Clean Air Act Advisory Committee February 3, 2010 DoubleTree Hotel Arlington, VA

Opening Remarks

Robert Brenner, United States Environmental Protection Agency (USEPA), welcomed and thanked everyone for coming. He turned the floor over to Gina McCarthy, USEPA, for an update on EPA activities.

Ms. McCarthy commended Janet McCabe, USEPA, for her recent rise to a new position in the Office of Air and Radiation, to which she brings creativity and experience. Ms. McCarthy prefaced her remarks with the acknowledgment that there is a big workload with serious challenges ahead. A lot has been accomplished, but there is still much more to come. Administrator Jackson has released her list of things to address, at the top of which is climate change and clean air.

Ms. McCarthy explained that she released a memo that is reflective of the Administrator's priorities, and submitted it to staff. It tries to align thoughts around a variety of tracks with common themes, many of which revolve around the reality of climate change. Simultaneously, they must keep in mind the clean air challenges and push those forward at the same time as other concerns, rather than separately. This is why the EPA is moving towards a multi-pollutant strategy.

Under the climate change umbrella, Ms. McCarthy would like to see better communication on the science of climate change. She is upset that the public is more confused about the science of climate change now than when the EPA began its discussions. The endangerment finding that was released in final form in December deserves an opportunity to be thoroughly considered, as it puts scientific information into language the public can understand. They must focus on taking fear out of the public and instead present climate change as a factual matter. A better understanding of climate science will provide the necessary foundation for taking action.

The second category to address is stationary sources and greenhouse gas (GHG) emissions. A mandatory reporting rule that was put out essentially covers most sectors. EPA is already doing outreach with industry categories to ensure that they understand the requirements. They also have additional work underway for specific industries where the path ahead was not clear, which will therefore be addressed in a separate fashion over the beginning of this year. Next year every industry will be counting GHG emissions in accordance with protocols in the mandatory reporting rule. The reporting rule will provide an opportunity to see where strategic investments are possible, which investments will drive down GHGs and save considerable money, boosting the economy. With investment strategies, hopefully the fear over climate change actions will diminish. Next is the contentious Prevention of Significant Deterioration (PSD) tailoring rule. There have been more than 420,000 comments on it, a lot of which are excellent. They look at implications of the rule that the EPA did not anticipate, and give them a range of options on what makes sense to address. There are legitimate concerns about the proposal; however, with the administrative options available, EPA will address the issues in a way that makes sense to everyone. Ms. McCarthy said that they can move forward with this rule in tandem with the light-duty vehicles rule.

There also are significant resources for New Source Performance Standards (NSPS), which need to be considered as they look at best available control technology (BACT) challenges. GHGs and NSPS seem to match up in terms of problems and tools available. There is litigation surrounding these issues because there are many discussions on whether GHGs should be addressed as they are pursuing NSPS.

The third issue, that of multi-pollutants, is part of EPA's discussions on utility strategy. Rep. Cooper has been pushing this issue for awhile: his next bill is a three-pollutant bill, which he hopes to marry with climate change legislation. This will set a pathway forward in the utility industry that matches President Obama's interest in a clean energy future. It fosters an opportunity for them to look at those rules in effect now, and see how they can roll them out effectively. They have also been looking at scenarios regarding how the utility industry might respond: the hope is that when they roll out the new Clean Air Interstate Rule (CAIR) in April, they will simultaneously tell the industry what is expected of them. CAIR should be part of a strategy development which pairs it with carbon, since all these problems should be thought of together.

Moving onto vehicles and fuel, EPA is rushing to ensure that the light-duty vehicle rules are ready by March. This has been the first opportunity they have had to partner with the National Highway Traffic Safety Administration (NHTSA) to put out one joint rule. Ms. McCarthy said she is confident the rule will come out in March and impact 2012-2016 model years. People are anxious about what happens after 2016, and discussions have already begun surrounding many of the challenges the next decade will bring in terms of car producers and the infrastructure that will need to be in place nationally to service a new fleet. This places an obligation on the EPA to look at how the next technologies will be laid out, the kind of deployment that should be expected and supported, and how to move the consumer market forward and service it nationally.

Next, Ms. McCarthy spoke about the complicated nature of the second renewable fuel standard rulemaking. It was the first time she was involved in a rulemaking where they were developing the models themselves and exploring how to pull them together, which was groundbreaking and exciting. The rule has been cleared by the Office of Management and Budget (OMB) and will be announced shortly. It represents another way of moving forward on GHG reductions in the fuel sector that make sense economically.

Ms. McCarthy next addressed E15, explaining that EPA is looking at how to bring higher ethanol blends into the market. This is extremely challenging, and they are looking at

testing vehicles with the Departments of Energy and Transportation (DOE, DOT). Early results look like the younger fleet, model years 2001 to present, are doing well in terms of their ability to handle the E15 blends; however, it is still too soon to be certain. This issue must be delved into through looking at how to introduce these fuels into the market, labeling issues, and consumer choice issues. They are looking to pull together a dialogue on how to label pumps to ensure that people are using the right fuel in the right engine.

The Agency is also interested in looking into labeling for fuel efficiency as a whole. The old "mpg" symbol does not mean as much as it once did, as it does not give consumers a good understanding of the costs associated with running their vehicle, especially as we move into electric and other technologically-advanced vehicles.

Since the endangerment finding was not just about light-duty vehicles, but about mobile sources in general and their contribution to GHGs, the Agency is also looking at heavyduty vehicles and will move forward to look at the potential for additional tailpipe standards. They have eight petitions on the mobile source side that will be addressed.

Another issue related to GHGs is the kind of partnerships that need to be used to promote GHG reductions, such as EnergyStar. Ms. McCarthy expressed her excitement about the consumer acceptance of EnergyStar and the agreement the EPA has with DOE. DOE is investing in energy efficiency in a way they have never before. This has challenged EPA to rethink what they do since they have always been the lead on energy efficiency; now they will need to think about these programs in light of what DOE is investing in. Ms. McCarthy noted the new funding for EnergyStar, the expansion of their appliance work, and their efforts in the home in terms of weatherization and other opportunities for investments in GHG reduction for everyday consumers.

The SmartWay program is growing as a foundation for a more specific analysis of goods movement, and has a tremendous benefit. The goods movement issue is very important for the Administrator because of environmental justice concerns for communities that live around transportation centers. There are great opportunities to move those issues forward wisely, especially through investments they will be making with stimulus dollars.

Internationally, the Agency is looking at continuing methane to markets. There are opportunities in this sector for quick reductions in GHGs, and they are looking at HFCs and how to address them in the Montreal Protocol. The more EPA delves into the numerous opportunities to reduce GHGs and aligns them with opportunities to reduce criteria pollutants, the more people will see the resulting great investment in public health.

Ms. McCarthy next spoke about air quality, and her concern with the incredible workload and pace that must be reached to move forward with National Ambient Air Quality Standards (NAAQS). She discussed about new NO₂ rules and the creative ways they are looking at monitoring issues and vulnerable communities. Rules on SO₂ and ozone need to be completed by August, and there will be a lot of work in the future to keep up with

the Clean Air Act and routine checks on the science behind the standards. There are challenges on the monitoring side as well, as monitoring will need to be enhanced.

Ms. McCarthy underscored the importance of the multi-pollutant approach. In light of emissions standards for stationary and mobile sources, CAIR will be heavily scrutinized. It must be legally grounded to stand the test of time. Ms. McCarthy stated that there are many Maximum Achievable Control Technology (MACT) rules, as well as New Source Performance Standards (NSPS). They also have a residual risk and technology review that must be accomplished on a challenging timeline.

Another challenging issue to be dealt with is that of toxics. The manner the EPA addresses this issue will be a mark of whether they are successful in a multi-pollutant strategy and in responding to the needs of environmental justice communities and children. The must make a wise investment in effort, money, and research, for this purpose must be taken on immediately. Better air quality must be brought to communities that deserve it, and money must be directed towards higher priority issues.

Ms. McCarthy emphasized EPA's continued work on indoor air quality, and the need to recognize the numerous opportunities for improvement in these programs. The EPA needs to make this an educational opportunity, and make structural changes to the way they address indoor air quality, especially if lives are being lost because of it.

Environmental justice is also a big issue for the Administrator. This issue must be addressed through a multi-pollutant strategy and a planning process that focuses on toxics. If NAAQS are going to be implemented quickly, they cannot expect all individual State Implementation Plans (SIPs) to be completed and implemented in time. They must provide a coherent message that recognizes science and moves standards forward in a way that allows states to create meaningful plans. The EPA must look at how they can pilot new strategies for SIPs and move them forward. They need more discussion on air monitors, and the newest technologies and strategic placement of them. The EPA needs a provision of resources and communication strategies to states that will allow for effective use of money for monitoring strategies to best help monitoring for affecting NAAQS and toxics in communities.

Data has presented a communication challenge and has pointed out that the issues being identified are community based issues. Part of the budget moving forward is to look at more community-wide challenges and determine whether the EPA's permits are effectively dealing with local pollutant issues, and what this means in terms of how to work with states and communities.

Ms. McCarthy said that they will also systematically and comprehensively address the leaks and flares in malfunction emissions. They must understand the technological challenges and promote good maintenance in a comprehensive way which addresses all sources.

Additionally, EPA will continue to look at clean diesel grants, and how they can align investments. She said they recognize the need to disseminate money in smaller chunks so that tribal communities can take advantage of it, since now they are essentially only allowing the money to be tapped by larger communities that can expend significant amounts of money. While this challenges EPA to make smaller grants, it provides the ability for tribal communities to tap those resources. Moving towards state and tribal partnerships is a priority of the Administrator. The EPA recognizes the need for providing resources such as guidance documents so that states can implement federal rules, and enhance their accountability if more money is to be invested.

