

GOVERNOR'S NUCLEAR ADVISORY COUNCIL MEETING

Gressette Building, Room #209

July 10, 2014

1:00 pm - 4:00 pm

Present: Karen Patterson, Captain Claude Cross, Carolyn Hudson, Vincent VanBrunt, David Peterson, Senator Tom Young, Representative Don Wells

Welcome: Chair Karen Patterson welcomed members and guests and entertained a motion to approve the minutes of the April meeting. Motion made and seconded to accept the minutes from the previous meeting. Motion passes.

Duke Update (slides and audio available here <http://energy.sc.gov/gnac/meetings>)
Steve Nesbit, Director Nuclear Policy and Support

Questions from the Council:

Ms. Patterson: What is the workforce for a retired plant? Where do the displaced workers go, what options do they have?

Mr. Nesbit: It depends. In the case of Crystal River, we did our best to place people at the site, in jobs maintaining the site until we complete decommissioning. We also transfer the people to other departments as applicable and some are unfortunately laid off. We did a good job minimizing layoffs.

Ms. Patterson: Are these 4 areas (equipment reliability, workforce sustainability, outage execution and financial stewardship) that you need to work on?

Mr. Nesbit: We are always trying to do better, these are the four areas that we call out with particular initiatives and try to address issues that we see.

Ms. Patterson: Why is it getting more expensive to run nuclear plants?

Mr. Nesbit: It still is cheaper to produce electricity at a nuclear facility with the exception of fuel-free things like solar and wind, which of course are expensive to build and do not run around the clock. Nuclear is very people-intensive operation, but our fuel is cheaper, and our electricity is still the cheapest. We are always trying to improve.

Mr. Haynes speaks (slides available here <http://energy.sc.gov/gnac/meetings>)
Larry Haynes heads the Nuclear Fleet Scientific Services group in Charlotte.

Ms. Patterson: Does NRC have regulations for monitoring and surveying your pipes?

Mr. Haynes: This is a voluntary initiative, but NRC does regulate the way we manage our pipes and systems and do inspections. This is not a regulation but it's in our procedures which becomes part of the regulation.

Ms. Patterson: Do you hold up your Tritium batch releases to meet the federal standard?

Mr. Haynes: We filter and clean it, but it is hard to remove since it is water. By nature pressurized water reactors produce more tritium than boiling water reactors. The Groundwater Protection Initiative started with an Illinois plant leak issue. It requires disclosure of information to the public any time a leak occurs. We monitor water flow patterns, water migratory paths, and do additional sampling. We inform our stakeholders, the NRC, and put out a press release. There is also a focus on preventing leaks and spills to avoid the issue to begin with. Piping and tanks are part of this. Inspections are constantly being performed on pipes and tanks.

Ms. Patterson: So this was a leak or a line repair?

Mr. Haynes: In May 2014 at Oconee, during a refueling process, we were transferring water to be adjusted chemically, a pipe leaked into a storm pipe which then became a puddle. Water was visible on the asphalt. It was greater than 100 gallons, but the Tritium level was barely detectible. The water transfer was immediately halted and we informed people. A simple repair stopped it.

Ms. Patterson: How can we prevent this from happening?

Mr. Haynes: We have trained our workforce about their impact on the plant and to keep an eye out for water in the wrong place. We use this incident as training for the staff. We have 40 monitoring wells at Catawba, 30 at Robinson, and 60 at Oconee. Catawba had 2 NEI 07-07 issues in 2013. These issues were resolved; they involved bad pipes and a pond overflow event.

Dr. Peterson: Traditional radiation badging systems aren't sensitive to Tritium. So there is no way of monitoring the effect or monitoring the exposure through drinking water. Effects of drinking tritium water is unknown.

Mr. Haynes: We have several programs. We look for tritium through the atmosphere and we can perform urinalysis to calculate levels in the employees that might be exposed. Fortunately we don't have to do that very often since the plants are designed to not have employees exposed to Tritium.

Dr. Peterson: Then what would trigger a urinalysis program?

Mr. Haynes: We perform air sampling in the spent fuel pool areas where you have increased levels from evaporation that can detect levels. If we have an increase of Tritium in the samples then we would perform urinalysis for a person that had spent time in that area.

Dr. VanBrunt: The background is approximately 2 orders of magnitude less than 20,000 picocuries per liter (pCi/L)?

Mr. Hayes: I think that's right. We typically see in environmental samples 200-250 pCi/L detectors. We have 10 minute counts, others up to 12 hours. We do special treatment for our environmental program.

