WHAT IS CLAIMED IS:

1. A method for reporting a beam failure, comprising:

determining (201; 301), by a terminal, that a target secondary serving cell among *n* accessed secondary serving cells has a beam failure, where *n* is a positive integer;

being characterized in:

transmitting (302), by the terminal, an uplink scheduling request or a random access request to the base station, wherein the uplink scheduling request or the random access request is configured to notify the base station of an occurrence of the beam failure of the terminal;

receiving (303), by the terminal, resource configuration information from the base station, wherein the resource configuration information is configured to indicate a physical uplink shared channel PUSCH resource for the terminal to transmit a first medium access control MAC control element CE signaling; and

transmitting (202; 304), by the terminal, the first MAC CE signaling to the base station, the first MAC CE signaling comprising beam failure indication information for indicating that the target secondary serving cell has the beam failure.

2. The method as claimed in claim 1, wherein the beam failure indication information is represented by a *m*-bit code word, and a *n*-bit code word among the *m*-bit code word and the *n* secondary serving cells have a one-to-one correspondence, *m* is an integer greater than or equal to *n*;

in which an ith bit in the *n*-bit code word is configured to indicate whether an ith secondary serving cell among the *n* secondary serving cells has the beam failure, and *i* is a positive integer less than or equal to *n*.

3. The method as claimed in claim 1, wherein the beam failure indication information is represented by a *k*-bit code word, $k=\lceil \log_2 n \rceil$, and $\lceil \ \rceil$ represents rounding up;

in which the *k*-bit code word is identification information of the target secondary serving

cell.

4. The method as claimed in any one of claims 1 to 3, wherein the first MAC CE signaling further comprises target beam indication information, and the target beam indication information is configured to indicate a target beam, selected from *p* candidate beams, for restoring the beam failure, and *p* is an integer greater than 1.

5. The method as claimed in any one of claims 1 to 4, further comprising:

transmitting, by the terminal, a second MAC CE signaling to the base station, wherein the second MAC CE signaling comprises target beam indication information, and the target beam indication information is configured to indicate a target beam, selected from *p* candidate beams, for restoring the beam failure, and *p* is an integer greater than 1.

6. The method as claimed in claim 4 or 5, wherein the target beam indication information is represented by a *q*-bit code word, and a *p*-bit code word among the *q*-bit code word and the *p* candidate beams have a one-to-one correspondence, *q* is an integer greater than or equal to *p*;

in which a jth bit among the *p*-bit code word is configured to indicate that a jth candidate beam among the *p* candidate beams is selected as the target beam, and *j* is a positive integer less than or equal to *p*.

7. The method as claimed in claim 4 or 5, wherein the target beam indication information is represented by an *r*-bit code word, $r=\lceil \log_2 p \rceil$, and $\lceil\ \rceil$ represents rounding up;

in which the *r*-bit code word is identification information of the target beam.

8. The method as claimed in claim 4 or 5, wherein,

the *p* candidate beams are beams configured by the base station through a radio resource control RRC signaling;

or,

the *p* candidate beams are beams activated by a MAC signaling among multiple beams configured by the base station through a RRC signaling.

9. The method as claimed in any one of claims 1 to 8, wherein:

the PUSCH resource is a resource on the target secondary serving cell; or

the PUSCH resource is a resource on a primary serving cell accessed by the terminal; or

the PUSCH resource is a resource on a primary secondary serving cell among the *n* secondary serving cells; or

the PUSCH resource is a resource on other secondary serving cells in the *n* secondary serving cells except the target secondary serving cell.

10. A terminal, comprising:

a processor; and

a memory for storing instructions executable by the processor;

wherein the processor is configured to perform the method for reporting the beam failure as claimed in any one of claims 1 to 9.

11. A non-transitory computer-readable storage medium having stored therein computer programs that, when executed by a processor of a terminal, causes the terminal to perform the method for reporting the beam failure as claimed in any one of claims 1 to 9.