

SOUTH CAROLINA NUCLEAR ADVISORY COUNCIL

MINUTES

(Approved June 8, 2006)

March 2, 2006

Room 209 Gressette Building
Columbia, South Carolina

Members present: Chairman – Mr. Ben Rusche, The Honorable Robert Perry, Dr. Vincent Van Brunt, Mr. Bill Mottel, Dr. David Peterson, and Mr. Steve Byrne
Absent: The Honorable Greg Ryberg; and Dr. Carolyn Hudson

Staff present: Ms. D’Juana Wilson, Mr. Michael Hughes

I. Welcome and Opening Comments

The Governor’s Nuclear Advisory Council convened on March 2, 2006, at 1:30PM. Mr. Ben Rusche, Chairman of the Council, called the meeting to order and welcomed the speakers and guests.

II. Approval of Minutes, December 1, 2005, meeting

Mr. Bill Mottel moved to approve the minutes from the December 1, 2005, meeting. Mr. Steve Byrne seconded and the motion carried unanimously.

III. SRS Salt Waste Treatment Program

Mr. Terrell Spears, Director, Salt Processing Division, SR Operations Office, US DOE presented an update to the Council entitled “Savannah River Site (SRS) Salt Waste Processing Update.” Mr. Spears’ presentation included the background of DOE and SRS developing strategy for disposition of salt waste at SRS; waste determination status; interim plan impacts; interim plan path forward; and key facilities. Mr. Spears reported that the Final Section 3116 Waste Determination for Salt Waste Disposal at the Savannah River Site was approved on January 17, 2006. SRS is working with the State of South

Carolina via an Executive Steering Group to finalize its interim processing plan. He further stated that solid progress is being made in developing the key facilities and treatment processes necessary to implement the interim strategy. For a complete copy of [Mr. Spears' presentation, please click here.](#)

There was a brief discussion following Mr. Spears' presentation. Mr. Mottel asked Mr. Spears to describe the process of both the Actinide Removal Process (ARP) and the Modular Cesium Removal Unit (MCU). Mr. Mottel also asked what is to be expected for 2006. Mr. Spears replied that they expect to have the Interim Path satisfied by April of this year so they can move forward by July.

Dr. Van Brunt wanted to know the status of Tank 48 and there was a discussion regarding options for Tank 48. There were questions regarding current construction for key facilities and particular start up issues. Mr. Spears reported that there is a pressure relief issue at the Saltstone facility that should be resolved soon. Mr. Mottel asked if Parson is on its original schedule. Mr. Spears responded there is a difference of about 26 months from the original schedule.

III. Defense Nuclear Facilities Safety Board Activities at SRS

Dr. A. J. Eggenberger, Chair, and Dr. Kent Fortenberry, Technical Director, of the Defense Nuclear Facilities Safety Board addressed the Council about the activities of the Board at SRS.

Dr. Eggenberger discussed the agency and the responsibilities of the Board. He stated that the Board is not a regulator; they are tasked with review of nuclear safety at DOE nuclear facilities and providing advice to the secretary. They review and evaluate facilities based on DOE standards and consider adverse effects of facilities.

Dr. Eggenberger discussed how they communicate with DOE. He stated that the Board makes recommendations to the Secretary of Energy. If the Secretary accepts it, he must put together an implementation plan over a specified time frame. He explained that public hearings are conducted at the start-up of facilities. He then introduced Dr. Fortenberry to discuss what is going on at the Savannah River Site.

Dr. Fortenberry gave a history of the Board's advice and recommendations; a timeline of observations of Salt Waste Processing; and discussed Board issues with Salt Waste Processing. He presented a summary of the Board's Salt Waste Processing Facility observations, ongoing reviews and proposed activities. This included:

- Increased use of old tanks;
- Preparation of Tank 50 for return to high level waste service;
- Proposals related to Tank 48 material;
- Tank 16 annulus cleaning;
- Extended use of 2 F Evaporator; and
- Continued reviews of SWPF, ARP, MCU and tank farm operations.

