

OPSMPEm Resource

From: Harrington, Holly
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To: OPSMPEm Resource
Subject: NRC Public Blog Blog June 2011-July 2011
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This file contains records for all communication posted during the period June 1, 2011 to July 31, 2011, via the NRC blog.

Holly Harrington
Office of Public Affairs
NRC

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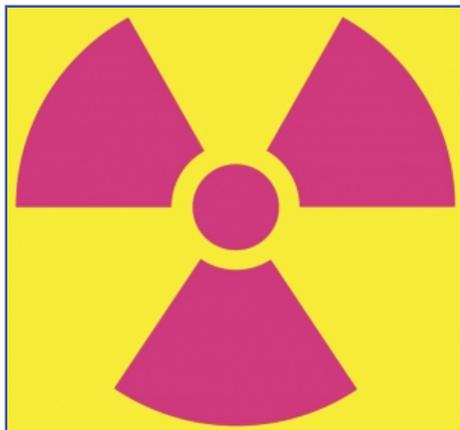
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U.S. NRC Blog

Archive file prepared by NRC

Radiation and Public Health

posted on Thu, 02 Jun 2011 15:35:14 +0000



Within days of the start of the Japanese nuclear emergency, [the NRC made statements](#) that no unsafe levels of radiation would impact the U.S. [Other federal agencies](#) also concluded the radiation reaching the U.S. from the damaged Japanese reactors would not be at levels of public health concern. What does that actually mean? Radiation released from Japan had to travel a very far distance to arrive in the U.S.—while all along the way being diluted by wind, rain, and radioactive decay. Even the two closest states – Hawaii and Alaska – are still a distance away from the source of radiation. We expected to detect trace amounts of radiation from the Japanese reactors in the U.S.—modern radiation detection equipment is very sensitive and able to detect very small amounts of radioactivity. However, just because something is detected doesn't mean it's hazardous. Scientists estimate that we receive a dose of about 620 millirem each year from natural sources – like radon – and human sources – such as x-rays. There are NO known health impacts from this typical annual dose. To put this into context, even people living in places where the background radiation is much higher – such as Denver, Colo., where the rate of background radiation is above 1,000 mrem a year – don't experience adverse health effects. The U.S. EPA and Department of Energy concluded from their environmental monitoring of the Japanese radioactivity in the U.S. that peak concentrations of particles

and gas detected in California or Washington State were 100,000 times less than the dose rate from background sources. Radiation experts make the conservative assumption, as part of an overall radiation protection philosophy, that any amount of radiation may increase the risk for cancer and damage to DNA, and that the risk increases as the radiation exposure increases. And we do know that high doses of radiation may cause cancer. But there are no studies that clearly show cancer being caused by exposure to low doses of radiation – considered to be below about 10,000 mrem. The bottom line? The radiation coming from the Japanese emergency can be detected by sensitive instruments, but that does not mean it's a public health concern. The levels of radiation detected in the U.S. are well below radiation standards and only a small fraction of the average background of radiation we are exposed to in everyday life. For additional information on radiation protection and health effects visit the NRC website at <http://www.nrc.gov/about-nrc/radiation.html>.

Sara Mroz

Emergency Preparedness Specialist

Comments

comment #1040 posted on 2011-06-02 15:36:45 by andy

What was background level in these places before 1940? Type of radioactive material will determine better cancer rates... it is here, but more is getting here every day predicted for at least another year to come... this will accumulate because of the ridiculously long half life of the particles... Please don't talk about this like it is over till it is no longer releasing radioactive smoke steam and dust ash from fires... This thing, has been for three months constantly leaking highly radioactive water into the ocean. Does this ocean dumping not concern anybody enough to recognize. This may end the whale wars...

comment #1069 posted on 2011-06-08 19:12:35 by Aaron

I realize there are many pollutants in our environment. But I still question whether "levels of public health concern" consider health impacts over the long term.

comment #1142 posted on 2011-06-17 12:22:04 by Laura in response to comment #1126

"But your charter is essentially scientific – so when science (not assumption) repeatedly shows that small amounts of radiation are hormetic rather than harmful, NRC staff should have the courage to turn this reality into policy." If the NRC's charter is scientific, then it is obliged to use standard scientific methods. Hormesis, while having support from some members of the scientific community, remains a controversial and debated theory. At this time, there is insufficient evidence from scientific trials, particularly in humans, to warrant moving away from a LNT. The National Research Council arm of the National Academy of Sciences performed a 16 year study that rejected hormesis. It has also not received support from UNSCEAR, National Council of Radiation and Protective Measurements, Harvard School of Medicine, or any other widely respected scientific body. L'Academie des Sciences in France published a study demonstrating a positive effect in something like 1/3 - 1/2 of test results with the caveat that the effect in humans required further testing. The current studies on low-dose radiation have seen across the board results, demonstrating no effect, to benefits, to harmful effects. Perhaps with time and more study, low-dose radiation will prove to be of demonstrated benefit but until rigorously controlled studies can be completed to confirm those results, it would be irresponsible for the NRC to adopt a position that is an unproven theory. Personally, I would like to think of the NRC's primary role as a conservative regulatory agency, and one who enforces the practice of sound and well-proven scientific principles, rather than imposing Americans to some theorie du jour. I don't

quite understand your aspirin analogy. I don't recall an irrational fear that has caused harm. I am a healthcare practitioner. The consensus thinking about aspirin remains that unless one suffers from certain conditions, taking daily is not recommended. One needs to consult their physician before embarking on this regimen. It is not globally of benefit and in some circumstances can be contraindicated.

comment #1130 posted on 2011-06-17 00:17:31 by Laura

Honestly I'm not particularly concerned about health risks from radiation here in the U.S. Before March 11, I had little interest in nuclear energy and even less knowledge of the subject. However I know people that are worried about radiation risks over here. They see the contamination continuing in Japan and the evacuation zone widening. After weeks, months of hearing their government assure them everything was okay, the Japanese are now being told there were full meltdowns of the cores. They were lied to, they don't trust their government anymore. Meanwhile in our country the decision was made weeks ago to eliminate the release of EPA radiation test results. The timing could not have looked anymore suspicious to anxious individuals. The NRC refrained from making definitive public statements about the status of Fukushima. Instead platitudes were shared of "we don't know what is going on but don't worry, everything is fine." Huh? I think the NRC is oblivious to the kind of appearance they portray to the public. They operate in the shadows, on a "need to know" basis where few need to know, seemingly unaware of the potential consequences of their opaque behavior in an environment where the very future of nuclear energy is at stake. Including other pieces of the picture, such as the defunding of Yucca Mountain, and it almost seems as if the NRC is attempting to sabotage the industry. For me, it isn't the technology or radiation risks inherent to nuclear energy that scares me. The fossil fuels we use come with their own bag of risks that historically have been considerably higher. What scares me is that IF we did have an accident like at Fukushima, could we expect the same cover-up? So far, the evidence seems to point to that.

comment #1126 posted on 2011-06-16 12:08:41 by Atomik Rabbit

“Radiation experts make the conservative assumption, as part of an overall radiation protection philosophy, that any amount of radiation may increase the risk for cancer and damage to DNA, and that the risk increases as the radiation exposure increases.” NRC, as one of the leading authoritative experts on radiation protection, needs to take a serious look at moving away from the Linear Non-Threshold theory of radiation damage. The poison is in the dose. If we take 100 aspirins in a day, it will kill us; 10 will make us sick; one is probably good for us. The irrational fear and expense associated with protecting us from that one aspirin has not been beneficial to us as a technologically advanced society. I realize that there is a vast amount of public radiophobia out there (see previous posts), and as a government agency the NRC must sometimes maintain a politically-correct posture. But your charter is essentially scientific – so when science (not assumption) repeatedly shows that small amounts of radiation are hormetic rather than harmful, NRC staff should have the courage to turn this reality into policy.

comment #1124 posted on 2011-06-16 11:52:37 by Karen Streetk

The public is more familiar with the new units of mSv after recent media coverage of radioactivity. Would you consider shifting to the newer units (perhaps with the older units in ()) to make life easier for the rest of us? I teach high school physics, and it is inconvenient that there are at least two units for everything!!!

comment #1136 posted on 2011-06-17 10:15:28 by Moderator in response to comment #1124

The NRC has a “metrication policy” that states the NRC shall use “...the system of units employed by the licensee.” Since the Japanese officials used SI units, that is the measurement we used (even though Japan is not one of our licensees). Along with many other things associated with the Japanese nuclear emergency, though, this is something we may be reviewing.

comment #1329 posted on 2011-06-29 12:43:24 by acls online

My concern for radiation has been enhanced since the quake in Japan. Shortly after, in May I visited Tokyo for the first time and you can see the effect mentally it had on the population there. I still think it has to be a concern here in the States over time.

NRC Meeting Challenges with Improved Technology

posted on Mon, 06 Jun 2011 12:47:46 +0000

The last six months have been incredibly busy here at the NRC - not just in response to the tragic events in Japan - but also with our inspections, public meetings and licensing reviews. One way we're meeting the challenge is with improved technology. To improve NRC's use of technology, we have been diligently working toward the goals set forth in the [25 Point Implementation Plan to Reform Federal IT Management](#). Implementing this plan is helping us modernize our operations, create efficiencies, save resources and improve effectiveness. One of the more important components of this reform plan is moving toward cloud-based systems. For example, we are now using a General Services Administration private cloud hosting platform for our capital planning, rather than one hosted internally at the NRC. We expect the NRC will save about \$50,000 a year with this move. We are also reducing travel time and expenses using cloud-based online meeting resources. We will continue to look for opportunities to migrate our processes to the cloud wherever possible and where it makes good business sense for the NRC. I also recently conducted our second NRC TechStat session. A TechStat session is an in-depth, review of an IT system. I've found it to be a very effective tool to analyze and improve system performance, to help implement a new system or to address a

critical, challenging issue. Our most recent review focused on the retirement of our licensee fee billing system – basically the system the NRC uses to generate bills to our licensees for work we’ve done. Our new accounting system will now be used, but NRC staff needs access to archived, historical data from the old system. Based on our review, we agreed upon an approach that will ensure access to the data, but at a much lower cost than originally proposed. We are now planning our third TechStat session to review our [Enterprise Project Management](#) system, and others will occur over the coming months, as these meetings are now a central component of our IT management strategy. These are just a few examples of how modernizing our IT enhances the mission of the NRC. Using the 25 Point Plan as a roadmap, my team and I are continuing to find efficient, effective IT solutions to serve NRC. As we find new ways to solve these problems, we plan to share them with our counterparts across the government. By cooperating with other agencies and sharing best practices, we will speed the pace and enhance the quality of IT reform.

Darren B. Ash
Chief Information Officer

Comments

comment #1162 posted on 2011-06-19 02:01:15 by Interior design ponte vedra

One of the more important components of this reform plan is moving toward cloud-based systems. thanks for sharing..

Safety and Sureties at Zion

posted on Wed, 08 Jun 2011 12:03:17 +0000

North of Chicago, on the shores of Lake Michigan, one of the largest demolition and clean-up projects in the history of nuclear power is underway. The Zion two-unit nuclear power plant, which was shut down 14 years ago, is being decommissioned, and people have questions. How can the public be assured that the job is done right? What will happen to the land after the cleanup is finished? What is the NRC’s role in the project? The NRC’s role is focused: our job is nuclear safety and security. NRC safety rules govern nearly every aspect of the project, from the demolition of piping, buildings, and equipment, to the packaging and shipment of rubble. ZionSolutions, the licensee responsible for the project, must follow strict safety procedures and provide robust site security. Every step of the way, NRC inspectors will be onsite to independently review the work done at Zion to make sure that the public, workers and the environment are protected. Protecting people and the environment during the Zion project will cost money, of course. So, NRC rules require that enough money be set aside to do it safely. About \$900 million has been set aside for that purpose. Some have asked whether the NRC has any role in deciding how leftover money would be spent if the project is completed for less. While other authorities might have something to say about such a decision, the NRC would not, because Congress has not given the NRC that role. Rather, the NRC’s focus is strictly on making sure that enough funds are in place to complete the job safely. Once the job is done, the site will be suitable for whatever use the property owner chooses to make of it. The NRC will still have a role to play, though, because the radioactive spent fuel that accumulated during the years Zion was up and running will continue to be safely stored on a small portion of the property until a permanent disposal facility is ready. Some people may not realize that spent fuel has been safely stored at Zion for years in a large, protective pool. That fuel will eventually be moved into NRC-approved dry storage casks on the Zion site. NRC experts will perform inspections of the fuel movement to make sure that it’s done safely. After that, NRC will continue to periodically inspect the safety and security of the storage casks for as long as they remain on site. From the beginning of the Zion decommissioning project to the end, the NRC will be there to protect people and the environment.

Jared K. Heck
Regional Counsel & Government Liaison Team Leader

Comments

comment #1072 posted on 2011-06-09 19:48:48 by Lance

Why not just reserve the site for future nuclear/Fusion plants??

comment #1109 posted on 2011-06-14 16:05:01 by Peacer in response to comment #1072

I have to agree with Lance { posted comment above }, site safety to the community would suggest a similiar project for the site to ensure safety, also continuity would suggest site availability to enhance updated performance due to improvements that are deemed needed within the industry

comment #1110 posted on 2011-06-15 01:53:46 by Thomas

NRC, I was looking at this post and a few questions sprang to mind. Who set aside the \$900 million, was it Exelon/EnergySolutions or the US taxpayers? And if it was the US tax payers did they receive any profits from the plant while it was running? Also, I’m assuming that the spent fuel had to be guarded by a small army of security personnel the whole time that the plant has been shut down and not making any money. Who paid them was it Exelon or the NRC/US tax payers? This brings up a vexing problem. If the utilities are required to guard this fuel when the plants are shut down, it is not hard to see why they are pushing to have their licenses renewed long beyond what was considered safe when the plants were first constructed. One would imagine that this could get quite expensive on the utilities if they had to pay to guard the spent fuel until it is “safe” 10,000 years from now, or a permanent storage facility is constructed, whichever comes first. I know that the utilities are not responsible for paying for a nuclear accident, what was that law that limits the amount they have to pay again? Is there a point where the US taxpayer steps in and starts to pay for the security of the

fuel? This cost should be factored in when any cost comparison of power generation methods is undertaken, I'm not so sure it is now. Also one more question, what is the status of that "permanent storage" facility you were talking about? When can we expect it to be ready, 2012,2014,2016? Thank you for your time and answers.

comment #1123 posted on 2011-06-16 11:42:05 by Atomik Rabbit

Thomas – you have a few misconceptions and misunderstandings: “have their licenses renewed long beyond what was considered safe when the plants were first constructed” The 40 year initial licensing period, established in the 1970s, was based more on accounting depreciation standards for the familiar fossil plants of the time. With advances in materials science and component age management, led by EPRI and others, it was found that plant life extension was a reasonable option. “I know that the utilities are not responsible for paying for a nuclear accident. what was that law that limits the amount they have to pay again” That is incorrect. The Price Anderson Act (for details see the Wikipedia article) puts them on the hook for \$12.6 billion. Even after TMI the taxpayers were liable for nothing. “Is there a point where the US taxpayer steps in and starts to pay for the security of the fuel? This cost should be factored in when any cost comparison of power generation methods is undertaken, I'm not so sure it is now.” Under the Nuclear Waste Policy Act of 1982, ratepayers benefiting from nuclear generation pay a tiny premium that goes to fund used fuel storage activities. There is currently over \$30 billion in the fund. “Also one more question, what is the status of that “permanent storage” facility you were talking about? When can we expect it to be ready, 2012,2014,2016?” You will have to ask Sen. Harry Reid when he plans on retiring.

comment #1147 posted on 2011-06-17 15:57:21 by Moderator in response to comment #1110

The \$900 million was set aside by Exelon, not U.S. taxpayers, specifically for the decommissioning of the Zion plant. All U.S. nuclear power plants are required by the NRC to maintain such decommissioning funds. Exelon collected much of the \$900 million by charging its Illinois customers a fee over many years, which required the approval of state regulators. The fees and electricity rates charged by Exelon and other generators of electricity are not regulated or set by the NRC. Under NRC rules, each nuclear power plant and spent fuel storage facility is required to have a highly-trained security force. The security force at Zion is a private force under contract with ZionSolutions, the NRC license holder for the Zion decommissioning project. The Zion security force is not funded by U.S. taxpayers. The NRC's original decision to license the plants to operate for 40 years was not based on the assumption or concern that the plants would no longer be safe to operate once the license expired. Nuclear plants can safely operate for well beyond 40 years and must undergo a thorough set of inspections and licensing reviews by NRC before a license extension is granted. Nuclear power plants are responsible for paying for a nuclear accident, but their liability is capped by the Price Anderson Act. The NRC requires that each licensee buy the maximum amount of private insurance that is available to cover the costs of a nuclear accident, which amounts to about \$375 million per plant. On top of that, each licensee must pay into an indemnity pool. That pool of money, which currently amounts to roughly \$11.6 billion, would be available to cover damages from a nuclear accident if the site's own insurance were exhausted. If all of the insurance and indemnity funds required by the Price Anderson Act were exhausted, then damages would have to be satisfied from some other source, possibly through a Congressional appropriation. At Zion, spent fuel will be stored onsite at the completion of decommissioning. The storage facility will be licensed by the NRC, and the license holder will be responsible for providing security as long as the facility remains. Currently, there is no licensed permanent storage facility for spent nuclear fuel. At one time, Yucca Mountain, located in Nevada, was proposed as a permanent storage site, but the Department of Energy has decided not to pursue that project. The project is now subject to a complex legal controversy involving DOE, NRC, and several states, and is currently pending in federal court. I hope I have answered your questions. Jared Heck

comment #1168 posted on 2011-06-19 18:39:48 by Terry Hogan

I would have to agree that the site should be used for a similar facility. I mean it only seems logical and should save taxpayers some money as well. I think as far as safety it would be good as well!

comment #1191 posted on 2011-06-21 09:43:41 by thomas in response to comment #1147

Mr. Heck, Thanks for taking your time to reply to my questions, yes you answered many of them, but a few could use a little clarification. If you know, is ZionSolutions the firm that employees the security people, part of Exelon or the company that now has the license for the facility? The reason I ask is because if the nuclear companies have to pay the “highly trained” force I'm guessing that is going to run into some serious money invested on a site that isn't bring in any money, especially if there is no end in sight of how long the force will have to stay to guard the spent fuel, 10,000 years is a long term investment. This will create a situation where the companies will try to keep these plants running long beyond what a reasonable person would consider safe. You say that these plants can run well over 40 years, have you had a chance to read the scathing report that the Associated Press released yesterday about NRC oversight of these “safe” aging plants? If not it can be found here. http://www.newsvine.com/_news/2011/06/20/6896954-ap-impact-us-nuke-regulators-weaken-safety-rules It is the culmination of a yearlong investigation by the AP. It says among other things that when a nuclear plant can no longer meet the safety requirements the NRC simply eases the safety requirements until the plant can pass. Some plants still can't pass after the standards have been lowered several times. Can you look at the pictures in this article and say that time has no effect on the operations at the plants the NRC oversees? One commenter on this article said that when he heard about nuclear plants he pictured them as being in pristine condition and well taken care of, he then said the pictures of US nuclear plants look like something dug up from an archeological site in Rome. So the liability for the nuclear companies is capped at \$375 million and there is a single pool of \$11.6 billion that all plants must share if there is an accident. Do you think this creates an atmosphere where plant operators might take shortcuts? If the insurance company is picking up the \$375 million I certainly think the nuclear companies might skip some safety measures, after all their liability is capped and they have to think about the bottom line for

quarterly profits. I personally think the companies should be liable for everything, with the whole company on the chopping block if something goes wrong. And do you think it would be wise to make them pay more into this fund, correct me if I'm wrong, but I believe the cost estimate for Fukushima is now well over the \$300 billion mark, for a mild accident. \$11.6 billion plus \$375 million, by my calculations does not equal \$300 billion. Again thanks for your time and any response you can give about the cost to the companies and the AP report about the NRC lowering standards to keep plants running and how this relates to the assertion that 40+ year old plants are safe.

Looking for a Few Good Men and Women

posted on Fri, 10 Jun 2011 12:46:15 +0000



In 2009, President Obama signed an Executive Order (13518) that required federal agencies (including the NRC) to develop a plan to improve veterans' employment. Our plan, published last spring, shows our commitment to this important initiative. Our plan includes: -Appointing a senior NRC person to lead and coordinate veteran hiring; -Conducting mandatory training for managers and human resources staff on the value of hiring veterans; and -Establishing a base line and targets to measure veteran hiring results. (Our baseline is 19.6 percent of new hires were veterans and 2.7 percent were disabled veterans.) Our goal for this year is that 23 percent of new hires are veterans and 5 percent are disabled veterans. To reach our goal, we are focusing on special recruitment outreach. We are attending eight veteran-specific career fairs including those sponsored by the military service academies, military officers associations, and student veterans conferences, as well as events sponsored by wounded warrior organizations. These special activities, we hope, will increase the number of veterans who apply for jobs at the NRC. Veterans are well trained, loyal and dedicated to getting the job done. Their commitment to the government has already been tested by service in the military. Many are eager to continue their public service career. We look forward to seeing even more veterans in the NRC workforce in the near future. Veterans interested in NRC opportunities should visit <http://www.nrc.gov/about-nrc/employment.html>.

Len Carsley

NRC Veterans' Employment Manager

Comments

comment #1078 posted on 2011-06-10 15:49:29 by asiprens@forumarsivim.com

ovv man thank you

comment #1083 posted on 2011-06-11 08:19:04 by

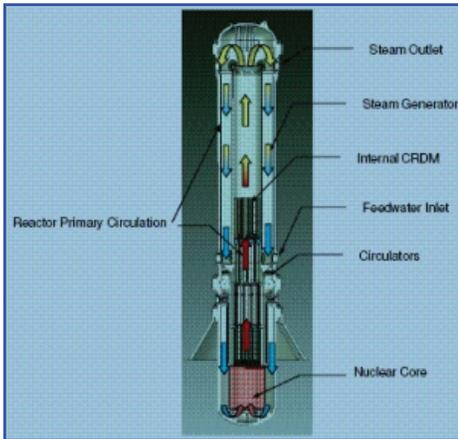
I enjoyed my career at NRC tremendously and will recommend it as an option for any young engineer looking to make a difference, especially veterans with nuclear training.

comment #1321 posted on 2011-06-29 08:10:59 by sia licence training

What a tremendous idea and undertaking. After all that veterans do in all armed forces around the world they should be one of the most cared for sections of society.

TVA May Be Interested in Building Small Modular Reactors

posted on Wed, 15 Jun 2011 11:32:38 +0000



The NRC regulates three operating nuclear power plants owned by the Tennessee Valley Authority (TVA): Browns Ferry, near Athens, Ala.; Sequoyah, in Soddy-Daisy, Tenn., and Watts Bar, near Spring City, Tenn. In a recent letter to the NRC, TVA -- the nation's largest public power company -- indicated it may want to build small modular reactor modules at its Clinch River Site in Roane County, Tenn. This would be the first application received by the NRC for a small modular reactor.

Small modular reactors differ from the 104 nuclear power plants currently licensed by the NRC in that they have a lower electrical output, are manufactured elsewhere and brought to a site instead of being constructed on site. The small modular reactor design that TVA is considering would be an integral pressurized-water reactor designed by the Babcock & Wilcox Company called mPower™. The mPower reactor has an electrical output of 125 megawatts as opposed to approximately 1000 megawatts for the currently operating reactors. The lower electrical output of these small modular reactors make them a better fit for some applications such as the Clinch River Site.

One of the primary customers for the electricity generated by these reactors will be the Oak Ridge National Laboratory which is adjacent to the Clinch River Site. They have a need for green power that is significantly less than 1000 megawatts.

TVA has informed the NRC that they may eventually build up to six reactors on this site. The modular nature of the designs allows a utility to easily add additional reactors to a site should electricity demand increase. In addition, since the reactors will be manufactured in a factory, the vendors claim that the cost and quality of construction will be better than other reactor designs. They also claim that key design features of the integral pressurized water reactor design make them potentially safer than currently operating reactors.

TVA proposes using the NRC's "two-step licensing process" for an initial group of module reactors, and the combined licensing process for future modular reactors at the Clinch River site. For more information on new reactors and the processes, please click on the agency's public web site at: <http://www.nrc.gov/reactors/new-reactors.html>.

TVA said it plans to submit its application to the NRC in 2012. We expect our review for the construction permit to take about 2 ½ years. The NRC expects to continue discussions with TVA to identify and resolve potential licensing issues within the coming months.

In addition, the NRC will continue meeting with B&W to review the technical adequacy of the mPower design. If the NRC determines that TVA has provided sufficient information, it will issue a construction permit that would allow TVA to begin construction of the first reactor at the Clinch River site. The NRC would not allow TVA to operate the reactor until a determination is made that it has been constructed properly and meet all of the appropriate safety, security, and environmental requirements.

Since the mPower design is a new one, TVA and B&W must work together to demonstrate to the NRC that all of the new features of the design meet our requirements. For more information on this design, go here: <http://www.nrc.gov/reactors/advanced/mpower.html>.

Stewart Magruder
Advanced Reactors Branch Chief

Comments

comment #1118 posted on 2011-06-16 10:44:35 by Atomik Rabbit

I hope NRC is staffing up and getting the technical expertise to expeditiously license these units. I worry about the two-step licensing process being an opportunity for mischievous interveners to stall, obfuscate, and fear-monger the process, as is their stock-in-trade. It would be nice to see the Clinch River site put to some good innovative use to make up for the mistaken and politically-driven dismantling of the breeder reactor project twenty years ago.

comment #1449 posted on 2011-07-12 12:46:52 by Tianello

I wish I had enough tech knowledge to understand what this was about. lol

Rumors and the Rising River

posted on Fri, 17 Jun 2011 12:59:46 +0000



As of June 16, NRC officially remains in normal response mode as the levels of the Missouri River rise and flood preparations are underway at the [Fort Calhoun nuclear power plant](#) in Nebraska. But behind the scenes there is lots of activity designed to ensure the safety of the plant. NRC is augmenting its resident inspector staff to provide around the clock coverage at the site. In addition to the two resident inspectors permanently assigned there, four other NRC officials have been sent to site. This includes three inspectors and the chief of the branch overseeing the plant. A roster of other inspectors has been drawn up from which additional inspectors can be dispatched if the need arises. Officials at the NRC's Region IV office in Arlington, Texas, have been conducting daily conference calls with the station's managers to monitor preparations and potential impacts on the plant, which is located about 19 miles north of Omaha. Exceptionally heavy rainfall and snowpack runoff led to this spring's flooding of the Missouri River Basin that is reported to be the most severe the region since the 1950s and 1960s. Flood conditions are expected to persist for months. The NRC's Region IV office has contacted the National Weather Service and the Federal Emergency Management Agency to review weather and river level predictions. NRC also plans to establish regular calls with FEMA, states and local response organizations next week for coordination purposes. Events at the site are being closely followed by regional news media and Internet bloggers, whose attention was galvanized on June 7 when the plant declared an Alert following a fire in a switchgear room. The fire was quickly extinguished, but briefly knocked out power to two pumps circulating water in the spent fuel pool. This triggered reports that the plant's spent-fuel pool was in danger of boiling and releasing radioactivity, prompting unfortunate comparisons with the accident at Fukushima. As the level of the Missouri River continued to rise over the past few days, more and more news media helicopters buzzed the area. This prompted Omaha Public Power District officials to contact the Federal Aviation Administration with a request that they remind pilots of the NOTAM, or Notice To Airmen, in effect since September 11th, 2001, restricting the airspace around the plant. Similar NOTAMS are in effect for all of the nuclear power plants in the United States, as well as other elements of the critical infrastructure, and are meant to discourage pilots from flying too low or lingering in airspaces. Unfortunately, this was misinterpreted by some of the media who reported that FAA had closed the airspace over the site. This suggested to some Internet bloggers that things were much worse than officials were publicly admitting, spurring reports that the airspace over the plant had been closed because of a release of radiation. An advisory that had been sent by NRC to the Department of Homeland Security was similarly misinterpreted, leading to reports that operators had flooded the containment building to protect the reactor. The rumors have been as difficult to combat as the rising floodwaters.

