# JFK International Airport, NYC 2023

# JFK New Terminal - One Microgrid

# The Challlenge

- Transform NTO into a resilient airport that can function off-grid during power disruptions
- Deliver on aggressive NY State and City sustainability laws
- Deliver energy reliability and resilience with guaranteed system-level uptime
- Produce lower carbon intensity, more efficient, locally generated energy
- Stabilize energy costs over the long-term

# The Solution



- Integrated 11.34 megawatt microgrid comprised of 7.66 MW rooftop solar, 3.68 MW fuel cells, 2 MW/4MWh battery energy storage, and a circular waste heat to chilled water system
- Consists of four power islands: each an integrated energy system with sources of generation, storage, and automation
- The AlphaStruxure Integrate digital platform manages the microgrid performance and operations in a cyber-secure environment
- The Energy as a Service business model provides JFK NTO with longterm, predictable operating costs and guaranteed performance without upfront capital expenditures







and on any airport terminal in the U.S. 13,000 solar panels cover all viable roof space



**Benefits** 

#### 38% decrease

in immediate greenhouse gas emissions over source energy

## 100% airport operations

during power disruptions and the first fully resilient airport transit hub in the New York region



## Compliance

with ambitious New York State, City, and Port Authority sustainability mandates



of energy supply