

**Sweeney, Beverly**

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**From:** Flanders, Scott - NYRO  
**Sent:** Monday, January 11, 2010 10:29 AM  
**To:** Schaaf, Robert  
**Subject:** FW: Comments on WITS20900231

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**From:** Zalzman, Barry  
**Sent:** Friday, January 08, 2010 6:11 PM  
**To:** Flanders, Scott  
**Cc:** Clayton, Brent  
**Subject:** RE: Comments on WITS20900231

I mentioned this to Brent and Nilesch as well as to you and indicated that I would respond in case he needed more information.

Perhaps this is as simple as understanding that a concurrence with comments allows the originator to determine whether or not to make changes to the document after considering the comments. If we planned to disregard the comments, then we would not have provided the explanation on how we considered them.

We only received NRR's concurrence at noon on 1/6 and I e-mailed him shortly thereafter with our approach and which comments would be addressed. By the time we received his reaction late yesterday 1/7, the package was with the front office. He was not in today. That's why we gave him the longer, more detailed explanation below.

We are not trying to minimize the value of the comments, but there is a reason that we decided on a high-level approach to keep this in perspective; if NRR had the lead, then we could have had a different outcome. We should leave it to the NEPA working group to follow the Commission's guidance accounting for the work products issued to date.

I have tried to be clear in our position and communications, but closure may be elusive.

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**From:** Flanders, Scott  
**Sent:** Friday, January 08, 2010 5:34 PM  
**To:** Zalzman, Barry  
**Subject:** RE: Comments on WITS20900231

Did we get to closure on this?

Scott

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**From:** Zalzman, Barry  
**Sent:** Friday, January 08, 2010 2:46 PM  
**To:** Imboden, Andy  
**Cc:** Clayton, Brent  
**Subject:** RE: Comments on WITS20900231

Andy -

Let me expand the discussion and provide some of our logic on how we see the tasking.

A/25

We certainly did not disregard NRR's comments; we did consider them in preparing the initial versions and the final correspondence. In fact, you may have noticed that we made changes between the version that we shared earlier and the one that was provided for concurrence; we even strengthened the text about the work of other programs based on concurrence comments. The text of the final version was:

"... The staff will continue to address GHG emissions in new reactor licensing environmental reviews. The GHG emissions issue is also currently being considered in EISs in the materials and operating reactors areas as well."

The approach agreed to with the signatory of the memo (Mr. Johnson) was to keep the perspective at a high level (i.e., the staff is on top of this in NEPA space and is already addressing the emerging issue). The memo will be issued to the EDO, not to the Commission; this tasking was not the result of an SRM. The Commission did not find it necessary to opine (its words) on the past reviews, so we did not want to focus on the past either. Consequently, while we believe that it is not necessary nor appropriate to enumerate the reviews where GHG has been considered, the staff is keenly aware of them and we expect that they will be used as starting points for the agency wide discussions. The guidance from the Commission is forward-looking with an objective of consistency; that will not be achieved overnight.

It was the ASLB that took on the "carbon footprint avoided" issue and suggested that the Commission weigh in; the Commission did not do that. The guidance is limited in scope:

"... because the Staff is currently addressing the emerging issues surrounding greenhouse gas emissions in environmental reviews for the licensing of nuclear facilities, we believe it is prudent to provide the following guidance to the Staff. We expect the Staff to include consideration of carbon dioxide and other greenhouse gas emissions in its environmental reviews for major licensing actions under the National Environmental Policy Act. The Staff's analysis for reactor applications should encompass emissions from the uranium fuel cycle as well as from construction and operation of the facility to be licensed. The Staff should ensure that these issues are addressed consistently in agency NEPA evaluations and, as appropriate, update Staff guidance documents to address greenhouse gas emissions."

If the Commission wanted to do more at this stage, then it would have directed the staff, for example, to prepare a paper that would lead to a Commission Policy Statement. While it may still elect to do that after the public policy debate matures and after adjudications set precedents, it did not now. In the interim, we should not be expected to impede the progress on licensing actions. I believe that we can all agree that the internal mechanism that already existed among the environmental branch chiefs is the best starting platform to ventilate this issue within the EDO's program offices. Thereafter, the Division Directors with environmental missions can vet the approach that the branch chiefs recommend and allow the staff to apply it consistently. I am sure that we have some staff members who will think that this is an exciting opportunity to pave new ground; I would encourage them to curb their enthusiasm and avoid controversy.

Keep in mind that the Commission's direction is solely related to greenhouse gas emissions in its NEPA reviews of major licensing actions; for every NEPA review of a proposed action, the staff already has the obligation to consider a reasonable range of alternatives including the "no action" alternative. There are other elements related to climate change that are not covered by the Commission's direction, but we know that Commissioners have expressed interest in them; we are communicating with their offices on the safety side as well. The effects of climate change on the safe operation of nuclear facilities is not the same as the environmental effects of activities related to construction, operation (including the fuel cycle), and decommissioning on climate change. Climate change in terms of geographical extent and intensity affect water resources, air resources, ecological systems, health issues, demographics, economics, etc. Some effects have different time scales and some will be more localized than others depending on proximity to boundary conditions. Staff hydrologists are already considering the potential effects of climate change on precipitation, floods, storm surges, tsunamis, seiches, icing, droughts, etc., but these are principally safety issues dealing with facility design and operation.

