EDF group nuclear facilities in 2017

EDF group operates 73 reactors around the world, 58 of which are in France. To remain the leading producer of very low-carbon electricity, it is accelerating development of renewable energy capacity while also ensuring the safety, performance and competitiveness of its nuclear power plants. Its facilities already give France a considerable lead over its neighbours in terms of limiting greenhouse gas emissions while keeping the price of electricity down. The group is also building five EPRs in France, China and the United Kingdom.

EDF group nuclear facilities around the world.

As part of a long-term nuclear power cooperation agreement with EDF, utility EDF holds 50% in undivided co-ownership of the Tihange 1 nuclear power plant through its wholly owned subsidiary, EDF Belgium. The capacity attributed to EDF is 481 MW (2% of total Belgian generation capacity). EDF Luminus (EDF 68.63%), which was set up to build and operate two EPRs, each of 1,750 MW, in Taishan, Guangdong Province. In April 2018, the Taishan project was granted fuel load authorisation for Reactor 1 at the plant. This reactor is scheduled for commissioning in 2018, with Taishan 2 scheduled for 2019.

EDF holds 30% of the share capital of TNPJVC (Taishan Nuclear Power Joint Venture Company Ltd), which was set up to build and operate two EPRs, each of 1,750 MW, in Taishan, Guangdong Province. In April 2018, the Taishan project was granted fuel load authorisation for Reactor 1 at the plant. This reactor is scheduled for commissioning in 2018, with Taishan 2 scheduled for 2019.

In the United States, EDF holds 49.99% of Constellation Energy Nuclear Group (CENG), a joint venture with Exelon, which is the country’s largest nuclear plant operator. CENG operates five pressurised water reactors at three plants for total installed capacity of 4,240 MW. The operating licences for Units 1 and 2 at Calvert Cliffs, Unit 1 at Nine Mile Point and for RE Ginna are for 60 years.

In the United Kingdom, EDF Energy, which is wholly owned by EDF, owns and operates 15 nuclear reactors at eight power plants.

Breakdown of nuclear facilities:
- seven plants with advanced gas-cooled reactors (AGR), designed for a nominal operating life of 25 years
- one plant with a pressurised water reactor (PWR), designed for an operating life of 40 years

Since EDF’s acquisition of British Energy, the operating life of the AGR power plants has been extended by eight years on average. The most recent extensions were announced in February 2016. The operating life of Hartlepool and Heysham 1 was extended by five years, and that of Heysham 2 and Torness by seven years.

Breakdown of nuclear facilities:
- 34 nuclear units each of 900 MW, average age of 36 years
- 20 nuclear units each of 1,300 MW, average age of 29 years
- 4 nuclear units each of 900 MW, average age of 17

EDF’s first-generation plants (nine reactors) were gradually shut down and are now being decommissioned.

EDF’s nuclear facilities in France comprise 58 pressurised water reactors (PWR) at 19 power plants that are owned by EDF. Their average age of around 32 years and estimated operating life of over 40 years places the reactors in the average range of nuclear facilities around the world.

EDF employees at plant
Permanent employees of service providers at plant
Number of reactors decommissioned
Number of reactors under construction (EPRs)

EDF’s first-generation plants (nine reactors) were gradually shut down and are now being decommissioned.

In the United Kingdom, EDF Energy, which is wholly owned by EDF, owns and operates 15 nuclear reactors at eight power plants.