Dr. Fortenberry reported that the site has resolved their organic issues related to Saltstone.

For a copy of the presentation, [please click here](#).

The gentlemen were thanked for their presence and continued diligence in protecting the facilities.

IV. SC Department of Health & Environmental Control Report

Chairman Rusche asked Mr. David Wilson, SC DHEC, to address the Council. Mr. Wilson reported that the management of Salt Waste Treatment and continued legal

debates continues to be the regulatory challenge of the process. He stated that over the past several months, the involvement of the Defense Board has been a good involvement. It is a challenge working with the Nuclear Regulatory Commission (NRC). The first waste processing determination has gone through and it is a little disappointing to know that the next one may be a great challenge as well. The state's primary goal is to support the closure of tanks and prevent radioactivity releases to the environment. He said that he is convinced the technical concerns will be met, but he is concerned about the financial aspects. He stated that some type of agreement between DOE and South Carolina is a challenge that has to be met in the very near future to ensure viability. Chairman Rusche thanked Mr. Wilson for his comments and expressed his appreciation for the relationship that exists between DHEC and the Council.

V. SCE&G and Public Service Authority – New Nuclear Power Reactor plans

Mr. Steve Byrne, VP Generation and Chief Nuclear Officer, SCANA, made a presentation to the Council. Mr. Byrne spoke on behalf of SCANA, not the Public Service Authority. He began with the Future Generations needs and stated that the year 2015 is the target for SCE&G bringing on some form of new generation capacity. There is limited potential for solar, wind, biomass and hydro. He reported that the greatest potential for solar expansion lies in the Southwest area of the United States. There is no practical wind potential in South Carolina, but, the potential for Biomass is good, although it would not be of sufficient size for a large baseload generating unit. He stated that the prospect for siting new hydro is poor for environmental reasons. He discussed the Saluda Dam Relicensing and talked about emissions and the Clean Air Interstate Rule

(CAIR) 2005; the Mercury (HG) Rule 2005; and Carbon (Global Warming). He reported HG Rule is applicable to power plants; it was effective March 15, 2005; it set limits to 38 tons in 2010; and the second phase limit to 15 tons (70% reduction) in 2018. Mr. Byrne discussed the impact of the HG Rule and the regulation of NO_x and SO₂. He showed a map of the United States highlighting Power Plant Emissions and the states that are affected by CAIR. He then showed the US CO₂ Emissions by Sector as of 2001. The chart showed: Electricity generation 39%; Transportation 30%; Industrial 17%; Residential 6%; Commercial 4%, and all other sources 4%. He said that to sequester carbon we can plant trees and corn (crops) or pump underground or into the ocean. He stated that by the year 2015 some form of generation has to be built. They are looking at nuclear because of some of the following: it has the lowest fuel cost; there are new incentives from the 2005 Energy Bill; and there is public support. There was a US survey and 70% were in support of nuclear. He reported that Greenpeace Founder Patrick Moore spoke in favor of nuclear energy at the U.N. Climate Change Conference. He further noted that renowned environmentalist James Lovelock sees nuclear energy as part of the solution to global warming. The Energy Bill Nuclear incentives were discussed as follows:

- Loan guarantees – it provides loan guarantees up to 80% of project costs;
- Risk insurance – provides protection against delays in startup due to causes not under control of the Licensee. Coverage is 100% (\$500M max for first two plants) and 50% (\$250M max for next four plants);
- Production tax credits – provides credits for first 6000 MW of production at a rate of \$18/MW up to \$125M per year per 1000 MW of capacity. Tax credit duration is eight years. Actual allocation methodology to be determined in next six months.

