Addendum 2 to Safety Alert for A100-M radial type turbochargers

Additional advice for engine testing activities

Dear Madam, Dear Sir

This Addendum 2 is in reference to Service News No 02/2016 and to Addendum 1 which describe a possible safety hazard associated with ABB turbochargers of the type A100-M radial (A130-M, A135-M, A140-M, A145-M, A150-M and A155-M). In addition to the two aforementioned documents the Addendum 2 provides in detail safety measures that are to be taken for safe testing activities in engine builder’s factory or shipyard with short term operation (trials on engine testbed, engine development tests, factory acceptance test or engine commissioning tests) on engines equipped with the concerned turbochargers.

Background

As an immediate interim measure, operators of ABB turbochargers of the type A100-M radial are advised to limit their direct exposure to the concerned turbochargers to the necessary minimum during testing activities in engine builder’s factory or shipyard with short term operation (trials on engine testbed, engine development tests, factory acceptance test or engine commissioning tests) on engines equipped with the concerned turbochargers.

In Service News No 02/2016 Addendum 1 the following is mentioned:

- If it is neither possible to shut down, nor postpone service activities due to extreme circumstances ABB recommends to run the engine above 70% load for at least 30 minutes in order to burn unburnt fuels that have potentially been accumulated during lower load operation in the exhaust gas system. This shall be done before any longer presence / direct exposure to a turbocharger of this type is conducted.

- During exposure times, engine load shall be kept at constant load (50-70%).

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Unless otherwise expressly set forth, no recommendation contained in this document is to be construed as provided due to a defect in the turbocharger, but merely as an improvement of the turbocharger and/or the maintenance procedures relating thereto. Any actions by the owner/operator as a result of the recommendations are not covered under any warranty provided by ABB and such actions will thus be at the owners/operators own cost and expences.
Action

The two bullet points serve the purpose of avoiding a sudden and excessive energy increase in the engine exhaust system (e.g. due to a manifold fire). In case of turbocharger operation on testbeds in engine builder's factory with short term operation (for example factory acceptance tests, engine development test) or during engine commissioning tests the following applies:

- During exposure times of operators, engine load shall be kept at constant load. [The target is to avoid situations in which a sudden and excessive energy increase in the exhaust system can occur]

This safety measure should be observed immediately in order to minimize the risk of harm to people. Please also refer to the safety instructions in the operation manual.

Non-adherence to this recommendation can lead to serious injuries or fatal accidents.

Further root cause analysis - next information

Next steps: ABB is currently evaluating, with top priority, which turbocharger sizes and types of the A100-M radial family are affected.

Further information will be issued latest by end of July, 2016.

Safety and quality are top priorities at ABB. We apologize for any inconvenience and would like to thank you for your support.