



सत्यमेव जयते

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

विषय: उ.क्षे.वि.स. की नवीकरणीय ऊर्जा उप-समिति की 4^{थी} बैठक की कार्यसूची।

Subject: Agenda of the 4th meeting of Renewable Energy Sub-committee of NRPC.

उ.क्षे.वि.स. की नवीकरणीय ऊर्जा उप-समिति की 4^{थी} बैठक का आयोजन **05.12.2025 (10:30 बजे से)** को एनआरपीसी सचिवालय, कांफ्रेंस हॉल, नई दिल्ली में किया जाएगा। उक्त बैठक की कार्यसूची उत्तर क्षेत्रीय विद्युत समिति की वेबसाइट <http://nrpc.gov.in> पर उपलब्ध है।

कृपया बैठक में उपस्थित होने की सुविधा प्रदान करें।

The 4th Renewable Energy sub-committee meeting of NRPC is scheduled to be held on **05.12.2025 (10:30 hrs. onwards)** at **NRPC Secretariat, Conference Hall, New Delhi**. The agenda of this meeting has been uploaded on the NRPC web-site <http://nrpc.gov.in>.

Kindly make it convenient to attend the meeting.

DHARMENDER KUMAR MEENA Digitally signed by DHARMENDER KUMAR MEENA
Date: 2025.11.28 16:04:07 +05'30'

(डी. के. मीना)
अधीक्षण अभियंता (प्रचालन)

सेवा में : उ.क्षे.वि.स. की नवीकरणीय ऊर्जा उप समिति के सभी सदस्य।

To : All Members of Renewable Energy Sub-committee of NRPC

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22	Adani Solar Energy Four Private Limited	
23	Adani Solar Energy Jaisalmer Two Private Limited	
24	Adani Solar Energy Jaisalmer Two Private Limited Project Two	
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26	SB Energy Six Private Limited,	

	Bhadla	
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60	Nedan Solar NTPC	
61	NTPC Nokhra_300MW	

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65	ReNew Solar Urja Private Limited	
66	Renew Sun Bright Pvt. Ltd. (RSBPL)	
67	Renew Sun Waves Private Limited (RSEJ4L)	
68	Renew Surya Partap Pvt. Ltd.	
69	Renew Surya Ravi Pvt. Ltd.	
70	Renew Surya Roshni Pvt. Ltd.	
71	Renew Surya Vihan Pvt. Ltd.	
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Agenda for 4th RE sub-committee meeting of NRPC

A.1. Confirmation of Minutes

A.1.1 3rd RE Sub-committee meeting was held on 10.07.2025. Minutes of the meeting were issued vide letter dt. 25.08.2025. No comments received till now.

Decision required from Forum:

Forum may approve the minutes of 3rd RE Sub-committee meeting.

A.2. Submission of periodic testing schedule of RE generators (agenda by NRPC Secretariat)

A.2.1 Regulation 40 (1) of CERC (IEGC) Regulations, 2023 stipulate that there shall be periodic tests, as required under clause (3) of this Regulation, carried out on power system elements for ascertaining the correctness of mathematical models used for simulation studies as well as ensuring desired performance during an event in the system.

A.2.2 The tests shall be performed once every five (5) years or whenever major retrofitting is done. If any adverse performance is observed during any grid event, then the tests shall be carried out even earlier, if advised by SLDC/RLDC/NLDC/RPC, as the case may be.

A.2.3 Further, Regulation 40(1)(b) stipulate that "All equipment owners shall submit a testing plan for the next year to the concerned RPC by 31st October to ensure proper coordination during testing as per the schedule. In case of any change in the schedule, the owners shall inform the concerned RPC in advance."

A.2.4 Extract of IEGC 2023 clause 40,

"40. PERIODIC TESTING

(1) There shall be periodic tests, as required under clause (3) of this Regulation, carried out on power system elements for ascertaining the correctness of mathematical models used for simulation studies as well as ensuring desired performance during an event in the system.

(2) General provisions

(a) The owner of the power system element shall be responsible for carrying out tests as specified in these regulations and for submitting reports to NLDC, RLDCs, CEA and CTU for all elements and to STUs and SLDCs for intra-State elements.

(b) **All equipment owners shall submit a testing plan for the next year to the concerned RPC by 31st October to ensure proper coordination during testing as per the schedule.** In case of any change in the schedule, the owners shall inform the concerned RPC in advance.

(c) The tests shall be performed once every five (5) years or whenever major retrofitting is done. If any adverse performance is observed during any grid event, then the tests shall be carried out even earlier, if so advised by SLDC, RLDC, NLDC, or RPC, as the case may be.

(d) The owners of the power system elements shall implement the recommendations, if any, suggested in the test reports in consultation with NLDC, RLDC, CEA, RPC and CTU.

(3) Testing requirements

The following tests shall be carried out on the respective power system elements:

TABLE 9 : TESTS REQUIRED FOR POWER SYSTEM ELEMENTS

Power System Elements	Tests	Applicability
Synchronous Generator	(1) Real and Reactive Power Capability assessment. (2) Assessment of Reactive Power Control Capability as per CEA Technical Standards for Connectivity (3) Model Validation and verification test for the complete Generator and Excitation System model including PSS. (4) Model Validation and verification of Turbine/Governor and Load Control or Active Power/ Frequency Control Functions. (5) Testing of Governor performance and Automatic Generation Control.	Individual Unit of rating 100MW and above for Coal/lignite, 50MW and above gas turbine and 25 MW and above for Hydro.
Non synchronous Generator (Solar/Wind)	(1) Real and Reactive Power Capability for Generator (2) Power Plant Controller Function Test (3) Frequency Response Test (4) Active Power Set Point change test. (5) Reactive Power (Voltage / Power Factor / Q) Set Point change test	Applicable as per CEA Technical Standards for Connectivity.
HVDC/FACTS Devices	(1) Reactive Power Controller (RPC) Capability for HVDC/FACTS (2) Filter bank adequacy assessment based on present grid condition, in consultation with NLDC. (3) Validation of response by FACTS devices as per settings.	To all ISTS HVDC as well as Intra-State HVDC/FACTS, as applicable

A.2.5 NRPC secretariat vide letter dated 05.08.2025 (copy attached at **Annexure-I**) had requested all generators including RE generators to submit testing schedule for period 2024-29 in prescribed format.

A.2.6 However, till date schedule for periodic testing has been received from CSP Bhadla

and CSP Jodhpur only.

A.2.7 In view of the above, all RE generators are requested to furnish Testing schedule for next five years in the format attached as **Annexure-II** to seo-nrpc@nic.in.

Forum may kindly deliberate.

A.3. Finalization of format for submission of annual self-audit report by RE generator in accordance with IEGC (agenda by TPREL)

A.3.1 As per clause 56.2 of the IEGC,

Quote

(a) All users, CTU, STUs, NLDC, RLDCs, RPCs, SLDCs, Power Exchanges, QCAs and SNAs shall conduct annual self-audits to review compliance of these regulations and submit the report by 31st July of every year.

(b) The self-audit report shall inter alia contain the following information with respect to non-compliance:

i) Sufficient information to understand how and why the non-compliance occurred;

ii) Extent of damage caused by such non-compliance;

iii) Steps and timeline planned to rectify the same;

iv) Steps taken to mitigate any future recurrence;

(c) The self-audit reports by users, QCAs, SNAs shall be submitted to the concerned RLDC or SLDC, as the case may be.

Unquote

A.3.2 With reference to this, TPREL has requested assistance in finalising the format for submission of annual self-audit report by RE generator

Forum may kindly deliberate.

A.4. RE generation loss events in case of fault in the vicinity of RE complex and LVRT & HVRT non-compliance by RE Generators at interconnection point (Agenda by NRLDC)

A.4.1 Regulations pertaining to LVRT & HVRT as per CEA (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019 are as follows.

(i). Clause B2 (3) under Part II of the Schedule for LVRT:

Quote

"The generating station connected to the grid, shall remain connected to the grid when voltage at the interconnection point on any or all phases dips up to the level depicted by the thick lines in the following curve, namely:

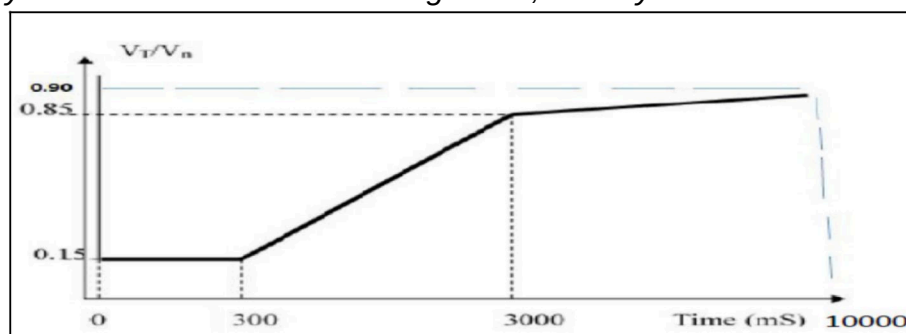


Figure 1 LVRT operating range

Provided that during the voltage dip, the supply of **reactive power has first priority**, while the supply of active power has second priority and **the active power preferably be maintained during voltage drops**, provided, a reduction in active power within the plant's design specifications is acceptable and **active power be restored to at least 90% of the pre-fault level within 1 sec** of restoration of voltage."

Unquote

(ii). Clause B2(7) under Part II of Schedule for HVRT:

Quote

"The generating station connected to the grid, shall remain connected to the grid when the voltage at the interconnection point, on any or all phases (symmetrical or asymmetrical overvoltage conditions) rises above the specified values given below for specified time".

Over voltage (pu)	Minimum time to remain connected (Seconds)
$1.30 < V$	0 Sec (Instantaneous trip)
$1.30 \geq V > 1.20$	0.2 Sec
$1.20 \geq V > 1.10$	2 Sec
$V \leq 1.10$	Continuous

Unquote

Further, CEA has issued the clarification on HVRT clause vide file no. 12/X/STD/CONN/GM/2023/438 dated 06.01.2023.

Quote

"In HVRT mode, the generating station shall provide reactive power support (absorption) proportional to the voltage rise at point of interconnection. During this phase, the quantum of reactive current absorption shall be dependent on reactive

current gain in the system i.e. HVRT “K” factor. The active current and overall current shall be limited as per the transient rated current limit of the plant”.

Unquote

A.4.2 Details of RE generation loss events from 21.06.2025 to 20.11.2025 and LVRT/HVRT non-compliance of RE generators:

The issue of renewable energy (RE) generation loss during faults in vicinity of RE complex and non-compliance of LVRT/HVRT requirements by RE generators at the interconnection point was thoroughly discussed in the previous meetings for the events occurred from 1st Jan’25 to 20th June’25. The necessary action points for RE developers were outlined in the last meeting. Since 21st Jun’2025 to 20th Nov’2025, total 2 numbers of RE generation loss events (>1000MW) occurred in RE complex of Northern Region. Summary of these two (2) events is shown below;

Summary of RE Generation loss in NR (21st June’25-20th Nov’25):

S. No	Date & Time	Fault event	Quantum of RE generation loss	Voltage dip observed	Frequency Dip (Hz)
1	15.10.2025, 12:11 hrs	Y-B Phase to phase fault in 220 KV Bhadla (PG)-CSP Jodhpur BHD_PG line due to snapping of jumper	1802	0.775	0.19
2	17.10.2025, 10:34 hrs	Tripping of 765kV Bus 2 at 765kV Bhadla-II (PG) due to fault in IPS tube of Y-ph isolator and auto reclosing of 765kV Bhadla2-Fatehgarh2 D/C line.	796	0.6	0.12

All the above two (2) events have been analysed in detailed based on SCADA/PMU data available at NRLDC. Based on analysis, list of LVRT/HVRT Non-compliant RE Plants, their Generation Loss quantum and details of common inverters are given below.

Table-1: List of LVRT/HVRT Non-compliant RE Plants and their Generation Loss quantum for 15th Oct’25 event: (18 nos. of RE plants found LVRT/HVRT Non-compliant on 15th Oct’25 event)

Event analysis of 15.10.2025 RE generation loss event @12:11hrs									
Sl. No.	RE Plant Name	Pooling Station	Plant Capacity (MW)	Generation before the event (MW) (A)	Generation after the event (MW) (B)	Generation loss (MW) C = (A-B)	% Generation loss (MW) D = (C/A)*100	Inverters Make	Inverter/ WTG Model No

1	SB ENERGY FOUR PRIVATE LIMITED, Bhadla	Bhadla(P G)	200	177	0	177	100	KEHUA	SPI3125K-B-H
2	Mahindra Renewable Private Limited	Bhadla(P G)	250	248	0	248	100	SUNG ROW	SG3125H V-20
3	Clean Solar Power (Jodhpur) Pvt. Ltd.	Bhadla(P G)	250	246	0	246	100	SUNG ROW	SG250HX-IN
4	Adani Solar Energy RJ Two Pvt. Ltd. (Phalodi)	Bhadla(P G)	150	148	68	80	54	WATTPOWER	WP-330KTL-H1
5	Tata Power Renewable Energy Ltd. (TPREL)	Bhadla(P G)	300	272	136	136	50	SUNG ROW	SG3125H V
								TMEIC	PVH-L2500EQ-2
6	Avaada Sunrays Energy Pvt. Ltd.	Bhadla-II(PG)	320	322	200	122	38	SINENG	SP-250K-INH
7	Ambuja Cements Limited	Bhadla(P G)	150	148	93	55	37	WATTPOWER	WP-330KTL-H1
8	ACME Chittorgarh Solar Energy Pvt Ltd	Bhadla(P G)	250	219	144	75	34	TBEA	TC3750KF
								TBEA	TC5000KF
								TBEA	TS208KTL
9	Clean Solar Power (Bhadla) Pvt. Ltd	Bhadla(P G)	300	290	192	98	34	HUAW EI	SUN2000-95KTL-INH0
10	ReNew Solar Urja Private Limited	Fatehgarh-II(PG)	300	275	187	88	32	SUNG ROW	SG250HX-IN
								TBEA	TS208KTL-HV
11	Avaada Sustainable RJ Pvt. Ltd.	Bikaner(PG)	300	299	209	90	30	SINENG	EP-3125-HA-UD
12	NTPC Nokh Solar	Bhadla-II(PG)	657	537	381	156	29	FIMER	PVS980-58- 5000-L
								SINENG	EP-3300-HB-UD
13	SB Energy Six Private Limited, Bhadla	Bhadla(P G)	300	296	222	74	25	SINENG	EP3125-HA-UD
14	ACME RAISAR SOLAR POWER PVT. LTD.	Fatehgarh-I(Adani Pooling)	300	309	236	73	24	SUNG ROW	SG3300UD-20 (51 deg. Model)
15	AMP Energy Green Six Pvt. Ltd.	Bhadla-II(PG)	100	49	41	8	16	SUNG ROW	SG320HX
16	Adani Hybrid Energy Jaisalmer Three Ltd.	Fatehgarh-II(PG)	300	267	227	40	15	HUAW EI	SUN2000-185KTL-INH0
								TBEA	TS208KTL-HV
17	Adani Solar Enegry Four Private Limited	Bhadla(P G)	50	47	40	7	15	HUAW EI	SUN2000-185KTL-H1
18	Avaada RJHN Pvt. Ltd.	Bikaner(PG)	240	240	211	29	12	SINENG	EP-3125-HA-UD
								SINENG	SP-250K-INH
Total			471	4389	2587	180	41		

	7			2			
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Table-2: List of LVRT/HVRT Non-compliant RE Plants and their Generation Loss quantum for 17th Oct'25 event: (11 nos. of RE plants found LVRT/HVRT Non-compliant on 17th Oct'25 event)

Event analysis of 17.10.2025 RE generation loss event @10:34hrs									
Sl. No.	RE Plant Name	Pooling Station	Plant Capacity (MW)	Generation before the event (MW) (A)	Generation after the event (MW) (B)	Generation loss (MW) C = (A-B)	% Generation loss D = (C/A)*100	Inverters Make	Inverter/ WTG Model No
1	Avaada Sunrays Energy Pvt. Ltd.	Bhadla-II(PG)	320	302	111	191	63	SINE NG	SP-250K-INH
2	ReNew Solar Urja Private Limited	Fatehgarh-II(PG)	300	258	124	134	52	SUNG ROW	SG250HX-IN
								TBEA	TS208KTL-HV
3	Renew Surya Ayaan Pvt. Ltd.	Fatehgarh-III PS	300	261	129	132	51	WATT POWER	WP-330KTL-H1
								TBEA	TS300KTL-HV-C1
4	Karinsar Solar Plant NHPC Ltd	Bikaner-II PS	300	97	71	26	27	SINE NG	EP-3300-HB-UD
5	ACME RAISAR SOLAR POWER PVT. LTD.	Fatehgarh-I(Adani Pooling)	300	280	219	61	22	SUNG ROW	SG3300UD-20 (51 deg. Model)
6	ACME Chittorgarh Solar Energy Pvt Ltd	Bhadla(PG)	250	202	158	44	22	TBEA	TC3750KF
								TBEA	TC5000KF
								TBEA	TS208KTL
7	SJVNL Solar Project	Bikaner-II PS	679	277	227	50	18	SUNG ROW	SG4400UD-20
8	Avaada Sustainable RJ Pvt. Ltd.	Bikaner(PG)	300	260	217	43	17	SINE NG	EP-3125-HA-UD
9	Adani Hybrid Energy Jaisalmer Three Ltd.	Fatehgarh-II(PG)	300	262	222	40	15	HUA WEI	SUN2000-185KTL-INH0
								TBEA	TS208KTL-HV
10	Adani Solar Energy Jaisalmer One Pvt. Ltd.	Fatehgarh-II(PG)	450	384	337	47	12	SUNG ROW	SG3125HV
								KEHUA	SPI3125K-B-HUD
								KEHUA	SPI3125K-B-H2
11	ACME DHAULPUR SOLAR POWER PVT. LTD.	Fatehgarh-I(Adani Pooling)	300	277	249	28	10	SUNG ROW	SG3300UD-20 (51 deg. Model)
Total			3799	2860	2064	796	28		

A.4.3 A detailed analysis of RE generation loss and LVRT/HVRT non-compliance for past 15 months (July'24-Oct'25) has been made to identify the repetitive non-compliant

RE plants having major share in total generation loss. These plants are impacting the grid severely during any fault event and need to take the remedial measures on urgent basis to ensure security of the grid.

Since 1st July'24 to 31st Oct'25 total 8 numbers of RE generation loss events (>1000MW) occurred in RE complex of Northern Region, these 8 events are considered for analyzing if any RE plant found non-compliant in any of these 8 events. As on 31st Oct'25, there are total 88 ISTS connected RE plants in Northern Region. Out of 88, 47 ISTS connected RE plants were found LVRT/HVRT Non-compliant in at least one of these 8 events and 41 RE plants were found to be LVRT/HVRT compliant in all the 8 events.

Total nos. of ISTS connected RE plants (wind/solar/hybrid) in NR as on 31.10.2025	Nos. of total ISTS connected RE plants which are LVRT/HVRT Non-compliant	Nos. of total ISTS connected RE plants which are LVRT/HVRT Compliant *	Nos. of ISTS connected RE (solar) plants which are LVRT/HVRT Non-compliant *	Nos. of ISTS connected RE (wind) plants which are LVRT/HVRT Non-compliant*	Nos. of ISTS connected RE (hybrid) plants which are LVRT/HVRT Non-compliant*
88	47	41	44	NIL	3

*Detail of RE Generators is given in below table.

Table-3: List of all the RE plants (wind/ solar/ hybrid) and their Present status of compliance with respect to the LVRT/ HVRT based on 8 nos. of RE generation loss events (>1000MW) occurred since 1st July'2024 to 31st Oct'2025.

Sr. No.	Name of REGS	Capacity of REGS (MW)	Name of ISTS Pooling Station where REGS is connected	Total Numbers of Events	No. of times REGS found Non-compliant	% of Non-compliance of REGS (Nos. of times non-compliant w.r.t total nos. of event occurred)	Type of RE plants (wind/ solar/ hybrid)
1	Avaada Sunrays Pvt. Ltd.	Bhadla-II(PG)	320	8	8	100%	Solar
2	Avaada Sustainable RJ Pvt. Ltd.	Bikaner(PG)	300	8	7	88%	Solar
3	ReNew Solar Urja Private Limited	Fatehgarh-II(PG)	300	8	7	88%	Solar
4	NTPC Devikot Solar plant_240MW	Fatehgarh-II(PG)	240	8	6	75%	Solar
5	ACME Chittorgarh Solar Energy Pvt Ltd	Bhadla(PG)	250	8	5	63%	Solar
6	Adani Hybrid Energy Jaisalmer Three Ltd.	Fatehgarh-II(PG)	300	8	5	63%	Hybrid
7	ACME RAISAR SOLAR POWER PRIVATE LIMITED	Fatehgarh-I	300	8	5	63%	Solar
8	SB ENERGY FOUR PRIVATE LIMITED, Bhadla	Bhadla(PG)	200	8	4	50%	Solar
9	Ambuja Cements	Bhadla(PG)	150	2	1	50%	Solar

	Limited	G)					
10	ASEJ2PL + ASEJ2PL-P2 (Formerly SBSR Cleantech Pvt. Ltd.)	Bikaner(P G)	300	8	3	38%	Solar
11	SB Energy Six Private Limited, Bhadla	Bhadla(P G)	300	8	3	38%	Solar
12	Clean Solar Power (Jodhpur) Pvt. Ltd.	Bhadla(P G)	250	8	3	38%	Solar
13	ACME DHAULPUR SOLAR POWER PRIVATE LIMITED	Fatehgarh -I	300	8	3	38%	Solar
14	Mega Surya Urja Pvt. Ltd. (MSUPL)	Bhadla-II(PG)	250	8	3	38%	Solar
15	NTPC Nokhra_300MW	Bhadla-II(PG)	300	8	3	38%	Solar
16	AMP Energy Green Six Pvt. Ltd.	Bhadla-II(PG)	100	8	3	38%	Solar
17	AMP Energy Green Five Pvt. Ltd.	Bhadla-II(PG)	100	8	3	38%	Solar
18	RENEW SOLAR POWER Pvt. Ltd. Bikaner	Bikaner(P G)	250	8	2	25%	Solar
19	Renew Surya Ravi Pvt. Ltd.	Bikaner(P G)	300	8	2	25%	Solar
20	Avaada RJHN_240MW	Bikaner(P G)	240	8	2	25%	Solar
21	Thar Surya One Pvt. Ltd.	Bikaner(P G)	300	8	2	25%	Solar
22	Azure Maple Pvt. Ltd.	Bhadla(P G)	300	8	2	25%	Solar
23	Renew Sun Waves Private Limited (RSEJ4L)	Fatehgarh -II(PG)	300	8	2	25%	Solar
24	Adani Solar Energy Jaisalmer One Pvt. Ltd.	Fatehgarh -II(PG)	450	8	2	25%	Hybrid
25	ACME PHALODI SOLAR POWER PRIVATE LIMITED	Fatehgarh -I	300	8	2	25%	Solar
26	ABC Renewable Pvt. Ltd	Bhadla-II(PG)	300	8	2	25%	Solar
27	NTPC Nokh Solar	Bhadla-II(PG)	657	4	1	25%	Solar
28	SJVNL Solar Project	Bikaner-II	679.29	4	1	25%	Solar
29	Karinsar Solar Plant NHPC Ltd	Bikaner-II	300	4	1	25%	Solar
30	ACME Sikar Solar Pvt. Ltd.	Bikaner-II	300	4	1	25%	Solar
31	Azure Power Forty Three Pvt. Ltd. PSS+RSS	Bikaner(P G)	600	8	1	13%	Solar
32	Avaada sunce energy Pvt limited	Bikaner(P G)	350	8	1	13%	Solar
33	TP Surya Pvt. Ltd.	Bikaner(P G)	110	8	1	13%	Solar
34	Ayana Renewable Power Three Private Limited	Bikaner(P G)	300	8	1	13%	Solar
35	RENEW SOLAR POWER Pvt. Ltd. Bhadla	Bhadla(P G)	50	8	1	13%	Solar
36	Clean Solar Power (Bhadla) Pvt. Ltd	Bhadla(P G)	300	8	1	13%	Solar
37	Mahindra Renewable	Bhadla(P	250	8	1	13%	Solar

