## **NUCLEAR ADVISORY COUNCIL MEETING**

Gressette Building, Room # 209
July 14, 2016
1:00 – 4:00

Call to Order – Approval of Minutes Karen Patterson, Chair

Attendees: Steve Byrne, Claude Cross, James Little, Karen Patterson, Vincent Van Brunt, and Tom Young

It was noted the April 2016 minutes are approved with the recommended changes of Vincent Van Brunt on page 3 of minutes to reflect:

Dr. Van Brunt: What about IEC 61508 or IEC 61511 in terms of safety systems analysis?

Mr. Precht: The tank in question was old, and the main analysis on the nuclear side is in disposal and hazard analysis for <u>IEC 61508</u> and <u>IEC 61511</u>.

**SCE&G Nuclear Update**, Steve Byrne, COO & President, Generation & Transmission SCE&G (Slides available here <a href="http://admin.sc.gov/node/1543">http://admin.sc.gov/node/1543</a>)

*Question from Council:* 

Captain Cross: When you changed constructors, how much time did that cost you?

Mr. Byrne: It is hard to say how much time it cost us in the short run. I think in the long run it is going to save time. Just about the entire construction work force rolled over from CBI to FLUOR so they are all FLUOR employees. It is probably the first time that I have ever seen construction craft cheer when a management team was introduced. The construction craft view this as a positive move. We really didn't miss anything during the transition. We had a number of milestones laid out and they hit all those milestones during the transition period.

Captain Cross: How about the NRC inspectors, when do you get them for the new build?

Mr. Byrne: We have had NRC inspectors for the new units for about 7 years now, maybe 8 years.

Captain Cross: Full time?

Mr. Byrne: Full time I think. I currently have 5 and that will probably ramp up to 7 and then they augment that with inspection teams to do specific inspections either from headquarters or from the region out of Atlanta.

Mr. Little: What is your best estimate when you think you are going to be done?

Mr. Byrne: We think the current schedule is achievable. Their guaranteed substantial completion date for us contractually is August 2019 for the first unit and 12 months later for the second.

Ms. Patterson: Completed, does that mean on line?

Mr. Byrne: Yes that means on line, making power.

Ms. Patterson: Are you going to retire coal plants because of these plants?

Mr. Byrne: Have done and will do. We have actually retired 3 coal plants a couple of years ago; the Canadys Units in Walterboro. Those plants are actually physically removed so they have been dismantled already. We have converted three other coal plants to natural gas; one in North Augusta and two here at the dam at Lake Murray in Columbia. So those are running strictly on natural gas. The plan is to eventually retire those three plants when these units come on line or perhaps earlier.

Ms. Patterson: Are these peeking plants or are they natural gas all the time.

Mr. Byrne: They were base load coal facilities but they were 50/60 plus years old so they are relatively small 125 megawatts each in the case of the ones near the dam here in Columbia and about 100 megawatts for the one over in North Augusta so relatively small units. Three hundred and forty-five megawatts between all 3 plants.

Ms. Patterson: How did the PSC take your constructor switch?

Mr. Byrne: How did the Public Service Commission take it?

Ms. Patterson: Yes.

Mr. Byrnes: I don't know that they have had any official position on it. We have briefed them in an ex parte briefing fashion which means that it is not a contentious hearing just a briefing so they obviously had the opportunity to ask us questions. So based on the questions I asked, I would say they view it as a positive. The thing that Fluor brings that others didn't is a tie to the state. Fluor constructed VC Sumner Unit #1 and FLOUR has actually constructed most of our recent power plants: our natural gas plants and even coal plant and one of our hydro units. So FLUOR's got a lot of construction experience not only in the state but with us. They run their nuclear operations out of Greenville so again they are in-state. The CEO of FLUOR Corporation is a University of South Carolina graduate. The person that runs nuclear for them is a Citadel graduate; the person that is responsible for placing the staffing that they need is a Furman graduate so they've got pretty heavy ties to the state. We have had a lot of business with them recently in our fossil hydro group to include putting in scrubbers.

Ms. Patterson: Didn't Southern make the same switch?