Ms. McCarthy concluded her opening speech by discussing the process that looks at how decisions are made and whether time is being wasted in certain process steps that do not add value. They started a process of looking at SIPs, beginning with Region 7, which informed them about what is needed to make the relationship between states, regions, and headquarters more effective in terms of moving implementation forward. Specifically, they looked at how to communicate better and move decisions forward more quickly.

Lastly, Ms. McCarthy asked the CAAAC to help brainstorm ways to celebrate the 40th anniversary of the Clean Air Act, and how to remind people of the progress that has been made in this arena. In terms of toxics, the EPA is beginning to look at resource allocations across OAR regarding challenges faced, investments in voluntary programs, and shifts in efforts.

Stephen Hartsfield, National Tribal Air Association, stated that he appreciated the updates and the mention of tribal issues. He commended the Agency's timely and productive response on diesel retrofits, which enabled tribes to submit applications for diesel retrofit grants. Mr. Hartsfield said that three things he did not hear Ms. McCarthy mention were promulgation of tribal new source review; comments or actions from the EPA regarding the tribal White House leaders summit where President Obama signed a memo giving 90 days to come up with a federal consultation policy; and mention of funding for regional planning organizations (RPOs) back to a level where full participation of all states including tribes will be refunded.

Ms. McCarthy responded that it is good to know that the Diesel Emissions Reduction Act (DERA) smaller grant amounts are appreciated.

Beth Craig, USEPA, said that they are working within the Agency on a consultation policy.

Ms. McCarthy stated that they will have a lot more discussion regarding RPOs. They aim to determine how, with the scare resources of states and tribes, they can create a better network of technical expertise so that each state does not have to duplicate specific expertise as they struggle to implement federal rules. EPA will be having larger conversations regarding what type of support states need to succeed, and how they can maximize resources to do so.

Carolyn Green, Sunoco, Inc., asked to what extent EPA will be working with the CAAAC on environmental justice issues, in terms of formulating air quality recommendations that speak to both issues and have support of both the National Environmental Justice Advisory Committee (NEJAC) and the CAAAC.

Ms. McCarthy stated that she would like to recognize that the CAAAC has tremendous expertise for the EPA, and encouraged them to think about how they can use their time more effectively as advisors and put forward recommendations.

Ms. Green asked whether the NEJAC is being resuscitated, and whether there will be opportunities for joint collaboration.

Ms. McCarthy responded yes to both of Ms. Green's questions. She said that the Administrator has made environmental justice a very large priority. The NO_2 rule is the first time ever that an Agency rule has discussed such vulnerable issues, and there is a real opportunity for dialogue in this field.

Mr. Brenner said that the Office of Environmental Justice heard some comments from NEJAC and approached him about coupling NEJAC with the air conference, possibly as an annual event. Next time, they should look at how CAAAC can participate effectively in NEJAC's conference.

Michael Formica, National Pork Producers Council, said that he was extremely impressed with the participation in the NEJAC meeting in New Orleans, and how 50 members of the public were in attendance to comment to the advisory committee. He thought it would be good for the CAAAC to go out somewhere besides Washington, D.C., and reach out and hear what people outside of this area think about these issues.

Mr. Brenner assured Mr. Formica that Pat Childers has a plan for this.

Mr. Formica stated that with the renewable fuel standard coming out, and the E15 standard in the making, they also should have a process to look at revising the ozone standard. He asked Ms. McCarthy to speak to EPA's stance on this in terms of the ozone debate. He wondered about the impact of increasing levels of ethanol in the fuel supply, and how that will impact ozone challenges.

Ms. McCarthy said that the EPA is well aware that a delicate balance exists, and they will have to think about ozone as they mull renewable fuels. She disclosed that the renewable fuel standard is going out today, and was an enormous challenge because of the indirect land use issue. She expressed her amazement with the level of work done in this rule. In the time between the proposal rule and final rule, science evolved, new information was added, models were updated, etc.

Bill Becker, National Association of Clean Air Agencies, commented that Ms. McCarthy's remarks were refreshing, especially her acknowledgement of the critical role that state and local government agencies should play in the air pollution control program and its implementation, and in the GHG implementation program. It is helpful that the President and the EPA have found a way to fill some of the gaps that states are facing and increase grants to \$82.5 million above last year's level—an unprecedented increase. He thanked Ms. McCarthy on behalf of state and local agencies for her efforts.

Eddie Terrill, Oklahoma Department of Environmental Quality, stated that he agreed with Ms. McCarthy's comment about the need to communicate the science of climate change, but that there also is a need for the connection between public health, and SOx, NOx, and ozone to be communicated as well. Once the standard is raised, many cities may drop from attainment to non-attainment. Therefore, it is important to communicate to these communities that there are grounded scientific and public health reasons behind the raising of standards; otherwise the public will not accept the new requirements. Mr. Terrill also requested that the EPA work with cities on implementation so that backlash from the public is minimized.

Ms. McCarthy agreed with Mr. Terrill, adding that one thing the EPA has spoken about is more effectively working with state, local, and federal health agencies on issues like this.

Gene Trisko, United Mine Workers of America, thanked the Agency for the way it handled communications to the full committee throughout the BACT work group process. He complimented the BACT work group based on the review of their draft work product, because while the work group did a heroic job of addressing complex issues in PSD and BACT determinations in a short time frame, there remained a substantial amount of non-consensus. He recommended they develop a process for continuing these deliberations as they move forward. He expressed the need for a public comment period on the draft BACT guidance. Next, Mr. Trisko brought up the topic of the new political environment. He stated that the Agency must be mindful of the consequences of their pace of regulatory initiatives on GHG actions. If the EPA moves aggressively on a particular issue area subject to potential congressional legislation, there is the possibility for Congress to step back from the legislation as opposed to enhance its prospects. He spoke of his concern with the risks associated with both recent and future political changes. He stated that there is a fairly large basis of support for national legislation as the preferred means of addressing GHG legislation.

Mr. Trisko brought up the example of the letter submitted to Rahm Emanuel from a building and construction trades departments in January, which spoke to the set of risks that he discussed. He asked that the EPA re-think the time of issuing the car rule; the NHTSA rule can move forward and achieve essentially the same objectives, including engineering for 2012–2016 model years without causing conflict between BACT, GHG, and PSD permitting guidance that states will need to administer. Mr. Trisko lastly spoke about the interest of the CAAAC in working with the Agency, with industry, and with environmental groups to develop flexible approaches for an air toxics rule that can avoid large scale union problems. He highlighted the great potential for multi-pollutant approaches.

Ms. McCarthy thanked Mr. Trisko, and followed up saying that the Administrator has made it clear that both legislation and regulation are necessary. The legislation will lay out some 17 or so regulations that will have to be completed in the first six months; states will be obligated to take some 60 separate actions, and everyone will be in it together. The Administrator has stressed responsibility in this regulation crafting, and all approaches will be considered.

Elaine Barron, Sierra Medical Center, said that the toxics which children are exposed to today are much greater than before, creating the rising need to address the location of cities in relation to highways. Nitrites that come from gasoline severely affect children and respiratory diseases, which is why some diseases like H1N1 are more severe in tribal nations in Arizona and Alaska where there are more pollutants impacting respiratory diseases. Ms. Barron asked how Ms. McCarthy planned on addressing air toxics strategy, and whether she thought that the current and new rules and the Clean Air Act are enough to cover all the toxics.

Ms. McCarthy agreed with Ms. Barron regarding the need to look at tribal issues more closely. She said that when the budget is addressed, it will become evident that there are many tools available under the Clean Air Act that can be used to analyze the toxics issue. She emphasized the need to prioritize which issues move forward and how to strategize efficiently.

Chris Hessler, AJW, Inc, expressed his excitement at Ms. McCarthy's comments from the perspective of technological innovation. He said that the embrace of a multi-pollutant sector-based approach and the implications of it are energizing. He stated that in terms of the renewable fuel standard, there is still much to be done in terms of delivering technologies to the marketplace that were envisioned when Congress first wrote the rule. He hoped that the Agency considers the renewable fuel standard a down payment on enabling those technologies, but recognizes that it needs to work a lot with industry to get the next generation fuels into the marketplace. He moved on and said that publicizing the 40th anniversary of the Clean Air Act is a great idea, and emphasized the need to applaud the advances from a health perspective and for the American economy. Lastly, Mr. Hessler addressed the DERA grants issue, encouraging the EPA to think more aggressively about taking the grant process barrier out so that they can address more of the rebate issues. They should facilitate people making the change and making the retrofit, and allow them to get the credit directly as long as they can prove that they have made the change in technology.

Mr. Brenner said that on September 14th, there will be a conference in D.C. to discuss health benefits of the Clean Air Act, other costs and benefits, and a technology exhibition.

Mark MacLeod, Environmental Defense Fund, addressed the 40th Anniversary of the Clean Air Act, and stated that there is a whole generation now that takes the Act's accomplishments for granted. He suggested organizing an informal team to put together social networking and visuals in order to communicate to people. As such an enormous

victory in light of a state, federal, tribal, local, and innovative company partnership, it is important to find a way to tell this success story.

Ms. McCarthy agreed with Mr. MacLeod, underlining the need to reach people quickly and maintain the momentum of using the anniversary as a great environmental opportunity.

Update on EPA Budget

Robert Brenner, United States Environmental Protection Agency (USEPA), introduced the budget discussion by saying that Gina McCarthy is the assistant administrator he has seen as most willing to look hard at the budget. By the time Ms. McCarthy came into her position the budget cycle was pretty far along. Her experience in public health and Janet McCabe's experience with a non-governmental organization have brought a broad set of perspectives on working with companies and industries. That is reflected in the budget with a strategic set of investments.

Beth Craig, USEPA, gave an overview of the budget. The air program has \$82.5 million more for state grants, to be divided into three areas. The first area is core programs, which will receive an additional \$45 million. This is a recognition of the support that states need to do what they do. Another \$15 million will be for air monitoring equipment. The remaining amount will provide funding the state and local permitting agencies as they prepare for greenhouse gas (GHG) permitting responsibilities when the regulations are put in place for stationary sources. There is also money for headquarters and the regions to work with states on that implementation, allowing us all to work cohesively. For the first time ever we will now have a multimedia implementation plan for tribes. This is the next step to the general assistance plan that gives tribes funding as it makes the step from planning to actual implementation work. This is very exciting because many environmental programs for tribes are multimedia.

