OPSMPEm Resource

From: West, Stephanie
Sent: Monday, July 06, 2015 11:43 AM
To: OPSMPEm Resource; OPSMNPEm Resource
Subject: Blog Archive for May and June 2015
Attachments: blog-published-2015-07-01@09-36-09.pdf

OPA

NRC

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Subject: Blog Archive for May and June 2015
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From: West, Stephanie

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U.S. NRC Blog

Archive file prepared by NRC

Indian Point Transformer Fire

posted on Tue, 12 May 2015 14:01:14 +0000

Diane Screnci Senior Public Affairs Officer Region I

NRC inspectors are following up on a transformer fire at Indian Point Energy Center over the weekend. The NRC Resident Inspectors for Indian Point – who work at the plant on a daily basis – are monitoring activities at the site while plant workers are troubleshooting and looking for the cause of the fire on the Unit 3 main transformer.

The transformer fire happened at about 6 p.m. on Saturday night. A sprinkler system initially extinguished the flames, but it reignited and was put out by the onsite fire brigade and local fire departments. The fire caused the reactor to automatically shut down, as designed. All safety systems worked as designed. There was no danger to the public and no release of radiation. The reactor is stable. Unit 2 continues to operate at full power.

Plant operators declared an "unusual event" – the lowest of the emergency classifications – in accordance with plant procedures. All plants have procedures, approved by the NRC, that dictate how events are classified to ensure appropriate steps are taken to respond to the event and to communicate the event to local and state agencies and the NRC.

In addition to cooling provided by fans, the main transformer is also cooled by oil flowing through it. On Saturday, oil from the transformer spilled into the plant's discharge canal. Entergy has been working to determine how much oil was spilled.

The transformer that failed carries electricity from the main generator to the electrical grid. The same type of equipment can be found at any plant that generates electricity. It is on the electrical generation side of the plant – not the nuclear side.

As far as next steps go, plant employees will determine what happened and why. They will repair or replace any equipment that was damaged in the fire. The plant can restart when ready. NRC inspectors will be monitoring Entergy's actions every step of the way, ensuring workers are taking all appropriate actions.

As we do with any event at a plant, we'll continue to review what happened and how the plant responded. If need be, we'll send additional inspectors to the site to look further into the event and its effects.

Comments

comment #1566531 posted on 2015-05-12 13:01:41 by Deb Reed

> This plant is unsafe and outdated…close it down!!!

comment #1566445 posted on 2015-05-12 10:16:07 by Mike Mulligan

> Did the failed transformer have indications of the minor off gassing or contaminants in the oil indicating the transformer was failing prior to the fire? Was there other indications of maintenance problems being unaddressed prior to the fire? Was it another run-to-failure maintenance philosophe with Entergy? Should the plant have been shut down before the fire and they replaced the degrading transformer? Mike Mulligan Hinsdale, NH

comment #1571877 posted on 2015-05-19 10:04:12 by Dan Williamson in response to comment #1568528

> Are you going to hold an entrance meeting for this special inspection you're conducting here? Will you be billing the NRC for all these postulated questions, or is this just your display of altruism? Do you have a bottomless barrel of questions?

comment #1571912 posted on 2015-05-19 11:54:24 by drbillcorcoran

> The Kitty Litter Principle applies: If you dig beneath the surface, you'll find the lumps. The current set of blunders could relate to superficial digging in response to past blunders. See also http://public-blog.nrc-gateway.gov/2015/05/19/nrc-inspectors-head-to-indian-point-3s-electrical-supply-room/comment-page-1/#comment-1571909

comment #1573418 posted on 2015-05-23 10:14:35 by drbillcorcoran in response to comment #1568680

> Most nuclear power plants have several dozens of institutions and programs, each of which could have or should have prevented this event and each of its harmful outcomes by simple, prudent, compliant, competent, businesslike activity. Please list them all. Please ask IPEC to list them as failed, missing, and/or ineffective barriers in the root cause evaluation/ analysis.

comment #1566974 posted on 2015-05-13 04:50:51 by Steven Dale

> How long has this transformer been is service? And is their a life expectancy for a transformer like this? And is their a regular maintenance cycle for power transformer like this?

comment #1566645 posted on 2015-05-12 17:56:06 by Gianni Zanini

> Sounds like a non-event to me, only requiring the local fire department and environmental agency to worry about. Or is there a risk of collateral damage to the nuclear side of the plant?

comment #1566648 posted on 2015-05-12 17:59:44 by steamshovel2002

> Paul, I yanked that “run to failure” phrase right out of a Pilgrim plant NRC inspection report. They all know I am mocking heck out of the lot of them. It is more a addiction to gambling problem..maximizing short term profits over long term gains. They gamble because there are positive incentives, until there is not... I doubt they don’t have an onsite spare or it could acquire one quickly. The vast amount of transformers used in the USA aren’t manufactured in the USA (95%). I always like USA engineering codes and standards. What foreign country made that failed Indian Point transformer? They use foreign uranium also?

comment #1568689 posted on 2015-05-15 14:05:44 by drbillcorcoran in response to comment #1568665

> If there are any NRC requirements, which, had they been adhered to, would have prevented the actual discharge to the river the way it happened, then noncompliance with them was a cause of the discharge. This should be a line of inquiry.

comment #1568685 posted on 2015-05-15 13:52:50 by drbillcorcoran in response to comment #1568681

> Is the moat described in the Updated Final Safety Analysis Report?

comment #1568681 posted on 2015-05-15 13:47:30 by Moderator in response to comment #1568528

> There is a rock-filled moat surrounding the main transformers at Indian Point. Its purpose is to capture oil that is released from a transformer should it fail. We are still reviewing the event. Neil Sheehan

comment #1568680 posted on 2015-05-15 13:46:31 by Moderator in response to comment #1568529

> Our review of the May 9th transformer failure event at the Indian Point 3 nuclear power plant is still under way. We will be providing our findings in an upcoming inspection report. Neil Sheehan

comment #1568676 posted on 2015-05-15 13:27:50 by drbillcorcoran in response to comment #1568665

> The question is still relevant and valid. Please list all of the NRC requirements, which, had they been adhered to, would have prevented the actual discharge to the river the way it happened?

comment #1568665 posted on 2015-05-15 13:09:46 by David Andersen in response to comment #1568529

> As the moderator stated elsewhere, oil discharges to bodies of water af under the purview of the New York Department of Environmental Quality and apply not only to nuclear plants but at any generating facility using oil filled transformers.

comment #1568526 posted on 2015-05-15 08:55:28 by drbillcorcoran in response to comment #1567882

> What carcinogens and other environmental hazards were in the oil?

comment #1568528 posted on 2015-05-15 08:57:16 by drbillcorcoran

> Was it a "dike", a "dyke", a "berm", a moat", or what? How is it described in the plant drawings? How is it described in the Updated Final Safety Analysis Report? At any rate it did not do what was required. This means, in plain engineering English, it failed. An item fails when its service demand is not met by its service capability. What conditions, behaviors, actions, and inactions resulted in the failure? What were the earlier, better, cheaper, safer, more compliant ways that those conditions, behaviors, actions, and inactions and their causations could/should have been discovered?

comment #1568529 posted on 2015-05-15 08:59:30 by drbillcorcoran

> Please list all of the NRC requirements, which, had they been adhered to, would have prevented the actual discharge to the river the way it happened?

comment #1566498 posted on 2015-05-12 11:54:13 by Paul Lindsey in response to comment #1566445

"Was it another run-to-failure maintenance philosophe with Entergy?" What would be Entergy's incentive to run a major piece of equipment like this until failure? It's not like there are huge spare transformers just sitting around. Do you think Entergy is saving money with the plant not producing power?

comment #1566488 posted on 2015-05-12 11:31:58 by Moderator in response to comment #1566445

The NRC resident inspectors are monitoring Entergy’s investigation into the cause of the transformer failure. We’ll assure their investigation is comprehensive. Diane Screnci, Sr. Public Affairs Officer

comment #1572344 posted on 2015-05-20 09:21:56 by drbillcorcoran in response to comment #1571877

Dan, Your concerns are valid. I would like NRC and the industry to arrest the serious trend in downstream identified safety noncompliances that threaten nuclear power as a non-GHG emitting power option. What's your approach?

comment #1569819 posted on 2015-05-16 20:58:48 by drbillcorcoran in response to comment #1567338

How can the life expectancy be 40-50 years for an item that failed recently?
http://pbadupws.nrc.gov/docs/ML1208/ML12088A511.pdf

comment #1567960 posted on 2015-05-14 11:07:09 by Moderator in response to comment #1567882

That’s a question for the New York State Department of Environmental Conservation. Diane Screnci

comment #1567956 posted on 2015-05-14 11:04:41 by steamshovel2002 in response to comment #1567924

Dan W, I was at that meeting. I felt uncomfortable and wished the police would have yanked him from the room. There were four or five police officers in the room, plus a contingent of other than NRC federal officials in the room. For those few hours, I am convinced it was safest space in all of New England. Believe me, they were all checking me out? I spent my time up at the podium profusely thanking the police officers for putting up with our antics and for doing their difficult day to day jobs in our area. I also thanked the NRC for being there. I was trying to say, I was going to miss the big foot print of the NRC operating staff. I was the only one there both pro, anti and NRC who thanked the local police at the podium for doing their difficult job over the ending of operating Vermont Yankee.

comment #1567924 posted on 2015-05-14 10:27:30 by Dan Williamson in response to comment #1567358

Unfortunately, the NRC has had "inconsistent" results in conducting public meetings outside the confines of Rockville, MD. Their recent experiences in Vermont have done little to "create much better public transparency" or to "enhance" their credibility. And I suspect you know full well how such a forum as a premature press conference would be co-opted by the likes of Gary Sachs and turned into a circus. Witness...atomicinsights.com/agencies-should-not-allow-creation-of-a-hostile-environment-at-public-meetings.

comment #1567914 posted on 2015-05-14 10:05:24 by steamshovel2002

“Transformer oils (mineral oil) are subject to electrical and mechanical stresses while a transformer is in operation. In addition there is contamination caused by chemical interactions with windings and other solid insulation, catalyzed by high operating temperature. The original chemical properties of transformer oil change gradually, rendering it ineffective for its intended purpose after many years. Oil in large transformers and electrical apparatus is periodically tested for its electrical and chemical properties, to make sure it is suitable for further use. Sometimes oil condition can be improved by filtration and treatment." It is interesting, they traded increased flammability and the instability of mineral oil for the human health concerns and inflammability of the horrendous PCBs. When the plant was new these transformers were loaded with PCBs, Has the flammability of mineral oil versus the inflammability of the notorious PCBs been accounted for in plant licensing? Nonflammable PCBs in transformers was the choice in the construction era for most plant licensing...have they updated all their licensing documents for flammable and instable mineral oil on all plant transformers? Basically mineral oil is a distillate of petroleum.... Mike Mulligan Hinsdale, NH

comment #1567902 posted on 2015-05-14 09:54:53 by drbillcorcoran in response to comment #1567882

Did Entergy have a permit to discharge the oil?

comment #1567882 posted on 2015-05-14 09:23:09 by Moderator in response to comment #1567759

Transformer oil is a light-weight mineral oil. Entergy is still working to quantify how much oil was spilled and how much may have made its way to the river. Diane Screnci

comment #1567857 posted on 2015-05-14 08:43:28 by drbillcorcoran in response to comment #1567340

Diane, Is causing a shutdown not "affecting?"

comment #1567860 posted on 2015-05-14 08:48:29 by drbillcorcoran

> From NRC Information Notice 2009-10 ..... A relatively high incidence of transformer failures has occurred in the last few years, the majority of which could have been avoided had the licensee fully evaluated and effectively implemented corrective actions and recommendations identified in industry operating experience. These corrective actions included a more effective maintenance program and a more proactive approach to addressing abnormal indications. In particular, some utilities have installed online automated oil analysis and monitoring system to support decisions regarding preventive and corrective maintenance to improve transformer reliability. The Institute of Electrical and Electronics Engineers (IEEE) provides industry guidance on this matter in Standard C57.140-2006, “IEEE Guide for the Evaluation and Reconditioning of Liquid Immersed Power Transformers.” ..... What's going on here?

comment #1567338 posted on 2015-05-13 16:39:51 by Moderator in response to comment #1566974

> This transformer had been in service since 2007. The life expectancy, typically, is expected to be about 40-50 years. Entergy has a monitoring and maintenance program for the transformers. Diane Screnci

comment #1567340 posted on 2015-05-13 16:40:23 by Moderator in response to comment #1566645

> You are correct. The transformer fire did not affect the nuclear side of the plant. Diane Screnci

comment #1567358 posted on 2015-05-13 17:44:47 by Mike Mulligan

> I wish the NRC was like the NTSB. The lead investigator just said the NTSB will release all factual information as it is discovered.They immediately released the passenger train was traveling twice the speed limit. I wish the NRC would become more like NTSB. The lead NTSB investigator is answering all questions by the media as I write less than 24 hours after the accident. So they copiously release all discovered factual information to the public, the local community and the victims, then go back to their office to write up the professional report. I request that the NRC reevaluate how they release information post all accidents or incidents. I wish within the first 24 hours the NRC would stand out behind a podium in a press conference and answer all press questions. This would create much better public transparency and enhance the credibility of the NRC. If the agency had a briefings and updates within the first 24 hours on every event like the Indian Point transformer fire, then if a much worst event occured, all of NRC officials will be better skilled and well seasoned at giving the professional style off the cuff a quick NTSB briefing and answering the press. This would lend to enhancing the NRC image in the more difficult events and accidents. Mike Mulligan Hinsdale, NH

comment #1567759 posted on 2015-05-14 05:58:16 by drbillcorcoran

> What were the constituents of the oil that got into the river? Did the berm fail?

comment #1567794 posted on 2015-05-14 07:02:11 by drbillcorcoran in response to comment #1567759

> More info at http://www.newsweek.com/indian-point-fire-raises-questions-about-nuclear-plants-exemptions-fire-safety-331154

comment #1568793 posted on 2015-05-15 18:39:48 by David Andersen in response to comment #1568665

> THERE ARE NO NRC REQUIREMENTS WITH REGARD TO DISCHARGES OF NON-RADIOACTIVE OIL TO THE RIVER.

comment #1566625 posted on 2015-05-12 16:35:28 by CaptD

> All NRC emergency classifications should require that at least one if not more independent experts Chosen from a Public Listing, not the nuclear industry be tasked with observing, that way nothing would get swept under the table, and the public would have yet another layer of safety.

comment #1571164 posted on 2015-05-18 09:43:41 by drbillcorcoran

> There is an active LinkedIn discussion that explores other concerns at https://www.linkedin.com/grp/post/2211620-6005015702946275329

comment #1571215 posted on 2015-05-18 11:37:10 by drbillcorcoran

> If there are any NRC requirements, which, had they been adhered to, would have prevented the actual discharge to the river the way it happened, then noncompliance with them was a cause of the discharge. These requirements could involve the care of the transformer, the care of the berm/moat, the root cause analyses of earlier events here, and/or the handling of industry operating experience and industry "standards." This should be a line of inquiry.

comment #1572681 posted on 2015-05-21 09:42:49 by drbillcorcoran in response to comment #1568680

> Who were the individuals and organizations that had opportunities to identify the harmful conditions, behaviors, actions, and inactions that resulted in the failed transformer, the failed fire suppression (reflash), the loss of the oil, the failure of the flood barriers, the failure of the pollution prevention measures, etc. before the event? How come each of them failed? How come they all failed? Is this a fair sample of how the U.S. nuclear power community performs? What is the extent? You can get an inkling by reading NRC Information Notices.

comment #1569120 posted on 2015-05-16 05:31:45 by drbillcorcoran

> A colleague posted elsewhere: While the oil leak is embarrassing, to me the bigger issue is the transformer failure. To be honest, I don't care about the oil in the Hudson. The oil spill shouldn't have happened, and needs to be investigated, but the oil can be cleaned up. It's not the significant issue though. This isn't a recent problem of aging transformers. Many relatively new transformers (like this one) have failed. INPO issued Significant Operating Experience Report SOER 02-3 “Large Power Transformer Reliability” in 2002, but the industry continues to have significant issues in 2015. I'm sure that you know that SOERs are rare because they deal with "significant" issues. This isn't just a large power transformer issue. Many plants have had lower voltage transformers fail, resulting in a fire and declaration of an Alert. I'm not sure why EPRI hasn't addressed this. This is not only embarrassing to the industry, this is a safety concern since an Unplanned Scram or loss of a safety bus challenges safety systems.

comment #1573024 posted on 2015-05-22 11:27:23 by drbillcorcoran

> For a shallow depth RCA see http://root-cause-analysis.info/2015/05/21/indian-point-fire-and-oil-leak/ Would the inspectors even read something like this?