	Private Limited	G)					
38	Adani Solar Enegry Four Private Limited	Bhadla(P G)	50	8	1	13%	Solar
39	Tata Power Renewable Energy Ltd. (TPREL)	Bhadla(P G)	300	8	1	13%	Solar
40	Adani Solar Energy RJ Two Pvt. Ltd. (Phalodi)	Bhadla(P G)	150	8	1	13%	Solar
41	ReNew Solar Energy (Jharkhand Three) Private Limited	Fatehgarh -II(PG)	300	8	1	13%	Solar
42	Adani Solar Energy RJ Two Pvt. Ltd. (Devikot)	Fatehgarh -II(PG)	180	8	1	13%	Solar
43	Adani Green Energy Twenty Four Limited	Fatehgarh -II(PG)	500	8	1	13%	Solar
44	Adani Hybrid Energy Jaisalmer Four Ltd.	Fatehgarh -I	700	8	1	13%	Hybrid
45	ACME DEOGHAR SOLAR POWER PRIVATE LIMITED	Fatehgarh -I	300	8	1	13%	Solar
46	NTPC Kolayat_400kV	Bhadla-II(PG)	550	8	1	13%	Solar
47	Renew Surya Ayaan Pvt. Ltd.	Fatehgarh -III	300	8	1	13%	Solar
48	Ayaana Renewable Power One Pvt. Ltd.	Bikaner(P G)	300	8	0	0%	Solar
49	Tata Power Green Energy Ltd. (TPGEL)	Bikaner(P G)	225	8	0	0%	Solar
50	AZURE POWER INDIA Pvt. Ltd., Bhadla	Bhadla(P G)	200	8	0	0%	Solar
51	Azure Power Thirty Four Pvt. Ltd.	Bhadla(P G)	130	8	0	0%	Solar
52	Azure Power Forty One Pvt limited	Bhadla(P G)	300	8	0	0%	Solar
53	Adani Renewable Energy (RJ) limited Rawara	Bhadla(P G)	200	8	0	0%	Solar
54	Adani Solar Enegry Jodhpur Two Limited, Rawara	Bhadla(P G)	50	8	0	0%	Solar
55	Adani Hybrid Energy Jaisalmer One Ltd.	Fatehgarh -II(PG)	390	8	0	0%	Hybrid
56	Adani Hybrid Energy Jaisalmer Two Ltd.	Fatehgarh -II(PG)	300	8	0	0%	Hybrid
57	Eden Renewable Cite Private Limited	Fatehgarh -II(PG)	300	8	0	0%	Solar
58	Renew Sun Bright Pvt. Ltd. (RSBPL)	Fatehgarh -II(PG)	300	8	0	0%	Solar
59	Nedan Solar NTPC	Fatehgarh -I	296	8	0	0%	Solar
60	ACME Heergarh Powertech Pvt. Ltd	Bhadla-II(PG)	300	8	0	0%	Solar
61	Rising Sun Energy-K Pvt. Ltd.	Bhadla-II(PG)	190	8	0	0%	Solar
62	AMP Energy Green Four Pvt. Ltd.	Bhadla-II(PG)	100	6	0	0%	Solar
63	ADANI GREEN ENERGY TWENTY FIVE LIMITED	Bhadla-II(PG)	500	8	0	0%	Solar
64	Gorbea Solar Pvt Ltd	Bhadla-II(PG)	300	4	0	0%	Solar
65	Eden Renewable Alma Pvt. Ltd.	Bhadla-II(PG)	300	2	0	0%	Solar
66	Adani Solar Energy	Bhadla-	50	2	0	0%	Solar

	Jodhpur Six Pvt. Ltd.	II(PG)					
67	One Volt energy Pvt. Ltd.	Bikaner-II	100	8	0	0%	Solar
68	Amplus Ages Private Limited	Bikaner-II	100	8	0	0%	Solar
69	Grian Energy private limited	Bikaner-II	100	8	0	0%	Solar
70	Adept Renewable Technologies Pvt. Ltd.	Bikaner-II	110	8	0	0%	Solar
71	TRANSITION ENERGY SERVICES PRIVATE LIMITED	Bikaner-II	84.4	8	0	0%	Solar
72	Transition Sustainable Energy Services Private Limited	Bikaner-II	50	8	0	0%	Solar
73	Transition Green Energy Private Limited	Bikaner-II	100	8	0	0%	Solar
74	Transition Sustainable Energy Services One Pvt Ltd	Bikaner-II	55.6	8	0	0%	Solar
75	Banderwala Solar Plant TP Surya Ltd.	Bikaner-II	300	8	0	0%	Solar
76	Serentica Renewables India 4 Private Limited	Bikaner-II	180	8	0	0%	Solar
77	Serentica Renewables India 5 Private Limited	Bikaner-II	220	8	0	0%	Solar
78	JUNIPER GREEN COSMIC PRIVATE LIMITED	Bikaner-II	100	8	0	0%	Solar
79	JUNIPER NIRJARA ENERGY PRIVATE LIMITED	Bikaner-II	50	4	0	0%	Solar
80	Juna Renewable Energy Pvt. Ltd.	Bikaner-II	335	3	0	0%	Solar
81	Khidrat Renewable Energy Pvt. Ltd.	Bikaner-II	300	3	0	0%	Solar
82	Altra Xergi Pvt. Ltd.	Fatehgarh -III	380	8	0	0%	Solar
83	Renew Surya Vihan Pvt. Ltd.	Fatehgarh -III	100	8	0	0%	Solar
84	Renew Surya Partap Pvt. Ltd.	Fatehgarh -III	200	8	0	0%	Solar
85	Renew Surya Roshni Pvt. Ltd.	Fatehgarh -III	400	8	0	0%	Solar
86	Neemba Solar Plant Renew Surya Vihaan Pvt. Ltd.	Fatehgarh -III	200	3	0	0%	Solar
87	Renew Surya Jyoti Pvt. Ltd.	Fatehgarh -III	210	3	0	0%	Solar
88	XL Xergi Power Pvt. Ltd.	Fatehgarh -III	400	3	0	0%	Solar

- o Drop in RE generation is mainly due to LVRT non-compliance of RE plants during fault events (i.e. several RE plants failed to recover 90% of pre-fault active power within 1 sec). Other reasons are undesirable tripping of Inverter on various protection during fault event such as Over voltage, df/dt, Under frequency, Transient Over current or Transient Over Voltage etc despite no tripping condition as per POI voltage & frequency.
- o Despite taking up in several earlier meetings, adequate action from some RE developers to resolve the generation loss issue is yet to be implemented.

- o Only few RE developers submitted the required details for analysing the event and to find the reason of generation loss and LVRT/HVRT non-compliance at POI (*Non submission of tripping details is Non-compliance of IEGC clause 37.2(c) and clause 15.3 of CEA grid standard*). It is causing issues remained unresolved and persistence non-compliance.
- o Issue pertaining to validation of Plant level simulation model with actual fault event is yet to be addressed. As per FTC procedure RE plants needs to validate the Plant level simulation model within 3 months of commissioning. Simulation model submitted at the time of connectivity/FTC are not depicting the actual plant behaviour in real-time due to various shortcomings like no modelling of various protection of Inverter or other elements which is implemented in field and causing abnormal tripping during fault event.

A.4.4 Suggestions for improvement:

- a. RE plants need to keep the settings of Plant's internal elements (*from 220kV or 400kV evacuating line to Inverters terminal*) in coordination with Point of Interconnection (POI) as per CEA standards, to prevent tripping of any internal elements of plants (causing generation loss) when voltage and frequency at Interconnection point remains within the No-trip zone. HVRT, over voltage, over current, Transient O/V and frequency protection settings of Inverters need to be reviewed & rectified for Non-complaints RE plants.
- b. RE developers should include the requirement of IEEE 2800-2200 (i.e. No ROCOF protection in Inverter) or if frequency protection or df/dt protection is there in inverters then operation of protection should be on frequency measured by averaging the frequency of 4-5 cycles window. (*Same was suggested in 1st RE sub-committee meeting*)
- c. RE generators need to analyse the reactive power support from Inverter during HVRT in case of any tripping of Inverter in Over voltage, as several cases have been observed where plant didn't absorb reactive power despite Inverters went in HVRT and tripped on O/V.
- d. Firmware of Inverters may be updated to resolve the issue of sharp reduction in active power during fault (even despite insignificant voltage dip) and to resolve the issue of any reduction in active power during HVRT (until the transient current limit of the Inverter/WTG is not hit).
- e. Firmware of Inverters may be updated for adequate and prompt reactive power support (i.e. injection during LVRT, ceasing reactive power immediately after fault clearance and absorption during HVRT).
- f. RE generators should also analyse the events of generation loss and non-compliance of LVRT/HVRT requirements at their end, high resolution data archiving and data logging facility at least in case of fault event should be ensured at plant end for better analysis of the events, remedial actions should be taken accordingly to resolve the issue.

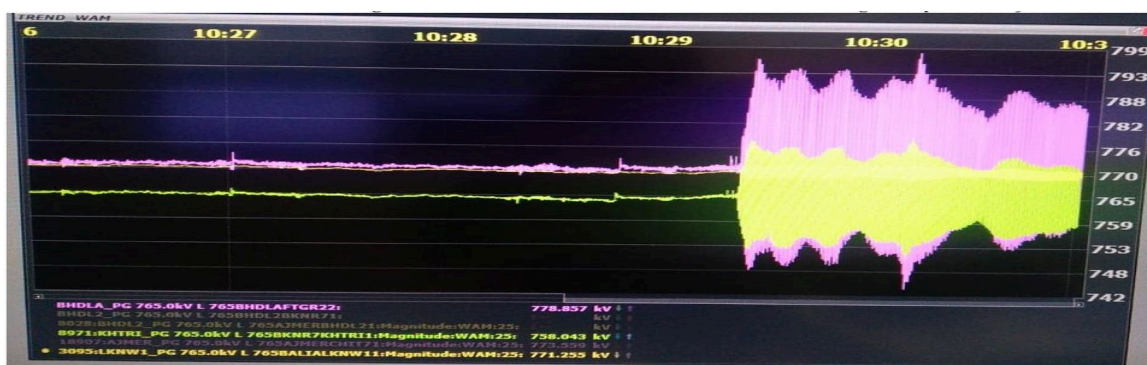
Drop of significant quantum of RE generation affect the grid security due to large excursion in grid frequency, hence all RE plants are requested to take serious cognizance of the issue of LVRT/HVRT non-compliance of RE plants at

POI and to implement necessary corrective measures to ensure LVRT/HVRT compliance at POI, further timely submission of required details for analyzing the event and to find the reason of generation loss and LVRT/HVRT non-compliance at POI must be ensured by RE plants to comply with IEGC clause 37.2(c) and CEA grid standard clause 15.3.

Forum may deliberate and discuss the further course of actions.

A.5. Voltage Oscillation and Voltage spikes issue in RE complex: (Agenda by NRLDC)

A.5.1 Two instances of high-frequency, high amplitude voltage oscillations occurred in the Rajasthan RE complex of the Northern Regional grid in the month of Nov'25 after outage of 400kV Bhadla(Rs)-Bikaner(Rs) D/C.



Voltage oscillation started at 10:29:50 hrs on 11.11.2025



Voltage oscillation died at 10:36 hrs on 11.11.2025 after changing STATCOM mode from Auto Voltage control (VCM) to Manual Fixed-Q mode

- A.5.2 High-frequency, low-amplitude voltage oscillations (mainly from RE plants side) escalated into high-frequency, high-amplitude voltage oscillations when the STATCOM at Fatehgarh-II & Bhadla-II remained in Auto mode (VCM or QCM) under low SCR scenario and voltage at 400kV bus of RE pooling S/s fell below 400kV. To mitigate this, STATCOM at Fatehgarh-II (PG) were put in manual mode (Fixed-Q) for short duration only when oscillation occurred.
- A.5.3 Issue of voltage oscillations and translation of high-frequency, low-amplitude voltage oscillations into high-frequency, high-amplitude voltage oscillations when STATCOM remains in Voltage control mode (Auto mode-VCM) were discussed in detailed in previous RE sub-committee meetings.
- A.5.4 With the rise in solar generation without commissioning of its associated transmission system, the SCR continues to decline and causes oscillation whenever ISTS connected RE generation exceeds 18.4 GW in the complex. Therefore, it is

crucial to take proactive measures to identify the **root-cause of High-frequency, low-amplitude oscillations originating from RE plants** and translation of high-frequency, low-amplitude voltage oscillations into high-frequency, high-amplitude voltage oscillations in case of Low SCR (Weak grid connectivity/low system strength) when STATCOMs remains in Auto mode (VCM or QCM).

A.5.5 Commissioning of RE evacuating lines planned for evacuation of Phase-II & Phase-III generation needs to be expedited as nearly entire generation of Phase-II has already been commissioned and significant quantum of Phase-III generation has been commissioned but few Transmission elements of Ph-II is yet to get commissioned and not a single transmission element of Phase-III is commissioned yet. Delay in commissioning of Associated transmission system is causing Weak grid connectivity/low system strength because of penetration of additional RE generation of Phase-III in existing system.

A.5.6 After detailed deliberation was made in 2nd RE sub-committee meeting regarding issue of STATCOM, a *Committee under SE(O), NRPC comprising members from NRLDC/NLDC, PGCIL, CTUIL, Rajasthan SLDC and SIEMENS (OEM) were constituted to look into the issue of STATCOM operation in view of the oscillations observed in Northern Region.*

1st meeting of the Committee was held on 09.07.2025, following major action points were deliberated in the meeting.

- SIEMENS (STATCOM OEM) shall carryout a EMT study on PSCAD model of the STATCOM. The study would be an open loop study by playing back the STATCOM terminal voltage (taken from DR for the oscillation period) for the following cases (i) Hunting detection >4Hz in-service and gain reduction of STATCOM (ii) Hunting detection disabled and no gain reduction.
- The response of the STATCOM (mainly reactive power response) shall be checked for the above mentioned cases in the studies and the difference in STATCOM MVAR response in both the cases shall be analysed.
- SIEMENS (STATCOM OEM) shall provide the rationale for keeping the threshold for gain reduction at 4 Hz. Any studies carried out to arrive at this 4 Hz reference shall be shared by Siemens with the committee. If the threshold was decided without any prior studies, the possibility of modifying the threshold to avoid gain reduction shall be explored by M/s Siemens.
- Siemens shall also clarify whether the stability controller (gain reduction on hunting detection feature) will remain in service in QCM auto mode also.
- SIEMENS (STATCOM OEM) shall submit a technical document explaining the exact difference in STATCOM response during fault event, If STATCOM operates in (i) Manual Fixed-Q mode (ii) Auto Mode (VCM or QCM) in pre-fault scenario. Technical document should highlight the difference between Reactive Power (MVAR) support from STATCOM (i) Manual Fixed-Q mode (ii) Auto Mode (VCM or QCM) in terms of Reactive power support quantum (MVAR) and Response time for achieving that support (ms).
- M/s Siemens shall provide potential solutions to the issue of amplification of oscillations with gain reduction of STATCOMs.

*Responses to the above-mentioned action points are still awaited from SIEMENS. Grid-India has already issued email communications on 13.10.2025 and 13.11.2025 in this regard. Same is attached as **Annexure-III**.*

A.5.7 **NRLDC Instruction should be strictly adhere in case of any oscillations or contingency in the grid.**

A.5.8 **RE generators should promptly provide the reactive power support in case of NRLDC instruction and should maintain their bus voltage ~225 kV in general to avoid any low voltage issue in the complex.**

A.5.9 High resolution data archiving and data logging facility should be ensured by RE developers. In case of any oscillation, data should be analysed by RE generators and same should be shared with NRLDC for further detailed analysis.

All RE developers are requested to share updates or findings from their respective investigations regarding voltage oscillations with the forum, actions taken status from RE plants side may be updated to forum. Solar/Wind association i.e. NSEFI & IWPA may carry out a comprehensive study to identify the root-cause of High frequency, low-amplitude oscillations originating from RE plants in Rajasthan RE complex.

Forum may discuss the further course of actions and may deliberate on the issue of Voltage oscillation in RE complex.

A.6. Power Quality measurement and Harmonic distortion analysis for all RE generating stations in line with Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2013 (Agenda by NRLDC)

A.6.1 As stipulated in Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2013, Part-II, clause B1, Sub-clause (1), (2), (3) & (4) about requirements with respect to Harmonics, Direct Current (DC) Injection and Flicker are as follows.

B1. Requirements with respect to Harmonics, Direct Current (DC) Injection and Flicker

- 1) Harmonic current injections from a generating station shall not exceed the limits specified in Institute of Electrical and Electronics Engineers (IEEE) Standard 519.
- 2) The Generating station shall not inject DC current greater than 0.5 % of the full rated output at the interconnection point.
- 3) The generating station shall not introduce flicker beyond the limits specified in IEC 61000. Provided that the standards for flicker will come into effect from 1st April 2014.
- 4) Measurement of harmonic content, DC injection and flicker shall be done **at least once in a year** in presence of the **parties concerned** and the indicative date for the same shall be mentioned in the connection agreement.
- 5) Provided that in addition to annual measurement, if distribution licensee or transmission licensee or the generating company, as the case may be, desires to measure harmonic content or DC-injection or flicker, it shall inform the other party in writing and the measurement shall be carried out **within 5 working days**.

A.6.2 List of RE plants commissioned full capacity before 30th Nov'24 and not performed power quality filed testing yet is enclosed as **Annexure-IV**. These RE plants are requested to conduct the Power Quality measurement, Harmonic analysis, DC injection and Flicker test at earliest **in presence of the concerned parties**, as they

are already in violation of the compliance of aforementioned clause B1(4) (Commissioned full capacity 1 year ago as on 30th Nov'24).

A.6.3 Therefore, it is requested to perform Power Quality measurement, Harmonic analysis test and Flicker test at Field in **the presence of concerned parties** as per CEA regulation as mentioned above and submit the Test report for Power Quality measurement, Harmonic analysis, DC injection and Flicker test showing the %THD and Individual Harmonic distortion at Point of Interconnection for Voltage and Current, DC injection and Flicker at POI.

Forum may decide the timeline to close these pending compliances related to Power Quality Norms.

A.7. Status of RE evacuation Phase-II transmission system (Agenda by NRLDC)

A.7.1 Commissioning of Planned Phase-II transmission system (which is yet to be commissioned) for RE generation evacuation from Rajasthan RE complex is essential not only for RE generation evacuation but also for improving the RE pocket's system strength making system more stable and less vulnerable to fluctuations and also for reliving the constraint of N-1 non-compliance of 765kV Jhatikara, 765kV Bhiwani and 765kV Moga S/s ICTs loading. Phase-II transmission system needs to be expedited as commissioning of planned Phase-II generation is almost completed, also ~2000MW of phase-III generation is commissioned.

Commissioning of 765kV Khetri-Narela D/C line and commissioning of 2 nos. of 400kV Narela-Maharanibagh D/C lines needs to be expedited. It would relive the constraint of 765/400kV Jhatikara ICTs loading, as it would divert some quantum of RE power flow from Khetri---Jhatikara path to Khetri---Narela path.

However, due to 765kV Khetri-Narela D/C line, loading on 765kV Bikaner-Khetri D/C line would increase further which is already highly loaded.

Therefore, to relive the constraint of 765kV Bikaner-Khetri D/C line loading, with commissioning of Phase-III planned generation, commissioning of 765kV Bhadla-II-Sikar-II D/C line (2nd), 765kV Sikar-II-Khetri D/C line and 765kV Sikar-II-Narela D/C line is most important.

A.7.2 ***PGCIL/Strelite is requested to provide an update on the status and the expected timeline of commissioning for following elements;***

- i. 765kV Bhadla-II(PG)-Sikar-II D/C (2nd) (i.e. Ckt-3 & Ckt-4). (Phase-II)
- ii. 765kV Khetri-Narela D/C line. (Phase-II)
- iii. 2 nos. of 400kV Narela-Maharanibagh D/C lines. (Phase-II)
- iv. 765kV Sikar-II-Khetri D/C line. (Phase-III)
- v. 765kV Fatehgarh-III-Bewar-Dausa system. (Phase-III)
- vi. 765kV Sikar-II-Narela D/C line. (Phase-III)
- vii. 765kV Bhadla-III – Ramgarh D/C

A.7.3 **As per the Minutes of 3rd RE sub-committee meeting**, all the Transmission elements mentioned in **sl. no. (i) to (v) were expected by october'25 but are still pending, resulting in bottle necking of RE power in the complex.**

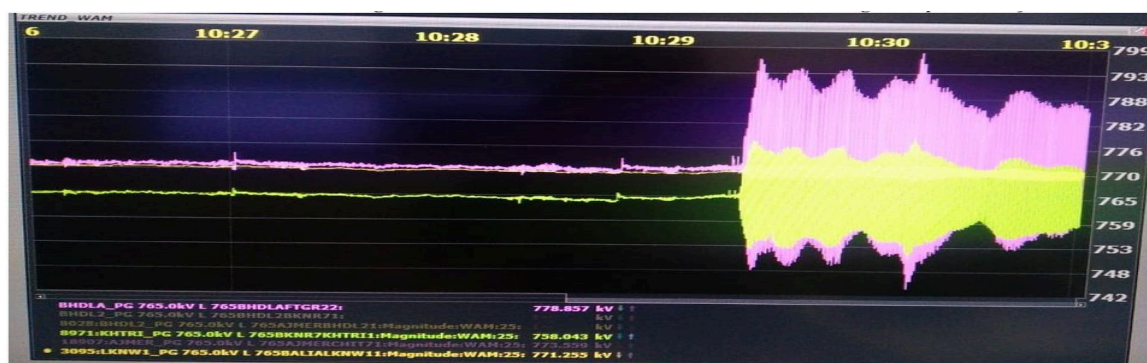
A.7.4 As on 24.11.2025. ~4.8 GW of present commissioned RE power having non effective GNA have been restricted during solar peak hrs. i.e. 10:30hrs to 14:30hrs

Forum may discuss the present status and actual timeline of the above-mentioned Transmission elements.

A.8.1 For assessment of inter control-area transfer capability and related simulation studies, thermal ratings of transmission lines as per CEA's Manual on Transmission Planning Criteria 2023 are being adopted, considering anticipated ambient temperatures as the basis for safe operating limits.

A.8.2 However, in the case of the 400kV Bhadla(RS)–Bikaner(RS) D/C line, the rating of terminal equipment is significantly lower than the thermal capacity of the line itself. Rajasthan has informed that, upon completion of the ongoing refurbishment, the loading capability of each circuit is expected to be enhanced to approximately 1300 MW creating additional margin for RE evacuation.

A.8.3 Accordingly, the 400 kV Bhadla(RS)–Bikaner(RS) D/C line has been under a planned outage since 10.11.2025 to facilitate these works and is expected to be revived on 15th December 2025. This outage has resulted in reduced system strength within the RE-rich pocket, increasing its vulnerability to oscillatory behaviour. Oscillations have, in fact, been observed after the outage, highlighting the critical need for expeditious restoration.



Voltage oscillation started at 10:29:50 hrs on 11.11.2025

Rajasthan SLDC is requested to provide status regarding the same.

A.8.4 Rajasthan SLDC is also requested to provide update on followings:

- Status of installation of already approved Capacitor bank in Rajasthan Intra-state system.
- Status of approval of planned STATCOMs at 400kV Bhadla(RS) and at 765kV Jaisalmer.
- Status on Installation of Power Plant controller (PPC) in Old Solar/Wind plant of Intra-state. As these plants don't have PPC, in case of any Wind generation ramping it causes direct reactive power (MVAR) drawl from the grid.

Forum may kindly deliberate.

A.9. Night mode operation of RE-Plants (Agenda by NRLDC)

A.9.1 As per **clause 39 (11) of IEGC 2023** *“All the Inverter Based Resources (IBRs) covering wind, solar and energy storage shall ensure that they have the necessary capability, as per CEA Connectivity Standards, all the time including non-operating hours and night hours for solar. The active power consumed by these devices for purpose of providing reactive power support, when operating under synchronous condenser/night-mode, shall not be charged under deviations and shall be treated as transmission losses in the ISTS.”*

A.9.2 In accordance with this regulation, all Renewable Energy (RE) plants were advised in the 3rd RE sub-committee meeting to ensure that their inverters are capable to both injecting and absorbing reactive power during night mode operation.

Utilizing inverters in night mode to manage voltage levels is crucial to prevent EHV line opening under high voltage conditions during night hours reducing wear and tear of associated CBs and also to reduce delays in charging of transmission lines during morning hours when solar is ramping.

A.9.3 A study to assess the impact of MVAR absorption has been carried out and significant improvement in voltage was observed during night hours. Results are attached as **Annexure-V**.

A.9.4 NRLDC will prepare a plant-wise schedule for night-mode testing and share the details with the respective plants. RE developers are requested to make the necessary arrangements and adequate manpower in control room during night shift to ensure successful testing and demonstrate compliance with the applicable regulations.

All RE developers are requested to kindly update and confirm the readiness of their plants for night mode operation capability.

A.10. Non-submission of Self-audit reports (Agenda by NRLDC)

A.10.1 As per Regulation 56, Clause 2,

Quote

All users, CTU, STUs, NLDC, RLDCs, RPCs and SLDCs, power exchanges, QCAs, SNAs shall conduct annual self-audits to review compliance of these regulations and submit the reports by 31st July of every year

The self-audit report shall inter alia contain the following information with respect to non-compliance:

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(i) Sufficient information to understand how and why the non-compliance occurred.

(ii) Extent of damage caused by such non-compliance.

(iii) Steps and timeline planned to rectify the same.

(iv) Steps taken to mitigate any future recurrence.

Unquote

- A.10.2 A communication was issued to all RE plants through letter Ref. No. NRLDC/SO/TS-09 dated 13.02.2025, requesting submission of the self-audit report in accordance with Regulation 56(2) of IEGC-2023.
- A.10.3 To date, only the 380 MW Altra Xergi Power Pvt. Ltd. (Fatehgarh-III PS) has submitted its report, received on 30th October 2025; however, the submission covered only the 220 kV switchyard and Control & Relay Panel (CRP) and did not include the LVRT/HVRT compliance status.

Members may like to discuss.

A.11. Protection related issues in multiple elements tripping, detailed analysis of the events and status of remedial measures (Agenda by NRLDC)

- A.11.1 The list of major RE tripping events occurred during **June-October 2025** is attached as **Annexure-VI**.
- A.11.2 **RE plants are requested to review the above-mentioned grid events, prepare detailed analysis report and present the event details during 04th RE sub-committee meeting.** Necessary actions also need to be taken to ensure the compliance of LVRT/JVRT during any grid events.

Further, it is also emphasised that overvoltage protection setting at RE plants to be kept in coordination with the LVRT/HVRT settings at inverter level to avoid unwanted loss of RE generation.

Members may like to discuss.

A.12. Status of submission of DR/EL and tripping report for the month of June-October 2025 (Agenda by NRLDC)

- A.12.1 The status of receipt of DR/EL and tripping report of utilities for the month of **June-October 2025** are attached as **Annexure-VII**.
- A.12.2 ***As per IEGC clause 37.2 (c), Disturbance Recorder (DR), station Event Logger (EL), Data Acquisition System (DAS) shall be submitted within 24 hrs of the event and as per IEGC clause 37.2 (e), the user shall submit a detailed report in the case of grid disturbance or grid incidence within one (1) week of the occurrence of event to RLDC and RPC.***
- A.12.3 However, it is evident from the submitted data that reporting status is not satisfactory and needs improvement. Non submission of DR/EL & tripping details further affect the grid event analysis.
- A.12.4 Members may please note and advise the concerned for timely submission of the information.

