

SOUTH CAROLINA NUCLEAR ADVISORY COUNCIL

NUCLEAR ADVISORY COUNCIL MEETING

February 6, 2003
1:00 PM, Room 209 Gressette Building
Columbia, South Carolina

Members present: Dr. John Stucker, Chairman, Mr. Ben Rusche, Dr. Carolyn Hudson, Ms. Kate Billing, Senator Greg Ryberg, Representative Robert Perry, Dr. James Navratil and Mr. Steve Byrne

Staff: Patricia Tangney and D'Juana Wilson

The Governor's Nuclear Advisory Council convened on Thursday, February 6, 2003, at 1:07 PM, in Room 209 of the Gressette Building in Columbia, South Carolina. Dr. John Stucker, Chairman, asked for a motion to approve the agenda. Senator Ryberg made a motion to approve the agenda. The motion was seconded by Mr. Ben Rusche, and unanimously approved.

Chairman Stucker then asked for a motion for the approval of the minutes of the October 16, 2002, meeting. Mr. Rusche made a motion to approve the minutes of this meeting, with a second from Ms. Kate Billing. The motion was unanimously approved. Dr. Stucker announced that Nuclear Advisory Council minutes are available in draft form on the Nuclear Advisory Council's web site a few weeks following the meeting. Once the draft minutes are approved, they will be posted as the final minutes. He encouraged everyone to visit the web site to receive this information.

Dr. Stucker then stated that the central purpose of this meeting was to continue the discussion of Environmental Management issues at the Savannah River Site generated by the "US-DOE SRS EM Top-to-Bottom Review" of the site that were introduced at the October 16, 2002, meeting by Mr. John Pescosolido. Following that meeting, the Chairman formed a subcommittee to further examine those issues and report back to the Council. The report of this subcommittee was issued by the Council in December. The highlights of that report were presented today by Mr. Ben Rusche. The Chairman stated that following the report, the Council would address the new mission initiatives at the Savannah River Site that were outlined at the October 16 meeting.

Dr. Stucker then introduced the subcommittee that developed this report - Mr. Ben Rusche, Dr. Carolyn Hudson and Dr. Vincent Van Brunt. He stated that Mr. Rusche would present on behalf of the subcommittee. Mr. Rusche began by stating that the report was intended to spur greater interaction between the Council, the Department of Energy, the Savannah River Site (SRS), and DHEC and was not meant to become a final finding of the Council.

The report states that DOE has been moving to dispose of more fissile wastes (mainly C_s137) at the site than had been previously indicated. The approval of the "Radioactive Waste Management Manual", DOE Order 435.1-1, directs SRS and other sites to seek ways to accelerate site clean-up. Based on this Order, DOE has established a category of materials called "wastes incidental to reprocessing" (WIR) and are proposing to reclassify some high-level radioactive waste into this category of materials after on-site processing. The subcommittee believes that this practice may be contrary to the Atomic Energy Act, the Nuclear Waste Policy Act, and 10CFR60 provisions, although it could be an appropriate approach for dealing with limited types and amounts of waste. Mr. Rusche stated that the findings of the report suggest that close monitoring and cooperation with DOE-SRS in connection with the DOE-EM activity should be pursued to develop strategies for waste disposal that will provide adequate protection on and off site. Mr. Rusche thanked the representatives from DHEC and SRS for their cooperation with the subcommittee in obtaining the necessary information for this report.

Dr. Stucker said that the subcommittee would continue to work with DHEC, SRS and other entities on EM issues, and the NAC would look forward to more reports from this subcommittee.

Mr. Bill Spader, Deputy Assistant Manager for High Level Waste at SRS, commented on the report. He said that the Council and SRS share a common overall objective, and that the site is actively pursuing Accelerated Risk Reduction strategies. He stated both groups share the desire for close interaction and he is confident that in so doing, they can resolve the concerns for the

state. Mr. John Pescosolido, Chief Financial Officer, SRS, commented and stated that there is an organization called the *Citizens Advisory Board*, and they may be another group to involve in this process. Mr. Rusche concurred with this recommendation.