The NRC Celebrates Public Service Recognition Week

posted on Mon, 04 May 2015 17:06:02 +0000

Public Service Recognition Week has been celebrated the first week of May since 1985. It’s a time set aside to honor the men and women who serve our nation as federal, state, county and local government employees. In honor of this week, we bring you a Q&A with Dan Dorman. He is representative of the more than 3,000 employees of the NRC who are dedicated to their job – and good at what they do. **Q. What does your job entail and how long have you been in federal service?** A. I am the Regional Administrator for NRC’s Region I office in Pennsylvania. We oversee safety and security at 25 nuclear reactors in the Northeast and more than 900 nuclear materials licensees in the eastern United States. I’ve been with the NRC for 24 years in various roles, most recently as deputy director of the operating reactors office in headquarters and before that as deputy director of the nuclear materials office. Over the years, I’ve served in reactor licensing and oversight, engineering research, nuclear security, and fuel facility licensing and oversight. Before joining the NRC in 1991, I served as a nuclear submarine officer in the U.S. Navy for almost a decade. **Q. Why did you decide to go into federal government service?** A. My degree is in naval architecture and marine engineering; I joined the Navy out of college to get operational experience that I felt would enhance my skills. I left the Navy for work-life balance and came to the NRC to apply the nuclear power knowledge and skills that I had gained through my Navy service. [caption id="attachment_6280" align="alignleft" width="363"]

Dan Dorman[/caption] **Q. Over the years , what has kept you interested in your job and willing to stay in federal service?** A. When I first came to the NRC, I had no intention of staying this long. The main reasons I have are the mission and the people. During the first decade I was at the NRC, the agency reduced from roughly 3300 to 2700 staff and opportunities for promotion were rare, but as I got engaged in our public health and safety mission and came to realize the caliber and

engagement of the people I was working with, my sense of family and dedication to the mission made my career choice clear. **Q. What would you consider to be one of your greatest challenges while working for the NRC?** A. I have become fascinated with people (which is a big deal for an engineer!). A lot of times our biggest challenges are working with people who have shared goals (e.g., public health and safety, common defense and security) but differing visions of how best to achieve those goals. Working security and incident response issues with other federal agencies after the 9/11 terrorist attacks and working with international counterparts to enhance nuclear safety worldwide following the Fukushima accident are great examples. We all have a passion to make it better, but the hard work is in listening to each other's ideas and not jumping ahead to drive to your own preconceived conclusions. In the end, if we can hear each other out, we end up with a stronger and more sustainable path forward. **Q. What would you consider to be one of your greatest work accomplishments?** A. It was a tremendous privilege to be part of the NRC's Near-Term Task Force on Fukushima lessons learned in 2011. The team we put together had tremendous diversity of experience and perspective. In 90 days we had time to engage senior NRC staff to explore a broad range of issues arising from the accident even as news continued to come in daily from Japan. We did not have time or the tasking for public engagement. Still, we produced a report and recommended actions that have stood the test of time. The most important safety improvements have already been completed at many nuclear power plants and will be completed at all of them by the end of next year, and our recommendations have served as a model for other nuclear safety regulators all over the world. **Q. What would you like the public to know about federal employees, that perhaps they don't know?** A. We are your neighbors and active participants in your community. The people I work with have exceptional skills and experience and are highly motivated by our mission to protect people and the environment. We're also active members of our communities, giving back in many ways well beyond our jobs. We give generously to help those less fortunate, we organize blood drives, we do outreach in our schools to help encourage our young people to develop their skills and be engaged citizens. Beyond our careers and our mission, we are working every day to make the world a better place, now and for the future.

Comments

comment #1560924 posted on 2015-05-04 15:07:51 by Nikohl Vandel

> :-) nice to virtually meet you! I wonder what you think #RealNuclearWasteConfidence looks like to you and any changes you would make that others at the NRC may disregard as unviable. We need some new ideas about now, imho, since nuclear plants on earthquake faults still seem to be acceptable. So much #Gratitude to everyone doing their thing for all of us! I hope the NRC throws a good party (or at least springs for a nice lunch) for everyone to express all of our gratitude!

comment #1563809 posted on 2015-05-07 19:52:44 by CaptD

> Ditto comment above, since Fukushima PROVED that Nature can destroy any land based nuclear reactor, any place anytime 24/7 despite what the NRC says...

Heeding the Sirens – Despite A Few Mishaps

posted on Thu, 07 May 2015 12:51:48 +0000

Victor Dricks Senior Public Affairs Officer Region IV Residents of St. Charles Parish, Louisiana, who live within the 10-mile emergency planning zone for the Waterford 3 nuclear plant, got an unexpected benefit last week when 37 emergency sirens were sounded for a tornado warning. St. John Parish is similarly protected by 36 sirens. But thousands of other residents who live in surrounding parishes have no sirens. The reason: The NRC and FEMA work together to make sure the commercial nuclear power plants in this country have sirens around their sites to alert the public in the event of a serious incident. Various federal, state and local agencies also have emergency notification systems they can use to alert the public to a variety of emergencies -- including one at a nuclear plant. "The people of St. Charles Parrish got the benefit of the emergency sirens that surround Waterford 3," said Ron Perry, the Director of Emergency Preparedness for Homeland Security in St. Charles Parish. Each nuclear plant is required to exercise its emergency plan with offsite authorities at least once every two years – which includes checking the siren systems. This helps make sure the plant operator, and state and local authorities, can implement their emergency plans if needed. If all goes according to plan, the interface among all these agencies is seamless. But things do not always go as planned. Last year, while preparing for an upcoming emergency exercise at the plant, the National Weather Service inadvertently alerted the public around the Cooper Nuclear Station in Brownville, Neb., of an unspecified emergency at the plant. The weather service was updating the wording of messages stored in a computer system when someone pushed the wrong button. This sent an advisory to various news media organizations and some members of the public. The weather service quickly realized what happened and sent a message explaining the error to the media 13 minutes later. But, the mishap received plenty of news coverage. Unfortunately, this was the second recent incident about emergencies at the Cooper nuclear plant. On July 24, Nebraska Public Power District workers were working on a computer system that controls sirens in Nemaha County when a false alarm was broadcast. There have been two other similar incidents at Region IV nuclear plants in recent memory: Last summer, Pacific Gas & Electric Co. workers were

upgrading their siren system around Diablo Canyon when they inadvertently activated one at 3:30 in the afternoon. It sounded continuously for 14 minutes before workers were able to deactivate it remotely. It took 10 minutes before county officials sent out an advisory noting the error. Some people vented their anger about all the confusion on the county's Facebook page, and several local TV stations and the Associated Press carried reports about the incident. Not a week later, something similar happened in Washington State. During a training class at the state Emergency Operations Center, a staffer inadvertently faxed a partially filled out form for an Alert (the second lowest level of nuclear emergency) at Columbia Generating Station. The fax went to nine different emergency management agencies, including one in Canada. A second fax was quickly sent out correcting the error. The NRC is primarily concerned with the reliability of sirens. The NRC tracks the performance of licensee alert and notification systems by measuring the number of successful siren tests conducted quarterly at each plant. These types of incidents are embarrassing to all involved and in each instance corrective actions have been taken to minimize the chance of future mishaps. But the bottom line is that residents in the communities around nuclear power plants need to heed the warning, and trust the emergency alert systems. A few false alarms should not change their response. If you hear a siren, or get a text message on your phone announcing an emergency, please heed the warning.

Comments

comment #1563564 posted on 2015-05-07 12:40:33 by Nikohl Vandel

> OK, i get being hooked into and expanding the emergency response system, what i don't get is that if there is an event causing that system to go off creates an incident uncontainable like #fuqafukushima what does it matter. I guess #yolo mentalities like that just do not need to be supported in Louisiana where #Katrina's grace is why you may even write that story. Not anymore. Not for energy. #REALnuclearWasteConfidence means wew DO NOT CONTINUE less than COMPLETE SECURITY when we don't have too. #ItsOK2beSmarter #TSLA

comment #1563503 posted on 2015-05-07 10:38:09 by Troy Martel

> Spurious action of protective systems and alarms cause people to lose confidence and begin to ignore those systems. It is unfortunate that nuclear power plants have the capacity to contaminate large areas, which require evacuation and distribution of iodine tablets. Protective systems and alarms must be perfect.

comment #1563510 posted on 2015-05-07 10:50:21 by joy cash

> This article brings to mind why all nuclear plants need to be shut down & spent fuel transferred to unpopulated areas. "Human error" coupled w/ nature's growing unpredictably is simply a recipe for nuclear disasters. Chernobyl & Fukushima are enough for our species & shared world to endure.

comment #1565774 posted on 2015-05-11 13:47:08 by Moderator

> We ask that any future comments relate to the topic of the blog post or they will be moved to Open Forum. Thank you. Moderator

comment #1563478 posted on 2015-05-07 09:24:09 by James Greenidge

> Funny how SO few oil/gas/chemical installations have ANY such sirens or horns or local alert systems in place despite their infamous track records having far more injurious incidents than nuclear plants ever had. Sure smacks of prejudice to me.

comment #1564647 posted on 2015-05-09 10:43:05 by Nikohl Vandel in response to comment #1563874

> Lol, yeah, i don't speak deviantease. Its a problem on this planet. I have angelic realms that run interference when people are too corrupt or stupid to understand. Most people made a C or worse in reading comprehension in the United States. Mostly because they fail to think for themselves, experts say. Its understandable. I try to be patient.

comment #1563547 posted on 2015-05-07 11:58:23 by Dan Williamson in response to comment #1563478

> The prejudice is the faulty notion that 100.00% perfection in ANY complex system is achievable. So when failures of any kind do occur, that (coupled with the inability - or unwillingness - to understand the vanishingly small risk of significant consequences) becomes the rationale to scrap the entire industry. BTW, I see that another of Mr. Buffett's oil trains is on fire this morning. There's some significant consequences for ya'.

comment #1563874 posted on 2015-05-07 21:27:24 by Dan Williamson in response to comment #1563564

> I think your universal translator is broken.

comment #1563819 posted on 2015-05-07 20:09:12 by CaptD

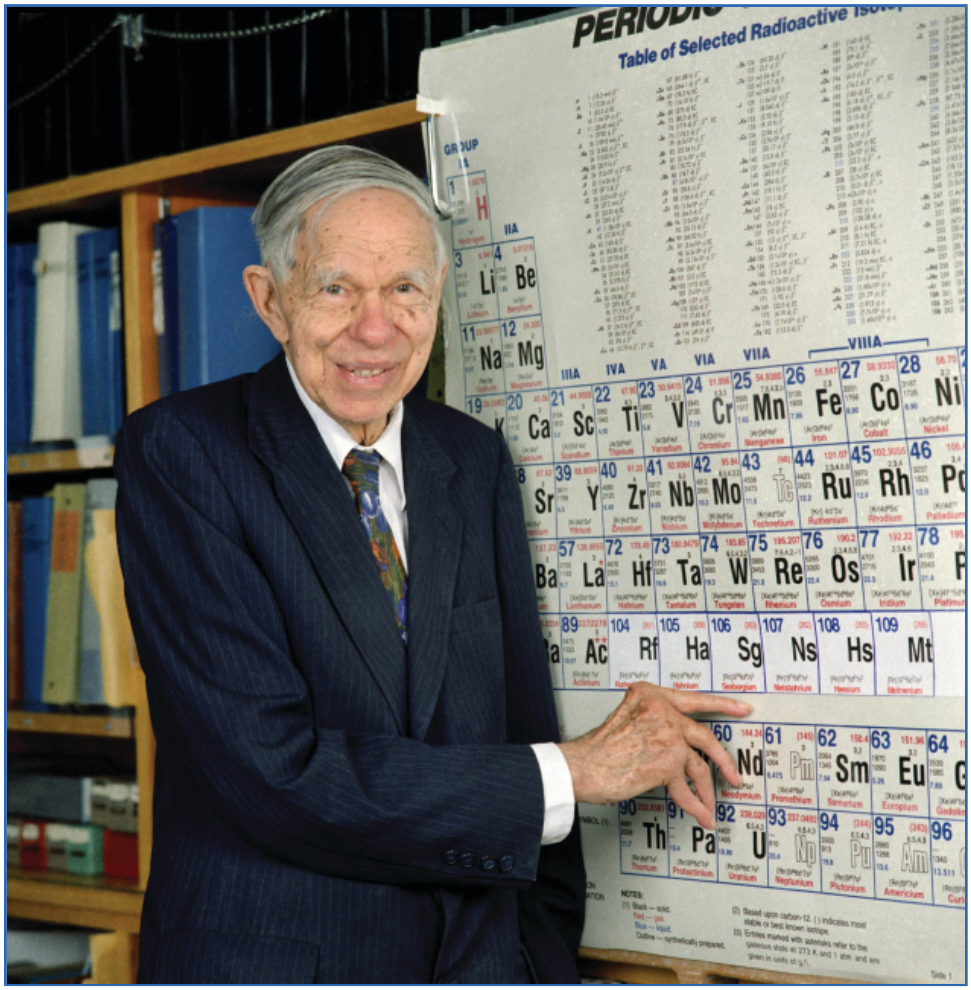
San Onofre (CA) had many sirens "events" go off but nobody told residents why, but of course the Operator SCE was never fined, yet another slap on the wrist by the NRC...

comment #1564502 posted on 2015-05-08 23:30:58 by Laura (@LauraStraightUp) in response to comment #1563478

No doubt, and the fact that nuclear energy production creates massive thermal output into our environment so subject to warming, cooling, changing, or whatever the hidden agenda of the week calls for.. Climate change global hot head hypocrisy at it's best.

Throwback Thursday – Name the Scientist

posted on Thu, 14 May 2015 14:25:37 +0000



This scientist is best known for discovering an important element, as well as winning the Nobel Prize in Chemistry. His other claim to fame – and the one he apparently cherished most highly – was having an element named in his honor. What was the scientist's name? What element did he discover and which one was named for him?

Comments

comment #1568056 posted on 2015-05-14 13:20:54 by DAVE ROSSIN

In 1992 I had the honor of presenting Prof. Seaborg with the ANS Historic Site recognition for the laboratory room where he and his colleagues separated and identified their first plutonium sample. Dr. Seaborg, his back already bent with age, towered over me and a former student of his from those early days (who was even shorter than me) who joined us as we climbed the flights of stairs from his office up to the top story lab room. Together we chose the spot on the wall for the ANS certificate. Dr. Seaborg thanked ANS for the recognition. And frankly, I cannot remember that former student's name or if anyone else was with us. This week Sandy and I are visiting our daughter Liz Laats in San Diego and all of my dusty file boxes are back home in Sarasota FL. If anyone reads this who can help with the memories, I'd welcome every word. I sure don't want to forget that experience.

comment #1579512 posted on 2015-06-02 16:01:22 by Delarno

This is dear Prof. Glenn Theodore Seaborg. He discovered seaborgium and held more than 40 patents, including one issued for americium and curium.

comment #1567959 posted on 2015-05-14 11:06:52 by NukePuke

It helped me that he was pointing to "Sg" on the periodic table! Wish Jeopardy was this easy! (:-)

comment #1567962 posted on 2015-05-14 11:10:00 by Moderator

Yes, this is Dr. Glenn T. Seaborg, who, along with Edwin McMillan, discovered plutonium in February 1941. In August 1997, element 106 was named in his honor -- seaborgium (Sg). (And, yes, he's pointing to it!) Dr. Seaborg served as Chairman of the Atomic Energy Commission from 1961 to 1971, longer than any other chairman. Dr. Seaborg died in 1999. Moderator

comment #1567963 posted on 2015-05-14 11:15:05 by Kristal

He discovered Plutonium in 1941. Seaborgium was named in his honor! :)

comment #1567943 posted on 2015-05-14 10:48:48 by chrisnamastephys11 (Christian Luca)

Prof. Seaborg, who discovered the element, Seaborgium, named after him.

comment #1567939 posted on 2015-05-14 10:37:32 by

Did he also discover plutonium?

comment #1567931 posted on 2015-05-14 10:32:20 by

Dr. Seaborg

comment #1567932 posted on 2015-05-14 10:32:51 by Steven Hutchins

It looks to me like Glenn Theodore Seaborg.

comment #1567930 posted on 2015-05-14 10:31:26 by

Is it Glenn Seaborg, for Seaborgium?

comment #1568903 posted on 2015-05-15 22:49:36 by Joe T. Gilliland

My wife, Lois Speaker, remembers hearing Dr. Seaborg speak around 1958-59, when she was a chemistry graduate student at the University of Tennessee. Joe Gilliland

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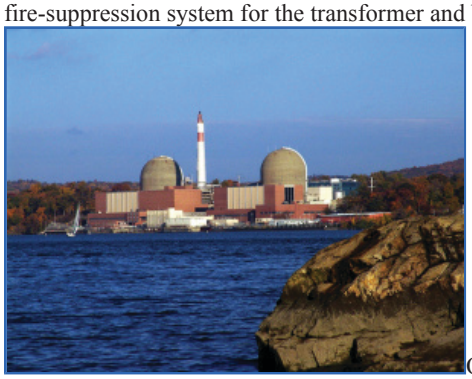
NRC Inspectors Head to Indian Point 3's Electrical Supply Room

posted on Tue, 19 May 2015 15:40:34 +0000

Neil Sheehan Public Affairs Officer Region I Dousing the fire that ensued after one of the Indian Point 3 nuclear power plant's main transformers failed on the evening of May 9th required substantial amounts of water, as well as foam. The water was applied by the automatic fire-suppression system for the transformer and by the on-site fire brigade and firefighters from off-site who provided assistance.



One of the follow-up concerns for the NRC is that during the event, some water was found on the floor of an enclosed room inside the plant housing electrical supply equipment. The power that flows through that equipment is used to operate plant safety systems and components. The equipment was not affected by the water during the May 9th event, and the plant was safely shut down. The plant remains out of service while work to install a replacement transformer is carried out. In order to better understand

what occurred, the NRC is launching a Special Inspection at the plant today. The three-member team will evaluate, among other things, how the water – apparently totaling an inch or two on the room's floor -- ended up in the room; and the potential for a significantly larger volume of water to build up and adversely impact the electrical equipment. The NRC applies risks insights and specific knowledge of plants when determining whether to perform a follow-up inspection and what type. In this case, the NRC decided it was appropriate to conduct a Special Inspection, the first level of "reactive" reviews performed in response to an event. The agency performs such inspections to independently evaluate and assess what occurred during an event, as well as any plans by the plant's owner to fix related problems. In addition to the Special Inspection, the NRC is continuing to review the transformer failure, operator and equipment response during the event, and other issues. A report containing the findings of the Special Inspection will be issued within 45 days after the formal conclusion of the review.