Dr. VanBrunt: So your 3000 pCi/L detection limit is between background and EPA drinking water standard?

Mr. Haynes: That's right.

Mr. Nesbit: The equipment in the environmental lab has a lower detection limit, but the stuff on site has a higher detection limit.

Dr. VanBrunt: The level is very low. It seems hard to measure.

Mr. Haynes: The environmental counts require evaporation to get accurate measurement so it can take 10-12 hours to do a test in the lab.

Ms. Patterson: Did your groundwater monitoring extend to diesel fuel and solvents?

Mr. Haynes: Yes. Under the NEI 0707 only radioactive materials, but the state regulations require reporting in those instances.

DHEC Update (slides and audio available here <http://energy.sc.gov/gnac/meetings>)

Shelly Wilson, Federal Facilities Liason, SC Department of Health & Environmental Control

Questions from the Council:

Ms. Patterson: Are you expecting a response from DOE? Do you know of anything we can do to push the funding issue?

Ms. Wilson: We would certainly like to have one, yes. The Department of Energy hasn't responded yet, if we can all urge the DOE to request and fight for the money, that would be helpful.

Captain Cross: Is this just a 100 million dollar problem?

Ms. Wilson: The money is a huge issue, but it is a cumulative problem that has taken a long time too. I'm not certain what is at the root of it.

Rep. Wells: If the DOE fails to meet the milestones will they be fined? If so, where will the money for the fines come from?

Ms. Wilson: We do anticipate accessing fines and penalties. There are stipulated fines in place. At the end of FY15, the fines can amount to more than \$193 million to DOE. The money would come from the Department of Energy and from our tax dollars unfortunately. We are using the fines to try and get their attention more than we are trying to get the money.

Ms. Patterson: So your goal is not necessarily to fine them, but to get the funding and get the process moving?

Ms. Wilson: Yes, but we are certainly prepared to fine.

Dr. VanBrunt: Tank 16 closure costs should be minimal. It has been empty since the 1970s. So I was wondering is the reason for going after that tank because there is a lack of funds or why hasn't it been closed before?

Ms. Wilson: Other tanks have been closed and that one is just next on the agenda. The DOE can give you better estimates. Much of the cost is grout work and characterizing residuals.

German HEU EA (slides and audio available here <http://energy.sc.gov/gnac/meetings>)
Gary DeLeon, EM-22, Director of Nuclear Materials Disposition

Questions from the Council:

Captain Cross: What is the timeline to complete the EA?

Mr. DeLeon: It is difficult to predict, I can only say what we estimate. Right now we are looking at 9 months to a year is a reasonable estimate. It depends on the amount of public input and also the ongoing scale-up work. We need to get results from testing to provide input about how much waste will be generated and what type of waste would be generated. This is a best guess; it could be longer or shorter.

Captain Cross: What would happen if we didn't get this done in time and the lease is up on the German storage area?

Mr. DeLeon: That is a decision by the German government. They have their own urgency within their country to determine what to do. We are trying to support their schedule, but it's not necessarily our schedule. We have to do what we are required to do to the extent possible. We want to support their schedule, but it is our schedule to comply with our tasks.

Captain Cross: Do we consider the German government custody of this fuel a risk for proliferation if they kept it?

Mr. DeLeon: We consider the HEU anywhere (of US origin) of concern to us. We would like to work with our international partners to take that back. We recognize the budgetary concerns of SRS and the DOE. We expect our partners to share in the liability for dispositioning this material. While no decision has been made they are very aware of that as well.

Senator Young: Thank you for being here. You stated in response to Captain Cross' question 'we need to comply with what we need to do', what did you mean?

Mr. DeLeon: Meaning how long will our NEPA analysis will take. We are going to follow the process required to do that no matter how long that takes. We must follow the process independent of their schedule. It may comply with their schedule, or may not. Also, the German casks must be reviewed per our processes. I also mentioned even though the casks are licensed in Germany for transport, we need to make sure they would meet our requirements.

Senator Young: Is the HEU reduction that the US is doing a law, or a DOE policy, or a national security policy. Who established the policy? Is that something that Congress has established? The President?

Mr. DeLeon: I can only comment on the DOE policy. I know that the DOE has been repatriating the HEU and it has been going on for many decades now to return that for safe storage and to convert that material so that it could no longer be used for illicit purposes.

Senator Young: This policy has been place for many decades. There are other nations that have sent HEU to US?

