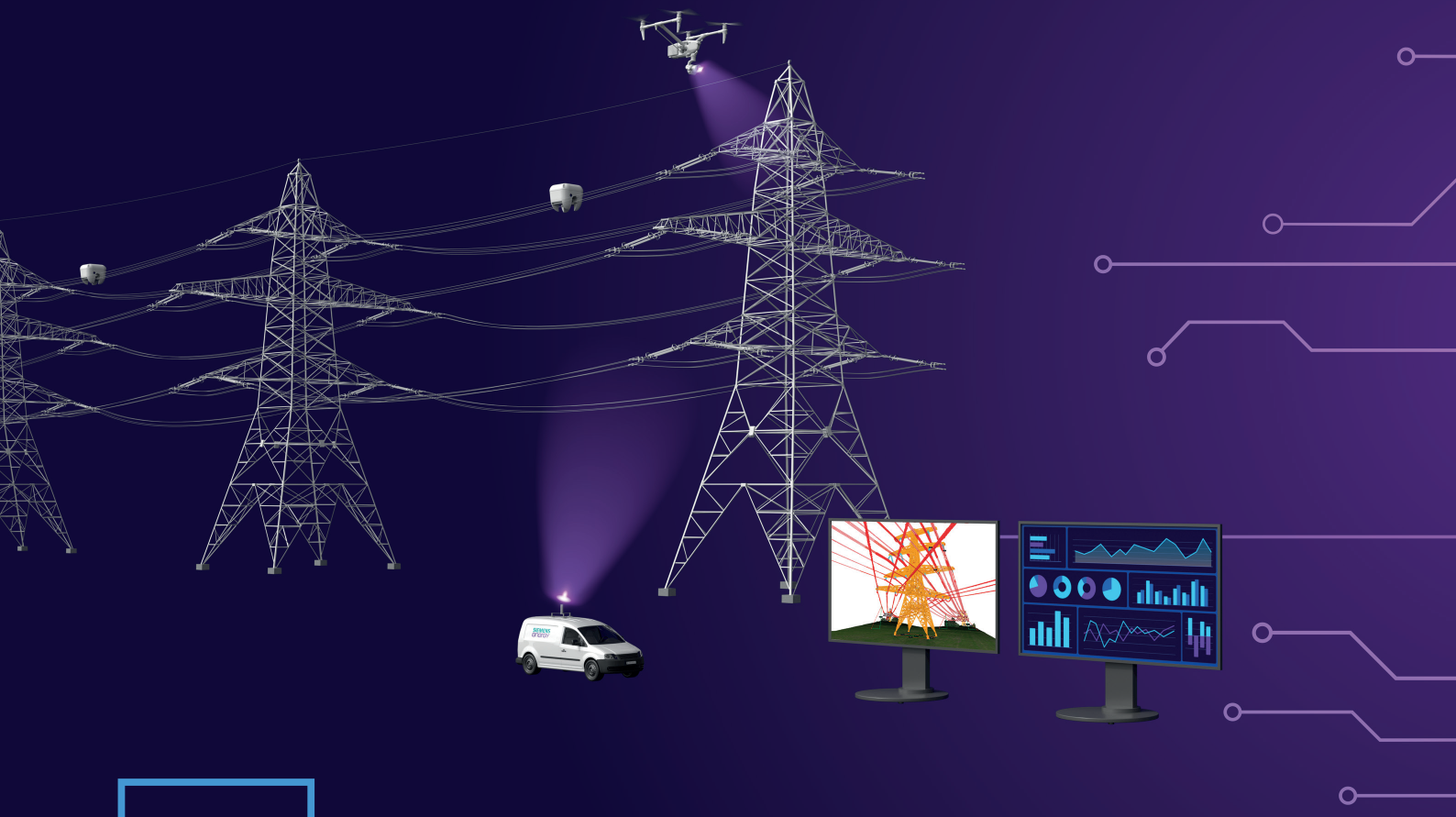
SIEMENS energy

Overhead line

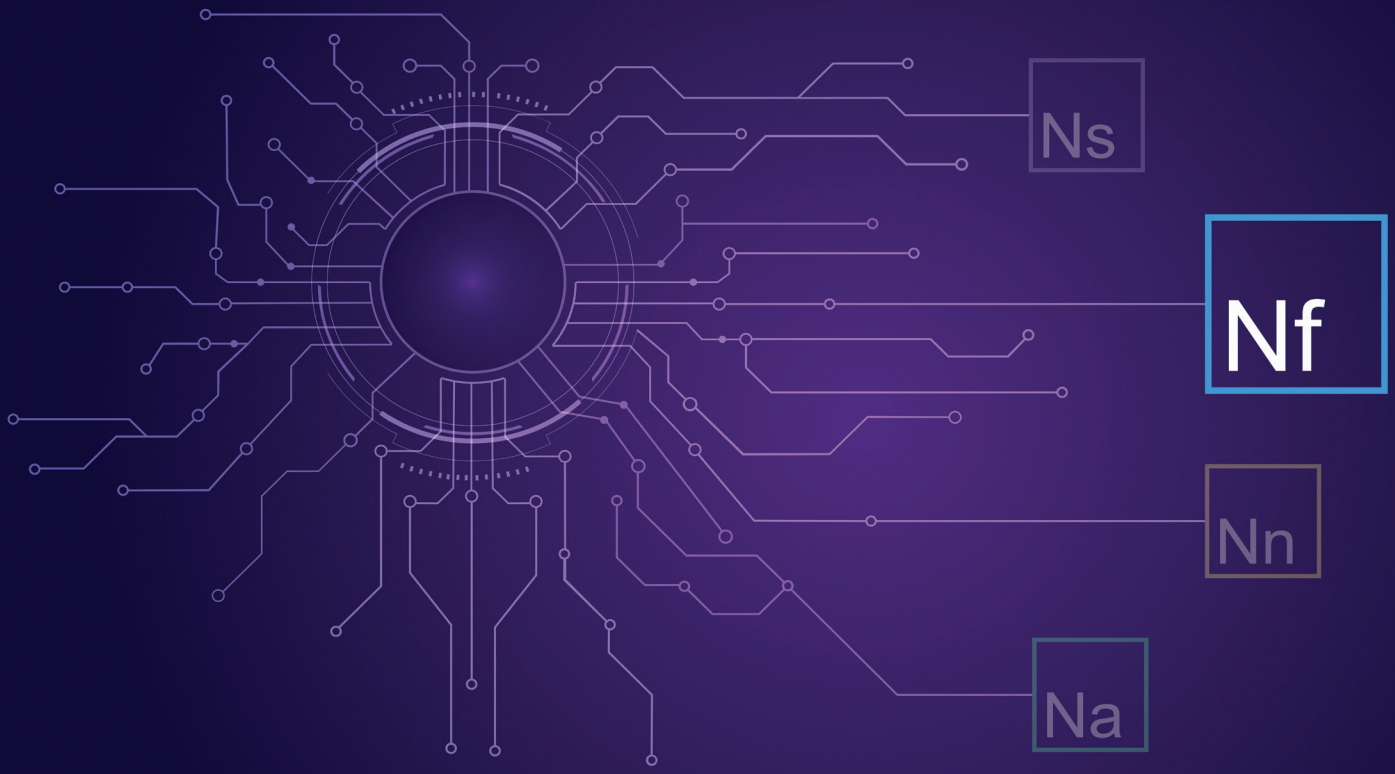
Noedra Flow suite for line digitalization

Bringing clarity, control, and confidence from above.



Nf

Noedra Flow
Line Digitalization



The Noedra framework

Noedra is Siemens Energy digital framework - the Mind of the Grid - bringing together Grid Technologies' intelligent solutions, from sensors and control systems to software and advisory, into one connected ecosystem.

By transforming grid data into clarity, coordination, and confident action, Noedra enables operators to manage grid complexity with intelligence and control.

Each Noedra Suite expresses a specific way this intelligence acts across the grid. Together, they protect, sense, structure, and guide energy systems toward a resilient future.

Flow suite - Intelligence from above the grid

Within the Noedra ecosystem, Flow delivers intelligence from above.

The Flow suite focuses on line digitalization, enabling operators to continuously see, understand, and anticipate the condition of transmission assets – overhead and cable.

Advanced Inspection is a core capability of this intelligence - transforming traditional overhead line inspections into precise, data-driven, and predictive processes.



From overhead line data to actionable intelligence

Transmission operators face increasing pressure to maximize grid capacity, maintain reliability, and manage aging infrastructure. Traditional approaches based on periodic inspections and conservative operating limits often provide only a partial view of asset condition and network performance.

As grids become more dynamic, operators need continuous visibility into assets, environmental conditions, operational risks, and available capacity.

The Noedra Flow suite addresses this challenge by combining monitoring, diagnostics, inspection, and analytics in a unified overhead line digitalization solution. By transforming operational and asset data into actionable intelligence, Noedra Flow helps utilities improve reliability, optimize maintenance, reduce risk, and unlock the full potential of existing grid infrastructure.

Our solutions

Monitoring

Gain continuous visibility into overhead line performance, environmental conditions, and asset status. Noedra Flow combines line loading, weather, sag and clearance, corridor, and tower monitoring to provide real-time operational awareness. By continuously tracking critical parameters, operators can optimize network capacity, improve safety, and respond proactively to changing conditions.

