

ABSTRAK

PT. PLN (Persero) menggunakan sistem SCADA (*Supervisory Control And Data Acquisition*) sebagai pengawasan kontrol dan pengambilan data dari jarak jauh (remote) pada Gardu Induk dan Key Point (Titik Manuver). Dalam hal ini, realisasi angka SAIDI (*System Average Interruption Duration Index*) atau lama padam menjadi aspek penting kehandalan dari suatu operasi sistem distribusi, terutama pada otomasi peralatan switching jaringan menengah seperti LBS (*Load Break Switch*).

Keberadaan LBS 20 kV sebagai otomasi peralatan switching di Area Pekalongan belum dimanfaatkan secara optimal. Seluruh LBS dioperasikan remote Scada oleh PT. PLN (Persero) APD Jateng & DIY melalui media GPRS dengan mode *sectionalizer* yang belum diaktifkan. Apabila terjadi gangguan pada jaringan, petugas lapangan harus melakukan lokalisir pada zona proteksi yang lebih luas, dan waktu padam yang lama karena operator/*dispatcher* tidak bisa melakukan penormalan sebelum section yang terganggu diketahui.

Melalui penarikan status *open / close by sectionalizer* yang terintegrasi pada sistem SCADA 20 kV PT. PLN (Persero) APD Jateng & DIY mampu menekan angka SAIDI di Area Pekalongan pada rentang waktu Agustus 2016 - Februari 2017 sebesar 84,04 %.

Kata Kunci : *Sectionalizer*, GPRS, Area Pekalongan

PT. PLN (Persero) uses SCADA (Supervisory Control And Data Acquisition) system as remote control and remote control on Substation and Key Point (Point of Maneuver). In this case, the realization of SAIDI (System Average Interruption Duration Index) number or long time off becomes an important aspect of reliability of a distribution system operation, especially in automation of medium network switching equipment such as LBS (Load Break Switch).

The existence of 20 kV LBS as the automation of switching equipment in Pekalongan Area has not been optimally utilized. All LBS is operated by Scada remote by PT. PLN (Persero) APD Jateng & DIY through GPRS media with sectionalizer mode that has not been activated. In the event of a disruption to the network, the field officer must localize to a wider protection zone, and the time goes long because the dispatcher can not perform normalization before the disturbed section is known.

Withdrawal of open/close by sectionalizer status integrated on SCADA 20 kV PT system. PLN (Persero) APD Jateng & DIY able to suppress SAIDI number in Area Pekalongan in the period August 2016 - February 2017 equal to 84,04%.

Keywords: Sectionalizer, GPRS, Pekalongan Area