

## ABSTRACT

*The allocation of electricity for costumers goes by three main components. They are generation, transmission, and distribution. The distribution starts from Gardu Induk (substation). Meanwhile, the Gardu Induk in Pandean Lamper has three transformers. One of them is transformer 3 (60 MVA) with seven working feeders and one express feeder. The capacity of transformer 3 is 1732 A. It has load of > 1000 A. On the other hand, the load for transformer 1 and 2 are < 1000 A.*

*Meanwhile, the peak load of PDL-09, one of the feeders of transformer 3, was 396 A in March. It surpassed the standard by PT PLN APD JATENG dan DIY, which is 250 A. Therefore, a new feeder was needed to solve the matter and to reduce the load of transformer 3 and the feeder PDL-09.*

*The new feeder was installed in transformer 2 as PDL-15. It broke the load of PDL-09 and also PDL-02. However, the supplied area experienced some problems. Thus, protection gear recloser was necessary. With recloser, PMT outgoing would not trip immediately in case a problem happened after recloser. Moreover, the black-out would be minimized. The installation of recloser in a feeder needed a measurement of the recloser distance and a precise setting. If so, the recloser and PMT outgoing would coordinate.*

***Keywords : new feeder, PMT outgoing, recloser, coordinate setting***