ENERGY BAR ASSOCIATION GENERAL COUNSEL ROUNDTABLE

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At the Energy Bar Association annual meeting, a plenary panel of senior legal officials from agencies with key roles in the energy sector discussed the issues of the day. What follows is a slightly edited recounting of the panel discussion.

SPEAKERS

PANELISTS: Michael A. Bardee Principal Deputy General Counsel Federal Energy Regulatory Commission

Stephen G. Burns General Counsel Nuclear Regulatory Commission

Joe Goffman Senior Counsel to the Assistant Administrator for Air and Radiation Environmental Protection Agency

Scott Blake Harris General Counsel Department of Energy

Frank R. Lindh General Counsel California Public Utilities Commission

Constance Rogers Deputy Solicitor for Energy and Mineral Resources Department of Interior

MODERATOR: Douglas W. Smith Van Ness Feldman, PC Former General Counsel, Federal Energy Regulatory Commission Former Deputy General Counsel for Energy Policy, Department of Energy

MR. SMITH:

We have a terrific panel this morning. In putting this panel together, my basic hypothesis was that there is an awful lot of energy law going on outside of FERC, the agency where a lot of us spend our days. This was confirmed for me when I looked back at the headlines of *Energy Daily* stories for the past two weeks, and found every one of the agencies represented on our panel mentioned in headlines in that two week period, some multiple times. So there's a lot of energy-related activity going on across a broad range of agencies within the federal government and at the state level.

Let me introduce our panelists. First we have Mike Bardee. Mike is the Principal Deputy General Counsel at the Federal Energy Regulatory Commission. Mike's been at FERC since 1990. Previously, he worked with the Pennsylvania Office of Consumer Advocacy, and the U.S. Justice Department. He has a B.A. from Oklahoma and a J.D. from NYU.

Next is Steve Burns, who is the General Counsel of the Nuclear Regulatory Commission. Steve has been the General Counsel for about a year, but has been at the NRC since 1978. He has a J.D. from George Washington University and a bachelor's degree from Colgate.

Next is Joe Goffman, who serves as Senior Counsel to the EPA Assistant Administrator for Air and Radiation. He has worked on air, climate, and energy issues for most of his career. Prior to joining EPA, he was the Majority Senior Counsel to the Senate Environment and Public Works Committee. Before that, he was Legislative Director to Senator Joe Lieberman. He had a prior stint at the Senate Environment and Public Works Committee, and between his periods of public service, he spent a number of years working at the Environmental Defense Fund. He has a J.D. and a bachelor's degree from Yale.

Next is Scott Blake Harris, who is the General Counsel at the Department of Energy, a position he took in May 2009. Before joining DOE, he was the managing partner at the firm of Harris, Wilshire and Grannis, and before that was a partner at Williams & Connelly and Gibson Dunn. He also had experience in the Clinton administration as both the Chief Counsel of the Export Administration of the Department of Commerce and as the first Chief of the International Bureau at the Federal Communications Commission.

Next is Frank Lindh, who is the General Counsel of the California Public Utilities Commission, where he's been the General Counsel for not quite two years now. Before that, he spent fifteen years at Pacific Gas & Electric in San Francisco; and before that he practiced in firms and also worked in the Solicitor's Office at FERC. He has a law degree from Georgetown and an undergraduate degree from Penn State.

And finally, Connie Rogers, who is the Deputy Solicitor for Energy and Mineral Resources at the U.S. Department of Interior. She is new to this job, having arrived in 2010. In this role she is the principal attorney at the Department of Interior on mineral and conventional and renewable energy resource issues. Previously, she was a partner in the Denver office of Davis, Graham & Stubbs. She has a bachelor's degree from William Jewell College and a J.D. from Georgetown.

So with those brief introductions, we're going to go alphabetically. We'll start with Mike Bardee from the Federal Energy Regulatory Commission.

MR. BARDEE:

Thank you, Doug, and good morning to all of you. Let me start first of all with a standard disclaimer that my remarks today are my own and do not necessarily reflect the views of the Commission or of any individual Commissioner. One of the topics for this panel on the agenda was Multiagency Coordination, and I wanted to start by talking about my most direct involvement with a multiagency coordination.

The Energy Policy Act of 2005 had in it a provision that required the formation of an interagency task force. This task force included FERC, the Department of Energy, the Federal Trade Commission, Department of Energy, and the Department of Agriculture. It was tasked with looking at competition in the electric industry and writing a report to Congress. And when I saw that, I said to my boss at the time, "Gee, that sounds kind of interesting. I think I'd like to work on that." And I was fortunate enough to be selected, or at least at the time I thought that was a fortunate thing. But those of you who work at the agency or have in the past, realize that it can be very difficult at times to get a majority of the commissioners, and hopefully even all of the commissioners, on board for the same words and ideas on the page. When you're down to the wire, it's a 60-day item, you've got to get it out, are you going to resolve the differences between them in a way that they all can vote for, or at least a majority can vote for? And what I hadn't thought through when I signed up for the Interagency Task force was, well, that's what it's like on a bad day in my job now, and I just volunteered for a project where it's multiplied by five times. So needless to say, if that ever happens again, I won't be the one volunteering to do the Interagency Task Force report to Congress.

Let me mention a few of the higher priority efforts that the Commission is working on. I'm sure you're all familiar with them, so I'll just try to provide an update on them. First of all, transmission planning and cost allocation is an issue of a high priority for the Commission right now. We held three technical conferences in the fall of 2009. We then put out a notice asking a lot of questions concerning transmission planning and cost allocation, and got a lot of comments. FERC staff is going through those comments now and preparing ideas for the commissioners on how they might want to proceed. It's not clear where the Commission is going to end up. FERC also needs to be aware of what the Hill is doing. It could be very interesting in the next few months watching how the Commission proceeds, and how Congress proceeds, and how those two interrelate.

The next issue I'd like to discuss is renewables. FERC put out a notice of inquiry on barriers to renewables in January 2010. Some of the ideas that were mentioned in this notice of inquiry included: whether there is a need for more accurate forecasting tools to better integrate renewables; whether the scheduling requirements of the Open Access Tariff are appropriate or should be changed in a way that makes them amenable to more renewables; whether the balancing authority areas are the right size, or whether changes should be considered for the size of the balancing authority areas that would allow better integration of renewables. All those ideas are out there. We got the comments from this notice of inquiry earlier in April, so it's going to be a little while before staff has gone

through all of that information and all those ideas, and prepared proposals for the Commission. I think that's going to take us a little longer this year.

The third major priority for the Commission is demand response. The Energy Independence and Security Act of 2007 gave FERC certain responsibilities, one of which we've already fulfilled, which was to prepare a national assessment of demand response. We released this assessment in June of 2009. The bottom line was that there was a potential for demand response of between 38 and 188 gigawatts by the year 2019, depending on how things played out and what choices are made in the meantime. FERC has done a draft national action plan, and a final national action plan will be released in June of 2010. Six months after we issue the final national action plan, FERC and the Department of Energy are required to issue an implementation plan.

I think the example of the Demand Response report brings up an interesting twist on interagency coordination. FERC is tasked with putting out the national action plan in June 2010 without coordinating with anybody - it's strictly a FERC product. But six months later, we have to produce an implementation plan with the Department of Energy, and that will require coordination with them. Therefore, FERC is trying to make sure that we don't put out a national action plan that is not going to work when it comes time to write the implementation plan. We're trying to work right now on coordination to avoid any disconnects later in the process.

