Flamanville EPR: Advancement of Reactor Vessel Testing Programme

AREVA, together with EDF, has recommended to the French Nuclear Safety Authority (ASN) to adapt the testing programme of the Flamanville 3 EPR reactor vessel head and bottom as decided at the end of 2015.

Initial analyses conducted on two parts similar to those at Flamanville 3 have shown that the carbon segregation phenomena extend beyond mid-thickness on one of them. As specified in the initial strategy approved by the ASN, the material sampling and related tests will be extended to three-fourths of the thickness of the part concerned.

The purpose of these initial analyses is also to better specify the variability of the main manufacturing parameters of the different parts. AREVA and EDF have therefore proposed extending the testing programme to include a third part to strengthen the robustness of the demonstration.

These adaptations to the testing programme will double the number of samples analysed. A total number of 1200 material samples will be taken to consolidate the representative nature of the three forged parts tested, both for carbon content and required mechanical properties.

The ASN has approved this addition to the testing programme, which will continue through the end of 2016, when the final report will be submitted.

EDF and AREVA have reaffirmed their confidence in their ability to demonstrate the quality and safety of the reactor vessel for the start-up of the Flamanville 3 reactor planned for the last quarter of 2018. The assembly and testing activities are going ahead at the construction site in line with the announced schedule.

About EDF Group
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About AREVA
AREVA supplies high added-value products and services to support the operation of the global nuclear fleet. The company is present throughout the entire nuclear cycle, from uranium mining to used fuel recycling, including nuclear reactor design and operating services. AREVA is recognized by utilities around the world for its expertise, its skills in cutting-edge technologies and its dedication to the highest level of safety. AREVA’s 40,000 employees are helping build tomorrow’s energy model: supplying ever safer, cleaner and more economical energy to the greatest number of people.