

GOVERNOR'S NUCLEAR ADVISORY COUNCIL MEETING
Savannah River Site
Applied Research Center (ARC)
January 29, 2018
12:45 pm – 2:45 pm

Rick Lee: Call to Order – Approval of Minutes & Update of NAC Activities

Attendees: Scott Batson, Claude Cross, Musa Danjaji, Carolyn Hudson, Rick Lee, James Little, Tom Young

Rick Lee: Welcome everybody. Hope this meeting will be somewhat shorter than the last one was. We will move briskly through the agenda today. Recognized Martha Ruthven, Senator Joe Wilson's Office, for attending. Asked Ms. Ruthven to thank Senator Wilson for all his support to Savannah River Site and the projects in South Carolina. Thanked de'Lisa Carrico for coordinating the meeting at Savannah River Site. Representative Sylleste Davis is in a committee meeting today in Columbia and will not be in attendance. Dr. VanBrunt will not be in attendance today; however, he should make the next meeting.

Captain Cross moved; Senator Young seconded; the minutes for January 29, 2018 meeting to be approved and they were accepted.

Rick Lee made a motion to amend agenda because to include a public comments session; Senator Young seconded; motion was approved and accepted.

We have two new Council members: Dr. Musa Danjaji from South Carolina State University and Scott Batson with Duke Energy. Thanked both new members for agreeing to be a part of the Council.

Rick Lee has been invited to speak to the Academy of Sciences on February 12, 2018 in the Gressette Building at 5:00 pm and the subject will be South Carolina's position on the proposed dilute and dispose methodology for the disposition of weapons grade plutonium. There will be several support speakers from universities and experts on criticality. Everyone is welcome to attend this public meeting.

Brief update on MOX. I think they are up to about six law suits now. I think the State of South Carolina has a couple and four are from the contractor. We hope they can come to a resolution and at least getting the funding back on track so we can bring this to closure. This is hard on

the workers at the Savannah River Site with the future being an unknow. Mr. Robert Raines, NNSA, briefed us at the October 12, 2017 meeting. We will be initiating additional discussions and seeking answers to additional questions.

SCDHEC Update, Shelly Wilson, DHEC, SRS Federal Facilities
(No Slides Used)

Question from Council:

Rick Lee: What is the scale of the pension cost? How much are you talking about?

Shelly Wilson: The cost is ramping up and it is getting worse to 2025.

Terry Spears: The pension payment for this year is at \$125M and it is going up to about \$180M next year. It will get up to over \$300M in a couple of years. The bulk of the retirement liability is already in hand. About two thirds of the total population that are retirement eligible are retired and receiving their retirement.

Jim Little: Are the pension funds invested in the market?

Terry Spears: Yes.

Rick Lee: Do you know what the cap will be on the processing of liquid waste in the future?

Shelly Wilson: What we are looking at for this year is 2.45 million gallons. This is because SWPF is not up and running. When it gets up and running we would be happy with 8 to 12M gallons per year. This is not going to be a jump it is going to be a steady incline to get to the 8 to 9M gallons per year.

Rick Lee: If you get to 10M gallons a year what would be the time frame for processing – 10 to 15 years when you get the money?

Shelly Wilson: When the site gets the money they rock.

Rick Lee: Thank you very much. It is always a pleasure to have you with us.

SRS Update, Terry Spears Savannah River Operations Office, (SR) Deputy Manager
(No Slides Used)

Question from Council:

Rick Lee: In the case of a shut-down where they don't have a budget or a continuing resolution, how does that affect you and what do you do?

Terry Spears: In the past, in 2013, we furloughed the employees during that shut down. This time we had a shut down for a few days, turned out it was over a weekend. We keep essential personnel necessary for health and safety of the site. Essentially, we are not processing or moving material.

Rick Lee: If you had a July contract expiration and this was February it is going to slip.

Terry Spears: I do not have the authority to extend the contract.

Rick Lee: Does the budget shortfall you are looking at right now have effect on SDU or does that simply delay procurements?

Terry Spears: It would affect our ability to stay on schedule so it could be a real challenge. Perhaps we could ramp up later to overcome that. It certainly adds to the significant challenge.

Rick Lee: What do you do when you process?

