Government of Rajasthan
Energy Department

Rajasthan Green Hydrogen Policy, 2023

No. F 20(17)Energy/2021 Jaipur, Dated: 29.09.2023

NOTIFICATION

1. Introduction

Rajasthan is endowed with the highest solar radiation in the country (>5.7 kWh/Sqm/Day), abundant land, more than 325 sunny days in a year and Wind Power Density of 210-400 kW/Sqm. These make Rajasthan, the most preferred destination for setting up of RE Projects. Rajasthan has a Solar Potential of 142 GW and a Wind Power Potential of 284 GWs.

To meet the global commitment, Government of India has set a national target of 500 GW Renewable Energy generations by the year 2030. This will reduce dependence on conventional sources of energy. Rajasthan has added a generation capacity of more than 23GW of Renewables in the last 2 decades which is the highest in India. Now, the State is exploring other options for development of non-fossil fuels.

Green Hydrogen is a non-fossil fuel which can fulfil the requirements of Industrial, Power, Transportation and Aviation sectors while reducing carbon emissions. It is also useful to produce Green Ammonia and could help in reducing our import bill. Ministry of Power, Government of India has also issued a National Green Hydrogen Policy in Feb, 2023".

In view of this, the State of Rajasthan would like to promote Green Hydrogen production through incentives and simplified procedures in the form of "**Rajasthan Green Hydrogen Policy, 2023**"

2. Guiding Principles

2.1. The **"Rajasthan Green Hydrogen Policy, 2023"** shall come into effect from the date of Notification and will remain in force till 31st March, 2030 or till it is superseded by another Policy whichever is earlier.

2.2. The Government may amend/modify/review this policy as and when required.

2.3. On the recommendation of SLEC, Interpretation of various provisions of this Policy lies with the Government.

2.4. The Nodal Agency for this Policy is RRECL which functions under the Energy Department, Government of Rajasthan.

2.5. If any dispute arises related to any provision, the decision of the Government shall be final and binding.

3. Objectives

3.1. To become the pioneer state for Green Hydrogen Production and its derivatives. To reduce the dependency on import of Ammonia and Fossil Fuels;

3.2. To develop an ecosystem for production of Green Hydrogen for Refineries, Fertilizers and other Industries requiring Hydrogen as an input;

3.3. To create an environment for Industry and Research Institutions to focus on cutting edge research and to make Rajasthan the preferred destination for green hydrogen;

3.4. To develop a green hydrogen manufacturing ecosystem (Electrolyser, compressor, storage and transport infrastructure etc.);

3.5. This policy will focus mainly on:

i. Promoting Generation of Hydrogen and its derivatives/by products through RE Power
ii. Development of Green Hydrogen Parks.
iii. Promote green tourism in the state by the use of green hydrogen-based mobility.
iv. Promotion of Green Hydrogen Fuel Cells for transportation. Explore and support distributed applications of green hydrogen across residential, commercial, industrial and mobility sectors
v. Promotion of Green Hydrogen equipment manufacturing industries.
vi. Promotion of research in cutting edge technology.
vii. Promotion of Green Hydrogen generation for storage and generation of RTC (round the clock) power.
viii. Support the development of pilots across the green hydrogen value chain.

4. Targets

i. Producing 2000 kilo Tonnes per Annum (kTPA) of green hydrogen by 2030.
ii. Commission at least one green hydrogen valley to cater to the demand from fertiliser plants and refineries within Rajasthan and in other States.
iii. Develop at least one Giga factory for electrolyser manufacturing. The state should also aim to export these domestically manufactured electrolysers across the globe.
iv. Cater to at least 20 per cent of green hydrogen exports from India either as fuel, chemicals derived from green hydrogen or technology products like electrolysers.
v. A minimum share of consumption will be met through green hydrogen by designated consumers in the State as per mandate prescribed in National Green Hydrogen Mission which shall be extended in phased manner.
vi. Blend up to 10 per cent green hydrogen (on a volume basis) in natural gas pipelines for gas produced within Rajasthan by 2030.

5. Green Hydrogen Projects

5.1. Eligibility of Developers for Green Hydrogen Projects

Developers, as defined below shall be covered under the provisions of this Policy:

Category 1: Develops Co-located Renewable Energy and Green hydrogen generation plant

Category 2: Develops Green Hydrogen Generation Plant and remotely located RE Plant.

Category 3: Develops Green Hydrogen Park/Hub/Cluster/Valley

5.2. **Green Hydrogen Generation Projects: -**

5.2.1. The State will promote Generation of Hydrogen and its derivatives/by products through Renewable Energy by setting up of Green Hydrogen generation plants and RE Plants in the State.

5.2.2. Green Hydrogen and its derivatives/by products can be generated through a Hydrogen Generation Plant by using Renewable Energy from a co-located Renewable Energy plant or from a remotely located Renewable Energy Plant within the State.

5.2.3. The remotely located Renewable Energy plant can be set up by the Green Hydrogen generator themselves within the State or can procure Renewable Energy from Third Party within the State.

5.2.4. Green Hydrogen Generators will be allowed to obtain renewable energy through Open Access from existing/new RE Projects as per relevant RERC Regulations and State Policies.

5.2.5. The State shall also promote Green Hydrogen Generation for power generation purposes. The power generation plant can supply assured power to the grid using green hydrogen as per the requirement of the grid.

