



## Análisis de confiabilidad en alimentadores de distribución utilizando métodos simulativos

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text (article)

Analítica

The present project shows the development of programming in Matlab with the purpose of performing an analysis from the simulation of random operating trains for faults in the components of a distribution system in Medium Voltage, specifically in two starting primary feeders Of the same substation and provide support to each other via two connecting lines connected through two circuits located in strategic position, which have a switch and disconnecter to facilitate the transfer of charge. The reliability analysis performed using the programming code made in the Matlab software is programmed in general, is that entering the respective data can be adapted to any network; Especially to two feeders which maintain a connection line for support between both, improving its reliability and reducing service interruption times. The code presented in this technical project applies to the feeders Centro Olmedo and Centro Sucre, belonging to the National Electricity Corporation CNEL Esmeraldas Business Unit, where reliability indexes were obtained as close as possible to the detailed suggestions In international regulations, which highlights the values obtained in both the average service availability index and the average energy not supplied, from which 0.99977 and 0.001 kWh / year respectively were obtained

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