

ROBUST COMMUNICATIONS IN A SECURE & MODERNIZED GRID

Emily Allen

Vice President, Critical Infrastructure & Enterprise Markets

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CHALLENGES

Affecting Utilities, Customers and Marketplaces

RISE IN SECURITY INCIDENTS

Rapidly evolving physical and cybersecurity threats

SHIFTING TECHNOLOGY LANDSCAPE

Pace of innovation and device deployment

DEMAND FOR OPERATIONAL EFFICIENCIES

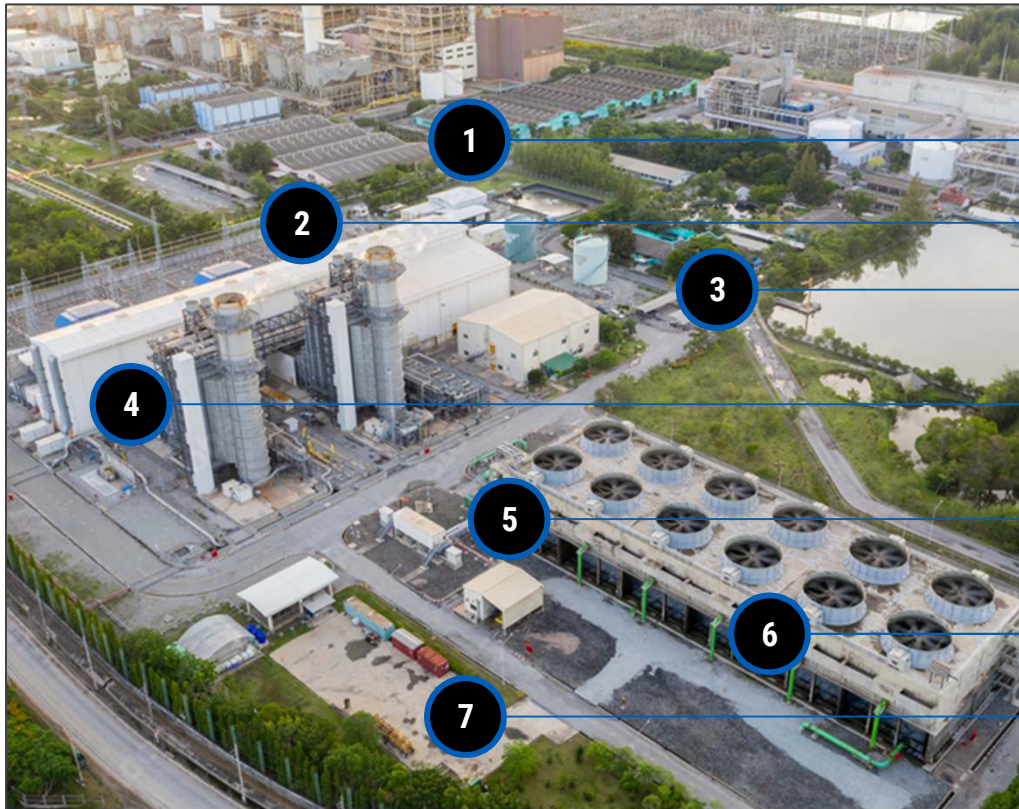
New and geographically dispersed facilities and assets



CRITICAL INFRASTRUCTURE TECHNOLOGY ECOSYSTEM



Finding an End To End Technology Solution



1. Voice Communications
2. Security Camera
3. License Plate Recognition
4. Sensor Monitoring
5. Door Access
6. Wide area outdoor data
7. Work order tickets

THEFT AT A REMOTE SUBSTATION

Use Case



DETECT

INTRUSION DETECTED AT REMOTE SUBSTATION

An intruder is detected getting out of a vehicle and jumping the fence of a remote substation. Security is directly notified and live video is transmitted over Private LTE to the control center.



ANALYZE

APPEARANCE TRACKED

Situational awareness maintained as intruder's appearance is automatically tracked across multiple cameras on and around the substation. Tracking continues even if they appear at another facility.



COMMUNICATE

RESOURCES DISPATCHED

Location and appearance of intruder is determined and shared across security teams to apprehend intruder and potentially prevent theft. Security uses microphone to warn intruder they have been detected.



RESPOND

FIRST RESPONSE DISPATCHED

Local police directly informed with video for immediate response. Incident is logged with pre-populated fields and relevant data to facilitate post investigation and prosecution.

SECURE COMMUNICATIONS



INTEROPERABILITY

Integrating Voice and Data Communications

- Land Mobile Radio (LMR)
- Push-to-talk (PTT)
- Public carrier/Wi-fi
- Private LTE

FLEXIBILITY

Adapt to evolving environment

- Operational efficiencies
- Physical or Cyber threats
- Distributed energy resources
- Wind/Solar plants
- Consumer engagement
- Climate impact

SECURITY

Physical Security

- Asset protection
- Safety

Cyber Security

- Monitoring
- Automated patching and software updates

Secure telecommunications provides the path for people/devices/sensors to communicate across the modernized grid.



THANK YOU

Emily Allen
emily.allen@motorolasolutions.com