

endeavour basis, plant may be commissioned before SCOD period mentioned in the PPA.

- 25) The Govt. approval was for procurement of power at tariff of Rs 2.78 per kWh at ISTS ex-bus basis without ISTS Transmission charges. 100% ISTS transmission charges waiver deadline is ending on 30.06.2025. Since NREL was not agreeing to consider SCOD as 30.06.2025, there may be additional financial implications in terms of applicability of 25% ISTS transmission charges.
- 26) Therefore, the matter was put up for decision of GUVNL's Board in the Board meeting dated 16.01.2024 for procurement of power at tariff of Rs.2.78 per kWh at ISTS ex-bus (plus applicable 25% ISTS Transmission Charges and losses).
- 27) GUVNL's Board vide B.R. No.131.14/2131 dated 02.02.2024 has approved the proposal for procurement of 500 MW power at tariff of Rs 2.78 per kWh at ISTS ex-bus basis (plus applicable 25% ISTS Transmission charges and loss) from NREL's Khavda RE Park subject to approval of State Govt. & GERC.
- 28) Simultaneously, GUVNL has submitted revised proposal to EPD-GoG vide letter dated 23.01.2024 (**Annexure-Q**) for approval for procurement of 500 MW power from NREL's Solar Power Project in Khavda RE Park at tariff of Rs.2.78 per kWh at ISTS ex-bus (plus applicable 25% ISTS Transmission Charges and losses) on mutually agreed terms and conditions of PPA.
- 29) EPD, GOG vide letter dated 12.03.2024 (**Annexure-R**) has accorded approval for procurement of 500 MW power from NREL's Solar PV project in Khavda RE Park at tariff of Rs 2.78 / kWh plus 25% applicable transmission charges and losses.
- 30) It is to submit that proposal for signing of PPA between GUVNL and NREL under Bilateral Mode was first of its kind in regime for power procurement through competitive bidding process after the issuance of Guidelines by MoP, GoI. Therefore, GUVNL intended to sign PPA with NREL on terms and conditions of standard PPA of GUVNL (as per TBCB Guidelines), with an





objective to discourage undue risks and financial implications, optimize the power procurement and protect the overall interest of consumers of the State at large. However, NREL did not agree to the terms and conditions of GUVNL citing that the proposed offer is under Bilateral Mode.

- 31) Accordingly, GUVNL has signed PPA with NREL on 15.03.2024 for procurement of 500 MW power at tariff of Rs 2.78 / kWh from NREL's Solar PV Project to be set up in the NREL's RE Park at Khavda.
- 32) The copy of signed PPA is attached herewith as **Annexure-S**.
- 33) **The Salient features of the Power Purchase Agreement are:**
- a) NREL to supply 500 MW Solar Power at the tariff of Rs. 2.78 / kWh.
  - b) PPA term is 25 years from the SCOD.
  - c) The SCOD of the project is 14.12.2025.
  - d) Capacity Utilization Factor (CUF) is 30%.
  - e) The project shall be connected with CTU grid and located in the 4750 MW NREL's RE Park in Khavda at Kutch.
  - f) Late Payment Surcharge shall be payable in accordance with Electricity (Late Payment Surcharge) Rules, 2022 and as amended from time to time.
  - g) **Criteria for Generation:** The Power Producer shall maintain generation so as to achieve annual CUF within + 10% and -15% of the contracted CUF till the end of 10 years from COD, subject to the annual CUF remaining minimum of 15%, and within +10% and -20% of the contracted annual CUF thereafter till the end of the PPA duration of 25 years. The lower limit will, however, be relaxable by GUVNL to the extent of non-availability of grid for evacuation which is beyond the control of the Power





Producer. The annual CUF will be calculated every year from 1st April of the year to 31st March next year.