The Diesel Emissions Reduction Program (DERA) got \$300 million under the American Reinvestment and Recovery Act. All of those grants were awarded by September 30, 2009. It was great to be able to put the money toward larger projects that would not ordinarily receive grants under the normal appropriations process. The Agency also just completed awarding the 2009 and 1010 dollars, which will go to the smaller programs.

In the climate arena, the Agency has a budget request to address its legal obligations, which gives them the ability to do the analytical work they need to do as an agency, like taking the next steps on carbon capture and sequestration. They also requested additional resources for the EnergyStar program. They are also now looking at air toxics at the community level instead of just at schools. There is a program with the Office of Enforcement and Compliance Assurance (OECA) to work with communities to reduce air toxics. The budget also increases funding for the indoor air program through Tools for Schools.

Gary Jones, Printing Industries of America Graphic Arts Technical Foundation, asked Ms. McCarthy the status of the ozone standard proposal. He also asked about the success of international compact cities, where 12 of the 13 cieites achieve success.

Steven Page, USEPA, answered that some items will come out this spring, including the 1997 8-hour ozone backsliding rule. The guidance for the reconsideration is expected to come out at the same time as the rule.

Mr. Jones said he though it was supposed to come out in December. There are a lot of implications for those rules. He also asked what the Agency's position is on early action compacts.

Ms. McCarthy replied that those were considered illegal. This is not a tool they can continue to use.

Bernie Paul, Eli Lilly, encouraged the Agency to use lean processes. This was very effective when used in Indiana. It was very energizing for lower level staff to be able to express their views of how good a job management is doing. The downside is that it was painful for the senior management to see the problems they had created. Maybe as a precursor to rolling it out, the Agency could encourage senior staff to be as open and flexible as possible.

Tim Johnson, Corning, Inc., expressed disappointment on the \$60 million request for DERA funding, which is in line with previous years. Last year the Agency spent \$300 million but had requests for a lot more, indicating a lot of demand for retrofit dollars. This is an excellent program with great health benefits, and this request seems very modest in light of the political capital. Why go for such a modest amount?

Ms. Craig said that between 2008 and the 2011 request, the project will have received over a half billion dollars, although it seems that chunks of \$60 billion at a time can get lost. There are a lot of great projects out there.

Ms. McCarthy added that she and the administrator are both aware of this success of this program and the importance to public health. There is also interest in Congress on a black carbon report.

Subcommittee Report Outs

Robert Brenner, United States Environmental Protection Agency (USEPA), discussed multi-pollutant and sector based strategies. He said the belief is that if you start to look more seriously at multi-pollutant solutions, criteria pollutants and eventually greenhouse gases (GHGs) together, it will lead to more efficient State Implementation Plan (SIP) planning.

As states and localities began their planning process, they would have the opportunity to see what is going to be needed in several different air quality areas or several different areas of concern. Then as they consider what might be needed from different facilities in different sectors of their local and state economies, they can figure out what needs to be reduced together at one time, rather than get a set of reductions of volatile organic compounds (VOCs) for a facility one year to deal with ozone, and then the next year deal with NOx and SO₂ and direct PM emissions, et cetera. He argued that this is not an efficient use of the state planning resources. Additionally, by turning to the facilities themselves it is not good for their planning of how to best meet these standards. Mr. Brenner recognized that if the facilities could know of all the requirements within a reasonable amount of time, then they could come up with more effective cost control strategies, and new innovative technologies may come out of it. This would benefit the Administration's agenda overall, which is to find opportunities for innovative technologies that contribute to their energy, clean air, climate and health goals in addition to help revitalize the economy and provide jobs. The Economic Incentives and Regulatory Innovation subcommittee was asked to begin thinking through these issues, and to provide thoughts on whether or not they would be interested in engaging on these issues over the coming year. He said that there was a good deal of interest in this task, and now they must think carefully and come up with a good set of issues that the committee can usefully address. He spoke with Janet McCabe and Peter Tsirigotis, and the inclination they had was that much could be benefitted from this group. He said that they actually began helping right away by flagging some issues to consider.

The first point made was that it really is a silo based process in the air quality management and planning world. He could think of too many examples in recent history of people focusing on one set of pollutants and then another, and a real reluctance to attempt to mesh the two. An observation made was that one of the valuable things about moving to this approach is going to be to put more pressure on the regulators. Those who make the regulations and implement them will then begin thinking about pollutants jointly, rather than try to deal with ozone now and PM later, and not meshing them.

The next point was the result of a conversation that Carolyn Green kicked off regarding some environmental justice implications of moving to this approach. It is important to consider these issues early on. If it is perceived that certain regulations are just going to be delayed, or that people will be allowed to not invest in cleaning up facilities in some communities, especially disadvantaged communities, a good deal of concern will be raised. It is important that the process be designed in a way where there is an effort to get at least as good, and ideally superior environmental results. He believes that it can be done, and referenced a study that looked at what kind of results a multi-pollutant approach in Detroit would get. By looking at ozone and PM, superior environmental results were yielded, which is the type of result the subcommittee is looking for.

Thirdly, they discussed new technology issues, and how a program like this would need to be structure to make it attractive for companies to invest. Companies would need to see that the market values the ancillary benefits that the new technologies may provide.

Finally, the subcommittee identified the tension between providing flexibility while ensuring that there will be air quality, environmental, and health results. He said a reoccurring question that accompanies innovation is how to make sure that as you provide sources and state regulators with additional latitude in how they develop the plans and compliancy strategies, that still is done in a way where it is known that within some time period there will be results and reductions made and health benefits accomplished. This consideration needs to go in to designing an initiative. Mr. Brenner reminded committee members that this was a brief overview, and that any comments or reactions from the full committee would be welcomed either during the discussion or if members have additional thoughts later.

Chris Hessler, AJW, Inc., repeated one part of the discussion that had occurred the day before for those who had not been in attendance. For many of the members of the subcommittee, a necessary first step in the process of reimagining how the Act is approached is to identify concrete issues to focus on. There are a lot of impediments in the Act to the best intentions, and the challenge is to make sure that when migrating from a silo approach no important protections are lost, and that meaningful improvements to health issues are made. His main comment was that the task is enormous, and people must think of engaging in this project as ambitious incrementalism. It is important to understand what can be done in the near term as well as what the long term goals are. It would be naïve to go down this road and not really start imagining reconstructing this Act in important ways. He mentioned a comment Gina McCarthy made about Early Action Compacts (EACs), which were developed with the best intentions, yet illegal owing to restrictions of the Act. He thinks one of the first steps the committee should take is to document the multiple reasons this makes sense, and to think about the tradeoff issues. How does one ensure that environmental justice issues are not victimized by economic efficiencies? He said they must think about where the benefits are by looking at examples such as EACs and the work that the EPA is currently doing. It would be beneficial to look how certain tradeoff situations were dealt with, what the successes are in terms of improvement, what shortcomings the group can learn from, and most importantly they must investigate if the Act were written differently how things could be improved upon.

Mr. Brenner thanked Mr. Hessler for the points he made, and suggested that for the next meeting they should have Peter Tsirigotis and his staff present on some of what they have done. They have looked at issues for a number of different sectors and identified what the possibilities and pitfalls could be.

Lisa Gomez, Sempra Energy Utilities, said she was really happy to hear that the work is moving forward on multi-pollutant strategies, as it has been talked about for years as important. The challenges presented are tremendous, but also they are conquerable because of the importance of the issue. She also wished to remind the committee that it is not just about multi-pollutants but also about multimedia such as impacts to water and hazardous materials. Coordination within the Agency has been discussed in the past to make sure these considerations are not lost, and she wanted to remind everyone of that. Mr. Brenner replied that it had been mentioned by a few people in the previous day's meeting, and that he has seen it happen already in the power generating sector. There are both solid waste and water rules making there way through the regulatory process while they were working on a series of air rules, and ultimately they realized that these must be looked at together.

Bernie Paul, Eli Lilly, wondered if the committee fully understood the range of implications that multi-pollutant strategies have. Their initial thinking seems to be focusing on certain industry types, like the utility industry, that have big capital investments, and where financial aspects are regulated by state utility commissions. He asked the committee to consider the smaller industries, or those that are operating in a very competitive environment globally, and whether or not the strategy works as well there. If you hit a company with multiple requirements all at once, the result could be a big change in how they are conducting their business that proves to be significant enough to put them out of business. He asked if there had been that type of evaluation regarding the extent of these types of strategies on the smaller end of the spectrum.

Peter Tsirigotis, USEPA, acknowledged that this was a very good point, and that they are looking into the issue. He said that even in small businesses they are finding that there are circumstances where hitting them with one requirement after another does not allow them to make investments in control technology based on the whole picture. Looking back they may have reformulated their process if they had seen the complete picture. It is the trade-off, because many times there could be a win-win situation. As far as the federal government is concerned there are timelines for doing things, and so it is not as if the requirements would be spread out over a 10 year span, but rather a one to three year span that can feel instantaneous when it comes to planning. He said that while they have not evaluated all industries, there are definite win-win opportunities for the big industries, but also some for the smaller industries.

Mr. Paul asked for some examples of the small industries where a multi-pollutant strategy has worked in their favor.

Mr. Tsirigotis responded that while they have not done the actual regulations, they are looking at smaller industries that are using various kinds of VOCs and HAPS where controls can be put in place to control those VOCs and HAP emissions. If the criteria side were to go after VOCs, and then later the toxic side decides to go after organic HAPs, it would be pretty much the same thing. However, if it were all laid out at once the company could decide to shift their practices one way or another, and what may not have been a cost effective decision when looking at the regulations separately, could become a beneficial reformulation. Also if the suppliers are involved right away they may be able to deal with the supply and demand the regulation would cause up front, rather than when the regulation is issued.