Let me also mention a couple of issues regarding the Commodity Futures Trading Commission (CFTC). There's obviously been a lot of controversy and press on the FERC/CFTC issue. Congress is actively considering a bill right now in the Senate. The House did have some resolution of issues involving FERC and the CFTC in the financial regulatory reform bill they passed late last year. There's obviously a difference of opinion between the agencies on how jurisdiction should be resolved, but fundamentally I think it's fair to say that there is a shared goal of protecting consumers and the economy from the kind of turmoil that occurred in 2008. I think despite the agencies' differences on how to resolve that issue, we do have an agreement. In addition, despite a legal difference of views, the agencies still have to work together. FERC has, for example, a proposal that our agency issued in January 2010 on credit reform for the RTOs and ISOs. And the FERC chairman wrote to the chairman of the CFTC and solicited their input, and they responded formally with comments. In addition, offline we've had some discussions between staff which have been very productive conversations. In short, I think it's very important for agencies to be able to work together well, even when they have a difference of an opinion on a major issue.

I think, looking back a couple of years, that the Amaranth case was one where there was a similar difference of views between the agencies, and we ended up on opposite sides in court. But despite that, there was on-going work between the staffs, information sharing that had gone on before and has gone on since. This information sharing is much less dramatic, much more mundane, and much more productive. I think it's possible for the agencies to work together well, despite any differences that they may have that end up in a vehicle like a court case.

I'll mention just a couple of areas where FERC's issues have interplayed with the EPA. One is actually prospective - the climate change legislation that

Congressman Boucher was mentioning earlier. One aspect of it that could involve FERC, depending on where that legislation goes, involves the emission allowances. The way the House bill had it structured, EPA was responsible for keeping track of the emission allowances. Each emission allowance would be identified, have a number, and the EPA would keep track of who held them. FERC would have a role under the House bill because we would monitor the markets for allowance trading. And the CFTC would have had a role under the House bill for allowance derivative trading.

This is a very interesting dynamic when you think of the controversy that has already occurred between just the FERC and the CFTC, splitting up what they do on energy, and then envision three agencies having to coordinate involving greenhouse gas emission allowances.

FERC had a case a few years ago that involved the EPA. I'll mention it because it highlights what can happen when these laws interact. The case involved a power plant on the Potomac River, the Alexandria plant owned by Mirant. The Virginia Environmental Agency, the state agency, had determined that the plant was no longer going to be able to operate at the same level it had without violating the State Implementation Plan under the Clean Air Act. Once the state issued that determination, the D.C. Public Service Commission filed at FERC and at the Department of Energy, asking both agencies to order that the plant keep running, despite the state ruling on the Clean Air Act. DOE ultimately used their emergency authority under section 202 of the Federal Power Act to require the plant to keep running in the short term, but to minimize any environmental harm. And, ultimately, FERC did issue an order which addressed the longer term solution, which was to build some transmission enhancements to make it less important for those plants to run for reliability purposes. This was a case that brought to my attention, very directly, the conflicts that can arise, depending on how things play out, between the Clean Air Act and the energy laws.

Let me also mention a couple of other aspects of jurisdiction that involve other panelists. For example, FERC and the Nuclear Regulatory Commission have had an issue involving cyber security at nuclear power plants. NERC sent us proposed standards, called the CIP Standards. We approved them, but they had an exemption that said whatever is regulated by the NRC for cyber security purposes is not regulated under the FERC-approved standards. So FERC had to develop a process where the NERC could go out and figure out which parts of this plant are NRC-regulated, and which parts are going to be regulated under the FERC-approved rules. This process presented the very interesting idea of splitting out the power plant and its facilities in a way that one agency would be here and the other agency would be there.

FERC has worked with the Department of Interior on the Outer Continental Shelf. About two years ago, there was a lot of interest, concern, and controversy about who was responsible for overseeing development of hydrokinetics on the Outer Continental Shelf. About a year ago, that was resolved by a Memorandum of Understanding between FERC and DOI which said that FERC would be responsible under the Federal Power Act for the licensing of hydrokinetic facilities on the Outer Continental Shelf. The Department of Interior, and more specifically the Minerals Management Service, would be responsible for the leases, easements, and rights of way for those facilities, as well as for any wind development or solar development on the Outer Continental Shelf. This is another example of two agencies trying to figure out how to parse their respective jurisdictions.

Lastly, I'll mention very quickly FERC's work with the California Public Utility Commission and other states that have looked into the idea of feed-in tariffs. Under a feed-in tariff, for example, homeowners who put solar panels on their rooftop would get paid a certain amount when they generate electricity, and that amount would be determined by the state government. This raises an interesting issue of how such a program would interact with the Federal Power Act, which gives FERC jurisdiction over all wholesale sales, and states jurisdiction over sales at retail to end users. A sale by a homeowner to the utility certainly has some aspects that look like a wholesale sale, but there is a lot of consideration underway of how to make those laws work well under the Federal Power Act. And that's still to be resolved in the future, either in a FERC proceeding or otherwise. Thank you.

MR. SMITH:

Thank you, Mike. I'm going to invite Steve Burns from the Nuclear Regulatory Commission up next.

MR. BURNS:

Let's talk about nuclear power regulation. I am not an economic regulator. I am a safety regulator, or represent the safety regulator, which is the Nuclear Regulatory Commission (NRC). We are responsible not only for nuclear power regulation, but also for the use of radioactive materials licensed directly by the NRC, and also for the materials regulation programs administered by what are called agreement states. There are 104 operating nuclear power plants in the United States, at sixty-five sites, in thirty-one different States. They generate about 20% of the electricity in the United States.

The NRC currently has a lot going on. I've been there for over thirty years, and started about six months before the Three Mile Island accident. This is a very busy time for us. But as I think Chairman Jaczko and the other commissioners would say, the number one priority is the safety of those 104 operating plants, as well as the other facilities we regulate. And that's a continual issue.

Even with the operating plants, we still have a lot of issues in which my staff is engaged with respect to ongoing safety issues. Some of these are issues that the engineers and technical people have been wrestling with for thirty years, trying to determine how best to address them through effective regulation. It's not that we think that the plants are unsafely operated. But there are issues concerning safety that come up and that continue to be addressed. One of those issues is fire protection. When I came into the agency, it was beginning to wrap up its first fire protection rule. This complex rule was challenged by the industry and was saved by the D.C. Circuit Court of Appeals because the court said the exemption provisions mitigated the potentially Draconian compliance procedures. Right now, thirty years later, the agency is trying to move the industry toward a new fire protection paradigm which is much more risk informed, and we think much more effective.

of conflict, with each other.

