

ABSTRACT

A transmission tower or power is a tall structure, usually a steel lattice tower, used to support an overhead power line. Transmission towers support the high-voltage conductors of overhead power lines, from the generating station switchyard right up to the source substations and satellite substations located near populated areas. Importance of structure: 1) It is used to give support to the transmission lines which supply electric power, 2) They serve as an intermediate support between transmission lines to carry out heavy loads caused due to transmission lines and 3) They are used to keep electric transmission lines away from the ground

In this project, transmission tower analysis was carried out for deflection calculations as a whole member and also at each and every joint by using Ansys tool. One can perform various types of analysis such as modal, static, transient for this transmission tower. Here, we are performing static to start with by using 1D elements. Tower is made up of mild steel. Loads and dimensions are explained in subsequent chapter. Report was generated for reactions and deflections. Verifications and validations were also completely documented