## Parallel Operation of Current-Source Inverter for Low-Voltage High-Current Grid-Connected Photovoltaic System

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Solar energy is very potential to be developed in a tropical country such as in Indonesia. This energy source is eco-friendly because it can eliminate air pollution such as caused by conventional fossil fuels. This research article presents analysis results of a novel grid-connected photovoltaic system using low-voltage high-current system. The electrical energy produced by the photovoltaic system was sent into the electrical power grid using two or more H-bridge current source inverters operated in parallel. The proposed system is very suitable for large size photovoltaic system because of its some merits. The inverter circuits work generating sinusoidal output currents and controlling the power delivered into the grid. The test results of the new system showed that the system worked properly as interface between photovoltaic system and the electrical grid delivering high ac current with low harmonic distortion.
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