digital twin CONSORTIUM

BUILDINGS AS BATTERIES

VALUE

- Operational Resiliency
- Optimized Energy Consumption
- Economic Opportunity

PLANNED DEPLOYMENT

Brooklyn Navy Yard

AFG

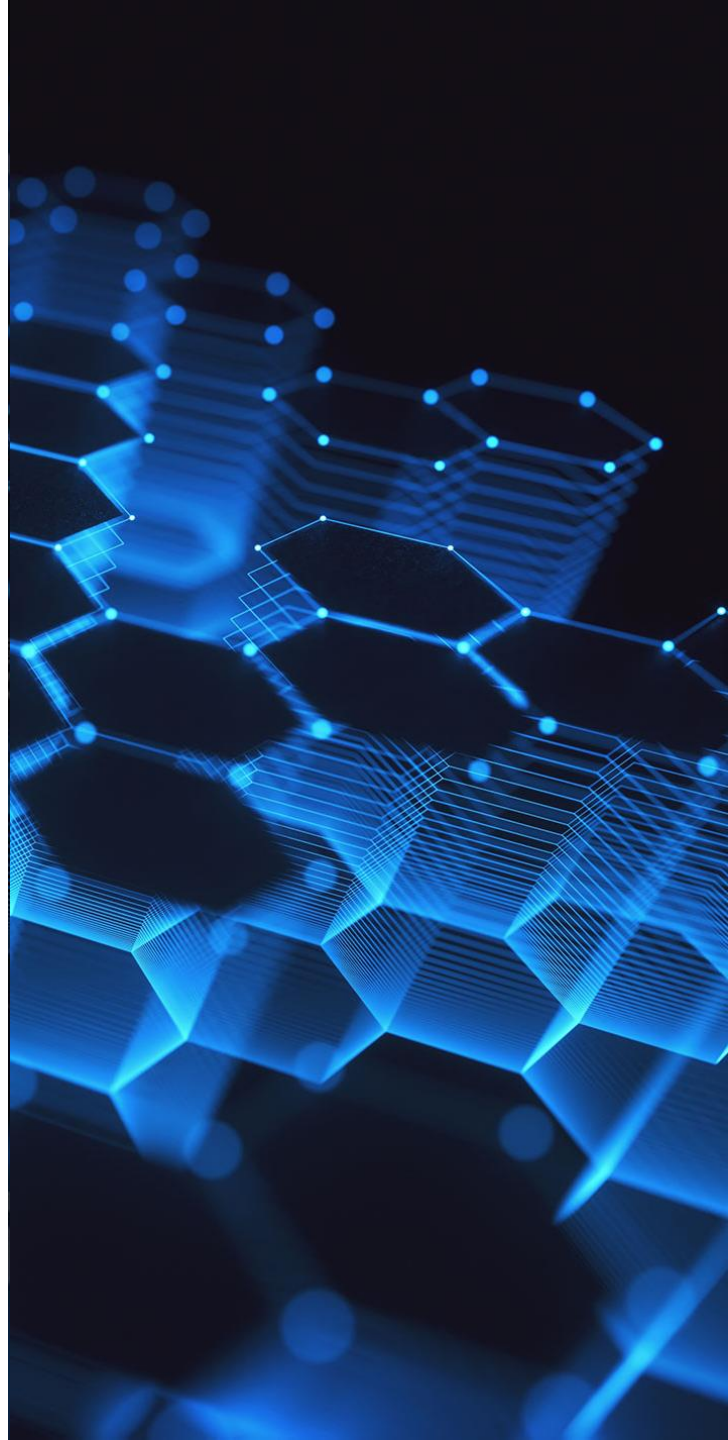
THE SOLUTION

The Agile Fractal Grid, Inc. has created a platform to help campuses and communities achieve energy security and meet renewable energy goals, while also providing contemporary broadband services.

- Provides templates for enabling mass customization at scale
- Allows for continuous improvement based on operational feedback
- Repeatable for others to compose their own customized implementation

DIGITAL TWIN ROLE

- Performs autonomous monitoring and analysis
- Provides prioritized real time optimization of energy consumption
- Enables efficient load balancing and storage



Solution Description

Decentralized Power Grid

When deployed at scale, this evolution of the power grid will provide a fully decentralized energy infrastructure, allowing for unparalleled energy redistribution and operational resilience.

