.

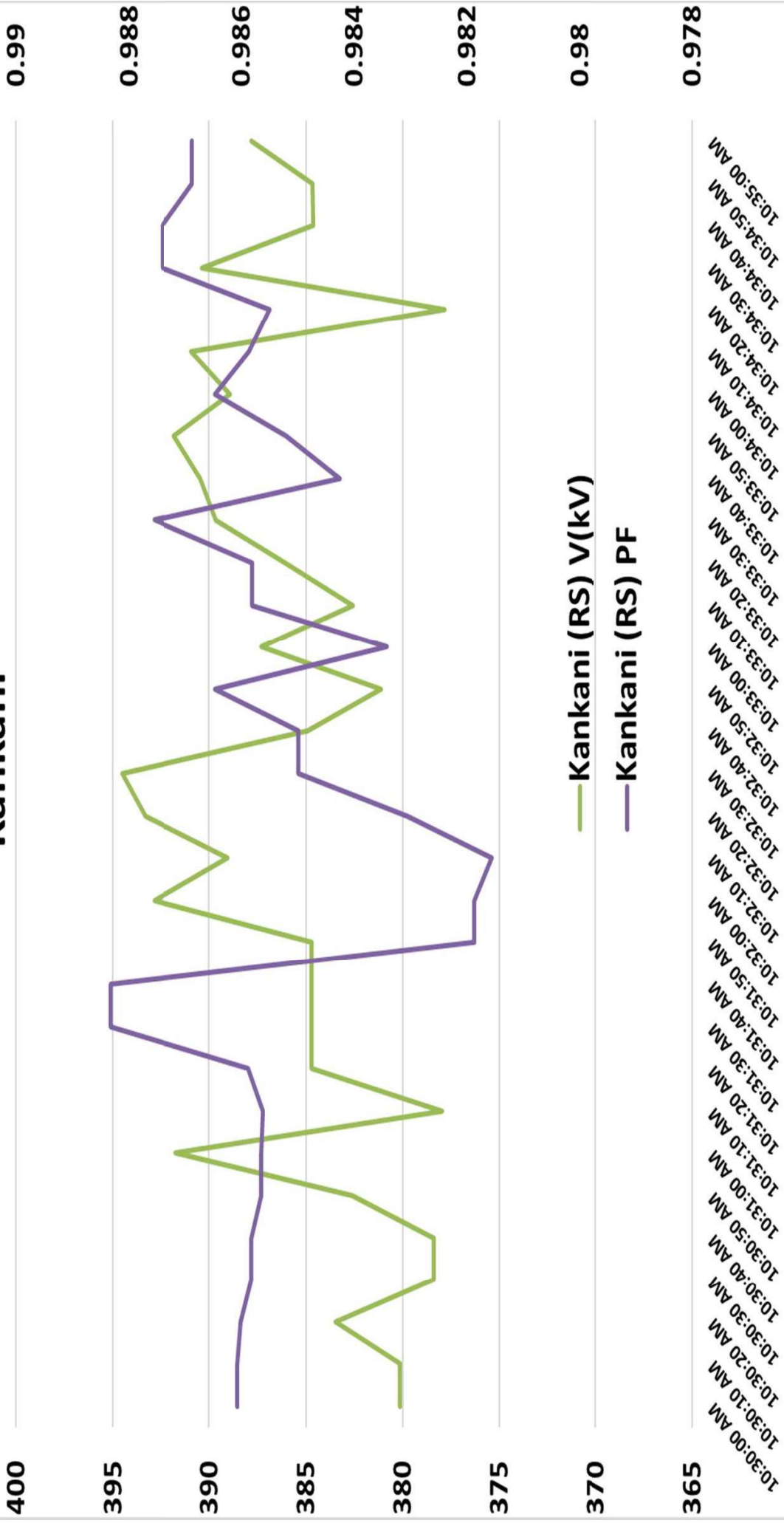


Therefore SPS need to be planned at Jawaharpur TPS in such a way that in case of tripping of 765 kV Jawaharpur TPS-Gr Noida line, all the running unit at Jawaharpur TPS get tripped.

