



RAJASTHAN RAJYA VIDYUT PRASARAN NIGAM LIMITED

[Corporate Identity Number (CIN): U40109RJ2000SGC016485]
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OFFICE OF THE CHIEF ENGINEER (LD)

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No. RVPN/CE(LD)/SE(SOLD)/XEn-III/A-1/F.

ID. 1097 Dated 11/10/2025

The Director (Technical),
Rajasthan Renewable Energy Corporation,
E-166, Yudhishtir Marg,
C-Scheme, Jaipur-302005

Sub: Information regarding Non-Compliance of Reactive Power Requirements under CEA Connectivity Regulation by RE Developers Connected to Rajasthan Grid.

With the increasing penetration of renewable energy (RE), grid operation has become increasingly challenging due to the variable and intermittent nature of solar and wind generation. The Rajasthan Grid is facing frequent voltage fluctuations and deviations, compounded by inadequate reactive power support from RE generators.

Dynamic reactive power support, as mandated under CEA (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2013, Part II, Clause B2(1), and reiterated by CEA vide letter dated 12.05.2023 (Annexure-1), as well as Regulation 39(2) of IEGC-2023, stipulates that:

"All generating stations shall be capable of dynamically varying supplying reactive power support so as to maintain power factor at the point of interconnection within the limits of 0.95 lagging to 0.95 leading as per the CEA Connectivity Standard Regulations"

However, compliance with these provisions remains unsatisfactory among many RE developers connected to the Rajasthan grid.

For adherence to CEA's requirements and to enable SLDC to monitor and control reactive power flow effectively at the Point of Interconnection (Pol), the following installations are essential:

1. Power Plant Controller (PPC) at the plant level.
2. Static VAR Generator (SVG) of requisite capacity (or equivalent inverter-based arrangement) at plant/pooling station for dynamic reactive power support.
3. PQ Meter at the Pol.

Despite repeated instructions and multiple stakeholder meetings (MoM dated 03.01.2025, Annexure-2; and 30.04.2025, Annexure-3), the compliance status even after ten months remains largely unsatisfactory. Persistent non-compliance has resulted in low-voltage conditions, voltage oscillations and increased reactive drawal from the interstate grid, thereby imposing MVAR charges on the State and posing risks to grid security and reliability.

Validity unknown Signature valid



Digitally signed by S. K. Jain
Designation: Chief Engineer
Date: 2025.10.10 12:23:52 IST
Reason: Approved

Further, as per CEA's communication dated 12.05.2023, RE developers who had applied for connectivity on or before 30.04.2023 were required to comply with reactive power control provisions by 30.09.2023, failing which such plants are liable for disconnection.

It is also observed that telemetered data from several RE plants (Annexure-C) are not being received at SLDC despite repeated reminders, which violates CEA's data telemetry requirements and affects real-time system visibility threatening grid security.

In view of the above, it is requested that RREC, being the nodal agency for RE development in the State, may kindly:

1. Instruct all non-compliant RE developers (as per lists at Annexure-A for Solar, Annexure-B for Wind, and Annexure-C for telemetry) to ensure strict adherence to the CEA Connectivity Regulations, 2013 (as amended).
2. Link approval of any new RE projects to confirmation of compliance of their existing installations with the said Regulations. No new approvals may be granted unless compliance is confirmed by SLDC.
3. Incorporate the above compliance requirements in the Standard Operating Procedure (SOP) for approval and monitoring of all new RE projects to ensure grid reliability and safety.

Your cooperation in ensuring regulatory compliance and maintaining stable grid operations is earnestly solicited.

Encl: As above

(Sudhir Jain)
Chief Engineer (LD)

Copy submitted/ forwarded to the following for information and necessary action:

1. The Director (Oper./ Tech.), RVPN, Jaipur.
2. The Chief Engineer (NPP&RA/ PP&D), RVPN, Jaipur
3. The Zonal Chief Engineer (T&C), RVPN, Jaipur/Ajmer/Jodhpur.
4. The Chief Engineer, RUVITL, Jaipur
5. The Superintending Engineer (P&P/NPP&RA/SOLD/REMC), RVPN, Jaipur
6. The Superintending Engineer (PP/Billing), RUVITL, Jaipur.
7. The Superintending Engineer (T&C), RVPN, Bhilwara / Merta City / Babai / Chittorgarh / Jodhpur / Bikaner / Ratangarh / Hanumangarh / Sirohi / Barmer / Jaisalmer / Ramgarh / Bhadla / Kankani / Jaisalmer-II
8. TA to the Chairman, RVPN for kind perusal of Chairman, RVPN, Jaipur.
9. TA to the CMD, DISCOMs for kind perusal of CMD, DISCOMs, Jaipur
10. TA to the CMD, RRECL for kind perusal of CMD, RRECL, Jaipur
11. TA to the MD, RVPN for kind perusal of MD, RVPN, Jaipur.
12. TA to the MD, RVUITL, Jaipur for kind perusal of MD, RVUITL, Jaipur.
13. The Executive Engineer- Shift incharge- SLDC CR, Heerapura, Jaipur.
14. The Executive Engineer- incharge- REMC CR, Heerapura, Jaipur.
15. The RE developers/generators as per Annexure-A, B & C.