Mr. Byrne: Yes the switch had to be the same at both locations.

Ms. Patterson: Southern Region Project.

Mr. Byrne: Yes.

**SCDHEC Update**, Shelly Wilson, Permitting and Federal Facilities Liaison, DHEC (Slides available here <a href="http://admin.sc.gov/node/1543">http://admin.sc.gov/node/1543</a>)

Question from Council:

Mr. Byrne: Can you tell us what the milestone was that was missed?

Ms. Wilson: Yes, they were supposed to start up the salt waste processing facility and have it operating.

Mr. Byrne: So the startup of the facility was the milestone?

Ms. Wilson: Yes, the facility has been constructed recently. It will be roughly another two years so I can tell you better before they can actually start up going through all the readiness testing. Our milestone for actual startup was October 31 of last year and so I think they are currently projecting 2018 to be able to start up and actually operate.

Mr. Byrne: So the dispute that went to your dispute resolution process is what?

Ms. Wilson: It is for getting waste out of 2 tanks.

Mr. Byrne: So it's the deadline; have they requested an extension?

Ms. Wilson: Yes.

Mr. Byrne: And that is what the dispute is about.

Ms. Wilson: Yes.

Mr. Byrne: And how was the dispute resolution process; does it go to an arbitration panel, an arbitrator?

Ms. Wilson: No it's set up for various levels so we first start off with an informal process where we set up a team with DHEC, DOE and EPA and we try to resolve it at that informal team level. If that doesn't work within a certain time it gets bumped up to the next level which is the higher management level and

that continues a couple of levels up until finally we get to the head of our agency and the EPA administrator and the head of DOE. The hope is it will get resolved at one of the lower levels before having to continue to the top.

Ms. Patterson: Do you have a tentative idea when the resolution will be resolved?

Ms. Wilson: For the salt waste processing facility?

Ms. Patterson: Yes, for both of them.

Ms. Wilson: In my mind, my hope is by the end of the summer for salt waste processing facility. I can't commit to that because there are so many variables and we are still in the midst of those discussions. If we resolve that; again, solving the illness will be able to help us solve everything related to it.

Ms. Patterson: Is not the root cause money?

Ms. Wilson: That's a very good absolute insight. You know the SWPF was delayed for several reasons. Not really so much money, but we know the reduction in funds since 2014 has slowed the other treatment capacities at the site. I agree with you that if we get DOE to ask for sufficient funds for a really hardy treatment in the future, then once they get the money at the sight they are really good at treating the waste.

Ms. Patterson: This is just Karen talking, I have come to the conclusion that some people other than DOE, people who live in South Carolina, need to be asking for some money too. Congress is not giving nearly the money we ask for. There is some disconnect between the Executive and Congressional Branch and someone needs to push Congress to give us the money, my personal opinion.

Ms. Wilson: I think that would be good.

**Duke Energy Nuclear Update**, Rounette Nader, Director, Nuclear Policy and Support, Duke Energy (Slides available here <a href="http://admin.sc.gov/node/1543">http://admin.sc.gov/node/1543</a>)

Question from Council:

Captain Cross: Are you saying there are no construction plans for those two plants: Levy and Lee?

Ms. Rounette: We are just moving forward with licensing at this point, no construction plans.

Ms. Patterson: Exelon and Dominion started what I call second license renewal. That's not the term of choice.

Ms. Rounette: It actually is second license renewal. It started out as subsequent license renewal and then they changed it to second license.

Ms. Patterson: Is Duke considering second license renewal - I don't know when your licenses are up?

Ms. Rounette: Yes, we haven't made any formal announcements or public announcements yet. But yes, we are heavily involved. We have a team involved in the industry looking at second license renewal.

Ms. Patterson: Well that's good.

Ms. Rounette: Yes it is very good. So there is hope in that hearing.

**SRS Budget Update**, Thomas Johnson, Associate Deputy Site Manager, DOE-Savanah River (Slides available here <a href="http://admin.sc.gov/node/1543">http://admin.sc.gov/node/1543</a>)

Question from Council:

Ms. Patterson: Wasn't 2016 \$111M?