Maxcine Maxted: H-Canyon is a dissolving facility. We go in and separate the uranium isotopes, so we dissolve the fuel, separate the uranium from the product and if there is any plutonium that goes off to the tank farms and that uranium is down blended to a low enriched because a lot of our fuels are high enriched so it is a lower enriched to meet the TDA standard which is about 4.95% uranium and then that is shipped to their fuel fabricator and they in turn use it for commercial and electric generation.

Rick Lee: Thank you.

Rick Lee: Have you purchased a back-up Melter at this point?

Terry Spears: We do have Melter 4; it has been in house for number of years. We would like to have a fifth but that is part of the planning.

Rick Lee: Every time there is a contract change there may be changes in the way people do business. I am sure with the protest there is not anything specific you can say about how the new operating environment will be like for liquid waste. After the decision by the GAO, when will the people become aware of what the staffing will be and how to operate it.

Terry Spears: I believe that is a matter that will be handled by the new contractor as they come on board and they would put out both internally and externally what they will do on their path forward.

Scott Batson: You said \$12M – \$30M shy according to which version in your budget request.

Terry Spears: \$12M in the Senate and \$30M in the House.

Scott Batson: Against a proposed or requested budget of how much?

Terry Spears: I don't know, it is shorter than what we asked for. In the nuclear materials area I don't remember what that was.

Maxcine Maxted: It was like \$323M to \$344M. I don't know the exact number but I can get that for you.

Senator Young: Mr. Spears is there any update as to the AMC (Advanced Manufacturing Collaborative) proposal at the Department of Energy?

Terry Spears: There has been a lot of internal discussion among the new administration about that but I do not have any news on that at this point to share with you Senator.

Senator Young: I know just looking back at the minutes from last meeting in October those minutes reflect that DOE told us that we might have a decision on that before the end of the year and that obviously hasn't happened.

Terry Spears: As I said there has been a lot of discussion and we have been encouraged by the discussion. I do not have a status update today.

Senator Young: Also, I know I asked at the last meeting too about new missions for the site and one of the things that DOE told the council is the National Lab is an enduring mission at the site and there is a lot of stuff going on with the National Lab. Is there anything new that maybe you haven't already told us about today as it relates to the National Lab and potential new missions?

Terry Spears: I don't really have an update on the National Lab today. I do know that SRNL is a very thriving National Laboratory among the National Lab Complex. Very heavily integrated not only in AM missions but also in other missions particularly in national security area. Tritium for example, outside of that intelligence series, matters associated with homeland security. I do know that they are very well couched in those areas and very well positioned for success.

Senator Young: One last question about the infrastructure needs of the site. Would that be a question that is better poised for DOE or for the prime contractor with SRNS?

Terry Spears: You can direct that either way; SRNS is the management operating contractor and they manage the infrastructure activities for the Department. The Department also has folks that oversees that and help coordinates leadership of that and seek funding for those things. We would be glad to provide you an update on where we are with infrastructure and what our critical needs are.

Senator Young: You have actually presented some of that information to the council in the past but I don't recall it being presented anytime in the past several meetings and I know I for one would be very interested in that. I am sure I would have several constituents that would be very interested in that as well.

Terry Spears: We can certainly coordinate that at your invitation to do so.

Senator Young: Thank you.

Rick Lee: Is there anything the Council can do to help you? We know a few people and we would be glad to help because the funding for Savannah River is critical.

Terry Spears: I think two things, one is the public forum is very helpful to us because it gives us the chance to communicate to the council and with the public. A lot of times we will talk about what our funding needs are. Another important avenue is to just help raise the awareness of what we are doing out at the site and what the necessary financial resources are that support that. If you see it and have an understanding you kind of have a feel for it and you believe it is helpful to have an advocate for it. I think those are two valuable things the council can do and does for us.

Rick Lee: Have there been any major retirements over at the lab with any key people who have decided to retire?

Terry Spears: I can't speak to that but maybe Stuart MacVean can.

Stuart MacVean: We have been in the mode of making sure we are hiring with a little bit of time to do handover from one individual to another. We have a few unique individuals who have specific skill set. If I have a half a dozen people I don't worry about a person retiring from that group but we have a few spots where we have individuals and we need to make sure we have that hand over and we have been very successful with that.

Rick Lee: Thank you very much.

NNSA Update, Nicole Nelson-Jean, NNSA, SRFO Manager
(No Slides Used)

Question from Council:

Captain Cross: Are you limiting the building of these pits to one location or could you build these pits at two locations:

Nicole Nelson-Jean: We are already building these pits at Los Alamos at 30 pits per year but we would continue that even if we were to have an additional location here at Savannah River. So, at this point right now, it is either expand the capability at Los Alamos only or have two locations.