Comments

comment #1580778 posted on 2015-06-04 16:08:14 by NukePuke

> Not All Flood Barriers are Created Equal Flood barriers installed at our nation's nuclear power plants (NPPs) have been notoriously unreliable. The latest case involved those "barriers" that failed to keep water out of an electrical switchgear room at the Indian Point NPP. This despite the fact that these barriers had, just a couple of years earlier, been inspected for adequacy by the owner and operator of the plant, Entergy. Furthermore, over many years numerous problems with these barriers have been experienced at a number of US NPPs and at a number of NPPs around the world. Seems like the nuclear industry and the NRC simply cannot solve this generic and critical reactor safety issue. "Mucking out" after a flood is a time-consuming and labor-intensive process. But "mucking out" after a nuclear plant flood would be impossible. Why? Because a flood at a nuclear power plant can result in a Fukushima-type disaster. Why has it been so hard for the nuclear industry and the NRC to solve this persistent problem? Facts: • There are scores of flood barrier penetrations at each of our NPPs. • There have been scores of such penetrations that have been found to be defective over the years. • There have been several formal NRC Information Notices sent to each US NPP alerting them of these potential problems. • There have been special flood barrier inspections, like the one recently completed at Indian Point NPP, conducted at all US NPPs. • There have been a number of actual water-intrusion events at NPPs here in the US and around the world. Questions: • Considering the dire potential consequences of NPP water-intrusion events, why hasn't the industry and the NRC been much more aggressive in wrestling these problems to the ground?! • Why are NPPs being allowed to operate with such a serious, unresolved, generic nuclear safety issue? • Are any flood barriers at our NPPs subject to a so-called single failure? That is, can the failure of a single flood barrier (permanent or temporary, fixed or installed when a flood is anticipated) result in, o The loss of a SSC (Safety System Component)? o The loss of an entire redundant train of safety equipment? o The loss of an entire safety system? Or, o The common-mode failure of all AC and DC power at any NPP? • For any flood barriers whose failure can result in threats to safety-related equipment, o What compensatory measures have been taken? o What design changes (modifications) have been completed to those especially susceptible barriers? o What more adequate & frequent inspections have been undertaken to catch any subsequent problems with such barriers? o What has been done to institutionally flag these barriers (placards, warning signs, etc.) so that the critical nature they serve is obvious to all? This would be similar, for example, to other warning signs in the plant like this door is a fire barrier and must remain closed when not in use. Not all flood barriers are created equal. Some protect property and some protect not only property but reactor and public safety as well. It is high time for public safety to be job 1!

comment #1571909 posted on 2015-05-19 11:50:03 by drbillcorcoran

> Should the post-Fukushima flood barrier upgrades have prevented this?

comment #1571914 posted on 2015-05-19 11:58:00 by badger777

> What did Ginna finally do to rectify the river water overflow impacting the DG start batteries through an open hole into the battery room from a manhole. What was the fix, and what was the cost. Its kind of on topic, with the Indian point water, and the fact that Fukushima emergency equipment was flooded, causing the ongoing triple meltdown/out

comment #1571921 posted on 2015-05-19 12:49:48 by Moderator in response to comment #1571914

> The NRC issued a "white" (low to moderate safety significance) inspection finding on April 17, 2014, for the issue involving cable penetrations at the Ginna nuclear power plant: http://pbadupws.nrc.gov/docs/ML1410/ML14107A080.pdf . An NRC Supplemental Inspection was performed to review the plant owner's evaluations and corrective actions in response to the finding. The results of the inspection were contained in an inspection report issued on Sept. 30, 2014: http://adamswebsearch.nrc.gov/webSearch2/view?AccessionNumber=ML14273A035 . The inspection team found that the company's actions, including sealing the penetrations, were satisfactory. That led to the closure of the issue. The NRC's focus is on plant safety rather than the cost. As such, we do not have a figure on the cost for the corrective actions. Neil Sheehan Moderator Note: Future comments unrelated to Indian Point will be moved to the Open Forum section of the blog.

comment #1575851 posted on 2015-05-26 16:41:47 by NukePuke in response to comment #1575795

> Good questions Dr Bill that I wish I knew the answers too. But here is the link to the walk down report...pbadupws.nrc.gov/docs/ML1235/ML12354A311.pdf. Sorry Dr Bill but I can't seem to get this link to work. I found it by googling, "Indian Point Unit 3 flood walkdown report". Dr. Bill, aren't you one that's the expert on corrective action programs among other things? I would love to get my hands on copies of the plant's corrective action documents that pertain to this 2012 flood walkdown at IP3. Especially of interest would be their assessments of the safety significance and consequences of each of the flood protection and mitigation features found to be substandard. Their corrective actions to prevent recurrence would also be of interest. I

think though that the outcome, if the NRC really digs into this properly, will be that the flood barriers that failed at IP3 were either overlooked (not examined) or that the inspection technique used was inadequate to assess operability. After all, this whole inspection process and procedure was conducted in accordance with nuclear industry specifications, not in accordance with NRC specifications. And of course those nuke industry specs were funneled through the Nuclear Energy Institute (NEI) the propaganda and lobbying mouthpiece for the industry. I am afraid this is just another example of the NRC letting the nuke industry come up with their own initiatives rather than the NRC setting the requirements like it should be.

comment #1572374 posted on 2015-05-20 12:09:52 by NukePuke

Excellent comments by my blogging partners! Thought I would share this little note that I sent to the NY Governor... Subject: "Dangerous Near Miss at Indian Point Nuclear Power Plant Unit #3" or "How We Almost Lost NYC" Dear Honorable Governor Andrew M. Cuomo: Included below is a recent blog update by the NRC of an incident at Indian Point Unit #3 located near New York City. (Not included in this blog for an obvious reason). At a nuclear plant, either too much water or too little water can be dangerous. A recent water intrusion event at Indian Point nearly caused a loss of vital electrical equipment required to safely cool nuclear fuel at the site. What the NRC Blog does not include is just how close water got to this vital equipment. A reliable source of mine stated that water came within inches of this equipment. Specifically I was told that the water level rose to within two inches of this vital electrical switchgear. The NRC does acknowledge the water intrusion event but indicated only that there was "an inch or two of water on the electrical equipment room floor". As we are all well aware, the loss of power to vital reactor cooling equipment can soon lead to the a disaster like Fukushima. The NRC has arranged for a special investigation of this incident. I hope all the really hard questions are asked by this team. For example… • Why were the flood protection barriers to this vital room inadequate? • There have been a number of flood barrier deficiencies found at US nuclear power plants over the years. Fort Calhoun Nuclear Station and ANO have found numerous deficiencies in flood protection barriers at their facilities. The NRC has issued NRC Information Notices to all plants regarding these potentially generic problems. What measures did Entergy take to ensure these vulnerabilities did not pose a safety threat at Indian Point? • Considering how close IP3 appears to have come to a catastrophic accident, why is the NRC not requiring an Augmented Inspection Team (AIT) or even an Incident Inspection Team (IIT) be sent to the site instead of its lowest level of investigative response, a Special Investigation (SI)? • Although IP3 will be out of service for some time due to the loss of its main transformer by fire during this event, why hasn't the NRC ordered the plant to remain shut down in cold condition until not only the NRC investigation is completed but until all necessary corrective measures have been taken? • Why hasn't IP2 been shut down until it can be checked for similar vulnerabilities?

comment #1572400 posted on 2015-05-20 15:05:21 by NukePuke

Everything Seems to Be a No Never Mind to Today's NRC Please, Mr Moderator, bear with me, I will eventually have no trouble tying this blog to Indian Point. Just let me set the stage a little first. Today's NRC is a shadow of its former self, in my opinion. The old NRC that I knew decades ago was a tough, no-nonsense, regulator. I know because I was on the receiving end of their "tough love"! As a manager at a small nuclear power plant (about half the capacity of most nuke plants operating today) I got in trouble w the feds over a couple of incidents in my nuclear plant. (There were undoubtedly more but I have chosen to ignore them, HA!) Both of these incidents were far less serious than a number of the incidents that have happened at nuclear facilities in recent years. Back then I was hammered by the NRC. The NRC Regional Administrator at the time said to me, "I don't owe your plant; I don't operate or maintain it; but I sure as hell know how to blow the whistle!" My opinion is that today's NRC doesn't even know where the whistle is. Looking back, over the years since I retired, I have reluctantly admitted to myself that I deserved the regulatory dress-down that I got at the time. My small plant and small utility were assessed civil penalties by the NRC in both cases. In recent years, due to incidents and violations at my plant, my utility has formally turned over the keys to operating the plant to a large nuclear operating company. The keys were also turned over to a large nuclear operating company at another facility in the state owned by a different, small electric utility. Their regulatory track record merited this action as well. I feel that both these moves were wise. Large nuclear operating companies have large technical and monetary resources that can quickly be brought to bear as needed to support their plants and resolve issues there. There is though a significant downside to a large nuclear operating company, like the one operating the Indian Point nuclear units. To put it bluntly, they are in bed with the NRC. They enjoy a beneficial symbiotic relationship with the NRC. One hand washes the other. There is a revolving door between these large nuclear operating companies and the NRC; folks are utility employees one day and NRC employees the next; and vice versa. No wonder then that the NRC seems to never get very excited about any problem or incident that occurs at plants operated by the big nuclear outfits. Entergy operates several nuclear plants, among them Pilgrim, Arkansas Nuclear, and Indian Point. I find it very disturbing that significant events have occurred at each of these Entergy plants and these incidents have been treated lightly by the NRC. Pilgrim has experienced many automatic reactor shutdowns over the years and even partial and complete losses of AC power at the site. An NRC Commission Chairwoman, even before the latest loss of offsite power event occurred at Pilgrim, thought that Pilgrim should be shut down and subject to an enhanced NRC inspection program if problems continue. No such additional oversight or action has resulted. ANO, a couple of years ago, found numerous degraded flood barrier penetrations at the site. Degraded flood barriers had been found earlier at other nuclear power plants and were the subject of several NRC Information notices sent to all nuclear plant owners to warn them of the potential problems. Now Indian Point Unit #3 has actual water intrusion through faulty room flood penetration barriers. Obviously Entergy did not learn from the experience at their own plant (ANO) and they didn't even appropriately respond to this potential safety issue when notified formally by the NRC years earlier?! I am dismayed by the totally unacceptable performance by both Entergy and the NRC. Flooding, either the external type or the internal type, at a nuclear facility is one of the most serious events that can occur. Flooding is known in the industry as a common mode failure. Flooding wipes out redundant power supplies and equipment, just like it did at Fukushima. It makes no difference whether the water comes from Mother Nature or from faulty or ruptured equipment at the site itself, the result still can be devastating. Will this finally get the NRC concerned enough to really hammer Entergy?! Will this dangerous near miss get the NRC to not only inform the industry of this generic and repetitive problem, but to actually require the

industry to check for and take all necessary actions to ensure that flood protection measures at each of our nuclear facilities are adequate and meet all design requirements? The NRC needs to develop a spine and really start putting public safety first!

comment #1572407 posted on 2015-05-20 15:42:27 by Moderator in response to comment #1572127

The focus of the Special Inspection Team will be on the presence of water in an electrical switchgear room at Indian Point 3 amid the transformer failure event on May 9th. However, the NRC Resident Inspectors assigned to Indian Point will continue to follow up on the main transformer failure event on May 9th and related issues. Once the Special Inspection Team formally concludes its reviews, its members will have 45 days to issue a report containing its findings. The exact cause of the fire is not yet known. A post-failure examination of the transformer should yield information on the cause(s). The NRC will be reviewing the results of that examination and documenting that information in an upcoming inspection report. Neil Sheehan

comment #1572458 posted on 2015-05-20 20:22:01 by mitanaka2012 in response to comment #1572407

Thank you so much for your reply. I wish your inspection goes well and will wait for a 45 days report.

comment #1572459 posted on 2015-05-20 20:23:10 by CaptD in response to comment #1572400

Great comments all. The NRC should have outside inspectors conduct an immediate fire seal inspection of all penetrations at every NPP, and post the findings, my guess is that at least 15% will have issues that should be "fixed", but they have not been done because they are of low importance to plant operators. The NRC needs to be far more proactive in their inspections, especially since on-site NRC inspectors are not finding these issues until AFTER a problem is discovered.

comment #1572022 posted on 2015-05-19 17:38:56 by drbillcorcoran in response to comment #1571921

This threatens nuclear power as a non-GHG source. What can we do?

comment #1571998 posted on 2015-05-19 16:41:24 by Mike Mulligan

I think the Independent National Transportation and Safety Board did a wonderful job at explaining the tragic crash of the Amtrak Philadelphia commuter train. I'd give them an "A" plus. I do miss NTSB chairperson Deborah Hersman's pretty face and especially her ability to communicate. Hmmm, the NTSB is missing a commissioner just like the NRC? As I said earlier, if Indian point and the NRC did a proper 50.59 and License Amendment Request (LAR)...the replacement of nonflammable PCB coolant to flammable vegetable oil coolant...they would have hardened the area around the transformer expecting a big vegetable oil fire and tremendous amounts of fire hose water being used. Published on May 18 at 12:45 pm: http://steamshovel2002.blogspot.com/2015/05/indian-point-needs-new-yard-loop-fire.html "Indian Point Needs New Yard Loop Fire System and Distribution Piping" My guesses are: 1) A leaking fire water system piping or component. 2) The copious fire hose water leaked down outside of the concrete foundation and then entered though a concrete foundation crack into the power supply room. Are there many concrete foundation cracks in IP buildings? The fire fighters must have directed copious hose water protecting the turbine building siding. Was there damage to the siding? 3) The siding was damaged by the fire...that is how the water got into the power room? 4) The overflowing transformer holding tank backed up into the supply room if both connected to each other. Does the supply room have a drain and where does it go? Did the NRC shame Gov. Cuomo by not telling him about supply room water on the floor or did the Governor intentionally withhold the water leak in the said electrical room from the public for some reason? Why didn't the Governor disclose the water on the floor? The information was big deal heading into a special inspection. Bet you the equipment operator has to inspect that room every four to eight hours. Mike Mulligan Hinsdale, NH

comment #1571971 posted on 2015-05-19 14:54:33 by NukePuke

Absolutely Dr Bill! As pointed out by others, our own USA nuclear power plant experiences over the years with degraded flood protection barriers should have caused industry-wide inspections and corrective action to improve these barriers. Fort Calhoun and ANO are other plants that I recall having similar problems. Obviously sharing industry experience is important, but what is critical is that action is taken to check for and correct problems at other plants based on knowing about industry problems. This is more of the same old stuff and that is just plain inexcusable!

comment #1573116 posted on 2015-05-22 18:03:15 by Half-TruthSlayer in response to comment #1573071

Neil, thanks for letting us know about the main XFMR and just how long it will drag out this investigation. But the elephant in the room is the near miss common-mode failure in the vital switchgear room and you know it! Not since the Brown's Ferry fire, TMI, and the Fukushima flooding has any event so threatened reactor and public safety as this IP event. High time for the NRC to talk w a straight tongue!

comment #1572127 posted on 2015-05-19 20:37:38 by mitanaka2012

I would like to see the following points; -What topics, other than water on the floor, dose Special Inspection Team investigate for 45 days? -Dose NRC already know the cause of the fire?

comment #1575795 posted on 2015-05-26 14:09:12 by drbillcorcoran in response to comment #1575709

> Slayer, How long had the failed barrier been non-compliant? Can you tick off just a few of the assessment and inspection activities that had to have been ineffective for this to occur? Would you be so kind as to post a link to the walk down information?

comment #1575831 posted on 2015-05-26 15:48:24 by Moderator in response to comment #1575795

> Our Special Inspection focusing on this issue is still in progress. The team left the site last Friday but is still waiting for more information from the company. Once the inspectors have all of the information they need, they will conclude that phase of the review and inform the company on a high level regarding their findings. The team will then have 45 days to issue a report containing its findings. That report will be made available to the public via the NRC's online electronic document system (ADAMS). Until that time, it would be premature for the NRC to comment on what caused the problem and whether the issue should have been identified and fixed previously. Neil Sheehan

comment #1576518 posted on 2015-05-27 12:55:10 by NukePuke in response to comment #1575795

> Dr. Bill Corcoran made this statement in a article he wrote about the 13 characteristics of a world class corrective action program... "Organizations that optimize their learning from experience will outperform those that do not. Those that do not are digging their own graves by making it easier for their competition." Clearly, this is exactly the characteristic that the nuclear industry and the NRC are dropping the ball on. Nuclear power lost the competitive edge long ago but now it seems they are losing the safety edge as well. Only the public will suffer if this nuclear nonsense continues!

comment #1572660 posted on 2015-05-21 09:07:34 by drbillcorcoran

> How many decades have the flood barriers been non-compliant at IPEC? At ANO? Elsewhere in U.S. NPPs? http://pbadupws.nrc.gov/docs/ML1427/ML14279A268.pdf Where was QA? Where was Reg Affairs? Where was the CNRB? Where was INPO? What was the effectiveness of OE? What was the effectiveness of RCA? Is this the best we can do?

comment #1572747 posted on 2015-05-21 12:55:54 by Mike Mulligan

> Sooo, basically we got four special inspections going on in Entergy plants right now. Two at River Bend, one at Pilgrim and another one at Indian Point. I think the real culprit is "nothing-ever-matters risk regulations. It is really sneaky deregulation. The cumulative result of regulations by a Republican campaign right now is deregulation on steroids. Basically the Republican House and Senate are blackmailing a USA regulatory agency...reduce NRC cumulative regulations or we will drastically cut the agency's budget. The punishment of a violation or repeated violation through risk perspective is not enough incentive to make straight the organization. You are just mildly paper whipping bad actors with copious minor or not cited violations. I think the agency is worried about massive retaliatory budget cutting... Risk Perspectives was always massive deregulation dressed up as science and engineering...It was a result of runaway campaign contributions and the humongous influence of the utility industry with the politicians. I wish we had a similar size, influence, unlimited money and political reach as the Electric Utilities...an organization who could contest the Electric Utilities and nuclear industry. We just don't have it. We are all worst for it. Mike Mulligan Hinsdale, NH

comment #1575709 posted on 2015-05-26 09:48:03 by Half-TruthSlayer

> This IP3 Near Miss Accident Should Never Have Happened Two years prior to this flooding incident at IP3, an extensive flooding walk down of all flood penetration pathways was conducted by Entergy and IP3. Entergy submitted the results of this flooding walk down to the NRC November 27, 2012. Like walk downs required at other US nuclear power plants, these walk downs were conducted in response to lessons learned from the Fukushima flooding disaster in 2010. The IP3 flooding walk down report noted the following: "…a total of 65 walk down packages of features credited for flood protection" were included in the flooding walk downs. The IP3 submittal concluded, "Based on the operability determinations, none of the conditions observed during the walk downs were determined to pose a risk to the safe operation of the plant." Yet, two years after these flooding walk downs, a serious water intrusion event occurs at IP3. Brings into question the adequacy of all such flooding walk downs at our US nuclear power plants.

comment #1573071 posted on 2015-05-22 15:15:12 by Moderator in response to comment #1572994