5.2.6. The overall target of 2000 kTPA can be taken with following allowable capacities in various categories for Green Hydrogen Projects:

1. RE Power injection and withdrawal at CTU (PGCIL) Network within State (No upper Cap)
2. Co-located Green Hydrogen Project with RE Projects (Up to 700 kTPA)
3. Green Hydrogen Projects with Round the Clock RE Power supply (Up to 800 kTPA)
4. Green Hydrogen Project with normal RE Project at STU (RVPN) Network (Up to 500kTPA)

6. Parks/Hubs/Clusters/Valley

The Green Hydrogen Generation Park is a concentrated zone/hub for development of Green Hydrogen Generation Plant with/without co-located renewable energy generation plant which provides developers, a well demarcated area with proper civil and power system infra-structure where the risk of projects is minimized and a fast approval process is facilitated. The Green Hydrogen Park Developer creates supporting infrastructure and facilities including power evacuation, water arrangements, internal roads and administrative facilities

6.1. **Development of Green Hydrogen Generation Park**

(i) The State shall promote development of Green Hydrogen Generation Parks by Developers. The Park Developer will submit an application in the prescribed online format to RREC for development of Green Hydrogen Generation Park along with a non-refundable process fee @ Rs. 10,000/ MW + GST subject to a maximum of Rs 10 Lac +GST for each Park. Registration of park will be carried out by RREC within a period of 30 days from the submission of application, complete in all respects.

(ii) The Park Developer(s) shall be obliged to create common infrastructure

facilities for development of Green Hydrogen Generation Plants(s) viz creation of power evacuation system, development of roads, road lights, water supply systems etc.

(iii) The Park Developer will be allowed to acquire agricultural land from landowners (Khatedars) for developing Green Hydrogen Generation Park(s) in excess of the ceiling limits in accordance with the provisions of Rajasthan Imposition of Ceiling on Agriculture Holding Act, 1973.

(iv) Allotment of Government land to Park Developer(s) for development of Green Hydrogen Generation Park will be considered on the recommendation of RREC.

(v) The Park Developer(s) shall be responsible for registration of Green Hydrogen Plants within their park with RREC as per the provisions of "Rajasthan Green Hydrogen Policy, 2023".

(vi) The State will also develop a Green Hydrogen Valley/Cluster at suitable location in State for facilitating all infrastructures for Generation of Green Hydrogen and its derivatives without any upper cap of individual developer.

7. Manufacturing of Equipments:

The Government intends to promote manufacturing facilities for Green Hydrogen equipment's in Rajasthan that can help develop an ecosystem and support job creation in the State. The manufacturing of equipments for Generation of Green Hydrogen like Electrolyser and other equipments as notified in Rajasthan Investment Promotion Schemer (RIPS) from time to time will be treated under Thrust Sector.

8. Research

The State shall promote and facilitate Research and Development (R&D) of technologies related to generation of hydrogen, fuel cell technologies, and storage technologies.

To facilitate industries with a robust ecosystem for Green Hydrogen manufacturing and to provide a cost effective manufacturing environment, Research and Development (R&D) Centres with testing, skilling and incubation facilities shall be promoted.

9. Incentives/ facilities available to Green Hydrogen Generation projects:

Green Hydrogen Generation Plants, Parks and equipment manufacturing plants shall be treated as eligible industry under the schemes administered by the Industries Department and for incentives available to industrial units under Rajasthan Investment Promotion Scheme (RIPS) as amended from time to time.

The following Incentives and facilitations for green hydrogen initiatives in Rajasthan:

9.1. **Green Hydrogen Projects/Parks**

Benefits prescribed under Rajasthan Investment Promotion Scheme shall be applicable to developers covered by categories 1,2 & 3 as listed in Clause 5.1 of this policy as amended from time to time.

9.1.1. **Availability of Water:**

Water Resource Department will allocate required quantity of water from IGNP canal/the nearest available source for cleaning of solar panels and auxiliary consumption for Solar PV Power Plants and water requirement for

Green Hydrogen Generation Plants subject to the availability of water.

In case of use of Brine water/Treated waste water for generation of Green Hydrogen, water will be allocated on priority basis.

Developer will intimate estimated water requirement to RREC along with the proposed source of water. After assessment/scrutiny, the case of water requirement shall be forwarded to the Water Resource Department. The modifications(s) required, if any, in the existing water resource system will be done by the Water Resources Department at the cost of the Developer/Power Producer.

9.1.2. **Special Incentives**

The following incentives/facilities will be available on individual Green Hydrogen Plant capacity of maximum 50 kTPA, as covered by Categories 1 & 2 as listed in Clause 5.1 of the policy for the first 500 kTPA (Kilo tons per annum with maximum 12,500 MW RE capacity @ 25 MW per kTPA) capacity established within the state or plants established up to 31st December, 2026 within the State, whichever is earlier. In case, after allocation of 500 kTPA capacity among developers @ 50kTPA, if it is not exhaust completely, the spare capacity will be allocated by SLEC to the developer beyond 50kTPA individually.

The date of commissioning of the plant shall be treated as the date of established for the above purpose.

These benefits will be applicable for 10 years from the date of commissioning of the projects:

i. 50% waiver of Intra-state transmission and wheeling charges, Electricity duty for the power produced from solar/ wind plants (with/without storage) to be established for the aforesaid Green Hydrogen plants. Transmission losses and wheeling losses shall be applicable as determined by the State Regulatory commission.

ii. The additional surcharge and cross subsidy charges shall be waived on the energy drawn from wind/ solar energy plant (with and without storage facility) established as captive plant or from plant owned by their subsidiary/ other company for use in green hydrogen production plant within state.

iii. The facilities/Incentives, if not modified/changed in above, as available under prevailing state's Solar/Wind/Hybrid Energy Policy as amended from time to time shall be available to the wind/solar generation plant (with and without storage facility) to be established for green hydrogen production plant.

iv. The aforesaid benefits will be limited to the Green Hydrogen quantum in case of Green Hydrogen is generated with other by products collectively.

9.1.3. **Banking:**

Banking of renewable power generated from solar/wind energy plant (with and without storage facility) established for green hydrogen generation plant shall be up to1/3rd of the energy injected during 15 minute time block basis at the consumption end. The energy shall be allowed to be banked for a period of 30 days.

Banking charges shall be the cost differential between the average tariff of

renewable energy (Solar & Wind) discovered through competitive bidding for procurement by the distribution licensee during the previous year and the average market clearing price of the energy procured in Day Ahead Market (DAM) for distribution licensees during the month in which the renewable energy has been banked.