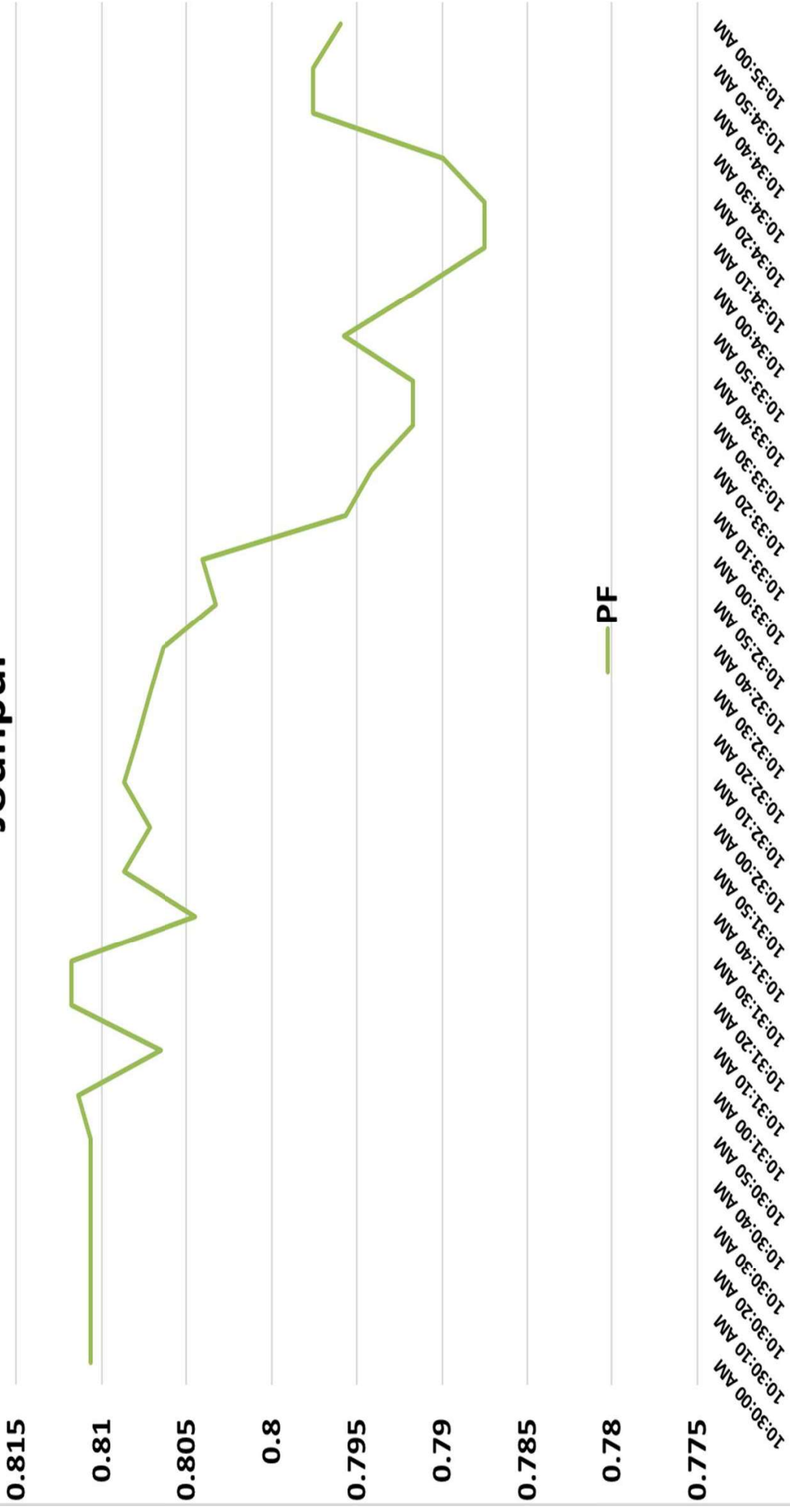




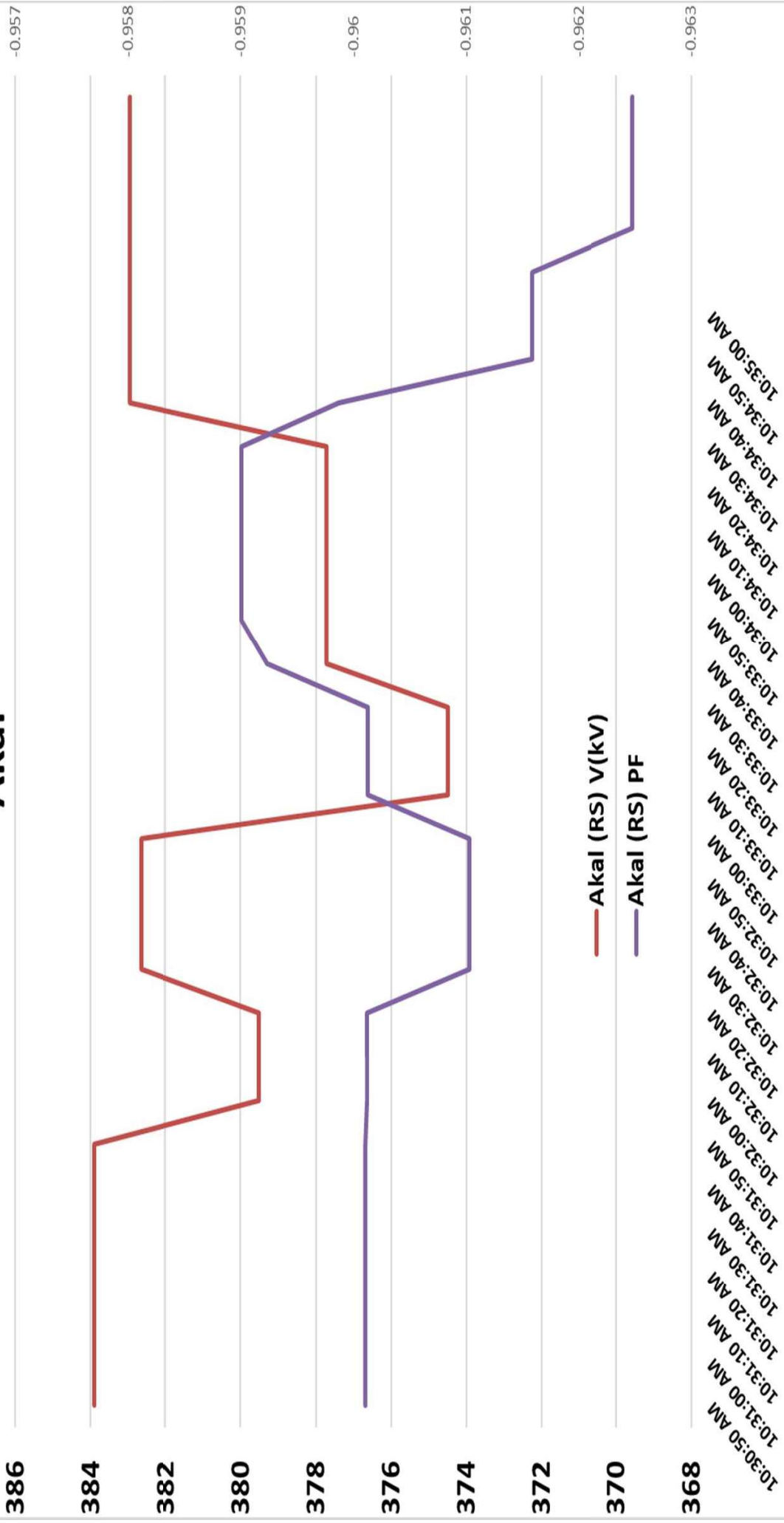
Kankani



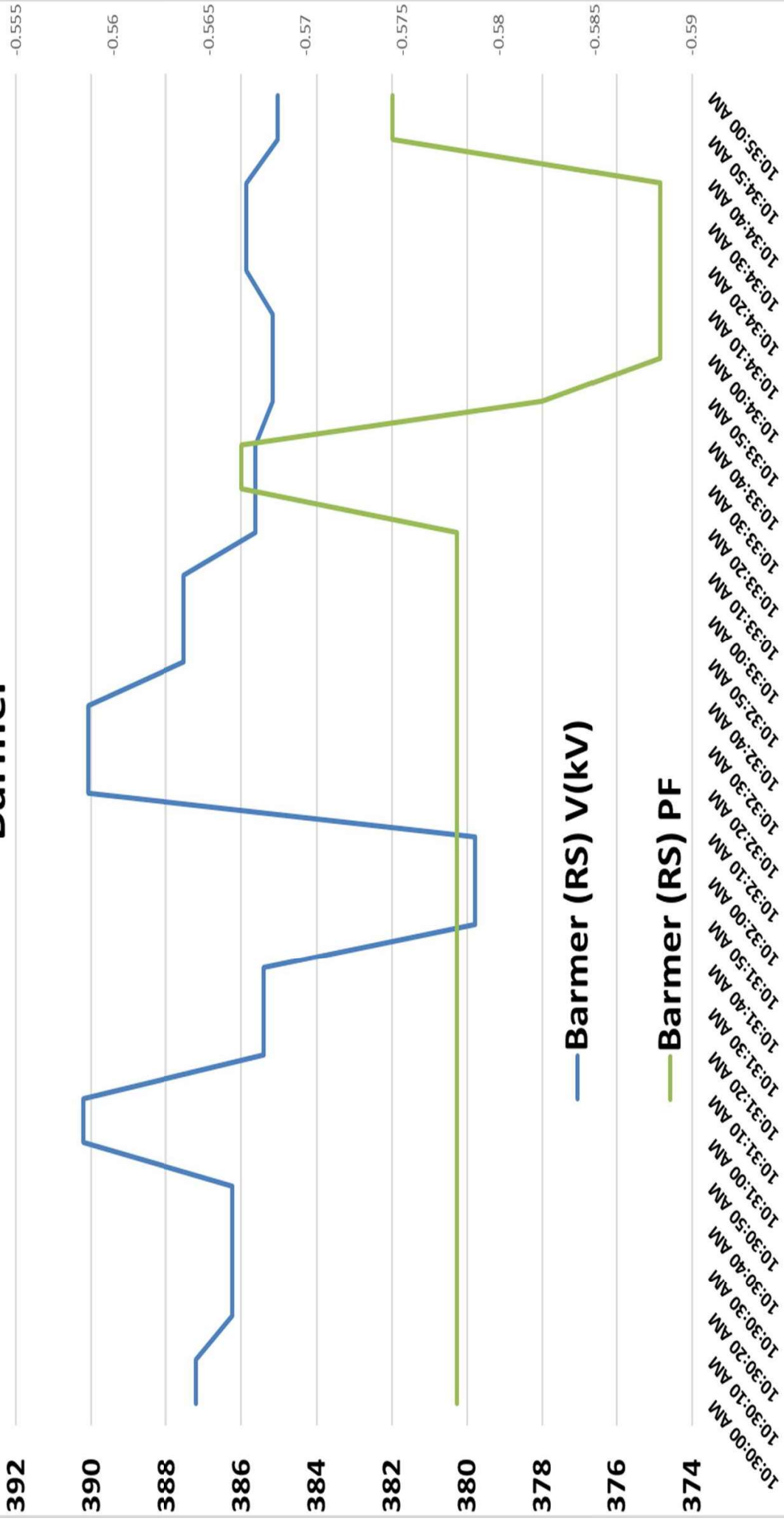
Jodhpur



Akal



Barmer



Compliance Status of RE plants vis-à-vis CEA Technical Standards for Connectivity to The Grid

