WHAT IS CLAIMED IS:

1. A method for controlling a restricted user equipment (UE) capability, the method comprising:

sending, by a base station, UE capability configuration information to a terminal, wherein the UE capability configuration information is used to indicate whether the terminal can send to the base station a request message for changing its current UE capability and using the restricted UE capability when the terminal is overheated; and

sending, by the base station, a response message confirming the use of the restricted UE capability to the terminal in response to receiving the request message for using the restricted UE capability sent by the terminal.

2. The method for controlling the restricted UE capability according to claim 1, wherein the sending, by the base station, UE capability configuration information to the terminal comprises:

sending, by the base station, a broadcast signaling to the terminal, wherein the broadcast signaling carries the UE capability configuration information; or

sending, by the base station, a dedicated signaling to the terminal, wherein the dedicated signaling carries the UE capability configuration information.

3. The method for controlling the restricted UE capability according to claim 2, wherein the broadcast signaling carrying the UE capability configuration information comprises:

setting an identifier in the broadcast signaling, wherein the identifier being a first preset value indicates that the terminal can send to the base station the request message for using the restricted UE capability; and the identifier being a second preset value indicates that the terminal cannot send to the base station the request message for using the restricted UE capability; or

setting an identifier in the dedicated signaling, the identifier being a first preset value indicates that the terminal can send to the base station the request message for using the restricted UE capability; and the identifier being a second preset value indicates that the terminal cannot send to the base station the request message for using the restricted UE capability.

4. The method for controlling the restricted UE capability according to claim 3, wherein the setting the identifier in the broadcast signaling comprises:

setting the identifier corresponding to each access level by respectively using N bits in the

broadcast signaling, wherein the identifier being the first preset value represents that the terminal that matches the corresponding access level can send to the base station the request message for using the restricted UE capability; the identifier being the second preset value represents that the terminal that matches the corresponding access level cannot send to the base station the request message for using the restricted UE capability, and N is a positive integer.

5. The method for controlling the restricted UE capability according to claim 2, wherein the broadcast signaling further carries configuration area information, the configuration area information is used to indicate an applicable range of the UE capability configuration information, the applicable range of the UE capability configuration information comprises at least one of: a cell, a base station or a Public Land Mobile Network (PLMN); or, wherein the dedicated signaling further carries configuration area information, the configuration area information is used to indicate an applicable range of the UE capability configuration information, the applicable range of the UE capability configuration information comprises at least one of: a cell, a base station or a PLMN;

when the applicable range of the UE capability configuration information is the PLMN, the broadcast signaling further carries a PLMN list;

when the applicable range of the UE capability configuration information is the cell, the broadcast signaling further carries a cell list; and

when the applicable range of the UE capability configuration information is the base station, the broadcast signaling further carries a base station list.

6. The method for controlling the restricted UE capability according to claim 2, wherein the dedicated signaling comprises at least: a radio resource control (RRC) signaling, or a medium access control control element (MAC CE) signaling, or a physical downlink control channel (PDCCH) signaling.

7. The method for controlling the restricted UE capability according to claim 5, wherein

if the applicable range of the UE capability configuration information is the cell, after the terminal changes the cell, the UE capability configuration information corresponding to the terminal is deleted;

if the applicable range of the UE capability configuration information is the base station, after the terminal changes the base station, the UE capability configuration information

corresponding to the terminal is deleted; and

if the applicable range of the UE capability configuration information is the PLMN, when the terminal is located in a PLMN other than those in the PLMN list, the UE capability configuration information corresponding to the terminal is deleted.

8. An apparatus for controlling a restricted user equipment (UE) capability, the apparatus comprising:

a UE capability control unit configured to send UE capability configuration information to a terminal, wherein the UE capability configuration information is used to indicate whether the terminal can send to a base station a request message requesting for changing its current UE capability and using the restricted UE capability when the terminal is overheated; and

a UE capability confirmation unit configured to send to the terminal a response message confirming the use of the restricted UE capability in response to receiving the request message for using the restricted UE capability sent by the terminal.

9. The apparatus for controlling the restricted user equipment UE capability according to claim 8, wherein the UE capability control unit comprises:

a first sending subunit configured to send a broadcast signaling to the terminal, wherein the broadcast signaling carries the UE capability configuration information; or

a second sending subunit configured to send a dedicated signaling to the terminal, wherein the dedicated signaling carries the UE capability configuration information.

