

## REliable MOniToring and Estimation of distribution GRID for smart societies (RemoteGRID)

Venue: Thy-Mors Energi, Løvevej 5, 7700 Thisted,

Wednesday, Feb. 5, 2020

The changing conditions in the low voltage distribution grids caused by increased interest in renewable energy production and a changing consumption behavior are challenging the operation of low and medium voltage grids for the DSO's. RemoteGRID has since 2016 been focused on the question on how data measured by smart meters deployed in the low volt voltage grids, can be effectively used for near real-time operations as well as a source for data analytics for grid asset management. The key challenge to achieve such functionality is found in the data network which does not offer the required level of capacity to support real-time overview of the DSO grids.

In this light the project have focused on three main areas that in combination attempts to solve the issue: 1) data collection process, 2) database and data management and 3) grid state estimation and asset management. In this workshop we will go through the challenges, solutions and opportunities that the project has worked with when using smart meter data to operate the grid. Most challenges are of technical nature, but the project has also been going into the legislation of using data, in particular in the light of the latest introduction of GDPR, and the workshop aims also to shed light over this topic in the scope of using smart meter data.

The tentative program for the workshop is as follows:

9:00-9:10 Introduction and welcome

9:10-9:30 Concept, approaches and use cases

9:30-10:15 Legislation and non-technical barriers for using smart meter data

10:15-10:30 Coffee break

10:30-11:15 Data collection: an algorithmic approach to read smart meters

11:15 – 12:00 Visualization and data management: offering the right information at the right time

12:00 – 12:45 Lunch break

12:45-13:30 Grid state estimation: problems and solutions that aids issues of missing data, poor data quality etc.

13:30-14:15 Pilot test demonstration on site

14:15-14:30 Coffee break

14:30-15:00 Lab facility, training and possibilities

15:00-15:30 Visit at TME for interested

For further information and registration, please see our website <https://www.remotegrid.dk/>

Registration by email to Anne Rommerdahl Bock: [anb@adm.aau.dk](mailto:anb@adm.aau.dk)

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