- h) **Shortfall in Generation:** In case the project generates and supplies energy less than the energy corresponding to the minimum CUF (Calculation of CUF will be on yearly basis), the Power Producer will be liable to compensate GUVNL for the shortfall in availability below such contracted CUF level at 25% of the PPA Tariff. This will, however, be relaxable by GUVNL to the extent of grid non-availability for evacuation (beyond the Delivery Point) which is beyond the control of the Power Producer. This compensation shall be applied to the amount of shortfall in generation during the Contract Year.
- i) **Excess Generation:** In case the availability is more than the maximum CUF specified, the Power Producer will be free to sell it to any other entity provided first right of refusal will vest with GUVNL. In case of excess generation, GUVNL shall reserve the right to purchase the excess generation at 75% (seventy-five per cent) of the PPA tariff.
- j) **Liquidated Damages for Delay in Commissioning the Project / Solar Photovoltaic Grid Interactive Power Plant Beyond Scheduled Commercial Operation Date.**

The Project shall be commissioned within Scheduled Commercial Operation Date. In case of failure to achieve this milestone except due to Force Majeure Event, NTPC REL shall pay Liquidated Damage (LD) of Rs.5 Lakhs/MW (Rupees Five Lakh per MW) in the following manner:

- Delay up to six (6) months from SCOD – NTPC REL will pay Liquidate Damages on per day basis and proportionate to the balance capacity not commissioned.
- In case the commissioning of the project is delayed beyond Six (6) months from SCOD, the contracted capacity shall stand reduced to the project capacity commissioned up to SCOD + 6 months. The PPA for balance capacity not commissioned shall be terminated.





In case NREL fails to pay Liquidated Damage (LD) as per above manner, GUVNL shall recover the Liquidated Damage (LD) from the energy invoices submitted by NREL.

- k) **Part Commissioning:** Part commissioning of the Project shall be accepted by GUVNL subject to the condition that the Minimum Capacity for acceptance of first and subsequent part(s) commissioning shall be 50 MW, without prejudice to the imposition of penalty, in terms of the PPA on the part which is not commissioned. However, the SCOD (Schedule Commercial Operation Date) will not get altered due to part-commissioning. Irrespective of dates of part commissioning, the PPA will remain in force for a period of 25 (twenty-five) years from the SCOD for the contracted capacity commissioned up to six months from the SCOD. Provided that in case of part commissioning of the last part, if the capacity is less than 50 MW, the commissioning of the same shall be accepted.
- l) **Early Commissioning:** The Power Producer shall be permitted for full commissioning as well as part commissioning of the Project even prior to the SCOD (Schedule Commissioning Operation Date). In cases of early part-commissioning, till SCOD, GUVNL shall reserve the right to purchase the generation till SCOD, at 100% (hundred per cent) of the PPA tariff if such part capacity is commissioned within 3 (Three) months before SCOD. For part capacities commissioned earlier than 3 (Three) months before SCOD, GUVNL shall reserve the right to purchase the generation at 75% (Seventy-five per cent) of the PPA tariff up to 3 (Three) months prior to SCOD. However, in case the entire capacity is commissioned prior to SCOD, GUVNL may purchase the generation at PPA Tariff.

m) **Change in Law**

After the date of signing of PPA, in the event a Change in Law results in any adverse financial loss/ gain to the Solar Power Generator then, in order to ensure that the Solar Power Generator is placed in the same financial position as it would have been had it not been for the occurrence of the Change in Law, the Solar Power Generator/ Procurer shall be entitled to compensation by the other party, as the case may be, subject





to the condition that the quantum and mechanism of compensation payment shall be determined and shall be effective from such date as may be decided by the Appropriate Commission.

In these Guidelines, the term Change in Law shall refer to the occurrence of any of the following events after the date of signing of PPA, including (i) the enactment of any new law; or (ii) an amendment, modification or repeal of an existing law; or (iii) the requirement to obtain a new consent, permit or license; or (iv) any modification to the prevailing conditions prescribed for obtaining an consent, permit or license, not owing to any default of the Solar Power Generator; or (v) any change in the rates of any Taxes which have a direct effect on the Project. However, Change in Law shall not include any change in taxes on corporate income or any change in any withholding tax on income or dividends.

Further, rule applicable for change in law along with all amendments thereafter as notified by Ministry of Power, Govt. of India, shall apply.

