

Abstract 006 - DNVGL

From: aleks.karlsen@dnvgl.com

First Name: Aleks
Last Name: Karlsen
Presenter (if different):
Other Authors: Sverre Eriksen (DNV GL Principal Engineer Electrical System) Also presenting.
Company: DNV GL
Address: Veritasveien 1
Address Continued:
City: Hovik
State/Province: Hovik
Postal Code: 1363
Country: Norway
Email: aleks.karlsen@dnvgl.com
Telephone: +47 99496085
Fax:

Presentation Title: Batteries as power sources in DP systems

Abstract:

The paper will present the latest experiences and rules made by DNV GL for use of batteries in battery hybrid DP vessels. The paper will focus both on new-buildings and on vessels being converted from more traditional power systems and in to battery hybrid systems. Reference will also be made to other types of pure battery and battery hybrid vessels.

The fuel saving potential will depend on how the batteries are designed in to the system, how they are used and the vessel operational profile. The paper will argue that for a DP vessel the fuel saving potential will typically be largest when the design is so that batteries can be used as spinning reserve (i.e. instead of a diesel engine). In addition to fuel saving the reduced environmental footprint will also be focused. Results from research projects will be included.

The paper will address the updated DNV GL DP rules with respect to the use of batteries as spinning reserve, and the new DNV GL Battery Power rules. The Battery Power rules set requirements to large lithium ion battery systems installation on board vessels. How these rules aim to ensure both the safety and the availability of batteries when used as a source of power in DP operation will be explained.