Captain Cross: That is fine, thank you.

Rick Lee: So with the current 30 you are producing annually at Los Alamos I presume you have a budget that goes along with it; is production falling in line with the budget you have set up for that.

Nicole Nelson-Jean: With our request yes.

Jim Little: Now the ramp up in pit production forecasted is that due to obsolescence or is that due to recent inventory that is driving that?

Nicole Nelson-Jean: The increase in inventory from 30 all the way to 80. So, the increase in inventory as well. One of the factors that NNSA is also paying attention to is the new nuclear posture review. It will be coming out soon and we will know what that means for our overall plans. So, know everything I have discussed deals with the current program of record.

Rick Lee: I didn't hear anything in the evaluation criteria with regards to community support for the facility. Sometimes places want something and other places don't. Is that criteria that will be evaluated?

Nicole Nelson-Jean: At some point; right now we are focused on the engineering analysis to look at risk and technical feasibility. We are laser focused on this first and then what ever comes out after that we would be looking at community support and things like that.

Jim Little: You are looking at things like workforce availability, right?

Nicole Nelson-Jean: Absolutely.

Rick Lee: Would a partnership with local technical schools be favorably viewed if a proposal was to be brought forward to the Department of Energy to help ensure staffing is available?

Nicole Nelson-Jean: I am sure that would be a factor in our overall activities. This is an enduring mission for the long term. We would want to build a pipeline.

Rick Lee: Do you have any position types or numbers of personnel that will be required for the program?

Nicole Nelson-Jean: We hope to have that after the workforce analysis. We are not waiting until the engineering analysis is over to begin the staffing analysis. We really need both.

Rick Lee: Would waste be generated by the process like with liquid waste or solid waste?

Nicole Nelson-Jean: There would be a waste stream.

Rick Lee: I raise that question because of the fact we are moving aggressively to close our liquid waste processing, shut down the tank, and I did not know if that would be a consideration. I just raise this as a point.

Senator Young: The material that you presented to us today, your presentation, is that something you can provide to us?

Nicole Nelson-Jean: I can see about that, absolutely. Most of the information given today was given to the South Carolina Delegation and most of the information I presented is in that and I can give you that as well.

Senator Young: The Congressional Delegation?

Nicole Nelson-Jean: The Congressional Delegation in Washington, yes. They receive a presentation along with the New Mexico Delegation.

Rick Lee: How many people are currently involved in doing 30 pits a year?

Nicole Nelson-Jean: At Los Alamos?

Rick Lee: Yes.

Nicole Nelson-Jean: I would have to get that number, I don't know off the top of my head. If I was to look at the technical and the administrative I believe that is being made, I would have to get that number for you.

Rick Lee: There was a comment with regards to reconditioning of facilities. What are some of the target facilities you might recondition here for pit production?

Nicole Nelson-Jean: The facilities that were in the current AOA that was included in October 2017 were the mixed oxide fuel fabrication facilities.

Rick Lee: How much actual space do you need. That is a quite sizeable building to produce pits – is it 200,000 square feet or do you have any ideas?

Nicole Nelson-Jean: Not that big. Less than that.

Rick Lee: This is such an important topic for South Carolina that I didn't know if there would be others here today that had questions that would like to be asked from the visitors. Would it be appropriate to open the floor for any other questions?

Captain Cross: Occasionally.

Rick Lee: So unless there is an objection I don't know if anyone has a question or not but I wanted to give the opportunity if they did because of the importance of this. Does any of our visitors or guests have any questions?

Rick McLeod: Can you tell the council how many pits Los Alamos has produced to date?

Nicole Nelson-Jean: I cannot.

Rick Lee: Thank you.

Nicole Nelson-Jean: Thank you for having me.

Savannah River Nuclear Solutions Update, Stuart MacVean, SRNS, President and CEO
(No Slides Used)

Question from Council:

Rick Lee: What is the problem with HYPER right now? I am not familiar with what is causing a delay.

Stuart MacVean: Their storage pond is close to full and ours is full. We can store HYPER fuel in two different locations. We are putting in a new dissolver and we are changing out the basket in the dissolver so we can start putting those cores in.

