INDUSTRIAL DEFENDER®


CASE STUDY

# Rapid OT Visibility and Continuous Monitoring for Critical Infrastructure Supporting Department of War

Industrial Defender OT Asset Management, Change Management, Vulnerability Management, and MOSAICS/ NERC-CIP Compliance Reporting

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# MISSION

A public-sector agency contracted with Industrial Defender to secure and sustain the highest levels of uptime for critical infrastructure supporting both public and private-sector operations across a strategic territory.

The engagement spanned power generation and distribution, water and wastewater treatment, and port operations, delivered through inter-agency collaboration for the affected entities.

## Challenges & Results

14

working days to full sensor deployment

1,300+

OT/IT assets identified (from a baseline of zero)

1,500+

vulnerabilities identified across IT and OT

15

critical sites monitored across 4 facility types

## Challenge

The partner entities had little to no visibility into their operational technology environments prior to engagement.

Asset inventories were not tallied while vulnerability posture was unknown, and there was no established baseline to detect malicious or unauthorized change in the OT environment.

Compounding the challenge, the region's infrastructure had also sustained recent storm damage, limiting connectivity at some sites and constraining options for continuous, always-on monitoring.

## Approach and Results

Working alongside the utility, water authority, and port operator, Industrial Defender deployed OT sensors and asset management capability across:

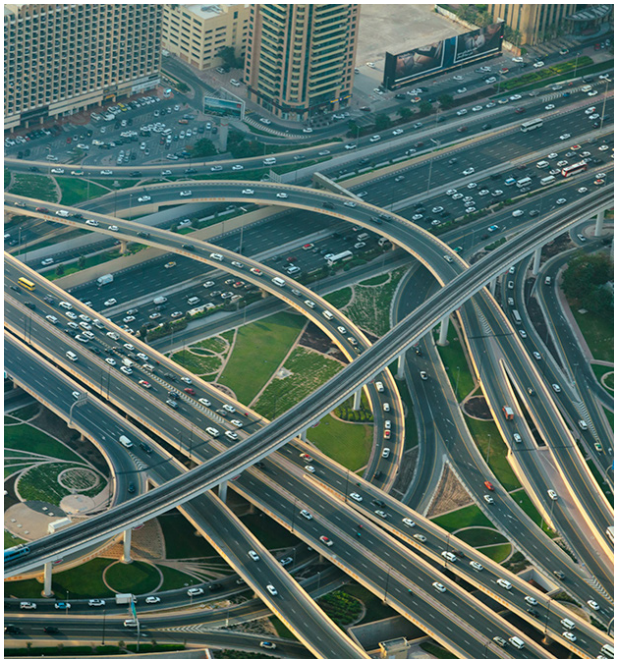
- four wastewater treatment facilities,
- two datacenters
- 30 substations
- and one port central yard

AI accomplished in a mere 14 working days.

This rapid deployment took OT asset visibility from zero to more than 1,300 assets, enabling vulnerability reporting and change baselining across the environment for the first time.

- **Vulnerability discovery:** More than 1,500 vulnerabilities were identified across IT and OT devices, with the highest operational impacted assets remediated in the first week and remediation continuing in the weeks following deployment.
- **Framework alignment:** Fully deployed, the platform positions the partner to achieve 21 of 23 (91%) MOSAICS Operational Requirements, 71 of 98 (72%) Functional Requirements, and 255 of 332 (77%) Technical Requirements — 347 of 453 total requirements (76.6%) — alongside alignment with NERC-CIP, the utility industry's gold-standard compliance framework.

> **This engagement proved what Industrial Defender can deliver at scale: real-time OT visibility across a fragmented, high-risk critical infrastructure environment.**



## Immediate Results

- **Stale credentials:** Updated Passwords after accounts were found enabled with passwords unchanged for more than a year.
- **Anomalous authentication:** Repeated failed logins from an unrecognized, unusually long username, and repeated “Guest” login attempts against another asset, were identified and blocked or disabled.
- **Outdated OT/IT firmware:** Legacy field-device firmware and network OS versions at or approaching end-of-support were flagged as high-severity OT vulnerabilities and queued for patching and upgrade.
- **Unmanaged removable media:** Notable USB device activity was observed with no clear governing policy — reviewed by affected entities.
- **Suspicious protocol behavior:** Passive monitoring of control-system protocol traffic surfaced two distinct high-frequency anomalous alarm patterns at a substation; each tied to a single asset communicating with multiple downstream devices.
- **Unexplained configuration changes:** Continuous audit-policy changes on a single asset raised concern over unauthorized access; credentials were modified.
- **Spoofed addressing:** One asset was found assigned to a public DNS provider’s IP address — a possible indicator of DNS poisoning — and was blocked at the firewall.