

GOVERNOR'S NUCLEAR ADVISORY COUNCIL MEETING
Gressette Building, Room #209
October 9, 2014
1:00 pm - 4:00 pm

Present: Karen Patterson, Captain Claude Cross, Carolyn Hudson, Vincent VanBrunt, David Peterson, Representative Don Wells

Welcome: Chair Karen Patterson welcomed members and guests and entertained a motion to approve the minutes of the July meeting. Dr. Hudson moved minutes of last meeting be accepted. Dr. VanBrunt seconded, and minutes were approved.

Update of GNAC Activities – Karen

Karen noted that GNAC had sent a letter to DOE regarding the scope of an EA for German spent fuel. She also noted that a number of individuals present had attended “listening sessions” held in four regions of the country by the Nuclear Waste Initiative. While there was general agreement that “the waste issue” needs to be addressed, it will require congressional and presidential action.

Increasing the SRS Safety Culture (slides and audio available here <http://energy.sc.gov/gnac/meetings>)
Michael Mikolanis, Chief Engineer, U.S. Department of Energy

Mr. Mikolanis opened his presentation (link) by stating that there is a trend across the country to reevaluate the safety culture and recognition that it is not what it could be.

Questions from the Council:

Captain Cross: Is there any organization within DOE that does a periodic look at safety culture throughout various organizations?

Mr. Mikolanis: Not at this time. Each of the field offices were directed to conduct their own safety culture assessments. Each has does its own safety culture self-assessment and benchmarking. We are looking to put together a corporate safety culture group with headquarters and field representatives to drive safety culture and improvements at the various sites.

Captain Cross: Independent assessments are always good because you get to see if from another perspective and that’s a healthy thing to do.

Mr. Mikolanis: I agree and in fact the commercial industry does both they just do the independent assessments at a much longer period than the self-assessments. Personal expectation is that there will continue to be self-assessment, with outside review at wider intervals.

Dr. VanBrunt: Are there parallels with new chemical industry risk based safety considerations and Executive Order 13650?

Mr. Mikolanis: I'm not familiar with anything being done in relation to that order. The department had a lot of that already in place, bringing together safety management programs and making sure they work more seamlessly. Safety culture underlies everything. It's like integrated safety management. If you don't have it the processes just aren't going to work. You have to have a strong foundation in safety culture so that you can rely on workers identifying problems and reporting problems and doing something about making changes to improve the workplace.

Dr. VanBrunt: Are there any lessons learned from 13650 that you could bring to bear on what you are trying to do at the site.

Mr. Mikolanis: Not that I'm aware of, but I have written the number down and will look into it.

Ms. Patterson: You said something about loss of knowledge and you said there was some concern about the workforce demographic changing. Is there a good training approach that will capture some of that institutional knowledge that is going out the door?

Mr. Mikolanis: The new training approach includes old knowledge but also calls on community colleges to give nuclear operations and nuclear theory as part of their training for operators. The engineering organizations are hiring older nuclear engineers, but are looking for younger engineers that can train under them.

Ms. Patterson: I got the sense that communication is improving between the site and headquarters about the condition of the site and that we have got to shore them up some.

Mr. Mikolanis: Oh yes! Headquarters knew that but the folks in Washington don't understand the expense of maintaining the site and the expense of repairs. We have been able to make them better understand that the money that we receive in the budget becomes much smaller when you talk about work scope.

Ms. Patterson: Is the loss of the "pull together to win the cold war" mentality, now replaced with "clean up waste" not as compelling? Is the loss of fighting for a common goal having something to do with this?

Mr. Mikolanis: Yes, it makes the job of recruiting and retaining new operators more difficult. It is hard to make nuclear cleanup sexy but we are trying to focus on environmental consciousness.

Westinghouse Nuclear Fuels Update (slides and audio available here <http://energy.sc.gov/gnac/meetings>)
Carl Snyder, Nuclear Critical Safety Manager, Westinghouse Fuels

Questions from the Council:

Mr. Snyder introduced Gilda Boccock who assisted with the presentation.

Dr. VanBrunt: How many megawatt days before the leak developed?

Ms. Boccock: It's a third burn assembly. It's in its third cycle of operation. I would have to double check, but it is something like 270 days, so it was well into the third cycle.

Ms. Patterson: I'm intrigued by this lab. You do a lot for other organizations. Is it one of the few testing labs in the country?

Mr. Snyder: Yes, we have a test loop that is able to run one to two assemblies at a time under pressurized test flow, transient conditions etc. So there are test facilities in Canada, but it is less expensive to test here than to use Canadian facilities. It is usually designs we are working on. Even items produced overseas are sent here for testing. If someone wanted to do a test and pay us for it we would do that as well.

Current Status of NRC Responsibilities at the Savannah River Site under the 2005 NDA (slides and audio available here <http://energy.sc.gov/gnac/meetings>)

Larry Camper, Director, Division of Decommissioning Uranium Recovery and Waste Programs

Christopher McKinney, Branch Chief, Performance Assessment Branch

Questions from the Council:

Dr. VanBrunt: Any discussion along the way about Tank 48?

