BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

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Southeast Infrastructure :

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Federal Energy Regulatory Commission

Southeast Energy Infrastructure Conference

PAGE

MS. BROWNELL: Good morning. Extra brownie points for all of you who've gotten up so early to be here. On behalf of our Chairman, Pat Wood, who will be coming in shortly, and my colleagues, we thank you for allowing us to visit the southeast and for joining us in discussing infrastructure and the issues around it.

We believe at the FERC that it is critically important that we all focus along with our state colleagues on the growth and critical infrastructure needs of this country. It's the very backbone of the economic development that we have all enjoyed in the past ten years. But it's been a very neglected part of our economy. And we're beginning to see in many subtle and some not so subtle ways the impact of the lack of a commitment and a clean and clear policy that will encourage investment in infrastructure.

So, today is an effort to analyze what's happening and what's not happening, to hear from industry participants about how they intend to manage through the short term and the long term, to hear from the financial community about what their expectations and needs are before they will direct capital towards the development of infrastructure and the new technologies that are the answer to optimizing the systems that we have and to answer a lot of the environmental issues with which we've been struggling.

So, we hope to have a discussion. We hope to identify public policy barriers either at the federal or the state level that we can work on that will eliminate some of the challenges that people have faced in getting infrastructure built. We hope to hear new ideas about how we can work together. I'd like to thank my colleagues at the State Commissions. I think this is the best turnout we've ever had.

We have enjoyed a very strong working relationship, a relationship that I think is getting stronger every day. These are not easy issues. On one hand we have intrusions in people's lives when we want to build infrastructure. On the other hand we have the growing cost of constraints and congestion. And in areas like your's, which have enjoyed wonderful growth, we cannot continue to sustain that without dealing with these issues.

So, they're not easy. They're very complex. But I'm delighted to be working with our colleagues in the states who share the commitment of addressing these issues. So, thank you for coming. I think it's going to be an exciting day. We want active participation from our state representatives, both of the Commission, Governor's Office and State Representative level. So, we hope you'll be asking a lot of questions and joining us as well.

And now I'd like to turn it over to my

colleagues, Bill Massey and Linda Breathitt, to hear their comments.

MR. MASSEY: Good morning. I think Nora's done a very good job a teaming this up. I'm here to hear from you. I'm glad to be here in sunny Florida. There's a lot of importance business to discuss today and so without further ado, I look forward to hearing your comments.

MS. BREATHITT: Good morning. It's my pleasure to be here and to see so many people here for what I think is a great turnout. This is the third of these that we've had. We held one on November the 1st in Seattle, Washing that was the first one that we had focusing on infrastructure needs in the northwest. We had one and I think it was January 31st, February 1st in New York City focusing on the infrastructure in the northeast. This is our third one and we'll have one more in the midwest since I've been at the Commission we have certificated quit a lot of pipeline infrastructure in the southeast and as we, because the Commission doesn't approve the transmission certificates to construct, we don't track the investment in transmission but we're beginning to.

But I think there's been some transmission investment in the southeast too. We hear about bottlenecks and congestions in other parts of the country. I know there's some in the southeast but you don't hear a lot of

bottlenecks and congestion. So I think that you've done a pretty good job keeping up with the fast pace growth that Nora talked about in her opening remarks in the southeast. There's been a lot of explosion of growth in our area down here.

So, I'm pleased that so many people have come, especially lots of the state commissioners. And I too look forward to hearing a focused discussion on this topic.

MR. MILES: Our next speaker will be Jeff Wright from the Office of Energy Projects. He will give an overview of current energy infrastructure. Jeff?

MR. WRIGHT: Thank you, Rick. Once again, my name is Jeff Wright from the Office of Energy Projects. And with me today is Scott Miller from our Office of Markets, Tariffs and Rates. The purpose of our presentation is to give you a snap shot view of the current energy infrastructure in the southeast regarding electric, gas, hydro as well as taking a short look at oil and coal.

Now, in defining the southeast for the purpose of this conference, it consists of 11 states seen on the map. I should note that this definition of the southeast excludes states that are sometimes considered southeastern states such as Kentucky and West Virginia.

But first let's take a quick look at some statistics comparing the southeast and the entire U.S. Now,

this slide shows how the population, gross domestic product and energy use grew in the U.S. and the southeast between the years 1990 and 1999. Now, in every category you can see the southeast has had greater growth in the U.S. over this time period. Population has increased from about 70 to 81 million people. The GDP for the region has gone from about 1.4 trillion dollars to 2.6 trillion dollars. And energy use has increased from about 29 quads to 34.4 quadrillion PTU's.

Now, I'd like to turn the attention to electric infrastructure in the southeast and Scott will present this section.

MR. MILLER: Good morning. What you have before you is a map depicting plants, projects that are under development or actually in construction as opposed to the plats map that was provided to you at the table, which, which just demonstrates actual capacity that's already in the ground.

One of the interesting things about this map is that there is a, following a national trend, of course, this is almost entirely natural gas fired generation and it tends to be located along interstate gas pipelines. In other words, away from load. And this is true even in places such as Florida where the new generation is being built largely in central Florida where the predominant load is along the

coast. The issue that this raises, of course, is whether or not there's going to be sufficient electric transmission capability to get this new capacity to the load.

This chart demonstrates the extreme growth that Jeff was talking about in demand in the southeast. As you can see, in 1990 to 2000 time frame that we're talking about here, demand outstripped the, the growth in demand outstripped the growth in capacity. And currently right now we're, at the year 2000 we were almost at equilibrium according to NERC, FRCC and CERT data. Kind of dangerous state of affairs.

Now, projected this is the reserve, reserve margin is projected to widen. However, as we have seen in other parts of the country, you can't always count on the capacity that's planned to go in. So this is something that they're watching.

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Southeast, this is a depiction of the southeast generation capacity and growth. This is actually, you know, the demonstrating name plate capacity between 1995 and 2000. And, of course, there has been an increase but as we noted before, it was not as rapid as the increase in demand. The new capacity, while the southeast remains on the whole a area that's dominated by coal and nuclear generation production, the growth area was mostly, of course, the

natural gas.

Now, actual output has grown at a slightly faster rate indicating that there was an effort made to get more out of the power plants that existed than occurred, say, in 1995. So, the year 2000, more output from some of the same plants than existed before. And most of this additional output came from coal, power plants and to a certain extent, natural gas. And this is predominantly in the new natural gas. So, the coal plants appeared to be running harder and more, which could possibly raise environmental issues.

Turning to congestion, congestion is somewhat of a problematic discussion with regard to the southeast because there is not recorded to be an awful lot of congestion. Nevertheless, when merchant generation is attempting to get transmission capacity through the southeast, they've experienced more difficulties. We've heard more difficulties in the southeast than we've heard in the rest of the country.

One of the reasons that we don't hear about so much of the congestion and the price effects is because of the nature of the electric market in the southeast United States where there is a dominance of large vertically integrated utilities, which tend to manage the congestion internally. And so therefore, you don't, you don't know or hear the price effects of congestion.

However, based on data that we have available on TRO NERC data and the Department of Energy data, we do know that there is a significant amount of congestion here in the energy area into and out of TVA at the Florida boarder, Varcar, going south and north south in central Florida. There's also, tends to be a constraint between Tampa and Orlando. There is congestion, of course, at these points in Texas. But of course, Texas runs in ISO. That is managed through a congestion management re-dispatch system. And there are price signals for that system.

Turning to proposed transmission projects, there are a number of proposed upgrades in the transmission system, a number of larger ones in Texas. The ones in the rest of the southeast tend to be a small mileage, tending to be, to solve localized congestion and not necessarily designed to deal with the bottlenecks sort of at the border that we were, that we'd been seeing in the southeast.

In summary, with regard to the infrastructure of the electricity in the southeast, as we pointed out the growth is almost entirely in natural gas. This is no different than the rest of the nation. However, here of the four, the growth has not kept pace with demand and this is something that bears watching, going forward as well as how investment is made in this region going forward.

The generation tends to be concentrated near gas

pipelines which raises issues of getting the actual electricity to load and whether or not there is going to be enough invested in the electric transmission system to accommodate this new generation which is intended to accommodate the new demands for the southeast.

And with that, I'll think we'll move on to gas infrastructure and turn it back over to Jeff.

MR. WRIGHT: Now, taking a look at the gas infrastructure in the southeast, as you can see, gas consumption in the four sectors depicted here increased by nine percent between 1990 and 2000 from about 6 and-a-half TCF to just over seven TCF.

Southeast gas consumption was 31 percent of total U.S. consumption of approximately 22.8 TCF in the year 2000. Residential and commercial consumption of gas was relatively flat during this period. And industrial consumption of gas declined during this period, meaning basically that the growth in the southeast gas consumption was due to growth and electric generation load. Electric generation load increased by about 93 percent over this time increasing its total share of natural gas consumption in the southeast to about 43 percent.

Now, this slide shows how the southeast backs up against the entire U.S. in the area of natural gas. As you can see, in the year 2000, the southeast accounted for about

61 percent of the nation's dry gas production of 19 TCF. Of the region's total production, 4.3 TCF came from offshore gulf sources, five TCF came from Texas and about one and-a-half TCF came from Louisiana. About 48 percent of total U.S. crude reserves of 177.4 TCF are in the southeast. And of this amount, 26 TCF are from the offshore gulf.

Now, there are deferent economic impacts from offshore versus on shore gas development and production that result in significant investment in offshore infrastructure. And that will have to be made to bring those increasingly deep water reserves to the market. In addition, there is imported gas to the southeast which comes in the form of LNG from several countries at two terminals in the southeast; Elba Island, Georgia and Lake Charles, Louisiana. And in the year 2000 this total about 130 BCF.

This slide is a simplistic view of the gas balance between sources and uses in the year 2000. Now the sources projection and the LNG import total approximately 11.7 TCF. And the uses of the gas in the southeast include consumption of seven TCF, a small amount of exports plus flows to the midwest, northeast and the southwest.

In the southeast there are 25 major U.S. pipelines that traverse the market and serve not only the southeast market but also other U.S. regions. It is important to note that most of this growth in pipeline

capacity is to serve gas fired power plants.

In looking at the major pipeline projects in the southeast, there are six major projects depicted here by the red arrows. Now they're pending before the Commission. The projected total capacity of over three BCF per day. With the exception of one project, pending projects would increase capacity within the southeast region chiefly to supply gas for electric generation. And the other project would export gas to Mexico for the purpose of electric generation in northern Mexico.

In addition, as depicted by the blue arrow, we have heard of another seven major projects that could be filed with the Commission in the near future with the capacity of over 4.3 BCF per day. And again, as we've heard these projects would be primarily to serve increased capacity in the southeast region to provide gas for electric generation.

Also, I'll note that there are numerous reports on potential LMG terminals in the southeast. In fact, if they were all built would have the capacity for over two TCF per day. And I will mention that in the very near future, a project that has been approved and is in the final stages of construction, Gulf Stream will be coming into Florida soon.

Now, in characterizing the gas infrastructure, electric generation, as Scott said, is a driving force

between recent infrastructure additions as well as future additions. And current and future gas production in the region will require significant investment in infrastructure, especially on the offshore supplies.

Now, taking a quick look at hydroelectric. One and-a-half percent of the southeast generation output was fueled by hydro in the year 2000 or about 20 million megawatts. In 2001, the total generating capacity was 20,526 megawatts. Now, the FERC regulated generation was approximately 14,300 megawatts. TVA generation was about 5,000 megawatts and other municipal generation totalled about 1200 megawatts. Now, this production is down significantly for 1998 due to drought that's cut production by about 40 percent.

Taking a quick look at oil, here we see that southeast fuel oil consumption by sector and, again, electric generation use of fuel oil constitutes a large percentage of fuel oil use. Over 50 percent of the consumption in the southeast was for electric generation. In the year 2000, the southeast consumed almost 28 percent of all fuel oil in the U.S. And the southeast accounted for 56 percent of U.S. electric utility sector consumption of fuel oil.

Now, four and-a-half percent of the southeast generation output was fueled by fuel oil in the year 2000,

about 59 million megawatt hours. Electric utilities are the largest users of residual fuel oil, Number 5 and Number 6 in the southeast and Texas. And over the past six years, fuel oil consumption by electric utilities increased by about 130 percent due to increased use of fuel oil by electric generators, particular in Florida. And in Florida we see a lot of generations coming from dual fuel power plants using fuel oil as an economic swing fuel.

In concluding the oil section, we note that 47 percent of the total U.S. refinery in capacity, refinery capacity is in the southeast and Texas. And the majority of the nation's oil and product pipelines originate in the southeast and Texas.

And last, but not least, we'll take a quick look at coal. Now, Texas and Virginia, and to a lesser extent Alabama, are the primary coal and lignite producing states in the southeast. And coal and lignite production in the southeast total about 109 million short tons or about ten percent of U.S. production. The southeast coal and lignite consumption increased just very slightly in the last five years.

So, in the year 2000, 54 percent of all southeast electric generation was coal fired. 91 percent of the coal consumption in the southeast between '95 and 2000 was by electric utilities. In 2000, 37 percent of all Texas

electric generation was coal and ignite fired. And 95 percent of all coal and ignite consumed in Texas between '95 and 2000 was by electric utilities.

Well, that concludes our presentation on the infrastructure portion of our program. Scott and I would be glad to take some questions.

MS. BROWNELL: If we could go back to Page 9 or the slide on transmission constraints in the southeast and Texas. I just want to be sure that I understand it. Lots of arrows. I'm not quite sure I understand them all.

Let me just say. I think, Scott, what you said, and correct me if I'm wrong, is that we are aware of these almost antidotally. That this is information that we have gathered but that in a northeast ISO or in ERCOT would be clearer but we just don't have the transparency in this market. That's the first thing, I think you said. But then the second question I just want to be clear about is that in ERCOT or where there's congestion management system, there is more transparency in terms of the actual cost. So buying decisions can be made by customers and price signals can be seen. Is that what you're saying here?

MR. MILLER: Yes, that is the case. What we have and in the southeast is a situation whereby we hear about the congestion because of the situation where we have hot line complaints from people trying to access transmission.

And they say that they're, they keep seeing zero ATC, zero ATC. And then suddenly an affiliate is alleged to have gotten it.

And yet you don't see much in the way of reported congestion. We do know that FRCC did a report on congestion inside Florida. But that was, you know, that's an internal document. And the difficulty with this is it does not allow for those who are trying to make investments to know where it's optimally, you know, the location is optimally to be made.

MS. BROWNELL: Have we seen any difference; I know the ERCOT has only been up and running for a short period of time, but have we had any customer feedback or seen any greater efficiencies because that information is now transparent and available to all of the market participants?

MR. MILLER: Well, the market has only been running a short time in ERCOT. But in the absence of a market, what the Texas Commission did was it made it quite apparent through the ISO, which has been operating for some period of time, where the places were that were most beneficial to the system and where it was likely to be of most value for an investment. And since then the; and they've had a robust build there. Since then, we've noted that the additional generation that's going on in a limited

time period that we've seen has tended to go in areas that demonstrate, you know, congestion. They see a higher price and therefore they know that that's where they should be located.

MS. BROWNELL: Thank you.

MR. MILES: Any other questions? Yes. Just hold on about five seconds. We have a microphone for you.

MS. BROWNELL: And if everyone could identify themselves as they ask the question.

MR. MILES: Yes. And also could I ask you, as we did in Seattle and New York, could you put your cell phones on vibration, if you don't mind? Thank you.

MR. HOLLAND: Thank you. Ed Holland with the Southern Company. Scott, could you help me reconcile the graph on Page 6 and the table on Page 7? One shows in, I think, 2001 capacity of about 200,000 megawatts and the graph on page or table on Page 7 shows close to 300,000. And I'm not sure Texas is included but I don't know what else might not be included on the Table on Page 6.

MR. MILLER: Well, there are two different ones. One is actual name plate capacity and the other is generation output in gigawatt hours. So they're, you know, they're, you know, one's the actual, how many plants, how many megawatts are in the ground and the other is how many gegawatt hours, if I'm looking correctly at --

MR. HOLLAND: They both show megawatts.

MR. MILLER: Six and seven?

MR. HOLLAND: Yes. Oh, I'm sorry, you were looking at the capacity and demand situation. Yeah, the, what we're using here is SERC and FRCC. And it excludes Texas on 6, where 7 is taken from RDI Power Data, a different data source, and it does include Texas.

MR. MILLER: Does Texas have 100,000 megawatts of capacity?

MR. HOLLAND: We were using different data sources because we couldn't come up with the, Argia Power Data has more up to date data. And that's why, in terms of trying to demonstrate what is in the ground in 2001, we used a different data set.

MR. MILES: There's a gentleman over here from Texas.

MR. NOEL: I'm Tom Noel. I'm CEO of ERCOT and I'm representing Commissioner Klein here today and I'm sorry I, we snarled up on our registration. So, I'm here anonymously.

I did want to just address a couple of quick questions. A short answer within ERCOT itself. There are about 73,000 megawatts of power. And that is up, well, to give you a perspective, the highest peak usage we've experienced was in the year 2000 and that was just under

58,000 megawatts, just to give you a perspective as to where we are.

With respect to transmission, the ISO is responsible for transmission and planning within Texas for the entire state. All of our schedules flow and there's open access. So, it is a very transparent system. And I think it's fair to say that we have continued to attract investment in transmission in Texas for that reason. We at ERCOT are responsible for producing an annual report October 1st of each year which identifies all of the constraints known in the state.

When we open the market, and as someone pointed out, we've been on the wholesale market since '95, '96. We opened our retail market on the 1st of January this year. But the planning process is currently handled through three regional planning groups that are led by or facilitated, shall I say, by ERCOT.

So, fundamentally, we are very much an open book. We have continued to attract transmission development both by the existing or formally bundled utilities. But we have also, one of our challenges right now is our wind power is in west Texas and the power is needed in central Texas. So, we are actively working on a model now where in this particular case, AP would be the logical provider of those transmission resources but they are, at least on that

instance, want to spend their money elsewhere.

So, LCRA, which is a utility district, is actually going to build and operate that line under contract with AP. So, we have not only the traditional direct investment by utilities in transmission but also we're seeing an innovative approach such as the one I just suggested. So, we do believe and the Commission believes that this transparency is a very positive thing, to respond to your question, Commissioner.

MS. BROWNELL: Thank you.

MR. MILES: Gentleman over there?

MR. WILEY: Yes, I'm Ken Wiley. I'm the President of the Florida Reliability Coordinating Council. And I wanted to make a couple of comments about Scott's presentation on Slide No. 9, showing the transmission constraints. One of the comments was concerning the transmission line or leaf calls and I wanted to indicate that over the past approximately three years that on the eastern interconnection, there's been about 1,800 plus TLR's called. Florida called two in that same time period. And that was back, I believe, in the first year. And we have not had any in the last two or three years. And so we don't consider that we have had a real constraint problem to date within Florida.

Regarding the interconnections at our northern

boundary, we have never had a TLR on those either. So, I can't see that we've had transmission TLR problems on that.

Now, the other comments were made that we had some internal type of problems, mainly from Tampa to Orlando. And I guess I'm not really sure what, where that information came from. I would appreciate if you could talk with us and share that kind of information, Scott. But we haven't seen that lately or in a long time, as a matter of fact.

And the last one is, well, I guess that was the last one. But I would like to welcome you, Scott, to come talk with us about some of these things, especially antidotal type of concerns that we have constraints that limit the market because in our organization we have a committee which we call the Market Interface Committee, very similar to Newarks, where all the members that deal in the wholesale market in Florida are encouraged to be members and most of them are.

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And even in that committee, I have not heard even antidotal information that we have any serious concerns in Florida. So, I would appreciate you sharing that kind of information you have so that we can take a look at it.

MR. MILLER: We'd be happy to.

MR. MILES: Any other questions? If not, we'll

have our next speaker. Wait, Commissioner Massey?

MR. MASSEY: Yes, back to the Slide No. 9. And the following page you indicate there are 30 projects proposed to upgrade and expand transmission systems in the southeast?

MR. MILLER: Yes.

MR. MASSEY: And when you say southeast you're excluding Texas. The eight in Texas are over and above that.

MR. MILLER: Yes.

MR. MASSEY: All right. What information do you have about where these projects are? What particular constraints are they attempting to alleviate? Are they in Florida or are they elsewhere in the southeast?

MR. MILLER: There are some in Florida and there are some elsewhere in the southeast. But they tend to be low mileage ones and of a lower, not of the backbone variety. They tend to be aimed more at localized congestion and not some of the congestion that we have, we have heard about on the borders.

MR. MASSEY: Is there anyone in the audience or Scott from the State Commission maybe can tell me this. Is there a problem importing power into Florida from elsewhere in the southeast? Is that a major bottleneck? Are there efforts to import power into Florida that do not occur

because of congestion or are sales deterred because of congestion?

MARTY: I guess I can give that one a try and then I'm going to maybe ask Bill or Andy to, see if they have any concerns.

MR. MILES: Marty do you want to identify yourself? Marty, do you want to tell everybody who you are?

MARTY: Marty -- Power and Light Company.

MR. MILES: Okay.

MARTY: I think this one's working better. If you look at the State of Florida, there's a lot of ties and there's four owners that own the transmission lines coming into the State of Florida. And there's a couple of issues there and it's not just a Florida issue. That we can take in and we can import 3,600 megawatts and we also have quite a bit of export capability. I mean, during the winter when it's nice down here and there's no usage, we export a tremendous amount of megawatts the other way. So, in general when you're talking winter time and those type of things, the power is going that way or we put it on hold.

When you talk about bringing power in and constraints in the State of Florida, the State Florida we have added transmission lines to get power out of Orlando, between Orlando and Florida about three years ago or four years ago. And the way our infrastructure is, we're pretty

solid in the State of Florida. To get more power into Florida you have to come through Georgia. And right now, I think that, let's just say that Florida says, okay, these ties that we have with Georgia are worth 4,000. The issue becomes the whole infrastructure of the southern Georgia area is where you have problems when we start importing too much power.

And what you're actually worry about is a lose of a generator or a lose of a transmission line somewhere in the State of Florida or in southern Georgia and having low voltage problems which would lead to cascading outages and other events. So, it's not as simple, in summary, really it's not as simple, okay, here's a line, you know, it's a DC line. And, gee, if we make it go up and put a DC line in, for example, and we say, okay, we can bring another 1,000 megawatts at the border across the river.

Then Mr. Dearaman and Mr. Bill Newman are going to say, gee, I can't get it through Atlanta or I; it's just a whole infrastructure thing is what I'm trying to say. Does that make sense? Bill, do you want to --

MR. MILLER: Anyone who would like to respond.

MARTY: What I'm trying to do is I'm trying to get a little bit off of this, gee, it's a Florida Georgia border problem. And maybe even if you talk real time, if you go to an oasis system today, it's actually limited,

okay? And it's limited due to a lot of work that we've got going in, on in the State of Georgia and other places. It is not limited by what's going on in the State of Florida. Maybe that's a real good example of what's happening today.

MR. MILES: Please introduce yourself when you speak.

MR. NEWMAN: Bill Newman with Southern Company. And Marty's right about there being a limit. And there's always a limit on any system. How large do you want the transfer capability to be? There are firm contracts that occupy most of that capacity. That's the way the transmission interconnections are paid for. Not all of the constraints are in Georgia. There are restraints all around the southeast in terms of increasing the capacity.

Again, I have to ask, what number do you want? If you want to be able to export 10,000 megawatts, will the Florida system accommodate that? Clearly not. Do you want to do that? Is it the right public policy? I think not. I think that's policy been shut by people that looked at the amount of interface there and their own desires within the state for they type of generation they want and how much they want to depend on imports.

MR. MASSEY: Yeah, I don't have a number in mind. I'm just wondering if it's a constrained system.

MR. NEWMAN: Every system is constrained.

MR. MASSEY: Are any of the projects that are planned for the southeast aimed at this area, at increasing this capability of importing --

MR. NEWMAN: Many of the projects that are being built today, in fact, they have to be every year. You increase the amount of transmission that's within Georgia, for instance, to maintain that interface capability because it won't stay at 3,600 megawatts without some construction or something.

If your question is are we looking to increase the capacity another, pick a number, a thousand megawatts. If there's a requirement for that in terms of contracts that will pay for that, that's our obligation. And yes, we would do that.

I ask another question. Who stepped up and said I need another 1,000 megawatts that I will pay for and pay for the expansion of the system? If you expand the system, and it does require expansion within the State of Georgia and it would require expansion in the State of Florida, who is going to pay for that? Does it provide enough transfer capability with the economics of that, a difference in short run marginal cost, to pay for the line?

That's a bet somebody has to make. If economics were there, then I would think that somebody would step up and say, look, I'll be glad to pay for that. I think that's

the question that's left to be answered.

There was a comment made earlier about ATC. If ATC is zero, is that a problem? Well, if ATC is zero for eight or ten times a year and you were able to expand the system so that there was some ATC, two or three hundred megawatts, whatever that need was, will that pay for the expansion of the transmission system? I'm not sure.

Another question to be asked. Is there a better way to address that zero ATC and would it be gas? And I think that's why we're here today to talk about the overall energy situation and is gas delivery a better choice? I think some areas have decided that it is. My numbers indicate a two to three times factor above a electric transmission to deliver power above that of a gas transmission.

