

Computer simulation of mobile scheme for lightning currents

**Ushnurtsev A E^{1,®}, Shilkin N S¹, Yuryev D S¹,
Shumilin V P² and Mintsev V B¹**

¹ Institute of Problems of Chemical Physics of the Russian Academy of Sciences, Academician Semenov Avenue 1, Chernogolovka, Moscow Region 142432, Russia

² Moscow Institute of Physics and Technology, Institutskiy Pereulok 9, Dolgoprudny, Moscow Region 141701, Russia

® ushnur@ficp.ac.ru

Testing of the industrial facilities on lightning protection has to be made at the places of their locations. Compact magnetic cumulative generator (MCG) seems to be the most convenient equipment for this purpose, with mobile outdore installation used. The possibilities of the EMG design for the lightning action on the grounded industrial facility were simulated. The calculated results of were compared with operating results. With electrotechnical models used, the estimation of output parameters in a time were developed. The transformer circuit design looks perspective for lightning current re-production.