CLAIMS

[Claim 1]

A power management system comprising: a plurality of electric devices; and a centralized controller configured to control the plurality of electric devices,

the centralized controller including

a difficulty determination table in which a power supply difficulty that indicates a degree of difficulty in supplying power to the plurality of electric devices is stored to be associated with power supply information externally acquired and indicating a state of power supply, power use states of the plurality of electric devices, and a power generation state of a solar power generation panel, and

difficulty determination means configured to

acquire the power supply information, the power use states, and the power generation state, and

determine the power supply difficulty by using the difficulty determination table,

one of the plurality of electric devices including

a control setting table in which contents of a plurality of power reduction controls that reduce use of power are stored to be associated with the power supply difficulty,

reduction control setting means configured to set the plurality of power reduction controls by using the control setting table and the power supply difficulty determined by the difficulty determination means, and

a device controller configured to perform the plurality of power reduction controls set by the reduction control setting means.

[Claim 2]

The power management system of claim 1, wherein

in the control setting table, priorities of the plurality of power reduction controls are set in accordance with the power supply difficulty,

the reduction control setting means sets the priorities of the plurality of power reduction controls in accordance with the power supply difficulty, and

the device controller performs the plurality of the power reduction controls in accordance with the priorities set by the reduction control setting means.

[Claim 3]

The power management system of claim 2, wherein

the plurality of power reduction controls comprises power reduction controls each having a different ratio of a power consumption reduction effect and a burden on a user, and

in the control setting table, the priorities are set for each level of the power supply difficulty based on a magnitude of the power consumption reduction effect and a magnitude of the burden on the user of each of the plurality of power reduction controls.

[Claim 4]

The power management system of claim 1, wherein

in the control setting table, an executable control of the plurality of power reduction controls is set for each level of the power supply difficulty,

the reduction control setting means sets the executable control of the plurality of power reduction controls in accordance with the power supply difficulty, and

the device controller executes the plurality of power reduction controls set by the reduction control setting means.

[Claim 5]

The power management system of any one of claims 1 to 4, wherein the difficulty determination means determines the power supply difficulty by using the information that is externally acquired and that indicates the state of power supply to all the plurality of electric devices.

[Claim 6]

The power management system of any one of claims 1 to 5, wherein the difficulty determination means acquires the power use states of the plurality of electric devices and determines the power supply difficulty by using the power use states.

[Claim 7]

The power management system of any one of claims 1 to 6, wherein the plurality of electric devices comprises a refrigerator.

[Claim 8]

The power management system of claim 7, wherein

the plurality of electric devices includes an information terminal device that allows a user to view information managed by the centralized controller, and inputs and outputs the information, and

the information terminal device transmits information indicating that it is difficult to supply power to the refrigerator by being operated by a user.

[Claim 9]

The power management system of claim 7 or 8, wherein

the device controller is configured to perform the plurality of power reduction controls for the refrigerator, and

the plurality of power reduction controls comprises at least one of

a power reduction control in which a power consumption is reduced by increasing a set temperature for a storage compartment,

a power reduction control in which a refrigerator interior lighting device is not lit up,

a power reduction control in which a rapid cooling function is disabled to be set,

a power reduction control in which a rapid ice-making function is disabled to be set,

a power reduction control in which a defrost avoidance function is not performed, and

a power reduction control in which a rotation speed of a compressor is limited.

[Claim 10]

A refrigerator that is connected to a centralized controller that is configured to control a plurality of electric devices and includes a difficulty determination table in which a power supply difficulty that indicates a degree of difficulty in supplying power to the plurality of electric devices is stored to be associated with power supply information externally acquired and indicating a state of power supply, power use states of the plurality of electric devices, and a power generation state of a solar power generation panel and difficulty determination means configured to acquire the power supply information, the power use states, and the power generation state and determine the power supply difficulty by using the difficulty determination table, the refrigerator comprising:

a control setting table in which contents of a plurality of power reduction controls that reduce use of power are stored to be associated with the power supply difficulty;

reduction control setting means configured to set the plurality of power reduction controls by using the control setting table and the power supply difficulty determined by the difficulty determination means; and

a device controller configured to perform the plurality of power reduction controls set by the reduction control setting means.