

RINGKASAN

ANALISIS KEANDALAN SISTEM DISTRIBUSI PT.PLN PERSERO UP3 SERPONG MENGGUNAKAN METODE *SECTION TECHNIQUE*

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Di negara industri, sistem distribusi menyalurkan listrik ke mana-mana, mengambil daya yang dihasilkan pada pusat pembangkit dan mengirimkannya ke pengguna akhir. Pembangkitan, transmisi, dan distribusi merupakan tiga komponen besar infrastruktur kelistrikan ini, tetapi sistem distribusinya yang paling sedikit mendapat perhatian.

Sistem distribusi tenaga listrik merupakan suatu sistem dari tenaga listrik yang berfungsi untuk menyalurkan tenaga listrik dari sumber pembangkit menuju ke konsumen. Karena berfungsi sebagai penyalur pasokan listrik menuju konsumen, tidak jarang sistem distribusi mengalami gangguan pada saluran sistem distribusi sehingga mengakibatkan pemadaman sementara dan merugikan konsumen

Keandalan sistem distribusi berbanding terbalik dengan tingkat pemutusan beban sistem. Semakin tinggi frekuensi pemutusan beban pada sistem akan berpengaruh pada penurunan keandalan sistem distribusi. Oleh sebab itu, PLN selaku penyedia energi listrik harus memberikan kenyamanan terbaik bagi pelanggan semaksimal mungkin. Beberapa indeks yang digunakan untuk menentukan tingkat keandalan sistem distribusi itu baik atau tidaknya yaitu SAIFI (*System Average Interruption Frequency Index*) dan SAIDI (*System Average Interruption Duration Index*)

Kata kunci : Keandalan Sistem distribusi, SAIFI, DAIDI

SUMMARY

THE RELIABILITY ANALYSIS OF THE DISTRIBUTION SYSTEM OF PT.PLN PERSERO UP3 SERPONG USING SECTION TECHNIQUE METHOD

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In industrialized countries, distribution systems carry electricity everywhere, taking the power generated at the generating station and sending it to the end users. Generation, transmission and distribution are the three major components of this electricity infrastructure, but it is the distribution system that receives the least attention.

The electric power distribution system is a system of electric power that functions to distribute electricity from the generating source to the consumer. Because it functions as a distributor of electricity supply to consumers, it is not uncommon for the distribution system to experience disturbances in the distribution system channels, resulting in temporary blackouts and harming consumers.

The reliability of the distribution system is inversely proportional to the level of disconnection of the system load. The higher the load termination frequency on the system, the lower the reliability of the distribution system will be. Therefore, PLN as the provider of electrical energy must provide the best comfort for customers as much as possible. Several indices are used to determine whether the distribution system reliability is good or not, namely SAIFI (System Average Interruption Frequency Index) and SAIDI (System Average Interruption Duration Index).

Keywords: Reliability of the Distribution Network, SAIFI, SAIDI