In case, there is no price discovery for procurement of RE (Solar & Wind) power in the previous year then the latest available average tariff of renewable energy (Solar & Wind) discovered through competitive bidding for procurement by the distribution licensee shall be considered.

The losses of power will also be adjusted during banking of the RE as per regulatory provisions.

The above provision will be applicable for the duration of 25 years from the date of commissioning of a Green Hydrogen Generation Plant setup under the provisions of this policy.

9.1.4. **RE Plant Size**

The peak power generation capacity of wind/solar/Hybrid plant (with or without storage facility) shall be allowed up to 2.5 times of the contracted capacity of power connection for the associated green hydrogen plant.

9.1.5. **Incentives for Green Hydrogen generation through Brine Water/ Treated waste water**

9.1.6. Green Hydrogen Generation Plant through Brine water**/Treated waste water** with co-located RE sources Government land will be provided on priority basis.

9.2. **Manufacturing of Equipments:**

The benefits shall apply to production of equipment's used in the production of Hydrogen. The equipments covered under this clause shall be notified by the Energy department from time to time.

i. Benefits prescribed in Rajasthan Investment Promotion scheme (RIPS) as amended from time to time.

ii. Any other concession besides above as customized package under the RIPS.

9.3. **Research& Development**

The State will provide a onetime grant/State contribution up to 30% of the cost incurred in the establishment of R&D centres subject to a maximum of INR 5 Crores to Research Institutes, Universities etc.

10. Role of RREC:

RREC will act as a Nodal Agency for:

i. Registration of Green Hydrogen Generation projects;
ii. Approval of Hydrogen plant along with RE Projects;
iii. Development of Green Hydrogen Parks;
iv. Facilitating allotment of Government land;
v. Facilitating water allocation for Green Hydrogen Generation Plant/for auxiliary consumption and cleaning of Solar PV Plants;
vi. Facilitating approval of power evacuation plan and allocation of bays etc;
vii. Facilitating execution of PPA/WBA with Discom(s) of Rajasthan/RVPN/NVVN/SECI/RUVNL (as may be applicable);

viii. Coordination with MNRE/NIWE/Industries department/Water Resources Department/ Discoms of Rajasthan/RVPN/Central Agency/Other Relevant Agency.

11. Registration of Green Hydrogen Generation Projects:

11.1. All projects as covered by Clause 5.1 of the policy installed in the State shall be required to be registered with RREC.

11.2. The Developer will submit an online application for registration to RREC in the prescribed format with requisite documents and details regarding capacity of Hydrogen Plant and RE Plant Capacity.

11.3. Each Developer/ Power Producer will deposit following non-refundable registration charge for RE Capacity with RREC (For 1 kTPA Green Hydrogen Plant, maximum 25 MW RE capacity will be considered).

S.No.	Project Capacity	Rate
1	For Project ≤100 MW capacity	Rs 30,000/- per MW
2	For Projects >100MWand≤500MW capacity	30 Lac +Rs 2.5 lac per 100 MW beyond 100 MW or part thereof
3	For Projects > 500 MW and ≤1000MW capacity	40 Lac +Rs.2 lac per 100 MW beyond 500 MW or part thereof
4	For Projects >1000 MW capacity	50 Lac+Rs.1 lac per 100 MW beyond 1000 MW or part thereof subject to maximum Rs. 80Lakh per project

11.4. The GST and other charges, as applicable, shall be payable in addition to the registration charge. Registration will not confer any right on the Developer and will not create any obligation on the part of RREC.

11.5. Installation of Green Hydrogen Generation plant not registered with RREC and without prior approval of the competent authority as per policy provisions will be liable to be disconnected from the Grid. The developer will be required to submit a certificate of registration of project with RREC to the Sub-Registrar or any other officer authorised by the Government for the registration of sale/lease deed of the land.

However, Registration of projects done under the aegis of Solar and Wind & Hybrid Policies, 2019 prior to the commencement of this policy shall be deemed to be valid and operative.

11.6. In case existing solar/wind/Hybrid Project is being used exclusively for Hydrogen Generation, the existing registration number in the category will be assigned to Green Hydrogen Project. In such case, developer shall deposit difference of registration fees in RREC as mentioned at clause 11.3 and already paid registration charges, if any.

11.7. Developers can transfer their registered capacity or part thereof, to their 'holding', 'subsidiary', 'fellow subsidiary' or 'ultimate holding' company with the prior approval of RREC on payment of an amount equal to 50% of the

Registration Charges. However, the provisions of clause 11.5 & 11.6 shall be applicable to the transferee.

11.8. Developers can transfer the registered capacity or part thereof, from one registration to another registration, with the prior approval of RREC on payment of an amount equal of 25% of Registration Charges.

11.9. Developers can transfer their registered capacity or part thereof, to other Companies with the prior approval of RREC on payment of an amount equal to 60% of the Registration Charges.

12. Approval Mechanism(See flow chart in Annexure-2)

12.1. State **Level Empowered Committee (SLEC):**

i) Chief Secretary, GoR (Chairman).
ii) ACS/Principal Secretary/Secretary, Industries, GoR.
iii) ACS/Principal Secretary/Secretary, Energy, GoR.
iv) ACS/Principal Secretary/ Secretary, Revenue, GoR.
v) ACS/Principal Secretary/Secretary, Water Resources Department, GoR.
vi) CMD, Rajasthan Rajya Vidyut Prasaran Nigam Ltd.
vii) Chairman Discoms.
viii) Chairman, Rajasthan Renewable Energy Corporation Ltd.
ix) MD, Rajasthan Renewable Energy Corporation Ltd., (Member- Secretary).

12.2. **In-principle clearance of Green Hydrogen Generation Projects:**

In-Principle Clearance of Green Hydrogen Generation Plant along with Renewable Power Projects

In principle clearance of projects will be granted by the State Level Empowered Committee after evaluating/examining the project proposals on the following criteria:

- Detailed Project Report of Hydrogen Plant and RE Plant.
- Financial Capability of the Power Producer (Annexure-5).
- Availability of land for RE Plants & Hydrogen Plant.
- Availability of water for Green Hydrogen Generation Plant.
- Availability of Power Evacuation System for proposed RE project.
- Documentary Evidence of Power Purchase Agreement or an undertaking in case of purchase of RE powerfrom3rd Party.

