

# ***SOUTH CAROLINA NUCLEAR ADVISORY COUNCIL***

## **MINUTES**

(Approved March 8, 2007)

December 7, 2006

Room 209 Gressette Building

Columbia, South Carolina

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

Absent: Mr. Steve Byrne

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

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### **I. Welcome and Opening Comments**

The Governor's Nuclear Advisory Council convened on December 7, 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, September 7, 2006, meeting**

Mr. Bill Mottel made a motion that the minutes from the September 7, 2006, meeting be approved. Dr. Carolyn Hudson seconded the motion. Dr. Vincent Van Brunt gave one edit to Ms. Wilson on the bottom of page 6, and the minutes were unanimously approved.

### **III. Overview of SRS Activities**

Mr. Jeffrey M. Allison, Manager, Department of Energy Savannah River Operations Office, discussed the Savannah River Cleanup. He provided an overview of the site. He said that the Savannah River Site is located on 198,000 acres, and is 310 square miles. The contractors at the site include Washington Savannah River Company (WSRC); Wackenhut Services, Incorporated (WSI); Parsons; University of Georgia and the US

Forest Service. The site workforce is 10,300 as of 10/31/06, with an annual budget of \$1.4 - \$1.7 billion. The future missions of the site include: MOX – site preparation under way; and Pit Disassembly and Conversion. Possible future missions include the National Energy Park and Hydrogen fuel. Mr. Allison discussed the integrated safety management system that exists at the site. He said that safety is integral to everything that they do. He said they continue to look at new and innovative ways to improve their safety and gave statistics on the site's safety record.

The major accomplishments in 2006 were reported. They are:

- Produced 246 cans of vitrified high-level waste, for a total of 2,221;
- Disposed of 3,546 cubic meters of transuranic waste, for a total of 21,170;
- Completed deactivation of F area complex;
- Completed Decontamination and Decommissioning (D&D) of 74 facilities, including the 247-F complex, for a total of 275;
- Shipped 60,260 kilograms of Low Enriched Uranium (LEU) to Tennessee Valley Authority (TVA), for a total of 202,493;
- Completed remediation of nine environmental sites, for a total of 324;
- Put facilities and regulatory structure in place to commence salt processing later this year.

Mr. Allison then discussed the D&D activities of T Area, before demolition and after demolition. He reported the following information: 28 facilities were demolished; 166,525 square feet removed; 102,000 cubic feet of backfill placed; 91 cubic yards contaminated material shipped off site; 12,000 cubic yards of topsoil placed; 434,430 square feet of geosynthetic liner installed; and 435,600 square feet of sod laid. Mr. Allison discussed the progress initiatives in 2006 with the Savannah River National Laboratory at the Savannah River Site. Mr. Allison gave the follow information regarding the SRS Contract Competition:

- DOE is in the process of executing its previously published acquisition strategy for follow-on contracts to replace the current Management & Operation (M&O) contract with WSRC;
- In order to allow sufficient time to foster full and open competition they intend to extend the current M&O contract with WSRC for up to 18 months;
- Multiple contract strategy will replace single M&O site contract strategy.

In regard to the basic site M&O contract, Mr. Allison reported that the draft RFP has been released and comments are due December 22, 2006. He said that the liquid waste processing contract is currently in the Request For Proposal (RFP) development stage. Mr. Allison also reported that there are several small business “break-out” acquisitions that include existing indefinite delivery, indefinite quantity contracts, and new small business set-aside contracts.

Senator Ryberg asked about the status of the MOX project and it was reported that it has not changed over the past couple of months. There was a brief discussion regarding the status of the Bill in Congress.

Mr. Bob Pedde, Manager, Washington Savannah River Site followed Mr. Allison’s presentation. Mr. Pedde’s discussion was a review of the past four years’ progress. He presented information showing that over the past four years, this site has been recognized as the second safest sites, and the record is getting better. He reviewed the record-setting performance in 2006 and reported that last year, they were recognized as one of America’s 12 safest companies. The site recognizes the importance of environmental performance, community growth and they look forward to continuous improvement. He reviewed the H area operations and the accomplishments and work remaining on the Spent Fuel project. Accomplishments in the Nuclear Materials Management were reported as well as projects that are currently under way. Mr. Pedde said that the T area closure was a major milestone for the site. They are now focusing on the P area for the next area of closure. Mr. Pedde stated that they now have full recovery of the Solid Waste Management area and he reviewed the accomplishments as well as the work that remains. He said that