I also want to mention the security paradigm for the agency. Security is seen chiefly as an issue affecting the operating fleet, but also has implications for new reactors that we may license. In the last ten years, or nearly ten years, since the September 2001 terrorist attack, the agency has been focused on upgrading and enhancing the security of our plants, as well as the security of materials, along with other partner agencies. I think many representatives of the nuclear industry will say that the security provided for nuclear power plants is probably among the most robust in the U.S. for various industrial facilities. In the last year we have wrapped up a major review of our security plans and rules that codifies in our rules steps taken since September 2001. We've added some new requirements to these plans, and as our FERC colleague mentioned, we're working cooperatively with FERC and NERC with respect to cybersecurity and assuring the overlapping jurisdictions of various agencies complement, instead

But one of the things that I think is very important for the NRC's security framework is what we call the "Design Basis Threat." In developing its requirements for physical protection at reactors and some other facilities, the NRC assesses the threat environment and also considers what we can reasonably expect private industry to do to defend against a threat. For a power plant, the threat is essentially sabotage, not diversion of material. The design basis threat is codified in the NRC's regulations and provides a general description of the type of attack against which a plant operator must defend. We were challenged on our final rule published in 2007 in an interesting case, Public Citizen v. NRC, 573 F.3d 916 (9th Cir. 2009), regarding the Design Basis Threat. The case sustains the NRC's approach, which balances the reliance on private protection with the proper role of government in providing protection. In that case we were challenged because we didn't require private utilities to directly protect against an aircraft attack. In that instance the NRC's point was that we need to be able to rely on the Defense Department, the FAA, and other institutions of government to complement plant protection. The NRC can do things to require licensees to help mitigate the possible consequences of an accident, and we can look in future designs for design improvements. We were holding our breath in the Ninth Circuit about this case and were pleased with the result. Regardless, I think the NRC has endorsed a good paradigm in terms of private-governmental cooperation.

Another area of significant focus for us is license renewal for these 104 operating plants. A little over half of them have had their licenses renewed. Under the Atomic Energy Act, you have a forty-year license, which had to do more with the economics and antitrust provisions that many of you are more familiar with, not with the initial safety determination. But again, the plants were originally designed looking at a useful life of forty years. The NRC adopted rules about twenty years ago allowing another twenty year license increment, so now, with most of these plants you're talking about a sixty-year life. The Department of Energy and NRC are cooperating on research that would look for potentially what they call "life beyond sixty," for another twenty years of operation. Now the principal technical issue for extending the life of nuclear power plants is the life of major components, such as the reactor vessel. Our focus on extending power plant life asks the question: can you manage the age-related degradation of these long-lived passive components and ensure safe

operation? Things like pipes that can be replaced. For many valves and things like that, as long as you have programs for maintenance, quality assurance, and all of that, those issues can be dealt with. However, you also need to have assurance with respect to the reactor vessel and some of the other long-life components. We've been challenged on this from some states to change our regulations on the scope of issues that can be reopened in license renewal, asking us to institute additional reviews, looking at the spent fuel pool, maintenance for spent fuel, and some other similar issues. The NRC has resisted, and stayed focused on this age-related degradation concept, and it's been sustained in the courts so far.

Let's talk a little bit about new reactor licensing. There are a lot of people talking about the new NRC licensing process. Well, the fact is that this process itself was adopted twenty years ago. It was a result of recommendations coming out of the commissions that looked at and criticized the agency after the Three Mile Island accident. And in fact, when I look back at this, some of these concepts were actually around about 1970 when I was in high school, and there was talk about how the Atomic Energy Commission - the NRC's predecessor - should reform its process even at that time.

In any event, twenty years ago, the agency adopted a new approach to licensing which would rely on three types of permits or licenses. The first is an early site permit, with which you could "bank" a site, if you will, by conducting the environmental and siting review, and determine later whether you're going to build something there. In addition the NRC at that time encouraged greater standardization and provided for approval of designs through a design certification rulemaking. So Westinghouse would come in, or General Electric, or today AREVA, and some other companies, and they would have a design approved which then could be referenced by a combined license applicant who would not have to relitigate or have the design itself re-reviewed by the NRC, but could incorporate it into its license application.

The concept of a design that could be referenced was that you could take it off the shelf, plug it into the combined license application, and marry it up to a site in a sequential order. What's happened in practice is that a lot more companies were getting in line earlier than anticipated with combined license applications before the design certifications had been approved or updated, partly because of the incentives in the Energy Policy Act of 2005 related to the availability of loan guarantees and standby risk insurance.

Some of our reviews have been going in parallel, so you have ongoing design reviews certifications for new or updated designs, and at the same time, the updated new designs are being referenced by combined license applicants before the design review is completed. This has not been an entirely smooth process - there have been some upsets and scheduling challenges. There's been some concern whether the NRC processes are working. I provided a report that came out of the Bipartisan Policy Center - a study headed by former Senator Domenici and former NRC Chairman Dick Meserve - that basically said the essentials of the NRC process are sound. The agency and the applicants need to work things through, and there's going to be a few perturbations as we go through the next years. The benefit for utilities from the newer process is that there is not the financial commitment that there was in the old process, where you had to get a construction permit, you started building, then you applied for

an operating license. In the old process, there were a number of issues that could arise: your design really wasn't very well along; you had the question of a hearing process; you had plants like Seabrook and Shoreham where all-of-asudden there was an emergency planning issue. Those types of issues are meant to be pushed to the front end, before there is substantial construction, so that we do not have the type of thing we had when I started at the NRC, which was plants in distress and then utilities had to abandon them. So that's new reactor licensing.

Lastly, I think many of you know that the NRC has the licensing authority over the nation's high-level waste repository. In 2008, the Department submitted an application for the waste repository, and the review is ongoing. The Obama administration has announced its plans to look at something other than Yucca Mountain. And, eventually, the Department moved to withdraw its application in March 2010, about the same time the Blue Ribbon Commission that Secretary of Energy Chu established came into being. What's occurring now is a two-ring circus in the D.C. Circuit, and in front of the NRC, with new litigants coming in. The states of Washington and South Carolina in particular have been active. NARUC has filed to intervene in front of the NRC, as did the Prairie Island Indian Community in Minnesota, to oppose the withdrawal of the application. There are various arguments I don't have time to go into about why DOE can or cannot withdraw the application.

Some of the litigants went to various courts at the same time they went to NRC, or they ignored the NRC, or they came to the NRC and didn't go to court. We had our licensing board, which is a trial-level tribunal at the NRC, throw up its hands and say, "let the courts decide it," which I think is unusual for an administrative tribunal.

In April, in response to DOE and other motions, the Commission basically "unsuspended" the proceeding, and directed the Board to decide the matter by June 1. The Board came back saying we couldn't possibly meet that schedule, but that it would decide by June 30th. So what's happening now is the NRC is on a path to decide the Department's motion to withdraw the application, and in court the proceedings are now all consolidated in the D.C. Circuit. Ultimately, it is a big national policy issue, as the nation has to deal with and look to the ultimate "what to do" in terms of waste disposal.

The last thing I'll mention is related to waste disposal and how it is considered as part of the environmental review for power plant licensing, and it's called "Waste Confidence." About thirty years ago, in response to some court cases, the NRC adopted a generic environmental finding to be applied in various proceedings with respect to its "confidence" about its ultimate ability to deal with high-level waste, hence the name, "Waste Confidence." And essentially what is included in the findings is a determination of generally what is technically feasible. We know today more than we knew thirty years ago. And the Commission still abides by the essential findings made in its Waste Confidence decision as it has been updated over the years. This comes into play now that Yucca is being pulled off the table, although the Commission assumed in its findings that Yucca would fail. But the question then becomes: when would a repository or disposal facility be available? What other factors come into play regarding long term storage of waste? The Commission has that under active consideration. It is relevant for new reactor licensing or license renewal.

We have a petition in front of the Commission concerning whether the Waste Confidence issue should be in one of the renewal cases for Indian Point, whether it should be litigated specifically. I think the Commission will address this issue in summer 2010. But again, the issue is not a licensing determination on the technical adequacy of a particular repository. It's really part of the general environmental information that goes into the overall licensing process.

MR. SMITH:

Thank you very much, Steve. Now we'll turn to Joe Goffman from the Environmental Protection Agency.