Scalability

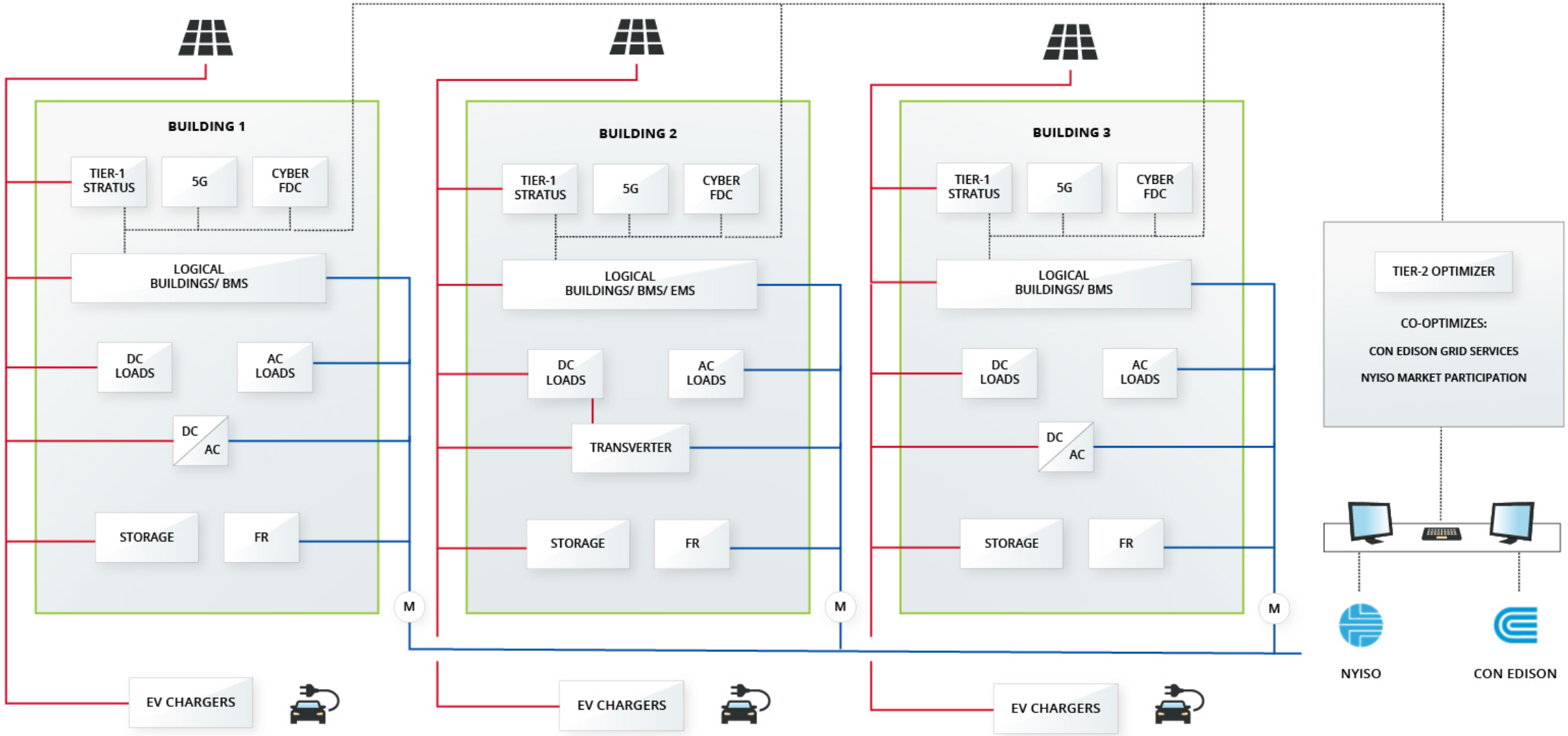
This Use Case provides a digital twin system of systems blueprint to develop and operate, using a mass customization approach, a decentralized energy infrastructure.

Production Improvements

The digital twin is a creation and optimizer engine, allowing for real-world operation and optimizations under the conflicting constraints including

- Safety and Security
- Operational Efficiency
- Economic Opportunity

Campuses of buildings operate as resilient fleets using hybrid AC and DC microgrids



The Mass Customization Network features the use of the Capabilities Periodic Table