1. ENERGY SECTOR

1.1 CERC Proposes Major Changes to Power Market Rules, Paves Way for Virtual Power Purchase Agreements to Boost Green Energy

In June, 2025, the Central Electricity Regulatory Commission (CERC) released the Draft Power Market (First Amendment) Regulations, 2025. This draft marks a forward-looking effort to modernize India's electricity markets in line with Sections 66 and 178 of the Electricity Act, 2003, focusing on deeper integration of clean energy, greater market flexibility, and enhanced consumer choice.

Refined Reflections:

The Central Electricity Regulatory Commission's proposal to formally introduce Virtual Power Purchase Agreements (VPPAs) marks a significant shift in how Indian corporates can participate in the renewable energy transition. VPPAs are financial contracts that allow companies to support green energy projects without physically receiving the power. Instead, the renewable generator sells electricity on the market (such as DAM or RTM), and the buyer pays a fixed VPPA price—settling any difference between the market and contract prices in cash. This setup provides a hedge against price volatility and helps companies meet sustainability goals without disrupting their existing power supply.

This change could make clean energy investment more attractive and accessible. But it also raises important questions. For instance, will this structure be transparent enough to avoid disputes? Will it benefit only large consumers with the financial capacity to manage these bilateral agreements? And how ready is the market—from regulators to platform operators—to manage these complex instruments at scale?

The draft regulation also expands the over-the-counter (OTC) market, allowing new instruments like battery storage and power banking. To build trust, CERC has clarified that OTC platforms will act as facilitators, not financial intermediaries—meaning they won't bear credit or counterparty risk. To ensure financial strength, platform operators must now meet a much higher net-worth threshold (₹35 crores, up from ₹1 crore), and their licenses will last 10 years instead of the previous terms.

Another structural shift is the alignment of open access with the General Network Access (GNA) framework, aiming to streamline how entities connect to the grid.

Together, these changes have the potential to make India's power market more flexible, transparent, and investor-friendly. But their success will depend on robust oversight, market education, and a regulatory ecosystem capable of managing risk without stifling innovation.

Official Notification: Draft Central Electricity Regulatory Commission (Power Market) (First Amendment) Regulations, 2025

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1.2 MNRE Releases Draft Guidelines for Series Approval of Solar PV Inverters Through Lab Testing

India has introduced new guidelines for solar inverter certification to streamline testing and reduce costs for manufacturers, especially MSMEs. The revised process allows series approval for safety tests while maintaining strict performance standards, supporting reliable and scalable solar energy deployment.

Refined Reflections:

India's solar inverter certification process is set for a much-needed revamp. In June 2025, the Ministry of New and Renewable Energy (MNRE) released draft guidelines introducing "series approval" for off-grid, on-grid, and hybrid SPV inverters. The aim is to ease the cost and complexity of lab testing and BIS registration.

Instead of testing every inverter model in a product series, only the highest-rated unit will undergo safety and anti-islanding checks under IS 16221 and IS 16169 standards. This significantly reduces the testing burden for manufacturers, particularly small and medium-sized players, without compromising safety. Performance testing will still be required for each model to ensure that efficiency and reliability are fully evaluated.

This is a practical and balanced approach. The policy reduces financial and logistical pressure on manufacturers while ensuring that products continue to meet high technical standards. However, some challenges remain. The requirement that even minor hardware or firmware changes can trigger re-testing may become a hurdle for companies that regularly update their designs or follow agile development practices.

Still, the draft guidelines reflect a positive direction. They encourage standardization, reduce duplication, and bring more clarity to the certification process. These are important steps toward building trust and scaling up India's solar energy sector.

Official Notification: Guidelines for series approval of Solar PV Inverters for conducting testing in test Labs lor implementation of Solar Systems, Devices, and Components Goods Order, 2025

1. ENERGY SECTOR

1.3 CERC issues draft of the Deviation Settlement Mechanism and Related Matters (Second Amendment) Regulations, 2025

In June, 2025, the Central Electricity Regulatory Commission (CERC) released the Draft Deviation Settlement Mechanism (DSM) and Related Matters (Second Amendment) Regulations, marking a critical update to how infirm power or power injected into the grid before formal commissioning is treated in India's electricity sector.