MR. GOFFMAN:

Thank you very much for the opportunity to speak here today. In the coming eighteen months, the EPA, particularly the Office of Air and Radiation, will be proposing and promulgating a series of emission reduction regulations addressing SOx/NOx, mercury and acid gases, and possibly carbon dioxide emissions. That suite of regulations will be directed at electric steam- generating units and the utility or electricity sector generally.

And the EPA will be doing so, for the most part, in a legal context in which our obligations under the Clean Air Act, and in a couple of cases, subject to D.C. Circuit opinions, are very clearly outlined and are required to be carried out, at least as we understand them now, with a certain literalness, and with fairly limited flexibility. That means two things, at least to us. First, those regulations will be calling on the electricity sector to make very substantial investments in compliance. The electricity sector, in response to those regulations, will have to make weighty capital investment decisions. And, as has often been the case, the regulated community will turn back to us, the agency, and suggest or cajole or litigate in order to try to shape the regulations that we promulgate and enforce in ways that are fully responsive to the wide range of decisions that the industry has to make, or will have to make, with respect to capital investment and compliance investment in general.

What's striking, however, about the regulations that we are looking at, and the foundational statutory authority already interpreted for us by the courts in a couple of cases, is that our ability to shape the regulations to accommodate all of the issues that the electricity sector will be facing in determining its compliance path is rather narrowly bounded. And a lot of the absolutely critical decisions that will determine how costly the compliance path is for these regulations, or how efficient and cost-effective the compliance path will be, will be decisions that will be made by the utility regulatory commissions in front of which many of you practice.

Let me give you a couple of examples. What we have figured out using some preliminary modeling of how the sector could respond to some of these regulations, is that substantial up-front investments in energy efficiency could make the compliance pathways for these reduction requirements significantly less expensive, and avoid utilities, the FERC, the PUCs, and ISOs having to make tough reliability decisions. That suite of decisions and decision-makers lies well beyond EPA's power to address. So part of what the agency is trying to do, as we move forward through this regulatory process, is to engage the people on this panel, the people in this room, and the authorities in front of which you practice, so that the kinds of decisions that need to be made that will make compliance with this suite of regulations lower-cost and less fractious, can be made in a timely and orderly way.

To ground this a bit, let me just outline what the regulatory docket is going to be like for the rest of this year and next year. Within a few weeks, maybe a month or so, we will be proposing SOx and NOx reduction requirements for approximately the eastern half of the United States, in response to the D.C. Circuit's remand of the Clean Air Interstate Rule (CAIR), and we anticipate going final with those requirements in about a year.

Our top objective in fashioning the CAIR replacement rule will be to make sure that it meets the legal requirements that the D.C. Circuit laid out for us. This court was quite clear, at least in our view, that we have to come up with a working definition of what "significant contribution to downwind nonattainment" is, and that we have to ensure that those states that are making a significant contribution make the reductions that are required to eliminate that significant contribution. Well, once you start that inquiry, once you create the template and the methodology and the logic of "significant contribution" determination following what we think the court asked us to do, then you've set up a mechanism that has a progressive aspect to it. Which means that over the next year or two, and then a couple of years hence, as we continue to tighten the national ambient air quality standards for particulate matter and ozone and sulfur dioxide as the Clean Air Act requires us to do with the development of scientific information, then it's probably reasonable to predict that there will be subsequent SOx and NOx reduction requirements to address transport of pollution to downwind non-attainment areas.

In addition to this SOx and NOx program for downwind attainment, we're also required to propose and promulgate maximum available control technology (MACT) requirements under section 112 for mercury and acid gas emissions from power plants. For those of you who are Clean Air Act practitioners, you know that the MACT provisions under section 112 are very explicit, some would even say prescriptive, and that while the remand of the Clean Air Mercury Rule that the D.C. Circuit entered about a year ago didn't reach the issues of how to create or impose that standard, the D.C. Circuit generally has made it clear that where the Act is explicit and prescriptive, we, the agency, have to follow the Act quite literally. So, in the next eighteen months, the utility industry will be looking at SOx and NOx reduction requirements, MACT technology requirements, and anticipated progress regarding the reconsideration of national ambient air quality standards, and the real possibility that once those standards are revised, yet another round of SOx and NOx reductions.

You can see why, when you look at this picture and you broaden the frame even just slightly, what you're looking at is a number of years where fundamental investment decisions that go directly to questions that many of you non-Clean Air Act, non-EPA practitioners, will have to face. Many of the authorities and agencies that you work in front of can make a tremendous contribution, in terms of ensuring efficient lower-cost compliance paths, rather than unnecessarily expensive compliance paths.

MR. SMITH:

Thank you, Joe. Now we'll hear from Scott Blake Harris from the Department of Energy.

MR. HARRIS:

The first thing I learned when I took my new job at DOE is that I'm not nearly as smart as I thought I was. First mistake: I accepted the job before I checked the website to see what the job actually entailed. But when I did check the website, it didn't seem that terrible, right? It said, as General Counsel I'm responsible for providing legal advice and counsel to the Secretary and all of DOE's operating units. It said I'm responsible for representing the Department before other agencies and for working with the Department of Justice to represent the agency before the courts. And I'm to ensure that the Department operates in compliance with all applicable laws and regulations. I've been practicing law in Washington for 34 years, both in the government and the private sector. This did not seem too daunting. Second mistake: I trusted what the website said.

Here's what the website didn't tell me: DOE's responsibilities, as you probably knew, but I didn't, range from energy efficiency regulations for dishwashers to maintaining our arsenal of nuclear weapons; from cleaning up nuclear waste and disposing of it, to nuclear secrets counterintelligence. Who knew?

The responsibilities range from issuing loans for advanced technology vehicles, to a litigation portfolio in which the cases literally have been pending for twenty years - many of them based on events that occurred before I was born. And I was born a long time ago. It didn't tell me that DOE has an annual budget in the area of \$25 billion, but that the Recovery Act instructed the Department to spend approximately \$39 billion in two years, and that every one of those dollars has a legal issue that has never been decided before associated with it, and that no matter what decision I make, there are people who are going to be angry.

The website also didn't mention Yucca Mountain.

The first thing I did at DOE was change our website. My job is dealing with a crisis a minute. Sometimes it makes me crazy. Most of the time, I totally love it. But I actually took the job not to deal with the crisis of the moment. Any DOE general counsel is going to do that, right? Some things are going to come across my desk, whether I'm sitting there or there's a pet rock sitting there.

I took the job because I was hoping to try to make some systemic changes in the way the building operates for the benefit of the Department, the benefit of the government, the benefit of the people of the United States. So I'd like to talk about the kinds of things I'm trying to do that are not the crisis of the moment. If you want to talk about Yucca Mountain, we can do that later.

First, on enforcement: I didn't get many instructions when I came to the building. But one clear instruction was given to me by Secretary Chu. He told me that the Department had missed its deadlines for enacting energy efficiency standards, energy efficiency regulations, consistently over the course of its existence, and that we'd missed the deadlines in some cases by 13 years. I didn't know you could do that and get away with it. But he told me it wasn't going to

happen again. And the truth is, since the Secretary got there, it hasn't happened. We've not missed a single deadline.

