UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PUBLIC COMMENT HEARING ON  
THE PROPOSED PREVENTION OF  
SIGNIFICANT DETERIORATION  
AND TITLE V GREENHOUSE  
GAS TAILORING RULE  

TRANSCRIPT OF PROCEEDINGS had in the  
above-entitled cause on the 19th day of November, A.D.  
2009, at the Donald E. Stephens Convention Center,  
Rosemont, Illinois, at 10:00 a.m. 

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:  

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Standards;  
JOSEPH MANGINO, Office of Air Quality Planning and  
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HOWARD HOFFMAN, Office of General Counsel.  

REPORTED BY:  

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VOLUME 1  
A.M. SESSION
MR. LING: Good morning, everybody. Good morning.

Thank you for attending the second of two public hearings. These are hearings to take comment on EPA's proposed -- this is a mouthful -- Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule.

We held the first hearing yesterday in the Washington, D.C., area, so this is the second of two.

My name is Michael Ling. I'm the associate director in the EPA's Office of Air Quality Planning and Standards, Air Quality Policy Division. I'll be chairing today's hearing.

Joining me on the panel are Joe Mangino of our Operating Permits Group and Howard Hoffman from our Office of General Counsel.

We are here today to listen to your comments on the EPA rule proposing greenhouse gas thresholds that would define when Clean Air Act permits under two programs that would be required.

The programs are called New Source Review or Prevention of Significant Deterioration and the second one is called Title V Operating Permits.

This is an opportunity for the public to comment on EPA's proposed rule. The panel members here at the table may answer questions that seem to clarify what we
have proposed, but the purpose of the hearing is to
listen to your comments not to discuss or debate the
proposal.

Before we move to the comment period, I would
like to briefly describe the proposed rule that's the
subject of today's hearing. This rule was published in
the Federal Register on October 27th.

The proposed thresholds would tailor these
permit programs to limit which facilities will be
required to obtain New Source Review and Title V permits.

The proposed threshold would ensure that the
permit programs will still apply to sources that emit
nearly 70 percent of the national greenhouse gas
emissions that come from stationary sources including
those from the largest emitters, power plants, refineries
cement production facilities and others.

Under the proposal, numerous small farms,
restaurants and many other types of facilities would not
be subject to these programs.

The proposal addresses the emissions of six
greenhouse gases as a group, that these gases may be
covered by some EPA rule in the future controlling or
limiting their emissions. They are: Carbon dioxide,
methane, nitrous oxide, hydrofluorocarbons,
perfluorocarbons and sulfur hexafluoride.
We are proposing in this rule that the carbon dioxide equivalent would be the preferred metric for determining the greenhouse gas emission rates for combinations of these six greenhouse gases, but we're requesting comment on that alternative.

Under the Operating Permits Program, one of the programs that the rule addresses, EPA is proposing a major source threshold for applicability of 25,000 tons per year of CO2 equivalent for existing industrial facilities.

Facilities that have greenhouse gas emissions below this threshold would not be required to obtain an operating permit.

Under the Prevention of Significant Deterioration program, which is part of the New Source Review program, EPA is proposing a major stationary source threshold of 25,000 tons CO2 equivalent also. This threshold will be used to determine if a new facility is a major source that triggers the PSD construction permitting requirements.

We are also proposing to establish a significance level, which is the level that's used for existing sources to determine if a modification at that source is major, and is therefore required to have a PSD permit.
We are proposing a range for the significance level, somewhere between 10,000 and 25,000 tons per year of CO$_2$ equivalents. We are requesting comment on the range with the intent of selecting a single value for the greenhouse gas significance level.

Under these proposed emission thresholds, we estimate that about 400 new sources and modifications would be subject to PSD permitting each year for greenhouse gas emissions. Because most of those would already need a PSD permit for other pollutants, we estimate that fewer than 100 of these would be newly subject to the program.

In total, approximately 14,000 large sources would need to obtain operating permits for greenhouse gas emissions under the Operating Permits Program.

Again, since most of these already have permits, we estimate that about 3,000 of these sources would be newly subject to Clean Air Act operating requirements as a result of their greenhouse gas emissions.

These proposed thresholds would therefore continue to preserve the ability of the PSD and Title V operating permit programs to achieve and maintain the public health and environmental protection goals while avoiding an administrative burden that would prevent state and local permitting authorities from processing
these Clean Air Act permits efficiently.

Under the approach laid out in the proposal, EPA would re-evaluate these greenhouse gas emission thresholds, the ones that we adopt as final in this rule, after an initial phase.

During that initial phase, PSD and Title V permitting authorities will gain experience in issuing these permits to larger greenhouse gas sources and would develop approaches for tailoring the permitting programs to address smaller sources.

By the end of the first phase, which is proposed to last for five years, we are proposing to study -- complete a study to evaluate whether it would be feasible for PSD and Title V permitting authorities to adequately administer the programs at lower thresholds.

And after reviewing the study results, we will complete a follow-on regulatory action within a year and it will establish thresholds for the second phase. And the thresholds for the second phase will either confirm the need to keep the thresholds where they were in the first phase or to establish different thresholds that more accurately reflect what the administrative capabilities are of the permitting authorities at that time.

Finally, we plan to develop some supporting
information to assist permitting authorities as they begin to start permitting greenhouse gas emissions for the first time. The guidance would initially focus on the source categories where permits will be needed soonest, which are the sources above the thresholds that we adopt in this rule.

And this is largely a separate effort from this rule including a key topic, how to do the Best Available Control Technology determinations that are part of this permitting program.

And so we invite comment on elements related to this aspect of the proposal as well. And we generally invite comment on all aspects of the proposal as there are things we specifically ask for comment for, and any other issues that are raised by that proposal.

Now, let me just describe briefly how this hearing will operate and how you can comment. Today we will be accepting oral comments on our proposal. We will be preparing a written transcript of those comments and that transcript will be available as part of the official record for this rule.

We will consider all the comments in this transcript as we move forward, but we're also accepting written comments on this proposed rule until December 28th of this year. We have a Fact Sheet
available in the registration area that contains detailed information for how to submit those written comments.

For those of you who will be providing oral comments today, I'll call the scheduled speakers to the microphone in pairs at this table. When it's your turn to speak, please state your name and affiliation. And it will also help our court reporter if you spell your name.

In order to be fair to everyone, we're asking that you limit your testimony to five minutes each. And to keep things moving along, we will ask that you remain at the microphone here until both speakers have finished. And at that time the panel may ask clarifying questions of either speaker.

And if you have brought a written copy of your remarks and you'd like to put that in the docket as well, please be sure to give a written copy to us here at the table. You can do that before you speak if you like or give them to the staff at the registration table.

We have a timekeeping system here that consists of green, yellow and red lights. When you begin speaking, a green light will come on which you'll be able to see from there and the timer will start at that time and you'll have five minutes to speak.

When there are two minutes left, the yellow light will come on to signal that it's time to start
summing up. And then when the red light comes on, I will ask you to stop.

I won't, you know, wrestle you to the ground immediately at zero, but when the red light comes on, it will be time to stop very shortly after that.

We do intend to stay into the evening until everyone has an opportunity to comment. It's going to be a very full day I think. If you would like to testify but haven't registered to do so, you can do so, but you need to sign up at the registration table outside.

And for those who have already registered to speak, we have tried to accommodate your requests for specific time slots, but we ask for your patience as we proceed through the list. We will certainly have to make adjustments to the schedule as the day progresses.

So with that, I'd like to thank everybody for participating today and I'd like to call up the first two speakers.

David Sykuta and Don Ferber.

Mr. Sykuta, we will begin with you, just whenever you're ready begin and we will start the timer at that time.

DAVID SYKUTA: Good morning, my name is David Sykuta. I'm executive director of the Illinois Petroleum Council.
The Illinois Petroleum Council is affiliated with the American Petroleum Institute. The national group represents about 400 member companies who are involved in all aspects of the oil and natural gas industry.

In Illinois specifically, the Illinois Petroleum Council represents the integrated oil and natural gas industry which represents -- employs nearly 50,000 Illinois consumers and taxpayers throughout the state.

By way of background, Illinois is the fourth largest refining state in the nation. Most of the gasoline in the midwest is made in Illinois and transhipped all around, and our geographic location makes us the energy crossroads of the country both in pipelines and rail shipments and otherwise.

Therefore, it's entirely appropriate that we comment on these proposed regulations on behalf of the millions of consumers and thousands of employees whose livelihood depends on our daily activities and whose pocketbooks will be heavily affected by what you decide through the process of these hearings.

I want to make three brief points today. First of all, the Illinois Petroleum Council along with hundreds of other groups, do not believe the Clean Air Act was designed to address the emissions of greenhouse
gases.

Secondly, requesting whether the EPA has the legal authority to modify the statutory thresholds in the Clean Air Act to regulate pollutants or in this case greenhouse gas emissions by relying on the EPA's so-called "absurd results" logic. I find that phrase one of the great ironies of the Environmental Protection Act.

Third, contrary to the Executive Branch requirements, the EPA has failed to provide any Regulatory Impact Assessment to support the totality of its plans to regulate greenhouse gases under the Clean Air Act.

And I might add that our industry, along with most others, relies on the USEPA, and correspondingly the State EPA, to provide a regulatory process that provides both certainty and practicality in application so that we can find ways to spend the billions of dollars that will have to be expended in order to comply with whatever comes through the process.

And I can tell you from 34 years experience in this business, the further the EPA strays from generally-accepted practices of regulation, the longer the eventual lead times will be in accomplishing anything because there are, despite the hopes of many, an ill-thought regulatory process leads to all sorts of ways
that in the end, and I can cite you dozens of examples of this throughout my career, in the end leads to longer delays than if we would have stepped back and gone through the, I guess you would say, normal process, the accepted process in the past and go through that way.

It's -- however this works out, it's going to be a multi-billion dollar, tens of billions of dollar solution. And those kinds of expenditures will not be made throughout the -- throughout the national economy without some degree of certainty that whatever is being decided on will actually stay that way.

Regarding the first point, the Illinois Petroleum Council believes that climate change is a serious issue demanding focused and effective action that is best taken with legislation that is dedicated to that problem rather than through the existing structure of the Clean Air Act which we believe was clearly not designed to address greenhouse gas emissions.

The EPA should not proceed with this rule or the related greenhouse gas rules that you have proposed under this system. Furthermore, since there's no fixed deadline for the EPA to regulate greenhouse gases under the Clean Air Act, we fail to see the rush to move forward this way. There's plenty of time to come up with a better system.
The best way to avoid the circumstances given rise to EPA's "absurd results" and supposed "administrative necessity" outlined in this proposal is to rely instead on the corresponding National Highway Traffic Safety Administration proposal to strengthen CAFE standards which we believe will achieve virtually all the benefits of EPA's proposed greenhouse gas tailpipe rules.

Meanwhile, Congress has the opportunity to develop a meaningful bipartisan energy and climate policy many of which are involved in that today that addresses the challenges at hand without holding back the nation's economic recovery.

Secondly, the Clean Air Act is quite clear regarding the thresholds that should be relevant for compounds regulated under the act.

The EPA cannot justify the proposed Tailoring Rule under the "absurd results" or "administrative necessity" doctrine. The narrow and limited doctrine of "administrative necessity" cannot justify the massive tailoring proposed by EPA.

The broad departure from the plain language of the statute necessary to sustain the EPA's proposed threshold increase is patently inconsistent with the statute and cannot be saved by the "administrative necessity" doctrine.
EPA cannot resort to judge-made exceptions to the law such as "absurd results" and "administrative necessity" when the agency can lawfully create -- avoid creating such circumstances in the first instance.

