Wider Area Monitoring: A Case for Synchrophasor Data Sharing Across Utility Boundaries

Enhancing grid reliability through collaborative data exchange

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The Reality of Today's Grid

Grid Interconnectivity and Dynamics

Stress Factors on the Grid

Need for Situational Awareness

Reliable operation requires broad visibility beyond utility boundaries, motivating real-time synchrophasor data exchange.

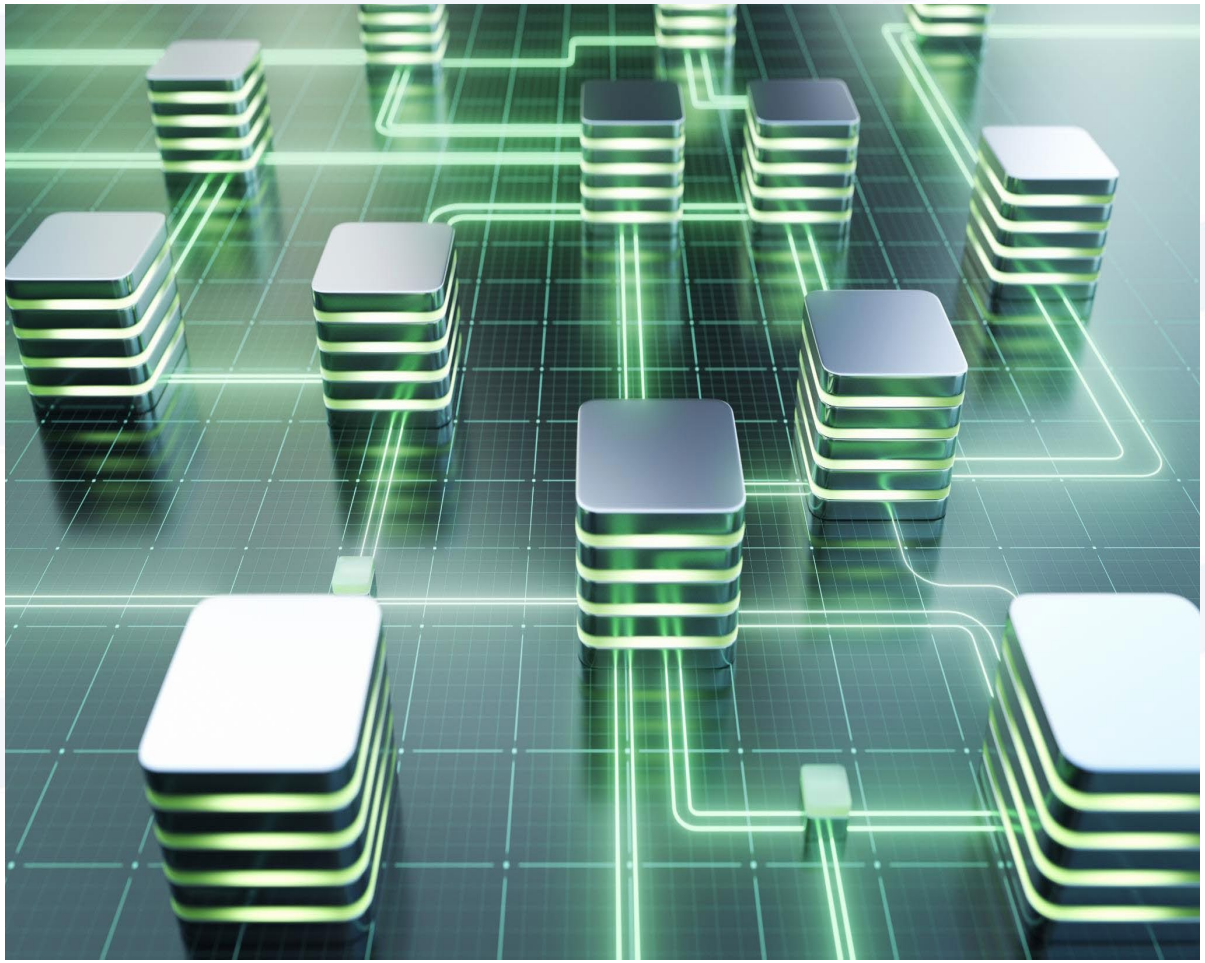
Why Synchrophasor Data Sharing Matters

Early Disturbance Detection

Enhanced Situational Awareness

