

**Minutes of the first meeting of the Illinois Governor Rod Blagojevich Climate
Change Advisory Group**

**February 22, 2007
Illinois Department of Transportation
300 West Adams St. 2nd floor
Chicago, IL**

Introduction

The meeting commenced at 9:30am with approximately sixty five people in attendance. Illinois EPA (IEPA) Administrator and Advisory Group Chairman Doug Scott called the meeting to order, welcomed all in attendance and initiated a round of introductions among participants.

Doug Scott reviewed the purpose of the group and the meeting schedule. Mr. Scott explained that the purpose of the 40 member advisory group is to generate recommendations to Governor Rod Blagojevich to advise him as to how Illinois can meet the dual greenhouse gas (GHG) reduction targets set previously of reaching 1990 levels by 2020 and 60 percent below 1990 levels by 2050. The recommendations need not be unanimously endorsed, however the greater the consensus behind a given recommendation the more weight it will have. The Governor has set this process in motion now for two reasons:

- It is uncertain whether and when the Federal government will take action
- Even if the Federal government takes action soon, Illinois should be positioned and adequately informed in order to influence the Federal debate.

The Chair also outlined three areas that will not be covered by the advisory group due to time constraints in meeting the Governor's time line for receiving recommendations. These areas are:

- *The science of climate change.* This process operates under the understanding that humans are increasing emissions of greenhouse gases, and this is largely responsible for global climate change. As such, the focus is on policy responses.
- *Adaptation and preparedness for the impacts of climate change.* Though the expected impacts of climate change in Illinois are important, the options under consideration by the group are to focus on GHG mitigation efforts. Adaptation may become the subject of a subsequent advisory group.
- *Research and Development.* The long-term solutions to climate change will require extensive research and development efforts at all levels of government. While such efforts are important, they are outside the scope of the advisory group as the group is charged with providing recommendations on immediate policy options.

Doug Scott then turned things over to Dr. Jonathan Pershing, director of the Climate and Energy Program at the World Resources Institute (WRI) who has been asked by the State of Illinois to facilitate the advisory group process. Dr. Pershing introduced himself and reviewed his experience in climate policy including his recent roles as facilitator of the Multi-State GHG Registry negotiations and Regional Greenhouse Gas Initiative State negotiations as well as his participation in California's GHG Market Advisory Committee, United Nations' Framework Convention on Climate Change and subsequent Kyoto Protocol negotiations and the design of the European Union's Emissions Trading Scheme. Dr. Pershing explained the role of WRI as facilitator as well as a resource for providing background research on policy options for the advisory group's consideration and contractor for any modeling of policy options.

Dr. Pershing then reviewed the day's agenda and explained the process and timeline for the advisory group discussions. The process is intended to generate comments and debate as to how best to meet the Governor's GHG reduction targets. To that end, written comments are encouraged. In the future, background research will be posted on a public website: www.ilclimatechange.org. The public will also be able to submit comments from this web site. In order to stay on schedule while also adequately examining

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all options thoroughly, sub-groups will be created to deliberate under narrower topics such as sector-specific options or economic modeling. The timeline for the process is as follows:

- The first meeting is one of five meetings between February and mid-July where the advisory group will come together to discuss and consider a various policy options while narrowing the list down over time.
- The next meeting is scheduled for April 3 in Springfield where the list of policy options will be narrowed and priority options will be identified.
- In the third meeting, the group will review preliminary modeling information and reports from yet to be formed subgroups. The cost and benefits of priority policy options will be considered.
- In the fourth meeting the group will construct a draft of policy recommendations which will be refined and iterated before the final meeting.
- The final meeting will be held in late-July where the group will review the final recommendations to the Governor.

Recommendations will not require consensus as it is not possible under the tight time frame. All views and concerns will be reflected in the final document.

At this point several group members had questions and comments for Dr. Pershing:

Rob Kelter, IL Citizens Utility Board: Is there any commitment from the Governor to implement the recommendations made by the group? What happens when the report is complete?

Doug Scott: The report will go directly to the Governor for his consideration.

Michael Schlesinger, U of I: All members should read the report issues by the New Mexico advisory group, it is instructive. Has any other process completed its mandate in such a short time-frame?

Jonathan Pershing: No but each subsequent process has taken less time.

Rebecca Stanfield, E-IL: It would be good to allow any posted comments to be open for response online.

Henry Henderson, NRDC: Can you elaborate on the idea of subgroups, what types of groups might be created and will other state efforts feed into them?