MR. LING: I'm going to have to --

DAVID SYKUTA: I'm about to close up. Finally, the EPA has avoided providing information on the costs and impacts on the economy of the regulatory scheme. And we think this is of the first order of magnitude.

In closing, we are asking here that we step back and work in partnership, as we have in previous regulation negotiations, that have provided immediate and visible results improving the economy and the environment of both Illinois and the United States.

Thank you very much. I'm sorry I ran over a few seconds.

MR. LING: Thank you very much.

Mr. Ferber.

DON FERBER: Thank you. My name is Don Ferber, that's F-e-r-b-e-r, from Madison, Wisconsin. I'm speaking on behalf of the Wisconsin John Deere Chapter of the Sierra Club.

In Wisconsin, we are definitely seeing the results of climate change already which is why we support this rule making. That's definitely a step in the right
direction to where we need to go with regulating greenhouse gases.

We are seeing changes in rainfall events where we are seeing dramatic flooding problems. We have a second community in Wisconsin that just this year decided to move the entire community away from the river valley because of the flooding problems.

We have had clean air advisories in Wisconsin in large part because of the pollutants emitted from these power plants, asthma problems, mercury in lakes that go along with the sources that are used to, emit the greenhouse gases.

We are well aware of the Ontario study from 2005 that decided when they took into account the healthcare effects that coal is not an option to use and is obviously one of the highest-emitting sources of CO₂ pollution that we need to curtail.

We just stopped our last proposed new coal power plant in Wisconsin last year. We are not looking at any new coal. And, in fact, are looking to take coal out of the remaining state-owned power plants and go to clean air energy sources.

We know, in particular, some of the changes that are going on in Wisconsin because we have got a consortium of leading scientists and researchers at the
University of Wisconsin at Madison with Wisconsin integrated climate change initiative who have been studying the impacts of climate change, and to persons, they routinely start off with talking about the levels of CO₂ and the impacts they are causing on our climate and the problems that we're having.

They talk about the rainfall events, how they're getting more severe, yet at other times we have areas of drought within the same State that are causing disruption not only to flooding -- with flooding and changes to people but also to the vegetative habitat that will also be accentuated because of climate change.

We're also concerned about disease vectors. There are various things that may change that we can't control and are of great concern and we need to really get the CO₂, in particular, under control to be able to have a chance of making these changes.

I grew up in central Illinois, and I can tell you that the winters in Madison are getting similar to what I remember growing up in central Illinois. I already see those changes myself.

Based on our concerns in Wisconsin, we -- several years ago, the Governor instituted a Governor's task force on global warming to come up with recommendations on climate change and what we can do in
Wisconsin.

Last year, they came out with the results of this report, and in December we will be introducing the Clean Energy Jobs Act because we are looking at, not only efficiency measures, but clean energy measures, to reduce our impacts on greenhouse gases and it will also provide a lot of jobs.

We are shipping a lot of money out of state to get energy sources, although we are now starting to build more wind and solar in order to get clean energy, and also to utilize efficiency measures, to reduce our energy demand. But as much as we are doing in Wisconsin, that is not going to be enough.

We are one state. We need everybody else to step up. We're concerned about what has happened at the national level. We are very pleased to see that EPA is looking to provide some rules to limit this and provide a proper response to the concerns that are out there, but we need the other states, we need EPA, we need regulatory efforts everywhere to reduce our CO$_2$ emissions and bring them back down to where we have the 350 parts per million.

A lot of us talk about, by 2050, that we need to have an 80 percent reduction in global warming gases. I hear other people, including having heard James Hanson
recently, talking about we may need to do this by 2020. We are putting things into motion that we can't control. We are suffering excessive costs by virtue of the climate change that's going on already when it's already minimal. We need to do something much stronger. And I appreciate the fact that EPA is having these hearings and looking at taking steps towards that. Thank you.

MR. LING: Thank you. Questions?

MR. MANGINO: No.

MR. LING: No questions. Thank you both very much.

Mr. Sykuta, I just want to remark that your full text of your remarks will be entered into the document.

DAVID SYKUTA: That's fine. Thank you very much.

MR. LING: I'd like to call the next two speakers.

Sandra Kaptain and Kathleen Patel.

So whenever you're ready, we will start.

SANDRA KAPTAIN: Hi. Good morning. I'm Sandra Kaptain, K-a-p-t-a-i-n. Kaptain with a K. I am co-chair of the Elgin Climate Change Organization and the Climate Change Chair of the Elgin League of Women Voters.

ECCO, Elgin Climate Change Organization, over three years now has been a grass roots organization that has worked on sharing environmental information with the public. We're approaching this from the standpoint of, if you save energy, you can save money. That's a big
selling point.

We've been distributing -- I think we have distributed about 5,000 $1,000 challenge cards. If you cut your energy waste, you can usually save a thousand, up to 1,700 a year.

So we're helping to push the information out from that standpoint. But we also want to, you know, save the environment at the same time.

I'm here today also because I am retired from the sanitary district of Elgin as assistant chemist and pretreatment coordinator. Some of you are probably aware, the sanitary district of Elgin, is a sewage treatment plant, and now it's Fox River Water Reclamation District, but for 14 years, we treated domestic and industrial wastewater at three treatment plants over 20 million gallons a day of raw wastewater from domestic and industrial sources.

This included about a dozen sources what we call categorical industries which would be similar to the major emitters now of greenhouse gases. These were the people -- the industries that discharged heavy metals and toxins into the wastewater streams, which as you know, eventually are the rivers which now in Elgin, is the drinking water.

Okay. I've been told now that the waters of the
United States are the cleanest in the world. And I would
like to thank the EPA -- the USEPA for doing this. They
mandated the regulations. It would not have gotten done
if they hadn't mandated that these things be treated at
the source. I believe this is due to them and I would
like to thank them very much.

Now, we need to do the same kind of regulation
of the worst emitters of greenhouse gases, coal-fired
power plants and others. Again this is the economical
way to go. It is not economical to take scrubbers and
other kinds of devices up into the atmosphere and collect
the waste.

It's similar to the sewage treatment plant. If
we would have discharged these toxic contaminants, let it
go to the ocean and now you try to clean it up. If you
clean it up at the source, it's the most economical way.
We need to start now.

Scientists tell us that we have less than seven
years now to get major changes started. As you heard
already, James Hanson has said that we've got to do it by
2020, 80 percent reduction.

I support the USEPA as the organization
best-suited to regulate greenhouse gas emissions from the
heaviest polluters first. Let's thank the USEPA for the
best water in the world. Let's keep going to clean up
the air from the major sources of greenhouse gas emitters now. Thank you very much.

    MR. LING: Thank you. Ms. Patel, whenever you're ready.

    KATHLEEN PATEL: Okay. Good morning. My name is Kathleen Patel. And I'd like to thank you for giving me this opportunity to speak.

    I am a medical researcher and I write a column for the Examiner on alternative medicine. In addition to this, I am a wife, a mother and an environmentalist.

    My main concern today is the dangers of air pollution that contribute to global warming and the health effects that it causes.

    My husband, my nephew and 20 million other Americans suffer from asthma. And I venture to say that probably everyone in this room knows someone with asthma. It's pretty wide-spread. It's almost at epidemic proportions.

    And, in addition to the suffering this causes, asthma is responsible for over 5,000 deaths per year.

    Now, scientists have proven that air pollution from coal power plants is the major cause of asthma attacks. In fact, coal-fired power plants are the single largest source of global warming pollution in the nation. And more than 159 million Americans, that's over half of
the nation's population, live in areas with poor quality of air.

    A research study that was mentioned before, published in 2002, estimated that 30 percent of childhood asthma is due to environmental exposures. This costs the nation $2 billion per year. And studies also suggest that pollution may contribute to the development of asthma in otherwise healthy individuals.

    Now, those numbers are extremely conservative, given that the study was done seven years ago, and things have only declined in quality, so I believe it's time to act before it's too late.

    I support the EPA's proposal. It makes good sense. It targets the biggest polluters and requires them to meet modern pollution standards. It's time for the big polluters to clean up their act.

    America can fight global warming and move to clean energy. Clean energy sources like wind and solar power don't harm the environment. They never run out. And they will create jobs across America. And right now America really needs jobs. It's win-win in my opinion.

    Thank you again for this opportunity. And I urge the EPA to finalize this important rule to fight global warming and help save America.

    MR. LING: Thank you. No questions. Thank you both
very much.

The next two speakers will be Kathy Gere and Manny Flores.

Miss Gere, you may begin whenever you're ready.

KATHY GERE: Good morning. My name is Kathy Gere. And I'm here as a private citizen, however, I also am a board member for Naperville for Clean Energy and Conservation. I am concerned about what's going on in the environment right now because I know that if we continue as we are that our future generation will not have the same benefits that we have enjoyed.

I recall, you know, a time where I went fishing with my grandmother and I recall a time where my own children go fishing with their grandfather and the joy that that brought them.

But our future generations won't be able to experience these simple little things in life if we continue to destroy our environment with the pollution that's creating the global warming right now. We won't have streams with fish because they won't be able to survive this climate change.

So large polluters not only contribute to a significant amount of mercury in the environment, but they also contribute to other types of emissions that contribute to global warming. This type of warming has
never occurred in the past and will have unpredictable consequences for generations to come.

I believe we have an ethical and a moral obligation to act today to do everything that we can to protect the only planet that we have. There are no alternatives. This is our earth. And we must act now.

The Clean Air Act requires that all new major emitting facilities use the best available technology to limit their emissions. Those facilities that are already polluting need to make changes that will reduce their emissions too. I'm asking the EPA to use its regulatory powers to significantly reduce the amount of mercury in the environment as well as other pollutants that contribute to global warming.

Scientists tell us that coal power plants contribute to more than 50 percent of the mercury and other pollutants in the environment. Targeting those industries that contribute the most to global warming pollution will have the largest impact.

I want to thank the EPA for listening to our concerns today. I am thankful that the EPA and President Obama are putting science ahead of politics. Quick action is needed to reduce global warming. Thank you.

MR. LING: Thank you. Mr. Flores.

MANNY FLORES: Good morning. My name is Manny
Flores and I am a city council member here in Chicago. I wanted to thank the Environmental Protection Agency for having this hearing here for the Chicagoland area and also for giving me the opportunity to address you in this hearing today.

As an elected representative of the people of Chicago, I am concerned about ensuring a sound satisfying healthy future for our community. As many of you know, the city of Chicago is one of the leading cities in developing policies to address the issue of climate change.

We are proud of having submitted last year, the Chicago Climate Action Plan, which was a work that was a result of many organizations collaborating and analyzing what the greenhouse gas emissions were like in the city, also studying what was causing the greenhouse gas emissions and establishing a very bold and vicious set of plans and standards for where we want to be by the year 2020.

For us to be effective in that effort, we discovered that we have to address the issue of the way that we use our buildings. More than 70 percent of all greenhouse gases come from the way that we use our buildings, our structures here.

And I would submit that for the city to be
successful in achieving the goals that it has set forth in the climate action plan, it is important for the EPA to fulfill its role in moving forward with the rules that it has in its capacity -- in its toolbox, if you will, to ensure that we are protecting our environment.

I would also submit that this provides us an opportunity to transform our economy, to take advantage of the movement in the area of clean technology and clean energy and to also give us an opportunity to create new jobs, not only in this region, but throughout the country, to allow for a greater degree of prosperity.

So thanks for the opportunity to be here with you this morning and I'm looking forward to continuing to collaborate with the organization in making our city a healthier place. Thank you.

MR. LING: Thank you. No questions. Thank you both.

The next two speakers are Ron Burke and Nora Dunn.

Mr. Burke, you may begin whenever you're ready.