RE plants are requested to upload DR/EL of all the tripping incidents on Web Based Tripping Monitoring System “<http://103.7.128.184/Account/Login.aspx>”

within 24 hours of the events as per IEGC clause 37.2(c) and clause 15.3 of CEA grid standard.

Apart from prints of DR outputs, the corresponding COMTRADE files (.cfg/.dat) may please also be submitted in tripping portal / through email.

Members may like to discuss.

A.13. Frequent tripping of 220 KV Bikaner_2 (PBTSL)-Juna_REPL_SL_BKN2 (Juna_REPL) line in October 2025 (Agenda by NRLDC)

A.13.1 220 KV Bikaner_2 (PBTSL)-Juna_REPL_SL_BKN2 (Juna_REPL) line tripped 4 (four) times during October 2025. The list of tripping is as per following:

Sr No	Element Name	Outage Date	Outage Time	Reason
1.	220 KV Bikaner_2 (PBTSL)-Juna_REPL_SL_BKN2 (Juna_REPL) Ckt-1	12-Oct-25	02:32	Earth fault
		12-Oct-25	02:32	Earth fault
		15-Oct-25	01:14	Earth fault
		18-Oct-25	00:44	Earth fault

A.13.2 It is to be highlighted that DR/EL & tripping analysis of above tripping hasn't received. Juna_REPL is requested to share the reason of frequent tripping of the line along with details of actions taken to avoid such event in future.

A.13.3 It may be noted that frequent tripping of such elements affects the reliability and security of the grid. Hence, **utilities are requested to analyse the root cause of the tripping and share the remedial measures taken/being taken in this respect.**

Members may like to discuss.

A.14. RTU Telemetry Availability Below 95% (Agenda by NRLDC)

A.14.1 Reliable and accurate telemetry is critical for secure grid operation. Based on SCADA availability data, several RTUs have been identified with low availability.

A.14.2 Chronic RTUs with Persistent Low Availability (<95% in All Months)

These RTUs have been recording low availability consistently across all monitored months (Aug, Sep, Oct, Till 20 Nov 2025), indicating serious and long-pending issues.

RTU Name	Aug	Sep	Oct	Till 20.11.2025	Remarks
MRPL_RTU	69.34%	41.10%	88.63%	81.82%	Severe degradation; persistent low availability across all months
RSDCL PPS4	32.52%	0%	0%	0%	Completely non-reporting across all periods

Action: Concerned RE Developers to submit a Corrective Action Report (CAR) detailing root-cause analysis, permanent corrective measures, and restoration timeline.

A.14.3 **Other RTUs with Availability Below 95% in One or More Months**

Other RTUs showed intermittent degradation and require corrective actions.

RTU name	Aug	Sep	Oct	Till 20.11.202 5
ACME Chittorgarh (Ayana)	98%	98.27%	86%	60%
AURIYA	99%	99.86%	90%	100%
MSRPL	69%	41.11%	89%	82%
ESUCRL	99%	98.76%	80%	100%
EDEN at fatehgarh2	96%	91.02%	78%	100%
RNEW Jharkhand	94%	93.09%	100%	100%
Adani hybrid One	100%	99.96%	100%	80%
Adani hybrid Three	100%	99.97%	100%	90%
Adani Wind PSS 2	98%	99.41%	94%	100%
RSUPL	0%	0.00%	53%	100%
NTPC Nidan	93%	99.56%	100%	100%
CSPJP	98%	99.97%	48%	87%
NTPC Devikot	0%	34.15%	100%	61%
RSDCL PPS 4	33%	0.00%	0%	0%
Rising Sun	69%	74.54%	100%	100%
ASERJ2PL Devikot Adan	100%	94.37%	80%	100%
PGPL	96%	92.67%	98%	95%
ANTA	83%	95.32%	51%	85%
ASER2PH an Bhadla	100%	94.37%	80%	100%
Acme 1200 MW	93%	99.54%	100%	100%
Essel Main Pooling	100%	99.54%	80%	100%
RSDCL PPS2	0%	73.58%	100%	85%
RSDCL PPS3	87%	72.97%	100%	100%
RSDCL PPS1	87%	99.85%	100%	84%
NTPC Plot2 at RSDCL	4%	74.74%	100%	85%
NTPC Plot3 at RSDCL	87%	99.88%	100%	100%
JREPL	59%	99.82%	100%	97%
XL Xergi	99%	70.60%	35%	98%
Essel Reactive power Station	100%	99.90%	80%	100%

Members may kindly deliberate.

A.15. Critical & Long-Pending SCADA Reporting Issue (Agenda by NRLDC)

A.15.1 **NTPC Devikot**

Telemetry from NTPC Devikot has been non-reporting for more than one year, despite repeated escalations by NRLDC in previous RE meetings.

Issue Summary

- No real-time SCADA/RTU reporting for over 12 months.
- In September 2025, one gateway came UP on 20th September, but 33 kV telemetry was not reported even during this window.
- Since 16th November 2025, both gateways are again DOWN, and the plant is completely not reporting.

This represents a continuous observability gap and compromises secure grid operation.

Action Required

- NTPC Devikot to submit:
 - A committed restoration timeline
 - Compliance details on communication & firewall architecture
- Weekly progress reporting to NRLDC until issues are fully resolved.

A.15.2 Ayana Renewable Three Pvt Limited

SCADA data from Ayana Renewable Three Pvt. Limited continues to remain incomplete from 24 Sep 2025 despite availability of both communication gateways. Although the gateways are healthy and reporting, the required operational parameters at the plant level are not being reported to the control centre.

Non-Reported Parameters

- 33 kV Bay-Level Telemetry
- Weather Monitoring System (WMS) Parameters
- Plant Power Controller (PPC) Parameters

Observations

- Both primary and standby gateways available.
- Only partial telemetry is reaching the control centre; essential parameters remain missing.
- Lack of WMS and PPC data impacts real-time supervision of plant.

Action Required

Ayana Renewable Three Pvt. Ltd. is requested to:

1. Rectify the telemetry mapping issues, particularly for 33 kV, PPC and WMS parameters.
2. Share a firm timeline for complete telemetry restoration.
3. Share weekly progress updates with NRLDC until full resolution

Members may kindly deliberate.

A.16. Requirement of Firewall at RE Sub-Station End (Agenda by NRLDC)**A.16.1 Requirement of Firewall at Sub-station end:**

The Guidelines on “Interfacing Requirements” focus on the general data acquisition systems for RTUs, SAS Gateway computers, communications and AMI metering systems required for reliable, secure and economic operations of the control centre(s) was issued by CERC in Jan 2024.

Clause 6 of the interface guidelines is as given below:

Quote

"The communication service provider while providing the interfaces for the data exchange between the control centres, between the user station and the Control Centre must comply with CERT-In, NCIIPC (National Critical Information Infrastructure Protection Centre) guidelines for the interface being provided to the end user in accordance with CEA (Technical Standards for Communication System in Power System Operations) Regulations, 2020. Necessary firewall/router as per requirement shall be provided by the respective users while connecting the remote equipment with the control centre network. Direct connectivity with the operational network be avoided while connecting the remote station and shall be through firewall with necessary VLAN configuration."

Unquote

A.16.2 As per above guidelines it is essential that firewall shall be installed at Sub-station end. All new sub-stations are being connected through firewall only and same has been incorporated in connection agreement also. However, firewalls are not available at many plants as tabulated below. In this regard all RE Generators are requested to please take up for installation for necessary firewalls.

A.16.3 Issue was also discussed in 1st, 2nd and 3rd RE Meeting but still there is no update in this regard.

FATEHGARH 1	ADANI SOLAR PSS1, PSS2, ADANI WIND PSS1,PSS2, NIDAN
FATEHGARH-2	EDEN SOLAR
	Adani Hybrid1,2,3 , Adani solar Jaisalmer Solar park, wind park
BIKANER 765	RENEW BIKANER 250
	SBSR 300 MW (Adani)
Bhadla	ADANI BHADLA
	AZURE MAPPLE
	CSP JODHPUR
	Saurya Urja
	ESSEL
Bhadla 2	AVADA 320

Members may kindly deliberate.

A.17. GE N60 PMU Configuration & Operational Issues (Agenda by NRLDC)

A.17.1 Several issues have been identified with GE N60 model PMUs installed under URTDSM, causing operational challenges at PDCs.

A.17.2 Key Observed Issues

- Same PMU communicating with multiple PDCs using different TCP ports.
- Incorrect reporting configuration: CFG2 + CFG3 enabled instead of CFG3 only.
- Communication type locked to TCP, cannot be changed to Spontaneous UDP.
- After PMU restart, reporting does not auto-resume; stream must be deleted and recreated.
- Inconsistent default values for Phasor Measurement Window Length and Measurement Group Delay.
- In some cases, data is not being reported simultaneously to all three data aggregators.
- Sikar-2 POWERGRID Substation: Installed N60 PMU is not compatible with the URTDSM system.

A.17.3 Recommendation

In view of the issues observed, it is advised that RE developers and substations undertake a thorough technical evaluation PMUs prior to procurement. This will help avoid potential operational challenges during integration.

A.17.4 Action Required

- GE OEM to be consulted for a uniform configuration template.
- Sites using N60 PMUs are advised to proceed with integration only after compliance have been reviewed and confirmed by NRLDC.

Members may kindly deliberate.

A.18. Issues in Real-Time Communication with ISTS-Connected RE Plants in Northern Region (Agenda by NRLDC)

A.18.1 More than 90 renewable energy (RE) plants have been commissioned at the ISTS level in the Northern Region (NR), and the number is steadily increasing. While this is a positive development for green energy integration, it is creating several operational challenges, particularly with regard to real-time communication.

A.18.2 The following issues have been observed:

- **Multiple and Unstable Contact Points:**
Multiple mobile numbers are being shared by RE plants for different functions such as scheduling, forecasting, real-time operation, SCADA, and protection. This causes confusion, especially in plants where no QCA (Qualified Coordinating Agency) is appointed.
- **Frequent Change in Responsible Personnel:**

The designated point of contact often changes, and in many cases, the contact person is not stationed at the plant. When contacted, they request time to coordinate with the plant control room, leading to unnecessary delays.

- **Delayed Response to NRLDC Communications:**

A noticeable delay has been observed in actioning the instructions or communications from the NRLDC control room, impacting grid reliability and smooth operation.

- **VOIP Communication Issues:**

During real-time operations, plants tend to prefer mobile communication over VOIP. In many instances, the VOIP numbers provided are either non-functional or not attended, further hampering coordination.

A.18.3 **Way Forward:**

To ensure efficient grid management and real-time coordination, the following measures may be considered:

- Dedicated 24x7 control room contact number (other than VOIP) for each RE plant.
- Ensuring up-to-date contact details are submitted to NRLDC and updated immediately upon any change.
<https://docs.google.com/forms/d/1iTZ3SCyk6Zk39pcCUSgUnt7EQ38WadiX6mh5SN4JZXo/edit>
- Ensure proper working of VOIP numbers.

Members may kindly deliberate.

A.19. Non-Compliance for Fast Frequency Response by RE plants (Agenda by NRLDC)

A.19.1 Frequency response from wind generating stations, generating stations using inverters, wind - solar photo voltaic hybrid systems as per CEA (Technical Standards for grid Connectivity to the Grid) (Amendment) Regulations, 2019 Clause B2(4) is quoted below

Quote

The generating stations with installed capacity of more than 10 MW connected at voltage level of 33 kV and above –

(i).....

Provided that for frequency deviations in excess of 0.3 Hz, the Generating Station shall have the facility to provide an immediate (within 1 second) real power primary frequency response of at least 10% of the maximum Alternating Current active power capacity;

Unquote

A.19.2 **Letter for the same has been issued by NRLDC in this regard to all NR ISTS connected RE generators.**

Kindly provide the compliance for the settings regarding above.

A.19.3 Some of the plants have communicated regarding implementation of Fast Frequency Response at their plants. Further, based on frequency excursion event up-to 50.38Hz(peak-15:04:40Hrs) continuously(>50.3Hz) from 15:01:50-15:09:50Hrs on 18.11.2025: -

S.No.	Name of the	% of Reduction(~)-As	Remarks
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	plants	per SCADA in 4 minutes (from stable frequency at 15:01:50Hrs to the time of 50.38Hz at 15:04:40Hrs)	(This was a ramp down time)
1	Clean Solar (Saurya Urja – Bhadla)	4%	8MW reduction from 248MW generation. Reduction stopped when frequency momentarily reaches to 50.33Hz momentarily.
2	Clean Solar Power Jodhpur (Bhadla)	8%	15MW reduction at 186MW generation with delay. Started at frequency of 50.37(15:04)Hz.*
3	RSEJ3PL (Fatehgarh2)	3.38%	7MW reduction at 218MW generation at frequency 50.37Hz. Reduction stopped when frequency momentarily reaches to 50.33Hz momentarily.
4	RSPPL (Bikaner)	3.66%	7MW reduction from 191MW generation at frequency 50.37Hz.
5	RSRPL(Bikaner)	2.59%	4MW reduction at 154MW generation at frequency 50.37Hz.
6	Renew (Adani Park Bhadla)	3.07%	1.2MW reduction at 39MW generation at frequency 50.37Hz. Reduction stopped when frequency momentarily reaches to 50.33Hz momentarily.
7	RSBPL	3.13%	7MW reduction at 223MW

	(Fatehgarh2)		generation at frequency 50.37Hz. Reduction stopped when frequency momentarily reaches to 50.33Hz momentarily.
8	RSVPL (Fatehgarh3)	2.7%	2MW reduction at 74MW generation at frequency 50.37Hz. Reduction stopped when frequency momentarily reaches to 50.33Hz momentarily.
9	KREPL (Bikaner2)	--	No reduction
10	AAPL (Bikaner2)	--	No reduction
11	OVEPL(Bikaner 2)	--	No reduction
12	GEPL (Bikaner2)	--	No reduction
13	RSRPL (Fatehgarh3)	2.85%	8MW reduction at 280MW generation at frequency 50.37Hz.

A.19.4 Above entities are requested to fine tune the response if required and further, this matter is for discussion in the forum for enabling compliance in rest of the plants also.

Members may kindly deliberate.

A.20. PPC not installed at Adani Park (200MW Azure and 50MW Renew Bhadla) (Agenda by NRLDC)

A.20.1 200MW solar Azure plant is connected at 250MW Adani pooling station along with 50MW Renew solar plant. Adani pooling station is further connected to Bhadla (PG) through 220kV Adani Bhadla-Bhadla (PG) D/C line. Therefore, PPC should be installed in the park to individually control the active and reactive power of 200MW Azure and 50MW Renew Solar plants being evacuated through 220kV Adani Bhadla-Bhadla (PG) D/C line

- A.20.2 PPC is yet to be installed in 200MW Azure Power and at Central Park level, 50 MW Renew is having PPC at its 33kV level. Due to unavailability of PPC, Adani Bhadla Solar Park is unable to provide the desired reactive power support whenever required. Most of the time these two plants are absorbing MVARs and not complying NRLDC instruction in real-time for reactive power support. It is a noncompliance of clause B2(1) of CEA technical standards for grid connectivity.
- A.20.3 Phone calls/emails and letters has been issued to the concerns. **The issue already raised in this forum in earlier meetings. AGEL may update the status of Installation of PPC to the forum.**

Members may kindly deliberate.

A.21. Compliance regarding Rated Capacity demonstration and Performing Frequency response test (Agenda by NRLDC)

- A.21.1 In accordance with clause 22 and 24 of CERC IEGC Regulations, 2023

Quote

22. TRIAL RUN OF GENERATING UNIT

- b) Successful trial run of a solar inverter unit(s) covered under sub-clause (a) of this clause shall mean the flow of power and communication signal for not less than four (4) hours on a cumulative basis between sunrise and sunset in a single day with the requisite metering system, power plant controller, telemetry and protection system in service. The generating company shall record the output of the unit(s) during the trial run and shall corroborate its performance with the temperature and solar irradiation recorded at site during the day and plant design parameters

Provided that:

- i. the output below the corroborated performance level with the solar irradiation of the day shall call for a repeat of the trial run.
- ii. if it is not possible to demonstrate the rated capacity of the plant due to insufficient solar irradiation, COD may be declared subject to the condition that the same shall be demonstrated immediately when sufficient solar irradiation is available after COD, within one year from the date of COD.

24. DOCUMENTS AND TESTS PRIOR TO DECLARATION OF COMMERCIAL OPERATION

- a) The generating company shall submit a certificate confirming compliance with CEA Technical Standards for Connectivity in accordance with sub-clause (a) of clause (4) of Regulation 26 of these regulations.
- b) Type test report for Fault Ride through Test (LVRT and HVRT) for units commissioned after the specified date as per CEA Technical Standards for Connectivity mandating LVRT and HVRT capability shall be submitted.
- c) The following tests shall be performed at the point of interconnection:
 - i. Frequency response of machines as per the CEA Technical Standards for Connectivity.
 - ii. Reactive power capability as per OEM rating at the available irradiance or the wind energy, as the case may be.

Provided that the generating company may submit offline simulation studies for the specified tests, in case testing is not feasible before COD, subject to the condition that tests shall be performed within a period of one year from the date of achieving COD.

Unquote

A.21.2 List of Non-complied RE Generator

Sl. No.	Plant	Plant Capacity	Commissioned capacity	Last Capacity COD Date	Rated Capacity demonstration date	FRT date	Remarks
1	RENEW SURYA PRATAP PRIVATE LIMITED	200	200	18-May-2024	8-May-24	Pending	1 Year from last capacity COD has been passed. Reminder :- mail sent on 26th June 2024, 12th Sep 2024, 8th Jan 2025, 17th Feb 2025, 14th May 2025, 28th July 2025 & 9th Sep 2025 and letter dated 16th May 2025 13 Nov 2025
2	RENEW SURYA VIHAAN PRIVATE LIMITED	100	100	22-May-2024	8-May-24	Pending	1 Year from last capacity COD has been passed. Reminder :- mail sent on 26th June 2024, 12th Sep 2024, 8th Jan 2025, 17th Feb 2025, 14th May 2025, 28th July 2025 & 9th Sep 2025 and letter dated 16th May 2025 13 Nov 2025
3	Serentica Renewables India 5 Pvt Ltd (SRI5PL)	232	232	6-Oct-2025	Pending	12 Aug 2025	Reminder :- mail sent on 26 may 25 and letter 24 june 25 , 13 aug 25
4	AYANA RENEWABLE POWER THREE PRIVATE LIMITED (ARP3PL)	300	300	8-Feb-2025	Pending	Pending	Reminder :- mail sent on 26 may 25, 28 july 25, 9 sep 25 and letter 24 june 25, 13 aug 25, 19 nov 25
5	Adani Green Energy	500	500	23-Mar-2025	Pending	Pending	Reminder :- mail sent on 13 aug 25, 26

	Twenty Five Limited						aug 25, 9 sep 25 and letter 19 nov 25
6	Adani Green Energy Twenty Four Limited	500	500	21-Mar-2025	12-Mar-25	Pending	Reminder :- mail sent on 13 aug 25, 26 aug 25, 9 sep 25.
7	ACME Raisar Solar Energy Private Limited	300	300	9-Jan-2025	14-Jan-25	Pending	Reminder :- mail sent on 28 may 25, 24 june 25, 13 aug 25, 9 sep 25.
8	ACME Dhaulpur Powertech Private Limited	300	300	9-Jan-2025	7-Mar-25	Pending	Reminder :- mail sent on 28 may 25, 24 june 25, 13 aug 25, 9 sep 25.
9	Nokh Solar Power Plant NTPC Limited(NSP PNL)	735	657	26-Sep-2025	Pending	Pending	Part commissioned.
10	Gorbea Solar Private Limited(GSP L_SL_BHD2_PG)	300	300	8-Jun-2025	Pending	Pending	Reminder :- mail sent on 13 aug 25, 9 sep 25 and letter 19 nov 25
11	Juniper Nirjara Energy Pvt. Ltd	50	50	23-Mar-2025	20-Mar-25	Pending	Reminder :- mail sent on 26 may 25 , 9 sep
12	SJVN GREEN ENERGY LIMITED	1000	730.14	14-Nov-2025	Pending	Pending	Part commissioned.
13	Karinsar Solar Plant NHPC Ltd	300	300	10-Oct-2025	Pending	Pending	Reminder :- letter 19 nov 25
14	ACME Sikar Solar Private Limited(ASS PL_BKN2)	300	300	26-Jun-2025	Pending	Pending	Reminder :- mail sent on 13 aug 2025, 9 sep 25 and letter 19 nov 25
15	Neemba Solar Renew Surya Vihaan	200	200	21-May-2025	Pending	Pending	Reminder :- mail sent on 26 aug 2025, 9 sep 25 and letter 19

	Pvt Ltd						nov 25
1 6	Renew Surya Jyoti Private Limited	210	210	25-May- 2025	Pending	Pending	Reminder :- mail sent on 26 aug 2025, 9 sep and letter 19 nov 25
1 7	Juna Renewable Energy Private Limited(JREP L)	335	335	20-Jun- 2025	Pending	Pending	Reminder :- mail sent on 26 aug 2025, 9 sep25 and letter 19 nov 25
1 8	XL Xergi Power Private Limited	400	400	30-Jun- 2025	Pending	Pending	Reminder :- mail sent on 26 aug 2025, 9 sep 25 and letter 19 nov 25
1 9	Khidrat Renewable Energy Private Limited	300	300	30-Jun- 2025	Pending	Pending	Reminder :- mail sent on 26 aug 2025, 9 sep 25 and letter 19 nov 25
2 0	Eden Renewable Alma Private Limited	300	300	6-Aug- 2025	Pending	Pending	Reminder :- mail sent on 4 aug 25, 9 sep 25 and letter 19 nov 25
2 1	ADANI SOLAR ENERGY JODHPUR SIX PRIVATE LIMITED	50	50	30-Jun- 2025	Pending	Pending	Reminder :- mail sent on 13 aug 25, 26 aug 25, 9 sep 25 and letter 19 nov 25
2 2	AMBUJA CEMENTS LIMITED(AC L)	150	150	8-Aug- 2025	23 Sep 2025	Pending	Reminder :- mail sent on 13 aug 25, 26 aug 25, 9 sep 25.

A.21.3 List of RE Plants which are compiled after 1 year of Last capacity COD:-

Sl.	Plant	Plant Capaci	Commissio ned	Last Capacit	Rated Capacity	FRT date	Remarks
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No.		ty	capacity	y COD Date	demonstrat ion date		
1	ALTRA XERGI POWER PVT LTD	380	380	9- Feb- 2024	22-Aug- 24	12- Feb- 25	Reminder :- mail sent on 9 April 24, 7 May 24, 20 May 24, 6 June 24, 26 June 24, 16 July 24, 12 Sep 24, 8 Jan 25 and letter 14 Jan 25.
2	AMP Energy Green Six Private Limited	100	100	24- Jan- 2024	5-Jun-24	20 Feb 2025	Reminder :- mail sent on 9 April 24, 7 May 24, 16 July 24, 12 Sep 24, 8 Jan 25 and letter 14 Jan 25.
3	RENEW SURYA AAYAN PRIVAT E LIMITED	300	300	8- Jun- 2024	18-Dec- 24	14 Nov 25	Reminder :- mail sent on 26th June 2024, 12th Sep 2024, 8th Jan 2025, 17th Feb 2025, 14th May 2025, 28th July 2025 & 9th Sep 2025 and letter dated 16th May 2025 13 Nov 2025.
4	RENEW SURYA ROSHNI PRIVAT E LIMITED	400	400	21- Jun- 2024	17 Oct 2025	25 Aug 2025	Reminder :- mail sent on 26th June 2024, 12th Sep 2024, 8th Jan 2025, 17th Feb 2025, 14th May 2025 & 28th July 2025, 9 sep 25, and letter dated 16th May 2025 & 20th June 2025, 13 aug 25, 7 oct 25
5	ADANI	150	150	1-Jul-	21-Jun-	4	Reminder :- mail

	SOLAR ENERG Y RJ TWO PRIVAT E LIMITED			2024	24	Nov 25	sent on 8 jan 25, 26 May 25, 28 July 25, letter 24 june 25
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Members may kindly deliberate.

A.22. RE Plants with pending Filter Bank Installation (Agenda by NRLDC)

A.21.1 Following plants are yet to install filter bank

- a. Anta Solar Power Plant, NTPC Ltd (90MW).
- b. AYANA RENEWABLE POWER THREE PRIVATE LIMITED (300MW).

Members may kindly deliberate.

A.23. Timely Submission of EIR Applications on the REC Portal (Agenda by NRLDC)

A.23.1 As per Regulation 10(2) of the CERC (Terms and Conditions for Renewable Energy Certificates (REC) for Renewable Energy Generation) Regulations, 2022):

“(2) Application for issuance of Certificates shall be made by an eligible entity—being a renewable energy generating station or a captive generating station based on renewable energy sources—to the Central Agency **within six months** from the corresponding generation:

Provided that no Certificate shall be issued in case the application is made beyond the period of six months from the corresponding generation.”

A.23.2 A detailed procedure was also issued by NLDC in compliance with Regulation 16(2) of the above Regulations. As per Para 4.1 of the Procedure for Implementation of REC Mechanism (https://www.recregistryindia.nic.in/pdf/REC_Procedures.pdf):

“**4.1** The eligible entity shall submit the application to SLDC/RLDC for issuance of the Energy Injection Report (EIR) **within three months** of the electricity generated and injected into the grid, or deemed to be injected in case of self-consumption by a CGP based on renewable energy sources.”

A.23.3 It is important to note that issuance of RECs involves multiple steps—submission of EIR by the entity, validation and approval by RLDC, uploading of the signed EIR on the REC portal (www.recregistryindia.nic.in) by RLDC, and finally issuance of RECs by NLDC. The time limit of three month for submission of EIR applications was defined in the procedure to ensure sufficient time for validation, approvals, and subsequent processing.