Mr. Johnson: I will get to more details on the next page. But 2016 was \$1.337B and the President's request is actually \$1.448B so that is \$111M more than 2016.

Ms. Patterson: Which we didn't get.

Mr. Johnson: No we got \$1.337B in 2016. But for 2017 we do not actually have a budget yet.

Ms. Patterson: I was just thinking the 2016 \$111M budget number was what we were supposed to get in 2016 over 2017.

Mr. Johnson: We did get an increase from 2015 but you will see when I flip to the next page.

Ms. Patterson: Ok. They passed the 2016 budget?

Mr. Johnson: We did get a budget for 2016.

Ms. Patterson: That was what I was missing.

Mr. Johnson: Yes, \$1.337B.

Ms. Patterson: I thought SDU7 got zeroed out too.

Mr. Johnson: If you look at the marks, on one of the marks I believe SDU7 was zeroed out. But as we have in past years we will speak with the appropriators. In at least the last few years anyway the conversations have been productive and we have gotten some adjustments that were more favorable to the site based on those discussions. We are hoping that we will succeed paying for 2017.

Ms. Patterson: You are so optimistic and you do so much with so little money. I'm just so glad you are there because I would be completely frustrated all the time.

Mr. Johnson: Well thank you, but it is frustrating with us as well but we also know we've got to put forth the additional effort. To have the conversation so the staffers supporting our representatives have a better understanding of what the needs are for the site. We take every advantage by extending invitations to come and visit us as well as responding to the requests to visit the site. We utilize those opportunities to make sure that they understand the condition of the facilities and what our needs truly are.

Ms. Patterson: Why do they think we don't need to upgrade our infrastructure?

Mr. Johnson: I don't know that they don't think that we need to upgrade the infrastructure. What we have done in the past is we have put together some small projects, things that are less than \$10M, to try and deal with some the infrastructure issues as we encounter some savings during the course of the year. We are at the point now where we need to make sure we have dedicated funding to deal with the infrastructure rather than trying to use savings here and there.

Ms. Patterson: This is coming from me talking with the contractors. Isn't something like \$30M they're thinking a year for 10 years or something which is a long way from zero?

Mr. Johnson: That is a long way from zero and that is a lot of savings to try and recover during the course of the year. If we've made the request for \$17M and if we can reasonably stay in the \$20M to \$30M range I think that we will be in pretty good shape. Obviously if we were able to get something much more you would be able to tackle some of the larger projects. That would at least allow us to plan and know what things we are going to address rather than the past where we have been required to utilize some of the savings to do it. When you are going that route it is difficult to plan which things you are going to do. You can prioritize what you may do but when you don't have the funding in advance it is a little bit more difficult to deal with.

Ms. Patterson: The pension money is through 2020 right? Where is that coming out of?

Mr. Johnson: The pension is a part of each of the PBS's.

Ms. Patterson: Each PBS pays a portion of the pension.

Mr. Johnson: Each PBS pays a portion of the pension and then I think I made a mention of it last time we were here. There are tremendous pension concerns on the site. The numbers required for the pensions are going up significantly. In the past we've gotten some benefits due to specific laws that were passed during the year that kind of held the numbers down for pension. But absent those things we are going to continue to have some trouble with pensions on site.

Ms. Patterson: For 2020 or so?

Mr. Johnson: You are saying through 2020 but that is 2020/2021 time frame. That is the point that number becomes extremely large and I didn't bring it with me but I think we are on the order of about \$275M to \$300M per year just for pensions in that time period. That is about where the bell curve starts to go down. We have looked at a couple of different options on the pension front. We have started conversations to try and get a levelized number for pensions. Now what does that do for us? When I say levelized if we do nothing and there is no specific law that is passed during a particular year to hold down the numbers on pensions we are going to see a gradual increase. Well we are going to see an increase from where we sit today in peaking on about the \$275M to \$300M per year range. What we are seeking is to try to levelize that number. It will be extremely difficult the first of the year because it will be much more than what we have been anticipating. But rather than having a need for \$275M to \$300M any given year, if we were able to get that levelized at some number we could at least plan to that and have a little better understanding and kind of lessen the impact on the particular projects on the site.