Your numbers may be a little different. They can be debated on what assumptions you make. But our numbers indicate at least twice as high a cost to transmit electricity as gas. So, the congestion issue, and all systems are congested. I mean, they are. Unless you want to eliminate all congestion, it's almost an infinite price and nobody wants to do that. The cost has to be taken into account.

How many hours does the congestion exist? Is ATC zero bad or does it recognize the value of those interfaces?

I think it recognizes the value of those interfaces. Now, if your question is today is there a plan to add another 1,000, 2,000 megawatts to the transfer capability between the southern system in Florida, there is not a firm plan to do that. In the past we've looked at adding a third 500 KB line. Motor Power Corp and Southern worked very hard on that for several years. Had begun to obtain the right of way. And there were policy reasons and public opposition why that line was not completed, that third 500 KB line, my guess, would have added probably 1,000 megawatts.

MR. MASSEY: Thank you for your comments. MR. MILLER: Commissioner, there is one indicator that does demonstrate that there is at least congestion some of the time. And that is that in most, most of the, many, many months of the year the price of power in Florida is considerably higher than it is in the rest of SERC. The difficulty is, and I think Mr. Newman pointed this out, is an awful lot of this transfer capability is locked up in long term obligations.

Currently there is no system to provide an incentive for people to more optimally use the transmission system. In other words, you know, give up some transfer capability on a short term basis for some remuneration. And so, therefore, it makes for, from a wholesale perspective in an illiquid market in the southeast, and it could, and we

don't know the analysis on this, could be raising prices higher than they need to be.

MR. MILES: Okay, let's move on to our next speaker. Our next speaker is going to talk about attracting capital for energy infrastructure. Our speaker is Douglas Kimmelman. Each of you may have picked up a copy of the blue booklet that is at the part of the room over here if you haven't had a copy. But contained in that document are bios of all of the speakers here today. But Mr. Kimmelman is Chairman of Global Power. If you take a look at his bio, you can see that he has many years of experience presenting testimony and submission to a number of national and state commissions. Also he has vast experience in transactions, merger and privatizations.

MR. KIMMELMAN: Thank you very much. I appreciate the opportunity to be with you today. And I would like to talk about some of the ingredients to ensure adequate infrastructure investment and what some of those prerequisites might be to attract ample low cost capital. And I'll stress ample and low cost because you may be able to get the capital but if the rules are murky, the cost of that capital may be so dramatically high that it wipes out any of the benefits of competition and the like.

But let me, before I dig into that, really talk a bit about where we are today because I really do believe

that this industry is on the verge of a crisis mode. I've been involved for 18 years in raising capital for utilities; investor owned and public power entities. And I have never seen such lose of investor confidence in this sector that we are facing today.

Investors are totally confused as to what are the rules of the market and what are the rules, excuse me, on how an investor in an utility will earn on an investment dollar going forward. So, they're having trouble keeping up and they seemingly are seeing one meltdown a week after another, whether it's a merchant IPP company or even a regulated utility. And they don't differentiate whether it's California or whether it's another part of the country or where we are here today in the southeast. They're concerned across the board.

And I really think that that, you know, mind set is really important to keep in mind when we start talking about some of the issues here. Why would you want to buy utility stock in this environment? Most utilities throw off something like a five percent dividend. The core business isn't growing much more than one or two percent. That provides a total return of maybe six, seven, at best eight percent. That's not a competitive return in the stock market vis-a-vis other vehicles it's barely north of where, what one can get on a treasury bond.

And the utilities look at this scenario as well. And utilities, I think, would love to be able to put more dollars to work into their own service territory and earn a reasonable return to prop up that earnings growth rate. But the history's been very difficult. This history's been very difficult around the country. We've gone through periods where utilities have built generation and they've been denied significant dollars spent on that generation. And so they've moved away from a period of wanting to build to them moving to purchase power and signing contracts with others or have others build it. And then they run into a situation of massive denials. And we can just look this week and see our Pacific out west with massive denials that is driving that regulated utility close to bankruptcy.

Perhaps the answer might be for the utility to, instead of building the generation or purchasing the power, maybe they ought invest in their transmission infrastructure to alleviate the need to build new generation. But there is an area, as we're beginning to hear today, where the rules are the least clear in terms of what market structure will be. Utilities look at investment in transmission right now and say, you know, we don't even know if we're going to be allowed to own it in five years. We don't know if it will be in our rate base. If it will be in an RTO, be in alliance or whether or not we'll have to sell it. It's not

a real desire by utilities to put the money to work there.

And even in this region, I think because of that dynamic, you're seeing many of the utilities in the southeast to look elsewhere to put their investment dollar to work. And I don't think it's a surprise when you see the FPL's and Entergies and Texas utilities and you look at the billions of dollars that they are committing to other regions in the country and other regions of the world. And I think that's a very telling sign in terms of some of the concerns that they must have in terms of investing that extra dollar that they have in their own service territory.

So, some background there. Let me try to talk a little bit about maybe what can be done to provide some clarity to investors. And let me talk about some things maybe that the companies can do and some things that perhaps regulators can do. And before I beat up on the regulators, let me beat up on the companies a little bit to be fair.

And I think there are three things that I would point out that they could focus on to restore investor credibility. I think the first one has to do with their balance sheets. This industry clearly in the last five years has witnessed a major expansion in terms of business risk. Utilities were capitalized in a much more stable environment ten years ago. Well, that environment all over the country, to varying degrees, has changed in terms of

increased volatility and business risk.

You know, even if the market is not fully open, someone maybe contracting to buy power from a third power. And that third power turn out to be an Enron or a Dinage and you're left holding the bag. So there's business risk all over the place in this industry. The industry, I think, got a little laxed in the last five years in terms of how they financed themselves. Balance sheets have a lot more debt than equity. And I certainly believe, and I think investors concur, that the financial structure of utilities are far too risky given the level of business risk.

So, they need to get more equity in their business. They need to shore up their balance sheet. You know, just note in the past year, we've seen a decline in wholesale spot power prices on average across the country from their high of about 70 or 80 percent. And notice many of the stocks exposed to those prices are down also, 70 to 80 percent. And if you're going to see that kind of volatility in your business you obviously need a large equity cushion.

And one of the fears of many companies, well, if I raise the equity, if I can even find the investor to invest, how are the regulators going to treat that? Do they concur with me that there's more business risk? Are they going to allow me to shore up the balance sheet? But I

think utilities need to focus on how they finance themselves. Take that financial risk out of the business as quickly as possible.

Second is transparency. Transparency of financial statements, funding vehicles, risk management strategies and counter party exposures. You know, I think this has been area, post Enron and others, that is at the top of mind for investors today. And the utilities need to over kill in this area in terms of transparency.

Related to that would be a third, which I would call planning by the spirit of the rules. And this is what we're reading about in the paper this morning. In terms of maintaining investor credibility by taking the high road and not so called gaming the system as these market structures around the country evolve in different ways. And I think utilities really need to take all three of these areas very seriously because they have lost investor confidence and they can't necessarily just look to the outside world, to regulators to restore it for them. I think they do have to look a little within. And I would point to financial structure, transparency and playing by the rules as three.

Let me then beat up on the regulators on the more regulatory specific things that it perhaps could be talked about or suggested. And I think the first would be what I would call upholding the regulatory bargain. I think the

regulators need to make the rules and stick with them. I think there's been several examples in recent years and months of the strong tendency to reach back if the regulator does not like the outcome that the market produces.

And I think this is an area where investors will ruthlessly pull their capital out if they think there's a tendency for the rules to change half way through the game. And this has been a big problem of late. We can start with some of the obvious ones. The denial of historic power purchase. I'll go back to my friends out in Nevada as being hit the hardest in the last couple of weeks of hundreds of millions of dollars of denials of power purchased on behalf of their customers. It's nearly wiping out the company.

And investors are concerned of where's the next shoe to drop. And so they're actually looking at companies and saying, who's got a lot of purchase power exposures? Who's got a lot of deferrals on the balance sheet. And maybe that's the one I want to stay away from because perhaps there's going to be a large denial there because the political will may not be there to pass through that high amount.

Second area would be sanctity of contracts. You know, reviewing contracts for termination if the market moves against one of the counter parties. This is obviously very topical in California. And you know, I think a lot of

utilities are going to hesitate into entering long term contracts and I don't think investors are going to give them credit for entering into low term contracts if there's a fear there will be a second look by a third party if they don't like the outcome.

Third would be proposals to force refunds if trading and marketing activities if profits are deemed to be excessive or if they deem to have resulted from market anomalies. So, again it's the area of looking back and not liking the results that the market produced.

And a last one might be a rate caps that limit financial returns. And I think one really has to ask the question of whether or not many regulators are ready for electric deregulation. They certainly like the period of low prices but does the political will exist for periods when the prices inevitably move higher. Which clearly, those periods are a necessary ingredient in a competitive market to send the signals for new investment. And if one is going to continually chop off the top, chop of those periods, you're not going to get the needed infrastructure investment. And perhaps this has to do with a little bit patience and trust and not be very short term orientated and reactive in those periods of price spikes, which is absolutely going to choke off investment.

So, that's upholding the regulatory bargain.

Another area that regulators could focus on are providing incentives for desired areas of spending. And maybe two areas where spending in regions of the country may be advantageous. One would be transmission. The other would be generation. Obviously the two are closely related.

On the transmission side, incentive rate making to attract capital infusion into system upgrades and to de-bottlenecking and even towards new capital, for new owners that have appropriated incentives to expand upon and make more efficient systems. We certainly have seen one independent company being responsive in this area, Transelectric, which many of you know of this company, which has stepped forward as an independent to both purchase transmission and invest in development projects. And perhaps this is an area where we need even more encouragement and incentives for fresh capital, fresh companies to come in and be the owners that have the appropriated incentives to de-bottleneck the system around the country.

Related to that one idea perhaps in the generation side is the concept of capacity payments. Investors are very comforted by that notion that there is some small minimum return that will be there if they invest in a project. It is incredibly difficult for a project developer, generation plant project developer, to put a

dollar down today when that plant may not come on line for three, four years. It's a reality that delays in terms of the siting and the environment. We all know that.

But we're now dealt with incredible price volatility so the developer has no idea. Even if the price signal is high today, he doesn't know what the price signal is going to be three years out. And we've seen it in many markets where it really has encouraged investment to have a minimum degree of capacity payment there so that he knows that there's at least some small return that he can, he can bank on. And I think that will help him in his raising capital. So, those are some ideas in perhaps the incentive area for regulators. Let me lastly, just a few unique ideas to throw out that we've kicked around and then we'll open it up for any discussion and questions. One anomaly that we see out there with regards to electric transmission is why does electric transmission not have many of the advantages that gas transmission has in terms of the way that it's financed itself. There's an anomaly that goes back to the '86 Tax Act that gas pipelines are allowed to put themselves in what's called a Master Limited Partnership format where they are allowed to distribute pre-tax, a stable pre-tax cash flows to investors and capitalize those.

I'd argue since '86, over half of the investment in the gas pipeline area has been done through this very

efficient funding vehicle. It's an anomaly but electric transmission is not allowed to finance itself that way. And it's a serious cost disadvantage that electric transmission faces versus gas. I don't think it was intended by anyone. I think it was an oversight back in '86. But it may be a way to spur a little more interest in capital formation in transmission.

It might even spur utilities to be more open minded towards perhaps divesting or spinning out their transmission assets into an independent entity if there was a efficient funding vehicle out there that has been done with many pipelines. As you know, many of the large pipeline companies have spun out their pipelines into these separately owned Master Limited Partnership vehicles.

The second area is impediments to foreign capital investment. It is a bit unique that the utility industry in the United States is not only so fragmented but the largest players here are much smaller than many of their foreign counterparts. In other industries that we would look at, you know, pharmaceutical industries, financial services industries, the biggest players in the world are from the United States and that's where we rely on most of the capital.

But we have an anomaly here. The biggest players in the utility industry are in Europe. Comes from some of

the roots of being, not too long ago, formerly large government owned entities. There are serious restrictions on foreign investment, mainly through PUHCA, the Public Utility Holding Company Act, into the utility infrastructure of this country.

And I think there probably is some fear that's not much talked about of foreign ownership of utility systems. And all I would say here is that the capital, the cost of capital required by the foreign entities is much lower than many U.S. counterparts. They just demand a lower return. They have ample capital. They want to invest here. And if one is concerned about foreign ownership, I think clearly the opportunity to regulate their U.S. holdings is quite evident and available. But it's the first step of allowing them to invest that is somewhat blocked and I think ought to be dealt with.

The last idea is just on the transmission side. You know, I hear all the debate here and I just wonder why we're not moving towards mandated divestiture by many utilities of their transmission systems. Many of these transmission systems, as you know, have been somewhat largely depreciated. And on the face of it you would think there would be a very large gain, a very large gain over book value available if the utility were to devest its transmission.

And maybe one of the ways to break the log jam here is that very large gain could be distributed in two ways. Number one, a portion of it could be used to restore the financial health of many of the utilities, as I talked about up front. They need to strengthen these balance sheets. And maybe a portion of that could go back to the customer to obviously, you know, help ease some of the burden on where power prices have been moving.

But let me stop there with some of those ideas. And I'll open it up. If there's any question, comment, debate or criticism on any of those comments. Thank you.

MR. MILES: Any questions? Comments?

MS. BROWNELL: I have one.

MR. MILES: Yes.

MS. BROWNELL: Doug, if capital isn't coming into the utility or the independent, wherever in the energy sector, where is it going? Is it going overseas? Is it; what's happening?

MR. KIMMELMAN: You know, the, it's been a difficult time. Let me start with individual investors. If we go back ten years, the foundation of investment in this sector has been individuals that relied on the stability, relied on the dividends of utilizes, many retired folks relying on that fixed income. They have been forced to look for alternative fixed income vehicles because it has been so

damaging to be wiped out of an investment that you counted on.

It would be a long list here if I had to count all of the dividend cuts that have been apparent in the industry in the last few years. So, they have been going to alternative income vehicles. They've been going to bonds. They've been going to real estate investment trusts. And curiously this Master Limited Partnership has grown up in the energy patch and many individuals have moved to investments there where they can earn a more stable and higher yield.

I'd also say much of the capital has gone to the foreign utilities. Many of those large foreign utilities that I've mentioned have listed on the New York Stock Exchange and have been fairly successful in attracting U.S. capital for their own needs around the world.

MR. MILES: Commissioner, did you have a question?

MR. CALLAHAN: My colleagues are shaking as I grab the microphone. I just have a fairly simple question. Do you think the industry does better in a regulated or an unregulated sense?

MR. KIMMELMAN: When you say industry --

MR. CALLAHAN: Electric industry --

MR. KIMMELMAN: -- and there are a lot of

constituents to the industry --

MR. CALLAHAN: The electric; because --

MR. KIMMELMAN: -- because we can go investors, customers --

MR. CALLAHAN: Yeah, because when you kind of hammered on the regulators talking about, you know, setting the rules, changing the rules, the sanctity of the contracts, the refunds and the price caps, those are all things that have happened in the deregulated markets across the country. Not in the regulated markets. And I don't think right now any one of these commissioners in the these front two rows are contemplating going to deregulation here in the south.

So, let's kind of narrow it down to the south so with our regulated monopolies vertically integrated, how do we stand, I mean, what's your take on the investor money in that situation?

MR. KIMMELMAN: Sure. Well, let me, I don't have an ax to grind in this debate so let me be very up front in terms of what I look at. I look at a couple of things. I look at deregulation of the gas markets, which has been now mature for at least ten years. And I think it's pretty obvious in terms of some of the benefits of the wholesale, the opening of wholesale markets in competition and what that has done in terms of consumer rates and efficiency that

that has driven into that sector. I think deregulation may not be the only reason but I think it's the major reason around that.

I also, I take that as a model and say, gee, how come the electric industry can't be patient and peruse somewhat of a similar model in some of the successes that we've seen in gas. I also, let's go back and look at the regulated world and we can look at the south. Let's look at the price of electricity and let's look at how that price of electricity has been in many jurisdiction. Let's look at the massive cost overruns that we've seen at many of the utilities in this region over the last ten years, perhaps because there is not a lot of market discipline around these companies.

Many utilities here who were of the mind set it doesn't matter what I spend to upgrade my system. It doesn't matter what I spend on the nuclear plant. It doesn't matter when I build that substation, what it cost because it's just a pass through. There is an absolute lack of discipline that when we look at the end use cost of electricity of the consumers around this country, it was all over the map. And it was causing many regions of this country and many regions in the south to frankly not be competitive.

And that and a dissertation on why we started

talking about deregulation but it was those forces of competition, efficiency and market discipline that were introduced to try to bring some of that down, to have a consistency and get the lowest possible cost. We're going through growing pains, it's obvious, as that market --

MR. CALLAHAN: I'm not talking about lowest possible cost for electricity. You moved the subject. I'm talking about investor security and money. Now, you're talking about investment in nuclear plants and all that kind of stuff. I mean, in Mississippi, we're a great example. We've got Grand Guff because billions and billions of overruns and in an unregulated market would have bankrupted the company. But in a regulated monopoly, it was past through to the consumers, much to, it went all the way to the Supreme Court in Mississippi. And, you know, that passes through. The company keeps on going. They're here today.

And I guess what I'm asking is, you know, when you take this to deregulation and you get on the wholesale market, there's going to be great risk. And investment where there's great risk there has to be great reward. And great reward in turn to there's got to be a higher rate of return which is higher prices and higher rates. So, I mean, to me it seems like it's kind of a choice between a home run and a base hit and a single. With an integrated monopoly

it's our job to ensure you're going to get a single every time.

MR. KIMMELMAN: Show me, if we were going to go back in time and we were to compare regulated monopoly industries and return to investors and we were to compare it to commodity oriented industries where the main exposure was price volatility, like refineries would be a good example, and maybe I could try to do this study and prepare it for another session, but you will find that the regulated return to investors over time has been much higher than has been apparent in pulp and paper and refinery and those type of industries.

The reality is, and again I come back to the refinery because I think it's a tremendous parallel to electric generation in terms of the exposure to the volatile commodity price. That has not been any windfall. There's been the perception by investors that, hey, they can hit this commodity price just right and they can earn excessive returns. But the history has been it's been a disaster for investors.

And guess what the early returns are for investors in deregulated generation in the U.S.? Unmitigated disaster. So, I don't think the investors are getting any picnic in terms of earning an extra dollar. They've been the ones that have been really clobbered on the

deregulation side.

MR. CALLAHAN: Does it make sense to put your money in a utility that is a regulated monopoly?

MR. KIMMELMAN: Not --

MR. CALLAHAN: But I can tell you anybody here who's got money in Walcom stock wishes the hell they were a regulated monopoly right now.

MR. KIMMELMAN: Yeah. But I think the point I was making is that the cost of capital is higher for a regulated utility. The returns have been higher for a regulated utility. I think the customers have benefitted in the refinery sector, the pulp and paper sector, because investors have been taking those risks and they've been burned, so.

MR. MILES: Could we have one more question and we're about 30 minutes behind schedule.

MS. JABER: Mr. Kimmelman, my name is Lila Jaber. I Chair the Florida Commission and we are regulators. And obviously I'm not going to take the approach you've taken. I don't want to beat up on you. I'll respect that you beat up on commissioners and industry. But on the industry's behalf and then on my colleagues behalf, let me tell you that at least from the perspective of Florida, the industry has come through. I think to our utility's credit, IPP's and IOU's, deregulated or regulated, have really come

through and made investment where they've needed to make it. And they continue to do that. And Florida utilities have been unique in embracing incentive base approaches to regulations. So, I have nothing but compliments there.

But I think what colleagues of mine and the industry have in common is we answer to a higher force and that's the consumer. And I haven't heard you talk about that at all. So I would suggest to you, when we're talking about regulatory certainty, which I completely agree with. I think regulation needs to be certain. I think whether it's FERC or the Florida PSE or any other commission needs to make a decision, abide by it and certainly make a decision that's been well analyzed, well thought through first. And again, our compliments go to FERC and what they're doing in getting input.

But we also have to understand that the consumer is more powerful than the analyst. And I would suggest that you add that to your list because that drives innovation and investment as well.

MR. KIMMELMAN: I couldn't agree with you more. And I think investors realize that. And they know when they invest in a high cost inefficient utility with very high rates they're taking a huge risk because they know that the customer is probably not getting a fair deal and that there's pain that's coming around the corner.

And, in fact, I think over time if you'll look, investors have done probably better in the low cost efficient utilities because when the customer is happy, the regulators are happy and a fair return can be achieved. So I very much agree with you.

MR. MILES: One final question. Commissioner Massey?

MR. MASSEY: I'm just going to throw my two cents in here. I think that most of this discussion arises because of the wake of the out of control western power markets, which most of the state commissioners sitting here have looked at it and said, we don't want any part of that. Investors for a while thought it was going to be a gravy train market and it's not. It's going to be a market in which there are going to be just and reasonable prices.

And my question is, if the California market had performed as well as, say the PJM market has performed over the last few years, would we have this concern about investor confidence right now? We have some concern. But would we have nearly so much?

MR. MILES: Thank you. Let's move on to the next speaker.

MS. MUSE: We weren't really finished with that but I guess you have to move on.

MR. MILES: We're 30 minutes behind.

MS. BROWNELL: Maybe Doug could stay and answer some questions.

MR. MILES: Sure.

MR. KIMMELMAN: Do you want me to comment on that? I can.

MS. MUSE: One quick comment for you. You started out by saying holding the regulatory bargain of the pact, don't change the game in the middle of the stream and sanctity of the contracts. The only concern I have with that is that's fine provided, you know, new technology comes in. And as Lila told you, we are answering to the consumer when things happen out there.

And one other thing, when the company does not come totally forward with information, should I say Enron? And then we have to kind of regroup and get, you know, back on track and make sure that we're not delving into the pockets of our constituents. That's the biggest problem that we look at. We don't just change those contracts to try to put you on a merry go round. We really try to work with the companies.

Like I said, that was mostly a comment. Thank you.

MR. MILES: Okay, well, thank you very much. Well, our next speaker; thank you, Doug. Our next speakers are going to discuss forecast for future energy use and

economic impacts of energy. They're going to answer questions, what is the southeast region's economic and demographic outlook over the coming decade; what is the forecasting growth in energy needs; how much energy is available and at what prices? Where is additional energy needed?

And our two speakers are Mary Novak and Scott Sitzer. I also like to note that Chairman Patrick Wood has been here for about the last half hour sitting at the back of the room listening to the conversation. He's with us today now. So, why don't we; Mary, if you don't mind?

MS. NOVAK: Thank you. Commissioners, thank you for inviting me. Let me introduce myself. I'm Mary Novak and I'm with DRI-WEFA, believing economic forecasting --

MR. MILES: Hold on. Can you turn that up a little bit?

MS. NOVAK: You mean like this?

MR. MILES: Yes.

MS. NOVAK: Okay, oh, I see. That close. Okay. As I said, I'm Mary Novak and I'm with DRI-WEFA, one of the leading economic forecasting firms in the world. And my presentation today is to sort of put you into the look forward mode before this afternoon's discussions.

There are a couple of things going on in the southeast markets and I'm going to concentrate on the South

Atlantic and what we call the East South Central Region, two census regions for this presentation that are actually going to change some of the major dynamics of the region. As you'll note, and particularly of the electric utility industry.

As you'll note here, what I've got, what I'm showing is population expectations for these regions relative to the U.S. That large blue bar in the middle is the South Atlantic Region. And the reddish bar is East South Central. As you'll note, these are average annual growth rates over five year periods. What that shows is during the previous five year period, '95 to 2000, the South Atlantic Region had about a 1.7 percent annual population growth and the East South Central Region had a one percent growth.

Over the next decade, the South Atlantic's rate of increase is going to slow almost unperceptively to about 1.5 percent per year. What that means is that over the last, the 25 year period from about 1985 up to 2010, the South Atlantic Region will increase by about 20 million people. The East South Central Region will have a similar but a much slower rate of increase of about a half of a percent per year. But over that 20 year period they will be increasing about three million people also.

Such an enormous rate of increase and huge

population bubble that's coming through the South Atlantic Region here with actually no end in sight. So I want to keep in mind the sheer number of people that are moving down to this region and what that's going to do in terms of economic requirements.

The next slide is real gross output. That's a measure, a financial measure of what is produced in these regions. As you can see, between '95 and 2000, South Atlantic led the country in terms of its annual rate of increase growing five percent per year. Over the next decade, that's going to slow somewhat but not a lot. The rate of change year over year is expected for this year to be just slightly above two percent, popping up to three percent next year. And then escalating up to about an average annual rate of four percent per year for almost the following ten years.

The East South Central Region is going to have a little bit slower rate of growth. But again it will pop up to about a 2.7 percent rate of growth and then move at three, 3.1, 3.2 for the rest of the decade, putting enormous pressure on infrastructure to support that rate of growth.

I'm going to slip forward a couple of slides here to shorten this up a little bit. If you could go to Slide 7, Non-manufacturing Employment.

MR. MILES: Non-manufacturing; thank you.

MS. NOVAK: Here's where the story is in non-manufacturing employment. The South Atlantic Region, let me just recap. We have about one and-a-half percent expected average rate of population growth. A total employment expectation of 1.8 percent and a personal income growth rate of 2.5 percent. On East South Central, we have a population of about a half a percent increase, a non-manufacturing employment rate of one percent and personal income growth of two and-a-half percent.