Mr. David Wilson, DHEC, commented and stated that DHEC supports accelerated risk reduction at the site and the mechanism that is being used to do this type of planning is the Performance Management Plan that the site has developed as a result of their Top-To-Bottom Review of activities across the DOE complex. He wanted to point out that there are other waste management and materials management issues that DHEC is paying close attention to, and they involve: continuing management of high level waste; shipment off-site of transuranic waste; management of spent fuel on site and clean up of contaminated areas on site. He asked that the Council look at these issues as a whole. In regard to Order 435.1-1, Mr. Wilson stated that DHEC has filed as a friend of the court in a legal action by NRDC against DOE. He closed by saying that he looks forward to working with the Council, DOE, citizens advisory boards, and other interested members of the public in making sure that decisions to be made on regulatory issues are the right ones for the site and for the State.

Dr. Stucker encouraged all interested parties to contact the Council and Mr. Ben Rusche and his subcommittee if they are interested in these issues. He referenced the Nuclear Advisory Council's web site as a reference for additional information and contacts.

Dr. Stucker then called on Mr. John Pescosolido, SRS, for his presentation.

Mr. Pescosolido presented information on future activities at the SRS including an energy park, National Nuclear Security Administration (NNSA) programs and technology transfer initiatives. Mr. Pescosolido stated that NNSA work at the site supports two DOE missions- Defense Programs and Nuclear Non-Proliferation. To support the Defense Programs mission, SRS will ensure Tritium Readiness by continuing Tritium reservoir loading, unloading, and surveillance

operations. The new Tritium extraction facility is currently under construction at the site with an estimated completion date of September 2007. This facility will provide the capability to extract tritium from gases produced in Tritium Producing Burnable Absorber Rods that are run in TVA reactors. He said that the initial rods are expected to ship in September 2005.

Pit manufacturing is a new opportunity for SRS that would support the Defense Programs mission. DOE made a decision last May to proceed with a modern pit manufacturing facility. The conceptual design is under way and should be complete in FY 2006. There are five candidate sites under consideration and SRS is one of those sites. The draft EIS is expected this summer and the site selection decision will be made in FY 2004. This is an opportunity for SRS and they are actively pursuing being named the as the site.

Mr. Pescosolido then described the MOX program, which is another NNSA program that supports the Nuclear Non-Proliferation mission. The Department is continuing to move forward with MOX, and the design should be complete by March 2004. They will be breaking ground in approximately one year, with physical construction starting around March 2004. The facility should be operational by September 2007. The President has asked for over \$400 million dollars in his 2004 budget to support the construction activity. The operational life of this facility to produce MOX fuel to dispose of surplus weapons material is planned for 12 –13 years. The NRC will license construction of this facility and regulate its operation.

Pit Disassembly and Conversion is another SRS activity that supports the non-proliferation mission. This is a complex of facilities capable of taking existing weapons pits, removing the plutonium, and producing Plutonium oxide capable of being used in MOX fuel. The design will be complete in FY 2004 and construction is scheduled to start in FY 2006, with completion in FY 2009. This facility is expected to be in operation for 7 years.

Mr. Pescosolido then reported that SRS is focusing on other activities for the Site outside of NNSA, including the production of nuclear energy. The possibilities that the Department are considering for the “energy park” concept are: possible deployment of at least one new advanced nuclear power plant in the United States by 2010 (gas –cooled reactor technology likely); design of an economic, commercial scale hydrogen production system using nuclear energy by 2015; and a next generation nuclear system for deployment after 2010 but before 2030.

The presentation was followed by a discussion on NNSA’s objectives and Non-Proliferation. Dr. Stucker asked where we stood with the immobilization facility and Mr. Pescosolido reported that that project has been cancelled. Dr. Navratil commented that the MOX facilities and Pit facilities are expensive, and wanted to know whether there were plans to use the facilities after these programs are over. Mr. Pescosolido stated that as of now, the stated plans are to deactivate and decommission, and other alternate uses for the facilities have yet to be determined.

