Innovation type: product

Innovation:

TRL: # 8

Year: 2024

Contact:

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Potential users:

User	х
DSO, TSO	Х
Technology provider	
Member organisation	
Market operator	
Research/consultancy	
Teaching	



Snapshot from Safemon FLS dashbord with available loads for diconnection and location

Pilot project: System for use of flexible resources

The aim of the pilot project was to use flexible resources in the grid as a standard alternative in operation and planning, where this is the most appropriate option. To achieve this, there was a need to develop a new tool. The pilot project has used Safebase's RTUs and Safemon (software/SW) to get an overview of and control electric boilers and other switchable loads, so that the operators at control center can, all times, see where the flexible resources are located and the current load situation. This will make the flexible resources more available in operation, if needed during peak hours or in fault situations. In the pilot, a notification service for customers was also tested, with notification by SMS and/or email. Here, contact persons were informed about the in/out connection with time and duration. An additional aim was to use flexible resources in planning the grid and consider the resources as an alternative to conventional grid investment, either to delay or avoid grid investment.

Challenge

How to be able to easily use flexible resources in grid operation and planning? There was a need to get overview of flexible resources; location, load situation and also ability to disconnect the recourses. A new tool was needed.

Solution

A new tool was developed named Safemon FLS (Fleksibel LastStyring – flexible load management) to solve the challenge: https://safebase.no/oversikt-og-styring-pa-fleksible-laster/

Potential

Additional DSOs can buy and use the tool to get overview and disconnect loads in peak or failure situations. There are plans to expand the functionality of the tool to be able to do partial disconnections of loads, as an alternative to full disconnection. It will also be relevant to assess whether the tool can be used for other categories of flexible resources.

Reference in CINELDI

Pilot "System for use of flexible resources" report (in Norwegian)