Wartsilla Energy Comments on Capacity Market

========== Forwarded message ==========
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Date: Wed, 27 May 2026 16:02:38 +0530
Subject: Wärtsilä Comments on CERC Staff Paper – Capacity Market for Electricity in India
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Dear Sir/Madam,

Wärtsilä is a global leader in advanced technologies and complete lifecycle solutions for the marine and energy markets. For the energy sector, Wärtsilä offers utility-scale energy storage systems, flexible engines and lifecycle services for these solutions. Wärtsilä's reciprocating internal combustion engines (ICE) typically run on natural gas with readiness for sustainable fuels such as hydrogen, ammonia and methanol. Wärtsilä's net sales totalled EUR 6.9 billion in 2025. The company has operations in over 199 locations in 78 countries worldwide.

We support the CERC's initiative to establish a capacity market to secure resource adequacy and reliable capacity for India's evolving grid. Establishing a robust capacity market is essential: capacity payments play a vital role in ensuring sufficient firm capacity and sustaining the financial viability of power plants that may operate only peak demand periods.

Not all capacity adds equal value. CERC should recognize flexibility in capacity market design and resource adequacy planning. Without this, inflexible plants (like coal) may be encouraged, even though they cannot ramp or start quickly and will run inefficiently at part load. In contrast, fast-start, flexible plants (like modern gas engines) can respond to renewable variability and supply power when needed.

Recommendations for RA Planning & Capacity Market Design:

1. **Adopt a Technology-Agnostic but Flexibility-Focused Approach** – We support the Staff Paper's recommendation for a technology-neutral capacity market. To enhance this, explicitly incorporate flexibility and performance attributes into RA planning and capacity auctions. This means that each State's RA Plan should consider the contributions of flexible gas generation (e.g., engine-based plants) and account for dynamic operational parameters (such as start-up time and cost, ramp rates, and minimum load). By reflecting these factors in RA models, planners will avoid over-estimating the need for inflexible resources (e.g., unnecessarily adding large coal or solely four-hour battery storage to cover evening peaks). Instead, they will see that fast, dispatchable capacity can reliably cover extended evening peak hours, reducing overall system costs and preventing overbuild of less flexible capacity.

2. **Enable Long-Term Contracting for New Flexible Capacity** – We support the Staff Paper's proposal for 15-year capacity contracts and suggest considering up to 20-year tenors for new flexible capacity. International experience, notably Japan's Long-Term Decarbonization Auction (LTDA), demonstrates the effectiveness of 20-year fixed-revenue capacity contracts in incentivizing new low-carbon firm capacity (e.g. hydrogen-capable gas plants). Extending contract length to 20 years for qualifying technologies would enhance investor confidence and ensure financing for these capital-intensive but essential flexible resources.

We reiterate our strong support for a well-designed capacity market as a cornerstone of India's resource adequacy strategy. By explicitly valuing flexibility, incorporating operational parameters into planning and procurement, and offering long-term revenue certainty, the capacity market will attract investment in flexible, firm capacity. This will ensure that fast-reacting gas-based plants and other flexible power plants can play their indispensable role in balancing renewables and meeting India's peak power demand reliably, while advancing the clean energy transition.

We appreciate CERC's thoughtful consideration of these comments and remain ready to further contribute to the development of a successful capacity market framework for India.

Thank you for the opportunity to provide our inputs.

Respectfully submitted,

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Wärtsilä Energy