

EXCITATION – AVR – RETROFIT SOLUTIONS

ENERGY
ENVIRONMENT
ECONOMY**PREVENTING THE UNEXPECTED**

Many installed automatic voltage regulators (AVR) are at the stage in their product lifecycle when spares and support are no longer available. Component failure can result in loss of a generator. This risk can be avoided. Wärtsilä provides proactive help with obsolete AVRs and excitation systems to prevent loss of power generation.

Unexpected downtime costs are among the highest of all maintenance costs. Replacement parts have to be shipped in urgently, if they are available at all. Additionally, your maintenance department may be working overtime, while your company is suffering from both production loss and potential loss of reputation. It is clear that unexpected downtime should be prevented if at all possible.

For this reason, Wärtsilä Electrical & Automation Services has created a range of solutions with focus on common obsolescence

failure modes. Wärtsilä provides lifecycle support and retrofit services for your generator set to enhance reliability and reduce downtime.

OBSOLESCENCE MANAGEMENT

Original analogue voltage regulators are often obsolete. They can, in some cases, give inaccurate performance due to the age of their electronic components. Because excitation systems are located in harsh environments they also suffer from heat, dust and vibrations. Digital voltage regulators and



Obsolete AVR



Solution for retrofit



- ■ ■ related systems, which are designed for harsh environments, are more accurate, stable and offer enhanced monitoring and protection.

FLEXIBLE SOLUTION

The excitation (AVR) retrofit solution has been performed globally with positive results to installations in the marine, offshore and power plant fields. Our customers appreciate the added value received. Wärtsilä has even performed retrofits while the drilling, sailing or production operations continued normally.

WEALTH OF EXPERIENCE

Not only upgrades of existing systems and replacement of obsolete systems are provided, but complete integration as well. Wärtsilä takes care of removing the old system, installing the new system, integrating it with existing systems, and commissioning the complete installation. New documentation and drawings are provided so that your crew can maintain your installation as a first level of support.

PROCESS

Knowledge through measuring

Whenever you experience difficulties with your installation, Wärtsilä is there to solve the problem. This is done by first measuring in the system, then analysing the data, and after that giving you advice on which you can base a considered decision. When you need information, just ask for an audit report or simply fill in the questionnaire.

Changes for the better

Depending on the outcome of the advice, Wärtsilä can provide independent excitation solution integration with modules from reliable AVR manufacturers. The solution is dedicated to reducing unexpected maintenance costs during normal operation. After the retrofit your installation is easier to operate, the monitoring is more efficient and versatile, and you make savings in your spare parts program.

Back to normal

To make sure everything works correctly and according to recognized quality standards, Wärtsilä calibrates, tests and commissions all the necessary systems from low to high voltage applications. All documentation and procedures are in compliance with class regulations. We only use skilled and trained personnel, to which you can easily trust your generator set.

By providing "One-stop" solutions with a flexible and modular automation upgrade, Wärtsilä minimizes installation, integration and commissioning risks. The excitation retrofit solution can be carried out alongside a governor upgrade or an engine overhaul.

When your operations are managed by Wärtsilä there will be minimal interruption. Wärtsilä takes care of your complete electrical installation and makes sure that you are back in business as fast as possible.