RON BURKE: All right. Thank you very much. I'm Ron Burke, Midwest Office Director with the Union of Concerned Scientists. Glad to be here today in support of your proposal. While we think it's preferable for Congress to pass a comprehensive law to create clean
energy jobs and ratchet down greenhouse gas emissions, we recognize that EPA regulation under the Clean Air Act is the best plan B at this time. And that EPA actually has the authority of course under the Clean Air Act to do this.

I want to urge you -- before I say anything else, I just want to urge you to move as quickly as possible on this front. We don't know when or if Congress is going to act. We're optimistic that they will, but clearly you are our best hope in the absence of Congressional action.

And we're also hoping that, beyond New Source Review and Title V, that you move as quickly as possible to utilize New Source performance standards to start to regulate greenhouse gas emissions from existing sources, not just major modifications to existing sources. We think that's going to be crucial to moving forward in tackling this problem.

We're happy that EPA and the federal government are also moving to regulate, for the first time, carbon dioxide emissions from motor vehicles. That is a monumental step forward. We're excited about that as well.

In combination with your movement towards regulating large source emitters under the Clean Air Act,
we can clearly make a lot of progress, but again, not as much as if we get a comprehensive bill in Congress.

You know, the Midwest is well-positioned, we think, to take advantage of this new clean energy economy that we are so in support of. Right now, the Midwest generally imports all of its energy, whether it's oil or gas or coal, which means the jobs to create that energy are generally not here.

In contrast to home grown energy, wind, solar, creating megawatts through energy efficiency, these are strategies that create local jobs and jobs that keep money in our local economy. So we're excited about that, the economic opportunity to take action to tackle climate change, but we also recognize the scientific imperative to move.

Just a few weeks ago, 18 more scientific organizations wrote the US Senate saying that indeed climate change is real and that humans are the main cause and that others who say otherwise are just not properly assessing the facts and essentially every major scientific organization in the world now is saying that climate change is real and that we need to take action quickly.

In fact, scientists are telling us that climate change is happening faster than they previously
projected, and that in order to avoid the worst
consequences of climate change, it is imperative that we
act immediately.

You know, it took decades to regulate lead in
gasoline and paint long after the scientific community
told us of the dangers.

It took at least a couple of decades to start
really, really regulating tobacco long after the
scientific community told us that tobacco is linked to
lung cancer and other health problems.

We can't wait decades to start regulating
greenhouse gas emissions. We have to start now. The
life boat is sinking, you know. We need to start bailing
water as fast as possible.

So I would support your proposal here and urge
you to move as quickly as possible and also again move
towards regulating existing sources using your New Source
Performance Standards as quickly as possible as well.

Thanks.

MR. LING: Thank you. Miss Dunn.

NORA DUNN: Well, thank you so much. I'm Nora Dunn.
I'm an actress and I'm a climate change activist. And
I'm a citizen of Chicago, proudly. And I just want to
say thank you for stepping up and bringing this issue up
again and being an EPA that's actually going to protect
I think in -- you know, it takes courage because we're facing a revolution and it's the next industrial revolution. And this revolution is going to be about clean energy. We can't go backwards. We can only go forward.

When we talk about jobs and employment, there are millions of jobs in energy, but, you know, we have to get through to Washington. We have to send a really, really strong message to Washington. And this is the first step. And it's a very, very important step. So I think that we all want to do everything we can.

I'm starting a radio show that's going to be strictly about climate change. We need to keep the pressure on. And, you know, regulations will help us. And next we need the regulations that are -- the legislation that will follow. So thank you so much for being here and listening to us and listening to me today.

Thank you.

MR. LING: Thank you. No questions. Thank you both.

I'd like to call up Kerwin Olson and Donna Askins.

And, Mr. Olson, you can start whenever you're ready.
KERWIN OLSON: Thank you very much. My name is Kerwin Olson. That's K-e-r-w-i-n. Last name O-l-s-o-n. I'm the program director for the Citizen's Action Coalition of Indiana. We're Indiana's oldest and largest consumer and environmental advocacy group.

I'm here today specifically to speak about Best Available Control Technologies and ask that those choices do not include carbon capture and waste storage, otherwise known as carbon capture and sequestration.

First of all, that's exactly what it is. It's hard to classify it as sequestration when it's not intended for future use. They intend to stick their waste under our ground, basically create massive landfills across our country, so, first of all, let's refer to it as what it is. It's carbon capture and waste storage.

Secondly, the costs are simply enormous. There's a study from University of Wyoming suggests storing 80 percent of today's CO₂ emissions from coal-fired power plants alone will cost in excess of $1.6 trillion. That's just storage. That's not including retrofitting, capturing and transporting.

Studies from University of Harvard suggest costs for retrofitting and capturing carbon emissions from coal-fired power plants may cost in excess of 22 cents a
kilowatt hour.

No. 2, it's a huge transference of risk to the public via the tax base, via the rate base. Utility companies, energy companies have not invested a single dime into carbon capture and waste storage. Not a single dime of their own money. They expect to shift the entire burden of this to the public via the tax base, via the rate base because it's simply not a good investment.

Venture capitalists today are not investing in carbon capture and waste storage. Venture capitalists in Wall Street are investing in renewable energy and energy efficiency.

The only way that these folks can get this done is through massive, massive public subsidies via the tax base and the rate base.

It's a nonproductive investment. It doesn't make us more efficient. It doesn't create jobs. And it doesn't modernize our electric system. And utilities, coal companies are the only sector that stand to benefit from carbon capture and waste disposal.

For example, in my state, the State of Indiana, right now we have Duke Energy sitting before the Indiana Utility Regulatory Commission seeking permission to essentially take $121 million from Duke Energy rate payers to study and characterize the siting of storing
the CO₂ waste emissions from their Edwardsport coal plant currently under construction.

That's $121 million just to characterize a site to store the emissions from one coal-fired power plant. Not to capture it. Not to move it. Not to store it. Just to do the preliminary studies for characterizing a site for carbon capture and storage.

The costs are enormous. It is an unproductive investment. We know yesterday is too late to act on climate change. We must act today.

Carbon capture and waste storage is a technology that is 15 to 20 years off in terms of any, any commercial deployment, but I must preface that by saying Citizens Action Coalition believes there is no such thing as clean coal. That it's the greatest lie of our day.

Carbon waste and storage, research and development should not be considered a Best Available Control Technology by the EPA. It will do nothing, nothing to mitigate emissions of carbon dioxide.

In fact, coal usage will increase somewhere between 30 and 45 percent through carbon capture and waste storage. Water usage will double. Costs will increase somewhere between 77 and, it's been suggested, as high as 200 percent if not higher to the rate payers. It will undermine investments in renewable energy and
energy efficiency.

Let's keep in mind again Wall Street has not invested one single dime in carbon capture and waste storage. And venture capitalists are investing in renewable energy, energy efficiency.

The Best Available Control Technology to mitigate CO\textsubscript{2} emissions is to shut down coal plants today and we should be investing on a massive scale immediately in energy efficiency, renewable energy.

Again I ask that carbon capture and waste storage not be considered a Best Available Control Technology and instead we invest immediately in energy efficiency, renewable energy and shut down these coal plants. Thank you very much.

MR. LING: Thank you. Miss Askins.

DONNA ASKINS: Thank you for hearing me and for hearing us today. My name is Donna Askins, A-s-k-i-n-s. Alpha Sierra Kilo India November Sierra.

I am a resident of Elgin, Illinois, lead gardener of the Elgin Community Garden Network and a member of the board of Elgin Chapter of the League of Women Voters. For 15 years, I've been a member of the Unitarian Universalist Church of Elgin.

For my living, I am a research associate in the Office of the Provost at Northern Illinois University.
We've heard a lot today and we will hear a lot more about the problems associated with coal-fired power plants and what they do to the atmosphere. We also know that significantly cleaner choices can be made.

For example, an organization known as Massey Energy started blasting the top of Coal River Mountain in West Virginia in late October of this year. This is so they can get more coal so that more energy can be produced which in turn causes the pollution we are discussing today.

Coal River Mountain has, quote, unquote, Class 7 wind resources, the highest on the scale. If we chose wind farms instead of coal, we would generate jobs, have energy and not cause pollution or excess heat. This is a clear win-win for everyone whether your goal is making money, cleaning the air or simply having a job and being able to breathe.

Coal is a hot spot we must cool down. My sense of urgency is driven by coal's other dangers as well. This fall, the USGS discovered mercury in 100 percent of fish sampled in 291 bodies of water within the United States.

Most of this contamination is caused by coal-burning power plants. Their mercury emissions in the atmosphere break down into more toxic methyl mercury.
These miniature metallic flakes drift into the water and into the fish.

Scientists in Alberta, Canada, have proven conclusively that this poisoning happens within three years. And we know that mercury is a neurotoxin which can damage the nervous system of unborn children and has been linked to heart disease and strokes.

Is there anyone in this room who has never eaten fish in the past three years? Four. So all of us except four people have eaten the mercury that's coming from the pollution in the air.

My point is that nature's ecosystem is inextricably interconnected. Nature does not say, okay, I'm going to poison the fish but nothing else.

Climate change is not limited to the air, the atmosphere or the weather. We have a food chain. Not only do humans eat the fish, but the contaminants are now in the water.

Imagine if every fish has mercury in it, then based on the research from Alberta Canada, they've been swimming in contaminated water for three years.

Guess what? We now have a country full of toxic streams, rivers and lakes where swimmers, boaters and children play every summer.

The more we use coal, the more we poison.
ourselves.

The rule under discussion today is an excellent step toward a cleaner climate in all of its many facets. I support you. I urge you to move forward. And if you need me, just give me a call. I am one of 70 million volunteers on the ground, and we're all here to help as much as we can. Thanks so much for your time.

MR. LING: I have one question for Mr. Olson.

I infer from your testimony that you would say that if you have an existing coal plant and you're considering the options for that plant that your preference would be that, you know, the plant shut down, but what I wasn't clear on is if the shutting down of the plant is not an option, then is your position on capture and sequestration that it still should not be considered as an option at that point.

KERWIN OLSON: Carbon capture and storage we see as merely a continuation of the coal industry. And Best Available Control Technology first of all should be energy efficiency.

Avery Lovins from the Rocky Mountain Institute tells us that if the bottom 40 states in terms of energy efficiency instituted the average of the top 10 states throughout the country, we could shut down over 60 percent of these coal plants tomorrow.
So I would ask that carbon capture and waste storage be removed from the conversation, and Best Available Control Technology is shutting off the coal plants, investing in efficiency, investing in solar, investing in wind.

MR. LING: Next two speakers are Grant Smith and Nachy Kanfer.

All right. Mr. Smith, whenever you're ready.

GRANT SMITH: Thank you very much. Thank you for taking the time today. My name is Grant Smith. I'm employed by the Citizens Action Coalition of Indiana, but CAC sits on the steering committee for The CLEAN which is a national network of about 140 organizations, CLEAN standing for Citizens Leading for Energy Action Now.

Clearly, in this situation a pollution prevention approach is indicated, not a pollution control approach. Preventative strategies in the context of electric generation would be energy efficiency first and foremost, renewable energy and distributed power.

The technological advances that are now occurring with these technologies provide us the -- and including storage technology, which is now being tested and piloted, provide us the opportunity, according to a number of studies, to phase out coal-fired and nuclear power within the next 35 to 40 years. This should be our
strategy.
This should be best available technology.

In terms of the potential for these -- energy efficiency potential, for instance, it's enormous. We can reduce our electric energy demand well over 50 percent with the technology we have now.

We can deploy renewable energy, to the point of becoming 20 percent of the capacity of the grid conservatively, without undermining reliability at all. And these technologies are available now. They're not -- we don't have to wait 20 years for them, if at all, with respect to carbon capture and sequestration. They're available now.