Rick Lee: If you get to the \$300M mark we were talking about earlier today how long does that endure? Is that one-year peek and then it drops or it stays at that elevated level for an extended period?

Stuart MacVean: Because the pension keeps going up what we see is there is a continuous climb in the budget requirement to operate the facilities at their full potential. This year I would tell you because of

the budget constraints from last year and this year combined we will operate H-Canyon and all the sister facilities that marry up to it at about 25% - 30% capacity.

Jim Little: In the short term does this CR kind of one week, two weeks, three weeks, is that temporary hiring or are you holding back?

Stuart MacVean: When you are in a CR you hold back. Under the CR the way the Federal process works is you either operate at the level you were at or you operate at the lowest mark you have got.

Jim Little: If you have a really good candidate then you can't hold on to that person because he is not going to wait for 60 days because he is going to work somewhere else. You cannot make a commitment to employment.

Stuart MacVean: That is right. To make it even worse even if we do get the budget we have a lot of people that are nervous about coming to work for us because they see us go through this with budgets every year.

Rick Lee: What is it they are doing differently at other sites that has kept them behind these eight balls.

Stuart MacVean: What I would tell you is other EM sites; if you would look over the last several years of budgeting scenarios what you find is every other site got their request or more and Savannah River has not got its request and has been reduced at some level.

Rick Lee: I understand that in the budgeting process the strongest get the most which is probably not unusual. Is there something that we as a South Carolina Delegation can do to help to bolster a case for funding for Savannah River.

Stuart MacVean: I think a consistent message of South Carolina should be held to the same accounting system as the rest of the sites are being held to. If we request something it is because we have a need and we ought to get that. We are getting a lot of good support from Congressman Wilson who was down a couple of weeks ago and he took that message back and he is a strong supporter. We are going to be meeting with Senator Graham later this week or early next week. We are getting a lot of continuous strong support from the Governor's Office and through DHEC as well. I think that through the drum beat of let's make sure Savannah River Site, which is doing a good strong work, is getting the budget it needs to do that work.

Rick Lee: The Department of Defense went through an extensive utilities privatization program where they turned over the utilities systems to local electrical companies, cities or whoever. Is that something that has ever been considered here?

Stuart MacVean: SCE&G owns a lot of the distribution system on site and they come on site and do that repair work for us. We also have one of the separate contractors on site AMERESCO who runs the

Biomass boiler system that provides steam for all our processing systems as well as about 10 MWs of electricity which is for peaking load. This was done under special federal environmental energy rules so it is a lease-back arrangement.

Rick Lee: Thank you very much.

German Fuel Processing, Maxcine Maxted, DOE-SR, Spent Nuclear Fuel Program Manager
(Slides available here <http://admin.sc.gov/node/1543>)

Question from Council:

Rick Lee: I would like to put forward a motion because it is our job to advise the Governor with regards to these things. I drafted up a proposal that has some of the history. I put in here two items I would like to share with you. One is our conclusions from this; I said the US has an obligation to uphold its prior agreements; the proposed activity introduces no appreciable risk to the citizens of South Carolina; the German HEU project will provide economic benefit to community and to Aiken; processing of HEU will give Savannah River an opportunity to develop new nuclear technology; processing of HEU will provide new employment opportunities; it will keep H-Canyon fully operational which is essential to preserving the nation's nuclear infrastructure; total waste by volume that is going to be produced by this is quite small in relationship with everything else that's ongoing at this projects. I would like to make a motion that we give a recommendation to the Governor that we endorse the DOE's plans for the German's HEU per the December 20, 2017 announcement with the following caveats: all cost of program and final disposition including accounting for an appropriate risk briefing are paid by the German Government and an agreement with adequate securities is completed prior to continuing the program; HEU materials will only be repatriated after a graphite treatment method is fully developed at Savannah River and proven on a large scale and a path for final disposition is identified; and no material other than those identified shall be put into the HEU repatriation program. So those are the three caveats provisos I have listed and I would like to put forward a motion that we recommend an endorsement by the Governor approval of this repatriation plan.

Jim Little: I second the motion.

Rick Lee: We have a motion and a second to give a recommendation to the Governor pending discussion.

Senator Young: What you just read is that somewhere we can look at.

Rick Lee: I just wrote it and I did make several copies here we will pass that out.

