## Interview Pierre Gadonneix, ceo EDF

## 'I am convinced we have what it takes'

Pierre Gadonneix, Chairman and Chief Executive of EDF since 2004, surprised everyone by publicly inviting German electricity producers to join EDF in building the second French EPR, in which oil company Total already participates for 10%. 'If we could also have German partners on board, it would be very good for the development of the EPR.'

by Yves de Saint Jacob

Following a decision by the French State, French state-owned energy company EDF is going to build a second new nuclear reactor of the EPR type (European Pressurised Reactor), in addition to the EPR that the company is already building near Flamanville. A third EPR also appears to be on the cards, although EDF might not be the leading operator on this. The ambitions of EDF-chief Gadonneix, who is also the former ceo of Gaz de France, go further than this: he wants to build some dozen EPR's outside of France in the coming decade. He is actively looking for international partners to make this happen. Inside France, though, Gadonneix is not very eager to make room for the new energy player GDF Suez. The French government has decided GDF Suez will get a minority share in the second EPR and might even give the majority of the third EPR to EDF's rival.

President Nicolas Sarkozy believes there is a "world to conquer" for the EPR network. How do you see the development of the nuclear market and EPR's place in it?

There is not just one world to conquer for nuclear energy, but several. We are looking at 140 GW, or the equivalent of close to 90 EPRs, the facilities for which will be built all over the globe between now and 2020. Out of this enormous installed capacity, there is room for several types of third-generation nuclear power plants, which will compete with one another, including EPRs. For our part, we have the ambition of developing a dozen EPR's

between now and 2020, including four in the UK, four in the US and two in China. I am convinced that we have what it takes to conquer that market share.

A second EPR is scheduled for construction in France, at the Penly site in Normandy. You will lead this project, but you are supposed to move over a bit for GDF Suez. What do you think of this?

Penly may provide us with the opportunity to find partners who, like us, are interested in promoting the EPR. We already, in the past, have entered into partnerships with Electrabel (Suez' Belgian electricity subsidiary, ed.) on the Chooz and Tricastin nuclear power plants, and more recently with Enel, which will have a 12.5% share in the first EPR, under construction in Flamanville. Enel will also participate in the construction and operation of the new EPR reactor at Penly and I am thinking about other partners. GDF Suez has already stepped forward. If we could also have German partners on board, it would be very good for the development of the EPR.

Won't this long lineup of partners make administration more difficult? In nuclear power there is no choice. The electrical industry is by nature both global and local. Engineering is international: you can have one model of power plant built in a number of faraway countries. But most of the energy chain (from production to commercialization) will be based locally. This is why, when we are going to build and operate nuclear power plants abroad, we



Areva ceo Anne Lauvergeon (left), French president Nicholas Sarkozy (centre) and EDF ceo Pierre Gadonneix (right) visit the Flamanville construction site. Photo by: Michel Euler/AFP/Getty images

need local partners: Constellation in the United States, CGNPC in China for example. Nonetheless, we do usually designate a leading operator who takes on responsibility both at the construction and the operation stage. We are intending for this to be EDF, which is justified by our experience and level of skill.

## 'The world will build 90 new EPR's in the next ten years'

The consistency this will provide in terms of coordinating the industrial aspects ensures that the projects will be executed effectively.

Claude Mandil, former executive director of the International Energy Agency, said recently, 'It's not France that needs two EPRs, but Europe.' How could we better incorporate French nuclear energy into a European energy policy?

It's indisputable: Europe needs more nuclear power, and much more of it than just one, two or three EPRs. Many governments are convinced of the fact and are starting programmes. Finland has led the way with a first EPR, the United Kingdom is laying the foundations for a series of them, and Italy is making similar noises. The organisation of markets is not a determining factor. In the past, nuclear energy was developed by monopolies in Europe, but now, countries with very competitive markets such as Great Britain are also taking steps to enter the nuclear market. It is true, however, that Europe has everything to gain if it would interconnect its markets better. Eventually, member states will pool their resources and produce the energy they all need at a lower cost.

But that is far from being the case today. The second French EPR, and potential third one, will not be running at full capacity if their production remains national.

France needs nuclear power and eventually one EPR will not be enough. There are two reasons for this. The first has to do with the products on offer. As fossil fuels become more and more expensive, the competitive advantage of nuclear energy compared to the other types of energy will grow. This ensures that there will be a great deal of room for production of nuclear electricity. The second is demand. We will develop new uses for electricity: heat pumps for buildings, innovative processes in industry, electric vehicles. New facilities will be needed to satisfy the demand. The good news is that, by consuming electricity with a smaller carbon footprint instead of burning hydrocarbons, we will not only be fighting climate change, but we will also lessen our dependence on countries that export fossil fuels.