

**U.S. Environmental Protection Agency (EPA) Board of Scientific Counselors (BOSC)
Air, Climate, and Energy Subcommittee**

Conference Call Meeting Minutes

July 20, 2015

Date and Time: July 20, 3:00 to 4:00 p.m. Eastern Time

Meeting Minutes

Minutes of the conference call discussion follow. The agenda is provided in Appendix A, and the participants are listed in Appendix B.

Welcome and Opening Remarks

Dr. Viney Aneja, Chair

Dr. Tim Benner, DFO for the Board of Scientific Counselors (BOSC) Air, Climate, and Energy (ACE) subcommittee, formally opened the meeting. Dr. Viney Aneja, Chair of the BOSC ACE subcommittee, welcomed the subcommittee members to the conference call. He said that the conference call was primarily scheduled to deliberate on a draft report created to address the charge questions that were presented to the subcommittee in a face-to-face meeting from June 18-19, 2015 in Research Triangle Park (RTP), NC. Dr. Viney Aneja gave the task of taking roll call to Dr. Tim Benner.

Designated Federal Officer (DFO) Welcome

Tim Benner

Dr. Tim Benner began by noting that seven members of the subcommittee were present on the call with exception of Jinhua—who was in China and not expected to join—and that other members would likely join in the next few minutes. He introduced himself as the DFO of BOSC ACE. His main responsibility within the subcommittee is to comply with the Federal Advisory Committee Act (FACA). He covered some basic rules—all meetings are open to the public, minutes of each meeting are taken by EPA's contractor (ICF) and would be available on the BOSC website after certified by the BOSC Chair, and no public comments were submitted to the docket that was published in the July 1st *Federal Register*. He reminded the conference call that all meetings involved in substantive issues are open to public by law, including all communications that comprise of at least half of the committee members. Dr. Brenner also noted that all federal advisory committee documents are available to the public. He requested that when someone speaks on the conference call they should identify themselves and speak clearly into the phone or otherwise remain muted.

Public Comments

No public comments were submitted or made.

Discussion and Approval of Responses to Charge Questions

Subcommittee

Dr. Aneja requested that Dr. Benner ask other members of EPA—participating and/or listening to identify themselves so the subcommittee would be aware of who was on the call. EPA staff identified themselves. Before the discussion began, Dr. Donna Kenski joined the conference call. He noted that the primary reason for holding the conference call was to get as close to a final document for submission to the EPA ACE office as possible.

Dr. Aneja requested that subcommittee members raise any comments or questions they may have regarding the document so the entire group could discuss collectively or modify the document and track the changes. Those on the conference call received draft 3 of the subcommittee reports, which contained the introduction and background sections as well as responses to the charge questions. Dr. Aneja wanted to make clear that in drafting the introduction section, they relied heavily on material within StRAP and face-to-face meetings. He noted that if the group was uncomfortable with this method of drafting that they should request the contractor to develop an introduction that reflected the subcommittee's words rather than the report or StRAP. The discussion of the introduction followed.

Discussion of Introduction and Overall Mechanics

Dr. Charlette A. Geffen joined the conference call and agreed with Dr. Aneja's sentiments towards the introduction. She noted that they may have some marked-up copies with higher level comments and that general comments were minor. Dr. Geffen believed that although it was helpful to have an introduction there seemed to be some duplication. She opened up the question of what level of information the group wanted to include in the introduction. Dr. Aneja indicated that he and Sandy Smith had a discussion on this matter. Ms. Smith mentioned Dr. Jeff Arnold's comments—marked up in the introduction—indicated some duplication. She believed this would be a good start for making the subcommittee's own introduction. Dr. Arnold noted that although it was legitimate to cut and paste from EPA's materials, this can lead to duplication of information. Dr. Aneja questioned Dr. Benner if it was the group's prerogative to request the contractor to make those changes or if it was the subcommittee's responsibility. Dr. Benner responded that the document was the subcommittee's report, and the language needed to come from the subcommittee, but the formatting and minor edits could be addressed by EPA or the contractor.

Dr. Elena Craft wondered if in order to avoid overlapping versions, there should be any additional comments and edits made on the current draft. Dr. Aneja suggested that any drastic errors or gaping holes in the draft and the charge questions should be discussed by the group one at a time. He said as far as comments were concerned, if they were sent in as tracked changes to him or Sandy they would incorporate the changes themselves. Dr. Craft asked for confirmation if those changes should be made on the most recent draft. Dr. Aneja affirmed that comments should be made on draft 3. He mentioned that although the work was divided up among the group members, everyone could comment on questions drafted by others. For example, Dr. Aneja welcomed the suggestions—comments on all questions—that were presented in Dr. Arnold's revised draft.

Dr. Geffen questioned Dr. Aneja about the process behind the last edits—if someone in his absence would pull together the various comments. Dr. Aneja discussed with Dr. Benner that Ms. Smith would be the one to handle this. He and Ms. Smith would communicate via email and work together electronically as she will be the principal person handling the next draft. Dr. Art Werner asked about the timing of completing the document. Dr. Aneja inquired the subcommittee's thoughts on sending in comments by August 15 with a near-final draft ready by the end of August. Dr. Aneja set a deadline of August 15 for everyone to send in their edits in tracked changes format to him and Ms. Smith or to the whole subcommittee. The final document will be done at the end of August, and then everyone can have a last look before it is sent to the contractor for editing.