Faster Confident Decisions

Better Asset Utilization



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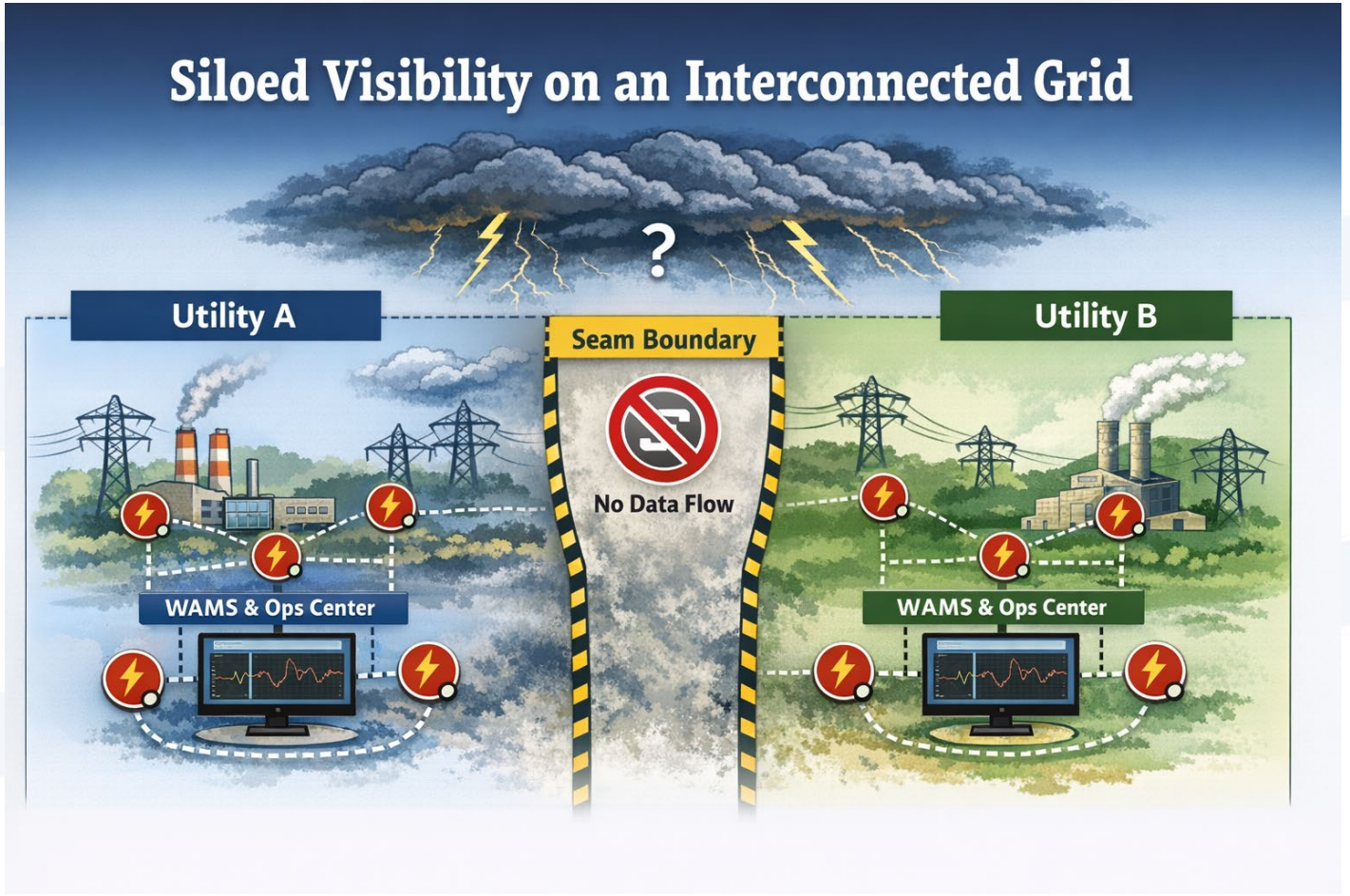
Are there Costs to Siloed Visibility on an Interconnected Grid

- Delayed Recognition of Grid-Wide Problems
- Misdiagnosis and Ineffective Control Actions
- Repeating History
- Underutilization of Existing Investments



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Common Concerns to Sharing Synchrophasor Data Across Utility Boundaries

Cybersecurity and Compliance

- NERC CIP Compliance,
- Increased cyber attack surfaces.