Refined Reflections:

India's approach to managing grid stability is undergoing an important evolution. In June 2025, the Central Electricity Regulatory Commission (CERC) released a draft amendment to the Deviation Settlement Mechanism (DSM), which reconsiders how infirm power, or electricity injected into the grid before formal commissioning, is treated.

Currently, such unscheduled power is not commercially compensated. This is intended to prevent grid disturbances and maintain scheduling discipline. However, as India's energy mix increasingly incorporates both thermal and renewable sources, there has been growing demand for more flexible rules. The new draft responds to this by allowing limited compensation for thermal generators injecting power between initial synchronization and the completion of trial runs. The compensation is capped at ₹2.86 per kilowatt-hour, and no payment is allowed when system frequency exceeds 50.05 Hz.

This proposal is significant for several reasons. It acknowledges the real costs that generators face during the pre-commissioning stage and offers a fairer economic signal. At the same time, the cap and the frequency threshold aim to preserve the reliability of the grid. This reflects a careful attempt to balance financial viability with operational discipline.

That said, concerns remain. Without strong oversight, such provisions could potentially weaken scheduling discipline. The success of this measure will depend on transparent implementation and effective monitoring to ensure that it supports flexibility without compromising grid stability.

Official Notification: Draft CERC (Deviation Settlement Mechanism and Related Matters) (Second Amendment) Regulations, 2025

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1.4 What the Draft Petroleum and Natural Gas Rules, 2025 Seek to Reform

India's Draft Petroleum and Natural Gas (Exploration and Production) Rules, 2025 aiming to modernize fossil fuel operations by introducing clear guidelines on leases, royalties, and emissions management. A key highlight is the mandatory monitoring, reporting, and verification (MRV) of greenhouse gas emissions, aligning with global climate standards. These steps position India's petroleum sector for cleaner, more competitive energy practices.

Refined Reflections:

India's Draft Petroleum and Natural Gas (Exploration and Production) Rules, 2025 represent a decisive move toward modernizing fossil fuel governance. These proposed changes aim to update outdated regulatory structures by clarifying lease terms, royalty payments, reservoir unitization, and integrated energy project approvals that include renewables and decarbonization measures.

One of the most important updates is the introduction of a dedicated chapter on greenhouse gas (GHG) emissions. It mandates monitoring, reporting, and verification (MRV), requires documentation of flared gas, and includes provisions for GHG sequestration. This is a significant step toward aligning India's petroleum sector with its national net-zero ambitions.

In a global context, the draft rules echo evolving standards elsewhere. In the United States, the Inflation Reduction Act has introduced methane-specific MRV rules with financial penalties for excess emissions. The European Union will require MRV for all energy imports by 2030 under its Methane Regulation. Even voluntary initiatives, such as the GIIGNL's MRV framework for LNG, reflect the rising importance of emissions transparency in cross-border energy trade. India's early adoption of MRV requirements and flared gas reporting reflects a proactive stance that could strengthen its credibility in international energy markets.

However, global experience also points to challenges. Scaling MRV across India will require robust metering infrastructure, high-quality data systems, and skilled compliance personnel. The draft rules must also define clear enforcement mechanisms and grievance redress systems to ensure accountability. Confidentiality protections for commercial data will need to be carefully balanced with public oversight and investor expectations.

If these operational and institutional gaps are addressed, India has the opportunity to not only clean up its petroleum sector, but also position it as globally competitive in a carbon-conscious world.

Official Notification: Draft Petroleum & Natural Gas Rules

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1.5 MNRE Releases Updated Guidelines for Installation and Testing of Prototype Wind Turbines in India

India has issued new guidelines for prototype wind turbine installations, replacing older norms to foster innovation while ensuring safety and global compliance. The rules, overseen by NIWE, allow limited testing under strict conditions before commercial rollout, supporting reliable growth in the wind energy sector.