A.23.4 Recently, it has been observed that some REC-registered entities are submitting their EIR applications well beyond the three-month deadline, in some cases only a few days before the six-month regulatory deadline. Such delayed submissions pose a

significant risk, as the EIR may not get validated and approved in time, potentially resulting in loss of eligible RECs.

A.23.5 Accordingly, all REGS registered under the REC mechanism are therefore advised to **submit their EIR applications within three months of the date of generation** to ensure timely validation, avoid last-minute delays, and prevent any risk of losing REC entitlement.

Members may kindly deliberate.

A.24. Outstanding Payments of Entities (Agenda by NRLDC)

Deviation Charges

Sl. No.	UTILITY	OUTSTANDING(Rs) as on 21/11/2025	Remarks
1	Ayana Renewable Three	1,75,48,212	
2	CSP Bhadla	88,83,727	
3	AZURE THIRTY-FOUR SOLAR	40,57,176	
4	XL Xergi	16,52,038	
5	Grian Energy	10,94,755	
6	ACME Dhaulpur Powertech	8,98,727	
7	Gorbea Solar	6,05,956	
8	ACME Phalodi Solar	3,23,765	
9	AMP Energy Green Five	3,06,659	
10	CLEAN SOLAR POWER	2,86,312	
11	ACME DEOGARH SOLAR	1,43,014	
12	RENEW SURYA NEEMBA	1,37,348	
13	AMP Energy Green Six	1,36,456	
14	ACME CSEPL	1,02,639	
15	ACME Raisar Solar	55,813	
16	AMP Energy Green 4	51,552	
Total		3,62,84,149	

Reactive Energy Charges

Sl. No.	UTILITY	OUTSTANDING(Rs) as on 21/11/2025	Remarks
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1	ABC RENEWABLE	1,376	
2	ACME Heergarh	2,464	
3	ADANI HYBRID	1,613	
4	Altra Xergi Power	32,256	
5	AMP Energy Green Six	4,400	
7	AVAADA SUNRAYS	1,584	
8	AYANA RENEWABLE ONE	11,394	
9	AZURE FORTY-THREE	20,455	
6	AZURE POWER	16,06,288	
14	AZURE THIRTY-FOUR SOLAR	1,49,431	
10	EDEN RENEWABLE	80	
11	EMSYS ENERGY SERVICES	54,447	
12	Grian Energy	88	
13	Mega Solis Renewables	312	
15	RENEW JHARKHAND	1,320	
20	RENEW POWER	3,92,923	
16	RENEW SOLAR URJA	7,800	
18	RENEW SUN BRIGHT	3,587	
21	RENEW SURYA PRATAP	70,408	
17	RENEW SURYA RAVI	41,797	
22	Transition Green Energy	88	
Total		24,04,111	

Members may kindly deliberate.

A.25. LC Status against Default in Deviation charges liability (Agenda by NRLDC)

A.25.1 As per clause 10(2) of DSM Regulation 2024, “Any regional entity which at any time during the previous financial year fails to make payment of charges for deviation within the time specified in these regulations shall be required to open a Letter of Credit (LC) equal to 110% of its average payable weekly liability for deviations in the previous financial year in favour of the concerned Regional Load Despatch Centre within a fortnight from the start of the current financial year.”

A.25.2 In FY 2024-25, a total of 43 entities were in default of payment, of which following 08 entities are yet to open a Letter of Credit (LC).

Sl. No.	Name of NR Pool members	LC Amount in Rs.	No. of Defaults during FY 2024-25	Maximum DEFAULT DAYS (After Allowing Days) during FY 2024-25.
1	ACME DEOGARH SOLAR	18,21,329	5	6
2	ACME Phalodi Solar	31,43,580	3	5
3	ACME Raisar Solar	48,88,361	3	3
4	Amplus Ages	22,59,968	8	62
5	AZURE FORTY ONE	20,10,954	29	65
6	EDEN RENEWABLE	15,33,855	3	11
7	Grian Energy	24,84,290	5	6

A.25.3 During CAG audit for FY 2022-2025 at NRLDC, CAG auditors raised the audit point regarding not opening of LC by entities and not adhering to the provisions of the DSM Regulations issued by the CERC.

A.25.4 Above mentioned entities are requested to open LC at the earliest.

Members may kindly deliberate.

A.26. Monthly Reconciliation of pool accounts (Agenda by NRLDC)

A.26.1 Reconciliation of Pool accounts is carried out through web portal “**poolar.nrl dc.in**” All the pool members have been provided with the Username & Password to access the web portal to reconcile the accounts.

A.26.2 Monthly reconciliation statement of the pool accounts up to October 2025 is published on the web portal.

A.26.3 Pool Members are requested to upload the duly signed copy of reconciliation statement on web portal before due date.

A.26.4 The Accounts shall stand deemed reconciled in case of no response from the pool members.

Members may kindly deliberate.

A.27. Non-Payment of DSM Charges from RE-Entity under QCAs on account of Revision (Agenda by NRLDC)

A.27.1 It has been observed that, in cases where DSM accounts are revised for periods prior to an entity coming under the QCA framework, some RE plants are not making the required payments, possibly due to a lack of clarity on their obligations.

A.27.2 It may be noted that, for any revisions in the DSM account pertaining to periods prior to an entity’s inclusion under the QCA framework, the obligation to make timely payments rests exclusively with the entity and not with the QCA.

A.27.3 Entities are requested to review the DSM account on a weekly basis to check for any revisions pertaining to periods when they were not under the QCA.

Members may kindly deliberate.

A.28. Submission of protection performance indices of 220 kV and above system along with reason and corrective action taken for indices less than unity to NRPC Secretariat for month of September- October 2025 (agenda by NRPC Secretariat)

A.28.1 As per clause 15 (6) of IEGC 2023;

- Users shall submit the following protection performance indices of previous month to their respective RPC and RLDC on monthly basis for 220 kV and above (132 kV and above in NER) system, which shall be reviewed by the RPC:

a) The **Dependability Index** defined as $D = N_c / (N_c + N_f)$

b) The **Security Index** defined as $S = N_c / (N_c + N_u)$

c) The **Reliability Index** defined as $R = N_c / (N_c + N_i)$

where,

N_c is the number of correct operations at internal power system faults,

N_f is the number of failures to operate at internal power system faults,

N_u is the number of unwanted operations,

N_i is the number of incorrect operations and is the sum of N_f and N_u

- Each user shall also submit the reasons for performance indices less than unity of individual element wise protection system to the respective RPC and action plan for corrective measures. The action plan will be followed up regularly in the respective RPC.

A.28.2 In earlier PSC meeting, it was decided that each utility shall submit the performance **indices of previous month by 7th day of next month.**

A.28.3 Accordingly, the status of the indices reported for the month of September- October 2025 is attached as **Annexure-VIII.**

A.28.4 It has been observed that some RE utilities are non-compliant in submission of protection indices.

Decision required from Forum:

Forum may direct RE utilities to submit the performance indices of previous month by 7th day of next month element wise along with the reason for indices less than unity and corrective action taken.

A.29. Annual protection audit plan for FY 2026-27 (agenda by NRPC Secretariat)

A.29.1 As per clause 15 of IEGC 2023;

- *Annual audit plan for the next financial year shall be submitted by the users to their respective RPC by 31st October. The users shall adhere to the annual audit plan and report compliance of the same to their respective RPC.*

A.29.2 In view of above, all utilities were requested to submit the annual protection audit plan for FY-2026-27 latest by 31st October 2025 in 63rd PSC & in the 56th TCC & 81st NRPC meeting (held on 29-30 October, 2025).

A.29.3 Accordingly, annual audit plans submitted by utilities have been compiled (enclosed as **Annexure-IX**).

A.29.4 It has been observed that some RE utilities have not submitted audit plan even after passing of deadline. Further, audit report is also awaited for FY 2025-26.

Decision required from Forum:

Forum may direct RE utilities to submit audit plan for FY 2026-27 as deadline of 31st October 2025 has already passed. Report may be submitted where audit has been completed.

A.30. Third-party protection audit plan (agenda by NRPC Secretariat)

A.30.1 As per clause 15 of IEGC 2023:

All users shall also conduct third party protection audit of each sub-station at 220 kV and above (132 kV and above in NER) once in five years or earlier as advised by the respective RPC.

A.30.2 In view of above, third party audit plans submitted by utilities have been compiled (enclosed as **Annexure-X**).

A.30.3 It has been observed that some RE utilities have not submitted third party audit plan and report is also awaited.

Decision required from Forum:

Forum may direct RE utilities to submit 3rd party protection audit plan. Further, utilities may update the status of 3rd party protection audit as per the submitted audit plans. Subsequently, the audit reports along with compliance status may be submitted to NRPC Secretariat regularly.



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

सेवा में,

As per Distribution list (email only)

विषय: Compliance of clause 40 of IEGC-2023 Regulation on Periodic Testing of Generators and HVDC/FACTS devices - reg.

महोदय/महोदया,

It is to bring to your kind notice that there are following provisions in clause 40(2) of IEGC-2023:

(a) *The owner of the power system element shall be responsible for carrying out tests as specified in these regulations and for submitting reports to NLDC, RLDCs, CEA and CTU for all elements and to STUs and SLDCs for intra-State elements.*

(b) *"All equipment owners shall submit a testing plan for the next year to the concerned RPC by 31 October to ensure proper coordination during testing as per the schedule. In case of any change in the schedule, the owners shall inform the concerned RPC in advance."*

(c) *"The tests shall be performed once every five (5) years or whenever major retrofitting is done. If any adverse performance is observed during any grid event, then the tests shall be carried out even earlier, if so advised by SLDC or RLDC or NLDC or RPC, as the case may be"*

2. In line with the above regulations, NRPC requested all synchronous generators, non-synchronous generators (Solar/Wind) and HVDC/FACTS devices to furnish the schedule of testing for the upcoming 5 years, i.e., 2024-2029. The issue was initially highlighted by NRPC during the 213th OCC meeting held in November 2023, and was subsequently raised in the 219th OCC meeting in May 2024, the 54th PSC meeting in November 2024 and in every OCC meeting thereafter. It was also emphasized during the 73rd NRPC meeting held on 21st May 2024.
3. In accordance with the regulations in effect, the non-furnishing of testing schedule by operators listed in **Annexure-I** may be treated as non-compliance of IEGC-2023.

4. SLDCs may take up with concerned Intra-state/IPP stations of their respective control area.

5. All generators (as annexure-I) and SLDCs (for Intra-state/IPP stations) are requested to submit testing schedule for period 2024-29 in prescribed format (copy attached as **Annexure-II**) to seo-nrpc@nic.in latest by **12.08.2025**. The same would be discussed in the upcoming OCC meeting of NRPC.

This issues with the approval of Member Secretary, NRPC.

Encl: as stated



(डी. के. मीना 15/8/25)

अधीक्षण अभियंता (प्रचालन)

Copy to: Executive Director, NRLDC, Grid-India, New Delhi (mkagarwal@grid-india.in)

List of generators who have not furnished the testing schedule for FY 2024-2025 and FY 2025-26

CENTRAL, STATE AND PRIVATE SECTOR STATIONS

Operator	Generating Unit	Installed Capacity	Tests for which schedule is to be furnished
NTPC	SINGRAULI STPS Unit 1	200	No schedule given
	SINGRAULI STPS Unit 2	200	No schedule given
	SINGRAULI STPS Unit 3	200	No schedule given
	SINGRAULI STPS Unit 4	200	No schedule given
	SINGRAULI STPS Unit 5	200	No schedule given
	SINGRAULI STPS Unit 6	500	No schedule given
	SINGRAULI STPS Unit 7	500	No schedule given
	RIHAND-I STPS Unit 1	500	No schedule given
	RIHAND-I STPS Unit 2	500	No schedule given
	RIHAND-II STPS Unit 3	500	No schedule given
	RIHAND-II STPS Unit 4	500	No schedule given
	RIHAND-III STPS Unit 5	500	No schedule given
	RIHAND-III STPS Unit 6	500	No schedule given
	UNCHAHAAR-I TPS Unit 1	210	No schedule given
	UNCHAHAAR-I TPS Unit 2	210	No schedule given
	UNCHAHAAR-II TPS Unit 3	210	No schedule given
	UNCHAHAAR-II TPS Unit 4	210	No schedule given
	UNCHAHAAR-III TPS Unit 5	210	No schedule given
	UNCHAHAAR-IV TPS Unit 6	500	No schedule given
	DADRI-I (NCTPP) Unit 1	210	No schedule given
	DADRI-I (NCTPP) Unit 2	210	No schedule given
	DADRI-I (NCTPP) Unit 3	210	No schedule given
	DADRI-I (NCTPP) Unit 4	210	No schedule given
	DADRI-II (NCTPP) Unit 5	490	No schedule given
	DADRI-II (NCTPP) Unit 6	490	No schedule given
	DADRI CCPP Unit GT-1	130.19	No schedule given
	DADRI CCPP Unit GT-2	130.19	No schedule given
	DADRI CCPP Unit GT-3	130.19	No schedule given
	DADRI CCPP Unit GT-4	130.19	No schedule given
	DADRI CCPP Unit ST-1	154.51	No schedule given
	DADRI CCPP Unit ST-2	154.51	No schedule given
	ANTA CCPP Unit GT-1	88.71	No schedule given
	ANTA CCPP Unit GT-2	88.71	No schedule given
	ANTA CCPP Unit GT-3	88.71	No schedule given
	ANTA CCPP Unit ST	153.2	No schedule given
	AURAIYA CCPP Unit GT-1	111.19	No schedule given
	AURAIYA CCPP Unit GT-2	111.19	No schedule given
	AURAIYA CCPP Unit GT-3	111.19	No schedule given
	AURAIYA CCPP Unit GT-4	111.19	No schedule given
	AURAIYA CCPP Unit ST-1	109.3	No schedule given
	AURAIYA CCPP Unit ST-2	109.3	No schedule given
	KOLDAM HPS Unit 1	200.00	No schedule given
	KOLDAM HPS Unit 2	200.00	No schedule given
	KOLDAM HPS Unit 3	200.00	No schedule given
	KOLDAM HPS Unit 4	200.00	No schedule given
	SINGRAULI SHEP Unit 1	8.00	No schedule given
	MEJA STPP Unit 1	660	No schedule given
	MEJA STPP Unit 2	660	No schedule given
	TANDA STAGE-2 TPS Unit 5	660	No schedule given
	TANDA STAGE-2 TPS Unit 6	660	No schedule given
	FARIDABAD CCGT Unit GT-1	137.76	No schedule given
	FARIDABAD CCGT Unit GT-2	137.76	No schedule given
	FARIDABAD CCGT Unit ST	156.08	No schedule given
	TANDA TPS Unit 1	110.00	No schedule given
	TANDA TPS Unit 2	110	No schedule given
	TANDA TPS Unit 3	110.00	No schedule given
	TANDA TPS Unit 4	110	No schedule given
APCPL	IGSTPP Jhajjar Unit 1	500	No schedule given
	IGSTPP Jhajjar Unit 2	500	No schedule given
	IGSTPP Jhajjar Unit 3	500	No schedule given
SJVN	RAMPUR HPS Unit 1	68.67	No schedule given
	RAMPUR HPS Unit 2	68.67	No schedule given
	RAMPUR HPS Unit 3	68.67	No schedule given
	RAMPUR HPS Unit 4	68.67	No schedule given
	RAMPUR HPS Unit 5	68.67	No schedule given
	RAMPUR HPS Unit 6	68.67	No schedule given
	NAITWAR MORI Unit 1	60	No schedule given
THDC	KOTESHWAR HPS Unit 1	100.00	No schedule given
	KOTESHWAR HPS Unit 2	100.00	No schedule given
	KOTESHWAR HPS Unit 3	100.00	No schedule given
	KOTESHWAR HPS Unit 4	100.00	No schedule given
	KHURJA TPP Unit 1	660	No schedule given
NLC+UPRVUNL	KHURJA TPP Unit 2	660	No schedule given
	GHATAMPUR TPP Unit 1	660	No schedule given
	GHATAMPUR TPP Unit 2	660	No schedule given

	GHATAMPUR TPP Unit 3	660	No schedule given
BBMB	BHAKRA LEFT & RIGHT HPS Unit L-1	126.00	No schedule given
	BHAKRA LEFT & RIGHT HPS Unit L-2	126.00	No schedule given
	BHAKRA LEFT & RIGHT HPS Unit L-3	126.00	No schedule given
	BHAKRA LEFT & RIGHT HPS Unit L-4	126.00	No schedule given
	BHAKRA LEFT & RIGHT HPS Unit L-5	126.00	No schedule given
	BHAKRA LEFT & RIGHT HPS Unit R-1	157.00	No schedule given
	BHAKRA LEFT & RIGHT HPS Unit R-2	157.00	No schedule given
	BHAKRA LEFT & RIGHT HPS Unit R-3	157.00	No schedule given
	BHAKRA LEFT & RIGHT HPS Unit R-4	157.00	No schedule given
	BHAKRA LEFT & RIGHT HPS Unit R-5	157.00	No schedule given
	GANGUWAL HPS Unit 1	27.99	No schedule given
	GANGUWAL HPS Unit 2	24.20	No schedule given
	GANGUWAL HPS Unit 3	24.20	No schedule given
	KOTLA HPS Unit 1	28.94	No schedule given
	KOTLA HPS Unit 2	24.20	No schedule given
	KOTLA HPS Unit 3	24.20	No schedule given
	DEHAR HPS Unit 1	165.00	No schedule given
	DEHAR HPS Unit 2	165.00	No schedule given
	DEHAR HPS Unit 3	165.00	No schedule given
	DEHAR HPS Unit 4	165.00	No schedule given
	DEHAR HPS Unit 5	165.00	No schedule given
	DEHAR HPS Unit 6	165.00	No schedule given
	PONG HPS Unit 1	66.00	No schedule given
	PONG HPS Unit 2	66.00	No schedule given
	PONG HPS Unit 3	66.00	No schedule given
	PONG HPS Unit 4	66.00	No schedule given
	PONG HPS Unit 5	66.00	No schedule given
	PONG HPS Unit 6	66.00	No schedule given
NLC	BARSINGSAR LIGNITE Unit 1	125	No schedule given
	BARSINGSAR LIGNITE Unit 2	125	No schedule given
NPCIL	RAPS-A Unit 2	200	No schedule given
PSPCL	ANANDPUR SAHIB-I HPS Unit 1	33.5	No schedule given
	ANANDPUR SAHIB-II HPS Unit 2	33.5	No schedule given
	GHTPS (LEHRA MOHBBAT) Unit 1	210	No schedule given
	GHTPS (LEHRA MOHBBAT) Unit 2	210	No schedule given
	GHTPS (LEHRA MOHBBAT) Unit 3	250	No schedule given
	GHTPS (LEHRA MOHBBAT) Unit 4	250	No schedule given
	RANJIT SAGAR DAM HPS Unit 1	150	No schedule given
	RANJIT SAGAR DAM HPS Unit 2	150	No schedule given
	RANJIT SAGAR DAM HPS Unit 3	150	No schedule given
	RANJIT SAGAR DAM HPS Unit 4	150	No schedule given
	GGSTP ROPAR Unit 3	210	No schedule given
	GGSTP ROPAR Unit 4	210	No schedule given
	GGSTP ROPAR Unit 5	210	No schedule given
	GGSTP ROPAR Unit 6	210	No schedule given
	GOINDWAL SAHIB (GVK) Unit 1	270	No schedule given
	GOINDWAL SAHIB (GVK) Unit 2	270	No schedule given
UPRVUNL	ANPARA TPS Unit 1	210	No schedule given
	ANPARA TPS Unit 2	210	No schedule given
	ANPARA TPS Unit 3	210	No schedule given
	ANPARA TPS Unit 4	500	No schedule given
	ANPARA TPS Unit 5	500	No schedule given
	ANPARA TPS Unit 6	500	No schedule given
	ANPARA TPS Unit 7	500	No schedule given
	HARDUAGANJ TPS Unit 7	110	No schedule given
	HARDUAGANJ TPS Unit 8	250	No schedule given
	HARDUAGANJ TPS Unit 9	250	No schedule given
	OBRA TPS Unit 9	200	No schedule given
	OBRA TPS Unit 10	200	No schedule given
	OBRA TPS Unit 11	200	No schedule given
	OBRA TPS Unit 12	200	No schedule given
	OBRA TPS Unit 13	200	No schedule given
	OBRA-C STPP Unit 1	660	No schedule given
	OBRA-C STPP Unit 2	660	No schedule given
	OBRA HPS Unit 1	33	No schedule given
	OBRA HPS Unit 2	33	No schedule given
	OBRA HPS Unit 3	33	No schedule given
	PARICHHA TPS Unit 3	210	No schedule given
	PARICHHA TPS Unit 4	210	No schedule given
	PARICHHA TPS Unit 5	250	No schedule given
	PARICHHA TPS Unit 6	250	No schedule given
	HARDUAGANJ EXT-II TPS Unit 10	660	No schedule given
	JAWAHARPUR STPP Unit 1	660	No schedule given
	JAWAHARPUR STPP Unit 2	660	No schedule given
	PANKI TPS EXTENSION Unit 1	660	No schedule given

JKSPDC	BAGLIHAR HPS Unit 1	150	No schedule given
	BAGLIHAR HPS Unit 2	150	No schedule given
	BAGLIHAR HPS Unit 3	150	No schedule given
	BAGLIHAR II HPS Unit 1	150	No schedule given
	BAGLIHAR II HPS Unit 2	150	No schedule given
	BAGLIHAR II HPS Unit 3	150	No schedule given
	LOWER JHELMUM HPS Unit 1	35	No schedule given
	LOWER JHELMUM HPS Unit 2	35	No schedule given
	LOWER JHELMUM HPS Unit 3	35	No schedule given
	UPPER SINDH-II HPS Unit 1	35	No schedule given
	UPPER SINDH-II HPS Unit 2	35	No schedule given
	UPPER SINDH-II HPS Unit 3	35	No schedule given
RRVUNL	CTPP CHHABRA Unit 1	250	No schedule given
	CTPP CHHABRA Unit 2	250	No schedule given
	CTPP CHHABRA Unit 3	250	No schedule given
	CTPP CHHABRA Unit 4	250	No schedule given
	CSCTPP CHHABRA Unit 5	660	No schedule given
	CSCTPP CHHABRA Unit 6	660	No schedule given
	DHOLPUR CCPP (DCCPP) Unit GT-1	110	No schedule given
	DHOLPUR CCPP (DCCPP) Unit GT-2	110	No schedule given
	DHOLPUR CCPP (DCCPP) Unit ST	110	No schedule given
	KOTA TPS (KSTPS) Unit 1	110	No schedule given
	KOTA TPS (KSTPS) Unit 2	110	No schedule given
	KOTA TPS (KSTPS) Unit 3	210	No schedule given
	KOTA TPS (KSTPS) Unit 4	210	No schedule given
	KOTA TPS (KSTPS) Unit 5	210	No schedule given
	KOTA TPS (KSTPS) Unit 6	195	No schedule given
	KOTA TPS (KSTPS) Unit 7	195	No schedule given
	MAHI-I HPS BANSWARA Unit 1	25	No schedule given
	MAHI-I HPS BANSWARA Unit 2	25	No schedule given
	MAHI-II HPS BANSWARA Unit 1	45	No schedule given
	MAHI-II HPS BANSWARA Unit 2	45	No schedule given
	JAWAHAR SAGAR HPS Unit 1	33	No schedule given
	JAWAHAR SAGAR HPS Unit 2	33	No schedule given
	JAWAHAR SAGAR HPS Unit 3	33	No schedule given
	KALISINDH TPS (KATPP) Unit 1	600	No schedule given
	KALISINDH TPS (KATPP) Unit 2	600	No schedule given
	R P SAGAR HPS Unit 1	43	No schedule given
	R P SAGAR HPS Unit 2	43	No schedule given
	R P SAGAR HPS Unit 3	43	No schedule given
	R P SAGAR HPS Unit 4	43	No schedule given
	RAMGARH CCPP Unit GT-1	35.5	No schedule given
	RAMGARH CCPP Unit GT-2	37.5	No schedule given
	RAMGARH CCPP Unit ST-1	37.5	No schedule given
	RAMGARH CCPP Unit GT-3	110	No schedule given
	RAMGARH CCPP Unit ST-2	50	No schedule given
	SSTPS SURATGARH Unit 1	250	No schedule given
	SSTPS SURATGARH Unit 2	250	No schedule given
	SSTPS SURATGARH Unit 3	250	No schedule given
	SSTPS SURATGARH Unit 4	250	No schedule given
	SSTPS SURATGARH Unit 5	250	No schedule given
	SSTPS SURATGARH Unit 6	250	No schedule given
	SSCTPP SURATGARH Unit 7	660	No schedule given
	SSCTPP SURATGARH Unit 8	660	No schedule given
UJVNL	CHIBRO (YAMUNA) HPS Unit 1	60	No schedule given
	CHIBRO (YAMUNA) HPS Unit 2	60	No schedule given
	CHIBRO (YAMUNA) HPS Unit 3	60	No schedule given
	CHIBRO (YAMUNA) HPS Unit 4	60	No schedule given
	CHILLA POWER HOUSE Unit 1	36	No schedule given
	CHILLA POWER HOUSE Unit 2	36	No schedule given
	CHILLA POWER HOUSE Unit 3	36	No schedule given
	CHILLA POWER HOUSE Unit 4	36	No schedule given
	KHODRI HPS Unit 1	30	No schedule given
	KHODRI HPS Unit 2	30	No schedule given
	KHODRI HPS Unit 3	30	No schedule given
	KHODRI HPS Unit 4	30	No schedule given
	MANERI BHALI-I HPS TILOTH Unit 1	30	No schedule given
	MANERI BHALI-I HPS TILOTH Unit 2	30	No schedule given
	MANERI BHALI-I HPS TILOTH Unit 3	30	No schedule given
	MANERI BHALI-II HPS DHARASU Unit 1	76	No schedule given
	MANERI BHALI-II HPS DHARASU Unit 2	76	No schedule given
	MANERI BHALI-II HPS DHARASU Unit 3	76	No schedule given
	MANERI BHALI-II HPS DHARASU Unit 4	76	No schedule given
	RAMGANGA POWER HOUSE Unit 1	66	No schedule given
	RAMGANGA POWER HOUSE Unit 2	66	No schedule given
	RAMGANGA POWER HOUSE Unit 3	66	No schedule given
	VYASI HEP Unit 1	60	No schedule given
	VYASI HEP Unit 2	60	No schedule given