Captain Cross: When does it peak?

Mr. Johnson: It peaks in the 2021 timeframe I believe.

Ms. Patterson: I have heard some rumblings; this is off your budget completely, that people in Washington are beginning to recognize that annual appropriations do not work for sites like ours. Is anybody making any progress going forward?

Mr. Johnson: Well one of the things that we did is we started last year looking at five year budgets. Now that hasn't picked up a lot of steam I would say outside of the department but at least within the department we started looking at a five year window for the budget so we can have a little better understanding of the needs for the given cycle.

Senator Young: Mr. Johnson, the last items in the budget overview were safeguard and security and one of the things that has been in the press in the last two weeks has been as of June 19 and July 5 there were eight drone sightings over the Savanah River Site and what I want to know and what I think we as a panel want to know is what can you tell us about these drones that have been sighted over this site?

Mr. Johnson: I am sure Jim will speak up if I start to provide a little more information than what I should be releasing publicly. But one of the things is there were seven drones during the period you referenced

June 19 through July 5. There are policies that are in place for drone utilization where one of the things are drones are supposed to fly at less than 400 feet above ground elevation and drones are supposed to be within line of sight of the individual controlling the device. You are probably well familiar with the size of the site. It is very unlikely that individuals will have line of sight in flying a drone within the confines of the Savanah River. We invoke a security exercise every time a drone is sighted there on the property. So there are concerns over the drones. What is it that is trying to occur with the device, is it taking photos of facilities, is it taking photos of security forces on the site, is it testing the reaction of the site security policies. So there are a number of concerns in trying to deal with the drones but we are going through an effort to try to have the air space over the site restricted, if possible. That effort has started. Right now the policy is simply if there is a drone, the security forces on site will take some responsive action which requires a number of personnel to do many different things typically because a drone has been spotted.

Senator Young: How are they spotted?

Mr. Johnson: This is just visual.

Senator Young: Just visual?

Mr. Johnson: Just visual because if you are less than 400 feet obviously this is something that can be seen with the naked eye. But part of the problem with that is if you are sighting a drone so is every security person on the site, most of the staff, folks that are on the site are now looking up in the sky and trying to figure out what is going on with this unmanned system that is above them because folks are obviously uncertain because they don't know the intent behind that craft.

Senator Young: I think you hit the nail on the head. We don't know the intent with all that's going on in the world today. There is obviously concern with the fact that the site is involved in some of the missions it is involved in and we don't know who these drones belong to and what their intent is. I think you hit the nail on the head on all of those. What I want to make sure of is, I think I hear you correctly, that the DOE is on top of this, Wackenhut Security contractor is on top of it. I think the press is here and it is important that you can just reiterate that to not only the panel but for the press that is present that you are on top of this. The other question I had is you commented that efforts are started to restrict the air space, I thought the air space was already restricted.

Mr. Johnson: Not to the point where it's a no-fly zone. This is just a point of providing notification if someone or a craft is going to be flying over the site and Jim can correct me if I have misstated something.

Mr. Jim Giusti: The FAA has a 2000 foot ceiling over the site that an aircraft can fly over but the air space over the site is not truly restricted. It's not a no-fly zone and so we are working with the FAA and other federal agencies every time we see a drone we report it. We cannot impede an aircraft in the air or a drone unless it poses a known threat to us and so we continue to track those. Our security forces

respond with the procedures we have in place to protect not only the facilities but the workers on site from the aircraft or drones flying over the site. So we are taking our appropriate action and working with the appropriate federal, state and local agencies. Every time we see one of these we respond to it. We have not had a drone flight since the last one July 5, I believe. So it may not be reoccurring again but we're prepared to respond if need be.

Ms. Patterson: You just see them visually. Does radar not track them or could radar track them?