Refined Reflections:

India's renewable energy landscape continues to evolve, guided by stronger regulatory frameworks that support both innovation and safety. The Ministry of New and Renewable Energy (MNRE) has issued updated guidelines for the installation and testing of prototype wind turbines, replacing the earlier norms from 2012 and 2016. Under the supervision of the National Institute of Wind Energy (NIWE), the new rules are designed to encourage technological advancement while maintaining strict performance and compliance standards.

The guidelines permit manufacturers to install a limited number of prototype turbines, capped at three per model, solely for testing and certification before any commercial deployment. This creates a controlled environment for validating turbine designs and ensures alignment with international benchmarks such as IECRE OD 501 and IS/IEC 61400-22:2010. To reinforce this separation from commercial operations, manufacturers are required to retain ownership of the prototypes and use only new components.

The intent is clear: India welcomes innovation but not at the cost of safety, quality, or grid stability. However, certain provisions may pose challenges for smaller manufacturers. The 18-month commissioning deadline, along with requirements for annual operation and maintenance reporting and recertification, could strain limited resources.

Despite these hurdles, such regulatory discipline is essential. It ensures that only rigorously tested and globally compliant technologies make it to market. By allowing innovation to take place within a well-defined framework, India is fostering a wind energy sector that is not only renewable but also reliable and globally competitive.

Official Notification: Revised Guidelines for installation of prototype wind turbine models

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1.6 Government Releases Updated Guidelines for Waste-to-Energy Projects to Enhance Efficiency and Streamline CFA Disbursement

India has revised its Waste-to-Energy (WtE) guidelines to simplify approvals, speed up financial support, and make projects more viable, especially for MSMEs. The new rules enable earlier access to Central Financial Assistance and reduce inspection burdens, supporting cleaner waste management and bioenergy production.

Refined Reflections:

India's clean energy transition is increasingly driven by not just innovation but also simplification. The Ministry of New and Renewable Energy's (MNRE) newly revised guidelines for Waste-to-Energy (WtE) projects signal a stronger alignment between policy design and on-ground realities faced by developers, particularly MSMEs.

In a June 2025 press release, the Press Information Bureau (PIB) announced the revised guidelines as part of the National Bioenergy Programme. The focus is clear: enable faster disbursal of Central Financial Assistance (CFA), simplify approval procedures, and offer targeted support for biomass and agri-residue-based energy projects. This marks a meaningful shift from process-heavy regulation toward performance-oriented implementation.

Earlier, many developers, especially smaller firms, struggled with excessive paperwork, delayed approvals, and a major bottleneck — the requirement to achieve 80% of generation capacity before any financial support was released. This often caused a funding crunch just when projects needed capital the most.

The revised guidelines tackle this issue head-on. CFA will now be released in two stages. Developers can access 50% of the assistance after securing their Consent to Operate, provided they furnish a bank guarantee. The remaining 50% will be linked to actual plant performance. This ensures that early-stage funding flows more easily while maintaining accountability for outcomes.

Additional improvements include more streamlined approval workflows, reduced inspection requirements, and the option for a single-site check for projects that do not seek advance CFA. These changes save both time and money, making WtE projects more accessible and financially viable.

This is more than just regulatory cleanup. It reflects a shift toward a more business-friendly and impact-driven approach to clean energy deployment. By easing project execution, the government is helping industries manage organic waste more efficiently and encouraging the production of cleaner fuels such as Biogas and Compressed Bio Gas (CBG). One potential concern remains: the requirement for a bank guarantee might still be a barrier for cash-constrained or first-time developers. Addressing this could further enhance accessibility for smaller players.

In the bigger picture, these reforms lay the foundation for scaling India's WtE sector and making it a key pillar in the country's waste management strategy and net-zero goal by 2070. The message is clear: when policy keeps pace with practical challenges, sustainability becomes scalable.

Official Notification: Revised waste to energy guidelines