Comments and suggestions on Discussion Paper on "Shortening the Scheduling Timeline for Real Time Markets (RTM) in India" by SEIL Energy India Ltd.

SEIL appreciates the initiative undertaken toward improving market efficiency, faster balancing, and enhanced grid responsiveness through shortening of the Real Time Market (RTM) scheduling timelines. The objective of aligning Indian power market operations with evolving system requirements and increasing renewable integration is acknowledged.

However, from the perspective of thermal generators operating under multiple long-term, medium-term, bilateral, and market-linked contracts, the proposed compression of timelines from the existing framework presents substantial operational and technical challenges.

Accordingly, SEIL submits the following detailed comments for consideration.

1. Operational Challenges in RTM Bidding Due to Multiple Contracts and Reduced Bidding Window

The discussion paper proposes reducing the RTM bidding window from 15 minutes to 5 minutes, Thermal generators supplying power under multiple Long-Term, Medium-Term, Short term, and exchange-linked transactions are required to undertake several contract-wise validations before placing bids in RTM. These activities include:

- Assessment of unrequisitioned surplus (URS) availability beneficiary-wise
- Verification of revised requisitions and surrender schedules from multiple procurers
- Optimization of bid quantity considering technical minimum, ramp rates.

In practice, beneficiary revisions and surrender instructions are often received close to the RTM gate closure, requiring repeated recalculation of contract-wise entitlements and surplus. Such recalculations cannot always be fully automated because commercial logic, contractual prioritization, and operational constraints differ across contracts and beneficiaries.

A compressed 5-minute bidding window would therefore create serious operational difficulties, particularly for large thermal generating stations managing diversified portfolios.

Risks Arising from Inadequate Bid Preparation Time

Insufficient time for proper assessment may lead to:

- Incorrect declaration of URS availability
- Errors in bid quantity allocation across contracts
- Potential contractual non-compliance and commercial disputes

SEIL's Submission

SEIL respectfully submits that:

- Compression of bidding windows should be considered after development, testing and availability of robust automated contract-wise URS allocation and scheduling tools.

2. Impact of NOC Fetching and Schedule Revision Timelines on RTM Participation

At present, RTM participation for inter-state generating stations depends on timely availability of:

- NOAR-based NOC confirmations
- WBES schedule updates
- RLDC/SLDC processing and validation timelines

Under existing operational experience, RTM bids must strictly conform to NOC quantum, any delay in fetching NOC substantially compresses the effective time available for submission of bids.

Need for Improved System Integration

The success of compressed scheduling timelines depends significantly on seamless and real-time synchronization between:

- NOAR platform
- WBES
- RLDC/SLDC systems
- Exchange platforms
- Generator-side scheduling software

SEIL's Submission

SEIL therefore requests that:

- NOAR-WBES integration and synchronization mechanisms be fully stabilized before timeline compression is implemented.
- A minimum guaranteed buffer time be maintained between confirmation of revised NOC visibility and opening of the RTM bidding window.
- Timeline reduction should only be implemented after demonstrating consistent system performance through pilot operations.
- Operational contingencies for delayed WBES updates should be clearly defined.

3. Challenges Due to Reduced Time Between Schedule Revision and Delivery Period

Thermal generating units require adequate physical preparation time to respond safely and reliably to revised schedules arising from RTM outcomes.

Unlike renewable generators, thermal plants involve complex processes that cannot be altered instantaneously.

Physical and Technical Constraints

To implement revised dispatch instructions, thermal generators may need to undertake several operational actions, including:

- Starting or stopping coal mills
- Adjusting boiler firing rates
- Stabilizing steam parameters
- Managing turbine loading
- Maintaining environmental compliance parameters
- Operating within permissible ramp-rate limits
- Ensuring equipment safety margins

These activities inherently require a minimum operational lead time.

Impact of Reduced Scheduling Horizon

The proposal to reduce the total RTM scheduling timeline reduces the preparation window available between schedule finalization and actual delivery.

This compressed timeline may increase the risk of under or over injection.

4. Need for Technology Readiness Before Implementing Compressed Timelines

The discussion paper relies substantially on assumptions regarding enhanced automation, digital integration, and streamlined coordination between market systems.

Current Ground Realities

Operational readiness currently varies significantly across:

- RLDCs and SLDCs
- NOAR processing systems
- WBES platforms
- Generator-side IT infrastructure
- Exchange interface systems

Even minor delays in one component of the process chain can materially impact downstream activities and compress physical response timelines for generators.

SEIL's Submission

SEIL respectfully recommends:

- Readiness assessment of all stakeholders, including RLDCs, SLDCs, exchanges, NOAR systems, and generators.
- Trial runs and mock operations before commercial implementation.
- Creation of fallback operational protocols in case of synchronization failures or system delays.
- Standardization of API-based integration and communication systems across platforms.

Conclusion

SEIL supports progressive reforms aimed at improving the efficiency and responsiveness of India's power markets. However, any reduction in RTM scheduling timelines must carefully balance market efficiency objectives with the operational realities of thermal generation.

Given the present level of operational complexity, varying automation readiness, immediate compression of RTM timelines may create unintended operational and commercial risks.

SEIL therefore respectfully requests the Hon'ble Commission to adopt a phased, consultative, and technology-ready approach while ensuring that thermal generating stations are not exposed to impractical operational obligations that could adversely impact reliability, compliance, and grid security.