TINJAUAN STANDART KESTABILAN TOWER NG STANDAR 30 METER TERHADAP BEBAN GEMPA DINAMIS DENGAN BERBAGAI SITUS KELAS TANAH SESUAI SNI 1726-2012

(Study kasus Tower NG Standart 30 m, Kabupaten Jember)

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RINGKASAN

Perkembangan dunia telekomunikasi yang berkembang sangat pesat terjadi dewasa ini, menuntut para provider telekomunikasi untuk menyediakan sarana perluasan jangkauan sinyal telepon seluler dan sinyal internet dalam bentuk 2G, 3G dan 4G. Dengan itu diperlukan sarana penunjang berupa tower BTS (*Base Transceiver Station*) untuk menompang *antenna* pada ketinggian tertentu.

Dalam melakukan perencanaan pembangunan tower BTS. Beban yang berpengaruh berupa berat sendiri beban hidup dan beban angin. Namun diperlukan peninjauan nilai *Twist, Sway, dan Displacement* akibat beban gempa yang terjadi dengan berbagai situs kelas tanah yang berupa tanah batuan, tanah keras, tanah sedang dan tanah lunak sesuai dengan SNI 1726-2012.

Kata Kunci : *Tower BTS, nilai* Twist, Sway, dan Displacement, *SNI 1726-2012*.

STANDARD REVIEWS OF TOWER STABILITY NG STANDARD 30 METER AGAINST DYNAMIC LOAD LOADS WITH VARIOUS GROUND SITES ACCORDING TO SNI 1726-2012

(Case study Tower NG Standard 30 m, Jember Regency)

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ABSTRACT

The development of the rapidly growing telecommunications world is happening today, demanding telecommunications providers to provide a means of expanding the reach of cellular telephone signals and internet signals in the form of 2G, 3G and 4G. Therefore, supporting facilities such as BTS (Base Transceiver Station) towers are needed to mount the antenna at a certain height.

In planning the construction of a BTS tower. Influential load in the form of own weight of living loads and wind loads. However, it is necessary to review the value of Twist, Sway, and Displacement due to earthquake loads that occur with various soil class sites in the form of rock soil, hard soil, medium soil and soft soil in accordance with SNI 1726-2012.

Keywords : *Tower BTS, point* Twist, Sway, dan Displacement, *SNI 1726-2012*.