



# Análisis cuasi-dinámico de la inclusión de generación distribuida en sistemas eléctricos de potencia, caso de estudio: Sistema IEEE de 30 nodos [

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Analítica

The latest advances in Distributed Generation (GD) systems have opened a new stage in planning strategies for electrical systems. It is of great importance to determine the economic and technical impact of the installation and commissioning of GD in those parts of the power system where they were previously installed. In this research, the process of optimization of the economic dispatch allows to find the optimum power values to which all the units of the 30-node IEEE system, modified with GD nodes, must be dispatched, trying to minimize generation costs in conventional units. The results of this optimization process are implemented in a "Quasi-Dynamic Simulation" that allows to identify and analyze the parameters that vary in the system over time, in addition to dimensioning the values of power losses in the lines and transformers of the system

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