Korea Hydro & Nuclear Power Co.,Ltd (KHNP)

Korea

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THE CUSTOMER

Korea Hydro & Nuclear Power (KHNP) is a subsidiary of the Korea Electric Power Corporation (KEPCO). It operates large nuclear and hydroelectric plants in South Korea, which are responsible for about 30% of the country's electric power supply.

Nuclear power plants are classified as 'A'-level national important facilities in Korea similar to the Blue House Executive Residence and the Korean National Assembly Building. In order to safely manage and operate nuclear materials and nuclear facilities, physical security protection is strictly managed in accordance with the Protection of Nuclear Facilities, Radiation and Disaster Preventi on Act.

KHNP was in need of a fully redundant system that should provide enhanced performance while still being able to interoperate with existing equipment. In addition, the new system had to meet the strict guidelines for security requirements presented by the National Intelligence Service.

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FAST FACTS

LOCATION
Gyeongju, Ulsan, Daejeon
/ Republic of Korea

YEAR OF COMPLETION
2020

APPLICATION
Access Control

TECHNOLOGY
Access Control & Integration

PROJECT SIZE
N/A

THE CUSTOMER
Korea Hydro & Nuclear Power Co.,Ltd
(KHNP)

SOLUTIONS
CoreStation: 30EA
BioStation A2: 500EA
BioEntry P2: 30EA

suprema
SECURITY & BIOMETRICS

THE CHALLENGE

Since the existing electrical system of the site was designed for centralized control, a system with compatible architecture was needed so there could be gradual migration away from the aging first generation server. Additionally, some doors had to be controlled separately by stand-alone readers. Due to the A-level security requirements of this critical infrastructure site there were many features necessary to meet high level of security, maintainability, and fire interlocking function.

System configuration and installation standards had to meet certain guidelines of domestic government agencies. Suprema was able to use its in-house customization team to design a solution that met the enhanced security needs of KHNP.

THE SOLUTION

By Installing Suprema's CoreStation Intelligent Controller, distributed and centralized architectures were possible at the same time. BioEntry P2 and BioStation A2 terminals work as stand-alone devices in the distributed portion, and they can be connected to CoreStation as reader in centralized system as well.

One of the most critical tasks was a migration with the existing system and firmware customization. By migration of first-generation terminals and BioStar2 software, it was possible to overcome the technical obsolescence of obsolete devices.

Suprema supported a redundant server connection by customization so that in case of failure with primary server, a redundant server can implement and keep the entire system work safely.

KEY BENEFITS

1) Managing centralized system & Distributed system at once

Due to robust performance and expandability, CoreStation fully provided central management functions and also operated with Suprema stand-alone device for flexible design.
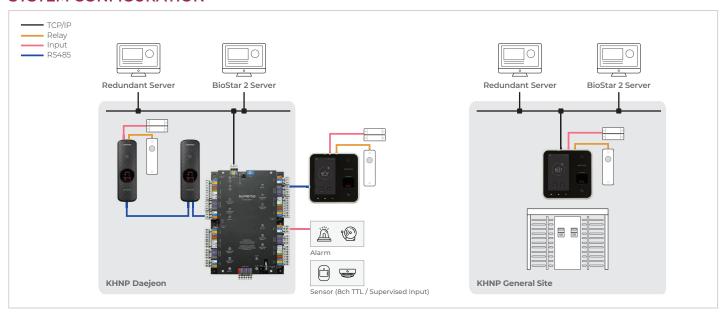
2) Achieved higher performance by migration of existing device & system

Migrating data of BioStar 1st generation with BioStar2 improved usability and efficiency over system management.

3) Met government regulation over security

As implementing redundant server and multiple cards selection mode, it provided a high level of security.

SYSTEM CONFIGURATION

LEARN MORE ABOUT CoreStation: www.supremainc.com/en/hardware/ic_corestation.asp

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