S.No	Connected at	Name of SPPD/Generator	Installed Capacity (MW)	Inverter/ WTG Make	PMU Code	Voltage (Fault instant) at POI (PU)	Highest Voltage recorded at POI (PU)	Active Power (MW)				Reactive power (MVAR)			HVRT/LVRT Compliance	Reactive Power Support during fault condition (partially, fully, non-compliant)
								Before at (12:57:22.560)	After One second (12:57:23.560)	Percentage Recovered immediately after fault	Before at (12:57:22.560)	At fault Instant (12:57:22.580)	Immediately after fault clearance (12:57:27.960)			
1	400 KV Bhadla (PG)	Adani Solar Energy Jodhpur Two Limited, Rawara	50	HUAWEI	RAWRA_IP	0.7	1.14	299	299	100%	0.48	27	-14	Compliant	Supported system during fault	
2		Adani Solar Energy Four Private Limited	50	HUAWEI	RAWRA_IP	0.7	1.14	299	299	100%	0.48	27	-14	Compliant	Supported system during fault	
3		Adani Renewable Energy (R) limited Rawara	200	HUAWEI	MIRPL_IP	0.65	1.15	246	258	105%	2.97	4.13	-25	Compliant	Partially	
4		Mahindra Renewable Private Limited (MRPL)	250	SUNGROW	MIRPL_IP	0.65	1.15	246	258	105%	2.97	4.13	-25	Compliant	Partially	
5		Esseel Saunya Urja Company of Rajasthan Limited (ESURL)	300	SINENG	ESURL_IP	0.65	1.15	301	207	69%	-25	-60	10	LVRT Non-Compliant	Opposite Response	
6		Azure Power Maple Pvt. Limited (AZRMP)	300	HUAWEI	AZRMP_IP											
7		ACME Chittorgarh Solar Energy Pvt. Ltd (ACME)	250	TBEA	ACME_IP											
8		Azure Power Forty One Private Limited (AZR41)	300	HUAWEI	AZR41_IP											
9		RENEW SOLAR POWER Pvt. Ltd, Bhadla	50	HUAWEI	AREPR_IP	0.65	1.14	115	89	77%	-14	-7	-9	LVRT Non-Compliant	Partially	
10		AZURE POWER INDIA Pvt. Ltd., Bhadla	200	SUNGROW/TMEIC	AREPR_IP	0.65	1.14	115	89	77%	-14	-7	-9	LVRT Non-Compliant	Partially	
11		TPREL (Chhayan)	300	TMEIC/SUNGROW	TPREL_IP	0.64	1.17	291	291	100%	-42	-15	-27	Compliant	Partially	
12		SB ENERGY FOUR PRIVATE LIMITED, Bhadla	200	KEHUA	SURJA_IP	0.71	1.14	502	303	60%	11	15	3	LVRT Non-Compliant	Partially	
13		Clean Solar Power (Bhadla) Pvt. Ltd	300	SUNGROW	SURJA_IP	0.71	1.14	502	303	60%	11	15	3	LVRT Non-Compliant	Partially	
14		Azure Power Thirty Four Pvt. Ltd.	200	TMEIC	APTEL_IP											
15		Clean Solar Power (Jodhpur) Pvt. Ltd.	250	SUNGROW	CSPJP_IP	0.61	1.16	250	50	20%	1	15	-13	LVRT Non-Compliant	Partially	

PMU Data Down

Azure Mapple tripped on tripping of 33 KV ICT on Over Voltage

ACME line tripped on R-N fault

Azure 41 tripped on tripping of 33 KV ICT on Over Voltage

Status of RE Plants at 765 kV Bhadla 2 (PG)

S.No	Connected at	Name of SPPD/Generator	Installed Capacity (MW)	Inverter/WTG Make	PMU Code	Voltage (Fault instant) at POI (PU)	Highest Voltage recorded at POI (PU)	Active Power (MW)			Reactive power (MVAR)			HVRT/LVRT Compliance	Reactive Power Support during fault condition (partially, fully, non-compliant)
								Before at (12:57:22.560)	After One second (12:57:23.560)	Percentage Recovered immediately after fault	Before at (12:57:22.560)	At fault Instant (12:57:22.580)	Immediately after fault clearance (12:57:27.960)		
1	765 kV Bhadla 2 (PG)	Mega Suryaurja Private Limited (MSUPL)	250	SINENG	MSUPL_IP	1	1.13	241	255	106%	-2	3.2	-2	Compliant	Partial
2		ACME Heergarh Powertech Private Limited (AHPPL)	300	SUNGROW/SINENG	AHPPL_IP	0.98	1.12	257	235	91%	0.2	-16	11	Compliant	Opposite Response
3		ABC Renewable Energy (RU-01) Private Limited (ABCRL)	300	TBEA	ABCRL_IP	1	1.13	294	265	90%	51	14	35	Compliant	Opposite Response
4		NTPC Kolavat_1	250	KEHUA	SKBSL_NT	1.01	1.13	400	255	64%	1.15	-38	48	LVRT-Non Compliant	Opposite Response
5		NTPC Kolyat_2	350		SKBS2_NT	1.09	1.13	154	111	72%	155	120	151	LVRT-Non Compliant	Opposite Response
6		Avaada Sunrays Pvt. Ltd.	320		ASEPL_IP	1	1.13	333	330	99%	1.3	-18	-5	Compliant	Opposite Response
7		NTPC Nokhra	300		SINENG/TBEA	Nokra_NT	0.98	1.12	258	171	66%	1.3	-21	11	LVRT-Non Compliant

Status of RE Plants at 765 kV Bikaner (PG)

S.No	Connected at	Name of SPPD/Generator	Installed Capacity (MW)	Inverter/WTG Make	PMU Code	Voltage (Fault instant) at POI (PU)	Highest Voltage recorded at POI (PU)	Active Power (MW)			Reactive power (MVAR)			HVRT/LVRT Compliance	Reactive Power Support during fault condition (partially, fully, non-compliant)
								Before at (12:57:22.560)	After One second (12:57:23.560)	Percentage Recovered immediately after fault	Before at (12:57:22.560)	At fault Instant (12:57:22.580)	Immediately after fault clearance (12:57:27.960)		
1	765 kV Bikaner (PG)	Avaada RIJN_240MW	240	SINENG	AVADA_IP	1.01	1.1	893	900	101%	-12	-40	14	Compliant	Opposite Response
2		Avaada sunce energy Pvt limited	350	SINENG	AVADA_IP	1.01	1.1	893	900	101%	-12	-40	14	Compliant	Opposite Response
3		Avaada Sustainable RJ Pvt. Ltd.	300	SINENG	AVADA_IP	1.01	1.1	893	900	101%	-12	-40	14	Compliant	Opposite Response
4		Ayana Renewable Power	300	SUNGROW	AYANA_IP	1	1.08	320	331	103%	0.88	-4	9	Compliant	Opposite Response
5		Azure Power	600	SUNGROW	AZR43_IP	1.01	1.1	600	600	100%	-21	-25	24	Compliant	Opposite Response
6	SBSR Power Cleantech Eleven Private Limited (SPCEP)	300	KEHUA	SPCEP_IP											
7	Thar Surya 1 Private Limited (TS1PL)	300	GAMESA	TS1PL_IP		0.99	291	290	100%	0.95	-3	4	Compliant	Opposite Response	
8	Renew Surya Ravi Private Limited Bikaner (RSRPL)	150	SUNGROW	RSRPL_IP		1.01	300	300	100%	2.57	-3	43	Compliant	Opposite Response	
9	Renew Solar Power Pvt Ltd, Bikaner (250MW) (BIKNP)	250	HUAWEI	BIKNR_IP		1	253	242	96%	30	20	-7	Compliant	Opposite Response	
10	Tata Power Green Energy Ltd. (TPGEL)	225	SUNGROW	TPGEL_IP		0.99	231	231	100%	-9	0.4	-1.8	Compliant	Partial Response	

PMU Data Down

Status of RE Plants at 400 kV Fatehgarh (Adani)

S.No	Connected at	Name of SPPD/Generator	Installed Capacity (MW)	Inverter/WTG Make	PMU Code	Voltage (Fault instant) at POI (PU)	Highest Voltage recorded at POI (PU)	Active Power (MW)			Reactive power (MVAR)			HVRT/LVRT Compliance	Reactive Power Support during fault condition (partially, fully, non-compliant)
								Before at (12:57:22.560)	After One second (12:57:23.560)	Percentage Recovered immediately after fault	Before at (12:57:22.560)	At fault Instant (12:57:22.580)	Immediately after fault clearance (12:57:27.960)		
1	400 kV Fatehgarh (Adani)	SINGRAULI SOLAR PV POWER STATION (SPRJ)	15	HUAWEI	SPRJ_NT	0.88	1.15	299	251	84%	7	-8	1.1	Slow Recovery	Opposite response
2		Adani Solar Park PSS-1 (ASPS1)	250	HUAWEI	ASPS1_IP	0.87	1.15	250	245	98%	44	47	12	Compliant	Partial
3		Adani Solar Park PSS-2 (ASPS2)	350	HUAWEI	ASPS2_IP	0.87	1.15	341	297	87%	53	30	6	Slow Recovery	Opposite response
4		Adani Wind Park PSS-3 (AWPS1)	250	Suzlon WTG/Siemens Gamesa	AWPS1_IP	0.88	1.14	8.2	7.7	94%	2.88	3.44	-13	Compliant	Partial
5		Adani Wind Park PSS-4 (AWPS2)	260	WTG	AWPS2_IP	1.05	1.12	5.7	5.2	91%	1.98	-11	1	Compliant	Opposite response

Status of RE Plants at 765 kV Fatehgarh II (PG)