> NRC inspectors are continuing to review the recent transformer failure at Indian Point 3. Until those inspections are completed, we would not be able to answer the question of whether this failure could have been anticipated and/or prevented. When will the RCE for this one be posted? We cannot provide an exact timeframe at this point. A key reason is that Entergy will have to have completed a diagnostic examination of the transformer to determine the failure mechanism, and those assessments can be time-intensive. Neil Sheehan

comment #1572994 posted on 2015-05-22 09:02:44 by drbillcorcoran

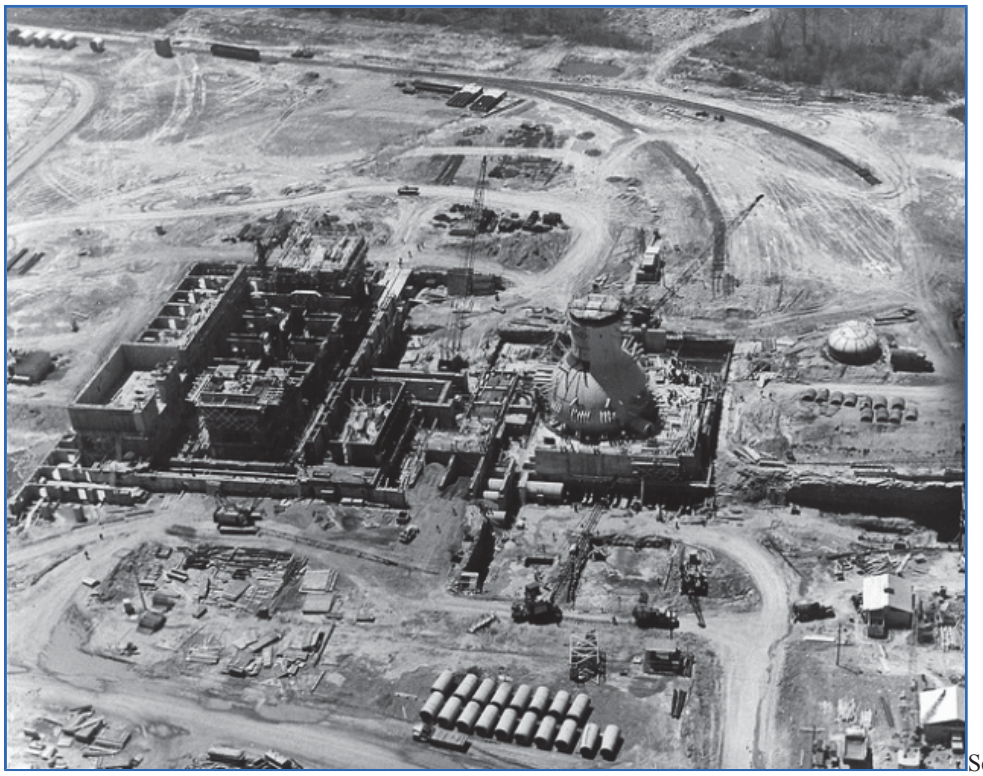
> The RCE for the 2010 similar event is at http://pbadupws.nrc.gov/docs/ML1208/ML12088A511.pdf How come we needed another event? When will the RCE for this one be posted?

comment #1573058 posted on 2015-05-22 14:31:06 by NukePuke

Common-Mode Failure Flooding at Fukushima caused a common-mode failure. Recently, flooding at the Indian Point Nuclear Station near New York City nearly caused a common-mode failure. Flooding or a fire can take “out all the redundant systems needed to cool the reactor cores, the systems needed to keep the containments from overheating and leaking, and the systems needed to help predict the path and extent of the radioactive plumes. At Browns Ferry (located in Alabama), workers managed to employ ad hoc measures in time to prevent a disaster. At Fukushima time ran out.” Excerpt from the book Fukushima by Dave Lochbaum continues…”Defense in depth is both a blessing and a curse. It allows many things to go wrong before a nuclear plant disaster occurs. But when too many problems arise or a common-mode failure disables many systems, defense in depth can topple like a row of dominoes. The risk of common-mode failure can be reduced through enhancing defense in depth, but it can never be eliminated. The true curse of defense in depth is that it has fostered complacency. The existence of multiple layers of defense has excused inattention to weaknesses in each individual layer, increasing the vulnerability to common-mode failure.” Let’s hope the near-miss common-mode failure at Indian Point lights a fire under the NRC and the nuclear industry, for the common-good!

Throwback Thursday: Which Plant Is This?

posted on Thu, 21 May 2015 15:56:09 +0000

 Seen from an aerial perspective, a boiling water reactor site is under construction -- carved out of part of a 1,500-acre site. Look familiar? Can you guess what plant this is and roughly what year this photo was taken?

Comments

comment #1577727 posted on 2015-05-29 16:23:25 by NukePuke

> Where is your throwback Thursday piece for yesterday, the 28th?! Must be hard to find something good to throwback about with us nuclear power predators around. (:-) Keep in mind though you need to keep posting stuff so you can bury some of the blogs you get a lot of negative feedback on under your older blog sections. (:-) I am proud of you though for never deleting them, right!? Or is that just the case on the Open Forum Blog that nobody reads?!

comment #1572859 posted on 2015-05-21 20:28:36 by NukePuke

> Hard to tell from this pic. Looks like the site took a direct hit from an F5 tornado. (:-) That genie-shaped container survived very well it seems. Kind of looks like a prickly pear with those things stuck in it. Were those tornado-borne missiles? So its NMP and the genie bottle is perhaps the BWR Mark I containment. Just like the 23 other Mark 1 containments at BWR reactors in the US. This is the same identical containment design that didn't contain much of anything at Fukushima. In fact these "containment" structures have been controversial almost from the time the first one went into operation in 1969 at Oyster Creek in NJ. These structures are relatively small and weak "pressure suppression" containment structures. As chronicled in his book "Fukushima" Dave Lochbaum writes "After the hydrogen explosion at Three Mile Island...the NRC required that the relatively vulnerable Mark I and II containments be "inerted" with nitrogen gas to prevent such explosions." But as Dave notes also this was not the Mark I's only problem. A prolonged station

power blackout would result in the core melting through the reactor vessel inside the containment and the steel containment liner itself, defeating each of the multiple layers meant to prevent radioactive materials from reaching the environment. How sadly prophetic! After years of bickering with the nuclear industry and the NRC's own Advisory Committee on Reactor Safeguards, who vigorously opposed five staff recommendations for design improvements, the NRC ended up only adopting and acting on two of the recommendations. This is oh so typical of the nuclear industry. They fight tooth and toenail over any safety improvements as that will affect their bottom line and their profits. There are after all just a typical greedy corporation. So what can you expect anyway?! Perhaps a nuclear power plant regulator that puts public safety first and not the industry it is supposed to be regulating.

comment #1572763 posted on 2015-05-21 13:29:59 by Brian Waite

nine mile point - 1965

comment #1572757 posted on 2015-05-21 13:23:27 by Christopher Chesna

Nine Mile Point in upstate NY. Photo goes back to around 1972?

comment #1572755 posted on 2015-05-21 13:17:05 by Patrick Isaac

It is Nine Mile Point Unit 1 taken around 1971

comment #1572753 posted on 2015-05-21 13:14:24 by in response to comment #1572725

Is it Nine Mile Point Unit 1. Picture taken around 1971

comment #1572771 posted on 2015-05-21 13:49:20 by Moderator

Yes, this is the Nine Mile Point Nuclear Power Plant, located six miles east of Oswego, New York. The photo is circa 1966. The first unit was issued an operating license in 1974; the second unit in 1987. Both licenses were renewed in 2006. Photo courtesy of the Department of Energy. Moderator

comment #1572725 posted on 2015-05-21 12:14:54 by Hopley, George

Nine mile point

comment #1572981 posted on 2015-05-22 08:10:41 by in response to comment #1572771

A point of clarification. NMP1 OL was issued 08-22-1969 and NMP2 OL was issued 10-31-1986.

comment #1573026 posted on 2015-05-22 11:31:47 by Bonds 25 in response to comment #1572859

There was a hydrogen explosion at TMI? Mark 1 containment at Fukushima didn't contain much of anything? Inerting the drywell at Fukushima wouldn't have prevented the hydrogen explosion that took place on the refuel floor. Where is the data that shows any fuel made it past the reactor pressure vessel? Also, how many people have been killed due to radiation exposure from the TMI and Fukushima accidents? That's right.....zero. Moderator Note: Some content removed for adherence to the Blog Guidelines

comment #1573062 posted on 2015-05-22 14:51:04 by Moderator in response to comment #1572981

According to the NRC's Information Digest, the provisional OL was issued in 1969 with the full-term operating license issued in 1974 for Unit 1. Unit 2's OL was issued on 7-2-1987. Moderator

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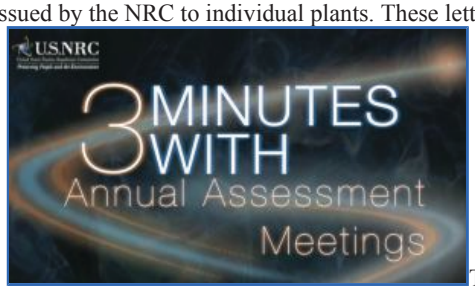
A Focus on NRC Annual Assessment Meetings

posted on Wed, 27 May 2015 14:12:26 +0000

Prema Chandrathil Public Affairs Officer Region III It's Spring – and annual assessment meetings are popping up all over. The NRC holds these important meetings every year for every nuclear power plant to provide information

about how the plant performed in the previous year. What happens at these meetings? If you attend, you can expect to hear about NRC inspection activities, how the plant performed from a safety perspective, and how it met NRC requirements, including if there were any violations and, if so, what actions were taken to correct those issues. You would also hear directly from NRC resident inspectors, who are at the plant on a daily basis and know the plant inside and out. They and other specialists inspect the plant to help ensure protection of the public health and safety. We just posted a short YouTube Video on the subject today. “Three Minutes with an NRC Expert on the Annual Assessment Meetings” can be found here. As the video underscores, annual assessment meetings are not all the same. There are different

types, including a formal meeting, an open house and community outreach event. The most common meeting is a formal meeting where the public is invited to observe the interactions between the NRC and plant staff. Open houses are informal and are designed to encourage one-on-one conversations. An example of a community outreach event is where the NRC would staff a booth at a local event in an effort to talk to more folks. The type of meeting will vary depending on the plant’s performance, community feedback and local interest. No matter the format of the meeting, the public will have an opportunity to not only hear about the plant’s performance and NRC inspection efforts but also ask questions, make comments and talk to the NRC staff. A common misconception is that these meetings are transcribed -- they are not. The basis for the NRC’s discussion is the annual assessment letters issued by the NRC to individual plants. These letters are



documented and publically available. You can find them on the NRC website. The NRC continues to reach out in an effort to inform people about what the agency does, how we regulate and how a particular plant is doing in meeting NRC rules and regulations. We are committed to protecting public health and safety, and strive to be open and responsive in these annual assessment meetings. If you are interested in any upcoming public meeting you can check out the public meeting schedule and review the meeting notice as well as the press release. We hope you’ll check out the video to learn more.

Comments

comment #1576631 posted on 2015-05-27 16:19:47 by Moderator in response to comment #1576594

> SONGS is awaiting approval from the state of California prior to beginning decommissioning activities or expansion of its Independent Spent Fuel Storage Installation. There have been and will continue to be public meetings at NRC Headquarters in Rockville, Md., where generic safety issues related to spent fuel storage, like stress corrosion cracking, are discussed. At this time the NRC has no public meetings scheduled in the vicinity of SONGS. However, the San Onofre Community Engagement Panel continues to provide opportunities for public engagement on the issues you have expressed interest in. They can be reached here: http://www.songscommunity.com/cep.asp Victor Dricks

comment #1584111 posted on 2015-06-11 15:44:39 by John J. Coupal in response to comment #1576521

> Sorry for the delayed response, Garry. Thanks for the information you provided! Not having been to any of those public meetings, I also don't know why nuclear facility staff would rapidly head for the exit. I'm sure NRC personnel act professionally. One possibility is the presence of "news media" with an anti-anything-nuclear agenda at the meeting, ready to pounce on facility staff with prepared negative "gotcha!" comments or questions. Members of the public who are present probably would behave respectfully and with genuine interest. Has anyone else experienced facility employees fleeing the site, giving us possible reasons for flight? Just curious...

comment #1576594 posted on 2015-05-27 15:10:30 by CaptD

> I used the search tool and nothing is scheduled for San Onofre NPP, why is that? Just because it is starting to be decommissioned is no reason not to hold a local meeting, since many are very concerned with safety, spent fuel storage casks and personnel cutbacks.

comment #1593929 posted on 2015-06-30 01:26:44 by zona nokia

> Very Good

comment #1576464 posted on 2015-05-27 11:25:20 by John J. Coupal

> It's crucial for NRC officials at formal meetings and community forums to fully report on initiatives by plant officials and employees which go "beyond the call of duty" promoting safety and energy security within the facility and all surrounding civilian areas. The tendency for governmental agencies to focus of what went wrong and "how we corrected it" MUST be balanced with additional reporting of SPECIFIC benefits of the facility to surrounding civilian environs. You can catch more bees with a fragrant flower bloom than with vinegar. Too often, governmental regulatory agencies focus solely on the vinegar, which is a severe disservice to a public

which depends on a safe and reliable energy source.

comment #1576521 posted on 2015-05-27 13:02:01 by Garry L. Morgan

The meetings are a place where members of the public may interact with the NRC and nuclear facility staff. I've seen some nuclear facility executives leave the room of the meeting as quickly as possible. Their choice, just as it is my choice to wonder what are they running from? It is an opportunity for informal discussion which the facility executives should not pass up. For the most part, the NRC is responsive, courteous and professional. Thank you. One additional item, there is a problem with the email block portion of the log in field for this posting. I attempted to use our organizational email, then my personal email address, neither worked, both are active email addresses. The Face Book login is working fine.

Counting the Steps to a Final Watts Bar Unit 2 Decision

posted on Mon, 01 Jun 2015 12:58:10 +0000

Jeanne Dion Project Manager Office of Nuclear Reactor Regulation The NRC's Commissioners have given the staff the authority to issue the Tennessee Valley Authority (TVA) a full-power operating license for Unit 2 at the Watts Bar nuclear power plant site in Tennessee. That permission has some strings attached, however, so we're still months away from our final licensing decision.

If TVA is issued the license, Watts Bar 2 will be the first U.S. nuclear power plant to start operating since 1996, when Watts Bar 1 came online. TVA still has to satisfy the staff that several regulatory requirements for safe operation of Unit 2 have been met. We're finishing up the licensing and inspection activities we need to conclude TVA is ready to load fuel and operate the reactor, which is near Spring City, Tenn. We have to be satisfied not only that Unit 2 is safe to operate, but also that TVA can safely transition to operating two reactors at the site. We're completing a few licensing actions needed to support dual-unit operation at Watts Bar. TVA also has to pass our remaining operational readiness inspections. Other upcoming milestones include getting a recommendation from the NRC's Region II Administrator, who has oversight responsibility for all inspections performed at Watts Bar 2. We also need to issue a couple supplements to the reactor's Safety Evaluation Report. TVA's progress in completing construction and testing of Watts Bar 2 will directly influence our completion of the milestones. We may be able to make a licensing decision later this year. TVA has said repeatedly, however, that the actual operating license date depends on several factors and could shift as the final months' work is completed. While we take TVA's schedule into consideration for planning our licensing and inspection work, our priority is always on ensuring safety. If we conclude Unit 2 is safe and ready to receive a license, TVA will still have to successfully complete several tests, including running the reactor at gradually increasing power levels, before the reactor can provide electricity to the grid. The NRC website has more information on the past few years of Watts Bar Unit 2's licensing and inspection activities.

