

OPSMPEm Resource

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Cc: Leong, Edwin
Subject: NRC Public Blog December 2011 through January 2012
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U.S. NRC Blog

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An Open Forum Now Available

posted on Sun, 15 Jan 2012 21:03:45 +0000



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

Holly Harrington
NRC Blog Moderator

Comments

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Since at least 1982, NRC Office of Investigations (OI) personnel at grade levels of GS-12 - 14, and GS-15 have been misclassified as series 1811, "Criminal Investigator." To be classified in this series, an individual must meet most of the "frontline law enforcement" factors, and have them largely constitute the position duties: 1. Perform investigations (long-term, complicated reviews); 2. Investigate individuals suspected of or convicted of violating criminal laws of the United States (employing agency must have criminal investigation authority); 3. Have the authority to carry weapons; 4. Have the authority to arrest, seize evidence, give Miranda warnings, and execute search warrants; 5. Have a "rigorous" position which includes unusual physical hazards due to frequent contacts with criminals and suspected criminals, working for long periods without a break, and being in on-call status 24 hours a day. For LEO retirement credit, one must show that the primary duties of the position are the investigation, apprehension, and detention of criminals or suspects. The most important factors, are: 1) frequently pursuing or detaining criminals; 2) an early mandatory retirement age; 3) a youthful maximum entry age; 4) the job is physically demanding requiring a youthful workforce; and 5) exposure to hazard or danger. The factors (above) may also be considered as appropriate. OI duties and authorities do not match these criteria, especially since NRC lacks statutory authority for performing criminal investigations. They lack arrest responsibilities, agency authority to carry firearms or other weapons, do not perform undercover work, do not execute search or seizure warrants, do not give Miranda warnings, and are not exposed to hazardous conditions nor inclement weather. Most work takes place in an office setting, and is not "rigorous." OI investigations do not involve felonies, but violations of the regulations contained in 10 Code of Federal Regulations (Energy). None of their work is "frontline law enforcement work, entailing unusual physical demands and hazards." In March 2007, the Director of OI admitted that OI personnel have never performed a single arrest. When OI was created, a proposed desk audit of investigative positions to determine the correct job classification was cancelled. OI personnel have indicated that "NRC is the best-kept secret on the 1811 circuit!" Letters from the NRC to the Civil Service Commission or Office of Personnel Management (OPM) regarding 1811 classifications and law enforcement retirement contained vague, erroneous, or misleading and false information. These letters indicated high percentages of criminal investigations, or investigations involving "matters of potential criminality covering a wide spectrum of violations." The position of "Investigation Specialist," later "Investigator," began with the Atomic Energy Commission (AEC). These positions were series 1810, located in the Division of Compliance, and the investigation reports issued were titled "Compliance Investigations." These positions were clearly originally established to conduct civil investigations to determine compliance with the regulations found in 10 Code of Federal Regulations (Energy). OI investigative personnel actually perform the duties and responsibilities of the series 1801 or 1810 classifications, and meet the 1801 or 1810 position classification guidelines and qualification requirements. Personnel classified in series 1801 or 1810 do not receive early retirement nor availability premium pay. The 1801 series guide, for example, specifically speaks to positions where investigations relate to violations of regulations and criminal matters are referred to another agency for criminal investigation. The result of the misclassification is that the NRC has unnecessarily paid OI investigators early retirement and premium pay (Administratively Uncontrollable Overtime [AUO] or "availability pay" of 25% of their salary), amounting to hundreds of thousands of dollars per year, and totaling millions of dollars during the period 1982-2010. The 25% availability pay is included in the OI investigators' basic pay, and therefore raises the "high three" salary years utilized to determine retirement pay. Also, a more beneficial percentage is used to calculate retirement benefits. A very conservative analysis indicates that the overpayments greatly exceed \$700,000 per year (the effect on Thrift Savings Plan agency contributions and retirement benefits of an additional 25% during an employee's "high three" years was not calculated). OI Investigations largely consist of interviews with a court reporter present, and document reviews. Between 7% - 30% of the cases are referred to the Department of Justice (DOJ) for prosecutorial review, but very few are accepted for further investigation, and even fewer result in convictions. In extremely rare cases, the OI investigator may provide assistance to the DOJ in its review or investigation, and may provide testimony in court or before a Grand Jury. In vanishingly rare cases, the investigator may assist in obtaining and executing a search warrant (accompanying the primary law enforcement officers), or collecting physical evidence. A chronology of events indicates that NRC senior management was well aware that NRC did not have the authority to conduct criminal investigations, had not given such authority to OI, and that OI did not perform criminal investigations. In the early years, OI did not even directly interface with the DOJ, but passed their investigations to the Office of Inspector and Auditor for referral to DOJ. Of central importance is a memorandum dated October 15, 1982 in which the NRC Deputy General Counsel advised that, lacking statutory authority, NRC personnel should not conduct criminal investigations under any circumstances. Subsequently, numerous submittals were made to OPM, claiming that all OI investigations were criminal investigations. Perhaps as importantly, on April 9, 1984, the full NRC Commission received a Briefing on Criminal versus Civil Investigations. A draft document giving OI the authority to conduct criminal investigations was discussed, with the Commission strongly objecting to and directing removal of the

term "conduct" and substitution of the word "assist." Quotes: "we believe that the Commission – and OGC has taken this position in the past – that the Commission does not have independent authority to conduct criminal investigations." "Yes, our policy is to first serve our civil purpose and then help DOJ." This briefing led to a commission paper used as guidance in negotiating a Memorandum of Understanding with the Department of Justice.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Nancy Allen May 22, 2011 at 1:56 pm Your comment is awaiting moderation. I want to add my concerns about the dangers of station blackout and loss of cooling accident. The disaster in Japan showed everyone that emergency safety protocols must be updated in the US. The present emergency response cannot be considered adequate to address all events that would cut power to the reactors for an extended period of time. There is a need for power generation other than just back up diesel generators and the 4-8 hour back up batteries. There should be an immediate effort by the NRC to have a power supply available for all natural catastrophic events including large magnitude earthquakes, tsunamis, tornadoes, hurricanes and more. If there is no emergency design criteria that can anticipate and fully prepare for this no new plants should be built and old ones relicensed only if they meet stringent NRC safety regulations with a back up alternative energy supply like wind, solar, geothermal and more.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NRC, I have a question this event notification was from 6-8-2011. It seems to say that the Prairie Island plant's emergency generators were off line because of excessive outside heat. Am I reading this correctly? If so is this something that affects all nuclear plant backup generators or is it site specific? Thanks "BOTH EMERGENCY DIESEL GENERATORS DECLARED INOPERABLE DUE TO EXCESS OUTSIDE AMBIENT AIR TEMPERATURE "Outside ambient air temperature exceeded the maximum analytical value for operability for Unit 1 D1 and D2 Diesel Generators at 1349 CDT. The calculated limiting outside air temperature needed for equipment in the D1 and D2 rooms to meet their temperature limits is 100.5°F. Outside ambient temperature exceeded this limiting value and both Unit 1 safeguards diesel generators were declared inoperable at 1349 CDT on 6/7/2011. If outside ambient air temperature is above the maximum analytical value, components within the D1 and D2 diesel rooms may not be able to perform their required functions thus preventing them from fulfilling their safety function needed to mitigate the consequences of an accident (10 CFR 50.72 (b)(3)(v)(D)). "Unit 1 is currently in Mode 3, Hot Standby. Ambient outside air temperatures are at or near peak values for the day and expected to decrease approximately 1 to 2 degrees per hour which will restore ambient conditions to less than the maximum analytical value. "The NRC Resident Inspector has been notified." The outside air temperature has peaked at 101.4°F which is unusually high for this location and is expected to drop below the 100.5°F limit shortly. The licensee does not anticipate that this condition will be repeated again any time soon."

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

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

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

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

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

Thanks for the open debate

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

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

comment #1920 posted on 2011-08-17 16:57:52 by Micheal

I guess that is why it would be a National project. We could do it. The Atlas rocket does not cost as much as the shuttle rockets. It does not have to get to the Sun to burn up its gravity would pull it in. The amount of energy we could produce would far out weigh the cost. All the jobs it would create would be enormous. I guess it is better to have something like Japans radiation rain down on us right?

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

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

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

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

comment #2039 posted on 2011-08-29 08:48:44 by Moderator

This comment has been moved by the moderator: Regarding the issue of fiery steam-cladding reaction it is not clear, why it was moved out to this environment. I hope there will be a regulatory resolution, finally accepting that this process was the key process in all major reactor accidents, like the Fukushima Daiichi Units 1, 2 and 3, Chernobyl 4 and TMI2, even the Paks 2 fuel washing accident. [PDF] 2010/11/24-Comment (3) of Aladar Stolmar, on New England ... Van, Attached for docketing is a comment on PRM-50-93/50-95 from Aladar Stolmar that I received via the regulations.gov website on 11/24/10. ... pbadupws.nrc.gov/docs/ML1033/ML103340250.pdf – 2010-12-09 It is a much overdue duty of NRC and IAEA to evaluate the evidence provided by the TMI-2 accident, Chernobyl-4 accident, Paks-2 incident, and related experiments. Evaluating this evidence, one can see that the ignition of the zirconium fire in the steam occurs at a local temperature of the fuel cladding of around 1000-1200° C, [[and that a self-feeding with steam due to the precipitation of eroded fuel pellets and zirconia reaction product from the hydrogen stream into the water pool, causes intense evaporation.]] There are insignificant differences in the progression of the firestorms that occurred in the TMI-2 reactor severe accident, Paks washing vessel incident, and Chernobyl-4 reactor accident; the later defined only by the amount of zirconium available for the reaction. At the mean time, there are significant similarities in the processes leading to the ignition of the firestorm. In all three of the compared cases, it took several hours of ill-fated actions or in-actions of the operators to cause the ignition condition. Also, there are similarities in the end result of the firestorm; namely, that the extent of the fuel damage is much less than it was predicted from any other severe fuel damage causing scenarios, introduced for explanations. Therefore the fraction of released fission products is significantly less than was anticipated from the fuel melting or a so called "steamexplosion" scenario. Also, the fiery steam-zirconium reaction results in a much higher than anticipated (from any other scenarios) rate of Hydrogen production, which in turn requires a review of containment designs. [PDF] 2010/03/24-Comment (3) of Aladar Stolmar, on PRM-50-93 ... From: Aladar Stolmar [astolmar@gmail.com] Sent: Wednesday, March 24, 2010 2:59 AM To: Rulemaking Comments Subject: Docket ID NRC-2009 ... pbadupws.nrc.gov/docs/ML1008/ML100830501.pdf – 2010-11-26 Similar destruction and relocation of nuclear reactor fuel was observed in the TMI-2 and Chernobyl-4 severe reactor accidents and in the Paks-2 refueling pond reactor fuel washing accident. The similarities in these tests and accidents are the formation of gaseous (steam) bubbles in the upper regions of fuel bundles, the ignition of Zirconium in the steam and generation of Hydrogen and zirconia (ZrO2) reaction products in a very intense fire, essentially in a firestorm. Therefore, the conservative regulation shall mandate that the owners and operators of Nuclear Reactors and Reactor Fuel Handling Facilities shall demonstrate that there will be no dry-out of the fuel bundles in any circumstances. Also, in order to prevent the exposure of the public to the harmful consequences of an accident in a reactor, the housing of the reactor (containment) shall withstand the detonation of the air-Hydrogen mixture with the amount of Hydrogen calculated from the consumption of the entire inventory of Zircaloy in the reactor core or in the entire enclosed in a vessel volume, where such bubble formation is possible. There are several reports presenting the same issue as Mark Leyse. The cladding of nuclear fuel made of Zirconium alloy ignites and burns in the steam. The same process can be recognized (and should be recognized) as the common cause of the TMI-2 and Chernobyl-4 reactor severe accidents and the Paks-2 refueling pond accident. And the regulations in 10 CFR 50 series shall mandate to deal with the real issues and real processes. [PDF] 2011/06/28 -- NRC Public Blog April 2011 through May 2011 ... comment #652 posted on 2011-04-06 07:31:03 by Aladár Stólmár comment #644 posted on 2011-04-04

20:11:31 by duxx ... <http://pbadupws.nrc.gov/docs/ML1117/ML11179A192.pdf> – 2011-06-29 As I wrote in the comment to US NRC <http://pbadupws.nrc.gov/docs/ML1033/ML103340250.pdf> : „It is a much overdue duty of NRC and IAEA to evaluate the evidence provided by the TMI-2 accident, Chernobyl-4 accident, Paks-2 incident, and related experiments. Evaluating this evidence, one can see that the ignition of the zirconium fire in the steam occurs at a local temperature of the fuel cladding of around 1000-1200°C, [[and that a self-feeding with steam due to the precipitation of eroded fuel pellets and zirconia reaction product from the hydrogen stream into the water pool, causes intense evaporation.]] There are insignificant differences in the progression of the firestorms that occurred in the TMI-2 reactor severe accident, Paks washing vessel incident, and Chernobyl-4 reactor accident; the later defined only by the amount of zirconium available for the reaction. At the mean time, there are significant similarities in the processes leading to the ignition of the firestorm. In all three of the compared cases, it took several hours of ill-fated actions or in-actions of the operators to cause the ignition condition. Also, there are similarities in the end result of the firestorm; namely, that the extent of the fuel damage is much less than it was predicted from any other severe fuel damage causing scenarios, introduced for explanations. Therefore the fraction of released fission products is significantly less than was anticipated from the fuel melting or a so called “steam explosion” scenario. Also, the fiery steam-zirconium reaction results in a much higher than anticipated (from any other scenarios) rate of Hydrogen production, which in turn requires a review of containment designs.” I hope the gentlemen will recognize the same process in the Fukushima Daiichi 1-3 reactors as the leading, key process. I hope we will have a thorough investigation of the fiery steam-zirconium reaction and there will be issued a call for shutting down the 11 still operating Chernobyl type (RBMK) reactors in Russia [PDF] 2011/04/08 – - NRC Public Blog February 2011 through March ... comment #441 posted on 2011-03-18 13:44:34 by Diesel comment #412 posted on 2011-03-17 07:06:13 by Aladár Stolmár ... <http://pbadupws.nrc.gov/docs/ML1109/ML110980787.pdf> – 2011-04-13 A few of us, nuclear engineers were, are fighting for lifetime for the consideration of real processes in the reactor severe accidents. As I formulated in a comment to US NRC: Consideration of the zirconium-steam reaction and the ignition and intense firestorm in nuclear reactor fuel rods is well overdue. Reevaluating the evidence provided by the TMI-2 reactor accident, Chernobyl-4 reactor accident, and Paks Unit 2 fuel washing incident, with consideration of this intense fiery process, will bring us closer to an ultimately safe nuclear power plant design. <http://pbadupws.nrc.gov/docs/ML1033/ML103340250.pdf> Also, I called two years ago for a review: If the hydrogen which is generated in the reactor core from the reaction of the steam (coolant) with the zirconium alloy (or other low neutron absorbing metal cladding and other fuel bundle elements) explodes inside the building surrounding the reactor, this detonation still will not cause a break of the pressure boundary of the containment. Thirty years after the TMI-2 accident and 23 years after the Chernobyl disaster, I feel obligated to formulate this guideline in order to protect the public from further irradiation from the use of nuclear power. The Chernobyl type reactors (RBMK), which are still operating, have to be shut down immediately because they do not satisfy this guideline. Other nuclear reactors operating and future designs shall be reviewed for compliance to this key requirement and the result of such review shall be defining for their future. <http://aladar-mychernobyl.blogspot.com/> Returning to the comment to US NRC <http://pbadupws.nrc.gov/docs/ML1033/ML103340250.pdf> : „It is a much overdue duty of NRC and IAEA to evaluate the evidence provided by the TMI-2 accident, Chernobyl-4 accident, Paks-2 incident, and related experiments. Evaluating this evidence, one can see that the ignition of the zirconium fire in the steam occurs at a local temperature of the fuel cladding of around 1000-1200°C, [[and that a self-feeding with steam due to the precipitation of eroded fuel pellets and zirconia reaction product from the hydrogen stream into the water pool, causes intense evaporation.]] There are insignificant differences in the progression of the firestorms that occurred in the TMI-2 reactor severe accident, Paks washing vessel incident, and Chernobyl-4 reactor accident; the later defined only by the amount of zirconium available for the reaction. At the mean time, there are significant similarities in the processes leading to the ignition of the firestorm. In all three of the compared cases, it took several hours of ill-fated actions or inactions of the operators to cause the ignition condition. Also, there are similarities in the end result of the firestorm; namely, that the extent of the fuel damage is much less than it was predicted from any other severe fuel damage causing scenarios, introduced for explanations. Therefore the fraction of released fission products is significantly less than was anticipated from the fuel melting or a so called “steam explosion” scenario. Also, the fiery steam-zirconium reaction results in a much higher than anticipated (from any other scenarios) rate of Hydrogen production, which in turn requires a review of containment designs.” I hope You will find useful this information for the background of the Fukushima Daiichi plant recent events.