Why are those three things important? Population, non-manufacturing employment and personal income are equal contributors to the rate of growth of electricity. They all play a part of pushing that electricity growth up. What does it mean for sales? The next slide.

This slide is an index slide. What I've done here is I've taken the electric sales history and our projections. And I've indexed it to 2000. What you seen then is for the particular regions exactly how much additional power will be required. In the South Atlantic Region over the next ten years, we're going to need to supply 30 percent more power than was supplied in the year 2000 to meet or to support the economic growth projections that we, that go along with our population estimates.

So that means we're, for all the capacity for all the power that was sold in the year 2000, you are going to

need, to be able to produce and get to people 30 percent more within the coming decade. The East South Central Region will have a little bit slower rate of increase but it will also require more than 20 percent more power delivered to homes and businesses over the next decade.

If you could flip to 10 now. While these are dramatic changes, there is still fundamentally an improvement in electric intensity in these regions. That means while we're having to increase power 30 percent in the South Atlantic Region, we are continuing to make fundamental improvements to position us better for growth in the long term. These are highly electric intensive regions relative to the rest of the United States. And as you can see, the average electric intensity is declining over the period. So that means we are making fundamental technological improvement in end use demand so that we can get the most out of our electric dollar.

What does this come down to? If you can flip to Slide 13. How much capacity will we need? Well, if we're going to sell 30 percent more power, today that means we need 30 percent more capacity. As you can see over the previous ten years, we sold about 30 percent more power in the South Atlantic Region while only increasing our capacity about ten percent.

How did we do that? Within this region, we

increased the utilization of every piece of capital that we had. Nuclear has been running flat out in this region. Coal's been running at an extraordinary rate. We've pushed our oil units back on line and are now running them at a very high rate. We've done that and still continue to meet our mission limits.

But that's over. Everything's about running at what it can be possibly be expected to run. So over the forecast interval to sell another kilowatt hour means building capacity to get it to customers. So to support the electric requirements of this dynamic and growing economy, you're going to need to build 30 percent more capacity.

Right now our expectation is to step out one third to two thirds, so maybe about half of the capacity has been planned. It's not expected to come on line all that quickly but it has been planned. And you can see that that bubble, in terms of pushing up the capacity during the first five years of the forecast is dependent upon getting that planned capacity on line and running.

It's a huge amount of capacity though. What we're talking about is in the South Atlantic Region adding an incremental, it looks like about an incremental 60 gigawatts of capacity over the next ten years. And in East South Central adding, you know, maybe 25 kigawatts of capacity over the next ten years. So, this region has an

enormous requirement for new capacity and the ability to move the power around. It's at the limit. It's used up all of its excess capacity and is in a build mode.

In terms of requirements for natural gas, if you turn to Slide 15. The forecast currently says that most planned capacities is expected to be natural gas and this will create; I think the next one. Requires additional infrastructure development. Right now to meet the expected build of gas combined cycle units in the South Atlantic Region we are going to need to increase deliveries of natural gas into this region by 50 percent over this period.

So, bringing some of the pieces together, I think the representatives from FERC showed you that over the last decade substantial increases in economic activity, substantial increases in population were largely met with in place capital. The capital stock on the ground was used more intensively. Going forward we see a continuation of the pressure for more energy resources and with the ability to push the present system coming to an end. It means a substantial and very large and continuing requirements for build over the next 20 years.

MR. MILES: Scott Sitzer, please?

MR. SITZER: Thank you very much. Thank you for the opportunity to present EIA's projections of energy markets in the southeast. My name is Scott Sitzer. I'm

from the Energy Information Administration. As many of you are probably aware EIA is the independent statistical agency in the Department of Energy. We have responsibility for comprehensive data collection, analysis, forecast and dissemination. We're not policy advocates but we do analysis to try to help policy makers in their work.

What I'd like to talk about this morning is our projections through 2020. I can compliment what Mary did nicely because I'm going to go out another ten years, which is riskier, I guess, but at least it's different. Each year we do that annual energy outlook, which is a midterm view of U.S. energy markets which we prepare for the public, Congress, industry and the administration.

Our report contains projections of energy markets based on various assumptions including world oil prices, economic growth and other factors. And what I've tried to do is to boil down this forecast to the southeast region. I'd like to mention that everything we do is on our website, which you can access at www.eia.doe.gov, including the annual energy outlook and all the other publications and data that we, that we do.

Put the first slide up. I think we talked a about a lot of different regional configurations this morning. I picked one that did not include Texas or Virginia because they tend to be somewhat looking at

different parts of the region. But at any rate, this just compares the growth by energy end use sector both in the U.S. and in the southeastern region. And the big difference is over the period through 2020 are primarily in the residential and commercial sectors. And what we see is considerably more growth in the southeast, in those two sectors in terms of energy consumption than in the U.S. as a whole. In fact, as much as 50 percent more in the residential sector.

Primarily this has to do with some of the factors Mary was talking about. New population growth, increase in light industry, immigration, as baby boomers are aging, this becomes a more and more attractive area for in country immigration. So we see considerable growth, particularly in the residential sector but also the commercial sector which tends to meet the kinds of needs, the retail needs of people, new shopping malls, new office buildings and so on.

The remaining sectors grow at about the same rate in our forecast as the rest of the U.S.; industrial, transportation. Transportation has a growth of 1.9 to two percent, the highest in the country. But only the second highest in this region. And electricity generation, although as I'll mention in a minute, we do see electricity generation growing. We also see it becoming somewhat more efficient in this region. So overall consumption by that

sector of primary fuels, coal and natural gas, oil and so on, is slightly lower than the U.S. as a whole even though the growth in electricity consumption is higher.

Next slide, please. What this shows is current and new generating capacity in the U.S. And I put it in to try to contrast it with the southeast. Today coal is very much the mainstay of U.S. generating capacity. Of our 700 and some odd gigawatts, over 300 of them are coal. In addition, we have nuclear, which is about 20 percent of the stock. And hydro another ten percent. Natural gas combine cycle, natural gas turbans are a much smaller proportion. But over the next 20 years, as has already happened in the past four, five years, and as most forecasters agree, we see a tremendous increase in new natural gas capacity in order to meet the country's needs.

If you go to the next slide, you'll see that it's very similar in the southeast. Again, coal, nuclear and hydro are very important in this region today but in order to meet the new growth that this region needs over the next 20 years, we see a tremendous growth in natural gas combine cycle. Just about 60 gigawatts of new capacity being needed and coming on line over the next 20 years. And in order to meet peak demands, approximately another 25 to 30 gigawatts of combustion turban.

Towards the later years of the projection

periods, say after 2012 to 2015, as natural gas prices begin to rise, then we see an opening for coal. And we have about 12 gigawatts of new coal coming on line in this projection for the southeast over the next 20 years. But mainly that comes in the second half of the projection because as all that new natural gas capacity comes on in the early years, it will tend to drive up somewhat the price of natural gas.

Electricity prices in the southeast, we project a fall at the rate of about 0.3 percent per year, which is about the same as is expected nationally. You've already had a discussion about regulation and deregulation. We do not assume any new, any further deregulation that hasn't already been announced in our projections. And retail deregulation is not occurring in the southeast right now.

But nevertheless, you do have the wholesale markets, which tend to have some impact on prices throughout the country. We expect prices for power to decline over time because as that competition lowers operating cost throughout the country, some of those benefits are felt. Even in those regions that aren't deregulating, we expect that the introduction of that gas fired capacity tends to be more efficient and we also see lower coal costs. And all of that should offset the effects of increases in natural gas prices.

So overall we see a continued decline in annual

average of electricity prices in this region as well as in the country as a whole.

Look at the next slide, please. This shows our forecast of natural gas consumption in the southeast. And it's a very stark picture. That what we are looking at is a tremendous increase in the use of natural gas, particularly in the electric utility sector. In 2000, consumption in the utility sector around 750 BCF and we're looking for something closer to three trillion cubic feet by the year 2020. And this again has to do with all the new generation capacity coming on line that we expect to be powered by natural gas.

Overall we expect natural gas consumption in the southeast to increase at about three percent over the forecast compared to two percent for the nation as a whole. And again, in this case I'm referring mostly to the South Atlantic and East South Central Divisions and not including Louisiana and Texas. Again, we expect all of the primary sectors to experience consumption growth in excess of the national average, except for the industrial sector, which is not, which is basically growing at about the same as the national average.

We expect that the number of households in the region will increase by about 1.3 percent compared to about 1 percent of the country. And, again, by 2020 the

consumption in the region is projected to be nearly 3 TCF higher than it was in the year 2000.

The intensity of commercial natural gas use, which is consumption per square foot, is somewhat lower than the country as a whole. But because of the growth in the sector we see increased growth of about 2.2 percent in that sector.

In terms of natural gas consumption by electric generators, we see the share of the natural gas market reaching about 45 percent in 2020 compared to the U.S. average of 30 percent. Historically natural gas has had about half the share of electric generated market in this region compared to the rest of the U.S. But by the end of the forecast period, not only has this shared increased from six to 20 percent, but it's nearly equal to the national share by 2020, which is also projected to grow. Again, we see growth by electric utilities increasing by about 2.1 trillion cubic feet over the forecast period.

Next slide? This graph shows what we see as capacity coming into the region not including Louisiana. So, it's not necessarily entirely capacity coming, flows coming from outside the region. But it does give you an indication of what some of those, some of the infrastructure requirements are. And basically what we see is about one TCF of inflow capacity being required between now and 2010

mainly because we see an increase in the utilization of the capacity that's being used for gas coming into the region.

The reason for that is as we get more electricity generation coming from natural gas, it can go in the opposite direction of the usual peaks. Natural gas tends to have a winter peak. Electricity tends to have a summer peak. If natural gas is going to be used for more electricity generation, it's going to allow us to use the capacity that we have in a somewhat more efficient matter. And we believe that utilization can grow from about 60 percent today on an annual basis to over 75 percent by 2020. So, the growth in the flow into the region is somewhat greater than the growth and capacity. At least these are the projections that we see coming for this region.

Talk a little bit about prices. The average natural gas well head price is expected to increase from a relatively low 2002 level, as we projected it last year, to $3.26 per 1,000 cubic feet in $2,000, which is an increase of about $1.28 in real terms. You factor in inflation, it's going to be more than that. We're looking for the same pattern in various regions including the southeast. Although prices to the residential and commercial sectors are expected to experience somewhat less of an increase hopefully with the increased utilization of the pipelines.

But we do see prices to the electric generator

sector increasing nearly $1.50 per 1,000 cubic feet by the time we get to 2020, somewhat over $4. And this is what brings the opening for coal in the second half of the forecast.

Very quickly to talk about coal. We expect to see coal continuing to be a very important part of this region's electricity generation. Projected increase of somewhere between 75 and 100 million tons. And the big change is more western coal. As eastern coal seems and reserves begin to be played out and as the cost of getting them becomes more expensive, it's an opening for the cheaper western coal to come into this region. And we do see that happening by 2020, particularly in the western part of the southeast region.

We also see prices continuing to fall partly because of the movement to the west but also because of improved productivity. Coal production has improved in productivity by six percent a year for the past two decades. We don't expect that kind of growth to continue, but we still see two to three percent a year. And the southeast should benefit from that in terms of the prices that they pay for coal.

So, to summarize, we forecast electricity demand in the southeast will grow somewhat higher than the U.S. at a whole, at about two percent a year. We expect that demand

to be met with new natural gas fired capacity. We expect new pipelines to be built and to be used more efficiently and coal to continue to be a mainstay for electricity generation in this region.

Thank you.

MR. MILES: Thank you. Unless there's a need for any questions, we're about a half hour behind. So, why don't we move on to the next panel. Can I have the next panelists come up please? We're not going to take a break but if you need to get a drink of water, feel free to go. But if I could have the next panel up.

Thank you, Mary. Thank you, Scott.

MR. SITZER: You're welcome.

MR. MILES: Has anybody seen Walter? Well, okay, we'll come back to Walter. Okay. We begin our panel presentation before the lunch recess. And as with all three panels today, we have a distinguished panel. And it's a privilege to have them here today. My role is that of a moderator facilitator. And they'll make my job a lot easier if they engage in a discourse after their presentations, which are to be limited to five minutes.

My role is also to make sure that there's a good balance and hopefully that we will have a very engaging conversation. Our goal is to have a panel presentation that's different from the tradition processes where

panelists might speak for 15 to 20 minutes from a prepared statement. This is going to be different, so we hope it is engaging. And with that, I'll start with our first panel speaker, and I'm going to not give introductions other than their names because as I indicated their bios are in the back. But our first speaker is Walter Revell. He's the Chairman and CEO of H.J. Ross and Associates. Mr. Revell.

MR. REVELL: -- Florida Energy 2020 Study Commission. Chairman Wood was one of our experts during our 15 months study. And I'm pleased to be here. With the help of Billy Styles, who was the Executive Director of the Florida Energy 2020 Study Commission and now with the Catz Stutter Law Firm in Tallahassee, we have worked very hard to research this subject from my perspective. These are all professional experts here. I'm just a layman. I'm a public policy nut. I've been doing it a long time in Florida.

But with Billy's help we checked out the southeast. Billy called the chief geographer in each of the 11 states and asked them in the next ten to 20 years are we going to move any mountains or rivers or big lakes or coastal lines? And in every case they said, not many. Then Billy called the chief demographer in each of these 11 states. He said in the next ten to 20 years, are we going to move any large cities or metropolitan areas or population centers? In every case they said, not many.

Then it was my job to call the chief sociologist in each of these 11 states. And my question was in the next ten to 20 years, are we going to have anymore informed citizens who know anything about their economy, their capital markets or their infrastructure or particularly about energy and how it's generated, transmitted and distributed. And in every case I got the answer, not many.

Then I called Paul Vocher, in Washington, who covers all subjects. And I said, Mr. Vocher, in the next ten to 20 years, are we going to have any more public officials or regulators or professional technical staff who have a comprehensive grasp of all the issues before them and all the skills needed to address them? And he said, not many.

And in fairness, I called Louis Ruckiezer in Washington, as he's changing jobs but I had a good conversation with him. And my question of Louis Ruckiezer was in the next ten to 20 years are we going to have anymore utility companies executives with a deep appreciation for the regulatory process and great patience in it. And he said, not many.

So, we have a real challenge before us. The only people in the southeast who can handle all this stuff are in this room. So we have a very heavy burden here today to cover all these subjects. The challenges, as I see it, for

all of you people who devoted your careers to all this stuff is, after 100 years, energy is no longer a mature industry. In the last five years we've almost started all over again. In fact, one of the keys is how all of us work together to make sure it's not really starting all over again. If we can capture most of what we've learned and done and benefitted from over the last 100 years so we're not, we're not starting in the crib.

We have no constituency. I'm a public policy guy. I mean a constituency who, lay people who understand all this stuff, which was one of my facetious questions. We don't have a constituency for energy, Including my wife and my family. All of our laws, regulations and policies are under scrutiny. Many are undergoing dynamic change. We have all kinds of new models and new players. Transelect was alluded to as a great example of all that.

We now have competition and controversy. We have California and Enron. We're addressing new systems like RPO's and ISO's and the chairman particularly has been devoting his leadership with the support of his commissioners to all of this. We are now getting lectured as never before about capital investment and reasonable returns and allocations of cost and pricing and economic --

We are face to face in a different way than ever before with lawmakers and the state senator on my commission

said, Florida's policy makers can't handle this. Their knowledge on energy, like everything else, is a mile wide and an inch deep. And none of them plan to go any deeper. And yet they have the final vote on so much of what we're talking about.

And the typical local commissioners, city and county, I'd say are exemplified by those in Pompano Beach, Florida, addressing a new power plant location whose the mayor lady said, I'm against this new power plant because it's really going to impact on the flea market and the butterfly farm.

Finally, we're here to talk about FERC's role. FERC is a very powerful agency. In fact, it ranks fifth in importance to four other powerful groups. The Securities and Exchange Commission; the stock exchanges, particularly the big board; and we've recently been reminded, the legal profession and the accounting profession. So FERC is terribly important but it's in fifth place. And among state regulators, it is clearly first among equals except there's one of them and 50 of you all. So, it's a very challenging situation.

I hope we're going to get Chairman Wood's picture on either Forbes or Business Week or both out of all of this. But I would remind him, he's a brilliant fellow, highly prepared for this job. But you get on these covers

by doing really, really good or really, really bad. And I would suggest that he be ready when the photographer comes by to make it a group picture with him on the back row.

My final advise, and I've heard it today, we all slip into. I have no patience for talking about problems. I have no patience for dwelling on problems. I have no patience for dwelling on the past. And it's an absolute sin in society to dwell on problems of the past. We are never going to face the future if we spend all of our time dwelling on problems of the past.

We ought not beat up on the incumbents. And we ought not praise all the innovators. We're somewhere in between, folks, and we need to get on with facing the future. I'm pleased to be here. Thank you very much.

MR. MILES: Thank you very much. Our next speaker is Bill Newman. He's the Senior Vice President for Transmission and Planning in Operations at Southern Company Services. Mr. Newman?

MR. NEWMAN: Thank you, Rick. If you'd put up that first overhead, the one that's the map. Thanks for allowing me to participate. It is a real privilege to be here. With all of the different things we heard so far, the one thing I've gotten out of that is that I'm really a lot more optimistic that there is a good solution than I was when I walked into the room. There's much difference, as

we've seen, and I will have some number statistics and points that are a little from what you've seen earlier.

The questions that we have in the information we were sent seem to assume that transmission is not being built to meet the needs of the consumers and that major bottlenecks exist. It depends on your point of view. I would tell you that there is a tremendous amount of transmission that's being built. Traditional planning has worked. I'm talking about history. I'm going to get to the things about what we're really for in just a minute.

But in the past, and as of now, the traditional planning has worked. Traditional planning means you know where the generators are and you know which loads those generators will serve. The region, the southeast, has been planned and expanded in a way that's consistent with FERC planning guides and reliability criteria. That has been accomplished. This is a very reliable area to the U.S. That's history.

The system has been designed, and this was pointed out by Scott earlier, so that within the particular system that was being designed, there is no congestion. That's the way it's designed and that's the way it operates. There's no congestion even with one or two contingencies, meaning line out or generator out, within that particular system. In our case the southern electric system. In the

case of Florida, I think the utility's planned the transmission system and generation as a whole. So, there's no congestion in that region.

So the question really is one of economics and congestion across the region and what is the best way to address that overall, not just transmission wise. One example I might make is today southern companies transmission investment, the gross investment, is 4.1 billion dollars and over the next five years we plan to invest 3 billion dollars more. 4.1, three billion dollars in five years, if you look at the history of the company; that's gross investment, not depreciated, tremendous expansion.

There's some other statistics I can show you for SERC and for western systems coordinating council, which is the only other region in the U.S. that has more miles of transmission plan and it's only a few miles more over the next ten years. It does not address all of the issues you're here today to talk about. That transmission is there to serve load and it would keep that congestion that Scott was talking about, that is addressed within the vertically integrated utilities and whatever group that is planned together. It will keep that congestion to a minimal. We have seen reduced margins because we pushed the system harder to accommodate more wholesale transactions.

Well, all that's history. And that's not really what we want to talk about today. If I could see Slide No. 2, please. I saw some different numbers today and some of them showed numbers for increased generation and margins going very small and all that sort of thing. And they included different areas. But what you see here, the green bars represent the SERC summer peak load. And I chose SERC because I could get consistent statistics. If you include Texas, I have some numbers of the FRCC. I'm not sure they add up linearly and I have some slides on that. But I stayed with SERC. That is the biggest geographic region we're talking about.

The green bar represents the SERC summer peak total demand as reported in the EIE 411 for 2001. That demand includes approximately eight thousand megawatts of interruptables. So the difference you see between the blue bar, which is the SERC summer net capacity reported in the same document. The difference in those two is generation margin.

Now, obviously in the future years, that's not all built yet. That's not a real issue because of the short lead times and constructing generation and I'll give you a few other numbers in there in a minute that says I'm not concerned about under supply of generation in this region. By the way, if you interrupted that 8,000 megawatts, which

is there and contracted for, that margin increases. The margin; you can't tell from that but I can tell you that it's 10.7 to 13.1 percent over those years for -- If you add the FRCC in together, the numbers go up a little bit, a percentage point or two.

The blue line that you see up near, it starts off down at the lower left and moves up across the upper part of the chart. It's from the SERC 2001 generation development survey. And it reflects generation connected as of 12-31-2000 plus all generation requesting interconnection. Now, that's not all built and some won't be built. So the numbers look really high and I know that. But what is going to be built? How do I plan a transmission system and expand it without knowing that? Well, there is a way. You wait until you know what is going to be built in the transmission and then you build it.

But when you look at that number; look at the red line in addition to that. It's the same type of information but it's from the latest 2002 SERC Generation Survey. So all of that is generation that's requested interconnection or has announced that they'll build in this area. Now, with those number, I haven't calculated that margin but I'm not concerned about a generation margin. Okay? So, I think the generations going to be built.

What is happening in some areas is that the

generation is locating all in one particular place. It's a couple of spots, particularly in our system. They're locating there and it's creating some considerable issues with the ability to export their power. And as they request for transmission, we'll try to address those issues.

I think the real issue turns out to be, in a global sense for an engineer is it more economic to locate the generation in a distributed fashion, and I'm not talking about distribution resources and only distribution system, but spread out. There's a map that's on the table as I came that showed a pretty good distribution of generation. Is it more economic to distribute the generation and haul the fuel, coal and gas? Or is it more economic to locate it in places where the gas may be very inexpensive or at -- for coal plants and then build transmission?

I have an answer and I've given it earlier here. Distributing that generation is better from an economic viewpoint and it's certainly better from a reliability viewpoint particularly if some of it has an energy stockpile sitting right out there next to the plant with a big old pile of coal or a fuel source such as nuclear. The reliability side has certainly improved.

In fact, in one case I heard recently, and Terry may elaborate on it, the worse contingency that was seen in a study of reliability for a region was the lose of a

pipeline. Never happened before. Actually, it has. There's been a couple of them that's been lost. So, there are other things that haven't happened before last September that now have happened that we have to be concerned about. And distribution of the generation is why.

I have to assume that RTO's will operate the system in a reliable fashion, however they're built, within their limits. If I can't assume that, it doesn't matter how much transmission you build anyway. But I have to assume they'll operate them within their limits. The real question is economics. And that really gets down to who pays.

If generators are not sent some form of economic signal, and location marginal crossing is one of those once a market is established, if they're not sent some form of economic signal and the transmission costs are socialized, spread over a large region, then they will locate in ways that suit their best purpose. They should.

There are economic signals sent for transportation of fuel. I have seen an aggregation of generators right across one of those geographic barriers that we were talking about earlier just to the west of the Chatawhochee River because on the east of the Chatawhochee River there's an increase in fuel price and a fuel severance charge. A lot of generators located there. Did they consider the cost of the transmission system? Not to the

degree that it should have been.

My real point is that all of the costs need to be considered. And if somebody makes an economic decision to locate in a particular location, it wants to be right here because the environmental issues are less, it's easier to sight here. The fuel cost is less, so on and so forth. And it is far from economic in terms of expansion of the transmission system. Could that person, entity pay for the expansion of the transmission system and get the associated right and put that risk where it really belongs. We call that participant funding and have talked about it a good bit and I think it's a way to get it done.

So, I think the real question here is besides the engineering issues of what is most efficient and reliable and all that sort of thing, when you get past that, if people chose to do things that don't tend to optimize, then I think it's a question of who pays.

Sorry, Rick.

MR. MILES: Okay, thank you. Our next speaker is Terry Boston. He's the Executive Vice President for Transmission Power Supply Group, Tennessee Valley Authority. Mr. Boston?

MR. BOSTON: Thank you, Rick.

MR. MILES: Can we send him a mike?

MR. BOSTON: Testing, testing. There we go.

Thank you, Rick. And I would like to thank Pat Wood and the entire Commission for hosting this meeting to look at, or all these meetings to look at the infrastructure for America's energy system. TVA is a federal corporation with a unique mission for the Tennessee Valley Region. That mission includes something very close to what the Commissioners here are also responsible for. And that is providing reliable power at the lowest feasible cost.

TVA has gone to great lengths to participate in the development of what we hope will be a stronger more reliable and more open transmission system in the southeast. We are also working very hard to adapt to the new market dynamics that is occurring, that Bill has referred to.

For instance, TVA has voluntarily followed Burke Order 888 and 889 and we're working closely with neighboring systems to develop strong transmission coordination agreement with the help of Pat Wood and others to meet the objectives of Burke Order 2000.

I agree with Bill. We had reliability coordination agreements in the southeast before the northeast blackout in 1965. Traditionally, transmission planning has worked well in the southeast. However, there's very little that is traditional about the emerging energy dynamics in the southeast with the gas well heads and the gas supplies.

Unless we focus as hard on the physical nature of the grid as we have focused on the economics of the market, I believe that the continued reliability is by no means assured. Simply put, we're building an ever increasing number of generators along the gulf coast to move power ever greater distances and we're asking the grid to do things that it was never designed to do.