12.3. The Developer shall obtain requisite clearance/ approvals from Industries department, Water Resources Department and other department/agencies required for setting up of Hydrogen Generation Plant as per their relevant rules/Regulations/Policies.

12.4. The Developer shall ensure compliance of safety and operational norms/Standards as prescribed by competitive authority of State Government/Central Government.

12.5. **Timeline for in-principle clearance:**

Developers to whom Government land is allotted will have to apply for in-principle clearance of the project within 3 months from the date of signing of the lease Deed of the allotted Government land. If Developers failt o apply for in-principle clearance within the time prescribed, RREC will recommend for cancellation of allotment of Government land with the approval of SLEC.

13. Security Deposits (see Annexure-3):

13.1. **For projects under Clause 12.2:**

After In-principle clearance of the projects under clause 12.2 by the State Level Empowered Committee (SLEC), the Developer will be required to deposit a security amount specified at Annexure-3. Provided that in case the Green Hydrogen Developer purchases RE power from 3rd Party, no security will be required to be submitted. In case developer have deposited Security amount for allotment of Government Land, no security will be required to be deposited

In case, the Developer fails to deposit the security money within the stipulated time as above, then the In-principle clearance shall be deemed to be cancelled without any notice.

13.2. The Developer, who has submitted the project security within the prescribed time period, shall be required to apply for final approval within 6 months from the date of issue of In-principle clearance, failing which, in-principle clearance shall be deemed to be cancelled without any notice.

13.3. In case the Developer wants to withdraw his project within 6 months of depositing the security deposit, or In-principle clearance has been cancelled under deemed provision of Clause 13.2, then 25% Security amount will be forfeited and balance 75% amount of the Security will be refunded to the Developer/Power Producer on his written request. This clause will be applicable only for new projects registered under this policy.

13.4. The security amount deposited by the Developer shall be non-convertible and non-transferable.

13.5. The security deposit shall be refunded to the Developer in proportion to the capacity commissioned after commissioning of such capacity. The remaining amount shall be forfeited after the expiry of the scheduled commissioning period including extension as per Clause 15.

14. Final Approval:

All In-principle cleared projects will be conveyed final approval by RREC on submission of Security Deposit under clause 13.

15. Time frame for completion of Green Hydrogen Generation Project:

15.1. The time schedule for completion of projects under Clause 13.2 will be as per Table-5 subject to force majeure conditions provided that extension in time schedule may be granted by the RREC on case to case basis after depositing penalty amount as mentioned in Annexure-3.

15.2. SLEC may consider extension beyond 15 months where there is a reasonable certainty of commissioning of the project. In such cases, extended completion schedule and penalties shall be decided by SLEC on case-to-case basis.

16. Power Purchase Agreement (PPA)

16.1. The developer as defined in Clause 5.1 of this Policy, will execute Power Purchase Agreement with RE Developer/ Power Producer in case of purchase of RE power at mutually agreed terms and conditions.

16.2. The Green Hydrogen Generator may execute PPA with Discoms for sale of firm power to Discoms, in case hydrogen is being used to generate power and to

supply infirm power, as per the requirement of Discoms. The Discoms will select the Green Hydrogen Generator through a transparent mechanism including competitive bidding process.

17. Wheeling and Banking Agreement (WBA)

Green Hydrogen Developer/Power Producer shall execute a Wheeling and Banking Agreement (WBA) with DISCOM(s). In case, the transmission system of RVPN is also used then power producer will execute a separate Transmission Agreement with RVPN.

18. Assignment of PPA/WBA:

18.1. PPA/WBA will be allowed to be assigned in parts or in full to other parties under the following conditions:

i. After completion of the project and its connectivity to the grid;
ii. Consent of RREC & RVPN/Discom(s) and related parties;
iii. On payment of Rs. 2.00 lac per application to RREC (GST will be payable as applicable).

18.2. In case the project is financed by any Financial Institute/Lender, name of the Financial Institute/Lender may be included in PPA/WBA on request of Developer/ Power Producer.

19. Rajasthan Renewable Energy Development Fund (RREDF)/Facilitation Charges:

In case the Developer purchases Solar/Hybrid Power for generation of Green Hydrogen from parties other than Discoms, then Solar/Hybrid Power Generator shall contribute to Rajasthan Renewable Energy Development Fund (RREDF) for Solar Components as per Rajasthan Solar Energy Policy, 2019 and Rajasthan Wind and Hybrid Energy Policy, 2019 as amended from time to time or such charges as per RE Policies prevailing at the relevant time.

20. Land:

20.1. **Allotment of Government Land to Green Hydrogen Generation Plant:**

20.1.1. Government land will be allotted for setting up of Green. Hydrogen Generation Plant in RIICO Industrial area or Revenue land as per Land allotment rules of RIICO and Revenue Department respectively.

20.1.2. Land will be allotted by RIICO or Revenue Department to the developers on priority within 6 months from the date of recommendation by SLEC.

20.2. **Allotment of Government Land to Renewable Energy Plant:**

20.2.1. The Government land will be allotted to Developers for setting up of Renewable Energy Plant as per the provisions of Rajasthan Land Revenue (Allotment of land for setting up of Power Plant based on Renewable Energy Sources) Rules, 2007, as amended from time to time.

20.2.2. RREC will recommend, on a case to case basis, to the concerned District Collector for allotment of Government land only on submission of cash security deposit by demand draft/RTGS in favour of RREC, Jaipur.

20.2.3. The security deposit will be refunded to the developer in proportion to the commissioned capacity of the project on written request of the applicant. The security deposit shall be forfeited in case the allotted land is not put to use within the specified period as per allotment rules. If land is not allotted, security deposit will be refunded, on the written request of the applicant.