While we are aware of information from a variety of sources (and our licensing actions can be informed by the views and opinions of others, especially as part of the NEPA process), the NRC must rely upon high quality

and reliable information for its NEPA reviews rather than on unsubstantiated views, opinions or hearsay. We certainly would not disregard comments from other governmental officials either; in fact, we consider Federal, State, Tribal, and local government sources of information very seriously. However, the linkage to the USGCRP work and the NRC's reliance on those agencies of the Federal Government with a mandate to inform the policy makers of the U.S. on the science of climate change cannot be understated. We are fortunate to have the cited report in hand and I believe that it is the NRC's best interest to embrace the Federal position unless we are prepared to defend departures from it. We may have reason to do so in the future, but in my view, we do not have any reason to do so now. If, collectively, we believe that there is a need to rely upon other entities outside of the USGCRP community, then I believe that we have the time to inform the Commission after the staff has developed its rationale. We should not prejudge that the staff guidance would require the use of information sources that have not been considered in by the USGCRP. Insofar as there may be safety questions regarding the effects of climate change on nuclear facilities, I believe that the staff will address them appropriately; we earnestly do not believe that they are part of this tasking.

Hope this helps. Brent and his management would be happy to discuss this with you and yours, if needed.

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**From:** Imboden, Andy  
**Sent:** Thursday, January 07, 2010 4:40 PM  
**To:** Zalcman, Barry  
**Cc:** Clayton, Brent  
**Subject:** RE: Comments on WITS20900231

Barry-

I'm confused about your email response - NRR concurred with comments and it's not clear to me if you are going to disregard them in your memo. Here are the specific issues that led to NRR's comments. Note that these are not new issues, they were largely transmitted to NRO several weeks ago.

Referencing other documents besides North Anna COL: Because of the Commission/Chairman's stated concerns about NEPA consistency, this memo should provide some pointer to documents addressing GHG emissions. Especially documents that the NRC has already published. If you don't want to include an enumerated list, you could footnote the examples provided by FSME and NRR, have an enclosure where references are provided, or you could say something like "such as in EIS for multiple recent license renewals, starting with Indian Point." Although you are reluctant to draw attention to other NRC products, NRR feels it is critical to provide this information clearly with the Commission as they are in the early stages of setting agency policy.

Alternatives: NRR's comments weren't just a comment on the science of policy change (which we both agree to). However we note that the Commission order and memorandum that kicked off this task also mentions things like the carbon footprint avoided, so we were attempting to include the staff's intent to compare GHG emissions between the proposed action and the alternatives. Currently, the paper is silent on that aspect.

Narrowed sources of information: The point is that the federal level isn't the only source of information, nor the only level of government with GHG mandates, as this paper would seem to imply. For example, during the Prairie Island public meeting we heard from the State of Minnesota on impacts of ice cover on that stretch of the river. NRR comments were intended to inform the Commission that we will incorporate info not just from the GCRP.

Andy

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**From:** Zalcman, Barry  
**Sent:** Wednesday, January 06, 2010 1:02 PM  
**To:** Imboden, Andy  
**Cc:** Clayton, Brent  
**Subject:** RE: Comments on WITS20900231

Andy-

First, thanks again for the thoughtful comments. I'm on the road next week and out for the rest of the day, so I need to move this along; I wanted to address your comments..

**Enumerating the EISs** -- You were not alone in suggesting that we list the EISs. In my e-mail back to FSME, I touch on this point as well. I do not believe that we need to draw additional attention to the NRC work products outside the normal course of business. I've attached my excerpted comments back to FSME, below. They apply here as well.

**Science of Climate Change** -- You are right on the science of climate change rather than of GHG. As for emerging science and public policy regarding GHG and climate change, it is not unique to licensing actions and alternatives.

**Sources of Information** -- We really want to rely upon those organizations with the mandate to consider the science and to provide insights in addressing the issues (e.g., Federal agencies that have enviro-something in their title). We do not want to revisit issues related to "high quality and reliable" information. However, we intentionally included the opportunity to gain from experience; embedded in that opportunity is for the public and scientific community to share their views on licensing actions and alternatives thereto.

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**From:** Zalcmn, Barry  
**Sent:** Thursday, December 31, 2009 12:10 PM  
**To:** Felsher, Harry  
**Cc:** Camper, Larry  
**Subject:** Comments on WITS20900231

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As for the second point, we addressed the inclusion of GHG in EISs in the materials and OpRx areas in the second paragraph on page 1 of the document; NRR has included GHG text in its recent license renewal EISs. The key point that we were trying to make is that the Staff was already on top of the topic; we did not want to enumerate the inventory of EISs and draw more attention to them than is warranted. We would have preferred not to revisit NUREG-1917, but the Commission referred to it; we have a number of new reactor draft EISs in the final review stages and our approach has evolved since issuing that draft EIS.

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