Diagnostics

Transform operational data into actionable insights with advanced diagnostic capabilities. Noedra Flow helps identify and interpret performance constraints, weather-driven risks, clearance violations, conductor degradation, and structural issues before they impact reliability. By understanding the causes behind asset behavior, utilities can make faster, more informed maintenance and operational decisions.

Inspection

Build a comprehensive understanding of asset condition through integrated inspection capabilities. Leveraging LiDAR, drone, and satellite inspections alongside tower and structure assessments, Noedra Flow enables efficient identification of defects, vegetation encroachment, and asset deterioration. AI-supported defect management helps prioritize findings and streamline the path from inspection to corrective action.

Analytics

Turn data into strategic decisions with powerful predictive and risk-based analytics. Noedra Flow supports dynamic line rating forecasting, vegetation growth prediction, wildfire and storm risk assessment, as well as reliability and investment analytics. These insights help utilities maximize asset utilization, strengthen grid resilience, prioritize investments, and plan maintenance activities with greater confidence.





Why Siemens Energy

Partnering with Siemens Energy means more than just choosing a technology provider. Our value goes far beyond technology - we bring vision, reliability, and partnership to every project.

Proven expertise:

Benefit from decades of experience in power systems and grid modernization, ensuring reliable and forward-thinking solutions.

Global reach:

Leverage our worldwide presence and deep industry knowledge to address local requirements while meeting global standards.

Tailored solution:

Our teams collaborate closely with customers to deliver solutions customized to your unique operational needs.

Trusted partnership:

Rely on Siemens Energy as your advisor, dedicated to building long-term relationships and supporting your journey toward a reliable, secure, and sustainable energy future.

Continuous innovation:

Experience ongoing support and innovation, ensuring your organization stays ahead in a rapidly evolving energy landscape.

Transform inspection into foresight.

Bring precision, intelligence, and confidence to line inspections with Noedra Flow - Advanced Inspection.

Discover Siemens Energy digital inspection solutions for transmission lines.



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