



The appeal of noT2D3

Historical overview of the T2 and D3 reactors

Reactor #3 in the Doel nuclear plant (D3) became operational in 1982; it was first shut down in June 2012 after several thousands of micro - cracks were found in the reactor pressure vessel. During checks in August 2012 similar defects were detected in the pressure vessel of reactor #2 in the Tihange plant (T2), which led to this reactor, which had been operational since 1983, also being shut down. (1)

Almost a year later, in May 2013, the AFCN (2) allowed Electrabel to restart these reactors, while making surveys and checks compulsory in the following year.

In March 2014, Electrabel decided to bring forward the planned shut - down of these two reactors because an irradiation test on a sample of steel that is similar to that of the vessels displayed excessive embrittlement. (3)

To try and explain this unforeseen finding, Electrabel next carried out more tests and analyses. Simultaneously the reactor vessels were again examined through an improved procedure, which resulted in a sharp increase in the number of detected flaws compared with the 2012 checks: over 13,000 for Doel 3 and over 3,000 for Tihange 2. Finally, in November 2015, after twenty months of consultations and analyses, the AFCN again allowed the company to restart the two reactors.

Observations

What should we think of it all ? Let us first of all remember that the reactor vessel is the essential component in a nuclear plant in which no flaw can be allowed since a break in the vessel would make it impossible to control the reactor and would inevitably result in the meltdown of its core and to an absolute catastrophe, as happened in Chernobyl or Fukushima. Such zero tolerance of any flaw in the reactor pressure vessel is what is advocated in all the specifications for building a nuclear plant (4).

The T2 and D3 reactor vessels do not meet those standards of maximum quality. Indeed, if a new reactor were to be accepted with a pressure vessel displaying the flaws that have been brought to light, it would be rejected in any country throughout the world. (5)

This first observation is obvious to anybody, but not to the AFCN, which raises the question of this agency's legitimacy and of its ability to oversee the safe running of the Belgian nuclear reactors.

The way in which Electrabel and the AFCN have managed the case includes several other failings relating to the safety of the population in Belgium and neighbouring countries, as indicated by the recent survey by Ilse Tweer, a consultant whose expertise in material science is internationally acknowledged (6). We can mention a general approach that does not heed the rules of good scientific practice as well as the lack of any certainty as to the origin of the micro - cracks, which alone should have prevented any consideration of restarting the reactors.

Last but not least, citizens can only wonder about the absence of real political decision making, as the minister for home affairs in charge of nuclear safety, Jan Jambon, the minister of energy, Marie-Christine Marghem, Prime Minister Charles Michel and all the other ministers in his government are sheltering behind the AFCN's alleged competence, abandoning all decision making powers to this institution and thus closing the door to any public debate.

Lawsuits

Faced with such political and scientific deficit and this irresponsible risk-taking, citizens from every region of the country have decided to file a lawsuit aiming at the final closure of the two reactors.

A first stage was reached at the end of December 2015 when the association *Nucléaire Stop Kernenergie* filed a claim as in summary proceedings. The claim was dismissed on 9 March 2016; yet it had also been a step forward in that it had first been deemed admissible. (7) It leaves a door open to further proceedings about the T2 and D3 reactors, on the basis of new information leading to better calling into question the validity of the report prepared by the AFCN.

A second claim, in the name of individual claimants, is due to be filed as soon as possible. Following on new information mentioned above, this procedure will call upon elements of law that are out of bounds in the case of a procedure introduced by an association.

The cost of the new procedure is difficult to assess since next to lawyers' and court fees there will be high assessment costs (they may amount to tens of thousands of Euros). We as claimants thus face expenses of around 40 to 50,000 euros.

How can you help?

- Become a claimant yourself.
- Make a donation, however small, to the specially opened bank account (see below).
- Pass on news about the initiative in your networks.
- If you represent an association, it would be nice if you could support us officially: your association's name will appear on the page for associations.
- See the contact page of our website to get in touch and express your support.
- Come to support us at the court sessions that will be announced on the calendar page (noT2D3.be).

Bank data

noT2D3.be

IBAN: BE43 0689 0555 0601

BIC: GKCCBEBB

Address: Liège, Belgique

Communication: an email address (which makes it possible for us to contact you).

Practical details

The bank account is managed by three people who are members of three different associations.

Once the court procedures are over and all costs paid, should any money be left in the account, it will be used only for campaigns aiming at closing nuclear plants that have gone beyond the 30 year lifespan they had been built for, i.e. unfortunately *all* of Belgium's reactors...

Other information

On the website's home page you can check

- the amount currently collected
- a list of claimants
- a list of supporting associations

(1) Each of these two reactors can produce 1,000 MW. A law that was voted in 2003 made it possible to use them for ten more years, as is indeed the case for the 5 other Belgian reactors, magically changing their lifespan from 30 to 40 years. This law said that reactor #1 at Tihange had to be shut down in 2015, but in 2012, through another sleight of hand, the government postponed its closure to 2025. The same applies to reactors 1 and 2 at Doel following an agreement signed by the Engie and Electrabel companies and the Belgian State, represented by Prime Minister Charles Michel and the minister for energy, Marie-Christine Marghem, on 30 November 2015. An annulment claim has been filed by IEW and BBL: see the section 'Other actions and calls for donations'.

(2) AFCN: *Agence Fédérale de Contrôle Nucléaire*, the Belgian Federal Agency that controls nuclear power (www.afcn.fgov.be).

(3) Irradiation embrittlement of the steel was much higher than had been anticipated. The sample had been provided by Areva and consisted of steel of a similar composition to that of the concerned vessels with similar defects.

(4) Reminder: a reactor pressure vessel can be neither repaired nor replaced.

(5) As acknowledged by the AFCN director Jan Bens at a meeting with Camille Gira, Luxembourg State Secretary for sustainable development. See www.rtbf.be/info/... (19 January 2016).

(6) *Flawed Reactor Pressure Vessels in the Belgian NPPS Doel 3 and Tihange 2*, published in January 2016. This study is now available in French and in other languages on our websites, along with a number of other reports and analyses.

(7) Contrary to what had been the case with a claim filed by Greenpeace in a similar context in 2015, but which had not been deemed admissible (an appeal to the Council of State against the extension in time of the D1 and D2 reactors).