OFFICIAL GAZETTES & ORDERS

Latest Verified MNRE Notifications & Circulars (2026)

Detailed breakdown of official government notifications issued by MNRE, the Ministry of Power, and the Central Electricity Authority. Each card details the issuing authority, legal requirement, affected entities, and compliance deadlines:

OFFICIALLY NOTIFIED

1. ALMM List-II (Solar PV Cells) 12th Revision

Issuing Authority: MNRE • **Notified:** October 8, 2026

Core Mandate: Operationalizes the Approved List of Models and Manufacturers (ALMM) List-II specifically governing Solar Photovoltaic Cells. Solar modules deployed in government-funded projects, subsidized schemes (PM Surya Ghar, PM-KUSUM), and state open-access/net-metering installations must integrate solar cells exclusively manufactured by ALMM List-II enlistees.

Transitional Relief: Limited window through **December 31, 2026** allows commissioning of specific pre-committed open access and net-metering projects that fulfilled milestone orders prior to cutoff dates.

Impacted: Cell Manufacturers, Module Assemblers, Utility Developers.

STANDARD OPERATING PROCEDURE

2. BIS Module Model Synchronization SOP

Issuing Authority: MNRE & BIS • **Status:** Active Enforcement

Core Mandate: Establishes a strict Standard Operating Procedure (SOP) requiring solar PV module manufacturers to update their model series numbers under Bureau of Indian Standards (BIS) registrations (IS 14286 / IS/IEC 61730) to achieve 1:1 synchronization with ALMM listings.

Traceability Code: Proposes uniform 14-digit alphanumeric identification codes for all cell models indicating wafer source, cell architecture (TOPCon, Mono PERC, HJT), and factory location.

Impacted: OEM Compliance Officers, BIS Laboratories, Tender Auditors.

OPERATIONAL DIRECTIVE

3. PM Surya Ghar Portal Confidence Scoring

Issuing Authority: National Programme Implementation Unit • **Enforced:** 2026

Core Mandate: Automated algorithmic verification on the PM Surya Ghar National Portal flags consumer applications with a confidence score below 70%. To unlock Central Financial Assistance (CFA), consumers and vendors must submit physical signed undertakings and government ID proofs.

Vendor AMC Guarantee: Empaneled vendors must submit legally binding undertakings guaranteeing a 5-year comprehensive system warranty and time-bound defect rectification within 72 hours.

Impacted: Rooftop Solar EPCs, Residential Consumers, DISCOM Verification Cells.

COMPULSORY QUALITY ORDER

4. Solar Goods (Quality Control) Order 2026

Issuing Authority: MNRE (Department of Quality Control) • **Status:** Enforced

Core Mandate: Strictly prohibits the manufacture, storage, sale, or import of solar PV systems, devices, and components that do not conform to specified Indian Standards (IS). Inverters must possess valid certification under IS 16221 (Parts 1 & 2) and IS 16169 (island protection).

Surveillance Audits: NABL accredited laboratories must conduct annual factory audits; non-conformance results in immediate cancellation of registration and confiscation of non-compliant inventory.

Impacted: Inverter Manufacturers, Component Importers, Distributors.

TECHNICAL GRID STANDARD

5. CEA Technical Standards for Grid Connectivity

Issuing Authority: Central Electricity Authority (CEA) • **Status:** Active

Core Mandate: Technical Standards for Connectivity to the Grid mandate that all distributed solar installations exceeding 10 kW must install bi-directional smart meters compliant with DLMS/COSEM (IEC 62056) protocols, featuring automated 15-minute generation data logging.

Cybersecurity & Telemetry: Inverters and dataloggers must support encrypted communications complying with National Cyber Security Policy guidelines for critical power sector infrastructure.

Impacted: Electrical Design Engineers, SCADA Specialists, DISCOM Metering Divisions.

STATUTORY OBLIGATION

6. MoP Renewable Purchase Trajectory & ESO

Issuing Authority: Ministry of Power • **Enforcement:** FY 2026–27

Core Mandate: Notified unified national RPO trajectory establishing escalating obligations for Obligated Entities (DISCOMs, Open Access consumers, Captive plants). Integrates mandatory Energy Storage Obligations (ESO) climbing towards 4.0% by 2029–30.