HPSEBL	GIRI BATA HPS Unit 1	30	No schedule given
	GIRI BATA HPS Unit 2	30	No schedule given
	LARJI HPS Unit 1	42	No schedule given
	LARJI HPS Unit 2	42	No schedule given
	LARJI HPS Unit 3	42	No schedule given
	SANJAY HPS (BHABA) Unit 1	40	No schedule given
	SANJAY HPS (BHABA) Unit 2	40	No schedule given
	SANJAY HPS (BHABA) Unit 3	40	No schedule given
HPPCL	KASHANG INTEGRATED HEP Unit 1	65	No schedule given
	KASHANG INTEGRATED HEP Unit 2	65	No schedule given
	KASHANG INTEGRATED HEP Unit 3	65	No schedule given
	SAINJ HPS Unit 1	50	No schedule given
	SAINJ HPS Unit 2	50	No schedule given
	SAWRA KUDDU HEP Unit 1	37	No schedule given
	SAWRA KUDDU HEP Unit 2	37	No schedule given
	SAWRA KUDDU HEP Unit 3	37	No schedule given
HPGCL	PANIPAT TPS Unit 6	210	No schedule given
	PANIPAT TPS Unit 7	250	No schedule given
	PANIPAT TPS Unit 8	250	No schedule given
	RAJIV GANDHI TPS HISAR Unit 1	600	No schedule given
	RAJIV GANDHI TPS HISAR Unit 2	600	No schedule given
	DCR TPS YAMUNA NAGAR Unit 1	300	No schedule given
	DCR TPS YAMUNA NAGAR Unit 2	300	No schedule given
PPCL	PPS-III BAWANA Unit GT-1	216	No schedule given
	PPS-III BAWANA Unit GT-2	216	No schedule given
	PPS-III BAWANA Unit GT-3	216	No schedule given
	PPS-III BAWANA Unit GT-4	216	No schedule given
	PPS-III BAWANA Unit ST-1	253.6	No schedule given
	PPS-III BAWANA Unit ST-2	253.6	No schedule given
	PPS-I PPCL Unit GT-1	104	No schedule given
	PPS-I PPCL Unit GT-2	104	No schedule given
	PPS-I PPCL Unit ST	122	No schedule given
UPJVNL	RIHAND HPS Unit 1	50	No schedule given
	RIHAND HPS Unit 2	50	No schedule given
	RIHAND HPS Unit 3	50	No schedule given
	RIHAND HPS Unit 4	50	No schedule given
	RIHAND HPS Unit 5	50	No schedule given
	RIHAND HPS Unit 6	50	No schedule given
ADHPL	ALLAIN DUHANGAN HPS Unit 1	96	No schedule given
	ALLAIN DUHANGAN HPS Unit 2	96	No schedule given
MEIL	ANPARA C TPS (LANCO) Unit 1	600	No schedule given
	ANPARA C TPS (LANCO) Unit 2	600	No schedule given
JSW HYDRO ENERGY	BASPA-II HPS Unit 1	100	No schedule given
	BASPA-II HPS Unit 2	100	No schedule given
	BASPA-II HPS Unit 3	100	No schedule given
	KARCHAM WANGTOO HPS Unit 1	250	No schedule given
	KARCHAM WANGTOO HPS Unit 2	250	No schedule given
	KARCHAM WANGTOO HPS Unit 3	250	No schedule given
	KARCHAM WANGTOO HPS Unit 4	250	No schedule given
JSW ENERGY LTD.	JSW ENERGY (BARMER) TPP Unit 1	135	No schedule given
	JSW ENERGY (BARMER) TPP Unit 2	135	No schedule given
	JSW ENERGY (BARMER) TPP Unit 3	135	No schedule given
	JSW ENERGY (BARMER) TPP Unit 4	135	No schedule given
	JSW ENERGY (BARMER) TPP Unit 5	135	No schedule given
	JSW ENERGY (BARMER) TPP Unit 6	135	No schedule given
	JSW ENERGY (BARMER) TPP Unit 7	135	No schedule given
	JSW ENERGY (BARMER) TPP Unit 8	135	No schedule given
Greenko	BUDHIL HPS Unit 1	35	No schedule given
	BUDHIL HPS Unit 2	35	No schedule given
GAMA INFRAPROP PVT.	GAMA CCPP Unit GT-1	75	No schedule given
	GAMA CCPP Unit GT-2	75	No schedule given
	GAMA CCPP Unit ST	75	No schedule given
SRAVANTHI ENERGY	KASHIPUR CCPP (SRAVANTHI ENERGY) Unit GT-1	75	No schedule given
	KASHIPUR CCPP (SRAVANTHI ENERGY) Unit GT-2	75	No schedule given
	KASHIPUR CCPP (SRAVANTHI ENERGY) Unit ST	75	No schedule given
ADANI POWER LTD.	KAWAI TPS (ADANI POWER) Unit 1	660	No schedule given
	KAWAI TPS (ADANI POWER) Unit 2	660	No schedule given
LPGCL	LALITPUR TPS Unit 1	660	No schedule given
	LALITPUR TPS Unit 2	660	No schedule given
	LALITPUR TPS Unit 3	660	No schedule given
CLP India	MAHATMA GANDHI TPS (CLP JHAJJAR) Unit 1	660	No schedule given
	MAHATMA GANDHI TPS (CLP JHAJJAR) Unit 2	660	No schedule given
MALANA PCL	MALANA-I HPS Unit 1	43	No schedule given
	MALANA-I HPS Unit 2	43	No schedule given
Everest Power	MALANA-II HPS Unit 1	50	No schedule given
	MALANA-II HPS Unit 2	50	No schedule given
PRAYAGRAJ PGCL	BARA TPP (PRAYAGRAJ) Unit 1	660	No schedule given
	BARA TPP (PRAYAGRAJ) Unit 2	660	No schedule given
	BARA TPP (PRAYAGRAJ) Unit 3	660	No schedule given
NABHA POWER LTD.	NABHA POWER LTD RAJPURA Unit 1	700	No schedule given
	NABHA POWER LTD RAJPURA Unit 2	700	No schedule given

ROSA POWER	ROSA TPP Ph-I Unit 1	300	No schedule given
	ROSA TPP Ph-I Unit 2	300	No schedule given
	ROSA TPP Ph-I Unit 3	300	No schedule given
	ROSA TPP Ph-I Unit 4	300	No schedule given
AHPCL	ALAKNANDA HPS Unit 1	82.5	No schedule given
	ALAKNANDA HPS Unit 2	82.5	No schedule given
	ALAKNANDA HPS Unit 3	82.5	No schedule given
	ALAKNANDA HPS Unit 4	82.5	No schedule given
TSPL	TALWANDI SABO TPP Unit 1	660	No schedule given
	TALWANDI SABO TPP Unit 2	660	No schedule given
	TALWANDI SABO TPP Unit 3	660	No schedule given
JP Power	VISHNUPRAYAG HPS (JAYPEE) Unit 1	100	No schedule given
	VISHNUPRAYAG HPS (JAYPEE) Unit 2	100	No schedule given
	VISHNUPRAYAG HPS (JAYPEE) Unit 3	100	No schedule given
	VISHNUPRAYAG HPS (JAYPEE) Unit 4	100	No schedule given
HP Sorang	HP SORANG HPS Unit 1	100	No schedule given
GMR Bajoli Holi	BAJOLI HOLI Unit 1	180	No schedule given
Renew	SINGOLI BHATWARI Unit 1	99	No schedule given

List of generators who have not furnished the testing schedule for FY 2024-25 and FY 2025-26

RE STATIONS

RE Station Name	Installed Capacity	Tests for which schedule is to be furnished
ABC Renewable Pvt. Ltd	300	No schedule given
ACME Heeragarh powertech Pvt. Ltd	300	No schedule given
ACME Chittorgarh Solar Energy Pvt Ltd	250	No schedule given
Adani Hybrid Energy	390	No schedule given
Adani Hybrid Energy Jaisalmer Two Ltd.	301.4	No schedule given
Adani Hybrid Energy Jaisalmer Three Ltd.	300.54	No schedule given
Adani Hybrid Energy Jaisalmer Four Ltd.	700	No schedule given
Adani Renewable Energy (RJ) limited Rawara	200	No schedule given
Adani Solar Energy Jaisalmer One Pvt. Ltd._450MW (Solar)	300	No schedule given
Adani Solar Energy Four Private Limited	50	No schedule given
Adani Solar Energy Jaisalmer Two Private Limited	300	No schedule given
Adept Renewable Technologies Pvt. Ltd.	110	No schedule given
Adani Solar Energy RJ Two Pvt. Ltd. (Devikot)	180	No schedule given
Adani Solar Energy RJ Two Pvt. Ltd. (Phalodi)	150	No schedule given
Adani Green Energy 19 Limited	50	No schedule given
Altra Xergi Pvt. Ltd.	380	No schedule given
AMP Energy Green Five Pvt. Ltd.	100	No schedule given
AMP Energy Green Six Pvt. Ltd.	100	No schedule given
Amplus Ages Private Limited	100	No schedule given
Avaada RJHN_240MW	240	No schedule given
Avaada sunce energy Pvt limited	350	No schedule given
Avaada Sunrays Pvt. Ltd.	320	No schedule given
Avaada Sustainable RJ Pvt. Ltd.	300	No schedule given
Ayana Renewable Power Three Private Limited	388.64	No schedule given
Ayaana Renewable Power One Pvt. Ltd.	300	No schedule given
Azure Power Forty One Pvt limited	300	No schedule given
Azure Maple Pvt. Ltd.	300	No schedule given
Azure Power Forty Three Pvt. Ltd._RSS	600	No schedule given
AZURE POWER INDIA Pvt. Ltd., Bhadla	200	No schedule given
Azure Power Thirty Four Pvt. Ltd.	130	No schedule given
Clean Solar Power (Jodhpur) Pvt. Ltd.	250	No schedule given
Clean Solar Power (Bhadla) Pvt. Ltd	300	No schedule given
Grian Energy private limited	100	No schedule given
Mega solis Renewable Private Limited	250	No schedule given
Mega Surya Urja Pvt. Ltd. (MSUPL)	250	No schedule given
AURAIYA Solar	40	No schedule given
DADRI SOLAR	5	No schedule given

SINGRAULI SOLAR	15	No schedule given
Anta Solar	90	No schedule given
Unchahar Solar	10	No schedule given
NTPC Devikot Solar plant_240MW	240	No schedule given
NTPC Kolayat_400kV	550	No schedule given
Nedan Solar NTPC	296	No schedule given
NTPC Nokhra_300MW	300	No schedule given
One Volt energy Pvt. Ltd.	100	No schedule given
ReNew Solar Energy (Jharkhand Three) Private Limited	300	No schedule given
RENEW SOLAR POWER Pvt. Ltd. Bhadla	50	No schedule given
ReNew Solar Urja Private Limited	300	No schedule given
Renew Sun Bright Pvt. Ltd. (RSBPL)	300	No schedule given
Renew Sun Waves Private Limited (RSEJ4L)	300	No schedule given
Renew Surya Partap Pvt. Ltd.	200	No schedule given
Renew Surya Ravi Pvt. Ltd.	300	No schedule given
Renew Surya Roshni Pvt. Ltd.	400	No schedule given
Renew Surya Vihan Pvt. Ltd.	100	No schedule given
Renew Surya Ayaan Pvt. Ltd.	300	No schedule given
RENEW SOLAR POWER Pvt. Ltd. Bikaner	50	No schedule given
Rising Sun Energy-K Pvt. Ltd.	190	No schedule given
Serentica Renewables India 4 Private Limited	168	No schedule given
Tata Power Green Energy Ltd. (TPGEL)	225	No schedule given
Tata Power Renewable Energy Ltd. (TPREL)	300	No schedule given
Thar Surya Pvt. Ltd.	300	No schedule given
TP Surya Pvt. Ltd.	110	No schedule given
Banderwala Solar Plant TP Surya Ltd.	100	No schedule given
TRANSITION ENERGY SERVICES PRIVATE LIMITED	55.6	No schedule given
Transition Green Energy Private Limited	100	No schedule given
Transition Sustainable Energy Services Private Limited	84.4	No schedule given

Renewable Energy Plants

Annexure-II

[illegible]

Revised Simulation Models

Whether Revised Models Submitted?	Remarks
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Fw: Minutes of 1st meeting of the Committee constituted to look into the issue of STATCOM operation in view of the oscillations observed in Northern Region

Ibtesam Asif

Tue 25/11/2025 17:31

To:Rahul Negi <rahulnegi@grid-india.in>;

From: Priyam Jain (प्रियम जैन)

Sent: 13 October 2025 16:27

To: Omkishor sahu; as-nrpc@nic.in; seo-nrpc@nic.in; ses-nrpc@nic.in

Cc: ms-nrpc@nic.in; S Usha (एस उषा); Vivek Pandey (विवेक पांडे); Somara Lakra (सोमारा लाकरा); Sunil Kumar Aharwal (सुनील कुमार अहरवाल); Bikas Kumar Jha (बिकास कुमार झा); Ibtesam Asif; Sugata Bhattacharya (सुगाता भट्टाचार्या); Manoj Kumar Agarwal (मनोज कुमार अग्रवाल)

Subject: Re: Minutes of 1st meeting of the Committee constituted to look into the issue of STATCOM operation in view of the oscillations observed in Northern Region

Sir/Ma'am,

The last meeting of the committee was held on 9th July 2025 wherein several action points at M/s Siemens end were identified. However, M/s Siemens is yet to respond to any of these action points.

In this regard, it is requested that a reminder may be sent to M/s Siemens (OEM) and POWERGRID (asset owner) for sharing the possible implementable solutions to the highlighted issues at the earliest.

Thanks and regards

Priyam Jain

NLDC, GRID-INDIA

From: Omkishor sahu <omkishor.sahu@gov.in>

Sent: 02 September 2025 11:02

To: se ldrvpnl; se sold; rpsrana; yashpal; yvmsprakash; sandeepk; Priyam Jain (प्रियम जैन); Sugata Bhattacharya (सुगाता भट्टाचार्या); Akash Tomar (आकाश तोमर); arindamchowdhuryext

Cc: SAUMITRA MAZUMDAR; Rajat Dixit

Subject: Minutes of 1st meeting of the Committee constituted to look into the issue of STATCOM operation in view of the oscillations observed in Northern Region

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महोदय/ महोदया

Please find attached minutes of 1st meeting of the Committee constituted to look into the issue of STATCOM operation in view of the oscillations observed in Northern Region.

भवदीय,
ओमकिशोर, कार्यपालक अभियंता (प्रचालन),
उत्तर क्षेत्रीय विद्युत समिति सचिवालय
18-ए, शहीद जीत सिंह मार्ग,
नई दिल्ली - 16

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Re: Minutes of 1st meeting of the Committee constituted to look into the issue of STATCOM operation in view of the oscillations observed in Northern Region

NRLDC SO 2

Thu 13/11/2025 18:21

To:yashpal@powergrid.in <yashpal@powergrid.in>; rpsrana@powergrid.in <rpsrana@powergrid.in>; sandeepk@powergrid.in <sandeepk@powergrid.in>;

Cc:Somara Lakra (सोमारा लाकरा) <somara.lakra@grid-india.in>; Sunil Kumar Aharwal (सुनील कुमार अहरवाल) <skaharwal@grid-india.in>; Bikas Kumar Jha (बिकास कुमार झा) <bikaskjha@grid-india.in>; Gaurav Malviya (गौरव मालवीय) <gauravmalviya@grid-india.in>; Akash Tomar (आकाश तोमर) <akashtomar@grid-india.in>; Ibtesam Asif <asif@grid-india.in>; Rahul Negi <rahulnegi@grid-india.in>; Gaurav Singh (गौरव सिंह) <gauravsingh@grid-india.in>; Priyam Jain (प्रियम जैन) <priyam.jain@grid-india.in>; Vivek Pandey (विवेक पांडे) <vivek.pandey@grid-india.in>; omkishor.sahu@gov.in <omkishor.sahu@gov.in>; Sugata Bhattacharya (सुगाता भट्टाचार्य) <sugata@grid-india.in>; Mahavir Prasad Singh (महावीर प्रसाद सिंह) <mahavir@grid-india.in>; Vishal Roy (विशाल रॉय) <vishal.roy@powergrid.in>; ED NRLDC <ednrlcdc@grid-india.in>;

📎 1 attachments (4 MB)

MoM of 1st meeting of the Committee to look into the issues of STATCOM (1).pdf;

Sir/Ma'am,

In reference to the trailing mail and and enclosed minutes of "*1st meeting of the Committee constituted to look into the issue of STATCOM operation in view of the oscillations observed in Northern Region*" held on 09.07.2025, following major action points were deliberated in the meeting;

1. SIEMENS (STATCOM OEM) shall carryout a EMT study on PSCAD model of the STATCOM. The study would be an open loop study by playing back the STATCOM terminal voltage (taken from DR for the oscillation period) for the following cases (i) Hunting detection >4Hz in-service and gain reduction of STATCOM (ii) Hunting detection disabled and no gain reduction.
2. The response of the STATCOM (mainly reactive power response) shall be checked for the above mentioned cases in the studies and the difference in STATCOM MVAR response in both the cases shall be analyzed.
3. SIEMENS (STATCOM OEM) shall provide the rationale for keeping the threshold for gain reduction at 4 Hz. Any studies carried out to arrive at this 4 Hz reference shall be shared by Siemens with the committee. If the threshold was decided without any prior studies, the possibility of modifying the threshold to avoid gain reduction shall be explored by M/s Siemens.
4. Siemens shall also clarify whether the stability controller (gain reduction on hunting detection feature) will remain in service in QCM auto mode also.
5. SIEMENS (STATCOM OEM) shall submit a technical document explaining the exact difference in STATCOM response during fault event, If STATCOM operates in (i) Manual Fixed-Q mode (ii) Auto Mode (VCM or QCM) in pre-fault scenario. Technical document should highlight the difference between Reactive Power (MVar) support from STATCOM (i) Manual Fixed-Q mode (ii) Auto Mode (VCM or QCM) in terms of Reactive power support quantum (MVar) and Response time for achieving that support (milli second-ms).
6. M/s Siemens shall provide potential solutions to the issue of amplification of oscillations with gain reduction of STATCOMs.

Further, following clarifications were sought from SIEMENS (STATCOM OEM) by committee:

1. It is understood that there is a voltage limiter feature in STATCOM which means that if voltage at the STATCOM terminal goes >1.05 PU or <0.95 PU, irrespective of its mode of operation whether in Manual Fixed-Q mode or Auto Mode (VCM or QCM), STATCOM will treat it as Transient fault and SVC unit of the STATCOM will respond to achieve the V_{ref} . Hence, Reactive power (MVar) support from STATCOM in case of any fault event ($V < 0.95$ PU) will be same from its SVC part. Unlike SVC, MSC and MSR part of STATCOM in Manual Fixed-Q mode need to be manually switched, MSC and MSR part of STATCOM will be automatically switched in case of Auto mode. SIEMENS may clarify the same.
2. As discussed in 3rd RE sub-committee meeting and as therefore recorded in its MoM point no. 11.8, *"Representative from SIEMENS stated that, in this way SVC output will be locked to a pre-set value once STATCOM will detect hunting. Integrator won't work on any voltage error and it will freeze the controller. Thus, STATCOM Q (MVar) remain unchanged w.r.t oscillating voltage and STATCOM would have zero contribution on the oscillating voltage. Controller can be unlocked after 7 sec, 70 sec etc. as may be specified by the PGCIL (customer)".* SIEMENS (STATCOM OEM) shall share their input on "Locking the SVC output at a fixed values while oscillations are present in the system" as per the 11.7 & 11.8 of MoM of 3rd RE sub-committee meeting.

Further, it is being highlighted that, Voltage oscillation again observed on 11.11.2025 at 10:29:50 hrs in Northern Region RE pocket of Rajasthan and Oscillation died immediately after taking STATCOM in manual Fixed-Q mode at 10:36 hrs, plots for both is shown below;

Voltage oscillation started at 10:29:50 hrs on 11.11.2025 in Northern Region RE pocket of Rajasthan



Voltage oscillation died at 10:36 hrs on 11.11.2025 in Northern Region RE pocket of Rajasthan after changing STATCOM mode from Auto Voltage control (VCM) to Manual Fixed-Q mode



Voltage oscillation again observed on 13.11.2025 and died out after taking STATCOM in Manual Fixed-Q mode.

It may be noted that 400kV Bhadla(RS)-Bikaner(RS) Ckt-1 and Ckt-2 are under planned outage since 10.11.2025 @18:03hrs and 18:04hrs respectively. Outage of 400kV Bhadla(RS)-Bikaner(RS) D/C line has certainly resulted slight reduction in SCR of RE pooling S/s and oscillation observed from very next day Solar peak hrs.

Therefore, root cause analysis need to be done to assess the correlation of Voltage oscillation when STATCOM is in Auto mode under low/slight low SCR scenario. Further, reply on the aforementioned action points are still awaited, same may kindly be expedited.

Matter may be taken-up urgently with SIEMENS (STATCOM OEM).

सादर धन्यवाद/ Thanks & Regards

प्रणाली संचालन-II/ System Operation-II

उ०क्षे०भा०प्रे०के०/ NRLDC

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड/ Grid Controller of India Limited

Formerly known as

पोसोको / POSOCO



ग्रिड-इंडिया
GRID-INDIA



एक धरा, एक कुटुंब, एक भविष्य
ONE EARTH - ONE FAMILY - ONE FUTURE



From: Omkishor sahu <omkishor.sahu@gov.in>

Sent: 02 September 2025 11:02

To: se ldrvpnl; se sold; rpsrana; yashpal; yvmsprakash; sandeepk; Priyam Jain (प्रियम जैन); Sugata Bhattacharya (सुगाता भट्टाचार्या); Akash Tomar (आकाश तोमर); arindamchowdhuryext

Cc: SAUMITRA MAZUMDAR; Rajat Dixit

Subject: Minutes of 1st meeting of the Committee constituted to look into the issue of STATCOM operation in view of the oscillations observed in Northern Region

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भवदीय,
ओमकिशोर, कार्यपालक अभियंता (प्रचालन),
उत्तर क्षेत्रीय विद्युत समिति सचिवालय
18-ए, शहीद जीत सिंह मार्ग,
नई दिल्ली - 16

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List of RE plants commissioned with status of power quality filed testing												
							FY 24-25			FY 25-26		
Sl. No.	Region	Name of the plant	Capacity (MW)	Pooling station	Type(wind/Solar)	Last capacity commissioned"Date (mm/dd/yyyy)	Power quality field test report submitted	Power quality field test report submission date (mm/dd/yyyy)	Remarks/violation observed	Power quality field test report submitted	Power quality field test report submission date (mm/dd/yyyy)	Remarks/violation observed
Northern Region												
1	NR	RENEW SOLAR POWER Pvt. Ltd. Bhadla	50	Bhadla(PG)	Solar	05-05-2019	NO					
2	NR	AZURE POWER INDIA Pvt. Ltd., Bhadla	200	Bhadla(PG)	Solar	05-05-2019	NO					
3	NR	SB ENERGY FOUR PRIVATE LIMITED, Bhadla	200	Bhadla(PG)	Solar	18-05-2019	NO			Yes	11-07-2025	No Violation
4	NR	Adani Renewable Energy (RJ) limited Rawara	200	Bhadla(PG)	Solar	23-08-2019	Yes		No Violation	Yes	11-07-2025	No Violation
5	NR	Azure Power Thirty-Four Pvt. Ltd.	130	Bhadla(PG)	Solar	09-09-2019	NO					
6	NR	RENEW SOLAR POWER Pvt. Ltd. Bikaner	250	Bikaner	Solar	28-10-2019	Yes	09-07-2025	Flicker Measurement 1. Short term Flicker (Pst) measurement values 95th percentile - All phase values are Exceeding the Limits. 2. Long term Flicker (Plt) measurement values 95th percentile - All Phase values are Exceeding the Limits 3. Short term Flicker (Pst) measurement values 99th percentile - All Phase values are Exceeding the Limits. 4. Long term Flicker (Plt) measurement values 99th percentile - All Phase values are Exceeding the Limits. For Current Circuit PQ Parameter Measurement 1. Total Harmonic Distortion in Current circuit (THD)/ Total Demand Distortion in Current circuit (TDD) for short time (10Minute) values 95th percentile - All Phase values are Within the Limits, Except B Phase 2. Individual Current Harmonic distortion measurement for short time (10 Minute) values 99th percentile - All values are within limits, Except 5th, 25th, 47th & 49th Harmonics. 3. Individual Current Harmonic distortion measurement for short time (10 Minute) values 95th percentile - All values are within limits, Except 5th, 25th, 37th, 47th & 49th Harmonics.			
7	NR	ACME Chittorgarh Solar Energy Pvt Ltd	250	Bhadla(PG)	Solar	03-01-2020	Yes		1. Total Demand Distortion (TDD) For short Time (10 minute) values 95th percentile: Out of Limit Individual 2. Current Distortion for short time (10 minute) value 99th percentile: 5th Harmonic is out of Limit 3. Individual Current Distortion for short time (10 minute) value 95th percentile: 5th, 7th Harmonics are Out of Limit			
8	NR	Clean Solar Power (Bhadla) Pvt. Ltd	300	Bhadla(PG)	Solar	29-02-2020	NO					
9	NR	Adani Solar Energy Four Private Limited	50	Bhadla(PG)	Solar	19-04-2020	NO			Yes	11-07-2025	No Violation
10	NR	Adani Solar Energy Jodhpur Two Limited, Rawara	50	Bhadla(PG)	Solar	19-09-2020	NO			Yes	11-07-2025	No Violation
11	NR	Azure Power Forty-Three Pvt. Ltd. RSS	300	Bikaner	Solar	01-01-2022	NO					
12	NR	SB Energy Six Private Limited, Bhadla	300	Bhadla(PG)	Solar	18-06-2021	NO			Yes	11-07-2025	No Violation