This also happens to be, in many respects, the least-cost approach. And when you look at cost effectiveness of best available technology, that's critically important for people in this country in terms of affordability, affording their utility bills. They have to afford healthcare bills. People are really under duress now. And this could create an economic boom.

We're sitting literally on an economic development program with unprecedented impact in terms of job creation. And if you look at any study, serious study that looks at efficiency and renewables separate or in combination, they always compare the best available --
or the business as usual, business as usual being nuclear and coal primarily, and natural gas to a certain extent.

And in every case, you get more jobs, you know, it's cheaper, it results in hundreds of millions of dollars in savings over our current generating system.

So there's no in question that in terms of best available technology that that should be our focus. And the EPA has the tools to accomplish this. And it's not going to cost people money. It's going to save people money.

As Avery Lovins pointed out in 1997, we can save the climate at a savings, not a cost, if we employ the correct investments. And even currently now in terms of buildings -- buildings use about 39, 40 percent of the energy in the country -- we have the ability to save 60 to 80 percent of the energy in those buildings now. So this is where we got to go. There's no question about it.

Study after study indicates that it is a least-cost approach, it creates the most jobs, it creates affordable bills and it cleans the air, which is very important in terms of the previous testimony in terms of public health and the costs exacted by coal-fired power plants on the public health.

So we -- the CLEAN supports a phase-out strategy
for coal-fired and nuclear power. The technology is available to achieve that. The advances are, you know, accelerating in terms of cost reductions, efficiencies, customer-owned generation, distributed power, and we can achieve this if we focus on it and not listen, you know, to the disinformation campaigns coming from the coal industry and the nuclear industry at this time.

MR. LING: Thank you. Mr. Kanfer.

NACHY KANFER: Yes. Hi. My name is Nachy Kanfer. That's spelled N-a-c-h-y K-a-n-f-e-r. I'd like to thank Jan and the people from EPA here for allowing me to testify. I'd also like to thank the court reporter who in my experience rarely gets thanked.

I live in Ohio and I'm not sure if anybody else is here from Ohio. If they are, I'll gladly share the mantel, but if not, I'll speak on behalf of the state.

You know, we're in a lot of trouble in Ohio. Ninety percent of our electricity comes from coal. The coal industry employs 2,200 people in the State of Ohio. The country's been in a recession for the last year and a half. Ohio's been in recession for the last two decades.

We see a huge loss of manufacturing jobs, a huge loss across all sectors of the economy including the young people in Ohio who don't feel they have any good reason to stay there. And there's no question that as
the nation moves toward regulating carbon dioxide and other global warming pollutants Ohio is going to have a pretty big challenge ahead of it.

Ohio is the fourth largest state in terms of global warming pollution. And it's because we burn so much coal. We don't drive more cars than anybody else or have more inefficient buildings. It's because we burn more coal.

And it's really important for the EPA, I think, to recognize there are some special challenges facing certain states and certain regions in this country. And yet, it is not despite those factors but because of those factors that I am in strong support of the proposed Tailoring Rule.

We -- I also feel that this issue of the floor at 25,000 tons is a perfectly reasonable thing to do. It would be great to regulate all sources of CO₂ in this country. I recognize that as an administrative nightmare for you folks. That shouldn't necessarily prevent us from regulating CO₂, which is what we desperately need to do.

There's a story that everyone here knows about a farmer that was leading his ass to the market and the ass didn't want to go, and so the farmer put a carrot in front of the ass and stood behind it banging it with a
stick. And Ohio has all these carrots -- Ohio is the ass in this analogy actually.

Ohio has all of these carrots dangling in front of it, but Ohio isn't even looking in the right direction. They can't see the carrots.

And so it's incredibly important that EPA bring in a couple of sticks and beat the ass on the rear end a few times. It is incredibly important because there are some very powerful interests in Ohio and other parts of this country that stand to lose a lot of money if we do the right thing, the moral imperative, and regulate carbon dioxide.

There is a very powerful coal industry, oil industry, other entrenched interests that have politicians in their back pocket, that have other forms of power available to them, and that will prevent well-meaning people in Ohio and elsewhere from seeing the carrots, the job creation, the energy efficiency, the savings there, the clean energy, the clean air and water that results from regulating CO₂.

We need to make it possible for these carrots to become apparent to the Midwest, places in Appalachia as well, and that may require a few bangs with a stick. And so I'm grateful for this proposed Tailoring Rule. I want you to move as quickly as possible and as stringently as
possible in order to regulate carbon dioxide just in case Congress fails to act. And I thank you for this opportunity.

MR. LING: Thank you. No questions. Thank you both.

All right. Next two speakers are Kate Schrank and Richard Cogan.

KATE SCHRANK: Good morning. My name is Kate Delahunt Schrank and I am here as a person who is experienced in dealing with USEPA on behalf of large industrial sources seeking air permits, complex industrial air permits. I made my living doing that for about 15 years.

And in doing this, my experience is that large industrial sources know how to get permits. And that when we successfully achieved a permit, we had the joy of watching companies find ways to reduce their emissions so that in many cases they were able to operate in new ways that actually put them below the permit limits.

Large companies know this. Large companies have been regulated for almost 40 years. Companies that want to survive in the 21st century have been planning for this eventuality of greenhouse gas regulation, so much so that to my amazement and surprise many large businesses have spoken out in favor of getting climate change gases
under regulation. They need it for stability of planning.

So I want to encourage you to in fact step up and regulate large sources. As I understand your proposal, you're looking to regulate large sources in the same pattern that you have regulated large sources in the past.

You start with the biggest emission sources. It just makes sense. And these large emission sources have the wherewithal and the staff to take care of this problem. And if they don't have the staff, then they'll hire them. And what does that mean? Jobs.

I can't imagine who else besides USEPA that would be so good at permitting the greenhouse gases. Who else but USEPA has 40 years of regulatory experience in order to implement new regulations?

So I am not going to repeat what others have said about the job creation aspect of this regulation except to put an exclamation point.

As a person that benefited from the creation of the green jobs sector when the original major environmental laws were enacted during the '80s and the '90s, starting with the '70s, '80s, '90s, we all saw what happened to the economy in this country with many new great jobs that were created as people learned to address
the problems that they were facing. It used to be the
criteria pollutants. And now we've got the climate
change issue.

And who of us would want to go back to the
quality of air that existed in Illinois alone before we
began regulating emissions, specifically the criteria
pollutants.

Just last week, I was at a meeting and was glad
to hear that finally Illinois has dropped down a level or
two in terms of its ozone severity. That would never
have happened without USEPA regulations. And large
sources know this.

So I just want to be a person that says -- I sat
across the table from USEPA and state agencies on many,
many occasions, negotiated those permits and have the
experience, as does USEPA, that large sources in fact can
be regulated, are regulated, have been regulated, and
that regulation results in lower emissions. It also
creates jobs. Thank you.

RICHARD COGAN: Good morning, gentlemen. Thank you
for having these hearings and allowing me to speak. My
name is Richard Cogan. I am the owner of a small
manufacturing company here in Chicago called Textile
Industries, Incorporated. We are a dinosaur. One of the
few manufacturing companies left around from my
understanding. And what we manufacture is dust collector bags for air pollution control.

I'm asking you to put me out of business. I would love nothing more than to not have to manufacture the products that we make to clean the air of pollutants.

One need only look at our sister planet Venus to know what run-away greenhouse gases will do to this planet. And they are already well on their way.

And if the process isn't reversed in the next 7 to 10 years, that's where we're headed. And all life on this planet will cease to exist. I have nothing more to say. Please put me out of business.

MR. LING: Thank you both.

Okay. I have Charles Nissim-Sabat and Susan Williams.

MR. NISSIM-SABAT: Good morning. My name is Charles Nissim-Sabat. I'm an attorney. Also I'm a retired physics professor.

And as an attorney first, let me make a legal point. The Supreme Court has given the EPA the authority under the Clear Air Act to regulate CO\textsubscript{2} and other greenhouse gases. This is not an exception to the rule as the first speaker said. This is the law. And therefore Congress will have to pass a bill that removes that authority from the EPA; therefore, the EPA under the
law must regulate greenhouse gases.

The proposed rules are excellent. People have spoken to it before and I don't think I have much to add except to tell you something personal. A couple years ago, I was diagnosed with idiopathic pulmonary fibrosis. It's a lung disease. Probably have never heard of it. But it kills more people than breast cancer.

It's -- idiopathic means they don't know what the cause is. That's it. And the incidence of that disease has increased 70 percent since the year 2000. And I'm not in any way competent to make a reasoned opinion, but it seems suspicious greenhouses gases are increasing and it's not just CO₂ but some rather toxic gases like fluorocarbons or hexafluorides, and it's not just IPF which is increasing in intensity and prevalence. You see lung cancer. People are reporting having lung cancer who have never had lung cancer in their family, who never smoked, who were never in an industrial environment where the air was polluted, so it's got to be in our whole total environment. So I think the situation is very serious.

And our CO₂ is now around 380 parts per million. 387. People say 350 is what we -- is the most we can have, therefore, we have to reduce it. And it will take a gigantic effort to reduce. And I think the EPA rules
are a reasoned first step. And they should be passed.

I'm going to tell something else about personal
history. I was born in Bulgaria before the war. Right
after the war, Bulgaria was a third-world country.
People walked barefoot in the streets. Our family moved
from one house to another. We used an ox cart to move
our furniture.

And my father had fainting spells. That was
1946. So he goes to the doctor. The doctor asks him, do
you smoke. My father said yes. So you have to stop.

So in 1946, in third-world Bulgaria, people knew
that smoking was bad for your health. It took more than
40 years for the United States to come to that same level
of knowledge.

And now we see the same thing about global
warming. Even a universal agreement what governments
ought to do and the United States is lagging behind by
more or less the same 30 or 40 years. And I think we
ought to reverse that trend because the United States is
the biggest contributor to greenhouse gases.

As a physicist, I have to tell you that I have
done scientific research for 50 years. And scientists
are always quick to publish, but they never recommend
action, as such, because they want to do more research,
want to get more grants, et cetera. Right?
Action is what will kill research. And so they
don't want it. But here you have unprecedented universal
agreement throughout the whole planet that global warming
exists, that it's caused by greenhouse gases, and that
has to be reversed. I'm finished.

MR. LING: Thank you. Miss Williams.

SUSAN WILLIAMS: Hi. I'm Susan Williams.
I'm here today from Madison, Wisconsin. I belong
to the Sierra Club, but I'm speaking as a private
citizen.

I want to applaud the EPA's proposed rules here
which I believe are a proper exercise of the EPA's
regulatory authority and I support their proposal.

I guess I would just like to say -- to make a
few comments about the presentation by the gentleman from
the petroleum council. I find it ironic that one of his
arguments against the EPA's taking action is that there
is no legal deadline for action and that, in fact, we
could wait I guess indefinitely, or until such time as
additional legislation has passed, even though we already
have the Clean Air Act.

His question was "What's the rush?" I find
myself having difficulty imagining how such a question
could be asked under the current circumstances when the
consensus of the worldwide scientific community is that
now is, in fact, too late and really immediate action is imperative.

I guess I'd also like to add that it is essential and necessary that the EPA act at this time. I mean, we are on the verge of the climate -- creating a situation where the earth is going to be uninhabitable by us and probably many other species, and we can't take action fast enough.

And I would just like to reiterate that I support these proposed rules. And I'll do everything in my power as a private citizen to see that we move forward along the course of regulating the heaviest polluters and trying to forestall climate change. Thank you.

MR. LING: No questions. Thank you both very much.

Okay. The next two speakers are Brian Urbaszewski and Debra Michaud.

You can begin whenever you're ready.

BRIAN URBASZEWSKI: Sure. My name is Brian Urbaszewski. I'm the Director of Environmental Health Programs for the Respiratory Health Association of Metropolitan Chicago.