34) **In regard to procurement of power under above PPA, GUVNL would like to highlight the following aspects:**

a) **National Targets for RE** : As per Gol's commitment in revised Nationally Determined Contribution (NDC) at global level, 50% of total electrical installed capacity of the Country is to be tied up from non-fossil fuel based energy sources by 2030. GUVNL has been tying-up the wind and solar power considering the RPO targets notified by GERC & MoP, Gol from time to time.

b) **Steps taken to meet RPO** : The Ministry of Power, Government of India, vide office order dated 20.10.2023 has specified the long term RPO trajectory till 2029-30 and has fixed the minimum percentage of total consumption of electricity from RE sources. This trajectory is higher than the RPO trajectory notified by Hon'ble GERC. The comparison of RPO Trajectory as notified by MoP vis-à-vis Hon'ble GERC is tabulated as under (minimum percentage of total consumption of electricity):





Fin. Year	MoP RPO Trajectory (%)					GERC RPO Trajectory (%)				
	Wind	Hydro	Distributed RE	Other	Total	Wind	Solar	Hydro	Others	Total
2022-23	0.81	0.35	--	23.44	<b>24.60</b>	8.25	8.00	0.00	0.75	<b>17.00</b>
2023-24	1.60	0.66	--	24.81	<b>27.07</b>	8.40	9.50	0.05	0.75	<b>18.70</b>
2024-25	0.67	0.38	1.50	27.35	<b>29.91</b>	8.55	11.25	0.10	0.80	<b>20.70</b>
2025-26	1.45	1.22	2.10	28.24	<b>33.01</b>	Yet to be notified				
2026-27	1.97	1.34	2.70	29.94	<b>35.95</b>					
2027-28	2.45	1.42	3.30	31.64	<b>38.81</b>					
2028-29	2.95	1.42	3.90	33.10	<b>41.36</b>					
2029-30	3.48	1.33	4.50	34.02	<b>43.33</b>					

Accordingly, to fulfil RPO requirement notified by MoP substantial RE capacity addition is required.

The details of RE capacity tied up by GUVNL and commissioned as on date is as under:

(in MW)

	Tied up	Commissioned	Under Construction
<b>Solar</b>	14,480	4,453	10,026
<b>Wind</b>	5,372	4,274	1,098
<b>Other RE</b>	162	65.5	96.5
<b>Total</b>	<b>20,014</b>	<b>8,793</b>	<b>11,220</b>

c) **KSY Scheme:**

Government of Gujarat has come out with Kisan Suryoday Yojana – a scheme for supplying day power to Agricultural Consumers in the State of Gujarat. The objective of the scheme is to meet the Agriculture demand during solar hours through comparatively cheaper solar generation. To meet the above objective of catering Agriculture demand during day time, extensive solar capacity addition is required.





d) **Previously discovered tariffs in GUVNL's Khavda Park based Solar Tenders:**

The tariffs discovered in the e-RA in GUVNL's Khavda Park based Solar Tenders are as under:

Sr. No.	Tender Phase	Tender capacity (Base+Greenshoe) (MW)	Capacity tied up (MW)	Tariff discovered in e- RA (Rs./kWh)	Month of e- RA
1	XVII	600+600 (GSECL)	1200	2.73 - 2.89	May-23
2	XX	800+800 (GSECL)	1600	2.70 - 2.71	July-23
3	XXI	600+600 (GIPCL)	1200	2.54 - 2.55	Jan-24
4	XXIII	1125 MW (GSECL)	1125	2.62 - 2.67	Mar-24
		<b>Wtg. Avg tariff</b>	<b>5125</b>	<b>2.68</b>	