Comments

comment #1579092 posted on 2015-06-01 16:19:54 by stock in response to comment #1579049

Ya Captain, the only safe old nuke plant is one that is shut down and dry casked 100%

comment #1579467 posted on 2015-06-02 13:58:48 by NukePuke

Two Different TVAs Yes, two different TVAs; one that takes care of some of its nuclear power plants and one that doesn't. According to an article entitled "Nuclear Safety Imperfection" by Dave Lochbaum of the Union of Concerned Scientists (UCS), NRC performance data since the turn of the century has been utilized to rank 104 nuclear power reactors in the US. Seems there are persistent top-performing plants and sadly, consistently poor-performing plants. Here's how the TVA plants stack up…best to poorest performers… #29 Watts Bar Unit 1 #36 Sequoyah Unit 2 #42 Sequoyah Unit 1 Then, #61 Browns Ferry Unit 3 #83 Browns Ferry Unit 2 #98 Browns Ferry Unit 1 Are there two different TVAs operating and maintaining these plants?! The three units with the good scorecard are all Pressurized Water Reactors and the three poor-performing units are Boiling Water Reactors (BWRs). These BWRs also have the same suspect Mark I containment structures that failed to contain much of anything during the Fukushima disaster in Japan. It has been said in the business world that "You are only as good as your weakest link". If there is only one TVA then by this standard TVA's performance is weak. Yet TVA is proceeding right along with bringing a Watts Bar Unit 2 on line. From all I have read Watts Bar Unit 2 should be just as good a plant as its sister unit and the Sequoyah units. The Watts Bar units as well as the Sequoyah units are also equipped with the latest in containment structures, so-called "ice condensers". WB1 also has had a continuous run of 512 days (2000) and a stellar capacity factor of 99% (2010). That capacity factor ranked it sixth in the nation at the time. But given all this, if you had to live close to a TVA nuke unit, which TVA unit would you chose for your neighbor? TVA has put forth a huge effort to complete WB1 and now to complete WB2. Why have they not been able, in 15 years, to bring their old Browns Ferry units up to par?! Is TVA spread too thin? How about requiring that the performance of the Browns Ferry units be considerably improved before WB2 is granted its operating license by the NRC? Without this sort of incentive how much longer will substandard performance at these Browns Ferry units be allowed?! More importantly, this would also be in the best interests of reactor and public safety.

comment #1579419 posted on 2015-06-02 11:00:23 by xoviat in response to comment #1579362

The mission of the NRC is to "protect people and the environment" from harmful radiation. No power reactor regulated under the NRC has significantly harmed the environment. The mission of the NRC is not to deny licenses to nuclear operators; the reason that the license approval is a foregone conclusion is that Watts Bar 2 poses no greater threat to the public than any of the existing plants. Maybe the nuclear industry has captured the NRC. Maybe not. But as before, the mission of the NRC is not necessarily to be "independent," it is to prevent harmful radiation. By most measures, it has fulfilled that mission.

comment #1579384 posted on 2015-06-02 08:27:15 by dmills in response to comment #1578988

"A soon to be released Health and Emissions survey and study of the Tennessee River Valley in East Tennessee have demonstrated ionizing radiation from the nuclear industry along with chemical contamination have shown to be causative factors in this high incidence of cancer rates." Please provide this reference or point me to where I can read it.

comment #1579382 posted on 2015-06-02 08:20:32 by Dan Williamson in response to comment #1578988

Please be sure to follow up with the link to that report when it's issued. I'll be interested in the specifics supporting the contention that "....demonstrated ionizing radiation from the nuclear industry ....shown to be causative factors in this high incidence of cancer rates." I mean, since licensed and approved emissions from nuclear plants are virtually indistinguishable (and a statistically insignificant contributor) from normally occurring isotopes and other sources of the 300 mr dose that everyone receives just by being on the planet, such a report would be highly enlightening.

comment #1579362 posted on 2015-06-02 07:21:40 by Tom Clements

Strange that the blog doesn't say what will happen if the NRC denies the license. The blog implies it's a foregone conclusion that Watts Bar unit 2 will get its operating license, right? Is that an indication of proper oversight or not?

comment #1579502 posted on 2015-06-02 15:35:29 by gmax137 in response to comment #1579362

It is not a foregone conclusion when the work starts; rather it is an earned conclusion after decades of work by TVA and NRC staff reviewers, along with myriad design changes necessary for both TVA and NRC to agree that the final plant meets all of the regulatory requirements.

comment #1579607 posted on 2015-06-02 22:36:38 by Garry Morgan in response to comment #1579384

The report will be issued soon. You may see and read about the specific cancer rate indicators at the National Cancer Institute's mapping site.at http://statecancerprofiles.cancer.gov/map/map.withimage.php?47&001&001&00&0&01&0&1&5&0#results Note the types of increased cancers such as leukemia, breast, ovarian, thyroid etc. for Rhea County Tennessee. Another indicator of problems in East Tennessee is the amount of Uranium dumped atmospherically into the environment since 1945. Reference - http://health.state.tn.us/ceds/oakridge/Uranium.pdf Tritium dumping continues to this date, do not forget that man made ionizing radiation bio-accumulates in the environment. My suggestion is to enter into your Google search engine the following terms - "tritium groundwater contamination in east Tennessee." You will receive a prolifera of data on groundwater tritium contamination. This information is related to the Watts Bar Nuclear Facility, existing environmental factors regarding citizen health are conveniently overlooked by regulators and public officials "chomping at the bit" to license this facility. The high cancer incidence rates have been presented to the TVA and NRC as evidence relative to existing human health declines in the areas surrounding Watts Bar, this does not matter to those whose concern is money over human health and welfare. The bottom line of corporate interests takes precedent

over human beings health, a dangerous precedent in the nuclear world, and a Human Reliability failure.

comment #1579614 posted on 2015-06-02 22:58:22 by Garry Morgan in response to comment #1579234

Quote: "A nuclear power plant will never hurt anyone, ever" On several levels you are very, very wrong. 1) Money - a nuke plant costs big bucks, over 10 billion dollars in todays money per unit and increasing. That increases the power bill for industry, business and families. 2) All nuclear plants emit ionizing radiation and all ionizing radiation bio-accumulates in the environment. 3) It is a fact that there is no safe dose of ionizing radiation. 4) It is a fact that ionizing radiation contaminants have been dumped in East Tennessee in the past and are being dumped in the present. 5) Radionuclide contaminants have caused cancer in East Tennessee and will cause cancer in the future. 6) The nuclear waste is a growing problem that complicates an already growing nuclear waste problem in East Tennessee and the entire TVA system. 7) The highly irradiated nuclear trash, spent fuel, is dangerous and a liability for all concerned.

comment #1579070 posted on 2015-06-01 15:04:17 by gmax137 in response to comment #1579013

Not to mention that the Operating License defines the periodic testing (shiftly, daily, weekly, monthly, quarterly, yearly) that the operators have to perform throughout the life of the plant in order to keep the plant running. It isn't like you get the license and that's the end of the testing.

comment #1579049 posted on 2015-06-01 14:01:00 by CaptD in response to comment #1579020

Stock - At least you would be responsible, whereas the NRC on the other hand would only pass the BUCK to the Track Operator, the other drivers and of course everything else including the weather!

comment #1579047 posted on 2015-06-01 13:58:17 by CaptD

The NRC’s Commissioners are just passing the BUCK, since they have already granted the approval, subject to "STAFF" making sure everything is OK... If this is now NRC SOP, then how the NRC getting rid of The NRC’s Commissioners and just let the NRC STAFF take care of all nuclear safety, since they not The NRC’s Commissioners are doing it already! The NRC need less "figure-heads" and more STAFF that are concerned with nuclear safety instead of Nuclear Politics.

comment #1579020 posted on 2015-06-01 12:33:06 by stock

Thats some seriously old equipment there. That would be like me taking my 66 mustang, souping it up, taking it to the race track, and expecting nothing to break. But big difference between a tow back to my shop, and a nuclear accident.

comment #1579013 posted on 2015-06-01 11:58:34 by Moderator in response to comment #1578988

The NRC will only issue an operating license for Watts Bar Unit 2 after the Tennessee Valley Authority satisfies all the relevant regulations, including passing several NRC inspections. A final agency decision regarding the license is expected no earlier than mid-summer. Jeanne Dion

comment #1579002 posted on 2015-06-01 10:56:19 by adrossin

Shame on NRC. Watts Bar should have been in CO-2 free operation for decade or more.

comment #1578988 posted on 2015-06-01 10:05:22 by Garry Morgan

This is a complete failure of the regulatory process , in my opinion. Issuing the license before final safety inspections reeks of political influence from political officials such as Sen. Inhofe, R-OK, who has threatened to defund the NRC, and Sen. Alexander and his out of touch with reality plan for one-hundred new reactors. These individuals are suppose to provide oversight of the NRC, unfortunately it appears these political individuals represent themselves, hidden political donors, and special interest groups such as the NEI, instead of prudent decision making for the people of the United States. Issuing a license to operate before all safety tests are complete, conveys pressure to overlook instances of safety defects and human failure, which have been a historical problem at TVA's Watts Bar. To demonstrate the absurdity of issuing a license prior to completion of safety testing all one must do is read this information article posted. Quote: "The NRC’s Commissioners have given the staff the authority to issue the Tennessee Valley Authority (TVA) a full-power operating license for Unit 2 at the Watts Bar nuclear power plant site in Tennessee. That permission has some strings attached, however, so we’re still months away from our final licensing decision...(last paragraph) If we conclude Unit 2 is safe and ready to receive a license, TVA will still have to successfully complete several tests..." This is a contradiction in words, first they say the reactor is safe and the license is issued; then, the NRC admits that the testing is not complete, however that does not matter, the license is issued. More evidence that the NRC is more interested in catering to political pressure and the industry instead of doing their job to protect the health of the citizens of the Tennessee River Valley from nuclear accidents. Never should a nuclear reactor's license be issued before all safety testing is complete. Speaking of citizen health, the NRC completely ignores the fact that the county where Watts Bar is located has the highest cancer incidence rates in Tennessee, according to the National Cancer Institute's cancer mapping program, it is #19 in the nation for all counties within the U.S. reporting cancer (as of 2014). These facts were demonstrated to the NRC and the TVA this year. A soon to be released Health and Emissions survey and study of the Tennessee River Valley in East Tennessee have demonstrated ionizing radiation from the nuclear industry along with chemical contamination

have shown to be causative factors in this high incidence of cancer rates. The NRC does not consider citizen health and existing ionizing radiation and chemical contaminants in its reactor oversight nor environmental protection processes. As a matter of record (Sequoyah 2013 relicensing public meeting), the NRC has stated in licensing and re-licensing processes it is economics that is the driving factor of licensing a nuclear reactor. Citizen health and safety must take a back seat to money. This is an example of failed values perpetuated by multi-national corporations and special interests groups involved in the government's bureaucracy over reasonable safety standards of a regulatory process to protect citizens and the environment.

comment #1579234 posted on 2015-06-01 21:19:47 by perdajz in response to comment #1579020

No, it's nothing like that. Besides, your driving is a bigger threat to public health and safety than any nuclear plant. Realistically, one mistake or mechanical failure while you are behind the wheel could be lethal. You should be denied a driver's license until you can prove that your driving is safe. A nuclear power plant will never hurt anyone, ever.

comment #1579299 posted on 2015-06-02 03:20:20 by Garry Morgan in response to comment #1579013

The article says the license already has been approved - Quote: "The NRC's Commissioners have given the staff the authority to issue the Tennessee Valley Authority (TVA) a full-power operating license for Unit 2 at the Watts Bar nuclear power plant site in Tennessee." Why would the commissioners approve the issuance of a license prior to final safety testing being complete? 'Cart before the horse' licensing does not instill confidence in the regulatory process, the approval of the license has already been granted. If the commission had said a limited license had been issued for limited power production during final phase testing, that is understandable. But to issue a 'FULL POWER LICENSE' prior to final testing is not sensible and indicates a rush to issue the license. If something goes wrong, how will the staff reverse the decision of your bosses, the commissioners? You say: "If we conclude Unit 2 is safe and ready to receive a license, TVA will still have to successfully complete several tests..." You are saying the plant is not safe for full power operation or ready to receive the license at this time already approved by the commission, do you not see the conundrum created by this action? In my opinion the bottom line is this, what may seem sensible to you is not sensible to citizens observing your actions.

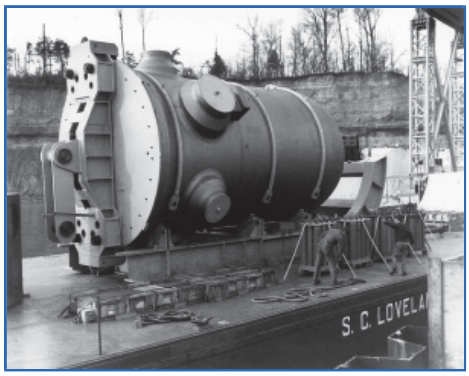
comment #1593928 posted on 2015-06-30 01:25:18 by zona nokia

The high cancer incidence rates have been presented to the TVA and NRC as evidence relative to existing human health declines in the areas surrounding Watts Bar, this does not matter to those whose concern is money over human health and welfare. The bottom line of corporate interests takes precedent over human beings health, a dangerous precedent in the nuclear world, and a Human Reliability failure.

Throwback Thursday – A Reactor Vessel's Arrival

posted on Thu, 04 Jun 2015 13:29:11 +0000

 In these photos, a reactor vessel is being towed (and then arrives) at the barge dock of an East Coast nuclear power plant site circa 1971 Can you name the power plant? Photo courtesy of the Department of Energy



Comments

comment #1583323 posted on 2015-06-10 11:38:36 by bob wilson

> Yep, that was easy, since I was a engineer on the CC reactor and internals many years ago. Those were were the days, we thought they would never end for the nuclear power industry.

comment #1581167 posted on 2015-06-05 13:07:50 by CaptD in response to comment #1581116

> NukePuke - Great Comment, as usual ==> Salute And Yes the "calm" Bay was the giveaway... Ever consider an image of most of the NRC as New car salesmen, very interested when one is shopping to buy but afterward, they have better things to do with their time...

comment #1581259 posted on 2015-06-05 20:49:00 by NukePuke in response to comment #1581167

> Thanks Cap! The NRC is indeed a salesman, but more like a used car salesman. Even nuke plant owners are trying to unload these old nuke plant dinosaurs. Some typical lines they are using now... Used Nuke Plant Salesman: Worth every penny! Translation: Every penny is one cent that is what it's worth. Used Nuke Plant Salesman: Last year's model! Translation: Everyone else found its faults, can you? Used Nuke Plant Salesman: Dealer Demo! Translation: We tried it, we're unloading it. Used Nuke Plant Salesman: These are getting hard to find! Translation: Scrap metal prices keep going up. Used Nuke Plant Salesman: "Is price important to you?" Utility Buyer: "No, charge me whatever you want, the ratepayers are footing the bill." Used Nuke Plant Salesman: The nuke plant of your dreams! Translation: You remember these dreams, waking up with your heart racing, don't you?

comment #1581116 posted on 2015-06-05 09:51:02 by NukePuke

> Reactor Vessel Coming & Going Good job Steven. So this is a throwback pic of a new reactor pressure vessel (RPV) heading to Calvert Cliffs in Maryland. To provide balance to this blog I found a picture of a used RPV leaving a reactor site on a barge. I tried to upload the pic but it didn't work. The used RPV looked pretty benign on its barge, all wrapped up in a blue covering. This used RPV (on a barge on the Columbia River) was sealed and shielded & was from the defunct Trojan Nuclear Power Plant, which ceased operation after only 17 years. By disposing of the Trojan RPV in one piece the contractor said he saved 19 million dollars. For some reason the total cost for disposal was not mentioned?! This used RPV contained two million curies of radioactivity, and that amount does not include the radioactive fuel that was removed before the used RPV was shipped. To get a feel for just how much radioactivity this two million curies is, I offer a couple of comparisons… • The Curie-Meter-Rem Rule-this rule estimates the radiation dose rate one meter from a one-curie radiation source. At one meter from a one curie radiation source the dose rate is one Rem per hour. So after only five hours a radiation worker would receive his maximum allowable yearly dose of radiation. So even one Curie is a huge amount of radioactivity. • The Los Alamos Lab offsite radioactivity recovery project recently celebrated a milestone. Since 1999 they have recovered more than one million curies of radioactivity from 38,000 radioactive sources from 1,100 different locations in the fifty states. Therefore the radioactivity in the used Trojan RPV alone was two times the amount of radioactivity recovered in over 15 years by the lab's recovery project! Guess where this barge discharged its radioactive cargo? In a shallow land fill grave on the Washington state Hanford Reservation. The land fill that it is said,"…poses unique problems due to its close proximity to the Columbia River." Such is another chapter in our nuclear power plant legacy series.

comment #1580755 posted on 2015-06-04 14:40:02 by Moderator in response to comment #1580685

> Yes, Calvert Cliffs, in Maryland. Moderator

comment #1580757 posted on 2015-06-04 14:45:10 by Steven Hutchins in response to comment #1580755

> When I was a consultant, my company had a doublewide trailer on the road to the intake structure and walked down to that very dock at lunch time. When we would look back up the road, the trees on the top of the bluff is exactly what we saw. Sometimes it's not so bad being in this business since 1976.

comment #1593927 posted on 2015-06-30 01:23:12 by zona nokia

Thanks cap!

comment #1580685 posted on 2015-06-04 09:52:43 by Steven Hutchins

That was ease. It's the arrival of the first unit at BG&E's CCNPP. It was the trees and the bluff in the background that gives it away.

Continually Improving Search to Enhance Openness

posted on Tue, 09 Jun 2015 13:00:17 +0000

Patricia Hall
Chief, Information and Data Operations Branch

The NRC prides itself on being an open and transparent organization and we have an extensive web site and a comprehensive online document system to prove it. We also provide a handy search tool that facilitates some 5000 to 8000 search requests on the average work day.

Because we understand that sometimes it can still be a bit difficult to easily find what you're looking for we have improved our search function effective immediately.

Located at the top of each page at www.nrc.gov, the search retains many of the features of the prior site search. You can still:

- Search the whole web site and the public part of the ADAMS document library
- Refine your search in a variety of ways
- Sort your results by relevance or date

Now, though, there are several new features. Your search will include thumbnail images (if images are part of the document) and you can search not just the website but also the agency's social media platforms, including the blog, Facebook, Flickr and YouTube. You can also search the site glossary of nuclear terms.

Search suggestions will appear as you type in the search and there is a link on the results page to save your current search results for later viewing or sharing.

But there's more! New collection searches will be available for several types of NRC Generic Communications, including Information Notices, Regulatory Issue Summaries, Generic Letters, Bulletins, and Circulars. Searches of the Commission Speeches collection will include links to filter by specific NRC Commissioners and searches of the News Releases collection will include links to filter by NRC region.

This new and improved search aligns more closely with the search experience at www.google.com, so you can expect a level of user friendliness from our search similar to what they would expect with a Google search. For example, when you enter a search phrase consisting of several words, Google search will bring up Web pages and documents containing instances of the entire phrase before those matching only the individual words. Web pages and documents containing more instances of your exact phrase will be favored in the ranking, as will those where the phrase occurs in the title or near the top of the document.

We hope you will find the improved search tool easier to use and your searches to be more fruitful. If you have additional suggestions for improvements, please put them in the comments below.

Note: The graphic is just an illustration. The Search box looks exactly the same as it did previously.

