

Simultaneous multiple accident cases and their countermeasures for electric power system against Typhoon

-Practical use of Risk Assessment and Management system for Power lifeline against Typhoon(RAMPT)-

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In Japan, meteorological severe disasters including typhoon disaster have recently continued to occur and have been intensifying damage to infrastructures. This presentation introduces simultaneous multiple accident cases and their countermeasures for electric power system against Typhoon. As typical typhoon disaster in metropolitan area, the damage and emergency restoration process of the electric power distribution equipment, caused by Typhoons occurred in 2018 and 2019, are illustrated. On the basis of these experiences, particular attention is paid to issues related to “Resilience” for disaster mitigation of electric power systems. As an example of resilience improvement of electric power system, Risk Assessment Management system for Power lifelines against Typhoon (RAMPT), which is a damage prediction tool for electric power distribution equipment, are introduced and the practical use are illustrated.

Keywords: electric power distribution equipment, resilience, typhoon disaster