Institutional and Legal Constraints

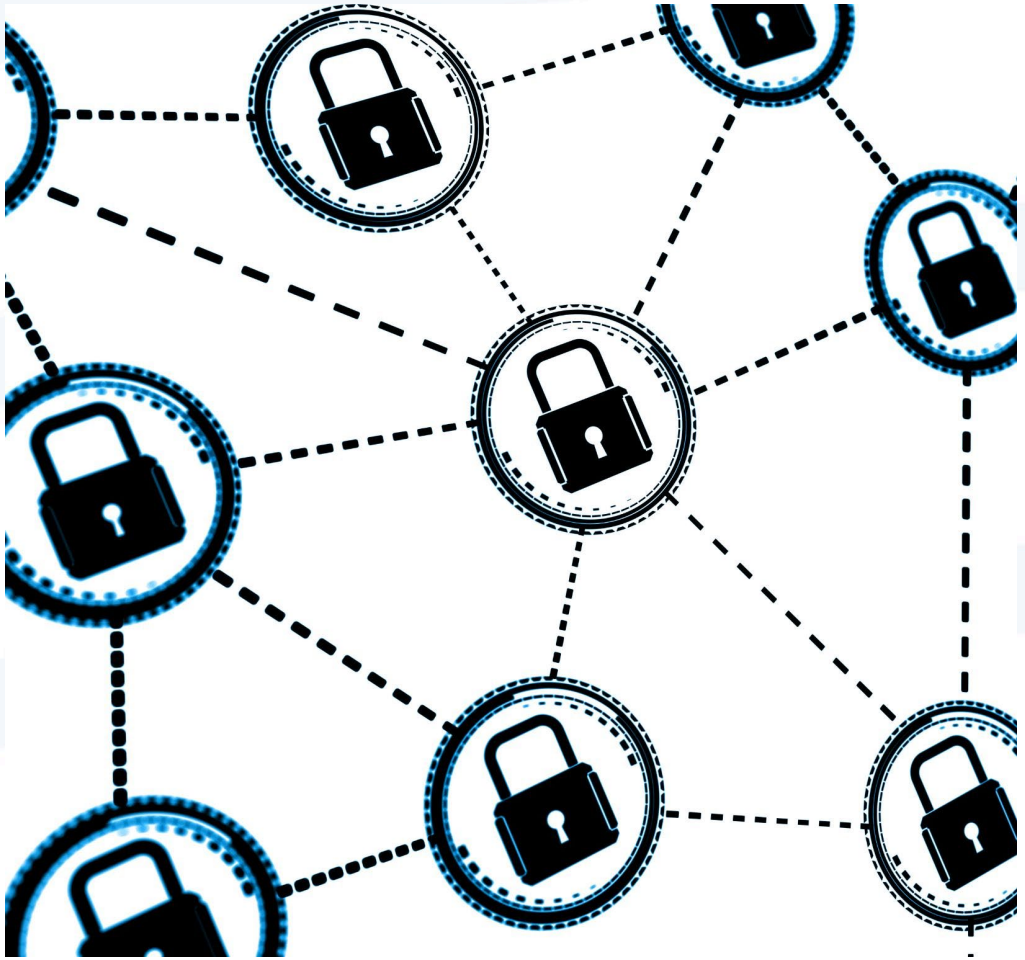
- Liability issues
- Data privacy and ownership
- Lack of uniform data-sharing procedure

Technical and Infrastructure/Cost Constraints

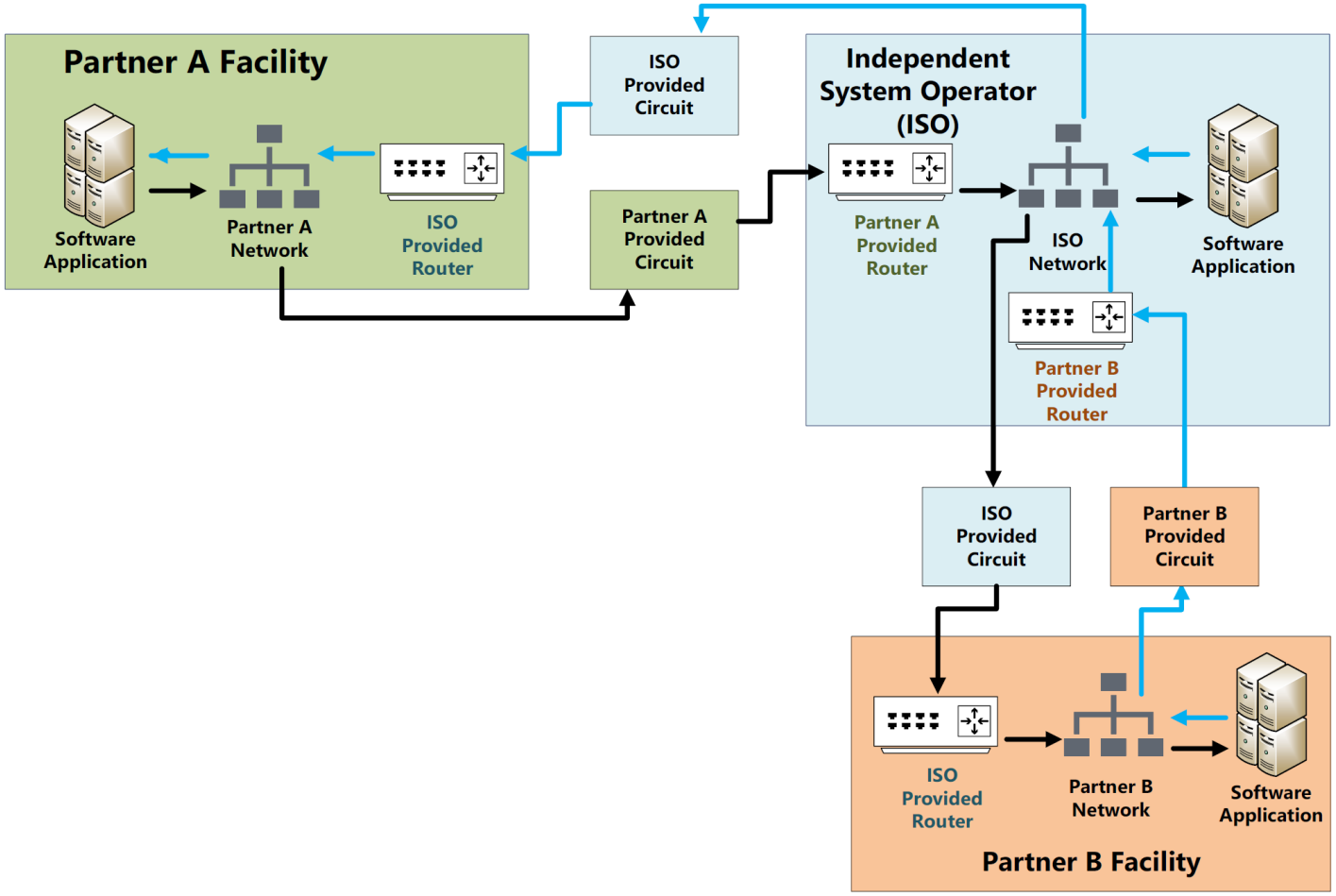
- High-speed communication requirements
- Data volume and storage
- Cost implications