We're a charity founded in 1906 focused on promoting healthy lungs through research, education and advocacy.

Many people are still breathing unhealthy air in
the United States. And the Chicago area is still listed as a nonattainment area for fine particulate matter and ozone. And given both standards will, if science is actually used, be tightened in coming months, this situation is likely to continue well into the future.

I've also recently learned that Cook County has the highest hourly nitrogen dioxide readings in the country per USEPA data. And yesterday, EPA proposed tighter NAAQS for sulfur dioxide as well. And Cook County would also fail to meet the range of hourly SO₂ limits that EPA proposed today as well as in 2020.

So EPA's current ozone, PM₂.₅, nitrogen dioxide, and sulfur dioxide standards are inadequate to protect public health with an adequate margin of safety as required by the Clean Air Act. We believe this to be true and we hope the agency agrees with us and moves forward to rectify the situation as soon as possible.

But this hearing is not about those standards. It's about greenhouse gases. Undoubtedly there are threats to the environment and welfare from the predicted impacts of global warming which will only get worse as emissions increase further in future years unless the EPA begins regulating and reducing such emissions.

Others will talk about flooding, droughts, sea level rise, agricultural damage, et cetera, but I want to
reinforce that there are direct human health threats from the buildup of global warming gases in the atmosphere.

First, warmer weather and longer summer seasons will increase the risk of the spread of diseases like malaria, dengue fever, yellow fever, encephalitis, plague, et cetera. Even allergies will worsen. More CO₂ makes ragweed produce more pollen leading to more severe hay fever.

In the summer of -- well, the heat itself is also deadly. Heat waves will increase the deaths in vulnerable populations. Published research in recent years has shown this impact.

In the summer of 2003, in Italy, those age 65 years and older experienced a 34 percent greater risk of dying during hot days, with higher risks for people with respiratory disease.

In particular, the death risk from hot temperatures is higher for women and chronic obstructive pulmonary disease patients. And I think you have already heard from some of those people today.

The temperature increases do not even have to be that large to have an impact. A 1 degree Centigrade increase in maximum temperature increased deaths 1.8 to 3.1 percent.
Respiratory deaths were two to three times higher than that. The authors note that this had the effect of advancing of date of death by several months. Those with respiratory disease not surprisingly were also more likely to be hospitalized due to high temperatures.

Climate scientists have predicted that Chicago will see extended summer seasons and heat waves with temperatures as high as 115 degrees in coming decades. Hotter temperatures and a longer summer season will increase ozone smog levels and consequent health damage above what we would expect to see without warming.

As PM_{2.5} levels rise on the same hot summer days as well, people are going to get a double dose of deadly pollution.

There is also evidence that temperature increases combined with high ozone levels increase the number of deaths. One study showed that if daily temperature rose 18 degrees Fahrenheit, heart disease and stroke deaths increased about 1 percent at the lowest ozone levels, but more than 8 percent at the highest levels.

As ozone and PM_{2.5} pollution levels are in large part driven by fossil fuel, primarily coal power plant emissions, elevated temperatures that drive electricity demand will only increase emissions from these sources,
eroding benefits achieved by any pollution controls installed in such plants.

Under current rules here in Illinois, power plants without sulfur dioxide controls will still be able to run uncontrolled in future years. And we have some of the most aggressive rules in the country.

In focusing on reducing greenhouse -- or global warming gas emissions from sources like coal-fired power plants, any efficiency strategies EPA adopts to reduce global warming gases must not increase conventional NAAQS or NAAQS precursors.

Regulating large sources of global warming gases and using a strategy of increasing carbon or carbon equivalent efficiency for such facilities can also bring significant benefits in reducing NAAQS pollutants that cause human health damage through direct inhalation.

We would support a BACT level of 117 pounds per million BTUs for sources. This is equivalent to something that would be burning natural gas.

Increased emphasis on energy efficiency and electricity generation from clean renewable sources will reduce global warming gases as well as conventional air pollution providing immediate health benefits.

These are strategies where the government should focus its vast resources. Moving the power sector away
from conventional coal power generation and towards the use of much cleaner natural gas, cleaner bio-energy sources and even gasification with sequestration could potentially also be stepping stones towards a cleaner and healthier future.

We applaud the EPA's clear and thoughtful approach in moving forward to regulate greenhouse gases, global warming gases. Thank you.

MR. LING: Thank you. You can start whenever you're ready.

DEBRA MICHAUD: Okay. Hi. My name is Debra Michaud, D-e-b-r-a M-i-c-h-a-u-d. I want to thank all of you at the EPA for giving us all of this opportunity to speak directly to you and also for your recent efforts in really taking a stance for the environment. It's been a long time coming.

And I was actually in New York City and was very strongly impacted by the fall of the World Trade Center. We had a very different EPA then. And I face a very high risk of lung cancer despite the fact that I never smoked a cigarette in my life thanks to the EPA's covering up of evidence from the World Trade Center, so I am very grateful that we have a different stance and different perspective happening right now with the EPA.

I'm a small business owner in Chicago and a
concerned citizen. I'm also a volunteer with the Rainforest Action Network, and we are trying to build a movement, you know, with -- in Chicago with a number of environmental organizations. We're forming coalitions. And this is happening all around the world, not just in Chicago, but we're based here locally because we're frankly really scared about our future.

You know, I grew up in the '70s and '80s when the future -- we weren't worried about our future, you know. Today -- I see youth today who are -- don't know if they have a future. You know, I have a three-year-old nephew and I wonder is he -- what kind of future is he going to have.

I think we can get really stuck in the details about the legislation, about, you know, dealing with all the details that you guys have to deal with in board room meetings, but as a citizen, I think we could bring it down to really simple levels like at the kindergarten level where we're like the kindergarten teacher and the oil industry and the dirty energy industry are like our students.

And as a kindergarten teacher, we can say to them, sorry, guys, can't blow up mountains. Can't do it. You can't build nuclear power plants that kill people. You can't do it.
We would say that to our kindergarten students. We have to say that to these corporations. We have to bring this down to the very basic level of a kindergarten classroom. You know, you can't dump tar sands effluent into our Lake Michigan drinking water. Can't do it. Sorry. Can't do it. We can't import tar sands from Canada. That's the dirtiest form of oil that exists on the planet, and it's killing people.

How many deaths per year are okay for our dirty energy? I want to know how many. I mean it's a rhetorical question for you guys that I hope you go to sleep with at night and use this question to help you when you're facing the powerful lobbyists and you're weak-kneed and it's scary because you got big interests fighting you. Just keep this question in the back of your head. How many people? How many deaths are okay? Zero.

If these corporations were human beings, they would be in prison. We have 40 deaths per year in Chicago because of the coal plants. When I first heard that number, I was like, oh, 40 deaths. Well, we probably have more from traffic accidents. We probably have more from cancer due to other carcinogens in the air. Forty deaths. But, you know, by comparison 40 in Chicago didn't strike me as a huge number. But then I
was like wait a minute. Forty people -- these plants are killing 40 people a year. Is that acceptable to us?

You know, it should be zero deaths. Zero deaths per year. And I thank you guys so much for really standing up to these powerful energy interests and just want to encourage you to continue to do so.

Top issues on my personal radar. Mountaintop removal. We got to stop it. Those mountains are there for a reason. We can't blow them up. It's killing jobs and it's killing our water and it's killing our communities. Can't do it. Just remember, kindergarten teacher. Sorry, guys. You can't blow up mountains.

Nuclear energy. We got to stop it. Tar sands. The most ridiculous idea on earth. Got to stop it. We're pouring the effluent into our drinking water. We're drinking this crap.

These are -- it's so simple, you know, but we've got to let go of our attachment to this dirty energy past. Nineteenth century dirty energy past. We're in the 21st century. It's time for us to grow up. And you guys are, you know, and I thank you. And I just want to -- I want you to know that you got a base of support including business owners, including teachers, we've got every end of the spectrum in our group in Chicago that are rooting you, just clapping for you, what you're
doing, and want to thank you, thank so much for your time.

MR. LING: Thank you.

MR. MANGINO: I have a question for Brian. So you mentioned this kind of multi-pollutant look at things. Do you favor anything like a review of controls, a weighting of criteria over greenhouse gases or something along that line? I'm just trying to understand.

BRIAN URBASZEWSKI: I'm not too sure if I follow your question.

MR. MANGINO: You have a series of gases you're controlling. The BACT review process, you're deciding on controls and multiple emissions from different gases. You mentioned about looking at, you know, criteria pollutants, focusing in on those, don't lose your eye on those in your decision process. Are you talking about favoring a weighting process to those over possibly greenhouse gases? I'm just trying --

BRIAN URBASZEWSKI: No. I think it's an absolute for us because my organization focuses on lung health and conventional NAAQS, many of them negatively impact lung health. They send people to the hospital. They trigger heart attacks, strokes, et cetera.

The people that are most sensitive to this are people who have lung disease. I do not want to see any
increase in conventional NAAQS as the EPA moves forward in reducing global warming gases.

I do believe, and my organization believes, that there are strong co-benefits to reducing global warming gases if done the right way because as we transition to a cleaner energy economy and move away from burning coal in conventional ways, it's opening the door towards producing electricity with sources that don't produce any greenhouse gases or conventional NAAQS like wind, like solar, et cetera, energy efficiency which is simply a no brainer.

I mean, we ought to be maximizing that to the greatest extent possible in this country. And, you know, going forward, we think, you know, having a target or a BACT for conventional plants that's akin to what would be -- being put out by burning natural gas is a good target.

MR. LING: I have just a brief question for Mr. Urbaszewski. You tossed out an example of an emission limit that you guys found to be an appropriate level, but you didn't say what pollutant that was for. I assume it's CO$_2$?

BRIAN URBASZEWSKI: CO$_2$ or CO$_2$ equivalent.

MR. LING: That's what I was going to ask you. Is it one or the other?
BRIAN URBASZEWSKI: I believe it's CO₂. Leave it at that.

MR. LING: All right. Thank you.

Next two speakers are Cynthia Linton and Nicole Granacki.

You may go first and start whenever you're ready.

CYNTHIA LINTON: Okay. My name is Cynthia Linton. I'm a teacher at Northwestern University and a grandmother. I will be gone in 2050, but my grandchildren will still be very much alive and I worry that they're going to have to deal with climate catastrophes. 2050 isn't that far away. And we're supposed to be cutting 80 percent from greenhouse gases according to what scientists are saying.

I wholeheartedly endorse your rule, your big polluters rule and commend the EPA for doing what you were set up to do, which is to protect the environment. I think sometimes we forget what EPA stands for.

The large coal-fired plants and big industries, as you know, are producing half or more of the greenhouse gas pollution in the United States. So it certainly makes sense to go after those polluters. You could take big steps towards solving the problem.

In Britain, very recently they banned any new
coal plants that didn't have the technology to capture and store carbon. And when they passed that law, it went into effect immediately. None of this waiting until 2013 or 2017.

We should use the Clean Air Act to begin cracking down on these plants. They're polluting the atmosphere. And the rule calls for the best available technology for new plants and those who are making changes or expanding, and that should include using cleaner energy, becoming more efficient, buying new equipment and, as a last resort, shutting them down.

While the cap-and-trade bill is languishing in the Senate and an international treaty has been delayed, the EPA must, and I commend you, take a big step to try to solve this problem for us to protect the future of people on this planet. Thank you.

MR. LING: Thank you.

