CLAIMS

1. An electricity suppressing type electricity and heat storage optimizing device comprising:

an energy predictor that sets, for at least one of control-target devices which are an energy supplying device supplying energy, an energy consuming device consuming energy, and an energy storing device storing energy, a predicted value of consumed energy of the energy consuming device or of supplied energy of the energy supplying device within a predetermined future time period;

a schedule optimizer that optimizes an operating schedule of the control-target device within the predetermined time period in accordance with a predetermined evaluation barometer and based on the predicted value, a characteristic of the control-target device, and a unit price of an energy usage fee;

an incentive acceptance determiner which determines a time with a possibility that an incentive is receivable based on the predicted value, an electricity suppression target time that is a time prepared for applying an incentive to electricity suppression, and a base line that is a threshold for whether or not to apply the incentive;

an electricity suppressing schedule optimizer that optimizes the operating schedule of the control-target device within the predetermined time period in accordance with the predetermined evaluation barometer and based on the predicted value, the characteristic of the control-target device, and a unit price of the energy usage fee at a time at which is determined that the incentive is receivable, the unit price is calculated by taking the incentive into consideration; and

an adopted schedule selector that selects either the operating schedule optimized by the schedule optimizer and the operating schedule optimized by the electricity suppressing schedule optimizer based on the predetermined evaluation barometer or a selection instruction input externally.

2. The electricity suppressing type electricity and heat storage optimizing device according to claim 1, further comprising a rescheduling necessity determiner that determines whether or not it is necessary to optimize the operating schedule again based on the operating schedule, and operation data of the control-target device operated based on the operating schedule.

3. The electricity suppressing type electricity and heat storage optimizing device according to claim 1 or 2, further comprising a control information outputter that outputs control information on the control-target device based on the operating schedule selected by the adopted schedule selector.

4. The electricity suppressing type electricity and heat storage optimizing device according to any one of claims 1 to 3, further comprising a preference order memory that stores a preference order of a time at which the incentive acceptance determiner determines whether or not the incentive is receivable.

5. The electricity suppressing type electricity and heat storage optimizing device according to claim 4, wherein with respect to the preference order, the larger the predicted value of energy predicted by the energy

predictor is, the higher the preference order of the time is.

6. The electricity suppressing type electricity and heat storage optimizing device according to claim 4, wherein with respect to the preference order, the smaller the predicted value of energy predicted by the energy predictor is, the higher the preference order of the time is.

7. The electricity suppressing type electricity and heat storage optimizing device according to claim 4, further comprising a preference order inputter that inputs the preference order.

8. The electricity suppressing type electricity and heat storage optimizing device according to any one of claims 1 to 7, wherein:

the incentive acceptance determiner determines a time with a possibility that the incentive is receivable based on an upper limit of electricity which permits an receipt of the incentive; and

the electricity suppressing schedule optimizer optimizes the operating schedule of the control-target device for a time at which the incentive is receivable based on the upper limit and a lower limit of electricity to be reduced.

9. The electricity suppressing type electricity and heat storage optimizing device according to any one of claims 1 to 8, further comprising a schedule display that displays the operating schedule optimized by the schedule

optimizer, and the operating schedule optimized by the electricity suppressing schedule optimizer.

10. The electricity suppressing type electricity and heat storage optimizing device according to any one of claims 1 to 9, further comprising an instruction inputter that inputs an instruction for selecting either the operating schedule optimized by the schedule optimizer or the operating schedule optimized by the electricity suppressing schedule optimizer.

11. An electricity suppressing type electricity and heat storage optimizing method causing a computer or an electric circuit to execute:

an energy predicting process for setting, for at least one of control-target devices which are an energy supplying device supplying energy, an energy consuming device consuming energy, and an energy storing device storing energy, a predicted value of consumed energy of the energy consuming device or of supplied energy of the energy supplying device within a predetermined future time period;

a schedule optimizing process for optimizing an operating schedule of the control-target device within the predetermined time period in accordance with a predetermined evaluation barometer and based on the predicted value, a characteristic of the control-target device, and a unit price of an energy usage fee;

an incentive acceptance determining process for determining a time with a possibility that an incentive is receivable based on the predicted value, an electricity suppression target time that is a time prepared for applying an incentive to electricity suppression, and a

base line that is a threshold for whether or not to apply the incentive;

an electricity suppressing schedule optimizing process for optimizing the operating schedule of the control-target device within the predetermined time period in accordance with the predetermined evaluation barometer and based on the predicted value, the characteristic of the control-target device, and a unit price of the energy usage fee at a time at which is determined that the incentive is receivable, the unit price is calculated by taking the incentive into consideration; and

an adopted schedule selecting process for selecting either the operating schedule optimized through the schedule optimizing process or the operating schedule optimized through the electricity suppressing schedule optimizing process based on the predetermined evaluation barometer or a selection instruction input externally.

12. An electricity suppressing type electricity and heat storage optimizing program that causes a computer to execute:

an energy predicting process for setting, for at least one of control-target devices which are an energy supplying device supplying energy, an energy consuming device consuming energy, and an energy storing
device storing energy, a predicted value of consumed energy of the energy consuming device or of supplied energy of the energy supplying device within a predetermined future time period;

a schedule optimizing process for optimizing an operating schedule of the control-target device within the predetermined time period in accordance with a predetermined evaluation barometer and based on the

predicted value, a characteristic of the control-target device, and a unit price of an energy usage fee;

an incentive acceptance determining process for determining a time with a possibility that an incentive is receivable based on the predicted value, an electricity suppression target time that is a time prepared for applying an incentive to electricity suppression, and a base line that is a threshold for whether or not to apply the incentive;

an electricity suppressing schedule optimizing process for optimizing the operating schedule of the control-target device within the predetermined time period in accordance with the predetermined evaluation barometer and based on the predicted value, the characteristic of the control-target device, and a unit price of the energy usage fee at a time at which is determined that the incentive is receivable, the unit price is calculated by taking the incentive into consideration; and

an adopted schedule selecting process for selecting either the operating schedule optimized through the schedule optimizing process or the operating schedule optimized through the electricity suppressing schedule optimizing process based on the predetermined evaluation barometer or a selection instruction input externally.