they have shipped over 20,000 drums; and within their capability, they will be able to ship all of the legacy waste in the next year. He said there is still a great deal of work to do in the long-term, but things are going well. Mr. Pedde talked about site D&D, and reported that they will be slowing down slightly in this area. They will still do area D&D work that will support the area closure concept; but, they have taken care of a number of major facilities that now will not degrade and cause additional safety problems or costs in the future. The closure of the F area was a major accomplishment for the site. There was a brief discussion on the defense programs. This is the foundation of everything that will be done at the site long term. Mr. Pedde said that in the 2025 timeframe, they will finish the Environmental Management Mission of the site. There was a brief discussion on nuclear proliferation. Mr. Pedde also discussed the accomplishments and work remaining with Liquid Waste Solidification. He said that the National Laboratory continues to expand and they have a FBI Forensics Lab on the site. If there is a need for nuclear forensics in the United States, that facility exists. He reported that plutonium is going to be a big part of the future with the MOX program, pit assembly facility and the support facility that will take care of the waste as it is coming out of both facilities.

Mr. Pedde talked about the Global Nuclear Energy Partnership and said that they are included in the group of sites that will be provided grant money to access the site against the requirements for those facilities. This is a long-term proposition and they are confident in their role to support the site in the long-term. There was additional discussion on the Consolidated Plutonium Center and the 2030 vision. Public hearings began for this in November and there is a long way to go.

Mr. Pedde then presented Chairman Rusche with a framed poster of his visit of the T area closure. Dr. Van Brunt had a question regarding safety and wanted to know if a way was identified to track safety of the sub-subcontractors at the site. Mr. Pedde replied that there is and that there is a safety orientation that they must attend in order to get a badge to get on the site. Chairman Rusche thanked management of the Savannah River Site for their presence and for their presentations.

#### **IV. Barnwell (Duratek) Merger w/*EnergySolutions***

Mr. Steve Creamer, President, *EnergySolutions*, addressed the Council. Mr. Creamer began by stating that *EnergySolutions* is a technology-driven nuclear services organization, offering broad based services to the nuclear industry. The company provides comprehensive integrated services and solutions to the nuclear energy industry. They have a wide spectrum of technical experience and know-how. He said that *EnergySolutions* utilizes its resources to drive technological innovation and solutions for its customers and clients. Their headquarters are in Salt Lake City, Utah; they employ 1,800 people and have offices across the United States and in the United Kingdom and the People's Republic of China. It is owned by a coalition of private investors led by Lindsay Goldberg & Bessemer of New York. The members are: BNG America, Duratek, Envirocare of Utah, Sciencetech D&D Division and Safeguard International Solutions of the UK. Mr. Creamer gave a brief overview of each partner. Mr. Creamer discussed the uniqueness of their fixed base processing and talked about US demands as it relates to fuel types. The partnership with *EnergySolutions* and the Savannah River Site was discussed and the relationship with Parsons in Barnwell. The following people

were introduced to the Council: Mr. Tim Dangerfield, Mr. Michael Moore and Mr. Richard Hayes.

Mr. Henry Porter, SC DHEC, discussed the current relationship of *EnergySolutions* with SC DHEC. Prior to requesting approval for transfer of ownership of Chem-Nuclear, LLC and Duratek, Inc., Steve Creamer, Bob Prince (former President of Duratek, Inc.) and Regan Voit (former president of Chem-Nuclear, LLC) met with DHEC management and made commitments that *EnergySolutions* would comply with all commitments made by Chem-Nuclear and Duratek to DHEC, that they would continue the existing financial assurance and that they would continue employment of the existing staff at the licensed facilities. To date, *EnergySolutions* has honored these commitments. Mr. Porter stated that he has moved into a new position at DHEC in the Bureau of Air Quality and that Mr. Richard Hayes, Director, Division of Waste Management and Mr. Michael Moore, Section Manager, Infectious and Radioactive Waste Program at DHEC have assumed his responsibilities. He also introduced Mr. Haynes and Mr. Moore to the Council. He indicated that he has enjoyed working with the Council over the years. The Council expressed their appreciation to Mr. Porter for his invaluable service over the years.

#### **V. Salt Waste Program Status and Update**

Mr. Lawrence T. Ling, Director, Salt Processing Division, DOE – Savannah River Operations Office, discussed two distinct programs: Actinide Removal Process (ARP) and Modular Caustic Side Solvent Extraction Unit (MCU). He said that Mr. Charles Hansen will discuss the Salt Waste Processing Facility progress.

Mr. Ling reported the following on the Actinide Removal Process:

- Completed construction 3/28/06;
- Currently conducting Startup Testing;
- Complete Startup Testing and Cold Runs 2/28/07;
- Ready for Proficiency Runs 3/28/07;
- Ready for Radiological Operations 9/30/07; and
- Developing strategy for integrated runs, readiness reviews, and the start of operations.