Penal Provisions: Shortfalls in RPO compliance attract severe financial penalties under the amended Energy Conservation Act, enforced directly by SERCs and Bureau of Energy Efficiency (BEE).

Impacted: Heavy Commercial Consumers, Captive Power Operators, Power Traders.

FLAGSHIP ROOFTOP PROGRAM

PM Surya Ghar: Muft Bijli Yojana • 2026 Operational Rules

Approved with a total budgetary outlay of **₹75,021 Crore**, the PM Surya Ghar: Muft Bijli Yojana targets 1 Crore residential rooftop installations across India. In 2026, administrative procedures have been tightened to enforce domestic manufacturing compliance, protect consumer rights, and automate subsidy disbursement.

1. Standardized Central Financial Assistance (CFA) Slabs

The central subsidy under PM Surya Ghar is disbursed directly into the consumer's Aadhaar-linked bank account via Direct Benefit Transfer (DBT). The current applicable financial assistance structure is structured as follows:

System Capacity	Applicable CFA Formula	Maximum Central Subsidy	Target Beneficiary Category
Up to 2 kW	₹30,000 per kW	**₹60,000** (for 2 kW system)	Low & Middle Income Residential Households
Above 2 kW up to 3 kW	₹60,000 + ₹18,000 for additional kW	**₹78,000** (for 3 kW system)	Standard Residential Households
Above 3 kW (up to 10 kW)	Fixed cap at ₹78,000 (No incremental CFA beyond 3 kW)	**₹78,000** (Capped)	Large Residential Villas & High-load Homes
GHS / RWA (Common Facilities)	₹18,000 per kW up to 500 kW capacity	**₹90,00,000** (₹90 Lakh max)	Group Housing Societies & RWAs (incl. EV charging)
Special Category States	Enhanced CFA: ₹33,000/kW (≤2 kW) + ₹19,800/kW (3rd kW)	**₹85,800** (for 3 kW)	NE States, Sikkim, Uttarakhand, HP, J&K, Ladakh, Islands

2. End-to-End National Portal Workflow

1. **Consumer Registration:** Register on the National Portal (`pmsuryaghar.gov.in`) with State, DISCOM name, Electricity Consumer Account Number, mobile number, and email ID.
2. **DISCOM Technical Feasibility:** The distribution utility verifies local distribution transformer (DT) capacity and issues online technical feasibility approval within 15 working days.
3. **Vendor Selection & Model Agreement:** Consumer selects an empaneled vendor on the portal and signs the standard model contract establishing equipment specifications and a 5-year comprehensive warranty.

4. **Installation & Work Execution:** Empaneled installer erects the plant strictly utilizing ALMM List-I modules and ALMM List-II cells, accompanied by verifiable Domestic Content Requirement (DCR) documentation.
5. **Net-Meter Installation & Inspection:** DISCOM engineers inspect the physical installation, test the anti-islanding protection relay, install the bi-directional smart meter, and synchronize the system to the grid.
6. **Commissioning Certificate & DBT Release:** DISCOM uploads the commissioning certificate to the National Portal. Consumer submits bank details and cancelled cheque. CFA subsidy is credited directly to the consumer's bank account within 30 days.

Critical 2026 Compliance Update: If the National Portal calculates an application confidence score under 70% due to electricity bill or Aadhaar name mismatches, the application is locked. The installer cannot proceed until a joint physical verification undertaking signed by the consumer is uploaded and cleared by the DISCOM nodal officer.

PROCUREMENT INTEGRITY

ALMM Compliance • List-I Modules & List-II Cells Framework

The Approved List of Models and Manufacturers (ALMM) is India's primary non-tariff regulatory instrument governing the quality, origin, and deployment of solar equipment. In 2026, the framework operates as a dual-tier mandate:

ALMM List-I (Solar PV Modules)

Governs assembled solar panels and modules. Cumulative enlisted module manufacturing capacity exceeds **55+ GW** across accredited Indian facilities.

- Mandatory for all government tenders (SECI, NTPC, NHPC, SJVN).
- Mandatory for all subsidized schemes (PM Surya Ghar, PM-KUSUM).
- Mandatory for government-owned and aided institutions.
- Requires active BIS certification under IS 14286.