Let's go to Slide 1 there, please. Consider the growing imbalance between generation and transmission in the U.S. I apologize, Walter, this is history. It's easier to talk about than the future. But historically, generation and transmission has built, has been built in lock step. The blue curve, red to the right axis, shows in the mid '70's, we were putting about five billion dollars a year in the nation's transmission system and we peaked at about 30,000 megawatts going in to the generation systems, red on the left axis. So, it was a tightly integrated planning process.

As you move through time, there was a C change in the mid '90's. Something happened in 1996. Transmission investment went through the floor and generation went through the roof. Bill was talking about numbers in SERC. By July 1 of this year, we will connect more generation this year in SERC than the nation as a whole connected last year. We expect that to double by the next year and the numbers

show almost a hundred percent reserve margin.

Folks, the generating cup is not empty. The transmission straw is beginning to clog. The recent adoption of fastest site first following the price spike of 1999 encouraged the location of generation. As Jeff had noted, there's hundreds of new generators being concentrated near the well heads where they can be built quickly and connected to the gas supplies and to what available transmission lines were there.

As an engineer, it concerns me to see the emphasis on the grid operation is shifting towards untested economic theory instead of following the laws of physics. A Harvard economist that we all know well, Bill Hogan, pointed out in a recent paper that the major problem in California was assuming of the way the physical characteristics of the grid to simplify the market.

Electrons don't understand supply and demand curves. They don't read contracts. As a matter of fact, power transactions take the path of least cost resistance. And electrons take the path of the least electrical resistance. As long as we ignore Alms Law and Kirchoff's Law and we schedule power and cash flow, a long contract to past instead of the way the electrons actually flow, the system will be over booked and at great risk.

Let's consider the airline industry. If Delta

Airlines could book seats on American Airlines' planes and Delta gets to keep all the money, how many seats would Delta book? A lot. What incentive would there be for American to add more planes to handle Delta's customers? None.

I want to take a quick example of how this applies in the electric business. On August 19th, 1999, a day when we were in good shape capacity wise, we came into the control center and there were heavy north to south flows across our system. About 8,000 megawatts not scheduled with us flowed across our system. Never had we seen such heavy flows and we were in good shape going into that day.

There was a severe voltage drop that resulted all the way from PJAM to Oklahoma. In fact, on that same day Calaway Nuclear Plant had to report to NRC there was not enough voltage on the grid to support a safe shut down of that reactor. Folks, this is serious business.

Equally disturbing on that day we were closer to a blackout than any of my 29 years in the industry. If we had lost one single 765 line of 500 KV line, there would have been a widespread, multi-regional blackout. We are forcing a transmission system designed to serve local loads from nearby generation to handle vast quantities of generation over vast distances. It's like taking a two lane highway system and trying to make it look like an interstate system.

Let's go to Slide 2 for a second and talk about it.

MR. MILES: You've got about two minutes left.

MR. BOSTON: Okay. There's a, if you look at the amount of generation that's being added along the gulf states that Jeff talked about earlier, and you take a cut line from Chicago to the center of the Cofields, where there's very little differential in price to justify a major transmission project, over to the Appalachian Mountain ridge, where AEP has been trying to site a transmission line for 15 years, come through the Great Smokey Mountains to South Carolina and head to the Atlantic, you cross two 500 KV lines and four 345 KV lines.

Most of the population lives to the north of that line. Most of the generation that's coming in is to the south of that line. It is a fairly serious problem. Most of the overloads we've seen have been north to south. Last year we had an overload south to north.

I am pleased that we've been working hard at TVA to try to develop an interstate highway system. Let's go to Slide 3. This year we have the largest capital investment in transmission in the history of TVA adjusted for inflation. Over the past six years we have built 620 miles of new transmission lines. Our R & D staff is working hard on new approaches for high voltage DC. Here you see a

sample of using existing right of way, you would have the super highway system on top, high voltage DC. On the bottom your local and state highway system for local deliveries.

In addition to that we're working on a re-genesis project that's new advanced storage using fuel cell and chemical batteries. We're working on diamond coatings with VanderBilt University that can increase the power electronics capability by two orders of magnitude, ten times the voltage, ten times the power output. This will allow us to move more power over existing right of ways and lower the risk of a voltage collapse.

In fact, we are currently joining forces with the national Laboratories at DOE, as was noted in the DOE transmission report that came out, to work on these new promising technologies and sharing with them what we've done today.

In summary, the cost of power outages are growing. The societal cost of having, of not having enough transmission is small compared to the societal cost of having power failures and voltage collapse. Those who want long haul transactions must be willing to make firm contracts and commitments as Bill has talked about. TVA is working hard to be a part of the solution. And for that reason I'm pleased to be a part of this conference.

Thank you very much and I look forward to the

questions.

MR. MILES: Thank you, Mr. Boston. Our next speaker is David Pursell. He's the Director of Research for Simmons & Company International.

MR. PURSELL: Thanks. I think we've heard a lot today about the growing demand for natural gas. That's been a constant theme over the last through years driven by gas fired power generation.

Walter wanted solutions. Well, the solution to guaranteeing an adequate supply, it's really twofold. Either build a lot of LNG terminals on the east coast and the gulf coast or put 40 drilling rigs in the eastern Gulf of Mexico, okay? You're not growing a popularity contest with that kind of answer, but that's a reality.

I want to run through some statistics to just highlight that point. In 2001, the industry drilled a record 22,000 gas wells, natural gas wells in the U.S. That is ten percent above the prior high drilled in 1981 when we were drilling for lots of oil back in the early '80's. The 22,000 gas well completions last year was 40 percent above wells completed prior year. 120 percent more completions than 1990, okay? This is not rocket science here.

What did we get from that? Last year production increased two percent from prior year. It increased two and-a-half percent from 1999 levels. Not an annual

increase. '99 versus 2001, 2.1 percent increase in natural gas supply. We more than doubled the number of gas wells completed and essentially got nothing for it.

If I'm building a nature gas fired power plant, I think those numbers are fairly startling. Now, if you're a believer that there's a lag affect from the time that we complete wells to the time that production actually hits the market, let's look at first quarter of 2002 production as drilling rate count fell through the back half of last year due to the low prices, due to low natural gas prices.

First quarter production is down five percentage compared to a year ago period. The first quarter of 2002 is down five percent. Based on Dealy numbers and based on reported production from the publicly traded ENP and major integrated oil companies. That is a startling statistic. If you look at the reported production from the publicly traded companies, it's also down two percent from fourth quarter 2001. There is no lag affect. Production will not grow this year.

If we look at net imports, okay? There's kind of a build it and they will come mentality regarding LNG and pipelines from Canada. Imports increased in 2001, and remember imports are about 10 BCF a day over 60 BCF a day consumptive base. Imports increased last year three percent compared to 2000, seven percent compared to 1999. No

question imports have been an important part of supply and demand growth.

The first quarter of 2002 imports were down 20 percent from year ago quarter as gas prices fell well below $3. Imports will come at the right price. Okay? This isn't Chicken Little. The sky's not falling. But we're out of $2 gas. We're out of $2.50. And I would argue we're almost out of $3 gas. Specifically for this region the question is what about the Gulf of Mexico? Okay, we heard earlier some forecasts that the deep water may be a source of gas.

When we look at the Gulf of Mexico, a thousand feet is the water depth where we consider, a 1,000 feet or deeper is deep water. The shallow shelf is 1,000 feet or shallower. The Gulf of Mexico shelf has declined from 13 BCF a day of production to 10.5 BCF a day of production from 1997 to last year. Deep water has increased, it has offset many of those; it's offset much of the decline that we've seen on the shelf. You have to remember though, deep water's an oily providence. The shallow Gulf of Mexico shelf is gas rich.

On a barrel of oil equivalent basis, for every barrel of oil produced on the shelf, there's three barrels of oil equivalent of gas. In the deep water, for every barrel of oil produced there's half of barrel of oil

equivalent of gas. It is a oil rich providence. If I'm building gas fired power generation, I'm not betting that there's going to be a lot of gas found in the deep water, okay?

Where are we going to be in the Gulf of Mexico in 2005? Shelf production should decline from ten and-a-half BCF a day currently to eight BCF a day. That's conservative, in my opinion. Deep water will grow from the current three BCF a day to slightly over four BCF a day by 2005. That is based on currently identified projects using a relatively conservative decline rate for the existing production.

You add those numbers up, the Gulf of Mexico production will decline in aggregate at least a BCF a day or close to ten percent from now to 2005. Okay? So, where are we going to get the gas? Open up the eastern Gulf of Mexico, put some rigs out there to drill or look forward to seeing L & G tankers coming in to the Gulf coast and east coast of the United States. There is a lot of gas in Alaska in the Canadian arctic. That pipeline, best case, is 20 billion dollars, 2010 before that's into the Chicago market.

These are not easy questions. They're not really attractive answers. But when we sit here and talk about the growth in gas demand, the fundamental question I think needs to be raised, how are you going to supply it. Thank you.

MR. MILES: Thank you very much, Mr. Pursell. Our next speaker is Toi Anderson, Manager of Project Development Southern Markets for the Williams Gas Pipeline.

MS. ANDERSON: Thank you very much. Am I on?

MR. MILES: Turn, it should be on.

MS. ANDERSON: Hello?

MR. MILES: Yes.

MS. ANDERSON: Okay, I'm on now.

MR. MILES: Move it closer. Just bring it closer to you.

MS. ANDERSON: All right. Good morning. I'm very pleased to be here. I'd like to thank the Commission for hosting this meeting. And I'd also like to thank everybody in the room for being here. It's a great opportunity to put all pieces of the solution in one place.

I just have two slides and up until David's comments, I was very, very pleased about everything that everyone said. You know, when you prepare slides you want to make sure that the story you tell compliments everyone else's story. I want to talk a little bit about the markets we serve. What I have to say is very evident and it's already been said by previous speakers, including Jeff. I represent to day all of the pipeline companies in the southeast. I work for Williams but I think all of the pipelines have done an outstanding job as far as adding

additional capacity. As far as the markets that we serve, it's very evident that our growth has been power generation. We've also had growth, as far as our residential and commercial customers are concerned.

My last point that I want to make for this slide is that in the pipeline expansion projects that we've had, our customers have stepped up for long term contracts and I think that's really important. When your building incremental capacity that you have a long term commitment for the power plants that are being built. So, we've enjoyed the fact that parties have stepped up for contracts. And my range, when I say long term, is ten to 20 years.

The commitment that we've made so far, there's a great story to tell as far as the history is concerned. But there's an even better story to tell as far as what we've done for 2000 to date. For 2000 to date, we've added quite a bit of capacity. We've added approximately two BCF to the market in transportation capacity. When I say we, again, that's the entire pipeline industry. And when you look at what we're doing for 2003, we're going to add an additional 1.5 BCF as far as capacity is concerned.

Looking at the projects, and this does not include open seasons that have been announced. These are projects that have been filed with the FERC. And so there's a wealth of capacity that's being added for, if you look at

the open seasons that have been announced. We're going to add an addition 2.5 between 2003 and looking at 2005.

Now, David did have some comments about, you know, if you're looking at power generation, where do you get the gas from? And I think that's a very realistic question but I also think that there is a good story. I don't have the story myself but I think in past presentations that I've heard, one particularly from EIA is that there is an optimistic view as far as getting natural gas to serve these power plans.

So, I want to encourage and also get to take the opportunity to thank the power generation market. I think natural gas is a good answer to providing our energy growth. And I think that, if you look at some of the studies that have been presented, as I said EIA in particular, that there is opportunity.

I also believe that there, you know, what he's saying is true. There has been a lot of drilling activities and you haven't seen the results that you would expect from that drilling. But I do think that LNG, I don't have the numbers of all of the LNG projects, but I do think that is going to be a short term solution.

So those are my comments and I look forward to answering any questions. Thank you.

MR. MILES: Thank you, Ms. Anderson. Our last

speaker is George Grey, Vice President System Optimization for Sequent Energy Management. Mr. Grey?

MR. GREY: Good morning. Before I get into my prepared presentation, I wanted to just say Sequent is representing, we're owned by AJLR and we're representing the local distribution company, Contingant, as part of the mix in this energy infrastructure forum.

Excuse me. Before I go into the main section of my opening remarks, I'd like to talk a little bit about the infrastructure issues on a macro level, some of the gas issues.

First, natural gas infrastructure development, as Toi alluded to, has been very significant at the interstate pipeline level. That's our view. Also, in addition to that supply source, existing interstate and local infrastructure designed for winter peak loads does provide significant additional capacity to serve summer peak loads for electricity generation. That being said, summer load factors are tightening somewhat as further power development takes place.

Third, further infrastructure is needed to accommodate LNG growth. And this has been talked about a little bit on the panel this morning. Movement of LNG source supplies from the east coast to end points is complicated greatly by lack of infrastructure and also by

existing LDC long term contractual commitments.

Finally, the regulatory process complicates LDC participation in a lot of these infrastructure development. And also capacity additions and capacity restructuring are complicated as well.

Okay, this last point leads to my, I guess the main point of my discussion, which is the LDC regulatory interface. The first question I'd like to address is how are the LDC's infrastructure needs faring under current PUC supervision? The answer depends on your perspective. From an LDC perspective, it is often difficult to participate pro-actively in expansions under current regulatory guidelines. As a result most of the recent infrastructure development has occurred directly between the major interstate pipelines and independent power producers. In the southeast a large percentage of the expansions have been supported by new power load only.

Regulatory approve cycles often limit LDC participation due to timing constraints. This often results in capacity coming on stream without LDC support. When LDC capacity is needed at a later date, these service expansions are often smaller, a little bit less efficient and more expensive than those needs based on, you know, overall regional needs.

The PUC's focus can be short term and impacted by

political time tables as opposed to the long term requirements needed for new infrastructure. Providers in infrastructure are driven by investment cost criteria which have very long, 15 year, time horizons. And a lot of time that's not consistent with, you know, the term of service.

Also, in deregulated gas markets where the LDC shares or does not participate in the sales function, marketer serving incremental load with currently available infrastructure. The needs of the marketers are often localized and fragmented while the LDC view is system wide. System wide improvements often need the support from regulators to be added to firm rate base. These opportunities need incentives to create win win scenarios to further develop infrastructure. This is especially true because the LDC retains the obligation to serve all customers despite the fact that many of the retailer customers being served are not their own.

Additionally, consideration of the economic tradeoffs relating to infrastructure costs has often met with regulatory resistance, both distribution system upgrades required to maintain service and new capacity additions must be considered together on a total cost basis to properly evaluate the economics.

Lastly, in some regions power loads are encouraged to bypass the LDC. The LDC has little or no

incentive to serve using existing utility assets under disproportionate revenue sharing arrangements.

Given all these potential difficulties, how should PUC's revise or alter their regulatory approach to take into account development of LDC's infrastructure needs? I think first they should capitalize and find ways to provide incentives to LDC's to use their infrastructure more effectively. Under the current framework LDC's see potential devaluation of their summer capacity while being required to obtain winter peaking on a margin.

Secondly, modification of regulations to consider the realities of current business and commercial practices would be helpful. Regulatory consideration of economic tradeoffs is one area in need of special attention. Finally, the greatest need is to provide more freedom to pro-actively manage LDC capacity needs. This would include freedom to participate in business ventures which help develop new infrastructure as well as work with existing providers on a more proactive basis.

Thank you.

MR. MILES: Okay, thank you, Mr. Grey. And the last few remaining moments that we have, I'd like to follow up with something that Mr. Boston raised. You talked about reliability. Reliability to pass and it was always assured. Reliability in the future, you don't have the same level of

comfort. And have Mr. Newman talk about that and see if there's some way we can, you know, integrated that with the gas part of it. Is there a connection between the two? Is it simply an electric problem or is there also a related gas issue involved?

MR. BOSTON: Let me start off with --

MR. MILES: Microphone? Can you keep the microphones on back there?

MR. BOSTON: Hello?

MR. MILES: Hello. They're on.

MR. BOSTON: Let me expand just a little bit on what Bill was saying. If you look at the nation as a whole, and especially the eastern interconnection, the lost of 765 line segment, normally the Bakerbroadferd that comes up out of Com Ed all the way down to Virginia, the last segment is the largest contingency in the eastern interconnection for the electric system and is the most probable cause of a voltage collapse.

If you look at the alignment of generators along the gas pipeline infrastructure with no storage on the ground, the Board of Directors, and I was at the last NERC Board meeting, the Board of Directors of NERC has instructed the Reliability Assessment Subcommittee to try to evaluate the impact of a lose of a single pipeline in the nation.

The most likely one to cause problems is the one

that Bill referred to that comes right up through south of Birmingham to Atlanta up the east coast. There is so must generation aligned with that pipeline. We're very concerned of what could happen if there was an interruption of gas supply on that line.

So, that's kind of where we are. Let me turn it over to Bill about the concentration of megawatts.

MR. NEWMAN: I agree with Terry. The mike is working? I agree with Terry that there is some concern for reliability. And it's in a couple of areas particularly the event he related earlier where I think we were marginally, we as an industry, were marginally able to control the electric system. And without the information that's been provided through electronic tagging and so on, I don't know what you've done, Terry. We faced the same thing in 1996. You didn't have those tools. Had we faced a tougher version, it would have been a real mess.

So, some steps have been taken to handle that. But the reason I mentioned earlier in my comment about RTO's operating the electric system within their bounds, you can send all the economic signals you want to. You can build a plant wherever they want to build and try to build all the transmission system you can. But that physic that Terry talked about has to be on it and in real time. The operator needs to be able to manage that system. It was near out of

hand in this particular case. And he had, those operators had the freedom to operate. So, I'm concerned about that.

But I have to assume the RTO's will be able to operate the electric system. Do you need to build more transmission for reliability? Terry's case is clear. In our region, three billion dollars over five years. Yes, you do.

The bigger question I think's been addressed here, do you need to build super highway system Terry's talking about to exchange large amounts of power and essentially eliminate congestion for all hours of the year. I'm editorializing a little bit but I've heard comments that led me to believe that there's a lot folks that support that. My answer to that is clearly not.

Concentration of generation, when you have all the generation in one place, and I mentioned that in my talk. Would like to elaborate a little bit. It is clearly not the most reliable way to run a system. It is just not. Put it all at the well heads, you've got big problems. You could have one tornado, and we have lots of those in our area, take out two or three major transmission lines. You could have a lose of a pipeline. And if you lose a pipeline, Terry mentioned, that was a very high contingency, I mean, a high risk contingency.

So, distribute the generation, provide the

pipelines and I hope somebody's building some coal, some coal fired units or a way to store natural gas. Just in time delivery for natural gas plus just in time delivery for electricity when one depends on the other, it gives you a double contingency right there.

MR. MILES: Commissioner Massey, you had a question. Could you keep all the microphones on? All of them on please?

MR. MASSEY: I'm on now?

MR. MILES: Yes.

MR. MASSEY: Oh, I am. Aren't you guys making a case for a large southeastern RTO that covers TVA, the Southern Company and others that can plan for the whole region and take into, that is not controlled by merchant interest and that can plan for the entire region and make decisions and recommendations about the infrastructure for the entire Southeast Region and not have a fragmented planning process? I mean, you seem to be making a good case the vertical integrated utility does a good job of planning. But if we move to a market based environment, isn't an RTO planning process that actually works that covers a large region a good solution?

MR. NEWMAN: Mr. Massey, I think that's a conclusion you could come to pretty easily. Whether it's one that involves TVA and all the utilities in the southeast

or whether it's two or three or whatever. The key issue there is planning, the coordination of planning. In the days past, which we bemoan now about not having coordination, we had major construction between our utilities for seasonal exchanges of power and reliability and so on. Is it optimized? Maybe, maybe not. I understand your point about could you do a better job if you coordinate? Well, do you need three RTO's to coordinate or can you do with the existing structure? That question's left to be debated.

I think it hasn't been a terrible mess at this point. I can point to major ties, the ones before Florida and Georgia and the ones between us and the ones between TVA and Entergy. It does seem, though, that you would have a better coordination of that planning if you had a few entities that did all of that.

It does not address at all the question of generators not seeing locational signals. It doesn't touch that unless an RTO dictates where they're going to locate. And if he can't dictate, then he needs to at least be able to say if he locates somewhere very unwise, and I have no merchant interest involved in this, I'm the RTO, you need to pay some more money. I'm not going to load that on the customers in this area just because it's a convenient way to make rates, just to average it all out.

So, I think even if you go that far, you know we're working hard to form a RTO in our region. It's very large in fact.

MR. MILES: Right. I wish I could make that point. I actually agree with you on, I agree with you on the funding question.

MR. BOSTON: Let me make a point to add what Bill is saying here. The problem that we've talked about has occurred since the 1999 -- It's generators that are already on the ground. The ground is level. The iron is sitting there. An RTO helping send price signals is not going to resolve that problem. It's going to take hard assets. We operated our system, we were hearing earlier about Florida. We operated our system last year at 99.99 percent reliable. That's an average interruption time of six minutes and only had two TLR's.

So, we have had coordinated planning through the VST committees and in the southeast. I think your report was very clear that designing a market that can be standardized will help solve these problems. The investment in transmission, in '96 if you had lots of transmission capacity, a strong robust transmission system, people schedule non-firm and you have to refund the revenues at the end of the year. If you have a weak transmission system with lots of bottlenecks, people schedule firm and you get

to keep the money at the end of the year. So the problem is getting the pricing signals so that transmission infrastructure can be built.

MR. MILES: On the gas side, am I hearing that the pipelines are saying that, we're there. We can handle it and we're doing a great job? But for the well part of it, it looks like more needs to be done or not enough is being done in order to meet the needs of the electric system? Is that --

MR. PURSELL: Yeah, I think so. You heard the guys earlier from the EIA say the gas prices won't until 2012. I'm looking at, I called in and my screen is telling me today we have $3.70 natural gas. The calendar year stripped is four bucks. I think we're there. I'm afraid to know what the price will do when it rises in 2012. I mean, the market pricing signals are telling you they're just sitting in the gas deliverability out there to meet the growing demand.

And what you're going to end up doing is pricing out industrial demand. Okay? The market is going to price out demand and the -- electricity prices and higher heating prices. And that's going to knock industrial demand to Trinidad and the middle east and the far east. I mean, that's, the reality is, if you can't grow supply, you can't fuel the demand. The market pricing signals are responding

to that.

MR. MILES: Mr. Revell, you have a comment?

MR. REVELL: Rick, there's another chapter in this book on transition to change. And I see a couple of speakers on the afternoon panel but it, but I'm compelled to make the point here. On the environmental question, we have to be very careful in which ever model we go to, one or three RTO's in the southeast or ISO's or whatever. The Florida incumbents have 95 lobbyists registered in Tallahassee to protect their interest, to try to keep a stable industry, to get environmental permits and all of those kind of things.

The Sierra Club has gone wild in America. The Autobahn Society, whom I work with very close, have gone wild in Florida. They just announced their against all roads. That we have 50 billion dollar back log but they're against roads. Well, they're against everything we're talking about. So, we need to be very careful with the Public Service Commission in Florida, at least, linking up with you folks when we build these new models in which ever technique, we're going to need 995 lobbyists in 11 states to get a permit for any of these generation or transmission facility. And if you don't have that local clout, it'll bog everything down.

The Sierra Club will shut down everything we're

talking about. So, let's be sure on the afternoon panel and maybe a specialty seminar some day we talk about the environmental impact question. They have told me, I'm an environmentalist. I have a home in the Florida Keys. We raised our kids in the woods and the water and all of that kind of stuff. But they have told me they will lie, cheat and steal to get their ways.

MR. MILES: Mr. Boston --

MR. NEWMAN: They're lawyers, aren't they? Mr. Moderator, may I ask a question, please?

MR. MILES: Let me go back to Mr. Boston then we'll get to you, sir.

MR. NEWMAN: Okay.

MR. BOSTON: I said and took notes carefully as David talked. He scared the heck out of me on the $4 natural gas in the ground. There's 200 years of $1.50 hole in the ground that's getting six percent more efficient every year. 92 percent of the nation's new generation is all natural gas. 92 percent, nuclear is wrong. 92 percent gas is wrong. 92 percent solar is wrong. We've got to get a diverse fuel supply for the nation's generation if we're going to have a reliable grid.

MR. MILES: Commissioner?

MR. CALLAHAN: Walter, I think you made a great point and I'm glad you said what you did because I was, had

something on my mind. Bill, and please understand I'm taking the Devil's advocate side here. You know I'm a strong proponent of participate funding. But economics doesn't solve all our problems because what sometimes makes economic sense is not necessarily in the public good. And what is necessarily in the public good does not always make economic sense.

So, my question to you, would it not be better to have, when you take in you've got to have gas infrastructure pipelines, you've got to have transmission and you've got to have generation. And we all agree that it's sited in the right place. But maybe sending economic signals is not the best way to site it. Maybe the best way to site it is having this RTO plan everything, much like we do in our integrated monopoly right now. And say if you're a power market, if you want to come in this region, bring us your plans on where you want to put your plant. And if it goes into our grand scheme and we think it's in the public good, then we're going to socialize all these, all these costs are going to be socialized because it's for the public good. And if you build and we approve your site, then you can go there because it's for the public good and we'll go with that.