Mr. Paul agreed that those initiatives made sense, but pointed towards the Midwest where there are still a lot of people who burn non gaseous fuels. Whether they burn oil, coal, or

wood waste, if they get hit with NOx or SO2 carbon requirements all at once they could be shut down.

Mr. Tsirigotis agreed that this was a fair observation, but what they are also looking at throughout this process is the suppliers of industries who may have been focusing on single controls for single technologies. He expressed that it is a growing process, and that as they are doing these regulations it is clear to them that it behooves them to be more coordinated. A great example of this was observed in the cement industry, where it made complete sense to align things.

Mr. Brenner made a couple of points, including that the current industry sectors they are looking at tend to be larger ones. He added that does not mean they will not find some opportunities elsewhere, but no one should leave the committee meeting thinking that this could be used across the board, because there are smaller industries they need to be careful with. The other point is one that Ms. McCarthy just raised, which was there are a lot of different views about what constitutes a multi-pollutant strategy. A beneficial first step for the group to decide would be what kinds of multi-pollutant strategies they want to focus on, so that a clear definition can emerge. This way it will be easier to grasp what is actually being discussed, as well as eliminate those approaches that do not have as much prominence.

Mr. Hessler commended Mr. Paul for getting right at the heart of the matter in pointing out the tension between flexibility and certainty. He believes it will be a difficult discussion of how to implement something like this in a way that will have the support of health and environmental communities as well as regulated entities. An important thing to emphasize is the other end of the process, which is the importance of a market signal to companies that have the abilities to bring forward innovative technology. He believes that this is stifled now; yet, sending that market signal is vital in ensuring that private sector resources will be flowing towards innovations.

Mr. Brenner wrapped up the discussion by promising to get word out, and gauge interest about who would like to be on the subcommittee. The plan for addressing BACT and GHG issues is to first receive comments back from Ms. McCabe regarding the sense of what has happened so far and the next steps. Then there will a background presentation from Brian Doster, EPA's office of the general counsel, and from Don Neal, Calpine. Questions will follow the presentations.

BACT/GHG Report Review and Deliberation

Pat Childers, United States Environmental Protection Agency, said that the Phase I report from the greenhouse gas (GHG) work group is being presented to the full Clean Air Act Advisory Committee (CAAAC). It was voted forward to the CAAAC from the subcommittee unanimously. EPA cannot officially receive a report until it is voted to move forward by the full Federal Advisory Committee (FACA). The co-chairs will describe how this report came about. There will be some minor grammatical revisions. Michael Formica, National Pork Producers Council, said that questions on small businesses and the tailoring rule were not included.

Mark MacLeod, Environmental Defense Fund, said he thought they resolved not to make changes to the text of the report. He did not want to dismiss Mr. Formica's arguments, but they are about the applicability and impact of the tailoring rule. Page 3 is where the work group outlines that there are differing opinions on the uses of Prevention of Significant Deterioration (PSD). He hoped that these caveats would suffice and the Phase II report would deal with those caveats. This report is intended to say, "assuming we move forward with this program, here are our recommendations." There is also language in the part about the needs of states and stakeholders about this. He expressed concern about how making this change could open up the document for other edits. He did not see the need to make a statement on the impacts of the tailoring rule to small businesses.

Mr. Formica said that it would appease a lot of people to include this language. Beyond the tailoring rule, once an endangerment finding is made, it triggers a lot of other aspects of the Clean Air Act. It would be beneficial to have something in there, particularly in light of the legal fees issue addressed this morning. This would put a lot of small businesses out of business. It would be good to say that this rule is not applicable to many businesses.

Eric Svenson, PSEG, suggested including this in the transmission letter, but not in the body of the report. The process to get to this report was very involved.

Mr. Formica asked if the CAAAC cannot make changes to the report, are they giving all authority to the work group?

Mr. Childers suggested beginning the presentations and allowing Mr. Formica to have the first comments.

Eric Svenson, Calpine Corporation, introduced himself as one of the co-chairs for the climate change work group, along with Mark MacLeod and Peter Tsirigotis. Mr. Svenson provided perspective to the committee about the enormity of the task. They worked closely with 35 very dedicated representatives from various industries, including those from state and local permitting authorities, environmental and public health organizations, and a team of EPA representatives. He mentioned the assistance of David Solomon in particular as being very valuable. He said that he had never had the experience of working on an advisory group that worked with something so compressed, and in such a short period of time, yet managed to turn out a report like they had. The effort was kicked off in October of 2009, and since that time they have had five face-to-face meetings that ranged from DC, to Raleigh, NC, to Los Angeles; six full days of deliberations; and broke into four subgroups that met over the months. It took 2,500 to 3,000 work hours to develop the report. He further explained that number does not even delve into the additional work such as members leveraging their own staff to help the

effort, and that other members of EPA contributed, and that the number could easily be double the estimate.

Next, Mr. Svenson discussed the charge of the subcommittee. He read aloud the three parts of the charge, and identified them as pieces of two different phases of the work. Phase I was to identify information and guidance that would be useful for EPA to provide to state and local permitting agencies concerning the technical, economic, and environmental performance characteristics of potential BACT options, and to further identify approaches to enable state and local permitting authorities to apply the BACT criteria in a consistent, practical and efficient manner. Phase II would be to identify the major issues and potential barriers to implementing the prevention of significant deterioration (PSD) program under the Clean Air Act (CAA) for greenhouse gases. He explained that what was not written into the charter but later explained to the committee members by Mr. Tsirigotis and Mr. Solomon, was that while consensus would be valuable, it would also be very valuable to see what issues caused contention and what the rationale was behind the various opinions. He explained that the two phases outlined in the formal charge were to yield two different reports, one being interim and the other being final. The charge envisioned a schedule of almost six months to complete this project, but early on it was recognized that this schedule had to be modified. For the work group to be able to make meaningful recommendations and give sufficient time to EPA to give guidance to state and local permitting authorities, they knew they would have to produce the primary part of the report by the February 2010 CAAAC meeting.

Mr. Svenson discussed the caveats associated with the report they had produced. The work group was comprised of a diverse group of stakeholders, who had a wide range of views from those who questioned the appropriateness of using the CAA to regulate GHGs, and then others who saw this as EPA's opportunity to force GHG reductions and technical innovation. Others thought BACT should be applied differently for GHG than criteria pollutants, whereas some thought there should be no difference. Some members questioned the scope of applicability of PSD and BACT to GHG sources, and as such proposed that the work group examine other sources that may be better suited to GHG sources and to climate stabilization objectives. Those advocating for a more expansive discussion encouraged the work group to discuss various approaches that are not currently used as part of the BACT process, including presumptive BACT, emissions averaging, trading, and other streamlining and compliance approaches. He said it became quite apparent the work group's effort needed to be divided, first by focusing on the original BACT process and current application of it, and then as a second phase they would undertake a more expansive conversation about alternatives and supplementary approaches to applying the PSD program to GHGs. The report in front of the committee was what has been completed as the first phase of the work group, which Mr. Svenson said focused on applying BACT as has been done for criteria and other pollutants. He explained that the report was the product of many lively discussions, as well as a lot of time.

Mark MacLeod, Environmental Defense Fund, also recognized how much work went into the report, and added that it had been completed over two of the largest holiday periods in the United States. In an effort to organize the work, he talked first about a list of questions that EPA sent to them at the beginning of the work project. These questions were described as the kinds of things that permit engineers, people processing permits and applications, are going to be looking for; whatever help the work group can give in answering the questions would be helpful. One of the first conference calls was devoted to sorting through these questions and putting them into logical groups, which ultimately led to the four categories: defining the source, criteria for determining feasible control technologies, criteria for eliminating technologies, and the needs of states and stakeholders. He said that they grouped the questions between these categories, and that the work group then split into the four issue teams to tackle the issues under them. Mr. MacLeod said that the committee would hear the perspective of the issue team leaders later, but first he was going to speak about the highlights of the report from the perspective of a chair person. He addressed the themes he noticed coming out of the report, and acknowledged that other members of the work group would have different perspectives about the report, and would be encouraged to share them.

The first point that the work groups identified was that there are a number of areas where EPA guidance is really helpful. These areas included the appropriate methods and formulations for calculating a cost related to GHG controls, how clean fuels should be evaluated under the BACT process for GHGs, and how to evaluate energy efficiency in a BACT analysis in a sector-by-sector basis. He said there was a lot of discussion in the work group about energy efficiency especially in the early years, as it was one of the most promising forms of emission reduction technology. He said it would be really helpful if EPA would help put together some guidance on how to review new emerging technologies on a sector-by-sector basis.

The next major highlight Mr. MacLeod commented on was the lively discussion associated with defining the source and scope of analysis, which would be discussed in full by Don Neal later. This topic seemed to yield the most interest for many people, as the meetings had no shortage of attendees. He said at the core of the issue was whether or not GHGs changed the scope of analysis, and that processes and not just the emissions unit have to be looked at. While this issue group did not always come to a consensus, he believes that they flushed out the issues in a way that will be very helpful to the EPA as they prepare instructions to the states on how to implement this.

The next highlight Mr. MacLeod observed was the sense that the NSR manual and the top down BACT process has a general level of flexibility and the ability to weigh different characteristics, and it works. No one took issue with any one of the five steps that constitute BACT reviews, but agreed the top-down BACT process had the structure that it needed.

The final highlight he referenced was the needs of states and stakeholders. He mentioned issues such as what the states would need to process the applications, and what does industry need in order to have predictability about what they should put forward. He then steered the conversation towards the recommendations, and said that since they had such

adept issue team leaders they would each present the highlights they saw from the four issue groups.

Don Neal, Calpine Corporation, thanked Mr. MacLeod for his introduction. He announced that there would be a more detailed report online, and then urged members of issue group 1 to look at that report as it contains a lot of very detailed information about the case law and the history as it relates to defining the scope of BACT.