Encl: As above

Chief Engineer (LD)

Validity unknownSignature valid

Digitally signed by Sudhir Jain
Designation: Chief Engineer
Date: 2025.10.23:23:52 IST
Reason: Approved



Copy also forwarded to the following for information:

1. The General Manager, NRLDC, 18A, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-110016.
2. The Superintending Engineer (Opr.), NRPC, 18A, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-110016.

Chief Engineer (LD)

Validity unknownSignature valid

Digitally signed by S. Anir Jain
Designation : Chief Engineer
Date: 2025.10.23:23:52 IST
Reason: Approved



Summary sheet of old solar plant (COD before 30.04.2023)

S.No.	Particulars	Numbers	PPC installed (Nos.)	PQ meter at RVPN GSS (Nos.)	PQ meter at RE Developers (Nos.)	SVG (Nos.)
1	220 KV Feeders	10	7	3	8	0
2	132 KV Feeders	19	6	1	9	1
	Total	29	13	4	17	1

ANNEXURE-1

INSTALLED CAPACITY OF SOLAR PROJECTS IN RAJASTHAN

SR. NO.	STU	POOLING STATION	TOTAL CAPACITY(MW)	Type of Solar (Project/Park)	Connectivity voltage level (kV)	Name of Developer/Project developer	S. No.	Name of Project developer inside park	Project Capacity inside park(MW)	Date of installation of project/Park	PPC installed (Yes/No)	SVG installed (Yes/No)	SVG Capacity (MVAR)	PQ meter installed at Developer GSSS (Yes/No)	PQ meter installed at RVPN GSSS (Yes/No)	Compliant(Yes/No)
1	400 KV BHADLA	220 KV RSDCL Line-1 (From RSDCL-GSS-1) AND 220 KV RSDCL Line-2 (From RSDCL-GSS-1)	340	Solar Park	220	M/s RSDCL	i	M/s RISING SUN-I & II (2*70)	140	2017	NO	NO	NA	NO	NO	NO
							ii	M/s YARROW	70	2017	NO	NO	NA	NO	NO	NO
							iv	M/s NTPC-I & II (2*85)	130	2017	NO	NO	NA	NO	NO	NO
2		220 KV RSDCL Line-1 (From RSDCL-GSS-2) and 220 KV RSDCL Line-2 (From RSDCL-GSS-2)	340	Solar Park	220	M/s RSDCL	i	M/s SSUPL-I & II (2*70)	140	2017	YES	NO	NA	YES	NO	NO
							ii	M/s NTPC-I & II (2*85)	130	2017	NO	NO	NA	NO	NO	NO
							v	M/s FORTUM	70	2017	YES	NO	NA	YES	NO	NO
3		220 KV ADANI Line -1 & Line-2	250	Solar Park	220	M/s Adani	i	M/s ADANI	100	2018	YES	NO	NA	YES	NO	NO
							ii	M/s AVAADA	100	2018	YES	NO	NA	YES	NO	NO
							iii	M/s AWANA	50	2018	YES	NO	NA	YES	NO	NO
4	400 kV GSS Jaisalmer-II	220 KV SPRNG SOLAR	250	Solar Project	220	FORTUM SOLAR	iii	SPRING SOLAR	250	19.03.2021	YES	NO	0	YES	NO	NO
5		220 KV RENEW SOLAR	110	Solar Project	220	RENEW	iv	RENEW	110	05.02.2021	YES	NO	0	YES	NO	NO
6		220 KV CLEAN SOLAR ENERGY	250	Solar Project	220	O2 POWER	v	O2 POWER	250	05.04.2022	YES	NO	0	YES	YES	NO
7	220 KV GSS BAP	132 KV GIRIRAJ	33	Solar Project	132	M/s GIRIRAJ Enterprise	i	M/s GIRIRAJ Enterprise	33	02.05.2025	NO	NO	NA	NO	NO	NO
8		132 KV MAHINDRA Suryaprakash(kiran solar)	55	Solar Project	132	M/s Kiran Solar India Pvt. Ltd (Mahindra Surya Prakash)	i	M/s Kiran Solar India Pvt Ltd (Mahindra Surya Prakash)	55		NO	NO	NA		NO	NO
9	220 KV GSS BADSID	ACME-I (132 KV)	50	Solar Project	132	EDEN RENEWABLE INDIA LLP	(i)	EDEN RENEWABLE INDIA LLP	50 MW		NO	NO	NA	YES	NO	NO
10		ACME-II(132 KV)	50	Solar Project	132		(ii)	EDEN RENEWABLE INDIA LLP	50 MW		NO	NO	NA	YES	NO	NO
11		SUN EDISON I (132 KV)	30	Solar Project	132	SEI Suryalabh Pvt. Ltd	(iii)	SEI Suryalabh Pvt. Ltd	30		NO	NO	NA	NO	NO	NO