Mr. DeLeon: Yes. When I say this type of material, US origin HEU, from many countries that is in storage now at the Savannah River Site.

Senator Young: So SRS has HEU material from different nations stored at SRS now. And that material has not been disposed of is that correct?

Mr. DeLeon: We are in the process of processing the fuel by the end of the year. Our plan is by the end of this year. Right now the H canyon facility we are completing our current campaign of processing potentially vulnerable spent fuel in extended storage and when that is completed we will begin processing this fuel starting this year. Also back in March of last year we issued a decision to process some of this fuel for them.

Pat McGuire (DOE): We have been doing a variety of different programs. What we have been concentrating on prior is un-irradiated spent nuclear fuel and we processed that to reduce the load on the liquid waste system. We were also awaiting the NEPA decision on processing the spent nuclear fuel and we recently got permission to begin doing that. We are in the position now to start processing the spent nuclear fuel and will start by the end of this fiscal year and continue for the next several years until we get it processed and out of L Area. That allows us to continue to support the nonproliferation agreements and treaties with other countries. That will enable us to begin a 3-4 year campaign to process the (German) material as quickly as we are able to. We will await the NEPA decision and then process. We also accept HEU from domestic sources from TN, MIT, and University of Missouri. We are getting both foreign and domestic spent nuclear fuel and will process in a way that we can meet our obligations with TVA to supply them the low enriched uranium to fabricate into nuclear fuel. So depending on the recipe we may process domestic as well as foreign so it's more of a chemistry recipe on the number of foreign fuel assemblies as well as domestic.

Senator Young: Help me understand as a public official. What I'm hearing is that there has been this type of material coming to the Savannah River Site and put into storage for decades. We haven't done anything to put it down the disposition path. And now we are talking about bringing in more material from Germany and we are looking at what the disposition path for that will be. And I know that some of the people here today and others have a lot of concerns about more HEU coming to SRS and siting without a disposition plan and what I'm hearing is that this has been done in the past and has been sitting for decades and we are bringing in more stuff and we haven't started trying to get rid of what we already have.

Mr. DeLeon: I would say that is accurate. That's a quick answer. However, what is different with this material is that the funding will be available and the NEPA decision would have been completed. One of the reasons we did not process the other fuel is that we were waiting on the NEPA decision. The second part is funding. The difference this time is that we expect that the Germans will provide the funding in advance so that it is available once the material has been

received. We don't have an agreement yet, but it is the expectation we would solve that obstacle in advance because we do know the troubles and challenges we've had with that in the past.

Senator Young: In the past, when another nation has sent US origin HEU back to the US, did that nation(s) provide funding to dispose of the material at the time that they sent it back?

Mr. DeLeon: We do. Yes. It was posted in the Federal Register that there is a fee associated with the receipt of the fuel but the fee only partially funds the disposition of the material.

Senator Young: So where is that money now? That money is just gone? Is it fair to say that we have accepted material in the past and accepted a fee to dispose of it from the nation we accepted it from yet we still have the material and the money that they gave us to dispose of it is gone?

Mr. DeLeon: Well the fee that we received was not sufficient for ultimate disposition of the fuel and is mainly for the receipt and management of the fuel and that is one of the things we are trying to change. We want to make sure we have the necessary funds and have that available up front. The current fee policy is only to offset and not pay for the cost completely. We want to make sure that if we go forward that we get funding provided for.

Senator Young: So you are saying a new fee policy will be put in place for this batch of HEU from Germany?

Mr. DeLeon: That is our expectation with the Germans.

Senator Young: What is the motivation for the German government to pay the United States to dispose of this stuff?

Mr. DeLeon: They do not have the capability and expertise that we have at the Savannah River Site. We have the H canyon facility and the supporting facilities at SRS that the German government does not have. It's just an infrastructure issue.

Senator Young: If we don't know how much it is going to cost to dispose of the waste, then how do we know how much to charge them?

Mr. DeLeon: That is something that we are in the process of developing. As we do the scale-up work we can determine the cost. It will determine how many years it will take. We are also assuming right now how much waste is involved.

Senator Young: Let me stop you there. Did you not just say that you would be making a determination about whether or not to take the waste in nine months?

Mr. DeLeon: Let me clarify. What I said was that we hope that the NEPA process would be completed in 9-12 months. But the NEPA process is not a decision; it's just a completion of part of the process.