20.2.4. For setting up Renewable Power Plant based on a different technology, maximum land area which can be allotted to the Power Developer/Producer shall be as per Annexure-4

20.2.5. For RE Power projects with storage systems, additional land will be allotted as per the rules prescribed by the Revenue Department, Government of Rajasthan (GoR).

20.3. **Project on Private Land:**

The State shall promote setting up of Green Hydrogen Plant and/ or RE Power Project / RE Farm on private land. Developers shall be permitted to set-up Project/Plant on private agriculture land without the requirement of land conversion in accordance with the provisions of Rajasthan Tenancy Act 1955 and Rajasthan Land Revenue Act 1956 and the rules made there under.

Developers shall also be allowed to acquire/hold private land from the title holders (Khatedar) for setting up of Solar Power Plant in excess of ceiling limit in accordance with the provisions of Ceiling Act, 1973.

21. Power Evacuation, Grid Interfacing, Forecasting & Scheduling and dispatch of RE Power:

Power Evacuation, Grid Interfacing, Forecasting & Scheduling and dispatch of RE Power for Green Hydrogen Projects will be governed as per the provisions of Rajasthan Solar Energy Policy, 2019, Rajasthan Wind and Hybrid Energy Policy, 2019 and relevant Regulations of RERC.

22. Savings

The RE Plants already approved and/or commissioned before commencement of this Policy will continue to be governed by the Policy/Regulations prevailing at the relevant time.

23. Regulation

The provisions of this policy shall be the guiding principle for Rajasthan Electricity Regulatory Commission.

24. Power to remove difficulties:

SLEC is authorized for necessary clarifications and amendments of this Policy as and when required. If any doubt, dispute, difference or issue arises in regard to interpretation/implementation of this Policy, State Level Empowered Committee may take decision in such matters, not inconsistent with the provisions of the Policy, as may appear to be necessary and expedient for removing the difficulties either on its own motion or on the written representation from the stakeholders. In order to implement this Policy and to remove difficulties being faced by Stakeholder, the Energy Department in consultation with other departments shall issue necessary guideline/schemes from time to time.

By the Order of Governor,

(R. K. Sharma)
Deputy Secretary to the Government

Copy to the following for information and necessary action:-

1. Secretary, Ministry of Power, Government of India, Shram Shakti Bhawan, Rafi Marg, New Delhi.

2. Secretary, Ministry of New & Renewable Energy, Government of India, CGO Complex, Lodhi Road, New Delhi.
3. Chairman and Managing Director, Rajasthan Urja Vikas Nigam Ltd., Jaipur
4. Chairman, Discoms of Rajasthan, Vidyut Bhawan, Jaipur.
5. Chairman & Managing Director, Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur.
6. Chairman, Rajasthan Renewable Energy Corporation Ltd., Jaipur.
7. Managing Director, Rajasthan Renewable Energy Corporation Ltd., Jaipur.
8. Managing Director, Jaipur/Ajmer/Jodhpur Vidyut Vitaran Nigam Limited., Jaipur/Ajmer/Jodhpur.
9. Director, Printing & Stationary, Government of Rajasthan with the request to get it published in extra ordinary gazette of Rajasthan.
10. Guard File.

Deputy Secretary to the Government

Definitions:

In this Policy, unless the context otherwise requires:-

1. "**Act**" means Electricity Act 2003, including amendments thereto;
2. **"ABT"** means Availability Based Tariff;
3. **"CAPEX Mode"** means the mode under which entire investment is to be incurred by the power consumer for installation of solar power plant;
4. **"CEA"** means Central Electricity Authority;
5. **"Ceiling Act, 1973"** means the Rajasthan Imposition of Ceiling on Agricultural Holdings Act, 1973;
6. **"Central Agency"** means National Load Dispatch Centre (NLDC) as designated by the Central Electricity Regulatory Commission vide Order dated 29.01.2010 for the purposes of the REC Regulations;
7. **"CERC"** means the Central Electricity Regulatory Commission, constituted under sub-section (1) of Section 76 of the Electricity Act, 2003,
8. "**CERC REC Regulations**" means Central Electricity Regulatory Commission (Terms & Condition for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 notified by CERC vide Notification dated 14.01.2010 as amended from time to time;
9. **"Contract Demand"** means regular contract demand plus standby contract demand, if any, of the Consumer with Discom;
10. "**COD**" means Commercial Operation Date i.e. the date when the Power Plant gets commissioned as per rules/provisions;
11. "**Collector**" means Collector of a district as defined in the Rajasthan Land Revenue Act and includes every officer authorized to discharge the duties of Collector under the Act/Rules/Executive Orders of the Government of Rajasthan;
12. **"CPP" or "Captive Power Plant"** means Captive Power Plant as defined in Electricity Act, 2003 and Electricity Rules, 2005;
13. **"CSP"** means Concentrated Solar Power;
14. "**DISCOM of Rajasthan**" means a distribution licensee of the State, such as Jaipur Discom, Jodhpur Discom and Ajmer Discom;
15. "**District Level Committee**" or "**DLC**" means the Committee constituted by the State Government for a District from time to time under Clause (b) of sub-rule (I) of rule 2 of the Rajasthan Stamps Rules, 2004;
16. **"Green Hydrogen Developer"** means person who develops Green Hydrogen Generation Plant through RE Power.
17. **"Energy Storage Systems"** or **"ESS"** shall mean the system(s) installed in addition to the solar PV and/or wind power capacity as part of the project, that can capture energy produced at one time for use at a later time;
18. "**Financial year**" means a period commencing on 1st April of a calendar year and ending on 31st March of the subsequent calendar year;
19. "**Force Majeure**" means any event or circumstance which is beyond the reasonable direct or indirect control and without the fault or negligence of the

Solar Power Producer or Developer and which results in Solar Power Producer's/Developer's inability, notwithstanding its reasonable best efforts, to perform its obligations in whole or in part and may include rebellion, mutiny, civil unrest, riot, strike, fire, explosion, flood, cyclone, lightning, earthquake, act of foreign enemy, war or other forces, theft, burglary, ionizing radiation or contamination, Government action, inaction or restrictions, accidents or an act of God or other similar causes;