S.No	Connected at	Name of SPPD/Generator	Installed Capacity (MW)	Inverter/WTG Make	PMU Code	Voltage (Fault instant) at POI (PU)	Highest Voltage recorded at POI (PU)	Active Power (MW)			Reactive power (MVAR)			HVRT/LVRT Compliance	Reactive Power Support during fault condition (partially, fully, non-compliant)	
								Before at (12:57:22.560)	After One second (12:57:23.560)	Percentage Recovered immediately after fault	Before at (12:57:22.560)	At fault Instant (12:57:22.580)	Immediately after fault clearance (12:57:27.960)			
1	765 kV Fatehgarh II (PG)	Renew Sun Bright Private Limited (RSBPL)	300	HUAWEI	RSBPL_IP	0.99	1.13	294	250	85%	33	47	1	Slow Recovery	Partial	
2		Adani Hybrid Energy Jaisalmer Two Limited (AHEI2)	300	SUNGROW	AHEI2_IP	0.96	1.13	290	175	60%	0.5	-9	1.6	LVRT Non-Compliant	Opposite Response	
3		Adani Hybrid Energy Jaisalmer Two Limited (AHEI2): Wind	67	Suzlon WTG												
4		Adani Hybrid Energy Jaisalmer Three Limited (AHEI3)	300	TBEA	AHEI3_IP	0.98	1.15	300	250	83%	-11	-12	30	LVRT Non-Compliant	Opposite Response	
5		Adani Hybrid Energy Jaisalmer Three Limited (AHEI3): Wind	43	Suzlon WTG												
6		Adani Hybrid Energy Jaisalmer One Limited (ADNHB)	360	HUAWEI												
7		Adani Hybrid Energy Jaisalmer One Limited (ADNHB): Wind	100	Siemens Gamesa WTG	ADNHB_IP	0.98	1.14	358	338	94%	20	22	1	Compliant	Partial	
8		Eden Renewable Cite Private Limited (EDEN)	300	SUNGROW	EDEN_IP	0.96	1.14	310	324	105%	49	52	-5	Compliant	Partial	
9		ReNew Solar Energy Jharkhand Three Pvt. Ltd (RJ3PL)	300	HUAWEI	RJ3PL_IP	0.96	1.14	300	272	91%	-0.3	1.13	9	Compliant	Opposite Response	
10		ReNew Solar Urja Private Limited (RSUPL)	300	SUNGROW/TBEA	RSUPL_IP	0.99	1.14	280	241	86%	69	59	-27	LVRT Non-Compliant	Opposite Response	
11		ReNew Sun Waves Private Limited, Fatehgarh-II (RNEWJ)	300	SUNGROW	RNEWJ_IP	0.97	1.13	289	73	25%	37	30	-11	LVRT Non-Compliant	Opposite Response	
12		NTPC Devkot Solar Plant	240	TBEA	DVKOT_NT	0.97	1.13	225	140	62%	1.12	3.02	-47	LVRT Non-Compliant	Partial	

* POI is at 220 kV Fatehgarh II PG. Here we have PMU data from 220 kV plant end of dedicated line

Annexure -1

Upcoming Transmission projects as per CTUIL website							
Sl. No.	Time/Date	Region	Transformers	Voltage (KV)	No. of transformer	Approx no of SEMs	
1	2023-24	NR	Augmentation with 765/400KV 1x1500 MVA Transformer (5th) at Fatehgarh-II	765/400	1	0	
2	2023-24	NR	Augmentation with 765/400KV 1x1500 MVA Transformer (6th) at Fatehgarh-II	765/400	1	0	
3	2023-24	NR	Augmentation with 400/220KV 4x500 MVA Transformer (6th to 8th) at Fatehgarh-II	400/220	4	0	
4	2023-24	NR	Augmentation with 400/220KV 3x500MVA Transformer (6th to 8th) at Fatehgarh-II	400/220	3	0	
5	2023-24	NR	Augmentation with 765/400KV 1x1500 MVA Transformer (4th) at Fatehgarh-II	765/400	1	0	
6	2023-24	NR	Establishment of 400/220KV 4x500 MVA at Ramgarh-II PS	400/220	4	8	
7	2023-24	NR	Establishment of 765/400KV 2x1500 MVA at Sikar - II	765/400	2	4	
8	2023-24	NR	1x 500 MVA, 400/220 KV ICT at Kurukshetra (PG) S/s	400/220	1	2	
9	2023-24	NR	1x 500 MVA, 400/220 KV ICT at Patiala (PG) S/s	400/220	1	2	
10	2023-24	NR	Shifting and installation of 400/220 KV, 315 MVA ICT at Binmal (PG)	400/220	1	2	
11	2023-24	NR	Establishment of 765/400KV, 3x1500 MVA GSSubstation at Narnaul	765/400	3	6	
12	2023-24	NR	Augmentation with 400/220KV, 1x500MVA Transformer at Fatehgarh-II	400/220	1	0	
13	2023-24	NR	Augmentation with 400/220KV, 1x500MVA Transformer at Bikarni	400/220	1	0	
14	2024-25	NR	Augmentation with 1x500MVA, 400/220KV Transformer (3rd) at Fatehgarh-II	400/220	1	2	
15	2024-25	NR	Establishment of 2x500 MVA 400/220 kV pooling station at Fatehgarh-II	400/220	2	0	
16	2024-25	NR	Augmentation of 3x500MVA 400/220 kV pooling station at Fatehgarh-II	400/220	3	0	
17	2024-25	NR	Establishment of 2x1500MVA 765/400KV at Bhadla-3	765/400	2	0	
18	2024-25	NR	3x500 MVA 400/220 kV pooling station at Bhadla-3	400/220	3	0	
19	2024-25	NR	Augmentation of 7x500MVA 400/220 kV transformation capacity at Fatehgarh-II	400/220	7	0	
20	2024-25	NR	Establishment of 2x1500MVA 765/400KV at Ramgarh	765/400	2	4	
21	2024-25	NR	2x500 MVA 400/220 kV pooling station at Ramgarh	400/220	2	4	
22	2024-25	NR	Augmentation of 1x1500MVA 765/400KV at Ramgarh PS	765/400	1	2	
23	2024-25	NR	Establishment of 3x1500MVA 765/400KV at Fatehgarh-3 (new section)	765/400	3	0	
24	2024-25	NR	3x500 MVA 400/220 kV pooling station at Fatehgarh-3 (new section)	400/220	3	0	
25	2024-25	NR	Augmentation of 3x1500MVA 765/400KV at Fatehgarh-3 (new section)	765/400	3	0	
26	2024-25	NR	2x500 MVA 400/220 kV pooling station at Fatehgarh-3 (new section)	400/220	2	0	
27	2024-25	NR	Establishment of 2x1500MVA 765/400KV Substation at suitable location	765/400	2	4	
28	2024-25	NR	Establishment of 2x1500MVA 765/400KV substation at suitable location	765/400	2	4	
29	2024-25	NR	Augmentation with 400/220KV, 1x500MVA Transformer (10th) at Fatehgarh-II	765/400	1	0	
30	2024-25	NR	Augmentation with 765/400KV, 1x1500MVA Transformer (5th) at Fatehgarh-II	765/400	1	0	
31	2024-25	NR	Augmentation with 765/400KV, 1x1500MVA Transformer (3rd) at Fatehgarh-II	765/400	1	0	
32	2024-25	NR	Augmentation of 1x1500MVA ICT (3rd) 765/400KV ICT at Jhalakir	765/400	1	2	
33	2024-25	NR	Augmentation with 1x500MVA, 400/220KV Transformer (3rd) at Fatehgarh-II	400/220	1	2	
34	2024-25	NR	Replacement of 1x315 MVA 400/220KV ICT (ICT-1) at 400/220 KV	400/220	1	2	
35	2024-25	NR	Replacement of 1x250 MVA 400/220 KV ICT to 500 MVA at 765/400	400/220	1	2	
36	2024-25	NR	Augmentation of Transformation Capacity by 1x500 MVA, 400/220KV	400/220	1	2	
					Total	54	