- 35) Khavda Park is situated in a low lying area with silty, clay rich soil and salty land. Hence, plants are prone to corrosion. This poses significant challenges for building foundations for structure and modules sustainability and also in their operation and maintenance.
- 36) Large variation in tariff range have been discovered in Khavda RE park tenders of GUVNL in the range of Rs 2.54 – 2.89 per kWh and the weighted average of discovered tariffs is Rs 2.68 per kWh.
- 37) The proposal for supply of 500 MW solar power from Khavda RE Park was received from NREL on 12.04.2023. At that time, the discovered tariffs in the Phase XVII tender were in the range of Rs 2.73 - 2.89 per kWh. The weighted average of tariffs discovered (excluding capacity tied up under additional 600 MW Green shoe option) was Rs 2.83 per kWh.
- 38) Taking into consideration various factors such as national targets of RE, capacity requirement as per RPO, Energy Transition Objectives, supply of Solar Power to agriculture under Kisan Suryodaya Yojana etc and considering that tariff of Rs 2.73 – 2.89 / unit at ISTS ex bus had been discovered in the tender Phase XVII at that prevailing time, GUVNL in principally agreed to off take 500 MW solar power from NREL on 08.06.2023





and subsequently has signed PPA on 15.03.2024 pursuant to accordance of approval by State Govt. on 12.03.2024.

39) In view of the above, the Petitioner has filed the present petition for the approval of Power Purchase Agreement dated 15.03.2024 appended herewith as **Annexure - S** signed with NREL for procurement of 500 MW power at the tariff of Rs.2.78 / kWh from their Solar PV Project to be set-up in their RE Park at Khavda.

40) **PRAYER:**

The Petitioner most respectfully prays that this Hon'ble Commission may be pleased to:

- a) To admit the present Petition;
- b) To approve the Power Purchase Agreement dated 15.03.2024 appended herewith as Annexure - S signed with NREL for procurement of 500 MW power at the tariff of Rs.2.78 / kWh from their Solar PV Project to be set-up in their RE Park at Khavda.
- c) To condone any inadvertent omissions / errors / shortcomings and permit the petitioner to make addition / change / modification / alter this filing and make further submissions as may be required at a future date;
- d) To crave relief for filing any further submissions;
- e) Pass any other Order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case, to avoid further delay and in the interest of justice.

PLACE: VADODARA

DATE: 08.04.2024



GUJARAT URJA VIKAS NIGAM LIMITED  
PETITIONER





## DECLARATION

Declaration that the subject matter of the petition has not been raised by the petitioner before any other competent forum, and that no other competent forum is currently seized of the matter or has passed any orders in relation thereto.

PLACE: VADODARA

DATED: 08.04.2024



GUJARAT URJA VIKAS NIGAM LIMITED  
PETITIONER





BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION  
GANDHINAGAR

FILING NO:

CASE NO:

IN THE MATTER OF

Approval of Power Purchase Agreement (PPA) signed by Gujarat Urja Vikas Nigam Limited (GUVNL) with NTPC Renewable Energy Limited (NREL) under the bilateral mode for procurement of 500 MW Power from Solar PV Project to be set-up in NREL's RE Park at Khavda.

**PETITIONER** Gujarat Urja Vikas Nigam Limited  
Sardar Patel Vidyut Bhavan,  
Race Course,  
Vadodara - 390 007

**Versus**

**RESPONDENT** NTPC Renewable Energy Limited  
NTPC Bhawan, SCOPE Complex,  
7, Institutional Area, Lodhi Road,  
New Delhi-110 003

**AFFIDAVIT**

SR. No. 6124  
Date 08/04/2024

I, Amitkumar Chavda, son of Hargovindbhai Chavda aged about 42 years residing at Vadodara do solemnly affirm and say as follows:

1. I am Deputy Engineer working in Gujarat Urja Vikas Nigam Limited and am well conversant with the facts of the case and able to swear to the present Affidavit.







2. I, on behalf of the Petitioner, Gujarat Urja Vikas Nigam Limited have gone through the contents of the accompanying Petition and say that the contents stated therein are based on the records of Petitioner maintained in normal course of business and believed by me to be true.

DEPONENT



**VERIFICATION:**

I, the Petitioner above named do hereby verify that the contents of my above Affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

Identified before me.

DEPONENT



PLACE: VADODARA

DATE: 08.04.2024

MY Commission Expires  
On 04/ 07/2028



Solemnly Affirmed/Declared  
Sworn Before me by *A.H. Chaudhari*

*H. J. ZALA*  
H. J. ZALA  
NOTARY (Govt. of India)