20. "**Generating Plant Sub-station/Pooling Sub-Station**" means Sub-station developed by the Solar Power Producer/Developer for interfacing with the receiving sub-station;
21. **"Government"** or **"State"** means Government of Rajasthan or the State of Rajasthan respectively;
22. **"Grid Code"** means Rajasthan Electricity Regulatory Commission (Rajasthan Electricity Grid Code) Regulations, 2008 / Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 as amended from time to time;
23. **"Green Hydrogen Project/Plant" means** the plants generating Green Hydrogen as a main product by electrolysis of water using Renewable Energy Sources or
    as a by product through any chemical process using Renewable Energy or
    as defined by Ministry of New & Renewable Energy, GoI;
24. **"GST"** means Goods and Services Tax;
25. **Green Hydrogen means hydrogen prepared using renewable energy.**
26. **Green Hydrogen Developer means an entity which is involved in the development of Green Hydrogen Parks or Green Hydrogen generating plants.**
27. **Green Hydrogen Park developer means an entity which is involved in the development of Green Hydrogen Parks, and related infrastructure.**
28. **"Green Hydrogen Generation Plant"** means the plants generating Hydrogen through electrolysis of water/brine water/waste treatable water or from biomass through thermo-chemical and biochemical routes or through any suitable technology as defined by GoI by using renewable including banking of renewable energy.
29. "**Interconnection Line**" means Transmission/Distribution Line connecting Generating Plant Sub-station/Pooling Sub-station of Developer /Power Producer to Receiving Sub-station of ISTS/RVPN/Discoms of Rajasthan;
30. **"Inter-connection Point"** shall mean a point at Extra High Voltage (EHV) substation of Transmission Licensee or High Voltage (HV) substation of distribution licensee, as the case may be, where the electricity produced from the RE generating station is injected into the Grid;
31. "**IREDA**" means Indian Renewable Energy Development Agency;
32. **"ISTS"** means Inter State Transmission System;
33. "**Licensee**" includes a person deemed to be a licensee under Section 14 of the Electricity Act,2003;
34. "**MNRE**" means Ministry of New and Renewable Energy of Central Government,

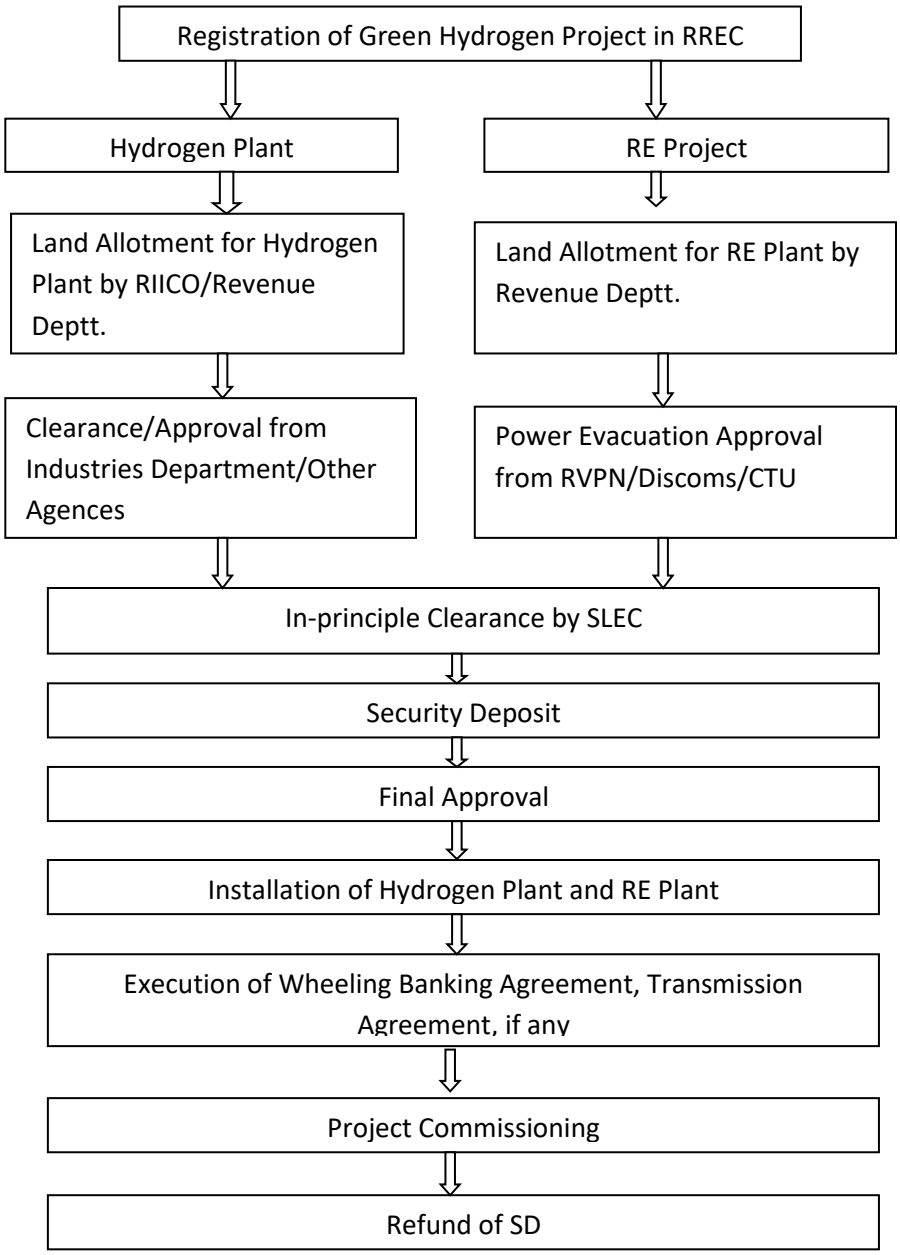
responsible to develop and deploy new and renewable energy for supplementary energy requirement of the country;

