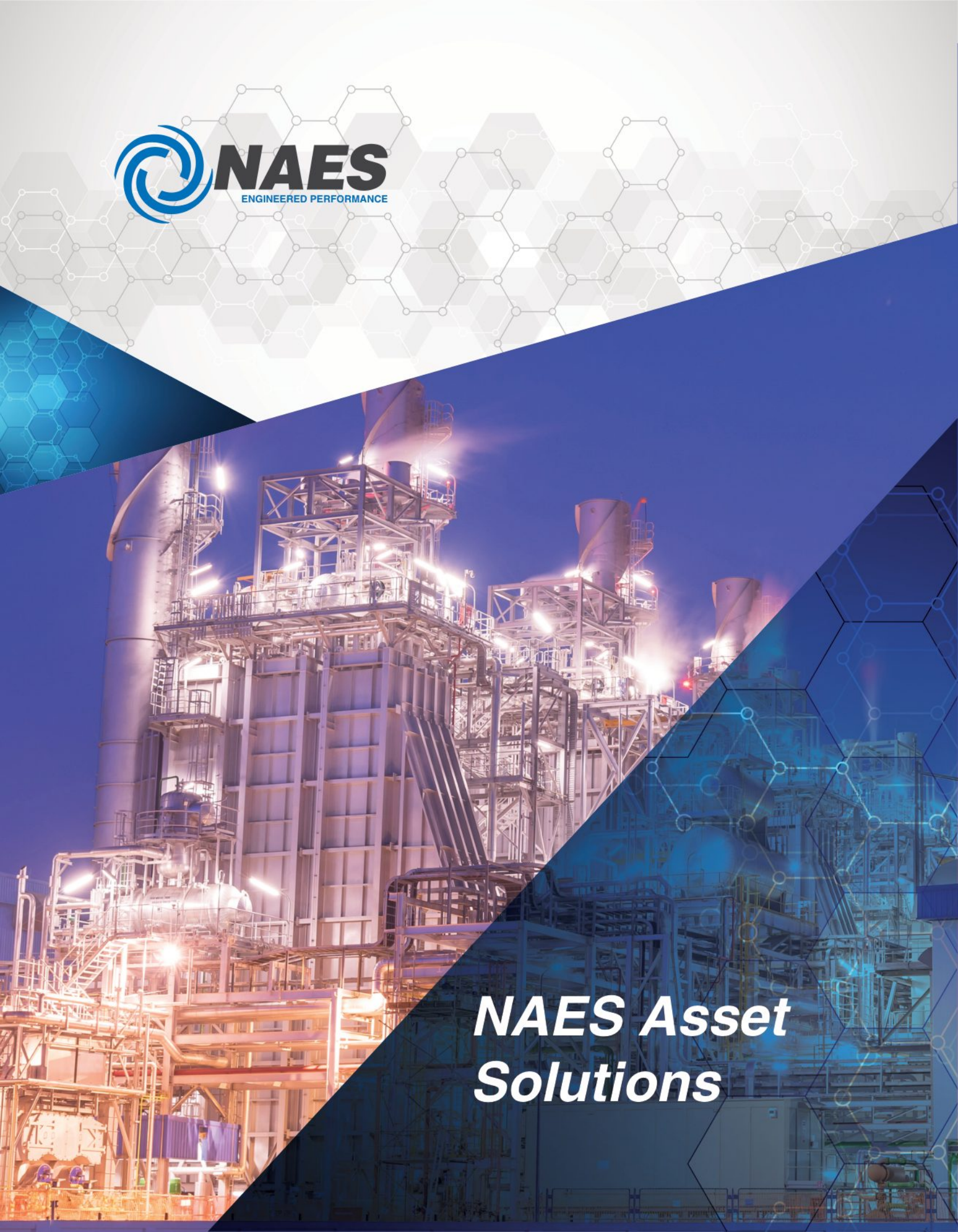


The background of the entire image is a photograph of an industrial facility, likely a refinery or chemical plant, at night. The facility is illuminated by numerous bright lights, creating a high-contrast scene. The structure is complex, with multiple levels, pipes, and large storage tanks. The right side of the image is partially obscured by a dark blue diagonal overlay that contains the text 'NAES Asset Solutions'.

