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Hardies, Robert

From: Kirk, Mark ^{RES}
Sent: Tuesday, August 14, 2012 2:10 PM
To: Hardies, Robert
Subject: Fw: some information

See below news articles, and validation from Robert Gerard that the comments are correct.
International expert panel sounds like alot of fun

Mark Kirk, (b)(6) Cell (b)(6)

From: robert.gerard@gdfsuez.com <robert.gerard@gdfsuez.com>
To: Kirk, Mark
Sent: Mon Aug 13 12:03:52 2012
Subject: RE: some information

Dear Mark,

Thank you for the information.

The General Director of the Federal Agency of Nuclear Control has effectively said that in an interview on the national radio on Friday morning. The main reason is the number of defects (although according to the latest count we are close now to 9000) concentrated in a relatively small volume (still roughly 1.2 m high on 360° and 120mm thickness).

You must know that FANC wants to constitute a panel of international experts and that the general philosophy in Europe is strongly deterministic, meaning that the probabilistic analysis alone is not an option, we also must demonstrate acceptability acc. to ASME XI App A criteria. Could be a hard task, depending on the hypotheses on material properties. In any case we will have to provide very hard evidence that there is no risk before we can get an authorization to restart.

Best regards

Robert

From: Kirk, Mark [mailto:Mark.Kirk@nrc.gov]
Sent: Monday 13 August 2012 15:09
To: Gérard Robert (TRACTEBEL ENGINEERING - BELGIUM)
Subject: some information

Dear Robert –

We found these articles (below) in the popular press, and I thought I would pass them on to you in case you have not seen them. I am particularly curious if you have any insights regarding the comments from FANC (I have them highlighted) saying that the Doel 3 reactor might not ever re-start. Is this in your opinion a serious view, or is the quote being taken out of context? If it is serious have you any idea of the justification?

In more mundane matters, the NRC will be sending Bob Hardies of NRR (the regulatory side of our agency ... I am on the research side) to the meeting in Belgium on the 16th. In case you have not met Bob, a few particulars:

- Before coming to work for the NRC about 6 years ago Bob had spent over a decade as the chief metallurgist at the Calvert Cliffs NPP in Maryland. He is therefore very well accustomed to what happens in "the real world"

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- While with the industry Bob worked extensively with EPRI, industry groups, and ASME. While not a technical specialist he is very well versed with and well aware of structural integrity, materials, and inspection topics.
- Bob is also very well acquainted with PFM and FAVOR as he was my boss in the 2006-2010 timeframe when we were finishing PTS.

Best,

Mark

FYI --

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 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.

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