Senator Young: So what do you think the timeline is for when a final decision will be made about whether we will accept the fuel and what the cost would be and how much they are going to pay and when the public would be informed?

Mr. DeLeon: It would not be sooner than when the NEPA is completed in 9-12 months and when we figure out how long the process will take to process the fuel. So about a year from now we hope to have better information. Whether or not that information is sufficient to make a decision is something that is to be determined. At that point the public will be able to be involved and make comments.

Senator Young: A year from now is July 2015 and the German government said their timeline is June 2016. So if we have all of the information in a year from now then what is the timeline after that when a decision would be made to send the material here or not?

Mr. DeLeon: If the German government oks the amount based on the amount of fuel and work then we would go from there. Depending on the amount of shipments. Right now there are 152 casks. That really is a matter of how many casks you could put on a ship and move. You can do 16 casks per ship at 10 shipments. If we do every six weeks we might be able to do it in a year. We just need to better understand the technical and logistical issues and the environmental and funding issues we can go from there. Once the NEPA EA is complete, and once we get funding, we will see how many casks can be shipped per boat, inventorying about the full shipment in one year.

Senator Young: Let me ask you about the public again. You want to get public comment, but you aren't required to get public comment. True?

Mr. DeLeon: Under the NEPA policy act, when we do an EA, it is not necessarily required that we have a public comment period. We wanted to seek out public input so we did have a public comment period and we plan to have another one as well.

Senator Young: When are you meeting the public next?

Mr. DeLeon: It has not been determined yet, but once we issue a draft of the EA we will provide sufficient notice for getting input.

Senator Young: What happens when we know the cost of the project? What if the Germans only pay half the cost? Will taxpayers be on the hook?

Mr. DeLeon: In our discussions with the Germans it is our expectation is that the Germans will cover the whole cost.

Senator Young: Have you factored in the possibility that it will take longer than three years? At that point can you re-negotiate the price with the German government?

Mr. DeLeon: Yes, that is a consideration. We have to have a contingency in the contract and convey to the Germans that this process is being developed is the first of its kind and we have to take into account that if there are issues we need to take that into account.

Ms. Patterson: NEPA does not fit the concerns that that we have. So what other components will go into this decision process and where will the public have opportunities to comment. For instance, I am concerned that the money will go into the US Treasury and we will never see it again. I am not concerned about the technical capabilities of SRNL getting it done, I am very concerned about getting it here and having it languish because we didn't get around to it or the money is gone. I would like for there to be a place where the public can voice their concern about the schedule and about the fact that this is actually going to happen when they say it's going to happen and the money will be attached to those casks and that the waste will be processed and that the money will not just go to the national treasury and not to the project? How do we communicate those kinds of concerns and get them addressed?

Mr. DeLeon: First let me say that we share your concern about funding. We have spoken to the Germans that the fee structure will be different than usual. We are looking at how we can convey to them that this is not going to be a fixed price. We are looking at ways to guarantee the money stays with the project and that this is not something that is going to take the place of money for other missions at the site. We are seeking ways to have public dialog as part of the NEPA process and address concerns whether through these forums or other places that we can hear the concerns and how we can address them.

Ms. Patterson: I am going to put this in the scoping section of the NEPA document that we want someplace to have a discussion and guarantees to the state that this actually going to happen the way you have laid it out and is the way that it will ultimately be laid out.

Pat McGuire: I think that is a very good path forward. You might consider writing a separate letter outside of the NEPA process to help reinforce your position would also be beneficial.

Rep Wells: When we are talking about bringing in HEU and turning it into LEU that can be sold to a vendor. Would the byproducts created, that become nuclear waste, would they be stored at the site or is there a pathway for disposition of that material?

Mr. DeLeon: The byproducts will be vitrified and stored as waste. Right now we estimate an additional dozen or so high level canisters that would be generated. If we converted to LEU. One of the alternatives if this was all going into glass logs, it would be as many as 200. There is also the salt solution that would be disposed of in the saltstone vaults on the site.

Rep. Wells: What about the casks? What happens to the casks?

Mr. DeLeon: The casks can be disposed of as low level waste or cleaned for other storage purposed. Ultimately they will be disposed of.

Rep. Wells: With the shipment of this product, if we move forward, would the shipment come in all at one time or would it come in as you process it?

Mr. DeLeon: That is to be determined. Certainly the Germans have conveyed that they would prefer to ship it as soon as possible. There are ongoing activities at the canyon; we want to be able to process it as quickly as possible.

