GOVERNOR'S NUCLEAR ADVISORY COUNCIL MEETING Gressette Building, Room #209 June 13, 2013 1:00 pm - 4:00 pm

Council Members in Attendance

Ms. Karen Patterson, Chairman

Mr. Steve Byrne

Captain Claude Cross

Dr. Carolyn Hudson

Dr. David Peterson

Dr. Vincent Van Brunt

Rep. Don Wells

SC Energy Office Staff: Jennifer Satterthwaite, Trish Jerman, George Kokolis

Call to Order – Approval of Minutes & Update of GNAC activities Karen Patterson, Chair

The minutes were approved as distributed, with a note to correct the spelling of Dr. Van Brunt's name. Ms. Patterson noted that a tour of the Barnwell Low Level Waste Disposal site was arranged and that Captain Cross was able to attend and represent the Advisory Council. Captain Cross noted that he was impressed by the professionalism of the staff, many of whom have been employed at the site for 30 to 40 years. He also came away with the sense that "the place is nearly full, with no plans to expand, so we need to think about what will happen down the road when it is full. "

Ms. Patterson stated that two letters had been send on behalf of the Council: one to DOE on the subject of the H tank farm and one to the SC and GA congressional delegations regarding the decrease in funding for remediation activities at the Savannah River site.

Dr. Van Brunt noted that as far as he is aware, the delegation is working hard to see that funds can be shifted around, with assistance from the Governor's Office.

Nuclear Regulatory Commission Update on Fukushima Tier 1 Report John Pelchat, Sr., Regional Government Liaison Officer Nuclear Regulatory Commission (NRC)

Mr. Pelchat's presentation outlining lessons learned from the Fukushima experience is available on the GNAC website. Questions following the presentation included:

Capt. Cross asked if any of the unaffected Japanese nuclear plants had been restarted, and was told no.

Steve Byrne asked for clarification between orders and rules, and why one would be issued rather than the other. Mr. Pelchat said that orders are used when a safety or regulatory issue that needs to be dealt with right away; they are very prescriptive in nature. Rulemaking, on the other hand, is creating, writing, and putting into place regulations. It provides for public comment and review, allowing the agency to gain insights from the public and learn things it didn't know about at the beginning of the exercise.

Dr. Petersen asked about the 4th slide....mitigation for indefinite offsite power loss. Mr. Pelchat confirmed that the intent is "truly indefinite"...at present licensees have to be able to handle outage for 72 hours; learned that you need to cover as long as it may take to get back up and running.

Dr. Van Brunt asked about spent fuel pool instrumentation and commented that there are other spent fuel pools other than those at reactor sites. Dr. Van Brunt asked what the relationship between the information at the reactors and where the spent fuel pools are. Mr. Pelchat clarified that he was talking about spent fuel pools that are holding fuel from commercial nuclear reactors. The orders have been issued to licensee's who are operating commercial nuclear plants or who have a fuel storage license. We do have several facilities that are no longer operating but have fuel stored in pools and this would apply to them as long as they have the fuel stored at the facility or until they transfer it off-site or put it in a spent fuel storage facility.

Ms. Patterson asked if the four new units going up in and near South Carolina were included in the evaluation of flooding potential. Did the owners have to do anything to address flooding issues? Mr. Pelchat said he would check on the details. Mr. Byrne weighed in to say that lessons were incorporated at V.C. Summer. She also noted that she had not heard any discussion of risk benefit analysis...that component is not in the order process, but it is very much a part of decision-making in the rule making process. She asked Mr. Pelchat if public meetings include some kind of statement to reassure public that these are highly unlikely accidents? Mr. Pelchat said that in general they are "taking a safe fleet and making it safer" but that they treat risk within the correct context as a regulatory agency, not an agency to promote nuclear power.

Rep. Wells asked how facilities were chosen for evaluation. Mr. Pelchat answered that the plants are arranged in "bins" which NRC had to prioritize. He supposed that the facilities with flooding hazards like dams were looked at first.

Emergency Common Operating Picture (EMCOP)
Phil Armijo, Director of Programs
Earth Technology Integration

Mr. Armijo explained that his company, under contract to the state's Emergency Management Division, has developed EM COP, which he demonstrated. The tool now includes all emergency management operations, in all counties, and will be available through a browser by late summer, and though a smart phone "APP" by the fall.

Dr. Van Brunt asked about the status of back-up generators right now. Mr. Armijo stated that in SC it is not required for gas stations to have back-up generators on-site. Most companies have back-ups in Florida (which requires on-site generators by law) and are requested on an asneeded basis. If there were to be an event where power was out for an extended period, the generators would be shipped up from Florida.

Ms. Patterson asked if Vogtle data was included, and Mr. Armijo and EMD confirmed that yes, Plant Vogtle is only plant outside our state for which SCEMD maintains an emergency plan. Rep Wells asked if the SCEMD plan for SC works "hand in hand" with GA and NC, and was told yes, the states hold joint exercises, conduct joint planning with regard to Vogtle and Catawba. Capt. Cross asked if the EM COP was country wide or developed just for SC. Mr. Armijo answered that this has been created for SC; several other states are putting one together including Florida, Georgia, and Virginia. But unlike others, this one accepts input from counties if they have web EOC access. Capt Cross asked if all counties can access the tool and was told yes.

