In this presentation a Robust Cyber Shield for a grid connected PV System is explained. It is shown that external manipulation (attacks) on sensor measurements of a grid connected PV system can lead to instabilities or degraded performance. A sophisticated dynamic watermarking system is introduced to provide a “Cyber Shield” – a defense mechanism to detect malicious manipulation of voltage/current/P/Q sensor measurements on a grid connected PV system. Validity of the proposed approach is verified via extensive simulations and experiments in a laboratory setting.


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