Section A1. Status of the Renewable Generation Projects granted LTOA/ LTA as per CTUIL website						
SL No.	SI# & LTA	LTA Quantum (MW)	Gen Comm. Schedule/Date from which connectivity required (as per SI- N/connectivity Intimation)	Approx. SCMs required	Gen Comm. Schedule (As per previous Meeting)	
1.	ACME Solar Holdings Limited (Stage-II 1200001602) LTA (SEC) LTA 300 MW (1200001684)	300	19-Oct-2020		300MW 25.09.2023 (Changed in meeting)	
2.	Eden Renewable Passy Private Limited (SI-4 1200002629) "LOA NHPC" LTA (1200002890)	300	31.03.2022 or availability of Tr, whichever is later	3	30-Jan-2024	
3.	SBE Renewables Sixteen Private Limited (Stage-II 1200002450) "LOA NHPC" LTA (1200002956)	180	11.08.2021 or system whichever is later	3	60MW 30.11.2023 100MW 31.12.2023	
4.	NTPC Limited (SI-1 1200002339)	150	29-Jul-2021	3	30-Sep-2022	
5.	Azure Power India Private Ltd (1200002400) "LOA SECI (Manufacturing)"	500	07.04.2024 or system whichever is later	3	11-Nov-2024	
6.	Eden Renewable Bercy Private Limited (1200002588) "LOA SECI (ISTS IK)" LTA 1200003947	300	13.04.2022 or system whichever is later	3	28-Feb-2025	
7.	Adani Renewable Energy Holding Four Limited	500	01.07.2021 or system whichever is later	3	31-Oct-2024	
Fatehgarh-II						
8.	Renew Surya Vihvan Private Limited (Stage-II 1200002590) "LOA SECI (ISTS VIII)"	200	31.03.2022 or system whichever is later	3	31-Dec-2023	
9.	Alfa Xepi Power Private Limited (Stage-II 1200002637) "LOA NHPC" LTA (1200002639)	380	15.02.2022 or system whichever is later	3	31-Dec-2023	
10.	SBE Renewables	600	01.03.2022 or system whichever is later	3	320MW 31-Mar-2024	
11.	Seventeen Private Limited					
12.	Private Limited					
13.	(Stage-II 1200002835)			3	280MW	
14.	ReNew Surya Aayan Private Limited (SI-4 1200002692)	300	13/04/22 or availability of Tr, whichever is later	3	30-Nov-2023	
15.	ReNew Surya Vihvan Private Limited (1200002692)	100	13.04.2022 or system whichever is later	3	30-Nov-2023	
16.	ABC Renewable Energy Private Limited 1200002699 "LOA NHPC"	400	31.01.2022 or system whichever is later	3	200MW 30.03.24 200MW 29.06.24	
18.	Renew Surya Roshni Private Limited (1200002629) "LOA SECI (RTG)" LTA 1200003289	400	01/09/2022 or availability of following ISTS whichever is later	3	Oct'23	
19.	Azure Power India Private Ltd (1200002402) "LOA SECI (Manufacturing)" LTA (1200003978)	500	07.04.2025 or system whichever is later	3	11-Nov-2024	
20.	IB VOLT Solar Seven Private Limited (1200002700) "LOA SECI (ISTS IK)" LTA (1200003931)	300	06.04.2022 or system whichever is later	3	31-Dec-2024	
21.	Azure Power India Pvt. Ltd. (1200002812) "LOA SECI (Manufacturing)" LTA (1200003979)	500	19.01.2024 or system whichever is later	3	11-Nov-2025	
22.	Azure Power India Pvt. Ltd. (1200002813) "LOA SECI (Manufacturing)" LTA (1200003980)	500	19.01.2024 or system whichever is later	3	11-Nov-2025	
23.	Azure Power India Pvt. Ltd. (1200002814) "LOA SECI (Manufacturing)" LTA (1200003981)	500	19.01.2025 or system whichever is later	3	11-Nov-2026	
24.	Azure Power India Private Limited (1200002832) "LOA SECI" LTA 9412100002	100	06-Aug-2023	3	31-Dec-2024	
25.	Adani Renewable Energy Holding Four Ltd. (enwhile Adani Green Energy Four Limited) Stage-II 1200002683 "LOA SECI (Manufacturing)" LTA (1200003686) LTA (1200003687)	1500	30.06.2022 or system whichever is later	3	500MW 30.09.24 500MW 31.10.24 500MW 30.11.24	

26.	XL Xergi Power Pvt. (Stage-II) (1200002547) L&FC LTA: 0412100007	400	31.05.2022 or system whichever is later	3	200MW 18.01.2024 200MW 11.06.2024
Fatehgarh-III					
27.	ABC Renewable Energy Pvt. Ltd. (1200003002) 'LOA SECI (Hybrid Tr-III)' LTA: (1200003531)	380	30-Jun-2022	3	31-Aug-2024
28.	Amp Energy Green Private Limited (1200003022) 'LOA SECI (Hybrid Tr-III)' LTA: (1200003416)	130	30-Sep-2022	3	31-Dec-2024
29.	ReNew Dinkar Jyoti Private Limited	100	30-Jun-2024	3	30-Jun-2024
Bhadsa					
30.	AMP Energy Green Private Limited (1200002676) 'LOA (SECI) ISTS-4X' LTA: (1200003882)	100	11.04.2022 or system whichever is later	3	31-Mar-2024
Bikaner-II					
31.	ReNew Dinkar Urja Private Limited (1200003360) L&FC LTA: (1200003935)	200	30.04.2023 or availability of following ISTS, whichever is later	3	31-Mar-2024
32.	ACHIE Solar Holdings Pvt. Ltd. (1200003663) 'LOA MSEDCL (LTA: (1200003829))	300	Final 28.11.2023	3	03-Oct-2023
33.	Ona Watt Energy Private Limited (1200003626-100MW) L&FC	62	30-Jun-2023	3	30-Aug-2023
34.	NHPC Limited (1200003915) 'LOA (RECI) LTA: 0412100006	300MW	29.02.2024 (Interim)	3	28-Feb-2024
35.	Juniper Green Cosmic Private Limited (1200003740) L&FC LTA: 0412100008	100	31-Jan-2025	3	31-Jan-2025
36.	Adani Renewable Energy Holding Four Ltd. (erstwhile Adani Green Energy Four Limited) Stage-II (1200002652) SECI (Manufacturing LOA) LTA: (1200003666)	1500	01-Dec-2025	3	500MW 30/09/2025 500MW 31/10/2025 500MW 30/11/2025
37.	Adani Hybrid Energy Jasvinder Five Limited (1200003073) 'LOA SECI (Hybrid Tr-III)' LTA: (1200003405)	600	15/09/2022 or availability of following ISTS whichever is later	3	300MW 31.05.24 300MW 30.06.24
38.	Adani Renewables Energy Holding Four Limited (erstwhile Adani Green Energy Four Limited) (1200002432) (Manufacturing LOA SECI) LTA: 1200003689	500	30.09.2022 or system whichever is later	3	30-Jun-2024
Section A2: Renewable Generation Projects granted only Stage-II Connectivity					
Fatehgarh-III					
39.	ReNew Surya Jyoti Private Limited (1200002746)	210	31-Dec-2024	3	Generation: 31.12.2024
40.	ReNew Surya Pratap Private Limited	210	31-Dec-2024	3	Generation: 31/12/24
41.	(1200002776) L&A			3	Dedicated system: Common Pooling Station of ReNew Surya Jyoti Pvt. Ltd. Solar Power Plant (210MW) & ReNew Surya Pratap Pvt. Ltd. Solar Power Plant (210MW) at ReNew Surya Jyoti - Fatehgarh-III PS 220 KV S/c line (suitable to carry 420 MW at nominal voltage) 15/12/24
42.	Azure Power India Pvt. Ltd.	500	11-Nov-2026	3	Generation:
43.	Energizent power private limited. (Stage-II) (1200002907)	125	31-Mar-2025	3	Generation: 31.03.2025
44.	Energizent Power Private Limited (1200002939) L&FC	60MW	30-Jun-2025	3	Generation: 30.06.2025 Dedicated system:
Fatehgarh-IV					
45.	ABC RJ Land 01 Private Limited	110	30-Jun-2024	3	Generation: 31/12/2024
46.	ABC RJ Land 01 Private Limited (1200003575) L&FC	270	30-Jun-2024	3	Generation: 31/12/2024 Dedicated system:
47.	ReNew Sclar (Shakti Five) Private Limited	300	30-Jun-2024	3	Generation: 30/06/2024
48.	ReNew Samir Shakti Private Limited (1200003552) L&A	100	30-Jun-2024	3	Generation: 30.06.2024 Dedicated system: Common PS of ReNew Samir Shakti Private Limited Solar Power Project - Fatehgarh - IV PS 220 kv S/c line on Dic tower
49.	ReNew Samir Shakti Private Limited	100	30-Jun-2024	3	Generation: 30.06.2024
50.	ReNew Samir Shakti Private Limited	100	30-Jun-2024	3	Generation:
51.	ReNew Sclar (Shakti Five) Private Limited	100	30-Jun-2024	3	Generation:
52.	ReNew Sclar (Shakti Five) Private Limited	200	30-Jun-2024	3	Generation:
53.	(1200003466)			3	30-Jun-2024
54.	ReNew Sclar (Shakti Five) Private Limited (1200003749) L&FC	100	30-Dec-2023	3	Generation: 30.06.2024 Dedicated system: ReNew Sclar (Shakti Five) Private Ltd- Fatehgarh-IV PS 220 kv S/c line on Dic tower (High Capacity) (Suitable to carry minimum 400 MW at nominal voltage)
55.	Khaba Renewable Energy Private Limited (1200003502)	250	100MW 31.12.2025 150MW	3	Generation: 100MW 31.12.2025 150MW 30.06.2026
56.	Juniper Green Stellar Pvt. Ltd. (1200003827) L&FC EnH Connectivity: 0312100010 0312100012	100 EnH. +45MW +60MW	31-Jan-2025	3	Generation: 31.01.2025 Dedicated system: Juniper Green Stellar Private Limited Solar Power Project - Fatehgarh-IV PS 220 kv S/c line on Dic tower (Suitable to carry minimum 300 MW per circuit at nominal voltage)
57.	Amp Energy Green Private Limited (0312100005) 'LOA SECI'	120 (EnH.)	-	3	Generation: 11.01.2025 Dedicated system: Common pooling station of Amp Energy Green Eight Amp Energy Green Ten Hybrid Power Project- Fatehgarh-IV PS 220 kv S/c line on Dic tower clubbed with Application Nos. 1200003022 (130 MW), 0312100005 (120 MW) & 1200003719 (50 MW) DTI: 27.12.2024 Generation PS: 27.12.2024
58.	Carnice Renewables Energy Private Limited (0212100004) L&FC	80	31-Jan-2025	3	Generation: 31.01.2025 Dedicated system: sharing of dedicated transmission system of M/s Juniper Green Stellar Private Ltd Appl. Nos. 1200003827 (100MW), 1200003510 (100MW), 1200003658 (60MW) - Fatehgarh-IV PS 220 kv S/c line on Dic tower.
Bhadsa-II					
59.	Eden Renewable Alma Private Limited (1200002554)	300	20-Jul-2024	3	Generation: 30/10/2024
60.	SBE Renewables Ffreen Private Limited (1200002556)	600	31-Dec-2024	3	Generation: 31.07.2024
61.	LOA SECI (ISTS VIII)			3	Dedicated system: SBE Renewable ffrean Pvt. Ltd. solar power plant - Bhadsa-II PS 220 kv Dic line DTI: 20.06.24
62.	Solarpack Corporation Technologica S.A. (1200002742)	300	30-Jun-2022	3	Generation: 300 MW 15/03/24

