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Simulation Tools for Training in the Case of Energy Sector Crisis

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Abstract : Crisis preparedness training is the best possible strategy for identifying weak points, understanding vulnerability, and finding possible strategies for mitigation of blackout consequences. Training represents an effective tool for developing abilities and skills to cope with crisis situations. This article builds on the results of the research carried out in the field of preparation, realization, process, and impacts of training on subjects of energy sector critical infrastructure as a part of crisis preparedness. The research has revealed that the subjects of energy sector critical infrastructure have not realized training and therefore are not prepared for the restoration of the energy supply and black start after blackout regardless of the fact that most subjects state blackout and subsequent black start as key dangers. Training, together with mutual communication and processed crisis documentation, represent a basis for successful solutions for dealing with emergency situations. This text presents the suggested model of SIMEX simulator as a tool which supports managing crisis situations, containing training environment. Training models, possibilities of constructive simulation making use of non-aggregated as well as aggregated entities and tools of communication channels of individual simulator nodes have been introduced by the article.

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