NAES Asset Solutions

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Reliability • OT Integrity • Lifecycle Support

***Independent, fleet-informed asset oversight
backed by global industrial leadership.***



NAES Asset Solutions



NAES and ITOCHU:

A Strategic Relationship Built on Scale, Stability, and Long-Term Value

NAES Corporation operates with the backing and strategic alignment of ITOCHU Corporation, one of the world's largest and most diversified industrial and infrastructure organizations. This relationship provides NAES with a unique combination of **financial strength, global scale, and long-term investment discipline**, while preserving NAES's independence as an operator and engineering authority.

ITOCHU's global footprint spans energy, infrastructure, advanced manufacturing, and industrial services across more than 60 countries. NAES leverages this relationship to support asset portfolios that require not only operational excellence, but also **capital discipline, lifecycle foresight, and risk governance**.

For asset owners, this relationship translates into:

- Long-term institutional stability
- Access to global industrial insight and best practices
- Alignment with asset value creation rather than short-term execution

NAES remains **OEM-neutral, owner-aligned, and operationally independent**, while benefiting from the scale and perspective of a global industrial enterprise.



Safety



Integrity



People



Passion



Accountability



Ever-Forward

NAES Corporation Overview

Four decades of operational excellence across critical infrastructure

NAES Corporation is the **largest independent operator of power and industrial facilities in the United States**, with more than 40 years of experience managing complex assets across regulated and merchant environments.

NAES OPERATIONAL FOOTPRINT

- Over 2,800 facilities managed globally
- More than 31,000 skilled professionals in its global resource pool
- Over 1,000 construction and major modification projects completed
- Active operations in 20+ countries

NAES SUPPORTS ASSETS ACROSS

- Power generation (combined cycle, simple cycle, steam, renewable)
- Water and wastewater utilities
- Manufacturing and process industries
- Oil, gas, and petrochemical facilities

This breadth of experience allows NAES to apply **fleet-informed insight** to individual assets—connecting lessons learned across technologies, markets, and operating models.



Water Utilities



Power Generation



Manufacturing & Process Industries



Oil & Gas



Petrochemical



NAES Engineered Performance

Independent, OEM-neutral engineering driven by fleet intelligence



NAES Engineered Performance provides the **technical foundation** that informs Asset Solutions.

This group delivers deep expertise in **engineering, controls, and performance optimization**, grounded in decades of operating data across a diverse asset fleet.

Engineered Performance is defined by three principles:

Fleet-Informed Engineering

Engineering decisions are based on real operating history and cross-asset learning, enabling identification of repeatable failure modes and performance opportunities.

Independent and OEM-Neutral

Recommendations are driven exclusively by asset performance and lifecycle value—not vendor or OEM commercial interests.

Proven Technical Outcomes

Consistent improvements in:

- Reliability and availability
- Output and thermal performance
- Operational stability and predictability

This engineering depth enables Asset Solutions to deliver **actionable, defensible recommendations** that translate directly into operational and financial value.

Why Asset Solutions Exists

Capabilities most individual plants cannot build internally

Asset owners are accountable for reliability, cost, and risk, yet most facilities cannot economically staff the **specialized engineering, controls, OT, and governance expertise** required to manage modern assets proactively.

Asset Solutions was created to consolidate these capabilities into a centralized, owner-aligned function that supports assets across their entire lifecycle.

Asset Solutions provides:

- Independent engineering oversight
- Reliability and risk intelligence
- OT system integrity and governance
- Financial and lifecycle insight

The result is **lower lifecycle cost, reduced operational risk, and better-informed decisions.**

How Asset Solutions Delivers Value

Asset Solutions integrates four disciplines that are often siloed at the plant level:

Reliability



Structured analysis identifies and mitigates failure modes before they impact availability or revenue.

Engineering



Independent engineering oversight supports lifecycle decisions, system upgrades, and capital planning.

Controls



Validation of control logic, alarm strategies, and configurations ensures stable, predictable operation.

OT / IT Integrity



Operational technology is treated as a production-critical system, with emphasis on cybersecurity, recoverability, and resilience.

Together, these disciplines drive measurable operational and financial outcomes.



Asset Solutions Core Capabilities

DCS & Controls Oversight

Ensures control systems support operational intent—not merely basic functionality.

Includes:

- Control logic health assessments
- Control philosophy review
- Alarm strategy validation
- Upgrade and migration oversight
- Vendor work verification

OUTCOME

Improved stability, reduced nuisance trips, and higher operator confidence.

OUTCOME

Safer execution, faster troubleshooting, reduced reliance on tribal knowledge.

Documentation & Governance

Restores discipline to documentation and change management

Includes:

- Management of Change (MOC)
- Drawing accuracy and traceability
- Procedure governance

Production Assurance & Audits

Verifies system readiness and configuration integrity.