JP: Subgroups are to be created by the advisory group. A subgroup on modeling is highly recommended, other subgroups could look at sector specific policies or other areas that are important to the group.

HH: What about other processes that have been created around the Energy Plan? Will this group coordinate?

JP: Agency representatives are in attendance who can provide input about the energy plan. This effort will not duplicate other processes.

Craig Sieben, Sieben Assoc.: This process could benefit from hearing directly from officials from other states and sharing those experiences.

JP: WRI has technical relationships with several states and may be able to arrange this as logistics permit.

DS: Illinois maintains a network of relationships among states that can be tapped as well.

Mark Calmes, ADM: What will happen to the report once its submitted?

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DS: The Gov. cares deeply about the issue, takes this process very seriously and will consider the report just as seriously. Recommendations will likely fit in to several categories including possible regulations, executive orders and legislation and the he will move forward accordingly.

Rob Carney, Caterpillar: There are several bills in the state legislature at the moment. Are they complimentary to this process? Are legislators aware of this process?

DS: The CCAG will run its independent course but the legislative process is important. These efforts are not mutually exclusive as the CCAG is intended to initiate legislative dialog and may ultimately inform future legislation. IL-EPA monitors legislative activity but cannot predict where it may lead.

At this point the introduction and process overview section of the day came to a close. This was followed by an overview presentation on GHG emissions in Illinois.

**Illinois Greenhouse Gas Inventory and Projections Presentation
John Larsen, Research Analyst, World Resources Institute.**

See posted presentation and inventory document.

After Mr. Larsen completed his presentation there were several technical comments and questions from the group. Most of comments reflected a desire by the group to have more detailed data on GHG emissions in each major sector and to see how GHG emissions in Illinois compare with other states. Some questions were raised as to the uncertainty of the underlying data for both the inventory and projections but the group agreed that the current document provides a good basis for considering policy recommendations.

Questions and Comments:

Jim Keating, BP: Are 1990 data reliable? Often the further back things go the less reliable the data are.

JP: EPA updates and improves state inventory tools on a regular basis. 1990 data are improved over previous versions but not perfect.

Dave Baker, IL- DCEO: It should be noted that in the 1970s and 1980s GHG emissions declined considerably in Illinois as several nuclear plants came on line and coal generation capacity declined. In the 1990s this trend reversed as open electricity markets took root and Illinois generation fuel mix became more carbon intensive.

R. Stanfield, E-IL: How do you account for nuclear plant operating license expirations in your projections to 2020?

JL: The license expirations take place after 2020 and therefore are not taken into account though that is an important point for advisory group members to keep in mind. If those plants are not relicensed or other plants are not built that base load power must come from somewhere.

DS: What's going on with transportation? Why are emissions growing at a slower rate in Illinois than at the national level?

JL: Illinois population growth was slower than the nation as a whole between 1990 and 2003 thus slower growth in emissions. Vehicle miles traveled per capita in Illinois fell slightly as well so people are driving somewhat less as well.

JP: Is the Advisory group comfortable with using this inventory and data as a basis from which to make decisions?

Mark Calmes, ADM: I would like to know who else is using this method and data sources. Are we playing with the same deck of cards as everyone else?

JP: Other states have used their own data and methodologies to develop their inventories. For example, California has exceptionally good transportation data.

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Question: Do we have time to do more inventory work? For example it would be good to develop sensitivities around data uncertainty for the inventory and projections and to see if we can project emissions beyond 2020.

JP: There are certainly ways to provide a better understanding of these data.

DS: We will need to do more work to provide some additional clarity. We will need to determine how and when this can be accomplished.

RS: We really need to look beyond 2020 in this process.

Art Gibson, Baxter: It would be helpful to look at emissions from other states that are significant exporters of electricity.

William Gerwing, BP: Can we get sub-regional breakdowns for emissions? How about sub-sector breakdowns?

Karen Hobbs, City of Chicago, Dept. of Environment: The Center for Neighborhood Technology is currently doing an inventory of GHG emissions in Chicago.

James Jerozal, NICOR Gas: Is this group looking at making recommendations on meeting the 2050 goal as well?

DS: Yes, we have to look at both.

Joe Schacter, Environmental Law and Policy Center: Can we extend the projection to 2050?

JP: We could try but the uncertainties get very larger the further out you go. There are a lot of assumptions on policy implementation, fuel prices, economic growth, etc.

Question: Is it possible to show where power exports are going?

JP: to address all of these questions and comments we will pull together data and post it on the advisory group website. We will see what we can pull together from IDOT, DCEO other states and federal data. The current inventory is a good proxy but we will iterate on it.

