

Case Study

SCADA Operations

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Background

A railroad organization operates its services across the US, including New York City. As part of its network, its trains run through underground rail tunnels that lead into the New York City rail terminal.

In order to improve safety and security, the organization wanted to establish a new SCADA-based operation that would control ventilation, operate the flow of water through standpipes, monitor sump pump activity as well as fire control panels, and perform other Fire and Life Safety functions relating to both the tunnels and the rail terminal itself. Since the SCADA computer system had already been developed by an external entity, **TekBank** was contracted in a management consulting capacity to set up the entire SCADA operation that would take place using the new SCADA system. Additionally, **TekBank** was asked to staff the operation on a temporary basis until permanent set of operations staff could be put in place.

Approach

Our team worked closely with the client's senior director responsible for Fire and Life Safety to fully understand the vision. From this we were able to develop an overall scope and set of objectives which served as a framework for the remainder of our tasks. To accomplish the client's goals, we needed to:

- ⚙️ **Fully understand the SCADA system's functions and capabilities.**
- ⚙️ **Fully understand the client's Fire and Life Safety operations as they relate to SCADA operations.**
- ⚙️ **Understand the operational transition that would need to take place.**
- ⚙️ **Understand the Key Performance Indicators that would serve as a measurement of success or failure.**

Through ongoing consultation with the client's operations representatives as well as with the SCADA system developers, our team developed a complete set of operational procedures that would cover in detail each aspect of all SCADA-related tasks, including tasks relating to both normal and emergency operations. These procedures included information on how to operate the SCADA system in each situation, all communication protocols, who to contact, and what and how to report incidents that may have taken place.

SCADA Operations

Approach (Continued)

TekBank also hired, trained, and managed a team of SCADA operators that would staff the operations center on a 24 x 7 x 365 basis. Through a series of tests, dry runs and the execution of various operations scenarios, the procedures were adjusted and fine-tuned, and the entire operation was then integrated into the client's working environment.

Results

The resulting operation exceeded the client's expectations by effectively managing emergency situations and minimizing disruptions. Over time, the client has moved additional functions and responsibilities to the SCADA operations team and continues to be pleased with the results. Fire and Life Safety field personnel, as well as other supporting entities have come to depend on the quality and integrity of the **TekBank's** SCADA operations team. As the role evolves and expands, we continue to refine and implement procedural updates, and continue to perform management consulting activities within the client's Fire and Life Safety environment.

Additionally, the client asked **TekBank** to take on a permanent role in entirely managing SCADA operations, including staffing. This is a role that we continue to play by providing ongoing SCADA operations support on a 24 x 7 x 365 basis.