

853 – Developing SF6 free products with alternative gas

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Abstract: SF6 gas has been used for insulation and breaking current in medium voltage switchgear for the past decades. The reasons were related to its long-time stability and exceptional electrical properties for switchgear applications that let the industry develop all the product using only type of gas, the best cost-effective insulation material. Currently, due to its very high global warming effects and high costs of recycling and end of life management, the manufacturers are looking for something new that has to be “SF6 free”, according to new latest technologies. The goal of this project is to analyse performance, behaviour, stability of new mixed gas available on the market in order to define and select which is the best compromise as mix of gas in a new switchgear design development.