Ms. Patterson asked if they have tested to see what people can usefully absorb and use for making decisions? Mr. Armijo answered yes, it has been tested with many data layers, but they now limit the layers, to aid decision making, unless someone asks for a specific layer. Dr. Petersen asked if the tool can interface with social media and was told that at present nothing is open to the public, but by next fall, they hope to have some layers available to public, with possible links to Facebook and Twitter.

High Temperature Gas-Cooled Reactor at SRS John Mahoney, Secretary/Treasurer Next Generation Nuclear Power Alliance (NGNP)

Mark Haynes substituted for Mr Mahoney. He noted the purpose of his organization is to see commercialization of high temperature gas cooled reactors and export to other countries. His presentation is available on the GNAC website.

Dr. Van Brunt asked about the status of waste from Fort St. Vrain in Colorado, and was told that it had been taken to Idaho some time ago, where it was still sitting. He followed up with a question about reshuffling fuel, to which Mr. Haynes responded that he thought all fuel was removed and replaced.

Capt. Cross noted that Fort St. Vrain was "very safe because it didn't run"...theory is great, can you get equipment to make a gas-cooled reactor plant run?

Dr. Van Brunt asked about the rates of helium leakage and was told they were not substantial within the confines of the plant, and that Mr. Haynes would check on the answer.

Dr. Hudson asked if other inert gasses could be used because helium is getting rare and was told that helium was best, although others have been tried. Mr. Haynes noted that the shortage is a market issue, one of cost, rather than actual scarcity. He went on to say that the amount of helium needed for a number of HTGC reactors would be a small percentage of helium generating capacity.

There were several questions regarding development of a commercial model and licensure of same. Partners are still under consideration, although Areva has been chosen to design the reactor. The Alliance is very clear it hopes to operate under an NRC license rather than a DOE research license so that it can add units as performance indicates.

There was also extensive discussion of the effect of coal and natural gas prices and availability, along with carbon controls, on the development of the HTGC reactor.

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

Ms. Wilson pointed out that eight tanks of high level waste, partially or wholly in ground water, represent the single largest environmental threat in the State of South Carolina. A 1988 law created a complicated roadmap for closure, with tanks 18 and 19 already closed, and a "manageable schedule" for closing the others as quickly as possible ending in 2022. The proposed budget will "derail all of the good will and planning" and will prevent the meeting of agreed upon milestones. Missing milestones will subject DOE to penalties. She stated that "all we need for success is an adequate budget." Similarly, lack of an adequate budget will interfere with shipments of trans-uranic waste to WIPP, and overall changes a cooperative relationship into a combative relationship between SRS/DOE and DHEC. There is a disparity among sites with regard to funding cuts, with SRS's budget taking the biggest hit in the entire waste complex.

DOE FY13 & FY 14 Budget Update & Liquid Waste Operations Impacts Doug Hintze, DOE

Mr. Hintze's presentation is available on the GNAC website. It sparked a number of questions, many of which could not be answered for legal reasons. Ms. Patterson inquired why liquid waste management was not a risk control issue as the budget was presented. Mr. Hintze replied that several categories were merged in FY 12. He noted that the budget" allows the site to remain in compliance with regulatory requirements." Follow up questions related to compliance in FY 14 versus subsequent years, as well as the timing of funding (early or late in the fiscal year.)

Mr. Byrnes asked about loss of staff and was told that no furloughs had taken place "on the federal side" but that the federal workforce has dropped as budgets have decreased. On the "contractor side" 850 individuals have been let go. Mr. Hintze noted that "young folks were raided" and many of the contractors were eligible for retirement.

Ms. Patterson asked about the justification for continuing the Salt Waste Processing facility when the Small Column Ion Exchange was available? Terry Spears, Assistant Manager for Waste Disposition, responded that the two worked in concert to reduce the length of time waste sat in tanks.

Rep. Wells asked about the relationship of ARRA funding to the current budget and personnel situation, and was told that ARRA did not contribute to the current shortfall because the additional ARRA funding was used to complete some projects ahead of schedule. However, in some instances ARRA fulfilled a dual purpose, allowing approximately 790 individuals to retain their jobs, contributing to disruptions now.

Mr. Hintze reminded the group that decisions resulted from complex discussions between OMB and DOE, and that the President's budget was simply a starting point for Congressional action. Ms. Patterson assured the group that there was no intention of shooting the messenger—just a desire to understand, and thanked DOE officials for their participation.

Public Comments

Clint Wolf, Executive Director of Citizens for Nuclear Technology Awareness in Aiken, noted that much of what he planned to say had been said by Ms. Wilson, and reiterated that there had been a good team approach to the closure of the tank farm, good relations between regulators, contractors and DOE, and maintaining momentum and the agreed-upon schedule will be in the best interests of the state. He expressed confidence in the local DOE officials, but said it was not realistic to expect them to be the ones to go to battle with DOE HQ for more funding. He recommended that the GNAC advise the Governor to invite the Secretary of Energy here to see the needs at the facility.

Pamela Greenlaw, citizen, noted that the Citizens Advisory Board had sent recommendations to DOE, but that it was not their responsibility alone to represent public views. She would like to see GNAC be involved in helping citizens define and achieve consensus, and recommended a future agenda item to that end.

Tom Clements, representing Friends of the Earth, submitted written comments which are available in the comments section of the GNAC website for this meeting. In brief, he recommended a focus on high level waste management and spent nuclear fuel, stating that everyone can support proper funding levels. He commented that it was appropriate for DHEC to make clear failure to meet milestones will result in penalties.

Ms. Patterson closed the meeting at thanked everyone for their participation.