

Renewable Energy Certificates

(REC)

Paving way for green economy



What is Renewable Energy Certificate (REC)?

Renewable Energy Certificates (RECs) represent the attributes of electricity generated from renewable energy sources. These attributes are unbundled from the physical electricity and the two products—the attributes embodied in the certificates and the commodity electricity—may be sold or traded separately. In other words, one REC represents that 1MWh of energy is generated from renewable sources. RECs are expected to become the currency of renewable energy markets because of their flexibility and the fact that they are not subject to the geographic and physical limitations of commodity electricity. RECs can be used by the obligated entities to demonstrate compliance with regulatory requirements, such as Renewable Purchase Obligations. There are two Categories of Certificates a) Solar Certificates & b) Non-Solar Certificates.



1. Procedure for Application of Issuance of Renewable Energy Certificates



Step 1. Accreditation

Through this process State Nodal Agency (SNA) authorizes or endorses the RE Generator and recommends it for registration.

- Eligible Generator can get accredited not before 6 months prior to the proposed date of commissioning.
- Accreditation Certificate valid for 5 years from the date of accreditation.
- Separate applications for separate RE generation projects
- Minimum capacity of RE generation project to be 250 kW.

Step 2. Registration

Through this process, NLDC (Central Agency) registers Generator as 'Eligible Entity' for its RE Generation Project.

- Eligible Generator can get registered not before 3 months prior to the proposed date of commissioning.
- Registration can only be done after receipt of the 'Certificate of Accreditation' for the RE Generation Project from the concerned State Agency.
- Registration is valid for 5 years from the date of Registration.

Step 3. Issuance of REC

- The metered electricity is recorded through energy accounting by SLDC.
- Eligible RE Generator to apply to NLDC to issue the RE certificates equivalent to the amount of electricity injected into the grid as certified by the SLDC. The application to be filed within three months from the date of renewable energy generated.
- Application can be made on a fortnightly basis, i.e., on the 1st day of the month or on 15th day of the month.
- NLDC to issue RECs to Eligible RE Generator within 15 days as per SLDC and State Agency's generation report.
- RECs to be sold within 365 days of issuance or else they will lapse.

Step 4. REC Trading at Exchange Platform

Once the RECs are issued to the RE Generator (Eligible Entity), sale/purchase of RECs amongst Eligible RE Generators and Obligated entities to be undertaken only through Power Exchanges.

- Trading through Closed double-sided auction on the last Wednesday of every month.
- Call of bids from 13:00 Hrs to 15:00 Hrs on the auction day (T-day).
- Exchanges to intimate details of maximum sale bids placed by each Eligible RE Generator to NLDC by 15:30 Hrs.
- NLDC to check availability of RECs with the eligible entity by 16:00 Hrs.
- Post-confirmation from NLDC, Exchanges to determine Market Clearing Price and Market Clearing Volume and send the details final cleared trades to NLDC for extinguishing of RECs sold by 17:00 Hrs.

Step 5. Surrender/Redeeming of RECs

The Obligated Entities purchase RECs through Exchanges and surrender to SERC or other agency as specified by SERCs so as to meet their RPO. NLDC (REC Registry) to maintain record of RECs sold and purchased.

Step 6. Compliance Reporting

Compliance Auditors to monitor and report the compliance of REC Regulations.

2. Trading at IEX

Who is obligated entity to purchase RECs?

- a. Distribution Licensees - Captive Consumers - Open Access Consumers

Who is Eligible entity to sell RECs?

Renewable Energy Generators like Wind, Solar, Small Hydro, Co-generation, Municipal wastes, Biomass/ Bio-fuel, Other MNRE approved source.

Criteria for being eligible Renewable Energy Generator for REC:

- a. Grid connected
- b. No preferential tariff from local distribution Licensees
- c. Not selling to local distribution Licensees at price > APPPC
- d. Selling to other licensee or open access consumer or through PX at a mutually agreed or market determined price.

Trading process

- a) Become Member or Client (of a Member)

Note: The existing members and clients are eligible to trade in REC market.

- b) Registration with NLDC
- c) Start Buying & Selling RECs at IEX

Trading Timeline

Trading Day	Last Wednesday of every Month
Market Clearing	Closed Double sided auction
Trading Time	1300-1500 Hrs
By 1530 Hrs	Verification by Central agency for Valid REC by cleared seller at IEX
By 1600 Hrs	Central agency confirms REC
By 1630 Hrs	IEX finalizes trade
By 1700 Hrs	Buyer & Sellers informed to Central Agency
By 1800 Hrs	Invoice raised (proof of REC trade)

**As advised by CERC*



SALIENT FEATURES OF RENEWABLE ENERGY CERTIFICATES	
Participation	Voluntary
REC Denomination	1 MWh
Validity	365 Days after issuance
Categories	1. Solar REC 2. Non-Solar REC
Trading Platform	Power Exchanges only
Banking	Not Allowed
Borrowing	Not Allowed
Transfer Type	Single transfer only, repeated trade of the same certificate is not possible
Penalty for Non-compliance	'Forbearance' Price (Maximum Price)
Price Guarantee	Through 'Floor' Price (Minimum Price)
Price Discovery Mechanism	Closed Double-sided Auction*
Trading Calendar	Last Wednesday of the month (T day)
Trading Period	1300-1500 hrs (T day)
Market Clearing	1700 hrs(T day)
Financial Settlement	Buyers pay upfront (T day) and Sellers receive on (T+1 day)

*As advised by CERC

IEX STRENGTHS :

- 85%+ Market Share since inception
- Participation of State utilities from 25 States and 4 UTs
- 70+ Members, 650+ Clients
- 480 open access consumers
- 110+ private generators
- Trading of over 15 Billion Units
- Quick membership process.
- Operation through secured leased-line connectivity.
- Neutrality in operations- equal treatment to small & large players.
- Excellent Domain expertise & smooth coordination with System Operators.
- Best state-of-the-art technology from NASDAQ OMX
- Dispute-free operations since last 2^{1/2} years
- Emerged as transparent, mature platform.
- Winning confidence and trust from market participants, system operators, policy makers and regulators

*Data till October' 2010.

Promoters of IEX



Technology :



Joint Equity Partners



Contact us to serve you better...

Contact us for	Contact Detail	Email
Membership	01143004028	membership@iexindia.com
Business Development	01143004022/32/98	iex-bd@iexindia.com
Market Operations	01143004089/43	iex-operations@iexindia.com
Finance & Accounts	01143004045/50	accounts@iexindia.com
Human Resources	01143004018	careers@iexindia.com
IEX SMS Service	09654125157	sms@iexindia.com
IEX Monthly Bulletin	01143004022	bulletin@iexindia.com
Other information	01143004000	info@iexindia.com