Mr. Giusti: Well surprisingly since the media stories we have gotten emails from several companies that have radars that track drones that you could purchase if you wanted to. I am not sure that is where we are going to go. But we see them, the workers see them flying in the area and they report it to security and our operation center and then we respond to that. They don't stay over the site very long. The come in and go out but they have reached the center of the site so they have been over most of the facility. We are continuing to monitor that and the biggest concern is we don't know what they are doing. They have not tried to fly into any of the secure areas and land or anything else like that. We see them in the air, they fly around and they leave so we are taking the precautions should they do anything more than that.

Dr. Van Brunt: So you mentioned 2000 feet. I just want to know so below 2000 feet?

Mr. Giusti: You would be violating the notice to airmen that the FAA puts out and we would report you to the FAA and they would take whatever appropriate action they do to pilots that violate their notice to airmen.

Dr. Van Brunt: Ok, so it is restricted in some way.

Mr. Giusti: It is restricted in some way but it's not a no-fly zone. I think a lot of people think when they say there's a restriction over an area that means you can't fly over it and that's not necessarily the case. There are various types and various degrees of penalty for violating those restrictions within the FAA. If you are really interested in it I have a public affairs office number at the FAA now and they can explain their rules to you. I do not want to speak for the FAA.

Dr. Van Brunt: Thank you.

Ms. Patterson then asked for concurrence to change the agenda around and allow Mr. Thomas to proceed with the WIPP Status briefing.

**WIPP Status**, Thomas Johnson, Associate Deputy Site Manager, DOE-Savanah River (Slides available here <a href="http://admin.sc.gov/node/1543">http://admin.sc.gov/node/1543</a>)

**Question from Council:** 

Ms. Patterson: So this base for us sounds like what we did before we ever shipped anything to WIPP; certifying the packages and certifying the waste. Are WIPP personnel going to come and do this?

Mr. Johnson: Yes, as part of the certification process they have a team that comes to the respective site to go through the process and in this particular case they are going to have to recertify that the site is ready for shipment of the waste. Your waste is going to meet the new waste acceptance criteria. The sites are best suited to handle any repackaging or anything of that sort that may be needed on the waste. You want to make sure that's identified before that waste is placed in transit and before that waste is received at the facility you are able to deal with it at the respective site.

Ms. Patterson: So the first time we went through this we had to x-ray drums and see what was in them. Do we have to do that again or is this more of a paper exercise looking at our documentation?

Mr. Johnson: Well it's a combination of things I believe. I don't have all the details on it or exactly what we're going to go through on the certification process. As far as duty in a non-destructive evaluations I believe that will be required as well and reviewing the paperwork. Jim Folk is coming up and will provide some assistance here.

Mr. Jim Folk: It is really looking at two different aspects and they are both out there but they kind of use code words when you are looking at acceptable knowledge and that kind of thing. We still have some legacy material left behind - about 600 cubic meters. I believe it is about 1,000 containers. The real focus there is going back and although it was certified to the old standard now it's going to be looked at again from a more in depth prospective. Hopefully it is a documentation exercise. Before they didn't quite reach so far back when it was generated, what chemicals or processes may have been involved, so they are reaching as far back as they can even to the point of trying to identify procedures that were used. Remember some of this was 30 to 40 years old as were the procedures that were used when the material was packaged. It's a very intensive documentation search to go through to do that. We are in the process of working with WIPP in doing that to get some of our material certified. The other piece of it is with the newly generated because don't forget we still generate 30 to 40 cubic meters a year primarily out of Pat McGuire's shop, the materials side. Now we have to make sure for newly generated and newly packaged material we meet these new sets of standards and requirements as well. That's what was referred to when they said they stopped the site certification. They are now going to go back and verifying all the procedures we use now do meet the new standards and requirements. One of those pictures on slide 3 was Atlanta which was referenced in the DSA. One of those people on there was one of mine. They have been very effective at reaching out for resources across the department and contractors. I have one of my safe base guys there. We kind of have a little bit of the insight on what was being thought about and so forth. Now they are going to another team to work the coordination of getting those requirements out to the sites. I have another person on that team. We are working very close to them to understand as well as we can what those requirements are kind of as they are generating, bringing them back to the site and preparing for that.

