

MANUAL ACTIVATION OF ROUGH SEA MODE

Easy option to activate rough sea mode manually in regular weather conditions.

Manual activation option

“Rough sea mode” is a unique power control mode of Power Conversion & Storage (PCS) - a GE Vernova’s business - drives and is used to avoid power variations due to torque variation of the propeller during bad weather conditions. Depending on the vessel design this power control mode will automatically be activated in any of the drives and the same mode will be activated in all other drives consecutively and then it will be de-activated when the drives fulfill a reset condition. The information will be displayed on the HMI workstation. This is only possible during bad weather condition.

We could enable the same control mode also in regular weather conditions to ensure the synchronous operation of drives in a vessel. This is possible by adding a software/hardware selection switch. Thus, operator could select it manually..

Example conditions to get into rough sea mode

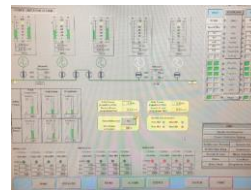
- The frequency of power variation is significant.
- The speed reference has not been modified for 3mins.
- The propulsion speed is greater than 60%.

Example reset conditions

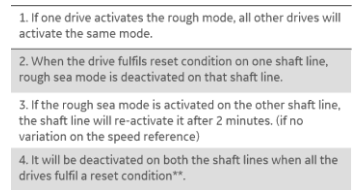
- Speed variation on one shaft lines or propulsion speed is lower of 50%.

Benefits

- Adaptability regarding the needs of the operation by the Chief engineer/Captain.
- Improve the stability of the main network.
- Software or hardware switch option based on customer feasibility.
- Helps to ensure the synchronous operation.



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Operating sequence of rough sea mode

Salient points

- It is applicable to all drives that do not have this function already implemented.
- Field Service Engineer (FSE) completion time at site will be appx 1 FSE for 2 days / vessel depending on site conditions.
- PCS recommends to implement this improvement during the next dry.

PCS services for a lifetime

PCS offers bespoke service support in the form of spares and replacement parts, onsite and remote technical support, maintenance services, upgrades, customized trainings and service agreements aimed at supporting customers based on their unique needs.

CONTACT US:
services.powerconversion@ge.com

