

Critical Matrix Integration LLC

Nuclear-Grade Precision for Critical Environments

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SBE Certified

DISS: Clean History (Prior TS Clearance)

Company Overview

Critical Matrix Integration LLC (CMI) is an elite, specialized technical consultancy providing multi-trade sequencing, operational risk mitigation, and advanced commissioning services for critical environments. Founded on a combined 13 years of hyper-strict nuclear naval shipyard planning and hands-on Critical Environment (CE) operations, CMI deploys self-contained, 3-role expert cells (Planning, Electrical, Mechanical) that bridge the gap between heavy construction and live-facility operations. We insulate data center owners and general contractors against multi-million-dollar downtime risks and trade execution bottlenecks.

Core Competencies

Construction & Commissioning — GC Support

- **Multi-Trade Congestion Sequencing:** Predictive analysis of 3D BIM models to eliminate physical spatial conflicts between heavy mechanical (HVAC/Chillers) and electrical (Busways/Switchgear) paths before physical mobilization.
- **Pre-Functional Milestone Auditing:** Executing internal Level 1 through Level 5 "mock inspections" to catch installation defects and documentation gaps prior to official third-party commissioning.
- **Schedule Recovery Intervention:** Deploying targeted operational cells to lagging infrastructure builds to re-sequence trade handoffs and compress project timelines safely.

Live Critical Operations — Owner/Operator Support

- **High-Stakes MOP/SOP Authoring:** Drafting, dry-running, and verifying rigorous MOP documents to guarantee zero accidental power or cooling disruptions during active maintenance windows.
- **Isolation Boundary Planning:** Cross-referencing complex electrical line diagrams and mechanical flow charts to establish bulletproof lock-out/tag-out boundaries in live data halls.
- **Incident Root-Cause Analysis:** Providing rapid independent investigations and remediation blueprints following critical infrastructure failures or generator/cooling loop anomalies.

The CMI Advantage

The 3-Role Tactical Cell

Cohesive, self-contained units (1 Planner, 1 Electrical Expert, 1 Mechanical Expert) overseen by a single Executive Director. Drastically reduces contractor onboarding and communication overhead.

Nuclear-Grade Discipline

Built on a decade of NAVSEA shipyard compliance. We apply zero-tolerance human-error methodologies developed in high-consequence naval vessels to enterprise data center architectures.

Local Corridor Agility

Headquartered in Hampton, VA. Servicing I-64 Richmond-Henrico-Petersburg and Hampton Roads corridors without mobilization delays or remote-team communication lag.

Past Performance & Representative Roles

- ◆ **Norfolk Naval Shipyard (NNSY):** 10 years of multi-trade mechanical, electrical, and HVAC layout planning, structural integration, and strict Work Authorization Form (WAF) routing for complex naval vessel availabilities.
- ◆ **Enterprise Data Center Corridors (Virginia):** 3 years of direct, hands-on operational oversight as Critical Environment Technicians, managing live data hall environments, emergency infrastructure troubleshooting, and strict MOP compliance execution.

Company Data

Structure: LLC Registered in Virginia | NAICS Codes: 541614 (Primary) – Process, Physical Distribution & Logistics Consulting | 541611 – Administrative Management Consulting | 541330 – Engineering Services | 541690 – Other Scientific & Technical Consulting

Socio-Economic Status

100% Locally-Owned Small Business
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