13	NR	Eden Renewable Cite Private Limited	300	Fatehgarh-II(PG)	Solar	14-08-2021	Yes		Individual Voltage Distortion For short time (10 minutes) value 95th percentile: 5th Harmonic is Out of Limit Long Term Flickers (plt) at 220 kV interconnecting point are Out of limit			
14	NR	Mahindra Renewable Private Limited	250	Bhadla(PG)	Solar	20-08-2021	NO			Yes	20-07-2025	No Violation
15	NR	Tata Power Renewable Energy Ltd. (TPREL)	300	Bhadla(PG)	Solar	24-08-2021	Yes	30-10-2025	Non-violations observed in the following 1. Long term Flicker (Plt), 12 successive measurements of 10 minute each over 2 hour values 95th percentile 2. Short term Flicker (Pst), 10 minute measurement values 99th percentile 3. Long term Flicker (Plt), 12 successive measurements of 10 minute each over 2 hour values 99th percentile			
16	NR	Renew Sun Waves Private Limited	300	Fatehgarh-II(PG)	Solar	10-08-2021	NO					
17	NR	Renew Sun Bright (RSEJ4L)	300	Fatehgarh-II(PG)	Solar	18-11-2021	YES	07-09-2025	Voltage Harmonic: All values are within limits, Except 5th Harmonic. Current Harmonic: All values are within limits, Except 5th, 35th & 41st Harmonics. Total Harmonic Distortion in Current circuit (THD)/ Total Demand Distortion in Current circuit (TDD) for short time (10Minute) values 95 th percentile is violating in R-phase. Flicker Measurement: Long term Flicker (Plt) and Short term Flicker (Pst) measurement values 99th percentile are Exceeding the Limits for All phases.			
18	NR	ReNew Solar Energy (Jharkhand Three) Private Limited	300	Fatehgarh-II(PG)	Solar	12-11-2021	YES	07-09-2025	Current Harmonic: Total Harmonic Distortion in Current circuit (THD)/ Total Demand Distortion in Current circuit (TDD) for Very short time (3 second) values 99th percentile for Y-Phase is violating the limit. Individual Current Harmonic distortion is violating the limit for 3rd, 5th, 11th, 23rd order harmonics. Flicker Measurement: Long term Flicker (Plt) and Short term Flicker (Pst) measurement values 99th percentile are Exceeding the Limits for All phases.			
19	NR	ReNew Solar Urja Private Limited	300	Fatehgarh-II(PG)	Solar	20-12-2021	NO					
20	NR	Azure Power Forty-Three Pvt. Ltd. PSS	300	Bikaner	Solar	01-01-2022	NO					
21	NR	Ayaana Renewable Power One Pvt. Ltd.	300	Bikaner	Solar	01-02-2022	YES		Flicker Measurement Long term Flicker (Plt) measurement values 95th percentile - All Phase values are Exceeding the Limits Short term Flicker (Pst) measurement values 99th percentile - All Phase values are Exceeding the Limits Long term Flicker (Plt) measurement values 99th percentile - All Phase values are Exceeding the Limits			
22	NR	Azure Power Forty-One Pvt limited	300	Bhadla(PG)	Solar	03-09-2022	NO					
23	NR	Avaada Sunce energy Pvt limited	350	Bikaner	Solar	04-08-2022	YES		No Violation			
24	NR	Clean Solar Power (Jodhpur) Pvt. Ltd.	250	Bhadla(PG)	Solar	23-04-2022	NO					

25	NR	Avaada Sustainable RJ Pvt. Ltd.	300	Bikaner	Solar	05-12-2022	YES		No Violation			
26	NR	Avaada RJHN 240MW	240	Bikaner	Solar	05-12-2022	YES		No Violation			
27	NR	ACME Heergarh Powertech Pvt. Ltd	300	Bhadla-II(PG)	Solar	25-05-2022	Yes		No Violation			
28	NR	Adani Hybrid Energy Jaisalmer One Ltd.	390	Fatehgarh-II(PG)	Hybrid	27-05-2022	Yes		No Violation			

29	NR	ABC Renewable Pvt. Ltd	300	Bhadla-II(PG)	Solar	06-05-2022	YES		1. Long term Flicker (Pit) measurement values 95th percentile-All phase values are Exceeding Limits 2. Long term Flicker (Pit) measurement values 99th percentile-R & B phase values are Exceeding Limits 3. Individual Current Harmonic distortion measurement for short time (10 Minute) values 99th percentile - All values are within limits. 4. Individual Current Harmonic distortion measurement for short time (10 Minute) values 95th percentile - All values are within limits, Except,5th, & 7th Harmonics 5. DC Current Injection, Percentage of Full Load rated current at POI - All phase values are Exceeding Limits			
30	NR	Mega Surya Urja Pvt. Ltd. (MSUPL)	250	Bhadla-II(PG)	Solar	25-06-2022	NO			Yes	20-07-2025	No Violation
31	NR	Tata Power Green Energy Ltd. (TPGEL)	225	Bikaner	Solar	08-02-2022	YES	14-10-2025	No Violation			
32	NR	Nedan Solar NTPC	296	Fatehgarh-I	Solar	08-05-2022	Yes		No Violation			
33	NR	Adani Hybrid Energy Jaisalmer Two Ltd.	300	Fatehgarh-II(PG)	Hybrid	29-09-2022	Yes		No Violation			
34	NR	Adani Hybrid Energy Jaisalmer Three Ltd.	300	Fatehgarh-II(PG)	Hybrid	29-09-2022	Yes		No Violation			
35	NR	Adani Hybrid Energy Jaisalmer Four Ltd.	700	Fatehgarh-I	Hybrid	10-07-2022	NO					
36	NR	Adani Solar Energy Jaisalmer One Pvt. Ltd.	450	Fatehgarh-II(PG)	Hybrid	23-10-2022	Yes		No Violation			
37	NR	Thar Surya Pvt. Ltd.	300	Bikaner	Solar	26-11-2022	YES		<p>Flicker Measurement</p> <p>1 Short term percentile Flicker (Pst) measurement values 95th - All Phase values are exceeding the Limits</p> <p>2 Long term percentile Flicker (Pit) measurement values 95th - All Phase values are exceeding the Limits</p> <p>3 Short term percentile Flicker (Pst) measurement values 99th - All Phase values are exceeding the Limits</p> <p>4 Long term percentile Flicker (Pit) measurement values 99th - All Phase values are exceeding the Limits</p> <p>For Current Circuit PQ Parameter Measurement</p> <p>Individual Current Harmonic distortion measurement for very short time (3second) values 99th percentile - All Values are Within Limits Expect 25th Harmonic R&Y phase on 4th day during Night</p> <p>Individual Current Harmonic distortion measurement for short time (10 Minute) values 99th percentile - All Values are Within Limits Expect 25th Harmonic R&Y phase</p> <p>Individual Current Harmonic distortion measurement for short time (10 Minute) values 95th percentile - All Values are Within Limits Expect 2nd Harmonics</p> <p>DC Current Injection - All the values are exceeding the limit</p>			
38	NR	Avaada Sunrays Pvt. Ltd.	320	Bhadla-II(PG)	Solar	14-12-2022	NO					
39	NR	NTPC Devikot Solar plant 240MW	240	Fatehgarh-II(PG)	Solar	15-12-2022	NO					
40	NR	Azure Maple Pvt. Ltd.	300	Bhadla(PG)	Solar	30-03-2023	NO					

41	NR	Renew Surya Ravi Pvt. Ltd.	300	Bikaner	Solar	31-03-2023	Yes	09-07-2025	<p>Flicker Measurement</p> <p>1. Short term Flicker (Pst) measurement values 95th percentile - All phase values are Exceeding the Limits.</p> <p>2. Long term Flicker (Plt) measurement values 95th percentile - All Phase values are Exceeding the Limits</p> <p>3. Short term Flicker (Pst) measurement values 99th percentile - All Phase values are Exceeding the Limits.</p> <p>4. Long term Flicker (Plt) measurement values 99th percentile - All Phase values are Exceeding the Limits.</p> <p>For Current Circuit PQ Parameter Measurement</p> <p>1. Total Harmonic Distortion in Current circuit (THD)/ Total Demand Distortion in Current circuit (TDD) for short time (10Minute) values 95th percentile - All Phase values are Within the Limits, Except B Phase</p> <p>2. Individual Current Harmonic distortion measurement for short time (10 Minute) values 99th percentile - All values are within limits, Except 5th, 25th, 47th & 49th Harmonics.</p> <p>3. Individual Current Harmonic distortion measurement for short time (10 Minute) values 95th percentile - All values are within limits, Except 5th, 25th, 37th, 47th & 49th Harmonics.</p>			
42	NR	Tata Power Green Energy Ltd. (TPGEL)	110	Bikaner	Solar	29-05-2023	Yes	14-10-2025	No Violation			
43	NR	NTPC Nokhra 300MW	300	Bhadla-II(PG)	Solar	30-06-2023	NO					
44	NR	ADANI SOLAR ENERGY JAISALMER TWO PVT. LTD. (SBSR)	300	Bikaner	Solar	10-07-2023	Yes		No Violation	Yes	11-07-2025	No Violation
45	NR	Amplus Ages Private Limited	100	Bhadla-II(PG)	Solar	02-08-2024	Yes		No Violation			
46	NR	ALTRA XERGI POWER PRIVATE LIMITED	380	Fatehgarh-III(PG)	Solar	02-09-2024	Yes		<p>Total Harmonic Distortion in Voltage circuit (THD) for short time (10 minute) values 95th percentile - All values are within limits, Expect Y Phase</p> <p>Individual Voltage Harmonic distortion measurement for very short time (3 second) values 99th percentile (7 days) - All values are within limits Except 5th (Y Phase) Harmonic</p> <p>Individual Voltage Harmonic distortion measurement for short time (10 Minutes) values 95th percentile - All values are within limits, Expect 5th Harmonic.</p> <p>Long term Flicker (Plt) measurement values 95th percentile - All Phase values are exceeding the Limits</p> <p>Short term Flicker (Pst) measurement values 99th percentile - All Phase values are exceeding the Limits</p> <p>Long term Flicker (Plt) measurement values 99th percentile - All Phase values are exceeding the Limits</p>			
47	NR	Rising Sun Energy (K) Private Limited	190	Bhadla-II(PG)	Solar	04-03-2024	NO					
48	NR	AMP Energy Green Five Private Limited	300	Bikaner	Solar	02-08-2025	Yes		No Violation			
49	NR	ADANI GREEN ENERGY TWENTY FIVE LIMITED	500		Solar	23-03-2025				Yes	14-07-2025	No Violation
50	NR	Onevolt Energy Private Limited	100 MW	Bikaner-II(PG)	Solar	02-02-2024	NO			NO		
51	NR	Grian Energy Private Limited	100 MW	Bikaner-II(PG)	Solar	06-02-2024	NO			NO		
52	NR	Renew Surya Pratap Private Limited	200 MW	Fatehgarh-III(PG)	Solar	18-05-2024	NO			NO		
53	NR	ADANI SOLAR ENERGY RJ TWO PRIVATE LIMITED	160 MW	Fatehgarh-II(PG)	Solar	11-04-2025	NO			NO		
54	NR	Renew Surya Vihaan Private Limited	100 MW	Fatehgarh-III(PG)	Solar	22-05-2025	NO			NO		
55	NR	Renew Surya Aayan Private Limited	300 MW	Fatehgarh-III(PG)	Solar	08-06-2024	NO			NO		

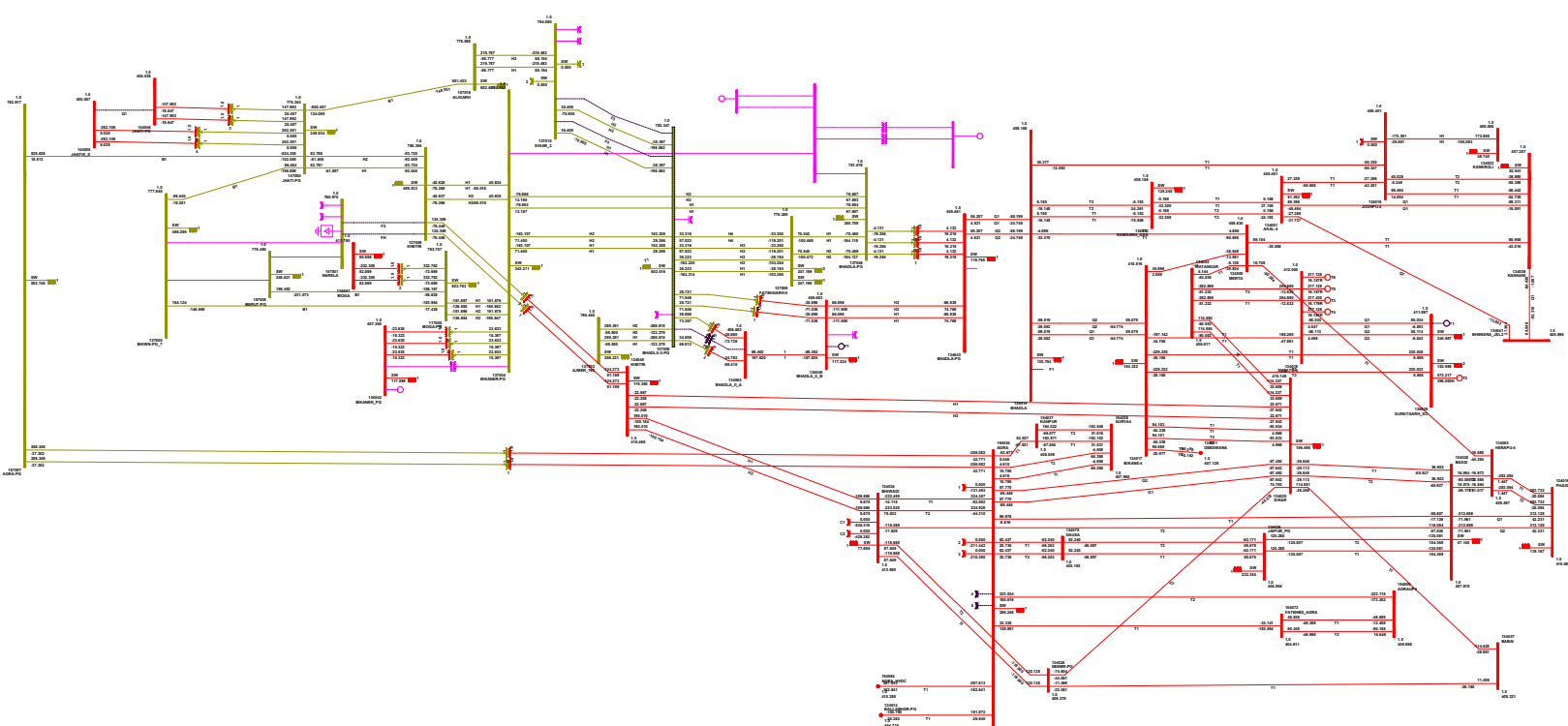
56	NR	TPSL 200MW TPTCL Banderwala	300 MW	Bikaner-II(PG)	Solar	31-10-2025	NO			NO		
57	NR	Adept Renewable Technologies Private Limited	110 MW	Bikaner-II(PG)	Solar	03-03-2024	NO			NO		
58	NR	Transition Energy Services Private Limited	60 MW	Bikaner-II(PG)	Solar	06-03-2024	NO			NO		
59	NR	Renew Surya Roshni Private Limited	400 MW	Fatehgarh-III(PG)	Solar	21-06-2024	NO			NO		
60	NR	NTPC ANTA SOLAR PV STATION	90 MW	Anta	Solar	31-05-2024	NO			NO		
61	NR	Serentica Renewables India 4 Private Limited	68 MW	Bikaner-II(PG)	Solar	08-09-2024	NO			NO		
62	NR	Transition Sustainable Energy Services Private Limited	50 MW	Bikaner-II(PG)	Solar	01-06-2024	NO			NO		
63	NR	Transition Green Energy Private Limited	100 MW	Bikaner-II(PG)	Solar	07-06-2024	NO			NO		
64	NR	ADANI SOLAR ENERGY RJ TWO PRIVATE LIMITED(Phalodi)	150 MW	Bhadla(PG)	Solar	01-07-2024	NO			NO		
65	NR	JUNIPER GREEN COSMIC PRIVATE LIMITED	100 MW	Bikaner-II(PG)	Solar	10-10-2024	NO			NO		
66	NR	TRANSITION SUSTAINABLE ENERGY SERVICES ONE PRIVATE LIMITED	55.6 MW	Bikaner-II(PG)	Solar	01-11-2024	NO			NO		

Night mode operation study result

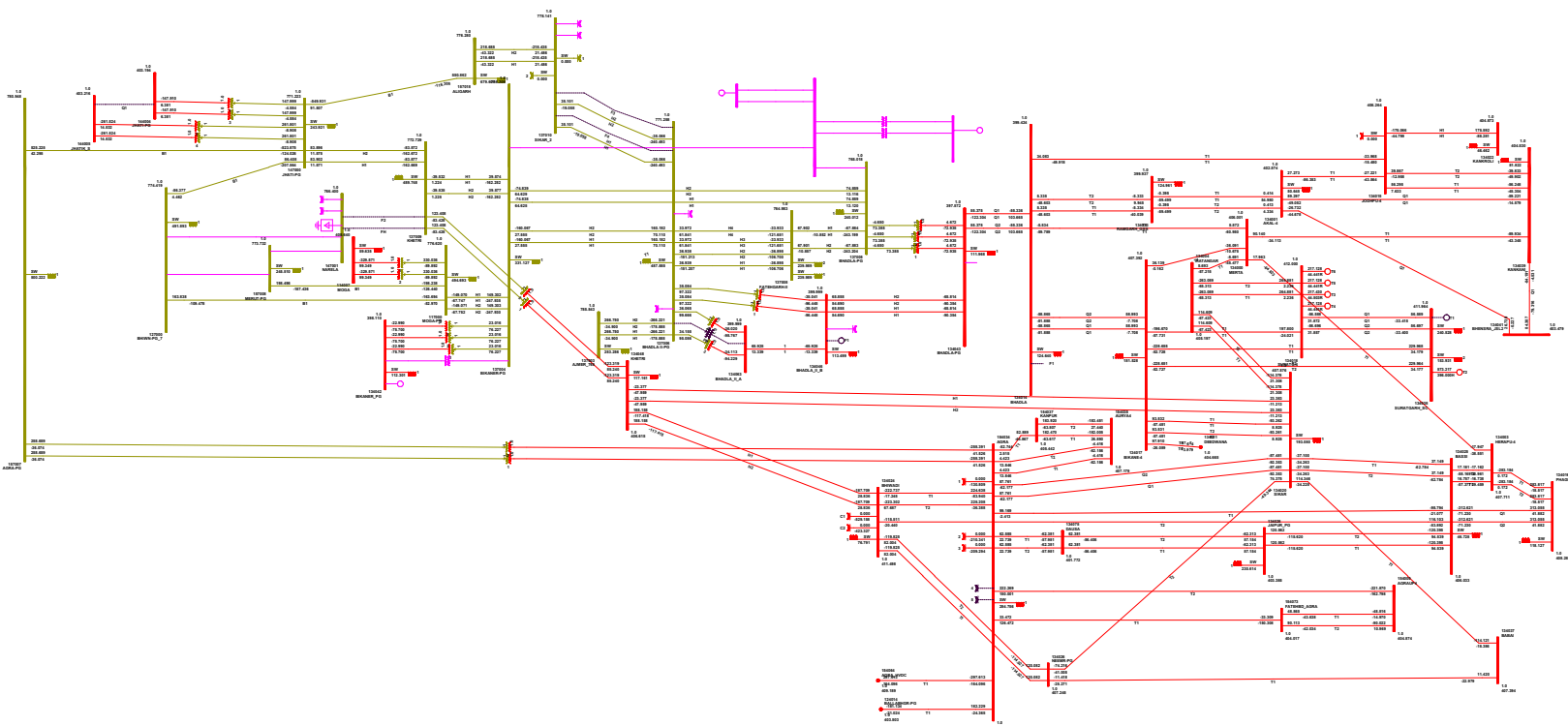
Annexure-V

Voltage	Station	Bus voltage				
		Before absorbing	After absorbing 3500MVAR	Voltage Relief after After absorbing 3500MVAR	After absorbing 6000MVAR	Voltage Relief after After absorbing 6000MVAR
765 kV	BHADLA-PG	781.879	765.018	16.861	741.823	40.056
765 kV	BIKANER-PG	780.162	766.306	13.856	743.889	36.273
400 kV	BHADLA-PG	409.461	397.572	11.889	385.259	24.202
765 kV	FATEHGARH-II	776.389	764.983	11.406	741.628	34.761
765 kV	BHADLA II-PG	782.347	771.258	11.089	752.937	29.41
400 kV	BHADLA(RS)	409.165	399.424	9.741	389.212	19.953
400 kV	BIKANER_PG	407.388	398.11	9.278	382.1	25.288
765 kV	KHETRI	780.394	772.729	7.665	759.732	20.662
400 kV	BHADLA_II_B	406.683	399.999	6.684	391.111	15.572
765 kV	SIKAR_2	784.08	778.141	5.939	768.474	15.606
400 kV	RAMGARH	405.158	399.937	5.221	394.102	11.056
765 kV	AJMER_765 kV	790.445	785.843	4.602	778.477	11.968
765 kV	JHATI-PG	775.343	771.223	4.12	764.408	10.935
400 kV	KHETRI	410.465	406.615	3.85	399.521	10.944
765 kV	BHIWAN-PG	777.848	774.419	3.429	768.961	8.887
400 kV	MOGA	411.79	408.64	3.15	403.785	8.005
400 kV	JODHPU-4	409.401	406.264	3.137	402.536	6.865
400 kV	BIKANE-4	410.516	407.392	3.124	403.72	6.796
400 kV	AKAL-4	405.491	402.574	2.917	398.949	6.542
400 kV	KANKANI	407.287	404.53	2.757	401.102	6.185
400 kV	MERTA	408.634	406.001	2.633	402.776	5.858
400 kV	SIKAR	410.149	407.576	2.573	403.407	6.742
765 kV	NARELA	768.97	766.4	2.57	762.3	6.67
400 kV	BHENSRA_JSL2	405.89	403.479	2.411	399.917	5.973
400 kV	BHIWADI	413.885	411.498	2.387	408.194	5.691
765 kV	ALIGARH	778.58	776.28	2.3	772.557	6.023
400 kV	NEEMR-PG	409.375	407.245	2.13	404.075	5.3
400 kV	BABAI	409.321	407.394	1.927	404.451	4.87
400 kV	HEERAPU-4	409.557	407.711	1.846	404.95	4.607
400 kV	Jhatik-S	405.057	403.216	1.841	400.214	4.843
400 kV	PHAGI_400 kV	410.08	408.288	1.792	405.544	4.536
400 kV	BASSI	407.818	406.033	1.785	403.332	4.486
765 kV	MEERUT-PG	775.48	773.732	1.748	770.932	4.548
400 kV	RATANGAR	406.917	405.197	1.72	402.582	4.335
400 kV	JAIPUR_PG	404.904	403.385	1.519	401.096	3.808
400 kV	DAUSA	403.162	401.772	1.39	399.671	3.491
400 kV	Jhatik-PG	404.525	403.194	1.331	401.009	3.516
400 kV	KANKROLI	406.086	404.873	1.213	403.247	2.839
400 kV	AGRA	410.258	409.189	1.069	407.555	2.703
765 kV	Agra	782	780.948	1.052	777.823	4.177
400 kV	AGRAUP4	405.695	404.874	0.821	403.621	2.074
400 kV	AURYA4	407.99	407.179	0.811	406.01	1.98
400 kV	FATEHBD_AGRA	404.611	404.017	0.594	403.102	1.509
400 kV	KANPUR	406.006	405.442	0.564	404.594	1.412
400 kV	SURATGARH_SC	411.997	411.964	0.033	411.924	0.073
400 kV	SURATG	412	412	0	412	0

