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MODELING THE SOLAR POWER PLANTS IN TERMS OF EFFECTS OVER THE ELECTRICITY NETWORK

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Abstract

The number of solar power plants (SPP) is increasing day by day with increasing demand for electricity. These power plants can operate independently from the network or can be integrated into the network. Increasing the number of SPP that was integrated network capable of forming a number of imperfections over the network. Some restrictions have been introduced with the regulations in order to avoid these problems. With this work, what kind of changes in the network caused by the increase in the number of SPP integrated into the network (especially in terms of power quality) was investigated with the aid of the Matlab/ Simulink program. In this context, electricity network and SPP were modeled with Simulink. The results obtained from this model were interpreted and solution proposals were presented.

Keywords: *Solar Power Plant (SPP), Power Quality, Matlab/Simulink.*

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