INTISARI

Air Insulated Switchgear (AIS) sangat populer di Indonesia terutama di daerah padat penduduk dan kota. Kondisi geografis Indonesia yang rawan terhadap gempa dan juga laju pertumbuhan penduduk yang kian meningkat membuat penggunaan AIS perlu dipertimbangkan untuk digantikan dengan Gas Insulated Switchgear (GIS). Inti dari penelitian ini adalah untuk memperoleh penilaian (assessment) transisi dan migrasi sistem Air Insulated Switchgear (AIS) ke sistem Gas Insulated Switchgear (GIS.) Dari sisi ekonomis dan teknis, penilaian yang dilakukan yaitu luas wilayah, pemeliharaan, life cycle cost, keandalan dan keamanan. Penelitian ini menggunakan spreadsheet sebagai alat bantu untuk membuat penilaian, diharapkan penilaian yang diperoleh bisa menjadi acuan yang dapat digunakan ketika akan melakukan transisi dan migrasi sistem Air Insulated Switchgear (AIS) ke sistem Gas Insulated Switchgear (GIS).

Kata kunci : Migrasi, *Air Insulated Switchgear* (AIS), *Gas Insulated Switchgear* (GIS), *Assessment.*

ABSTRACT

Air Insulated Switchgear (AIS) used is really popular in the city and dense population area. Indonesian condition geographic which very prone to the earthquake and high population growth rate impact Air Insulated Switchgear used important to be considered and changed to Gas Insulated Switchgear (GIS). The core of this thesis is focused to make assessment consideration transmission of Air Insulated Switchgear to Gas Insulated Switchgear from the economic side. In this thesis using a spreadsheet as helping tools to make an assessment. The outcome of this thesis is expected could be migration references from Air Insulated Switchgear to the Gas Insulated Switchgear system.

Keywords : *Migration, Air Insulated Switchgear* (AIS), *Gas Insulated Switchgear* (GIS), *Assessment.*