ALMM List-II (Solar PV Cells)

Governs raw silicon solar PV cells utilized inside modules. The 12th revision (notified October 8, 2026) enforces domestic cell utilization.

- Mandatory for modules supplied to government-backed tenders.
- Mandatory for residential PM Surya Ghar installations.
- Eliminates reliance on imported cells for subsidized capacity.
- Transitional window extends to Dec 31, 2026 for specific pre-committed open access projects.

Developer Supply Chain Verification Protocol

To ensure zero compliance friction during project commissioning and lender audit, EPC contractors must execute the following 4-step procurement verification protocol:

Step 1: Gazette Cross-Check

Verify OEM name, plant location, and exact model code against the latest MNRE ALMM List-I and List-II revision spreadsheets.

Step 2: RFID & Barcode Audit

Physically scan internal RFID tags embedded inside module laminates. Verify cell manufacturer identity, wafer origin, and production date.

Step 3: DCR Certificate

Obtain an OEM notarized Domestic Content Requirement (DCR) certificate with matching cell invoice and serial number registers.

Step 4: NABL Flash Test Reports

Cross-verify OEM factory flash test data (IV curves, Pmax, Voc, Isc) against independent NABL accredited batch test certificates.

Tender Prequalification Risk: Bidders submitting tenders for SECI, state discom, or CPSU tenders who specify modules from non-ALMM listed manufacturers or models whose BIS certifications have lapsed will face immediate technical bid disqualification without opportunity for cure.

GRID INTEGRATION & POWER MARKETS

Grid Connectivity, Net Metering & Green Energy Open Access

Interconnecting solar PV systems into India's transmission and distribution networks requires navigating both central technical standards formulated by the Central Electricity Authority (CEA) and retail tariff frameworks regulated by State Electricity Regulatory Commissions (SERCs):

1. Green Energy Open Access Rules (GEOAR) • 100 kW Threshold

The Ministry of Power's foundational Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules established a uniform open access eligibility limit of **100 kW** (reduced from the historical 1 MW limit), enabling commercial establishments, IT parks, and industrial consumers to directly purchase green power:

- **Cross-Subsidy Surcharge (CSS) Cap:** CSS for green energy open access is capped at a maximum of 20% of the Average Cost of Supply (ACS) determined by the respective SERC.
- **Additional Surcharge Exemption:** Additional surcharge is completely waived for consumers procuring power from non-fossil captive plants.
- **Standardized Banking Provisions:** Energy banking is permitted on a monthly cycle across participating states, with banking charges capped at reasonable levels determined by SERC orders.

- **Single Window Clearance:** All applications are processed through the central Green Open Access Registry (GOAR) portal operated by GRID-INDIA (NLDC) within a mandatory 15-day timeline.

2. Net Metering vs Gross Metering Regulatory Evolution

Following successive amendments to the Electricity (Rights of Consumers) Rules, state regulators have established tiered metering regimes for rooftop solar consumers:

Capacity Tier	Permitted Metering Model	Tariff / Settlement Mechanism	Smart Metering Requirement
Up to 10 kW	Net Metering (Universal)	Energy-to-energy unit netting against monthly domestic consumption; surplus settled at APPC tariff.	Standard Bi-directional Digital Meter
10 kW to 500 kW	Net Metering or Net Billing (State Specific)	Net Billing / Net Feed-in: Imported power billed at retail tariff; exported power credited at feed-in tariff.	Mandatory DLMS/COSEM Smart Meter (15-min log)
Above 500 kW	Gross Metering / Captive Open Access	All generated power injected into grid at feed-in tariff; consumer buys total consumption at retail tariff.	ABT / AMR Smart Meter with direct DISCOM SCADA

3. CEA Technical Standards & Inverter Telemetry Mandates

The CEA Technical Standards for Connectivity to the Grid mandate strict protection and communication capabilities for solar inverters:

- **Anti-Islanding Protection (IEC 62116 / IS 16169):** Inverters must automatically disconnect from the grid within 2 seconds of grid outage to safeguard maintenance personnel.
- **Fault Ride-Through (FRT):** Systems connected at HT voltages (11 kV and above) must support Low-Voltage Ride-Through (LVRT) and High-Voltage Ride-Through (HVRT) to maintain grid stability during network faults.