NICOLE GRANACKI: Thanks for having us here today. My name is Nicole Granacki, G-r-a-n-a-c-k-i. And I'm here with Greenpeace today. Greenpeace, as you may know, is an independent campaigning organization that uses peaceful direct action and creative communication to expose global environmental problems and to promote solutions that are essential to a green and peaceful future.
My role at Greenpeace is to be an organizer for Illinois and Iowa and I work all over the Midwest. And I wanted to come here today to just talk about some of the conversations that I have with people in my role here at Greenpeace. My job a lot of the time looks really similar to what is going on today. I hear stories like these, probably a dozen a day at least every day. And what I'm hearing from folks is really that they're seeing the effects of climate change already.

And a lot of people have gotten up here today and said this is urgent, we're hearing from scientists and we're hearing from doctors. And this is what I'm hearing from people in the community every day, is that it's urgent for them as well. And it's personal.

Here in Chicago we're seeing really extreme weather, one of which is the flooding. Last year we had the northwest side of Chicago underwater. There were city streets where people were in canoes on the streets of Chicago. We're also see these floods along the Mississippi River and our farmers are being affected.

I've spoken with farmers whose entire crops have been ruined by these floods that we're going to see more and more of as the effects of climate change get worse, if they're unchecked.

We also saw -- heard from a couple of folks
today from Wisconsin, and as everyone may have seen in
the news, Lake Delton, a popular tourist destination in
the Dells, the banks of the lake broke and took many
homes and businesses with it when that lake emptied out
into -- just into nothing. There was no water. I got a
chance to go visit that. There may be other people here
today who did as well. And when those banks broke, it
was dry as a bone taking homes and businesses with it.

And these sorts of floods and these sorts of
disasters are what we're going to see more and more of if
it goes unchecked.

Outside the Midwest, we're seeing wildfires in
California. I got a chance to speak with firefighters
who are every day out fighting those blazes. And extreme
storms on the coast that are really affecting homes and
businesses as well.

The good news here is we have seen the EPA take
action, and we're seeing people in their everyday life
take action as well. Businesses are going green. We're
seeing people change their light bulbs in their home and
drive less and do things that they can to be more energy
efficient every day, which is wonderful.

And people are doing these things like we heard
a moment ago for future generations, for the children and
grandchildren, so we don't leave them with this problem
that they have to inherit and deal with. It's really up to us to take this opportunity now.

People are also making these changes in their lives to save money. Using energy more efficiently is going to save money as we've heard from business owners here today and what I hear from business owners every day on my job. So while we are trying to save the planet and stop climate change, we also are going to be saving money and creating jobs and leaving our children and grandchildren a better future.

So I'm here today to congratulation the EPA on taking this step towards doing its part as well with the people in this country. And I urge you to move forward towards finalizing this Tailoring Rule as quickly as possible. Thank you very much.

MR. LING: Thank you.

Next two speakers are Chris Romaine and Laura Knezevic.

Mr. Romaine, you can go first. Start whenever you're ready.

CHRIS ROMAINE: Good morning. My name is Christopher Romaine and I'm the manager of New Source Review Unit in the Air Permit Section of the Illinois Environmental Protection Agency.

On behalf of the agency and our director,
Douglas Scott, we appreciate the opportunity to provide testimony today on the proposed Tailoring Rule. We will also be providing detailed written comments on this proposed rule.

Illinois strongly supports climate change initiatives designed to reduce emissions of greenhouse gases. In this cause, the State of Illinois has previously announced ambitious goals to slash the state's emissions greenhouse gases, to implement a long-term strategy to combat global climate change and to build on measures that the state has already taken to reduce greenhouse gas emissions.

Illinois very much appreciates the significant and ongoing efforts of USEPA and the Obama administration to conduct an open dialogue and inclusive policy-making process on the steps necessary to address climate change. We're particularly appreciative that the important role of states in this process has been acknowledged.

In recognition of the unique nature of regulating greenhouse gases and the wide-spread impacts across the economy, Illinois believes that regulation of greenhouse gases, that is, control of emissions is best addressed through comprehensive federal legislation that includes a nationwide greenhouse cap-and-trade program.

Turning to the proposed Tailoring Rule, the
Illinois EPA also wishes to commend USEPA for thoughtfully addressing the consequences that would result from using the existing permitting thresholds of the Clean Air Act for PSD and Title V permitting programs if they were applied to emissions of greenhouse gases.

The Illinois EPA agrees that the legal constructs of prevention of the absurd results and administrative necessity support setting these thresholds at levels at least as high as proposed by USEPA. However, even at the higher permitting thresholds of the proposed Tailoring Rule, there will be significant burdens on already overburdened and underfunded state and environmental agencies.

We believe that the cost to states of implementing permitting programs for greenhouse gases is significantly higher than USEPA has predicted. The Illinois EPA has conducted an analysis of the impact of the Tailoring Rule on our permitting programs.

Based on potential greenhouse gas emissions, we estimate the proposed rule would result in a 38 percent increase in Title V permits, almost half of which would be first-time Title V permittees requiring a Title V permit solely due to greenhouse gas emissions.

Moreover, this effort would not necessarily be directly accompanied by any meaningful reductions in
emissions of greenhouse gases until substantive regulations for control of greenhouse gas emissions are actually adopted.

In this regard, reporting of emissions of greenhouse gases by existing sources can and will be accomplished independently of Title V permitting. USEPA should consider not only the amount of greenhouse gas emissions that would be covered by the permitting thresholds that are proposed but also the environmental benefits that would accompany simply that permitting.

We have also estimated the number of new projects that would be subject to PSD permitting requirements by examining the actual construction permits that were issued during 2006 and 2008 in Illinois.

Currently we process about eight PSD applications each year. We estimate an additional 51 projects per year would require PSD permits, an increase of over 500 projects and proposed permitting levels. Most of that permitting would involve projects that would be proposing to use natural gas. It would not be limited to or target proposed projects that would be using coal or other projects for which PSD permitting can significantly reduce emissions of greenhouse gases.

We also notice that -- note that PSD permitting requirements such as Best Available Control Technology,
announcements about air quality impacts are essentially uncharted territory for greenhouse gases. As such, it is expected that the requirements will be controversial and will be the subject of legal challenges.

As the Illinois EPA has experienced firsthand, the amount of resources necessary to defend permits that are appealed can be substantial, taking resources from and delaying other very important air quality objectives such as actions necessary to meet national ambient air quality standards.

In conclusion, the issues surrounding the regulation of greenhouse gas emissions are controversial and complex. We applaud the USEPA and the federal government for taking the leadership role in climate change issues, notably with the recent requirements for comprehensive reporting of emissions of greenhouse gases.

We must all move forward to protect our planet and our climate from climate change with approaches that result in real reductions in emissions of greenhouse gases. Thank you.

MR. LING: Thank you. Miss Knezevic.

LAURA KNEZEVIC: Thank you. My name is Laura Knezevic, K-n-e-z-e-v-i-c. I'm from the Illinois Student Environmental Coalition. I want to thank you for the opportunity to speak today.
Our coalition consists of students from over 40 schools from across the state who are active in their student campus environmental organizations. We seek to harness the energy of these students from across the state to take action on larger environmental issues.

Right now our No. 1 issue is global warming. The reason that it is the No. 1 issue for the students of the coalition is because they understand that this will determine not only their own quality of life going forward in the future but also the quality of life for their children and generations to come.

The students who are part of this coalition take action on these issues in a variety of ways. They have really dedicated not only the focus of their education but their spare time to taking real action on global warming.

Students at a lot of the universities participate in campus-based sustainability projects. They really bring it home. They try to educate their peers on these issues and try to improve sustainability on their own campuses.

Students at Loyola University actually learn how to make biodiesel and then they use that biodiesel when they're transporting students around the area.

The students, as part of the coalition, also
work with their local communities on projects like community gardens. So these issues are very personal for them and they really dedicate a lot of their spare time to this sort of thing.

They understand also that these issues need to be tackled from a variety of angles. And because they feel that they are working very hard to do something productive to better their future, they would like to see the same sort of action taken from their government.

So our coalition is asking you to do what is within your power to address climate change through emission reductions from the largest polluters. And we definitely feel it is within your power to take action on these issues through this proposed rule.

Not only that, but it's necessary to take action immediately within the next few years, not 10 years from now, not 20 years from now, but now because this is a critical time. And if we don't make reductions soon, it's going to be too late.

These students are also very concerned about finding jobs when they graduate. They understand that it's going to be a very difficult job market for them when they graduate. And they see this as an opportunity for clean green jobs for them when they graduate. And they feel that this will not only allow them to build a
secure future for themselves but also a secure future for all people on this planet.

And we also have an opportunity with this proposed rule to create a -- sort of a new industrial revolution. The technology that we're using right now for energy is from the last industrial revolution. And it's been far too long.

So the students really feel that we need new technology, clean technology that's going to create a very bright future for them.

And as far as the cost concern, I understand that a lot of people are concerned about the cost. But we're already paying a cost for our pollution and that cost is going to continue to increase as time goes forward. And that the cost to do something about it now is going to cost us less than it will in the long run.

So I thank you for this opportunity.

MR. LING: Thank you.

MR. MANGINO: For Chris, on your analysis for the PSD, what did you use for significance level for that?

CHRIS ROMAINE: We used the significant levels in the proposal Tailoring Rule.

MR. MANGINO: 10,000 or 25,000?

CHRIS ROMAINE: We used both.

MR. MANGINO: Used both. Fifty-one -- increase in
51 projects is due to what level?

CHRIS ROMAINE: It's the combined. I would refer you to our detailed written comments which will explain in detail how our analysis was conducted.

MR. MANGINO: I was going to ask. Thanks. If you could do that, that would be great.

CHRIS ROMAINE: Yes.

MR. HOFFMAN: Will it include costs and personnel hours associated?

CHRIS ROMAINE: We have included information on the projected number of personnel. We have not converted that into actual costs for those personnel.

MR. HOFFMAN: If you have the time to do that, that would be another piece of information.

CHRIS ROMAINE: Thank you.

MR. HOFFMAN: And are you able to compare, you know, compare that to your current costs, increase in cost as well?

CHRIS ROMAINE: I can see what our budget people can do for you.

MR. LING: All right. Nothing else. Thank you both very much.

Okay. The next two speakers are Nancy Siekierka and Emily Church.

Miss Siekierka, you can start.
NANCY SIEKIERKA: Thank you. My name is Nancy Siekierka. I'm representing the Will County Senior Health Collaborative which is a group of charity organizations who came together a couple years ago to improve the health of senior citizens in Will County.

The first thing that we discovered when we did our analysis because there's not a lot of data that goes past -- in needs assessments that goes past the age of 50 or 55, was we had to look at what we could pull from the state database on hospitals.

What we discovered was that the No. 1 cause of death that was preventable in the population over 60 was lung disease. There wasn't a cancer in that top 10 list. It was more than 50 percent including over heart disease.

We were absolutely astonished. We pulled in the American Lung Association of Illinois to work with us and to partner with us and that's one of our primary aims right now.

Interestingly, as we have moved forward on our initiatives to try to raise awareness, the very simple fact at the same time that's happening is that we know we have over 46 million uninsured and underinsured in the United States right now with healthcare.

We're now being forced, those of us that are in healthcare provision situations, to make rationing
decisions on oxygen. We have people who cannot afford their oxygen and home health equipment company providers who cannot afford the volume of people that need to breathe the air.

So this problem is going to get substantially worse. It seems ludicrous that we're looking at rationing air and providing oxygen in cannisters. Of course 20 years ago if you would have told people we'll be drinking water out of bottles, I could just see my father rolling his eyes at the table and saying go drink out of a hose.

We've learned a few things since then. So we're more than willing to help in any way that we can because we think the quality of the air that we all breathe obviously impacts all of our lung health, not just our seniors. This isn't getting better. It's actually getting worse.