comment #1878 posted on 2011-08-12 18:10:16 by Micheal

Why can we not have a government controlled central waste disposal site from which we charge corporations for depositing nuclear waste on a one way rocket to the Sun? It would create jobs, research, in all parts of the country. Just do it.

comment #1865 posted on 2011-08-11 23:05:57 by

Why can't decay heat be harnessed and used as an energy source to safely power down/cool a nuclear reactor? I have been wondering about this since the incidents in Japan. It appeared that the Fukushima nuclear reactors survived the 5th largest recorded earthquake on earth quite well and initiated normal shutdown procedures. It was the fact that the tsunami later damaged the backup power system for cooling, which resulting in a cascade of failures and a meltdown in the reactors. I feel that nuclear energy is a clean source of power and that it can help solve our dependence on imported fossil fuels as well as provide no CO2 emissions. On the other hand, plants should be designed to withstand extreme events, even if they are of a low probability. In the Japan case, ancient stone markers warned of tsunami risk at levels above the Fukushima backup generators. As an engineer and a scientist, I hate getting information on important topics through normal news outlets that like to sensationalize and oversimplify stories. I understand that I am not a nuclear engineer so maybe this is a dumb question but I have dealt with lots of disasters including Katrina and know that failures of the power grid over an extended period could result in the loss of backup cooling due to diesel fuel running low and such. It seems something more robust and redundant should be used. It is my understanding that the typical reactor will produce between 5-7% of its rated output in decay heat due to the radioactive decay of fission byproducts after shutting down. I understand that the amount of heat generated depends on the length of time the fuel has been in use and undergoing fission so older fuel will have a larger decay heat. I understand the heat generation drops quite rapidly as the short lived isotopes decay but that longer lived isotopes continue to decay and generate heat so that cooling is needed for a very long time (5-10 years) after the spent fuel is removed from service. I looked up the operational rating of several nuclear power plants in the U.S. and most tend to range between 1000-1200 MW of power, which is quite a large number. When one of these shuts down, decay heat should be generated in an amount around 50 MW (or more) immediately after shutdown based on the 5-7% heat of operation. 50 MW is an immense amount of power and I would think this would well exceed the rated output of even the largest (or a bank of) diesel generators. My question is why this tremendous amount of energy cannot be harnessed and used to generate power that could be used to safely shut down and cool a nuclear reactor. It seems there is plenty of heat to lead to a complete core meltdown and/or fire long after the primary fission reaction is shut down. Why can't this heat be used to generate power, whether it be electrical or mechanical, in order to run pumps and such to cool the reactor during shutdown? Why couldn't one of the steam turbines be run to generate power to run the pumps? If the main turbines are too large to run on such a reduced output, could a smaller turbine be used for backup purposes? How about running the pumps directly and mechanically without any electric generation via a turbine meant just for this purpose? I like to keep things simple as there is less to

go wrong so a purely mechanical pump might be in order. How about a thermocouple system? I know that radioactive decay is used to power space probes in this manner and such but don't know how it would work on such a large application. Even if decay heat cannot produce enough power, can it not provide some power and reduce dependence of batteries or diesel? If nothing else, it could reduce the rate at which batteries or diesel are used up and buy time to solve the underlying problem. As decay heat drops, potential power generated from it also drops, but so would the cooling requirements. Pumps would not be able to be run at their maximum rating but is this a bad thing after most of the short lived isotopes have decayed? I am not an expert so maybe decay heat can remain dangerous even if it isn't enough to generate a meaningful amount of power. Is it like my electric stove. Sometimes I turn it off right before the food is done and let it cook with the residual heat. Eventually it cools off to where it can no longer cook but would still be dangerous to touch. I know this is very simple but is it a good comparison? If decay heat cannot effectively be used to shut down a nuclear reactor, why can't the reactor go down to an "idle" mode where it generates just enough power to run the emergency cooling systems? It could be run this way indefinitely and let some of the short-lived isotopes generated during full power operation decay over a period time before reducing power further or shutting down completely once enough short-lived isotopes have decayed. Why is this not done? All it takes is one unforeseen disaster to knock out external power at a nuclear plant and it seems this might be a solution or at least part of the solution to the decay heat issue. I have been reading about solar flares and their ability to fry large electrical transformers that are key to large parts of the power grid. I understand that we are entering a very active solar cycle and there is some concern one of these flares could knock out a large part of the grid for an extended period. What would happen to a nuclear plant in such a situation?

comment #1888 posted on 2011-08-14 01:00:14 by Amy Still in response to comment #1865

WASHINGTON, D.C. — August 11, 2011 — The U.S. Nuclear Regulatory Commission is legally required to slow down reactor licensing and relicensing in order to address major changes urged by the agency's own experts who have reviewed the Fukushima accident, according to 19 separate legal challenges filed today by a total of 25 public interest groups. The groups contend that under federal law, the NRC may not issue or renew a single reactor license until it has either strengthened regulations to protect the public from severe accident risks or until it has made a careful and detailed study of the environmental implications of not doing so. The groups are also pursuing a technical finding from high in the NRC that leads to upgraded safety standards. "What we've learned in the wake of Japan's nuclear disaster — and what NRC experts concluded — is that current regulations are fundamentally inadequate. They simply do not provide the level of safety required by laws including the National Environmental Policy Act and the Atomic Energy Act," said Phillip Musegaas, Hudson Program Director of Riverkeeper, Inc., which today filed a contention document related to the Indian Point reactor in New York State with the NRC. "The law requires regulators to take this information into account before issuing any licenses for reactors. Our filing today is intended to force them to do so."

comment #2076 posted on 2011-09-01 01:26:18 by Alex

I also agree, that US and other countries are using current technology, but I am not sure that we are very well protected after the Fukushima Daiichi plant recent events.

comment #1918 posted on 2011-08-17 15:40:43 by Alister Wm Macintyre in response to comment #1642

Each source of energy is limited, and many have dangerous side effects. Solar and Wind use technology whose construction is dependent on industrial commodities which the world is running out of, and of course need a volume of weather activity which is not universally available. Fossil fuels have carbon cycle implications for climate change and maybe ozone hole. Hydro-electric is great on rivers, until earthquake brings down dam, and people downstream inadequate time warning to get out of way of flood. Hydro-electric works for some coastal inlets ... get tide power coming and going, but better not mess with ocean going currents essential to other nation's climates.

comment #1919 posted on 2011-08-17 15:43:16 by Alister Wm Macintyre in response to comment #1637

We have world wide solutions through UN treaties with IAEA to develop and share best practices info on wide spectrum of nuclear power energy. Problems then are with any nations which do not choose to join the treaties.

comment #1916 posted on 2011-08-17 11:38:36 by Chris in response to comment #1878

People periodically bring up the idea of sending waste towards the sun. If you run the calculations, you will find that this method of disposal is simply not practical from a cost standpoint, unless we all want to pay a whole lot more for our electricity. First, there are the political ramifications and risks associated with a radioactive rocket that might blow up before getting out of Earth's atmosphere. Remember the Columbia disaster? Not sure anybody wants highly radioactive material raining down from the skies over land or sea. Second, the amount of energy (and hence, fuel) it would take to do this is very large. You have to realize that we are moving in orbit around the sun. That means that any rocket we shoot into space is also moving in orbit around the sun. So shooting something to the sun is not as simple as putting a rocket into space and letting gravity take over. All you succeed in doing is putting that canister of waste in orbit around the sun as well. Orbital mechanics dictates that it takes a change in kinetic energy for a body to go from one orbit to another. To change to a closer orbit around the sun requires you to speed up the spacecraft. The closer you want the craft to get to the Sun's surface, the more and more kinetic energy you have to add to get there. The fuel it would take to do this is so enormous as to make this method of disposal simply impractical.

comment #1917 posted on 2011-08-17 15:34:55 by Alister Wm Macintyre

I agree, with respect to current technology used by NASA, USAF, other nations. However, if you take a look at the mechanics of space elevators, the cost drops from current technology to microscopic cost by comparison, to get anything out of Earth gravity field. If the waste container is sent in a direction below the Earth orbit with the Sun, that means it will spiral closer and closer to the Sun, and fall into the Sun, unless it crashes into Venus or Mercury or other stuff in transit.

comment #1947 posted on 2011-08-21 15:53:13 by Steve

Yes there are better and cheaper ways to go about it. But maybe the government has some insight.

comment #1949 posted on 2011-08-21 16:31:17 by French Translation

Time and time again have we witnessed a global accident as a result of mother natures swift hand. When will we learn that if we can build it, then it can be destroyed. Nuclear included. Are we not just filling the foundations for total man made destruction of (our) planet..?

comment #1951 posted on 2011-08-22 08:08:14 by Babu Jobs

I agree, NASA, USAF, other countries are using current technology. However, if you take a look at the mechanics of lifts, the costs will fall from the current technology on the microscopic cost comparison, stems from the gravitational field of the Earth.

comment #2802 posted on 2011-10-24 12:49:14 by dave

Re blog thread on safety culture policy posted last month, to develop the new definition, in Feb 2011 NRC assembled a panel of over a dozen "experts" and held a three day conference. I was the sole member of the public on the panel and I believe the most studied and accomplished in safety culture. I have an extensive bibliography and I have written many papers on the subject including a master's thesis. I have given a number of industry presentations a couple at the request of NRC and INPO. I was the primary safety culture advisor on an EPRI sponsored MIT project. The NRC invites input from the public, but does the NRC really "listen" the public? As a "member of the public" I felt I was continually treated as a "third class citizen". INPO and NEI being first class, nuclear industry reps second class, myself third class, even though of the panel members, I was likely the most expert in the subject. The NRC however, had very small ears for what I was saying [or trying very hard to say]. The result is that the industry got the definition it wanted, not the definition needed [or accurate or proper]. The underlying dynamics may have been similar to finance industry regulation under Greenspan: the regulation the industry liked, but not the regulation needed to properly protect the interests of the public. What kind of "core values and behaviors?" the new definition does say. Safety culture is not a "collective commitment by leaders and individuals". What Schein says is: "leaders create culture". Safety culture is it is a function of [is created by, is the responsibility of] LEADERSHIP, period. This is a CENTRAL [a sine qua non] point. Without this you fail to identify leadership as responsible for safety culture, and you cannot have effective regulation or effective licensee management of safety culture. This is such an obvious oversight, the only conclusion I reach is that the leaders of industry did not want this responsibility identified. Additionally, the phrase "to emphasize safety over competing goals" says nothing. Saying "to emphasize safety over profits" is clearer, but still tells you little about safety culture. Safety culture is an attitude that manages risk. In a HRO, it is a professional leadership attitude that protects people and the environment from the risks of a hazardous process. Like the medical profession, you must invoke the term "professionalism" but leaders of industry do not want regulators ever to hold them responsible for maintaining "professional attitudes". Politically, they do not like to clearly state that operating nuclear involves managing hazards and risks, but it does. "Nuclear Organizations" are high hazard ventures, operated by HROs, and are all about managing risk. The tool used by NRC that is central for assessing safety [PRA] focuses on assessing and managing risk. All of these including the concept of maintaining stakeholder trust are central to safety culture, but absent from the definition adopted by NRC. The new NRC definition addresses none of the problems with the old INSAG definition. This is because NRC never too the time and never made an effort to clearly understand what those problems were. Here is a proper definition of HRO safety culture [such as nuclear, process etc] if NRC had a better understanding of safety culture in Feb 2010, this would have been selected as the new NRC definition: HRO Safety Culture "In a high hazard industry or venture, professional leadership attitudes that ensure hazardous processes are managed such that risk to people and the environment is maintained as low as reasonably achievable, thereby assuring stakeholder trust."

comment #2040 posted on 2011-08-29 08:50:24 by Moderator

this comment was moved by the moderator: My son is visiting Connecticut for the first time. I have just seen there are nuclear plants all around him. I cannot believe after Japans experience America still has Nuclear power plants operating. The public will have to band together to sue power companies for exposing us with poison then maybe they will shut them down. Question there are also 2 closed plants in CT are these also dangerous in other words are there still ponds that need to be kept cool??? Is so that is 4 surrounding my son at present. Thanks America!!

comment #2286 posted on 2011-09-19 21:18:39 by Mike Saunders the car insurance cheapest quote guy

The real problem here is that we have a much better alternative to these reactors (LFTR-Liquid Fluoride Thorium Reactors) and are not pursuing it as we should be. We made a bad choice 40 years ago and are paying for it now... If we don't wake up the rest of the world (Russia, China, and India) are going to pass us by. LFTR's are much safer, cheaper, can be started and stopped easily, produce 1/30th the waste and what waste they do produce is radioactive for much less time, no proliferation danger, etc. A proven technology that we chose not to develop. For more info, see <http://www.youtube.com/watch?v=WWUeBS0EnRk>.

comment #3069 posted on 2011-11-07 13:03:25 by Jake

I applaud the NRC for at least initiating this kind of an open discussion. It should however be more public, and it's too bad such discourse wasn't available during the time when all these plants were set up in the first place.

comment #2909 posted on 2011-10-28 11:18:00 by Moderator in response to comment #2887

The development of uranium-based light-water reactors in the United States was based, at least in part, on the existence of infrastructure for enriching uranium, as well as U.S. Navy experience operating uranium-based reactors. The NRC is aware of Liquid Fluoride Thorium Reactor technology and would be the agency to approve and regulate any civilian reactor design using that technology in the United States.

comment #3247 posted on 2011-11-15 13:48:53 by Moderator

The NRC logo at the top of the blog page should be clickable to the nrc.gov homepage. -Cindy Montgomery Comment moved by the moderator

comment #2887 posted on 2011-10-27 19:56:29 by Astro Gremlin in response to comment #2286

Just saw a presentation on LFTR. No sensitive intermediate elements, waste has a short half-life, no pressurized containment required, fail-safe consists of plugs that melt upon overheating and allow vessel to drain into smaller vessels, stopping the reaction. A prototype at Oak Ridge was "turned off" every night using this multi-drain system. Research needed for commercial version. AEC wasn't interested in the 1950s and 1960s. Why? No weapons grade materials are produced in a LFTR; the very characteristic that recommends it today.

comment #3817 posted on 2011-12-15 08:23:42 by Ray

It is embarrassing as an NRC employee to see the Commissioners before a Congressional committee discussing their inability to work in some semblance of tolerance, if not harmony, among themselves. The accusations against the Chairman, right or wrong, reflect poorly on all. I believe the Commission owes the NRC staff an apology for its inability to contain these internal squabbles and the need to elevate them to the public level of embarrassment. We are supposed to be a technical, not a political, agency. Yet we have politicians accusing us of acting like politicians!