To the contrary, the Department has announced, on time, a series of energy standards which will have the effect of reducing carbon emissions and, not insignificantly, saving consumers billions of dollars over the years. But as a lawyer, I asked the next most obvious question: What do we do to enforce our regulations? I was a little surprised by the response. People looked up. People looked at their shoes. They looked to the right, and they looked to the left. And they didn't say anything. I figured this is not good. So here's the truth. We didn't have a plan. We didn't have a team. We didn't have a strategy. We hadn't had anything in place for systematically enforcing these regulations. They had been essentially unenforced for decades.

The problem is, adopting regulations and not enforcing them is worse than doing nothing at all. Why? Because lax enforcement of energy efficiency standards can actually undermine the development of energy-efficient products. It lets bad actors gain an economic advantage over those who try to follow the rules. This not only distorts competition in the short term in a way that's adverse to the public interest, but it also undermines the kind of long-term competition that would otherwise drive innovation. Why would anyone spend scarce corporate resources to develop energy-efficient products if a competitor can just falsely claim to be selling the same thing without spending the money? It wouldn't.

So we've undertaken a series of steps to enforce our energy efficiency regulations. First, we issued guidance on our certification regulations. Manufacturers have to certify to the Department that they meet energy-efficiency standards by submitting a certification with test data. So we issued guidance indicating that we will treat each violation of the certification obligations as an independent violation of the Energy Policy Conservation Act. It's obvious; every other agency in the world that has similar regulations does the same thing. But DOE never actually said so clearly. So we said so clearly.

Second, we then created a dedicated enforcement team. Previously, it was nobody's job to do enforcement. Now we have a team, and I've just brought in a new Deputy General Counsel for Enforcement and Litigation. He comes from the U.S. Attorney's Office and the Securities and Exchange Commission, and he knows how to do enforcement.

Third, we announced a thirty-day window to file certifications and to get into compliance, because we knew we were changing the culture, if not the rules. Why did we do that? Well, we took a look at what was on file when we got there, and the answer was: essentially nothing. That's not hyperbole. There was nothing there. In the thirty-day window, 600,000 residential appliance certifications from over 160 manufacturers were filed.

Fourth, we announced a new policy. We're going to investigate all credible allegations of energy efficiency violations. As lawyers, this probably doesn't shock you, right? Well, this is new. And so we now, every time we get an allegation, we open a file, we open an investigation; we do so transparently and publicly. And we follow through to the end. And, in those cases where we find that nothing was done improperly, we immediately announce it. We immediately announce it publicly. So people can see what we're doing and why we're doing it.

Fifth, we have begun to take actions where people have, in fact, violated the regulations. We issued DOE's first test notice and first subpoena to check compliance with our energy efficiency standards. No one in the building seemed to know what a subpoena looked like. We signed our first consent decree with a manufacturer whose products failed to meet our energy efficiency standards. We issued our first notices of civil penalty for failure to comply with the certification obligations to those who didn't take advantage of that thirty-day grace period. We've now entered into our first agreements to settle certification cases for the payment of civil penalties, and we've issued our first notice of non-compliance, requiring that a product that failed to meet our energy efficiency standards actually be removed from the market. And we defeated a court challenge by a company that tried to stop us from withdrawing its right to use the ENERGY STAR logo on products we did not believe were entitled to carry that logo.

These efforts, and others we're still working on, were designed to send a simple message. From now on, compliance with all aspects of DOE energy regulations will be expected, and compliance will be enforced. We expect people to obey the law, and the law will be enforced. This isn't radical, I think, but it is new. This is just the beginning. What we've learned from our initial enforcement efforts is that we can do better than we are able to do right now. So we are embarking on an effort to reform both our certification and enforcement regulations.

Within a month, we intend to initiate a rulemaking asking questions about how we can best exercise our obligation going forward to systematically and rigorously enforce our energy efficiency standards. I hope many of you will pay attention to this and help us work through this rulemaking process to make sure we do enforcement better than we currently do it.

Another issue we're focusing on is technology transfer. One of the key issues confronting the Department of Energy is how to ensure that cutting-edge technologies developed through Advanced Research Projects Agency-Energy (ARPA-E) or our labs can be commercialized in a way that they start saving money for American consumers and also, not coincidentally, start creating new jobs. Agencies like the Department of Energy need to empower private enterprise to turn laboratory innovations into marketed products that will bring actual benefit to the American public which, through the Department of Energy, has helped fund the creation of these innovations.

The American public is entitled to a payoff for the risk it has undertaken in investing in these things, and we are looking for ways to help that happen more easily, more efficiently, and more quickly. It is has often been said that our internal regulations and our contracting processes inhibit technology transfer. We're taking a deep look at all of those regulations and policies. So in the first round of awards made by ARPA-E, we used what is called "Other Transactions Authority." This gives us more flexibility to craft creative approaches to IP rights to ensure that the research we funded is more likely to produce benefits to the American public. And we're in the process, as I said, of a comprehensive review of all of those policies. Again, we've done so publicly. We've gotten lots of comments from the public, from industry, from academia, from the national labs, I suspect from some of you in this room. If we haven't heard from you, there's still a chance to get in and talk to us. Our doors are open. Please come visit.

Finally, I wanted to note our efforts to implement the Smart Grid-related recommendations in the FCC's national broadband plan. That plan, as you may know, makes recommendations for further actions by a variety of executive branch agencies, including the DOE. And we've tried to move aggressively to start to implement those recommendations. Our office, in conjunction with the Office of Electricity, will soon be releasing two Requests for Information (RFI) intended to start a dialogue about the recommendations made to DOE in the national broadband plan for further study.

The first RFI relates to data gathering, data use, and data protection as nearreal-time individualized energy usage data becomes available through the implementation of Smart Grid technologies. The Smart Grid creates a lot of data issues. We have been asked to do an analysis of those challenges and to issue a report, which we will do by fall 2010. The second RFI will look at the present and future communications needs of utilities and the present and future capabilities of communications companies to meet those needs. The idea is to start a dialogue between these two critical sectors of our economy, and hopefully we will work together with state regulators and try to look for some sort of consensus as to what the utilities need, what the communications companies can provide, and what the ratepayers can pay for as we try to implement the Smart Grid.

To conclude, let me stress an important point about my role at DOE. The truth is, I'm a bit awed by the significance of the work being done, both inside and outside of DOE, in the energy sector. All of it is critically important to our short-term economic recovery, to our long-term economic growth, and to the health of our planet. For a lawyer, it's both inspiring and daunting to discover that your new client is a Nobel prize-winning physicist and that Rolling Stone magazine has called him the Secretary for Saving the Planet. Fortunately for all of us, it's not my job to save the planet. But it is my job to provide some support to those who actually may be able to do so. And the thing is, in providing that support, I am all too aware of my own limitations. First, I am under no illusions that I have the answers to all of the questions that I encounter. Second, I also understand that you never know what you don't know. Fortunately, there's an answer to those two limitations I have. For those of you in this room today, and those you represent, if there is something we are missing, there is something we are getting wrong, or there is something we can do better, all you need to do is let me know. I answer my own phone. I respond to my emails almost instantaneously. I even do so at dinner - my family is not real happy about that, and I've promised to stop. But for now, I am still doing it. I never turn down a meeting request. If you want to talk with me, call my office. Come on in. You just need get a hold of us, and tell us what we ought to do to be better. And I promise you, you'll get the attention you deserve, the hearing you deserve, and we'll do what we can to make it right if we're getting it wrong. Thank you so much.

MR. SMITH:

Thank you, Scott. Now we're going to hear from Frank Lindh from the California Public Utilities Commission.