Victor Dricks

Public Affairs Region IV

Moderator Note: In addition to the NOTAM, which remains in effect for all nuclear plants, in response to a request from Fort Calhoun on June 6, the FAA issued an additional NOTAM tightening, but not closing, the airspace around the plant. Aircraft are now restricted from flying within a two-mile radius of the plant below 3,500 feet.

Comments

comment #1229 posted on 2011-06-22 16:14:30 by Dave Kraft, Chicago

@ MrGlitch: "...but at some point, you look like loony conspiracy theorists." Name-calling is a short-cut to rational thinking. And using the epithet "conspiracy theorist" is the new "leprosy" or "infidel" or "blasphemer", meant to immediately trivialize or demonize the person without having to go through process of examining the details of what the person is saying. There is nothing "inherently safe" about storing 1,000 Hiroshima's worth of radiation in a box, no matter how sophisticated that box may be. The nation has had to endure 40 years of selective education, obfuscation, and minimization of risk at the hand of specialists dealing with a pretty arcane technology. We're sorry if the questions seem nit-picky or overly basic, but we've experienced too many instances where common sense gets swamped with techno-babble, with no accompanying enhancement of either safety or security. Yesterday's AP story about the NRC is a litany of instances proving that point. Please refrain from considering this emergency an instance of "conspiracy theorizing." If anything is conspiratorial, it's the redundant offensive blather of NRC's vocabulary ("robust" "enhanced" "within regulatory limits" "no member of the public was immediately harmed") accepted as "fact" by an uncritical, poorly trained media. If the people around Fukushima had been a little more "conspiratorial" in demanding as a group answers and accountability to the hard but simple questions, they might not be enduring the suffering they're in right now. --Dave Kraft, Chicago--

comment #1149 posted on 2011-06-17 16:52:16 by Patrick

Could you post what the temperature was in the spent fuel pool before the fire and what the max was it climbed too after the power went out, in Fahrenheit please? The news just keeps saying it was a small rise. While you might try to down play this event, and it may be nothing, I hope you can understand the public's concern with this. It seems more and more in the last few months we keep hearing the nuclear industry say "well we never could have foreseen an event like this, the plant was simply not designed to handle

something of this magnitude”, be it tsunami, tornadoes, or massive flooding. Let’s be very clear a disaster at one of your plants can destroy much of the country for hundreds of years with just one “unforeseen event”. And we are not fooled by those in the nuclear industry who keep getting on these posts talking about how we have it all wrong. We know you get a paycheck working for some utility, so no matter what the safety record is you are going to be pro nuclear. Any credibility the nuclear industry or NRC had was lost when the public found out that your plants have to constantly have power or they will self destruct. How they were ever allowed to be built is the real question. You cannot guarantee outside power or resupply of petroleum fuel. Just because nothing has happened yet doesn’t mean it won’t. Just one event that knocks out the power grid and the US is finished because of these nuclear plants. Look in the news solar flare, cyber attack, or EMP congress is having hearings right now. We are on borrowed time. The nrc better start fixing these plants to survive long term black out or start digging bunkers so at least somebody might survive long enough to get out of the radioactive wasteland formerly known as America.

comment #1179 posted on 2011-06-20 19:52:49 by Lisa Martin

Victor, I am trying to understand all of this and have done much digging. Some things I found I posted below from an article I am writing. They include links from the FAA that show the text of the NOTAM’s, the issue dates, the reason for the NOTAM and the expected duration. Care to explain why on the FAA website these were just issued in June of 2011? NOT Sept 2001? There is one over Ft. Calhoun and one over the Cooper plant... as well as some 30 additional no fly zones that have popped up lately. If you aren't being honest about the no fly zones... can we assume the rest of your post is questionable as well? 6/6/11 Issue date: FAA issues a temporary no fly zone over Ft Calhoun, until further notice, hazards. “IN EFFECT FOR FLOOD RELIEF EFFORTS” text of NOTAM http://tfr.faa.gov/save_pages/detail_1_6523.html 6/7/11 Event date: Ft Calhoun, fire in the switchgear room <http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110608en.html#en46922> 6/7/11 Issue date: FAA issues a temporary no fly zone over Cooper, until further notice, hazards. “IN EFFECT FOR FLOOD RELIEF EFFORTS” http://tfr.faa.gov/save_pages/detail_1_6704.html 6/19/11 Event date: Cooper, Notification of Unusual Event” <http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110620en.html>

comment #1153 posted on 2011-06-17 18:46:56 by FurAndFeathers

I did not see any posts or links at the IAEA site when I was on it. I did leave a request for accurate information. The first news report was a video on the internet posted by a news agency that was told not to approach the site by boat. The waterway is public but has expanded to the doors or the NPP. That was the first report that I saw and it looked pretty bad to have sand bags all around a NPP on the same stream of video as a levee breaking up river. There was noone watching the sandbags, the river was 6 inches from breaching them. Also, the complete lack of local coverage would raise the concerns of residents. If this just comes down to a really bad public relations job on the part of the NRC or Nebraska Emergency Man. Agency then all the better. The point is that people need to be kept informed with the truth. Wether one is for or against nuclear I believe we all agree that safety is the way to handle it. Have a good weekend folks.

comment #1144 posted on 2011-06-17 13:49:56 by Moderator in response to comment #1139

As the blog post points out, there are significant rumors and misunderstandings associated with recent events at this nuclear power plant, one of which is the characterization of the short-lived fire.

comment #1143 posted on 2011-06-17 13:34:39 by Moderator in response to comment #1140

The request to the FAA to remind pilots of the NOTAM came from the Omaha Public Power District, not the NRC. The NOTAM was put in effect after 9/11 as a security precaution.

comment #1140 posted on 2011-06-17 12:10:23 by Nancy Allen

Why wouldn't NRC want the media to take pictures of the flooded plant? Pictures tell people the truth.

comment #1141 posted on 2011-06-17 12:12:54 by James Greenidge

It's a given that anti-nukers are not only going to milk and exaggerate and "re-imagine" the smallest "incident" at any plant, even a spilt bucket of barely irradiated water, for all fear's worth while the iron's hot, so it's beholden on the nuclear industry not to take it on the chin and Aggressively hit back at willful and pernicious disinformation and fear sowing. One thing Fort Calhoun could do is IMMEDIATELY invite members of the local community on a tour of the plant to assure them that it's not on the cusp of Doomsday. Second IMMEDIATELY publicize what was posted here on the media regarding the FAA incursions. Show the up fearmongers for what they are! Do not get cocky that things will blow over. If it were up to me I'd make a clean sweep of every public affairs office of every nuclear facility and install a crew that knows how to touch and relate and constantly educate the people of their community and region and take the Dark Vader mystery and demonic peril tall tales out of nuclear energy. Thank you Atomic Power Review for the great at unbiased public education. James Greenidge

comment #1139 posted on 2011-06-17 11:54:22 by Jane Swanson, Mothers for Peace

Please give us some perspective on this news report: http://www.pakalertpress.com/2011/06/17/us-orders-news-blackout-over-crippled-nebraska-nuclear-plant/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+pakalert+%

28Pak+Alert+Press%29 The first paragraph states: "A shocking report prepared by Russia's Federal Atomic Energy Agency (FAAE) on information provided to them by the International Atomic Energy Agency (IAEA) states that the Obama regime has ordered a "total and complete" news blackout relating to any information regarding the near catastrophic meltdown of the Fort Calhoun Nuclear Power Plant located in Nebraska." Clearly this report is in direct contradiction of the NRC's reported assessment of the situation. How can a citizen know what the objective truth is?

comment #1159 posted on 2011-06-18 16:28:38 by Nancy Allen

Thank you for you reply to my first post. I am wondering if the NRC as an organization agrees with the comments below of Bill Borchardt? UNITED STATES OF AMERICA U.S. NUCLEAR REGULATORY COMMISSION BRIEFING ON THE PROGRESS OF THE TASK FORCE REVIEW OF NRC PROCESSES AND REGULATIONS FOLLOWING THE EVENTS IN JAPAN JUNE 15, 2011 9:30 A.M. Bill Borchardt, Executive Director for Operations "The conditions of Fukushima continue to improve. Over the last month, conditions of the reactor and the spent fuel pools, I would describe as being relatively static. And while full stability might be several months away, I think very good progress is being made. There's been notable progress over the last month in implementing the road map that has been put together by TEPCO 13 and the government of Japan." TRANSCRIPT OF PROCEEDINGS: <http://www.nrc.gov/reading-rm/doc-collections/commission/tr/2011/20110615.pdf> on Commission meeting website, with slides from the meeting: <http://www.nrc.gov/reading-rm/doc-collections/commission/tr/2011/>

comment #1175 posted on 2011-06-20 14:12:51 by Dan Yurman

I'm not sure what the NRC means by "Internet bloggers" but as one of those "bloggers" dealing with facts not fiction about the issue here it is. <http://djsrv.blogspot.com/2011/06/spiking-conspiracy-theories-about-ft.html>

comment #1163 posted on 2011-06-19 03:00:04 by Nyna in response to comment #1139

That is a good question, what is Objective Truth.... The article referenced states: "A shocking report prepared by Russia's Federal Atomic Energy Agency (FAAE) on information provided to them by the International Atomic Energy Agency (IAEA) states that the Obama regime has ordered a "total and complete" news blackout relating to any information regarding the near catastrophic meltdown of the Fort Calhoun Nuclear Power Plant located in Nebraska." I have found the same article reposted by many websites, but it is exactly the same article every time, with no variation. As far as I can tell, it originated at a website called "European Union Times" -- which the Southern Poverty Law Center (I'm sure you are familiar with them) has identified as a very dubious new source run by US skinheads. So, Jane.... though I am a mother for peace, I doubt the validity of that particular article. Plus, it says that there is a news blackout, which isn't the really the case. Local news channels have been covering the issue.

comment #1174 posted on 2011-06-20 13:29:48 by Meh

Any vital structure built in a flood zone should be built fifty feet above maximum possible flood height, then protected with reinforced concrete (not dirt). Make islands. That simple. A levee is a barrier defense. Once breached, it's useless. Islands are dispersed, local defense. Loss of one threatens no other. Made properly at the right locations, floods are too low to threaten them. Islands don't require reconstitution after a flood. Live in flood range of a river, build MUCH higher than the river. If it's in a tornado zone, add reinforced concrete. Bunkers work.

comment #1167 posted on 2011-06-19 12:29:27 by Allison Chaning

It really probably wouldn't matter if the NRC allowed the media inside to document everything, there are a lot of conspiracy theorists that misinterpret information and are always looking for ways that the government is hiding something from them. Hopefully, everything at the NRC will be kept under control and the general public can carry on with business as usual.

comment #1173 posted on 2011-06-20 13:14:53 by Moderator in response to comment #1159

As essentially the chief operating officer of the NRC, Mr. Borchardt is speaking for the NRC staff in the briefing of the Commission that you cite.

comment #1171 posted on 2011-06-20 07:36:06 by Scott Portzline

Reponse to Jame G.....There are many anti-nuclear folks who are actively working to dispell the rumors regarding the flooding situation. Additionally, they continue to work to dispell the rumors put out by the NRC that a Fukushima can't happen here. Victor... there is no such thing as a "no fly zone" over US nuclear plants.

comment #1180 posted on 2011-06-20 20:28:49 by dan

Victor Dicks The OPPD release says that the water level is at 1004 feet above seal level. What the release does NOT say is what the level at the reactor is. Now, why would the OPPD leave out this obviously essential information? Also, the no-fly area over the reactor is intended to prevent news organizations from learning-and reporting-on what it happening at the reactor. Its apparent that the OPPD is intent on concealing the state of the reactor.

comment #1181 posted on 2011-06-20 20:31:44 by dan in response to comment #1143

OK then the OPPD should release recent pictures and video of the plant to the news media, or preferably should invite the news media into the plant . Is the picture on this page a recent picture of the plant? http://www.pakalertpress.com/2011/06/17/us-orders-news-blackout-over-crippled-nebraska-nuclear-plant/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+pakalert+%28Pak+Alert+Press%29

comment #1182 posted on 2011-06-20 20:33:07 by dan in response to comment #1141

OF course antinuclear people are going to be concerned about any accident. Nuclear plants are dangerous. An accident could contaminate a huge area of the country and kill many thousands of people. Ever heard of Chernobyl, or Fukushima?

comment #1184 posted on 2011-06-21 01:11:53 by Dave Kraft

Perhaps the rumors would be fewer if the most current information posted wasn't 4 days old. --Dave Kraft, NEIS, Chicago--

comment #1193 posted on 2011-06-21 12:24:46 by in response to comment #1179

From the FAA website, latest General NOTAMs, Notice to Airmen, is the following statements: FDC 4/0811 ... SPECIAL NOTICE... THIS IS A RESTATEMENT OF A PREVIOUSLY ISSUED ADVISORY NOTICE. IN THE INTEREST OF NATIONAL SECURITY AND TO THE EXTENT PRACTICABLE, PILOTS ARE STRONGLY ADVISED TO AVOID THE AIRSPACE ABOVE, OR IN PROXIMITY TO SUCH SITES AS POWER PLANTS (NUCLEAR, HYDROELECTRIC, OR COAL), DAMS, REFINERIES, INDUSTRIAL COMPLEXES, MILITARY FACILITIES AND OTHER SIMILAR FACILITIES. PILOTS SHOULD NOT CIRCLE AS TO LOITER The NRC comment is correct.

comment #1187 posted on 2011-06-21 04:28:21 by Barbara

I think this is a good example of what a lot of the local people feel is happening. <http://www.thebulletin.org/web-edition/columnists/dawn-stover/rising-water-falling-journalism> I hope this gives clearer picture. We shall see what these horrible storms do.

comment #1188 posted on 2011-06-21 04:46:52 by The Truth in response to comment #1171

Yo Scotty- you better check with the FAA on your serious lack of truth and knowledge. They issued a warning not to fly over the flooded nuke site. http://tfr.faa.gov/save_pages/detail_1_6523.html

comment #1189 posted on 2011-06-21 05:11:57 by Futuro Nucleare

I am sorry, but as a pilot I find the statement that all NPPs have been subject to NOTAMs after 9/11 a load of blowing snow. There are no TFRs (temporary flight restriction areas) above NPPs in the USA, simply put. And most definitely the Ft Calhoun NPP TFR has been issued on 6/6 as can be easily verified on the FAA TFR website: http://tfr.faa.gov/save_pages/detail_1_6523.html Once again, genuine lack of good information will expose the Nuclear Industry to attacks from the usual fear mongers which will use the TFR as a way to spread more fear, uncertainty and doubt. I wish that Mr. Victor Dricks could have done his homework a little better before posting false information on a public blog of the NRC. As a pilot, I believe that the most likely reason for the TFR being established is to avoid having too many news choppers around the NPP reporting "live from the scene", avoiding collision between choppers in an area which has been already severely damaged by the flooding. I wish that the NRC could change their statement now, but the damage is done. And this is bad, particularly so as it comes from an agency of the Federal Government. You should know better before posting false information, Mr. Dricks. Best regards, Luca Bertagnolio Futuro Nucleare Milan, Italy

comment #1192 posted on 2011-06-21 11:54:50 by Moderator in response to comment #1149

The temperature in the spent fuel pool at Ft. Calhoun rose from approximately 80 degree Fahrenheit to about 83 degrees. Here is the link to the event report on the fire: <http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110608en.html#en46932> .

comment #1196 posted on 2011-06-21 13:27:50 by Guest in response to comment #1189

FDC 4/0811 ... SPECIAL NOTICE... THIS IS A RESTATEMENT OF A PREVIOUSLY ISSUED ADVISORY NOTICE. IN THE INTEREST OF NATIONAL SECURITY AND TO THE EXTENT PRACTICABLE, PILOTS ARE STRONGLY ADVISED TO AVOID THE AIRSPACE ABOVE, OR IN PROXIMITY TO SUCH SITES AS POWER PLANTS (NUCLEAR, HYDROELECTRIC, OR COAL), DAMS, REFINERIES, INDUSTRIAL COMPLEXES, MILITARY FACILITIES AND OTHER SIMILAR FACILITIES. PILOTS SHOULD NOT CIRCLE AS TO LOITER FDC General NOTAMs Notices to Airmen 1-GN-28 IN THE VICINITY OVER THESE TYPES OF FACILITIES. WIE UNTIL UFN. CREATED: 08 OCT 18:22 2004 http://www.faa.gov/air_traffic/publications/notices/media/2011-06-02.pdf Sorry Futuro. there is a Special notice as quoted below and has been since 9/11. This is the latest reissue.

comment #1206 posted on 2011-06-21 19:12:23 by Futuro Nucleare in response to comment #1196

I am sorry, but your reference to that FDC NOTAM is quite weak. "Pilots are strongly advised" does not mean anything, particularly so if you are a news chopper that needs to report about a flood that is creating some concern in the general population. And in any case, there is a TFR above the NPP, established with FDC NOTAM 1/6523 on June 6th, and as a pilot I take a TFR in a much different light than a generic FDC NOTAM like the one you listed in your message. On top of everything, saying that nothing different happened in the airspace above the Ft Calhoun NPP is plain wrong, and I've proved that what Mr. Dricks originally said was incorrect. No wonder there is now a new note added at the end of Mr. Drick's message. But unfortunately that note is wrong too, as a TFR is infact a no-fly zone, so the airspace below 3500' and within 2 miles of the Ft Calhoun NPP is effectively closed. Not sure I get why the note specifies "tightening, but not closing". A TFR is a TFR, even though it's only 3500' thick. But still, that airspace is closed. Best regards, Luca Bertagnolio Futuro Nucleare Milan, Italy

comment #1211 posted on 2011-06-22 00:02:44 by

I have a simple question , what is the current level of alert at the Ft Calhoun and Cooper plants, It has been said that you use a system of 1 - 4 , what level are they at and how do we find this information? The four emergency classifications set by the NRC are listed below in order of increasing severity, according to the NRC website. Notification of Unusual Event - Under this category, events are in process or have occurred which indicate potential degradation in the level of safety of the plant. No release of radioactive material requiring offsite response or monitoring is expected unless further degradation occurs. Alert - If an alert is declared, events are in process or have occurred which involve an actual or potential substantial degradation in the level of safety of the plant. Any releases of radioactive material from the plant are expected to be limited to a small fraction of the Environmental Protection Agency (EPA) protective action guides (PAGs). Site Area Emergency - A site area emergency involves events in process or which have occurred that result in actual or likely major failures of plant functions needed for protection of the public. Any releases of radioactive material are not expected to exceed the EPA PAGs except near the site boundary. General Emergency - A general emergency involves actual or imminent substantial core damage or melting of reactor fuel with the potential for loss of containment integrity. Radioactive releases during a general emergency can reasonably be expected to exceed the EPA PAGs for more than the immediate site area.

comment #1227 posted on 2011-06-22 14:45:52 by Jason in response to comment #1211

Here are some helpful links for the information you requested: NRC webpage for Ft. Calhoun Station: <http://www.nrc.gov/info-finder/reactor/fcs.html> Preliminary Notifications Page: <http://www.nrc.gov/reading-rm/doc-collections/event-status/prelim-notice/2011/Ft.Calhoun> is currently within the "Notification of Unusual Event". You can read more details about this particular event on the preliminary notifications page.

comment #1215 posted on 2011-06-22 04:29:06 by Computer Support

Is the Nebraska plant still safe? We have many friends and relatives in that area.

comment #1223 posted on 2011-06-22 11:27:21 by Nancy Allen

I think a lot of people are concerned when they see pictures like these. I am not a conspiracy theorist but these pictures are quite alarming. They were taken on June 16-18 and the river has risen since then. <http://cryptome.org/eyeball/ne-npp-flood/ne-npp-flood.htm>

comment #1222 posted on 2011-06-22 10:30:21 by MrGlitch

Wow, some of you people are amazing. What ridiculousness nitpicking trivial details trying to invent a conspiracy. The real issue is the safety of the plant. Between this and OPPD's pictures and answering questions, it seems all is in as good a shape as can be expected. The plant is dry, the reactor is safe, there's no radiation. Yeah, it's great to ask questions, but at some point, you look like loony conspiracy theorists. <http://oppdstorminfo.blogspot.com/> http://www.oppd.com/AboutUs/22_007105

comment #1231 posted on 2011-06-22 16:54:13 by Lisa Martin in response to comment #1211

Here are the NRC notices: Ft. Calhoun: for the fire, not where it stands now for the flooding: <http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110608en.html#en46922> "Emergency Class: ALERT 10 CFR Section: 50.72(a) (1) (i) - EMERGENCY DECLARED" "Spent fuel pool cooling was lost [as a result of the de-energized busses and the licensee] entered AOP-36 for loss of SFP cooling. Heat up rate [was] determined by STA. Current time to boil for SFP is 88.3 hrs. Spent fuel pool cooling is currently back in service. This condition is being reported pursuant to 10 CFR 50.72(a)(1)(i) for declaration of an emergency class specified in the licensee's approved emergency plan." The licensee has notified appropriate State and local government. The licensee notified the NRC Resident Inspector. A media or press release is also anticipated. "Cooper: (yes, there is another nuclear power plant being affected by the flooding in NE) <http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110620en.html> Emergency Class: UNUSUAL EVENT 10 CFR Section: 50.72(a) (1) (i) - EMERGENCY DECLARED 50.72(b)(2)(xi) - OFFSITE NOTIFICATION UNUSUAL EVENT DECLARED DUE TO MISSOURI RIVER FLOODING At 0402 CDT on 6/19/2011 a Notification of Unusual Event was declared due to the elevation of the Missouri River reaching 899.1 feet above mean sea level. This is above the Emergency Action Level HU1.5 elevation of 899 feet. The Missouri River is expected to crest at 899.5 feet within the next couple of days. It is expected that the elevation of the Missouri River will

remain above 899 feet for most of the summer. Actions are in progress in accordance with the site flooding procedure, including strategic placement of sand bags at building entrances and important facilities. There is no major plant equipment out of service at this time. Personnel access to the site is not presently impeded. Emergency evacuation routes remain available. "On 6/19/2011 at 0447 CDT, Nebraska Public Power District issued a press release concerning the declaration of a Notification of Unusual Event declared today at 0402 for the Missouri River elevation above 899 feet above sea level. "This is a four hour report per 10CFR50.72(b)(2)(xi) for any event or situation for which a news release is planned or notification to other government agencies has been or will be made which is related to heightened public or government concern. State and local agencies were notified of the expected news release during the NOUE notification. Also, another question, does the NRC use the INES levels to classify the plants as well? IF so, then the terminology of an alert level between 1-7 is absolutely correct... <http://www.iaea.org/Publications/Factsheets/English/ines.pdf> General description of INES levels: Here is the description of Level 4 (accident with local consequences) below: People and Environment: Minor release of radioactive material unlikely to result in implementation of planned countermeasures other than local food controls. At least one death from radiation. Radio logical barriers and control: Fuel melt or damage to fuel resulting in more than 0.1% release of core inventory. Release of significant quantities of radioactive material within an installation with a high probability of significant public exposure. Conspiracies happen everyday... and media cover ups happen every day too... just give some straight answers - up front and it wouldn't happen. It is insulting to be treated as if we cannot handle or understand what is going on... I speak for myself when I say: I am not an idiot, please don't treat me as one.

comment #1233 posted on 2011-06-22 18:25:47 by in response to comment #1222

"Wow, some of you people are amazing. What ridiculousness nitpicking trivial details trying to invent a conspiracy." Really? "The real issue is the safety of the plant" , I think you just gave yourself away - how 'bout the people bub Let's look at this from a logical , non-hysterical perspective - a great deal of time and effort has been placed on denying rumors and painting a rosy picture. Obviously if there was any good news, it would be plastered on every page of the internet and beyond. Instead of spending time denying rumors, how about giving us some facts. What is the current status of water level?, has the protective barrier around either plant been breached at all? How much spent fuel is currently stored at each site both in pools and dry cask? What are the risks involved if flooding occurs? How does dry cask storage cooling get affected if water is introduced and is that a possibility? What are the backup power systems in place that are either water proof or outside of flood zone? What monitoring is being done at present? What are the current temperature readings in the reactor, in the pools etc... Pointing out standards that were written umpteen years ago, showing pictures from weeks ago, accusations of conspiracy theories and inability to comprehend the complexity of the situation only promotes anger and disbelief. I think it's a quite natural reaction to consider the possibility that nothing is being said so that there is no accountability. People can handle the truth whether it is a nothing burger as you claim or something more, but they can't stand having the truth withheld, twisted, or manipulated. The public would like to know what is going on in more detail, even if it's nothing.

comment #1234 posted on 2011-06-22 18:52:00 by Concerned about Transparency

I'm writing here simply as a concerned citizen. I am very concerned about the what appears to be a failure by the NRC to abide by their own commitments to transparency and honesty as well as a failure to meet common sense expectations that the public holds for an essential public safety agency like the NRC. The NRC web site lists a news release for June 8th, 2011. That release describes the events that took place at the Ft. Calhoun NPP, specifically the failure of electrical switches due to flooding, the subsequent failure of the pumps that keep the spent fuel rods pools at the proper temperature and the situation was corrected. I think it's reasonable to conclude that this was a newsworthy event on it's own and that recent events in Japan would result in a strong increase in public concern about such an event. However, since that news release, there has been no mention of this in any other news releases from the NRC. Personally, I find this surprising and I'm very concerned about this glaring gap in reporting by the NRC. I'm not interested in hearing about standard reporting procedures as a explanation or justification by the NRC for failing to follow up with subsequent reports about this incident at Ft. Calhoun NPP. Common sense and simple concern about the public as well as a desire to avoid unwarranted rumors would dictate being as open and transparent as possible re: an event that is monitored by the NRC. Yet the delay in posting the the one news release and the absence of any follow show that the NRC is living up to those expectations. I will leave with a simple question and my hope is that I get and honest and simple answer: Why didn't the NRC post any follow up information about the June 6th incident at the Ft. Calhoun NPP? Was the NRC subject to any outside orders or influence from the Executive Branch or any other government agency that affected it's handling of the news reports re: the Ft. Calhoun June 6th incident? If so can you provide details about it? Many thanks, Alex

comment #1235 posted on 2011-06-22 20:03:10 by lightnup

Wednesday, 6:00Pm EST, and 8 inches away from the Cooper Nuclear Plant's shut down point, concern is an appropriate response.

