



Extreme values of wet snow loads over electric wires in France

S. Parey

EDF, R&D, CHATOU, France (sylvie.parey@edf.fr)

Important snow falls when temperature is around 0°C leads to the formation of so called “wet snow accretions” over the overhead lines, which can cause damages to the network. Therefore, for exposed areas, an evaluation of the possible extremes of these wet snow loads has to be conducted in order to reinforce consequently the network and to manage situations at risk. However, such situations are observed too rarely in France for this evaluation to be treated in the framework of the statistical extreme value theory. Therefore, another approach is proposed, based on the fitting of defined distribution laws on the total series of potential events. As a matter of fact, overloads are not routinely monitored but calculated from the meteorological parameters using a numerical model. The study will show different tests of laws and propose a way of deriving 20-year return levels.