

Abstract

A control system includes an operation control unit configured to switch a mode between a first cold energy storage mode in which hot heat stored in a hot water well is supplied to a cooling tower without going through a heat source device, and cold energy obtained from the cooling tower is stored in a cold water well without going through the heat source device, a second cold energy storage mode in which the hot heat stored in the hot water well is supplied to the cooling tower via the heat source device, and the cold energy obtained from the cooling tower is stored in the cold water well via the heat source device, a first cold energy discharge mode in which the cold energy stored in the cold water well is supplied to a device without going through the heat source device, and a second cold energy discharge mode in which the cold energy stored in the cold water well is supplied to the device via the heat source device; a calculation unit configured to calculate a cumulative cold energy storage amount; a prediction unit configured to predict a required cold energy storage amount; and a mode determination unit configured to determine whether to perform control in the first cold energy storage mode or in the second cold energy storage mode, based on the cumulative cold energy storage amount and the required cold energy storage amount.