Mr. Neal said that they decided to break their topic down into two questions, which in their most simplistic form, he described in terms of "inside the facility" and "outside of the facility." The first question was what is the source, and to what extent should BACT consider reduction opportunities separate from the emissions unit. This he explained as the "inside the facility" question, because if someone decides to make a major modification or build a new facility, they must differentiate between what is fair game for GHG emissions, and whether or not it will be different from that of criteria pollutants. The second, "outside the facility" question was at what point does a control option define the source. Mr. Neal gave an example using Calpine, saying that if they were in the natural gas combined cycle power generation business as well as geothermal, would the source be redefined if they were required to look at a solar project instead of proposing a combined cycle power plant. These were the types of questions Mr. Neal's group evaluated, and because of the issue group's high membership they had a lot of creative discussion. He said that the great thing about the issue group was that despite there being so many people with strong opinions and differing perspectives about what BACT should be, they maintained their professionalism, and this was impressive.

Mr. Neal explained that for each of the questions they came up with a consensus position and a point-counterpoint where there were areas of non-consensus. The first position was related to the "inside the facility" question of what is the source and to what extent should BACT consider reduction opportunities. The consensus position was that EPA should continue to apply BACT to units undergoing a physical and operational change. He said that the consensus favored the EPA's current policy towards criteria pollutants. He then explained that the non-consensus recommendation, depending on the perspective, was either the EPA should stop there and do no more, or that the statute allowed applicants and permitting agencies to require a larger scope of BACT. He then explained how he saw the non-consensus opinions. The first he described as the belief that expanding BACT beyond the current practice would promote the opportunity to achieve efficiency gains in other parts of the production process. Putting this in terms of natural gas combined cycle power, he explained that if they were to propose and upgrade to a combustion turbine, then they should look at insulating the heat recovery steam generator on the back end so the boiler could capture all the waste heat, because technically that would provide additional efficiency that would be related to that production process. The point being there are other areas of a production process within a facility that could yield GHG reductions. He then talked about the counter point to that: keeping the scope of analysis as it currently is, with the view that expanding BACT would create too much uncertainty. He said that from the perspective of someone proposing a major modification, they really would not have an understanding of how far they needed to go

in evaluating potential process modifications or equipment upgrades to satisfy the requirements for BACT. In its current form BACT is a legal mess, and there is uncertainty in how to apply it.

The second recommendation, aimed at the question at what point do potential control options redefine the source, he described as starting an even more interesting conversation. The consensus opinion was that the EPA needs to define what it means by terms like "fundamental business purpose" and "basic design." There was much disagreement, and the non-consensus opinions were that BACT should not redefine a project such that it would change the fundamental business purpose or the basic design. He said that environmental agencies are not best equipped to evaluate an applicant's business decision, whether it be generating electricity or manufacturing automobiles, as the people proposing these projects have done the work necessary and that is why they are proposing their particular approach to satisfying a need that they have identified. Redefining a product could therefore force a company outside its core business. He says that the issue goes beyond the issue of uncertainty, and if you required those types of evaluations it would chill development and possibly reduce efficiency in existing manufacturing processes. The counterpoint to that non-consensus opinion is that statutory BACT requires a broad review of alternative production processes, including clean fuels, and that expanding the scope of BACT to evaluate those processes, if it does not materially change them, is certainly warranted and supported by the staff. Mr. Neal concluded by saying that this was a summary of countless hours of the deliberation of the issue group, and that he hopes he captured it appropriately.

John McManus, American Electrical Power Service Corporation (AEP) directed everyone to the text of the report. Page 5 of the report contained the two things Mr. McManus's issue group examined, which were which technologies were demonstrated in practice, and what criteria should be used to determine the technological feasibility of control measures. They put emphasize on the second item, on the basis that the group did not have a technical expertise to comprehensively address the first issue. He believes that in reality an entirely separate work group would have to be put together to examine the second issue, and they learned early on in the process that the EPA has started to create a GHG mitigation technology database. Since the Agency is already moving forward on the issue of technologies they spent their time not on that matter, but on the issue of what criteria should be used to determine the technological feasibility of control measures. As they talked through the issues they ultimately came up with three overarching consensus recommendations that are on the bottom of page 8 in the report.

The first recommendation is that the EPA should handle the first issue through the Office of Research and Development (ORD), because of the previously mentioned lack of technical skills. Since GHG technology development is in the early stage it is necessary to have systems in place through the clearinghouse and through the EPA's database to provide information, particularly to permitting agencies and the regulative community, on what technologies are out there.

The second recommendation Mr. McManus talked about was that the EPA should explore creative ways to encourage the use of GHG control technologies. He explained this further by saying that the EPA should provide guidance regarding evaluating energy efficiency in a BACT analysis, on a sector-by-sector basis. He said that this came out of the discussions of all the working groups, and was a common theme that could be applied to all of the issues discussed, so they encourage the Agency to explore this in more detail.

The next three issues they have within the report relate to general criteria, what is meant by "demonstrating practice" and a discussion of technology transfer. He mentioned that by looking at the report, one can observe that they mainly went back to the draft NSR workshop manual from 1990. Instead of trying to reinvent all the work that was done there, they used it as their guidance, and most of what is in the report really draws from that manual. It is not verbatim from the manual, but Mr. McManus said they tried to touch on some key points that they believed to be relevant. The areas of consensus contained within the report are in large part from the manual.

They had an area of non-consensus relating to the role of commercial guarantees in determining whether technology is technically feasible. The differences here related to whether or not you had a commercial guarantee, and if you do, does that mean absolutely that technology is feasible, particularly at the emissions limit? He said that from the regulated community perspective, while guarantees like that are sought, they often do not have a lot of weight behind them. This could create situations in which regulations are not met, yet it has negligible effect on the supplier. On the other hand, he explained that just because there is a lack of commercial guarantee does not mean that the technology is not available or feasible.

In the next two areas – what is meant by "demonstrated practice" and "technology transfer" - there are areas of consensus and no areas of non-consensus. The one comment Mr. McManus had was in terms of "technology transfer." They had discussed transfer of technology from one source category to another source category. Technology transfer may be from another country to the United States, and there was full agreement that it is appropriate to look at those types of technologies, as long as certain criteria are considered, such as if they really are applicable. There should be an effort to look at a broad view of the technologies that are available and not just focus on the source category. The next issue his work group discussed is on page 11 of the report, and is innovative control technology. This discussion recognized that the innovative control technology that is in the current rule has had little use and even less success. Here they concluded that given that GHGs really do cry out for technology development, we need more flexible ways to give us more options to try new development technologies. This way a huge risk is not being created to the permitting agency or the regulated source. He asserted that this discussion completely underlies the recommendation they had, and that the EPA must look at a different way to use the existing provision in the regulation or other approaches that can be used to aid innovative technology development.

They then looked at three specific approaches that might be taken in terms of technology. The first was carbon capture and sequestration, and there was a full agreement that this is

a technology well into its early stages and should be followed closely in terms of BACT evaluations. Both pieces must be examined in tandem, to ensure that they work together to yield desired results. There was also general consensus that the ability to pipe to another source should be investigated. Mr. McManus highlighted one non-consensus issue having to do with this approach, that if there was not storage space nearby, could that be used to change the location of the source? The second area discussed was energy efficiency. He gave the caveat that with this issue they looked at energy efficiency in the context of the unit that is subject to the BACT analysis and not the broader view that was discussed across the work groups. There was consensus on a few areas with energy efficiency, first being that energy efficiency limits may be difficult to quantify into an emission limit. There are factors that affect energy efficiency over time: a lot of equipment degrades and energy efficiency is lost over time, so how could that be factored into setting that emission limit? The area of non-consensus is whether to apply energy efficiency at the unit itself or can you look at a broader base. The last issue they addressed was clean fuels, and there was general agreement that different fossil fuels have different CO₂ characteristics. If different fuels are used there will be a different CO₂ emissions rate. They did not, however, reach agreement on how to apply clean fuels in a BACT process, and it goes back to the issue of redefining the source.

Mark MacLeod then introduced Ann Weeks, as the leader of the work group tasked with investigating criteria for eliminating technologies.

Ann Weeks, Clean Air Task Force, structured her presentation like the steps of the BACT analysis. The central question her group looked at was how environmental costs and other issues get factored in. She praised the subgroup for their liveliness, and gave credit to her colleague Helen Silver, who sat in on the work group. While the couple of pages in the report do not reflect the extent of the conversations that occurred in the subgroup, Ms. Weeks summarized the five issues that emerged from the longer paper produced by the working group.

First she discussed the trade-offs between GHG controls and criteria pollutant control applications. How should a hypothetical negative impact of a GHG control on criteria pollutant control be considered? What if efficiency decreases or criteria air pollutant increases occur because one must control GHG? The second issue she talked about dealt with what other environmental impacts may be important in addressing GHGs and BACT. The third issue was about how offsite energy should be considered. These might include raw material impacts, fuel production impacts, off-site energy use, and what would happen if energy use went up due to choices made in order to control GHGs. The fourth question she presented was related to the differences between GHGs and criteria pollutants in the sense of the magnitude of the tons produced. Thinking about the amount of GHGs produced by the combustion of fuel relative to the amount in raw tons of criteria pollutants, there are implications for cost effectiveness, so how would the cost effectiveness of a technology be evaluated. The fifth question that the work group tackled was about how the combustion of biomass should be considered, if at all, in the BACT analysis. Ms. Weeks then presented on the consensus and non-consensus views the working group held on each topic.

For the first issue, it was generally felt as a consensus position by the subgroup members that the states have a lot of valuable experience to date in evaluating trade-offs between pollutants, and that the states should continue to use their vast experience with the current BACT practice in evaluating the trade-offs between GHGs and criteria pollutants to see if there are any. She added that this should be done without NAAQS violations from GHG controls. There was no consensus on whether a permitting agent can limit control technology of either criteria pollutants or a GHG control technology, based on the impact in the other pollutant. If a criteria pollutant control technology has GHG impacts, some members thought the criteria pollutant should always have priority, while others felt the contrary, so long as the NAAQS is not exceeded.

