Claims

1. A district cooling system for providing a supply of chilled water to a plurality of buildings, the system comprising;

a plurality of chiller plants in fluid communication with the plurality of buildings;

each of the buildings falling within at least one of a plurality of categories;

wherein each of the categories defined by a respective peak demand within a different time period;.

wherein the plurality of chiller plants are in fluid communication with each other.

2. The system according to claim 1, wherein the plurality of chiller plants are engaged in a network topology by means of fluid communication.

3. The system according to claim 1 or 2, wherein the capacity of the chiller plants is determined by the category having the highest peak demand.

4. The system according to claim 2, wherein a capacity of the network of chiller plants is determined by a demand of buildings supplied by the network.

5. The system according to any one of claims 1 to 4, wherein one category of buildings is limited to entirely residential use, having at least one chiller plant corresponding to a residential use category.

6. The system according to claim 5, wherein a capacity of the at least one chiller plant corresponding to residential use is determined by a demand of buildings within said residential use category.

7. The system according to any one of claims 1 to 4, wherein one category of buildings is limited to entirely commercial use, having at least one chiller plant corresponding to a commercial use category.

8. The system according to any one of claims 1 to 7, wherein one category of buildings is for mixed use and therefore includes both residential and commercial use, having at least one chiller plant corresponding to a mixed use category.

9. The system according to claim 7, wherein a time period corresponding to the commercial use category includes weekdays daytime.

10. The system according to claim 5, wherein the time period corresponding to the residential use category includes weekdays and/or weekends night.

11. The system according to any one of claims 6 to 8, wherein each chiller plant is located proximate to one of the buildings to which the chiller plant supplies the chilled water.

12. The system according to any one of claims 5 to 6, and 8 to 10 when dependent upon claim 5 only, wherein each chiller plant is located in the buildings to which the each chiller plant supplies the chilled water, and wherein the buildings fall within the residential use category.

13. The system according to claim 2, wherein a number of chiller plants within the network is less than a number of buildings within a precinct.

14. The system according to any one of claims 1 to 5, 9 to 13, wherein a cumulative capacity of each chiller plants is in a range of 100% and 150% of a cumulative peak demand of the plurality of buildings.

15. The system according to any one of claims 1 to 14, further including a fluid connection such that the system is in fluid communication with a second district cooling system.

16. The system according to any one of claims 5 to 15, when dependent upon claim 5 only, wherein the chiller plants are located on a rooftop of one of the plurality of buildings to which the chiller plants supply the chilled water, and wherein the buildings fall within the residential use category.

17. A district cooling system for providing a supply of chilled water to a plurality of buildings, the system comprising;

a plurality of chiller plants in fluid communication with the plurality of buildings,

wherein the plurality of buildings comprises one or more building falling within a first category and one or more building falling within a second category;

wherein each of the categories defined by a respective peak demand in a different time period, and

wherein the peak demand of the first category supplements the peak demand of the second category so as to optimize the system;

wherein the chiller plants are in fluid communication with each other.

18. The system according to claim 17, wherein a cost for access to the system is a function of usage time and/or size of a household unit.

19. The system according to claim 17 or 18, further including a plurality of meters connected to each unit within each building, the meters arranged to record time usage.