ABSTRACT

EXTERNAL LIGHTNING PROTECTION ANALYSIS IN OFFTAKE

KALISOGO PT. PERUSAHAAN GAS NEGARA (Persero) Tbk
SBU WIL II JABATI

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Distribution of business activity is the main activity of PT. Perusahaan Gas Negara (Persero) Tbk, which contributed revenues of 90.88% of the total operating revenues in 2009. Distribution network management carried out by three units of SBU Distribution by region grouping. One is the SBU Distribution Region II, which covers an area of eastern Java, which consists of areas of Surabaya, Sidoarjo, Mojokerto and Pasuruan, Probolinggo. On gas distribution in Surabaya area there are several locations offtake, which are included in the offtake MRS regulating metering system, which serves to lower the high gas pressure of the gas supplier, to distribute to consumers.

One of the off-take location distribution is in the kalisogo, where the Kalisogo off-take station is placed in the Surabaya region. Kalisogo off-take installation of high-pressure gas pipeline and there are buildings in many tools for monitoring the gas flow, so the locations have the potential fire and explosive due to short-circuit the electricity or lightning. It is worth noting because the intensity of rainfall in Indonesia is quite high and the possibility of lightning is quite large. To avoid this will require lightning protection systems.

In the field project will discuss the analysis of the lightning rod system at the off-take Kalisogo, the application of a lightning protection system according to the area of protection factors and topography at these locations based on the standard General Requirements for Electrical Installation (PUIL 2000) and PERMENAKER No. 02 / MEN / 1989 on the supervision dealer installation of lightning.

Keywords: installation of lightning protection, lightning, soil type, conductor material, Permenaker, PUIL