Rep. Wells: If we processed the HEU when it was shipped, we wouldn't have decades of waste sitting around with nothing being done. I'm wondering why we don't have something like that in place to avoid accepting a shipment and have it sitting around as well.

Mr. DeLeon: That is an option; we could look at that because the German government wants to get rid of the material so we can look at that.

Ms. Patterson: We obviously have a lot of questions that DOE does not seem to be able to answer. Would it be OK to postpone the remainder of this presentation until we have answers that are more firm? Is that OK with the rest of Council?

Council: Yes, that is fine.

Ms. Patterson: Thank you so much for coming and we will be in touch for an update in the future.

Savannah River Site Update (slides and audio available here
<http://energy.sc.gov/gnac/meetings>)

Jean Ridley, US Department of Energy, Waste Disposition Programs Division
Introduces speakers

Stuart McVean, Vice-President of Savannah River Remediation
Brief welcome

Steve Wilkerson, Defense Waste Facility & Saltstone Facility Project Director, Savannah River Remediation

Questions from the Council regarding LLW contamination at stormwater outfall Z-01:
Dr. VanBrunt: Can I ask, contamination of what?

Mr. Wilkerson: It's mostly in the soil and is mainly Cesium 137 that we have found.

Senator Young: Is the contamination close to the pipe or closer to the river?

Mr. Wilkerson: We put sedimentation breaks after the pipe that keeps the sediment from moving. We have sampled those, we have gotten no liquid samples with radioactivity but there are soil samples with low levels. We are monitoring McQueen's Branch and there are no signs of radioactivity.

Senator Young: Is McQueen's Branch solely on the site property?

Mr. Wilkerson: I think the answer is yes, but I will check. Downstream it is all on our property.

Senator Young: Is there any monitoring from where McQueen's Branch goes to the Savannah River?

Mr. Wilkerson: Yes. McQueen's Branch goes to Upper Three Runs Creek and then to the Savannah River. We monitor Upper Three Runs as well and there is no contamination. Better sedimentation breaks are being built this year.

Presentation Continues regarding leaks sites at Vault 4:

Dr. VanBrunt: Is there any water freezing and going into any of the vault cracks?

Mr. Wilkerson: We haven't seen any freezing temperatures. The temperature stays relatively high with the concrete form and we keep the water level very low inside the containments. The walls are about a foot and a half and we haven't seen any indication of freezing. We monitor the temperature.

Ms. Patterson: I think ultimately we are going to put soil over the vaults. Is the roof cap designed to last, and how will it be monitored once it's covered?

Mr. Wilkerson: The roof that we put on is fairly standard. There is an 8-10 year life before you have to go back and do maintenance. We wanted to put something there was not going to create a problem. The cap is just enough to reduce exposure for the workers. We still have to go in after closure and put on a permanent cap.

Neil Davis, Project Director for Tank Farms and Effluent Treatment Facilities

Questions from the Council regarding next generation solvent at MCU:

Ms. Patterson: ARP MCU was put in place as an interim facility. Is it going to wear out before we have salt waste processing?

Mr. Davis: We have two big sets of lifecycle extensions completed and ones ready to deploy if it is necessary. We don't feed this plant with the higher activity feed. So I think we have several measures in place to help the plant get to SWPF start-up.

Dr. VanBrunt: With such a large change in DF, is there any understanding of synergism to get that large change in terms of what the solvent is actually doing? All of the sudden you have a large change; you usually associate that with the enhancement due to two chemicals interacting together. I was wondering what the difference was between those two peaks.

Mr. Davis: Not at this point. I will say this, there are a number of tanks between the contactor banks in this process and there is a heel of waste in each of those tanks and we get to a point where any variation in this process will carry on to the next sample and the next sample so it's hard to identify exactly what happened in any of those peaks and valleys but we will try to learn what we can. In the past we had the opposite problem and managed to determine that cause so we do look at them we just don't have enough data yet to do it at this time.

Captain Cross: When will SWPF come online?

Ms. Ridley: The current date we have been given is September of 2018.

Mr. Davis: So we have our eye on that date and will continue to make the plant work until that date.

Captain Cross: When was the initial plan?

Ms. Ridley: I think 2008 but I'm not positive on that date.

Dan Wood, Tank Closure

Questions from the Council:

Dr. VanBrunt: When you say leakage, you mean leakage into the saucer?