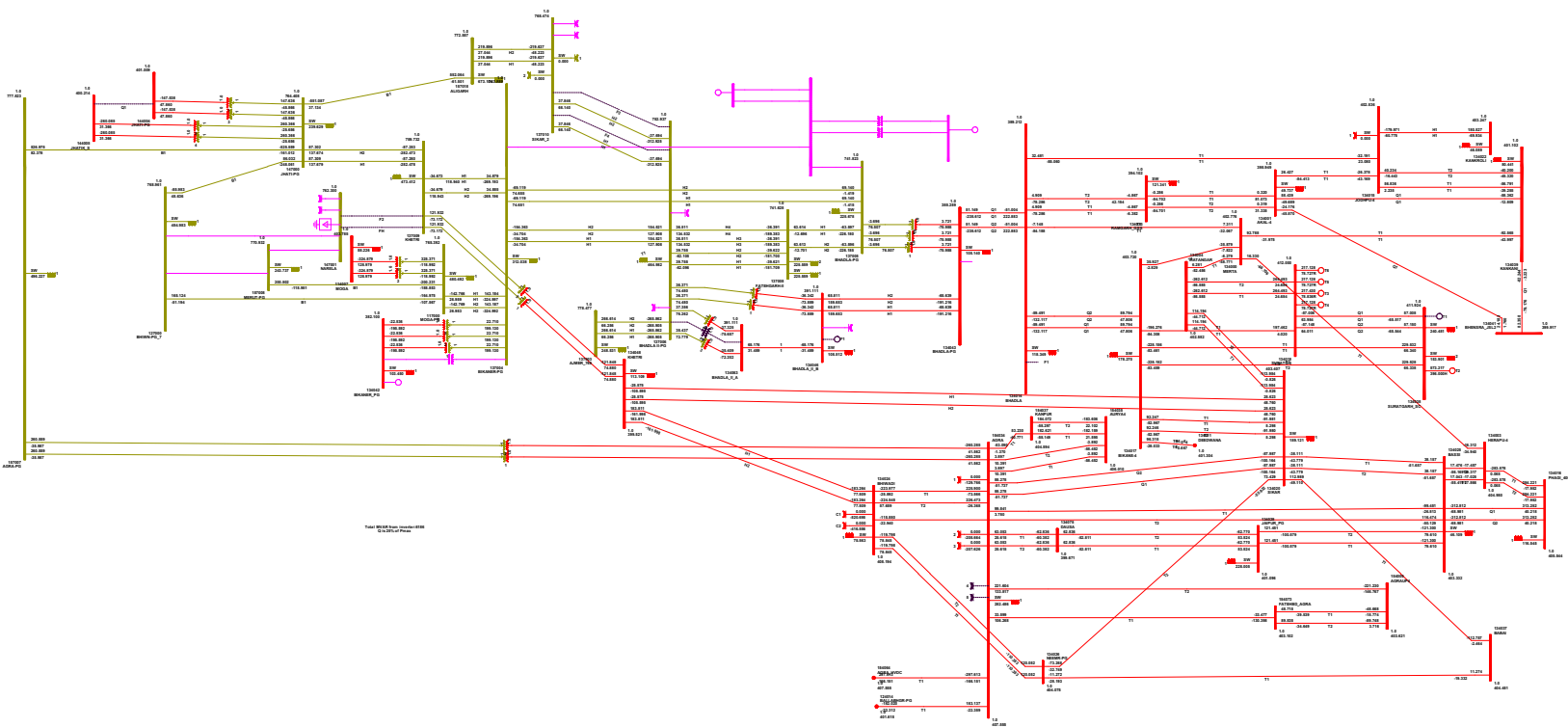
Voltage Profile with no absorption



Voltage Profile with 3500 MVAR absorption



Voltage Profile with 6000MVAR absorption



**Status of submission of FIR/DR/EL/Tripping Report
on NR Tripping Portal**

Time Period: 1st June 2025 - 30th June 2025

S. No.	Utility	Total No. of tripping	First Information Report (Not Received)		Disturbance Recorder (Not Received)	Disturbance Recorder (NA) as informed by utility	Disturbance Recorder (Not Received)	Event Logger (Not Received)	Event Logger (NA) as informed by utility	Event Logger (Not Received)	Tripping Report (Not Received)	Tripping Report (NA) as informed by utility	Tripping Report (Not Received)	Remark
			Value	%	Value		%	Value		%	Value		%	
1	ABC RENEWABLE_RJ01	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
2	ACME SOLAR HOLDINGS LIMITED	1	1	100	1	0	100	1	0	100	1	0	100	
3	ADANI GREEN ENERGY TWENTY FOUR LIMITED	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
4	ADANI SOLAR ENRGY RJ TWO PRIVATE LIMITED	1	0	0	0	0	0	0	0	0	0	0	0	Details received
5	AHEJ3L	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
6	AHEJ4L	1	0	0	0	0	0	0	0	0	0	0	0	Details received
7	AMP Energy Green Private Limited	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
8	AREPRL	1	0	0	0	0	0	0	0	0	0	1	0	Details received
9	AYANA RENEWABLE POWER THREE PRIVATE LIMITED	1	1	100	1	0	100	1	0	100	1	0	100	
10	CLEANSOLAR_JODHPUR	1	1	100	1	0	100	1	0	100	1	0	100	
11	GORBEA SOLAR PRIVATE LIMITED(GSPL)	1	1	100	1	0	100	1	0	100	1	0	100	
12	RENEW SOLARURJA (RSUPL)	1	0	0	0	0	0	0	0	0	0	0	0	Details received
13	RENEW SURYA AAYAN PRIVATE LIMITED	2	2	100	2	0	100	2	0	100	2	0	100	DR, EL & Tripping report not submitted
14	RENEW SURYA VIHAAN PRIVATE LIMITED	1	1	100	1	0	100	1	0	100	1	0	100	
15	RSDCL	4	4	100	4	0	100	4	0	100	4	0	100	
Total in NR Region		19	15	79	15	0	79	15	0	79	15	1	83	

As per the IEGC provision under clause 37.2 (c), detailed tripping report along with DR & EL has to be furnished within 24 hrs of the occurrence of the event

**Status of submission of FIR/DR/EL/Tripping Report
on NR Tripping Portal**

Time Period: 1st July 2025 - 31st July 2025

S. No.	Utility	Total No. of tripping	First Information Report (Not Received)		Disturbance Recorder (Not Received)	Disturbance Recorder (NA) as informed by utility	Disturbance Recorder (Not Received)	Event Logger (Not Received)	Event Logger (NA) as informed by utility	Event Logger (Not Received)	Tripping Report (Not Received)	Tripping Report (NA) as informed by utility	Tripping Report (Not Received)	Remark
			Value	%	Value		%	Value		%	Value		%	
1	ACME SOLAR HOLDINGS LIMITED	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
2	ADANI GREEN ENERGY TWENTY FIVE LIMITED	1	1	100	1	0	100	1	0	100	1	0	100	
3	AHEJ4L	2	1	50	1	0	50	1	0	50	1	0	50	
4	AHEJOL	2	2	100	0	0	0	2	0	100	2	0	100	
5	ALTRA XERGI POWER PVT LTD	2	2	100	2	0	100	2	0	100	2	0	100	
6	AP43L	1	1	100	1	0	100	1	0	100	1	0	100	
7	AREPRL	1	1	100	1	0	100	1	0	100	1	0	100	
8	BANDERWALA_TPSL	1	0	0	0	0	0	1	0	100	1	0	100	
9	ESUCRL	3	3	100	3	0	100	3	0	100	3	0	100	
10	Mega_SuryaUrja	1	1	100	1	0	100	1	0	100	1	0	100	Details received
11	RENEW SUN BRIGHT (RSBPL)	1	0	0	0	0	0	0	0	0	0	0	0	
12	RSDCL	4	4	100	4	0	100	4	0	100	4	0	100	DR, EL & Tripping report not submitted
13	SJVN GREEN ENERGY LIMITED	7	7	100	7	0	100	7	0	100	7	0	100	
Total in NR Region		27	24	89	22	0	81	25	0	93	25	0	93	

As per the IEGC provision under clause 37.2 (c), detailed tripping report along with DR & EL has to be furnished within 24 hrs of the occurrence of the event

Status of submission of FIR/DR/EL/Tripping Report on NR Tripping Portal	
Time Period: 1st August 2025 - 31st August 2025	

[illegible]

S. No.	Utility	Total No. of tripping	First Information Report (Not Received)		Disturbance Recorder (Not Received)	Disturbance Recorder (NA) as informed by utility	Disturbance Recorder (Not Received)	Event Logger (Not Received)	Event Logger (NA) as informed by utility	Event Logger (Not Received)	Tripping Report (Not Received)	Tripping Report (NA) as informed by utility	Tripping Report (Not Received)	Remark
			Value	%	Value		%	Value		%	Value		%	
1	ADANI GREEN ENERGY TWENTY FIVE LIMITED	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
2	AHEJ4L	1	1	100	1	0	100	1	0	100	1	0	100	
3	AHEJOL	1	1	100	1	0	100	1	0	100	1	0	100	
4	AMP Energy Green Private Limited	3	1	33	1	1	50	1	1	50	1	2	100	
5	AP43L	2	1	50	2	0	100	2	0	100	2	0	100	
6	CLEANSOLAR_JODHPUR	2	2	100	2	0	100	2	0	100	2	0	100	DR, EL & Tripping report not submitted
7	NTPC_KOLAYAT SL	2	2	100	2	0	100	2	0	100	2	0	100	DR, EL & Tripping report not submitted
8	NTPC_SL_DEVIKOT	1	1	100	1	0	100	1	0	100	1	0	100	
9	RENEW	1	1	100	1	0	100	1	0	100	1	0	100	
Total in NR Region		14	11	79	12	1	92	12	1	92	12	2	100	

As per the IEGC provision under clause 37.2 (c), detailed tripping report along with DR & EL has to be furnished within 24 hrs of the occurrence of the event

**Status of submission of FIR/DR/EL/Tripping Report
on NR Tripping Portal**

Time Period: 1st September 2025 - 30th September 2025

S. No.	Utility	Total No. of tripping	First Information Report (Not Received)		Disturbance Recorder (Not Received)	Disturbance Recorder (NA) as informed by utility	Disturbance Recorder (Not Received)	Event Logger (Not Received)	Event Logger (NA) as informed by utility	Event Logger (Not Received)	Tripping Report (Not Received)	Tripping Report (NA) as informed by utility	Tripping Report (Not Received)	Remark
			Value	%	Value		%	Value		%	Value		%	
1	ACME SIKAR SOLAR PRIVATE LIMITED(ASSPL)	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
2	ACME SOLAR HOLDINGS LIMITED	6	6	100	6	0	100	6	0	100	6	0	100	DR, EL & Tripping report not submitted
3	ADANI GREEN ENERGY TWENTY FOUR LIMITED	1	0	0	0	0	0	0	0	0	0	0	0	Details received
4	AP43L	2	2	100	2	0	100	2	0	100	2	0	100	DR, EL & Tripping report not submitted
5	AYANA RENEWABLE POWER THREE PRIVATE LIMITED	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
6	CLEANSOLAR_JODHPUR	1	1	100	1	0	0	1	0	0	1	0	100	DR, EL & Tripping report not submitted
7	GORBEA SOLAR PRIVATE LIMITED(GSPL)	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
8	JUNIPER GREEN COSMIC PRIVATE LIMITED	1	0	0	0	0	0	0	0	0	0	0	0	Details received
9	KARINSAR SOLAR PLANT NHPC LTD(KSP_NHPC)	3	3	100	3	0	100	3	0	100	3	0	100	DR, EL & Tripping report not submitted
10	KHIDRAT RENEWABLE ENERGY PRIVATE LIMITED(KREPL)	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
11	SJVN GREEN ENERGY LIMITED	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
12	TATAPOWER	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
Total in NR Region		20	18	90	18	0	90	18	0	90	18	0	90	

As per the IEGC provision under clause 37.2 (c), detailed tripping report along with DR & EL has to be furnished within 24 hrs of the occurrence of the event

**Status of submission of FIR/DR/EL/Tripping Report
on NR Tripping Portal**

Time Period: 1st October 2025 - 31st October 2025

				Plant	Plant	Plant	F-10	F-10	F-10	F-10	Plant	Plant	Plant	
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S. No.	Utility	Total No. of tripping	First Information Report (Not Received)		Disturbance Recorder (Not Received)	Disturbance Recorder (NA) as informed by utility	Disturbance Recorder (Not Received)	Event Logger (Not Received)	Event Logger (NA) as informed by utility	Event Logger (Not Received)	Tripping Report (Not Received)	Tripping Report (NA) as informed by utility	Tripping Report (Not Received)	Remark
			Value	%	Value		%	Value		%	Value		%	
1	ACME SOLAR HOLDINGS LIMITED	1	0	0	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
2	ADANI GREEN ENERGY TWENTY FOUR LIMITED	1	2	200	0	0	0	0	0	0	0	0	0	Details received
3	ADANI SOLAR ENRGY RJ TWO PRIVATE LIMITED	1	1	100	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
4	AHEJ2L	1	3	300	0	0	0	0	0	0	0	0	0	Details received
5	AHEJ4L	3	4	133	3	0	100	3	0	100	3	0	100	DR, EL & Tripping report not submitted
6	AP43L	2	1	50	2	0	100	2	0	100	2	0	100	
7	AYANA RENEWABLE POWER THREE PRIVATE LIMITED	1	2	200	1	0	100	1	0	100	1	0	100	
8	BANDERWALA_TPSL	1	4	400	0	0	0	1	0	100	1	0	100	
9	CLEANSOLAR_JODHPUR	1	1	100	1	0	100	1	0	100	1	0	100	
10	GORBEA SOLAR PRIVATE LIMITED(GSPL)	1	0	0	1	0	100	1	0	100	1	0	100	
11	JUNA RENEWABLE ENERGY PRIVATE LIMITED(JREPL)	4	3	75	4	0	100	4	0	100	4	0	100	
12	RENEW SURYA JYOTI PRIVATE LIMITED(RSJPL)	2		0	1	0	50	1	0	50	1	0	50	
13	SJVN GREEN ENERGY LIMITED	1	0	0	1	0	100	1	0	100	1	0	100	DR, EL & Tripping report not submitted
Total in NR Region		20	21	105	16	0	80	17	0	85	17	0	85	

As per the IEGC provision under clause 37.2 (c), detailed tripping report along with DR & EL has to be furnished within 24 hrs of the occurrence of the event

RE Grid Event summary for June-October 2025

S.No.	Category of Grid Incident/ Disturbance	Name of Elements (Tripped/Manually opened)	Affected Area	Owner/ Agency	Outage		Event (As reported)	Loss of generation / Loss of load during the Grid Disturbance		Fault Clearance time (in ms)	Remarks
	(GI-I to GD-V)				Date	Time		Generation Loss(MW)	Load Loss (MW)		
1	GD-1	i)220 KV Nokhra SL_BHD2 (NTPC)-Bhadla_2 (PG) (NTPC_) Ckt ii)220/33 kv 100 MVA ICT 1 at Nokhra SL_BHD2 (NTPC) iii)220/33 kv 100 MVA ICT 2 at Nokhra SL_BHD2 (NTPC) iv)220/33 kv 100 MVA ICT 3 at Nokhra SL_BHD2 (NTPC)	Rajasthan	PGCIL & NTPC	9-Jun-25	12:41	i)Generation of 220kV Nokhra (IP) stations evacuate through 220 KV Nokhra SL_BHD2 (NTPC)-Bhadla_2 (PG) (NTPC_NOKHRA) Ckt. ii)During antecedent condition, 220kV Nokhra (IP) was generating approx. 212 MW (as per PMU). iii)As reported, at 12:41hrs, 220 KV Nokhra SL_BHD2 (NTPC)-Bhadla_2 (PG) (NTPC_NOKHRA) Ckt tripped on overvoltage protection. iv)During the same time, 220/33 kv 100 MVA ICT 1, 2 and 3 at Nokhra SL_BHD2 (NTPC) also tripped due to lack of evacuation path. v)The overvoltage setting received from Nokhra end shows that Stage-1 overvoltage protection will operate after 5 sec and phase – phase voltage above 154kV. vi)However, as per per PMU, the Overvoltage protection operated at a voltage below 154kV and instantaneously. vii)As per PMU at 220kV Nokhra(NTPC), no fault was observed. viii)As per PMU, solar generation loss of approx. 358 MW in Rajasthan control area with 212MW in Nokhra(NTPC) were observed.	358	0	NA	Detailed analysis of the event and remedial action taken details need to be shared by Nokhra(IP). Reason of tripping when there is no persistent overvoltage in system need to be shared.
2	GD-1	1) 765 KV Bhadla_2 (PG)-Fatehgarh_II(PG) (PBTU) Ckt-4 2) 220 KV Bhadla_2 (PG)-RSDCL(PSS2)_SL_BHD2_PG (RSDCL) Ckt-1	Rajasthan	PGCIL, RSDCL	24-Jun-25	08:26	i)Generation of 220 KV RSDCL PSS2(IP) station evacuates through 220 KV Bhadla_2 (PG)-RSDCL(PSS2)_SL_BHD2_PG (RSDCL) Ckt-1. During antecedent condition, 220 KV RSDCL PSS2(IP) was generating approx. 145 MW (as per SCADA). ii)As reported, at 08:26hrs, IPS AI tube between CT & CB of tie bay 723 (B-Ph) at Fatehgarh_II end dislocated due to bad weather. iii)As per SCADA SOE, DR and PMU, the sequence of the event is as follows: a.At 08:26:41.680 hrs (as per PMU): B-N phase to earth fault occurred in 765 KV Bhadla_2 (PG)-Fatehgarh_II(PG) (PBTU) Ckt-4 with fault current of ~0.33kA from Bhadla2(PG) end (as per DR). b.A/R operated on this fault and after dead time line auto-reclosed successfully. c.At 08:26:45.680 hrs (as per PMU): Again B-N phase to earth fault occurred in 765 KV Bhadla_2 (PG)-Fatehgarh_II(PG) (PBTU) Ckt-4 with fault current of ~2.33kA (as per DR) and fault distance of 193km from Bhadla2(PG) end (as reported). d.A/R was blocked in the line and as fault was within reclaim time, 765 KV Bhadla_2 (PG)-Fatehgarh_II(PG) (PBTU) Ckt-4 tripped on this fault. e.At 08:26:45.855 hrs (as per SCADA SOE): 220 KV Bhadla_2 (PG)-RSDCL(PSS2)_SL_BHD2_PG (RSDCL) Ckt-1 also tripped (exact reason, nature and location of fault and details of protection operated yet to be shared). f.Due to tripping of 220 KV Bhadla_2 (PG)-RSDCL(PSS2)_SL_BHD2_PG (RSDCL) Ckt-1, 220 KV RSDCL PSS2(IP) S/s lost its connectivity from grid and blackout occurred at 220 KV RSDCL PSS2(IP) S/s. iv)As per PMU at Bhadla2(PG), two consecutive B-N phase to earth faults were observed with fault clearing time of 80ms each. v)As per SCADA, dip in NR solar generation of approx. 340 MW was observed. Generation loss of 145 MW occurred at 220 KV RSDCL PSS2(IP).	340	0	80	Detailed analysis of the event and remedial action taken details need to be shared by RSDCL PSS2(IP). Reason of tripping of RSDCL PSS2 line when there is no fault on the line(as per PMU)?
3	GI-1	1) 220/33 kv 100 MVA ICT 2 at RSDCL(PSS2)_SL_BHD2_PG 2) 220/33 kv 100 MVA ICT 3 at RSDCL(PSS2)_SL_BHD2_PG	Rajasthan	RSDCL PSS2	3-Jul-25	11:21	i)Generation of 220 KV RSDCL PSS2(IP) station evacuates through 220 KV Bhadla_2 (PG)-RSDCL(PSS2)_SL_BHD2_PG (RSDCL) Ckt-1 which is further connected to 220/33 kv 100 MVA ICT 1, 2 & 3 at RSDCL(PSS2)_SL_BHD2_PG. During antecedent condition, 220/33 kv 100 MVA ICT 1 at RSDCL(PSS2)_SL_BHD2_PG was under shutdown. 220 KV RSDCL PSS2(IP) was generating approx. 162 MW (as per SCADA); 220/33 kv 100 MVA ICT 2 & 3 at RSDCL(PSS2)_SL_BHD2_PG was carrying 81 MW each. ii)As reported, at 11:21hrs, 220/33 kv 100 MVA ICT 2 & 3 at RSDCL(PSS2)_SL_BHD2_PG tripped due to transformer protection operation (exact nature of protection operation and exact reason, nature and location of fault yet to be shared). iii)As per PMU at Bhadla2(PG), no fault, however fluctuation in voltage was observed. iv)As per SCADA, dip in NR solar generation of approx. 165 MW was observed.	165	0	NA	Detailed analysis of the event and remedial action taken details need to be shared by NRSDCL PSS2(IP). Reason of tripping of transformer at RSDCL?
4	GD-1	1) 400 KV Bikaner_2 (PBTSU)-SIVN_GEL_SL_BKN2 (SIVNGEL_BKN2) Ckt	Rajasthan	PGCIL, SIVN GEL	12-Jul-25	15:41	i)Generation of 400KV SIVN Solar(IP) station evacuates through 400 KV Bikaner_2 (PBTSU)-SIVN_GEL_SL_BKN2 (SIVNGEL_BKN2) Ckt. ii)During antecedent condition, 400KV SIVN Solar(IP) was generating approx. 270 MW (as per SCADA). Tie CB at Bikaner2(PG) end of 400 KV Bikaner_2 (PBTSU)-SIVN_GEL_SL_BKN2 (SIVNGEL_BKN2) Ckt was already in open condition. iii)As reported, at 15:41hrs, DT was received on L90 relay of 400 KV Bikaner_2 (PBTSU)-SIVN_GEL_SL_BKN2 (SIVNGEL_BKN2) Ckt at SIVN end and 400 KV Bikaner_2 (PBTSU)-SIVN_GEL_SL_BKN2 (SIVNGEL_BKN2) Ckt tripped (exact reason of tripping and exact nature of protection operation at PG end yet to be shared). iv)Due to tripping of 400 KV Bikaner_2 (PBTSU)-SIVN_GEL_SL_BKN2 (SIVNGEL_BKN2) Ckt, complete blackout occurred at 400KV SIVN Solar(IP). v)As per PMU at Bikaner2(PG), no fault was observed in the system . vi)As per SCADA, dip in NR solar generation of approx. 270 MW was observed.	270	0	NA	Detailed analysis of the event and remedial action taken details need to be shared by SIVN_GEL(IP). Reason of DT received at SIVN end?
5	GD-1	1) 220 KV Bhadla_2 (PG)-RSDCL(PSS2)_SL_BHD2_PG (RSDCL) Ckt-1	Rajasthan	RSDCL PSS2, PGCIL	22-Jul-25	09:49	i)Generation of 220 KV RSDCL PSS2(IP) station evacuates through 220 KV Bhadla_2 (PG)-RSDCL(PSS2)_SL_BHD2_PG (RSDCL) Ckt-1 which is further connected to 220/33 kv 100 MVA ICT 1, 2 & 3 at RSDCL(PSS2)_SL_BHD2_PG. During antecedent condition, 220 KV RSDCL PSS2(IP) was generating approx. 170 MW (as per SCADA). ii)As reported, at 09:49hrs, 220 KV Bhadla_2 (PG)-RSDCL(PSS2)_SL_BHD2_PG (RSDCL) Ckt-1 tripped on B-N phase to earth fault due to B-phase jumper broken in yard (exact nature of protection operation and exact reason, nature and location of fault yet to be shared). iii)Due to tripping of 220 KV Bhadla_2 (PG)-RSDCL(PSS2)_SL_BHD2_PG (RSDCL) Ckt-1, complete blackout occurred at 220 KV RSDCL PSS2(IP) S/s due to loss of evacuation path. iv)As per PMU at Bhadla2(PG), B-N phase to earth fault with delayed fault clearing time of 520 ms was observed. v)As per SCADA, dip in NR solar generation of approx. 229 MW was observed.	229	0	520	Detailed analysis of the event and remedial action taken details need to be shared by RSDCL(IP). Reason of delayed clearance of fault?
6	GD-1	1) 220 KV Fatehgarh_II(PG)-Devikot SL_FTHG2 (NTPC_DEVIKOT) (NTPC_DEVIKOT) Ckt-1	Rajasthan	PGCIL, NTPC Green	29-Aug-25	10:31	i)Generation of 220 KV NTPC Devikot(NT) station evacuates through 220 KV Fatehgarh_II(PG)-Devikot SL_FTHG2 (NTPC_DEVIKOT) (NTPC_DEVIKOT) Ckt-1 which is further connected to 220/33 kv 100 MVA ICT 1, 2 & 3 at NTPC Devikot(NT). During antecedent condition, 220 KV NTPC Devikot(NT) was generating approx. 183 MW (as per PMU). ii)As reported, at 10:31 hrs, 220 KV Fatehgarh_II(PG)-Devikot SL_FTHG2 (NTPC_DEVIKOT) (NTPC_DEVIKOT) Ckt-1 tripped on wave trap fire due to R-Phase jumper broken. (Exact nature & location of fault, if any and details of protection operated yet to be shared by NTPC Green). iii)Due to tripping of 220 KV Fatehgarh_II(PG)-Devikot SL_FTHG2 (NTPC_DEVIKOT) (NTPC_DEVIKOT) Ckt-1, complete blackout occurred at 220 KV NTPC Devikot(NT) S/s due to loss of evacuation path. iv)As per PMU at Fatehgarh2(PG), no fault was observed in the system. v)As per PMU, generation loss of approx. 183 MW was observed at NTPC Devikot(NT). vi)As per SCADA, NR total solar generation loss of approx. 187 MW was observed.	183	0	NA	Detailed analysis of the event and remedial action taken details need to be shared by NTPC Devikot. Exact nature & location of fault, if any and details of protection operated need to be shared.
7	GD-1	1) 765KV Fatehgarh_2-Bhadla (PG) line-1 2) 220 KV Nokhra SL_BHD2 (NTPC)-Bhadla_2 (PG) (NTPC_NOKHRA) Ckt	Rajasthan	PGCIL, NTPC Green	9-Sep-25	16:04	i)Generation of 220kV Nokhra (IP) stations evacuate through 220 KV Nokhra SL_BHD2 (NTPC)-Bhadla_2 (PG) (NTPC_NOKHRA) Ckt. ii)During antecedent condition, 220kV Nokhra (IP) was generating approx. 180 MW (as per PMU). iii)As reported, at 16:04hrs, 765KV Fatehgarh_2-Bhadla (PG) line-1 tripped on R-N fault. At the same time, 220 KV Nokhra SL_BHD2 (NTPC)-Bhadla_2 (PG) (NTPC_NOKHRA) Ckt tripped on DT received from Bhadla2 end. Reason of DT sent from Bhadla2(PG) end to Nokhra end yet to be received. iv)As per PMU, 765kV Fatehgarh_2-Bhadla (PG) line-1 tripped after unsuccessful A/R operation on permanent fault and there was no fault on 220kV Bhadla2-Nokhra line. v)As per PMU and SCADA, RE generation loss of approx. 180 MW at Nokhra(NTPC) is observed.	180	0	80	Detailed analysis of the event and remedial action taken details need to be shared by RSDCL(IP). Exact nature & location of fault, if any and details of protection operated need to be shared.
8	GD-1	1) 220 KV Bikaner_2 (PBTSU)-KSP_NHPC_LTD_SL_BKN2 (KSP_NHPC_LTD) line	Rajasthan	KSP_NHPC, PGCIL	25-Sep-25	07:41	i)Generation of 220kV Karnisar Solar (NHPC) evacuates through 220 KV Bikaner_2 (PBTSU)-KSP_NHPC_LTD_SL_BKN2 (KSP_NHPC_LTD) line. ii)During antecedent condition, 220kV Karnisar Solar (NHPC) was generating approx. 55 MW (as per PMU). iii)As reported, at 07:41hrs, 220 KV Bikaner_2 (PBTSU)-KSP_NHPC_LTD_SL_BKN2 (KSP_NHPC_LTD) line tripped on R-Y fault. iv)As per PMU at Bikaner_2(PG), no fault in system is observed. v)Due to tripping of line, complete generation of Karnisar Solar (NHPC) got affected due to loss of evacuation path. vi)As per PMU and SCADA, RE generation loss of approx. 55 MW at Karnisar Solar (NHPC) is observed.	55	0	NA	Detailed analysis of the event and remedial action taken details need to be shared by KSP_NHPC(IP). Exact nature & location of fault, if any and details of protection operated need to be shared.
9	GD-1	1) 220 KV Bhadla(PG)-TPREL (TP) line	Rajasthan	TPREL, PGCIL	27-Sep-25	09:52	i)Generation of 220kV Tata Power RE station (TPREL) evacuates through 220 KV Bhadla(PG)-TPREL (TP) line. ii)During antecedent condition, 220kV TPREL(IP) was generating approx. 194 MW (as per PMU). iii)As reported, at 09:52 hrs, 220 KV Bhadla(PG)-TPREL (TP) line tripped on R-N fault. iv)As per PMU at CSP Jodhpur(IP) connected at Bhadla(PG), no fault is observed in system. v)Due to tripping of line, complete generation of TPREL(IP) got affected due to loss of evacuation path. vi)As per PMU and SCADA, RE generation loss of approx. 194 MW at TPREL(IP) is observed.	194	0	NA	Detailed analysis of the event and remedial action taken details need to be shared by TPREL(IP). Exact nature & location of fault, if any and details of protection operated need to be shared.
10	GD-1	1) 220/33 kv 150 MVA ICT 1 at AHEJAL PSS2 HB_FGRAH_FBTU (AHEJAL) 2) 220/33 kv 150 MVA ICT 2 at AHEJAL PSS2 HB_FGRAH_FBTU (AHEJAL) 3) 220/33 kv 150 MVA ICT 3 at AHEJAL PSS2 HB_FGRAH_FBTU (AHEJAL)	Rajasthan	AHEJAL	3-Oct-25	12:53	i)Generation of 220kV AHEJAL PSS2 (ASPS2) (IP) station evacuates through 220 KV Adani Renew Park SL_FGARH_FBTU (AREPRL)-AHEJAL PSS2 HB_FGRAH_FBTU (AHEJAL) (AREPRL) Ckt which is further connected to 220/33 kv 150 MVA ICT 1, 2 & 3 at AHEJAL PSS2 HB_FGRAH_FBTU (AHEJAL). ii)During antecedent condition, 220kV AHEJAL PSS2 (ASPS2) (IP) station was generating approx. 70 MW (as per SCADA). iii)As reported, at 12:53hrs, 220/33 kv 150 MVA ICT 1, 2 & 3 at AHEJAL PSS2 HB_FGRAH_FBTU (AHEJAL) tripped on over-flux protection operation (exact reason of tripping yet to be shared) which led to complete blackout out of 220kV AHEJAL PSS2 (ASPS2) (IP) S/s. iv)As per PMU at Fatehgarh(IP), no fault was observed in the system. v)As per SCADA, NR solar generation loss of approx. 70 MW was observed at AHEJAL PSS2 (ASPS2) (IP).	70	0	NA	Detailed analysis of the event and remedial action taken details need to be shared by RSDCL(IP). Exact nature & location of fault, if any and details of protection operated need to be shared.