Rick Lee: The first part is a lot the history and background and I think it is pretty much in line with what you have but you would know better. You are welcome to look at it if it needs to be modified. And then on the last page are the conclusions and recommendations to the Governor. I just think we should do what we can do to meet our obligations. Also, H-Canyon is sixty years old and could certainly use some new investment.

Rick Lee: Ms. Maxted, thank you so much.

Rick Lee: Any discussion or comments?

Senator Young: Was this sent to us before today?

Rick Lee: It was not. This is a meeting where we certainly can act on items. Any questions or comments?

Senator Young: I would like the opportunity to read through this a little bit closer. This is three pages and I may vote for it but I want to make sure I am familiar with it.

Rick Lee: Everything except the conclusion and recommendations is just a restoration of history we chose to provide for the benefit of the Governor it is all background.

Senator Young: I thought we were going to circulate something to the council based on the discussion we had the last meeting before we brought up this or whatever meeting we brought it up and that is why I asked because I don't remember getting this. If I overlooked it then that's my fault.

Rick Lee: No you didn't.

Senator Young: I don't remember getting this and that is what I thought we discussed at the last meeting.

Rick Lee: If that was the case it was an error on my part. I put this together a week or so ago and did the research on it to try to have something available for us to discuss here. This is at least the second presentation on it.

Jim Little: I guess, we had a meeting before that, my feeling on this was I don't see any issues that aren't otherwise covered by the current program. I have no objections to doing this. There are some benefits to this, it keeps H-Canyon running with infrastructure and the talent pool developed and they can do that. There is a US commitment to repatriate the materials that goes back to Eisenhower because we don't want those materials out there that are materials of US origin so it's like the US living up to its commitments. It is like the US living up to its commitments that is how the Germans got this material. I didn't see anything that said wait a minute there is a problem here. We have the capabilities

and the resources for these kinds of provisions. I think the heart of this thing is that this looks ok so it's the three provisos at the end that kind of reinforce and protects South Carolina's interests.

Senator Young: Jim, did you see this before today? Did you review this before today?

Jim Little: I helped him write it. Those were the provisos I said: we don't want to pay for it, we have got to hit our commitments and we don't want anything else coming in here, I think it is that simple.

Senator Young: Is this the position the council has taken before; I know we wrote letters or that Karen the previous Chair wrote letters on this?

Jim Little: Yes, it is consistent. Sylleste, myself and at that time Steve Byrne and we met with the Germans in Columbia I want to say back in April or March. Gary DeLeon came in and briefed us. We met with them before the last council meeting. Karen had a position on that before. We don't want an environmental impact of this staying here so there must be a disposition path. That is where her head was at the time.

Rick Lee: And since that time we have had to find the FONZI (Finding of No Significant Impact) finding and it has cleared all the hurdles that I am aware of.

Jim Little: And you have got to demonstrate this readiness level 6. It is really what it is and DOE is not going to pass that unless it is a readiness level 6. This is kind of the way the program looks ok to us but let's just memorialize the provisions for the Governor's benefit to say look the Germans must pay, there must be a fully developed process for the disposition path and we are telling the Governor here the scope of this is the scope of this and nothing else. Really it is advice to the Governor.

Rick Lee: To make it easier if you like we can separate out just the conclusion and the recommendations to the Governor which is quite short and do away with this other information. I can provide it to them for informational purposes only.

Dr. Carolyn Hudson: I am sort of torn like Tom, there is a lot to read and absorb and I keep thinking maybe I didn't read this like I wanted to.

Rick Lee: Then take off the front two sheets and we will only have the conclusion and recommendations.

Rick Lee: There has been no action by Congress associated with this that stipulates they must take the waste back after we process it.

Maxcine Maxted: No not in our country. They do have laws in Germany for what they must do and what they must right now is pick the fastest path whether it comes here or it goes to their storage facility that is the only law that I know about and it is in Germany and not here.

Senator Young: The part that is in italics on page two, the key excerpts from the DOE announcement; that's from their December 20, 2017.

Rick Lee: Yes that's from the FONZI EA. But we can take all that off. Most of the information was just for informational purposes.

Senator Young: I am reading it to say that DOE in their announcement says they will continue technology maturation efforts necessary to ensure that a full-scale production process can be developed.

Rick Lee: Right.

Senator Young: Completion of the spent nuclear fuel from Germany EA are successful scale up does not constitute an agreement to accept the spheres. Technology to develop this technology efforts is expected to take up to four years and then it goes on to if a decision is made to accept the materials. So, basically, they are not in any position to accept the material. They are going to continue to look at it and evaluate it.