Mr. Wood: Only one tank has ever leaked into the environment that we are aware of. Tank 16 has leaked to the annulus and then did leak through the concrete encasement and into the soil. All other tanks are in an inspection program where leakage is monitored. If it is occurring, the levels are dropped below the lowest known leak point/level. We keep levels low and have no active leaks today, especially to the environment.

Ms. Patterson: I recently looked at 4-Mile Branch data and in the 90s there is Technetium and Iodine in the seeps at the 4-Mile headwaters that SRNL determined came from the seepage basins. How are you sure that the contamination came from basins and not the tanks because they are not very far from 4-Mile?

Mr. Wood: I'm not an expert in the groundwater monitoring program, but we can certainly get you that information. There is an extensive ground water monitoring system. We have data from dozens of wells and I will get you the most accurate answer.

Peter Hill, System Planning Manager for Savannah River Remediation (System Plan Rev 19)

Dr. Hudson: What is the environmental impact of cutting out the Ion Exchange Program?

Mr. Hill: There is no change in radionuclide components or effects to the environment. If you see the comparison of Rev 18 to Rev 19 you'll see that salt processing is extended by five years in two scenarios. There is an impact to having the waste in there for those additional years.

Captain Cross: Is there a plan to have underground piping system maintenance similar to commercial nuclear plants?

Mr. Davis: We have underground waste transfer lines, all of which have a jacket. While those systems are getting older, we don't anticipate leakage because the core pipe failed and the jacket failed. We have a good testing program. We also have underground service piping (steam, air, water). All of that is at least 30 years old. We are working to bring that piping above grade. We have a piping program that we are a year into and it's at least a three year project. We are looking at other facilities and have they have done it. We are benchmarking best practices.

Dr. VanBrunt: Do you estimate the effect of federal fines into your planning? Because that could significantly change the numbers involved. Have you presented that information to headquarters?

Mr. Davis: No, we do not.

Ms. Ridley: Headquarters is well aware of the state's letter to Moniz and they are currently working on a response. I don't know when it will be issued. The DOE is well aware that the state intends to fine if milestones aren't met. We are currently developing an executive team to discuss strategy going forward.

Dr. VanBrunt: But if you have not included that in your model, why haven't you?

Ms. Ridley: We have incorporated Rev 19 into the model we were waiting for it to run to see what the impacts were before we knew we were going to miss the milestones by what it is projecting. However, as you saw by some of the revisions, it is a tool, a modeling tool, and sometimes it shows extending the life by longer than we thought. At this point we are not prepared to incorporate or say that we have missed any milestones because we have not to this date.

Dr. VanBrunt: But you are trying to model into the future and you are presumably going to have to follow the law and if the state is talking about imposing this fine, then you should project or take into account that the state is going to impose this fine and I don't understand why you haven't included it in the model.

Ms. Patterson: Are you suggesting that the fine is going to come out of the high level waste funding?

Dr. VanBrunt: Yes, that's additional cost.

Ms. Ridley: I don't know the answer to that question. I'll take the question back and see what the department's response is. Where that money would come from I don't know the answer to that if we are fined.

Ms. Patterson: It looks like we have gained or lost 40 years depending on the tank closure. Two questions: DOE is asking for these alternative analyses, is SRS asking so they can point out to headquarters the dire situation or does headquarters realize how dire the situation is?

Ms. Ridley: Headquarters is aware and we have briefed up through the EM offices. At this point that is all I can tell you, that yes, they are aware.

Ms. Patterson: So they are not asking for these alternative analyses?

Ms. Ridley: No, the addendum was internal to us to try and put the focus on cleaning the old style tanks first.

Ms. Patterson: My last question is since we now operate half of our fiscal years under a continuing resolution, which means 3-6 months of every year is not operating at the level of

funding you would hope for. Do you ever catch up? Do you lose time every year that you can never regain?

Mr. McVean: Yes, ultimately there are things that money cannot recover. But, this year is a good example. If you remember the funding profile, we started the year at \$380 million. We actually had a funding increase for the first six months of the year. We actually used that increase to recover many of the items that fell behind in the first six months. There are things that money cannot recover. We had an increase in the funding profile to try to recover the work. When you are on a short schedule, you lose ground. Funding is a concern.

Ms. Patterson: Thank you very much.

Public Comment:

Tom Clements, Friends of the Earth (handouts and audio available here <http://energy.sc.gov/gnac/meetings>)

Susanne Roads, League of Women Voters (slides and audio available here <http://energy.sc.gov/gnac/meetings>)

With no further comment or questions from the Council the meeting was adjourned.