May 5, 2018

Dear Editor,

We are submitting the manuscript, "A Guide to Solar Power Forecasting using ARMA Models" for publication as a Letter in *IEEE Power Engineering Letters*.

Various economical, social, and political factors support the increasing share of solar energy to complement energy generated using conventional fossil fuels in our electric power systems [1]. Efficient and fast methods to forecast solar power are often needed for stochastic optimization models [2], and easy-to-incorporate forecasting models are required.

We provide a succinct step-by-step methodology methodology to build hourly solar power forecasts using historical data with an ARMA model. We provide conditions under which ARMA models are suitable; describe how to use various statistical tests and their suitability; and, provide metrics to estimate the fit. Finally, we use the model to develop future forecasts.

We believe the Letter will be useful for academicians and practitioners who are interested in solar power forecasting, as it provides directly implementable instructions to generate solar power scenarios.

Our manuscript is not under consideration for publication at any other journal. We look forward to hearing from you.

Sincerely,
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References

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[2] Wencong Su, Jianhui Wang, and Jaehyung Roh. Stochastic energy scheduling in microgrids with intermittent renewable energy resources. *IEEE Transactions on Smart Grid*, 5(4):1876–1883, 2014.