comment #1237 posted on 2011-06-22 20:25:16 by Jonathan

The latest NRC document NRC TRACKING FLOODING AT TWO NEBRASKA NUCLEAR POWER PLANTS <http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-030.iv.pdf> includes the phrase "The NRC has augmented its inspection staff at Fort Calhoun where there is now two feet of water in many areas onsite." This phrase has been picked up by the media e.g. <http://missouri-news.org/midwest-news/nebraska/nrc-two-feet-of-water-at-fort-calhoun-but-nuke-plant-still-safe/6256> Can you clarify that the reference to two feet of water is for areas not protected by the aqua dam, as the impression may be given that there is 2 ft of water within that protected area. Also, both this blog and the new document refer to rising water. Can you confirm whether water levels are rising or falling at the site and by how much. The OPPD Flood and Outage blog refers to levels falling slightly between June 15 and 17.

comment #1245 posted on 2011-06-23 09:26:30 by Barbara

I response to the statement: "The rumors have been as difficult to combat as the rising floodwaters" I could argue on the point of reason, water has non, people do. Or that we are now more educated as a society after Fukushima and the subsequent Senate hearings, and to expect us to have our heads in the sand still is to underestimate our lack of trust in how nuclear energy is being handled in this country. This is not sensationalist produced fear. It is an honest intelligent response to an industry that is failing in many ways. If you would like my laypersons, joe public list I can follow up with that. At this point I would like to say that the rumors are a direct result of a failure to consider the needs of the public. We need to sleep at night, which means that we have to know if the nuclear plant down the road is stable, and if not, can we trust our regulatory system to inform us in a clear, honest and timely matter of the degree of instability? The loud and clear answer, proven by the hunger with which these 'rumors' were accepted and forwarded, is no. My point, that there was, and still is, a failure of clear and consistent information flow to the public is made in the link below. <http://thebulletin.org/web-edition/columnists/dawn-stover/rising-water-falling-journalism> I thank you for offering this forum. I hope next time I do not have to go to the IAEA to get my first answer about what is true and what is rumor.

comment #1246 posted on 2011-06-23 09:43:34 by Barbara in response to comment #1229

Great quote "was immediately harmed.." When the statements during the first few days of Fukushima changed from "any danger" to "any immediate danger" we knew we were an acceptable risk, collateral damage, mere statistics. To us you are a machine, an automaton without feelings or humanity, making no decisions that are made as a human but as a corporation, an entity without conscience. I applaud Dave Kraft, and I hope more people have the courage to confront the lack of concern for individual human needs in "by the People, for the People" That's US, the people YOU work for, and knew you served when you signed up for this job.

comment #1252 posted on 2011-06-23 19:54:12 by C.A. Cooper in response to comment #1234

"Why didn't the NRC post any follow up information about the June 6th incident at the Ft. Calhoun NPP?" I would think the answer to that question is very simple. The NRC reported at that time, that the issue with the wiring for the cooling pumps was corrected, and there really has been no new developments since then requiring notification. If you expect the NRC to mollycoddle every curious person in the country, after they have reported all the pertinent information, why not just get your mother to read you a bedtime fairy tale, and maybe take some Valium to calm your nerves. They did their job, and that's what they were supposed to do. And they are still doing it.

comment #1273 posted on 2011-06-24 11:50:25 by Bill

Fine. Then you need to put out daily releases with a ridiculously high amount of media (still & video) so we can see for ourselves that things are well under control and not at risk of the same disaster at Fukushima. It was the WATER there that decimated that nuclear complex and cast all of Northern Japan into a horrible fate. It wasn't the design of the plant that did it but greedy and terrible management. Having seen the very recent AP article that the state of the nation's nuclear plants are rusting — to the point of leaking — and safety margins are being reduced, we do not trust you!

comment #1283 posted on 2011-06-25 19:22:45 by C Moore

The 1994 report on the 1993 flood showed a lot of leakage into radiologically sensitive areas in the lower areas of the buildings at Cooper. I think important plumbing and electrical stuff is in there? It's not the reactor itself, it's the plumbing!

comment #1286 posted on 2011-06-26 14:07:33 by

So where's the pictures now since the rubber weenie busted? I'm guessing there won't be any....

comment #1287 posted on 2011-06-26 14:22:59 by Tenney Naumer

This post is from June 17. There are no replies to the comments and questions. In fact, I can't find a shred of news on the Fort Calhoun plant from after June 20th. Does anyone here have more current news? Thanks,

comment #1288 posted on 2011-06-26 15:17:06 by

I would like to know what the hell you have to say about this? The lack of information is astounding and unacceptable. The PUBLIC has the RIGHT to know what is going on... NOT what YOU deem we need to know. We are grown and can handle the truth... this is a comment from a family member of mine in the area and I want to know what you have to say about it? "The berm failed @ Ft Calhoun and wow! it is the only one with the story. The head guy from the nrc regulatory comm is coming here. There was a story a week ago saying if we got 2 & a half (exactly) inches of rain at once, the sh!t would hit the fan with the flood situation. Funny we got exactly that amount Sat night, the berm failed, 2 bldgs are surrounded and the press is too quiet! The streets downtown are flooding and the officials say to stay out of any puddles because they may have raw sewage in them!" How is that water berm working out for you? Water seeks its own level, not sure exactly HOW a water berm was ever expected to keep out water... it isn't a sand berm... it is WATER! WELL?? What is going on?

comment #1289 posted on 2011-06-26 15:23:57 by in response to comment #1237

http://m.omaha.com/om/pm_23081/contentdetail.htm?contentguid=LZfgOfGm More rain expected
http://m.omaha.com/om/pm_23081/contentdetail.htm?contentguid=RVe9N9ko The NRC chairman to visit the plant Anyone who has lived in the midwest, like I did for 30 years, knows that June is the beginning of the stormy summers there.... lots of severe storms, tornadoes, RAIN... One cannot possibly believe that the levels of the river are going down... to the contrary, they will rise. They are not using common sense: 1. water seeks its own level, explain to me the logistics of a water berm holding out more ater. 2. the midwest summer weather pattern is not a secret... so explain to me how they can actually think people will believe the flood levels will not rise? 3. I have family in Omaha, and they are all watching the river RISE and the flooding get WORSE... water levels are not receding... we should be demanding the truth instead of buying into their lies, which a 6th grader could poke holes through.

comment #1303 posted on 2011-06-27 13:07:21 by Barbara in response to comment #1287

I recieved my first and only reply on this matter from the IAEA in Stockholm, Sweden. I have been trying to get a decent overall reaction to the situation for 2 weeks. The Omaha ABC affiliate is covering the story now but I haven't checked the site since yesterday morning. I didn't stop to get the link. Be safe everybody, we are out here thinking of you.

comment #1331 posted on 2011-06-29 19:31:51 by jon.wharf@hotmail.com in response to comment #1288

Anon, picture of an aqua berm here: <http://opdstorminfo.blogspot.com/2011/06/june-15-2011.html> from a later entry <http://opdstorminfo.blogspot.com/2011/06/media-pool-stills-june-27-2011.html> "[Plant Manager Tim Nellenbach] said an aqua dam that collapsed early Sunday was used in a non-critical area to provide a dry walkway for employees. It will be replaced."

The NRC and the Write-in Campaign

posted on Tue, 21 Jun 2011 18:45:11 +0000

The NRC has recently received thousands of nearly identical CitizenLetter© messages expressing concerns about U.S. nuclear power plants in light of Japan's earthquake and tsunami, and the subsequent events at the Fukushima Daiichi Nuclear Power Station. The CitizenLetters mention the Pilgrim, Indian Point, Diablo Canyon and San Onofre plants, among others, asking for "immediate inspections" and making claims about the plants' inability to withstand severe natural events. The NRC makes sure that all U.S. nuclear power plants are built to withstand external events including earthquakes, flooding, and even tsunamis where they can occur. Each plant is designed to safely ride out the strongest earthquake appropriate for its location. The Diablo Canyon and San Onofre plants, for example, are designed to safely handle the highest levels of seismic activity expected at a U.S. site and both are also designed to withstand the largest tsunami that could affect the California coast. The events that occurred in Japan are the result of seismic activity in a "subduction zone," where one tectonic plate is pushed under another plate. The only place this kind of situation would occur in the U.S. is off the coast of northern California, Oregon and Washington. And the only nuclear plant anywhere near there is the Columbia Generating Station, which is some 225 miles inland. It's also important to understand that not only does the NRC devote thousands of hours a year to inspecting each nuclear power plant in this country, but that we have also conducted two inspections after the Japan incident specifically for issues related to emergency procedures and resources – just as the CitizenLetters mentioned. Both inspections showed U.S. plants are prepared to use those emergency measures to keep the public safe. The first inspection covered "B5b" measures, which would help keep the reactors and spent fuel pools safe even after the sudden loss of significant areas of the plants. The second inspection examined the plants' guidelines for reducing the severity of situations where a reactor core has been damaged. The NRC has also demanded more detailed information from every plant regarding its B5b measures. A task force of senior NRC managers and staff has been working since early April to examine the lessons that can be learned from the situation in Japan. The task force's systematic and methodical review will generate recommendations for any changes the NRC should make to its programs and regulations to ensure protection of public health and safety and the environment. This effort will also identify issues that warrant further study in the longer term. The task force is scheduled to provide its recommendations to the Commission in July. So, while we thank everyone who sent a CitizenLetter, all the available information continues to show that U.S. nuclear power plants are designed and operated so they will protect the public and the environment, even after severe natural events.

*Scott Burnell
Public Affairs*

Note: Chairman Jaczko made some comments today about possible regulatory improvements that may come out of the post-Japan review. They are posted here: <http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-113.pdf>.

Comments

comment #1197 posted on 2011-06-21 15:02:19 by

So, thousands of hours (seeing as the phrase becomes tens of thousands after 10,000) divided by the number of plants in the country comes out to a maximum of about 100 hours per plant, per year. How is that satisfactory by any stretch of the imagination? That isn't even a full hour every three days? You state elsewhere that you have people on site every day, so they only work for 45 minutes and then leave? Sincerely, A Nitpicker

comment #1198 posted on 2011-06-21 15:11:31 by Moderator

On average, the NRC expended about 6,500 hours of inspection effort at each reactor site during 2010. We'll amend the original post to express that more clearly.

comment #1200 posted on 2011-06-21 15:20:53 by in response to comment #1198

6,500 man hours translates to 3 people full time. Any given nuclear plant can take a thousand people to keep it running, and you expect three people to be able to assure you that every single part of the plant is operating safely?

comment #1201 posted on 2011-06-21 16:01:36 by Joel Riddle

This response seems very appropriate. I hope to see the NRC continue to properly vet public comments that are obvious campaigns from obstructionist organizations rather than raising not-yet-resolved safety issues so that focus can be maintained on legitimately not-yet-resolved safety concerns rather than wasting valuable NRC time re-performing activities that have already been completed. I hope to see similar vetting utilized within the licensing process for new reactor designs, rather than arbitrarily adding additional commenting periods simply as a result of commenters asking for another opportunity to comment during initially-defined comment period(s) as that is simply another blatantly obstructive activity if a new and legitimate not-yet-resolved safety issue is not raised. Sincerely, A Younger American concerned with future energy supplies

comment #1205 posted on 2011-06-21 17:06:22 by Desmothenes in response to comment #1201

As an American concerned with our energy future, I feel we should have been phasing out these plants for a newer generation of plants 10 years ago, before they became worn out and dangerous to millions of Americans. At this point, plants like Indian Point are threatening untold millions of lives for a small percentage of the value of the human lives in profit. Yours, Demosthenes

comment #1228 posted on 2011-06-22 16:00:01 by John in response to comment #1219

(In response to Mr. Burnell from June 22, 2011 at 9:55 am) Mr. Burnell, You're not giving me much to work with here, but you've given me enough to make my point. Thank you for posting the link to that petition. I was aware of it and I've read the whole thing. I hope everyone both pro and anti-nuclear will post a positive comment on it. It is not anti-nuclear it just seeks to close a gaping hole in nuclear safety, it does not seek to close any plants. The reader should note that the NRC has NO WHERE DISPUTED THE CLAIMS I MADE IN MY FIRST POST, reading between the lines this should tell you something. I did not bring up this petition because it was not the point of my post. In the original blog post, I felt that you came down a little hard on the use of preformatted letters. I can certainly sympathize, it seems letter writing is a lost art, I can see where it would be kind of annoying getting thousands of letters saying the same thing. That being said, almost every one of the letters you have received was sent by an individual concerned about the safety of your plants. I believe that almost a third of the population lives within 50 miles of a plant, this is how far you are recommending be evacuated in Japan in a mild SBO event. They have seen how the lives of the people of Japan have been destroyed by that accident and they are justifiably worried. While I wish that everyone would take the time to hand craft a letter, not everyone can. Some don't feel that they have the talent, some don't have the time, and some just feel that others could write it better. I realize also that some of these letters came for vehemently anti-nuclear organizations and if the plants were closed outright the NRC would not have a job, other than ensuring that the waste is guarded for the next 250,000 years. That being said the NRC still has a duty to respond to the concerns of these people, I know that all the letters were generic, but there is defiantly a cause for concern. When you say "So, while we thank everyone who sent a CitizenLetter, all the available information continues to show that U.S. nuclear power plants are designed and operated so they will protect the public and the environment, even after severe natural events." It conveys the message," don't worry folks, we're professionals, we have everything well in hand". The situation I detailed in my first post proves that the facts do not support this. We have been lucky, plain and simple. You know as well as I do that the Japanese were just as advanced as we are in regard to nuclear safety. Just a week before Fukushima President Obama said we should "look to the Japanese to see how nuclear safety is done". And you also know that any talk of earthquakes and tsunamis simply cloud the issue. Japan was caused by a SBO it is irrelevant how the power was lost. Now that brings us to the question is the NRC doing its job, as the your original post seems to assert? Every since the first nuclear plant was built the danger of long term blackout has existed. This has been over 50 years. The first one should never have been built if it was fatally dependent on artificial electricity, but they were built without any regard for this, strike one. The Starfish prime nuclear explosion of July 1962 revealed the vulnerability of electrical systems to EMP, still no action(I know NRC was not around yet),strike two. The mild solar storm of 1989 showed that solar storms can damage electric equipment, even at NPPs, like Salem, strike three. From what I have read of the petition PRM-50-96 it was WRITTEN AND FILED BY A PRIVATE CITIZEN WITH NO CONNECTION TO THE NUCLEAR INDUSTRY. THE NRC HAD NOTHING TO DO WITH IT EXCEPT TO QUESTION EVEN FILING IF FOR PUBLIC COMMENT. THE PETITION WAS WRITTEN AND FILED BEFORE FUKUSHIMA AND PEOPLE HAVE BEEN WARNING ABOUT THIS SINCE 2003 AND STILL NO ACTION BY THE NRC. This leaves us to conclude two things. A. The NRC did not think about protecting the citizens from a well documented danger that a child can see, and should have been addressed before the first NPP left the drawing board, and are thus inept. Or B. They knew of the danger and simply ignored it and hoped for the best, in which case they are criminally negligent and will be directly responsible if the situation detailed in the my first post comes to pass. And this is just one situation that we know of. Commissioner Apostolakis brought up the issue of the nuclear industry "voluntarily" addressing safety problems that it(the industry) identifies. From the line of questioning I concluded that the industry will identify a problem and then they" volunteer" to fix it the and since it is "voluntary" NRC has no role in seeing if it was actually fixed. I think in your recent inspections you found some of these "voluntary" fixes had not been implemented. So how much don't we or you know about? Here is an article about the industry "volunteering" to fix something. And as we see in the post about Zion here on the NRC blog the power companies have almost no liability if their plants destroy the country.

http://www.salon.com/wires/techbiz/2011/06/21/D9O0HULG0_us_aging_nukes_reaction/index.html Please don't think I am addressing you personally, Mr Burnell, but since you are the public face of the NRC and the author of the blog post I had to address my comments to you. I know you personally may have little say over policy. I just took issue with the way the mass of public

comments were handled with the standard “were the professions, we have it under control” when the facts do not attest to this in the example I cited and most likely the ones we don’t even know about.

comment #1216 posted on 2011-06-22 05:23:26 by john

Mr. Burnell, You seem somewhat upset that the NRC is receiving thousands of identical letters, so I decided to take the time and write you one personally. I hope that you will take the time to address/correct my allegations/assertions. I allege that NO nuclear power plant (NPP) in the US is safe in its current configuration. Every nuclear plant in the US is vulnerable to a long term wide spread loss of power incident. Every power plant must have a constant supply of outside electric power from the commercial grid to run cooling for the reactor, even if in shutdown, and the spent fuel pool (SFP). Barring this the plant must have fuel for the emergency generators, of which I believe that plants currently have no more than a 7 day supply of fuel on site. If there is a loss of cooling power or station black out(SBO) it is highly probably that the reactor will meltdown, and in the case of GE MK1, breach containment. Or that the spent fuel pool, which is outside primary containment and holds many times the radioactive material (sometimes 40 years worth) that the reactor core does, will boil off and expose the spent fuel rods to air with will cause the zirconium cladding of the rods to experience rapid oxidization and heat up, possibly catching fire and spewing radiation for hundreds of miles around EACH affected plant. DO YOU DISPUTE THIS ASSERTION? Now, government and private researchers have identified several natural and man-made situations that can cut power to much of the US for months or years. Namely solar flare, EMP attack, and cyber attack. Solar flares with grid destroying power have been documented before, just not since widespread electrification or NPPs, on average 1 per century and we are overdue. And several, potentially hostile, nations are known to have the capability to destroy the US power grid via EMP or cyber attack, the only reason I have electricity to type this is because these nations have not decided to act.....YET. And please don’t imply that they are afraid of US retaliation, these two attacks can be launched anonymously. If anyone would like to see the government reports I site, simply ask and thou shalt receive. I can post comments from NRC officials that state that NPPs have no passive cooling, are not prepared for power outages lasting over a couple of days and various other weakness to long-term wide spread blackout. Simply ask and I’ll post the quotes, you know I have them. So the NRC has something know as “defense-in-depth” to protect the country from destruction for a SBO at one of their plants. Let review it, the cooling systems rely on outside electric power, if this is cut they have diesel generators which rely on diesel to run. But wait, what do the oil refineries rely on to make the diesel? Oh, that’s right they rely on the power grid just like the NPP, after a week or so no more diesel.....scratch diesel generators. Next we have 4 hour batteries. And after 4 hour batteries what was it we had? Oh, that’s right.....nothing. So for “defense-in-depth” we have two systems that rely on an electric grid that can be destroyed at any time, a solar flare could be heading for us right now, or a 14 year old could be running our power grid via his laptop halfway around the world as we speak. And after the grid and diesel are gone we have a 4 hour battery. Fukushima #1 melted down 3.5 hours after it lost cooling power. And from your report on the Fort Calhoun fire , I’m not making any assertions about this incident only getting a time frame for SFP boil, we have “Current time to boil for SFP is 88.3 hrs”. And how long was it that power could be out for if one of the events I discussed above transpired? That’s right, months or years. The NRC is grossly negligent of its duty in this matter, and the future habitation of North America is in jeopardy at this very moment because of this situation at NPPs. By the way how long is it expected to be before the people around Fukushima can return home after the MILD(power was restored in a few days) SBO event there? We are on borrowed time. In conclusion, I know some will say that if we lost power for months or years NPPs would be the least of our worries. This is totally FALSE, granted there will be massive casualties, but the country could come back, throw in multiple meltdowns and uncontrolled spent fuel fires all over most of the country and there will be no coming back. The US does not have the resources or ability to deal with this situation, prevention is the only option. I for one am practicing up on my Spanish in the hopes that our neighbors to the south will let me stay with them. NRC you are negligent in your duty to protect the American people as long as this situation exists. All plants must be able to withstand a blackout lasting as long as there is enough heat in a SFP to cause a boil off. If the technology does not exist to enable this they should be closed immediately.....POINT BLANK. And before you say it I know that Chairman Jaczko addressed this a little in the statement you provided, but he seems to be focusing on SBO lasting weeks, not good enough, again I can post transcripts from meetings if you dispute this. But in his defense he and Commissioner Apostolakis seem to be the only ones on the NRC that have a clue about how dangerous these things are. I hope this made you feel a little better about getting all the cookie cutter letters, but there is an old saying about being careful what you wish for because you just might get it. Thanks for the answers to my allegations, that I’m sure you are going to provide. Just remember I’ve read the NRC transcripts and government reports dealing with this issue, so be careful what you say. And also please don’t answer with rambling vague assertions. Simple direct answers to questions would be greatly appreciated, although not anticipated.

comment #1217 posted on 2011-06-22 06:30:01 by Joel Riddle in response to comment #1200

Anonymous, The thousand or so people that are there to keep it running are there to assure that the plant is operating safely and properly.

comment #1219 posted on 2011-06-22 09:55:31 by Moderator in response to comment #1216

As has been noted in comments on earlier blog posts, there is a current Petition for Rulemaking before the NRC regarding alternate power supplies for spent fuel pool cooling, PRM 50-96. You can add your voice to that discussion via www.regulation.gov under docket NRC-2011-0069. As you have pointed out, both the Commission, as well as the agency’s task force reviewing information from events in Japan, are considering whether changes to NRC regulations in areas such as station blackout are called for. Scott Burnell

comment #1243 posted on 2011-06-23 06:39:50 by Joel Riddle in response to comment #1205

I agree that a situation of beginning to build a newer generation of plants starting 10-15 years ago would have been highly preferable to the present situation where a newer generation won't be started until late this year at the earliest and possibly later than that (especially if an additional 75 day comment period is added for the AP1000 certification process). Sadly, the economics of building these newer plants haven't been attractive enough and electricity demand has not been increasing fast enough to encourage a great deal of nuclear investment. A large component of the economics of new nuclear plants is due to uncertainty, which stems in part from the current licensing processes. Uncertainty is risk, and risk prices up the cost of borrowing.

comment #1292 posted on 2011-06-26 22:43:35 by Thomas Popik in response to comment #1219

The Foundation for Resilient Societies, petitioner for PRM-50-96, appreciates that the NRC has invited members of the public to comment on this Petition for Rulemaking. PRM-50-96 would provide protection for spent fuel pools under conditions of long-term loss of outside power. We, too, would appreciate comments from nuclear licensees and other members of the public. The current comment period for PRM-50-96 is scheduled to end on July 20, only one day after the scheduled July 19 NRC meeting and briefing on the Task Force Review of NRC processes and regulations following events in Japan. Many of the topics in PRM-50-96, including simultaneous diesel generator failure and Loss of Outside Power (LOOP), are similar to those being addressed by the Task Force. An extended comment period would give stakeholders time to consider findings from the Task Force Review in their comments. An activist group has informed us that a large number of comments have been submitted to the NRC on PRM-50-96. These comments have not yet been placed on the regulation.gov website. An extended comment period would allow stakeholders to see submitted comments before formulating their own comments. We have requested that the NRC extend the comment period for PRM-50-96 an extra 30 days, until August 19, 2011. If you believe that this would be in the public interest, please write Rulemaking.Comments@nrc.gov.

comment #1296 posted on 2011-06-27 11:45:01 by Marvin Lewis

I have been writing comments for decades. Several of my comments refer to EMP and sunspots producing waves of particles that can take down any or all electronic devices with an antenna.

comment #1304 posted on 2011-06-27 16:15:06 by in response to comment #1197

Anonymous, The moderator said approximately 6500 hours per each plant, NOT 6500 hours for all 104 plants. There at least 2 full time resident inspectors at each site plus specialized regional inspections.

comment #1310 posted on 2011-06-28 11:00:33 by Bbq Ribs

This campaign should be supported by those in favor of it. IF this will help every citizen, surely there a lot of supporters for this.

comment #1351 posted on 2011-07-01 15:11:29 by Denys Vlasenko

> So, while we thank everyone who sent a CitizenLetter, all the available information continues to show that U.S. nuclear power plants are designed and operated so they will protect the public and the environment, even after severe natural events. IOW: you did not find even one small lesson in the whole Fukushima accident. Everything in squeaky-clean? All US emergency diesel generators are flood protected? Every single plant has emergency battery-backed lighting? Every single worker knows what to do if total blackout hits hit station? The dams around every plant have large margins, no frantic sandbagging efforts needed (cough... Calhoun... cough)? Every single plant has mobile power generators and pumping cars on standby? NRC has helicopters on standby with mobile power generators and pumps, ready to save a plant in case impossible happens and it *does* lose all means to cool the core? Forgive me, but I would feel much more reassured if you *did* find a few "lessons learned" from Fukushima, and announced concrete actions you plan to implement.

comment #1353 posted on 2011-07-01 16:23:55 by Moderator in response to comment #1351

The NRC has initiated a Task Force Review of NRC Processes and Regulations Following Events in Japan. The task force has already made two presentations to the Commission and its final report will be presented (and made public) later this month. This task force will be followed by a longer-term review. Information on the status on the review so far is here: <http://www.nrc.gov/japan/japan-meeting-briefing.html> . We'll also have more information here and on our website about how to view the upcoming Commission briefing by the task force.

comment #1552 posted on 2011-07-20 12:18:44 by gandhi

have been writing comments for decades. Several of my comments refer to EMP and sunspots producing waves of particles that can take down any or all electronic devices with an antenna.