Rick Lee: That is correct. They receive some amount to experiment with and to test and develop the technology and only after it has all been tested, proven to be effective, would they then enter how do you get the material. Would you have to do an amendment to the EA at that point?

Maxcine Maxted: No sir. The EA covers everything all the way through final disposition.

Carolyn Hudson: Final waste or clean waste would the shipped back to Germany.

Rick Lee: No the clean waste would be mixed here, wouldn't it? Wouldn't it go into glass?

Maxcine Maxted: Yes sir it would go into glass.

Shelly Wilson: Does some of that end up in salt stone?

Maxcine Maxted: Yes and some will end up in the normal high-level waste system and will end up in salt stone?

Shelly Wilson: And it will stay here in South Carolina.

Maxcine Maxted: Yes.

Dr. Danjaji: Where does the high-level glass ultimately end up?

Rick Lee: That is beyond our scope.

Senator Young: I would like to propose an amendment or an addition to the recommendation. Add number 4 where it would say the council would reserve the right to amend its position if additional information becomes available or as additional information becomes available.

Rick Lee: That is reasonable. Yes.

Jim Little: That makes sense.

Senator Young: So I make a motion to add that as amended as number 4.

Jim Little: I second.

Rick Lee: So parliamentary we will vote on the amendment. All in favor say I. Any oppose. The amendment carries. If we can vote on the motion as amended.

Jim Little: I make a motion to vote on this as amended.

Senator Young: I second.

Rick Lee: Any discussion. Hearing none. All in favor say I. Any opposed. Motion carries. Thank you very much.

Westinghouse Update, Sarah Cassella, Westinghouse Electric Company, External Communications Manager

(Slides available here <http://admin.sc.gov/node/1543>)

Question from Council:

Rick Lee: I would think that of all your business units that one of the best you have is the fuel unit in Columbia.

Sarah Cassella: Correct.

Rick Lee: Has there been any efforts that you are aware of or anything to spin off any of the pieces or thoughts or discussions of spinning off any more of the pieces at this point.

Sarah Cassella: One of the important parts of this acquisition is that Brookfield has acquired all of Westinghouse globally. At this point in time all of Westinghouse continually is operating as one single unit.

Rick Lee: So your plant in Columbia is it operating near its capacity how is it doing.

Sarah Cassella: It is operating very well. The plant has been operating successfully for the past 16 months at this point with no incidents. They will be giving a public update to the NRC in Atlanta on February 6, 2018.

Jim Little: There has been some recent media stuff with this Steve Hamilton allegations and whistleblower thing. Some of the concerns he expressed about the situation in Columbia is he doesn't feel it is quite right yet and some of the things as the forensic review of the acquisition of CBNI so where does that stand with Westinghouse right now because he has filed complaints with the NRC and whistleblower protection and he was your head of safety quality and was replaced by Jim Brennan and he is up in Canada now?

Sarah Cassella: Regarding the specifics it is an employee matter so I can't get into too much detail. I will tell you that personally I have witnessed from this executive leadership team a very serious desire to tackle nuclear safety culture and the ethics code. They take that very seriously and they are really trying to encourage employees to come forward when they do see something that doesn't feel right and to bring it forward. I can't go into a lot of details regarding the CBNI specifics because of litigation.

Jim Little: I guess I am concerned about the events that happened in Columbia, there were several. It wasn't just the scrubber event and there were employees furloughed so from the staff's point of view in South Carolina's interest it is in Columbia. So, what is being done in the fuel fabrication facility now? Can you enlighten us about what is being done to turn the situation around?

Sarah Cassella: I made reference to the excellence plan which went into effect following the scrubber event which really looks at the holistic view of Columbia fuel. So, not just the nuclear fuel safety culture but also operational excellence and many other factors that tie into that and go toward making the Columbia fuel fabrication facility not only an excellent operational standpoint but also a good place to work and a place where employee's concerns are addressed head-on. I don't have a great deal of detail for you in regarding to that on but that certainly could be a topic next time.

Jim Little: I think we would like to hear about what happened. As a last thing, with an acquisition like that you are going to come in with the expectation naturally to start making money. You are going to look at the structure of the organization. Are there any plans out there about workforce level by location or any plans to do a workforce restructuring in the future?

