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Improved electrolysis for distributed hydrogen production

GA No. 700008

**High Performance PEM Electrolyser for Cost-effective Grid  
Balancing Applications**



**HPeM2GAS - Deliverable report**

**D2.2-Complete set of technical and operational  
requirements for field-testing**

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<b>Author(s)</b>	G. Kielmann (SWE) S. Steinigeweg (HSEL) N. van Dijk (ITM)	
<b>Checked by</b>	G. Kielmann (SWE)	2017-03-27
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## Publishable summary

The steps necessary to carry out the field tests were identified. These mainly consist of the approval of the installation as well as the prerequisites for installation on site. The necessary steps to be addressed by SWE were identified. In addition, it was possible to identify the necessary documents from ITM that SWE needed. A schedule for the field test as well as the installation was defined. It is of importance that the final design of the prototype is finished at the end of 2017.

Furthermore, load profiles for the field test were defined. These, on the other hand, revolve around the perspective of a grid operator. On the basis of historical 15-minute data from SWE, load profiles for the electrolyzer were identified. These are, on the one hand, standard load profiles, on the other hand load profiles, which are taken from SWE's operational practice.

A similar approach will be used when defining the load profiles from the perspective of the operator of a wind turbine. Here, second-to-second data are required, which are not available to the SWE. These should be collected up to the field test in order to be able to define the corresponding load profiles from the operational point of view.