

# 2019 SCENARIO

You and your team have been tasked with the security for one of the following four infrastructure. Not only will you need to concern yourself with keeping your infrastructure up and secure, you will need to connect and communicate with the other three types of infrastructure throughout the competition. This model simulates real-world interdependency channels, which allow infrastructure to receive and distribute data throughout the day.

## **SOLAR ENERGY GENERATION FACILITY**

*SEG Facility is the main energy generation facility.*

SEG Facility provides:

- Power to the ED Substation (5)
- Current energy generation data to HPC Data Center (11)
- Solar parts needs to Mighty Manufacturing Plant (1)

SEG Facility receives:

- Increase power load requests from ED Station (8)
- Energy generation calculations from HPC Data Center (12)
- Parts and services from Mighty Manufacturing Plant (4)

## **HIGH PERFORMANCE COMPUTING DATA CENTER**

*HPC Data Center houses several facilities' servers including high performance computers.*

HPC Data Center provides:

- Energy generation calculations to SEG Facility (12)
- Updated part order quantities and status to Mighty Manufacturing Plant (3)
- Power distribution needs to the ED Substation (7)

HPC Data Center receives:

- Current energy generation data from SEG Facility (11)
- Solar panel part order requests from Mighty Manufacturing Plant (2)
- Increased/decreased power distribution from the ED Substation (6)

## **ENERGY DISTRIBUTION SUBSTATION**

*ED Substation is the main energy distribution station.*

ED Substation provides:

- Requests for increased power load to SEG Facility (8)
- Increased/decreased power distribution to Mighty Manufacturing Plant (10)
- Increased/decreased power distribution to HPC Data Center (6)

ED Substation receives:

- Power from SEG Facility (5)
- Power distribution needs from Mighty Manufacturing Plant (9)
- Power distribution needs from HPC Data Center (7)

## **MANUFACTURING FACILITY**

*Mighty Manufacturing Plant is the main solar panel resource provider.*

Mighty Manufacturing Plant provides:

- Parts and services to SEG Facility (4)
- Solar panel part order requests to HPC Data Center (2)
- Power distribution needs to the ED Substation (9)

Mighty Manufacturing Plant receives:

- Solar parts needs from SEG Facility (1)
- Updated part order quantities and status from HPC Data Center (3)
- Increased/decreased power distribution from the ED Substation (10)

