

Regional Differences in Economic Impacts of Power Outages in Finland

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Abstract Estimating the worth of continuity of electricity supply is of interest to industry, governments, regulators and the research community. There are numerous methods to calculate the Customer Interruption Costs (CICs). Each method has its advantages and disadvantages. We approach the problem from the Distribution System Operator (DSO) point of view and employ two existing analytical models. One model is used by the Finnish Energy Market Authority and the second one was proposed by some of the authors in a previous study. Our model offers a simple and straightforward methodology which can provide credible and objective estimations utilizing only publicly available analytical data. We made use of cost and reliability indices data of 78 DSOs in Finland from the 2016. In addition to cost estimations, we highlight regional differences in CIC estimations in different parts of Finland and provide a critical overview of the existing standard customer compensation scheme in Finland.

Keywords electric power outages, security of supply, customers, interruption, cost, DSO, compensation

JEL Classification L15, L51, L94

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