comment #3886 posted on 2011-12-19 12:13:09 by Moderator

This is more than the NRC chairman's "personality." His deficiencies as a leader and manager are too severe for him to be entrusted with such an important post, let alone his extreme partisan approach to his job. The NRC should be about science, engineering, and public health not crass politics and crass managerial behavior. Gregory Jaczko is a disaster on all counts and President Obama should be asking for his resignation, too. Moved by the moderator to this topic

comment #3255 posted on 2011-11-16 09:19:35 by Nuevo Jordan Zapatos

Hey! Do you use Twitter? I'd like to follow you if that would be okay. I'm definitely enjoying your blog and look forward to new updates.

comment #3831 posted on 2011-12-15 13:56:18 by Moderator

I am unhappy to hear that four NRC Commissioners have aired to Congress specific instances of abusive conduct by NRC Chair Jaczko, directed at the Commissioners as well as toward NRC staff. ("Leader of Nuclear Agency Hears Litany of Objections" NY Times Dec 14 2011) Apparently these recent criticisms were preceded by an Inspector General's report, which outlined similar misbehavior by Chairman Jaczko. I hope to see more about this posted here. Moderator Note: Comment moved from another post

comment #3892 posted on 2011-12-19 12:32:06 by David Collins in response to comment #3890

Link to probably the best nuclear safety discussion blog in the world, comprised of 6000+ mostly nuclear experts & professionals, operated / moderated by a woman who is a nuclear regulator in Romania. You can join the group and start a discussion on any nuclear safety subject, and get interesting thoughtful feedback. <http://www.linkedin.com/groups?home=&gid=2170900>

comment #3891 posted on 2011-12-19 12:20:02 by Moderator in response to comment #3890

For more information about nuclear safety in the U.S., go to our website at: www.nrc.gov .

comment #3887 posted on 2011-12-19 12:14:43 by Moderator

Why is the Project on Government Oversight, a supposedly nonpartisan watchdog, wading into a partisan controversy and stoking the flames of conflict? If abuse of authority took place by Jaczko, why is POGO whitewashing it? Moved by the moderator to this topic

comment #3890 posted on 2011-12-19 12:19:28 by Moderator

Where I can find more info about appropriate safety of nuclear power, I want it to share with my country, I am from Peru, please send me the info thank you very much Moderator Note: Comment moved from another post

comment #5224 posted on 2012-02-10 09:04:55 by Moderator

Just got my bachelor in EE, and I would like to know much bureaucratic/politic issues typically encountered by a junior engineer. I asked because I worked part time on campus, and although I didn't deal with departmental issues directly, my boss often shared the headaches he had to deal with, usually after meetings. Moderator Note: Moved from another post.

comment #5225 posted on 2012-02-10 09:07:57 by Moderator in response to comment #5224

You might try getting some information on this topic from the Institute for Electrical and Electronics Engineers (IEEE) at: <http://www.ieee.org/index.html> or from a similar engineering organization.

comment #5232 posted on 2012-02-10 16:17:33 by Moderator

no nuclear energy! advalue.editor@gmail.com Moderator Note: Comment moved from another post.

comment #5242 posted on 2012-02-10 23:03:49 by sewa proyektor jogja

The NRC and DOE spend billions of dollars studying the problem of nuclear waste disposal. Yet not a dollar has been spent investigating these various claims, which have been around for a least forty years. no nuclear <http://www.sewaproyektor.heck.in>

comment #4140 posted on 2011-12-28 09:26:02 by Moderator in response to comment #4139

The Department of Energy is responsible for developing a strategy for dealing with high-level waste. To that end, DOE and President

Obama initiated a Blue Ribbon Commission on America's Nuclear Future to "conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle and recommend a new plan." From that commission's value statement: We are investigating a wide range of issues. These include reactor and fuel cycle technologies, options for safe transport and storage of nuclear waste, options for waste disposal, and institutional arrangements for the management of used fuel and high-level wastes. We will also make recommendations regarding the handling of the nuclear waste fund. You can learn more at their web site: <http://brc.gov/>

comment #4139 posted on 2011-12-28 09:25:24 by Moderator

There are many reports on the Internet that the radioactivity in radioactive waste and spent nuclear fuel can be neutralized by various simple, safe, inexpensive processes. The NRC and DOE spend billions of dollars studying the problem of nuclear waste disposal. Yet not a dollar has been spent investigating these various claims, which have been around for a least forty years. WHAT IS YOUR EXCUSE? Moderator: Moved from another post

comment #4147 posted on 2011-12-28 17:40:44 by Mike in response to comment #4139

Atlas rockets on a one way trip to the Sun full of toxic waste creating a clean environment and millions of jobs paid for by the corporations just what is wrong with that? It can be done the question is why not?

comment #5291 posted on 2012-02-13 10:41:13 by Moderator

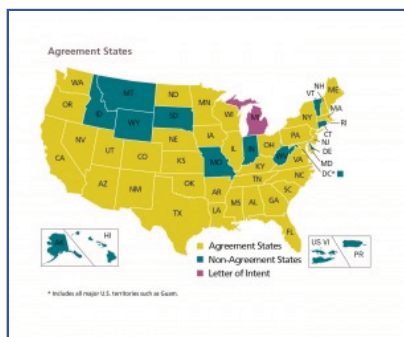
Can't wait until the days of nuclear fusion, as opposed to fission, reactors. Once we're able to get ITER viable for commercial usage - or rather, a reactor based on ITER's build - our worries will dwindle to nothingness. Fusions reactors wont be worried about earthquakes or most other natural disasters, with their safety assured by the benign waste products they produce. Trevor Michaels
Moderator Note: Comment moved from another post

comment #5911 posted on 2012-02-16 09:35:44 by Moderator

It is time to get off the imports of fossil fuels, save the hundreds of billions now paid for the imports and put them to a better use. As a side effect air pollution would be reduced. Moderator Note: Comment moved from another post

Watching the watchers: NRC oversight helps ensure state materials programs hit the mark

posted on Mon, 05 Dec 2011 15:39:03 +0000



Federal law allows states to enter into agreements with the NRC which permit them to regulate the use of certain types of nuclear materials within their borders that would otherwise be overseen by the NRC. The NRC refers to these states as "[Agreement States](#)." Thirty-seven states have chosen to go this route, resulting in about 19,000 or the 22,000 material licenses nationwide falling under the jurisdiction of Agreement States. The other roughly 3,000 material licenses remain under the authority of the NRC. Even though these agreements are in place, the NRC retains an oversight role. As such, the NRC periodically assesses the Agreement State programs to determine if they are adequate to protect public health and safety and are compatible with our program. (Materials inspections performed by the NRC's Regional Offices are also subject to periodic reviews.) Toward this end, the NRC in 1994 designed and piloted a new review process for Agreement State radioactive materials programs called the Integrated Materials Performance Evaluation Program, or IMPEP. In 1996, the NRC began full implementation of IMPEP. So how exactly are these evaluations carried out? One of the first steps is to ask the Agreement State program being reviewed to respond to a questionnaire, which asks detailed questions about the program.

Another initial step entails having qualified inspections accompany the program's inspectors to assess their performance. Next, a thorough on-site examination of records and interviews of program personnel are conducted. Once the on-site review is finished, the IMPEP team – made up of NRC staff and experts from Agreement States other than the one being evaluated -- issues a draft report of its findings to the program undergoing scrutiny for any comments on factual accuracy. Any comments received are then dispositioned and a proposed final report is issued. A public meeting of a Management Review Board (MRB), which is comprised of senior NRC managers and an Agreement State manager who serves as a liaison, is held. At this session, the MRB reviews the proposed final IMPEP report and renders a final determination of the program's adequacy and compatibility. After this meeting is held, and the evaluation is finalized, the NRC issues a final report to the Agreement State that was reviewed. Those reports are made public in the [NRC's electronic document system](#). Each day in the United States, radioactive materials are used for purposes that include the treatment and diagnosis of diseases, making food safer and industrial applications, such as detecting oil in the ground or cracks in pipes. The Agreement States, in conjunction with the NRC, work to ensure those uses remain as safe as possible for the public and for the environment.

Neil Sheehan
Region I Public Affairs Officer

Comments

comment #3489 posted on 2011-11-28 12:43:41 by asparagusutter

Thanks for the transparent explanation!

comment #4212 posted on 2012-01-04 09:48:10 by Moderator in response to comment #4132

The China Basin area in San Francisco was apparently built partially on an old landfill, but there was no NRC involvement with licensed radioactive materials at the site. If you have concerns about what may have been buried there, we suggest you contact the Radiologic Health Branch in the California Department of Public Health – that's the office that regulates radioactive materials in California. Radiologic Health Branch 1500 Capitol Ave., MS 7610 Sacramento, CA 95814 PH (916)445-2196

comment #3929 posted on 2011-12-21 09:50:44 by Flood Damage Cleanup

I agree, the transparency is something that is needed in a lot of other govt organizations... This is a very important area of government that is grossly overlooked and also a reminder of the good things that the govt provides for its citizens...

comment #4132 posted on 2011-12-28 01:26:34 by Ann Vu

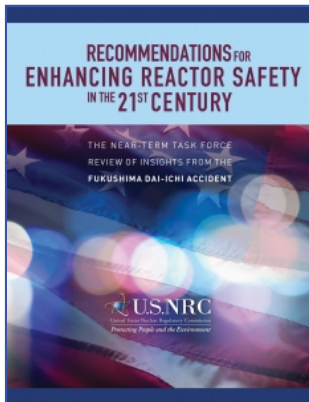
What are your guys knowledge on the radioactive material down by China Basin in San Francisco? Reports are coming out that there is radioactive material buried beneath the newly built high-rises, which is really unfortunate because I just began working for a startup, Searchmanipulator.com, which is DIRECTLY ABOVE it. Apparently it use to be a huge shipping yard area and they were lazy about dealing with radioactive waste. Now, people are demanding that they do tests, but the land owners are refusing because they know what is under there. How unsafe is it to work there? Thanks! Ann

comment #4862 posted on 2012-01-30 11:38:04 by NRC oversight review

US is using radio active materials in a very efficient manner.US as always is showing the way to other nations in world. @Annu vu Here I completely agree with moderator.There were no official signs of NRC involvement with licensed radio active materials at china basin.

The Near-Term Task Force Report – Readable for all?

posted on Thu, 01 Dec 2011 13:40:13 +0000



Many of us who work at the NRC are scientists and engineers. So as with anyone who works in a specific field, we spend our time at work thinking and speaking in jargon. Even within the NRC, different program offices use different jargon – and we may sometimes not speak each other’s language. So it’s no wonder we may sometimes have a hard time communicating with the general public But that doesn’t mean we’re not trying. We want to improve the way we communicate outside the agency. Our Plain Language initiative is one part of this effort. More specifically, though, we’re trying to make sure our important report from the task force that examined what happened at Fukushima in Japan and proposed recommendations for action is easy to read and understand. If you have read the report in full or any portion, please provide a comment here with your feedback in terms of how well you can and/or cannot understand it. Comments will be collected and provided to our Commission to be considered in terms of how we can improve the way we communicate. The report is located here: <http://pbadupws.nrc.gov/docs/ML1118/ML111861807.pdf>. Thank you in advance for your input,
Lance Rakovan
Senior Communications Specialist

Comments

comment #3566 posted on 2011-12-01 09:58:50 by rick

The Plain Language initiative sounds like a great idea. It does become a problem when team members refer to the same thing in much different terms.

comment #3614 posted on 2011-12-03 12:13:10 by Gregory Lewis

I like this initiative. I love science but I am not a scientist so being able to follow your developments in easier to follow language will be very helpful.

comment #3594 posted on 2011-12-02 06:37:55 by Diamond

All of your recommendations in your reports are more than enough to be implemented.

comment #3662 posted on 2011-12-06 18:07:15 by Jesús- Comida a domicilio en Mazatlán

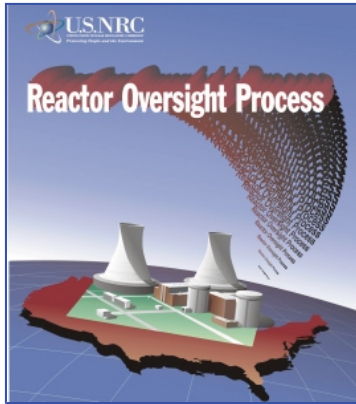
Firstly let me tell you that English is not my native language and still the pages that I read are very understandable. The document is easy to read and well explained; however I don't understand why did you write down this page was intentionally left in blank... it is not in blank anymore.

comment #3699 posted on 2011-12-08 10:51:01 by Chris in response to comment #3662

Writing "this page was intentionally left blank" is a standard approach when documents are maintained in both printed and electronic form. Because sheets of paper are always 2-sided, it is normal for some pages to be left blank. New chapters or sections almost always start on the right hand page of a book. So in an electronic document, blank pages sometimes need to be inserted to ensure the printed document comes out correctly. But it is not necessarily obvious to the reader of the electronic document whether a page was left blank intentionally for formatting purposes, or if some sort of mistake or electronic glitch was made by the author which could indicate missing content. So that message is sometimes intentionally inserted by the author so the reader knows what is going on.

Time to hear from the public about the NRC's Reactor Oversight Program

posted on Mon, 05 Dec 2011 16:43:30 +0000



While nuclear power plants are an important source of electricity in the U.S., they also contain radioactive material and produce radioactivity that needs to be contained – both under ordinary circumstances and during accidents. The NRC requires many controls and barriers in nuclear power plants to protect workers and the public from the effects of radiation. And the NRC inspects the [104 commercial nuclear power plants](#) daily in this country to make sure these requirements are met. The NRC has full authority to take whatever action is necessary to protect public health and safety and if our inspections reveal issues, we can demand immediate actions -- up to and including a plant shutdown. These regular inspections are part of the NRC's Reactor Oversight Process (ROP). This process uses objective, timely, and risk-informed criteria (meaning the most attention is paid to the most important elements of the safety process) to assess plant performance. There are [seven cornerstones in the process](#) that focus on the licensee's ability to operate the plant safely, to respond promptly and appropriately to emergencies, to protect plant workers and the community and to protect against threat of radiological sabotage. If a nuclear power plant is not meeting our requirements, they may get lowered scores in each area and be subject to more NRC scrutiny. The public can see an annual ROP report on each nuclear power plant online at [ROP Action Matrix Summary and Current Regulatory Oversight web page](#). Periodically, we re-assess the ROP to make sure it's effective and to determine if we need to make any improvements. We value public input in this assessment—including both what is right and what needs improving! A survey that gives you a chance to weigh in is available [here](#). We are looking for the surveys to be completed by January 13, 2012. We really appreciate your time. We'll keep you up to date on changes to the ROP on the blog and will be available online on the [ROP Program Documents web page](#).

*K. Jocelyn Lian
Reactor Operations Engineer*

Comments

comment #3691 posted on 2011-12-08 09:25:03 by Moderator in response to comment #3664

We have about 450 inspectors in the U.S. performing inspections at our commercial reactor sites. Our inspectors performed about 155,938 hours of direct inspection at the commercial reactor sites during calendar year 2010. NRC inspection and inspection support staff expended, on average, about 6,620 hours of inspection at each site. This is equivalent to about six man-years of inspection related activities being expended at each of our reactor sites on an annual basis. Licensees are inspected daily by our resident inspectors and typically, there is a regional specialists on site each month to perform their inspections as well.

comment #3664 posted on 2011-12-07 01:31:23 by Dr. Jacob Canfield

I had no idea we had that many nuclear reactors in the United States, nor did I know that the inspection procedures were so vastly complex (thankfully). This gave me a whole new appreciation... I have a cousin who used to live near a reactor in Russellville, AR. I always thought it would be somewhat hazardous to live near one, but she's in great health, and after reading the inspection procedures, I can see why. How many people and days does it take to complete a baseline inspection?