And there is nothing more distressing, and I have been personally facilitating ethics consults with nurses and care providers who are having been told by their companies, "You need to go into this patient's home and remove their oxygen supply because we can't afford to continue to give it away for free or we won't be giving it to anybody." That's pretty serious. Nobody wants to be in that position I don't think.
So please, anything we can do, any data we can help you with, we would more than glad to assist. Thank you.

MR. LING: Thank you. Miss Church.

EMILY CHURCH: My name is Emily Church. I am a concerned citizen and a scientist in training. I just started working on my Ph.D in neuroscience this fall. After I finished my undergrad a year ago, I started looking into climate issues and looked at the science and promptly joined several environmental organizations.

I think that this is something that affects all of us. I think many of the people here realize that. And I would just like to offer my support and say that based on conversations that I've had, so many people are concerned about this that I just really hope that EPA does take action and regulate greenhouse gases.

I'd also like to point out, I hear a lot of arguments against using coal -- I'm sorry -- against regulating coal because we need energy sources for when the sun isn't shining or the wind isn't blowing. And I think that people that make those arguments ignore the idea that we have energy storage capabilities and that we can continue to use sustainable sources of energy even when the sun is not shining and the wind is not blowing if we have means of storing that energy.
That's all I'd like to say. Thank you for giving me this opportunity.

MR. LING: Thank you. No questions. Thank you both.

All right. Let's call up David Archer and Mary Ellen DeClue.

MARY ELLEN DeCLUE: Can I go first? Ladies first?

MR. LING: We will lead off with Mr. Archer because he is next in line.

MARY ELLEN DeCLUE: It's a man's world. No. Go ahead, please.

MR. LING: Miss DeClue. He said yes.

MARY ELLEN DeCLUE: My name is Mary Ellen DeClue. I'm a retired chemistry and physical science teacher. At the time I lived in Godfrey, Illinois, and I taught at Wood River, at East Alton Wood River High School.

As a science teacher, I wanted to instill in my students an appreciation for the beauty and necessity of clean air, water and land. The students very often participated in field trips where they analyzed stream and river samples for water quality like dissolved oxygen, pH and so on.

We also did a study on particulate matter. We filtered air for a 24-hour period. It was really kind of a nice gizmo. We had like a roof and we'd set it on the
roof of the school and we would fasten down a preweighted filter and set the speed at a certain -- so we could document how many cubic feet per minute or hour or whatever it was and so on.

It was very interesting for the students, very informative and shocking. We also did a control. The control usually looked maybe a little dirty, okay, but the actual experimental model was at best a dark gray but usually black. And this was extremely good for the students because you look at air and it looks great. You really don't know what's in it. But by filtering it, it really brought it home that particulate matter is around and very alive and well, unfortunately.

This particular area of Wood River has several oil refineries and also the Portage Des Sioux coal power plant in West Alton, Missouri. We were kind of like down wind from it. So there were basically a lot of potential polluters at that time.

This particular study brought home a very important thing for the students. As I mentioned, you really don't know the quality of water or air unless you examine it and analyze it. And that's what EPA has been wonderful in doing. You set up standards. You analyze. You tell us, you know, what the problems are. And we certainly appreciate it.
Another thing students -- I want you to keep in mind, the students are on top of it. They are very, very concerned about the quality of their environment and future environments, as we are all.

You have been there for us in the past and we need you even more today. This proposal for CO₂ emissions addresses many issues in addition to global warming. The environment cannot take care of itself without your interaction. Fossil fuels are so terribly entrenched. And I don't know about you, but the name fossil, doesn't that sound outdated, outmodeled, get rid of it, get a newer model in. And sure enough, that's, I feel, what we need to do.

One of the primary things I think we need to address is that as long as we burn coal, we're going to mine coal. And to my knowledge every interaction with coal produces massive pollution and destruction. Coal mining by whatever method is destruction to the environment. Some more so than others.

I live in Montgomery County. Right now there is a longwall mining, Deer Run mine being developed which the compound is 450 feet from Hillsborough Hospital. Not good planning, but here it is. But basically longwall mining and mountaintop removal especially have destroyed communities. I want to emphasize, destroyed communities.
You will see abandoned houses. I mean it's sad. It's like what happened. They destroyed communities, land formations, water resources and very productive farms.

I don't know if you know, but longwall mining, you have this farmland, when you have longwall mining, it will subside five to six feet. How can you farm on a bathtub effect. It's kind of scary. I like to eat food, not coal.

Coal processing, which is another part of the picture, has produced millions, and I want to emphasize, millions of gallons of coal waste slurries in impoundment across the United States.

Right now, next door to Montgomery County is Macoupin County. And there are just huge refuse disposal, coal slurry piles. In fact, when I stand there and look up, it's scary because they aren't really regulated to the extent to be permanent. They are often left.

And then last but not least, the burning of coal has promoted global warming in addition to mercury, lead, arsenic, particulate matter, polycyclic aromatic hydrocarbons, which are known to be carcinogenic, are given off. And we are left with tons of toxic coal waste. Coal combustion waste, that is another issue I'm sure that we will be dealing with somewhere along the
line in the future.

The collapsing of the TVA dam in December of '08 is just one example of the damage that coal inflicts on citizens. Coal has -- coal will never be clean and to think of spending billions on sequestering CO$_2$ is really, I think, foolish and a waste of money.

We have clean energy now with solar and geothermal and wind. And the billions that we could use on clean-up or sequestering CO$_2$ I'd love to be put on grids so that we can do that stored energy concept.

MR. LING: You need to wrap up.

MARY ELLEN DeCLUE: Thank you. I will leave -- I have some other information, but I have a typed text. May I leave it with you?

MR. LING: Yes.

MARY ELLEN DeCLUE: Yes. Thank you. I really appreciate it.

MR. LING: Thank you. We'll put that in the record if you leave it with us.

Mr. Archer.

DAVID ARCHER: Good afternoon. My name is David Archer. I'm a professor at the University of Chicago in the department of the geophysical sciences. I've published 80-some peer-reviewed papers and five books on the carbon cycle of the earth and its interaction with
I also teach a class as part of our core science curriculum for undergraduates about the physics and chemistry of the global warming forecast. It's become the most popular class on campus which I think shows the concern that young people have about what business-as-usual is doing to their futures.

One of the books I have the students read is called *Six Degrees, Our Future on a Warmer Planet* by a journalist named Mark Lynas. The first chapter describes the potential impacts of 1 degree Centigrade average global warming, all the results taken from the main-stream peer-reviewed climate impacts literature. And chapter 2 is about 2 degrees of warming and so on up to 6 degrees which is the high end of the IPCC projection range for the year 2100. It's a very good book, well researched and clear, and I recommend it to you.

The earth today is already deep in chapter 1, 1 degree C of warming. So the things you can read in the book you can also read in newspapers. In my opinion, the most profound climate impact of global warming in this country is the ongoing drought in the Southwest. The climate impacts in later chapters of the book get truly horrific including droughts and desertification that make
the Dust Bowl seem mild.

During the time of the Dust Bowl, 85 percent of the people that lived in Oklahoma felt the need to pick up stakes and leave. You can imagine in the future, mass migrations of people and water wars and ultimately failure of civilized government, the failed states.

The population of the earth depends on the infrastructure of our complex society, and if it breaks down, the carrying capacity of the earth could collapse. This happened to the Mayans, the most advanced civilization of their day, as a result of extended droughts during the medieval warm time. How many of us would survive if there was no food in the grocery stores?

I come away from the book thinking that ultimately humankind is better than this. Humans have done amazing things and this challenge technologically isn't even all that hard.

Coal is by far the most abundant fossil fuel, and the future of climate depends mostly on what we decide to do with that coal. If hypothetically there were no more coal in the ground, we wouldn't be going back to the stone age. We'd figure out another way to keep things running. No problem. And if the climate starts to bite harder in the future, humankind will figure out ultimately how to leave that coal in the
ground.

Since dangerous climate changes are already underway, really fixing the climate means preventing the earth from getting any warmer than it already has. Our understanding of the physics of earth's climate tells us that to do this would require an atmospheric CO$_2$ concentration of 350 parts per million.

The reason -- where 350 comes from is this. The atmosphere already has more CO$_2$ than this. 387. And if the CO$_2$ concentration were to stop rising, if it was to stay at 387, the earth would continue to warm for several decades as the oceans warm up. The oceans right now are keeping us cool. This is what they call committed warming. And avoiding that committed warming is where the target CO$_2$ concentration of 350 parts per million comes from.

My optimistic opinion is that ultimately humankind in the coming decades will begin to actively scrub CO$_2$ from the atmosphere as part of a crash effort to get back to 350 parts per million. Some day someone is going to clean up this mess.

And in the larger scheme of things, this wouldn't be that hard to do. If this is the ultimate tide of history, there is an easier way to get there and a harder way. As with many environmental messes, it
would be much cheaper in the long run to avoid as much as possible emitting CO$_2$ to the atmosphere in the first place.

Climate change is more difficult than other challenges humans have faced only in that it's global and the "tragedy of the commons" effect is particularly strong. The people who benefit from using coal are not the same people as pay the price, mostly people in the future and the developing world. Will humankind plan intelligently for our collective good, or are we just another out-of-control weed species like so many others in earth history, doomed to bloom and collapse? This is the decision that we're facing today. Thank you.

MR. LING: Thank you.

I'd like to call Katy Hintzen and Courtney Eccles.

KATHY HINTZEN: Hello. My name is Katy Hintzen. I'm testifying today as a private citizen. I want to thank you for the opportunity to speak and for giving the public a chance to have a voice in this very important decision.

I wanted to speak today for the very simple reason that I'm 22 years old and this is -- it's my generation and the generations that come after me whose futures are going to be most heavily impacted by climate
change. And we're really doing our part.

Young people are very much aware of this issue. We take public transit. We recycle. We really try to live our lives in ways that are responsible and sustainable. But I think one of the big messages that everyone here has been saying today is that private action is not going to be enough. That we need help on this. And as long as the larger sources of carbon pollution, the biggest contributors to global warming remain unregulated that we don't really have a hope of progress.

Climate change is a serious threat. And it's going to require some very challenging decisions, and regulating the large polluters is the most logical way to quickly and effectively cut carbon pollution.

And as I just want to urge you as the people who have the power to make those challenging decisions to take the action that is necessary to really reduce our greenhouse gas emissions and to halt climate change because this is something that's going to be your decision, but that ultimately will impact all of our futures. Thank you.

MR. LING: Thank you. Miss Eccles.

COURTNEY ECCLES: Hi. My name is Courtney Eccles. I am the Assistant Director of Outreach and Policy at
Protestants for the Common Good. We go by PCG because it's a little easier.

PCG is a not-for-profit organization comprised of individuals and churches from mainline Protestant churches across Illinois. And our work centers around education and advocacy work with people of faith on a wide range of social justice issues including environmental work.

We work and communicate directly with about 5,000 individuals across the state and about 500 churches.

I wanted to thank you for the opportunity to speak today. I am here to express PCG's full support for the proposed EPA rule that would cut global warming pollution by regulating emissions from plants and facilities that release at least 25,000 tons of greenhouse gases each year.

My intention is not to give you all of the science behind it -- I know we've heard quite a bit of that this morning -- but rather to talk to you about why this issue is so important to people of faith across Illinois and a little bit about what we've been doing with that.

As an organization over the past three years, we have seen significant and growing interest from the faith
community on environmental issues, specifically global warming.

The passion for this issue has led to a number of different areas of work including green teams being formed in churches, initiatives to put solar panels and wind turbines on top of a number of different church roofs and the creation of curricula and other training sessions that help individuals and congregations make their homes and churches more energy efficient, more environmentally friendly.

And we realize that while individual action is important, that combatting global warming demands work at local, state and federal levels, and so by reducing the greenhouse gas emissions from these larger facilities, we're certainly taking one significant step in the right direction. I congratulate the EPA for moving along in that process.