35. **"National Solar Mission or Solar Mission"** means Jawaharlal Nehru National Solar Mission 2009 launched by Government of India;
36. **"Nodal Agency"** means Rajasthan Renewable Energy Corporation Limited (RREC);
37. **"NVVN"** means NTPC Vidyut Vyapar Nigam, a wholly owned subsidiary company of NTPC;
38. **"Person"** means an individual or a firm / company registered under the Companies Act 1956/2013;
39. "**Pooled Cost of Power Purchase**" means the weighted average price at which the distribution licensee has purchased the electricity including the cost of self-generation, if any, in the previous year from all the energy suppliers excluding short-term power purchases and those based on renewable energy;
40. "**PPA**" means Power Purchase Agreement;
41. "**Pooling station**" means sub-station developed by the Developer for interface with the Receiving Sub-station;
42. **"Power Producer"** means person who set up RE Plant and generate electricity through RE Power and supply into grid.
43. **"Project Capacity"** shall mean the total generation capacity of Green Hydrogen Project in KTPA and/or equivalent Alternating Current (AC) capacity of RE Plant capacity in MW required for Hydrogen generation plant per KTPA at the delivery points subject to maximum 25 MW per KTPA;
44. "**Receiving Sub-station**" means EHV/HV Sub-Station developed by RVPN/DISCOM of Rajasthan/PGCIL for evacuation of power generated from Renewable Energy Sources;
45. **"Renewable Energy Certificate"** or **"REC"** means the Renewable Energy (Solar) Certificate issued by the Central Agency in accordance with the procedure prescribed by it and under the provisions specified in this regard by the Central Electricity Regulatory Commission (Terms & Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010;
46. **"Renewable Energy Plants/RE Plants"** means the power plants other than the conventional power plants generating grid quality electricity from Renewable Energy Sources;
47. **"Renewable Energy Sources"** means and includes non-conventional renewable generating sources as approved by the Ministry of New & Renewable Energy, Government of India;
48. **"RERC"/"Commission"** means Rajasthan Electricity Regulatory Commission;
49. **"RIICO"** means Rajasthan State Industrial Development and Investment Corporation Limited
50. **"RPO"** means Renewable Purchase Obligation;
51. "**RREC/RRECL**" means Rajasthan Renewable Energy Corporation Ltd;
52. **"RTC power"** means Round the Clock power
53. **"RVPN**" means the Rajasthan Rajya Vidyut Prasaran Nigam Limited;

54. **“RVUN**" means the Rajasthan Rajya Vidyut Utpadan Nigam Limited;
55. **“RUVN”/RUVNL”** means the Rajasthan Urja Vikas Nigam Limited;
56. **“SECI”** means the Solar Energy Corporation of India;
57. **“SLEC”** means State Level Empowered Committee constituted under the provisions of this Policy;
58. **“SLSC”** means State Level Screening Committee constituted under the provisions of this Policy;
59. **“Solar Farm/Park”** means a group of solar power plants in the same location used for the generation of electric power;
60. **“Solar Power Park Developer”** means a person who develops and / or maintains solar parks and the related common infrastructure facilities;
61. "**Solar Power Producer/Developer**" means a person that makes an investment for setting up of solar power project and generating electricity from solar energy;
62. **“Solar Plant/Solar Power Plant”** means a power plant or system utilizing solar energy through solar photo-voltaic or concentrated solar thermal devices for generating electricity;
63. **“Solar PV Power Plant”** means the Solar Photo Voltaic (SPV) Power Plant that uses sunlight for direct conversion into electricity through Photo Voltaic technology;
64. **“Scheduled Commissioning Period”** means the scheduled period of the completion of the project counted from the date of “final approval” from SLSC/SLEC to the date of “COD”;
65. **“State Agency”** means Rajasthan Renewable Energy Corporation Ltd. or any other agency designated by the Rajasthan Electricity Regulatory Commission for accreditation and recommending the Renewable Energy Project for registration with Central Agency in accordance with the procedure prescribed by it and under the provisions specified in the CERC REC Regulations;
66. **“State Load Dispatch Centre”** or "**SLDC**" means the Centre established by the State Government for the purposes of exercising the powers and discharging the functions under Section 31&32 of the Electricity Act, 2003;
67. **“Tariff”** means the schedule of charges for generation, transmission, wheeling and supply of electricity together with terms and conditions for application thereof;
68. "**WBA**" means Wheeling and Banking Agreement.
69. **“Water”** means available water in any form pure water/demineralised water/ brine water/Waste treatable water suitable for Green Hydrogen generation.

The terms not defined above will have their usual meanings.

Flow Chart of Project establishment



Annexure-3

Various Charges

Table-1

1. Registration Charges:

1	Project Registration	**S.No.**	**Project Capacity**	**Rate**
		1	For Project ≤100 MW capacity	Rs 30,000/- per MW
		2	For Projects >100MWand≤500MW capacity	30 Lac +Rs 2.5 lac per 100 MW beyond 100 MW or part thereof
		3	For Projects > 500 MW and ≤1000MW capacity	40 Lac +Rs.2 lac per 100 MW beyond 500 MW or part thereof
		4	For Projects >1000 MW capacity	50 Lac+Rs.1 lac per 100 MW beyond 1000 MW or part thereof subject to maximum Rs. 80 Lakh per project
2.	Park Registration	Rs. 10,000 per MW RE capacity plus GST subject to Maximum Rs. 10 Lac per park		

2. Security Deposit –

If Green Hydrogen Developer sets up own RE plant for Green Hydrogen Generation

Security Deposit: **Table-2**

Project Capacity	< 2000 MW	≥ 2000 MW,
Solar	Rs. 1 Lac/MW by demand draft/RTGS in favour of RREC.	Rs. 1 Lac/MW up to 2000 MW by DD/RTGS and for exceeding capacity, Rs. 1 Lac/MW in form of Bank Guarantee.
Hybrid	Rs. 1 Lac/MW by demand draft/RTGS in favour of RREC.	Rs. 1 Lac/MW up to 2000 MW by DD/RTGS and for exceeding capacity, Rs. 1 Lac/MW in form of Bank Guarantee.
Wind	Rs. 1 Lac/MW by demand draft/RTGS in favour of RREC.	Rs. 1 Lac/MW up to 2000 MW by DD/RTGS and for exceeding capacity, Rs. 1 Lac/MW in form of