Mr. Fred Hume, representing the Aiken Economic Development Partnership, EDP, along with Dr. Paul Deason and Mr. Ernie Chaput then gave a presentation to the Council. Mr. Hume stated that EDP supports the efforts of the Accelerated Cleanup, and his efforts were going to focus on the community initiatives, other than the decline in employment levels. Mr. Hume stated that an “energy park” would create private and public-sector jobs based on SRS-related expertise and infrastructure. He said that the community surrounding the site is supportive of the park. The EDP believes that an energy park would allow them to take the physical and technological assets of the SRS and make a significant contribution to the needs of the country in the future. The concept of the energy park is to take a site at the SRS and develop an energy park that would allow development of nuclear technology in a safe, well buffered, secure area in order to meet the needs of the nation. SRS Redevelopment Authority will lease sites for nuclear and related activities. There is a large land mass available for this park and EDP believes that there is minimal potential for interference between SRS and park activities. Other reasons presented in support of this park were: modern nuclear infrastructure on and off site; proximity to large

customer base; strong local support for nuclear activities and strong regional technology base. Mr. Hume talked about potential park activities, electric supply with current generation reactors, and a proposed hydrogen laboratory and potential energy park locations. The EDP believes that this is a win-win situation for the state, region and private sector, DOE and academic programs. There has been a request for lease of land made to DOE. The next steps are DOE's response on the concept, identifying items for discussion, preparing a schedule to resolve open items and additional information gathering and field work. Mr. Hume said that there would be ongoing coordination with potential park tenants.

After a brief discussion of this presentation, Mr. Rusche commended the representatives from the site on the information given on the activities that are going on at the site, in the areas of safety and future development and use of the site. He expressed his appreciation for both pieces of information.

Senator Ryberg expressed his appreciation as well. He stated that as we look at the employment piece of our community, the accelerated cleanup may produce an earlier downturn at SRS; but that void can be filled with the expertise that is at the SRS. He said that he was hopeful that SC will become a more active partner with the Commerce Department to work with the local community and DOE and site and Governor Sanford's long-range plans, and that as we move forward with the new administration that there is a cooperative effort between the state and community. He stated that he looks to this Council to promote this effort in SC.

Dr. Stucker then opened the floor for public comment and asked that people limit their comments to five minutes. The following made comments to the Council: Mr. Harry Rogers, Carolina Peace Resource Center; Mr. Gerald Rudolph, Carolina Peace Resource Center; and Mr. Gregg Jocoy, 203 Pond View Drive.

Dr. Stucker stated that the views expressed are the views of the speakers and not the views of the Council.

Mr. Rusche asked the speakers to please leave any reading material or additional comments they may have for the Council.

Dr. Stucker said that there are four elements of study for a new subcommittee. They are: a) the issue of nuclear power generation, present, past and future; b) R&D – new technology; c) Environmental Impact; and d) National Security issues. The subcommittee to address these issues at SRS will consist of Mr. Steve Byrne, Ms. Kate Billing, and Dr. Jim Navratil. Dr. Stucker said that he would be following up with this subcommittee.

Dr. Stucker then introduced Representative Robert S. “Skipper” Perry to the Council, who was appointed by Speaker of the House, David Wilkins to replace Mr. Charlie Sharpe who was recently elected as SC’s new Commissioner of Agriculture.

Senator Ryberg took a moment to thank Dr. Stucker for his dedication and work toward the Council for the past two years. He commended him for his presence today in spite of the loss of his father the previous week.

Dr. Stucker made closing remarks and announced that the next meeting of the Governor’s Nuclear Advisory Council will be held in 209 of the Gressette Building and the date and agenda will be announced. Having no further business, Senator Ryberg made a motion to adjourn. The motion was seconded by Dr. Navratil and unanimously approved.