The Rising River Puts Flood Preparations to the Test

posted on Wed, 22 Jun 2011 13:07:35 +0000

Flood protection plans that the NRC requires for all nuclear power plants are now being put to the test by historic flooding along the Missouri River in Nebraska. Rising waters are lapping at three sides of the [Cooper Nuclear Station](#) in Brownville. [Fort Calhoun](#), located 19 miles north of Omaha, looks like an island in aerial photos. One question is on everyone's mind: Will the flood preparations be good enough? Cooper, which is operating at full power, sits two and a half feet above current river levels. It remains under the [Unusual Event](#) declared on June 19. (Unusual Event is the lowest of four emergency categories established by the NRC.) Nebraska Public Power District officials have installed barriers required to protect buildings and structures from flooding. A three-foot earth and stone berm has been assembled around the plant's electrical switchyard for additional protection. If all goes well, floodwaters will not impact vital plant equipment. The NRC has augmented its inspection staff at Fort Calhoun where there is now two feet of water in many areas onsite. In addition to the two resident inspectors, three more inspectors and a branch chief are there to provide around the clock coverage of licensee activities. The Ft. Calhoun plant remains under the [Unusual Event](#) declared on June 6. Omaha Public Power District (OPPD) officials have not restarted the plant, which has been in a refueling outage since early April. This way they can devote their full attention to dealing with the flood rather than adding the distraction of startup, which can take several days of preparation. The plant has erected an Aquadam around the powerblock – vital areas including the containment and auxiliary buildings. The water-filled berm is eight feet tall and 16 feet wide at the base, and provides protection for up to six feet of water. The dam also protects several pieces of equipment that have been brought onsite, including an additional emergency diesel generator for supplying AC electrical power, water pumps, firefighting equipment and sandbagging supplies. An earthen berm protects the electrical switchyard and a concrete barrier has been built around electrical transformers to protect them. Satellite phones have been distributed to key workers. Extra food and water has been stockpiled. Existing diesel fuel tanks have been topped off and two additional fuel tanks have been brought onsite. Special gas-fired pumps are available in the event of station blackout. If there is a complete loss of power on site the pumps can circulate cooling water through the spent fuel pool and reactor core. The NRC's inspections in 2009 revealed deficiencies in OPPD's flood response plan. The NRC increased its oversight of Fort Calhoun while the plant responded, and today the plant is well positioned to ride out the current extreme Missouri River flooding while keeping the public safe. The NRC's Region IV in Texas remains a hive of activity with communications ongoing between the technical staff, the resident inspectors at both sites, and licensee officials. Several times each day, managers discuss flood preparations with their licensee counterparts and receive briefings from the resident inspectors. Licensee plans are questioned, critiqued and where necessary augmented with input provided by NRC staff. It's all designed to stay one step ahead of the rising floodwaters.

Victor Dricks

Public Affairs

Comments

comment #1230 posted on 2011-06-22 16:51:55 by John in response to comment #1224

Jane, The sad fact is that there is no where that we can go as to not be affected by it. Radiation was being picked up 10,000 away from Japan in Massachusetts rain water after the accident at Fukushima. If the Japanese hadn't been lucky with the wind blowing out to sea the island would be cut in half for the next 300 years and we would be talking about North and South Japan. Not to make you worry but look as some of my posts on the blog post The NRC and the Write-in Campaign from 6-21-11 it goes into more detail about the danger of these plants. Here is a better place to look for info about the plants type in your address and see where the nearest evacuation zone go out to 50 miles the 10 mile designation was just pulled out of thin air by early regulators, a nuclear plant will destroy much more than that when it goes. <http://www.psr.org/resources/evacuation-zone-nuclear-reactors.html> I personally live about 15 miles from one that the NRC has just extended for another 20 years. There is too much nuclear industry money in politics to ever believe they will be closed until it is too late. My Senators are very pro-nuclear I found this strange until I looked at campaign donations and saw the nuclear company is the number 1 donor to one and the number 2 donor to the other one.

comment #1226 posted on 2011-06-22 13:57:14 by Moderator in response to comment #1224

You can find a map of the U.S. with all the locations of nuclear power plants marked here: <http://www.nrc.gov/info-finder/reactor/>

comment #1224 posted on 2011-06-22 13:17:37 by Jane

I personally do not like the idea of nuclear energy at all, I've never been asked if I want to live where they're being used and I know that's all over the world now but I think they're dangerous even when they're only a little bit broken or leaking only a little bit and I don't know how much money was invested into this alternative energy but would like to know where I can go where I will not be effected by it.

comment #1238 posted on 2011-06-22 22:51:51 by

A thousand thanks Mr. Dricks for this detailed update. Of course we will check back often to see if any new information and details have been added. Thanks again, Sincerely, Paul Christopher Anzalone

comment #1241 posted on 2011-06-23 03:15:41 by Risa Bear in response to comment #1224

Patagonia, maybe. :(I'm not being flippant. I wasn't asked either, and I've seldom or never seen it come up for a vote.

comment #1248 posted on 2011-06-23 12:17:41 by Nancy Foust

Can someone post some clear numbers for Cooper and Calhoun? The sea level vs river level heights and the flood protection height

can be very confusing. Calhoun sits at 1004 ft and has flood protection to 1014ft. What is the river height at 1004 ft sea level so we can compare where the water is? Cooper sits at 903 above sea level. How high are their flood protection efforts? IE: how high is any temporary levee, berm or sand bag walls above 903 ft sea level or just how high is that flood protection wall so people have a better understanding where things sit vs. the water?

comment #1249 posted on 2011-06-23 13:07:16 by

Was NRC consulted by the Corps of Engineers when they developed their flood release strategy

comment #1278 posted on 2011-06-25 08:44:43 by LoboSolo in response to comment #1241

Patagonia? Depends on how close you want to be to the nuclear power in Argentina and Chile. Even Mexico has a nuclear power plant ... I used to drive past it on my way to Veracruz. A utility must get permission from various regulatory agencies before building a nuclear plant especially the NRC. Some states have regulators who are elected but I think most are appointed by somebody you elected. IMO, the NRC has over-regulated to the point of discouraging it. I'm looking forward to more being built and to the day when molten salt reactors (MSR) are approved ... especially a liquid fluoride thorium reactor tho I'd be happy with a uranium MSR.

comment #1277 posted on 2011-06-25 08:36:09 by LoboSolo in response to comment #1230

A little hyperbole there don't ya think? Cut in half for 300 years? Naw. There are people living in Nagasaki and Hiroshima and there was a lot worst exposure there. Those radiation detectors are so sensitive that they can pick up the radiation in bananas ... Had a banana lately?

comment #1302 posted on 2011-06-27 13:00:45 by Bill

"If all goes well, floodwaters will not impact vital plant equipment." WHAT? We are talking the potential risk of radioactive contamination of our nation. It's trite but true: failure is NOT an option. Since the AquaDam has been breeched already, I'm presuming the worst as nothing has been said on this blog about it. Are the pumps' and generators' buildings staying dry? Are you attempting to repair the dam?

comment #1309 posted on 2011-06-28 08:52:51 by john in response to comment #1230

LoboSolo, No hyperbole at all my friend. In fact it is very conservative. I could have based that estimate on uranium-235 with a half-life of 700 million years or plutonium with a half-life of 24,200 years. Instead I based it on Cesium-137 has a half-life of 30 years, meaning it will be in the soil for 300 years. Eat a banana that was grown in soil contaminated with cesium-137 if you like; it is after all your funeral, as they say. And the radiation released by an atomic bomb is a totally different thing as far as concentration and dispersion go. I believe there was around 25kg of uranium in the Hiroshima bomb, by contrast a nuclear power plant contains thousands of tons of high level radioactive waste its reactor and spent fuel pools. And much of the radiation from an air blast explosion is consumed by the heat of the blast or lifted into the stratosphere, there is some ground contamination but not like with a nuclear accident. Have you seen the census data for the area around Chernobyl lately? It is a much better idea to compare the damage from a nuclear reactor accident to Chernobyl than Hiroshima. I took the time to add a few articles to enlighten you so that you won't mistake facts for hyperbole again. If you take the time to read the one about radiation in German boars keep in mind that the area in question is 1000 miles from Chernobyl. <http://hyperphysics.phy-astr.gsu.edu/hbase/nucene/fisfrag.html>
http://www.rerf.or.jp/general/qa_e/qa12det.html http://www.huffingtonpost.com/2010/08/19/radioactive-boars-on-the-n_687379.html

comment #1311 posted on 2011-06-28 11:19:22 by Moderator

Please see the latest blog post for updated information on the flood preparations at Ft. Calhoun and Cooper nuclear power plants. Also, the U.S. Army Corps of Engineer's website has a Spring 2011 Flood page with updated information here: <http://www.nwo.usace.army.mil/html/op-e/flood.html> . Omaha Public Power District (Ft. Calhoun) press releases can be found here: http://www.oppd.com/AboutUs/NewsEvents/22_000812 Nebraska Public Power District (Cooper) press releases can be found here: <http://www.nppd.com/Newsroom/>

comment #1322 posted on 2011-06-29 08:28:31 by Dolly in response to comment #1230

I live within 35 miles of Indian Point (NY) and there is no way in Hades Long Island and NYC could be evacuated during an emergency... and evacuated to where exactly? If it weren't so serious, it would be laughable. Nuclear was pushed down everyone's throats as the "cheap" and "clean" alternative to coal. The fact is other fuels have been suppressed for at least 100 years (since the time of Rockefeller's philandering, pedophile grandfather, and Standard Oil). As always, "money" talks. Yes, it appears that a great swath of Japan should not be inhabited for many, many years to come, just like chernobyl. But will the loving Japanese government advise the Japanese people? Only if forced into it; and they'll make it so it will be difficult for those who want to leave- unless perhaps the Japanese government pays other governments to accept those irradiated folks. SO---LoboSolo (down below) is the one who is hyperbolic. Ongoing exposure to radiation (at any level) isn't good for humans. It mutates cells. It's too bad that everyone's cells (other than just LoboSolo's) are affected. The bottom line---the public....er, I mean public, is never told the truth--certainly not the whole truth. You are not entitled to it. You don't deserve it. You are chattel. You don't matter. You are told Disney fairy tales and

you're expected to eat it up. You are given trivia as "news" every, single day. You are treated like children and usually even worse; like dumb animals. You are to be used for your labor and discarded when you've out-lived your usefulness. So either continue to put up with it or do something else.

Holding Nuclear Power Plants to Strict Standards

posted on Thu, 23 Jun 2011 18:49:19 +0000

It's not uncommon for regulatory agencies to be accused of being too cozy with whatever industry they regulate. It happens to the FDA, the SEC, the FAA and other federal regulators. And it's happening to the NRC with some vigor recently, especially since the public's attention to the Japanese nuclear emergency. As an independent regulatory agency, the NRC has a robust and comprehensive approach to holding U.S. nuclear power plants to strict safety standards. We have our own inspection and maintenance requirements that have led plants to detect and repair, replace or otherwise fix the equipment, systems or other issues mentioned in recent news coverage. In 2009, for example, the NRC's inspections at the Fort Calhoun plant in Nebraska showed the plant needed to correct deficiencies in its flood response plan. The NRC increased its oversight of Fort Calhoun while the plant responded, and today the plant is well-positioned to ride out the current extreme Missouri River flooding. The NRC has also ensured Westinghouse meets existing, stringent safety requirements in that company's attempt to get its AP1000 new reactor design approved. There are many other examples. The NRC never wavers from its primary mission – ensuring that the public remains safe during the civilian use of radioactive materials in the United States. The NRC carries out that mission by requiring all 104 U.S. nuclear power reactors to meet safety requirements. We work with professional societies to create and maintain the formal standards that support our requirements. These professional groups, along with researchers from the NRC and the industry, regularly reassess whether or not standards should change. The NRC only permits such changes if they continue to maintain acceptable levels of public safety. The NRC may also review – and change – its own regulations for a variety of reasons. Any changes are always made for sound scientific reasons and without regard for potential economic impacts on plant operators. And when problems are found and a licensee hasn't upheld NRC requirements the punishment can be severe. The Davis-Besse nuclear power plant owned by FirstEnergy was fined \$5.5 million for lying to the NRC and failing to follow agency requirements. The NRC kept Davis-Besse shut down for years until the plant's damaged reactor vessel head was replaced and other required repairs were done. And when the NRC's required inspections recently spotted degradation in the interim replacement head, the NRC forced FirstEnergy to accelerate its plans to install a brand-new, corrosion-resistant head. The bottom line remains the same – the NRC sets appropriate technical requirements using impartial professional standards, expertise and analysis; we have inspectors stationed at every nuclear power plant in the country, who inspect plants every day; and we enforce our requirements to ensure the public remains safe. We have a single mission – safety.

Gregory Jaczko
Chairman, NRC

Comments

comment #1254 posted on 2011-06-23 21:00:56 by LucyLulu

One quick comment, or perhaps two. First, while I don't necessarily agree that the NRC is always on top of its regulatory duties the way that it needs to be, a comparison to the SEC and the financial industry is like apples and oranges. The NRC has been too "cozy" at times, and asleep at the wheel at others, IMO, but certainly not nearly to the same extent. The other comment relates to Fort Calhoun. When it first hit the news I looked up the event report at the NRC and came upon the documents filed the previous year relating to the lack of preparedness for a flood event. Excellent, excellent catch on the part of the NRC. They were not adequately prepared. By the end of the process they were in excellent shape. I believe the proof will be in the pudding. Good job! Enjoy this complimentary comment from me while it lasts, it will be a rarity. :) Oh, and Commissioner Jaczko, good job standing ground and casting the lone opposing vote to (yet again) extend the time reactor facilities will have to amend their fire response plans. They should have been completed yesterday.

comment #1253 posted on 2011-06-23 20:12:24 by Water Damage Restoration

I think that a lot will be gained from the still ongoing incident in Japan. Unfortunately, sometimes it takes a catastrophe to educate us on avoiding a catastrophe... good article.

comment #1251 posted on 2011-06-23 16:33:40 by Mike Mulligan

<http://www.nytimes.com/2011/06/15/arts/people-argue-just-to-win-scholars-assert.html> Has anyone in the agency ever read in the NYT's: "Reason Seen More as Weapon Than Path to Truth"

comment #1255 posted on 2011-06-23 22:35:09 by Ioan Popa

After what happened in Japan this will be very good for our future.

comment #1275 posted on 2011-06-24 19:51:33 by Stephen Villano in response to comment #1253

I think SOME information will be gained, but not a lot. From what has happened, it appears that Japan's NISA did not require TEPCO to make some changes that the NRC and European authorities ordered. The suppression ring was not reinforced, as the NRC has mandated here. The containment vessel bottom appears to have not been reinforced as the NRC has directed. The suppression

chamber seems to still have been vented inside of containment, rather than through scrubbers to the outside of the plant, as the NRC had ordered here. Additionally, TEPCO didn't follow their own emergency procedures in several areas, to include maximum tolerable pressure before venting. If anything, what will be learned is, the NRC has the regulatory authority that NISA lacks.

comment #1281 posted on 2011-06-25 13:10:31 by Teeter

Mr. Jaczko, The statement "Any changes are always made for sound scientific reasons and without regard for potential economic on plant operators.", while it sounds honorable and sound, concerns me a bit as an American. Because constantly increasing the barriers to economic viability of existing nuclear facilities and to entry by newer, safer, more advanced, less waste producing nuclear technologies and plant designs, without regard at all to economics, has stunted the growth and understanding of nuclear in the U.S. and worldwide. The NRC's actions and regulations have, both directly and indirectly, prevented the commissioning of any new commercial power reactors in the last 35 years, it has prevented the logical and forward looking completion and opening of waste storage and processing, and it has prevented the true development of new revolutionary nuclear power plant designs that, in 35 years past of more reasonable regulation, would likely have solved or minimized many of the issues we continue to have with current operating plant designs (that are now 60+ years old). Instead of continuing to stunt the industry, cede the U.S.'s technical leadership in nuclear to China, France, South Africa, and even India, and essentially allow designs like the BWR design used in Fukushima and other places to persist as the only designs out there by not allowing new designs to economically pursued, why not open the NRC to some true consideration of the overall problem by allowing some reasoned look at economics when new safety regulations are continued. The nation would truly be served better for it...

comment #1282 posted on 2011-06-25 16:26:33 by LoboSolo in response to comment #1254

I don't think that the NRC can be accused of being too cozy with the nuclear industry. After all, the NRC was created after such accusations against the AEC. If anything, the NRC over-regulates. Notice how many new nuclear plants have been built in the past 20 years in the US? ... NONE ... oh excuse me, TVA did complete one that they had mothballed. If the NRC had been too cozy with the industry then cost of nuclear plants wouldn't have skyrocketed! As it is, they've practically have driven up the costs so much that it's not practical to build one. Meanwhile, China and India are pushing forward with Gen III, III+, and IV reactors. They'll probably have molten salt reactors before we will and will be buying the technology from them.

comment #1285 posted on 2011-06-26 09:15:54 by Thomas Levi

I'm sure the Chairman realizes that it does somewhat give the impression that the NRC is a captured agency when a former Chairman leaves his post at the NRC and goes to work directly for a company he was just regulating in the form of the Shaw Group. And that this Chairman was appointed a VP in the power division. Shaw group it just so happens is the half owner of Westinghouse, the company that makes the AP1000 reactor. This is the only new reactor that is even close to being approved to be constructed. I saw that everything seemed to be going good to get these reactors installed in Georgia, the wheels had been greased, if you get my drift. Even though serious safety concerns had been pointed out about the AP 1000 .When I pointed out on your May 4 blog post "a full and fair hearing" about the connection between the former Chairman and the AP1000, I was happy to see Chairman Jaczko had ordered a safety review of this reactor on 5-20-2011, good catch on that one Mr. Chairman. Also, I would like to point out that while damaging, regulatory capture at the SEC, FCC, FDA or any other regulatory organization is nowhere near as dangerous, by several orders of magnitude, as regulatory capture at the NRC. Regulatory capture at the NRC has the potential to physically destroy the country. So comparing it to some other agency is being a little disingenuous or it points to the fact that someone doesn't realize just how important the NRCs job is, and just how dangerous these plants are.

comment #1306 posted on 2011-06-27 19:13:41 by Laura in response to comment #1281

I think you are misplacing any blame here for lack of progress upon the NRC when it more fairly belongs elsewhere. The NRC, while in the immediate sense, may have blocked forward movement with Yucca Mountain, it isn't responsible for the project's demise. Yucca Mountain was doomed long ago, beginning with passage of the "screw Nevada bill". No waste depositories globally have been able to proceed without the cooperation and involvement of the local community, and which the NWPA of 1982 in its wisdom originally had provisions, but were bypassed. It was long past time to stop the hemorrhage of funding into a project failed due to poor policy decisions implemented by the DOE, at the behest of industry. The accident at TMI had a profound effect on the construction of new power plants. And yes, the public wanted reassurances that improved safety measures would be put into place, justifiably so. The biggest hindrance however has been economic ones. Deregulation, cheap coal, inability to obtain loans from lenders (requires federal guarantees), inability to obtain liability insurance (again, taxpayers must fund liability beyond initial deductible amounts), and the requirement of outright taxpayer funding subsidies to cover substantial portions of construction costs. New regulations may well have driven up costs to some extent but that doesn't negate the fact that nuclear energy has required infusions of federal funding to be cost competitive with our own fossil fuels. It is cheaper for the industry to maintain current plants than to build new ones. I am certainly an advocate of the need to explore new technologies, particularly ones that address the back side of the fuel cycle. Our most pressing issue is our spent fuel pools. In the interim, at the very least, we need to get the fuel into dry cask storage. We also need to look into the feasibility of technologies that have built in safety features and produce less waste, e.g. molten thorium salt reactors. However, this requires funding and since industry hasn't been forthcoming, we need to have an honest and open discussion as a nation if this is a policy we want to pursue, particularly in the current environment of spending cuts and deficit reductions. And btw, we have NO plants that are 60+ years old, nor even 50, or 45. Our oldest plant, Oyster Creek in NJ, went online in 1969, 42 years ago. It will be decommissioned in 2019, at 50. Let's keep the discussion real. Industry credibility is already a major factor in play, and its future depends largely on increasing the public's perception of its trustworthiness.

comment #1307 posted on 2011-06-27 19:16:48 by LucyLulu in response to comment #1282

See comment to Teeter above.

comment #1324 posted on 2011-06-29 08:44:41 by Dolly in response to comment #1285

ABSOLUTELY CORRECT.

comment #1326 posted on 2011-06-29 09:25:42 by Dolly in response to comment #1306

So "perception" is REALITY, right? The important thing then is the industry, not the safety of people or environment in which they live, correct? Yes, let us keep the discussion "real", shall we? The discussion should "real"-ly be centered around WHY the industry has been subsidized for so long if it's such a great idea to use nuclear for the generation of electric power in the first place. WHY is the industry using older technology, especially if the industry really thought nuclear was going to be the means to provide power for generations to come and thus they'd be generating profits for years to come? Is it perhaps because the powers behind government (read transnational corporations) knew nuclear power was an interim, short-lived distraction? Otherwise, wouldn't the nuclear industry have poured much more effort into upgrading and retrofitting at least existing plants? What did they know that the public doesn't know? Industry leads the way, right? If money talks, then industry and the non-governmental organizations set up around industry (mostly as controlled opposition funded by your tax dollars), and the bureaucrats (read "policy makers") who spring up around the industry to "regulate" it are all on the same page--even if many of the lower echelon people in these organizations don't understand that they are. All 3 groups need each other to continue their own existence. If nuclear is such a great way to provide energy, one must ask- is it really the big, bad NRC that has stopped industry from building great, nuclear plants based upon new (and superior) technology? Or is there another reason? Is it perhaps that the time is approaching when we must be "green" and live in communitarian communities with mercury, vapor-filled light bulbs, or lots of candles, fewer private modes of transport and human and animal "corridors"? What would've been the point in wasting industry money on better, safer nuclear plants? Is it likely that carbon trading is the new, money-making wave of the future for those in-the-know, and nuclear will slowly be laid to rest? Love nuclear or hate nuclear; that isn't the ultimate question. The questions are: what is the agenda for "the century of change", who benefits from the agenda and who is running the agenda?

comment #1350 posted on 2011-07-01 15:00:19 by Denys Vlasenko in response to comment #1275

> The suppression ring was not reinforced, as the NRC has mandated here. This wouldn't help F1 much, cores would melt regardless.
> The containment vessel bottom appears to have not been reinforced as the NRC has directed. This wouldn't help F1 much, cores would melt regardless. IOW, Fukushima-like disaster in US would probably have somewhat less disastrous amounts of radiation released, but it would still be bad. IOW: many US reactors probably wouldn't survive complete station blackout lasting about a day, just like F1 did not. After Fukushima lesson, the level of safety where we basically *must* ensure that blackout NEVER lasts more than an hour doesn't feel good enough to me. I think Fukushima tells us that we need to require all new designs to be able to survive multi-day complete power outage (and by outage, I mean "no diesel generators either"). Also, all new designs should have Core Catcher, so that if we ever do reach corium stage, we have a disaster plan even for that.

comment #1364 posted on 2011-07-03 15:32:27 by patrick

Nrc, I was trying to post this in the open forum but it does not seem to be open for comment. Is there a certain amount of fuel that plants are required to keep on hand for emergency operations? If so how much is it? If this rule is governed by fuel volume, what is the basic time, in days, that a plant can operate on emergency power with no resupply of fuel? If the amount varies from plant to plant can you give me a high and low end, and what governs why the required volumes may be different. Thanks a lot.

comment #1390 posted on 2011-07-06 12:55:44 by Moderator in response to comment #1364

Each emergency diesel generator shall have adequate fuel oil to operate for three to seven days without needing to be refueled. In addition, sites must also have procedures and contracts with fuel suppliers to get additional fuel to operate the generators for as long as 30 days. Since the seven-day fuel oil requirement was established in the mid 1970s, after some plants were already licensed, there are some differences in how plants meet this requirement. The exact specific details of maximum and minimum fuel oil capacity at the 104 nuclear plants are provided in licensee's Technical Specifications, Technical Requirements Manual, and design bases calculations. However, all plants have programs and procedures to replenish the fuel before the minimum inventory is reached in accordance with plant-specific Technical Specifications. There is more information in 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," at <http://www.nrc.gov/reading-rm/doc-collections/cfr/>. For more guidance see the following references: NRC Regulatory Guide - 1.137, "Fuel-Oil Systems for Standby Diesel Generators." The guide can be downloaded from NRC web site: <http://pbadupws.nrc.gov/docs/ML0037/ML003740180.pdf> ANSI N195 1976 or ANS 59.51, Edition: 97, "Fuel Oil Systems for Standby Diesel-Generators" ANSI standards can be purchased <http://global.ihc.com> ASTM D975-77, "Standard Specification for Diesel Fuel Oils; ASTM standard can be from purchased from <http://www.astm.org/Standards>

A First Hand Look at the Flooding

posted on Tue, 28 Jun 2011 13:42:41 +0000

[caption id="attachment_1415" align="alignright" width="300" caption="Chairman Jaczko views flood preparations at Cooper nuclear power



station near the Missouri River." [caption] The Missouri River usually meanders past Nebraska towns like Fort Calhoun, Omaha and Brownville at a placid 5-7 m.p.h. These days it's racing past at about 15 m.p.h., and spreading out over the surrounding farmland, turning the rich Midwestern soil into a boggy light brown bayou. And it's creeping up around the two nuclear plants – Ft. Calhoun and Cooper -- that sit hard by the Missouri upstream and downstream of Omaha. NRC Chairman Gregory Jaczko visited both plants this week and also flew over the Fort Calhoun plant. He was checking in with the full-time NRC staff who work at the plants and the reinforcements the agency has sent to these sites, talking with plant officials and workers, and inspecting the substantial flood preparations made at both plants. The pictures from the helicopter tour over the Fort Calhoun plant look worse than the situation really is. The plant is surrounded by water, but protected by flood gates, waterproof bunkers and other systems, many put in place by owner Omaha Public Power District as the result of an NRC inspection two years ago that found the plant's flood protection systems lacking. Now, all the vital safety equipment is safe and dry, despite the fact workers wearing hip-high waders pulling boats laden with equipment walk through 3-plus feet of water around the plant's perimeter. Not every nuclear plant these days has life preservers nearby in case a worker or visitor falls off the quarter-mile metal catwalk built to get people and equipment from higher ground into the plant. Workers hauling in gasoline cans with fuel for small pumps pass those coming out with the empties on the catwalk. Nearby sit two huge tanker trucks with diesel fuel for the huge diesel generators tucked safely into watertight compartments deep within the plant. The chairman talked with reporters at several stops along the way, mentioning what he saw in the flyover and that the loss of an aquadam around the Fort Calhoun site was not a problem because it was a supplement to what the NRC requires, and the NRC requirements protect the plant against an additional eight or so feet of flooding. Inside the control room was a computer monitor reporting on the latest flood stages, showing the river at about 1,006 feet above sea level. The plant under NRC requirements must protect critical safety equipment to 1,014 feet. Chairman Jaczko also spoke directly with Fort Calhoun employees at their Omaha headquarters, telling them this is a challenge that will be with them deep into the summer. "You seem to be preparing yourselves to deal with those challenges and that's good to see. In the end, the challenge is yours." Press coverage was wall to wall: the calls for interviews from the major networks were non-stop (he did the CBS Early Show and an NBC interview before heading to the airport, CNN and ABC the day before, and talked to the New York Times and virtually every local print and broadcast outlet and major wire service at a press conference that drew about 10 video cameras.) Outside the two plants, the Missouri is rolling by carrying no less than 160,000 cubic feet of water every second, according to Col. Robert Ruck of the Army Corps of Engineers who briefed the chairman before the helicopter tour. It's the highest flooding on the Missouri since the flood control dam structure was put in place back in 1952. The chairman said the visit at Fort Calhoun was instructive. "I don't think you can appreciate a flood like this and the force and power of the water until you see it up close. When you get down close and really see the flow, you recognize this is not a trivial thing." At the two plants – Cooper which is operating and Fort Calhoun which has been off-line and cold for months because of refueling and the anticipation of flooding – NRC resident inspectors are standing watch to keep an eye on the performance of the flood protection systems and the work of the plant owners. Outside, the Missouri keeps rolling by.