A member commented on the introduction by asking for clarity on Dr. Arnold's comments regarding the bullet point on integration. Dr. Aneja tried to interpret what EPA was trying to imply through internal integration of all programs within the Agency. He questioned the group that if it was not clear, then they would need to revise it to make it more clear. He asked if Dr. Dan Costa was on the line, who was. Dr. Aneja thanked Dr. Costa for being on the conference call and asked if his interpretation of integration based on the documents was accurate. Dr. Costa remarked that integration was exemplified largely across the ACE research program and EPA's Office of Research and Development (ORD) where they interact with other programs. He noted a section in Strategic Research Action Plan (StRAP) where EPA tried to integrate projects by taking a systems approach. Dr. Aneja clarified his interpretation to mean in essence, integration is defined with respect to programs within ACE or ORD. The subcommittee agreed to rephrase the part on integration. No more comments were made on the introduction, and the discussion moved to the background.

Discussion of Background

Dr. Aneja attempted to give clarity about the process unfolding within the background section. He questioned the group if there was anything "big picture" missing in the section. No further comments were made. Dr. Aneja asked the group to delve into the five charge questions provided by ACE where each response was developed by a subgroup of the subcommittee.

Charge Question 1: Given the research objectives articulated in the StRAP, are the topics and project areas planned and organized appropriately to make good progress on these objectives in the 2016-2019 time frame?

Dr. Aneja recognized that the charge question was essentially created by Dr. Patrick Kinney and Dr. Arnold, and asked them if they were happy with swathe draft. Dr. Kinney said he would take a closer look before August 15th. Dr. Aneja inquired to if there were any high-level edits or comments. Dr. Geffen questioned that since the document was about climate change and EPA is enhancing work in the associated human health impacts, there needs to be discussion about what the National Institute of Environmental Health Sciences is doing in that space but also make sure EPA is given clear priority in the broader research spectrum. Dr. Aneja asked if the document did not capture that. Dr. Geffen said that the document indeed captured this, but questioned if the advice given was implementable. Dr. Arnold thought they were trying to do exactly as Charlette

explained by showing how the work fits in with ongoing activities such as fitting climate change work into the rest of ongoing EPA work. He acknowledged this idea goes along with the integration point, and looked to Dr. Kinney for agreement. Dr. Kinney was in agreement with Dr. Arnold, and noted that EPA has been an innovator of air pollution health effects research, but since it is taking on climate change, the Agency should assume a serious role in understanding the health effects of climate change. He understood that the scale and scope of the role would be dependent on resources and may change over time. He believes EPA is the perfect agency to fill in the gaps between the interests of National Science Foundation and National Institutes of Health. Dr. Geffen thanked Dr. Kinney for his assistance.

Dr. Aneja said that the draft document captures the big issues that Dr. Geffen noted regarding climate change and that the last iteration will continue to clarify them. He asked the group if there were any other major questions on which to focus. Ms. Smith had a format question for charge question write-ups. She noted that Dr. Benner mentioned it would be very helpful if each write-up could boil down recommendations to numbered/bulleted items, so her sub-subcommittee on charge questions 4 and 5 attempted to do that. She asked if any others had any success doing this. Dr. Aneja thanked Ms. Smith for clarifying this approach. He asked the group if they could include a bullet or two at the end of each question to add clarity. Dr. Kinney agreed that it was a helpful suggestion, indicating that key points might get lost in a longer text. He advocated to put the bulleted summary points at the top of the charge question response. Dr. Geffen agreed with Dr. Kinney as well and remarked that it would help reach a consensus on key points. Dr. Aneja asked the question leads to add a bullet or any other principal highlight thoughts to draft four. No other comments were made on charge question 1.

Charge Question 2: How effective are the approaches for involving the EPA partners in the problem formulation stage of research planning?

Dr. Aneja called on the principal writers of the report—Dr. Geffen and Dr. Myron Mitchell. Since Dr. Mitchell was not on the call yet, Dr. Geffen agreed to write summary bullets. Dr. Aneja asked Dr. Geffen if she was generally happy with the approaches. Dr. Geffen said she was and that she and Dr. Mitchell welcomed others' thoughts on it, especially related to the key messages. She said she would pull those out and send them well in advance of August 15. No other comments were made on charge question 2.

Charge Question 3: How well does the program respond to the needs of EPA partners (program office and regional)?

Principal writers for this charge question were Dr. Werner and Dr. Donna Kenski. Dr. Werner had no changes. Dr. Kenski was mostly happy with the document the way that it was drafted. She had a couple of minor changes to consider. She provided a specific edit to the second sentence of the second paragraph and move the climate change text to the next paragraph. Dr. Kenski said she and Dr. Werner can draft bullets. Dr. Connie Senior noted that the final paragraph of charge question 3 was a bit disconnected from the rest of the section. She suggested adding introductory text to tie it better to the section. Dr. Werner agreed with Dr. Senior. There

was also a suggestion to move the final paragraph of charge question 3 to the end of the second paragraph.