Ms. Patterson: So is it fair to say that any true waste that is still on the Savanah River Site is going to have to be certified?

Mr. Folk: Yes.

Ms. Patterson: Even if it has already been certified.

Mr. Folk: Yes, now what they have done there is if you take those roughly 1,000 containers that I talked about of the legacy material, they have broken those down. They look at them by their history. It is broken down into about 51 individual streams. That may be type of material, how it was processed, where it processed, all that kind of thing. So that's broken into about 51 different streams, one of those so far has gone through the full certification process. We have three more that are actively in that process. Our goal is whenever mine is ready that we will have as much certified as possible under new guise so hopefully we will be near the front of that line.

Ms. Patterson: Do we have to do anything for the stuff already in WIPP? Do we have to do paper review?

Mr. Folk: There is some material that is stored above ground at WIPP. We are going through the same kind of process to make sure all that material is ok. I believe it is. That may have been that one stream, I am not positive on that but that was certainly one of those focal areas early on because that's what I think Thomas referred to when they do start up they want to manage the material that is above ground and their own generated place as early as they can.

Ms. Patterson: The PBS 13 is the budget right?

Mr. Folk: Yes.

Ms. Patterson: We have a Presidential request for \$51M - does that include money to do this certification process?

Mr. Folk: Yes that's where that's funded from, that is correct.

**SRR Update**, Tom Foster, President and Project Manager, Savanah River Remediation (Slides available here <a href="http://admin.sc.gov/node/1543">http://admin.sc.gov/node/1543</a>)

Question from Council:

Senator Young: You mentioned on developing this new technology putting two in the canister, the \$40M in savings over what period of time is that?

Mr. Foster: I would like to get some help on this but I will speculate a little bit that it took us 20 years to fill two buildings so somewhere over the next five to ten years we will have to build another building and this prevents us from having to build the next building as we are able to double the capacity of the existing one. Jim I don't know if you know but I expect we would have to build the new building probably starting in the next few years.

Mr. Giusti: 2017 roughly.

Mr. Foster: We would have to start in 2017 in order to have it complete to be available for storing the next generation of cans that comes through.

Senator Young: So is that money that would be available in your budget, the one that Mr. Johnson mentioned?

Mr. Foster: I doubt you could find a direct one-to-one correlation .That would have had to be a capital project so it would have probably had a separate funding. When I made the comment we could take that money and put it into remediation I guess I'm using that in a global sense as the American economy we can do that. I don't know that we necessarily have the ability to take those funds and redirect them into a different application.

Senator Young: And right before you talked about that you mentioned that these were supposed to go to WIPP.

Mr. Foster: They would have gone to the repository in Yucca Mountain.

Senator Young: Yeah alright. Of course we know that doesn't happen.

Mr. Foster: Well hopefully they still will at some point. The intent when all this started years ago was to have a building to provide some buffer storage then you would make shipments out to Yucca periodically. Now we just have to collect them there until that's resolved.

Senator Young: Thank you.

Ms. Patterson: Is that the only evaporator in H?

Mr. Foster: There is another one. There is a 2H evaporator as well. So we still have it operating.

Mr. Little: Is this some kind of zeolite or something like that? What's the ARK exchange?

Mr. Kent Fortenberry: It's a CST resin - Crystalline Silicotitanate Tightening non-elutable resin.

Mr. Little: Alright.

**Salt Disposal Unit Update**, Kent Fortenberry, Project Execution and Plans Operations, SRR (Slides available here <a href="http://admin.sc.gov/node/1543">http://admin.sc.gov/node/1543</a>)

Question from Council:

Ms. Patterson: Can you describe short term and long term?

Mr. Fortenberry: Short term would be operational periods so 10/20 years while we are waiting to get into starting to cap these. Ultimately all of these will be covered with a good bit of clay and dirt.

Ms. Patterson: What is long term, 10,000 years?

Mr. Fortenberry: Yes our PA goes out to 10,000 years and beyond actually.

Ms. Patterson: Does this mean all the next big SDU tanks are going to have this liner in them?

