For the littoral areas with high design wind velocity, the wind load under downburst is lower than under normal wind. Transmission towers are not controlled by the wind loads from downbursts in the design process. View. The capacity curve of a tower is a convenient way to assess a tower design under HIW, as the definition of a reference wind speed between downburst events is challenging due to the number of parameters affecting the downburst wind profile. Capacity curves based on two downburst scenarios are obtained for oblique wind directions, and their differences are shown to be related to the shape of the loading profile, and therefore the size of the downburst.