Comments

comment #1592536 posted on 2015-06-26 16:24:17 by in response to comment #1591846

We'll do our best to answer your questions. First, to clarify, the Open Forum is not a separate blog site on which anyone can post. It is an individual post on the NRC blog site on which anyone can comment. The total number of views to the NRC blog site is 454,939 from the time the Open Forum blog post first went up in August 2012. We estimate there are approximately 500 views on the blog each work day, with peaks at various times as high as 6,000 views. The total number of comments on the blog since its creation in January 2011 is 5300. The total number of comments on the Open Forum post itself is 312. The WordPress template we use does not

calculate average comments per week. It also has other limitations in terms of statistics capture. As we said previously, anyone can sign up to be notified of comments on any blog post they wish or can sign up for the blog in its entirety. These are mechanisms that are part of the WordPress platform. Our only control over these mechanisms is to allow or not allow; there is no customization. Moderator

comment #1585303 posted on 2015-06-12 18:44:22 by NukePuke in response to comment #1582820

I am anxiously awaiting your blog post on Safeguards Information Ms. Janney. Your insights and answers to blog questions and comments will be most appreciated. Would you also include answers to the following in your post? Remove One Nuclear Power Stigma The NRC is the only federal agency that has a secret classification that goes beyond “Confidential”. It is called “Safeguards Information (SGI)”. With it the NRC has kept from the public domain around 17,000 documents. This additional secret classification has been questioned even by the NRC’s own Office of the Inspector General. Specifically Audit OIG-04-A-04 questioned “whether the designation of SGI as sensitive unclassified information is justified or cost effective.” Subsequent OIG audits pointed out a number of deficiencies with the SGI program and especially with the adequacy of the SGI data base itself. (OIG-12-A-12 & OIG-13-A-16) Furthermore the NRC has abused its authority by classifying more documents as SGI than it should. A number of SGI documents have been requested for release under the Freedom of Information Act (FOIA) and the NRC has been forced to release many of them. The cost to us taxpayers for the NRC to maintain and upgrade this separate SGI system has been steep. In the NRC’s ADAMS data base 1,900,000 documents are maintained, 900,000 of which are in the non-public portion of ADAMS. Still the NRC persists in maintaining a separate data base for only 17,000 documents. If my math is correct those 17,000 documents constitute less than 1% of all documents maintained by the NRC. The NRC should finally do the right thing. Review those 17,000 and move only the ones that are truly sensitive to the non-public portion of the ADAMS data base. Better yet if they so qualify they should be classified and treated as truly Confidential documents. Another “cost” of this separate, special, and unique NRC classification system is the cost to the public’s perception of what the NRC is about. These perceptions might include… • Why does the NRC have the right to keep more information from the public than any other federal agency? • Is nuclear power so much more dangerous than anything else the feds regulate, that such additional secrecy is essential? • That the NRC is keeping more secrets than any other agency, even the CIA and the FBI. • That this additional secrecy flies in the face of the image the NRC tries to convey to the public. Namely that they are an open and transparent federal agency. Please NRC at least remove this one nuclear stigma!

comment #1583379 posted on 2015-06-10 13:05:49 by Moderator in response to comment #1582820

The NRC cannot speak for the FBI nor the CIA. Neither can we speak for Congress related to its passage of Atomic Energy Bill. However, we are happy to do a future blog post on the subject of SGI. Margie Janney

comment #1583374 posted on 2015-06-10 13:00:15 by Mike Mulligan in response to comment #1583241

Exactly! I'd like to put on my blog, this is how a good plant looks and this guy got a lot to work on. http://steamshovel2002.blogspot.com/ Like these two examples currently on my blog: River Bend and Grand Gulf? Ok, I am a bit lazy?

comment #1583195 posted on 2015-06-10 08:34:13 by Moderator in response to comment #1582820

ADAMS contains approximately 1.9 million electronic documents. Of those, approximately 1 million are publicly available and 900,000 are withheld from public disclosure. In general, the non-public documents contain information such as proprietary information, personal and private information, or information subject to attorney-client privilege that should not be in the public domain. These documents are what you might consider “confidential.” For additional detail, see Information Security at http://www.nrc.gov/security/info-security.html . Safeguards Information (SGI) is a special category of sensitive unclassified information authorized by Section 147 of the Atomic Energy Act to be protected. Safeguards Information concerns the physical protection of operating power reactors, spent fuel shipments, strategic special nuclear material, or other radioactive material. Although SGI is sensitive, unclassified information, it is marked and protected in many aspects similar to Confidential National Security Information. The NRC is the only federal agency that creates Safeguards Information. There are about 17,000 electronic documents that fall into this category. No Safeguards Information is in ADAMS. Thank you for your interest in accessing NRC documents. Margie Janney Chief, IT/IM Policy Branch Office of Information Services

comment #1583241 posted on 2015-06-10 09:42:52 by Paul Lindsey in response to comment #1582929

You mean like this from BPA? http://transmission.bpa.gov/business/operations/Wind/baltwg3.aspx (Wind output is the green line.) and the data is downloadable in 5 minute increments for years. Note that this is the only US location that provides this type of historical wind data.

comment #1583282 posted on 2015-06-10 10:39:10 by NukePuke in response to comment #1582820

Glass Half-Empty or Half-Full? I appreciate the prompt informative response. So the public has access to a little more than half of the information in ADAMS. You state, “In general, the non-public documents contain information such as proprietary information, personal and private information, or information subject to attorney-client privilege that should not be in the public domain.” Additionally, approximately 17,000 documents are maintained outside of ADAMS in a special category of sensitive unclassified information created by Section 147 of the Atomic Energy Act. Furthermore, the NRC is the only federal agency that has this so-called

Safeguards Information category. Considering then all the documentation the NRC possesses, about half is available to the public. Frankly, I am pleased that there are far fewer documents classified as Safeguards Information than I suspected. I guess I especially notice the times the NRC uses this classification. I wonder what is deemed to be so sensitive that it cannot be shared with the public?! For example, recently I have noted that some meetings (and portions thereof) with nuclear power plant licensees regarding the results of their flood hazard's analyses have been declared to be off-limits to the public. I suspect that the reason is that the results of the analyses point toward a possible nuclear plant susceptibility to a flood. Seems to me that if that is the case, classifying such a meeting as Safeguards Information acts as nothing more than a lightning rod to any potential enemies. Also isn't keeping such critical information from the public under those circumstances, very questionable at a minimum?! Doesn't the public have an inherent right to know about potential threats to their safety/security? Some other questions Ms. Janney, • The CIA and the FBI are also very large federal agencies. Is roughly the same portion of their databases withheld from public disclosure? • As I understand it the Atomic Energy Act was approved in 1954. Why was this special category of sensitive yet unclassified information created just for the Atomic Energy Commission (AEC), now called the NRC? For example is nuclear energy considered a greater national security threat than all other potential threats? • Over the years this special category has been questioned by a number of auditors. Why has the NRC not abandoned or otherwise modified this special category?

comment #1585160 posted on 2015-06-12 13:42:27 by Moderator in response to comment #1582820

A blog post on the subject of SGI is under development. Moderator

comment #1585100 posted on 2015-06-12 10:43:27 by NukePuke in response to comment #1582820

Ms. Janney, in order to assist in your search for an answer to my previous blog I offer the following… Excerpt from the "Audit of NRC's Protection of Safeguards Information", OIG-04-A-04 dated January 8, 2004 "Especially in the aftermath of the terrorist attacks on September 11, 2001, the OIG questions whether the designation of SGI as sensitive unclassified information is justified or cost effective. OIG believes SGI information can be protected by the standard confidential classification with little or no additional cost. Moreover, SGI-M can be adequately protected by the standard official use only designation." This audit is by the NRC's own Office of the Inspector General (OIG) which reports directly to the Chairman of NRC Commission. It appears that the NRC did not act on this important recommendation. Why, Ms. Moderator?! (It is OK with me if you just answer for the NRC.)

comment #1582754 posted on 2015-06-09 09:45:16 by NukePuke

Non-public Portion of ADAMS I am glad the Commission is allowing even better access to the "public part of the ADAMS document library". To help the layman better understand your agency's claim to be "open & transparent", how about giving us a feel for just how large the "non-public" portion of the document library is? For example, what portion of ADAMS is public versus non-public? Perhaps a gigabyte (GB) comparison would be helpful. Also the NRC uses a special classification category not used by any other federal agency. It is called "Safeguards Information". This classification is used to withhold literally tens of thousands of additional documents from the public domain, documents that would be available from other federal agencies. Therefore NRC please give us even a rough estimate of... The portion of ADAMS that is the "public part"... The portion of ADAMS that is the non-public part... And of the non-public part what portion is classified "Confidential" and what part is classified "Safeguards Information"? Or is our "open & transparent" NRC even able to provide such a rough estimate as any such answer would probably be classified as "Safeguards Information"?!

comment #1582822 posted on 2015-06-09 13:06:43 by CaptD

To Patricia Hall Thanks for all your efforts, now please consider adding an edit button with at least a few minute of accessibility so that users can correct and/or delete posted as necessary to make using this blog even better. If you are really generous, perhaps you will also add some basic formatting "tools" as most other sites offer because that along with faster moderation will really help speed up the discussion on this NRC blog site.

comment #1582823 posted on 2015-06-09 13:12:17 by CaptD

Patricia Hall FYI: I entered new search bar into the search bar located here: http://www.nrc.gov/site-help/search.html?q=new+search+bar&site=allSites#gsc.tab=0&gsc.q=new%20search%20bar&gsc.page=1 (which looked nothing like the one in the above article) and did not get anything other that Watts Bar in the first page of "hits", so you still have some work cut out for you and your staff. Best CaptD

comment #1582820 posted on 2015-06-09 13:01:58 by CaptD in response to comment #1582754

Great Comment, hopefully they will post a factual reply, especially about what is available from other Gov't. sources but not from the NRC site! It is very hard for the educated public to provide useful information to the NRC if we cannot get access to the data which is required to determine it, case in point is the $5 Billion San Onofre RSG debacle, where the operator is withholding operational data from Unit 2 and Unit 3 (which was listed in the NRC's own AIT report) which will be helpful in determining exactly why FEI occurred in Unit 3 but not Unit 2. SCE is now claiming that the operational data is proprietary even though both Unit 2 and Unit 3 are being decommissioned and the NRC ALB has received calculations indicating that Unit 3 was being operated outside its limitations by SCE in what can only be called an experiment that went wrong. If the NRC will not provide data and/or info on an as needed basis, then their claim to be open and transparent is "flawed". BTW: I suggest that Patricia Hall add the search button to this page as

that would allow users of the blog to access eh larger NRC site much easier.

comment #1583843 posted on 2015-06-11 07:47:46 by NukePuke in response to comment #1582820

Ms. Janney response, "The NRC cannot speak for the FBI nor the CIA. Neither can we speak for Congress related to its passage of Atomic Energy Bill. However, we are happy to do a future blog post on the subject of SGI." I appreciate the offer of a future blog on SGI Ms. Janney. I admit though that I was disappointed in the first part of your response. I was hoping that you would speak just for the NRC. I know the NRC takes positions on issues and also responds to auditor's comments and recommendations. Perhaps you could share a link to the NRC's response to an OIG audit that questioned the use of this special SGI category. Additionally, has the NRC recommended to Congress any changes to this program including perhaps that this special classification is no longer deemed to be necessary or even appropriate? Thanks.

comment #1582929 posted on 2015-06-09 21:00:13 by Mike Mulligan

I'd like to see the" Power Reactor Status Report" in graph form versus time. You could see quickly see short term changes as well as long term trends. See it in a daily, weekly and yearly form on one page , where you could quickly pick up the time and duration of a down power(amount), shutdown and start up. I'd like to compare the operation of one plant from another. OMG, an android app... As it goes now, you bury information by only seeing one date at a time. It is amazingly time consuming to see the trends. These bad boys who go up and down at power like a mad man is hard to detect...

comment #1591830 posted on 2015-06-25 10:07:07 by NukePuke

Suggestion to enhance openness and transparency... NRC Blog site questions for you Ms. Moderator… I noted that you state about the NRC Blog site that "1,675 other amazing people" are following this blog. How many amazing people are following the NRC Open Forum site? I like the fact that you keep blogs on the Open Forum site indefinitely. But I do not believe you let all of us amazing people know of a new blog on the Open Forum site or for that matter any new comments posted in response to that blog. If blogs and comments meet your comment guidelines why aren't we (your amazing people) alerted by email to posts and comments on the Open Forum site as we are alerted to those on the NRC Blog site? I am sure this is just an oversight on your part. Otherwise it would seem to me, and perhaps others, that you are really primarily interested in just selective feedback on issues and topics that interest the NRC. Also alerting folks to new posts and comments on the Open Forum site would I believe encourage even more, as you have stated, "lively and engaging dialogue".

comment #1591846 posted on 2015-06-25 10:59:31 by Moderator in response to comment #1591830

According to Wordpress (the platform that hosts the blog), there have been 6,125 total views to the Open Forum blog post. To be notified whenever a new comment is posted to a post you are interested in, just click in the Leave a Reply box and you will see options below it that include "Notify me of new comments via email." Moderator

comment #1591856 posted on 2015-06-25 11:43:41 by NukePuke in response to comment #1591846

Thanks for the prompt response Moderator. To give me a better feel for the info you have provided I must ask some follow-up questions. You state that there have been 6,125 total views to the Open Forum blog post. During that same period of time how many total views have occurred on the NRC Blog site itself? I assume that those 6,125 total views on the Open Forum blog site have occurred since its inception August 2012. If my math is correct the Open Forum blog site then has approximately 10 views per day on average. How many total views per day are experienced on average on the NRC Blog site? "Views" are one thing and "posts" and "comments" are quite another. Only the NRC can post on the NRC Blog site; anyone can post on the Open Forum site. How do the number of NRC posts on the NRC Blog site compare to the number of posts on the Open Forum site? (Average number per week would be fine). Now for "comments" posted in response to the blogs posted on these two sites... How many post comment replies are posted on average per week on each of these sites? I suspect that these numbers will show that the NRC Blog site is where the vast majority of the action is. Seems to be the NRC would want to encourage more comments on a variety of topics and not just those limited to the NRC flavor of the week featured on the NRC Blog site. Sending an email alert to those 1,675 amazing people (who have signed onto the NRC Blog site) whenever a comment is posted on the NRC Open Forum site would be a great way to substantially increase not only total site "views" but the total comments as well on that site. Isn't that what having a successful blog site is all about?

comment #1582867 posted on 2015-06-09 16:14:46 by Moderator in response to comment #1582823

The results you received are exactly as expected. The search returned the most relevant information with the word "bar." The graphic in the post is only an illustration and does not represent the search bar on the Web page, which has not changed in how it looks. We've updated the post to clarify it's only a graphic. Pat Hall

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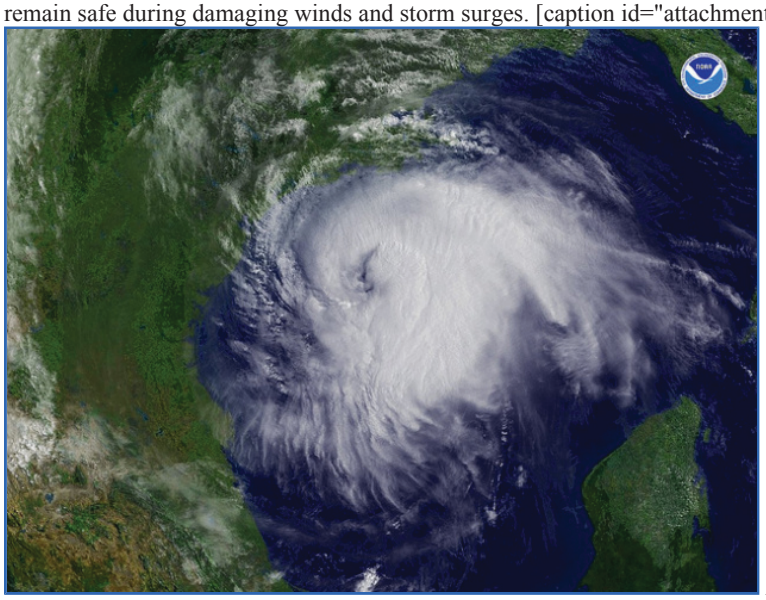
NRC -- Ready for the 2015 Hurricane Season UPDATED

posted on Thu, 11 Jun 2015 18:14:18 +0000

Update: Due to Hurricane Bill, the South Texas Project nuclear power plant, located near Bay City, Texas, has started tropical storm/hurricane procedures. Actions taken include performing a plant walkdown to secure and tie down anything that could be become a projectile missile or flying debris. The plant operator has implemented restrictions for employees to stay inside if winds get above 40 mph. Today, winds are projected to be sustained at 50 mph with gusts up to 60 mph. Both units are at full power unless winds reach speeds above 75 mph, but that is not expected at this time. They have additional staff onsite and supplies (cots, food, water). The resident inspectors are not evacuating and an additional group of NRC inspectors has been on site and will remain so to back up the residents if need be. (At this time the hurricane is not expected to affect River Bend or Waterford nuclear power plants, but the NRC's Region IV will continue to monitor the projected path.) *Roger Hannah Senior Public Affairs Officer Region II* The hurricane season officially began June 1, but this year the Carolina coast experienced a tropical storm named Ana in early May. While Ana produced winds of more than 60 miles an hour near the Brunswick nuclear plant, there was no major damage. It did, however, serve as an early reminder of the NRC's role in ensuring nuclear plants remain safe during damaging winds and storm surges. [caption id="attachment_6361" align="alignright" width="493"]



A hurricane as seen by satellite. Be assured, it's not a current photo and is NOT happening now.[/caption] The NRC has years of experience with hurricanes and other severe storms. Nuclear facilities were affected by Hurricane Andrew in Florida in 1992, by Katrina in Louisiana in 2005, by Sandy along the East Coast in 2012 and by many others. Although the National Oceanic and Atmospheric Administration predicts fewer storms this year than the historical average, any storm can be dangerous. How does the NRC oversee the safety of nuclear plants and other facilities during these storms? The NRC staff monitors tropical storms as they form, and if the projected path is towards the coast, the agency's regional offices begin continuous tracking. If a storm's path shows the possibility of it affecting a nuclear plant or other NRC-licensed facility, the NRC collects more information on the storm and NRC resident inspectors check the plant's preparations. Depending on the projections, additional NRC inspectors may be dispatched to some nuclear plants. Around 12 hours before predicted hurricane-force winds, nuclear facilities that may be in the path provide the NRC updates and NRC inspectors monitor the plant staff's actions. Plant procedures require the plant operators to shut the reactor down if winds greater than a certain speed are expected on the plant site. Nuclear plants are built to withstand all expected local meteorological events, including hurricanes, and actual storms have shown that plants can safely shut down and with little or no damage to important safety equipment. The NRC stays in contact with plants and NRC inspectors on site as the storm passes over, and the agency has backup systems if regular communications channels are lost. Once the storm is over, the NRC and FEMA assess damage and make sure local emergency response organizations can resume their normal roles. If the plant shut down, it will only be restarted after the NRC is satisfied there is no damage to safety equipment and emergency response capabilities have been restored. Fortunately, most tropical storms and hurricanes do not adversely affect nuclear plants, but the NRC is ready in case one does.