SR. NO.	STU	POOLING STATION	TOTAL CAPACITY(MW)	Type of Solar (Project/Park)	Connectivity voltage level (kV)	Name of Developer/Project developer	S. No.	Name of Project developer inside park	Project Capacity inside park(MW)	Date of Installation of project/Park	PPC installed (Yes/No)	SVG installed (Yes/No)	SVG Capacity (MVAR)	PQ meter installed at Developer GSSS (Yes/No)	PQ meter installed at RVPN GSSS (Yes/No)	Compliant(Yes/No)
12	220 KV GSS BHAWAD	AZURE GREEN TECH 132 KV	60	Solar Project	132	Azure Green Tech	(i)	Azure Green Tech	60		NO	NO	NA		NO	NO
13		AZURE CLEAN ENERGY (132 KV)	40	Solar Project	132	Azure Clean Energy	(ii)	Azure Clean Energy	40		NO	NO	NA		NO	NO
14	220 KV GSS GAJNER	132 KV Mahindra susten (80MW)	60	Solar Project	132	NTPC	(i)	NTPC	60		YES	NO	NO	YES	NO	No
15		220 kv Mahindra Susten Pvt. Ltd	200	Solar Project	220	SECI	(ii)	SECI	200		YES	NO	NO	YES	NO	No
16		132 KV RAYS SOLAR PARK	60.05	Solar Project	132	Rays	(iii)	Rays	60.05		under installation	NO	NA	NO	NO	NO
17	220 KV GSS BHADLA	SAURYA URJA LINE-1 & Line-2	500	Solar Park	220	M/s Saurya Urja	i	M/s Acme	200 MW		YES	NO	NA	NO	NO	NO
							ii	M/S ADANI	300 MW		YES	NO	NA	NO	NO	NO
18	220 KV GSS KANASAR	SP PHOTO VOLTALIC PVT. LTD. (132 KV)	50	Solar Project	132	M/s Spmg photovoltaic pvt Ltd	i	M/s Spmg photovoltaic pvt Ltd	50 MW		YES	NO	NA	YES	NO	NO
19		SITARA SOLAR ENERGY P Ltd. (132 KV)	100	Solar Project	132	M/S Sitara Solar Energy Pvt. Ltd	ii	M/S Sitara Solar Energy Pvt. Ltd	100 MW		YES	NO	NA	YES	NO	NO
20	220 KV CHCHATARG ARH	132 KV NTPC SOLAR	150	Solar Project	132	M/s NREL Chhattargarh	i	M/s NREL Chhattargarh	150 MW		YES	YES	90 MVAR	YES	NO	NO
21	220 KV GSS DECHU	Dhanu-I 220 KV	40	Solar Project	220	Dhursar Solar Power Pvt. Ltd.	i	Dhursar Solar Power Pvt. Ltd.	40	28.03.2012	NO	NO	NA	Yes	Yes	NO
22		Dhanu-II(RSETPL) 220 KV	100	Solar Project	220	Rajasthan Sun Technique Energy Pvt. Ltd	ii	Rajasthan Sun Technique Energy Pvt. Ltd	100	23.05.2013	NO	NO	NA	Yes	Yes	NO
23	132 KV GSS POKARAN	132 KV Askandra	35	Solar Project	132	M/S IODAY GREEN	i	M/S IODAY GREEN	35	30.09.2015	NO	NO	NA	NO	NO	NO
24		132 KV Today Green	50	Solar Project	132	LANCO	ii	LANCO	50	08.08.2012	NO	NO	NA	NO	NO	NO
25	132 KV GSS JAYAL	Azure Solar (132 KV)	40	Solar Project	132	NTPC		Azure Solar Pvt. Ltd.	40	02-12-2013	NO	NO	NA	YES	YES	NO
26	132 KV GSS PS-2	GODAWARI GREEN (132 KV)	50	Solar Project	132	Solar thermal plant (parabolic trough CSP plant)	(i)	Solar thermal plant (parabolic trough CSP plant)	50		NO	NO	NA	NO	NO	NO