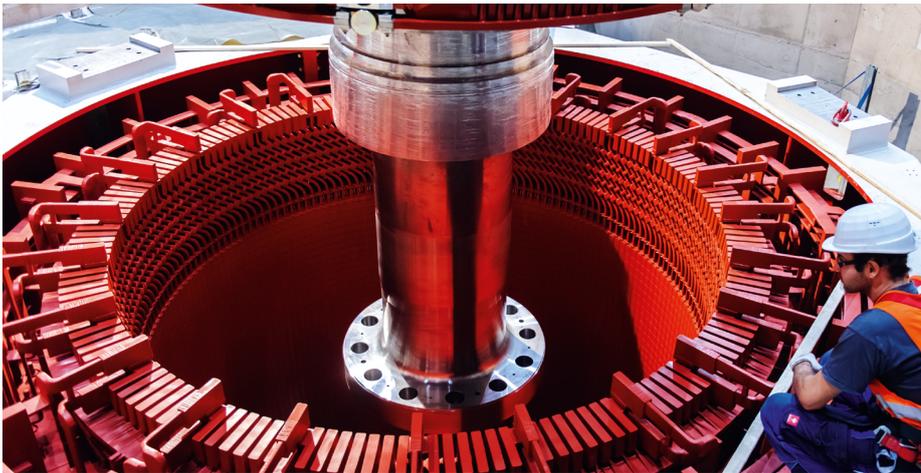


Hydropower from VERBUND

Generator diagnosis tailored to your needs



Your goal is to maintain your hydropower plants in top condition despite pressure to reduce costs? Then a precise diagnosis of your generator is something you can't do without. VERBUND is your reliable partner in this thanks to our broad range of expertise and many years of experience in hydropower operations – both at our own and our customers' plants.

Precise measurements give you optimal protection

Generators are subject to a variety of defects and damage when in operation. Potential issues range from overheated soldered connections and cable breakage, through damage from debris and humidity, to laminate core distortion and electrical and mechanical ageing of the main insulation system. We are able to conduct an analysis of your generators in around two days using modern technology. By precisely identifying defects before they become a problem, we help you to avoid downtime that can result in many months of lost output and revenue.

Our services

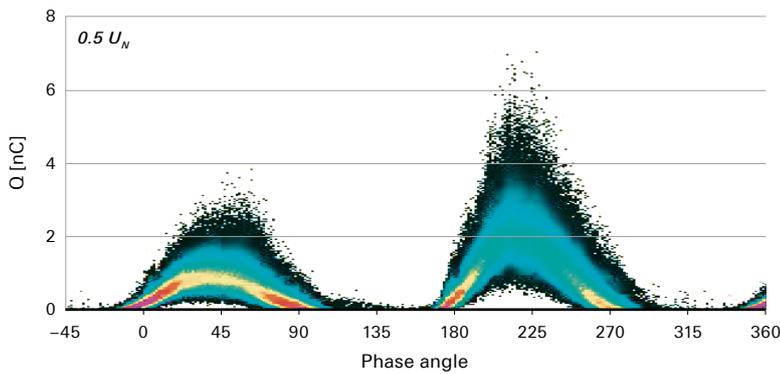
VERBUND offers you a comprehensive package of services from a single source. Our experts use modern, reliable diagnosis methods incorporating uniform evaluation criteria to assess the condition of your generators. Benefit from our longstanding experience in the application of such analyses.

Our services comprise:

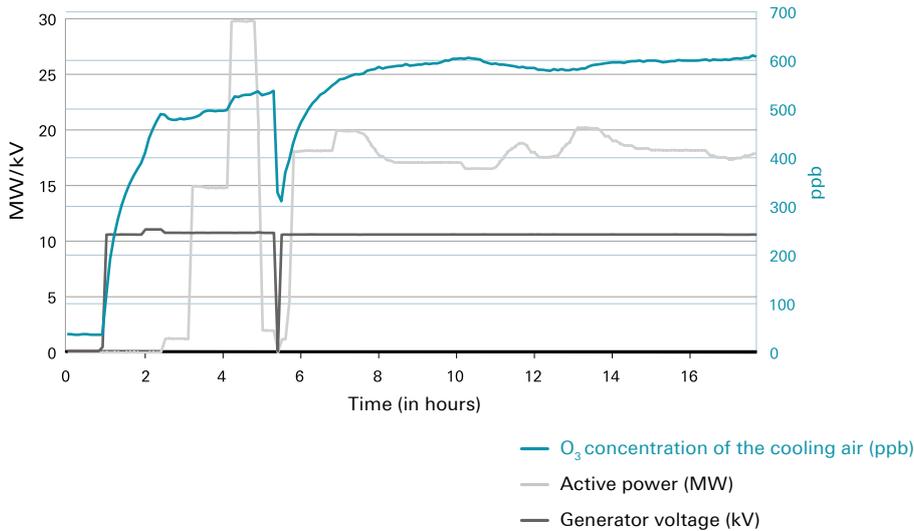
- Visual inspection
- Electrical measurements, including high-voltage testing
- Partial discharge analysis
- Analysis of cooling air ozone levels
- Thermovision measurements
- Various additional specific tests of rotors and stators
- Condition assessments based on uniform criteria
- Planning, sequencing and implementation of the necessary actions

Our modern, reliable diagnosis methods allow you to detect generator damage or deterioration at an early stage.

PD pattern



Ozone concentration



Top left:

The partial discharge measurement shows the distribution of load heights. This is one of the primary methods used to detect insulation faults.

Top right:

Generator diagnosis enables scorching and other damage to be detected before issues arise.

Bottom:

Measuring ozone concentration at different generator voltages.

You can rely on our expertise

You're looking for a professional to entrust with the maintenance of your generators? Work with the best in the business. We at VERBUND have carried out more than 800 generator measurements over the past 25 years. Our customers include public utilities and plant manufacturers in addition to industrial enterprises and insurance firms. With VERBUND as your partner, you also benefit from our experience gained in the professional operation of more than 120 hydropower plants of all generations.

You can always count on us thanks to our expertise along the entire plant lifecycle and across all stages of the value chain, from planning and design, construction and operation all the way to supervision and maintenance.

Pressure to reduce costs in energy generation mean that budgets for maintaining hydropower plants are shrinking. This makes it all the more important to gain a precise understanding of the condition of your plants. With VERBUND, you have a competent partner at your side. Using our reliable methods, we spend around two days inspecting your generator for any damage or deterioration. In case of an emergency, this allows you to avoid sustained lost output and revenue over longer periods.

Contact:

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Our customers

Alstom
Andritz Hydro (ELIN)
ATP
Energie AG Oberösterreich
Ennskraft
E.ON
Hannover International Versicherung
illwerke vkw
KELAG
LINZ STROM
Norske Skog
Papierfabrik Steyermühl
Salzburg AG
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