MR. LINDH:

Thank you. Good morning everybody. I'm very grateful to participate as the lone state government representative on this panel of senior federal agency attorneys. I said last night, it's going to be like being the kid at the grownups' table. But actually I think it's fair to say that in many respects, the states are leading the way on a lot of energy policy issues. They have been leading the way in the absence of leadership from the federal government over the past decade or so. And in some important respects, it's really the federal government that is playing catch-up with the states in some of these areas.

There have been several comments about what it's like to be a general counsel. I love being a general counsel because I'm constantly interacting with very intelligent people who know a lot more than I do about all of these subjects, and so I'm really being paid to learn on a daily basis. So it's a great job. And it's also kind of humbling to then try to talk about these subjects when I realize that my own level of understanding is not as good as the people that I work with. But nevertheless, here I go. I should say by way of disclaimer that any comments that I make are just own personal views, not those of our Commission or our individual commissioners.

I thought what I would do is just talk about the things that I think are of most importance to our state commission in the area of energy, measured by how I spend my time, based on the amount of my own personal time and attention I give these issues. Maybe it goes without saying, but most of the state commissions in the United States, ours included, regulate other areas besides energy. We have water utilities; we do a lot of work with railroad safety, the telephone/telecommunications industry, and so forth. So energy is really just a subset of our total package. But nevertheless, about 70-80% of our Commission's staff attention, and Commission decision, are in the area of energy.

Here's my list of the top five things that I spend my time on as the general counsel. The first is the energy crisis. There was a big energy crisis in California - I think everyone knows that - in 2000-2001. So this crisis was literally a decade ago, but there is a lot of cleanup going on, including litigation against sellers of electricity in the wholesale market, to seeking repayment of some of the excess prices that were charged at that time. I'm very much engaged in efforts to settle that litigation. In April, we announced a very big settlement for \$400 million dollars with Sempra Energy, bringing to a total of \$700 million the amount of money that Sempra is now paying to resolve the litigation against that wholesale market company. This settlement is added to \$300 million in price concessions that Sempra had offered previously. So we're very happy about that. We are also actively engaged in settlement negotiations with other sellers in the wholesale market that still have unresolved claims arising from the energy crisis. Most of those cases are pending before the Federal Energy Regulatory Commission. We also are engaged in litigation against municipal utilities and some of the federal utilities, including the BPA and WAPA. We have a case pending in the Court of Claims seeking refunds from them. And again, the Commission is on the hunt for settlements, and I hope that anybody here who's representing any of those sellers will take that message back to your clients. We really do want to engage sincerely in efforts to get these cases resolved, and get some of that money back for the consumer.

The second area where our Commission spends a lot of its time is on renewable energy development. That's a huge priority for our Commission. In California we have the most ambitious renewable energy standards in the United States for the utilities that we regulate. State commissions have tremendous influence over private sector utility companies in terms of their procurement of electricity and how they prioritize their procurement. California has very high standards for carbon reduction strategies generally, and renewable energy specifically, and we're setting increasingly higher targets for our utilities to procure renewable energy. In addition, we have a fairly strict definition in California of what constitutes renewable energy. So California is probably at the head of the nation, and maybe even among governments of the world, in promoting the development of renewable energy through the contracting by the utilities that we regulate.

We reach about 80% of the electricity consumers in California by regulating the privately-owned utilities. The remaining 20% are served by municipal and governmental utilities. The Commission still provides leadership in that area. In short, renewable portfolio standards and approval of energy procurement contracts are big priorities for our Commission. And this renewable energy work really is making a difference. There are very substantial investments being made in and around California in renewable energy technologies including solar, wind, and other technologies, in response to these efforts by our state commission.

Another important area for our Commission, which is closely related to renewable energy development, is transmission line siting. And in particular, building transmission lines out to some of the remote areas where the wind or the solar resources are concentrated - in the desert, for example. It's a peculiarity of U.S. law that under the Federal Power Act the transmission line siting authority belongs to the states, not to the federal government. It's a big contrast to the natural gas industry, where natural gas pipeline siting is done by the FERC here in Washington. In the case of electric transmission lines, you have to go to your state authority, or in some states, you have to actually go county by county to local authorities. In 2002, I published a law review article with my good friend, Nick Fels, in the *Energy Law Journal*, where we advocated for increased federal siting authority over transmission lines. And I have to ask you not to ask me about that today, because now I'm working for the state commission.

Regardless, in California in particular, the Commission takes pride in the fact that we are moving the transmission siting cases along. We are issuing certificates of public convenience and necessity on a prompt and regular basis for very large transmission projects to reach out into those desert and high mountain areas to access the renewable facilities. I want to break down that stereotype that the states are parochial and look out for their own self-interest to an excessive degree, and therefore we need federal siting authority. I think, in fact, the states in the west, California included, are doing a good job in getting siting permits issued for transmission lines. Frankly, the big hang-up we have is with some of the federal agencies. Getting the federal agencies to pay attention to these issues and devote resources to get the various federal permits and environmental clearances completed, and so forth. So it's not the state

commissions that are preventing construction. I think they're doing a pretty good job in that area.

A fourth area where I spend a lot of time is in the promotion of combined heat and power as a resource for combating climate change and limiting carbon emissions. California has had a pretty ambitious program under the Public Utility Regulatory Policies Act of 1978 since the early 1980's. In California, we have something like 5,000 megawatts of combined heat and power resources, which is a substantial investment in that area. But under recent state legislation and also initiatives by our own Commission, we are going to be moving to increase that quite substantially, and also to increase the efficiency standards that we associate with the combined heat and power resource.

Mike Bardee mentioned the concept of a feed-in tariff. A feed-in tariff is associated with renewable energy facilities in most people's minds. But actually, the first feed-in tariff case on which we've issued a decision in California involves a feed-in tariff for combined heat and power, rather than renewables. There are big things happening for California with respect to combined heat and power resources as a means to capture waste heat and combat climate change.

The fifth area where I spend a lot of my time has to do with energy efficiency and demand response. I think we all understand that when it comes to combating climate change and reducing the contribution of the electricity sector to the problem of climate change, this is the low-hanging fruit. There is a lot of work that can be done to improve our efficiency and implement demand response programs. We're very gratified that FERC Chairman Wellinghoff is a very big proponent of demand response at the wholesale level. His initiatives to promote a much more robust demand response program at the wholesale level will match up very well with what we're trying to do at the retail level in California to promote demand response and reduce electricity consumption. Thank you.

MR. SMITH:

Thank you, Frank. And now we'll hear from Connie Rogers from the Department of Interior.

MS. ROGERS:

Good morning, and thanks for this opportunity. I'm sort of the odd duck at the table, in that while we are a regulatory agency in the sense that we have a lot of regulations we have to work with, we really come from a development and project level more as a landlord or a management agency. The resources that we represent are one-fifth of the nation's land mass, including 700 million acres of onshore mineral estates and more than 1.7 billion acres of the Outer Continental Shelf. We're working on renewable energy both onshore and offshore, as well as conventional energy.

I will probably only talk about renewables today. The agencies I represent are the Office of Surface Mining and Reclamation, which is coal; the Minerals Management Service, which is onshore and offshore royalty issues and development of offshore oil and gas and renewables; and the Bureau of Land Management, which manages the largest land mass of any agency here, comparable to the Forest Service. And we work very closely with the Forest Service and the Department of Energy and FERC on some of the projects under our management responsibilities to parse the jurisdiction issues and to be efficient so that we can move the President's renewable energy agenda forward in a comprehensive and efficient manner.