63.	AMP Energy Green Private Limited (1200025569) LOA SECI (STS VIII)	100	31-Oct-2024		3	Generation: 31/12/2024 Dedicated system: Amp Energy Green Four solar power plant - Bhadla-II PS 220 KV S/c Ine-15/04/2023 Generation PS: 15/04/2023
Bhadla-II						
64.	ReNew Solar Shakti Six Private Limited 1200003848 L&A	550MW		30-Jun-2024	3	Generation: 30.06.2024 Dedicated system: ReNew Solar (Shakti Six) Private Limited Solar
65.	ReNew Solar (Shakti Six) Private Limited 0312100004 L&A	450		31-Dec-2024	3	Generation: 31.12.2024 Dedicated system: ReNew Solar (Shakti Six) Private Limited Solar Power Project – Bhadla-II PS 400 KV S/c Ine on Dc/dc tower – To be implemented by the Applicant 400 KV line to be d/bbed with Application No. 120003848 & 0312100004 DTL 15.06.2024 Generation PS: 15.06.2024
66.	Prerak Greentech Solar Private Limited (Park) 0212100003 L&A	400		31-Dec-2024	3	Generation: 31.12.2024 Dedicated system:
67.	Seven Renewable Power Pvt. Ltd. (Park) 0212100028 L&A	300		First Meeting	3	Generation: 31.01.2025 Dedicated system: Seven Renewable Power Private Limited Solar Power Project – Bhadla- III PS 220 KV S/c Ine DTL
68.	Juniper Green Beta Pvt. Ltd. 0212100027 L&A FC Enr Connectivity- 0312100013	150 +40MW		First Meeting	3	Generation: 31.03.2025 Dedicated system: Common PS of M/s Juniper Green Beta Pvt. Ltd 150MW & 40 and 50MW of Frugal – Bhadla-III PS 220 KV S/c Ine on Dc Tower 220 KV line to be d/bbed with Application No. 0212100025 & 0312100013
Bikaner						
69.	Shikhar Surya (One) Private Limited 1200003115 L&FC	70		31-Mar-2024	3	Generation: 31/03/2024 Dedicated system: Shikhar Surya (One) Private Limited Solar Power Project – Bikaner 220 KV S/c Ine on Dc tower – along with bay at generation switchyard
70.	Shikhar Surya (One) Private Limited 1200003772 L&A	105		30-Sep-2024	3	Generation: 30.09.2024 Dedicated system: Shikhar Surya (One) Private Limited Solar Power Project – Bikaner PS 220 KV S/c (high capacity) line on Dc tower
71.	ReNew Solar Energy (Jharkhand Four) Private Limited	300		100 MW / 06.02.2022	3	Generation:
72.	Shikhar Surya (One) Pvt. Ltd. (Enr.) 0312100003	125 (Enr.) On 70MW		First Meeting	3	Generation: 30.06.2025 Dedicated system: Shikhar Surya (One) Private Limited Solar Power Project – Bikaner
Bikaner-II						
73.	Juna Renewable Energy Private Limited 1200003233 L&FC	250		50MW- 10.01.24 10.01.24 50MW- 31.03.24 31.03.24 50MW- 30.06.24 30.06.24 100MW- 30.06.24 40MW- 31.12.24	3	Generation: 50MW- 10.01.24 50MW- 31.03.24 50MW- 30.06.24 100MW-30.06.24 40MW- 31.12.24 Dedicated system: Juna Renewable Energy Pvt. Ltd. Solar Power Project – Bikaner-II PS 220KV S/c Ine on Dc tower – to be implemented by the grantee along with bay at generation switchyard DTL: 31/12/2023 Generation PS: 31/12/2023
74.	Khadrat Renewable Energy Private Limited 1200003390 L&FC	300		100MW- 30/06/2025 200MW 31/12/2025	3	Generation: 100MW, 30/06/2025 200MW, 31/12/2025 Dedicated system: Khadrat Renewable Energy Private Limited Solar Power Project – Bikaner-II PS 220 KV S/c Ine on Dc tower DTL: 15/09/2025 Generation PS: 15/09/2025
75.	Ampus Ages Private Limited 1200003624 L&FC	100		31-Oct-2023	3	Generation: 31.10.2023 Dedicated system:
76.	Griin Energy Private Limited 1200003625 L&FC	100		31-Aug-2023	3	Generation: 30.08.2023 Dedicated system: Common PS of Onevolt Energy, Griin Energy & Ampus Ages Private Limited Solar Power Project of 100 MW each for Application No. 120003625, 120003625 & 1200003624 – Bikaner- II PS 220 KV S/c Ine on Dc tower 220 KV Ine & 220 KV Bay at Bikaner-II PS shall be under the scope of M/s
77.	TP Saurya Limited 120000382 L&A	300		31-Dec-2023	3	Generation: 31.12.23 TP Saurya Limited Solar Power Project – Bikaner-II PS 220 KV S/c Ine on Dc tower DTL: 31.12.23 Gen. PS: 31.12.23
78.	Spring Nirjara Energy Private Limited 1200003823 L&FC	50		31-Jan-2025	3	Generation: 31.01.2025 Dedicated system: Spring Nirjara Energy Private Limited Solar Power Project – Bikaner-II PS 220 KV S/c Ine on Dc tower 220 KV Bay at Bikaner-II PS by the applicant DTL: 31.01.2025
79.	Senentica Renewables India Pvt. Ltd. (renewable Steel/Ine Power Technologies Private Limited) 1200003828 L&FC	100		01-Jul-2024	3	Generation: 01.07.24 Balance: 180MW -31.03.2024 Balance: 220MW-01.07.24
80.	Prerak Greentech Private Limited 1200003770 L&FC	340		200MW 31.12.2023 140MW 31.12.2024	3	Generation: 200MW 31.12.2023 140MW 31.12.2024 Dedicated system: Prerak Greentech Private Limited Project – Bikaner- II PS 220 KV S/c Ine on Dc tower (220 KV line to be d/bbed with Application No. 120003770) DTL: 30.11.23
81.	ALF Solar Amarsar Private Limited 1200003785 L&FC	400		30-Jun-2024	3	Generation: 30.06.2024 Dedicated system: ALF Solar Amarsar Private Limited Solar Power Project – Bikaner-II PS 220 KV Dc Ine (220 KV line to be d/bbed with Application No. 120003831 of M/s ALF for 150 MW) DTL: 10.06.24 Gen. PS: 15.06.24
82.	Utsaara Energy private Limited 120003893 L&FC	100MW		31-Jan-2024	3	Generation: 30.01.2024 Dedicated system: sharing of dedicated transmission system of M/s ReNew Dinkar Uja Private Limited (Appt. No. 1200003890-200 MW) – Bikaner-II PS 220 KV S/c Ine on Dc tower DTL: 30.09.2024
83.	Sourya Manthan Renewable Energy Private Limited 0212100005 L&FC	100		31-Jan-2025	3	Generation: 31.01.2025 Dedicated system: Sharing of DTL of M/s Spring Nirjara Energy 1200003625-50 MW &
Bikaner-III						
84.	TP Saurya Limited 0212100025	300		First Meeting	3	Generation: 31.01.2025 Dedicated system: TP Saurya Limited Solar Power Project – Bikaner- III PS 220 KV S/c Ine on Dc tower DTL: Gen. PS:
Total					331	