At PCG, we work diligently on environmental issues for two very important reasons. First, we feel that as Christians we're called to be good stewards of the earth, caring for the land, the water and the creatures that live here.

In addition to our care for creation, PCG has always worked on behalf of individuals that live in poverty. And we are acutely aware of the fact that
global warming affects individuals in low income communities far more than it does others.

The coal-fired power plants and oil refineries that we're talking about today are probably located in the communities where these individuals live, meaning that the pollution hits them first.

Individuals who live in these communities already struggle with housing, jobs, transportation and safety. Those with fewer resources, less access to healthcare and inability to afford amenities like heat or air conditioning and thus are far less able to adapt to our rapidly changing climate. It is for these people that I come to speak to you today and urge moving forward on the EPA rule.

So, in closing, we feel strongly that significant progress will come only if we as individuals make changes in our own lives but also if changes come at a higher level as well from our federal government.

American businesses and energy providers have to change their message as well, and this rule puts us on the right path to doing that. These large facilities account for a significant portion of the global warming pollution and cleaning them up would be an important and necessary step in the fight to end global warming.

So thank you again for this opportunity. And I
urge quick progress in finalizing the rule. Thank you.

MR. LING: Thank you. The last two speakers before lunch will be Laura Chamberlain and Pam Martin.

I think this says that Pam Martin is actually scheduled to go first.

PAMELA MARTIN: Thank you for this opportunity to speak. My name is Pamela Martin, and I'm an Assistant Professor at the University of Chicago. I teach classes in past climate change, chemical oceanography and the science of sustainability.

Looking back into the paleo-record reveals abrupt changes in climate, tipping points and many things that we still cannot explain. We must go back millions and millions of years to get to the CO\textsubscript{2} levels that we're at currently.

This past fall, I've been participating in a seminar with other climate experts such as David Archer, who spoke earlier, who is an expert on the carbon cycle, climate dynamicists who try to understand the radiative forcing of greenhouse gases, atmospheric chemists and biologists who study the real nitty-gritty of photosynthesis.

We've been studying the details of the fate of CO\textsubscript{2}, what happens to the CO\textsubscript{2}, to that portion of it that sinks out of the atmosphere into natural sinks. And this
has a cycle through the atmosphere. One clear sink is the oceans. And the CO$_2$ enters the oceans and leads to a lowering of the pH. It acts as an acid.

While understanding the sinks of CO$_2$ requires some detailed sleuthing, understanding the anthropogenic sources, the major emission sources, does not require such sleuthing -- a relatively small number of polluters and yet one half of all of the greenhouse gases; and these are the ones that the EPA is talking about regulating today.

EPA is taking an important first step in addressing greenhouse gases under the Clean Air Act.

By requiring that the big polluters install technology to reduce their greenhouse gas emissions, EPA's proposed rule will begin the work of cutting greenhouse gas global warming pollution while creating green jobs.

I applaud your commitment to holding these big polluters responsible first, but I urge you to also continue to work to regulate those who emit less than 25,000 tons per year.

Under the current rule, EPA proposes to take five or six more years of study to address these smaller sources. This is too slow. The longer we wait, the more that is committed warming for the future and the more
it's going to cost to address this future -- cost to address this future problem.

The Clean Air Act provides a comprehensive system of pollution control. I applaud you again for using this to address the major polluters. And I encourage you to act quickly on that and then to also start to address the smaller emitters as well. Thank you.

MR. LING: Thank you.

LAURA CHAMBERLAIN: Hi. My name is Dr. Laura Chamberlain. I'm a family physician here in Illinois. And I want to build on the statements given by Brian Urbaszewski from the Respiratory Health Association of Metropolitan Chicago, but I'm afraid I don't have a lot of statistics for you.

I actually just want to give you an idea of what a respiratory death is -- the actuality of a respiratory death here in Chicago.

Most of my experience of being a physician has been in Chicago. And most of that has been working on the south side and the west side. And so I've attended many patients that have had heat-related respiratory distress. And I wanted to give you a little picture of what that meant for patients.

It's very hard if you have asthma or COPD in
this city if you are -- you are in the lower socioeconomic categories. It's very hard to be able to afford air conditioning, to be able to afford housing that has a good availability of air, that is not -- that does not involve pollutants in any way, shape or form like formaldehyde from drywall, you know, a number of different allergens, cockroaches, infestation, mold. It's very hard to avoid that.

And then when they you add heat-related ozone and air quality to the whole picture, what happens to a patient is this. And I'm going to focus on an elderly patient, okay, probably with COPD and some element of asthma in their past.

They usually are on one, two, three inhalers and kind of a back-up steroid or some other medication like an emergency medication. And it's very difficult to know at what point they are in real trouble. We give them a lot of information about this, but for the patient, it's very, very hard to know this.

So as the heat increases and the air quality in their homes decrease, they end up overutilizing their inhalers and their nebulizers to a great degree and they start not being able to sleep and eat and drink, so an added dimension of dehydration begins to occur over the course of days and hours.
Okay. And then what happens is they start to --

ty they determine that they're in need of their emergency
medicine and they take that and they give -- they always,
always, the patients give these medications too long.
They watch the clock. They're not breathing well. They
give the medications too long. And they end up coming in
when they already have very, very significant bronchial
obstruction. Already calling 911. And really actually
being in need of emergency ventilation at that point or
even tubing or artificial ventilation.

What happens to a patient when they actually die
of a respiratory distress is that, you know, it's
basically drowning. They have bronchial obstruction and
bronchial edema and all of the exudate that is involved
in that.

And even with intubation very, very often we
cannot give oxygenation to a certain extent, so without
actually putting them on some kind of heart lung bypass,
we cannot oxygenate their blood. So it is a drowning
death.

And it's extremely distressing to the patients,
to the family. It is not a comfortable death. I want to
tell you that. That's the No. 1 message I'm here to tell
you. Dying from respiratory distress is not a
comfortable death for anybody in the family or the
patients.

And there's very little that we can do after a certain point even in the ER, even with medications, if they do not respond to intubation and direct ventilation.

These are the deaths that we're talking about. These are the deaths that Brian Urbaszewski talked about and the other commenters talked about. And it's absolutely important that you as a body understand the cost of these deaths in terms of the monetary cost, the emotional costs and the -- this is really robbing us of a large portion of our population especially in the inner city that could be, you know, extremely useful, beneficial lives to us.

Because of this constant onslaught of the heat-related, you know, ozone, heat-related air quality, the particulate matter, we must, must move away from coal if we are going to give these people quality lives.

That's really what I want to talk to you about. So I thank you very much for letting me talk to you.

MR. LING: Thank you. And I had a question for Miss Martin. You made a comment about urging EPA to move more quickly for the smaller sources.

The proposal that we're talking about today is about permitting and we do talk in the proposal about some challenges with using the permitting program for the
smaller sources, although we state that there may be other more appropriate tools for smaller sources, so in that context, I wanted to ask you should we interpret your comment as we should move more quickly with smaller sources through the permitting program or should we move more quickly with smaller sources in general? Which did you mean?

MS. MARTIN: I think you can think to address it within the permitting program actually, but in any case, we need to move forward and that would be one of the really most rapid ways to do that rather than coming up with a new way of doing it.

MR. LING: Okay. Thank you. No other questions. Thank you very much.

With that, I will adjourn the hearing until 2:00 p.m. where we will have another round of speakers. I'll see some of you back here then. Thanks.

(WHEREUPON, the hearing was recessed and continued to 2:00 p.m.)
STATE OF ILLINOIS 
COUNTY OF COOK 

I, SHARON A. STUCKLY, a Certified Shorthand Reporter of the State of Illinois, do hereby certify that I reported stenographically by means of machine shorthand the proceedings had at the hearing aforesaid thereafter reduced to typewriting via computer-aided transcription under my personal direction, and that the foregoing is a true, complete and correct transcript of the proceedings of said hearing as appears from my stenographic notes so taken and transcribed under my personal direction.

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E

e-z-e-v-i-c [i] - 70:23
earth’s [i] - 85:5
easier [ii] - 85:24, 88:2
East [ii] - 78:16
eat [ii] - 36:17, 81:7, 94:23
ECCLUS [i] - 87:24
ECCO [i] - 18:21
economical [ii] - 20:9, 20:10, 20:16
ecosystem [i] - 36:12
edema [ii] - 95:14
educate [i] - 71:19
Edwardsport [i] - 33:1
effective [ii] - 12:14, 25:20
effectively [i] - 87:15

emit [i] - 3:12, 15:11, 92:20
emitted [i] - 15:9
emitting [ii] - 15:16, 24:8, 86:2
emotional [i] - 96:10
emphasis [ii] - 55:20
emphasize [ii] - 80:25, 81:10
employ [ii] - 40:12
employed [i] - 38:11
employees [i] - 10:18
employment [i] - 30:7
employs [ii] - 10:8, 41:19
emptied [i] - 65:4
enacted [i] - 45:22
encephalitis [i] - 53:6
encourage [i] - 43:5, 59:8, 93:6
endorse [i] - 62:16
Energy [ii] - 17:4,

EFFICIENCY REPORTING 630.682.8887

www.EfficiencyReporting.com
environmental [2] - 1:2, 1:15
environmentalist [1] - 21:10
environmentally [1] - 89:10
environments [1] - 80:4
92:11, 92:22, 96:21
excessive [1] - 18:3
exclamation [1] - 45:19
Executive [1] - 11:8
every [1] - 50:12
exist [1] - 47:11
existing [1] - 46:5
expected [1] - 4:9
expanding [1] - 63:9
expected [1] - 70:3
expended [1] - 11:18
expenditures [1] - 12:8
experimental [1] - 79:8
expert [1] - 91:18
experts [1] - 91:17
expose [1] - 63:23
express [1] - 88:13
exude [1] - 95:14
eye [1] - 60:15
eyes [1] - 76:10

F

face [1] - 56:19
faced [1] - 86:5
facets [1] - 37:3
facilitating [1] - 76:19
exceed [1] - 47:22
exceptions [1] - 14:1

EFFICIENCY REPORTING 630.682.8887

www.EfficiencyReporting.com
margin [1] - 52:14
Mark [1] - 83:10
mass [1] - 84:4
Massey [1] - 35:5
maximizing [1] - 61:12
maximum [1] - 53:24
Mayans [1] - 84:10
meant [1] - 93:24
meanwhile [1] - 13:8
medieval [1] - 84:12
meeting [1] - 46:8
meetings [1] - 57:17
megawatts [1] - 28:10
members [1] - 2:24
35:20, 35:24, 35:25, 36:5, 36:10, 36:19, 81:20
merely [1] - 37:18
messages [1] - 87:5
messes [1] - 85:25
metallic [1] - 36:1
metals [1] - 19:21
methane [1] - 3:24
method [1] - 80:18
methyl [1] - 35:25
metric [1] - 4:2
MICHAEL [1] - 1:16
MICHAUD [1] - 56:11
microphone [2] - 8:5, 8:11
midwest [1] - 10:12
might [1] - 11:13
migrations [1] - 84:5
mild [1] - 84:1
mind [2] - 34:2, 40:2
miniature [1] - 36:1
minimal [1] - 18:4
minutes [3] - 3:8, 8:9, 8:23, 8:24
Mississippi [1] - 64:20
Missouri [1] - 79:16
model [2] - 79:8, 80:12
modernize [1] - 32:18
modification [1] - 4:23
modify [1] - 11:3
moment [1] - 65:24
monetary [1] - 96:9
moreover [1] - 68:24
mostly [2] - 84:19, 86:8
mother [1] - 21:10
motion [1] - 18:2
mouthful [1] - 2:4
moves [3] - 42:1,