



District Heating and Cooling

DR information (electricity/heat)

- Implementation
- Baseline
- Curtailed amount
- Target amount

Central Monitoring Room

Meter monitoring

- AC fan INV electricity consumption
- AC cumulative heat level
- Pump INV electricity consumption
- Heat intake

Tenants

Building air conditioning BA

DR control software

Determines the control implementation levels for lighting and each air conditioner system based on various information

The control levels are as follows:

- AC control levels (electricity/heat)
- Lighting control levels

AC control levels are transmitted to AC controllers for execution.

Lighting control levels are transmitted to the lighting control system for execution.

Heat demand warning level

AC energy-saving control level

Electricity demand warning level

Lighting energy-saving control level

Determines the levels of control for AC (heat/electricity) for common areas

Determines the levels of control for AC (heat/electricity) for standard floors

Determines the levels of control for lighting (electricity)

AC controller for common areas

AC controller for standard floors

Lighting control system

Building and Energy Management System (BEMS) database

DR control performance calculation software

Creates CSV files on control performance based on meter info, control levels, demand warning levels, etc.

Electricity BA

- Amount of electricity received
- Demand warning level

Automated metering system

Registers control levels setting information

- Energy-saving control level
- Permissible control level

Control performance information

- Demand warning level
- Control level performance (electricity/heat)
- Target electricity consumption for entire building
- Target heat consumption for entire building
- Actual electricity consumption for entire building
- Actual heat consumption for entire building
- AC control level performance (electricity)
- AC control level performance (heat)
- AHU fan (electricity) consumption
- AHD heat consumption
- Pump (electricity) consumption (prorated value)
- Estimated AHU fan (electricity) reduction
- Estimated AHU heat reduction
- Estimated pump (electricity) reduction
- Lighting control level performance
- Estimated lighting reduction

Electricity consumption of leased areas

Tenant Energy Web System

Reflects in tenant BELS