On the issue of other environmental impacts and how they are considered an issue in BACT analysis for GHG, the consensus view was that this is not a new question and there was much discussion about what the related impacts are. She said that these must be the most carefully considered of the environmental impacts, as they range from issues such as comparing process options for GHG control options, to trying to evaluate the relative water uses and water quality impacts associated with control technologies since scarcity is a huge issue on the horizon. In addition, issues such as threats to endangered species, solid waste impacts, and soils and vegetation were all discussed as areas that need to be considered when conducting BACT for GHGs, just as they are for criteria pollutants. Ms. Weeks stated that the recommendation was that the EPA should emphasize that collateral impacts should be carefully considered, and that on this issue there were no non-consensus positions.

The third issue had to take into account offsite energy-related impacts, and here the group felt that in the short period of time they had to discuss how GHG BACT should work, there is some value in the current guidance. Ms. Weeks spoke of the current guidance, and how it recognizes the permitting authority has latitude to consider indirect energy-related impacts, particularly where they are significant. In this context, energy efficiency came up again, as this is an important question in thinking about GHG controls and reduction. The key questions the group could not come to a consensus agreement about were where and how energy efficiency gets evaluated.

For the fourth issue, which raised the question about cost effectiveness, the group recommended that GHGs should be assessed on a CO_2 equivalency basis. Ms. Weeks explained that GHGs that are emitted are produced in larger volumes than traditional criteria pollutants, and therefore one will have different cost effectiveness figures. This is where the subgroup could not reach a consensus, as some members felt that it is appropriate to set threshold cost effectiveness values for GHGs in various amounts per ton, while others thought there was no appropriate ton figure that should be selected, but rather that BACT is done case by case.

Lastly, Ms. Weeks discussed the fifth issue, the questions related to biomass as a clean fuel. The members of the group agreed that there is no precedent in the current BACT program for issues presented by biomass. She used an example of switching from a fossil

fuel combustion turbine to a biomass combustion turbine application, and stated that the question is an accounting one, because how should the carbon produced by biomass combustion be counted in BACT? Traditionally BACT looks at emissions from units, and not at issues of how the fuel is sourced. The consensus regarding this issue was that the EPA should develop guidance with respect to how biomass fuels are to be treated in BACT analysis, and whether the use of biomass fuels should allow an applicant to avoid BACT applicability. Ms. Weeks said that along with this comes the issue of whether biomass should be considered carbon neutral, and there was no consensus between members about that. Some members felt that biomass is inherently carbon neutral, and some felt that while some biomass fuels may be carbon neutral based on sustainability and where they are sourced from, that is not sufficient, and the EPA needs to define this clearly. Ms. Weeks said that further dissent came from the states' members on the subgroup, who were of the opinion that conducting case-by-case evaluation of this issue was going to be very labor intensive.

Mark MacLeod thanked Ms. Weeks, and introduced John Paul, who was the leader of the work group that looked at the needs of states and stakeholders. Mr. MacLeod believes that one of the key themes coming out of this final report is the idea of how best to get the information to the individuals that need it, and there are some specific recommendations that the group came up with.

John Paul, Regional Air Pollution Control Agency, thanked Mr. MacLeod, and then directed the subcommittee to follow along on page 16 of the report, "The needs of states and stakeholders." He went on to highlight several areas of the section. First he said agencies will use the existing SIP approved PSD process, as the work group did not envision a new process for GHG BACT determinations. The top down process is predominant, but is not the only SIP approved process that exists among state and local agencies. Next, they envision that some form of the Tailoring Rule will be adopted by the EPA. Going off of those basic assumptions, Mr. Paul discussed their recommendations. The first big topic is communication, and they suggest a periodic GHG control measures newsletter be adopted by the EPA. As things are developing, there must be communication about what is going on with regard to significant decisions, the issuance of guidance, and the issuing of permits. Likewise, he said there needed to be communication among the EPA's headquarters, the regions, and state and local permitting agencies on permit decisions. Timely distribution of this information is essential, so that others can benefit from it.

Many here are familiar with the RACT/BACT clearinghouse, and there is also a mitigation database that is being developed by ORD, which is called the GHG ORD mitigation database. Mr. Paul and the work group ask that both be readily accessible, timely, complete, and adequately staffed. He spoke of the large amount of guidance needs among all the work groups, and they identified some of them in the pages of the report. Directing the committee to page 18 of the report, Mr. Paul listed the following guidance needs specifically: the appropriate methods for calculating costs, how to evaluate pollution prevention methods, guidance on efficiency improvement measures, emission factors including fugitives, biofuel effects on GHG emissions, monitoring requirements,

test methods, acceptable control technologies, ranking of GHG with regard to impact, netting GHG under the PSD rule and whether that is to be allowed, and then many more that are not listed.

Mr. Paul's group primarily had consensus, but there were two areas of non-consensus. The first is in regard to the appropriateness of New Source Performance Standards (NSPS), as there were some on the work group who did not believe that NSPS was an appropriate tool for GHG emissions. Others were concerned that though they might be a good tool for new sources, if the EPA tried to use NSPS to control existing GHG sources, problems would emerge in approaching the system, as well as at the state and local agencies with regard to resources. He said that although there was general agreement that a NSPS for new sources would be a good tool to provide a baseline, there was not consensus. The other area of non-consensus was with regard to presumptive BACT. Going into this issue they recognized there may be some legal problems with presumptive BACT, but there was a strong call from state and local agencies for some form of it, especially for smaller sources. There is a big call for this either exactly as presumptive BACT, or as a model permit, or possibly a different name that does not carry the same stigma. However, he explained that some members were concerned that this would conflict with the case by case determination that is mandated, and others were concerned that agencies would simply do this without considering other points.

The final area they talked about was training, and Mr. Paul reported that they all agreed training is essential for all stakeholders on both the process to be followed, as well as the technical aspects of GHG controls. They recommended periodic training on the national, the local, and the state and regional levels. He said that the bottom line is that there must be timely communication on GHG control measures and the process. Since everyone is going to be new to this process and there will potentially be new permits before them, the ability to process them in a timely and effective manner is essential.

Mr. MacLeod thanked Mr. Paul and said that there was one other issue that should have belonged to an "other" issue category. This issue came up in the final days of the work group, so Mr. Svenson will report on it.

Mr. Svenson said that the other issue was to what extent should the permit reviewer envision there may be controls available soon, and therefore could a condition be placed in the permit based upon the future availability of a technology. They were unable to come to consensus, with the two different points of view being that it should not be included in the permit versus it should be included.

Mr. MacLeod asked for any comments that the work group members and subcommittee members may have.

Comments from BACT/GHG Report Review and Deliberation

Michael Formica, National Pork Producers Council, commented that the work thus far has been focused on emissions and BACT for the largest emissions in the country. He expressed a number of concerns for both the agriculture sector and the small business sector. His primary concern is that once this is going to be a template that will be used for other sectors, and as a way to move forward, and that may or may not be appropriate. There is continuing concern over elevated emission thresholds, as well as what would result if one of these industries were taken to court, since the cost of just legal fees can be up to seven figures, which would put people directly out of business. There are emissions from the animals themselves, and in cold weather a tank will be emitting heat for the animals and will considered as running 365 days a year.

Mr. Formica said that what they have come up with is a statement that lower thresholds would be problematic, and would raise significant feasibility concerns for a number of other stakeholders including small business and agriculture. He motioned to include the language of the statement on page 16 of the report, after the last bullet point, and said that there could be a discussion first.

Gary Jones, Printing Industries of America Graphic Arts Technical Foundation, echoed Mr. Formica's comments, and had been under the impression the report was going to be changed based on the subcommittee's discussion on small business concerns. The concern is that even in looking at the tailoring rule and the EPA's attempt to set the threshold high enough to exclude small businesses, there are still risks. He said that they have fuel combustion sources that do not run every year, or may run periodically, but they are still counted as a source. In addition, carbon capture may be feasible at some points of emissions, but it is not feasible to a small business. Mr. Jones believes the report has to reflect that small businesses have different concerns than larger businesses in this process. From his personal experience, he knows the possibility exists of getting bogged down on very inconsequential issues that delay permits 16 months, and their members do not have the resources to fight it legally. He added that the language Mr. Formica prepared was satisfactory to him.

Mark MacLeod, Environmental Defense Fund, asked for only comments on this particular issue so that it could be resolved and the committee could move on to other general comments.

Jack McClure, Shell Oil Products Company, brought up a comment that came out of a work group about the difference between a small business verses a small source. There must be clear definitions of what constitutes a small business, and how to handle the issue of a small business with a large source or a large business with a small source.

Mr. Jones argued that it should be small emissions, and that the focus should be on the source rather than the size of the industry.

Mr. MacLeod said that the committee currently had a suggestion on the table. He reiterated that Mr. Formica and Mr. Jones said they cannot live with this report as it is, without including this paragraph, and would not want to recommend it forward. He

asked for comments from the work group, and if people could live with the language Mr. Formica proposed.

Lisa Gomez, Sempra Energy Utilities, asked that Mr. Formica restate the language.

Mr. Formica read the statement aloud.

Ms. Gomez said she supported the language of the statement. She thought that Mr. Jones highlighted two great reasons why the thresholds are important: one being potential to emit and the other being what would happen with a 25,000 ton threshold. She offered a third one, which is the issue of state laws. As soon as GHGs become a regulated pollutant, the threshold for them will be significantly less than 25,000 according to many states' laws. She believes that this is a big issue for small sources and small businesses, and therefore supports adding the protective language.

Rick Bolton, Center for Toxicology and Environmental Health, commended the work group, yet argued nothing new really came out of it. The report draws on core issues of BACT, but he was anticipating some new, out of the box thinking about GHGs and BACT and how they will be handled. His perspective is that this has tremendous potential to affect growth and jobs, and if it is dragged out for too long, then it will be difficult to stimulate jobs and the economy in any significant way. He then asked about the timeframe in which comments from the EPA would be completed and whether or not to expect to have some formal response by the next meeting in June.