If you chose to go another place, then you've got to pick up the tab because we don't think it's in the social

good. At that point you're on your own because you're making an economic decision that's not going to benefit this region but you think it's going to benefit your company for whatever reason. And that's your business. It's your business, you do what you've got to do.

Would that not be a better structure to do this because, number one, that would take care of a lot of deciding, designing. It would ensure public benefits. It would ensure other concerns such as environmental concerns and other issues that may raise their heads. It would give all of a sudden a regional wide planning aspect to make sure we don't have guys going out and putting all the plants in north Mississippi when all the power's needed in central Florida. Just what's your thoughts on that?

MR. NEWMAN: I know most of the things and I've gone over several of them. I talk too much. But I can get really enthusiastic about doing exactly what you said. And I made an assumption, hoped I get to elaborate on it. I made an assumption that the states would still be involved and there would be things for regions within a state that people would push for.

One is some fuel diversity. You may feel a responsibility for making sure you have security of energy in that area. Economics is the thing that we have of a common language. So we throw economics out. But I would

have assumed all along that every state commission would have a strong voice in what that RTO did, including all the things you mentioned, still talking primarily about economics.

But I have to go back to what Walter said. If you think the opposition is tough to building a transmission line where you see a definite need, I wonder how tough it's going to be when you go out and build one that you've not demonstrated that that's near the optimum and serves that purpose you're talking about. I'm not sure that I even have my heart and going one that I can't point to, and I've tried to do this many times, that I can't point to and saying it serves some good purpose that I can predict that I can anticipate and it's more than just short run marginal cost economics.

I agree with you. You didn't say anything I didn't agree with.

MR. CALLAHAN: And I agree and that's why I say, that's why if you look at participant funding in a skeptical kind of way, that's where it falls short because participant funding says if you've got the money we'll build the line regardless of whether it's for the public good or whatever. If you take it into the grand scheme of things and say we're going to socialize everything but we're going to make sure that everything we build is going to benefit this region and

the folks in this region. And if you chose not to go to our master plan for whatever reason, then you're on your own and you've got to pick up the tab.

MR. MILES: Chairman Wood, did you have a question?

MR. WOOD: I do, I actually had a different one but I'm going to ask Michael. But don't you, as the siting authority in the state, have the right to say that line ain't going to work for whatever reason?

CALLAHAN: All states are not created equal. In Mississippi we have, we are the alpha and the omega when it comes to siting and generation and transmission in the state. In some states, and I think Alabama, Jim Sullivan said you've got county commissions deciding when and where to put power plants. And they have no idea of the giant scheme of the region or how it's going to affect anything else. They're looking at tax basis, revenues and job. And Arkansas, Sandy just said, nobody decides.

So, as you go from state to state, it varies. In Louisiana, they're like us. They decide. So the problem is in states like Louisiana and Mississippi you do have the Commission looking at that. But when you break this out and we no longer have the monopoly, we don't know, I mean, these guys come for us to build a plant. They don't know where the electricity's going. They don't have any firm contract.

What are we going to say? All right, unless you have a firm contract and can tell us where this power is going to go for the next 20 years, no more plants. You know, I don't think these guys want that to happen. I certainly don't want that to happen. So, I mean, you know, again, and I'm kind of going back to the way I thought because I am a big proponent of participant funding. But I don't think participant funding is the solve all to all our problems when it comes to RTO's. There's a lot of issues about RTO's and about transmission infrastructure.

And I agree with Walter. I don't care, we could have billions of dollars and we can have green lights and everything. I think environmentalists and other folks are going to fight us. It may not be possible to build transmissions. I know my chief of staff was on a commission in 1980 when Mississippi Power put the 500 KV line through south Mississippi. And I can assure you there's a whole lot more people now in south Mississippi than what was there then and it caused a blood bath.

And I think as you start to do that, when you start taking people's land and you start building a 500 KV line that may or may not cause health problems and other things, you're going to have fights on your hands. And they're going to go to their congressmen and their senators and their state representatives and their state senators and

their governors and it's going to be a mess.

That's why we've got to have some kind of; you know, it is great to sit here and talk about all the problems. It is good that we're talking about all the problems. But like Walter said, we've got to come up with some answers. It's going to be difficult, extremely.

MR. WOOD: Let me follow up with one because what Terry was saying about, and I read an earlier draft of the DOE Transmission Study that came out yesterday and I wish we could have had copies here for everybody, but they did talk a lot about the use of new technology to already optimize what we've got and use the existing rights a way, and Terry you mentioned some of that. And I'm looking forward to sitting on your side here and getting educated more.

But what are the financial obstacles? And I know TVA's probably got a little bit easier run on getting rate recoveries than maybe Southern does. But take a IOU and a government transmission entity. Talk to me about what is lacking in the current over-arching regulatory and other infrastructure to incent you guys to really test the waters on all the new technology.

MR. PURSELL: Let me touch on it a little bit. There are three uncertainties, I guess, that came out of the de-integration planning between transmission and generation of the curb in 1996. And I disagree with Eric Hearse. I

call it the disintegration of planning between transmission and generation. With the generations all siding along the Gulf state region and there are some states that are easier to decide in; Mississippi and Louisiana, for example. The environmental concerns that you have on siting generation. There's more megawatts going in to Mississippi than there are catfish in Mississippi.

So, if you look at the overall flow of power, it's got to move to the north where there's more population centers. And the line that we have, for example, inter-tieing us and Entergy, there's only one 500 KV line through the center of the state. It will not overload and sag to the ground. It will sublime if all the generation in those states come on at the same time. So, we're going to have to find ways to move power longer distances.

The work that we've done so far, we think to move power long distances, as Tom Edison first said, was the best idea is DC. And we're looking very hard at HBDC on existing rights of way and power electronics. We built the first FAX device, Flexible AC Transmission device in the world on our system. And we're looking at that. It will not give us a hundred percent reserve margin in the transmission system. It will incrementally be evolutionary, not revolutionary. But it will take long haul transmission and using existing rights of way because it's going to be too tough to say

we're going to build a 600 mile new line because people located, they're generation along the Gulf coast.

MR. NEWMAN: I think Terry's answer is great. The thing that would, right now would incent us to make major investment in some of the new technology is just for it to be cost effective. If it's not cost effective and you're building a line somewhere that you could build a traditional technology at a lower cost, who is that's going to want to step up to pay for the additional cost?

However, there is a solid state device. It's test and true that we're looking at now that could increase the ability to handle large amounts of generation in one particular area of our system that, at this point, is oversubscribed. And it looks like it'll be a good solution. There are places where those things look good.

By the way, I think Southern is probably the biggest single funder of Effery and they have lots of research projects on. I don't follow all of them but we are interested in technology and the things that you can do to increase the existing paths. Now, there is a limit to that at some point. If the past today is capable of handling 3,000 megawatts, and that might be two 500 KV lines on the same right away, you're exposure to lose of that means that you must plan for something else to back that up. So it's not free lunch but it may be the only lunch we get is to use

those existing rights of way and to expand them considerably. So we are interested.

One other point that Terry made, though, that he and I differ a little on. And he's operated the system longer than I have. And that is the issue of lots of generation here and expect load to be there. And he's right, the lines will sublime. That means they melt instantly, engineering term, I think. But the thing is, RTO's or whoever's operating the system had best not let that happen. That's a control issue. That's a real time issue. So regardless of what's sitting on the ground and what we planned in the economics, if that happens, the system's out of control anyway.

So I have a little less concern about that but I know he's sitting in the middle and he has a lot more concern for it because I think he's expecting that at times that may actually occur.

MR. PURSELL: Let me add one comment to Pat Wood's question. We are meeting with American Super Conductor and it's a pipe dream but could we pull an --DC to gegawatt super-conducting cable through an abandoned pipeline. For example, where FERC has the right of imminent domain for long haul right of way? So that might be a solution. It would be, it's far out there. It's not going to happen in the next three years as these generators come

on. But it is something that we're working with American Super Conductor.

MR. MILES: Well, with that why don't we take our break, the panelists and everybody. And we'll be back at 2:00 o'clock. Thank you.

(Off the record.)

MR. MILES: Take your seats, please. Okay, welcome back. We're going to begin the second panel. And the panel is going to discuss identifying factors effecting the adequate energy infrastructure investment and alternative actions. Some of the questions that we've asked them to address include why is needed infrastructure delayed or not being built, what barriers have to be overcome, what can state and federal governments do to overcome these barriers, what planning process changes would you recommend to address these issues and do alternatives exist to new infrastructure projects.

We've asked the speakers to try and keep their opening remarks to five minutes. And if they succeed in my suggestions, my job ends right now because we really want this to be an engaging conversation and that's what I've asked them to do. If there's more than one panelist that wants to speak, I'll recognize that but you don't need me to be recognized in order to engage in conversation after the presentation.

And I think with that we'll start with our first panelist. His name is Frank Gallaher. He's the President and also Operations and Transmissions for Entergy. Frank?

MR. GALLAHER: Thank you, Rick. Mr. Chairman, Commissioners, I want to thank you for the opportunity for allowing me to bring Entergy's viewpoint to this important discussion. This is probably one of the most critical issues that is facing the entire industry, and that is the expansion and the funding of the infrastructure for this industry. And I believe that answering the questions that you have posed is fundamental to the policy debate that is occurring in Congress and at the federal and state level as well as the RTO's are being developed.

And with respect to the first question, why is needed infrastructure delayed or not being built, I believe we first have to identify the infrastructure that we're talking about. Based on what we have heard during earlier panels and based on the fact that generation within the Entergy service territory is projected to almost double over the next few years. That is going from approximately 22,000 megawatts to 42,000 megawatts.

It appears, as Bill Newman has already indicated, that there is ample generation being built around the southeast. But when it comes to transmission there are really two types of infrastructure improvements. And I

think these have been touched on as well. There are those transmission improvements that are necessary to continue to reliably serve the load that is located on the transmission system. And then there are the transmission improvements that are desirable from an economic standpoint for a market participant or a group of market participants.

Generally, I think that you will find that the transmission and related infrastructure needed to reliably serve the load is being built. But these reliability projects are not really the ones that are -- in all the debates. The debate revolves around the second category of transmission improvements. Those transmission enhancements that an entity wants constructed to improve its own economics. This includes investments to export power from the area where the generation is being built to regions with potentially higher prices.

For example, the transmission infrastructure build out that will be necessary to move large amounts of power from Entergy's region to other regions in order to increase the price that the seller receives for the power or to decrease the price paid by the load in the other region. Now, Entergy has received hundreds of requests for transmission service, to move power from its region to other regions. However, to date, the entities making those requests have been unwilling to pay the cost of the

transmission upgrades that are necessary to accommodate these transfers. Instead the appear to want Entergy to construct these upgrades and then roll the cost into Entergy's existing transmission rate.

The cost of these potential transmission facilities is not insignificant. In Entergy's control area, we currently estimate that facilities to export even half of the new generation will cost somewhere between two and four billion dollars to construct. The real question becomes if the parties that are requesting these transmission expansions and that will benefit from them are not willing to pay for them, are they really needed? -- the entity causing cost to be incurred be allowed to shift those costs to the other parties. And Entergy respectfully submits that the answer is no.

Now with regard to the question of barriers, it appears to me that barriers to the construction of generation are less ownerness than those on the transmission side. Those transmission barriers include obtaining the necessary permits and rights of way, EMF concerns as well as aesthetic and environmental issues, organized opposition can create both cost and scheduling risks. Now, presently there's also a barrier associated with the fact that under the Open Assess Transmission Tariff there are not property rights. The funding party is not necessarily provided the

benefits of the project that he funds.

Now these barriers will be exasperated if a proposed transmission expansion project does not represent the most economic alternative or if parties that do not benefit from the project are required to fund it. And the state and the federal regulatory agencies working together can address many of these concerns in order to facilitate transmission grid expansion.

But Mr. Chairman and Commissioners, let me be clear that I feel we are at a fork in the road with RTO pricing policy. We need to make the right choice on the pricing policy for new expansion if we are going to reap the benefits of wholesale competition. And there are three alternatives. We can let generation locate anywhere and just roll in the cost of upgrades. We can have the RTO decide where to locate generation. What transmission to build and who to charge for it. But in that case you have to recognize that the RTO will be missing a key part of the puzzle. And that is the generator economics. Or we can send transparent price signals and let the market determine where to locate and what transmission to build. I firmly believe that the third option is the best. If not the only choice, if you want the most efficient outcome and real wholesale competition to flourish.

The Commission has started to head in the right

direction. Implementing a standard market design with an LMP market structure and transmission rights is a critical component in providing transparent price signals and creating the type of property rights. But it only gets us part of the way there. The Commission also needs to get the pricing for the transmission upgrades right. The pricing structure must insure that the cost of necessary transmission upgrades are considered in generator siting decisions and end resource acquisition decisions. The way to ensure this is to require that those entities that will benefit from the expansion project pay for that expansion.

And finally, facilitating a regional planning process is a critical component to ensure the needs of all market participants within the region and all options, including demand side, are identified and addressed in an efficient and economic manner. The broader more all encompassing the plant and project is, the more likely it is to result in the most economically efficient alternative being identified, whether that, excuse me, whether that is transmission, generation or the demand side alternatives.

Thank you, Rick.

MR. MILES: Thank you, Frank. Our next speaker is John Boone, Senior Vice President for Gulf South Pipeline Company. John?

MR. BOONE: Thank you, Rick. First of all I

would like to mention the natural gas industry. Sincerely appreciates focused FERC split on the certification process in the last two years. We feel in particular that pre-certificate filing meetings have really improved the process. And we look forward to working with FERC to continue to improve that process.

In that regard, I'd like to talk about some of the challenges we see the natural gas pipeline industry has in developing new pipeline infrastructure in the southeast. First of all, I'd like to talk about the difference between the new customers that we intend to serve with new pipelines today versus the current customers that built the current or the existing grid. Basically, the new customers are combined cycle power plants.

The customers that built or underwrote the building of the current infrastructure were local distribution companies. And these local distribution companies were regulated. They signed firm contracts with the pipeline for their expanded needs. They got those contracts approved by their state utility commissions. And they typically had very high credit ratings.

Today's new customer, the power plant developers, are spending; well, first of all, they're unregulated and they're spending a lot of money at risk to build these power plants. And typically they're going to be limited liability

corporations whose credit is the plant itself. So there's unique challenges we see serving that customer versus the customer of the past.

Some of the needs, the needs that these new power plant developers have include the lowest possible rates, they need a higher pressure than the local distribution companies needed. And they need date certain in terms of first deliveries of natural gas.

And let me talk about a couple of those in more detail. First rates. A power plant developer could not afford to pay higher rates than another power plant in its region. If they cannot get competitive transportation rights, they're not going to build their plant. So, how does a pipeline developer provide economic efficient rates? We need to do that to have a scaled project, proper scale. It's going to have to be of size that we can get an efficient rate to provide the natural gas deliveries for that power plant.

How do we get that scale? Well, we're going to have to build some capacity at risk. A pipeline developer cannot build a large scale pipeline and have a hundred percent of the capacity sold with firm demand charges from the initial start up of the project. They're going to have to build some of that capacity if it won't be contracted for with the anticipation that they'll be able to sell new

demand down the road.

The problem we have today with that is that interstate pipelines have to sell uncontracted for capacity at cost base rates on an interruptable basis. So, if a pipeline developer comes in, builds a pipeline and half of the capacity's unsold, any new market can come in and get commodity, cost base rates for that unused capacity. And it has no incentive to sign up for long term firm capacity. This, we feel, will prevent the pipeline developers from going forward with the project.

Second is equally important as efficient rates is date certain natural gas deliveries. The power plants that are being built cannot afford to have six months to 12 months delays in their natural gas deliveries. That type of delay in a project like that can just destroy the economics of the power plant. New power plant misses its first summer of deliveries, it'll never catch up in terms of the economic returns they expected to have.

So, if they can't be certain of when the natural gas will be delivered to the power plant, they're not going to build it. And we feel it's very important for the pipeline industry and the FERC to deliver the message that pipelines can be built on a date certain basis and natural gas deliveries can be made to meet the needs of these new power plants.

Any large gas pipeline project has the potential and probably will have some entrenched landowners that are not going to allow the pipeline to proceed. And we feel it's important in those situations for FERC to grant certificates so that the pipeline can use the right of imminent domain to acquire the rights to build the pipeline. With that we feel we can be of a much more certain date of when that pipe can be in the ground. We can successfully contract with the new power plant. And its vital infrastructure can get built.

So, in summary, the two things that we think are vital to pipeline development in the southeast and the pipeline development is needed to provide clean and efficient power to the southeast, we need to have some flexibility with our rate making and we need to have the ability to use or to have date certain deliveries for the new power plants.

Thank you.

MR. MILES: Thank you, John. Our next speaker is Hamilton Buck Oven. He's the administrator for the Site and Coordination Office with the Florida Department of Environmental Protection.

MR. OVEN: Thank you. Since I'm the might say the lone environmental regulator on this group, got a few things to cover. In the State of Florida in the last four

years we have permitted just a little under 18,000 megawatts of generating capacity. We are reviewing now another 8,600 megawatts of generating capacity. So, we are in the process of permitting power plants.

Now, I'm not sure all of them will be built. There is a barrier to wholesale competition in the State of Florida in the Florida statutes. In the Duke New Saburnim Beach case, the Florida Supreme Court held that unless you have retail customers, you can't be an applicant and get a need determination from the Florida Public Service Commission. And without that need determination you can't utilize the Power Plant Siting Act which applies to any steam electric facilities 75 megawatts or larger.

Now, independent power producers can build as much peaking capacity as they want because that's outside of the Power Plant Siting Act. But how much peaking capacity can you actually market. So, although people have permitted those type of facilities, well, not that I can build one with something else again. In some cases they are posturing themselves with a lot of peaking capacity and minimal 74.9 megawatts or less steam combined cycle capacity and hopeful that they can get a contract with a Florida utility and therefore ramp up and go combine cycle. There's a lot of that out there.

There's also an impediment minor but in the

Transmission Line Siting Act that would initially hamstring an RTO. And that an RTO in and of itself right now could not be an applicant under the Transmission Line Siting Act because they aren't defined as a utility. I think that's something that's very curable but that is something the Legislature would have to address. However, an RTO, if and when formed, could come in as a co-applicant with a Florida utility and go through the process that way. That is a minor impediment here in the State of Florida.

Gas pipelines, we do have an intrastate natural gas pipeline siting act which my office administers. It's only been used partially once. We were about two thirds the way through the project, getting it pretty successfully, but the main corporate client backed out and the project went belly up.

The Gulf Stream pipeline has been permitted. It's well under construction. In fact, it's just been about completed. But one thing we've learned from Gulf Stream and previous efforts from Florida Gas Transmission is you pipeline companies, you better look at your contracts for your contractor. You better exercise institutional control because we filed an injunction to stop construction on Florida Gas.

And we came very close to doing that with Gulf Stream because of environmental noncompliance because you

had a contractor that went out and did what they wanted to do, when they wanted to do it and where they wanted to do it. And we didn't care for the pollutions of the water bodies that was going on. And we have taken some enforcement action. And I think, you know, there's a right way and a wrong way to do it. If you do it the way the permit's written, no problem. We'll work with you. That, in and of itself, is what we can do here in Florida.

One thing that the Florida utilities have learned and some of the gas pipeline companies may have learned is an advanced work with local communities and public interest groups is well worth the time spent in avoiding problems in the environmental permitting phrase. I won't say it's quite as bad as Walter Revell indicated out in the Sierra Club being able to stop projects. But somehow the controversial projects can be and have been stopped in the State of Florida especially since the final determining body, the Siting Board, whether it's power plant, transmission line or gas pipeline siting board is the governor in cabinet.

They are an elective body and as elected politicians they are sensitive to public interest. And in some cases, especially the very notorious FBL or -- Diversion Project, which we thought environmentally was pretty good, was highly controversial and it got denied because it was not in the public interest even though it

might have saved the Florida power and light rate payers quite a bit of money. And environmentally, it would have been an improvement over what they've got there. But I say it was unpopular.

There was also one transmission line that got initially denied before the Supreme Court reversed it. Again because of the extreme controversial nature of that transmission line. We have not had any real big ones under that permitting since then. They will be coming. And the EMF is a big bugaboo or scare tactic that people will use even though they really don't want the thing in the back yard.

Speaking of transmission lines and capacity here in Florida, I note that back in the early '90's to mid '90's, the Florida Public Service Commission had a docket encouraging a west coast 500 KV line in the State of Florida. And both Florida Power and Light and Florida Power Corp. are actually looking at that particular line. And then I think one of them backed out because they were afraid what deregulation might do and who's going to pay for capacity on that line. And unfortunately, the lines died and I think it was a mistake. They should have permitted them because Florida growing, the longer you wait the harder it is to put in a line or a power plant or a gas pipeline.

MR. MILES: Thank you, Buck. Our next speaker is

Gini Cooper. She's the Chair person for the Floyd Unified Landowners Association.

MS. COOPER: Well, I'd like to express my appreciation for being invited and being able to voice Landowners concerns. My question is how can landowner objection to facility siting be accommodated while still meeting the objective of constructing necessary infrastructure additions. And hopefully in my talk you'll find a solution.

A holy man and his disciples were traveling and came across a village at war with an army. A disciple asked his master, should we stop and help? And his master replied, yes. The holy man, to which; sorry. The disciple then asked, which side should we help? And the master responded, to both. And I started with this parable because it exemplifies my belief that it's necessary to work with the industry as well as with landowners in order to change the current dynamics between landowners and the industry.

My experience began with this industry as an impacted landowner. I then later became the Chairman of this group. And we're addressing a 30 inch gas transmission line that's bisecting our county. This project is unique in that it's the first to use the experimental need of pre-filing process. And this, we were explained, is intended to increase early landowner involvement in order to mitigate

the impact on the environment and the community.

We agree with this goal and we think that this is the answer. However, we've had some problems with the process. My goal today, though, is to provide you with the information about some of the causes of landowner objection, to identify how the company's approach can actually increase that resistance and objection, and to offer a solution that can remedy the pre-filing process so that it can become a win win situation for both landowners and the company.

When landowners discover that a utility is going to cross their property, they experience a deep sense of lose and it's not only for the land but also for the lose of control over their lives. This sense of lose is especially deep in the Appalachian culture where land and a sense of place is probably the primary value in our culture.

Another cultural value is reciprocity. Reciprocity means that you give what you take. When the pipeline is impacting our lives, it's not just the lose of something, it's the lose of our identity. And what I've observed is that grief is the natural response to lose. So, landowners enter into a grieving process and there are certain stages that you go through. And it begins with denial. It moves to anger, bargaining, depression and finally acceptance.

Now, people can move through these stages in a

linear or cyclical fashion to actually process the grief or they can become stuck in one cycle. And if they become stuck in a cycle, it usually extends the cycle indefinitely. For landowners this cycle is typically anger because anger provides a sense of control, it produces feelings of vulnerability and the overwhelming sadness that comes in a lose. But anger is often a trigger and it will project collective angers, meaning that the company will receive anger about multiple issues, not just the pipeline.

It also leads to black and white thinking and emotional reactivity. And this is not only detrimental to the project, but it's detrimental to the community. I've seen my community split in half and that's what pulled me into forming the Landowner Committee, just to heal my community.

I've observed that it's an approach that a company takes towards a community that feeds and reinforces this tendency to become stuck in anger. When a company is unresponsive to landowners' request for information, when it does not ensure that landowners participate in the process and when tactics such as lying, stonewalling, intimidation are used the landowners become angrier about their treatment by the company than they are about the project. This has been the case in my community. And additionally pre-filing has quickened the process. And that has reduced the

potential for landowners to actually become involved.

The pre-filing manual outlines a number of actions that both the company and landowners can take to improve the level of participation. But the pre-filing process as it now stands does not mandate that the company use those actions or follow those procedures. Company representatives have told us repeatedly they don't have to do these things. We have requested to participate in studies. We've requested maps for properties. We've requested correspondence between the agencies and the company. And these have been denied because they aren't required to provide them for us.

So we have concluded that the only way the pre-filing process is going to be successful and realizing the intent to improve stake holder involvement is to mandate the actions and the approach that a company uses during the pre-filing period. When I spoke last month at pre-filing workshop I learned of the mutual gains model developed by Lawrence Seskine.

It's based on early landowner involvement, sharing of information, participation in decision making and honest communication. These are the needs that landowners have in order to understand the process and move through the grief cycle into acceptance. And if you don't have that acceptance, you get stuck in anger and you get this

emotional reactivity and I think several people have mentioned how it can become a big barrier.

The elements of Seskine's model are similar to the actions outlined in the pre-filing manual. Both have a goal of achieving consensus among all involved parties in order to collaberatively develop a project plan that will reduce harmful impact to the land and to the communities as much as possible. He cautions, however, that it's necessary to use all elements of the model in order to realize his benefits. We saw the importance of this in our community because we had some meetings and we did have some site visits. But it was not enough to build the trust and to ensure our participation.

A genuine commitment to the pre-filing process and this model would have made honesty and trust building a priority in the company's interaction with landowners. Unfortunately, they appear to be following what I've heard referred to as the old model. And this model creates and feeds the very resistance that you're hoping to avoid. I'm not sure why this hasn't been more evident to people but I've been very heartened to learn that there is a growing movement in the industry to use this new model of business that's based on improving landowner participation and it more closely follows the mutual gains approach.