Mr. Camper: Tank 48 is not yet on the plan about whether it will be transferred to saltstone or not. Although the effects of 48 have been in an alternate way used to increase the height that they are currently allowed to put waste into saltstone disposal because they had left margin in case they brought in organics into the new disposal structures. Tank 48 to our knowledge has not been a high priority. It's a standing issue, but we don't consider it high priority until they are ready to move on that specifically.

Ms. Patterson: What does monitoring mean in this context? Are you actually monitoring activity in the tank farm? Are you looking at their reports and data?

Mr. Camper: Monitoring is a "light" version of inspection. We have constant meetings on a project manager basis. We are relying on a lot of day-to-day reviews with SCDHEC which we have a monthly call with and talk when other issues come up. We come down and do long term technical reviews of long term metrics. We have looked at their programmatic for worker protection to make sure they have a program consistent with NRC's worker protection requirements. We have looked at their systems and what they are doing on a programmatic basis. DHEC understands our high priorities and are on the lookout for certain things which avoids us having an on-site person.

DHEC Update (slides and audio available here <http://energy.sc.gov/gnac/meetings>)

Shelly Wilson, Federal Facilities Liaison, SC Department of Health & Environmental Control

Questions from the Council:

Mr. Little: How does the formal process of dispute resolution actually work?

Ms. Wilson: We have a tri-party agreement (DOE/SCDHEC/EPA) and the schedule is under that agreement. There are a series of levels of defined interaction and you begin at the lowest level and try

to resolve it there. If you cannot, you move up to the next level and so on. It's a tiered approach trying to engage different levels of management to come to a resolution.

Mr. Little: Is this a true budget shortfall or is it a matter of priorities?

Ms. Wilson: It depends on who you ask. We would say it is a matter of priority because DOE needs to prioritize us higher and give us (SRS) more money. DOE cites technical issues in the extension request as well as a funding issue. We did not believe the technical issues were a fair basis for an extension request. We believe that those issues were resolved and DOE said they were on schedule until the funding issue came up and then they were suddenly behind schedule. From DHEC's perspective, we wish they put a higher priority on solving this problem.

Rep. Wells: If there is a fine imposed and paid, what would that money go for? Would it go to increase production at the site? Where would it go?

Ms. Wilson: That depends on how the penalty is imposed and who imposes it as to where it goes. We don't need the money; we need the site to use that money for treatment. We are wrestling with that question. We don't want to penalize them to make them feel the burden. We are evaluating the penalty and it is our wish to see treatment happen.

Karen introduced the newest member of the Savannah River team: Carol Johnson, CEO of Savannah River Nuclear Solutions. Ms. Johnson noted that she had spent her career in nuclear operations, a major portion at SRS.

SRS FY15 Budget Update (slides and audio available here <http://energy.sc.gov/gnac/meetings>)
Sandy Hall, DOE

Questions from the Council:

Ms. Patterson: If the House and Senate mark ups go away, does that mean the new Congress gets to start over?

Ms. Hall: Yes, so we might operate under a continuing resolution through the end of the year under the FY14 level.

Dr. VanBrunt: Suppose the resolution with the state does not work out and DOE has to pay a fine, where will the money come from?

Ms. Hall: I know we do not budget or plan for fines and penalties. The risk has been transferred to headquarters. They are debating about whether to put one under our environmental liability or not so I'm not sure where that is going to fall out. It is carried as a contingency risk by headquarters.

Tank Crawler & the leak monitoring system (slides and audio available here <http://energy.sc.gov/gnac/meetings>)
Kent Fortenberry, Chief Engineer, Savannah River Remediation

Questions from the Council:

Rep. Wells: Thank you for coming and presenting with us today. One question I have, I saw on the slide how the walls are inspected, what type of inspection is done on tank floors?

Mr. Fortenberry: In the annulus, the crawler is on the secondary floor. For the primary tank, there is no inspection that has occurred beneath the tank. There are air channels under the bottom of the tank. They are not very large so it is a significant challenge to get under there. There is work underway at Hanford to get a robotic inspector under the tank. We are watching that to make use of that technology.

Ms. Patterson: When you compare images from year to year, is it done visually or by computer analysis?

Mr. Fortenberry: Visually for the most part. There may be some computer comparisons in use now. I know they go back to the same location and compare the photographs. However, computer software has become much more capable—we will look into it. And to follow up on the tank bottom: the Type 4 tanks that we use for different waste, there was a series of tank bottom inspections in the 1970s-1980s by lowering a camera into the tank and sitting it on the tank bottom. Those are the only known tank bottom inspections. No changes or thinning were observed.

Ms. Patterson: That random sampling to make sure you were sampling adequately, how did that come back?

Mr. Fortenberry: Yes, the determination was that 4 random strips were adequate to represent the tank.

Ms. Patterson: Has the chemistry management gotten better over the years?

Mr. Fortenberry: I will say it's gotten a lot more attention. SRS typically had strong chemistry programs. These are large tanks and there are periods where the chemistry gets out of line and there are efforts to correct that. I think those have all been fairly minimal and there has not been a situation where an out of chemistry spec has been neglected for a long period of time. I think it has been pretty good following the initial leakage in the 1960s.

There was no public comment.

Karen announced proposed dates for 2015 meetings: January 8, April 9, July 9, and October 8.

Meeting adjourned