Includes:

- System health assessments
- Logic and configuration audits
- Version and change integrity reviews

OUTCOME

Early identification of latent risks before forced events occur.

OUTCOME

Shorter outages and improved post-outage reliability.

Outage Management

Brings structure, cost control, and accountability to outage execution.

Includes:

- Outage planning and governance
- Cost and schedule oversight
- Post-outage performance reviews

Reliability & Risk Insights

Applies structured methods to prioritize reliability investment.

Includes:

- RAM studies
- FMEA
- Risk ranking and mitigation planning

OUTCOME

Focused effort aligned to consequence and business impact.

OUTCOME

Lower recurring costs and improved capital efficiency.

Financial Performance

Connects technical performance to financial outcomes.

Includes:

- O&M cost benchmarking
- Organizational structure review
- Accounting and cost allocation support

OT / IT Asset Integrity

Treats OT as a production system—not an IT extension.

Includes:

- OT network architecture assessments
- Cyber hygiene evaluations
- Backup and recovery readiness

OUTCOME

Increased resilience and faster recovery from system or cyber events.

OUTCOME

Recovered capacity, improved heat rate, extended asset life.

Thermal Performance & Lifecycle Engineering

Protects and enhances the thermodynamic value of the asset.

Includes:

- Thermal condition assessments
- Performance benchmarking
- Life-extension strategies

Risk & Reliability Service Tiers

A structured engagement model aligned to asset criticality and operational risk.

NAES Asset Solutions delivers risk and reliability support through a tiered framework that scales with asset complexity and performance objectives. Each service tier builds on a foundation of independent assessment and owner-aligned governance, expanding into deeper reliability analysis, engineering oversight, and performance monitoring as needs evolve. This modular approach allows asset owners to engage at the appropriate level while maintaining flexibility over the asset lifecycle.

Service	Basic	Advanced	Premium	Timing
Foundational				
Training and Qualification Assessment	X	X	X	3 wk
Roles and Responsibilities Matrix	X	X	X	1 wk
Leadership Assessment	X	X	X	3 wk
Procedure Development	X	X	X	4-8 wk
O&M Processes				
Operations Process Assessment	X	X	X	4 wk
Maintenance Process Assessment	X	X	X	4 wk
CMMS Assessment /Asset Database Clean-Up	X	X	X	3 wk
Reliability Programs				
Critical Equipment Identification	X	X	X	3 wk
Failure Modes Analysis	X	X	X	4-10 wk
Reliability Process Assessment		X	X	3 wk



Service	Basic	Advanced	Premium	Timing
Consequence of Failure Analysis		X	X	4-8 wk
Economic Analysis / Remaining Useful Life		X	X	4-6 wk
Single Point of Failure Analysis			X	6-12 wk
Risk Plan Development / Process			X	3 wk
Advanced Practices				
KPI Development / Monitoring			X	3 wk
Thermal Performance Analysis			X	4 wk
DCS Assessment			X	2 wk
Sensor Deployment			X	
Advanced Technology Evaluation			X	3 wk
APR Modeling / Monitoring			X	
Remote Monitoring and Diagnostics			X	
Operational Excellence Review (OER)			X	6-12 wk

Proof of Execution

Case Study: Cogeneration Facility – Louisiana

Objective

Evaluate operational performance and transition from a steam host mentality to a power generation profit center.

Scope



- Operations and maintenance
- Reliability and risk
- Training and administration
- Financial and LTSA review
- Thermal and technical performance

Engineering



- Availability materially below industry benchmarks
- Variable O&M costs 44% above benchmark
- Fixed O&M costs 133% above benchmark
- Contractor and LTSA inefficiencies
- Outage execution overly people-dependent

Controls



- Clear roadmap for reliability improvement
- Identified recurring annual cost reduction opportunities
- Foundation for increased power export revenue
- \$280K fixed-price engagement with follow-on workstreams

What Asset Solutions Means for You

Operational clarity and risk control translated into measurable asset value

Asset Solutions translates complex technical oversight into clear, owner-aligned outcomes. By integrating independent engineering, reliability intelligence, and lifecycle governance, NAES helps asset owners move from reactive issue management to proactive control—improving reliability, reducing risk, and preserving long-term asset value.

A Long-Term Asset Stewardship Partner

Asset Solutions is not a one-time audit. It is a lifecycle-focused stewardship model designed to protect performance, reduce risk, and enable confident asset decisions over time.





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