Mr. MacLeod first addressed the innovative ideas issue, and assured everyone that there would be ample opportunity to discuss them while they established the scope of Phase II. During Phase I, the objective was to get the stakeholders' recommendations, while the intentions for Phase II is to talk about innovative issues. For information about a timeline, he deferred to Pat Childers.

Pat Childers, USEPA, said he saw no harm in asking for a response by the June meeting.

Bill Becker, National Association of Clean Air Agencies, followed up on the comment made by Mr. Bolton. He has served on a number of work groups over the past 30 years, and was really impressed by this one. He believes a magnificent job was done. This was a tough process and they still got through it really well. He views their most impressive feat was the pushing that was done by states and localities. They managed to be quicker than their deadline permitted because they understood the importance of creating a useful document that the EPA can take and revise so that the states and localities have the necessary guidance for issuing permits. That was very important and laudable. He wanted to reinforce how important it is that the EPA takes this document, when it becomes approved, and do the necessary due-diligence with it to make it practical and helpful to states. They will have to resolve the issues of non-consensus, and provide examples of what BACT works and what does not, and give more information to the subcommittee. The EPA is going to have to pursue this in an equally expeditious manner as the work group did, and get this information out to all stakeholders so they fully understand what the guidance is.

Mr. Becker's final point was to make the recommendation for bifurcating what the committee really means with regard to a large source that should be affected versus a small source is important, and he would support it. His worry is that those supporting exempting small businesses would turn around and argue against using the Clean Air Act (CAA) to regulate GHGs. It is imperative that those who are supporting exempting small businesses are not going to turn around and also argue against using the CAA to regulate GHGs. He hopes that those who benefit from this will still provide support to EPA to move forward on this rulemaking.

Mr. Formica responded that the comments he submitted to the EPA on the tailoring rule itself did not get into the CAA issue, and dealt specifically with the potential to emit.

Gene Trisko, United Mine Workers of America, had a question about CCS and economics relating back to the statutory definition that BACT is determined on a case by case basis that takes into account energy, environmental, and economic costs. He understands the part of the CCS discussion about issues such as availability of pore space, pipelines, etc. What he is unsure of is why there is not an explicit recognition in the CCS about the relevance of the regulatory regime that is in place in which a permit is being considered, and the impact of the regulatory regime on the price or value of carbon. He argues that the price or value of reducing a ton of CO_2 , which would be one of the important benefits of CCS if it is developed, depends on whether there is a cap, at what level the cap is set, and the availability of incentives such as bonuses. All of these factors go into determining the economic feasibility of the application of CCS to a proposed facility. He sees no explicit discussion of this regulatory regime issue, and would like to know if this can be addressed by the subcommittee's consensus position under Economic Impacts on page 15 of the report, the first sentence of which reads "The BACT economic impact assessment considers the ability of the source to bear the cost of air pollution controls." He asked if the subcommittees felt that that sentence adequately addresses his concern about the lack of reference to the regulatory regime and its impact on the economic feasibility of CCS.

Ann Weeks, Clean Air Task Force, responded that the members on the work group were asked to think about what issues were relevant to a BACT determination for GHGs. The question about what new regulation constructs there might be was not on the table for them. No consensus was reached about thresholds for cost effectiveness, and she suggested looking at the work group's detailed reports in order to see the depths of their conversations. She believes the issue Mr. Trisko raised is beyond the scope of what the work group was asked to consider and discuss.

John McManus, American Electrical Power Service Corporation, added that they were looking at these issues in the context of regulating GHGs under the CAA. If legislation ultimately changes that regulatory scheme, it changes a lot of the views people held. He directed people to page 15 of the report, to the section about non-consensus about the right amount of cost effectiveness range to use. He explained that the lower range reflects some people's idea of where the market might be, while the upper range reflects the specific cost of the technology. He suggested that this area of non-consensus was formed in part by how people view that specific regulatory regime, yet followed up by saying this was speculation.

Kathryn Watson, Improving Kids Environment, said she would like to know where Mr. Formica's proposed language is supposed to go in the report, and what its purpose is. She asked if it were a comment on the tailoring rule.

Mr. MacLeod answered that it was to go on page 16 of the report under "needs of states and stakeholders," as an appendage to the final bullet in the bulleted list. This bullet talks about the assumption for the tailoring rule, as well as the impacts on state and local permitting agencies, so the recommendation from Mr. Formica is to add recognition of impacts on small sources and agriculture.

Ms. Watson asked if this meant that the group would be making the assumption that the tailoring rule and where that threshold is set has an impact on small sources and businesses.

Mr. MacLeod confirmed that this would be true.

Mr. Becker asked for clarification of the statement's intent. He asked if the language is trying to make a distinction that this is about pulling small sources into this regulatory program down to the criteria pollutant sizes, and not seeking an exemption for agriculture. If agricultural sources emit GHGs above the major source threshold of 25,000 tons, for example, this would not be seeking an exemption for them, just for the agricultural and other small sources that are emitting at the criteria pollutant range of GHGs.

Mr. Formica replied that he does not know about the criteria pollutant range, but that this statement is not seeking an exemption under the 25,000 ton threshold. It is just an acknowledgment that if the threshold is dropped below this value it will set off many triggers and concerns for these industries.

Mr. MacLeod called to question the language, asking committee members to raise their hands if they cannot accept this report with the addition of this statement.

John Walke, Natural Resources Defense Council, asked Mr. Formica to clarify if the lower threshold was referring to 100 and 250 the same way it is in the sentence addressing the states, or referring generically to anything less than 25,000 tons.

Mr. Formica asked if using the term "these thresholds" as opposed to "lower thresholds" would be clearer.

Mr. Walke said that using "these thresholds" was much clearer, and would also be in line with the meaning of the prior sentence. He added that the reason he requested the clarification was because he believes there is consensus around that factual prediction of the agreed-upon threshold.

Mr. MacLeod replied that the chairs would do some wordsmithing, and added that Mr. Walke's comment is well taken to make the link between the sentences and values clearer.

Mr. Jones agreed that because this is a FACA (Federal Advisory Committee Act committee), they have to deal with the federal threshold.

Mr. Childers said to the committee that this is more than a pulse check, it is an actual vote. There was no dissent, and he declared that the report was unanimously moved forward to the EPA for full consideration. He congratulated the work group, subcommittee, and full committee for all their work, and turned the discussion back over to the chairs.

Jeff Muffat, 3M Corporation, said that it was important for everyone to recognize the amount of work that was put into this entire process. The chairs of the issue groups did an unbelievable job of getting the points out and available to the subcommittee members. EPA's help and guidance was really helpful throughout the process. He said that he has been on the CAAAC for a very long time, and that this was one of the biggest efforts he has seen put forward, in the shortest amount of time.

Eric Svenson, Public Service Enterprise Group, thanked Mr. Muffat and began the Phase II discussion. The subcommittee had a lengthy discussion on what should be involved in Phase II, as well as the work group. On page 4 of the report there is a list of suggested topics, that are not in any way the topics, but they are the start of a list of topics that can be amended to be included in Phase II. He said that they would like to have an opportunity in the next week to take this list, and any other ideas from committee members, and submit all ideas as a conceptual paper to EPA as potential topics. With the timeliness of Phase II and the compressed time schedule, they concluded that in order for work efforts to comprise a product between now and the next CAAAC meeting in June, they only wanted to embark on topics that the EPA felt were useful to developing guidance from the CAAAC. From a subcommittee standpoint, the current list of topics, along with any other formal topics presented by CAAAC members, should be considered by the EPA, who would return their thoughts on the topics. The hope is that they will narrow down the list to topics they feel are relevant and worth pursuing. If the committee still has a topic they cannot leave alone that the EPA did not recommend looking into, it can still be pursued. The main goal is to cull the list of topics worth investigating, in an effort to come up with a feasible task. Although they were not submitted to the full committee, certain members of the work group had created concept papers that had been reviewed during the January working session. He directed a question towards EPA, asking if other committee members make a determination about what should be added

should they provide the concept papers to other members in an effort to prevent them from having to re-write about their topics.

Chuck Knauss, Bingham McCutchen LLP, asked for the members who had created a concept paper per the directive of the co-chairs, if they had already gone out to the members of the full CAAAC. He thought that most members are on the cc list of the emails, and therefore should have the concept papers already.

Mr. Childers said that he would make sure all members of the CAAAC had copies of the concept papers.

Mr. Jones recommended that they are sent out again just for the sake of clarity.

Mr. Childers added that they could prioritize sections from papers they felt were the most relevant.

Ms. Weeks just wanted to make clear that while there are white papers available, not all of the six issues have an associated paper and either the subcommittee or full committee decided that these issues needed to be brought to the attention of the Phase II discussions. She suggested that if members wanted to submit a one-page summary of the topic to flush out why it is relevant, that can be done until the next Tuesday.

Mr. Becker said that what he gained from the subcommittee's discussion was that the Phase II suggestions that had been put into the Phase I report were merely suggestions, and that they would be looked at, but have yet to be agreed upon. There are papers, ideas, and a solicitation to submit more ideas by next Tuesday. The idea discussed by the subcommittee was to seek the EPA's, and especially Gina McCarthy's, advice and see if she had any suggested direction for the committee, and any suggested time frame in which she would suggest completing it. Once that information is transferred back to the CAAAC, they would cull out the ideas that both the committee and the EPA were most interested in pursuing, and begin conducing outside the box thinking to create Phase II of the report. He believes that winnowing down the number of issues to examine to those that can be pursued successfully. The reason to have the EPA identify which issues are most important to them is so the committee's work can be relevant.

Mr. Knauss argued that they should not focus only on topics where they knew consensus could be reached. He said that Mr. Becker described the process perfectly, and that Ms. McCarthy and her team's comments will be very useful to review, but that the committee should ultimately decide.