- **Power Factor & Reactive Power Control:** Inverters must operate within a dynamic power factor range of 0.95 lagging to 0.95 leading as instructed by the state load dispatch centre (SLDC).
- **Automated Telemetry:** Real-time generation data (kW, kWh, voltage, frequency, solar irradiance) must be pushed to state utility datacenters at 15-minute intervals.

OPERATIONAL IMPACT

Policy Implications for Key Industry Stakeholders

The 2026 MNRE and central regulatory updates transform operating models across the clean-tech ecosystem. The operational consequences for eight distinct industry stakeholder groups are analyzed below:

1. Solar EPC Companies

Operational Shift: Must restructure supplier contracts with rigorous ALMM List-II cell compliance clauses. EPC contracts must explicitly apportion cell non-compliance penalties to module vendors.

Primary Risk: Project commissioning rejection by DISCOM or SECI if unapproved cell batches are detected during physical inspection.

2. Rooftop Solar Installers

Operational Shift: Must maintain active empanelment across multiple DISCOMs via the PM Surya Ghar National Portal. Must pre-screen consumer identity documents to maintain confidence scores >70%.

Primary Risk: Delayed subsidy DBT releases and customer dispute liability resulting from portal documentation errors or unverified DCR serials.

3. Utility-Scale Solar Developers

Operational Shift: Transition from imported wafer/cell modules to domestic supply agreements. Must manage power evacuation agreements adhering to updated CEA cybersecurity and telemetry norms.

Primary Risk: Tariff escalation in competitive bidding tenders if domestic cell premiums exceed projected capital expenditure buffers.

4. Commercial & Industrial Consumers

Operational Shift: Accelerated corporate procurement through Green Energy Open Access (100 kW threshold) and on-site behind-the-meter captive installations to mitigate commercial tariffs (₹8–₹12/kWh).

Primary Opportunity: Immediate reduction in power OPEX by 35%–50% through third-party open access solar PPA structures.

5. Module & Cell Manufacturers

Operational Shift: Mandatory enlistment in ALMM List-I (modules) and List-II (cells). Must establish automated traceability linking wafer source, cell barcodes, and module serial numbers.

Primary Mandate: Annual surveillance testing at NABL accredited labs and compliance with BIS IS 14286 standards.

6. Equipment Distributors

Operational Shift: Must liquidate legacy inventory of non-ALMM listed modules or imported non-DCR stock. Must maintain certificates of origin and BIS registrations for every SKU in stock.

Primary Risk: Unsaleable dead stock of non-compliant modules or inverters lacking BIS IS 16221 certification.

7. Project Consultants & Owner's Engineers

Operational Shift: Developing compliance verification matrices into detailed project reports (DPRs). Conducting pre-dispatch factory inspections and reviewing OEM cell traceability logs.

Primary Opportunity: High demand for compliance-auditing professionals capable of navigating SERC net metering and open-access filings.

8. Electrical Design Engineers

Operational Shift: Modeling solar PV systems in PVsyst and AutoCAD utilizing verified ALMM PAN files. Designing bidirectional smart metering systems conforming to DLMS/COSEM standards.

Primary Need: Mastering CEA connectivity codes, reactive power compensation, and inverter protection coordination.

QUALITY ASSURANCE PROTOCOL

Practical Compliance Checklist for Solar Developers

This practical self-audit checklist is designed for project developers, EPC engineers, and compliance auditors. Prior to executing procurement contracts or mobilizing on-site installation teams, verify every item against governing notifications:

Audit Stage	Compliance Check	Governing Authority / Norm	Verification Method	Non-Compliance Risk
Pre-Tender Feasibility	Scheme Applicability & Subsidy Eligibility	MNRE / PM Surya Ghar Guidelines	Cross-check consumer category, DT capacity & DISCOM load sanction.	Ineligible application & zero CFA subsidy.