Operational challenges

- How much data sharing is adequate?
- Data Quality issues



Data-Sharing Framework – Sharing via ISO



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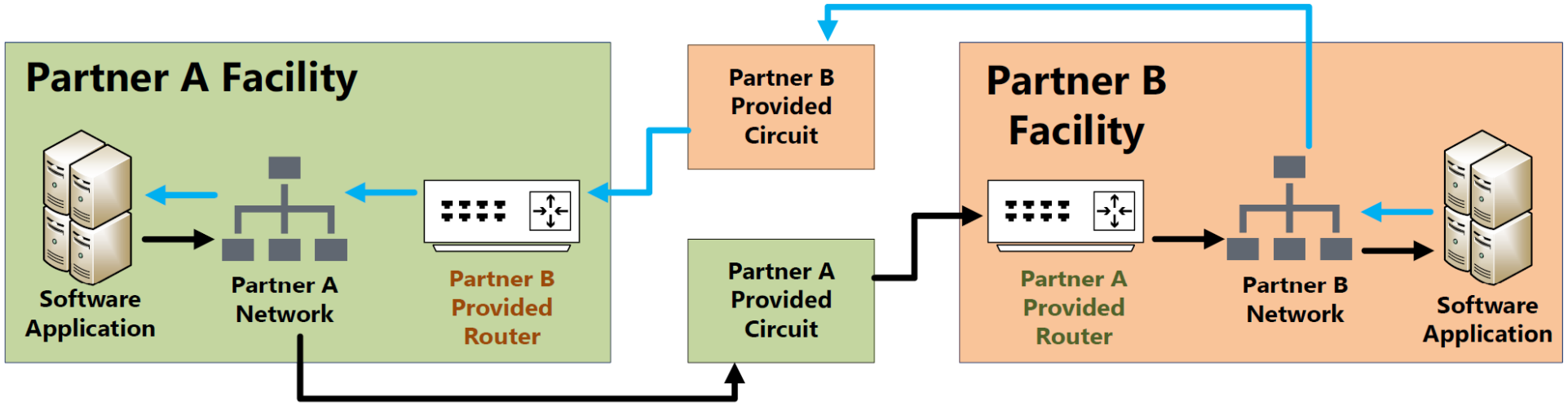
Data-Sharing Framework – Direct Partners Sharing



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Our ask…

The grid is already interconnected…
…**Our data practices need to catch up.**

If we want to move from reactive operations to proactive, resilient grid management, **synchrophasor data sharing between neighboring utilities is not optional—it is essential**.

Let NASPI **assemble a practical playbook for neighbor-to-neighbor synchrophasor sharing—minimum data set, governance, and a pilot approach**.

Synchrophasor already provide the measurement foundation for wide-area awareness; sharing is the multiplier that turns local tools into interconnection-level reliability outcomes.

The question for all of us is simple:
Will we wait for the next major event to prove this again, or will we act now—together?