Sarah Cassella: As part of the process we went through to begin the sale process and interact with bidders we put together a business plan which was a five year look ahead. We submitted that to the

bankruptcy court in late July. It took a little bit of a turn when VC Summer was cancelled the same day but we adjusted. Included in that plan was our strategy going forward in relations to things like workforce numbers. So, we are as of July 31, 2017 eliminating approximately 1,500 jobs locally. That is over the course of about 18-24 months beginning from that July 2017 time frame. The majority of those are from the corporate center so functions like human resources, financing and that nature where we were a little overloaded in looking at comparisons to our competitors. At this point in time as part of the sale there are no additional layoffs beyond what we committed to in our business plan that we submitted to the court and we don't anticipate there being any further based on the feedback that we received back that we were making good process doing what we proposed to the business moving forward and we are looking to move forward in a leaning manner. To the local point Columbia is not affected in a manner as the corporate center.

Rick Lee: A legacy question; Scott, do you have Westinghouse steam generators still in your reactors or any Westinghouse components?

Scott Batson: Yes.

Rick Lee: So, the question I would ask is legacy wise would you continue manufacturing, servicing or repairing those things?

Sarah Cassella: Fuel services and added services remain a critical component of our business strategy going forward.

Rick Lee: But you are not going to build any new ones.

Sarah Cassella: We remain committed to the AP1000 and we believe it is the best on the market, we are not going to be involved in construction and that is the critical area where we saw some missteps with VC Summer and Vogtle.

Jim Little: So you are going to have them roll it back to the original SSS vendor role.

Sarah Cassella: That is correct. That is the strategy we have pursued in China, that is what we proposed for possible contracts in India and any other new bids we would bid in globally from that standpoint and not participating in construction.

Rick Lee: Thank you. I was going to go back to an earlier discussion we had on pit production.

Senator Young: We heard a lot about that. I appreciate you for coming back to that. I would like to propose a motion that I think is consistent with the presentation that Nicole Nelson-Jean made today and what I believe would reflect the support of the community in this area. Just as a background I think it is the County Council and the City Council of Aiken have all but endorsed this. So, I have a motion I have wrote out and I don't have it typed up so I am going to read it and then you tell me what you think

about it. The motion is as follows: South Carolina has a proven track record as a state with superior workforce skills used to manufacture automobiles, trucks, textiles, aircraft, tritium, machinery, equipment and many other products. SRS means Savannah River Site has a longstanding history for nearly seventy years of providing a highly skilled workforce to support and to accomplish national security missions for the United States. With thousands of manufacturers in South Carolina over 11,000 current skilled workforces at Savannah River Site and strong community support in the two-state region we have the trained workforce, the experience and the talent necessary to support the Department of Energy's pit production mission at Savannah River Site. As part of our statutory responsibility the Governor's Nuclear Advisory Council in the State of South Carolina The Governor's Nuclear Advisory Council supports the relocating of the Department of Energy's pit production mission to Savannah River Site and encourages the Honorable Henry McMaster as Governor to work with our state's congressional delegation other leaders to secure this important national mission for South Carolina. That is the motion.

Rick Lee: I will second. Open for discussion.

Scott Batson: So based on what have heard is the right terminology to relocate or expand.

Rick Lee: Expand

Scott Batson: Expand

Senator Young: That is a good point. I am going to change that to GNAC supports the expansion of the Department of Energy's pit production mission at Savannah River Site.

Rick Lee: The only thing that I would add is this is in addition to MOX as opposed to a replacement. It sounded like their only consideration was terminate that project. Right now, that is a bird in hand and I don't know what DOE would do in the future. I have seen a lot of plans that have come and gone.

Senator Young: So how would you want to word that?

Rick Lee: I would like to leave that to the author to finalize the wording. I think in the motions from Aiken and the county they both have some proviso in there like that so you might plagiarize.

Senator Young: I am good with that. I strongly believe we want to support both missions. We obviously have a lot of investment in a lot of folks that are invested in the MOX project.

Rick Lee: So if you can include that and so your motion it would be as amended.

Senator Young: Yes. And we do have a second. Then I will call for a vote. All in favor say I. All opposed. Motion carries.

Rick Lee: Thank you very much. That is a good motion.