We at the Solicitor's Office at Interior are taking an interdisciplinary approach. Even though I do minerals and energy, I often end up with issues relating to archeology, cultural resources, and wildlife. Wildlife is one of the biggest issues in connection with renewable energy that we are coming across, and so I am digging into the Endangered Species Act along with my colleagues.

Interior is an interesting agency. It has no single mission. We've got OSM and BLM and the MMS on one side, and you have the Park Service, Bureau of Indian Affairs, Fish and Wildlife Service, and the Geological Survey. So we've got science, we've got preservation, and we have development all housed under one roof. And we have lots of family squabbles, as you might imagine, on how to go forward with a variety of issues. But the intent is to provide certainty to industry by settling these squabbles inside the Department prior to having outside individuals get involved. It is a Department of Interior policy goal to make sure that we are doing the rights things at the right place at the right time. And our interdisciplinary goal is talking about development that is smart from the start. We want to get our environmental reviews and our policy considerations, and those types of decisions, made up front, thereby reducing litigation and protests, and providing certainty to industry once we've made a decision to go forward.

With that background, let me talk about onshore renewables. One of the programmatic things we're doing is continuing to develop the solar programmatic environmental impact statement (EIS). We have changed the focus of that to include specific study areas where we can do a step-down National Environmental Policy Act (NEPA) review in order to make sure those areas that have real potential for solar energy development on public lands are studied in greater depth. We want to make environmental decisions up front so that then when projects are proposed in those areas, we can be more efficient about the project-level reviews.

The second thing we're doing, and I'm actually working a lot with the California Energy Commission, is fast-track projects. Of course, when you're talking about being a government lawyer, you don't want to say the term "fast track" and NEPA in the same sentence. But what we mean by "fast track" is that we have identified those projects that were already far enough along in their environmental review process so that, with focused review times, they could meet the deadlines for funding under the American Reinvestment and Recovery Act by the end of 2010. So we are not starting review of a project from scratch and trying to get it done in a year; instead, these projects have already been in the pipeline for two, three, four, sometimes six years. We've identified those that need ARRA funding in order to make them economical, and we're focusing our attention on those particular projects. In fact, we have a Memorandum of Understanding with the State of California, so I'm working on how to combine the NEPA review with the review under the California Energy Commission

on those projects that they have jurisdiction over, including concentrating solar projects.

We are also working with other California agencies on photovoltaics that don't require CEC approval. We are coordinating the federal reviews with the state reviews on wildlife issues for those projects. So the California Fish and Game is also working with the Fish and Wildlife Service to come up with an agreed-upon standard for mitigation of impacts on the desert tortoise and the California condor. We're trying to make sure that we're not making applicants go through fifteen different processes under federal and state agencies. We're getting the federal agencies and the California agencies together, to agree on the set of mitigation measures, so that we're not requiring duplication or creating inefficiencies. We are doing this in other states as well. We're finding that this collaboration has lead to very robust discussions and is going to be very useful going forward once we get these pioneer projects off the ground.

Regarding offshore renewables development, the Secretary of the Interior has approved a commercial lease for the Cape Wind project in Nantucket Sound. DOI has received three notices of intent to sue. So you'll probably see more lawsuits. Cape Wind has, of course, been controversial for a very long time. Regardless, the Department has been working very diligently to make sure that the nine years of review that Cape Wind has already received was sufficient, and we are confident that we will be able to defend the Secretary's decision. There are other federal permits that Cape Wind needs, and so I don't think the project is going to get started tomorrow. If you want to see the record of decision in Cape Wind, it is on the Department's website. Cape Wind will be an interesting project - it will provide a new chapter in the history of Nantucket Sound. It will be the first offshore wind project in the United States. We're well behind Europe and China, and this hopefully will be the first in a series of offshore projects.

Last month the department also issued a request for interest for offshore of Delaware, and I believe we will have some other requests for interest coming up for other development lease parcels up and down the Atlantic coast. The Secretary has also gathered together the Atlantic States' governors into the Atlantic Wind Consortium, where we're looking at state and federal regulatory processes where we might able to work together to have the multiple federal and state reviews go hand-in-hand to help meet the President's and the States' renewable energy goals. Last year, we published new offshore regulations for renewable energy. Cape Wind was actually grandfathered under the Energy Policy Act of 2005 (EPAct). So Cape Wind is sort of a hybrid situation because its approval came after the final regulations, although EPAct grandfathered its application. We will be looking for another opportunity to utilize our new final regulations.

On oil and gas, the Department is doing a lot of work on onshore oil and gas reform. The current system for oil and gas leasing is that industry proposes an area for leasing, and then that area goes through a very high-level review, and then it goes to the states for a lease auction. We've run into problems over the past eight years or so where we have protests on those oil and gas leases on a very consistent basis, which holds up that leasing. So DOI is trying to go back and take a look at our Resource Management Plans and make sure that they support all of the leasing decisions before we have potential leases on the block,

so that when we do get them on the block, we are confident that they will either survive a protest, or perhaps even avoid a protest. We'll see. The hope is that we can actually lease the parcels that we want to lease, as opposed to having everything tied up in litigation for a very long time. We are working with industry and stakeholder groups on that process, and hopefully that will produce more certainty for industry while protect the important places. One of our internal reviews found that we just didn't have the staff to actually step foot on some of these leases prior to leasing, and so part of it is also providing the resources needed for site-specific reviews so that we make sure we are not offering for lease areas with petroglyphs or cliff dwellings, or other important areas.

Regarding offshore oil and gas leasing, the Obama administration announced in March a new strategy for offshore oil and gas; decided to close Bristol Bay and important military areas to oil and gas leasing; announced a new round of leasing in the Gulf of Mexico; and is pursuing exploration in the Beaufort and Chukchi Seas of Alaska.

And finally, we're also doing a lot of interagency work on climate change. America's public lands have a vast amount of resources. The Department of Energy has studied, and has provided a good report on opportunities for geologic and biological storage of carbon on federal lands. We'll be working with the Department of Agriculture, as well, on coming up with plans for biological storage of carbon on both Forest Service and BLM lands. And President Obama has established an interagency task force on carbon sequestration and storage that the Department of Interior has been actively working on,

MR. SMITH:

Thank you, Connie. It is now time for questions.

Joe, you didn't talk very much about what happens next with respect to EPA regulatory activity on climate change. Can you give the short version of what's expected to happen? If Best Available Control Technology (BACT) is going to be applied, who's going to determine what constitutes BACT, and how is that determination going to be made? What's the range of options for BACT for power facilities, for instance?

MR. GOFFMAN:

EPA is planning to put out a guidance package between now and the end of 2010 to answer those questions. Best Available Control Technology is a requirement for plants in attainment areas that applies when they are being built as new or being modified. BACT is a process by which each individual facility, together with the permitting authority (of which there are actually about a hundred, since it's a mix of federal, state, and in some cases local authorities) determine in a case-specific situation, taking account of a very wide range of factors, the best available control technology for limiting additional emissions increases. The Agency plans to do is put out a series of white papers addressing various issues, such as how to deal with fuel choices; how to deal with energy efficiency as an emissions avoidance system or strategy; and how to anticipate, if at all, possible future availability of technology.