An American construction inspector in China

posted on Wed, 07 Dec 2011 14:33:44 +0000



Thanks to the NRC's agreement with China's nuclear agency to exchange construction knowledge, I traveled there last summer to observe ongoing work on two Westinghouse [AP1000](#) nuclear units. In July, I arrived in Shanghai, a sprawling, modern city full of skyscrapers and familiar places like Starbucks and Burger Kings. I traveled southeast to the Sanmen nuclear power plant Units 1 & 2 on a high-speed train, a journey that took four hours. The Sanmen site was built to support current construction as well as future operations. There are apartments, a convenience store, banks, restaurants, a police station, tourist center, offices, and an excellent hotel, where I stayed. It is also the site of a tidal bay where dozens of people worked in the mud digging for clams and snails twice daily during low tide. During the months of July and August, temperatures typically ranged from 97 to 104°F with 90 percent humidity. The joint project with

China will better equip [NRC construction inspectors](#) like me as we examine the quality of work done on reactors anticipated to be built in our country. The areas we will have to examine range from concrete quality to whether welding is done properly. In the U.S., we completed construction inspections in the 90s at one existing reactor that was refurbished, and are continuing inspections at another unfinished reactor. However, it has been decades since we've had to inspect the construction of an entirely new reactor in the United States. We currently have two inspectors at the Vogtle nuclear plant site in Georgia and one inspector at the Summer site in South Carolina where pre-construction activities are taking place. The Commission is expected to reach a decision soon on whether new advanced reactors can be built at those sites. While in China, I was able to see emergency planning at work as more than 200,000 people were evacuated in advance of a typhoon. And, as a sidelight, the trip also offered a look at Chinese culture and cuisine. The menus are varied and the food delightful, though I did lose 20 pounds. After a few weeks in Shanghai, I met [Region II](#) Administrator Victor McCree and Jimi Yerokun, deputy director of the Division of Construction Inspection in the NRC's Atlanta office, for a meeting in the Eastern China Regional Office. We visited the Shanghai Electric Nuclear Power Equipment Co., manufacturer of nuclear reactor vessels, steam generators, pressurizers, and core makeup tanks where many of the components are fabricated. We also returned to the Sanmen site for a meeting with the China National Nuclear Corporation and a final tour before returning home in September. The construction is far from complete, but so far we can say that the containment vessels of both units are being assembled, welded, heat treated and inspected in a manner meeting all the Westinghouse specifications. The trip allowed me to see China and learn about the culture, but most importantly, we are learning lessons that will be valuable when American utilities begin to build Westinghouse AP1000 nuclear plants here at home.

*Alain Artayet
Senior Construction Inspector
Region II*

Comments

comment #3737 posted on 2011-12-10 13:41:23 by Devonshire

Did you ever stop and consider the fact that there is a whole group of senior experienced enginers and construction management personnel from nuclear construction of the 1980's. The industry claims there is a lack of experienced personnel. Recruiters look at us as "dated" not experienced. When I was a kid I was always taught to listen to your elders. They have learned from their mistakes and they have the wisdom it takes to accomplish a task. It is a darn shame when old fossils get relegated to the scrap heap. How do you spell age discrimination, arrogance and ignorance?

comment #3863 posted on 2011-12-17 19:31:06 by Pete Johnson

When can we expect some more recent pictures of the Sanmen project? A link off the Westinghouse Site was posting photos every month or two, but the most recent posting is for August. I know this isn't the NRC's business, but you may have picked up some info on public information activities.

comment #3671 posted on 2011-12-07 10:05:15 by Dean Chaney

Glad to see the NRC getting a head start on construction inspections.

comment #3676 posted on 2011-12-07 14:15:02 by sheena mundra

I have been following worker safety in power plants as well as complications that arise in nuclear power plants/environment surrounding them. Many pipes experience leaks, erosion, and ultimately pipe bursting. I realize most companies try keep their cost to a minimum, but this should not be the case when lives are at risk. I believe they should look into preventive methods rather than finding last minute solutions when a problem has arisen. Data and solutions exist which should be sought and implemented when risks are this high. Plant piping leaks occur from valve vibrations, erosion, and turbulence. Simple spot repairs are not sufficient the flow turbulence and noise vibrations need to be corrected. Flow needs to be uniform and non-disturbing. **Moderator: Product promotion removed.** Laws and mandates should be enforced in building these plants correctly and addressing problems in a timely manner with proper training. Accidents are predictable and preventable if sought.

comment #4740 posted on 2012-01-26 03:20:16 by 99binaryoptions

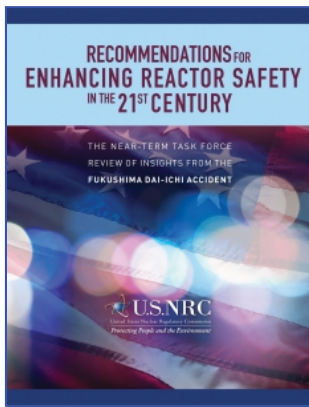
I welcome the NRC's efforts in preparing for a better nuclear energy future, and sincerely hope that the tragedy of Fukushima will not be repeated in China or anywhere, for that matter. But who really thinks there won't be another disaster at some point in history? And why isn't more being done to invest in alternative energy R&D? Even if the technology isn't there yet, it's worth improving our options in that respect, or else we'll all be living on a darker planet, where energy is more than a commodity ... it will become the next great tipping piont to launch untold conflicts.

comment #4646 posted on 2012-01-21 02:11:44 by Appliance Spare parts,Appliance Repairs,kleenmaid repairs

Very interesting topic about NRC's agreement with China's nuclear agency to exchange construction knowledge..!

NRC continues discussions on implementing Japan Task Force recommendations

posted on Fri, 09 Dec 2011 14:32:15 +0000



The NRC will hold several meetings next week in Rockville, Md., with industry representatives to continue discussions on proposals for implementing recommendations from the NRC's Japan Near-Term Task Force. The task force examined issues raised by the Fukushima nuclear accident in March. The meeting on [Monday, Dec. 12](#), will discuss the recommendation that covers a plant's staffing needs during a potential accident at multiple reactors on one site and communications needs if a nuclear power plant loses all A/C power. The meeting on [Wednesday, Dec. 14](#), will discuss recommendations that call for re-examination of earthquake and flooding hazards at U.S. nuclear power plants. The staff will hold two meetings on Thursday, Dec. 15. The [first](#) will discuss the recommendation to require certain types of U.S. nuclear power plants to have reliable means of releasing pressure buildup during an accident. The [second](#) meeting will discuss the recommendation to require U.S. nuclear power plants to install additional equipment to monitor their spent fuel pools. Future meetings will be posted on the NRC [website](#). The task force issued its [report and recommendations](#) on July 12. The Commission directed the staff to identify which recommendations could be implemented without unnecessary delay, and the staff responded with a [proposal](#) Sept. 9. The Commission provided [direction](#) to the staff Oct. 18 on how to carry out the proposal.

Scott Burnell
Public Affairs Officer

Comments

comment #3754 posted on 2011-12-12 15:56:28 by Al Macintyre in response to comment #3724

I share some of these concerns. We have heard that 20% of the world's nuclear power plants are located in areas at high risk of earthquakes. We have heard that Japan's nuclear plants were mandated by law to be able to withstand at least an 8.2 quake, that Fukushima was actually built to withstand an 8.6 quake, what Japan got was a 9.2 quake. Now we know in recent history, the world has had at least a 9.5, with higher theoretically possible, but that most of Japan chaos was due to inadequate planning for how high a Tsunami might be, because planners decided to save money by not consulting Tsunami experts. So this begs the question of how severe an earthquake we might expect in USA in proximity to nuclear power plants, and whether they are built to withstand that, and if USA nuclear designers have in fact consulted the seismic and tsunami scientists. More importantly, these spent fuel need to be stored for hundreds of years, so it does not matter where they are stored, there will probably be an earthquake there, before the hundreds of years expire, so are they where no natural disaster will disrupt the containment? Also the seismic and tsunami scientists are constantly learning new stuff, which could have implications for nuclear safety. Have arrangements been made so NRC remains informed about new discoveries in seismic and tsunami sciences which could impact nuclear safety?

comment #3753 posted on 2011-12-12 15:46:51 by Al Macintyre in response to comment #3747

Anyone who has been following news of the aftermath of the Japan 2011 Tsunami has probably noticed: 1. Japan took a hell of a beating from the Tsunami and the associated Fukushima and other nuclear power plant incidents. 2. Investigations have determined that a great many errors of judgement were made, by Japan government and Industry, that had they not been made, there would have been no nuclear power plant melt downs, and the death rate to the Japanese people, from the Tsunami, would have been much less. 3. The world is in shock. We had thought Japan was a world class nation, with best technology, and best thinking. If this can happen in Japan, is there a risk that similar errors in judgement have been made in our nation? This thinking has led to an evaluation of our own safeties, to see if there is room for any improvement thanks to lessons learned about the Japan disasters. 4. Yes, we have in fact found areas where our nation's risks can be better mitigated. That is the purpose of implementing the lessons learned.

comment #3747 posted on 2011-12-11 23:50:05 by Reputation Management

What is the purpose of the implementing Japan Task Force recommendations?.....

comment #3724 posted on 2011-12-09 17:03:24 by BR

I am still very concerned that the Spent Fuel Pools are still the main storage, long term and short term, for the radioactive waste. With most of the Pools across the country full to near capacity when are the laws passed to store the waste going to be modified and implemented? I'm glad to hear that there are measures to enhance the safety of the spent fuel storage pools but it really is not a solution. What proposals are on the table to Permanently store nuclear waste?

comment #3893 posted on 2011-12-19 12:51:09 by Moderator

The NRC Task Force concluded that current U.S. nuclear power plants can continue to operate safely. The task force's recommendations are meant to enhance the plants' already-acceptable ability to deal with very unlikely severe natural events. The NRC continues to conclude U.S. reactors and spent fuel pools/dry casks have been designed and built to withstand the earthquakes possible at their sites. An ongoing joint effort between the NRC, Electric Power Research Institute and the Department of Energy, examining the most current understanding of Eastern and Central U.S. seismic information, is being incorporated into a similar task force recommendation. The NRC's Office of Research also maintains close ties with the U.S. Geological Survey and other seismic

How did the NRC decide the shield building at Davis-Besse is safe?

posted on Mon, 12 Dec 2011 16:43:30 +0000



Do the cracks discovered in the shield building at the [Davis-Besse Nuclear Station](#) compromise its ability to stand up to tornadoes and earthquakes? Can the shield building still protect the reactor vessel from being hit by heavy outside objects? The NRC concluded on December 3 that the shield building can fulfill these safety functions. However, the agency is making sure the plant takes necessary actions to ensure the continued safety of the shield building and issued a [Confirmatory Action Letter](#) (CAL) documenting these actions as commitments to the NRC. The NRC responded to the discovery of the cracks in the shield building immediately by dispatching a structural inspector to the site and putting together a team of about ten engineers to provide a thorough and independent review of the plant's actions to characterize the cracks and analyze their implications for shield building safety. NRC inspectors worked tirelessly to make sure they had a thorough understanding of the condition of the shield building. This intense review process allowed the agency to reach the conclusion that the structure was strong enough to fulfill its safety function. This review involved: • monitoring the licensee's activities at the plant as they were identifying the extent and nature of the cracks; • examining the licensee's methodology for assessing the impact of the cracks on the shield building; • making sure the samples taken from the building were sufficient to indicate the extent and the severity of the cracks in the building as a whole; • reviewing the calculations and the assumptions on the shield building's ability to withstand stresses during normal operation and during events such as tornadoes and earthquakes; • continuing to ask questions about the specifics of the licensee's calculations; challenging their assumptions; requesting additional information; and • making sure the calculations were sufficiently conservative until NRC inspectors had reasonable assurance that the building had sufficient structural strength to fulfill its safety function. The NRC has two outstanding issues that don't have an immediate impact on the shield building's ability to fulfill its safety function but need to be addressed going forward. One is understanding what caused the cracks; the other is determining if the shield building still meets the original design specifications in the plant's license. The first issue will be addressed through the CAL, which commits the plant to submitting a "root cause evaluation" to the NRC by February 28, 2012. In the meantime, the CAL also commits the plant to monitoring the extent and the size of the cracks short-term to make sure the company's safety conclusions remain valid. The plant had committed to develop a long-term monitoring program after the causes of the cracking are better understood. If the company fails to meet the commitments in the CAL the agency can take further regulatory action to ensure the safety of the plant and the public. The NRC will continue to inspect the second issue to determine if the cracks affected the design margins of the shield building in the plant's license. The agency will document the results of this review in a future inspection report, which will be made public, and determine the need for any further regulatory action.

*Cynthia Pederson
Acting Regional Administrator
Region III*

Comments

comment #3838 posted on 2011-12-16 07:03:06 by Shine

The cause of the crack should be established.

comment #3751 posted on 2011-12-12 14:07:06 by Jim Crockett

It would be very helpful on the Blog if you could provide a link to referenced documents, e.g., in the Davis Besse case a link directly to the CAL.

comment #3752 posted on 2011-12-12 15:39:44 by Al Macintyre

You say that you have determined that the cracks do not pose a danger hazard, and I accept that you are the best experts in our nation to make such an evaluation. But so far, I have not seen an explanation of this, which makes sense to those of us who lack your expertise. My understanding is that the purpose of the shield is to contain radiation, in the event of a nuclear incident. Are the cracks not all the way through, in other words, there is no hole all the way through the shield for the radiation to leak out, in the event of an accident? Or do radioactive gasses gather somewhere in the containment such that where the crack is located, it is highly unlikely that they would escape out there? I guess what might be helpful would be an illustration on web site, showing cross-section of crack relative to thickness of shield, so we can see they are trivial, or other illustrations to show (a) statistics on types of nuclear incidents, what radiation results, (b) how these likely incidents, the shield, even cracked, will perform its job satisfactorily provided the cracks do not get larger. Hopefully what you learn about the causes of the cracks can help in other areas of our critical infrastructure. Is Hoover Dam at risk of busting loose because of similar cracks? Or was it built with different technology. Are bridges at risk of falling down, thanks to similar cracks?

comment #3765 posted on 2011-12-13 09:48:14 by Moderator in response to comment #3751

Done. Sorry for the oversight. Also here: <http://pbdupws.nrc.gov/docs/ML1133/ML11336A355.pdf>

Fort Calhoun nuclear plant gets more NRC oversight



In recent months, the NRC has identified additional performance and technical issues that will need to be resolved before the [Fort Calhoun Nuclear Station](#), located about 19 miles north of Omaha, Neb., can restart. Getting ahead of problems and ensuring safety at nuclear plants is what the NRC does – and why we exist. The plant was shut down on April 9 for a refueling outage. The outage was extended due to flooding along the Missouri River. Then an electrical fire on June 7 led to the declaration of an “Alert” and caused further restart complications. On September 2 the NRC issued a Confirmatory Action Letter documenting actions that Omaha Public Power District (OPPD) officials agreed to take prior to seeking permission from the NRC to restart. The NRC later dispatched a special inspection team to review circumstances surrounding the electrical fire. The fire had resulted in the loss of spent fuel pool cooling capability for a brief time and caused significant unexpected system interactions. During the fall, OPPD employees have been working their way through an extensive checklist of actions needed to assess damage to the site as well as

checking structures, systems and components for damage that may have been caused by flooding. All of this has been occurring against a very significant backdrop: On Sept. 1, the plant was placed in Column Four of the NRC’s Reactor Oversight Process Action Matrix because of multiple violations of NRC regulations. These include a “yellow” finding of substantial safety significance because of inadequate strategies to protect the plant from flooding and a “white” finding of low to moderate safety significance for the failure of electrical components used to automatically shutdown the reactor. Column Four is reserved for plants with significant performance issues. The discovery of additional concerns, which are still being studied and evaluated, further complicates matters. The Alert caused by the breaker fire resulted from inadequate design or installation of electrical components. Deficiencies were noted with environmental qualification analyses for plant structures, systems and components. These analyses are relied on to demonstrate that key systems will be able to perform their safety functions under a variety of challenging accident conditions like earthquakes, loss of coolant accidents, high radiation fields, seismic events, etc. There also are concerns with the plant’s emergency response program. OPPD officials failed to notify state and local officials of the June 7th Alert within the required 15 minutes. In a separate emergency exercise, OPPD withdrew a protective action recommendation after it had been communicated to emergency responders. For these reasons, out of an abundance of caution, NRC senior managers have decided to increase oversight of Fort Calhoun using [Inspection Manual Chapter 0350](#), which is reserved for facilities that are shut down due to significant performance and/or operational concerns. This inspection process provides guidance to the NRC staff to ensure that licensee corrective actions will be sufficient to safely restart and operate the plant. The 0350 process has only been used for 12 other sites since 1994, making this an infrequent – and important – step to maintaining safety as U.S. nuclear power plants. Stay tuned for more information about this site in the future.