In conclusion, I would ask of FERC that you

mandate the use of the pre-filing manual guidelines and the mutual gains model before using the pre-filing process in the future. I believe that early and full participation by landowners using such a model is the only way you can transform landowners from being a barrier to being an important participant in the siting process.

I would ask of the industry and of Inga that you look closely at your approach towards landowners and incorporate the mutual gains model on a corporate level as El Paso Gas is now doing. The world has become an angrier place and we have to find a way to address conflict without adding to that anger. I hope that my comments will challenge assumptions and open the door to a new model of collaboration.

MR. MILES: Thank you, Gini. Our next speaker is richard Roos-Collins. He's the Director for Dispute Resolution at the Natural Heritage Institute.

MR. COLLINS: Thank you, Rick. Mr. Chair, Commissioners, thank you for this opportunity to provide my perspective today in this conference. I'm here on behalf of the Hydro Power Form Coalition which is an association of conservation groups involved in the licensing of hydro power projects including Alabama Rivers and also the South Carolina Conservation League.

I have three recommendations in response to the

question put to me, which is how to integrate environmental concerns into the planning process for the energy infrastructure. First, you should understand and treat environmental improvement as a desired result not just a concern or a legal constraint. Your own studies as well as those by other federal agencies demonstrate that the environmental benefits associated with our energy infrastructure could be improved and the cost could be reduced over the course of the next generation if the market rules are structured properly.

Certainly our experience with hydro power licensing has confirmed this hope. The licenses that this Commission has issued over the past five years have substantially improved environmental quality at minimal cost to the energy system. What can you do specifically? Assure that the standard market design is non-discriminatory with respect to renewable resources, demand side resources in distributed generations and also improve the method which you currently use to address the cumulative impacts of energy infrastructure decisions. Plainly those impacts cross jurisdictional boundaries.

Second, you should assure accountability for the actual results of your decisions. Now, you currently have a strategic plan and you also have an annual report that evaluates results under that strategic plan. You do this in

compliance with the Governed Performance and Results Act. It's a good start. And what I'm describing takes that good start and adds measurable objectives for the results that you intend to achieve in the energy market. And then over time, contract whether those results are actually achieved.

You can do that across the regional boundaries since our energy system is, of course, national. And then the regional organizations that you are seeking to establish could do the same at the regional level.

Let me underscore, I am not recommending centralized planning. Instead I'm recommending the regulatory equivalent of a business plan where you predict the results you intend to achieve and then you evaluate honestly whether you've achieved them. And if you haven't, you consider whether alternative strategies would be more effective.

At the Northeast Infrastructure Conference, Commissioner Massey, you commented that regional planning process is essential. You said, I struggle with how specific should it be. My answer is very specific. The planning process should result in measurable objectives so that you can actually determine whether you succeed. And then Mr. Chair and Commissioner Brownell you both commented that information is nice but information has to be translated into action. And that's precisely why any plan

that you adopt must then be tracked over time to assure that the actions are successful.

My third recommendation follows on Gini's. And that is that your procedures should be collaborative as a matter of course and contested only as the exception to the rule. Let me begin first with your relationship with the states. You recently established a Division of State Relations and you also established a Federal State Forums anticipatory to the Regional Transmission organizations. Again, good starts.

You need to go further and include or develop memoranda of understanding with the RTO's and the public service or the public utility organizations as well as the environmental regulators to assure that you have working relationships that minimize the transaction cost and maximize the public benefits.

Collaboration also occurs as importantly between the applicants and effective stake holders. And here let me underscore that inertia is the biggest threat to the success of such a collaborative procedure. Such a procedure must be structured to succeed beginning with a mutual commitment by all stake holders to try to reach a result which serves as mutual gains and will be the basis for any needed regulatory decisions. And beyond that you need to schedule and you need drafting procedures that assure that the negotiations

are more than a talking society but actually produce an agreement that you can then use for the purpose of regulatory decisions.

One of the earlier panelists commented that the environmental community will lie, cheat and steal even taking into account the rhetorical flourish that was intended. I respectfully submit that's a tired and helpful as well as inaccurate stereotype. And I would say the same if the stereotype were used with respect to any industry or other constituency involved in the development of the energy infrastructure. And of course that's precisely what collaborative procedure is all about. It's about establishing mutual trust sufficient to make decisions.

Let me close with a plea for continued innovation. You're holding this workshop as well as the prior workshops in the northeast and the northwest show that you are committed to learning from experience. And I think that is precisely the right attitude. I want to underscore by telling a historical story from actually California where one of the first hydro power projects sited west of the Mississippi was built to serve a mine at the town of Body in 1880. They built the line, the project, and then ran a straight line from the project to the mine because they were certain that the electricity would otherwise jump off the line and not reach the mine itself.

I think that many of the things that we know today will prove to be equally primitive as time goes by. It essential that we continue to learn from experience so that we can truly improve this energy infrastructure. Thank you.

MR. MILES: Thank you, Richard. Our next speaker is Christine Tezak. She's the Electricity Analysis for the Washington Research Group for the Schwab Capital Markets.

MS. TEZAK: Good afternoon. Thank you, Commissioners, for your invitation and thank you also to the state representatives who have made time to come and listen to us. We really do appreciate this opportunity.

What I do is I follow how Washington regulation, politics and legislation impact the electric utility sector. My clients specifically are managers of what's called institutional money or mutual funds that any of you and ironically many of your customers happen to hold. And we're a segment of the capital markets that many of you may not be familiar with. And I was delighted that we had not only the investment banking side represented but also what is viewed as the classic shareholder at the institutional level.

What I would like to do today is share with you some of the feedback that I get from that particular constituency. They're often called upon to hold the stocks and bonds of existing companies whether they're members of

the IPP group or whether they're members of the more classical utility environment like Entergy and Southern and the other companies that you're fortunate to have down here in your area.

Why is infrastructure, needed infrastructure delayed or not being built? Well, according to most institutional investors there is transmission being built. It just tends to have the tendency to be within existing service territories and for native load and is often successfully permitted and incorporated into tariffs. It's the intra or interregional transmission recovery that has become so uncertain, particularly in the eyes of institutional investors.

And it's the fact that there is no clear revenue stream. I.e., what will be the tariff? Who will it be collected from and on what proportion? That's unclear. Therefore, I think there are very few utilities and I think Entergy could agree with this or the gentleman from Southern, it's really hard to go and tell your investor base that you're going to put several billion dollars worth of iron in the ground when you don't know how you're going to pay for it.

And that's simply not so much what you're going to charge but where the revenue stream comes from and how it's going to be collected. Unfortunately, that is the

legacy of the 1992 Environmental Policy Act, which it began the transition to unregulated wholesale markets. And it's not so much in my view that any company has done anything deliberate to not do that. It's simply the incentives and the alignments that began beginning in 1992 didn't foster that as the most efficient internal investment for a company.

So, what barriers need to be overcome? In the view of investors, clarity on tariffs under the new order would do a lot to substantially boost their confidence particularly in investing in transmission. A lot has been made, and I've been asked a lot about why Wall Street wants to see a 13 percent or higher return on investment for transmission. And I sure understand your confusion. It's not like we're building something new or that it's different.

However, I will tell you it's coming from this lack of availability of information on how the tariff's going to be structured, when it will be place. We're still in the developmental phase of are we going to regional tariffs or not. Are they going to be localized? Are they going to post stamped? Are they going to be license plate? In all honesty, Wall Street doesn't really care because there's an appetite for different levels of risk. If you have very socialized, quick recovery, you'll get cheaper

money. If you have more performanced base incentive, long recovery times, it will be more expensive. But you have an offset that perhaps that will drive more efficient investing.

It's not so much that there's an approach that should be dictated for any reason. It's simply the fact that decisions have not yet been made. And in this, at this point I think that there is an opportunity for PUC's to actively contribute to recovering the confidence that investors would like to see in the sector. And that is by being clear in your message as to what is the service that needs to be delivered to your base and what you would like to see being captured in that.

And this is difficult because federal and state governments do have different priorities and it is a challenge to work together to define the goals. But one thing I noticed on the earlier panels, when we had the exchange particularly with Mr. Kimmelman from Goldman Sachs, is that if volatility that is something politically unacceptable to you, there are options in between a fully regulated monopoly and an unfettered market.

There are programs like Installed Capacity. There are programs for capacity payments. Clear prudence criteria could do a lot, would have done a lot in California if market participants believed that they could contract on

a long term basis. Or prudence criterias that would encourage the adoption and installation of innovate technologies.

The planning and process changes that I've discussed with my clients that they would like to see is something that they find themselves guilty of themselves. And that is the conflict between short term demands and long term realities. There's not an investor I speak to that doesn't tell me that he invests for the long term. But when I get up to get out of the room, every one of them wants to know what he should buy in the next 90 days.

State utility commissioners are often under a very similar sort of strange incentive program in the fact that they're called upon to make very long term decisions but they would like to also be able to deliver something constructive to their constituencies to show that they've done something for them on their behalf in the short time that they have spent in that particular role in public service.

It's difficult. It's risky and it requires leadership to step up and make a decision, especially when you might not be able to be around long enough to take the credit for it. But as I said, this is something that even the investor base I speak to would say that they are equally guilty of.

The RTO planning process, I think, you know, offers a lot of alternatives to incorporate widespread decision making not only in the wiser siting of generation and transmission but also to more fully integrate, as Mr. Collins suggested, what environmental impacts really cost to the system as a whole. One thing I think would also be useful in the planning process is to focus on the long term as far as what's the greatest bang we can deliver to the customer for the buck as opposed to how big is the rate we can deliver next week.

And do alternatives exist to infrastructure projects? I would say the thing that comes up most often in discussion with investors is why isn't there more demand side management. If there's elasticity in the demand curve, then that's something that will really harness the ability of businesses to run away with your market. And that's a challenge and one that is probably best served by people like you at the state level. And that is education. One of the things that the gentleman earlier spoke about is the absence of a good understanding among a lot of consumers for what their energy marketplace is.

FERC can do a lot of outreach. But there's nothing that they will be able to accomplish that will come close to what you have the opportunity to do since your face that is more familiar to the customers. And so those are

the two things that I would say that my investors would offer to you as steps along the way, certainly not a comprehensive solution. But things that they would see and recognize as contributing to a more positive instead of negative investment climate.

MR. MILES: Thank you, Christine. Our next speaker is John Rohrbach. He is the Senior Engagement Manager for Navigant Consulting.

MR. ROHRBACH: Thank you very much. I'd like to say hello to the state commission. I've worked at three state commissions. I understand where you come from. My remarks, briefly; put up the first slide, thank you, touch on a couple of topics. I looked at NERC's planned investment for the southeast region including Texas, and I also left Texas out because I didn't have data to complete the study.

But basically if I look at the region, NERC shows about two billion dollars in investment plant for this decade. Now, I understand the gentleman from Southern had a little higher number. That's fine. We can assume that these numbers go up. Say, it's really four billion. How much do we really need for the region on transmission investment?

All right, put the next slide up. My friend Eric Hurston at Oak Ridge, he's formally at Oak Ridge, he wrote a

paper for EEI two years ago. He basically estimated that there's roughly 56 billion needed in the U.S. for replacing obsolete and worn out transmissions lines as well as meeting future demand over the next year, the next 10 years. So, I tried to apportion this to the southeast. And I used two methods. I use the ratio of circuit miles in the southeast, CERT and FRCC specifically, compared to circuit miles in the U.S. 230 and above. And I also used the ratio of retail rates, bundled retailed rates in the southeast compared to total retail expenditures in the U.S.

Using both of those methodologies, I roughly came up with eight billion of needed expenditures in transmission, 230 JB and above can be replacement of existing line and obsolesce and wear and tear and retirement. And that I needed roughly 11 billion to meet growing demand in this decade. So, if we assume we're at four billion in planned transmission investment, there's a few billion dollars that has to come from somewhere.

Again, some of that could be met by, you know, better management if the Arcio comes into place. Maybe we're getting more efficient with our use of our transmission lines, and I believe we are. But you have to ask the question, what would happen if we really needed to make this investment. And this is just to meet growing demand. This is not to get beyond that. So, assuming we

have to invest several billion dollars in the southeast over the next decade, what does that impact?

Well, if we don't have any growth in consumption, it's less than a five percent bundled rate rolled up impact over the decade. That's a gradual rate increase over the decade. I would submit that is a first step, given what we've seen with generation roll out where CERC also, I'm sorry, NERC also deposits that there's possibly roughly 200,000 megawatts at least in various stages of design or planning and thought in the southeast. That's a hundred billion dollars of potential desired investment. Of course, not all of it will be built. Not even close to that.

But if there's a hundred billion dollars that people have at least, you know, thought about and have submitted plans to invest in the southeastern generation, truly over a decade or more, maybe 15 years, we can invest a ten billion in the southeast and including Texas roughly 18 billion. I understand Texas has a new model. I would urge the state regulators to look at where they appropriately deal at the ercot level with new pressure transmission. I think that's a good model to look at.

And the only thing I'd close with is what is the cost of not doing this? I think what we've seen is that there's an acetous impact of not doing things ahead of time, especially in electricity. And especially with

transmission. You may not see the impact now. It may get swept under the rug but some day it'll rear up. And given the long lead times for building new transmission, I would exhort all the parties in this room to at least earnestly, as Richard says, deal with the facts. And I believe the facts do suggest that there's a need for a significant investment in transmission.

The only other thing I'd add is I think historically as people have, EEI has studied this, we're really in the position of catch. Up for years there's been a decline of investment according to different ratios in the industry. So, it is border line crisis and I'd urge our attention on that.

MR. MILES: Thank you, John. Our next and last panelist is Steven Gilliland, a Senior Vice President for Asset Management, Duke Energy. Steve?

MR. GILLILAND: Thanks. It's great to be here. It's nice to have the opportunity to address the commissioners and the audience as well.

The speaker this morning, Mr. Kimmelman, said that the industry is at a crossroads. I believe that to be true. Truly the structure of the industry is cyclical by its nature and by the types of designs that are coming in here. This is a pretty deep troth and I want to give you some Dukes statistics, most of which, hopefully all of which

are made public. If not, I'll hear about later.

In the next 60 days Duke is going to put 11 plants into commercial operation aggregating about four billion in investment. This is just the unregulated power generation piece which is in the unit I'm in, that I'm talking about here. 6,700 megawatts; about a quarter of that is in the southeast. For next summer, seven more projects, three billion of investment and another 4,300 megawatts. At this time we should be putting into construction that level of projects or whatever level of projects we're going to put in for the 04 summer in service.

Anybody want to have a guess on how many we're starting? Zero. So, here you have a situation where you start at four, you go to three, you go to zero. We're not the only ones that are concerned about the environment, the business environment that's being created. Uncertainty drives up the cost of capital. It drives away capital. And anybody who thinks that this industry is not competing on a worldwide basis with capital for other industries; for consumer goods, for hamburgers, for hard goods is sadly mistaken.

What do the providers of capital want? And let's talk about the providers of equity capital as one segment and the providers of debt capital as another segment. Providers of debt capital want the timely repayment of

principle and interest. They want it when the borrower agreed to paid it at the amount that the borrower agreed to pay with a very high probably of payment. What's high probability? 99 percent plus. They don't want to have as much as one percent in arrears. That's what debt providers want.

Can they take their money and put it into debt instruments in other industries? You bet. People did that today. I don't know who they were but today somebody sitting in an office somewhere, maybe, Christine, somebody in your office looked at all the places that suppliers of capital who wanted to invest it in debt instruments could place that capital. They looked at our industry and they said, no thanks. It's not time now. I'm going somewhere else.

How about equity providers? Equity providers have the same choice and while Duke fortunately has been amongst the best in the group, there are a lot of folks in this industry that are down 80, 90, 95 percent from a year, year and-a-half ago. And that's not, in my opinion, totally because their creation of a business model that doesn't work. It's because -- the story that they are selling is not as attractive of a story as the story that exists in some other industry, in some other country, in some other currency.

And money which is the must fungible of commodities disappears. It disappears overnight. It goes to other industries regardless of FERC's ability or desire to stay in this industry. It goes there regardless of company management's desire to have it stay in this industry. It goes where it thinks it can get the highest return. And we should never lose sight of that. That's a fundamentally important thing.

There's no free lunch. So, the rules and regulations that are created collectively by all market participants either attract capital or they drive capital away. And if we drive capital away, there just won't be any capital for investment at the level of which prior speakers have discussed. There won't be any capital to fund the investments that are required. And I don't think that any of us want to see the lights go out and see the cost be driven up.

Let me see. I would say, in preparation for this I polled about a dozen bankers with whom Duke has a relationship. And there was one thought that came out very clearly. And it was a feeling by those lenders in particular, and it's also my feeling as an equity participant, that the economic up side in this industry is currently viewed as being capped and that the down side is viewed as being unlimited. And that's not a good economic

bargain. And part of it's probably the industry's fault. Some of it's probably not the industry's fault. We need to repair that. We need to fix that.

The industry equity providers are not saying that, at least this one is not saying that we have to have any type of a guaranteed return. There are risks that we have proven. We are very capable of evaluating, one of which I would just throw out being the relationship between supply and demand from the retail and wholesale customer level. That's a risk that businesses that are in the business like Duke is in can evaluate and can price appropriately.

I'll conclude with a statement that I dug up. It's now two years old and it came from Chairman Allen Greenspan. And he was talking about financial meltdown in the Asian marketplace but there's some segments of his remarks that I thought were appropriate and applicable to us today and I will read them.

Uncertainty and retrenchment have escalated. The state of confidence so necessary to the functioning of any economy has been torn asunder. Fears have become contagious. It does not appear to have resulted wholly from a measured judgment that financial forces have turned appreciably more adverse, but it is more based on a visceral engulfing fear. The onset of uncertainties that destroy

previous understandings of the way the world works. That has induced massive disengagements of investors.

In all aspects of life, when confronted with uncertainty, people tend to withdraw. Vicious cycles are evidently emerging more often. For once they are triggered damage control is difficult. Once the web of confidence which supports the financial system is breached, it's difficult to restore quickly. The lose of confidence that one understands the dynamics of the systems of which we are engaged can trigger rapid and disruptive changes in the pattern of finance which, in turn, feed back on exchange rates and asset prices.

At one point, the economic system appears stable. The next it behaves as though the dam has reached a breaking point. The more extended the risk taking or more generally the lower the discount factors applied to future outcomes, and again the speaker this morning addressed that, the more vulnerable our markets to a shock that abruptly triggers a revision in expectations of future needs and sets off a vicious cycle of contraction of financial and product markets.

We are in that cycle. We are deeply in it. We should be concerned about it. And I think some of us in this room have something, maybe all of us in this room have some role to play in fixing that environment. And I would

urge us all to try to pursue that goal.

MR. MILES: Thank you. Steve, if I could suggest two areas; it looks like I lost my; hold on a second. If I can suggest two areas of discussion. One might include a follow up to points made by Buck, Gini and Richard about the collaborative process, advance work with community, pre-filing process. And maybe, John, you can touch upon that. How is the pipeline industry addressing that, if it is addressing it at all? And then I think, Christine and Steve, when you talked about certainty in financial market. Frank, if you want to build a transmission line today, how do you address the concerns that were just expressed by Christine and Steve and earlier by this morning's speaker.

Who wants to go first?

MR. GALLAHER: Rick, I'll try it first. One of the things that we have learned over the years is just what has been articulated. It appears that when you are going to build a transmission line, the first thing that you really need to do is visit with the effected parties. And the effected parties are the landowners, the regulatory commission that has the jurisdiction over that particular transmission line and anybody else that might be affected by that, by that line. Environmental agencies and give those people the background, what you're going to do, why you were doing it and what the process is that you're going to follow

to receive input relative to how this is going to impact the various stack holders.

And we found that by early involvement we are able to mitigate the delays and cost increases as a result of any organized opposition. An example that the Chairman may be well familiar with is a project that we had in Woodland, Texas, which is just north of Houston, where we were going to build a 138 KV line through that residential neighborhood to solve a local problem. And we were not as diligent in getting up front input as we should have. And soon there were thousands of bumper stickers that sprung up that said, underground or go around. And we finally went around. And after getting the input in determining that route, that was the most effective route for all involved. And if we had done that in the beginning we would have been able to save a few months off of that project. Involving affected entities early is the key to avoiding problems down the road.

MR. MILES: John, did you have a comment on remarks made by Buck, Gini and Richard?

MR. BOONE: Well, yes. We totally support the pre-filing process, a collaborative approach to building these projects. I mean, we use, I mean, we're out trying to market a project right now in the southeast, a big pipeline project. And what we tell our potential customers is the

way we're going to get this project approved in a timely basis is by using that process. By getting way out in front of the project, working with all the communities, all the landowners, understand the problems and issues and address them way ahead of the project. So, we do support that process and we'll continue to support it.

You know, we don't understand, and Gini and I were talking about this earlier, she can comment on this better than I can because she's right in the middle of it, why the current project that's using the pre-filing process is not going the way you would think it would or is anticipated and may not be speeding up the process right now. But in general our company, and I think 99 percent of the industry, supports that type of approach.

MS. COOPER: Well, what I can explain in our community, I'm not, my understanding is that the pre-filing did not start at the earlier stages of planning. So, it may not really be a true, a true example of pre-filing. But what hasn't worked for us is that it has not been collaborative. We wanted to become involved. I think what happened is there is a group in a neighboring community that has turned into a hate group. They started another chapter in our community. And I think there was some defensiveness on the part of the company because of the reputation of that one coalition.

What I think, where I think pre-filing, if it was used according to the pre-filing manual or Order 608, if collaboration had begun in the very, very beginning, the early stages of the process with landowners, with the community members, there would have been understanding of what was going on. There would have been more acceptance that this is needed and it's going to happen. I've learned a lot just by attending these two workshops on the need that's out there. Need is a very important thing to convey to landowners because you're taking their property. And in an agricultural area you're taking their livelihood.

Information is what moves people into a thinking stage out of reaction. But I think that, I think there's, there's some hesitancy on the part of companies to share information and to help get the neighborhood or the community organized for fear of this resistance. But my belief is and what I've seen in my group, which we did end up having to separate from the coalition because their militancy.

But the more information that we've gotten, the more able we've been able to work with the process. So, I feel that if, if this process was begun very early on, what I think it would do to contain that small element that does become resistant and is not going to change their minds because they've taken everything that the government has

ever done to them wrong, that their neighbors ever did to them wrong and they've projected it onto this one project.

So, you're dealing with an almost irrational level of anger. But if you start with the community in a, I think Suskine in his book, "Dealing with an Angry Public", he talks about having a community advisory board. Then you would have other people who would balance that small element. So, you might have actual elected officials in the community or you might have a pastoral association. And that's going to help counterbalance the small group that could grow and become a fringe element. But you're going to have to catch that early because once it starts they're very difficult to stop.

MR. MILES: Steve, could I cask you a question? On the financial end of it, is needed infrastructure being delayed or not being built because of the concerns of the; and Christine, maybe you can comment on it too, because of the financial markets?

MR. GILLILAND: The banks are open for business and all of them would tell you that. Since September, fees have gone up, spreads have gone up. Terms and conditions have gotten tougher. And most importantly, the sparks spread or the economic value of, and I'm addressing generation here, the spark spread and the economic value of new generation has dramatically fallen. It is woeful

compared to where it was a year ago. And so while the doors are open, the likelihood of essentially clearly the hurdle rates is pretty dim.

On the electric side, I would say that the problem, on the electric transmission side I would say that the problem on the electric transmission side is that you can't demonstrate to the providers of capital how they get their money back. You just can't do it. It's like trying to swim through mud with your eyes open.

MR. MILES: Okay, and maybe, Frank, you can comment on that last observation before we wrap it up because I thought you had indicated earlier that if you need transmission lines for reliability you can do it but for economic incentives it's more difficult. And then, Christine, you can, did you have a comment?

MS. TEZAK: Yes.

MR. MILES: Go ahead, please.

MS. TEZAK: I have two now.

MR. MILES: Oh, you have two.

MS. TEZAK: Yes, first I wanted to follow up on what Miss Cooper said about the collaborative process. One of the things that when I'm explaining RTO's structures and talking about RTO's structures with my investors, you know, I've asked them, I said, would you be willing to exchange a longer collaborative initial process for certainty over the

longer term? And in every occasion that I have spoken to as a professional money manager, the answer has been a resounding yes because they would far rather get the issues that Miss Cooper and her neighbor's have on the table, sorted out, worked out and not even contemplated lawsuits and, God forbid, whether or not we need to have a domain in an electric transmission.

So, I would say that the support of the collaborative process by state and regional authorities is something, another opportunity to help work against the fact that we do have wider credit spreads, that we do have a difficult economic situation for generation. We have the easing of the economy, which is contributed to significantly lower prices. And if it looks like there's a more rational way to go through the process, whether it's for generation siting or transmission siting, that's something that incrementally will help moderate to a certain extent the adverse impact that some other influences that the companies in this industry deal with.

MR. MILES: Frank, do you have any comments on that?

MR. GALLAHER: Well, I was just going to respond to what you had asked about --

MR. MILES: Yes.