Audit Stage	Compliance Check	Governing Authority / Norm	Verification Method	Non-Compliance Risk
Module Procurement	ALMM List-I Model Enlistment	MNRE Order / ALMM List-I	Verify exact OEM model code on active MNRE spreadsheet.	Disqualification from government & subsidized tenders.
Cell Procurement	ALMM List-II Solar Cell Compliance	MNRE Order / ALMM List-II (12th Rev)	Inspect OEM DCR certificate & wafer-to-cell traceability registers.	Tender rejection & rejection of CFA claim.
BIS Registration	Modules & Inverter Standards	BIS IS 14286 / IS 16221 / IS 16169	Validate active R-Number on BIS portal & NABL test reports.	Customs seizure or project commissioning halt.
DISCOM Approvals	Technical Feasibility & Interconnection	State ERC Interconnection Code	Secure written feasibility sanction prior to physical mobilization.	Unauthorized grid connection & penalty disconnection.
Smart Metering	Bi-directional Meter Compliance	CEA Technical Regulations (IEC 62056)	Verify DLMS/COSEM certification & 15-min interval telemetry.	Refusal by DISCOM to execute grid synchronization.
System Warranty	5-Year Comprehensive AMC Agreement	PM Surya Ghar Model Contract	Upload signed tripartite model contract on National Portal.	Vendor portal suspension & forfeiture of security deposit.
Commissioning Audit	Joint Inspection & Anti-Islanding Test	DISCOM / Chief Electrical Inspector (CEIG)	Obtain signed CEIG safety clearance & DISCOM synchronization certificate.	Delayed power export & revenue loss.

Audit Best Practice: Maintain an auditable digital binder for each project containing: (1) OEM flash test data, (2) RFID barcode scan reports, (3) DCR undertaking on non-judicial stamp paper, (4) BIS test certificates, and (5) DISCOM synchronization minutes.

CHRONOLOGICAL EXECUTION

Solar Project Developer Action Plan (5-Stage Blueprint)

A structured, chronological execution roadmap guiding solar developers and EPC contractors through the complete compliance lifecycle in 2026:

Stage 1: Regulatory Verification & Scheme Eligibility

TIMELINE: WEEK 1

Assess whether the project falls under PM Surya Ghar, state net metering, gross metering, or Green Energy Open Access. Verify sanctioned load, sanctioned distribution transformer capacity at the local substation, and check for applicable SERC tariff notifications.

Responsible Role: Business Development & Regulatory Affairs • **Key Document:** Electricity Bill, DT Capacity Clearance, Portal Application.

Stage 2: Pre-Procurement ALMM & DCR Supply Chain Audit

TIMELINE: WEEK 2–3

Execute procurement contracts specifying modules listed on ALMM List-I and cells from ALMM List-II. Contractually bind manufacturers to provide traceable RFID barcodes and batch-level DCR certificates. Inverter purchase orders must mandate BIS IS 16221 certification.

Responsible Role: Procurement Lead & Quality Auditor • **Key Document:** OEM DCR Undertaking, ALMM Gazette Match, Flash Test Curves.

Stage 3: Engineering Design & DISCOM Technical Approval

TIMELINE: WEEK 3–5

Develop Single Line Diagrams (SLD), earthing schemes, and protection coordination in AutoCAD. Model plant output in PVsyst conforming to local solar insolation. Submit engineering pack to DISCOM and CEIG for technical feasibility clearance.

Responsible Role: Solar Electrical Design Engineer • **Key Document:** Approved SLD, CEIG Drawing Approval, Structural Stability Report.

Stage 4: On-Site Erection, Testing & Quality Inspection

TIMELINE: WEEK 5–8

Install module mounting structures (MMS) per wind-speed codes (IS 875 Part 3). String modules, route DC/AC cabling, install surge protection devices (SPDs), and establish dual earth pits for lightning protection and electrical grounding (IEEE 80). Perform pre-commissioning testing.

Responsible Role: Site Execution Manager • **Key Document:** Pre-Commissioning Test Logs, Earth Resistance Test (<1 Ohm), RFID Audit.

Stage 5: Grid Synchronization, DBT Claim & Telemetry Setup

TIMELINE: WEEK 8–10

Coordinate joint inspection with DISCOM metering wing. Install bi-directional smart meter. Execute synchronization and record joint commissioning report. Upload commissioning certificate to National Portal to trigger consumer CFA subsidy release. Activate 15-minute telemetry feed.

Responsible Role: Commissioning Lead & Liaison Officer • **Key Document:** Joint Inspection Report, Commissioning Certificate, Telemetry Handshake.

