CLAIMS

What is claimed is:

1. A power control method, applied to a terminal device, wherein the method comprises:

receiving configuration information from a network device, wherein the configuration information is used to indicate target spatial relation information of target uplink data; and

determining transmit power of the target uplink data based on the target spatial relation information, wherein

the target spatial relation information comprises at least one of the following: M power control parameters, a target power control parameter corresponding to the target spatial relation information, and information used to indicate the target power control parameter, wherein M is a positive integer; and

the target uplink data comprises a sounding reference signal SRS or a physical uplink shared channel PUSCH,

wherein if no path loss calculation reference reference signal is configured for the target power control parameter, a quasi co-located assumption reference signal of a control resource set is used as a path loss calculation reference reference signal.

2. The method according to claim 1, wherein in a case that the target spatial relation information comprises the M power control parameters and the information used to indicate the target power control parameter, the target power control parameter is at least one of the M power control parameters.

3. The method according to claim 1, wherein in a case that the target uplink data is the SRS, the target spatial relation information comprises at least one of the following: an SRS power control parameter set and an identifier of the SRS power control parameter set, and the SRS power control parameter set comprises the target power control parameter.

4. The method according to claim 1, wherein in a case that the target uplink data is the PUSCH, the target spatial relation information comprises at least one of the following: a PUSCH power control parameter set, a PUSCH power control parameter set identifier, and a target SRI, wherein the PUSCH power control parameter set comprises the target power control parameters, the PUSCH power control parameter set identifier comprises an identifier of the target power control parameter, and the target SRI is used to indicate the PUSCH power control parameter set identifier.

5. The method according to any one of claims 1 to 4, wherein the M power control parameters are preconfigured by the network device for the terminal device or predefined.

6. The method according to any one of claims 1 to 4, wherein

the configuration information is used to indicate at least one SRS resource, and the at least one SRS resource comprises the target spatial relation information, wherein the configuration information is carried in a target MAC CE, and the at least one SRS resource is an SRS resource corresponding to the target MAC CE; and/or the configuration information comprises a resource indicator SRI of the at least one SRS resource.

7. The method according to any one of claims 1 to 4, wherein any power control parameter comprises at least one of the following: preset receive power of the network device, a path loss compensation factor, a path loss calculation reference reference signal, and a closed loop power control process, wherein in a case that the target spatial relation information comprises a target signal, the target signal is the path loss calculation reference reference signal.

8. A power control method, applied to a network device, wherein the method comprises:

transmitting configuration information to a terminal device, wherein the configuration information is used to indicate target spatial relation information of target uplink data, wherein

the target spatial relation information comprises at least one of the following: M power control parameters, a target power control parameter corresponding to the target spatial relation information, and information used to indicate the target power control parameter, wherein M is a positive integer; and

the target uplink data comprises a sounding reference signal SRS or a physical uplink shared channel PUSCH,

wherein if no path loss calculation reference reference signal is configured for the target power control parameter, a quasi co-located assumption reference signal of a control resource set is used as a path loss calculation reference reference signal.

9. The method according to claim 8, wherein in a case that the target spatial relation information comprises the M power control parameters and the information used to indicate the target power control parameter, the target power control parameter is at least one of the M power control parameters.

10. The method according to claim 8, wherein in a case that the target uplink data is the SRS, the target spatial relation information comprises at least one of the following: an SRS power control parameter set and an identifier of the SRS power control parameter set, and the SRS power control parameter set comprises the target power control parameter.

11. The method according to claim 8, wherein in a case that the target uplink data is the PUSCH, the target spatial relation information comprises at least one of the following: a PUSCH power control parameter set, a PUSCH power control parameter identifier set, and a target SRI, wherein the PUSCH power control parameter set comprises the target power control parameter, the PUSCH power control parameter identifier set comprises an identifier of the target power control parameter, and the target SRI is used to indicate the PUSCH power control parameter identifier set.

12. The method according to claim 8, wherein before the transmitting configuration information to a terminal device, the method further comprises:

transmitting the M power control parameters to the terminal device.

13. The method according to any one of claims 8 to 12, wherein the configuration information is further used to indicate at least one SRS resource, and the at least one SRS resource comprises the target spatial relation information, wherein the configuration information is carried in a target MAC CE, and the at least one SRS resource is an SRS resource corresponding to the target MAC CE; and/or the configuration information comprises an SRI of the at least one SRS resource.

14. A terminal device, wherein the terminal device comprises a receiving module and a determining module, wherein

the receiving module is configured to receive configuration information from a network device, wherein the configuration information is used to indicate target spatial relation information of target uplink data; and

the determining module is configured to determine transmit power of the target uplink data based on the target spatial relation information, wherein the target spatial relation information comprises at least one of the following: M power control parameters, a target power control parameter corresponding to the target spatial relation information, and information used to indicate the target power control parameter, wherein M is a positive integer; and

the target uplink data comprises a sounding reference signal SRS or a physical uplink shared channel PUSCH,

wherein the terminal device further comprises a processing module, wherein

the processing module is configured to use a quasi co-located assumption reference signal of a control resource set as a path loss calculation reference reference signal if no path loss calculation reference reference signal is configured for the target power control parameter.

15. The terminal device according to claim 14, wherein in a case that the target spatial relation information comprises the M power control parameters and the information used to indicate the target power control parameter, the target power control parameter is at least one of the M power control parameters.

16. The terminal device according to claim 14, wherein in a case that the target uplink data is the SRS, the target spatial relation information comprises at least one of the following: an SRS power control parameter set and an identifier of the SRS power control parameter set, and the SRS power control parameter set comprises the target power control parameter.

17. The terminal device according to claim 14, wherein in a case that the target uplink data is the PUSCH, the target spatial relation information comprises at least one of the following: a PUSCH power control parameter set, a PUSCH power control parameter identifier set, and a target SRI, wherein the PUSCH power control parameter set comprises the target power control parameter, the PUSCH power control parameter identifier set comprises an identifier of the target power control parameter, and the target SRI is used to indicate the PUSCH power control parameter identifier set.

18. A network device, wherein the network device comprises a transmission module, wherein

the transmission module is configured to transmit configuration information to a terminal device, wherein the configuration information is used to indicate target spatial relation information of target uplink data, wherein

the target spatial relation information comprises at least one of the following: M power control parameters, a target power control parameter corresponding to the target spatial relation information, and information used to indicate the target power control parameter, wherein M is a positive integer; and

the target uplink data comprises a sounding reference signal SRS or a physical uplink shared channel PUSCH,

wherein if no path loss calculation reference reference signal is configured for the target power control parameter, a quasi co-located assumption reference signal of a control resource set is used as a path loss calculation reference reference signal.