Mr. Fortenberry: We are commencing the SDU7 plan now. One of the first things we've done is look at lessons learned and we've developed a series of testing on our concrete to confirm do we really need to add this additional slag and fumed silica. What exactly do we need to the approach for curing? Are there other types of concrete that will give us what we want? Are we just going through that to minimize any cracking in the future? It is likely if you listen to our expert panels they will tell you if you are looking for a zero probability of leakage you can't get that with a concrete tank. That doesn't seem too surprising so it is likely we may have some form of liner or some version of that for future tanks but we are going through that process now.

Ms. Patterson: Since you exceed the strength of the tank, you modeled your PA modeled gravel on the bottom. When would people get a dose and is the dose significant, is the dose anybody would get from this worth the trouble we are going through to do this?

Mr. Fortenberry: In the PA analysis you are looking at a long period of time. So you're way beyond any operational consideration which is really what we are trying to address right now while we are operating the tank. You know with SDU4 we had some leakage. We had some cesium come out and we don't want that to occur so it is about that operational period. If you look at the 10,000 year period, the concrete models I think you are looking at several hundred years where we are assuming the concrete starts degrading and then the saltstone grout itself is providing all of the protection or the resistance to leaching. So yes there is a potential for material to leach out of the saltstone. That's what we modeled and I don't think we have significantly changed that here but we are addressing the operational.

Mr. Byrne: Have you considered going without a construction joint?

Mr. Fortenberry: Yes, in fact that is one of the things we are looking at for the future. Should we build a batch plant there on site and do a continuous placement. So we didn't do that on this one because we didn't have a batch plant on site so we did it in sections.

**SREL/WAND Collaboration**, Dr. Gene Rhodes, Director, Savanah River Ecology Lab (Slides available here <a href="http://admin.sc.gov/node/1543">http://admin.sc.gov/node/1543</a>)

Question from Council:

Ms. Patterson: Do you remember the WAND acronym?

Dr. Rhodes: Women's Action for New Directions.

Ms. Patterson: Are you working with Vogtle and Shell Bluff?

Dr. Rhodes: We haven't but we are going to approach Vogtle about getting their monitoring data. So when we do that we will probably start discussions with them about what kinds of things that we are doing that might be helpful to them.

Ms. Patterson: I am not telling you anything you don't know but the people in Shell Buff are concerned about Vogtle.

Dr. Rhodes: Yes they are. We have also encouraged Georgia WAND to talk to the EPA which they have and we are talking to the EPA because the EPA may be able to provide additional funds to help expand their ability to get us into the well community.

Senator Young: Where is Shell Bluff?

Dr. Rhodes: Shell Bluff is in Burke County. If you come across from the site where Plant Vogtle is there are the two cooling towers and Shell Bluff is just on the other side.

Senator Young: I see it now. I am looking at the map. It's actually not on the river.

Dr. Rhodes: Not on the river, but it is on some of the tributaries that lead into the river I think. There are concerns in that community about legacy contamination as well as the potential ongoing sources of tritium contamination from Vogtle and from the site. There is no data that suggests that there is a problem if you look at the monitoring data collected from in wells and air and everything else. But I understand their concern. That site has been there a long time so we are going to go in and collect some data. We're going to show them what's in their community and if anything pops up in the metals for example. Then we will try to help them understand what that means and what they can do about it.

Dr. Van Brunt: Port Wentworth used to model and monitor tritium and I was wondering coordination with that community?

Dr. Rhodes: We have a number of folks in our own lab that monitor tritium as well. We have a lot of the data on past tritium releases from the site and we have all the current monitoring data tritium releases from the site. But one of the things we are going to do is we are going to go and pull what's available from SCDHEC, pull what's available from the site, and pull what's available from Votgle if they will share the data with us and use that. If you look at the current wind directions and ground water flow and all of those things suggests there is really nothing moving that way. But we are going to coordinate with that community.

## **Public Comments**

There were no public comments.

The next meeting of the Nuclear Advisory Council will be held on October 13, 2016.

## Meeting adjourned