With this final point the discussion of the Illinois GHG inventory was completed and the discussion turned to the Governor's Energy Independence Plan.

Illinois Energy Independence Plan

Steve Frenkel, The Office of Governor Rod R. Blagojevich

Dave Baker, Illinois Department of Commerce and Economic Opportunity

See posted presentations.

After both Mr. Frenkel and Mr. Baker completed their respective presentations both took questions and comments from the group. In this discussion, the group had several questions about the assumptions behind the emission reduction projections for the EIP. Many in the group expressed a desire to see a range of emission projections based on different assumptions around the effectiveness of cellulosic ethanol and IGCC with Carbon Capture and Sequestration (CCS) to reduce emissions. The group was fairly comfortable with the assumptions behind projections for the RPS and energy efficiency measures in the Governor's plan.

There were also questions on the implementation process of the EIP and the role of the CCAG in that process. It was made clear by the chair that the EIP process is independent of the CCAG and the measures in the plan are not to be considered unless in the context of augmenting these policies.

Questions and comments:

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Rob Kelter, IL Citizens Utility Board: My understanding is that the RPS only applies to bundled electricity retailers. What happens if a lot of communities aggregate or municipalize their electricity? Are they off the hook?

Steve Frenkel: ICC is the regulator for the RPS. The RPS will apply to any retailers under ICC's jurisdiction (?), not Munis but most other entities.

Question: What capacity factor was used for the RPS modeling?

Dave Baker: about 30%.

Question: Were water resources included in the analysis of increased biofuels production?

SF: That has not been looked at.

Comment: We're seeing serious water issues as ethanol production increases we need to keep this in mind in our discussions going forward.

Joe Schacter, ELPC: What are the percentages of various types of Biofuel in this analysis?

Andrew Aulisi: We can post the spreadsheet that contains this information, the big driver of GHG reductions is cellulosic ethanol.

JS: Is public transit factored into this analysis?

DB: No

Stefan Noe, Midwest Wind Energy: Are there mandates in the RPS regarding the location of wind generation? Does a certain amount need to be source from Illinois? What about credit trading?

SF: At the moment there is an initial requirement for wind power to come from Illinois in the early years of the RPS with Renewable Energy Credit trading with other states ramping up around 2010.

Michael Schlesinger, University of Illinois: It would be very helpful if there were a range of estimated reductions presented or some other uncertainty band rather than just one projection.

Question: What are the working groups in the EIP?

SF: Each group has a slightly different charge and is working at its own pace.

Doug Scott: It should be noted that in this group we are making the assumption that the entire EIP is implemented and achieved. This is not guaranteed however, the group should only focus on additional measures.

Rebecca Stanfield, Environment Illinois: I can't understand why we're not looking at the carbon implications of the coal programs in the EIP?

DS: The problem is, how do we know IGCC supplements or supplants existing and new plant builds going forward. Its not a perfect science.

SF: We recognize the carbon issue and are doing our best to maximize the uptake of CCS but there is tension across policy goals because we want to both support new IGCC plants while also addressing climate change responsibly. Our hope is that IGCC plants will take the necessary steps to capture CO₂ but these projects are very expensive and there is outstanding issues that make the future of gasification hard to predict, including rising capital costs, the need for long-term contracts for plant output and the additional capital costs of carbon capture and the associated loss of plant efficiency.

RS: At a minimum the scenarios we are looking at should include a case where IGCC-CCS does not work. Including such a scenario would be a step in the right direction.

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MS: We need to look at two futures, one where CCS works and one where it does not.

Jonathan Pershing, WRI: The group should consider what it needs as far as information going forward on this issue when considering recommendations to the Governor.

JS: the same uncertainties exist around cellulosic ethanol. We should consider scenarios where this technology works and where it doesn't as well.

CS: Efficiency projections are fairly robust.

JP: To summarize the feelings of the group I think its sufficient to say that some additional information is needed on some of the underlying work around the Governor's plan. Not with the intention to revisit those measures but to use them as a backdrop in considering additional policy recommendations.

With this final point the group recessed for lunch. Lunch was followed by an in depth discussion of various policy options to reduce GHG emissions.

Policy Options for Reducing GHG Emissions

Andrew Aulisi, Senior Associate, World Resources Institute.

See the posted presentation and policy options sheet for details.

Upon the completion of his presentation, Mr. Aulisi took questions and comments from the group.