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

Budget Section

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

Date: 01/05/2023

To

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

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

Sir,

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

This issues with the approval of Chairperson, CEA.

Encl.: as above.

Yours faithfully,

V. Karthik
1/5/23
(Vagicharla Karthik)
Deputy Director (B&A)

Copy for information to: -

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

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



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

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

दिनांक: 24th April, 2023

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

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

(Reeturaj Pandey)
Assistant Secretary &
HoO

सेवा में,

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

Copy for information to: -

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

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

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

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

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

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

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

Meeting ended with vote of thanks to the Chair.

CEA

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

NRPC

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

WRPC

1. Sh. Satya Narayan, Member Secretary, WRPC

SRPC

1. Sh. Asit Singh, Member Secretary, SRPC

ERPC

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

NERPC

1. Sh. Kishore Jagtap, Member Secretary, NERPC

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

1. Budget of RPCs:

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

2. Expenditure of RPCs:

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

3. Delegation of Financial Power:

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

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

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

4. IFD for expenditure:

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

5. Compliance of government rules:

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

6. Mode and payment of procurement:

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

7. Creation of Other Specific Funds:

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

8. Procedure for audit:

8.1 Internal audit shall be done by Director level official(s) (not dealing administration matters) of same RPC.

8.2 External audit shall be done from a CA Firm.

9. Amendment in SOP:

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

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

True Copy

New Delhi the 3rd April, 2006

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

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

Sir,

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

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

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

Yours faithfully,
Sd/-

(K.V.Gopala Rao)

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

Copy to:

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

Copy also to:

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

Annexure-VIII

Note No. #1

Attachment: Replacement of 2 Nos 13 Passenger lift installed at NRPC.pdf



भारत सरकार
केन्द्रीय लोक निर्माण विभाग
दिल्ली विद्युत मंडल - 61, कमरा नं - 333, तृतीय तल,
पुष्पा भवन, नई दिल्ली - 110062
फैक्स-011-29962547, दूरभाष-011-29051185
ई-मेल - deleeeecd5.cpwd@nic.in
eeeccd5@gmail.com

Govt. of India
Central Public Works Department
Delhi Electrical Division - 61,
Room No. - 333, Third Floor,
Pushpa Bhawan, New Delhi-110062.
Fax 011-29962547 Phone 011-29051185
e-mail:- deleeeecd5.cpwd@nic.in
Eeeecd5@gmail.com

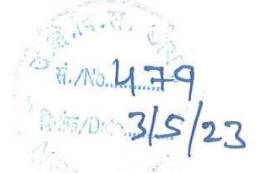


पत्र सं०:23(5)/दि०वि०मं०-61/2023-24/792

दिनांक : 27/04/23

सेवा में,

Member Secretary
Ministry of Power
NRPC, New Delhi-110016.



विषय: Replacement of 2 Nos. 13 Passenger lift installed at NRPC, Qutab Institutional Area, New Delhi-110016.

उपरोक्त कार्य का प्रारम्भिक प्राक्कलन केवल 66,93,398/- रुपये का बनाकर आपके कार्यालय में प्रशासनिक अनुमोदन एवं व्यय स्वीकृति हेतु भेजा जाता है। कार्य की आवश्यकता प्राक्कलन के इतिहास में दर्शायी गई है।

अतः आपसे अनुरोध है कि इस अनुमान को प्रशासनिक अनुमोदन प्रदान करने के पश्चात् इसकी एक प्रतिलिपि इस कार्यालय में भिजवाने का कष्ट करें।

संलग्न:- प्राक्कलन दो प्रतिलिपियों में।

कार्यपालक अभियंता (वै०)
दि०वि०मं०-61, के०लो०नि०वि०,
पुष्पा भवन, नई दिल्ली।

प्रतिलिपि:-

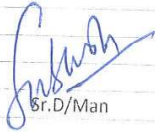
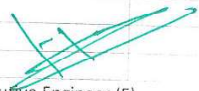
1. सहायक अभियंता(वै०)-4, दि०वि०मं०-61, के०लो०नि०वि०, नई दिल्ली।

कार्यपालक अभियंता (वै०)

H. m. p.
S.E. (op.)
17/5/23

EELS), Sr. DGM PG
SR
17/5/23

Pls take approval
of MS NRPC LS
bring into in
next NRPC
meeting for approval.

Preliminary Estimate						
Name of Work:- Replacement of 2 Nos. 13 Passenger lift installed at NRPC, Qutab Institutional Area, New Delhi-110016						
S.No	Description of Items	Quantity	Rate	Unit	Amount	Remarks
1	Upgradation 13 Passenger of Lift OTIS make having following scope of work :- Replacing existing old machine with In house manufactured Eco Friendly Gearless Machine Stops-4, (G+3) Speed 1mps Controller type ACD5-MR Drive - VF Regenerative (close loop) Gearless machine Up gradation of Cabin and Landing doors to SS Honeycomb Braille On all COP & LOP types Elegant Led Light Ceilings With Various Choice Independent Service (for Duplex only) Overload Device- Emergency Firemen Service Emergency Car Light Unit Infrared Curtain Door Protection Door Time Protection, Emergency Alarm Button Auto Fan Cut Off Extra Door Time of Lobby & Parking Door Open/Close Button Manual Rescue Operation Belt Inspection Drive i/c testing, commissioning etc. complete as required.	2 Jobs	2333963	per Job	4667926.00	MR
SH-II, Comprehensive Maintenance and Operation						
2	Comprehensive Maintenance of 2Nos. 13 Passenger lift complete etc as required.					
2.1	1st Year					
2.2	2nd year					
2.3	3rd Year				140037.78	
2.4	4th year				233396.30	
2.5	5th Year				326754.82	
					420113.34	
SH-III, E.I Works						
3.1	Minor E.I Works			L.S	500000.00	
SH-IV, Rebate						
4.0	Credit for dismantled Material (To kept by the Contractor) including dismentling of following material.					
4.1	13 Passenger Lift	2 Sets	-100000.00	Each	-200000.00	
Total Amount =					6088228.24	
Add ESI & EPF @ 3.94%					239876.19	
Add contingency @ 5.0%					304411.41	
Add Labour Cess @ 1.0%					60882.28	
Grand Total =					66,93,398.13	
Say Rs =					66,93,398.00	
 Sr.D/Man		 Executive Engineer (E) DED-61, CPWD Pushpa Bhawan, New Delhi.				

CENTRAL PUBLIC WORKS DEPARTMENT.

