

State Monthly Policy Debrief

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Solar Policy Debrief: State and Central Monthly Highlights

20 October 2020

Idam Infra – Service Offerings





Policy and Regulatory (P&R):

- P&R Analysis
- P&R Formulation
- Tariff Orders and Petitions
- Adjudication and Appeals
- Case Specific Arbitration & Litigation Support
- Regulatory Process Support
- Market Development
- Institutional Strengthening and Capacity Building

Corporate Advisory Services:

- Market Assessment and Business Entry Strategy
- Risk Assessment and Due Diligence
- Transaction Support Services
- Project Appraisal
- Project Design and Implementation Support
- Resource Efficiency
- Policy and Regulatory Support
- IT Solutions

Renewable Energy (RE) Services:

- RE Policy Analysis and Design
- Grid Integration of Renewable Sources
- **RE Procurement Strategy**
- RE Bid Process Management
- RE Technology Assessment
- Project Feasibility Development and Structuring
- RF Transaction and Due Diligence Support
- Capacity Building

Distributed RE Services:

- Policy Design and Analysis
- Regulatory Analysis and **Process Support**
- Market Assessment Services
- Project Structuring
- Techno Commercial Feasibility Study
- Project Development and Project Management Support
- Battery Based Energy Storage
- Institutional Strengthening and Capacity Building

Energy Efficiency (EE) Services:

- EE Policy Advisory
- DSM Planning. Implementation and Regulatory Support
- Energy & Water Audit
- EE Technology Assessment
- Engineering & Project Management
- Monitoring and verification
- Carbon Foot Printing
- Institutional Strengthening and Capacity Building

Information Technology Services:

- IT Consulting and Strategy
- Application Development and Support
- Database Development and Administration
- Offshore Software Development and Support
- Mobile Application
- Portal Development
- Website Design and Content Management Solutions
- Technical & Customer Support

Geomatics Services:

- Underground Utility and Cadastral Survey
- Aerial and Satellite Mapping
- 2D and 3D Geodatabase LiDAR Data Processing
- Orthophoto Generation
- Spatial Modelling
- Digital Elevation Model/Digital Terrain Model Generation
- Cadastral Maps Geo-Referencing and Digitization

Amendment to Tariff based Competitive Bidding



MNRE has issued amendment to Tariff Based Competitive Bidding process for procurement of power from Grid connected Solar PV Projects Period of holding minimum paid up share capital reduced from 3 years to 1 year from the COD The Solar Project Developer is allowed to provide EMD and PBG in form of Bank Guarantee or Payment on Order Instrument / Letter of Undertaking Payment on Order means Letter of Undertaking issued by IREDA / PFC / REC. It would be treated as is similar to Bank Guarantee issued by an Public sector bank and would promise to pay procurer on demand within stipulated time in-case of default by the Solar Power Generator

Green Term Ahead Market (GTAM)



GTAM is an alternative market product introduced for selling of RE power into the open market

The new market mechanism shall promote more penetration of RE power into the grid as this would provide platform to RE generators to sell power in open market and DISCOMs can purchase this power to fulfil their RPO

GTAM shall also provide an opportunity to corporate buyers who wish to fulfil their RPO/RE100 goals while meeting their short term demand at competitive prices

Market-based mechanism where RE surplus and RE deficit states would trade RE power and balance their RPO targets would incentivize RE resource rich states to develop RE capacity beyond their own obligation

This market based mechanism shall provide an alternative to REC mechanism, where you are required to purchase power and REC as well, leading to higher cost.

Volume and Price Discovery in GTAM





- The purchase bids are higher than the sell bids in GTAM
- The market clearing price has settled ~₹3/kWh comparable to DAM

Different Types of GTAM contracts



| Market Type | Green Intra Day contracts | Green Day ahead contingency contracts | Green Daily contracts | Green Weekly contracts |
|--------------------------------|---------------------------------|---------------------------------------|---|---|
| Contract available for trading | 15-minute | 15-minute | 15-minute | 15-minute |
| Matching | Quantity (MW) and price (₹/MWh) | Quantity (MW) and price (₹/MWh) | Energy (MWh) | Energy (MWh) |
| Delivery Day | Т | T+1 | T+2 to T+10 | T+2 to T+10 |
| Trading hours | 00:30 hrs to 20:00 hrs daily | 15:00 hrs to 23:00 hrs | 13:00 hrs to 17:00 hrs | Friday & Saturday |
| Trading cycle | Continuous trading | Continuous trading | Continuous trade or uniform price step open auction | Continuous trade or uniform price step open auction |
| Quantity variation | Zero quantity variation allowed | Zero quantity variation allowed | Downward variation up-to 15% of energy traded | Downward variation up-to 15% of energy traded |

ISA appointed Nodal Agency for OSOWOG



International Solar Alliance (ISA) has been selected as a Nodal agency for developing Global Grid

India has been a propagator of 'One Sun One World One Grid' to leverage the solar power and connect the electricity grid across the continents

ISA shall manage the bid process management and the global grid implementation plan, as per the partnership agreement yet to be inked between ISA, MNRE and World Bank

Global Grid Planned across 3 phases, 1st phase: Middle East – South Asia – South East Asia interconnection (MESASEA), 2nd phase: MESASEA connecting to African power pool/grid, 3rd phase: Global interconnection

This is a strategic initiative taken up by India against China's Belt and Road Initiative

SECI – EoI for Transformative/E-mobility



E-mobility / Transformative mobility is one of the areas to reduce GHG emissions under NMEEE Government of India aims to have 30% share of EVs of total vehicles in the country SECI has invited EoI for empanelment of agencies for identification and implementation of business opportunities in electric / transformative mobility space The empanelled agencies are envisaged to create demand, aggregate demand, set-up charging infrastructure, introduce new and innovative products in market, and capacity building of various stakeholders The empanelment is valid for 3 years, with current EV penetration of ~1% in Indian market, with this it is envisaged that penetration shall increase

CSERC RPO Amendment



The Captive users (Co-located / Non Co-located) with connected load above 1 MW and Open Access consumers under the ambit of RPO regulations in 2016

These entities shall also be required to fulfil the RPO trajectory notified by the commission

The first amendment has also brought Captive plants commissioned before 1st April, 2016 under the ambit of regulations, these plants need to fulfil RPO for year 2015-16

Captive plants commissioned after 1st April, 2016 need to follow the trajectory specified by commission or MoP, whichever is higher and augmented capacity of plant need to follow RPO as per augmented category from the year of augmentation

Here, the Green Term Ahead market shall provide a market based alternative to fulfil the RPO for the captive users

Solar Policy in Chhattisgarh



- Grid Connectivity of co-located SPV PP of minimum 1 KW and above.
- Minimum capacity of SPV PP for connectivity under open access now would be 500 KW.
- Power Generation from Solar is now under priority sector industry as per state industrial policy and incentives as per industrial policy are eligible for Solar Power Generation in state for Captive consumption.
- Exemption from Wheeling & Transmission charges for Solar power for captive consumption within state .
- Cross Subsidy charges Exemption for Solar power generation and captive consumption within state.
- 100% Banking of Solar Power allowed as per CSERC regulation.
- Provisions of land allotment for Solar Plant from land bank as per state industrial policy.



Thank You

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