Mr. Byrne reported progress has been made. The selected site is VC Summer and the reactor is Westinghouse. The combined construction and operating license application

(COLA) contractor is Bechtel. There will be a team of 14 people working on the project and SCE&G has decided to join the NuStart consortium. He reported that Westinghouse was selected because of its ability to meet the desired schedule; regulatory risks to obtaining COL; long term O&M considerations and the collaboration opportunities and preferences. He showed the schematic of standard PWR vs. AP1000. He reported that AP1000 provides safety and investment protection. The AP1000 is smaller and dramatically simpler than conventional plants. He spoke of collaboration opportunities and reported that recent announcements of site options in the Southeast are being considered. There was a brief discussion on Yucca Mountain and spent fuel. Waste that can't get to Yucca Mountain can be safely stored dry, onsite. Mr. Byrne briefly discussed dry fuel storage facilities that are operating and different perspectives on dry fuel storage.

Dr. Van Brunt asked about reprocessing and Mr. Byrne reported that at the present time, reprocessing is illegal. He feels that reprocessing is many years off.

Chairman Rusche thanked Mr. Byrne for his comments and presentation. Chairman Rusche then introduced Mr. Jeff Allison, DOE Site Manager at SRS to the Council.

Comments by Mr. Allison of DOE-SRS:

Mr. Allison greeted the Council and commented that the highest risk is putting waste in tanks. He stated that this is a very important issue and they have some talented people working on this task. Mr. Allison thanked the DNFSB for their assistance and said that he would be glad to make a presentation to the Council at a future meeting on what is going on at the site. Mr. Rusche suggested that Mr. Allison come in June.

VI. Savannah River Site Heritage Foundation

Mr. Bill Mottel, President of the SRS Heritage Foundation gave a brief progress report to the Council. He reported that the Foundation's emphasis is shifting from reaching agreements, establishing procedures, and preserving artifacts; to raising funds, initiating design and construction. There are 14 members of the Board of Directors: David Amerine, Senior Vice President, Parsons; Joe Buggy, Navy nuclear submarine service and former employee of Westinghouse; Todd Crawford, Retired, SRS; John Cunningham, Savannah River Regional Development, Retired; Dan Evans, Project Director, Fluor Daniel; Gwen Johnson, Director of Allendale Elementary School Professional Development School and Director of Ruth Patrick Science Center; Walt Joseph, Retired SRS; Ann Loadholt, Former Barnwell County Council and SRS Citizens Advisory Board Chairman; Bill Mottel, Retired, DuPont and Savannah River Plant; Pres Rahe, Washington Group, President of Energy and Environment Business Unit; Bettis Rainsford, Rainsford Development Co.; Lee Smith, President and CEO of the Community Foundation for the CSRA since 1998; Chris Verenes, President, Security Federal Bank; and Joanne Zobel, Coker College - Board of Trustees, Alumni Board, Board of Visitors, etc. The Foundation Board held its second meeting on February 1, 2006, where they elected officers, approved the Strategic Plan and set a schedule for future quarterly meetings.

Officers are: Mr. Mottel, President; Mr. Buggy, Vice President; Ms. Loadholt, Secretary; and Mr. Verenes, Treasurer.

Chairman Rusche commended Mr. Mottel and the foundation for their work.

VII. Public Comment

Mr. Louis Zeller, Blue Ridge Environmental Defense League for North Carolina, South Carolina and Virginia requested to address the Council. Mr. Zeller stated that he has an interest in issues related to Salt Waste Disposal. He stated his disappointment in SWPF and pointed out what he thought to be severe deficiencies in the Salt Waste Processing Project from regulatory and environmental points of view. He wanted to know what the State of South Carolina is going to do to ensure that the state is safe. Representative Robert Perry commented and stated that he feels very confident that the environment that surrounds the facility is safe. Mr. Zeller gave additional comments and asked to have an opportunity to be put on the agenda at a future Council meeting.

Ms. Mary Kelly, SC League of Women Voters addressed the Council and expressed her feelings of dissatisfaction with site matters and the concerns of the public.

Chairman Rusche stated that the next meeting has been rescheduled for June 8, 2006.

At 3:45 PM, Mr. Mottel made a motion to adjourn. The motion was seconded by Representative Perry and unanimously approved.