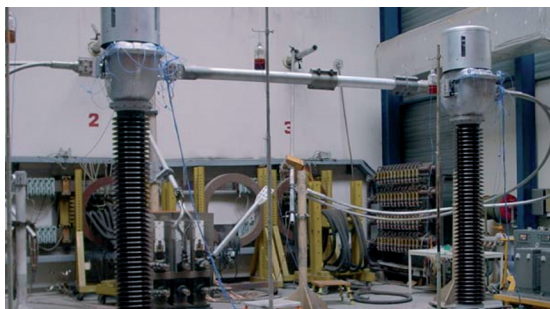


UNINTERRUPTED CURRENT TESTS

Hall 50 kA

The increase of the electrical energy generation plant led EDF to fit out a testing facility able to provide a three-phase uninterrupted current up to 50 kA, in order to perform heating tests on:

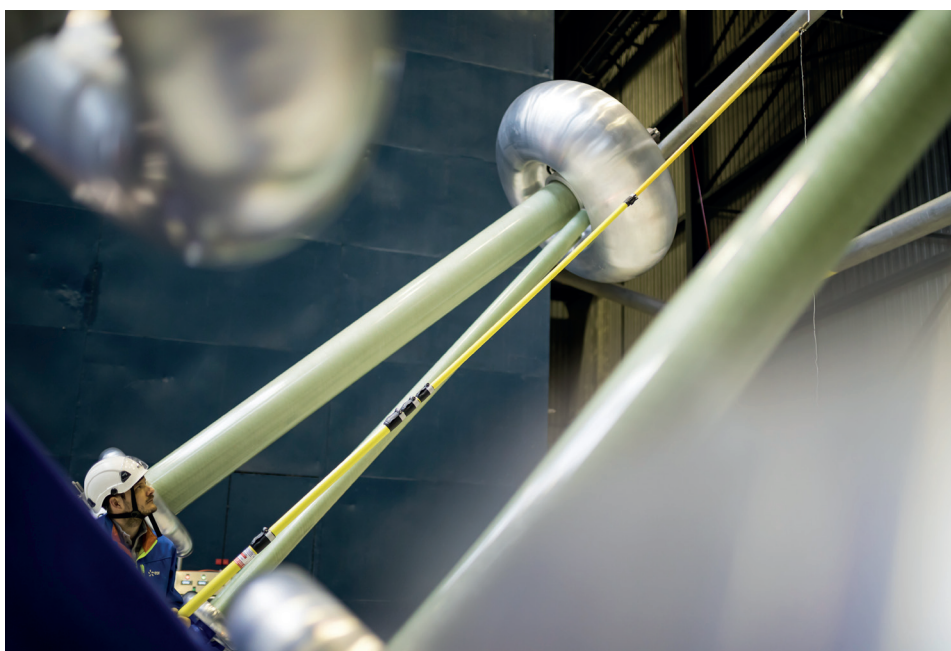
- sheathed bus bars,
- generator connection terminal boxes,
- switches, re-closing devices after trip-out,
- current transformers,
- insulating bushings,
- power convertors, rectifier stations.



This testing facility comprises three single-phase power generators, equipped with a Varivolt transformer, whose secondary voltage on load is continuously variable. This transformer is combined with a step-down transformer delivering 50 kA current at 175 V. An intermediate output allows three-phase tests up to 5 kA at 2 kV.

The whole source is energized from the 20 kV distribution network, providing power up to 15 MVA. The connections of the equipment being tested to the power sources are made by flexible water-cooled cables.

A computer manages the 180 temperature measurement channels by thermocouple in real time.





EDF POWER NETWORKS LAB

UNINTERRUPTED CURRENT TESTS

400kV overhead test line

A 330 m overhead test line has been designed to perform uninterrupted current test up to 5 kA. This test bay is used to perform ageing and heating tests on conductors, based on measurements of temperature, stress and sag, correlated to meteorological data.



This testing facility belongs to Enedis



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