		Bank Guarantee.

i. In case, Green Hydrogen Developer procures RE Power from 3rd Party- Security Deposit-NIL

Table-3

3. Extension fees:

a)	For delay up to 1 month	Rs 25,000 per MW RE Capacity plus GST
b)	For delay up to 3 months	Rs 50,000 per MW RE Capacity plus GST
c)	For delay up to 6 months	Rs 1,00,000 per MW RE Capacity plus GST
d)	For delay up to 9 months	Rs 1,50, 000 per MW RE Capacity plus GST
e)	For delay up to 15 months	Rs 2,00,000 per MW plus GST

Annexure-4

Land requirement and Extension in Time lines

Table-4

1- Maximum Land area allotable to the RE Projects

S. No.	Technology	Maximum land area for Solar Plant	Maximum land area for Hybrid Plant
i	SPV on Crystalline Technology.	2.0Hect./MW	3.0Hect./MW
ii	SPV on Crystalline Technology with tracker.	3.0 Hect./MW	3.0 Hect./MW
iii	SPV on Thin Film/Amorphous Technology with or without tracker.	3.5 Hect./MW	3.5 Hect./MW
iv	Solar Thermal (CSP)- Parabolic Trough / Tower/Other Technology with and without storage	a) Up to PLF of 21%: 3.5 Hect./MW b) For every 1% increase in PLF, 0.15 Hect./MW additional land will be allotted.	-
v	**Maximum land area for Wind Plant**	3 Hect/MW	

Table-5

2- Project Completion Time schedule

Type of RE Projects/ Hydrogen	Completion Time schedule
Up to 25MW RE capacity and/or 1 kTPA Hydrogen Plant	Within 15 months from the date of final approval
More than 25MW and up to 100 MW RE capacity and/or >1 kTPA to 4 KTPA Hydrogen Plant	Within 18 months from the date of final approval
More than 100 MW and up to 200 MW RE capacity and/or >4 KTPA to 8 kTPA Hydrogen Plant	Within 24 months from the date of final approval
More than 200 MW RE capacity and/or >4 KTPA to 8 kTPA Hydrogen Plant	Within 36 months from the date of final approval

Annexure-5

Net Worth Criteria

The Developer/Power Producer desirous to set up Green Hydrogen Project along with RE Power Plant in State of Rajasthan must fulfil the following minimum financial criteria.

A - Qualification Criteria for RE Projects:

Net Worth

The "Net Worth" of the company should be equal to or greater than the value calculated at the rate of Rs 1 Crore or equivalent US$ per MW of the project capacity. The computation of Net Worth shall be based on unconsolidated audited/unaudited accounts of the company. For the purpose of the computation of net worth, the best year in the last four years including current running year shall be considered. The Company, would thus be required, to submit annual audited accounts for the last three financial years and for part of the current running year (Un-Audited), while indicating the year, which should be considered for evaluation, along with a certificate from the Chartered Accountant to demonstrate the fulfilment of the criteria.

For companies, which are newly incorporated, the Net Worth criteria should be met seven days prior to the date of submission of application by the Project Developer. To demonstrate fulfilment of the criteria, the Project Developer shall submit a certificate from a Chartered Accountant certifying the Net Worth on the date seven days prior to submission of application. Further, the Project Developer shall submit the un-audited financial statements of the company for the date on which the Certificate of Chartered Accountant has been obtained.

{Note: For the Qualification Requirements, if data is provided by the Project Developer in foreign currency, equivalent rupees of Net Worth will be calculated using bills selling exchange rates (card rate) USD/INR of State Bank of India prevailing on the date of closing of the accounts for the respective financial year as certified by the Project Developer's banker.

For currency other than USD, Project Developers shall convert such currency into USD as per the exchange rates certified by their banker prevailing on the relevant date and used for such conversion.}

Net Worth calculation for an individual/partnership firm

Net-Worth = Proprietors/Partner's Capital reflecting in the Audited Balance Sheet

Add: Free Reserves (Including the Credit balance of Reserve and Surplus appearing in the Balance Sheet)
Subtract: Intangible Assets
Subtract: Miscellaneous Expenditures to the extent not written off and carry forward losses.

Net Worth calculation for a Company

Net-Worth = Paid up Share capital which includes

1. Paid up Equity share capital and
2. Fully, compulsorily and mandatorily convertible Preference Shares and
3. Fully, compulsorily and mandatorily convertible Debentures)

Add: Free Reserves
(Including share premium provided it is realized in Cash or Cash equivalents.)

Subtract: Revaluation Reserves
Subtract: Intangible Assets
Subtract: Miscellaneous Expenditures to the extent not written off and carry forward losses.

For the purposes of meeting financial requirements only unconsolidated audited annual accounts shall be used. However, audited consolidated annual accounts of the Project Developer may be used for the purpose of financial requirements provided the Project Developer has at least twenty six percent (26%) equity in each company whose accounts are merged in the audited consolidated account and provided further that the financial capability of such companies (of which accounts are being merged in the consolidated accounts) shall not be considered beyond the equity participation of Project Developer.

In case of a Consortium the financial requirement to be met by each Member of the Consortium shall be computed in proportion to the equity commitment made by each of them in the Project Company. Any consortium, if selected shall incorporate a Project Company with equity participation by the Members in line with consortium agreement before signing the PPA/WBA/Wheeling Agreement. The Project Developer may seek qualification on the basis of financial capability of its Parent Company.

In case of land/any other asset, only the book value will be considered. The value of land/any other assets will not be re-valued for calculating net worth. Any reserve created due to this shall not be counted for calculating Net worth.

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