



# GENERATOR CONDITION ASSESSMENT

The Generator condition assessment accurately assess the health of the main generator components, within a reduced outage, to optimize your maintenance and keep your assets up and running. An assessment typically consists of a visual inspection and electrical testing.



## TRUSTED EXPERIENCE AND EXPERTISE

The inspection and tests are performed by field engineers and technicians with specific experience in turbine assessments, repair and design.

## KEY BENEFITS

- Reduce insurance cost
- Reduce outage time and associated cost
- Identify & solve small issues before they become big problems
- Get a base-line condition and trend it over time to predict failure
- Enhance performance, durability, efficiency, availability and safety
- In case of failure, identify & repair efficiently to minimize outage time
- Increase production by improving unit's availability, when it matters the most

## SUCCEED WITH GE VERNOVA

- Access GE Vernova's resources from multiple industries
- Benefit from designer's local and global expertise
- Combine inspections on many power plant systems in parallel
- Access the latest inspection & repair technologies to implement the best solutions

### Ready for **emergency**

Packages adapts to assist you in case of failure

### All OEMs

All hydro generator types  
0.5 to 800 MW

**Standard** packages or **customized** to your specific needs

**Flash intervention** minimizing outage and suiting your schedule

## STANDARD PACKAGES

| Basic  | Premium   | Inspected Areas  |
|--|---|--|
| <b>TESTING</b>   |   |  |
| <ul style="list-style-type: none"> <li>• Insulation resistance &amp; PI</li> <li>• Dc-ramp test</li> <li>• Dc resistance test</li> <li>• Wedge tap test</li> </ul> Optional: <ul style="list-style-type: none"> <li>• Power factor and tip-up</li> </ul> | <ul style="list-style-type: none"> <li>• Insulation resistance &amp; PI</li> <li>• Dc-ramp test</li> <li>• Power factor and tip-up</li> <li>• Dc resistance test</li> <li>• Wedge tightness test</li> <li>• RTD tests</li> </ul> Optional: <ul style="list-style-type: none"> <li>• Lights-out test</li> <li>• Corona probe test</li> </ul> | Stator winding   |
| <ul style="list-style-type: none"> <li>• Knife test</li> </ul>   | <ul style="list-style-type: none"> <li>• Elcid test</li> </ul> Optional: <ul style="list-style-type: none"> <li>• Core loop test</li> <li>• Stator roundness</li> </ul>   | Stator core  |
| <ul style="list-style-type: none"> <li>• Insulation resistance</li> <li>• Dc resistance test</li> <li>• High Potential test</li> </ul>   | <ul style="list-style-type: none"> <li>• Insulation resistance</li> <li>• Dc resistance test</li> <li>• High Potential test</li> <li>• Pole drop test</li> </ul> Optional: <ul style="list-style-type: none"> <li>• Rotor concentricity</li> </ul>  | Rotor winding (including collector)  |
| <ul style="list-style-type: none"> <li>• Insulation resistance</li> <li>• Oil sample analysis</li> </ul>   | <ul style="list-style-type: none"> <li>• Insulation resistance</li> <li>• Oil sample analysis</li> </ul>  | Bearings   |
| Some covers off, rotor in  | All covers off, rotor out   | *Assessment durations are indicative only and depend on unit size, design, customized requirements and options |
| 3 days*  | 5 days*   |  |

Visual inspection: Stator frame, core, winding, rotor, exciter, bearings