QUESTION FROM AUDIENCE MEMBER ONE:

Good morning. I had two questions, one for Mr. Burns, from the NRC; one for Mr. Lindh from California. My first question concerns the problems that have arisen in the NRC's licensing process, particularly with respect to the fact that there are ongoing concurrent reviews of both the design of the reactors and of the specific reactor requests, which had not been intended in the development of the process. How is the licensing process going in terms of timing? Are you able to keep on the schedules that you initially set up, or are you finding that there's a need to extend them? When are the early applications likely to get completed?

MR. BURNS:

As I said, the theory in our part 52 regulations was more of a sequential, rather than parallel, review. I'll take the AP-1000, the Westinghouse design, as an example. What has happened with the parallel reviews is that our staff has been reviewing the AP-1000 design. We identified an issue, the shield wall issue, that needs to be resolved. Westinghouse is addressing that problem. Now, this also affects how you then plug into the combined license because the Westinghouse design might be referenced, for example, at the Vogtle site in Georgia. It is expected to be used there. The idea is that you have the design, and you plug it into the site. However, you still need to do work in terms of the site-specific design parameters. So, for example, some delay in resolving the shield wall issue probably spills over to some extent into delay of the combined license. Now, we're not talking about years and years of delay in the review.

The agency has a statutory anomaly that requires us to have a hearing, whether anyone wants one or not, and this certainly occurs in contested cases. But our basic schedules have a target of about 42 months. I think the licensing is going to run a little bit longer than that. I anticipate that early in 2011, some of the staff safety evaluations, as well as the environmental statement, for example, on the Vogtle site, will be finished. So from that standpoint, I think we're progressing. As the Bipartisan Policy Center report discusses, there are bumps on the road. If I compare that to when I was a young boy and watching my colleagues litigate and go through the licensing process in the first round, I think this approach has proven to be much superior.

QUESTION FROM AUDIENCE MEMBER ONE:

Mr. Lindh, you had noted in your remarks that a major focus of your attention is enabling and assisting in major capital investments in renewable energy and their related transmission lines. And my question is, have you seen the effect of those new investments on rates, and what are they? Do you have cost-effectiveness evaluations that you review? Do you have any anticipation as to what the rate effect of these investments might be over time?

MR. LINDH:

I don't think we have seen the full impact on the retail rates of all these investments. That's something that will come through in a period of years as the investments are made and as the costs of these contracts begin to get reflected in people's energy bills. But our commissioners are certainly very mindful about that, and we try the best we can to achieve the right balance.

As the Commission reviews utility contracts for renewable energy, we try to keep our eye on the ball with respect to price and not allow price to become excessive. So it is a balancing act. California suffered the highest electricity prices in the history of the industry during the crisis in 2000-2001. It was a very painful episode for California. We're still digging our way out of it. And that has, I think, really tempered the approach that our Commission takes with respect to these renewable contracts. But nevertheless, I think your basic point is a valid one. As things stand today, renewable technologies are, on the whole, more expensive than the traditional conventional technologies. And we're going to have to do a lot to promote energy efficiency to take the edge off of those price increases. And then, of course, to some extent, the cost of fossil-based energy is artificially low, because we are externalizing the cost of the emissions associated with those energy sources. And so there also will be, over time, with federal legislation in particular, an increased pressure on the carbon-based electricity sector to begin to internalize the cost of carbon-based generation. And then prices for conventional and renewable energy are more likely to equilibrate. But we are mindful of the pricing issue. We're trying to marry up the renewable energy initiatives with a lot of focus on energy efficiency and demand response. Those are very important and compatible programs.

QUESTION FROM AUDIENCE MEMBER TWO:

As a non-Clean Air Act practitioner, I was intrigued by Mr. Goffman's suggestion that the EPA is going to suggest that energy efficiency implementation may be a means to reduce the cost of meeting the forthcoming Clean Air Act requirements. Given the cost cutting potential of using energy efficiency to help meet Clean Air Act requirements, is there an opportunity for greater interagency collaboration on this?

MR. GOFFMAN:

The answer is yes. What is required is some additional clarity, developed iteratively, about the roles of the various agencies on the federal and state level. And part of the exercise will be ensuring first that the EPA is very clear about what's coming in terms of regulatory demands that will be placed on the electricity sector. And another part of the exercise will be ensuring that all of the stakeholders have the same information set, because if the stakeholders that focus primarily on each of the organizations or agencies represented here can create a degree of demand, and the relevant agencies are responsive and attentive and, indeed, proactive, in response, then that's another way to facilitate that kind of coordination. An example, sticking with energy efficiency, would be that EPA can talk to our stakeholders all we want about energy efficiency and how it is a real shaper of a compliance path, and the compliance investment path, and how it might be able to anticipate and alleviate certain reliability challenges or claimed reliability challenges. But we don't have any direct ability to make the decisions that need to be made to promote investment in and use of efficiency. We certainly don't have the tools to effectuate reliability planning. On the other hand, those with the big stakes in it who have the experience, the credibility, and the expertise in front of other decision-making entities can contribute significantly to ensuring proactive, timely engagement of those other decision makers.

MR. HARRIS:

It's no secret that our Department is completely committed to energy efficiency. I think Secretary Chu described energy efficiency, in terms of dealing with both our energy issues and our climate issues, as not the lowhanging fruit, but the fruit lying on the ground. We are putting our money where the Secretary's mouth is. We've invested, as you probably know, about \$4.5 billion in Smart Grid technologies. We're investing in weatherization programs - any place you can do an energy efficiency project, we have been trying to help others do that and to get the private sector to pick up the ball and run with it by making strategically targeted investments. We think it's good for economic policy as well as for energy policy. In addition to all of that, there's an enormous amount of expertise at DOE, not surprisingly, regarding energy efficiency. And in terms of EPA and other agencies, we view ourselves as an agency where people can come for expert advice, opinions, data, the kinds of things that will help other policy makers reach appropriate decisions. We are always working with the state PUC's to try to share that information as well as other agencies that are interested in that expertise.

QUESTION FROM AUDIENCE MEMBER THREE:

I want to follow up on this energy efficiency issue. I want to ask if any of you have read the Associated Industries of Massachusetts report which shows, quite to the contrary, that when you start investing in energy efficiency, it's much more expensive for ratepayers. So I'm curious as to the kind of analysis you have done, and whether you are familiar with reports that actually say energy efficiency is pretty expensive to implement. It's definitely a good carbon policy. But it's expensive, and I always get concerned when regulators promise cheaper rates for things that aren't really going to get cheaper.

MR. HARRIS:

I don't know that report, but I've seen lots of other data floating around DOE. For example, there was a pilot project down in North Carolina on Smart Grid technology that simply allowed consumers to see their data usage in real time and see what they were doing. The average reduction in energy usage was something like 40% in the course of a year. I mean, the numbers were off the charts. There are other studies indicating that you get a bang for the buck by weatherization - the economics do work in that case. I don't know the study you have referenced, but I've seen lots of studies and lots of information that suggest to the contrary.

MR. LINDH:

I will acknowledge that, for our Commission, that energy efficiency is a complex, difficult, and somewhat contentious area. We're trying hard to get it right, but there are a lot of controversies about whether we're spending too much, and whether our incentives for the utilities are too rich. It's a difficult, complex area. However, our Commission has an intention behind the policy, that

energy efficiency investments will be treated by utilities as equivalent to "steel in the ground" rate-based investments by the utilities. And that they'll have the same economic motivation to promote and invest in energy efficiency that they have for building power plants and other infrastructure. But it's not an easy area.

MR. SMITH:

We're going to have to cut it off there. I just wanted to conclude by thanking all of you for your public service. Please join me in thanking our panelists.