*Victor Dricks
Region IV Public Affairs*

Moderator Note: The Notification of Change to Regulatory Oversight letter is available through ADAMS by going to <http://wba.nrc.gov:8080/ves/> and doing a Simple Search for ML113470721

Comments

comment #5172 posted on 2012-02-08 13:02:39 by Michael

I agree that nuclear power is paramount for us to possess as a nation; but obviously mistakes can happen and increased oversight will hopefully serve to prevent some mistakes that could have been avoided.

comment #3782 posted on 2011-12-14 06:52:56 by matus - minijuegos

I commend the work they did to create the Inspection Manual 0350, because we never know when some catastrophe may occur that endangers the lives of the people or the continent, it is important to take strict security measures for these cases to safeguard the American nation and world.

comment #3849 posted on 2011-12-17 02:51:31 by Mary Jane Shoes For Women

While I applaud increased oversight, I can't help but question how effective it will be. Its good to have created an inspection manual, but will additional oversight ensure its followed?

comment #3842 posted on 2011-12-16 12:03:59 by Jose Antonio- Seguridad privada

For me those kind Nuclear Stations are such a dangerous for people around, you just have to look what happened in Chernobyl in Rusia. Lets take down all those Nuclear Stations.

comment #3843 posted on 2011-12-16 12:20:52 by X5069 - minijuegos in response to comment #3782

Good coment!

comment #4241 posted on 2012-01-05 20:47:33 by Pro-Nuc'er

For you anti-nuc'ers out there just remember that if nuclear power goes away, you will not be able to afford electrical power. Those of you who think you are going "Green" because you drive an electrical vehicle, guess where the electricity comes from that fuels that vehicle? It comes from nuclear power, coal fired power or other fossil fuel generating plants. Well air generation will take care of us you say, I don't think so. The wind doesn't blow all the time and especially on those very hot summer days when you want the AC on and the turbines are not turning to generate electricity because your windmill is not spinning! Now as for Ft. Calhoun, the NRC has some concerns. They say: "There also are concerns with the plant's emergency response program. OPPD officials failed to notify state and local officials of the June 7th Alert within the required 15 minutes. In a separate emergency exercise, OPPD withdrew a protective action recommendation after it had been communicated to emergency responders." Fort Calhoun only missed "an NRC imposed deadline" by one minute... Big Deal! In response to the second part, concerning protective actions recommendations, again the NRC wants it both ways. Last year, they dinged Ft. Calhoun for not withdrawing a protective action recommendation in the almost exact same set of circumstances and now the NRC is dinging the for following what the NRC wanted last year. They can't make up their minds. NRC needs to get its house in order as well as Fort Calhoun. Concerning the remark about Chernobyl in

Russia... there are not any nuclear power stations like Chernobyl running in the United States. Chernobyl was a graphite moderated reactor whereas the two designs used in the United States today are the Boiling Water Reactor (BWR) and the Pressure Water Reactor (PWR). Chernobyl was also a human induced accident in that what the operators were doing allowed the reactor to get away from them and blow up. Concerning Nuclear Power Plants being dangerous. Yes they could be but the NRC for the most part does a good job of oversight and continues to evaluate each nuclear power station continuously over the year and during each quarterly drill and/or functional exercise. The NRC reviews every minor incident and add regulations to ensure all nuclear power stations will not experience the same events. The NRC and even all the Nuclear Power Plants themselves are looking at what happened in Japan to see what they can do better to ensure nothing like that happens in the U.S. In addition, U. S. nuclear power plants have multiple safety systems and are always looking for "best practices" amongst themselves to ensure the safety of the public. Finally if one does some research, they will find that the radioactivity found at the boundary of a coal burning power plant is actually higher than that found at the boundaries of nuclear power plants. Not only that but have you looked at what comes through or by your homes or towns via truck or train that can seriously injure you or kill you immediately if an accident were to occur. Even with the incident in Japan, have you heard and CONFIRMED of anyone in the general public actually dying from radiation exposure?

NRC Dedicates Staff to Manage Lessons Learned from Japan

posted on Thu, 15 Dec 2011 14:53:52 +0000



[caption id="attachment_2073" align="alignright" width="238" caption="David Skeen"] As the year comes to an end, the NRC continues to evaluate the lessons learned from the March 2011 nuclear accident in Japan to ensure that appropriate safety enhancements are implemented at nuclear power plants here in the U.S. We at the NRC take the tragic accident at the Fukushima nuclear power plant very seriously, and are striving to gain insights from the accident to improve nuclear safety here at home. Earlier this year, the Commission directed technical experts on the NRC staff to develop recommendations for enhancing reactor safety at U.S. plants. This direction resulted in a July 2011 [report](#) that identified 12 over-arching recommendations from what is known as the Near-Term Task Force. We've established a group of 24, full-time employees to focus exclusively on the implementation of the recommendations. These employees are experts in nuclear power plant design and operations and emergency preparedness. The group is called the Japan Lessons-Learned Project Directorate. The directorate will support a steering committee consisting of senior agency managers to coordinate and implement the task force recommendations per with our Commission's direction, including its goal of striving to implement the recommendations within five years. An important aspect of our path forward is stakeholder engagement with members of the public. We will seek input through public meetings to help us determine whether changes may be required to improve safety at U.S. nuclear power plants. David L. Skeen was recently named as head of the directorate. He's been involved in the U.S. response since the tsunami hit Fukushima. He has more than 20 years experience as a reactor engineer and policy advisor, and excellent skills and experience to effectively lead the effort. We will keep you up to date on our activities here, and on the dedicated Japan page on the NRC web site.

Amy Bonaccorso

*Sr. Communications Technical Assistant
Japan Lessons-Learned Project Directorate*

Comments

comment #3870 posted on 2011-12-18 02:29:45 by Prabhu

The tsunami in Japan has been somewhere a result of Human manipulations, not sure how many lives are again bought under the nuclear outbreak. Hope the studies would benefit thickly populated countries like India where plans of setting up new nuclear plants are proposed.

comment #3846 posted on 2011-12-16 19:57:02 by Cloture Rivesud

Well, I think the NRC as a lot of work ahead. This is such a tragedy for Japan.. I guess Leasson Learned!

comment #3847 posted on 2011-12-17 02:27:47 by Mary Jane Shoes For Women

While I can appreciate the use of public meetings, I'm concerned over whether they will be enough. A forum to be heard is great, but will the people really be heard? What process are in place to act on that public input?

comment #3913 posted on 2011-12-20 18:36:47 by Manchester United T Shirts

We need a world without nuclear weapons nuclear energy before we kill ourselves each other and the innocent

comment #3898 posted on 2011-12-20 01:42:20 by Sergio Guzman

Nuclear energy still is the cleanest. Is a tragedy of what happened in Japan, but accidents happen It's our job to learn, correct them and move on

comment #4980 posted on 2012-02-03 09:28:04 by Web Designer Edinurgh

if this happened in Japan it can happen anywhere

comment #3884 posted on 2011-12-19 09:56:10 by internetten para kazanma forum

Thank you for the information you provide. very nice website

comment #3885 posted on 2011-12-19 11:55:47 by NEALE THOMAS

<http://www.nrc.gov/about-nrc/organization/commission/jaczko.html> .. prompted following thoughts already emailed to NRC pertinent also to learned lessons item below .. Stick to your guns Greg and don't the bidders beat you up! Said as 80s pioneering campaigner on errors in all approved LOCA codes at that time lacking a key term controlling depressurisation dryout bubble transit time from bulk to wall, roughly halving it indeed. Derivation done in CamUni DAMTP (google!), details delivered by one of their last cohort of 3Year Part3 brightest best mentored by me and disseminated during five years of headbanging against entrenched establishment who never explicitly conceded defeat only ever acknowledged awareness! Sounds familiar?! Gobsmacked years later discovering same failings still in LOCA codes adopted for HP-HC blowout emulation, my evaluation commissioned for UK HSE-OSD compliance with Cullen post PiperAlpha. Again took five years to zap them after vendor of worst offender injuncted HSE & me for defamation, resulting in withdrawal of report until courageous campaigning by retiring CS got guarantees from incoming UK government in '97 that HSE must never again be intimidated because failings persist without published awareness! Pretty much matches your agenda! Crossed my mind that maybe Japanese authorities were likely also in denial about LOCA code shortfalls on depressurisation dryout when it came to persisting with licensed operation at Fukushima, if so then amazingly seeing as their academics were amongst the first to recognise the glaring omission back in 80s. Must mention also that TMI meltdown conundrum (crisis exacerbated by pumping) would never have been a puzzle had US authorities been aware of UK work on convection following fatal accident with supercritical water loop, early 70s indeed so upwards four decades ahead of current considerations! Be pleased to receive requests for further insightful information.

comment #3889 posted on 2011-12-19 12:17:25 by Moderator

Radiation exposure and radiation sickness are things to be concerned with. The United States west coast is concerned about the ongoing impacts from Japan's earthquake and on March 11, 2011 and the subsequent tsunami and now the radiation. And what about Hawaii, which is hours closer to Japan. Comment moved by the moderator

comment #5217 posted on 2012-02-10 06:16:52 by Chac at Vacation Rentals in Hawaii Org

Ms. Bonaccorso: God bless you and your comrades. We desperately need some kind of alternative energy in the name of security.

comment #4156 posted on 2011-12-29 05:18:54 by web design Manchester

This is not an NRC problem or a nuclear industry problem. This is an imperative for nuclear safety. The American people are looking to everyone involved in nuclear safety – from the operators to the regulators – to do their part in continuing to protect the public. We must deliver.

comment #5047 posted on 2012-02-05 09:24:20 by web design Pakistan

It seems they need to work more, its a really bad tragedy, I think one can learn from mistakes and move forward. wish for best..

comment #5022 posted on 2012-02-04 21:13:09 by internette nasıl para kazanılır

I THINK Nuclear energy still is the cleanest.

comment #5081 posted on 2012-02-06 21:10:04 by WebDesign

Learning from the past is the only way to take the right steps in to the future.

The NRC and radioactive consumer products

posted on Tue, 20 Dec 2011 14:38:36 +0000



Did you know the smoke detectors in your home may contain radioactive material? Many smoke detectors contain a small piece of a radioisotope called americium-241. This is what alerts you if your house catches fire – the americium ionizes the air, making it conductive, so that any smoke particles that enter the unit reduce the current and trigger the alarm. Does your watch glow in the dark? Very handy in theaters if the movie's boring. That feature could be tritium (hydrogen-3) or promethium-147. Older clock dials and watches used radium-226. Night sights for guns often use tritium. So you see, some consumer products function because of radioactive material. And you may have guessed by now that the NRC has something to say about that. The agency has a policy statement on consumer products, published in 1965 by the Atomic Energy Commission, which we are currently proposing to update. The policy statement incorporates the three fundamental principles of radiation protection: Justification of a practice; optimization of protection (the "As Low As Reasonably Achievable" practice, or ALARA); and application of dose limits to individuals. For example, under the policy, approval of a proposed consumer product depends upon both associated exposures of persons to radiation and the apparent usefulness of the product. The policy calls for

monitoring the amounts of radioactive materials being distributed for use by the general public and reconsidering the policy if there is any indication that materials in products reaching the public may result in a significant fraction of the permissible dose. Well-informed regulatory decisions in this area can have a significant effect on minimizing cumulative exposures to the public. The NRC does not, however, approve consumer devices with radioactive material simply because they are cool. A proposed product must pass our “frivolous use” standard – meaning the radioactive source provides a benefit. Glow-in-the-dark trinkets need not apply. So as you putter around your house, you may receive a very small radiation dose from the smoke detectors on your ceiling – but the possible life-saving benefit of those devices far outweighs any radiation risk. They are an example of the beneficial uses of radioactive material, and of how the NRC protects the public. (The proposed revision to the NRC’s policy statement on consumer products was published in the [Federal Register](#) on October 14. Public comments on the revisions will be accepted through December 28, and may be submitted through the federal government’s rulemaking [website](#) using Docket ID NRC-2010-0292; by e-mail to Rulemaking.Comments@nrc.gov; by fax to 301-415-1101; or by mail to Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, ATTN: Rulemakings and Adjudications Staff.)

Shirley Xu

Health Physicist

Comments

comment #3916 posted on 2011-12-20 19:58:18 by Paul

Do the sellers of these devices warn consumers of the risk. If not perhaps it should be a requirement.

comment #3932 posted on 2011-12-21 22:10:06 by Jose Rolando Palacios Barnuevo

Hi, this article is very interesting and I have a question that I hope will be resolved: What are the regulations regarding radioactive gas produced by mining? Thank you for your prompt response. José Palacios.

comment #3945 posted on 2011-12-22 14:09:41 by Moderator in response to comment #3932

Radon emitted from deep-shaft mines is naturally occurring radiation and would not be under NRC jurisdiction. It would fall under the Bureau of Mines or OSHA as an occupational health issue for miners. Waste residue (not necessarily gases) from uranium recovery (conventional mills and/or in situ leach facilities) is under NRC jurisdiction and you can find the relevant regulations in 10 CFR Part 40 Appendix A for uranium tails impoundments.

comment #3935 posted on 2011-12-22 02:21:54 by <http://www.systemreviewbonus.com/>

The iPhone is a very large part of my life and I don't give a thought to the radiation that is emitted. I know there are cases that dissipate the radiation over a surface but I prefer others. I just hope the phone itself as it advances technologically will use less and less radiation.

comment #3925 posted on 2011-12-21 06:20:06 by Linda Evans

I doubt that the radiation emitted by these devices greatly affect health, we also carry devices that emit radiation into our pockets, cell phones emit harmful radiation and have all day glued to the head.

comment #3905 posted on 2011-12-20 14:08:30 by Maria | armario cultivo interior

I doubt that the radiation emitted by these devices greatly affect health, we also carry devices that emit radiation into our pockets, cell phones emit harmful radiation and have all day glued to the head.

An easier-to-use ADAMS: You asked, we acted

posted on Wed, 21 Dec 2011 21:03:00 +0000

Yes, it's true – the NRC has just unveiled an even better ADAMS. The NRC's [Agencywide Documents Access and Management System](#), which is available from our website, now boasts a number of enhancements – some implemented directly as a result of public input. We've been making continuous improvements and our latest enhancements include a new “content search” feature for searching words either in documents or in index information. Other enhancements include the: • Ability to display up to 500 search results. • Ability to save a search as a web link and then use it again to find your frequently requested documents. • Ability to export a list of documents as hypertext markup language (HTML) or as a Microsoft Excel spreadsheet. • Ability to access search-specific folders by right-clicking on the folder or using the “Advanced Search” tab. • Ability to more easily modify a saved search by changing your search criteria. ADAMS is an online library that includes all the agency's publicly available documents as well as a Public Legacy Library that has entries for 2 million older NRC documents stored on microfiche or in paper form. If you have questions about any of the new search features or you need help to develop an effective search, the reference librarians in our [Public Document Room](#) are available to assist. We hope you find the new search capabilities easier to use and we welcome your feedback via comments to this post.