S.No.	Category of Grid Incident/ Disturbance	Name of Elements (Tripped/Manually opened)	Affected Area	Owner/ Agency	Outage		Event (As reported)	Loss of generation / loss of load during the Grid Disturbance		Fault Clearance time (in ms)	Remarks
	(GL-I to GD-V)				Date	Time		Generation Loss(MW)	Load Loss (MW)		
11	GD-1	1) 220 KV Bhadla(PG)-CS_Jodhpur SL_BHD_PG (CSPJP) (Cleansolar_Jodhpur) Ckt 2) 220 KV Bhadla(PG)-Saurya Urja Solar(SU) (Saurya Urja) Ckt-2	Rajasthan	PGCIL, CSPJP, Saurya Urja	15-Oct-25	12:11	i)Generation of 220kV Clean Solar Power Jodhpur (CSPJP) (IP) and 220kV Saurya Urja(IP) station evacuates respectively through 220 KV Bhadla(PG)-CS_Jodhpur SL_BHD_PG (CSPJP) (Cleansolar_Jodhpur) Ckt and 220 KV Bhadla(PG)-Saurya Urja Solar(SU) (Saurya Urja) Ckt-1 & 2. ii)During antecedent condition, 220kV Clean Solar Power Jodhpur (CSPJP) (IP) and 220kV Saurya Urja(IP) station were generating approx. 246 MW and 463 MW (Ckt-1 carrying 190 MW and Ckt-2 carrying 273 MW) respectively (as per PMU). iii)As reported, at 12:11hrs, 220 KV Bhadla(PG)-CS_Jodhpur SL_BHD_PG (CSPJP) (Cleansolar_Jodhpur) Ckt tripped on Y-B Phase to phase fault due to snapping of jumper (exact location yet to be shared). As per DR at Bhadla(PG) end, line differential protection operated in Main-2 relay with fault current of Iy~28.22kA, Ib~28.30kA from Bhadla(PG) end; fault sensed in zone-1 in main-1 relay; fault clearing time was ~56 ms. iv)During the same time, 220 KV Bhadla(PG)-Saurya Urja Solar(SU) (Saurya Urja) Ckt-2 also tripped from Saurya Urja(IP) end only (exact reason and nature of protection operated yet to be shared). v)As per PMU at Bhadla(PG), Y-B Phase to phase fault was observed with fault clearing time of ~120ms. Voltage dipped upto 0.775 pu. Frequency decreased from 50.023 Hz to 49.833 Hz (max change in frequency~0.19 Hz). vi)As per PMU at CSPJP(IP) and Saurya Urja(IP), solar generation loss of approx. 246 MW and 273 MW were observed at CSPJP(IP) and Saurya Urja(IP) respectively. vii)As per SCADA, change in NIR total Solar generation of approx. 1855 MW was observed among which dip in Rajasthan solar generation was approx. 295 MW.	1855	0	120	Detailed analysis of the event and remedial action taken details need to be shared by Saurya Urja Exact nature & location of fault, if any and details of protection operated need to be shared.

Status of performance indices reporting of September 2025 (Last date of submission 07.10.2025)							
S. No.	Utility		Received Status (Yes/No)	Vide mail dated	Remarks	Indices less than 1 (Yes/No)	Reason submitted and corrective action taken
1	ABC Renewable Pvt. Ltd		Y	08.10.2025		NO	NA
2	ACME Heeragarh powertech Pvt. Ltd						
3	ACME Chittorgarh Solar Energy Pvt Ltd						
4	AHEJOL-Hybrid-1 Madhopura	ADANI GREEN	Y	04.10.2025		NO	NA
5	AHEJ3L - Hybrid-2B 300MW	ADANI GREEN	Y	04.10.2025		NO	NA
6	AHEJFL(AEML 250)	ADANI GREEN	Y	04.10.2025		NO	NA
7	AHEJ4L(AEML-350)	ADANI GREEN	Y	04.10.2025		NO	NA
8	ASEJ2PL(Hapasar 300MW) SPC11PL	ADANI GREEN	Y	04.10.2025		NO	NA
9	Adani Renewable Energy (RJ) Limited Rawra 200	ADANI GREEN	Y	04.10.2025		NO	NA
10	Adani Solar Energy Four Limited SECI 50	ADANI GREEN	Y	04.10.2025		NO	NA
11	Adani Solar Energy Jodhpur Two Limited Merchant 50	ADANI GREEN	Y	04.10.2025		NO	NA
12	ASEJ05PL (RJ200)	ADANI GREEN	Y	04.10.2025		NO	NA
13	ASERJ2PL - Phalodi 150 MW	ADANI GREEN	Y	04.10.2025		NO	NA
14	ASERJ01PL-Pokhran 300 MW (SB energy six)	ADANI GREEN	Y	04.10.2025		NO	NA
15	AGE25L(Badi Sid)	ADANI GREEN	Y	04.10.2025		NO	NA
16	Bhadla park - South block	ADANI GREEN	Y	04.10.2025		NO	NA
17	AGE24L (Bhimsar)	ADANI GREEN	Y	04.10.2025		NO	NA
18	AHEJ2L - Hybrid-2A 300MW	ADANI GREEN	Y	04.10.2025		NO	NA
19	ASERJ2PL - Devikot 180 MW	ADANI GREEN	Y	04.10.2025		NO	NA
20	ASEJOPL-Hybrid 450 MW	ADANI GREEN	Y	04.10.2025		NO	NA
21	Altra Xergi Pvt. Ltd.		Y	30.10.2025		NO	NA
22	AMP Energy Green Four Pvt. Ltd.	AMPIN ENERGY	Y	07.10.2025		NO	NA
23	AMP Energy Green Five Pvt. Ltd.	AMPIN ENERGY	Y	07.10.2025		NO	NA
24	AMP Energy Green Six Pvt. Ltd.	AMPIN ENERGY	Y	07.10.2025		NO	NA
25	Amplus Ages Private Limited	GENTARI	Y	08.10.2025		NO	NA
26	Avaada RJHN 240MW	AVAADA	Y	07.10.2025		NO	NA
27	Avaada sunce energy Pvt limited		Y	07.10.2025		NO	NA
28	Avaada Sunrays Pvt. Ltd.		Y	07.10.2025		NO	NA
29	Avaada Sustainable RJ Pvt. Ltd.		Y	07.10.2025		NO	NA
30	Ayana Renewable Power Three Private Limited						
31	Ayana Renewable Power One Pvt. Ltd.						
32	Azure Power Forty One Pvt limited						
33	Azure Power Forty Three Pvt. Ltd. RSS						
34	Azure Maple Pvt. Ltd.						
35	AZURE POWER INDIA Pvt. Ltd., Bhadla						
36	Azure Power Thirty Four Pvt. Ltd.						
37	SB Energy Six Private Limited, Bhadla						
38	Clean Solar Power (Jodhpur) Pvt. Ltd.	Hero Future Energies	Y	03.10.2025		NO	NA
39	Eden Renewable Cite Private Limited						
40	Grian Energy private limited	GENTARI	Y	08.10.2025		NO	NA
41	Mahindra Renewable Private Limited						
42	Mega Surya Urja Pvt. Ltd. (MSUPL)						
43	AURAIYA Solar						
44	DADRI SOLAR						

45	SINGRAULI SOLAR						
46	Anta Solar						
47	Unchahar Solar						
48	NTPC Devikot Solar plant-1	NGEL	Y	09.10.2025		NO	NA
49	NTPC Devikot Solar plant-2		Y	09.10.2025		NO	NA
50	SKB NTPC -1 (250MW)	NGEL	Y	09.10.2025		NO	NA
51	SKB NTPC-2 (300MW)		Y	09.10.2025		NO	NA
52	NTPC Nokhra_300MW		Y	09.10.2025		NO	NA
53	NTPC Fatehgarh 296MW		Y	09.10.2025		NO	NA
54	One Volt energy Pvt. Ltd.	GENTARI	Y	08.10.2025		NO	NA
55	ReNew Solar Urja Private Limited	IndiGrid	Y	08.10.2025		NO	NA
56	ReNew Solar Energy (Jharkhand Three) Private Limited		Y	03.10.2025		NO	NA
57	Neemba Renew Surya Vihan Pvt. Ltd.		Y	03.10.2025		NO	NA
58	Renew Sun Bright Pvt. Ltd. (RSBPL)		Y	03.10.2025		NO	NA
59	Renew Surya Partap Pvt. Ltd.		Y	03.10.2025		NO	NA
60	Renew Surya jyoti Pvt. Ltd.		Y	03.10.2025		NO	NA
61	Renew Surya Ravi Pvt. Ltd.		Y	03.10.2025		NO	NA
62	Renew Surya Roshni Pvt. Ltd.		Y	03.10.2025		NO	NA
63	Renew Surya Vihan Pvt. Ltd.		Y	03.10.2025		NO	NA
64	Renew Surya Ayaan Pvt. Ltd.		Y	03.10.2025		NO	NA
65	Renew Solar Photovoltaic Pvt Ltd		Y	03.10.2025		NO	NA
66	Renew Hans Urja Pvt Ltd.		Y	03.10.2025		NO	NA
67	RENEW SOLAR POWER Pvt. Ltd. Bikaner		Y	03.10.2025		NO	NA
68	Rising Sun Energy-K Pvt. Ltd.						
69	Serentica Renewables India 4 Private Limited						
70	Solzen Urja Private Limited	Sekura	Y	06.10.2025		NO	NA
71	Tata Power Green Energy Ltd. (TPGEL)	TATA POWER	Y	09.10.2025		NO	NA
72	Tata Power Renewable Energy Ltd. (TPREL)		Y	09.10.2025		NO	NA
73	Banderwala Solar Plant TP Surya Ltd.		Y	09.10.2025		NO	NA
74	Thar Surya Pvt. Ltd.						
75	TRANSITION ENERGY SERVICES PRIVATE LIMITED						
76	Transition Green Energy Private Limited						
77	Transition Sustainable Energy Services Private Limited						

Status of performance indices reporting of October 2025 (Last date of submission 07.11.2025)							
S. No.	Utility		Received Status (Yes/No)	Vide mail dated	Remarks	Indices less than 1 (Yes/No)	Reason submitted and corrective action taken
1	ABC Renewable Pvt. Ltd		Y	11.11.2025		NO	NA
2	ACME Heeragarh powertech Pvt. Ltd						
3	ACME Chittorgarh Solar Energy Pvt Ltd						
4	AHEJOL-Hybrid-1 Madhopura	ADANI GREEN	Y	06.11.2025		NO	NA
5	AHEJ3L - Hybrid-2B 300MW	ADANI GREEN	Y	06.11.2025		NO	NA
6	AHEJFL(AEML 250)	ADANI GREEN	Y	06.11.2025		NO	NA
7	AHEJ4L(AEML-350)	ADANI GREEN	Y	06.11.2025		NO	NA
8	ASEJ2PL(Hapasar 300MW) SPC11PL	ADANI GREEN	Y	06.11.2025		NO	NA
9	Adani Renewable Energy (RJ) Limited Rawra 200	ADANI GREEN	Y	06.11.2025		NO	NA
10	Adani Solar Energy Four Limited SECI 50	ADANI GREEN	Y	06.11.2025		NO	NA
11	Adani Solar Energy Jodhpur Two Limited Merchant 50	ADANI GREEN	Y	06.11.2025		NO	NA
12	ASEJ05PL (RJ200)	ADANI GREEN	Y	06.11.2025		NO	NA
13	ASERJ2PL - Phalodi 150 MW	ADANI GREEN	Y	06.11.2025		NO	NA
14	ASERJ01PL-Pokhran 300 MW (SB energy six)	ADANI GREEN	Y	06.11.2025		NO	NA
15	AGE25L(Badi Sid)	ADANI GREEN	Y	06.11.2025		NO	NA
16	Bhadla park - South block	ADANI GREEN	Y	06.11.2025		NO	NA
17	AGE24L (Bhimsar)	ADANI GREEN	Y	06.11.2025		NO	NA
18	AHEJ2L - Hybrid-2A 300MW	ADANI GREEN	Y	06.11.2025		NO	NA
19	ASERJ2PL - Devikot 180 MW	ADANI GREEN	Y	06.11.2025		NO	NA
20	ASEJOPL-Hybrid 450 MW	ADANI GREEN	Y	06.11.2025		NO	NA
21	Altra Xergi Pvt. Ltd.		Y	07.11.2025		NO	NA
22	AMP Energy Green Four Pvt. Ltd.	AMPIN ENERGY					
23	AMP Energy Green Five Pvt. Ltd.	AMPIN ENERGY					
24	AMP Energy Green Six Pvt. Ltd.	AMPIN ENERGY					
25	Amplus Ages Private Limited	GENTARI	Y	13.11.2025		NO	NA
26	Avaada RJHN_240MW	AVAADA	Y	03.11.2025		NO	NA
27	Avaada sunce energy Pvt limited		Y	03.11.2025		NO	NA
28	Avaada Sunrays Pvt. Ltd.		Y	03.11.2025		NO	NA
29	Avaada Sustainable RJ Pvt. Ltd.		Y	03.11.2025		NO	NA
30	Ayana Renewable Power Three Private Limited						
31	Ayaana Renewable Power One Pvt. Ltd.						
32	Azure Power Forty One Pvt limited						
33	Azure Power Forty Three Pvt. Ltd._RSS						
34	Azure Maple Pvt. Ltd.						
35	AZURE POWER INDIA Pvt. Ltd., Bhadla						
36	Azure Power Thirty Four Pvt. Ltd.						
37	SB Energy Six Private Limited, Bhadla						
38	Clean Solar Power (Jodhpur) Pvt. Ltd.	Hero Future Energies	Y	03.11.2025		NO	NA
39	Eden Renewable Cite Private Limited						
40	Grian Energy private limited	GENTARI	Y	13.11.2025		NO	NA
41	Mahindra Renewable Private Limited						
42	Mega Surya Urja Pvt. Ltd. (MSUPL)						
43	AURAIYA Solar						
44	DADRI SOLAR						
45	SINGRAULI SOLAR						
46	Anta Solar						

47	Unchahar Solar						
48	NTPC Devikot Solar plant-1	NGEL	Y	10.11.2025		NO	NA
49	NTPC Devikot Solar plant-2		Y	10.11.2025		NO	NA
50	SKB NTPC -1 (250MW)	NGEL	Y	10.11.2025		NO	NA
51	SKB NTPC-2 (300MW)		Y	10.11.2025		NO	NA
52	NTPC Nokhra 300MW		Y	10.11.2025		NO	NA
53	NTPC Fatehgarh 296MW		Y	10.11.2025		NO	NA
54	One Volt energy Pvt. Ltd.	GENTARI	Y	13.11.2025		NO	NA
55	ReNew Solar Urja Private Limited	IndiGrid	Y	11.11.2025		NO	NA
56	ReNew Solar Energy (Jharkhand Three) Private Limited		Y	03.11.2025		NO	NA
57	Neemba Renew Surya Vihan Pvt. Ltd.		Y	03.11.2025		NO	NA
58	Renew Sun Bright Pvt. Ltd. (RSBPL)		Y	03.11.2025		NO	NA
59	Renew Surya Partap Pvt. Ltd.		Y	03.11.2025		NO	NA
60	Renew Surya jyoti Pvt. Ltd.		Y	03.11.2025		NO	NA
61	Renew Surya Ravi Pvt. Ltd.		Y	03.11.2025		NO	NA
62	Renew Surya Roshni Pvt. Ltd.		Y	03.11.2025		NO	NA
63	Renew Surya Vihan Pvt. Ltd.		Y	03.11.2025		NO	NA
64	Renew Surya Ayaan Pvt. Ltd.		Y	03.11.2025		NO	NA
65	Renew Solar Photovoltaic Pvt Ltd		Y	03.11.2025		NO	NA
66	Renew Hans Urja Pvt Ltd.		Y	03.11.2025		NO	NA
67	RENEW SOLAR POWER Pvt. Ltd. Bikaner		Y	03.11.2025		NO	NA
68	Rising Sun Energy-K Pvt. Ltd.						
69	Serentica Renewables India 4 Private Limited						
70	Solzen Urja Private Limited	Sekura	Y	04.11.2025		NO	NA
71	Tata Power Green Energy Ltd. (TPGEL)	TATA POWER	Y	07.11.2025		NO	NA
72	Tata Power Renewable Energy Ltd. (TPREL)		Y	07.11.2025		NO	NA
73	Banderwala Solar Plant TP Surya Ltd.		Y	07.11.2025		NO	NA
74	Thar Surya Pvt. Ltd.						
75	TRANSITION ENERGY SERVICES PRIVATE LIMITED						
76	Transition Green Energy Private Limited						
77	Transition Sustainable Energy Services Private Limited						

Status of Internal Protection Audit Plan for FY 2026 -27									
S. No.	Organization	Category	Status	Schedule submitted as per utility	Present Status Completed (yes/no)	Report Submission Date by audit party	Discussion held in PSC meeting number	Compliance status	
1	ABC Renewable Pvt. Ltd								
2	ACME Heeragarh powertech Pvt. Ltd								
3	ACME Pholdi								
4	ACME Deagarh								
5	ACME Raisalr								
6	ACME Dhoulpar								
7	ACME Chittorgarh Solar Energy Pvt Ltd								
8	Adani Hybrid Energy Jaisalmer One Ltd.	AGEL	Received	7/16/2026					
9	Adani Hybrid Energy Jaisalmer Two Ltd.	AGEL	Received	7/25/2026					
10	Adani Hybrid Energy Jaisalmer Three Ltd.	AGEL	Received	8/8/2026					
11	Adani Hybrid Energy Jaisalmer Four Ltd. (AEML 1 -350)	AGEL	Received	8/15/2026					
12	Adani Hybrid Energy Jaisalmer Four Ltd. (AEML 2 -250)	AGEL	Received	9/11/2026					
13	Adani Renewable Energy (RJ) limited Rawara	AGEL	Received	9/26/2026					
14	Adani Solar Enegry Four Private Limited	AGEL	Received	9/26/2026					
15	Adani Solar Energy Jaisalmer Two Private Limited Project Two	AGEL	Received	10/17/2026					
16	SB Energy Six Private Limited, Bhadla	AGEL	Received	10/28/2026					
17	Adani Solar Energy Jodhpur Two Limited, Rawara	AGEL	Received	9/26/2026					
18	Adani Solar Energy Jaisalmer One Ltd. (Hybrid450)	AGEL	Received	10/3/2026					
19	Adani Solar Energy RJ Two Pvt. Ltd. (Devkot)	AGEL	Received	11/7/2026					
20	Adani Solar Energy RJ Two Pvt. Ltd. (Phalodi)	AGEL	Received	11/14/2026					
21	Adani Green Energy 24 Limited (Bhimsar)	AGEL	Received	11/26/2026					
22	Adani Green Twenty-Five Limited (Badisid)	AGEL	Received	12/4/2026					
23	Bhadla park - South block	AGEL	Received	12/16/2026					
24	AEML-250 WIND (Hybrid-2A)	AGEL	Received	9/16/2026					
25	AEML-260 WIND (Hybrid-2B)	AGEL	Received	9/20/2026					
26	Hybrid450-WIND (SBE Hybrid 450)	AGEL	Received	10/7/2026					
27	Altra Xergi Pvt. Ltd.								
28	AMP Energy Green Four Pvt. Ltd.								
29	AMP Energy Green Five Pvt. Ltd.								
30	AMP Energy Green Six Pvt. Ltd.								
31	Amplus Ages Private Limited								
32	Avaada RJHN 240MW								
33	Avaada sunce energy Pvt limited								
34	Avaada Sunrays Pvt. Ltd.								
35	Avaada Sustainable RJ Pvt. Ltd.								
36	Ayana Renewable Power Three Private Limited								
37	Ayaana Renewable Power One Pvt. Ltd.								
38	Azure Power Forty One Pvt limited								
39	Azure Power Forty Three Pvt. Ltd. RSS								
40	Azure Maple Pvt. Ltd.								
41	AZURE POWER INDIA Pvt. Ltd. ,Bhadla								
42	Azure Power Thirty Four Pvt. Ltd.								
43	Clean Solar Power (Jodhpur) Pvt. Ltd.								
44	Eden Renewable Cite Private Limited								
45	Grian Energy private limited								
46	Mahindra Renewable Private Limited								
47	Mega Surya Urja Pvt. Ltd. (MSUPL)								
48	AJRAIYA Solar								
49	DADRI SOLAR								
50	SINGRAULI SOLAR								
51	Anta Solar								
52	Unchahar Solar								
53	NTPC Devkot Solar plant 240MW								
54	NTPC Kolayat 400kV								
55	Nedan Solar NTPC								
56	NTPC Nokhra 300MW								
57	One Volt energy Pvt. Ltd.								
58	ReNew Solar Energy (Jharkhand Three) Private Limited								
59	RENEW SOLAR POWER Pvt. Ltd. Bikaner								
60	ReNew Solar Urja Private Limited								
61	Renew Sun Bright Pvt. Ltd. (RSBPL)								
62	Renew Surya Partap Pvt. Ltd.								
63	Renew Surya Ravi Pvt. Ltd.								
64	Renew Surya Roshni Pvt. Ltd.								
65	Renew Surya Vihan Pvt. Ltd.								
66	Renew Surya Ayaan Pvt. Ltd.								
67	Renew Solar Photovoltaic Pvt Ltd								
68	RENEW SOLAR POWER Pvt. Ltd. Bikaner								
69	Renew Hans Urja Pvt Ltd								
70	Renew Surya Jyoti Pvt Ltd								
71	Rising Sun Energy-K Pvt. Ltd.								
72	Serentica Renewables India 4 Private Limited								
73	Solzen Urja Private Limited								
74	Tata Power Green Energy Ltd. (TPGEL) (225MW)								
75	Tata Power Renewable Energy Ltd. (TPREL) (300MW)								
76	Thar Surya Pvt. Ltd.								
77	TP Surya Ltd., Noorsar (110MW)								
78	Banderwala Solar Plant TP Surya Ltd. (300MW)								
79	TRANSITION ENERGY SERVICES PRIVATE LIMITED								
80	Transition Green Energy Private Limited								
81	Transition Sustainable Energy Services Private Limited								

