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Alley, David

From: Hull, Amy *RES*  
Sent: Thursday, August 16, 2012 7:41 AM  
To: Alley, David  
Subject: as discussed yesterday: Regulators to Discuss DOEL-3 Belgian Reactor Pressure Vessel Cracks

According to French-language daily Le Soir, a crack of between 15 and 20 millimetres (0.6 and 0.8 inches) was discovered during a test in June. There has been no denial of this report.

-----Original Message-----

From: (b)(6) [mailto:(b)(6)]  
Sent: Wednesday, August 15, 2012 8:05 PM *246*  
To: Hull, Amy  
Subject: Fw: Regulators to Discuss DOEL-3 Belgian Reactor Pressure Vessel Cracks

Sent via BlackBerry from T-Mobile

-----Original Message-----

From: "Malik, Shah" <Shah.Malik@nrc.gov> *MRK*  
Date: Sun, 12 Aug 2012 19:53:18  
To: RES DE CIB<RESDECIB@nrc.gov>; RES DE CMB<RESDECMB@nrc.gov>  
Cc: AMY HULL (b)(6)  
Subject: Regulators to Discuss DOEL-3 Belgian Reactor Pressure Vessel Cracks

FYI --

[http://www.marketwatch.com/story/regulators-to-discuss-belgian-reactor-cracks-2012-08-10?reflink=MW\\_news\\_stmp](http://www.marketwatch.com/story/regulators-to-discuss-belgian-reactor-cracks-2012-08-10?reflink=MW_news_stmp)

Aug. 10, 2012, 2:03 p.m. EDT

Regulators to discuss Belgian reactor cracks

By Anna Perez

(Adds background, U.S. regulator's comment.)

European and U.S. nuclear regulators will meet in Brussels next week to discuss possible cracks found in a key component inside a Belgian reactor, in an effort to coordinate response to a problem that may affect several other countries around the world.

"Our technicians and technical staff from other nuclear regulatory bodies in Europe and also the U.S. will attend a meeting on August 16th," a spokesman for Spain's nuclear safety regulator, Consejo de Seguridad Nuclear, said Friday.

Belgian authorities said this week that they were shutting down, at least until the end of the month, one of their seven nuclear plants on the suspicion that the steel vessel holding the reactor core could be cracked. The same component might be present in other power plants

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in the region and while regulators say the cracks pose no danger, the fact that they appear to stem from a production defect has prompted checks in other countries.

The problem will likely add new controversy to the debate about the safety of atomic energy. After the meltdown at Japan's Fukushima reactor following last year's earthquake and tsunami, the European Union rushed to undertake tests to ensure the safety of its nuclear power plants. Some countries, including the region's largest economy, Germany, decided to speed up their phase-out of nuclear power.

Checks with a new technology at the Doel power plant near Belgium's biggest port, Antwerp, identified the possible cracks, the Belgian regulator FANC said.

The vessel is a 20-centimeter-thick steel tank, which is roughly three meters tall and four meters in diameter.

At least one reactor in Switzerland, another in Belgium and two in Spain have components produced by the same Dutch firm, Rotterdam Drydock Company, which has gone bankrupt since producing the equipment. The U.S. Nuclear Regulatory Commission said Friday it has been informed that 10 American reactors may have used the component in question, but it hasn't yet verified that information with U.S. nuclear operators.

The U.S. regulator said it will send an engineering expert to next week's meeting. "We want to know more about what tests were done, the methodologies and techniques and equipment used to test it," spokesman David McIntyre said. "It's a little early to be jumping to conclusions at this point. There will be more testing to verify that there's a problem and the extent of it."

The Swiss reactor was already shut for routine checks and the second Belgian reactor will be shut next week for tests, the countries' regulators said. Spain didn't find any problem in its vessels, after testing them with the same advanced technology used in Belgium.

Authorities have assured that there are no risks. However, if the cracks are present in sufficient number and size, the reactors might have to be permanently shut down, leaving power generators the challenge of finding alternative sources of electricity.

In Belgium, FANC doubts the Doel 3 reactor, which provides roughly one-sixth of the country's nuclear power, will ever resume operations. "I am pretty skeptical at the moment," Willy De Roovere, the head of FANC, told RTBF radio Friday. "There are many (cracks), and for our taste a bit too many," he added.

Steve Kidd, the deputy director general of the World Nuclear Association, said that it was highly unlikely that there would be radioactive leaks because there is a concrete container around the reactor pressure vessel. However, he add that it wouldn't be possible to continue to operate a reactor with such cracks.

Given the age and origin of the nuclear reactors operating in the U.K. it was highly unlikely that they would have pressure vessels made by the Rotterdam company, Mr. Kidd said.

The Belgian problem is now rated one on the scale of nuclear accidents. Fukushima had reached level seven, the same as the 1986 Chernobyl disaster.

Ryan Tracy in Washington DC and Selina Williams in London contributed to this article.

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<http://www.france24.com/en/20120810-cracked-belgian-nuclear-reactor-impossible-repair-closed-antwerp-radiation>

latest update: 10/08/2012

- Belgium - nuclear power

Cracked Belgian nuclear reactor to remain closed

A crack discovered in a steel tank containing a nuclear reactor at a Belgian power plant will likely keep the station closed, the country's nuclear safety

agency said on Friday. Repairing the crack is "practically impossible," the agency said.

AP - The head of Belgium's federal agency for nuclear safety AFCN said on Friday he was "sceptical" that an ageing reactor closed over fears of cracks could be restarted.

"I'm fairly sceptical for the moment," Willy de Roovere told RTBF public radio, even if "the possibility remains that I am wrong."

**According to French-language daily Le Soir, a crack of between 15 and 20 millimetres (0.6 and 0.8 inches) was discovered during a test in June.** There has been no denial of this report.

According to the agency, repairs are "practically impossible" and are "not an option" for fear of creating new tensions "which we must avoid at all costs."

Installing a replacement meanwhile has never been attempted anywhere because of the problem of high radiation levels.

The AFCN revealed on Wednesday that the Doel 3 reactor, located 25 kilometres (20 miles) north of Antwerp, would remain closed at least until August 31 after the discovery of possible cracks in the protective vessel surrounding the core during routine June testing.

The agency is also mulling the permanent closure "in the worst case" of a second reactor in the country's south near Liege.

The tests showed "faults in the steel base material" on which the reactor vessel is mounted, the AFCN said.

The Dutch firm, Rotterdam Drydocks, that made the vessels is out of business, which has amplified concerns about others it delivered in Europe and in the Americas.

Spain has indicated it has two reactors in the same bracket, Switzerland and Sweden one each.

The firm supplied one to the Netherlands, but had not manufactured it. The government in The Hague said it has still to decide whether to test its nuclear facilities.

The German government said reactors supplied by the defunct company were no longer in service.

Representatives of nuclear safety bodies from all the countries involved will meet in Brussels on August 16 to "exchange information," the AFCN said.