State : Delhi.
CIRCLE : DC-6

Branch : E& M
Division : DED-61

Name of Work:- Replacement of 2 Nos. 13 Passenger lift installed at NRPC, Qutab Institutional Area, New Delhi-110016

Head of Account :

Detailed Head : This Preliminary estimate has been framed by Er. Narendra Kumar Khoker, Executive Engineer(E), DED-61, C.P.W.D. Pushpa Bhawan, New Delhi for the probabale cost of Rs. 6693398/- only including 5 % contingencies & 3.94% ESI & EPF.

REPORT

History : The Preliminary Estimate amounting to Rs. 6693398/- has been framed to cover the cost for the above mention work except civil work

A Requisition has been received from NRPC vide Letter No.: NRPC/SER/310/2022/6250 Dated: 20.07.2022 for the Proposal for Repairing and Upgradation of 2 Nos. 13 Passenger lift installed at NRPC, Qutab Institutional Area, New Delhi-110016

Hence Preliminary Estimate has been framed to obtain the A/A & E/S from the competent authority.

DESIGN & SCOPE :- The following provision has been taken under the scope of this work :-

The Existing 2Nos. Lifts (OTIS and UT make), 13-passenger lifts are installed and one of the lift is hydraulic type & shall replaced by traction type. Both of these 2Nos. Lift are of different make (OTIS and UT make) lift, these are Converted into OTIS make lifts as both same lifts may easy for maintenance in future.

The Lift was installed in the year 1997 & completed its useful life as per CPWD Specification. Currently, these lifts are not in working condition from 1 year. In this condition the maintenance cost becomes high. So, it is better to replace both of these lifts for smooth running. Moreover, some lift parts such as Braille on all COP & LOP types etc are required to meet the requirement of an accessible India campaign. Civil work such as pit etc to be done by Civil.

Hence this PE has been prepared for Replacement of 2 Nos. 13 Passenger lift installed at NRPC, Qutab Institutional Area, New Delhi-110016

All the necessary provision for the above work has been included in the estimate. Unforeseen minor item, if any shall be meet out from the contingencies.

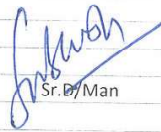
Rate :- Market Rate.

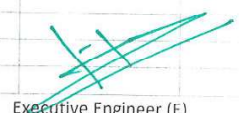
Method : By Contract after all of tenders

Time : 04 Months after getting A/A & E/S

Cost : Rs 6693398/- only.

T& P : Shall be arranged by the Contractor


Sr. D/M


Executive Engineer (E)
DED-61, CPWD
Pushpa Bhawan, New Delhi.

Status of Contribution towards NRPC Fund for the year 2022-23 by the Constituents

Table-I

S. No.	Name of Constituents who were requested to pay NRPC contribution fees.	Status of payment
1	Prayagraj Power Generation Co. Ltd.	Amount Rs 10 Lacs Received within due date
2	Dakshinanchal Vidyut Vitran Nigam Limited	Amount not received
3	BSES Rajdhani Power Ltd.	Amount Rs 10 Lacs Received within due date
4	Uttarakhand Power Corporation Ltd.	Amount Rs 10 Lacs Received within due date
5	Nuclear Power Corporation of India Ltd.	Amount not received
6	Rosa Power Supply Company Ltd.	Amount Rs 10 Lacs Received within due date
7	Mahindra Susten Private Ltd.	Amount not received
8	Delhi Transco limited	Amount Rs 10 Lacs Received within due date
9	Lalitpur Power Generation Co. Ltd.	Amount Rs 10 Lacs Received within due date
10	Nabha Power Limited	Amount Rs 10 Lacs Received within due date
11	Meja Urja Nigam Pvt. Ltd.	Amount Rs 10 Lacs Received within due date
12	Aravali Power Company Pvt. Ltd.	Amount not received
13	Adani Power Rajasthan Limited	Amount Rs 10 Lacs Received within due date
14	Jhajjar Power Limited	Amount Rs 10 Lacs Received within due date
15	JSW Energy Limited	Amount Rs 10 Lacs Received within due date
16	Talwandi Sabo Power Limited	Amount Rs 10 Lacs Received within due date
17	Lanco Anpara Power Ltd.	Amount Rs 10 Lacs Received within due date
18	NTPC Limited	Amount Rs 10 Lacs Received within due date
19	THDC India Limited	Amount Rs 10 Lacs Received within due date
20	NHPC Limited	Amount not received
21	Power Transmission Corp. of Uttarakhand Ltd.	Amount Rs 10 Lacs Received within due date
22	Satluj Jal Vidyut Nigam Ltd.	Amount Rs 10 Lacs Received within due date
23	Uttarakhand Jal Vidyut Nigam Ltd.	Amount Rs 10 Lacs Received within due date
24	U.P. Rajya Vidyut Utpadan Nigam Ltd.	Amount Rs 10 Lacs Received within due date
25	Uttar Pradesh Power Transmission Corp. Ltd.	Amount not received

26	Punjab State Power Corp. Ltd.	Amount Rs 10 Lacs Received within due date
27	Punjab State Transmission Corporation Ltd.	Amount Rs 10 Lacs Received within due date
28	H.P. Power Transmission Corp. Ltd.	Amount Rs 10 Lacs Received within due date
29	HPSEB. Ltd.	Amount not received
30	Rajasthan Rajya Vidyut Utpadan Nigam Ltd.	Amount Rs 10 Lacs Received within due date
31	Rajasthan Rajya Vidyut Prasaran Nigam Ltd..pdf	Amount Rs 10 Lacs Received within due date
32	Haryana Power Generation Company Ltd.	Amount Rs 10 Lacs Received within due date
33	Haryana Vidyut Prasaran Nigam Ltd.	Amount Rs 10 Lacs Received within due date
34	UT Chandigarg	Amount Rs 10 Lacs Received within due date
35	Bhakhra Beas Management Board	Amount Rs 10 Lacs Received within due date
36	Indraprastha Power Generation Co. Ltd.	Amount Rs 10 Lacs Received within due date
37	Tata Power Trading Company Ltd.	Amount Rs 10 Lacs Received within due date
38	Uttar Haryana Bijli Vitran Nigam Ltd.	Amount Rs 10 Lacs Received within due date
39	Ajmer Vidyut Vitran Nigam Ltd.	Amount not received
40	Powergrid Corporation of India Ltd.	Amount Rs 10 Lacs Received within due date
41	Jammu Kashmir Power Developmment Corporation Ltd.	Amount not received
42	Jammu Kashmir Power Corporation Ltd.	Amount Rs 10 Lacs Received within due date
43	Adani Transmission Limited	Amount Rs 10 Lacs Received within due date

Out of the above constituents, following 09 No. constituents, who did not deposit the contribution amount with in due date were issued reminder- I letters dated 19.04.2023 for the revised contribution amount of Rs 10,10,000/- in lieu of late payment. The same was supposed to be paid by 30.04.2023.

Table-II

S. No.	Name of Constituents who were issued Reminder-I	Status of revised payment (Rs 10,10,000/-)	Remarks
1	Dakshinanchal Vidyut Vitran Nigam Limited	Amount not received	
2	Nuclear Power Corporation of India Ltd.	Rs 10,10,1000/- received	
3	Mahindra Susten Private Ltd.	Amount not received	

4	Aravali Power Company Pvt. Ltd.	Rs 10,00,000/- received	Requested NRPC to waive off penalty amount of Rs 10,000/-
5	NHPC Limited	Rs 10,10,1000/- received	Requested NRPC to waive off penalty amount of Rs 10,000/- . Adjust Rs 10,000/- paid as penalty in the next financial year contribution fees.
6	Uttar Pradesh Power Transmission Corp. Ltd.	Rs 10,00,000/- received	Rs 10,000/- penalty amount is yet to be paid.
7	HPSEB. Ltd.	Amount not received	
8	Ajmer Vidyut Vitran Nigam Ltd.	Amount not received	
9	Jammu Kashmir Power Development Corporation Ltd.	Amount not received	

Till now, following 05 Nos. constituents have not paid contribution amount, who have been issued reminder- II letter dated 10.05.2023 for the revised contribution amount of Rs 10,20,000/- in lieu of late payment. The same is supposed to be paid by 30.05.2023

Table-III

S. No.	Name of Constituents who were issued Reminder-II	Status of revised payment (Rs 10,20,000/-)
1	Dakshinanchal Vidyut Vitran Nigam Limited	Amount not received
2	Mahindra Susten Private Ltd.	Amount not received
3	HPSEB. Ltd.	Amount not received
4	Ajmer Vidyut Vitran Nigam Ltd.	Amount not received
5	Jammu Kashmir Power Development Corporation Ltd.	Amount not received