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Approval of HVO and GtL fuels for Series 4000 50Hz GenDrive Engines

To whom it may concern,

Rolls-Royce Solutions is pleased to announce its approval of use for HVO and GTL synthetic fuels as a drop-in fuel. The release includes HVO & GTL fuels according to EN15940 without further requirements in regards of fuel characteristics or engine hardware, blends are possible.

Approved series / engine types:

Series	Remarks
S4000Gx3, Gx4	All years of manufacture

This customer information is valid for the following engine series and emission optimizations:

- "fuel consumption optimized"
- "NOx- Optimized"
- "EPA Tier II compliant"
- "NEA- Optimized"

Although **mtu** engines are not specifically designed to run on synthetic fuels, we expect

- performance to be in line with distillate diesel fuels as well as
- no effect on service & maintenance intervals and
- no adverse effects on emissions levels and fuel consumption.

Compared to conventional diesel fuels studies also show, that synthetic fuels can be stored for longer while requiring less fuel treatment.

The standard warranty conditions apply also for HVO and GTL fuel acc. to EN15940. For more details on boundary conditions and fuel characteristics pls. refer to the **mtu** "*Fluids and Lubricants specification*".

A detailed white paper regarding the use of synthetic fuels as well as the specific performance of Series 4000 Gen-drive engines will be provided shortly.

For any enquiries with regards to the conversion of existing fuel supplies and/or new equipment, please contact your local Rolls-Royce Solutions representative.

Yours sincerely,

Digital Signature - Original filed at TSL

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