Eliot Brenner
Director, Office of Public Affairs

For raw video of the chairman's flyover of Ft. Calhoun go to: <http://video.ap.org/>

Comments

comment #1312 posted on 2011-06-28 11:24:56 by ron

Excellent article. One of our band mates used to be a nuclear reactor operator. About 8 years ago, he wrote a song called "Time-Distance-Shielding". Very timely song. Check it out on You Tube: "time distance shielding jacoby and SNS_0001.wmv".

comment #1314 posted on 2011-06-28 17:45:46 by Eric Straatsma

FIVE Emergencies So Far And Counting; #FortCalhoun#Nuclear Power Plant <http://t.co/VEXmDKm>

comment #1325 posted on 2011-06-29 09:09:56 by Elias abdelkerim

It appears from the article that one of the shutdown plant has not completed the modifications for flood protection up to NRC requirements and remains shutdown, probably defuelled. We learned from Fukushima accident that continuous cooling of the used fuel pool is important. can you comment on its status?

comment #1328 posted on 2011-06-29 12:08:59 by Moderator in response to comment #1325

The Ft. Calhoun made the additional flood preparations the NRC identified from inspections in 2009, and these additional preparations are now in place and the plant (including its spent fuel pool) remains stable and safe. The plant had been in a previously scheduled refueling outage prior to the flooding, and the plant has opted to remain in this outage until river levels fall.

comment #1337 posted on 2011-06-30 09:18:54 by Kurt Penner

Why did you wait until now to request Dam Break Analysis for Missouri River Main Stem System? It is too late for the NRC to do an assessment for specific flooding conditions at Fort Calhoun Station and Cooper Nuclear Power Plant and verification of the licensee's PRA analyses.

comment #1348 posted on 2011-07-01 14:07:21 by Moderator in response to comment #1337

In 2004, the U.S. Army Corps of Engineers completed its latest hydrology studies/dam break analyses for six dams on the Missouri River, to re-evaluate the flooding associated with the Missouri River, which led to the NRC inspections at Ft. Calhoun in 2009 that ultimately resulted in the enhanced flood protection in use now. The USACE reports had found that the flooding level originally used for site preparations were too conservative. The NRC staff requested data from the US Army Corps of Engineers (USACE) for the Dam Break Analyses associated with 6 dams on the Missouri River to do follow up verifications of the analyses based on the yellow inspection finding at Ft Calhoun associated with inadequate flooding procedures. In summary, the staff is verifying the modeling data to ensure that there are no inconsistencies.

comment #1442 posted on 2011-07-11 18:24:34 by Paul Christopher Anzalone

Howdy again, We were hoping for an update. We haven't found an undate for the two stations in Nebraska. The last update was June 22, and 28, 2011. What is the latest? We're sure everything is okay, but we'd like the NRC to take a moment for re-assurance. Often, the media moves on to other stories. As far as I've heard the river levels have not fallen in NW Missouri. Please give us the latest. Thank you NRC. Sincerely, Anzalone

comment #1448 posted on 2011-07-12 11:56:11 by Moderator in response to comment #1447

Update: This morning, Cooper terminated the Unusual Event declared on June 19 because projections by the U.S. Army Corps of Engineers show the river will remain at less than 899 feet at the site.

comment #1447 posted on 2011-07-12 09:18:04 by Moderator in response to comment #1442

Conditions remain stable and safe at both plants. The level of the Missouri River at Cooper Nuclear Station has fallen to 896 feet above mean sea level and the plant is continuing to operate at full power. At Fort Calhoun, which remains shut down since a refueling outage in early April, the river level remains at 1006 feet. Installation of a water-filled berm to replace the one that collapsed on June 26 was completed over the weekend of July 9-10, and the plant has pumped most of the water inside the protected area back out into the river. The plant is continuing activities to clean up the residual silt and debris from the concrete areas in the newly dried out portions of the protected area. Also, the plant has implemented several additional administrative controls for work activities conducted around the replacement berm to help preclude damage to the barrier. We will soon be posting a special page devoted to flooding at Cooper and Fort Calhoun. There will be a link to the new page from the NRC website at www.nrc.gov. Victor Dricks

2.802 vs. 2.206 -- What's the Difference?

posted on Thu, 30 Jun 2011 13:43:48 +0000

Mathematically, of course, the answer is 0.596 – a tiny amount – but when referring to two different parts of NRC regulations, there's a big difference. 10 CFR Part 2.802 and 10 CFR Part 2.206 both describe petition processes. However, 2.802 petitions are requests from the public for a new rule (regulation) while 2.206 petitions are related to enforcement actions. My area, the Office of Federal and State Materials and Environmental Management Programs (FSME), usually gets two to four 2.802 rulemaking petitions a year about medical or general license issues. However, petitions are also addressed in other offices, including the Office of Nuclear Reactor Regulation. The basic steps for submitting petitions for rulemaking to the NRC are found in [10 CFR 2.802](http://www.nrc.gov/about-nrc/regulatory/rulemaking/petition-rule.html), with specific details on what to include in the petition documented in paragraph (c). For information on the process for submitting a petition for rulemaking to the NRC, please visit: <http://www.nrc.gov/about-nrc/regulatory/rulemaking/petition-rule.html>, which also has a link to the NRC's petition for rulemaking dockets. The 2.206 process allows anyone to ask the NRC to take enforcement action against NRC licensees. Depending on the results of its evaluation, NRC could modify, suspend, or revoke an NRC-issued license or take other enforcement action to fix a problem. Additional information on how to submit a petition under 10 CFR 2.206, how the agency processes the request, and status information on 2.206 petitions we've received can be found at: <http://www.nrc.gov/about-nrc/regulatory/enforcement/petition.html> There have been occasions where a petitioner has invoked the term "2.206" when the request was really a petition for rulemaking under 2.802. Unfortunately, this situation often delays the petition while staff members review the request and get it put into the right process. The NRC's petition process provides the public with a voice in how we regulate our licensees. Hopefully, this post clarifies which process is appropriate for a given situation and highlights the difference between the two numbers beyond 0.596!

George Deegan

Senior Program Analyst (Nuclear Materials/Waste Management)

Comments

comment #1341 posted on 2011-06-30 14:42:54 by Thomas Saporito

The NRC 2.206 petition process is flawed. The petitioner is not permitted to engage the Petition Review Board in discussing the PRB's decision making process. The process should be changed to allow a petitioner to question PRB members under oath before the Atomic Safety and Licensing Board - and allow petitioners to bring expert witness opinions on the record. Thomas Saporito Senior Consulting Associate Saproani-Associates.com Jupiter, Florida

comment #1338 posted on 2011-06-30 10:21:37 by Water Damage Restoration

Interesting. I never thought the public would have the ability to implement changes to the way this organization operates itself.

The NRC and the State of Minnesota

posted on Fri, 01 Jul 2011 18:05:26 +0000



As the state of Minnesota was facing the possibility of shutting down most activities because of budgetary issues on July 1, the NRC initiated actions to make sure that adequate protection of the public health and safety will be maintained if the state government is shut down. The Minnesota state government has two critical functions affecting the safety of nuclear materials and nuclear power plants – it regulates the use of radioactive materials for nuclear medicine, research, and industrial applications, and it provides emergency response in the unlikely event of a problem at one of the state's two nuclear power plants. Planning for the possible state government shutdown began about two weeks ago as NRC's Region III staff in Lisle, Ill., and its headquarters Federal State Materials and Environmental Management program began discussions with the state's Department of Health, which regulates the use of radioactive materials under an agreement with the NRC. Minnesota has about 180 nuclear materials licenses that it regularly inspects and, if necessary, responds to emergencies or other events at the facilities. Nuclear materials safety and response functions will be maintained by a reduced Department of Health staff which, having been designated by the Governor as providing a critical function, will remain on duty. The state has also made contingency plans with major users of radioactive materials to provide support in the event of an emergency and, further, to call upon state regulators in Wisconsin and Iowa for assistance, if needed. There are two nuclear power plants in Minnesota – the [Monticello Nuclear Plant](#) located in Monticello north of Minneapolis, and the [Prairie Island Nuclear Power Station](#) near Red Wing, south east of Minneapolis. Both are operated by Northern States Power Company, Minnesota. The [Federal Emergency Management Agency](#), which oversees state and local radiological emergency planning, has been reviewing the state's contingency plans for responding to emergencies during the shutdown, and the NRC has been monitoring the interactions between FEMA and the state's Homeland Security and Emergency Management agency. The NRC will continue to closely monitor the situation and is prepared to provide assistance should it be necessary to provide for public health and safety.

Cindy Pederson

Deputy Regional Administrator

NRC Region III

Comments

comment #1450 posted on 2011-07-12 13:49:27 by Drug Rehab Utah

I agree with you..Nuclear materials safety and response functions will be maintained by a reduced Department of Health staff which, having been designated by the Governor as providing a critical function, will remain on duty.

The Job of a Health Physicist at the NRC

posted on Wed, 06 Jul 2011 13:23:54 +0000

The [Office of New Reactors](#) (NRO) evaluates designs for new reactors and license applications to make sure they meet the necessary laws and regulations. NRO staffers complete these reviews after we've gathered the information we need to conclude the design or proposed reactor can protect public health and safety and the environment. I'm one of nine NRO health physicists who participate in these reviews. We work to ensure the plant will protect people from the reactor's radiation, both during normal operation and during accidents. We have engineering or physical science degrees, and our training focuses on radiation sources in a nuclear reactor, how they could impact people and the environment, and how to avoid unnecessary radiation exposure. Our work helps ensure that new reactors' structures, systems and components will minimize radiation exposures to plant personnel and members of the public -- to the extent reasonable with modern technology. The reviews also consider risks from hazards that are not radiological, so that when we reduce radiation risk we don't inadvertently increase risk from other hazards. NRO health physicists also review the operational programs and procedures for proposed new reactors to make sure that management and personnel keep radiation exposures as low as is reasonably achievable through proper training, behavior and decisionmaking. Our work always focuses on ensuring the possible health risks and environmental hazards associated with new reactors are managed before the reactors are approved and built.

Sara Bernal
Health Physicist

Comments

comment #1635 posted on 2011-07-26 06:29:01 by blog design

Are these health physicist also concerned about the environmental issues with the uses of nuclear processes?

comment #1425 posted on 2011-07-09 03:56:08 by Mike

What is the future role of the health physicist? What changes are taking place that will shape the way we conduct our business?

comment #1536 posted on 2011-07-18 12:54:05 by Moderator

Thanks for your interest and your comment. As I see it, the future role of the health physicist will be to continue what they are doing now, educating themselves and others about the radiation risks around them, and working to protect people and the environment from these risks to the extent possible. Changes that may affect how health physicists conduct business include improvements in technology and design, new or updated research results, and gradual changes in regulatory requirements. For more information on health physics as it relates to NRC's mission visit <http://www.nrc.gov/about-nrc/radiation.html> . For general information on health physics and radiation protection visit Health Physics Society's website (www.hps.org), the National Council for Radiation Protection & Measurements (<http://www.ncrponline.org/>) or the International Commission on Radiological Protection (<http://www.icrp.org/>) websites. Sara Bernal

Cybersecurity and Nuclear Power Plants

posted on Fri, 08 Jul 2011 12:55:44 +0000

It's hard to read the news these days without seeing reports of one entity or another "getting hacked" or being attacked in cyberspace. We're frequently asked how nuclear power plants are protected from those who try to break into computer systems without authorized access -- often for malicious purposes. Perhaps the most important thing to recognize is that nuclear power plants and their computer systems were designed before the days of internet cafes and wireless connections. So there is no connection to the internet and thus no way for a hacker from the outside to get at the safety-related computer systems of the plants. Even the digital control systems installed in some plants more recently have no connection to the 'net. And while nuclear power plants were designed to feed electricity to the power grid, they were also isolated in ways to protect them from any potential negative effects that could come from the grid. After the terrorist attacks of September 11, 2001, cyber security quickly became a major focus of U.S. government activities. The NRC was no exception. We took immediate steps -- through orders -- to ensure that computer systems used to operate nuclear power plants were not accessible even by "insiders" who could attack the cyber systems directly from within the plant. Later, the NRC went even further with a new regulation that required all the nuclear power plants to have a cyber security plan and a timeframe for implementing protections of those key systems related to safety, security and emergency preparedness functions. In addition any power company seeking to build a new nuclear power plant will need to include a cyber-security plan as part of their application to the NRC. The NRC has its own cyber security experts on staff and works closely with other federal experts, including U.S. Cert -- the [U.S. Cyber Emergency Readiness Team](#) -- to monitor what's happening in cyber space here and around the world, and to take actions if necessary to protect the vital systems in nuclear power plants.

Sara Mroz
Security Specialist

Comments

comment #1453 posted on 2011-07-12 22:22:41 by Chris P

Hacking a into a nuclear power plant has a large potential of being very dangerous and having a huge negative impact on society. I believe the security in these systems needs to be better than any other system in the world. Look at Sony for example, a company that makes COMPUTERS was hacked into. If these guys try and go after power plants, there could be some very big problems.

comment #1418 posted on 2011-07-08 12:44:37 by Mark - eliminar estrias

God save us from those crazy terrorists, can not imagine what can cause a cyber terrorist attack. Security at nuclear plants mean that is the number one priority. The nuclear plants are needed, many countries depend on it.

comment #1518 posted on 2011-07-17 13:45:58 by dog training courses

Paul Leventhal had a great quote about nuclear power plant security. - "The security guards at half the nuclear power plants in the United States have failed to repel mock terrorist attacks against safety systems designed to prevent a reactor meltdown. These are so-called "force-on-force" exercises supervised by the Nuclear Regulatory Commission. The NRC refuses to take enforcement action in response to the failures, and is in the process of weakening the rules of the game in response to industry complaints. Sabotage of nuclear power plants may be the greatest domestic vulnerability in the United States today. This is the time to strengthen, not weaken, nuclear regulation."

comment #1795 posted on 2011-08-06 21:03:50 by Curt

While the article gives the reader assurance that our nuclear power plants are not connected to the internet I agree that we need to increase the security on these seemingly outdated nuclear plant systems which are vulnerable to our national security. With government looking to cut costs I can see potential danger for the security of our nuclear power plants.

comment #1739 posted on 2011-08-03 06:45:17 by dog training

Nuclear power plants are very dangerous and I really hope that with time the impact on the society will be reduced. this is the priority #1.

An Open Forum Now Available

posted on Fri, 08 Jul 2011 20:03:45 +0000



The NRC welcomes comments on the topics we're blogging about. But we realize there are other topics you might want to talk about. This post serves as the Open Forum section of the NRC Blog. You may post comments here on any topic relevant to the role and mission of the NRC. Comments here are still moderated and must adhere to the Comment Guidelines. If we determine a comment on another post is more appropriate here, we'll move it over. This post will stay open for comments and not be subject to the 30-day comment period of other posts. You can always find this post by clicking on the Open Forum category on the side bar.

Holly Harrington

NRC Blog Moderator

Comments

comment #282 posted on 2011-03-10 12:22:26 by Peter Van der Does

Thank you for the opportunity to comment. In a few days the NRC will likely give Vermont Yankee another license period. This is the same plant which has had a cooling tower collapse , a two story transformer fire ,unaccounted for missing fuel rods , cracks in the steam dryer and Tritium , Cobalt 60 and Ziinc 55 found in the groundwater test wells nearby and I won't repeat the earlier post about Strontium 90 in the fish in the nearby river. In a recent NRC report (2009 ?) the estimate for a severe accident was every 1 million hours of man-operations. That works out to every 114 years. I suppose "severe accident" is a euphemism for a meltdown. Great research guys ! The 4 partial meltdowns we've had in the US were all within 15 years of starting operations : Simi Valley , Idaho SL-1 , Enrico Fermi and TMI. Your Radioprotection Health Officer , a nice woman who I've met , would be interested to know that a health study was done and the 6 towns surrounding Vermont Yankee were found to have a slightly higher incidence of Leukemia in comparison with the rest of the county. Please forward this comment to your chairman. Thanks.

comment #203 posted on 2011-02-25 10:27:15 by Moderator in response to comment #95

It's not clear what reviews or reports you're referring to, but here are some links that might be helpful: How the NRC reviews new plant designs: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/new-nuc-plant-des-bg.html> How the NRC reviews new reactor applications: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0298/> How the NRC reviews reactor license renewals: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0291/> Moderator

comment #286 posted on 2011-03-11 10:32:12 by Dan

Is the NRC staff following the recent news from the earthquake in Japan? Can you post some reliable technical information regarding the impact of the earthquake on Japanes nuclear facilities? What is the significance of the evacuations that have been ordered due to "failure of backup generators"?

comment #71 posted on 2011-02-07 16:01:35 by Moderator in response to comment #69

You can learn more about the NRC's license renewal process for existing nuclear power plants here: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/license-renewal-bg.html> .

comment #51 posted on 2011-02-04 16:15:57 by Moderator

Thank you for the opportunity to speak out. The NRC allowed Vermont Yankee to forgo the ASME 10 year welds exam scheduled for 2010 and replace it with their own welds exam while Vermont Yankee has had the same internal radioactive leaks due to old welds in the same area two years running ??? The Connecticut river now has Strontium 90 found in the fish in proximity to the Vermont Yankee nuclear power plant. Strontium 90 which the EPA says on their website causes Leukemia and bone cancer. Strontium 90 which has a half-life of 27.8 years and was produced at Vermont Yankee as effluents in 2002 , 2003 and 2004. We can collectively thank the NRC for contributing to the health of the American people. Peter Van der Does Moderator: This comment has been moved here from a different post.

comment #52 posted on 2011-02-04 16:17:30 by Moderator

When will the NRC be releasing SER, Volume 3? What is the rationale for holding it up and how does this support the commission's commitment to openness and transparency? Frank Moderator: This comment has been moved here from a different post.

comment #53 posted on 2011-02-04 16:18:47 by Moderator

I am concerned about the aging nuclear reactors in the US. Recently there have been multiple incidents — scrams — that indicate less than secure conditions. I believe the public is being kept in the dark about the danger they are in because of the lack of repairs and continued use of aging nuclear reactors. I would like to see them all shut down, and replaced by solar and wind systems. Kathryn Barnes Moderator: This comment has been moved here from a different post.

comment #54 posted on 2011-02-04 16:20:13 by Moderator

The NRC Chairman's recent actions regarding suspension of Yucca Mountain staff review of the license application is a disgrace to the NRC as an agency. If one person, chairman or not, can stop a licensing proceeding the stability of the NRC licensing process is undermined. NRC's only job should be nuclear safety — not political favoritism. Not allowing the Commission vote on the Yucca Mountain CAB ruling is nothing short of a coverup. So much for openness in government. Joe Ziegler Moderator: This comment has been moved here from a different post.

comment #55 posted on 2011-02-04 16:26:52 by Moderator

Public Participation Wondering if you will make this a separate NRC blog issue? (The point I make, is public participation fun for the NRC, they don't take it as a serious business. NRC "having fun" over Vermont Yankee 2.206 So I am on the phone bridge this morning Feb 3, 2011 at 9am, I identify myself to the mechanical voice message system, then I am just kind of waiting around in silence on the phone waiting for them to push the button to join the conference. I assume there are people on the voice bridge, and then there are NRC officials in one or more rooms on a speaker phone device. All of a sudden I hear a click, I hear the snippet "and have a little fun", then I hear the talking of all the NRC officials, then the "welcome to this is a 2.206 petition...". All the background chatter of the officials stops...then we are off to the races with the 2.206 processes. From this point on everything is recorded in the NRC ops center and it is transcribed for addition into the public record. They do the introduction, then they give me the microphone so to speak. I say I got to get this down on the record. I just heard a snippet of "and have a little fun" when I first came into the meeting, when I was connected to the phone bridge...what did you mean by this? It was a male voice talking to a female. I am thinking two NRC officials were talking about outside activities, but you never can tell what is behind it. I said to myself too, they just might be talking about have having a little fun with me in the meeting. The chairman of the petition board pops up explaining on my phone, "I was introducing a new NRC official to the petition board and I was telling her to have a little fun as she participates and listens to your review board" concerning tritium and root cause analyze issues at Vermont Yankee. I want to force a shutdown of VY and remove the licenses of all the Entergy nuclear plants, or at least get peoples attention... Can you imagine a 2.206 petition meeting chairman indoctrinating a new NRC official into the petition process by saying have a little fun with it. Are they all laughing and making faces behind my back as I am stuttering and fumbling my way through my speech. Are they laughing and having a little fun over us all? Mike Mulligan Moderator: This comment has been moved here from a different post.

comment #56 posted on 2011-02-04 19:15:15 by James E. Foster

Since at least 1982, NRC Office of Investigations (OI) personnel at grade levels of GS-12 - 14, and GS-15 have been misclassified as series 1811, "Criminal Investigator." To be classified in this series, an individual must meet most of the "frontline law enforcement" factors, and have them largely constitute the position duties: 1. Perform investigations (long-term, complicated reviews); 2. Investigate individuals suspected of or convicted of violating criminal laws of the United States (employing agency must have criminal investigation authority); 3. Have the authority to carry weapons; 4. Have the authority to arrest, seize evidence, give Miranda warnings, and execute search warrants; 5. Have a "rigorous" position which includes unusual physical hazards due to frequent contacts with criminals and suspected criminals, working for long periods without a break, and being in on-call status 24 hours a day. For LEO retirement credit, one must show that the primary duties of the position are the investigation, apprehension, and detention of

criminals or suspects. The most important factors, are: 1) frequently pursuing or detaining criminals; 2) an early mandatory retirement age; 3) a youthful maximum entry age; 4) the job is physically demanding requiring a youthful workforce; and 5) exposure to hazard or danger. The factors (above) may also be considered as appropriate. OI duties and authorities do not match these criteria, especially since NRC lacks statutory authority for performing criminal investigations. They lack arrest responsibilities, agency authority to carry firearms or other weapons, do not perform undercover work, do not execute search or seizure warrants, do not give Miranda warnings, and are not exposed to hazardous conditions nor inclement weather. Most work takes place in an office setting, and is not "rigorous." OI investigations do not involve felonies, but violations of the regulations contained in 10 Code of Federal Regulations (Energy). None of their work is "frontline law enforcement work, entailing unusual physical demands and hazards." In March 2007, the Director of OI admitted that OI personnel have never performed a single arrest. When OI was created, a proposed desk audit of investigative positions to determine the correct job classification was cancelled. OI personnel have indicated that "NRC is the best-kept secret on the 1811 circuit!" Letters from the NRC to the Civil Service Commission or Office of Personnel Management (OPM) regarding 1811 classifications and law enforcement retirement contained vague, erroneous, or misleading and false information. These letters indicated high percentages of criminal investigations, or investigations involving "matters of potential criminality covering a wide spectrum of violations." The position of "Investigation Specialist," later "Investigator," began with the Atomic Energy Commission (AEC). These positions were series 1810, located in the Division of Compliance, and the investigation reports issued were titled "Compliance Investigations." These positions were clearly originally established to conduct civil investigations to determine compliance with the regulations found in 10 Code of Federal Regulations (Energy). OI investigative personnel actually perform the duties and responsibilities of the series 1801 or 1810 classifications, and meet the 1801 or 1810 position classification guidelines and qualification requirements. Personnel classified in series 1801 or 1810 do not receive early retirement nor availability premium pay. The 1801 series guide, for example, specifically speaks to positions where investigations relate to violations of regulations and criminal matters are referred to another agency for criminal investigation. The result of the misclassification is that the NRC has unnecessarily paid OI investigators early retirement and premium pay (Administratively Uncontrollable Overtime [AUO] or "availability pay" of 25% of their salary), amounting to hundreds of thousands of dollars per year, and totaling millions of dollars during the period 1982-2010. The 25% availability pay is included in the OI investigators' basic pay, and therefore raises the "high three" salary years utilized to determine retirement pay. Also, a more beneficial percentage is used to calculate retirement benefits. A very conservative analysis indicates that the overpayments greatly exceed \$700,000 per year (the effect on Thrift Savings Plan agency contributions and retirement benefits of an additional 25% during an employee's "high three" years was not calculated). OI Investigations largely consist of interviews with a court reporter present, and document reviews. Between 7% - 30% of the cases are referred to the Department of Justice (DOJ) for prosecutorial review, but very few are accepted for further investigation, and even fewer result in convictions. In extremely rare cases, the OI investigator may provide assistance to the DOJ in its review or investigation, and may provide testimony in court or before a Grand Jury. In vanishingly rare cases, the investigator may assist in obtaining and executing a search warrant (accompanying the primary law enforcement officers), or collecting physical evidence. A chronology of events indicates that NRC senior management was well aware that NRC did not have the authority to conduct criminal investigations, had not given such authority to OI, and that OI did not perform criminal investigations. In the early years, OI did not even directly interface with the DOJ, but passed their investigations to the Office of Inspector and Auditor for referral to DOJ. Of central importance is a memorandum dated October 15, 1982 in which the NRC Deputy General Counsel advised that, lacking statutory authority, NRC personnel should not conduct criminal investigations under any circumstances. Subsequently, numerous submittals were made to OPM, claiming that all OI investigations were criminal investigations. Perhaps as importantly, on April 9, 1984, the full NRC Commission received a Briefing on Criminal versus Civil Investigations. A draft document giving OI the authority to conduct criminal investigations was discussed, with the Commission strongly objecting to and directing removal of the term "conduct" and substitution of the word "assist." Quotes: "we believe that the Commission - and OGC has taken this position in the past - that the Commission does not have independent authority to conduct criminal investigations." "Yes, our policy is to first serve our civil purpose and then help DOJ." This briefing led to a commission paper used as guidance in negotiating a Memorandum of Understanding with the Department of Justice.