Margie Janney

Deputy Director, Information and Records Services Division

Comments

comment #4185 posted on 2012-01-02 02:30:34 by Jose Green

seems to be a useful tool. It really does make life easier!!

comment #3994 posted on 2011-12-26 21:05:25 by Tornado Shelters

Any update to the ADAMS system is a step in the right direction!

comment #4172 posted on 2011-12-31 06:38:27 by Sheet Music Utah

Excellent post. I've been looking around on the internet for this kind of information, and I'm glad I landed on this blog.

comment #4173 posted on 2011-12-31 08:02:48 by ash

The ability to display up to 500 search results is a great improvement, it's one a personally wanted.

comment #4124 posted on 2011-12-27 21:28:41 by Agustin Cruz

Wow!! The new ADAMS update is great. I love how I can now export documents to excel, this make my life a lot easier. Thank you

comment #4148 posted on 2011-12-28 21:28:29 by Steve

The added ability to save a search as a web link and come back to it is great. That would be extremely helpful if you were doing ongoing research. Thank you

The AP1000 is certified – Where do we go from here?

posted on Thu, 22 Dec 2011 20:15:49 +0000



The NRC's five Commissioners have approved [a rule](#) that certifies the amended AP1000 reactor design for use in the United States. The Commissioners took this final step in the certification process after four years of review by the NRC's technical staff. The staff carefully examined information from the reactor's designer, Westinghouse, and asked thousands of additional questions to ensure the company appropriately resolved all the issues necessary to show the design is safe. The amended design includes changes to some reactor systems and it shows the AP1000 can keep the public safe even after the impact of a large commercial aircraft. The new rule means the [AP1000](#) is generally acceptable for use by companies interested in building and operating new U.S. nuclear power plants. Companies still have to show, however, that the reactor can be safely built and operated on a given piece of land in an environmentally acceptable way. The NRC's Combined License process answers those site-specific questions. Several companies submitted Combined License applications for the AP1000 while the design was still under review – NRC regulations allow this because certification must be complete before any decisions are

reached on the licenses. The NRC is now ready to complete the Combined License process for the first two AP1000 applications, one for the [Vogtle](#) site in Georgia and one for the [Summer](#) site in South Carolina. The Commission is now deciding if the applications and the NRC staff's review meet the requirements of the Atomic Energy Act and the National Environmental Policy Act. If the Commission concludes all the requirements are met, the NRC will be able to issue licenses for the Vogtle and Summer projects. These decisions are expected early next year.

Scott Burnell
Public Affairs Officer

Comments

comment #4211 posted on 2012-01-04 09:37:02 by Moderator in response to comment #4209

For more information on power companies interesting in building new reactors using the AP1000 design, go to this chart: <http://www.nrc.gov/reactors/new-reactors/new-licensing-files/new-rx-licensing-app-legend.pdf>

comment #4209 posted on 2012-01-04 06:23:20 by Jose Luis | estores enrollables

Are there plans to install this type of reactors in other states? How soon?

comment #4705 posted on 2012-01-24 11:03:17 by Social Media Marketing

4 years to decide this? this level of delegation needs to stop. We need a definite system based on quick decisions not a 4 year process backed by taxpayers and fueled by big business lobbyists.

comment #5204 posted on 2012-02-09 21:03:35 by Online Millions

Hi All, It's nice that they are going to such an effort to make sure these are up to the right standard but I don't know a lot about these reactors and I guess my question is are they going to all the existing reactors and making sure they are up to the same standard as it only takes one weak link for disaster

comment #4121 posted on 2011-12-27 16:27:10 by Joe Thadani

Since this is a whole new project, how do residents of the Vogtle site in Georgia and the Summer Site in South Carolina feel

comment #4146 posted on 2011-12-28 15:44:21 by Moderator in response to comment #4121

The NRC has been engaged with the applicants for the Vogtle and Summer sites for several years, beginning in 2006 for the Vogtle site. As part of our licensing review process, we have held a number of public outreach meetings to inform and engage the local citizens about our review process, our standards, and how they can be involved. In addition, as part of our design review process, we requested public comments and we addressed those comments prior to approving the AP1000 design.

comment #4594 posted on 2012-01-19 05:07:15 by Genifique

I encourage others to take whatever action they think should be taken. It almost makes my blood boil to see how much time and effort some deluded people will put into the task of slowing down valuable infrastructure projects that can provide not only thousands of well-paying jobs during the component manufacturing and plant construction processes, but also will provide many decades worth of reliable, clean, prosperity-enabling power for a large population exceeding several million people.

comment #5084 posted on 2012-02-06 23:04:29 by trevor michaels

It seems obvious that generation IV nuclear reactors should start being implemented, as we await the successful application of ITER and nuclear fusion as our energy sources of the future. This news makes me happy; I actually voted for McCain years back because of his insistence that we needed to get off oil and start building more reactors.

Acting as a 'Neutral' to Help NRC Meetings Be More Productive

posted on Tue, 27 Dec 2011 15:44:28 +0000



The NRC hosts hundreds of [public meetings](#) each year. For the most part, these meetings go well -- discussions take place, participants get what they need, and the parties move forward with plans and actions. From time-to-time, though, NRC staff members need some help to make a meeting successful. In those cases, an NRC facilitator may get involved. An NRC facilitator is a specially trained NRC employee who acts as a "neutral" and whose main purpose is to make sure meetings are successful for all participants. This can mean anything from helping set up a productive agenda to making sure the public knows about the meeting to ensuring all meeting attendees have a chance to participate to rephrasing something someone has said to help people understand each other. Facilitators are there to represent the process of the meeting and to do what they can to assist all participants. Can it be a challenge working for the NRC and yet acting as a neutral during an NRC meeting? Definitely. Acting as a neutral means in some cases you are helping NRC staffers get their point across and in other cases helping members of the public get their point across. There have been plenty of meetings where I have found myself devoting my energy to trying to get the NRC staff in attendance to understand the excellent point a member of the public has (in my opinion very clearly) made. Good communication takes hard work, and when the topic is as complicated as nuclear regulation and you throw in some emotion on top of that, it can be even more challenging. A good facilitator can make the communication process a bit easier on everyone. There is always room for improvement when it comes to our public meetings. Facilitators can go a long way to ensuring meetings are productive, but it's your input that really helps us focus on what aspects of our public meetings needs improving. You can help us by always filling out a public meeting feedback form after an NRC public meeting and providing the form to an NRC staff member or dropping it in the mail. We are currently taking steps to improve that form and to make filling it out easier (as in electronic). If you have some feedback, we can also take it here as a comment. Please be sure to let us know in your comments (here or on the form) if a facilitator was involved, and how he or she did.

Lance Rakovan

Senior Communications Specialist and Manager of NRC's In-House Meeting Facilitator Program

Comments

comment #4329 posted on 2012-01-11 19:21:03 by Just a guy in response to comment #4141

I have been in the commercial power industry for 20+ years and have worked closely with a variety of NRC inspectors over the year. I can assure you the NRC is keenly interested in public safety and not at all concerned about convenience.

comment #4138 posted on 2011-12-28 09:07:29 by Len Skoblar

Lance, as a former Markey and Reid advisor, your Chairman is not "neutral". Do you have any idea what a pall that, and his decisions, casts on what was once the absolute best Federal agency?

comment #4155 posted on 2011-12-29 04:41:03 by Alen.shop

They always do great work. And as discussed the task of any moderator were always challenging as he has to gathers everyone idea and make sure everyone thoughts get clearly aired.

comment #4141 posted on 2011-12-28 10:35:01 by Jane Swanson, Mothers for Peace

I have in years past requested an electronic form for members of the public to evaluate NRC meetings, so thank you for that. The concept of "a neutral" is logical and a good first step toward more productive meetings. But in order to convince the public that this new approach is more than a public relations effort, the NRC will need to also follow through. When the agency gets useful input, it needs to STUDY IT and TAKE MEANINGFUL ACTION if it wants to convince the public that the NRC ranks public safety as more important than corporate convenience.

comment #4122 posted on 2011-12-27 17:57:48 by Chris

NRC staffers have always done a great job and i am glad we have them. Thank you

comment #4115 posted on 2011-12-27 12:19:55 by asparaguscutterClyde H Stagner

NRC employees have vested interests. Past experience with city facilitators was one of city cop control. Select your facilitators from neutral components of University Engineering and Science Departments and obtain integration with with respect.

Recent Uprate Approved for Upstate New York

posted on Thu, 29 Dec 2011 18:35:14 +0000



Enough news space has been devoted over the years to the prospects for new reactors in the U.S. to lay waste to several small forests and countless electrons. However, there is a different means by which the nation's share of nuclear-generated electricity can be increased, and it does not involve earth-movers, the construction of new buildings or other changes visible to the casual observer. Another option available to nuclear power plant owners is to pursue a power uprate, which essentially means an increase in the maximum amount of power a reactor can generate. But before a power uprate can be implemented, it must first undergo a thorough review by the NRC. Just last week, the NRC approved a 15 percent power uprate for the [Nine Mile Point 2](#) nuclear power plant in upstate New York. That approval was the culmination of an NRC review that began with the submittal of the application on May 27, 2009. During the course of the agency's evaluation of the proposal, NRC staff scrutinized data regarding the proposal and posed dozens of technical questions to the plant's owner, Constellation. They included queries about the effects of

greater stresses on piping and the plant's steam dryer, a component at the top of the reactor vessel, as a result of operations at higher power levels. The NRC does not proceed to a final decision until all such questions are answered to our full satisfaction. Uprates are not a new development. In fact, the NRC approved the first uprate back in 1977 and has to date okayed 140 such applications. All told, the uprates have led to an increase in power output nationwide of about 6,000 megawatts electric. There are three different kinds of power uprates:

"measurement uncertainty recapture" uprates, "stretch" uprates and "extended" uprates. Here's a brief description of each: Measurement uncertainty recapture uprates – They involve an increase of less than 2 percent and are achieved by implementing enhanced techniques for calculating reactor power levels. State-of-the-art devices are used to more precisely measure feedwater flow, which is used to calculate reactor power. Stretch uprates – The increases are typically between 2 and 7 percent and usually involve changes to instrumentation settings but do not require major plant modifications. Extended uprates – Power boosts of this type have been approved for increases of up to 20 percent. They usually involve significant modifications to major pieces of non-nuclear equipment, such as high-pressure turbines, condensate pumps and motors, main generators and/or transformers. The Nine Mile Point 2 uprate would fall into this category. For more information on power uprates, visit the NRC web site at: <http://www.nrc.gov/reactors/operating/licensing/power-uprates.html>.

Neil Sheehan
Region I Public Affairs Officer

Comments

comment #4195 posted on 2012-01-02 22:23:24 by organizational culture

I thought that the uprates are some sort of new development. But anyway, the change in instrumentation settings is nice to hear.

comment #4174 posted on 2011-12-31 12:17:42 by danny

I always thought that Under existing rules, a reactor design that commissioners have voted to approve must be published in the Federal Register for 30 days before it is legally effective.

comment #4249 posted on 2012-01-06 02:52:18 by Green Planet Grass

They government ought to make a review on this proposition so the citizens won't be suffering in the near future.

NRC Staff Train Students in Africa

posted on Tue, 03 Jan 2012 14:27:48 +0000



While the NRC's mission is to regulate nuclear materials in the U.S., we do, at times, have an opportunity to help other countries. Recently, I was one of two NRC inspectors who were invited to Ghana to assist the [International Atomic Energy Agency](#) in training 25 students from 13 developing African countries. The focus for myself and Willie Lee, of the office of [Federal and State Materials and Environmental Management](#), was to train students in the technology, use and regulation of industrial and medical radioactive materials. The course was hosted by the Ghana Atomic Energy Commission, at the University of Ghana graduate school. The students were selected based upon responses to a lengthy application process and their respective country's need for trained inspectors. During the four-week program, the students were provided room and board plus a small stipend at the university dormitories, and they gained knowledge and experience in the technology and regulation essential to ensuring the safety of the sources in their home countries. As part of the visit, we were given a tour of the University of Ghana Research Reactor, laboratories and graduate school, and even invited to present

additional lectures to the graduate level nuclear engineering classes on the accidents at [Three Mile Island](#) and Chernobyl. The students were very interested in how to apply the lessons from those accidents to their own country's regulations. What the students lacked in experience they made up for with enthusiasm. We found the African people to be eager to learn, bursting with excitement and overflowing with kindness. I now have a much greater appreciation for the African people, for what they lacked in material possessions they made up for with a desire to achieve and maintain safety for their countries.

Doug Simpkins
Trainer, Technical Training Center

Comments

comment #4217 posted on 2012-01-04 15:27:07 by nazvi

That's great to know that NRC is training other countries too. Its necessary for most of the developing countries to have some experts on nuclear technology. Hopefully more countries and students will join in this training program of you guys.

comment #4223 posted on 2012-01-05 01:18:45 by Lendio

We are glad that knowledge is passed.

comment #4210 posted on 2012-01-04 09:36:13 by HMA VPN

Thanks for sharing your story. I would have never thought NRC actually provides educational help to poor countries. I have been spending last 10 years in Africa teaching English and I agree with you that Africans are eager to learn.

comment #4275 posted on 2012-01-08 12:49:31 by Pro7 Live

Hi, really interesting article. Very informative.

comment #4280 posted on 2012-01-08 21:16:11 by Cruises Perth

"...for what they lacked in material possessions they made up for with a desire to achieve and maintain safety for their countries." It just shows that these people are still hopeful and is striving hard to give their country a better future. These people are truly very inspiring.

comment #4321 posted on 2012-01-11 09:05:43 by

I worked in Ghana for several years during construction and operations of the Takoradi Thermal Power Plant and certainly echo the writer's remarks concerning the Ghanaian students. If only the young people in the US would participate in their schooling with as much zeal and dedication.

comment #4248 posted on 2012-01-06 02:50:56 by Green Planet Grass

I appreciate how NRC helps poor people. More power to the organization. The story is truly very touching.

Simulation on a Generic Digital Platform Now Possible at the NRC's Training Center

posted on Thu, 05 Jan 2012 16:33:25 +0000

[caption id="attachment_2136" align="alignright" width="300" caption="New NRC Digital Control Room Simulator (left to right, Scott Egli,



Bill Russell)"]
The NRC's [Technical Training Center](#) (TTC) located in Chattanooga, Tenn., has completed a major milestone in a project to develop new reactor simulation with the installation and testing of two "generic digital platforms." A generic digital platform is a fancy way of saying that we have computerized displays and controls capable of mimicking more than one of the new nuclear power plant control rooms that are being developed. We use simulated control rooms to train NRC licensing and inspection staff on the operation of nuclear power plants. This milestone is important in the NRC's development of training for staff to support nuclear power plant licensed operator examinations and inspections at the Westinghouse AP1000 nuclear power plants currently under consideration in the US. The [AP1000](#) is a new generation pressurized water reactor with a power rating of 3415 megawatts thermal and an electrical output of at least 1000 megawatts electric. NRC classroom training for the AP1000 will begin at the TTC in mid-2012 and will be supplemented by control room simulator training in late 2013.

Steve Cochrum
Branch Chief
Technical Training Center

Comments

comment #4316 posted on 2012-01-10 19:51:16 by Suunto Watches

Nice to know the NRC classroom training for the AP1000 will begin at the TTC in mid-2012

comment #4302 posted on 2012-01-10 01:04:47 by Shie | Background Check

Wow... this is very cool. Now, NRC can provide training for those who want to work in a nuclear power plant without any harm done to actual plants. However, the simulation room must be able to deal or simulate problems that may occur. This way, problems can be solved in much shorter time in the long run.