10. The apparatus for controlling the restricted user equipment UE capability according to claim 9, wherein the UE capability control unit further comprises:

a first setting subunit configured to set an identifier in the broadcast signaling, wherein the identifier being a first preset value indicates that the terminal can send to the base station the request message for using the restricted UE capability; and the identifier being a second preset value indicates that the terminal cannot send to the base station the request message for using the restricted UE capability; or

a second setting subunit configured to set an identifier in the dedicated signaling, wherein the identifier being a first preset value indicates that the terminal can send to the base station the request message for using the restricted UE capability; and the identifier being a second preset value indicates that the terminal cannot send to the base station the request message for using the

restricted UE capability.

11. The apparatus for controlling the restricted user equipment UE capability according to claim 10, wherein the first setting subunit is further configured to set the identifier corresponding to each access level by respectively using N bits in the broadcast signaling, the identifier being the first preset value represents that the terminal that matches the corresponding access level can send to the base station the request message for using the restricted UE capability; the identifier being the second preset value represents that the terminal that matches the corresponding access level cannot send to the base station the request message for using the restricted UE capability, and N is a positive integer.

12 The apparatus for controlling the restricted user equipment UE capability according to claim 9, wherein the broadcast signaling further carries configuration area information, the configuration area information is used to indicate an applicable range of the UE capability configuration information, the applicable range of the UE capability configuration information comprises at least one of: a cell, a base station or a PLMN; or, wherein the dedicated signaling further carries configuration area information, the configuration area information is used to indicate an applicable range of the UE capability configuration information, the applicable range of the UE capability configuration information comprises at least one of: a cell, a base station or a PLMN;

when the applicable range of the UE capability configuration information is the PLMN, the broadcast signaling further carries a PLMN list;

when the applicable range of the UE capability configuration information is the cell, the broadcast signaling further carries a cell list; and

when the applicable range of the UE capability configuration information is the base station, the broadcast signaling further carries a base station list.

13. The apparatus for controlling the restricted user equipment UE capability according to claim 9, wherein the dedicated signaling comprises at least: a RRC signaling, or an MAC CE signaling, or a PDCCH signaling.

14. The apparatus for controlling the restricted user equipment UE capability according to claim 11, further comprising:

a deleting unit configured to, if the applicable range of the UE capability configuration information is the cell, after the terminal changes the cell, delete the UE capability configuration information corresponding to the terminal; if the applicable range of the UE capability configuration information is the base station, after the terminal changes the base station, delete the UE capability configuration information corresponding to the terminal; and if the applicable range of the UE capability configuration information is the PLMN, when the terminal is located in a PLMN other than those in the PLMN list, delete the UE capability configuration information corresponding to the terminal.

15. A computer storage medium having stored thereon computer executable instructions that, when executed by a processor, implement steps of the method according to any one of claims 1-7.

16. A method for controlling a restricted user equipment (UE) capability, the method comprising:

receiving, by a terminal, UE capability configuration information sent from a base station, wherein the UE capability configuration information is used to indicate whether the terminal can send to the base station a request message for changing its current UE capability and using the restricted UE capability when the terminal is overheated;

sending the request message for using the restricted UE capability to the base station when the terminal is overheated; and

receiving, by the terminal, a response message confirming the use of the restricted UE capability.

17. The method according to claim 16, further comprising:

receiving, by the terminal, a dedicated signaling from the base station, wherein the dedicated signaling carries the UE capability configuration information.

18. The method according to claim 17, wherein the dedicated signaling comprises at least a radio resource control (RRC) signaling, or a medium access control control element (MAC CE) signaling, or a physical downlink control channel (PDCCH) signaling.

19. A terminal adapted to:

receive UE capability configuration information sent from a base station, wherein the UE capability configuration information is used to indicate whether the terminal can send to the base station a request message for changing its current UE capability and using the restricted UE capability when the terminal is overheated;

send the request message for using the restricted UE capability to the base station when the terminal is overheated; and

receive a response message confirming the use of the restricted UE capability.

20. The terminal according to claim 19, wherein the terminal is further adapted to:

receive a dedicated signaling from the base station, wherein the dedicated signaling carries the UE capability configuration information.

21. The terminal according to claim 20, wherein the dedicated signaling comprises at least: a radio resource control (RRC) signaling, or a medium access control control element (MAC CE) signaling, or a physical downlink control channel (PDCCH) signaling.