comment #57 posted on 2011-02-05 01:08:01 by Andrew Williams

An issue which the NRC very much needs to address is the matter of the Yucca Mountain Nuclear Waste Repository. NRC Chairman Gregory Jaczko's actions regarding this matter have been extremely disturbing. Last year, the NRC's Atomic Safety and Licensing Board ruled that the Energy Department does not have the authority to withdraw its application to build the Yucca Mountain site. This decision is now appealed to the full NRC commission of which Gregory Jaczko is the chairman. In what took the ASLB 39 days to decide, the NRC commission is still deciding and has been doing so for over 200 days. It is quite obvious to everyone involved as well as the public that the decision is being delayed for political reasons. Of five NRC commissioners, two oppose Yucca mountain (Jaczko and Magwood), two support Yucca mountain (Ostendorff and Svinicki), and one recused himself from voting (Apostolakis). If the decision on whether to uphold the ASLB decision was made now, the vote would end in a tie meaning the ASLB decision would stand. This scenario is obviously untenable to Gregory Jaczko so he has delayed the commission's vote for over 200 days. It is worth noting, at this point, that George Apostolakis, the commissioner who recused himself from voting on this issue, did so because he earlier worked on the DOE license application for the Yucca project. Ironically, Gregory Jaczko, who was senate majority leader Harry Reid's science advisor and who helped Reid frame arguments against Yucca mountain, has NOT recused himself. In this blatantly political action, Jaczko has made it clear that he will use any means at his disposal to stop Yucca Mountain from going forward. Jaczko has already delayed a commission ruling for over 200 days and I have no doubt that he will delay further. In fact, I believe he will delay the decision until William Ostendorff's term as NRC commissioner expires in June of this year. This will give him free reign to decide the matter how he wishes. Gregory Jaczko has turned the once apolitical Nuclear Regulatory Commission into a political tool for Harry Reid to exert control over America's nuclear policy. He refuses to allow a vote to occur to decide the fate of the Yucca Repository until he can control the outcome. The NRC has lost credibility and will continue to lose credibility in the eyes of the American people until a decision is made by the commission. Gregory Jaczko is delaying a legal proceeding for political gain and should resign immediately from his position, as he has lost the confidence of the public. I also find it abhorrent that on this

blog an NRC moderator said "The decision to cancel the Yucca Mountain Project was made by the White House and the Department of Energy, not the NRC." The decision on whether or not to cancel Yucca Mountain is still in review! Furthermore, the NRC ultimately WILL decide on whether or not the project will go forward or not based on the commission's ruling.

comment #58 posted on 2011-02-05 08:06:49 by Tom Clements

The NRC has a regulatory role related to DOE's program seeking utilities to use weapons-grade plutonium fuel (MOX) in commercial nuclear reactors. After Duke Energy withdrew from a failed test of MOX fuel in 2008, DOE was left with no utilities which even had interest in MOX. Now, DOE has turned to the TVA and Energy Northwest (Richland, WA), and is attempting to convince them to use weapons-grade MOX, which has never been used on a commercial scale and never even tested in a BWR. But any use in BWRs or PWRs will need a full three cycles of testing, licensed by the NRC, to see if "batch" use of MOX can be licensed by the NRC. As DOE, Energy Northwest (EN) and TVA, which has a MOU with EN (see that in documents linked below) failed to provide information to the public about the interest in MOX by EN, that has been done by Friends of the Earth, in the public interest: "Secret Plan Exposed to Use Surplus Weapons Plutonium in Washington State Nuclear Reactor" - see: <http://www.foe.org/secret-plan-exposed-use-surplus-weapons-plutonium-washington-state-nuclear-reactor>

comment #61 posted on 2011-02-05 09:43:01 by Rod Clemetson

Part Two ==> China has grand plans to build enough nuclear power plants to supply 200 gigawatts by 2030, and do it with a modified (Gen-III) Westinghouse AP 1000 design. Now they've included TFMSR's in the plans, which may eliminate the need for the much more expensive Westinghouse LWR's. Their nuclear capacity is already replacing coal-fired plants amounting to 60 gigawatts since 2006. China has 13 nuclear plants in operation today, another 25 under construction, and 200+ more on the drawing boards. They aren't waiting around to sign any pollution reduction treaties, they're just *DOING* it! Now they're siezing the fantastic opportunity to leap straight ahead to Gen-IV designs, such as TFMSR and Liquid Fluoride Thorium Reactors (LFTR's). Please google "Energy From Thorium" and "Thorium Energy Alliance". I promise you'll be amazed. By the way, the United States is preparing to destroy (i.e., down-blend and bury) one thousand kilograms of Uranium 233 (currently classified as toxic nuclear waste). U233 can be used to produce many beneficial medical and industrial isotopes, and is an ideal "starter" fuel for TFMSR's. It's going to cost several hundred million dollars to destroy this valuable stockpile of U233. The United States could proceed with the destruction plans -- which would make the Chinese TFMSR success more difficult -- or, we could develop our own TFMSR program and beat the Chinese to the patent office. The latter notion gets my vote. So here's a new challenge for the NRC: adopt and adapt regulations to take into account the concept of liquid fueled reactors that can operate at atmospheric pressure and passively shut down in an emergency. The SCRAM process for a liquid fuel reactor will manually or automatically drain the molten core into holding tanks where the fuel solidifies and traps all the radioactive materials. What a concept!

comment #66 posted on 2011-02-07 09:09:06 by Mike Mulligan in response to comment #55

This is my test drive of the new car. If this is the new NRC...it is something? This transparency is powerful stuff...having people see events in their near immediacy....having people all see the information at the same time, or at least letting people see indiveguals interpretation of events, not just the bureaucrats' and licensee interpretation of events. ...It is transformational. Congratulations to the NRC!

comment #67 posted on 2011-02-07 12:08:23 by Moderator

I have read that the American military has more freedom as do research labs. If the military wanted to start developing their own Generation 4 reactor is there any reason they need to consult with the NRC? Moderator: This comment has been moved here from a different post.

comment #68 posted on 2011-02-07 12:11:53 by Moderator in response to comment #67

The NRC has jurisdiction over all civilian (e.g., non-weapon) uses of nuclear materials in the United States. For example, the NRC regulates a research reactor operated by the Armed Forces Radiobiology Research Institute, while Congress has directed DOE to seek NRC licensing for the Next-Generation Nuclear Plant, a Generation IV project. The White House can designate specific facilities as being under the self-regulation of either the Department of Energy or the Department of Defense. DOE self-regulates a few of its own research reactors under this authority. The NRC, DOE and DOD have been discussing other small modular reactor concepts, some meeting the Generation IV definition. Both DOE and DOD have indicated they will seek NRC licensing for any small modular reactor projects at their respective facilities.

comment #69 posted on 2011-02-07 14:18:48 by Raphael

I remember seeing "The China Syndrome" as a kid and it kind of freaked me out. I have always wondered how realistic was that movie in terms of what Jack Lemmon's character was freaked out about. Forty years later and I do not recall any big snafus, which makes me wonder about the comment above regarding nuclear infrastructure as "aging". Any insights on this?

comment #74 posted on 2011-02-07 22:13:44 by Billy in response to comment #54

since you did not include my earlier post it is obvious you are censoring posts you don't like. NRC is living a culture of corruption.

Jaczko must go.

comment #79 posted on 2011-02-08 15:54:16 by Moderator in response to comment #74

Posts that do not adhere to our Comment Guidelines cannot be posted. The full guidelines are available here: <http://public-blog.nrc-gateway.gov/nrc-public-blog-guidelines/> .

comment #99 posted on 2011-02-11 18:35:19 by A concerned citizen

I have been told by NRC staff that Chairman Jaczko has been directing the staff to take various policy positions in papers being sent to the Commission either for information or for a vote. Recent examples would be the paper on Yucca Mountain and the paper on Waste Confidence which is close to being delivered to the Commission. If this allegation is true, it is quite disturbing. Openness demands that the public know what the professional staff's views are before the Commission acts. If the staff's views are modified by the Chairman before policy papers are delivered, how will the public ever know the staff's real views?

comment #95 posted on 2011-02-11 15:50:37 by Moderator

I would like to know more about your review process. Many people are confused about the long periods of time that are invested in providing a report on requests. For instance is their a research team that needs to study the technology being reviewed? Is there a consultation with the professionals about their processes? Your role is a complex one to understand so any information that can explain why some reports can take years and not just months. Moderator: This comment has been moved here from a different post.

comment #196 posted on 2011-02-24 21:25:31 by Hamilton

I think it an important step in the right direction to put up this blog site. Collaboration and Communication is essential for projects of the magnitude as energy. Energy project affect everyone and everyone should know how things are going. Thanks.

comment #85 posted on 2011-02-09 10:41:26 by Mike Mulligan in response to comment #66

Official Transcript of Proceedings NUCLEAR REGULATORY COMMISSION Title: 10 CFR 2.206 Petition Review Board RE Vermont Yankee Thursday, February 3, 2011 CHAIRMAN QUAY: At this point I would like to turn it over to Mr. Mulligan. Mr. Mulligan: Hello. I've got to get this on the record. When you first pushed the button when I came on the phone, I heard a snippet of information and the snippet of information was, "Let's have a little fun." What was that about? CHAIRMAN QUAY: That was me. I was welcoming a new Board member. She hasn't been here before and I said, "This will be fun for you." The reason I said that is it's a new experience. It's an experience which all of us need to have is interacting and learning how to interact with the public. MR. MULLIGAN: Who is this? CHAIRMAN QUAY: This is Ted Quay. MR. MULLIGAN: Okay. CHAIRMAN QUAY: Okay? MR. MULLIGAN: Thank you

comment #88 posted on 2011-02-09 11:22:20 by Moderator

As of recent, the NRC is becoming more dependant on industry's ghost stories, basically unsubstantiation stories and events dressed up as fact. They and the industry are increasingly representing a filament or fragments of the facts, partial and incomplete evidence and truth in documents and testimony. The examples I would give is the engineering, design, licensing bases and UFAR of the VY AOG piping radiological containment system. A developing problem is a factual understanding of the technical meaning of environmental LLD...the standards of how long a sample stays in a scintillation counter that gives us a LLD...what is the minimum level of detection of tritium and what constitutes a indication of a radioactive leak? Don't give me it is 2000 picocuries per liter... Vermont establishes it at 670 to 700 picocuries. Has the NRC in their deeds and actions...in their hearts... been gaming the first emergent indication of a radiological leak at the nuclear plants? We are getting a lot engineering ghost stories out of the agency recently...the facts are so thin it is like translucent ghost and just fragments of the truth floating all around us. There was a lot of ghost floating around in the part 26 commissioner meeting yesterday, did you see them...in LERs, the ROP and the inspection reports...its like Halloween all time and all year long. The NRC is just becoming a "not facts" based agency! Mike Mulligan Moderator: This comment has been moved here from a different post.

comment #104 posted on 2011-02-13 00:49:53 by Kaye Swain

Thank you for a very informative article, along with interesting comments. It is rather disconcerting to consider all these issues with old and newer reactors, particularly for those of us caring for elderly parents who live far from us but near an older reactor. One more issue for those of us in the Sandwich Generation to have to take into consideration. I appreciate this website to keep us updated and informed.

comment #270 posted on 2011-03-07 18:23:05 by AMA Nation

Its great NCR have this open forum. And it's a good way of communication with the agency through people concerns.

comment #287 posted on 2011-03-11 12:47:51 by Moderator in response to comment #286

Yes, the NRC is following the impact of the earthquake in Japan and the resulting tsunami. Please see our latest blog post outlining NRC actions. However, we cannot speak for the Japanese government on their actions nor on the specifics of their plants. Holly Harrington Blog Moderator

comment #264 posted on 2011-03-05 05:13:49 by Paul Christopher Anzalone

Howdy from Missouri! Just would like to post that NRC.GOV is my home page on my personal home computer. That's all. Sincerely, Paul Christopher Anzalone

comment #391 posted on 2011-03-16 17:49:41 by mapsurfer

OK, I wonder who's bright idea it was to build a nuclear plant on a subduction plate. Even if we survived this catastrophe, what happens down the road when this planet gets into the ring of fire? We might not have a planet left to talk about. Hillary Clinton said on CNN that we didn't have the foresight to see this catastrophe, but I disagree with that.

comment #403 posted on 2011-03-16 21:23:01 by Art

I've done several searches via your NUREG page and the ADAMS interface for NUREG 0408 and other documents applicable to the Mark I containment and Mark I containment short and long term programs from the 1970s and 1980s. Why are these not available?

comment #705 posted on 2011-04-15 10:37:37 by Moderator

This comment has been moved to this page by the moderator: Hello, Recent Congressional correspondence related to Yucca Mountain SER was made publically available through several websites. They included a letter from Chairman Jaczko as well as another letter signed by four Commissioners. Read together, it appears that the Chairman is not following the will of the Commission as a whole in sending policy views to Congress. If true, this is a major breach of existing protocol and calls into question whether the NRC has a Commission or a sole Administrator. What's really going on? Thank you. Here's a link to one of the stories. <http://www.nucleartownhall.com/blog/rebellion-at-the-nrc-jaczko-outvoted-4-1-on-release-of-safety-report/>

comment #707 posted on 2011-04-15 11:04:07 by Moderator in response to comment #403

Unfortunately, many older documents that pre-date our electronic database have not been scanned and made available online, but you can still get them. For help, contact our Public Document Room. Contact information can be found here: <http://www.nrc.gov/reading-rm/contact-pdr.html>

comment #851 posted on 2011-04-29 22:58:56 by Kyle

Reg guide 1.8 outlines the training requirements for SRO's and will be looked at on a case by case basis. If an individual without a bachelorette degree had a technical background in quality control would they be considered for the instant SRO program if they have three level III's from the American Society of Nondestructive Testing, a CWI from American Welding Society and over ten years of nuclear experience?

comment #1642 posted on 2011-07-26 13:39:26 by Moderator

As much as nuclear energy proves effective on large scale production, a simple breach could be very catastrophic, solar and wind energy is the only safe way out. Lets embrace safe green energy. festow32@gmail.com Moved to Open Forum by the moderator

comment #693 posted on 2011-04-14 10:07:43 by TrueNorthist in response to comment #391

Non sequitur. This is a typically overwrought and hysterical response. The resulting effects from the earthquake and subsequent tsunami on the power station in Fukushima will in all likelihood result in a statistically insignificant number of casualties *of any kind*. The facilities in Japan performed extremely well considering the magnitude of the event, and the operators and authorities there have responded in a most timely and effective manner. I would suggest that the preceding posters' angst would be more effectively directed at banning walking outdoors, as the risk of injury and death from that engaging in that activity is exponentially higher.

comment #829 posted on 2011-04-26 03:11:27 by bestcarins

I agree with The resulting effects from the earthquake and subsequent tsunami on the power station in Fukushima will in all likelihood result in a statistically insignificant number of casualties of any kind

comment #980 posted on 2011-05-22 14:08:25 by Nancy Allen

Nancy Allen May 22, 2011 at 1:56 pm Your comment is awaiting moderation. I want to add my concerns about the dangers of station blackout and loss of cooling accident. The disaster in Japan showed everyone that emergency safety protocols must be updated in the US. The present emergency response cannot be considered adequate to address all events that would cut power to the reactors for an extended period of time. There is a need for power generation other than just back up diesel generators and the 4-8 hour back up

batteries. There should be an immediate effort by the NRC to have a power supply available for all natural catastrophic events including large magnitude earthquakes, tsunamis, tornadoes, hurricanes and more. If there is no emergency design criteria that can anticipate and fully prepare for this no new plants should be built and old ones relicensed only if they meet stringent NRC safety regulations with a back up alternative energy supply like wind, solar, geothermal and more.

comment #1021 posted on 2011-05-29 20:31:52 by wiwik

I agree with this I want to add my concerns about the dangers of station blackout and loss of cooling accident. The disaster in Japan showed everyone that emergency safety protocols must be updated in the US.

comment #1600 posted on 2011-07-22 16:40:55 by Moderator

Moved by the Moderator to Open Forum: At the heart of the problem is the fact that safety upgrades will impact the bottom lines for a significant portion of the U.S. reactor fleet. Reactor operators face significant capital expenses such as making SNF pools nuclear safety-rated, movement away from high density SNF storage, repair/replacement of degraded piping, hydrogen mitigation measures, etc.. For instance, According to EPRI, the additional per-reactor costs of placing SNF greater than five years of age into dry storage ranges between \$573 million (BWRs) to \$760 million (PWRs). Plus there is the potential for loss of revenue from the closure of aging reactors, that are no longer economical with these additional expense and/or are under siege by a growing number of states – especially BWR Mark I units, reactors in high-risk seismic areas, or those too close to major population centers (ie Indian Point). This is a big problem for those reactor owners operating in a de-regulated environment, notably Exelon with close ties to Obama, which don't have a captive rate-base to recover these expenses

comment #1279 posted on 2011-06-25 12:24:50 by Alister Wm Macintyre in response to comment #980

I share Nancy concerns. Remember Katrina - it was 3 days before serious help could arrive, other than Coast Guard helicopters, which were kept very busy. In fact FEMA has some guidelines how many days supplies people should try to have, because of how long until National Guard can get there, so similar thinking is needed for how long a power plant may be without aid, if there is a regional disaster like Japan, causing reduced capacity to respond to individual events among the thousands, and delays to provide aid, due to damage to transportation infrastructure. There can also be disruption to telecommunications, delaying SOS getting out. In anticipation of this, critical infrastructure ought to have satellite phone available, in case cell towers and land lines go down. Regional homeland security should know what are critical infrastructure, check in with them when regional disaster, to make sure their needs not neglected. There needs to be availability of helicopters and marine landing craft for search and rescue forces along flooded areas. Fukushima plant design has spent pools above containment, and no way to vent hydrogen, leading to holes in roof, radiation escaping, problem managing radioactive water. My understanding is that US design has spent pools closer to ground level, stored longer time period. I sure hope those buildings are earthquake resistant, well protected against flood waters.

comment #1301 posted on 2011-06-27 12:42:03 by Art in response to comment #1295

You might be looking directly for this, John. <http://pbadupws.nrc.gov/docs/ML1116/ML11167A114.pdf>

comment #1298 posted on 2011-06-27 12:18:32 by Moderator in response to comment #1295

Yes, it is available through our ADAMS system. Here is the link: http://wba.nrc.gov:8080/ves/view_contents.jsp

comment #1295 posted on 2011-06-27 10:00:11 by john

Nrc, Do you have a link to a transcript of the 6-8-2011 meeting with the group Beyond Nuclear where the petition to close the GE mark 1 plants in the US was discussed? Thanks

comment #1332 posted on 2011-06-30 06:25:17 by john in response to comment #1301

Thanks Art and moderator for helping with those links. Yes that's what I was looking for Art.

comment #1333 posted on 2011-06-30 06:32:56 by john

NRC, I have a question this event notification was from 6-8-2011. It seems to say that the Prairie Island plant's emergency generators were off line because of excessive outside heat. Am I reading this correctly? If so is this something that affects all nuclear plant backup generators or is it site specific? Thanks "BOTH EMERGENCY DIESEL GENERATORS DECLARED INOPERABLE DUE TO EXCESS OUTSIDE AMBIENT AIR TEMPERATURE "Outside ambient air temperature exceeded the maximum analytical value for operability for Unit 1 D1 and D2 Diesel Generators at 1349 CDT. The calculated limiting outside air temperature needed for equipment in the D1 and D2 rooms to meet their temperature limits is 100.5°F. Outside ambient temperature exceeded this limiting value and both Unit 1 safeguards diesel generators were declared inoperable at 1349 CDT on 6/7/2011. If outside ambient air temperature is above the maximum analytical value, components within the D1 and D2 diesel rooms may not be able to perform their required functions thus preventing them from fulfilling their safety function needed to mitigate the consequences of an accident (10 CFR 50.72 (b)(3)(v)(D)). "Unit 1 is currently in Mode 3, Hot Standby. Ambient outside air temperatures are at or near peak values for the day and expected to decrease approximately 1 to 2 degrees per hour which will restore ambient conditions to less than the

maximum analytical value. "The NRC Resident Inspector has been notified." The outside air temperature has peaked at 101.4°F which is unusually high for this location and is expected to drop below the 100.5°F limit shortly. The licensee does not anticipate that this condition will be repeated again any time soon."

comment #1323 posted on 2011-06-29 08:40:40 by Dolly in response to comment #1279

Yes, well it was 3 days before serious help could arrive because FEMA prevented people (regular folk you know, not "experts") from helping their fellows. I don't think I want the National Guard "protecting" me. These so-called homeland security agencies seem good at taking tax money but not so good on the protection end. I think we need protection FROM them. What did gun confiscation during Katrina have to do with protecting people from flood waters? Let us not forget that levees (thanks to the core of engineers) are blown to flood certain areas so that other "more important" areas are more protected from damage. Who decides? And on what criteria? Who among us is less or more important? I guess that's left up to the actuaries and the insurance companies.

comment #1347 posted on 2011-07-01 11:16:51 by Moderator in response to comment #1333

The plant declared both Unit 1 diesel generators inoperable based on the licensee's engineering analysis which is not only site specific: it is specific to the type of diesel generators used for Unit 1; their location; and the amount of space and ventilation available to the diesel and associated equipment. In this case, the major concern was not so much the possibility of direct damage to the diesel itself but impact on electrical and other auxiliary equipment located in the diesel room. If, in addition to the heat produced by a running diesel the ambient temperature in the diesel room is unusually high, the auxiliary equipment adjacent to the diesel may overheat and affect its operability. If Unit 1 diesel generators are not available, Unit 2 diesel generators which are of different design could be used to supply power to Unit 1 equipment. The NRC is still reviewing this issue for compliance with NRC regulations and design requirements.

comment #1429 posted on 2011-07-09 15:58:53 by Nathali

Thanks for the open debate

comment #1637 posted on 2011-07-26 09:43:34 by Moderator

hello this is biomonta from germany. as you know the time nuklear machines end in 2021 but other euopean countries like france build new machines. the question is, why can't we find a worldwide solution Moved by the Moderator to Open Forum

comment #1569 posted on 2011-07-21 14:07:55 by aldo in response to comment #53

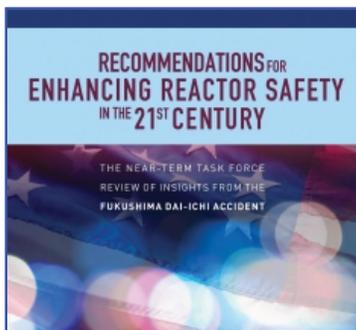
I agree with you Kathryn. Why government doesn't focus on research of environment friendly power resources like solar and wind systems? Nuclear reactor incidents can kill us all. Perhaps US can prevent nuclear reactor incidents what about other country with poor standard like North Korea, Iran, or Indonesia? If something happen with their reactor its hard to prevent radio active exposure event our location far away from their reactor. In this case, I believe we still have any chance to get radio active exposure.

comment #1630 posted on 2011-07-25 20:13:01 by AstroGremlin

We tolerate risk in all other technologies for generating energy. In fact we tolerate assured depletion of finite resources, loss of miners/drillers, and release of greenhouse gases. Yet nuclear energy has to prove ahead of time that it is utterly without risk. A scientific approach, were the nation to adopt it, would be to consider the risks of traditional energy production when compared with nuclear power. Unfortunately, the emotional has trumped the rational. That an aging reactor survived a direct hit by a tsunami is a triumph of engineering. If we applied the same expectations to automobile design, we would have to drive Bradley fighting vehicles (and go broke paying for them).

Japan Task Force Report Now Public

posted on Wed, 13 Jul 2011 16:03:07 +0000



While finding that events like the Fukushima accident are unlikely at U.S. reactors and U.S. reactors can be operated safely, the NRC's Japan Task Force report made public today proposed improvements in a variety of areas, including "loss of power" response, spent fuel pools and preparedness for natural events. The report has been given to the Commissioners, who will be formally briefed on it next Tuesday. On July 28, the task force will hold a public meeting on the report, and members will appear before the Advisory Committee on Reactor Safeguards on Aug. 17. Additional meetings may be scheduled to seek public input on the recommendations. Any action on the report's recommendations is up to the Commission. The report, which noted that over the years "patchwork of regulatory requirements" developed and suggested it be replaced with a more logical, systematic and coherent regulatory framework, was produced by team of in-house experts who collectively had over 130 years of reactor regulatory experience. This report will be followed about six months later by a more in-depth report as additional information about the Fukushima reactors

becomes available. Other highlights from the report: The current NRC approach to regulation includes requirements for protection and mitigation of design-basis events, requirements for some “beyond-design-basis” events through regulations, and voluntary industry initiatives to address severe accident issues. “Consistent with the NRC’s organizational value of excellence, the Task Force believes that improving the NRC’s regulatory framework is an appropriate, realistic and achievable goal.” Continued operation and continued licensing activities do not pose an imminent risk to public health and safety, the report added. The report, among other things, recommends: • Requiring plants to reevaluate and upgrade as necessary their design-basis seismic and flooding protection of structures, systems and components for each operating reactor and reconfirm that design basis every 10 years; • Strengthening Station Black Out (SBO) mitigation capability for existing and new reactors for design-basis and beyond-design-basis natural events – such as floods, hurricanes, earthquakes, tornadoes or tsunamis – with a rule to set minimum coping time without offsite or onsite AC power at 8 hours; establishing equipment, procedures and training to keep the core and spent fuel pool cool at least 72 hours; and preplanning and pre-staging offsite resources to be delivered to the site to support uninterrupted core and pool cooling and coolant system and containment integrity as needed; • Requiring that facility emergency plans address prolonged station blackouts and events involving multiple reactors; • Requiring additional instrumentation and seismically protected systems to provide additional cooling water to spent fuel pools if necessary; and requiring at least one system of electrical power to operate spent fuel pool instrumentation and pumps at all times. The Task Force noted it will take some time for a full understanding of the sequence of events and condition of the spent fuel pools. The report said based on information available to date the two most cogent insights related to the availability of pool instrumentation and the plant’s capability for cooling and water inventory management; • Requiring reliable hardened vent designs in boiling water reactors (BWRs) with Mark I and Mark II containments; • Strengthening and integrating onsite emergency response capabilities such as emergency operating procedures, severe accident management guidelines and extensive damage mitigation guidelines. The full report can be found here: <http://pbadupws.nrc.gov/docs/ML1118/ML111861807.pdf>. Broad recommendations are contained in the Executive Summary, and details on recommendations can be found in Appendix A.

