BAB V KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berdasarkan hasil analisis dan pembahasan, dapat disimpulkan bahwa

1. Penelitian ini berhasil menerapkan jaringan saraf *Nonlinear Autoregressive Exogenous Neural Network* (NARX-NN) sebagai metode prediksi tegangan *flashover* pada isolator terkontaminasi alami. Model NARX-NN yang dikembangkan mampu memprediksi tegangan *flashover*.
2. Evaluasi performa model menunjukkan bahwa NARX-NN memiliki kemampuan prediksi yang baik dalam mengestimasi tegangan *flashover* pada isolator terkontaminasi alami. Hasil ini menunjukkan potensi penerapan model NARX-NN sebagai model penentuan tegangan *flashover* isolator yang akurat tanpa merusak isolator tersebut.
3. Penelitian ini berkontribusi pada pengembangan metode prediksi tegangan *flashover* yang lebih akurat dan efisien dengan faktor korelasi sebesar 1, yang dapat membantu dalam meningkatkan keandalan sistem tenaga listrik dan mengurangi risiko terjadinya gangguan akibat *flashover* pada isolator terkontaminasi.

5.2 Saran

Dari analisa dan kesimpulan yang telah dijelaskan maka untuk penelitian selanjutnya disarankan :

1. Model NARX yang digunakan untuk pelatihan dapat dilanjutkan dengan memasukkan model tersebut ke mikroprosesor menjadi sistem cerdas untuk menentukan besar tegangan *flashover* pada isolator terkontaminasi alami.
2. Menggunakan sampel isolator yang terkontaminasi buatan sehingga prediksi tegangan *flashover* menjadi lebih luas.

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