Elaine Barron, Sierra Medical Center, pointed out that she did not believe that the committee should work on topics selected by the EPA. The committee should not go to the EPA and ask if it is okay to discuss and recommend topics, but rather should have the freedom to choose what they think is relevant and present it to the EPA. She recognizes that there are time constraints, and that this may be a simpler solution, but the idea of having so much diversity of opinion coming forth is worthwhile and democratic. All the

expertise and diversity involved in their discussions allows for a better learning process than to just come up with solutions.

Mr. Childers said that the role of a FACA is to give advice that the EPA will either take or ignore. There is not enough time to cover all topics or ideas, so the decision was to present them to the EPA and have them provide feedback on how we should proceed.

Mr. Wakelyn responded that they are an advisory group, and therefore should give advice. Ms. McCarthy had said that she was excited to hear their ideas during the morning session, and that she wanted to know what the CAAAC considered important to move forward on in Phase II. The ground rules were that there would be a second phase where they would have these discussions, and decide on recommendations.

Mr. Svenson responded that there was a lot more deliberation about this during the subcommittee meeting and the work group meetings than he had touched on in his introduction. They came to an agreement early on that the effort had to be broken into pieces that resulted in the first and second phases. There has always been discussion about looking at out of the box ideas, and so they decided to create concept papers in November. The work group did not have sufficient time to produce a report for this meeting, but the conclusion was that they have all these ideas and wanted to hear what the EPA thought was meaningful to work on. The objective is to not expend a lot of energy on things that will not produce meaningful input to the agency. The predominant point of view that came out of the work group was that they needed to get the EPA's guidance to help in culling down the list. He said they still need to have the full committee saying that Phase II is what they want to do, and then request guidance from the EPA on what they want from it.

Mr. Becker agreed with Mr. Wakelyn and Ms. Barron, and argued that what they are saying is inconsistent with the direction from the subcommittee meeting. Of course the committee should not blindly follow the EPA's advice and let them dictate what they should be doing, yet the goal is to be relevant. The committee wants to dedicate time to work that will be helpful in answering some of their questions and providing new thinking by winnowing down the issues they came up with to ones that the EPA believes could be of great help.

Mr. Wakelyn reiterated that he heard Ms. McCarthy say to them that while she was going to come up with ideas of her own, she was interested in hearing theirs moving forward.

Mr. Childers said that he does not believe the committee is against what Mr. Wakelyn is saying. At the subcommittee level they decided to move forward a package of papers to the EPA to get guidance on how to proceed on all or some of them. Based on what the group hears back, they would establish the work groups and move forward with Phase II.

Lisa Gomez, Sempra Energy Utilities, said that her understanding from the day before was that there is clear agreement that this body provides advice to the EPA on issues they deem important, but at the same time they have a limited amount of time and are getting tired. She thinks the solution that was proposed yesterday was thoughtful, in that, the white papers will be completed within the next week and then would go to the EPA. The EPA would come back within some period of time with the papers they were most interested in and a deadline for completing the report. These papers would then come back to the work group and they would have their input as well, so that they could add to the EPA's suggestions if necessary. To her, this addresses those competing concerns of limited time and resources, and also ensures that they maintain a separate voice.

Stephen Hartsfield, National Tribal Air Association, discussed how CAAAC has always considered the legitimate concerns of everyone. He said they have to remember that there are a lot of issues that are valid, and that CAAAC has always accepted those issues and discussed them, but time is a big consideration. If the EPA is on a short timeframe, they cannot slow that down, but they can be mindful by giving CAAAC member the courtesy of more than five days to review a product. For members to be able to do their job properly it is unreasonable to have five people review this document in five business days. They need to have enough time to allow their members to review this document so they can fairly and accurately represent their viewpoints. This issue must be considered for Phase II.

Susana Hildebrand, Texas Commission on Environmental Quality, said that Ms. Gomez had addressed the point perfectly, that it does not need to be that the EPA tells the committee what to do, or that they come up with it completely on their own. This system is a good hybrid, because the last thing they want to do is waste time, and there are potentially so many issues worth discussing. She believes the committee needs focus on issues that are feasible to address within their time frame. Since the EPA has been attending their meetings, they should be able to identify what issues are not worth pursuing.

Kelly Green, Texas Cotton Ginners Association, said that he has not seen the concept papers, so most of what he had learned about the work groups had been since Monday, but he offered his thoughts about going forward with Phase II. The first thought was in response to an earlier discussion, in that they are a FACA, so state rules are not part of their consideration, yet it is important to be mindful that state rules are going to come into play. Some of the impacts they are worried about are going to happen due to interaction between federal and state rules. In reference to the statement on small business and agriculture, he has a lot of concern that they are trying to cram something into a law that is not meant to be there. Further, there was mention of technologies that were almost ready for being put into a permit, and how to address those. Here he argues that a manufacturer may give a guarantee, but that manufacturer is not on the hook for that permit, rather the company is. If you have a nearly ready technology and put it into permit, and then something happens to that technology, then that company is still bound to the permit. Here the committee needs to be careful that they do not set up harmful situations for companies. He mentioned the presentation from Calpine, saying that it was interesting but brings up another point. The seven digit figure that they had to spend to get that power plant permit will ultimately get paid by people who buy that electricity.

They must be careful and do this in a cost efficient way, because all electricity users will be paying these costs.

The last thing Mr. Green mentioned was that there had not been much talk about biomass, and that is something they are really interested in. His industry produces a lot of biomass, but do not use it for energy. There are a lot of industries out there and places that are biomass capable. If they keep this in mind and handle this correctly, he believes they will provide incentives to companies to use this biomass to produce energy. Yet he also warns that if this is handled incorrectly it will drive biomass usage out of feasibility, so they must think carefully about a solution.

Mr. Svenson directed his attention to page 20 of the report, and said that they were unable to reach a consensus over whether or not it is carbon neutral, and so there was no consensus on how to treat it. EPA is in the best positing to determine how biomass should be treated, as this is obviously a big policy consideration.

Ms. Weeks added that the two perspectives regarding biomass are pretty well fleshed out in the longer report from the third issue group. The group had agreed not to put the white papers in front of the group, but she suggested that they could reconsider this, as they spent a great deal of discussion on this question.

Mr. Svenson wrapped up the discussion by saying that the subcommittee had made a recommendation which was captured in what Ms. Gomez said. There have been a number of ideas through concept papers, but there are not concept papers written for all suggestions on the list. The full CAAAC members are encouraged to look at the list and the papers and provide input or add an area that the believe needs consideration in Phase II. One-page papers discussing the various issues will be submitted to the EPA by Tuesday of the week following this meeting, and then in a short time frame the EPA will provide their assessment by looking at these ideas as well as their own ideas. They will come back to the work group and indicate what they think is most meaningful from their perspective, then the work group will decide if that list is too confining or not, and act accordingly.

Clean Air Excellence Awards/Next meeting

Pat Childers, United States Environmental Protection Agency (USEPA), said that the next meeting will probably be the first week of June, when they will also have the Clean Air Excellence Awards. The meeting after that will be in October. They have not done many mobile source topics recently, so they are considering a lab tour in Ann Arbor, Michigan. This goes along with the consideration to have a meeting somewhere other than Washington, D.C. This is the 10th anniversary for the awards. They considered doing the awards in Ann Arbor in June, but members liked last year's location. There will be a Federal Register notice regarding new members, as everyone's membership will expire after the June meeting; membership will either be renewed or a person will be replaced. EPA wants to ensure the members are consistent with the vision and goals document.

They are currently looking for new members. EPA is also talking about two potential work groups, which will keep the committee busy. The four issue papers that have been developed for Phase II will be made available. The slides from the meeting will also go on the Web site.

Clean Air Act Advisory Committee February 3, 2010 DoubleTree Hotel Arlington, VA

Elaine Mowinski Barron	Sierra Medical Center
William Becker	National Association of Clean Air
	Agencies (NACAA)
Rick Bolton	Center for Toxicology and Environmental
	Health (CTEH)
Robert Brenner	United States Environmental Protection
	Agency (U.S. EPA)
John Campbell	Caterpiller, Inc.
Pat Childers	U.S. EPA
Chuck Collett	National Association of Home Builders
	(NAHB)
Beth Craig	U.S. EPA
Anthony DeLucia	East Tennessee State University
David C. Foerter	Institute of Clean Air Companies (ICAC)
Michael Formica	National Pork Producers Council
Buddy Garcia	Texas Commission on Environmental
	Quality
Jack Goldman	Hearth, Patio, and Barbeque Association
Lisa Gomez	Sempra Energy Utilities
Carolyn Green	EnerGreen Capital Management
Kelley Green	Texas Cotton Ginners Association
Stephen Hartsfield	National Tribal Air Association
Steven Lee Hensley	USA Rice Federation
Christopher Hessler	AJW, Inc
Susana Hildebrand	Texas Commission on Environmental
	Quality
Timothy Johnson	Corning Incorporated
Gary Jones	Printing Industries of America Graphic
	Arts Technical Foundation
Mark MacLeod	Environmental Defense Fund (EDF)
Janet McCabe	U.S. EPA
Gina McCarthy	U.S. EPA
Jack McClure	Shell Oil Products Company
John McManus	American Electric Power
Jeff Muffat	3M
Robert O'Keefe	Health Effects Institute
Steven Page	U.S. EPA

List of Attendees

Bernie Paul	Eli Lilly
Eric Svenson	PSEG
Eddie Terrill	Oklahoma DEQ
Eugene Trisko	United Mine Workers of America
Peter Tsirigotis	U.S. EPA
Valerie J. Ughetta	Alliance of Automobile Manufacturers
Phillip Wakelyn	National Cotton Council
John Walke	Natural Resources Defense Council
Kathryn Watson	Improving Kids Environment
Ann Weeks	Clean Air Task Force
Anna Marie Wood	U.S. EPA