

Smarter Portfolio, Better Tomorrow

Powered by  SHARAJMAN Technologies

SEPMS The Smart Energy Portfolio Management System (SEPMS) is a next-gen solution built exclusively for DISCOMs to manage power scheduling, trading, and compliance with SLDC. It integrates advanced optimization models, forecasting, outage analytics, and cost-benefit analysis of RTM, DAM, and RSD markets. By automating real-time backdown, tracking MOD violations, and supporting zero scheduling,

SEPMS helps DISCOMs reduce power purchase costs, improve trading efficiency, and achieve reliable, regulation-compliant operations.

Feature Highlights

✓ Advanced Optimization Models

- Power & cost optimization via built-in algorithms
- Balances demand, supply, and financial efficiency
- Maximizes savings with minimal risk exposure

✓ Scheduling & Trading (RTM, DAM, RSD)

- Basic, model, & exchange-linked scheduling
- Buy/Sell cost benefits in RTM, DAM, and RSD
- DISCOM smart trading & deviation charge reduction

✓ Real-Time Backdown & Compliance

- Executes SLDC real-time and must-backdown orders
- MOD violation tracking and corrective compliance
- DISCOM penalty and imbalance charge protection

✓ Forecasting & Scenario Planning

- Day-ahead, short/long/multi-term-scenario forecasts
- Renewable variability in demand prediction
- Schedule optimization in changing markets

✓ Outage & Zero Schedule Analytics

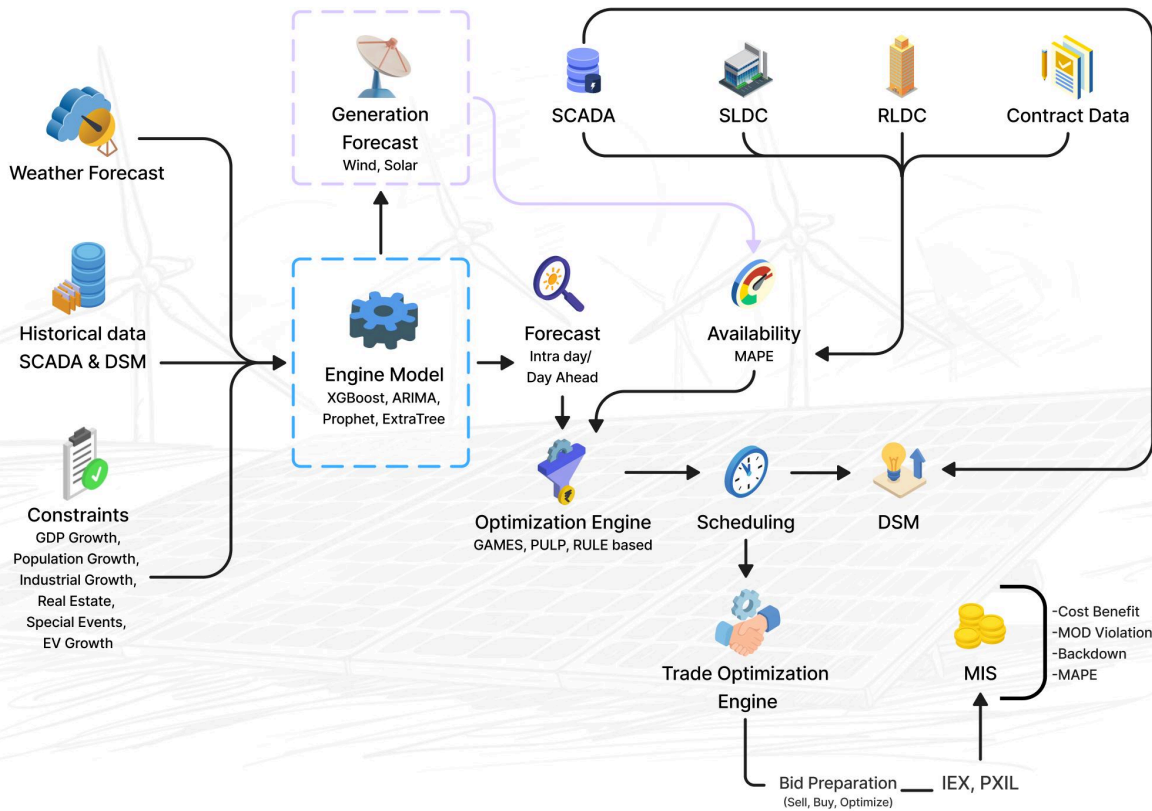
- RD-SM outage data analysis for scheduling impact
- Zero scheduling in surplus or low-demand conditions
- Reduced costs from over-procurement and improves reliability

✓ MIS, Reporting & Regulatory Insights

- Provides portfolio, cost-benefit, and compliance MIS
- RTM, DAM, & RSD buy/sell performance analytics
- Regulatory filings and leadership decision-making



Data Flow Overview



Challenges Solved

Rising power purchase costs

RTM/DAM trade inefficiencies

Forecasting inaccuracies

Real-time backdown execution

MOD violation penalties

Zero schedule challenges

Outage impact mismanagement

Lack of trading cost-benefit analysis

Limited portfolio visibility

Key Stats at a Glance

10–20% Savings in DAM
Better day-ahead procurement

95% Forecast Accuracy
Demand & renewable prediction

Zero Penalty Losses
RSD & MOD compliance automated

360° Visibility
Portfolio, trades, outages, costs, one dashboard

Up to 15% Lower RTM Costs
Real-time optimized buy/sell

20–30% Cost Savings
Smart DAM & RTM trades

Future Scope

AI-driven RTM/DAM trading strategies

Advanced analytics for buy/sell benefits

IoT data for demand-side accuracy

Blockchain for market transparency

Cross-DISCOM energy trading