

OPTIMIZATION OF THE ELECTRIC FEEDER SYSTEMS STRUCTURES OF OIL PUMPING PLANTS IN ALGERIA

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ABSTRACT

In Algeria, now, the oil pumping plants are fed with electric power by independent local sources. This type of feeding has many advantages (little climatic influence, independent operation). However it requires a qualified maintenance staff, a rather high frequency of maintenance and repair and additional fuel costs. Taking into account the increasing development of the national electric supply network (Sonelgaz), a real possibility of transfer of the local sources towards centralized sources appears. These latter cannot only be more economic but more reliable than the independent local sources as well. In order to carry out this transfer, it is necessary to work out an optimal strategy to rebuild these networks taking into account the economic parameters and the reliability indices.