

**International Conference on  
Smart Technologies for Energy, Sustainability & Industry (STESI)  
July 22-23, 2026**

**Department of Electrical Engineering, Manipal University Jaipur**

<b>Special Session ID</b>	SS-06
<b>Title</b>	From Assets to Ecosystems: Lifecycle Intelligence and Governance of Power Infrastructure
<b>Tentative Topics</b>	<ol style="list-style-type: none"> <li>1. AI/ML-based lifecycle and degradation modeling of power assets</li> <li>2. Data-driven asset health assessment and predictive maintenance</li> <li>3. Digital twins for long-term infrastructure planning and validation</li> <li>4. Climate resilience and risk-informed infrastructure design</li> <li>5. AI-enabled techno-economic and multi-objective optimization</li> <li>6. Governance, regulatory, and ownership frameworks for infrastructure assets</li> <li>7. Human-centric and explainable AI for operator decision support</li> <li>8. Transition risk analysis and stranded asset management</li> <li>9. Socio-technical integration in infrastructure decision-making</li> <li>10. Utility-scale case studies and real-world implementations</li> </ol>
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