Mr. Ling reported on the Modular Caustic Side Solvent Extraction Unit (MCU):

- Completed construction 11/14/06;
- Currently conducting Startup Testing;
- Developing operating procedures;
- Complete Startup Testing and Cold Runs 4/30/07; and
- Start Radiological Operations 9/30/07.

He briefly discussed the Salt Waste Processing Facility (SWPF) and reported that DOE headquarters chartered an Independent Technical Review (ITR) Team to review the Preliminary Design of the SWPF. The ITR concluded that there were no fatal flaws in the design and that the “SWPF project is ready to move into final design”. ITR further stated that “technical issues associated with the structural design can be addressed as part of the normal design evolution”. He said that Parsons has committed that the “entire ITR report will be considered by the SWPF design team in the development of the final design”.

Mr. Charles Hansen, Vice President, Parsons Infrastructure and Technology, followed with a briefing to the Council. Mr. Hansen said that the enhanced Preliminary Design was completed on schedule on September 15, 2006. The Department of Energy (DOE) independent review concluded that the SWPF is ready to proceed to final design. The development of the Critical Decision (CD) – 2 baseline is in progress with approval planned in February 2007. The schedule baseline is aimed at a September 2011 start-up. The Construction Plan is based on

two full shifts per day with planned overtime each week. The Commissioning schedule has been revised to achieve early startup. He reported that in October, Parsons made some management changes and gave an overview.

Mr. Hansen said that an Independent Review of the CD-2 Baseline by the Office of Engineering and Construction Management (OECM) will be done in January. He also stated that the startup of the cold operations testing of full scale Caustic Side Solvent Extraction (CSSX) system at *EnergySolutions* facility in Barnwell, SC will be in January. He invited the Council to visit the facility in the near future.

He discussed the CSSX FST Overview and reported that CSSX FST will validate the SWPF full-scale design. The CSSX FST is to be conducted December 2006 – February 2007. The test system is located at *EnergySolutions* Barnwell Processing Facility. Liquid waste simulant will be used for testing. He reviewed the system assembly, and in closing discussed the project risks. Mr. Hansen reported that Congress must act on the FY2007 budget in order to start construction in 2007. Otherwise a project delay will occur. He said there is competition for engineering and construction assets due to other local and regional work including Mixed Oxide (MOX).

Dr. Van Brunt asked about operational status issues and there was a brief discussion.

Ms. Shelley Sherritt, SC DHEC, addressed the Council and said that in order to close the High Level Waste (HLW) tanks at the Savannah River site in accordance with the Federal Facility Agreement (FFA) schedule, the waste must be treated and the administrative processes must be completed on time.

She said that treatment is a subject of the draft permit modification for the Saltstone Disposal Facility (SDF) which was proposed for public review from October 3, 2006 to December 1, 2006. Public comments were received from at least 29 sources. DHEC is evaluating all the comments received and intends to make a final permit decision in December 2006 or January 2007.

Ms. Sherritt reported that the Section 3116 consultation between the Department of Energy (DOE) and the Nuclear Regulatory Commission (NRC) must also be completed in a timely manner to support closure of the tanks on schedule. DHEC and DOE are currently in dispute over the closure schedule for Tanks 18 and 19. The reason cited by DOE for Tank 18 and 19 schedule extension was due to the consultation process. She said DHEC believes that the consultation should be redefined in terms of time schedule to ensure that DOE meets the FFA closure dates.

There was a brief discussion and Mr. Rusche thanked everyone for their comments. Dr. Van Brunt asked if working groups that would include the Council, WSRS, SCDHEC, NRC and others would be helpful. At this time, there have not been any discussions with NRC for this type of setting, but Ms. Sherritt said she will keep this in mind if it comes up.

## **VI. Navy Nuclear Power Training**

Mr. Rusche introduced a guest in the audience from Charleston, South Carolina. Mr. Chuck Engle. Mr. Engle is the Radiological Control Manager for the Navy Power Training Unit in Charleston. Mr. Engle explained their mission. He said that the site has two ex-submarines that have been converted to training ships to support the training mission. He reported that there is a nuclear power school on the facility

and officers do go through training at that location. He expressed his gratitude for the invitation to attend the meeting and Mr. Rusche thanked him for his presence.

## **VII. Comments/Questions from Attendees**

Public comments to the Council were given by Mr. Robert Guild, SC Chapter of the Sierra Club. Mr. Whit Ashley, an environmentalist and Ms. Leslie Minard of Columbia. After each person spoke, Chairman Rusche asked them to please put their comments in writing addressed to the Council.

There being no further business, the meeting was adjourned.