



Power Market Coupling and Implications

Overview

Market coupling is the next major structural reform in India's power markets. It aims to create a single, uniform price for electricity across all power exchanges by pooling bids from every exchange and matching them centrally through a Market Coupling Operator (MCO). The goal is to improve price efficiency, transparency, and overall welfare without changing existing exchange operations for trading and settlement.

Regulatory Background

The Central Electricity Regulatory Commission (CERC) laid the foundation for market coupling through the Power Market Regulations, 2021 (Regulations 37–39). After years of debate, CERC issued Order 8/SM/2025 on July 23, 2025, directing a phased rollout. The first phase will couple the Day-Ahead Market (DAM) by **January 2026** using a **round-robin MCO** arrangement among IEX, PXIL, HPX, with Grid-India as backup and auditor. Coupling of the Real-Time Market (RTM) will follow later.

Objectives

- Eliminate price divergence between exchanges.
- Ensure a uniform national clearing price and schedule.
- Improve overall welfare and grid efficiency.
- Reduce exchange-level price-setting dominance and foster competition on innovation and services.

Key Developments

- **Pilot & Findings:** Grid-India's 2024 shadow pilot showed ~0.3% overall welfare gains and ~0.2% volume growth, with negligible average price change.
- **Market Reaction:** Following the July 2025 CERC order, IEX's stock declined ~30%, reflecting investor concerns about reduced pricing power.
- **Legal Challenge:** IEX has appealed the CERC order before APTEL; however, no stay has been granted, and implementation is proceeding toward the 2026 target.

Implications by Stakeholder

Power Exchanges: Price discovery shifts to a central algorithm, reducing the largest exchange's pricing advantage. Competition will move toward user experience, analytics, and fee structures.

Traders & Utilities: Arbitrage opportunities between exchanges will vanish in the DAM. Focus will shift to advanced bidding strategies, RTM participation, and hedging instruments.

Renewable Generators: A uniform DAM price enhances transparency for merchant sales and Virtual Power Purchase Agreements (VPPAs). Slight efficiency gains may improve system dispatch.

C&I; Buyers and DISCOMs: Greater clarity in price signals supports budgeting, risk management, and contract benchmarking.

Regulators & System Operator: CERC and Grid-India gain improved visibility and control over market efficiency, congestion, and dispatch.

Risks & Considerations

Implementation requires strong algorithm governance, cybersecurity, and audit mechanisms. Legal and governance scrutiny has intensified after recent SEBI actions concerning insider trading linked to the coupling announcement. The broader challenge lies in balancing central efficiency with healthy competition among exchanges.

Conclusion

Market coupling represents a transformative step toward an integrated and efficient Indian power market. While short-term effects may be muted, long-term benefits include transparency, fair access, and stronger foundations for renewable integration and financial instruments such as VPPAs and contracts for differences.