NRC Issues hefty fine against River Bend nuclear plant

posted on Mon, 09 Jan 2012 19:06:24 +0000



The NRC today issued a hefty \$140,000 civil penalty to the [River Bend Nuclear plant](#). Why? We found some of the employees who operated the reactor from the control room had been surfing the internet when they didn't have permission. We also found that when the utility learned of the issue, the problem didn't get fixed quickly and fully. The NRC doesn't take such situations lightly. From January to April 2010, nine operators knowingly ignored plant procedures to remain attentive and focused while being in one of the most important positions in the control room, known as the "at the controls" operator. The "at the controls" operator is responsible for monitoring important systems that function to keep the reactor cool and operating safely. The nine operators have been contacted by [NRC Region IV](#) staff and have received violations for ignoring the rules. An NRC investigation found three of the individuals went online so many times -- and for such long periods of time -- that they are being issued a more severe violation. Some of the sites the operators visited are commonly allowed for limited use in the workplace such as news,

sports, hobbies and financial websites. The utility has taken measures to ensure this doesn't happen again, such as setting internet blocks on the "at the controls" computer. But the NRC determined that the licensee did not take prompt corrective actions to effectively address the larger safety culture issues raised by the operators' actions. Only after NRC pressed this matter at a November 21, 2011, regulatory conference did the utility really grasp the larger [safety culture](#) issue. Region IV staff looked at two prior cases involving [Fitzpatrick](#) and [Peach Bottom](#), from 2006 and 2009, where operators ignored the rules, surfed the web, and received reprimand. However, it became clear that the River Bend case was more serious due to the number of operators ignoring the rules and doing so while being at a key control room position. A key part to safe operations at all plants requires utilities and their employees to act with integrity. For NRC to uphold the safety of the public and environment it can't and will not tolerate deliberate avoidance of the rules.

*Lara Uselding
Region IV Public Affairs*

Comments

comment #4297 posted on 2012-01-09 21:04:33 by Michael

I am glad the fine levied upon River Bend nuclear plant was so high; if ever we need focused and committed employees at an establishment this is it!

comment #4616 posted on 2012-01-19 23:11:55 by sports medicine supplier

its pretty frightening to think the very people responsible for watching a nuclear reactor are too busy watching stuff online. another worry about that as well is the possibility of external dangers, by having computers that connect online. I'm wondering whether these systems they were on were also a part of the control systems? surely not! but I didnt know that they were able to surf from work as well - maybe it was through there phones? and on top of that as well, if they felt it was ok to play online - what does that say about their mental states about "cheating" at work. I mean really, these guys are paid tons - and they're spending their time online?

Openness, transparency and Davis-Besse

posted on Tue, 10 Jan 2012 17:45:38 +0000

[caption id="attachment_2156" align="alignright" width="300" caption="NRC officials take questions during the latest Davis-Besse public



meeting."]
[caption] Openness and transparency aren't just catchy watchwords at the NRC. They are the way the agency operates. For three and a half hours Jan. 5 the agency took questions from the public at a standing-room-only meeting the agency organized in Port Clinton, Ohio. The meeting was held to discuss the appearance of small cracks inside the concrete of the shield building around the reactor at the [Davis-Besse](#) plant nearby on the shore of Lake Erie. At the session, both the NRC and the plant's owners, FirstEnergy Corp., talked about the discovery of the cracks during work to cut a hole in the building, and the NRC's subsequent conclusion that the building remained capable of performing its safety function. NRC officials told the crowd that inspecting a nuclear plant

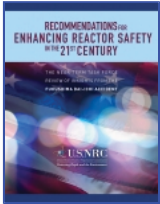
is a process that is never finished because the agency's full-time, on-site inspectors are constantly inspecting the plant. And, if at any point they saw something of concern the agency would take the necessary steps, including a ordering a shutdown, to maintain safety and protect people and the environment. Some 300 people -- about 50 standing in the back and along the sides of an Ohio National Guard meeting hall -- gathered for the 6:30 p.m. meeting, which ran a half hour past the scheduled 9:30 conclusion. The NRC let the meeting run long to ensure all questions posed by the audience and those listening by telephone were answered. Some of those who came to the microphone had detailed questions for both the NRC and FirstEnergy. Others made what amounted to speeches, some against nuclear energy, others in support of the plant. The meeting even drew a few people with "Occupy Toledo" on their jackets. Two members of Congress and several local elected officials also attended. After an hour of explanation about the cracks from FirstEnergy and the NRC's presentation on its independent safety review of the situation, they praised the NRC. Rep. Marcy Kaptur, D-Ohio, whose district includes the plant, noted her previous criticism of the agency over Davis-Besse, where the reactor head was found to be severely eroded in 2002, but added, "We believe the NRC has been doing a much better job of oversight at the facility." She said the agency was "taking it to the public" with the informational session. Rep. Dennis Kucinich, D-Ohio, added: "NRC -- thank you for your diligence on this. ... We all appreciate your having given us an opportunity to listen to the presentations" and the "programs to satisfy concerns that we all have about a safety." And Ottawa County Commissioner James Sass added: "Thank you for the openness and transparency you have shown in conducting this meeting tonight. ... We are the ones who live here. We appreciate the opportunity to discuss these issues. ... Things aren't hidden. Thank you." Openness and transparency aren't just catchy words at the NRC. They are the way the agency operates.

*Eliot Brenner
Director, Office of Public Affairs*

Comments

NRC Revising Approach to Japan Lessons-Learned Recommendations

posted on Wed, 11 Jan 2012 17:03:22 +0000



Recent developments have given us the opportunity to improve on our goal of implementing the agency's Japan Near-Term Task Force recommendations by 2016. You can get an up-close view of a [meeting](#) Friday between senior NRC managers and industry executives as we lay out the NRC's new implementation approach. When Congress passed a bill funding the NRC through fiscal 2012, it added specific instructions regarding the task force recommendations. Our task force focused primarily on earthquake and flooding concerns, but Congress required us to consider all kinds of "external hazards" in directing U.S. nuclear power plants to review their ability to meet our requirements, "as expeditiously as possible." Congress also directed the NRC to implement the eight "Tier 1," or top priority, recommendations at least as quickly as the schedule described in the staff's [Oct. 3, 2011 paper](#) to the Commission. Last month the Nuclear Energy Institute laid out the nuclear power industry's "FLEX" approach to addressing several recommendations. "FLEX" would create a diverse, flexible set of strategies for counteracting the effects of severe natural events that could exceed a plant's design limits. The NRC staff believes this approach is a reasonable starting point, although more work is needed on defining these strategies. We also must ensure the NRC can inspect how plants put the strategies in place and that we can hold plants accountable for keeping those strategies ready and available. The bottom line is that we believe these combined developments may enhance the agency's approach to implementing the recommendations. The NRC Steering Committee overseeing the implementation effort will lay out our new approach to members of the industry's Steering Committee on [Jan. 13 from 9 a.m. to noon](#) at NRC Headquarters in Rockville, Md. This meeting will also lay the foundation for more detailed, recommendation-specific discussions next week. The meeting will be [webcast](#) and a teleconference will also be available. The NRC has also set up the JLD_Public.Resource@nrc.gov e-mail address for public comment on the recommendations and their ongoing implementation. We hope you'll take the time to learn more about our new approach and come back to the blog and our website as more information becomes available.

*Scott Burnell
Public Affairs Officer*

Comments

comment #4344 posted on 2012-01-12 17:50:13 by Nancy Allen

Congress, in the 2012 Budget, took NRC to task and demanded NRC implement staff recommendations to expedite the process of Lessons-Learned Fukushima instead of the commissioner's vote and demanded NRC expand their process to include much more than just seismic and flooding problems. They also required the National Academy of Sciences to produce an additional report on Lessons-Learned. Sounds like the NRC took it on the chin. Congress stepped up to the plate and chastised NRC for being too weak and complacent on Fukushima lessons. About time.

comment #4449 posted on 2012-01-15 09:09:53 by oyunadur11

Once identified, a successful intervention could be performed: rapid depressurization by venting the steam from the top of reactor vessel and staged passive boron containing water injection all the way to gravity reserves

comment #4633 posted on 2012-01-20 13:54:06 by San Diego SEO

After watching what took place in Japan and seeing how little time it took for the media to stop covering it here in the US, it makes me wonder if we can even afford the necessary retrofits for all of the places that require updates and changes. Whether it be generator systems, passive systems that require no operator input to self correct, or whatever the answer is - flat out I don't think anyone wants to foot the bill for the changes. It almost seems like we have to guard against the risks the best we can, and incorporate design changes into new plants as we go forward.

comment #4660 posted on 2012-01-21 17:04:52 by karatren

Designing and adding a dedicated severe accident response system as described is a must.

comment #4356 posted on 2012-01-13 02:35:22 by Aladar Stolmar

It is well overdue to identify the key process in the severe accident progression: the stagnant steam volume forming, covering the upper part of the fuel in the core, which leads to the fiery zirc-water reaction. Once identified, a successful intervention could be performed: rapid depressurization by venting the steam from the top of reactor vessel and staged passive boron containing water injection all the way to gravity reserves. Designing and adding a dedicated severe accident response system as described is a must.

comment #5090 posted on 2012-02-07 03:28:06 by Aladar Stolmar in response to comment #4541

I found two key issues to rise regarding the severe accident phenomena. 1. NRC is obsessed with post fuel damage phenomena and a lack of effort to avoid the damage to the fuel is evident. 2. The operators are not dealt with the deserved respect and do not have necessary means for interfering with the progression of a severe accident. It is necessary to revise the regulatory environment and correct it on the knowledge basis, including the zirconium firestorm in the steam as the leading severe accident phenomenon. Doing that will require the addition of a vent-depressurization line from the top of reactor of PWR type and the rerouting to the atmosphere of an alternate relief line from the turbine driven emergency cooling pumps of BWR reactors, which are left to be operated without any power source directly by the operators. It will add a shortcut pathway for energy release directly from the reactor into the atmosphere, operated by the operators in case of a severe accident. With sufficient gravity (staged pre-charged) water reserves it will avoid the zirconium firestorm in the core and the fuel damage.

comment #4472 posted on 2012-01-15 23:01:44 by Steven Farkas in response to comment #4344

The population of U.S. nuclear plants with emergency AC power sources in the basement of the turbine building is zero. Weak and complacent? NRC? NRC has a host of severe accident regulations upon which to build useful inspection programs that would independently assure adequate risk mitigation equipment, procedures, and operator training. It is unlikely that additional regulation in this context would improve the margin of safety or defense in depth already in-place inadvertently from previous over-reach.

comment #4559 posted on 2012-01-18 01:10:15 by gout home remedies

This is definitely something that needs to be addressed. Im sure we would all hate to see another castastrophe again. Build them bigger and stronger.

comment #4504 posted on 2012-01-16 16:24:59 by wood projects

I am not entirely sure i agree with the task force recommendations made, yet, I cannot come up with anything better personally. So, who am I to refute it? lol

comment #4556 posted on 2012-01-17 23:57:08 by Suneel

"Congress also directed the NRC to implement the eight "Tier I," or top priority, recommendations at least as quickly as the schedule described in the staff's Oct. 3, 2011 paper to the Commission." I think the dates and details mentioned in the paper provide a substantial amount of confidence in attaining the results.

comment #5087 posted on 2012-02-07 00:32:34 by San Diego HARP Lender

I'm glad to see steps are moving forward to ensure our safety but why does a tragic episode like that in Japan force us to deal with these issues? Shouldn't have this been thought of before? I'm eager to see the outcome of these proposed strategies. Thank you,

comment #4593 posted on 2012-01-19 03:26:15 by Stabi

That's right, lesons must be learned from others mistakes! Good job on that!

comment #4649 posted on 2012-01-21 12:29:30 by Lisa Smith

Even though the "Flex" approach is only a starting point, you can always add to it and make changes to it as you go along.

comment #4541 posted on 2012-01-17 11:45:51 by Gelenkgesund

You ought to address a much more basic problem: IF nuclear power was to be safe, THEN a balance sheet of a manufacturer of, or a utility running, nuclear power stations could surely afford to have provisions for damages that would be so contained or unlikely to occur, that the balance sheet would not be in dripping red. If, on the other hand, one cannot exclude a scenario, as yet unknown but nevertheless possible, to ever occur, that is not containable, then you must draw the conclusion that nuclear power generation is irresponsible and needs to be discontinued immediately. Then why does every regulator insist on scenarios that are of minimal import and fails o discuss the big picture - the cause and terrible effects of accidents that have not even thought through yet because human understanding is limited while the possibilities for failure are infinite?

NRC's Regulatory Information Conference Registration Now Open

posted on Fri, 13 Jan 2012 14:49:30 +0000



The NRC is holding its 24th annual Regulatory Information Conference on March 13th through 15th, 2012, at

the Bethesda North Marriott Hotel and Conference Center in Maryland. This is a unique forum for government, industry, international agencies, and other stakeholders who want to meet and discuss nuclear safety topics and significant regulatory activities. The opening session features NRC Chairman Gregory B. Jaczko delivering the keynote remarks and a presentation by NRC's Executive Director for Operations Bill Borchardt. Included throughout the conference are plenary sessions with Commissioners Kristine L. Svinicki, George Apostolakis, William D. Magwood, and William C. Ostendorff. A special plenary session with Martin Virgilio, the Deputy Executive Director for Reactor and Preparedness Programs, and industry will be moderated by Eric Leeds, Director of the Office of Nuclear Reactor Regulation. There will also be several sessions addressing topics associated with the Fukushima Dai-ichi accident and NRC's response to lessons learned as well as tours of the Headquarter's Operation Center. The conference is free and open to stakeholders, industry representatives and members of the public, but registration is required. [Online registration](#) is now open. Registration will be available on-site, however, we strongly encourage online registration prior to the February 28 closing date. Program information, as well as information about webcasting, is available on the [RIC website](#).

Lorna P. Kipfer

RIC 2012 Conference Program Specialist

Comments

comment #4457 posted on 2012-01-15 16:47:56 by Voyages pas cher

The conference looks very interesting. I will probably book my seat.

comment #4645 posted on 2012-01-21 00:16:08 by Drug Addiction

Great ! I look forward to hearing how the confrence went. Best of luck, I hope there are many in attendance.

comment #4650 posted on 2012-01-21 12:51:54 by Deck boxes

Having a Regulatory Information Conference that is open to everyone is good. It enables both the industry leaders as well as the every day citizen have the opportunity to know what is happening in the Nuclear arena.

A Day in the Life of a Resident Inspector

posted on Tue, 17 Jan 2012 14:20:09 +0000



[caption id="attachment_2182" align="alignright" width="300" caption="Amar Patel"]

It is said that the resident inspector job is the greatest job in the NRC. You are the front-line eyes and ears of the agency, you can clearly see the impact you provide with regard to nuclear safety, and your boss is far away on the phone! For the last 3 ½ years, I have had the chance to prove that adage true. The job of a resident inspector at the [Hope Creek Nuclear Plant](#), located in southern New Jersey next to the [Salem Nuclear Station](#), is unique for several reasons. The site is close to a metropolitan area (Wilmington, DE), but the winding rural roads leading to the site make for a considerable drive to work. Once I reach the parking lot, it still remains quite a trek to my desk. That's because the site is sprawling, and the pre- and post-9/11 security measures necessitate a long walk through checkpoints with armed security guards. The inherent nature of the resident inspector's job makes for an early start. I need to provide plant status and safety information to [NRC Region I](#) management on a call that starts at 7:30 a.m. To get that information, I either visit the control room or attend a "Plan of the Day" meeting. In the control room, I speak with the licensed operators, examine their logs, and review the control room panels. After communicating with the regional office, the senior resident inspector and I discuss possible inspection activities for the day. The [Reactor Oversight Process](#) prescribes the inspections we must perform and the frequency they must be performed. However, the company's work schedule dictates what inspection opportunities may present themselves on any given day; emergent equipment problems also adjust our priorities. The inspections selected are done considering the risk significance of the activity; if two similar activities are ongoing, I choose the activity with greater safety significance. The results of our inspection work are discussed with company management on a periodic basis -- or immediately if a safety issue arises -- and are documented in a publicly available inspection report on a quarterly basis. The greatest thing about the Hope Creek Resident Inspector Office is that it is co-located with the Salem Resident Inspector Office. Thus I have four other co-workers to speak with and bounce questions off of versus the usual two. I work with three inspectors and an ever-pleasant office assistant. We work well together as a team and have a high degree of camaraderie. We also have visiting specialist inspectors almost every week, which keeps us current on issues in the office and the industry. My favorite element of inspection work involves plant "walkdowns." They allow me to see the most about the plant's design, construction, and operation, and generate many ideas for follow-up inspection activities. They also allow me to observe workers actually performing their jobs. On rare occasions, these workers will have concerns with certain work activities and will bring them to my attention. They are handled by the [NRC allegations process](#). My interaction with the worker is critical in making them feel comfortable in raising a concern, and reassuring them that the NRC will be responsive to their concern. Overall, the job of an NRC resident inspector is great. While I joined the NRC out of college as an engineer and received extensive training my first two years on the job, I continue to have opportunities to get top-notch training to help me do my job better or prepare me for another position in the NRC. (The NRC's current Executive Director for Operations began his career as a resident inspector at this site.) I also have the opportunity to inspect other sites periodically, and I have a high degree of job satisfaction. And I know that every day I am working to keep the community around the plant safe.

