

Impact of Large Scale Solar Power Plant on Airports and Aviation

Authors : Munirah Stapah Salleh, Ahmad Rosly Abbas, Sazalina Zakaria, Nur Iffika Ruslan, Nurfaziera Rahim

Abstract : One of the areas that require a massive amount of energy is the airport. Hence, several airports have increased their reliance on renewable energy, specifically solar photovoltaic (PV) systems, to solve the issue. The interest regarding the installations of airport-based solar farms caught much attention. This, at the same time, helps to minimize the reliance on conventional energy sources that are fossil-based. However, many concerns were raised on the solar PV systems, especially on the effect of potential glare occurrence to the pilots during their flies. This paper will be discussing both the positive and negative impact of the large scale solar power plant on airports and aviation. Installing the large scale solar have negative impacts on airport and aviation, such as physical collision hazards, potential interference, or voltage problems with aircraft navigational and surveillance equipment as well as potential glare. On the positive side, it helps to lower environmental footprint, acquiring less energy from the utility provider, which are traditionally highly relying on other energy sources that have larger effects on the environment, and, last but not least, reduce the power supply uncertainty.

Keywords : solar photovoltaic systems, large scale solar, airport, glare effects

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