Several members of the group made comments on the reliance of qualitative analysis in the policy options list and the lack of clarity as to how specific policies were selected as priorities. Andrew Aulisi went through the decision making steps again and added additional clarity. As the discussion progressed, it became clear that the group will require additional information both on the methodology used to formulate the options list and on the policy options themselves before the it can begin to set its priorities.

Several group members asked for quantitative data on the various policy options. Jonathan Pershing explained that this initial effort did not have the intent of running a rigorous analysis of one hundred policies but instead is meant to inform the group as to which policies should be considered further. The shorter list of policies will go under much more analysis.

Ron Burke, IL EPA: We looked at conducting a quantitative analysis of all of these policies but there is a lot of subjectivity behind the numbers, also policies need to be defined with considerable detail in order to generate quantitative data, we felt that his would get us ahead of the group.

Doug Scott: If this where something were we took quantitative data and shoved it into a computer, we wouldn't need the advisory group. We want input in order to make sure that we can make the best possible recommendations.

JP: We take the charge of this group as the targets the Governor has set. That is the basic framework for this process. Within his framework we rely on you to develop recommendations and we will analyze those recommendations. The group should decide if there are any additional criteria that are needed to make decisions.

(?) Regional Transportation Authority: One of the things we're missing is the timeline for implementation of these policies. That should be one additional criterion.

Scott Wiseman. Center for Energy and Economic Development: There are some things near the bottom of the list that I think deserve serious consideration. The incandescent light bulb ban is very promising.

Rob Kelter: I am less troubled with the list itself. The important thing is how we narrow it down. Right now it is unclear to me how we should do this. If we look at individual sectors we may not generate a comprehensive package.

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Paul Pike, Ameren: We should form subgroups based on affected sectors. Interested members can sign up and we can have conference calls to discuss policy options for each sector. Through this discussion and interaction we can build a more cohesive and robust consensus around a short list. WRI should facilitate these discussions.

JP: In order to meet the Governor's timeline we need to narrow this list down fairly quickly perhaps to a short list of 30 - 40 options.

DS: We are currently struggling to get to the next step of narrowing down the list. We need to provide more information to the group on these policies in order to move forward.

JP: Please let us know what additional information the group will require in order to move forward.

(?) RTA: Instead of examples of states, you should include other states' quantitative estimates.

RS: Another category would be the certainty of GHG reductions from a given policy options.

JP: Summary of discussion: There is clearly a need for more information, additional columns, more detail in the methodology and more information on other states' actions. What will be provided will not be enormously detailed but will be more than what you have now. There is also acceptance in the notion that after this additional information is distributed members of the group will select their top 30 – 40 policy options and then we will tally the results. This process will not take anything off the table but will help to narrow things down. Finally, we need to construct subgroups for the next phase. These groups will be Power Sector, Transportation, Agriculture and Other plus a subgroup for modeling. We will have group members volunteer for subgroup membership.

With the completion of the summary and discussion of next steps the meeting moved on to the final agenda item, the issue of modeling climate policy options.

Modeling of Climate Policies

Andrew Aulisi, Senior Associate, World Resources Institute.

See the posted presentation for details.

In his presentation Mr. Aulisi provided the group with a list of possible options for modeling of various impacts of climate policies including emission reductions and economic impacts. The aggressive timeline was reiterated and it is clear that any modeling work will have to be initiated quickly. The group agreed that modeling will be a critical component of the process and that a subgroup should be formed quickly to establish key criteria and requirements and solicit proposals from modelers. Mr. Aulisi stressed that financial resources may also constrain the modeling exercise depending on what the group requires.

Key comments follow:

Scott Wiseman, Center for Energy and Economic Development: This is probably the most important part of the process. The models referred to in the presentation represent a good list of options. Regarding financial constraints, have you considered asking the group for contributions?

Doug Scott: We have not considered contributions, if we find that resources are not adequate we may revisit this idea.

Jonathan Pershing: Regarding timing, the key assumptions and reference scenario will take the most time after a modeler is retained. From there things should move fairly quickly. One difficulty is that most macroeconomic models don't have good state level data.

Andrew Aulisi: We do not have any current favorites as to who should be retained for the modeling exercise. These decisions are really for the group or the modeling subgroup.

DS: Please let us know if you have a desire to be on the modeling subgroup. We will need to form this group quickly to keep on schedule.

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Wrap Up

After the modeling discussion a few next steps were reviewed before the meeting came to a close including:

- The next meeting will be held in Springfield on April 3rd
- All meeting proceedings will be posted on www.ilclimatechange.org

An email will go out to the group in a few weeks informing everyone that additional policy information is available on the website as well as instructions for subgroup formation and modeling information