JURISDICTIONAL ANALYSIS

State-Specific Regulatory Nuances & DISCOM Variations

While MNRE sets national policy trajectories and funds central capital subsidies, electricity remains a Concurrent List subject under the Indian Constitution. Distribution utilities (DISCOMs) operate under the statutory regulation of State Electricity Regulatory Commissions (SERCs). Key state nuances are outlined below:

Gujarat (GERC / GUVNL)

Regulator: GERC • **Utilities:** DGVCL, MGVCL, PGVCL, UGVCL

Leading state in Surya Gujarat and PM Surya Ghar deployment. High transformer hosting capacity. Favorable net-billing tariffs and efficient online single-window processing. Green energy open access guidelines proactively aligned.

Maharashtra (MERC / MSEDCL)

Regulator: MERC • **Utilities:** MSEDCL, Adani Electricity, Tata Power

Net metering permitted up to 1 MW under MERC regulations. Strict smart-metering enforcement. High industrial tariffs (₹9–₹12/unit) drive booming behind-the-meter C&I captive and rooftop adoption across Pune, Thane, and Nashik.

Rajasthan (RERC / Discoms)

Regulator: RERC • **Utilities:** JVVNL, AVVNL, JdVVNL

Epicenter of utility-scale solar parks (Bhadla, Fatehgarh) and KUSUM agricultural solarization. RERC enforces strict scheduling and forecasting regulations with deviation settlement mechanism (DSM) penalties.

Karnataka (KERC / BESCOM)

Regulator: KERC • **Utilities:** BESCOM, HESCOM, MESCOM, GESCOM

Mature renewable market. Extensive open access deployment. KERC has transitioned towards gross-metering and net-billing for larger commercial roofs, making behind-the-meter zero-export systems increasingly attractive.

Uttar Pradesh (UPERC / UPPCL)

Regulator: UPERC • **Utilities:** MVVNL, PVVNL, DVVNL, PuVVNL

Aggressive target under UP Solar Energy Policy 2022 (22 GW target). Offers additional state subsidy of ₹15,000 to ₹30,000 on residential rooftops stacked over PM Surya Ghar central CFA, boosting installer sales.

Tamil Nadu (TNERC / TANGEDCO)

Regulator: TNERC • **Utility:** TANGEDCO

Enforces network charges on exported units under net feed-in model. High C&I demand for captive group solar due to heavy textile, automotive, and industrial manufacturing clusters across Coimbatore, Chennai, and Tirupur.

State Regulatory Guidance: Always check the latest tariff order and interconnection guidelines issued by the respective State Electricity Regulatory Commission (SERC). A central MNRE advisory does not automatically override a state-notified tariff or distribution code until formalized by the SERC.

PRIMARY GOVERNMENT REPOSITORIES

Official Government Source Library

Direct access to official primary source portals, regulatory repositories, and gazette notifications referenced in this technical briefing:

Issuing Authority	Official Portal / Document	Key Regulatory Scope	Official Link
Ministry of New & Renewable Energy	MNRE Official Portal & Current Notices	ALMM List-I & List-II notifications, solar scheme circulars, quality orders.	**mnre.gov.in →**
PM Surya Ghar Mission	PM Surya Ghar National Portal	Consumer registration, CFA subsidy disbursal, vendor empanelment, guidelines.	**pmsuryaghar.gov.in →**
Ministry of Power	MoP Official Website	Electricity (Rights of Consumers) Rules, Green Energy Open Access Rules.	**powermin.gov.in →**
Central Electricity Authority	CEA Standards & Regulations	Grid Connectivity Standards, technical metering norms, inverter protection codes.	**cea.nic.in →**
Central Electricity Regulatory Commission	CERC Orders & Regulations	Inter-state transmission system (ISTS) tariffs, scheduling, GNA regulations.	**cercind.gov.in →**
GRID-INDIA (NLDC)	Green Open Access Registry (GOAR)	Centralized single-window clearance portal for Green Energy Open Access.	**greenopenaccess.in →**

Issuing Authority	Official Portal / Document	Key Regulatory Scope	Official Link
Press Information Bureau	PIB Government of India	Official Cabinet approvals, national clean-energy mission press releases.	**pib.gov.in →**

REGULATORY CLARIFICATIONS