Eliot Bremner
Public Affairs Director

Comments

comment #1500 posted on 2011-07-16 17:42:48 by Eric Wilson

That seems like a great idea about the watertight enclosures. You would think that waterproofing would have been thought of if you are building something near the coast.

comment #1463 posted on 2011-07-13 13:57:49 by Charles Bell

The Leak Detection system design requirements in BWRs should be looked at more closely. From what I remember studying leak detection in RHR rooms, that only a single power supply to the leak detection in an RHR room met design requirements. That meant that if that power supply was lost and a leak occurred in a room, the room might not get isolated. That never made sense.

comment #1469 posted on 2011-07-13 22:49:11 by kirk forney@aextremewealthmechanism.com

Regulation and system design must be monitored and closely watched at all times to make sure that we do not have any types of problems like Japan.

comment #1465 posted on 2011-07-13 18:40:32 by Alan Horn

Alan Horn, Nuc PE, July 13, 2011 A little while ago my son and I were discussing the problems at Fukushima and I noted that the loss of the diesels due to flooding was one of the problems. He asked why the diesels were not higher in the building and I said because the heavy mass would be a problem in earthquakes. Since I had served on submarines, and he knew this, he said why not put the diesels in watertight enclosures - basically like submarines. There could be inlet snorkels and high exhaust stacks protected from damage that would allow the diesels to run even if the surrounding part of the plant was under water. This idea should be credited to him, Thomas Horn.

comment #1534 posted on 2011-07-18 10:12:32 by patrick

These proposals are a good start but not nearly enough. Come on ,a 72 hour battery, I think we have already established that the power can be out for months or years. But this point appears to be moot, and I would caution you about making too many bold statements, the corporations have gotten wind of this report. Here is what they had to say: "We're still digesting the contents of the report," said Tony Pietrangelo, senior vice president of the Nuclear Energy Institute, the industry's trade association. But Pietrangelo told reporters that the NRC needed additional input from the industry before approving any new regulations. "I might have done it a little bit differently in separating out what the near-term Fukushima lessons learned are versus a sweeping review of the entire regulatory framework," Pietrangelo told reporters Wednesday. "I think we can do it more efficiently, more effectively, more holistically, but that takes time." Pietrangelo said the U.S. nuclear industry is likely to see higher costs in the aftermath of Fukushima Daiichi, but "It remains to be seen which recommendations will be implemented and how they'll be implemented." "At this point, I think the entire report should be vetted with not only the commission, as it will be, but with the broader spectrum of stakeholders across the board to sort it out and get added perspective to the table about how to proceed," he said."

<http://www.cnn.com/2011/US/07/13/nuclear.safety/index.html> Well, reading between the lines it looks like what the nuclear industry trade organization is saying is that this is going to cost them money, and they plan on telling the NRC what they will or will not do. Again I would caution the NRC about giving the public any bold assurances. I'd hate to see you guys eating crow and saying things like “well the task force’s findings were merely recommendations, the industry has already addressed the problem with

VOLENTARY methods” or “ we don’t want to regulate so strictly that we create a environment that is HOSTILE TO BUSINESS and STIFLES INOVATION”. http://en.wikipedia.org/wiki/Eating_crow Once the corporations get wind of the costs all these “recommendations” will most likely be out the window. There is money to be made the corps can’t be bothered by the potential destruction of the country. I suspect calls will be made and these recommendations will be quietly forgotten, after all money talks and what was it that walks? Also, the recommendation that vents be installed at the GEMK 1s is garbage. If the NRC had a shred of credibility they would shut these plants down immediately. Every time this containment system is tested it fails. And you already have vents, they had them in Japan, guess what, the containment still failed! One more thing, I see that you guys refused to extend the PRM-50-96 dead line. I think you said something like the events at Fukushima were not related to the petition, even though it focuses on long term cooling and spent fuel pools, two major issues at Fukushima. I’m just glad that you decided to post it for public comment in the first place. At least now when the grid goes down there will be a record that you were warned about the danger repeatedly. I have absolutely no hope that this petition will be adopted ,if the nuclear industry is scoffing at 72 hour batteries what will they say about a requirement for two year emergency cooling of spent fuel pools, they’ll laugh in your face. I’m sorry but it appears that the NRC is a rubber stamp agency, that is totally in the pocket of industry, may God have mercy on us all.

comment #1733 posted on 2011-08-02 15:47:30 by Richard

The Leak Detection system design requirements in BWRs should be looked at more closely. From what I remember studying leak detection in RHR rooms, that only a single power supply to the leak detection in an RHR room met design requirements

Radiation and Smoke Detectors

posted on Fri, 15 Jul 2011 13:24:02 +0000

In the late 1930s, a smoker inadvertently made a discovery for detecting smoke. The Swiss physicist Walter Jaeger tried to invent a sensor for poison gas. His device failed: small concentrations of gas had no effect on the sensor's conductivity. Frustrated, Jaeger lit a cigarette—and noticed that a meter on the instrument registered a drop in the current. Smoke particles had apparently done what poison gas could not. Jaeger's experiment was one of the advances that paved the way for the modern smoke detector. Here's something else surprising: Smoke detectors work because of radiation. They are an example of the beneficial uses of radiation and radioactive materials. The first significant installations of commercial smoke detectors started in the US around 1969. Since then, the installation of smoke detectors has saved thousands of lives, numerous injuries, and millions of dollars. It has been reported that smoke detectors are installed in 93 percent of US residences. However, it is estimated that more than 30 percent of these alarms don't work, as users remove the batteries or forget to replace them in a timely manner. In the US, while smoke detector manufacturers and distributors are subject to NRC regulation, end users of smoke detectors (consumers) are typically not because of the small amount of radioactive material used in each detector. The most common type of smoke detector consists of an ionization chamber, electronic circuitry, a power source that is usually a battery, an alarm mechanism, and an outer case. The ionization chamber is the main component. It consists of a source of ionizing radiation, usually Americium (Am-241) positioned between two oppositely-charged electrodes. The radiation source is a very small metallic foil disc about 3 to 5 millimeters in diameter. To give you an idea of the small amount of radiation that is emitted by this disc, a person flying coast-to-coast gets more radiation from cosmic sources in one trip than a person sitting in the close proximity of an ionization smoke detector gets in a whole year. Here is how the device works: Particles emitted during radioactive decay of the Am-241 interact with neutral air molecules flowing through the chamber and convert them to positive ions by removal of electrons. The removed electrons then form negative ions by attachment to other neutral molecules. The resulting positive and negative ions are attracted toward the electrodes, causing a small, reasonably steady current between the electrodes. The electronic circuitry monitors this current and, if the current drops below a preset level, which it will if the air entering the chamber contains enough smoke, it triggers an audible alarm. If you are interested in the technical evaluations the NRC has done on smoke detectors and other consumer products containing radioactive material please see [NUREG-1717 “Systematic Radiological Assessment of Exemptions for Source and Byproduct Materials”](#).

Ujagar Bhachu
Mechanical Engineer

Comments

comment #1542 posted on 2011-07-19 10:08:52 by Chris in response to comment #1537

While it may be time consuming and expensive, it is not impossible. Look up the story of the "Radioactive Boy Scout". http://en.wikipedia.org/wiki/David_Hahn He used Americium from smoke detectors.

comment #1815 posted on 2011-08-08 13:35:43 by Moderator in response to comment #1799

There are no restrictions as to the number of smoke detectors containing Am-241 that can be disposed of at any one time by an end user because the potential radiation dose to both landfill workers as well as other members of the public is very small on a per detector basis. Rather, when the NRC examined the potential radiation dose from disposal of such smoke detectors the review was done on a cumulative dose basis assuming 10 million such detectors were disposed of annually across the country. See NUREG 1717 Subsection 2.15.4.3 beginning on page 2-221 of the NUREG (<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1717/>)
Ujagar Bhachu

comment #1498 posted on 2011-07-16 17:28:14 by Eric Wilson

Is there any kind of risk of the radioactive substance becoming a danger? I worry that with so many smoke detectors around the country, someone could get a large amount of them and use them together, are there types of smoke detectors without a source of radiation?

comment #1535 posted on 2011-07-18 12:06:47 by Andrew J.

Very interesting article, I too wonder about the cost to our bodies to the little radiation, would love to hear more on the subject.

comment #1550 posted on 2011-07-20 09:28:38 by Moderator in response to comment #1538

The primary radiation from a smoke detector is atomic particle called an alpha particle, which can travel only a short distance but has the ability to charge the air molecules in the ionization chamber inside the smoke detector thereby creating the current necessary to operate the detector. A microwave oven creates electromagnetic waves, which in the frequency spectrum from 300Mhz to 300Ghz, are called microwaves. Ujagar Bhachu

comment #1650 posted on 2011-07-27 23:45:20 by enuresis

What a fabulous invention to stumble upon. A great story.

comment #1494 posted on 2011-07-16 07:39:04 by Matthew

Pity that my home country (New Zealand), is against any and all forms of Nuclear Power. I would love to enjoy the cost savings of having a nuclear power plant supplying the entire country, but sadly we are a tiny country of left-winged radicals.

comment #1551 posted on 2011-07-20 09:29:42 by Moderator in response to comment #1537

With regard to the David Hahn, he did in fact extract the radioactive sources from smoke detectors and accumulate varying amounts of other radioactive materials from other commercially available sources. However, he never successfully built any type of device with those materials while causing a very localized contamination problem that needed to be professionally cleaned up. Ujagar Bhachu

comment #1537 posted on 2011-07-18 16:04:16 by Moderator in response to comment #1498

Yes, there are optical smoke detectors that do not rely on radioactive material. Those smoke detectors are more effective at quickly detecting smoldering/smoky fires while the ionizing smoke detectors (those containing radioactive material) are more effective at quickly detecting fires that proceed quickly to flame without as much smoke. Because each type of detector is more effective in certain situations, many fire experts recommend that they be used in combination with each other along with carbon monoxide detectors. With regard to concern about aggregation, each smoke detector contains a very small amount of radioactive material, it therefore would be both time consuming and expensive to collect even a modest amount of material, and even if a large quantity of detectors was accumulated the form of the material inside each detector makes dispersal of the material difficult. Ujagar Bhachu

comment #1538 posted on 2011-07-18 16:54:33 by duane m

Huh never knew there was radiation in a smoke detector, thats kinda weird. Anyways I imagine I get more radioactive exposure from a freshly microwaved meal then from a smoke detector can put out anyway.

comment #1531 posted on 2011-07-18 01:10:42 by Derek

This is a very interesting article and pertains to a subject that I have thought about for years. I do understand the small amount of radiation that a person is exposed to in this situation. However, what happens when you contemplate all of the different exposures we face today? There have been some great technological advances which have made life more convenient. I wonder at what cost to our bodies. You know, cell phone radiation, air port screenings, microwaves, xrays and MRIs and the list goes on and on. I believe the rate of cancer was much lower in the pre-50s era. I often times wonder if we are killing ourselves.

comment #1651 posted on 2011-07-27 23:45:45 by James in response to comment #1494

I disagree Matthew, your country's anti nuclear status places it on a pedestal in terms of examples to follow. It has actually been one of the best forms of indirect marketing on the world stage, which actually makes it a capitalistic endeavour. Multi B\$ Tourism sector or a few bucks off power? No brainier. With today's renewable energy, your argument is even more moot.

comment #1652 posted on 2011-07-27 23:46:44 by anzacare

an amazing story of how necessity breeds invention!

comment #1791 posted on 2011-08-06 09:16:09 by solarpanelsforcheap in response to comment #1494

I think New Zealand uses a lot of solar power. I admire that - Solar Power has a lot of potential.

comment #1799 posted on 2011-08-07 08:03:22 by David

Whilst this is an interesting article, it should have included some basic safety information relating to the use and disposal of ionisation smoke detectors. Where I live, it is permissible to dispose of them in domestic trash (max 1 per bin, I believe), but I don't know if this is universally the case.

NRC Chairman Speaks to the National Press Club

posted on Mon, 18 Jul 2011 20:02:35 +0000

The recent events in Japan and their implications for nuclear safety in this country are foremost on everyone's mind. Since the events began to unfold four months ago, the NRC has taken strong and immediate actions to ensure the continued safety of the nation's nuclear power plants. The Commission established a task force, made up of some of the agency's most experienced and expert staff. The task force had full access to the NRC headquarters and regional staff and the NRC site team in Japan. And, as part of its review, the task force reached out to FEMA as well as the Institute for Nuclear Power Operations. Additionally, the task force considered information from stakeholders and monitored international efforts and reports by the International Atomic Energy Agency, the Nuclear Energy Agency, and others. Last week, the task force completed its 90-day review and submitted its recommendations to the Commission. The Commission made the full report publicly available here: <http://pbadupws.nrc.gov/docs/ML1118/ML111861807.pdf>. The task force will formally present the report to the Commission at a public meeting tomorrow morning. In its review, the task force did not find any imminent risk to public health and safety from the continued operation of the nation's nuclear power plants. The task force was clear, however, that any accident involving core damage and uncontrolled radioactive releases of the magnitude of Fukushima – even one without significant health consequences – is inherently unacceptable. In addition to 12 sets of recommendations, the task force calls on the Commission to redefine “adequate protection.” In NRC parlance, “adequate protection” is the standard of safety that the NRC must require of nuclear power plants and other licensees to allow them to operate. Over the past 25 years, there have been few occasions when the Commission has revisited this standard and redefined how safe is safe enough. We did so after September 11th, and now, the task force believes, we should do so again. While the decision of whether we redefine this core definition of safety is for the Commission to make, it's clear that Fukushima was an unacceptable accident and we need to take strong steps to ensure that type of accident does not happen in the United States. In order to move forward openly and transparently, I have proposed to my Commission colleagues a roadmap for taking action on the report. The centerpiece of this proposal is a series of public Commission meetings. In the lead-up to these meetings, there would be opportunities for stakeholders to provide feedback on the task force's recommendations and for the NRC staff to provide additional information to the Commission. I see no reason why the Commission cannot provide clear direction on each of the task force recommendations in less than 90 days. That is the time the Commission gave the task force to do its job, and I believe that is more than enough time for the Commission to outline a clear path forward. We know that some changes are in order, and none of us want to make rushed, poor decisions. We must move forward, however, with the urgency called for by these safety issues. As Chairman, I am committed to ensuring that the Commission has all the information it needs to make timely decisions and take decisive actions in response to the task force's recommendations. That is why I am calling today for the NRC and the nuclear industry to commit to complete and implement the process of learning and applying the lessons of the Fukushima accident within five years – by 2016. This will take a lot of hard work, strong and decisive leadership from the Commission, and an even stronger commitment by our licensees to put safety first. We have no other choice. The costs of inaction are simply too high. I believe that we are more than up to the task of seeing this effort through. This is not an NRC problem or a nuclear industry problem. This is an imperative for nuclear safety. The American people are looking to everyone involved in nuclear safety – from the operators to the regulators – to do their part in continuing to protect the public.

Gregory Jaczko
NRC Chairman

Moderator Note: The full transcript of this speech is available at: <http://www.nrc.gov/reading-rm/doc-collections/commission/speeches/2011/s-11-016.pdf>.

Comments

comment #1578 posted on 2011-07-21 16:28:53 by lashay lewis

We are going in the right direction with this.

comment #1547 posted on 2011-07-19 18:49:09 by Mike

I think this is a step in the right direction, nuclear power is a very dangerous tool and should be treated with caution.

comment #1631 posted on 2011-07-25 20:38:32 by AstroGremlin

There's an old saying, "The perfect is the enemy of the good." Translation: Unrealistic expectations make any accomplishment in the real world effectively impossible. Of course we expect and deserve safety, but engineering every reactor to withstand a direct hit by a tsunami is unrealistic, magical (political) thinking. The obstacle to the safe use of nuclear power is cost, imposed by regulation that surpasses all competing forms of energy generation. It's not fair, not smart, and not forward thinking. Moreover, all other utilities should be held to similar standards or regulation becomes restriction of fair competition. Thanks for listening.

comment #1598 posted on 2011-07-22 13:13:31 by Gilbert Ryan

Thanks for letting us know the crucial steps needed to safeguard our nuclear facilities. Comforting indeed!

comment #1779 posted on 2011-08-05 11:22:02 by David

I live within five miles of a nuclear power plant. I can't say that the idea of a three mile island episode has never entered my mind. But, it is really not possible for me to move away. I'm comforted by the thought that you people do take the public's safety to heart. I just hope we never have to worry about this plant becoming something like we have seen in Japan earlier this year.

comment #1735 posted on 2011-08-02 20:29:22 by cupcake boxes wholesale

I think that the safety of all Americans should always be at the forefront of our actions. Mr. Jaczko is calling for the us to move in the right direction.

NRC Commissioners Briefed on Near-Term Report

posted on Tue, 19 Jul 2011 17:31:15 +0000



The NRC Commissioners today were briefed by the near-term task force that had been appointed to look at immediate lessons learned from the Japan nuclear emergency in March. Upfront, the task force told the Commissioners: • A similar sequence of events in the U.S. is unlikely; • Existing emergency measures could reduce the likelihood of core damage and release of radioactive materials; and • There is no imminent risk from continued operation and licensing activities. But the task force is recommending a variety of changes to NRC procedures, regulations and policies, including a review of the agency's "defense-in-depth" philosophy, which refers to multiple layers of protection within and around a nuclear power facility. The task force specifically cited the need for a focus on preparing for natural disasters and long-term loss of all A/C electricity at a plant. The task force also recommended strengthening emergency response capabilities. The recommendations need Commission approval to move forward. Chairman Jaczko urged his fellow commissioners to review and act up on the report's recommendations within the same 90-day time frame given the task force to generate the report. The task force has scheduled a follow-up meeting on July 28th to discuss the report's findings and recommendations with the public, the industry and other interested groups. More information will be available on that meeting here: <http://www.nrc.gov/public-involve/public-meetings/index.cfm>. A video archive of today's meeting is available here: <http://video.nrc.gov/>. The slides from today's meeting are here: <http://www.nrc.gov/reading-rm/doc-collections/commission/tr/2011/>. The entire task force report is available here: <http://pbadupws.nrc.gov/docs/ML1118/ML111861807.pdf>.

Eliot Brenner

Public Affairs Director

Comments

comment #1584 posted on 2011-07-22 05:06:03 by prestiti INPDAP

I think the initiatives always come late, it is true that there is a risk because, in theory, neither were in Japan. Any preventive measure is good and positive. This meeting did not convince me.

comment #1624 posted on 2011-07-25 13:59:04 by answering service orange county

Glad there wasn't a knee jerk reaction to shut down everything nuclear. If you want clean fuel, it is really the only choice right now. Wind, solar, magnetic, etc. just don't do enough. If we are trying to get away from fossil fuels, then we can't get rid of the one viable alternative too...

comment #1816 posted on 2011-08-09 01:24:44 by Brian Fraser in response to comment #1624

Instead of wasting our time and money with commercial nuclear power, let's move on to more forward-looking technologies that are a lot safer and more cost competitive: <http://www.mnn.com/green-tech/research-innovations/blogs/5-breakthroughs-that-will-make-solar-power-cheaper-than-coal>

comment #1546 posted on 2011-07-19 16:59:36 by

No matter how many meetings, additional Regulations and band aids you try to fix all the inherent dangers with nuclear power, it wont work. Nothing will stop this madness until we have our own Fukushimer and then the blamegame will be something to behold

comment #1559 posted on 2011-07-21 01:54:22 by Brian Fraser

I am interested in knowing more about the regulatory and business environment for nuclear waste disposal. Let us SUPPOSE there was a simple, inexpensive, safe way to destroy the radioactivity in nuclear waste on site at the power plant. And SUPPOSE that the reprocessing, packaging, transportation, storage, and concerns about terrorism and accidents would be minimal. This would, in my opinion, be a "best case" scenario. My questions are: 1. Would nuclear power plant managers be willing to use such a technology? 2. What kind of regulatory obstacles would such a process face? 3. Would the implementation face fierce opposition from those industries which reprocess, transport, and store nuclear waste? 4. What are good sources of information to help answer these questions?

comment #1565 posted on 2011-07-21 10:11:27 by Patrick

I agree Nancy, this all smells of a PR campaign, with no real results. If the NRC was really interested in safety they would order that all SFPs have emergency power separate from the grid and petroleum industry that will last as long as there is enough residual heat in the spent rods to create a boil, or around a year or two. And harden all critical circuits against EMP current surge. And I agree with Anonymous as well. Nothing will change here until we have our very own disaster. In the final recommendations in this blog post it says: "A similar sequence of events in the U.S. is unlikely;" and "There is no imminent risk from continued operation and licensing activities." I would say it was safe to say that on 3-10-2011 the regulators in Japan would have agreed 100% with these statements if they were made about the nuclear industry in Japan. Alas, those who do not learn from history are doomed to repeat it. Case in point the 23 GEMK1 BWR in the US, these are the exact same design as in Fukushima. It is called a containment system, this is a misnomer because the last thing this design does is "contain". Every time this design has been tested it has spewed radiation into the environment. The NRC's and GE's own engineers have been warning for years about the dangers of this containment system. The NRC then allowed vents to be installed that would actually bypass containment and allow radioactive gases to be vented directly into the environment. Now they recommend making even more "patches" to this containment system. These plants should be shut down, the containment system does not work. NRC, please feel free to correct me if I am in error on any of the assertions I have made, thank you.

comment #1544 posted on 2011-07-19 14:20:26 by Nancy Allen

I would think if the NRC was really interested in safety of the public that immediate implementation actions involving an increase in length of time for emergency back up power in a LOCA and SBO accident, including monitored off site generator trucks with high response priority for traffic access -even in evacuation situations - would be ordered as of TODAY !! Anything less is just PR.

comment #1638 posted on 2011-07-26 09:46:38 by patrick in response to comment #1617

While I may not be as smart as someone at the NRC, I am forced to question why you think the vents at your plants will enable your plants to survive when the plants in Japan HAD HARDENED VENTS AS WELL AND FAILED TO STOP A MELT DOWN AND MASSIVE RADIATION RELEASE! <http://www.gereports.com/venting-systems-in-mark-i-reactors/>
<http://www.csmonitor.com/USA/2011/0520/Nuclear-power-safety-Latest-on-Japan-crisis-fuels-new-concern-in-US> Now I'm sure you will say "but our vents are different" the GE report that I site says that all the vents are plant specific, so this statement would be technically true, but inherently dishonest. I assume that these "hardened" vents are intended to serve a purpose, namely to prevent a containment breach and massive radiation release, so do you have a documented case where they have served this purpose? I'm sorry if my ramblings have confused you. I know I am not as smart as a NRC regulator, so I will attempt to stream line my questions. 1. Hardened vent systems were in place at the three GEBWR MK1s that lost power for a short time in Japan. Can you tell me out of the three times this design was tested with the harden vent system, how many times was a meltdown and massive radiation release averted? 2. While I'm sure you will employ some verbal gymnastics to avoid directly answering question number one, in the unlikely event that you answer directly, what makes you believe that the vents in the US will do anymore good than those in Japan? The GE MK1 has been a flawed design from the beginning, GE knows it, and the NRC knows it. I believe the NRC avoids addressing the risks of these plants to assure high level regulators lucrative employment with the nuclear utilities when they leave the NRC. I can live with this conclusion much better than I can with the alternative, which is that the nrc actually believes these plants are safe. After seeing the NRC approach to regulation and risk assessment I would recommend everyone start practicing their Spanish, it's only a matter of time before we are living with our South American neighbors for the next 10,000 years while North America decontaminates

comment #1629 posted on 2011-07-25 18:52:22 by Brian Fraser in response to comment #1608

Kenny and Nancy: rest assured that we can do our own PR too. If you can't educate the government or the NRC, then educate the public. Use this free PowerPoint presentation or make one like it:
<http://scripturalphysics.org/4v4a/YourKidCanDestroyNuclearWaste.pps> Press ESC key to exit. Good source material and references can be found at: "Adventures in Energy Destruction" at <http://scripturalphysics.org/qm/adven.html>

comment #1627 posted on 2011-07-25 18:07:17 by Brian Fraser in response to comment #1601

I think the best example of "greed and denial" is about the processing of nuclear waste. We have know for decades how to get rid of the stuff: "Radioactive isotope decay rate or half-life can be increased or decreased as needed to deactivate radioactivity or to increase shelf life of radioactive isotopes. Currently many investigators/experimenters have reported half-life anomalies and have demonstrated repeatability of the various processes. The deactivation/neutralization of radioactivity in isotopes by the several demonstrated processes clearly suggest the possibility of full scale processing of radioactive nuclear materials to deactivate radioactive nuclear materials." "In 1964 we thought and believed that radioactivity in nuclear waste would soon be history on planet earth. As history has proven us wrong, we now know and understand that there is a fortune, billions yearly, to be made by saving every scrap of radioactive nuclear waste and trying to bury it in Yucca Mountain and in cleaning up spills, leaks, and escaping radioactive particles from decaying containment schemes. We were just looking at the wrong goal post. No one receiving the funds has any interest in eliminating radioactivity in nuclear waste. Nuclear Half-Life Modification Technology could reduce the cost to a fraction of the cost that is experienced today. " ("Radioactivity Deactivation at High Temperature in an Applied DC Voltage Field Demonstrated in 1964". Larry Geer & Cecil Baumgartner, http://www.gdr.org/nuclear_half.htm) There are more technical details (and methods) in my article "Adventures in Energy Destruction" at <http://scripturalphysics.org/qm/adven.html> The real problem is clearly political, not technical. If nuclear power plant operators were required to destroy their nuclear waste on site, or even before it was removed from the reactor, they would find a way to do it.

comment #1623 posted on 2011-07-25 12:27:24 by Nancy Allen

PR gobbledygook cannot not hide the fact that a catastrophic natural event CAN happen at any time at a US nuclear plant - that it is not impossible - and hiding the collective NRC head in the sand by saying there are no "immediate safety issues" will not make that fact go away. The time to make safety upgrades to the regulatory process is NOW as Chairman Jazcko recommended in his comments on fixing adequate protection.

comment #1608 posted on 2011-07-23 12:16:35 by Kenny

Mark my words. Nothing will happen until something drastic happen. as Nancy said , It's just PR

comment #1617 posted on 2011-07-25 10:38:10 by Moderator in response to comment #1565

Mark I BWR containments and the hardened vent systems meet NRC requirements and the agency continues to conclude they will perform their designed functions to prevent, and if necessary, mitigate any accidents.

comment #1621 posted on 2011-07-25 11:37:55 by Moderator in response to comment #1596

The task force recommended that the Commission redefine the level of protection that is considered adequate for low likelihood, high consequence events so that protection is required for events similar to the Fukushima accident. Given the low likelihood of such events, and the existing mitigation measures, the task force did not identify any immediate safety issues. However, several near-term actions were identified by the task force to enhance safety. The task force recommended that these actions be implemented through orders, since the use of orders is an appropriate regulatory mechanism for a time frame of requiring action within a few months or a few years. The task force also recommended rulemaking for other actions desired in the time frame of two to six years. In addition, the task force concluded that the current regulatory requirements and reactor oversight program continue to serve as an appropriate basis for the reasonable assurance of adequate protection of public health and safety until the decisions on the task force's recommendations are considered by the Commission and resulting actions as appropriate are implemented. The recommendation for the issuance of Orders to initiate enhancement or improvement of existing safety is not contradictory to the view that there is reasonable assurance that a nuclear plant can continue to operate safely until the proposed activities are reviewed or completed. The Near-Term Task Force is briefing the ACRS subcommittee on its final report on August 16, 2011, and the ACRS full committee will meet to discuss the task force report in September 2011.

comment #1626 posted on 2011-07-25 18:01:01 by Brian Fraser in response to comment #1624