Amar Patel

Resident Inspector, Hope Creek Nuclear Power Plant

Comments

comment #5168 posted on 2012-02-08 11:24:12 by Alliance Tickets

The resident inspector job is a very important job since you are the eyes and ears of the company

comment #4700 posted on 2012-01-24 03:54:27 by anika

I am a student and its help me a lot , nice sharing , thankyou so much..

comment #4766 posted on 2012-01-27 12:50:45 by Hector

It's not just the greatest job, its the greatest responsibility, I don't have guts to work in such a position. However, when I see how passionate the resident inspector about his job I feel safe.

comment #4709 posted on 2012-01-24 11:57:12 by Branding Agency Toronto

Of course most of us don't really know what it takes be an Nuclear Power Plant Inspector. It's good to know a day live and what is involved of such career. It helps us to gain a better appreciation for the Inspectors - for what they do for us and the country. G'luck with your continuous study Amar.

comment #5194 posted on 2012-02-09 08:46:12 by Iphone app developer

Yeah, agree with William. It's a very responsible and dangerous profession. Thanks for your story. It was very interesting for me)

comment #4852 posted on 2012-01-30 07:18:56 by ana

Hello. Thank you very much for sharing your day-to-day work at a nuclear power plant. I am resident inspector too at Trillo nuclear power plant in Spain and I feel quite close to the comments and descriptions you made. Ana.

comment #4639 posted on 2012-01-20 17:43:10 by William

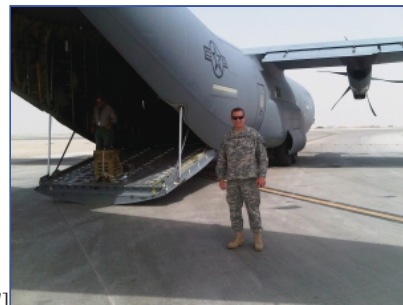
Most people don't realize what is required to run a nuclear power plant. This blog shed some light into the day by day operations a resident inspector must go through. I believe it is a great honor and a tremendous responsibility to be in this position due to the fact that one decision is capable of affecting millions of lives.

comment #5889 posted on 2012-02-15 21:21:59 by dompet pria

It sounds cool, but you hold all the responsibilities though. I feel proud to hear about your commitment for the job as well. Thanks for sharing :)

A Letter from Afghanistan Part II

posted on Thu, 19 Jan 2012 17:48:14 +0000



[caption id="attachment_2188" align="alignleft" width="300" caption="Bob Carlson"]

[/caption] Robert Carlson, a branch chief in the Office of Nuclear Reactor Regulation, is a Brigadier General in the U.S. Army Reserves. In May, he was called to active duty to serve as the chief of staff for the [U.S. Agency for International Development](#) delegation in Kabul. Below is part of a recent letter he sent to work colleagues updating them about his experiences. His first letter can be found [here](#).

Dear Friends – Happy New Year! I hope this note finds you all doing well. As promised, I am sending you an update of my deployment to Afghanistan. I've now been in Afghanistan approximately seven months of my year-long tour. Much has transpired since my last update back in August 2011. As you might expect, I have seen and experienced a lot during this timeframe that has left an indelible imprint on me regarding Afghanistan, war, working in an interagency and international organizational environment, and the physical/mental effects of wartime stress. Hopefully by the end of this deployment my experiences and lessons learned here will serve me well when I return to assume future leadership positions within the military and NRC. Since I last wrote, there have been many high-profile attacks and suicide bombings in Afghanistan. Before the Country Team staff meeting at the Embassy each Sunday morning the Ambassador conducts a roll call and a moment of silence for all the U.S. soldiers killed in action that week – often numbering in the dozens. This is a very sobering way to begin a staff meeting and helps to put things in perspective when we carry out our routine daily affairs. The single largest attack involving U.S. forces was the downing of a Chinook helicopter this summer killing 30 Special Operations Forces members and eight Afghan soldiers during a planned night raid. Afterwards there was an emotionally charged ramp ceremony involving a very solemn memorial service for the fallen soldiers before they were boarded on a plane headed to the U.S. for final burial – extremely heart wrenching. A few weeks after this event the Embassy where I'm located was assaulted for 20 continuous hours by insurgents who had overtaken an abandoned building near our

compound and began firing down on us. My building took much small-arms fire and a direct RPG hit less than 40-meters from my office – definitely causing me to hit the deck and low-crawl to safety! Fortunately, our office walls and ceilings are reinforced with sandbags that help to mitigate the effects of shrapnel. No U.S. casualties from this attack – but there were a lot of frayed nerves (unfortunately approximately 20 Afghan civilians were killed in this attack). There were several high-profile government assassinations involving the former Vice-President of Afghanistan, the Governor of Kandahar Province and President Karzai's half-brother, and numerous other mayors and local officials. In many instances the assassination involved a suicide bomber wearing either an explosive laden vest or device hidden beneath a turban. In one sensational attack, the suicide bomber used a VBIED (Vehicle Borne Improvised Explosive Device) directly outside one of our combat outposts, completely obliterating many of the life-support structures within. The exterior blast walls of the compound withstood much of the explosion and deflected most of the shrapnel. However, the resultant concussion from the blast wave leveled many of the temporary structures within the compound. Miraculously, although there were more than 70 casualties, only a few resulted in death. We visited the site shortly afterwards to survey the damage and visit with the soldiers. You can only marvel at and admire the courage, determination, and sense of duty these soldiers exhibited under these trying circumstances – unbelievable! I continue to conduct missions with the Ambassador throughout the country. These missions are usually to visit our folks in the field, view infrastructure projects, meet with Afghan government officials, and attend ceremonial events. Our primary mode of transportation is fixed- and rotary-winged aircraft because of the long distances involved, hostile terrain, and the threat of IEDs. We also have a large entourage footprint when traveling due to the staff and security requirements of my boss, which often attracts unwanted attention – thus better to fly than drive. As you can imagine, the grind of long hours and endless work weeks, being without family, and living in poor environmental and stressful wartime conditions can take its mental and physical toll on you after awhile. That said I see a light at the end of the tunnel and look forward to being home soon.

Bob Carlson

Comments

comment #4927 posted on 2012-01-31 20:22:11 by Katipsoi Zunontee

I see several impressive news from Afghanistan, and see here his account of his ordeal. Bob Carlson is an example of you strength and courage that God is with you.

comment #4718 posted on 2012-01-24 20:32:39 by GratisDinero

Thanks Bob for you work :) You sacrifice is not in vain because we get to the hearts the people have be like you. You family sure are proud of you. Encourage! Regards

NRC Moves its Public Photo Gallery to Flickr

posted on Tue, 24 Jan 2012 14:10:36 +0000



Since a picture is worth a thousand words, the NRC has long made photos available to the public through the photo gallery on our website. The photos help explain who we are and what we do. But the gallery had a number of significant limitations – including a lack of visibility, difficult uploading process and a search engine that was clumsy at best. The rise of social networks, however, and the ease and popularity of photo-sharing has given us a ready alternative. Beginning today, the NRC will be using Flickr.com to host our images rather than the NRC website. This change will give us a bigger audience and be easier for us – and you, the public – to access the images. Among the benefits is the ability to “tag” a photo. Tags are keywords associated with each image that makes searching for and

organizing images much easier. Flickr also allows us to organize NRC photos into sets, which can then be viewed as a slideshow. These sets are a group of photos, which are categorized under one heading --such as creating a set for all operating power reactors. With Flickr, it is extremely easy to create or join an existing community, such as becoming part of the [Official US Government Photostreams](#), a group comprised of official U.S. federal, state and local government image banks on Flickr. Flickr also has an RSS feed option that can notify you whenever a new photo is uploaded. Images uploaded on Flickr can be viewed by anyone and found easily on a variety of search engines such as Google, Bing and Dogpile. We hope this will translate into more traffic to our photos and an increased understanding about the NRC mission and activities. All photos on the site continue to be free, and anyone can download them for their use. Some of the social media functions associated with Flickr will be disabled, and comments instead funneled back here to this post. So go and check out the new photo gallery [NRCgov Photostream](#) on Flickr.

Ivonne Couret

Public Affairs Officer

Comments

comment #5131 posted on 2012-02-07 14:54:45 by eticaret

i saw yours flickr pages. Nice pictures.

comment #5276 posted on 2012-02-12 01:46:22 by steve

Flickr has been know to be sluggish and not as user friendly as other services. <http://picasa.com> is the way to go.

comment #4711 posted on 2012-01-24 14:59:34 by Saidur Mamun

This is a great decision taken.. Flickr can really be a better platform to host NRC photos. I have been using them for over a year now. They have solid servers; however, please keep an eye on the account security too.

comment #4749 posted on 2012-01-26 11:51:04 by Lisa

Awesome! As Saidur stated, Flickr's servers are amazingly stable, and their internet speeds are great.

comment #4843 posted on 2012-01-30 02:25:27 by phresh greens

Nice site! Extremely easy to read. Great images as well

comment #5146 posted on 2012-02-08 01:33:22 by Trent

Awesome. Great move!

Three Minutes: New NRC Q&A Series Kicks Off

posted on Thu, 26 Jan 2012 14:18:32 +0000



Three minutes isn't a lot of time – but it's enough to learn a bit about a wide variety of NRC topics via our new YouTube series, launched today. These new question-and-answer videos will offer information about issues of high public interest, general areas of NRC activities and some plain old science education. The inaugural video of the series, "[Three Minutes with ACRS](#)," is a conversation with the ACRS Executive Director Ed Hackett. He answers a brief series of questions including "What is the ACRS?" Look for new segments each month on the [NRC YouTube Channel](#). The NRC's YouTube channel launched in September. Since then we've been posting a variety of different types of videos in an effort to communicate with you, the public, in new and meaningful ways. In addition to this new series, look for a future series called "Moments in NRC History," featuring the NRC's historian. If you have topics you'd like to see addressed in our "Three

Minutes" series, please let us know in the comment section below. And we hope you'll take three minutes and watch our new video.

Ivonne Couret

Public Affairs Officer

Comments

comment #4748 posted on 2012-01-26 10:53:34 by Carmen - Fotografo bodas tenerife

Great initiative! I've seen some videos and the truth is that I find very practical, those three minutes have been well. With useful information and unknown to me. Congratulations! I would like to know more about security protocols, can make a video about that? Regards

comment #4763 posted on 2012-01-27 11:54:24 by BobinPgh

Please, have a little enthusiasm! These people sound like the teacher on Charlie Brown shows.

comment #4807 posted on 2012-01-29 06:10:26 by dobbs tire coupons

Sweet, I'll be checking your YouTube series. Hopefully it's good!

comment #5174 posted on 2012-02-08 13:27:38 by Alliance Tickets

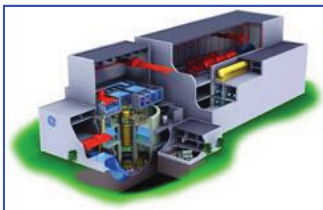
I really like the you tube videos so far that explain a little more of what NRC does.

comment #5186 posted on 2012-02-08 17:40:37 by Alan

Actually this is a really clever way to get the NRC's message out there to the people. I'm sure there are many people interested in what you have to say, this just allows you reach them in a very easy way! Good luck with the project NRC.

NRC Quickly Applies New Information to Technical Reviews

posted on Mon, 30 Jan 2012 17:15:50 +0000



When the NRC says we consider new and significant information, we mean it. The latest example came as we were finalizing our review of a design for a new nuclear plant called the [Economic Simplified Boiling-Water Reactor](#) (ESBWR). General Electric-Hitachi asked the NRC to review this new design in August of 2005. We did and issued a final safety evaluation report for the design in March 2011. Our next step in the process would normally involve giving our Commissioners a draft final rule that would approve (or certify) the ESBWR. But that is not going to happen right now because new information has come to our attention that needs to be closely reviewed. The new information came to light because of a request by an existing nuclear power plant, [Grand Gulf](#). In September 2010, that plant asked the NRC for permission to, among other things, replace its steam dryer with a version designed using the same methods proposed for the ESBWR. (A steam dryer prevents excess moisture from damaging the plant's turbine.) As we reviewed Grand Gulf's request, we asked for more information. After we reviewed that additional information, we realized there were errors in the information we were initially given to determine how the ESBWR steam dryer would react when that design is operating. Addressing these errors could mean the NRC will have to revise or supplement the safety evaluation report or the applicant might have to revise its design

control document. Either of those options would delay a final decision on certifying the design. The agency will discuss this issue with General Electric-Hitachi on [Jan. 31](#) at NRC headquarters in Rockville, Md. Meanwhile, Detroit Edison has asked the NRC for a Combined License to build and operate an ESBWR next to the current [Fermi nuclear power plant](#) near Detroit. The agency must come to a final decision on design certification before we can complete our work on that license request.

Scott Burnell
Public Affairs Officer

Comments

comment #5301 posted on 2012-02-13 13:11:37 by Moderator in response to comment #5167

At this time we continue to review a single application for permission to build an ESBWR. If the NRC finds the design acceptable, our current schedule for the license review expects a final decision late in 2013. If a license is issued, Detroit Edison would need several additional years to build the reactor. Scott Burnell

comment #5300 posted on 2012-02-13 13:10:19 by Moderator in response to comment #5238

The NRC takes whatever time is necessary to ensure a design is properly analyzed before we decide whether the design is safe for use in the United States. All reactor designers and users must follow quality assurance and control guidelines. In this case, additional information led the NRC to ask more questions before we reach our final decision on the ESBWR. Scott Burnell

comment #5299 posted on 2012-02-13 13:09:43 by Moderator in response to comment #5231

The ESBWR design completely avoids the circumstances that led to the Chernobyl accident. The issue we're looking at involves how the steam dryer, a very large metal structure, will vibrate and otherwise respond to the pressures and forces involved when the reactor is operating. Scott Burnell

comment #5065 posted on 2012-02-06 08:34:40 by Heribertus

Good review and information about nuclear power plant... very nice information to share... thank you... :D

comment #5167 posted on 2012-02-08 11:11:52 by Alliance Tickets

I'm glad it took 6 years for a final safety report for the design after submitting the plans. How long will it take before it will actually be built

comment #5231 posted on 2012-02-10 14:44:07 by borber

"After we reviewed that additional information, we realized there were errors in the information we were initially given to determine how the ESBWR steam dryer would react when that design is operating." - does it mean that something similar to Chernobyl Catastrophe could happen?!

comment #5238 posted on 2012-02-10 18:07:39 by All-American Pressure Canner in response to comment #5231

How in the world could it take 6 years for the initial review to begin with, and didn't the original submitters have a TD or something to ensure the information submitted was correct?! I hope they are held accountable for the repercussions of not disclosing the truth. This is scary. What happens if you approve something based off faulty information and a Chernobyl does happen?!

comment #4867 posted on 2012-01-30 12:50:01 by Charles Bell

When GGNS started up, the Pressure Reference setpoint initially was 920 psig as best as I can remember. Then later it was changed to 950 psig. I wonder if that disparity has anything to do with the problem you are analyzing.

comment #5118 posted on 2012-02-07 12:44:10 by palaceonweb

great information for my wife's project on Nuclear power. Thanks..