MR. GALLAHER: -- the difference between, why

it's more difficult for economic expansion than reliability expansion. And the reason, we can justify expansions for reliability purposes. We can go to our regulators, whoever they may be for a particular project, and justify the cost in order to be able to reliably serve our existing customers. If indeed, though, we go to those regulators and say we have an economic expansion, then the first thing that we have to answer is who is reaping the economic benefits. And then next question, are those who are reaping the benefits paying for the cost of the expansion. And that is where we run into a problem is that it seems everyone is wanting to shift cost responsibility to some other party for these kinds of infrastructure improvements.

MS. TEZAK: But even when it's clear who the other party should be and there's willingness, there's still that structural absence of how it gets picked up on the regional side. That's where things like participant funding and other proposals that are now being discussed would play a role that could really dramatically change how companies can move forward because it's filling that gap. If it's not appropriate to go into local rate base because someone else's benefit, then it's incumbent upon the regulators because they're probably the best suited to do it is to craft a tariff that bridges that gap.

MR. GALLAHER: And I absolutely agree with that

comment.

MR. ROHRBACH: And I would say, Frank, is that at least there appears to be several billion still needed for in region demand not just for export. I mean, that's what I'm trying to reconcile what you're saying with numbers. There appears to be several needed, what I call a quasi reliability or some day reliability in a region that's not being planned.

MR. GALLAHER: And I don't know, I'm not familiar with the source of your data. But indeed, if outside of Texas we need ten billion dollars of investment in the southeast over the next decade, I suspect we'll have that in the next five years.

MR. ROHRBACH: In transmission.

MR. GALLAHER: In transmission.

MR. MILES: Commissioner Massey?

MR. MASSEY: For Christine or Steve or whoever else wants to respond, the FERC is proposing to standardize wholesale market design across the nation. What will be the impact if we're successful? What will be the impact of this on investments?

MS. TEZAK: Well, I think incrementally it'll make a huge difference because right now it seems to me that there's, if there was more guidance and more information available to the decision makers of the state level of what

works and what doesn't, it would facilitate their ability to participate in rate design in a constructive matter in a way that would support each region.

You know, there are differences between regions and different parts of the country but there's a lot of stuff that does work. And I think that what I've notice investors are positive about when we talk about the RTO program is going over the next year is that this ability to take the things that are working and see how to enhance them as opposed to recreating them from scratch is a time saver both on looking at the amount of time it takes to site both generation and transmission. And it also provides that sort of stability that once there's a process that's in place, then it's more likely that, you know, it will be recovered, it will be managed in a way that contributes to both the health of the companies and to the health of the communities that they serve. So, I think incrementally it's something that certainly the folks that I talk to are very positive on.

MR. GILLILAND: Duke is a fan. Seek transparency, set the rules, monitor compliance. Other than that, stay out of the way.

MR. MILES: Okay. It's time for our break. Any other questions? Comments? Anybody from the state or the audience would like to ask a question?

MR. JAGTLANT: Rick, I have one question.

MR. MILES: Yes.

MR. JAGTLANT: Sanje Jagtlant from FERC Staff. Is this on? Sanje Jagtlant from FERC staff. I had a question about a point that you made, Mr. Oven. Did I understand you correctly that independent generators without retail customers can't participate in the RFP process in Florida or at the very least that they're severely disadvantaged in that process competing against the incumbent utilities?

MR. OVEN: That's incorrect. Anybody can submit a bid, I believe, to an RFP. And if it gets a successful bid, then that utility would take that bid to the public service commission and therefore establish the need. The utility would establish the need for the independent because the utility has the domestic customers. So, any independent can bid and has bid. And, in fact, we have at least one calpine that got contracts, got perimeters and was under construction.

MR. JAGLTLANT: How often has that been successful?

MR. OVEN: Recently once although there are two, when I say independent power things under operation, the Indian Tagogian Project, the Cedar Bako Jet Project, which was U.S. generating PJ & D or whatever you want to call

them. You have Reliant who has purchased an old power plant from Atlanta Utility's Commission. You have re-powering done at Lake Worth and another re-powering being done at Fort Pierce, where you've got, you might say a combined cycle with the steam going to an existing utility and the excess capacity for sale in the open market. But these are people who've come in around the edges.

MR. MILES: Okay, any other questions? If not, I would ask that the state representatives be here about five minutes of four where we begin the last panel for today. Thank you very much. 15 minute break.

(Off the record.)

MR. MILES: Let's go ahead and get started. We're going to start our last panel. And it will be a discuss by state and federal officials. Next steps and closing remarks by FERC Commissioners. And of course the representatives from the states are welcomed to join in on any time. I'll bring a microphone down there in case you want to engage in a discussion.

And so why don't we start off with Commissioner Baez, please.

MR. BAEZ: Thank you. Good afternoon. I want to thank the FERC Commissioners for coming down to sunny Florida. We hope the heat hasn't been too tough on you although I'm sure you haven't had a chance to go outside too

much.

This part of the panel was listed as a discussion of next steps and I guess, you know, judging from the conversations or discussions that have gone on all day today, I think that's pretty appropriate even though at some point we're still trying to figure out what those next steps are going to be.

I do want to start off by offering one. I have some brief comments because I want the rest of the panel really do the heavy lifting here. I also have the privilege of serving as President of SEARUS. So, somehow I've got to herd the southeastern cats, as they say. And it's been a lot of fun so far. Back in the fall, under Chairman Jacobs at the time, the Association decided to undertake some infrastructure assessment. It's funny; we've heard those words a lot today.

And it's just hot. It's hot off the press. It's a southeastern infrastructure assessment. I want to thank Jim Dean and Mark Portrel and Tom Ballinger from the Florida staff as well as many other I'm sure I've already forgotten for putting this together. But our Florida staff had a lot to do with putting the report together along with cooperation from the rest of the southeastern state staffs.

It is hot off the press. It will be shortly available on the Florida Public Service Commission website

for anybody that does want to down load it. I think we've been able to provide some copies to the FERC Commissioners. I'll give you a brief overview of it, some of the key points and I think it's really relevant in light of some of the comments we've heard especially this morning from the FERC staff assessments.

One word comes to mind and that is antidotal. Personally I don't think that antidotal is a word that should be used necessarily when we're talking about projects and futures of this kind of magnitude. So I would urge the FERC staff to look at least what we all feel and have agreed is the real picture of infrastructure in the state.

Based on that information, with respect to generation adequacy in particular, our report indicates that the incumbent utilities are going to be constructing enough generation to maintain 15 percent reserve in the SERC Region for the summer peak and in Florida, the FRCC control area in particular, the report indicates that generation reserves are going to be in excessive of 20 percent in the summer throughout this decade. I will add that at least in Florida that 20 percent reserve margin is to some extent a mandate. So, when we talk about our generation is going, whether demand is outstripping capacity, as we heard earlier this morning, I guess I would raise questions about that.

In addition to that, the generation figures that

are in the report are pretty conservative because they don't have substantial megawatt capacity attributable to merchant plants. As you heard Buck say earlier, we don't have, we've got an interesting set of laws and regulatory frame works that only allow committed capacity to actually be built in the state. And for that reason we don't, even in our ten year siting plans and our capacity projections into the future, we don't count merchant capacity. And just as an example, in Florida that counts for about 8,000 megawatts of planned capacity. And I think I have one other number in Mississippi, and Michael can correct me later as I'm sure he will, that's 16,000 megawatts.

The adequacy of the transmission system is a little bit more difficult to assess, admittedly. You heard discussions about curtailment events. And I know that Ken Wiley of FRCC stood up and corrected some of the information or clarified some of the information. While curtailment of non-firm transactions in the SERC region did increase significantly to 30 events in 2000, for 1998 to 2000 only one transmission loading relief occurred that curtailed firm transmission service. No firm curtailments occurred in FRCC Region.

FERC's own staff analysis dated December 19th, 2001, indicated that there were no major transmission constrained areas for the summer of 2000 and 2001 within the

SERC or the FRCC subregions.

Finally, in combination SERC and the FRCC indicate that they plan to add about seven percent more 230 KV or higher transmission lines for the period of 2000 to 2009. I'm not exactly sure how that fits into the two billion in improvements that Mr. Rohrbach had mentioned earlier but I'm sure the numbers may match.

In summary, I think we can say with confidence that at this time, anyway, the generation infrastructure in the southeast appears adequate to serve the existing and the anticipated load for the foreseeable future. Second, the transmission infrastructure is adequate to permit most intra-regional, that's within the region, wholesale transactions at this time.

What we don't know is the extent that the planned transmission upgrades proposed in the SERC and FRCC will permit future intra-regional commercial transfers or to permit intra-regional transfers. And as we all know, greater transfer capability is one of the objectives that the FERC is encouraging in terms of ROT policy.

Now, I've got a couple of observations. We've heard a number of speakers talk about what things need to be done. And I'll share with you a couple of observations about the construction of backbone transmission facilities in the south in general and in Florida specifically. First,

there aren't any big differences between utilities in the SERC Region. Coal and nuclear make up much of the embedded generation. And most utilities happen to have both assets.

Admittedly Florida generally has higher production cost due to its graphic isolation and higher delivered fuel costs. We don't have natural resources in Florida, natural fuel resources anyway. Because of this the recent cost assessment that FERC put out, cost assessment of RTO's, excuse me, indicated that Florida would be a beneficiary under a competitive wholesale market.

At the time we commented to FERC that the RTO assessment assumed that the transmission interface between SERC and Florida could carry far more megawatts than permitted under the rated contingency limits. And I think you heard some discussion. Mr. Menis mentioned some of the numbers earlier this morning.

In addition, our staff has done some preliminary analysis to indicate the construction of backbone transmission systems between Florida and Georgia. And it turns out, no surprises, that it's nearly cost prohibitive under any scenario. This is true because there's no, all our load centers and if you take Georgia and Florida together, the load centers are at opposite ends. They are far to the north in Georgia and they are far to the south in Florida. As a matter of fact, I think you all are sitting

at the beginning of the load sink for Florida and it flows southward from there.

Substantial upgrades would be required to move those large power blocks over the southern system to those load centers, whether in Atlanta or South Florida. Thus questions arise as to the magnitude of the economic benefits that Florida, in particular, would likely see under these RTO assessments assumptions.

There also appears to be little political impetus to pursue retail choice in the southern states. That's self evident and it's been mentioned over and over again. I think that one of the things, one of the comments or reactions that most of the southeastern states, one of the reactions that's solicited is, you know, we're not going to competition, or retail competition anyway. And I think that's one reason I think Mr. Kimmelman's comments this morning kind of struck a nerve with some of the things in terms of regulatory uncertainty and high risk to investments. I don't think that necessarily applies given the certain political realities in terms of deregulation on the retail side that exists in the southeast.

Quite frankly, our vertically integrated utilities have provided very good service over the years and have had rates below the national average. And I think this raises or this points up really the highlight, or sort of

highlights the situation that we as regulators are in, at least in my opinion anyway, is you hear things about Florida being, Florida in particular, being a high cost state. That's why RTO policy assessments have benefits flowing down to Florida despite physical constraints that are evident.

What the regulators or what we at the Commission at least try to keep our eye on is our rates, our bills, in essence, are at the national average despite, if you take everything as true that our costs are high, at the end, the people that we're looking out for, the end user or the rate payer, it's pretty well protected. That's just my opinion.

Anyway, given these facts, it seems that infrastructure upgrades, especially between Florida and Georgia have to be based on the following premises. Any system upgrades have to show identifiable benefits to retail customers who are for the most part served by, and as I mentioned most likely will continue to be served by, vertically integrated utilities. In other words, the focus should be on cost effective infrastructure upgrades to serve retail load with the objective of promoting wholesale competition as a secondary goal. And that is not to understate the importance of wholesale competition, something that at least we at the Florida Commission are very mindful or and encouraging of on our terms.

If upgrades for retail load enhance wholesale

transactions, that's a desirable secondary result. Upgrades that don't show benefits to the body of retail customers must be allocated in a manner that those receiving benefits should pay for those upgrade costs. In other words, under a bundle system cost shifting has to be avoided to the extent possible. By avoiding cost shifting there should be less opposition to system upgrades. Excuse me.

And just to close, everybody supports objectives of more robust wholesale markets in this region. The question is how much pain. That really is the question. How much of it will be inflicted on retail customers to enhance such competition? We used to hear the phrase a long time ago competition for competition sake. And I think that that's at home in this scenario as well. As regulators, we're trying to protect the rate payers as much as possible. Recognizing all the while that these goals of wholesale competition are worth while. And we're trying to tread that thin line at all times.

Those are my comments. So, thank you all for having me.

MR. MILES: Thank you, sir. Our next speaker is Commissioner Ervin from North Carolina Utilities Commission.

MR. ERVIN: Mr. Chairman, I couldn't help but to start off by commenting the four of the five of us are refugees from the practice of law in one form or other and I

don't know what that says about our technical expertise to talk about it this afternoon. But a member of my family used to tell the story about the lawyer's prayer. And he said that back in the 1920's when revivals were current in the North Carolina mountains, where I come from, that a lawyer, a young lawyer went to a revival, probably for the purpose not of religious edification but drumming up business. And was asked to give the prayer. And his prayer was as follows. Stir up much strife amongst thy people, Lord, lest thy servant perish.

I will try not to do that today. I'll try to put my training behind me and try to be constructive because I think that's what we're all here for. The question on the table, as I understand it, what is the infrastructure needs of the southeast and what should we do about it. I think before we address that question I want to revert to something that Bill Newman said this morning, which is when you ask yourself infrastructure questions you need to ask them in the light of what is it that you are trying to achieve because the ultimate goal of the process, at least we in North Carolina see it, is to provide the most reliable power possible at the most reasonable cost for end user customers.

Regulation is a means to an end. Competition is a means to an end. The end is what is the reliability of

the service to the end user customer and what is the price that that customer pays. And so our job as regulators, yours at the federal level and ours at the state level, is to work toward that end. Like Florida, North Carolina still is dominated by vertically integrated utilities that provide bundle retail service. Our general assembly has indicated that the matter of restructuring is a question for it and not for anybody else. So that's not something that we have the power to implement.

And I think I can speak candidly and say that aside from that that there's not much inclination on the part of either the General Assembly or the Commission, at this point, to make that yet. So, for the foreseeable future we are looking at the preservation of a traditional regulated environment. And Mr. Kimmelman may have some concerns about that but that is the political reality in North Carolina.

There is no groundswell of opinion in North Carolina to change the system. To date, due to the high quality of service that has been provided by our utilities, and I'll echo what Raleigh has said about this, we have had very reliable service both to the customers that are served by our investor owned facilities and also to the customers that are served by our municipal and cooperative facilities. We've been very fortunate in having a high quality of

service.

I heard Mr. Kimmelman's comments about the price of power in the southeast. I can't speak for anywhere but North Carolina. But with the exception of a few municipalities, it's been my impression, at least, that our power prices, even though like Florida we don't have any gas or any coal in North Carolina, that our retail rates for the most part are lower than the national average.

So, when you have a pretty high degree of reliability and relatively low rates, there's not a lot of impetuous in favor of changing the system. And I know that because I use to represent some people who wanted to change it. And I saw what the political realities were. Even so, we have spent a fair amount of time in the last year looking at the question that's on the table today. What is the status of utility infrastructure in North Carolina? We've looked at the generation question. We've spent a fair amount of time working on gas pipeline issues, at least at the LDC level in North Carolina and we've also spent some time recently looking at transmission issues.

And our results to date indicate that we think we're in reasonably good shape starting with electric generation because of the fact that the North Carolina Utilities Commission has the power by statute to order the construction of plants to the extent needed to provide

reliable service. We have that safeguard. We haven't needed to exercise it because our utilities, through the plan and processees that they engage in have anticipated the need to add load as it becomes necessary to do so and have done so.

Both of the two companies that provide the bulk of the IOU service in the state have built their own plants within recent years. There has been, we have certificated a number of merchant plants. It remains, frankly, to be seen what's going to happen to the power that's generated by those plants if they're built. But our projections, as embodied in our integrated resource plant and orders indicate that we're likely to have comfortable reserve margins for the foreseeable future.

Now, obviously we could be in error in projections. All projections are nothing more than projections. But to date we've had reliable service and have not seen any need to get overly concerned about the availability of the electric generation capacity. Similarly, with respect to transmission issues, we initiated a proceeding last year, which has not been completed, to examine our transmission infrastructure. To date we have seen no indication that that system is inadequate for the purpose for which it's being used, which is to bring power from the plants operated or operated by our owner contract

to our investor owned utilities to the places where the load is.

I had my staff check this morning. We've had one TLR in North Carolina, on a North Carolina, South Carolina system utility that interrupted firm load in the last four years. That was in 1998. And I'm assured that the constraint has been fixed. Now, I don't know the source of that but I asked my staff to find it yesterday. So, at least as of the present time we're not under the impression that our system is inadequate for the purpose for which it has been traditionally used. I did see the chart this morning that dealt with the import capabilities. But our companies tend to sell supply their own load.

Finally, with respect to gas pipeline infrastructure, one of the interests of North Carolina historically has been the advisability of looking into second interstate pipeline. We have one interstate pipeline that serves the bulk of our needs in the state. Of course, we don't have any interstate pipeline siting authority. But that's been our biggest concern historically. Our General Assembly has spearheaded a program whereby we have been attempting to extend LDC infrastructure throughout the state. And we now have plans; we have a hundred counties in North Carolina. I believe there are firm plans to serve every county in the state that's unserved except for four.

And they're all in the far western mountains and that's a fairly hard area to extend interstate pipeline infrastructure.

So, as we look at the infrastructure that we have today, it appears to us to be serving the need that it was intended to serve. We understand that the Commission has its goals. We don't regulate the wholesale market. I've got enough to do dealing with the intrastate market without worrying about attempting to regulate the wholesale market.

But we urge you in whatever steps you take in dealing with infrastructure questions to ask yourself the question I started out with. What is the purpose of the infrastructure results that you are seeking to achieve? We remain concerned that if the FERC is primarily interested in developing infrastructure for the purpose of serving a wholesale market on which we principally at this time don't place principal reliance, on which we are not likely to place principal reliance at least in the immediate future. Then please don't do anything that is going to adversely impact the system that we've got for dealing with our end user customers.

Without violating the admonition that I started out with, that concern exists and I would be less than candid with you if I didn't say that. We need to insure the reliability of service to our end user customers that are

supplied by our vertically integrated utilities. We need to preserve the prices that we think we can sustain. And we ask you to keep in mind as you work on these wholesale issues that have been alluded to today, we ask you to keep in mind that North Carolina, like much of the southeast, is a unique environment. All of us like to think of ourselves as unique but we believe that we are.

We are not charged with not setting national regulatory policy. We are, however, charged with setting state regulatory policy. And we ask you in setting national policy to keep in mind that each state does have its differences and to try to accommodate those differences as you make the decisions that you're charged with making.

MR. MILES: Thank you, Commissioner Ervin. Our next speaker is Chairman Hochstetter from the Arkansas Public Service Commission.

MS. HOCHSTETTER: Thank you. I, like Commissioner Ervin, am a recovering attorney and so I found myself sitting here today rewriting and rewriting about three different times the comments that I came in here with this morning. So, it has been an evolving process but it's been an interesting dialogue today. And if I could possibly be more concerned now than I was when I walked in the door this morning, unfortunately I am.

I would note that there appears to consensus, not

total unanimity but some consensus on some things that have been discussed today that I wanted to note. And then also throw out some questions and concerns that popped up through the discussion today. And then also outline my suggestions for next steps.

And I start with the premise that I think all of us that are regulators, state and federal regulators, share and I think that we share a commitment to make regulatory policy, make regulatory decisions that are driven by facts as opposed to theories or antidotes. And I throw out a few facts that we start with here in this debate or this situation with the infrastructure. And that is, number one, quoting my colleagues up here, the southeastern portion of the United States does have adequate generation and transmission to meet its needs as a region. And we do have excess generation, both now and for the foreseeable future. I think there had been different statistics sighted here today going anywhere from 30 to 50 percent extra generation.

On the Entergy system along, we have an extra 20,000 megawatts of power, even assuming only a 50 percent completion rate of the merchant plants that have been announced. So, obviously the merchant folks that are building plants in this part of the country are relying on this region of the country to be an exporter of generation to other parts of the country.

So, then you have to ask yourselves a couple of questions. One is do we want this region to be an exporter of generation? Does it make sense? Similar to what Commissioner Callahan was saying earlier today, regardless of who pays for the infrastructure, is that a good regulatory goal because of issues of reliability and fuel diversity that had been mentioned. Is it too late to answer that question? Maybe we don't worry about what's happened up to this point in time. Let the free market handle the generation that's out there right now. But on a going forward basis, establish some regulatory policies that make sense, that answers that question.

And so that brings me to kind of a note that I thought was ironic. It seems like we're at a point now of maybe needing to put some regulatory guidelines into our deregulated wholesale market because I'm not quite sure that the deregulated wholesale market has totally taken into account the societal economies that ought to go into those sorts of decisions.

On a next steps basis I think at this point we need to adopt some economic pricing policies, as I know you all are grappling with and we are as well, and look at approaches like participant funding and perhaps others. Maybe look at regional siting or regional IRP approaches. And I seem to recall someone telling me that regional IRP

had a life in the past. Maybe about a decade ago there was some pending federal legislation on that point and I believe the Arkansas Commission was involved with or involved in with Senator Bumpers.

At any rate, I think that those concepts, which are similar to what Commissioner Callahan mentioned earlier, might be appropriate in addition to or as part of this overall context of adopting some sound economically based regulatory policy on a moving forward basis. And besides just making sure that rates are reasonable, it seems like there were a lot of other macro economic things that emerged from discussion today.

One is that it makes more sense to have generation located closer to the load. If you look at what's in the best overall societal needs, you've got to look at the total cost of delivery and power and let the load see that pricing signal so you know whether or not the new generation transmission needs to be built or if, on the other hand, Conservation and DSM needs to be implemented.

We need to insure that we do have reliability and it does seem like a dispersion of generation would best achieve that as opposed to creating bottlenecks on the basis of one part of the country being a net exporter or the primary exporter of generation.

Fuel diversity is something that is also, I

think, near and dear to all of hearts. And I worry about the majority of new generation being gas fired, which is certainly looks like is one of the reasons that so much is being located in the southeast. I think that the issue of subsidies, one region of the country subsidizing another is a regulatory issue. And I think that economic development, as Commissioner Brownell noted at the beginning of the session today, is critical to keep in mind. Our region is enjoying very, very low generation rates or just overall retail rates right now, which will help us in our economic development efforts. If, on the other hand, our rates go up through subsidizing this exportation of generation, that's going to compromise our ability to improve our economic development situation on a going forward basis.

So, in conclusion, if we set regulatory policy that's based on fact and on economic principals, we won't exacerbate and can hopefully reverse this path that we're currently on where we seem to have a collision of a deregulated wholesale market with the goals of reliability, reasonable rates, economic development and fuel diversity. Thank you.

MR. MILES: Thank you, Chairman Hochstetter. Our next panelist is Commissioner Dixon from Louisiana Public Service Commission.

MS. DIXON: Thank you so much and good afternoon.

I just want to say hello to Sara Cowe and welcome you here. It's good to see you. I notice you came in.

Unlike my colleagues, I'm trying to be a recovering social worker. However, prices are high, people can't afford it and it's a problem for me and I have to get back into social work.

A couple of years ago in Louisiana, we did conduct an investigation on our, the large vertically owned utility. And we found that fuel costs were not minimized. The allegations that the company didn't take advantage of economic purchases from third parties rather than purchasing from its own system or within its system. From there we went to having investigations done and we required them to perform the analysis of bulk transmission systems and determine whether constraints existed and whether they were being cost efficient or they were cost defective remedies.

The preliminary results of that study appear to be very promising. From what we see we're going to benefit from significant potential savings somewhere around over half a billion dollars, or a quarter of a billion dollars, I'm sorry, would be the present value just to our state alone, Louisiana. The benefit will be to the native load of customers, however. From this, it did warrant further study and we know that the analysis right now is underway and we can't wait for the results.

In generation, there is significant generation under construction in Louisiana into these service territories. However, Entergy is not the company that's doing most of the generation. We have some 15,000 plus megawatts that's going to be coming to Louisiana. It's all in natural gas. As you know we're the queen of natural gas in our area, besides Texas. They're over there and we don't mess with them and they don't mess with us. That's how they come up with that expression, don't mess with Texas.

It's going to be gas in merchant plants. None of the vertically utility, vertically integrated utilities are participating in that. We recently adopted some new procedures, though, to certify all this new generation that's coming in. Competitive bidding for the new generation, the IPP's regulated utility customer and staff will all participate, and I even told the staff I'm going to participate too to make sure it's going to be feasible for us.

We're just seeking efficient results and trying to deal with cost efficient, cost effective diversification for our area. And we're waiting for the first participant so we can see if it's going to really benefit us or not. We've done whatever we can to try to maintain lower rates in this region. We have worked hard to make sure that transmission constraints are removed. We have a lot of

them. As you know we're on a system that includes Arkansas, Texas and Mississippi. And we feel since we worked hard and maintain lower rates we should not be penalized. And we're very concerned about it.

We also know that our utility is working hard to form this C-tran, which we're not sure is going to be effective, cost effective or in our best interest in Louisiana. However, as it was said this morning, we're a little bit different from some of the other states. We have our constitutional provision and it is our job to make sure we maintain reliability, cost effectiveness and have the capacity for our people in Louisiana. The other thing is, unlike a lot of the states, we are elected commissioners and I know what our job is. It even makes me more of a social worker when I know what my job is.

