STUDY OF RELAY COORDINATION AND ARCFLASH ON ELECTRICITY SYSTEM IN AN OLDER INDUSTRIAL PLANT

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ABSTRAK

Coordination system will require an industry to maintain continuity of service of the electrical system. This is include of security equipment electrical systems. In the ammonia producing companies such as PT.KPI Bontang has a lot of drive motor and pump devices with considerable power. Electrical system must be followed by the disturbances which may occur at any time by a variety of factors, one of them is like a short circuit. The present study discusses the safety system in PT.KPI Bontang. The coordination system at the Bontang PT.KPI existing condition still need improvement, setting the time delay relay is not in synchronous with accounting standards, the lack of studies about the arcflash energy is certainly important for electrical safety coordination system PT.KPI Bontang. Initial conditions arcflash analysis on the main bus has 4 categories, this means energy arcing short circuit when an interruption is very large and dangerous. This research will be conducted Resetting, calculating arcflash incident energy that can be used to determine the flash protection boundary and the safety relay coordination resetting conditions will also affect the decrease in arc or arcflash category.

Key Word– short circuit, setting time delay, arcflash, incident energy, flash protection boundary;
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