Charge Question 4: Please comment on the quality of the products delivered by the program. Are there additional approaches that could be taken by the program to ensure that its products are of high quality?

Principal writers for this charge question were Drs. Jinhua Zhao, Senior, Smith, and Constance, and Ms. Smith. Dr. Aneja asked the writers if they felt comfortable with the charge question and had any thoughts. Ms. Smith mentioned that one of Dr. Arnold's comments was to provide examples and she sought clarification. Dr. Arnold acknowledged that it is challenging to come up with alternative metrics. He said that there should be some way to increase the breadth of the measure of utility of a program, and that it would be more helpful to give ideas of how rather than just tell them to increase breadth. Ms. Smith invited any ideas people may have on the issue to note them on the comments they send in. Dr. Kinney had a comment—that will be sent in writing—about paragraph two, which sought new metrics that ACE can use to characterize quality. Dr. Arnold agreed and said rather than just saying they need new metrics, it would be good to give some ideas. A member gave some examples for one category at the end of paragraph five, but noted that it was only a small category of what ACE does. Dr. Aneja asked Ms. Smith and Dr. Senior if they were comfortable with the additional integration. Ms. Smith said they would need to think through Dr. Arnold's suggestion, and again invited people's thoughts on the subject when they send in comments. Dr. Senior agreed and liked the suggestion for the first sentence of paragraph two. No more further comments were made on charge question 4.

Charge Question 5: How well have we translated research findings and understanding for the end-users? How can we improve our ability to translate research findings and understanding for end-users in the future?

Principal writers for charge question 5 were Dr. Senior, Ms. Smith, and Dr. Zhao. The group was asked if they were comfortable with the definition of user community that was indicated in the bullets. Dr. Aneja asked if the subcommittee would be okay in replacing "end user" with "user." Two members were fine with the substitution. Dr. Aneja gathered the group came to a consensus about using "user" instead of "end user," and asked Ms. Smith for her confirmation. She noted that the term "user" instead of "end user" was a specific recommendation of Dr. Mitchell. She thought the recommendation was a bit broader than that in terms of the groups and entities that are considered users. Dr. Aneja noticed that the group was ahead of schedule and recognized there was plenty of time until the final document deadline of August 15 to resolve this question. No more further comments were made on charge question 5.

Wrap-up, Next Steps, and Adjournment

Dr. Benner noted that the FR notice is worded such that the meeting can end whenever the subcommittee decides. Dr. Aneja expressed his gratitude to the subcommittee for taking the time to provide thoughts, comments, and draft content. He noted that all members have until August

15 to send in changes and comments for the report. He and Ms. Smith will take into consideration the changes and comments and create an “almost” final document before it goes to the editorial contractor. Dr. Benner relayed that the contractor would put the document in the final format, and at that point it can be sent back to the subcommittee for a last look. Dr. Aneja wanted the subcommittee to have a final look of the document. Dr. Benner recommended that they draft all the text and make the document read the way they wanted it to before submitting it to the contractor. Ms. Smith had no other comments to make as Vice Chair of the subcommittee.

Dr. Benner concluded the conference call by thanking everyone for their time, and applauded the productivity and efficiency of the meeting. He recommended that any comments to the final document be sent to himself to circulate to the whole subcommittee or Dr. Aneja and Ms. Smith directly. He acknowledged that emails back and forth regarding comments become public. No more comments or concerns were made, and the meeting was adjourned.

Appendix A: Agenda

**United States Environmental Protection
Agency Board of Scientific Counselors (BOSC)
Air, Climate, and Energy (ACE) Subcommittee**

Conference Call Agenda – July 20, 2015, 3:00-5:00 PM

EDT 866-299-3188

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TIME	TOPIC	PRESENTER
Monday, July 20, 2015		
3:00 - 3:10	Welcome and Opening Remarks	Viney Aneja, Chair
3:10 - 3:15	DFO Welcome	Tim Benner
3:15 - 3:20	Public Comments (if any)	
3:20 - 4:50	Discussion and Approval of Responses to Charge Questions	Subcommittee
4:50 - 5:00	Wrap-up, Next Steps, and Adjourn	

Appendix B: Participants

BOSC ACE Subcommittee Members Present:

Viney Aneja, *Chair*
Sandra Smith, *Vice Chair*
Jeffrey Richard Arnold
Elena Craft
Charlette A. Geffen
Donna M. Kenski
Patrick Kinney
Constance Senior
Art Werner

[Members absent: Myron Mitchell and Jinhua Zhao]

EPA Designated Federal Officer (DFO):

Tim Benner, *Office of Research and Development (ORD)*

EPA Attendees:

Dan Costa, *ORD ACE National Program Director*
Beth Hassett-Sipple, *ORD ACE Team*
Stacey Katz, *ORD*
Vasu Kilaru, *ORD*
Andy Miller, *ORD ACE Team*
Gail Robarge *ORD*.

Contractor Support:

Wendy Jaglom, ICF International