I would not say that the ONE viable alternative is NEW nuclear plants. Other technologies are rapidly becoming cost competitive with nuclear power. One example is solar power: RSi's ChemArc Process has greatly reduced the cost of photovoltaic silicon. <http://www.engineeringtv.com/video/The-Chemistry-of-RSis-ChemArc-P> And relevant advances are being made in storage of electrical power: "Utilization of poly(ethylene terephthalate) plastic and composition-modified barium titanate powders in a matrix that allows polarization and the use of integrated-circuit technologies for the production of lightweight ultrahigh electrical energy storage units (EESU)" <http://www.freepatentsonline.com/7466536.html> , <http://en.wikipedia.org/wiki/EEStor> "This paper reports the successful creation of a new ultracapacitor structure that offers a capacitance density on the order of 100 to 200 Farads per cubic centimeter; versus the current state of the art capacitance density of 1 F/cm³." ("New mega-farad ultracapacitors", Bakhoun, E., 2009, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4775259 "We report the observation of extremely high dielectric permittivity exceeding 10⁹ and magnetocapacitance of the order of 10⁴% in La_{0.875}Sr_{0.125}MnO₃ single crystal." ("Giant dielectric permittivity and magnetocapacitance in La_{0.875}Sr_{0.125}MnO₃ single crystals", R. F. Mamin, T. Egami, Z. Marton, and S. A. Migachev, 29 March 2007; DOI: 10.1103/PhysRevB.75.115129 ; PACS numbers: 77.22.+d, In the last citation, a dielectric permittivity of over a BILLION (one thousand million) is simply astounding, and would also be useful in antigravity research. (<http://scripturalphysics.org/4v4a/ADVPROP.html#Biefeld-BrownEffect>) Old battery charging technology is being pulled out of the

closet too. One implementation uses an AC electropolishing technique to increase the charge/discharge cycling life times of ordinary batteries by a factor of 20 to 30 times the usual. http://pages.ripco.net/~marnow/uk/NASA_Vargo_Start.html
<http://www.freepatentsonline.com/2752550.pdf> This is just ONE example in ONE industry. There are many others, and some are astonishing--real "poop-a-brick" developments! America's nuclear future is headed to the trash bin. Unfortunately, there will still be plenty of nuclear waste leftover. But there are simple, safe, inexpensive ways to get rid of that too.
<http://scripturalphysics.org/qm/adven.html>

comment #1601 posted on 2011-07-22 19:44:09 by Claudine Cremer

The only reasonable reaction a sane person could have to the disastrous events at Fukushima would be to immediately terminate any future plans for the expansion of nuclear power production and move with expeditious speed to shut down currently operative nuclear reactors and replace their energy generation with safe, renewable, ABUNDANT natural sources including wind, wave, hydro, geothermal, solar, magnetic fields and any others yet to be identified and developed. What do you people not get? Can you really be so insulated and immobilized by greed and denial? You are remarkable and a hallmark of the arrogance, selfishness and stupidity of human beings.

comment #1596 posted on 2011-07-22 08:12:03 by Joseph King

The NRC Report from "The Near-Term Task Force Review of Insights From The Fukushima Dai-Ichi Accident" stated the following: "Therefore, continued operation and continued licensing activities do not pose an imminent risk to public health and safety." Yet, the Task Force recommends Orders. I thought the NRC had to have a safety or security basis to issue an Order. So, how can the plants be safe, but the NRC needs to issue Orders? This seems to be a huge contradiction to me. The Task Force recommends a dramatic change to the regulatory framework related to adequate protection. If adequate protection needs to be fixed, how can the Task Force consider the continued operation of the nuclear plants safe? From reading speeches from Chairman Jaczko, this seems to me that this is his desire. Did Chairman Jaczko and/or Chairman Jaczko's staff lobby the Task Force members regarding any of the recommendations? Why was the Advisory Committee on Reactor Safeguards (ACRS) not allowed to review and approve the Task Force recommendations? ACRS is a diverse panel of independent experts that advise the Commission. What better group is there to review the Fukushima Dai-Ichi Accident and make recommendations to the Commission?

comment #1662 posted on 2011-07-28 14:20:11 by Brian Fraser in response to comment #1623

I remember bits and pieces of an accident study from many years ago. A man fell from a wooden ladder and injured his back because one of the rungs popped out when he stepped on it. The investigation revealed that the rung was positioned over knots in the wood. The study identified over 30 factors that contributed to the accident. The rails were cut from the same piece of wood making the knots (and knot holes) the same size, the knots ended up on the same side of the ladder on the same rung, the ladder was leaned against the wall with the knots pointing down (so they could pop out), the knots were the same size as the rung, and so forth. If any ONE of these factors had been absent, the accident would not have occurred. The lesson is that accidents depend on a very unlikely chain of events occurring. The longer the chain, and the lower the probability of each event, the less likely for the accident to occur. That is why they are called accidents! But the possibility is still there. Accidents WILL still happen, and the results can be catastrophic with a 1000 megawatt nuclear reactor. The same is true of overstuffed, relatively unprotected cooling ponds. I am not convinced that nuclear power plants are nearly as safe as we have been led to believe. Additionally, highly reliable systems tend to breed complacency. And if any of those safety systems are run by something as flakey as software, we are in real trouble!

comment #1693 posted on 2011-08-01 11:39:54 by Moderator in response to comment #1621

Due to the very short timeframe provided for completing its review and report, the task force did not seek independent review of its recommendations from stakeholders, including the ACRS, NRC staff, industry or public. In the Commission memorandum directing the formation of the task force, the Commission specifically directed "The ACRS should review the report as issued in its final form and provide a letter report to the Commission." The task force is scheduled to brief the ACRS on August 16th. The task force made its recommendations and drafted its report independent of the chairman and the four commissioners.

comment #1692 posted on 2011-08-01 09:07:42 by Joseph King in response to comment #1621

How come the ACRS was not involved with reviewing the recommendations from the Near-Term Task Force Report before it was issued? Providing the ACRS with an information brief after the report is released is not the same as having the ACRS write a letter report. ACRS is a diverse panel of independent experts that advise the Commission. What better group is there to review the Fukushima Dai-Ichi Accident and make recommendations to the Commission? Was the ACRS deliberately cut out of the process before the Task Force Report was released? Also, you did not respond to my question. Did Chairman Jackzo or Chairman Jaczko's staff lobby the task force regarding any of the recommendations?

comment #1766 posted on 2011-08-05 01:43:22 by Steven

I live close to a nuclear plant and think that all the testing is important but the energy itself is safe. It gives more energy then say coal and in that sense is better for the environment. I am hoping that is something the commission reviews. Thank you.

comment #1741 posted on 2011-08-03 09:20:34 by Joseph King in response to comment #1621

You (Moderator) stated, “Due to the very short timeframe provided for completing its review and report, the task force did not seek independent review of its recommendations from stakeholders, including the ACRS, NRC staff, industry or public.” However, Chairman Jaczko’s Tasking Memorandum – COMGBJ-11-0002 – NRC Actions Following the Events in Japan, dated March 23, 2011, states the following for Near-Term Review: “The task force efforts should be informed by some stakeholder input but should be independent of industry efforts.” Why did the Task Force not seek some stakeholder input from the NRC staff and ACRS in accordance with the Chairman’s Tasking Memorandum? From March 23, 2011, to June 23, 2011, the ACRS held three full committee meetings and 20 subcommittee meetings. Matter of fact, the ACRS held a subcommittee meeting on Fukushima on May 26, 2011. NEI, DOE, and public interests groups gave presentations; however, the NRC staff did not give a presentation. Why not? How can you say that there was not sufficient time for the task force to meet with the ACRS before the final recommendations when the ACRS meet 23 times? In addition, Commissioner Apostolakis’ vote sheet for the Chairman’s Tasking Memorandum requested in the Long-Term Review section the following change, “The report should be provided to ACRS for review prior to being submitted to the Commission.” However, it seems for political reasons that this request was changed to “The ACRS should review the report as issued in its final form and provide a letter report to the Commission.” It seems to me that the Task Force was advising or making recommendations to the Commission like ACRS; however, the Task Force was not formed in accordance with the Federal Advisory Committee Act (FACA). When I read the applicability of FACA, it seems to me that FACA applied to the Task Force. Why did you think FACA did not apply to the Task Force? On June 6, 2011, the NRC Inspector General issued a Report regarding Yucca Mountain (OIG Case No. 11-05). OIG Case No. 11-05 stated, “He [Chairman Jaczko] acknowledged using forceful management techniques to accomplish his objectives but maintained that these techniques were necessary to facilitate the work of the Commission.” OIG Case No. 11-05 went on to state, “Several current and former Commission staff members said the Chairman’s behavior caused an intimidating work environment. A former Chairman told OIG that the Chairman often yelled at people and his tactics had a negative effect on people. He described the behavior as ruling by intimidation.” Still further, OIG Case No. 11-05 stated, “Chairman Jaczko acknowledged that he sometime loses his temper.” The Report went on to say, “He [Chairman Jaczko] concluded that his behavior created an environment sometimes in which it is difficult for people to work with him, and he regretted that.” OIG Case No. 11-05 found that “OIG determined that the Chairman controls information provided to the other Commissioners based on his interpretation of his statutory authority as Chairman versus the authority given to the Commission.” Based on OIG Case No. 11-05, it seems to me that Chairman Jaczko and/or Chairman Jaczko’s staff would use “forceful management techniques” to get his views into the Task Force Report especially since “Chairman Jaczko told OIG that as the Chairman of the agency he is responsible for managing the agency’s workload and workflow, and in that respect he has overall management authority of the staff.” Since Chairman Jaczko believes he has overall management authority of the staff, it seems to me that this would extend to the Task Force since the Task Force members are staff. So, besides formal Commission meetings, did Chairman Jaczko and/or Chairman Jaczko’s staff have any interactions with any Task Force members from March 23, 2011, to July 12, 2011? Any formal meetings? Any non-public meetings? Any informal meetings? Any informal discussions in the hallway, elevator, or cafeteria? Any phone conversations? Any voice mails? Any conference calls? Any video conferences? Any text messages? Any tweets? Any social media interactions? Any faxes? Any hand-written notes? Any memos? Any other digital, electronic, or paper media?

The Importance of Inspectors and Inspections

posted on Wed, 20 Jul 2011 18:59:52 +0000



When the NRC Senior Resident Inspector at the [Perry Nuclear Plant](#) in Ohio arrived at the plant on April 22, he stopped first at the outage control office, which oversees work being done during the plant’s refueling and maintenance outage. One job of interest – removing a neutron detector that was lodged in the reactor core – had not been completed during the night as scheduled. The inspector inquired further and learned that the job had been halted when higher-than-expected radiation levels were encountered during the work. After gathering more details, he conferred with the [NRC’s Region III Office in Lisle, Ill.](#), and began the process that led to a special inspection into the circumstances surrounding the incident. The NRC has two or more resident inspectors assigned to each nuclear plant on a fulltime basis to assure the plant is operating safely. Their efforts are supplemented by inspections performed by specialists from the regional office or NRC Headquarters in Rockville, Md. When something unexpected happens at the nuclear plant, particularly an event with safety implications, the NRC may dispatch inspectors to begin a special inspection to review the circumstances surrounding the incident and determine what additional agency action, if any, is called for. The inspection is called a “special inspection” when it is managed by the regional office, and an “augmented inspection team” when the significance of the event warrants additional staff from the headquarters or other regional office. An inspection can also be headed by an “incident investigation team” for major issues that bring in NRC experts not previously involved with the plant and headed by a senior NRC manager. The Perry incident led to a special team inspection with two Region III radiation specialists at the Perry site backed up by three inspectors working in the regional office. Special team inspections occur several times a year at reactor sites across the country. In the past five years there have been 42 special inspections at 31 reactor sites. Thus far there have been nine special inspections in 2011. Once the regional staff determines that an event warrants a special inspection a “charter” is prepared that lays out the plans for the inspection. The inspections typically involve interviews of plant personnel involved with the event, review of documents associated with it, and assessment of the causes and consequences of the event. The inspectors also look at the plant staff’s response to the event and make sure the plant promptly addresses any immediate safety concerns. Once the inspection is completed – and the preliminary results presented to plant management – the inspectors prepare a written report to be issued within 45 days. Like all NRC inspection reports, the special inspection report is promptly made available on the NRC website. The results of the inspection determine the

NRC's next steps. If violations are found, there may be further inspections and increased oversight to assure that the problems are corrected. The Perry special inspection report was issued July 6 and it documents the preliminary finding that the event was of "low-to-moderate safety significance," a "white finding" in the NRC's assessment of findings ranging from "green" for minor safety significance and continuing through "white," "yellow," and "red" for increasing safety significance. (It is available via [ADAMS](#) using MLML11187A121.) The inspectors identified three apparent violations associated with the event – failing to appropriately evaluate the radiological hazards associated with the work, failing to have adequate procedures in place, and failing to properly control work in a high radiation area. The radiation exposures received by the workers involved were a small fraction of the NRC's limit for nuclear plant workers, but the NRC inspectors determined that it was "fortuitous" that more significant radiation exposures did not occur. After reviewing the NRC inspection report, the Perry plant may accept the NRC's findings or provide additional information in writing or in a "regulatory conference," which would be open to the public. The NRC would then review the response before making its final determination on the issue. A final "white" determination would lead to a detailed inspection to evaluate the causes and corrective actions for the event and the plant's efforts to prevent of recurrence of the violations.

*Mark Satorius
Regional Administrator
Region III*

Comments

comment #1555 posted on 2011-07-20 15:10:28 by Thomas Saporito

Excellent work by the NRC resident inspector - clearly on top of his game protecting not only the nuclear works at that particular nuclear plant - but also the public from a possible nuclear accident. Thomas Saporito Senior Consultant

comment #1556 posted on 2011-07-20 15:16:38 by steamshovel2002

Why did the Cooper Plant and Perry plant refueling rad incidences happen in such a short time frame this year, taking things recklessly out of the core...how abnormal is this and what do they have in common...?

comment #1597 posted on 2011-07-22 11:58:23 by Moderator in response to comment #1556

NRC identifies issues at nuclear plants and responds to them by evaluating the situation, making sure the plants corrects the problem, assessing if violations occurred and taking appropriate enforcement action. The NRC responded to issues at both plants individually as they are not related. At Perry, NRC dispatched a special inspection that resulted in a preliminary finding. Should the finding become final, the agency will issue a violation and conduct additional inspections to make sure the problem has been understood and resolved by the plant. Mark Satorius

comment #1564 posted on 2011-07-21 09:59:47 by Jeff

Thanks for the interesting read. I'm really interested in inspections, even in different industries like this, since I'm a home inspector in NJ.

comment #1567 posted on 2011-07-21 13:26:36 by asparagusutter

During the Fukushima meltdown, the EPA compared our human exposure to less than that received during a transcontinental air flight. The cited transcontinental airflight involves US citizens making a volitional choice. The airflight citation becomes an effort at psychological behavior acceptance control when the Fukushima radiation results in non choice US citizen human exposure. The Academy of Scientists. The ALARA objective is the most important factor in guiding actions aimed at radiation protection. The US Agencies response to Fukushima fallout was EMERGENCY related. Prevention of low level FUKUSHIMA radiation exposures and accumulative exposures of US citizens appear to be lost with medical exposures in an unprepared government and medical accountability.

comment #1607 posted on 2011-07-23 12:10:50 by Jenni Cortez

inspectors and inspection needed to prevent violations. especially the nuclear issue, will be a big problem when we make mistakes

comment #1619 posted on 2011-07-25 10:46:52 by Bali Ratih

the important thing is how to evaluate the causes and corrective actions for the event and the plant's efforts to prevent of recurrence of the violations.

Protecting Our Nation

posted on Fri, 22 Jul 2011 15:56:38 +0000



The NRC has just posted on its website an updated report about the NRC's security activities in the 10 years after the September 11th terrorist attacks. The report, titled "Protecting Our Nation," (NUREG/Br-0314 Rev. 2) outlines important

upgrades in security, emergency preparedness, and incident response related to nuclear facilities and radioactive materials. Some highlights in the report include information on: • Force-on-Force security inspections, which incorporate both tabletop drills and simulated combat between a mock commando-type adversary force and nuclear plant security force. • Cyber security as an emerging tool that both domestic and international adversaries can use to exploit potentially vulnerable systems. The NRC is working with its federal partners to address this complicated issue. • Incident response exercises as a way to prepare for potential terrorist attacks or other incidents, such as major storms, that could disrupt operations. • Intelligence assessments used to evaluate and warn of possible threats of attacks or other malevolent activities directed at nuclear facilities or radioactive material licensees. The report can be found at: <http://148.184.174.31/reading-rm/doc-collections/nuregs/brochures/br0314/index.html>.

Rebecca Clinton
Security Specialist

Comments

comment #1625 posted on 2011-07-25 15:41:51 by Frank

The issue of cyber security is very important and the nation needs to be very much aware of how to protect themselves from cyber attacks. I'm glad the topic is being discussed.

comment #1648 posted on 2011-07-27 19:49:11 by Carlos

"The NRC is working with its federal partners to address this complicated issue." this is a potential big threat, I'm glad to see this issue is being addressed. Can you imagine what would happen if a cyber attack took out the internet!

comment #1609 posted on 2011-07-24 09:45:14 by bench grinder

This blog is so important. Here I have learn many things that will be helpful for me to contribute for the nation. thanks NRC.

comment #1610 posted on 2011-07-24 16:37:31 by Zubar u Osijeku

This is a very serious topic and I'm glad that someone is promoting it this strongly. Keep up the good work, Rebecca!

comment #1611 posted on 2011-07-24 17:53:44 by Mark

Are these updates not well over due? Surely someone could have come up with something sooner, especially when its an entire nation which is in danger.

Access Authorization Regulations Lead to Arrest

posted on Tue, 26 Jul 2011 13:40:25 +0000



An illegal immigrant from Mexico was recently arrested after using an invalid Arizona identification card to enter the Palo Verde Nuclear Generating Station. Power plant security officers reported the suspicious ID to the Maricopa County Sheriff's Office, which promptly made an arrest. The man, a contract worker, did not have access to the most secure areas of the plant. He was arrested on felony charges -- criminal trespass on a commercial nuclear generating station. The incident underscores the NRC's [access authorization regulations](#), which are designed to make sure only the most trustworthy and reliable individuals gain access to vital safety areas of a nuclear power plant. As with many industries and facilities, contract companies are used for projects and basic maintenance such as concrete work. In the case of the Palo Verde plant, the individual was doing work just inside an area known as the owner-controlled area (OCA), which houses no vital safety areas, information or systems. The area requires a valid ID issued by a state or government, and a legitimate reason for entering the OCA, such as previously approved work. The worker had no access to the most secure areas of the plant with what is called

the "protected area." This area is only accessible by badged personnel, who have undergone stringent screening and background checks, or by individuals being escorted by approved plant personnel. The site can be thought of as a series of rings representing areas with varying degrees of security checks and measures. The reactor, turbine building, and other safety related equipment, for example, are housed in the highly secured and heavily guarded inner-most ring with access controls, intrusion detection and strategically placed observation towers. It is the responsibility of the nuclear power plants licensed by the NRC to vet individuals and approve their access to the plant -- including those working under contract through other companies. The NRC will be taking a look at the Arizona Public Service Company's actions related to the arrest of the contract worker to make sure our regulations were followed. The good news is that the system worked to identify someone who didn't belong and the appropriate law enforcement action was taken.

Lara Uselding
Region IV Public Affairs Officer

Comments

comment #1649 posted on 2011-07-27 20:15:06 by Peter Crane

According to a Fox News report on the incident, this individual was a worker doing remodeling work at an administrative building on the Palo Verde site. (My inference is that he had no particular intention of getting within the precincts of a nuclear site, and went there only because that was where the contractor he worked for happened to have a contract.) He has been CHARGED with being in the country illegally. This NRC blog post seems to have convicted him of that crime already, which is utterly inappropriate, and should be corrected. As an aside, the arrest was made by Sheriff Joe Arpaio of Maricopa County, who has built a political career on arresting Hispanics on charges of being in the U.S. illegally and then treating them cruelly, including creating the nation's first female chain gang, keeping inmates in tents where temperatures rise to dangerous levels, and providing inadequate and often spoiled food. In 2008, Federal Judge Neil Wake found that Sheriff Arpaio's treatment of prisoners violated Constitutional standards, through overcrowding, overheating, malnourishment, and deprivation of adequate medical and mental health care, and he ordered corrective action; in 2010, he found that his orders had not been followed. The Ninth Circuit Court of Appeals upheld Wade's 2008 decision in the 2010 case of *Graves v. Arpaio*, in which it stated that prisoners were "often given food that is overripe, moldy, and generally inedible," and kept in excessively hot conditions. The NRC blog speaks of "Protecting our nation." That term is broad enough to include both keeping nuclear power plants safe from potential attackers and ensuring that the Constitution is adhered to -- not least the principle that arrestees are presumed innocent until proven guilty. -- Peter Crane, NRC Counsel for Special Projects (retired)

comment #1643 posted on 2011-07-26 15:56:14 by Kurt Penner

Should all facilities operating under the NRC umbrella at a minimum be required to validate all incumbent identification documentation prior to entering a regulated site?

comment #1644 posted on 2011-07-27 06:05:19 by Zubar u Zagrebu

Maybe people don't agree with this, but I think that everyone that trespasses in to a Nuclear Generating Station should take the consequences for it. You just can't do that, only God knows what he would do in there if he would get his fingers on any instruments.

comment #1646 posted on 2011-07-27 10:57:44 by EMT Training

I think this is a pretty isolated event. Nuclear facilities tend to be some of the most secure in our country.

comment #1659 posted on 2011-07-28 09:11:01 by Moderator in response to comment #1643

Individuals requesting access to a commercial nuclear power plant regulated by the NRC are required to present a valid photo ID such as a driver's license or passport issued by a state or by the government. NRC licensees currently use a number of methods to validate true identity of individuals requesting access to nuclear plants. In some instances this includes document scanning technology to authenticate the photo ID.

comment #1677 posted on 2011-07-29 19:06:24 by in response to comment #1643

getting on the site has no risk because all of the plant equipment is inside the protected area. thorough background checks are required to get into the protected area or vital area where there is operating equipment. in general, the worst you could do in the owner area is break into someone's email or something like that (corporate or site facilities are usually in the OCA).

SATAN's Code: The Early Years of Accident Models

posted on Thu, 28 Jul 2011 13:29:04 +0000



[caption id="attachment_1515" align="alignright" width="130" caption="The IBM 650 circa 1950s"] When the first mass-produced computers hit the stage in the 1950s, nuclear engineers saw the opportunity to use them to help run accident scenarios. It was a good idea that took decades to become reality and the computer limitations created early uncertainty about reactor safety. In 1954, Westinghouse experts put together a homemade digital computer that read punch tape. With a practiced ear, you could tell from the computer sounds which program was being run. In 1959, Battelle Memorial Institute developed an early Loss-of-Coolant-Accident model for a heavy-water plutonium reactor. The program was run on an IBM-650/653, the first mass production computer ever developed. The 650 weighed more than a 1955 Cadillac Deville, had vacuum tubes, and used a punch-card reader. Even if it had the memory and someone willing to load the 50 million cards, it would take six months to boot up Microsoft Windows 7. Fortunately, Battelle's code was a mere 166 cards. It calculated the behavior of just one fuel rod (modern reactors have thousands of rods) and took minutes to produce one data point. For the sake of speedier results, gross simplifications were made. For example, an ideal accident code would have broken a reactor cooling system into many small volumes and done extensive calculations on each one to accurately simulate the complex conditions that existed throughout the reactor core and piping. But to run it on mid-1960s computers could take days. As a result, Westinghouse's FLASH code used just three volumes to represent the whole reactor system. At least they had computers. Neither the Idaho National Labs, a center for accident-code

development, nor the Atomic Energy Commission had them. INL relied on weekend visits to the University of Utah. At the AEC, engineer Norm Lauben begged time from the National Bureau of Standards. Norm drove to the Bureau's headquarters in Gaithersburg, Md., in the morning to submit his job on the 12,000-line RELAP-3 code, and returned after lunch to pick up the results. Engineers were confident that the codes would prove reactor designs were overly conservative. Their optimism proved unfounded. When Westinghouse proudly unveiled its 70-volume SATAN code in 1970, AEC staffers discovered errors in the code indicating that the company's Emergency Core Cooling System might fail in an accident. The problems of the SATAN code helped lead to a major rulemaking hearing in 1972 on the adequacy of both emergency cooling system designs and accident codes. Those hearings revealed just how embarrassingly uncertain and rudimentary the early codes were about what happened during an accident. The AEC and later the NRC had to make a huge investment in creating more robust – and accurate – codes. Additional research that produced the RELAP-5 Code is still used today as an industry standard worldwide.

*Tom Wellock
NRC Historian*

Comments

comment #1755 posted on 2011-08-04 16:38:42 by Ad

great info, it just shows how computers have been used to our advantage in designing things like reactors which could never have been done manually. They are also good for predicting and simulating scenarios with many factors as even a team of humans couldn't produce as accurate results as a computer can.

comment #1661 posted on 2011-07-28 10:49:42 by Nancy

This is an amazing admission. I was an intervenor in the Pilgrim Plymouth MA licensing in 1970 and MIT grad student Dan Ford and I brought up the possibility of failure of the emergency core cooling system. Many others testified around this time about this possibility including John Gofman and Frieda Berryhill. In my case we were dismissed as nuts. The plant was licensed. This says the faulty code was discovered in 1970 and rewritten in 1972. The NRC pats itself and the AEC on the back for this but it seems to me that their optimism was unwarranted and they came close to making a terrible mistake which could have proved catastrophic. Now, in the present, they again refuse to listen to those, including Chairman Jazcko, who urge caution after Fukushima and want safety measures upgraded quickly. Is history about to repeat itself, the NRC once again acting with too much confidence, and a US nuclear catastrophe even more possible?

comment #1660 posted on 2011-07-28 10:48:16 by asparagusutter

Thanks for your historical transparency. Remember the idea of using water spray inside non fractured containment vessel and steam became a compressed layer smacked against the inside of the containment vessel with naught fire and heat quenching. Is Greg Gibson still with you-worked with him during his first years out of Georgia Tech in 1970?

comment #1676 posted on 2011-07-29 17:59:58 by Richard

Esto indica que el código defectuoso fue descubierto en 1970 y reescrito en 1972. El NRC palmaditas en sí y la AEC en la parte posterior para esto, pero me parece que su optimismo era injustificado y que estuvo a punto de cometer un error terrible que podría haber sido catastrófico.

comment #1689 posted on 2011-08-01 04:00:52 by sgwhois

At least they had computers. Neither the Idaho National Labs, a center for accident-code development, nor the Atomic Energy Commission had them. INL relied on weekend visits to the University of Utah. At the AEC, engineer Norm Lauben begged time from the National Bureau of Standards. - Agreed