But we're willing to try to work within the confines of this region and do whatever is necessary to try to form these transmission organizations to our benefit. Now, a question came up at a meeting we had, I guess on the coast, oh, I'm sorry, it was in Georgia. Are there going to be three transmission organizations? 10? 20? We're not sure. We're trying to, again, look at what's in the best interest.

I want to applaud this FERC because I feel the last FERC Commission, and maybe some of you are overlapping,

don't take it personally, but they didn't do a good job of reaching out to the states to try to work on this issue. It was very discouraging. I'm happy to see that you've come all the way down to Florida. We look forward to you coming to Louisiana. We're going to move you around a little bit so you can actually get an eyeball and get a view of what's happening within our states, where the constraints are, where the problems are and who's going to have to pay for some of the transmission lines that are, you know, going to have to be built so that we can form this, these grids that you're, you know, trying to hope for or thinking it's going to be cost effective or in the best interest of the people of these United States.

But keep in mind, I keep saying my job is to make sure that the people of Louisiana have all of these good things; good capacity, good transmission, and lower cost. And that is first and foremost what I'm looking out for. And then I look at the four states that we're coupled with. And beyond that, I like Florida, I like Georgia and I care about some of the people over there. And the Carolinas.

MR. CALLAHAN: You love Mississippi though.

MS. DIXON: Oh, I love the four states that we're in. But we're actually trying to reach out. And I will be in Carolina, North and South, before the week is out. So, you see how much we're concerned. But we are working real

hard together in SERO to try to make sure we do our share. But again, we don't feel we should actually be penalized or subsidize the other states. Thank you.

MR. MILES: Thank you. Chairman Callahan, do you have anything to say or do you want to take a pass?

MR. CALLAHAN: Do you have anything to say?

MR. SELLERS: I do but go ahead.

MR. CALLAHAN: No, go ahead.

MR. SELLERS: Great, yeah. I'd like to be brief, thank you, Richard.

MR. MILES: Okay, this is Nick Sellers who's representing Governor Siegelman.

MR. SELLERS: Governor Siegelman in Alabama. I'm his policy advisor. I just want to touch on an issue that I know we've touched on a little bit today but not in much detail. I think, Commissioners, it's an issue that is paramount going forward to any policy making or promulgation of rules. And that's the issue of water and water withdrawal. Governor Siegelman pays great respect to the Alabama Public Service Commission and their ability as a body to make policy. But when we talk about identifying factors of adequate energy infrastructure, from an investor's standpoint I can think of no issue greater than dealing with the issues of water.

Water is a commodity that is no less precious

than gold. And in Alabama, it's funny to be talking about the issues of water and challenges that we face going forward. As the chief economic development officer of the state, a governor has to balance economic development with environmental protection. And admittedly, we've got to clearly define more our regulatory and legislative issues including beneficial use. In Alabama if you pull water out of the ground for power you have to get a certificate of beneficial use. But we haven't even clearly defined what that is. Is it five million gallons a day? Is it three million gallons a day?

And repairing rights. Our code is vague at best in Alabama on repairing rights. If you have an easement does that mean you have authority to pull water out of the ground or not? It's something that's not even been adjudicated and we have to look at that issue very closely going forward. And we're beginning to have these discussions.

But one thing's for sure. Just like they say in Texas and in Alabama, if you always do what you've always done, you'll always get what you've always got. And we've got to think anew and we've got to look anew. Particularly understanding that the generation demands are going nowhere. And infrastructure needs are going nowhere but increasing. There's not enough data to clearly understand the impacts at

this point. We understand that. We've been looking at our sister states and what they've been doing with respect to short term moratoriums on IPP's and the issues that they face.

There is a great economic impact to the local areas. There's clusters of economic development that can come from independent power plants but what are the risks versus the rewards? So, I would just say respectfully, we request that this regulatory body will continue to do due diligence like it's doing today when it promulgates any rules in the future dealing with water policy and water withdrawal.

I didn't know if there were any thoughts from the Commission on that issue but it's something that's obviously important to the Governor of Alabama, to the Legislature of Alabama and going forward it will be an issue that we'll talk about in great detail.

MR. MILES: Thank you.

MR. CALLAHAN: I know it's late and everybody's tired and ready to go to dinner and everything. I'm not going to, just kind of ditto what my fellow colleagues have said. But Mr. Chairman, I just kind of have a question of you. You know, you heard Braulia and Jimmy and Sandy and Irma. And I think the other commission they'll tell, we all agree. We've done a pretty good job regulating our

utilities. We think we have, we know we have some of the lowest prices in the country. I negotiated three special contracts last month. One of the suppliers said we were a cent and-a-half a kilowatt hour cheaper than anyone else they had talked with to bring a use plant to Hattiesburg, Mississippi.

And I think from my colleagues, what they said, and I know from my colleagues sitting out there, the southeastern commissioners are probably like any other you've ever dealt with. And we are very concerned with our end user customer and protecting that customer. And we think through our prudent regulatory policies, we've done a very good job of that. So, my question to you, with all due respect, you know, why are you down here in the southeast and what are you trying to accomplish? Because we are very scared that what you're trying to do is going to interfere with our way of life.

MR. WOOD: Easy answer. Because if we didn't come down here I'd be getting phone calls from all of you, why in the hell did you ignore us?

MR. SELLERS: No. No, no, no, no, no. I'm not talking about here, particularly here talking with us. I mean in general. I mean, why are you pushing this RTO on us in a region that we don't have the problem that they have out west, in the northeast and other places?

MR. WOOD: The context of this hearing is to talk about infrastructure. A lot of you come back to the RTO issue and I know we've had discussions on that but the course issue that we have done, and we started in Seattle, which is in the middle of, right at the really at the tail end of a really bad turn of events for them out west. Then we went to the northeast, which while not in the same basket, has some issues certainly with infrastructure and overloading an older system. We're doing here. We're going to the midwest. We're going to do the desert southwest. We're going to cover the whole country because one of the things that we have to do in our statutory mandate is look at the health of the infrastructure of the nation's energy grid.

And a lot of you talked about electrical and some of your concerns because of our prior discussions as a group. But quite frankly, one of the things that we've got and I was pleased to see on the earlier panels, one of the things that I really want to engage with you all on is, you know, -- pinnings of a lot of what we're talking about on this map is natural gas. And, Michael, I think the man who was sitting in your chair on the last panel before lunch, you know, talked about, you know, where's it going to come from? You know, Erma, your state and my home state do a lot of it offshore and it's kind of nice to see all those little

green lines on the ground. But there aren't any in offshore Florida. There's none outside, other than Mobile Bay there's some. There's none of the east coast here about where little gas pipelines are.

So, I mean, the core issue in my mind, here, up there, over there from an infrastructure point of view is where is the fuel source coming from. I think we're all concerned about all the eggs in one basket. We all have some way to influence the outcome of that. You know, I don't know that hydro electricity has a lot more potential down here in the south. I do see a few blue circles there. Coal issue, I know, Jimmy, you and Joanna, I think Joanna just told me you all are working on some cleaning up issues in your states as we had to do in mine before I left to come up here.

So there are a lot of issues on the fuel source that I really am, I'm not going to say concerned about yet. But I do think that engaging on the level; regardless of market structure, Mike, I do want to have that debate. And I think we can have that tomorrow. We can have it later today --

MR. SELLERS: How much infrastructure, because when the southeast, as a serous region looked at our infrastructure for the past six or eight months, we came to the conclusion that it was adequate to serve --

MR. CALLAHAN: And trust me, having gone from the west to the northeast to here, it's great to be here for a number of other reasons as well, one of which is it's a little bit different level of discussion than, gosh, southwestern Connecticut is going to be, you know, for the third straight summer low voltage and really may brown out. Or gosh, you know, California, you can tell that story to northwest, shut down the aluminum smelters. It's much easier to come here. I guess my thought is it's important for us to do mixed roles on infrastructure to build a working relationship.

So whether it's Pat, Linda and Nora and you all are successors, we've got more than just kind of a, you know, let's all get together at the cocktail party relationship. But a working relationship of we do some stuff on our side. You all do some stuff on your side. Making sure that, as we heard from the investment community, the infrastructure pricing signals get sent clear. I thought your questions already this morning were pretty good on that. But that, a lot of the issues to make sure that regardless of your political decision to open up your state or not as to retail competition of electricity or gas, kind of independent of that, do we have the over-arching infrastructure to make it all work?

I've got some pretty good feedback from you all

and from the panelists here today about the health of certain power plants. That sounds like -- check -- worry about. I do think, as I've heard, and Erma, probably you were the most eloquent, but and I think some panelists earlier, are those generation plants where they need to be to serve the load? Good question. Transmission lines, I think some issues, related issues to that. Natural gas pipelines. And I guess, Jimmy, I did want to ask you a specific question on that while I've got the mike.

We have one before someone coming, some pipelines that would actually be an alternative to Transco coming through. And I don't know. Is there, does the State PC or the Environmental Commission; I mean, we've got some landowner issues there and --

MR. ERVIN: That's kind of an interesting one, Mr. Chairman, because that one is mostly being built in Virginia but it will come into North Carolina and intersect with some of our infrastructure right over the border.

MR. CALLAHAN: Right.

MR. ERVIN: So, you're mostly hearing from Virginia folks on that one. But we had sent a letter generally in support of it without getting into the side issues.

MR. WOOD: That shows even on gas, the multi-state issues are just as important as they are on the

electricity. And I think on oil issues, I think coal. We didn't get much take on the rail contact but I've not picked up that there's much issue with regard to that.

So, Michael, to answer your question why are we here. I think we're here just to make sure we're doing our job.

MR. CALLAHAN: Well, do you feel good about what you've heard?

MR. WOOD: I do.

MR. CALLAHAN: Do you feel good about the infrastructure in the southeast?

MR. WOOD: For me, yeah. Linda's nodding. Nora? I saw some of the issues and I haven't had time to digest them about the, in the transmission study yesterday that was released by the Department of Energy that I'd like to, and I think probably will mention a little bit in the Searok study. And since I just got both of those today, I'd like to say a qualified yes. But I like what I heard. I think it's, kind of makes it easy to move onto the next one, which won't probably be as easy.

Keep on keeping on, as they say.

MR. CALLAHAN: Well, you know, like I say, we're speaking for Mississippi and really for the whole southeast. I think we're proud of ourselves for what we've done and how we've done it. You know; oh, okay. I'll give you two some

credit too. But you have to watch them because they want these like very high rate of returns that just aren't reasonable.

I guess some things that concern me, when you talk about infrastructure you can reach a point where, for simplicity of numbers, say your load in the southeast is 10,000 megawatts. How much more generation and transmission capacity do you need above that? I mean, you get to a point where you've over-built and overinvested. And, you know, if you're saying, all right, we've got a load of 10,000 megawatts but we think we need 20 or 30 or 40 files and so we can have a robust wholesale market and all this. Are you not getting to a point where you're over building?

You're putting too much capital in the ground. You're putting too much strain on your natural resources and your environmental resources. And it doesn't make a lot of sense to take infrastructure to that degree.

MR. WOOD: I think one of the paradigms that came out of the '92 Act and one that as a state regulator I'm thrilled about because it got pretty annoying passing through every risk down to the end use customer, which the old system that, I guess we've all been a part, actually every one of us has been a part of, tends to do. Well, if there's a risk, let's put it on the back of the customer. If the fuel goes up and down, it goes on the back of the

customer. If a nuclear plant, once we do the disallowance and, I think, Irma, your state and mine have been through a wonderful history on that --

MR. CALLAHAN: Mine too.

MR. WOOD: Yeah, and Mississippi was there. Yeah, we've all; that's the four. Here we are. A long history there. But, you know, the nice thing about the new market, and it has been, I think the gentleman from, what was his name?

MS. BROWNELL: Goldman Sachs?

MR. WOOD: Goldman Sachs this morning pointed out is in the new world, the risk is put on somebody different than your constituent or your customer. And I think that that's actually a better state of affairs than it used to be. So if somebody is building a plant and it doesn't get dispatched, well, they wasted somebody else's capital. Those tend to be pretty good disciplines. Probably about better than every three or four year rate review that you or I do.

But I think those power plants that are out there may do the interesting impact because we aren't talking about on any of the charts today all the plants that didn't get shut down. The old dirty inefficient plants that are polluting the skies, the ones that use twice as much gas as the new guys. All these new plants bring a lot of benefits

not only for customers and costs but in the environment.

So, I think we do have to be excited about the excess of generation capacity that we've got. But also recognize that what that ends up doing is shutting some other plant that becomes an economic down.

MR. CALLAHAN: Let me ask you this, and I understand the shifting of the risk. But when you shift that risk and you make the investment and the investor as a more risky proposition, you have to allow them a greater return because with high risk should come high reward or nobody's going to invest. Can we agree on that?

MR. WOOD: Yeah, generally.

MR. CALLAHAN: Something that troubled me, I mean, I go from one to the other. I mean, I like the regulated market. I think it's worked real well and I don't know if this industry can work outside of that. But I'm open minded. I can stay open minded on that point. But when I, ABC Company and I build a plant and I take the risk of building that plant and I put my five hundred million in the ground. And it hits 110 degrees in the summer time and everybody needs electricity, should I not be allowed to sell the product for its market price? And why it concerns me is, given Gachs Goldman, and I hate to do this because he's not here, but Commissioner Massey again went back to the phrase just and reasonable rates.

In a market, when I go back to my economics books and capitalism, just and reasonable never comes in. I mean, we all want to be in a world where we sell widgits and we wake up one day and everybody needs a widget and we're the only ones that got them. And something that concerns me is we talk about we're going to have a market, we're going to do this. And I can understand the investor's frustration because we want to go to a market but when the market starts to go up, we all run for cover, for political reasons or other reasons.

I mean, we've got to understand that a market can go up and down. And I think there's some frustration. If we're going to let this market go and we're going to put these risks on these guys back, when it's time to get the rewards, they've got to be entitled to the rewards. I mean, would you not agree with that?

MS. BROWNELL: Michael, I would agree with that accept I think the assumption is that those prices get out of control and we're basing that on the assumption that California is the model. I think what we have said is California was not the model and there were many reasons that that got out of control, not the least of which was scarcity. And of course the price of widgits go up when you have them all. The intent of a market is the competitive pressures to keep those prices under control. I think all

of us would agree today --

MR. CALLAHAN: But they don't always work that way, Nora.

MS. BROWNELL: Excuse me, Michael, can I just finish, please? I think what all of us would say today is we do not have competitive markets. We certainly don't have them here nor do we have them, I think, totally in the northeast where we have all kinds of market mitigation measures in order to protect the end use customer from that volatility. I think all of us have said, I think I've really come a thousand percent in a different direction on this, that market transitions from monopolies to free markets, particularly with a commodity that is so vital to the individual lives of the people that all of us serve, those transitions take a whole lot of discipline, a whole lot of rules, deregulation, you know, the title is not accurate. We're restructuring. We are not, we're creating more regulations rather than less.

So, I think, Michael, we need to, you know, I think we're all scarred by the events of a company that didn't know how to play by the rules and a set of rules that probably were inadequate and a scarcity situation. And we need to get beyond that to say, as one of our speakers did this morning, we can do better than history. What is it going to take to do better?

So, what I'm saying is yes, all of your concerns are legitimate and we share those concerns. But some of those concerns are based not on what we're doing but what people think happened. And think cannot be controlled. And I think you gave an example this morning where there were cost overruns past on to rate payers. And you said would it have been better to let the company go out of business or would it have been better to pass them through? I think in a truly competitive market where there are plenty of players, letting a company with a bad business plan go out of business is what we're all about in this country.

So, without putting customers at risk, when you have a real market people can afford to take other kinds of risk. So, that's my view.

MR. CALLAHAN: Well, let me ask you this. At what point do we have a real competitive market?

MR. WOOD: When you have market power moved to the edge, which is very difficult. It's very difficult here where you've got --

MR. CALLAHAN: I mean, is it ever going to be possible to have a competitive market with this service commodity or whatever you want to call it?

MR. WOOD: Oh, I think so, yes. I think certainly on the wholesale side. On the retail side, that's going to be a function of probably a lot more political

decisions than economic ones. But, I mean, look at the gas model. I heard Sandy on a phone call we had when we were talking about this, our first phone call with you all. The gas model, which was engineered by FERC in the '80's and '90's, at the wholesale level, and I know, I think Braulio and Jimmy both kind of, in your comments at least just a moment ago, seemed to kind of put the two together.

There are two very different things going on. The economic revolutions, so to speak, that happened on gas and that we're talking about at FERC's level electricity is the wholesale level, to get the efficiencies of having power plants, the new clean efficient stuff compete against all this stuff that's already on the grid for the best production value for the customer. Let that win. And the customer in this case is a coop, a munie, an investor owned utility, big or small. And then in states that are on bundle, like mine and in Virginia, on both ends of this map, where the end use customer can make that choice.

Those are at the wholesale level, though. Those benefits at the wholesale level are intended to capture generation competing on generation. Just like in the gas revolution, you've got the benefits of all the gas in the continent competing against each other so that you really do have a national gas price, whether it's Canadian; or international when you count Canada. But that has created;

and what came along with gas was a sufficiency of infrastructure to actually move that commodity around. Unlike electric, it doesn't move at the speed of light. It's got to go a lot slower.

But in any event, the gas model is a good one that I think has a lot of applicability to power. People won't always distinguish it. But quite frankly the things that are distinguishable are not central to the core values of what you can actually get if you get it set up right.

And what I like our debate to move to is how do we then capture wholesale benefits so that you, as state regulators and closed states, can have some benefits to pass on to customers. Because I've heard the 0.3 up there. It's like, well, okay. That's great for status quo but I hope we can do better. Or that the open states can just have the market allocate those benefits. Either way we want to get the benefits. So that happens a lot easier, I think, if there are some consistent rules of the road as to how we set up the rules for generations to compete, for transmission to be added onto, for customers, wholesale or retail or both, to participate. And rather than kind of being in the jurisdictional, you know, squabble and, you know, where we never really get anywhere.

MR. CALLAHAN: Well, you understand that our concern is what if the cost the customer has to pay to get

those wholesale benefits exceeds the sum of the benefits? That's our concern in the southeast. You understand that, correct?

MR. WOOD: That's a concern everywhere.

MR. CALLAHAN: Okay.

MR. WOOD: I mean, that's our job to make sure that the same thing that happened on gas happens here. If not --

MR. CALLAHAN: Now, remember now, in December of 2000 natural gas was at a roof. I mean, it went up big time.

MR. WOOD: Yeah, and it came back down --

MR. CALLAHAN: It did, it did. It was market. And I was so glad to see everybody not running putting a price cap on it and all because we saw, the guy, I forgot his name, talking about the number of wells. And we've also seen as the prices went down, they're not drilling. And you know what? If it's as hot as I've been praying it's going to be this summer and these plants use natural gas and then it gets cold this winter, in December of 2002, we're going to be right back where we were in December of 2000.

MR. WOOD: Maybe one of the panels we didn't do was talking about gas storage. Exactly. With all the salt domes around the Gulf, I know there's a lot of potential there. But storing gas is, fortunately what California did

do this year.

PARTICIPANT: How about salt --

MR. WOOD: They've got some too? Good.

PARTICIPANT: Yeah, they can just throw that in - -

MR. WOOD: All right.

MR. MILES: We have a few minutes left. Commissioner Dixon, did you want to; and then we'll go to Christine, I think had a question or a comment?

MS. TEZAK: I just wanted to offer some additional information to Commissioner Callahan because I think that one of the things that I think you're mistaken about is that there is a lot of opportunity for flexibility between the black of a completely unregulated market and the white of a completely unregulated market. One of the reasons why so much capital was attracted to ERCOT was because it was possible to build even though there was a very, very large market now for capacity in Texas.

There's been no problem for those companies to get money to fund projects in Texas because they know that they're feasible, they're fundable and that they can compete. One of the reasons that they're possible is because of the capacity requirements that exist in Texas and it's a clear way of working, you know, what you need in the future with what you have now.

And I think that one of the things that would be helpful as far as moving your, you know, your comfort level as you analyze whether or not deregulation will be incrementally positive for your customers is not look at going completely to unprotected wholesale markets. I don't think that's what is being tried to propose here. But the investor base also is very scared about the political repercussions of price caps. They're very positive on things like if an RTO or if a region or if a utility will have opportunity to contract forward as a requirement because that gives them surety that there's going to be financing and it drops the price of the cost of capital.

So, I think that, you know, don't, although as I agree with Commissioner Brownell, we have been scarred by the California debacle, not only on the consumer side but also on the investor side. That there are ways that Wall Street and investors are willing to work with you to avoid what both of you might see as volatility that's beyond your tolerance level.

MR. CALLAHAN: I agree. But you have to have the rules hammered out. I mean, investors are not going to stand for the rules to keep changing in the middle of the game every time because when somebody, when they invest half a billion dollars, I mean, they're not doing that out of the goodness of their heart.

MS. TEZAK: Right --

MR. CALLAHAN: They're doing it to make a profit.

MS. TEZAK: But you're the ones who can help structure those rules. The investors are not --

MR. CALLAHAN: No, I can only structure the rules to regulate. And I guarantee you, if you invest in Mississippi Power or the Southern Company, they're going to get their rate of return. It's guaranteed. They're not going to make a mistake. They're not going to go belly up. They're going to be there. And we just had a hearing last week. Actually, Mississippi is under Performance Regulation Plan. If they do a good job with good service and keep prices low, we'll allow them to earn above their return for being a good company.

And we just had a hearing last week to update that formula to take into effect the new economic indicators. It's probably going to raise their return a little bit. With regard to the companies we regulate, to me it's a difference of you want somebody who's going to come up and hit a single every time or do you want to get a Barry Bonds who has a chance of knocking one out of the park?

But what you don't want to have is Barry comes up and he may get a single or he may knock one out of the part or he may strike out. If he strikes out, he has to live with the consequences. If he knocks one out of the park,

you say, no, no runs score. You can't go that far. But if he hits a single, you'll let him have it.

That, I think, is what we need to get away from. We need to get the rules and establish them and play by them.

MR. MILES: Okay, we're nearing the end. Commissioner Dixon, I thought you had a comment.

MS. DIXON: Thank you so much. I do want to acknowledge Julia Johnson and thank her for allowing us to continue this discussion through emerging technologies. We will be doing that later tonight and tomorrow. But to the Chair, I noticed earlier, we had the, I can't think of her name but the lady who talked about statistics and the growth that was coming to the south. I was really concerned and wondering, is there such growth going to the north and to the west as far as population shift? Or are they all just shifting down here because there's no coal or no heat to get them, you know, any heat in the winter and they got to come down here and be warm. But look out for the summer because you might be too warm.

The second thing had to do with the study that you all did on the RTO. And our concern was, we didn't see where it included what the impact was going to be on cost to consumers nor the congestion pricing component. Is there anyway we can get at least to the fix of that or, you know,

get a feel for what you all are going to do with that or use that to justify before we, could we get some answers to that before you move forward with that study?

MS. BROWNELL The study, let me repeat. The study was not intended and clearly wasn't the be all, end all, answer all the questions. The Committee of State Commissioners has continued to work with the staff to raise questions of concern that they would like to see answered. And that is a work in progress so that there will be further development on the cost benefit study.

MS. DIXON: I'm interested in those two though, those two questions.

MS. BROWNELL: If they're not added to the list, and Ed Meyers is in the audience and he's been working on that and he can probably talk to you afterwards.

MS. DIXON: Thank you.

MS. BROWNELL: But as we discussed in Atlanta, and I would repeat again, I think that you might be comfortable as other parts of the country are doing in doing your own cost benefit study.

MS. DIXON: We are.

MS. BROWNELL: And we hope that you will let our staff know. The northwest has been working with our staff. We're happy to share common databases, so at least we're starting from the same premise, if you wish to do so. If

you do not, that's okay too.

MS. DIXON: Oh, we share.

MS. BROWNELL: I think they're not mutually exclusive.

MS. DIXON: We'll continue some of this at Emergent Technologies.

MR. MILES: We're past 5:00 o'clock. Any closing remarks or comments? That's it.

MR. WOOD: Well, my Q & A with Mike, we got there. I think the out take for me, certainly of the three we've had, Mike, a/k/a Oprah, the out take we had was clearly, compared to the northeast and the northwest, a nice place to come to. So, I hope the midwest and the desert southwest continue the trend. But thank you all. I appreciate the nice turnout. The audience, it's good to see a lot of old friends again and meet some good folks.

We had a good set of panelists. I want to thank the folks on our staff who worked hard to put this together. And Rick, as always, thank you for your leadership.

MR. MILES: Okay, thank you all.

(The above matter was concluded at 5:05 p.m.)

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This is to certify that the attached proceedings before the FEDERAL ENERGY REGULATORY COMMISSION in the Matter of:

Name of Proceeding: FERC Meeting

Place: Orlando, Florida

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was held as herein appears, and that this is the original transcript thereof for the file of the Federal Energy Regulatory Commission, and is a full correct transcription of the proceedings.

Ronald N. LeGrand, Sr.

Official Reporter