![SINTEF Energy Research]	**PROJECT MEMO**		
SINTEF Energy Research Address: N-7465 Trondheim, NORWAY Reception: Sem Sælands vei 11 Telephone: +47 73 59 72 00 Telefax: +47 73 59 72 50 http://www.energy.sintef.no Enterprise No.: NO 939 350 675 MVA	MEMO CONCERNS Specification of energy storage laboratory		
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PROJECT NO. 12x127		Nils.Ringheim@energy.sintef.no	NO. OF PAGES 8
DIVISION Energy Systems		LOCATION Sem Sælands vei 11	LOCAL FAX +47 73 59 72 50

This project memo is a documentation of the facilities and specifications of the energy storage laboratory. Detailed specification of the dc-dc converters can be found in AN 01.12.36.

The energy storage laboratory is designed for testing up to three energy storage or energy converting elements in parallel. The energy devices under test can be paralleled to a common dc link through separate dc-dc converters, each of $P = 20$ kW. (For the time being only one of these dc-dc converters are built.) A rectifier supplies the dc link voltage through a 3-phase, 400 V transformer of $S = 50$ kVA. (An active front-end converter will replace the rectifier this autumn.) Excess power from the energy devices under test, can be dumped into three external resistors, each of $P = 6, 4$ kW.

Through a LabView interface, the test parameters, load profiles and measurement specifications are set up from a local laboratory PC. This PC communicates with the converters and the data acquisition unit (Agilent 34970 A) and make sure that the appropriate actions are taken. From a remote web address, potential customers can log on to a server and get updated measurement results. In the future they will also be able to change or modify the ongoing test (parameters, load profile, measurements and so on).

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