Rick Lee: One last thing in the budget process in Washington they are working on the possibility of \$120M being devoted to the re-licensing effort of Yucca Mountain for the DOE and \$30M in the budget for the NRC to complete the licensing process or at least get it going with Yucca Mountain. I don't have anything written so I can't exactly phrase a perfect motion but it seems to me this is long overdue that what needs to occur now is to get the site open. We hear time and time again about anything to do with Savannah River argument about where the final product get disposition and sent. So, a lot of people are unaware that as part of this delay of Yucca Mountain that the federal government is paying every year through a settlement fund between \$300M-\$500M just as I researched and I think I am correct in those numbers. They are paying utility companies to manage the waste they have at their sites that the federal government owns and has an obligation to provide a final resting place. So, there is a huge amount of money every year that is being chewed up for that purpose. I think if you look at it over the ten or twenty-year timeframe there were some people estimating that it is as much as \$20B would be chewed up and paid out to manage waste that is not in the right place. It is not its final resting place. So, I would like to suggest we pass a resolution, send it to the Governor, encouraging him to work with the delegation and other Governors to assist Washington in funding the licensing requirements for Yucca Mountain and move as expeditiously as possible to get it open. I can't imagine a more significant event than that with regards to all the EM operations and cleanups that are underway. Here a case in point where we have stacks of glass and cannisters that they are having to put two in hole because they have run out of space. So that is my motion.

Senator Young: I Second motion.

Rick Lee: Any discussion? Hearing no discussion – All in favor say I. All opposed. Motion carries. I will circulate the wording so everyone can see it before it goes. So that brings us to the public comments. Anyone wishing to address the council may do so now.

Chuck Messick: retired DOE, I used to be the Program Manager for the Foreign Research Reactor Spent Nuclear Fuel Acceptance Program that is now run by the person I hired. But also, a couple of things, I intentionally I guess will take credit for the Canadian projects. At the time I worked for NNSA and I convinced my upper level managers to take on Canada because we had not previously done that and it turned out to be a very good partnership for both the Canadians and the Savannah River Site and the Department of Energy so I will take credit for that. Two things; one is on the proposal that Senator Young just talked about on the educational pipeline those words I didn't hear you say those. One of the things I thought was very important especially when Nicole was talking about that. She kind of felt that the education pipeline was already existed in Los Alamos. Well we already have these things. South Carolina State University has some programs, University of South Carolina has programs, HP programs at Aiken Tech and Georgia Tech is not that far away. So, we have a lot of nuclear engineering programs that support the Savannah River Site. I think we need to make a good point about that. I just wanted to pass that on. The other thing has to do with graphite fuel. Again, when I was working with the Department of Energy, I was a consultant to the graphite fuel project with Max Singletary and Gary DeLeon.

You said in your statement which it covered technology development but one of the things I think is very important for us is that it will not just take care of this solution for the Germans it is development for the United States as well. The Department of Energy has its own graphite fuel. It must figure out how to get rid of it at some point in time. The second thing is technology development I think has the potential for being one piece of future development for commercial fuel. We don't know that until this part of the importing gets potentially resolved to this process that makes it another viable technology. So, it is a benefit from that point also not just the German solid fuel problem. Thank you that is all I have.

Rick Lee: I will go back to Senator Young and reopen for discussion his motion if would care to amend it to include a reference to the already established education pipeline.

Senator Young: I would make a motion to go back to it and then amend it to add in something appropriate with respect to the education pipeline that exists in the state in the nuclear, engineering and technical college infrastructure that is in place.

Rick Lee: Is that a formal motion?

Senator Young: That is a motion.

Rick Lee: Is there a second?

Jim Little: I second.

Rick Lee: The motion is seconded. Is there further discussion? Hearing none, all in favor say I. Any opposed. Motion carries. When you finish your document if you will get it to Gary and I must get one to him regarding Yucca Mountain.

Senator Young: Ok.

Rick Lee: We have one for the HEU and I will give you the information I have here so you can get that in a form suitable for the Governor.

Gary Anderson: Yes sir.

Rick Lee: Any other items? I would like to welcome Mr. John Allensworth, as the Chair of the Savannah River Site-Citizens Advisory Board. He and I talked on the phone and we have agreed to exchange meetings. I think it is important for the two groups to work together and to stay abreast of what each is doing. We all have the same goal and we all have a platform for presenting that goal and trying to get it accomplished. I am very glad you could make it.

Mr. Allensworth: Thank you.

Rick Lee: The next meeting is May 21, 2018 at Oconee. Meeting adjourned.