

1117-91-327

Vishwakant Malladi, Rafael Mendoza-Arriaga and Stathis Tompaidis*
(stathis.tompaidis@mcombs.utexas.edu). *Modeling Dependent Outages of Electricity
Generators.*

We present a framework for modeling dependence in outages of electricity generators based on time changed stochastic processes. We provide an algorithm for the calibration of our model and illustrate it for the case of two regions in North America using actual outage data. We use our calibrated results to quantify the impact of dependence in outages to the reliability of the electricity system. (Received January 17, 2016)