Comments

comment #1589210 posted on 2015-06-19 08:58:38 by Moderator in response to comment #1584087

> The Brunswick units were not required to shut down and continued to operate during Tropical Storm Ana in May. There was no water intrusion or damage to plant equipment from the storm. The NRC has taken and continues to take a number of actions to address lessons learned from the 2011 nuclear accident in Japan. More information on those actions can be found at www.nrc.gov/reactors/operating/ops-experience/japan-dashboard/priorities.html . Roger Hannah

comment #1584087 posted on 2015-06-11 15:19:09 by NukePuke

> Glad to hear there was no major damage to Brunswick Units #1 & #2. Your article does not mention whether or not the units were shutdown as a precaution or just specifically what actions were taken by the plant owners and the NRC there. Of course I am most concerned about the 31 nuclear power plants (including the Brunswick units) operating in the US with suspect Mark I or II containment structures. You know the same containment structures that did not contain much of anything during the nuclear nightmare in Japan. Has the NRC in any way stepped up its inspection efforts at these facilities since the Fukushima accident?

comment #1584478 posted on 2015-06-11 21:23:38 by CaptD

Remember: Nature can destroy any land based nuclear reactor, any place anytime 24/7 despite what inspection personnel do!

comment #1585862 posted on 2015-06-13 13:19:52 by Half-TruthSlayer in response to comment #1584087

Also read that there were significant amounts of rainfall when Ana passed. Was there any water intrusion as a result at Brunswick? As you are aware at Indian Point near NYC there was a water intrusion event just as a result of the activation of a fire suppression system on a main transformer located outside the buildings there. That occurred despite a "thorough" walk-down of "all" flood barriers at that plant just 2 years earlier. Just what damage, although not "major", did occur at Brunswick?

comment #1587059 posted on 2015-06-15 06:39:32 by Dan Williamson in response to comment #1584478

Still handing out that bumper sticker, huh? That's right up there with Split Wood, Not Atoms!

comment #1585115 posted on 2015-06-12 11:21:41 by Pamela79

We can never fully prepare for mother nature, but taking all possible necessary steps is our responsibility. Great job!

comment #1589287 posted on 2015-06-19 11:58:21 by NukePuke in response to comment #1589210

Thank you for the additional information Mr. Hannah. I am glad there were no untoward adverse effects on Brunswick from Tropical Storm Ana. It also tells me that even with a half-foot of rain or so the Brunswick units had no water intrusion that would threaten reactor safety as was the case at Indian Point recently. Glad nature's "leak check" of Brunswick passed with flying colors!

In Honor of June – Fresh Fruit and Vegetables Month

posted on Tue, 16 Jun 2015 14:49:54 +0000

June isn't just about Father's Day and graduations. It's also Fresh Fruit and Vegetables Month. In honor of that designation, we bring you this question: Which of these fruits and vegetables contain naturally occurring radioactive potassium?

1. a) White potatoes
2. b) Carrots
3. c) Lima beans
4. d) Bananas
5. e) All of the above

Comments

comment #1588213 posted on 2015-06-17 09:10:34 by Garry Morgan

Man made ionizing radiation deposited in our food sources as a result of mining, nuclear fuels processing, weapons processing or nuclear reactor emissions increases the levels of ionizing radiation in our food supplies which increases the risk of cancer as there is

no "safe level" of ionizing radiation. What is the message in this piece of educational propaganda? a) Are you attempting to convey the message that radiation is good for us? b) Are you attempting to convey the message that radiation is "natural"? c) Are you attempting to convey the message that radiation is safe? d) This message was delivered by the NEI special interest group? e) We are having problems with those in Congress who wish to defund the NRC so we are placating the special interest groups with their propaganda instead of strictly enforcing our regulations to protect the public?

comment #1587756 posted on 2015-06-16 13:06:34 by Moderator

Yes, the answer: e. You can find more information about radiation in your daily lives here: http://www.nrc.gov/about-nrc/radiation/around-us/doses-daily-lives.html Moderator

comment #1592860 posted on 2015-06-27 10:06:44 by Frank in response to comment #1588213

How can there be a thing as "no safe level of radiation"? When life evolved, this planet was much more radioactive than it is today. Since Hiroshima, life expectancy on this planet has increased, I am not saying because of radiation, but in spite of radiation, it obviously does not harm us at the levels we are exposed to. Like everything else in life, too much is bad for you, too little kills you as well e.g. oxygen, salt, heat....

comment #1593796 posted on 2015-06-29 15:46:48 by Garry Morgan in response to comment #1592860

The fellow that invented Health Physics made this statement, "There is no safe level of exposure and there is no dose of (ionizing) radiation so low that the risk of a malignancy is zero." Dr. Karl Morgan. Some other very learned people in the scientific community agree. Additionally, "There is a "no-threshold dose-response relationship between exposure to ionizing radiation and the development of cancer in humans." National Academy of Sciences,BEIR VII, Phase 2, 2006 study, pg. 15 The Radiation Hormesis theory, is a theory, it is not factual. The reason it is before the NRC and continues to be placed forward is financial gain for the nuclear industry. Your suggestion that the nuclear detonation at Hiroshima has extended life expectancy of the planet is wrong in any way that you may attempt to qualify such a statement. One of the greatest threats to any nuclear system is human reliability failures. You have suggested that a nuclear detonation increases life expectancy. There were deaths at Hiroshima, that is the purpose of a nuclear weapon, and deaths continue to mount as a result of nuclear programs in the world and U.S. today. Those facts may be gained from reading official U.S. Government documents, either in hard copy or online.. Are you suggesting that the scientific evidence and facts of the past 70 years relating to nuclear energy be discarded so that the nuclear industry may realize further profits?

comment #1588029 posted on 2015-06-17 02:23:44 by Ms.Jarunee Kraikaew

Supposed to be bananas

comment #1588313 posted on 2015-06-17 13:48:28 by CaptD

Depends where they are grown, since the word "natural" is too vague. + Fukushima has taught us that ☢ can be of concern if nuclear goes BAD for any reason.

comment #1588321 posted on 2015-06-17 14:02:57 by CaptD

This is a Serious Question: What about the (fruit) flies? Are they a good indicator of potential ☢ problems? When the Flies All Go Away, You Are Being Blasted With Radiation http://nukeprofessional.blogspot.com/2015/06/when-flies-all-go-away-you-are-being.html?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+NukeProfessional+%28Nuke+Professional%29

comment #1587784 posted on 2015-06-16 14:25:07 by adrossin

We can tell people but nobody cares.

comment #1587727 posted on 2015-06-16 11:26:20 by Ed

e) All of the above

comment #1587717 posted on 2015-06-16 10:56:40 by Kjell Johansen

They all do.

comment #1587723 posted on 2015-06-16 11:17:12 by John J. Coupal

5. e) All of the above

comment #1588179 posted on 2015-06-17 07:13:32 by Half-TruthSlayer

Natural & Man-made Radiation Thanks for the link to this information on radiation. The article concluded that… "We live in a radioactive world, and radiation has always been all around us as a part of our natural environment." I feel better about radiation now. It is all around me and in me and in the foods I eat and the water I drink. I am now OK with it thanks to you. Radiation is my constant companion, my friend. Man-made radiation treats a lot of my ailments and diseases. For that I am truly grateful. But there is one form of man-made radiation that I can do without. It is the kind that has traumatized millions of people; displaced hundreds of thousands of people from their homes; made vast areas of our planet uninhabitable; and killed and maimed many people. This kind of man-made radiation has been foisted on me by big government and big business. I signed no consent form allowing such made-made radiation exposure. No one advised me of the risks and benefits of such man-made radiation. This form of man-made radiation is so potentially dangerous that no private insurer will underwrite it. Boss: Dilbert, You have been chosen to design the world's safest nuclear power plant. Dilbert: This is the greatest assignment that any engineer could hope for. I'm flattered by the trust you have in me. Boss: By "safe" I mean "not near my house."

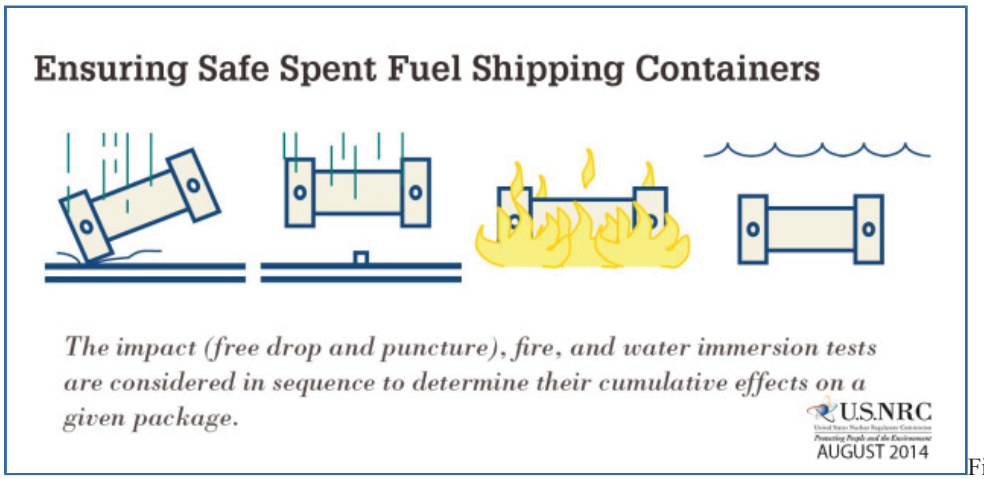
Testing Spent Fuel Transport Casks Using Scale Models

posted on Thu, 18 Jun 2015 16:40:03 +0000

Bernard White
Senior Project Manager
Division of Spent Fuel Storage and Transportation

Before casks can be used to transport the most radioactive cargo—including spent nuclear fuel—the NRC requires them to undergo a thorough safety evaluation. Casks are evaluated for their ability to withstand vibration, water spray, free fall, stacking, penetration and fire. A cask must be able to contain and shield the spent fuel and keep it in a safe configuration under both normal and accident conditions. Typically, spent fuel casks are certified through a combination of engineering analyses and scale model or component testing.

People often ask why the NRC allows designers to test scale models instead of requiring tests on full-sized casks. The bottom line is scale-model testing provides the necessary information for the NRC staff to know that a cask loaded with spent fuel can be transported safely, even in the event of an accident.



First, it is important to understand what information comes out of these tests. Test casks are fitted with sensors to measure acceleration. These accelerometers are similar to the ones used in smart phones, video game remotes and pedometers to respond to the movements of the user. Knowing the cask's acceleration allows designers and the NRC to understand the forces different parts of the cask will experience in different types of impacts. The design engineer generally calculates these impact forces first by hand or by computer. Tests on a scale model can be used to check the accuracy of these analyses.

Engineers follow a similar process to safety-test airplanes, ships, bridges, buildings and other large structures. Scale-model testing is a proven and accepted practice across engineering disciplines, and may be one of the oldest engineering design tools. (Ancient Egyptian, Greek, and Roman builders are known to have built small models to assist in planning structures.) Today, models allow oversized structures to be examined in wind tunnels, under different weight loads and on shake tables to provide key inputs into design and safety reviews.

Cost savings is a factor, but not the most important one. The biggest reason for using scale models is practicality. Transport casks for spent nuclear fuel are typically in the 25-ton to 125-ton range. There are very few testing facilities in the world that can put a 125-ton cask through the required tests.

For example, during 30-foot drop test, the test cask must strike the surface in the position that would cause the most severe damage. Cask designers often perform several drops to ensure they identify the correct position. After the 30-foot drop, the cask is dropped 40 inches onto a cylindrical puncture bar, then placed in a fully-engulfing fire for 30 minutes. Casks are also immersed in water to ensure they don't leak. Measurements from these tests are plugged into computer programs that analyze the cask structure in great detail.

This analysis can determine the stresses placed on cask closure bolts, canisters and baskets that hold the spent fuel in place, and the spent fuel assemblies themselves. Computer simulations can be run for different scenarios, providing maximum flexibility to designers in understanding how best to design different parts of a cask's structure.

In addition, NRC regulations specify that in the 30-foot drop test, the cask must hit an "unyielding" surface. This means the cask itself, which may be fitted with "impact limiters," has to absorb all the damage. The impact limiters work much like the bumper that protects a car in a collision. The target surface cannot dent, crack or break in any way. In a real-world accident, a 125-ton cask would damage any surface significantly. It requires considerably more engineering work to achieve an unyielding surface for a full-sized cask than for a scale model, with no measurable advantage. The rule-of-thumb for testing is the impact target should be 10 times the mass of the object that will strike it. So a 125-ton cask would need to hit a 1,250 ton surface. A 30-ton cask would only need a 300-ton target.

Scale models are easier to handle and can be used efficiently for many drop orientations to meet the multiple test requirements. If a test needs to be run again, it can be done much more easily with a scale model. Design changes are also more easily tested on models. Together with extensive analyses of a cask's ability to meet our regulatory requirements, the information from these tests allows the NRC to decide whether a cask can safely transport the radioactive contents.

Comments

comment #1589226 posted on 2015-06-19 09:39:53 by NukePuke

> If We Could Only Have Learned From Models of Nuclear Power Plants Interesting article about shipping casks for spent but still highly radioactive fuel. (BTW, is the word "casks" short for "caskets"?!) NRC, when might we expect to have a permanent High Level Waste (HLW) repository so we can actually use these "transportation" casks? Glad the NRC is using cask models to save us taxpayer's money. How does this savings stack up against all the costs taxpayers and utility ratepayers are being assessed to store all this HLW at 94 sites all over the country? Let alone the potential costs to humanity if terrorists attack these vulnerable sites and cause a public Armageddon. If only nuclear power plant models were used in the earliest days of nuclear power. Such models may have given us valuable insights into just how deadly nuclear power could be. We then could have avoided the nuclear nightmare that has ensued. Come to think of it though "models" called nuclear research facilities and nuclear power plant prototypes were used in the early days. Sadly they were not used to carefully consider whether or not nuclear power was really the safe or wise thing to do. They were used only to figure out the best way to foist this new energy source on the public. Just take a look at all the nuclear accidents that have occurred in the United States involving just those nuclear "models". There is a long list provided at: http://www.lutins.org/nukes.html The handwriting was on the wall a half-century ago: nuclear power technology is fraught with uncertainty and danger. But big business and big money trumped concerns for public safety. Full speed ahead, damn the torpedoes!

comment #1588750 posted on 2015-06-18 13:00:57 by Nikohl Vandel

> Reblogged this on Niki.V.all.ways.My.way. and commented: My initial thought is that scale model testing is like as good as full size testing so long as compounding impact of more nuclear fuel vs. the scaled amount is not a factor. I hope they also do random just got thrown off the truck, rolling down a hill kind of testing. The random rather than expected impacts are likely the most probable kind of accident.

comment #1590188 posted on 2015-06-21 17:32:40 by Engineer-Poet in response to comment #1589226

> Witness this:

(BTW, is the word "casks" short for "caskets"?!)

As I said, fear-mongering, trying to create an association with death. Almost any native English speaker knows that there is nothing in common between cask (a container made and shaped like a barrel) and casket (a. a coffin; b. a small chest or box) and hasn't been since the back-formation almost 600 years ago.

Let alone the potential costs to humanity if terrorists attack these vulnerable sites and cause a public Armageddon.

The stationary storage casks are even more heavily-built than transport casks, and transport casks can withstand impact from a speeding locomotive at 80 MPH. You would have to be paranoid to believe that terrorists could come up with anything remotely as damaging, and a shameless fear-monger to try to make the public believe there's any possible danger.

If only nuclear power plant models were used in the earliest days of nuclear power. Such models may have given us valuable insights into just how deadly nuclear power could be. We then could have avoided the nuclear nightmare that has ensued.

If only the public had been educated in the earliest days of nuclear energy. Such education could have immunized the public against the fear-mongering still pushed by the anti-nuclear (and implicitly pro-fossil) forces to this day. The formation of the NRC might have been done differently or avoided completely, nuclear power could have continued to be cheaper than coal, and millions of people whose lives were cut short by fossil-fuel extraction, transport and combustion would have enjoyed better life and health.

But big business and big money trumped concerns for public safety.

Yes, that is exactly what the coal and gas industries have managed to do, by sidelining nuclear power for several decades. Nuclear power is far safer than what's kept the grid going in the mean time, even 4x safer than wind.

> *Just take a look at all the nuclear accidents that have occurred in the United States involving just those nuclear "models". There is a long list provided at: http://www.lutins.org/nukes.html*

And there have been exactly zero radiation-related fatalities at commercial nuclear power plants in all that time (the 1961 SL-1 incident was an experimental military reactor, the Peabody accident involved highly-enriched uranium not even produced for commercial nuclear power plants). Everything else on the list is either non-nuclear (and would be considered not newsworthy if it occurred at a fossil-fired plant) or harmed nothing and no one. In other words, it is ALL fear-mongering.

> *The handwriting was on the wall a half-century ago: nuclear power technology is fraught with uncertainty and danger.*

I have learned that the "true believers" and those who simply post for pay have no shame. Moderator Note: Some verbiage removed to adhere to blog comment guidelines.

comment #1593921 posted on 2015-06-30 01:17:28 by zona nokia

> Good very good

comment #1594021 posted on 2015-06-30 09:44:17 by Erica Gray

> We still do not know how High Burnup fuel will be behave in storage or transport! This casks being used were NOT designed to hold high burnup fuel...read Dominions convincing statement to the NRC. As usual the NRC putting the cart before the horse! 2003 ~ Currently, the TS for the North Anna ISFSI limit the fuel to be stored in the TN-32 to the following: initial enrichment of <=3.85% (wt U-235), assembly average burnup of <=40,000 MWD/MTU, and heat generation of <=0.847 Kw/assembly. This amendment requests the limits be amended as follows: initial enrichment of <=4.35% (wt U-235), assembly average burnup <=45,000 MWD/MTU, and heat generation of <=1.02 Kw/assembly. Need for the Proposed Action: The proposed action is necessary to allow continued storage of spent fuel in dry casks at the North Anna ISFSI. Without this amendment, North Anna will be unable to load spent fuel in TN-32 casks because the remaining spent fuel at the site has the higher enrichment and burnup. If unable to store spent fuel in TN-32 casks, North Anna will not be able to retain full core offload capability. North Anna would eventually have to find an alternate means to store fuel, or shut down. http://www.gpo.gov/fdsys/pkg/FR-2003-06-11/html/03-14683.htm and NOW Dominion has volunteered VA to become a test site for an experimental cask. All in the VA seismic zone, on an earthquake fault.

comment #1594015 posted on 2015-06-30 09:32:00 by Erica Gray in response to comment #1589392

> Frank, you obviously don't realize the situation. Yucca is not suitable and even if it had been....it would already be full. It's already been stated we would need several deep geological sites, but since that's not going to happen any time soon..the NRC is going to allow interim/temporary storage. Hence the reason for all this talk about transportation. Shipping high level nuclear waste around the country to temporary sites is ridiculous and NOT a solution. The solution starts with the discontinued production of this dangerous waste in the first place! http://www.energy.senate.gov/public/index.cfm/hearings-and-business-meetings?ID=ad6d1de1-c2e9-41a5-aef8-2238bee5162c

comment #1588923 posted on 2015-06-18 20:33:32 by CaptD

> Model testing cannot duplicate actual long term testing since what happens in a test chamber does not really indicate what will happen in real life, things like design flaws, manufacturing flaws and other "mistakes" only become know with time, not models. Since these casks will become highly radioactive, if they start leaking ☢ it will become a very BIG deal! Why not instead aim for a cask system that is designed to last say 50 years then be inserted into yet another larger cask thereby encasing the entire original cask in a new cask that is good for yet another 50 years or longer as determined by actual real life testing? + Surprise: High Burnup fuel delays decommissioning & raises cost! Containing the Edison and Mitsubishi Heavy Nuclear Energy Dispute Proves Problematic https://shar.es/12P746 #NukeFreeCal The NRC said the "high burnup" fuel which has been used at San Onofre (a surprise to almost everyone) and the problems it causes in decommissioning: Much longer periods to "cool down" before caste storage is possible. Different castes required for high burnup fuel. Incomplete NRC/DOE testing on length of time that the caste will survive storing high burnup fuel! Expect to hear much more about this issue since it directly affects the cost to decommission San Onofre and stay tuned to find out who will pay the "extra" amount ratepayers or SCE? + NRC symposium on high burn-up spent fuel: http://www.nrc.gov/public-involve/conference-symposia/ric/past/2013/docs/abstracts/sessionabstract-24.html

comment #1588928 posted on 2015-06-18 20:40:32 by CaptD

> More on long term low cost ☢ storage first suggested in 2012 I've suggested that the NRC offer a Million Dollar Prize for the best way to "solve" the nuclear waste storage problem" for the next 50 years, so please consider this idea as my "low cost" solution to America's "long term" radioactive waste storage problem: Make use of our Military Testing Bases and or our MOA's (Military Operation Area's) out west, which are really huge tracts of land (think tens of thousands of acres) used ONLY by the military and already secured by them 24/7! Placing these very large (heavy) concrete casks in a poke-a-dot pattern will allow for at least 50 to 100 years of storage, safe from everything except a War, (in which case every reactor is just as vulnerable) and then revisit the storage

problem then; at which time, probably a future solution will allow for an even better, lower cost “final solution”… Because these casks would be very large and all look alike nobody would know what was in any one of them, which would be yet another level of security for the casks containing even higher levels of nuclear waste! An ideal outside coating for these casks would be similar to the spray-on "bed liner" used for pickup trucks that not only prevents rusting and or damage for the life of the vehicle but would also seal the casks to prevent leakage of any kind! Hopefully these casts would be similar in size to a large shipping container so that existing material handling equipment could be used to load, unload and or move them about without "inventing" a mega hauler vehicle. By keeping the "footprint" of these casks similar to a large 40 foot container, the stacking and or placement of them might also be semi or fully automated which would not only save money but again keep the exact location of any specific cask secret! The monitoring of these casks 24/7/365 could even be done via satellite since these casks are similar in size to rocket launchers which are easily seen from space. In another 50 to 100 years, storage technology will be such that, yet another lower cost solution for all this waste will be found, and then it can be considered verses continuing to using the above storage plan... Perhaps sometime In the future, a safe low cost solution like lifting it all into space via a space elevator* and then shoving it in an orbit that will send it into the SUN for final recycling will present itself... BTW: Area 51 (which now officially finally exists) contains huge tracts of land that has already been used as a nuclear testing site (which is now still contaminated and is now off limits to all but a few forever) so it would allow all this material to effectively disappear into an already highly remote and ultra secure site... * The Space Elevator Project is something that the NRC should help fund ASAP, because it represents the best way to actually "recycle" ☢ by eliminating the storage of nuclear waste on Earth!

comment #1589392 posted on 2015-06-19 17:09:28 by Frank in response to comment #1589226

Your anti nuke bias does not mean you should close your eyes to it. How many (civilian) nuclear accidents have we really had, and how many people died of nuclear radiation? Google how safe is your Kilowatt. In Fukushima we really had a worst of a kind case, not one melt down but three, and yet nobody was killed by radiation and nobody is likely to die from it. Chernobyl which was not really an accident of course stands out. It is people with your agenda that prevent the opening a permanent repository at Yucca mountain. It, like the NRC have been paid for by the electricity consumers at a rate of 0.1 cent per kWh and not the taxpayers. If terrorists attack the HLW containers at their scattered sites, and really cause a problem, blame Harry Reid. He and the rabid anti nukes are the cause that the material is not at a safe centralised facility, where it could be protected and guarded much easier. Moderator Note: Some verbiage removed to adhere to comment guidelines.

comment #1589394 posted on 2015-06-19 17:12:44 by Frank in response to comment #1588928

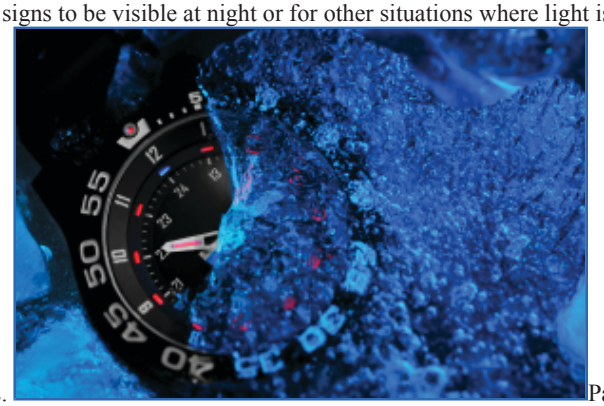
Place it at Yucca mountain, an already contaminated test site, and leave it there until you either decide to use it in a different type of reactor or forget it for a couple of million years.

comment #1590407 posted on 2015-06-22 07:06:17 by Bob Tripathi

Bernie: nice summary of 10 CFR Part 71 requirements. Cheers□

Shedding Some Light On Tritium Illumination Devices

posted on Tue, 23 Jun 2015 15:04:34 +0000

Shirley Xu Health Physicist Some radioactive materials are used to produce light. This is done by bombarding a special material known as a phosphor with the radiation (typically beta radiation) emitted by the radioactive material. Phosphor gets its name from the Greek words for “light” and “to bring.” The phenomenon is called “radioluminescence.” Radioluminescence can be used to provide a low level light source to allow instruments or signs to be visible at night or for other situations where light is needed for long periods without electricity, such as emergency exit signs.  Paint with radium was the first radioluminescent product. Today, tritium is most commonly used, primarily on wristwatch faces and gun sights. Small tritium lights can be made by sealing tritium and a phosphor layer in small glass tubes. Such a tube is known as a "gaseous tritium light source" (GTLS), or more commonly, a beta light (since the tritium undergoes beta decay). Tritium is a radioactive isotope with a half-life of about 12 years, which means the glass tube loses half its energy and some of its brightness in that period. So the types of GTLS used in watches generally have a useful life of 10 to 20 years. They give off a small amount of light: not enough to be seen in daylight, but enough to be visible in the dark. The more tritium that is initially placed in the tube, the brighter it is to begin with and the longer its useful life. The NRC regulates devices that contain small amounts of

tritium. Manufacturers and initial distributors of these devices need to have a distribution license issued by the NRC. They also need to have a separate license to possess and use the material. This license can be issued either by the NRC or the state. [There are 37 states that have agreements with us to regulate these types of radioactive materials. They are called Agreement States.] Anyone who initially buys one of these products from someone who has the proper licenses and subsequent owners of the product are exempt from the requirements for an NRC license. Approval of these types of products would require extremely low risk of radiation exposures to members of the public from normal use, misuse or accidents. The NRC would also need to see the usefulness or benefits of the product. For example, items that could be mishandled, especially by children, will be approved only if they combine an unusual degree of utility and safety. Other countries have different regulatory requirements. That is why some tritium products available for sale internationally are not sold in the U.S. These regulations can be found in 10 CFR Part 30 and Part 32.

Comments

comment #1591457 posted on 2015-06-24 13:55:59 by richard123456columbia

> Do we wait for deaths before preventing the use of a product, radiation lingers for a long time, when it causes health problems it will do harm for along time? Because other problems are greater then others do we attack the present worse one only. Bodies have many radioactive materials and are attacked by the radiation from the sun but to much sun kills humans so why wouldn't more internal radiation do harm.

comment #1593380 posted on 2015-06-28 13:38:30 by CaptD in response to comment #1591032

> Atomic - GREAT -the longer the list the better for mankind...

comment #1593379 posted on 2015-06-28 13:36:35 by CaptD

> The NRC should encourage the phase out of consumer radioactive devices as soon as technology provides a non-radioactive alturnative. That would be the safe prudent path forward, to do otherwise opens the NRC to being called out for promoting radiation that is neither controlled or disposed of properly.

comment #1593780 posted on 2015-06-29 14:39:42 by richard123456columbia in response to comment #1591028

> What they say is not policed to make sure it is done.

comment #1591234 posted on 2015-06-24 04:40:07 by Simon in response to comment #1590950

> Women and men are 2 common things that contain radiation. (About 5,000 internal radioactive disintegrations per second per person.) These should now be outlawed because technology has given us better options in which radiation is eliminated from the product, specifically robots and UAVs. ;)

comment #1591245 posted on 2015-06-24 05:11:20 by Simon in response to comment #1590937

> Neither the TAP alarmists nor anyone else can point to a death, injury, or any other actual hazard from tritium in groundwater, which if you drank that water would still be insignificant in comparision to the thousands of natural radioactive disintegrations per second already taking place in all our bodies, plus the literally millions of free-oxygen radical insults per second. If this is supposed to be a "massive problem" I shudder to think of what an apocalype the air pollution of large cities is. It has an actual body count!

comment #1591043 posted on 2015-06-23 19:11:53 by Joey Racano

> How can we think about desalination when Fukushima is sending tritium to us?

comment #1591028 posted on 2015-06-23 18:32:12 by atomikrabbit in response to comment #1590937

> Both the CNSC (http://nuclearsafety.gc.ca/eng/resources/fact-sheets/tritium.cfm) and the NRC (http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/tritium-radiation-fs.html) seem to disagree with you. Moderator: Some verbiage removed to adhere to comment guidelines.

comment #1591032 posted on 2015-06-23 18:39:21 by atomikrabbit in response to comment #1590950

> @stock There will be a very long list, then, of things and places you will want banned, roped off, or criminalized.

comment #1590979 posted on 2015-06-23 15:41:10 by Half-TruthSlayer

> NRC, thanks for shedding light on tritium illumination devices. Now would you shed some light on uncontrolled tritium leaks from a number of different nuclear power plants? As I understand it all radioactive releases from nuclear power plants must be carefully controlled and continously monitored to ensure no releases exceed regulatory requirements. Environmental monitors adjacent to a number of nuclear power plants have detected tritium leaks. Why are these plants being allowed to continue plant operations?

comment #1590950 posted on 2015-06-23 13:31:58 by stock

> Exit signs and smoke detectors are 2 common things that contain radiation. These should now be outlawed because technology has given us better options in which radiation is eliminated from the product, specifically LED with battery backup and photo-electric smoke detectors.

comment #1590937 posted on 2015-06-23 12:42:58 by richard123456columbia

> Canada has no regulations for tritium on exit signs. Tritium has become a massive problem in Ontario Canada, fresh water contamination. See this http://tapcanada.org/

Throwback Thursday – The Commission Briefing

posted on Thu, 25 Jun 2015 17:47:36 +0000

This grim 1970s NRC Commission Briefing includes (from left to right): John Ahearne, Richard T. Kennedy, Joseph M. Hendrie, Victor Gilinsky and Peter A. Bradford. What is your guess for the topic of the briefing?

Comments

comment #1592122 posted on 2015-06-25 22:40:41 by

> TMI - I was a guest of the govt. there for a total of five weeks. Ken Clark (OPA-Retired)

comment #1592059 posted on 2015-06-25 20:43:51 by C. Hackney

> Agree, TMI

comment #1591967 posted on 2015-06-25 17:06:09 by adrossin

> TMI AND CONCERN ABOUT AHEARNE

comment #1591889 posted on 2015-06-25 13:52:25 by

> 3 mile island

comment #1591893 posted on 2015-06-25 14:09:28 by Mike King (OIS)

> Let's see, late 1970's. Going to have to say TMI. Second choice - WASH-1400.

comment #1591901 posted on 2015-06-25 14:33:02 by Steven Hutchins

Remember it well. There was continuous NRC Commission Briefing (as long as there were at least 3 Commissioners present) on the accident at Three Mile Island. Meeting like this one caused many planned units to be cancelled, and construction engineers to join Utilities.

comment #1591911 posted on 2015-06-25 15:13:06 by John Coupal

Three Mile Island in PA.

comment #1591917 posted on 2015-06-25 15:34:51 by

March 28, 1979, equipment failures and operator error contributed to loss of coolant and a partial core meltdown of Unit 2's pressurized water reactor at the Three Mile Island Nuclear Power Plant in Pennsylvania.

comment #1591932 posted on 2015-06-25 15:58:49 by

Yes, you are all correct. The topic was the ongoing accident at TMI. Moderator

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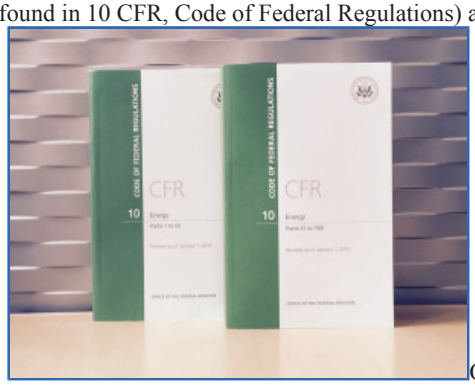
Keeping the NRC's Rules Up to Date

posted on Tue, 30 Jun 2015 14:05:21 +0000

Anthony de Jesus Regulations Specialist NRC's regulations (found in 10 CFR, Code of Federal Regulations) are very important. They are how we do our job of protecting people and the environment. 

Our rules cover these three main areas:

- Commercial reactors for generating electric power and research and test reactors used for research, testing, and training.
- Materials - Uses of nuclear materials in medical, industrial, and academic settings and facilities that produce nuclear fuel.
- Waste - Transportation, storage, and disposal of nuclear materials and waste, and decommissioning of nuclear facilities from service.

To keep all these rules, on all these topics, up-to-date, we use a single process, called the Common Prioritization of Rulemaking, to prioritize our rulemaking activities. Each year we identify the rules already under development and any new rules that need to be written. Using the same criteria, we rank by priority, every rule, regardless of the regulatory area. This way we ensure that we are focusing our resources on the high priority rules that most contribute to the NRC's key strategic goals of safety and security. Through this annual review we also monitor the progress of our rulemaking activities and develop budget estimates for preparing new rules. Because the NRC is committed to transparency, participation, and collaboration in our regulatory activities, we created a new "Rulemaking Priorities" Web page. This page allows us to provide periodic updates concerning rulemaking developments, which responds to a recommendation proposed by the Administrative Conference of the United States. Our new page provides the rulemaking activities identified and prioritized through our Common Prioritization of Rulemaking process. From this page you can access the methodology that NRC staff uses to prioritize our rulemaking activities. Each rulemaking activity listed on this new Web page is linked to further information on that rulemaking, including:

- an abstract that describes the rule
- a prioritization score
- a justification describing how the rule was prioritized
- estimated target dates for completion of the rule

We plan to update the web page regularly so this information remains up to date. We hope this new page will help you understand how the NRC prioritizes its rulemaking activities. After all, our regulations are at the heart of what the NRC does for a living.

Comments

comment #1594223 posted on 2015-06-30 23:41:27 by Engineer-Poet

I'm happy to see the NRC keeping its regulations up to date. There are petitions in front of the NRC right now noting that the linear no-threshold model on which so many regulations are based has been proven false in many tests (including the Hiroshima and Nagasaki survivors), and asking for the NRC to re-write or scrap anything affected by this updated knowledge. This would include all work regulations based on the As Low As Reasonably Achievable exposure standard. Replacing ALARA with a simple threshold standard (per day, month and year) would simplify many tasks around nuclear plants, allowing much more actual work to be done rather than meticulously planning work to minimize already-minuscule exposures. It would also update accident response guidelines, preventing policy-driven disasters like the panicky evacuations around Futaba which caused the deaths of so many fragile elderly. After that, the NRC needs to look at other things. One essential piece is the standards for nuclear-rated components. If components built for NRC certification are not substantially more reliable than selected and inspected commercial components, then those regulations are probably not contributing to anything except higher costs and should be scrapped. Reducing the cost of components and expanding the list of available suppliers would make components cheaper to source and easier to replace, allowing them to be updated much more frequently and reducing the likelihood that they would fail in service. That would improve overall safety. Last is the task of comparative risk, which the NRC has not undertaken to date. Everyone knows that coal is dangerous, but natural gas also has a great many dangers and environmental hazards associated with its production, shipment and consumption. Replacing natural gas with nuclear energy improves overall safety as well as national security and greenhouse emissions. The NRC should view its role as improving our overall safety and security, and avoid any tendency to focus on trivial risks while ignoring great ones.

comment #1594034 posted on 2015-06-30 10:53:45 by NukePuke

Glad the NRC is keeping its rules up to date. Problem I have is that the NRC is not enforcing them. Rules are regularly negotiated with the nuclear industry. The NRC regularly allows the industry to come up with "initiatives" to avoid new rules or even compliance with existing rules. The industry and the NRC know full well that since initiatives are voluntary they are not enforceable. How convenient?! For detailed information check out blogs on the NRC Open Forum entitled "Another Unholy Marriage" and "Behavior Modification Approaches Contrasted".