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PLACE: Dobbs Building, Raleigh, North Carolina

DATE: Monday, January 24, 2011

DOCKET NO.: E-100, Sub 128

TIME IN SESSION: 7:00 p.m. - 10:23 p.m.

BEFORE: Commissioner William T. Culpepper, III Presiding
Chairman Edward S. Finley, Jr.
Commissioner Lorinzo L. Joyner
Commissioner Bryan E. Beatty
Commissioner Susan W. Rabon
Commissioner ToNola D. Brown-Bland
Commissioner Lucy T. Allen

IN THE MATTER OF

Investigation of Integrated Resource Planning in North Carolina - 2010

A P P E A R A N C E S:

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COMMISSIONER CULPEPPER: Good evening. Let's come to order please and go on the record. I am Commissioner Bill Culpepper and with me are Commission Chairman Edward S. Finley, Jr. and Commissioners Lorinzo L. Joyner, Bryan E. Beatty, Susan Warren Rabon, ToNola D. Brown-Bland, and Lucy T. Allen.

The Commission now calls for hearing at this time for the purpose of taking non-expert public witness testimony Docket No. E-100, Sub 128 - In the Matter of Investigation of Integrated Resource Planning in North Carolina - 2010.

Integrated Resource Planning (IRP) is intended to identify those electric resource options that can be obtained at least cost to the ratepayers consistent with adequate, reliable electric service and other legal obligations. IRP considers conservation, efficiency, and load management, as well as supply-side alternatives, in the selection of resource options.

G.S. 62-110.1(c) requires the Commission to "develop, publicize, and keep current an analysis of the long-range needs" for electricity in this State. The Commission's analysis is to include: (1) its estimate of the probable future growth of the use of electricity; (2) the probable needed generating reserves; (3) the extent,

size, mix, and general location of generating plants; and (4) arrangements for pooling power to the extent not regulated by the Federal Energy Regulatory Commission (FERC). G.S. 62-110.1 further requires the Commission to consider this analysis in acting upon any petition for construction. In addition, G.S. 62-110.1 requires the Commission to submit annually to the Governor and the appropriate committees of the General Assembly: (1) a report of the Commission's analysis and plan for the future requirements of electricity for North Carolina; (2) the progress to date in carrying out such plan; and (3) the program of the Commission for the ensuing year in connection with such plan. G.S. 62-15(d) requires the Public Staff-North Carolina Utilities Commission (Public Staff) to assist the Commission in this analysis and plan.

In addition, G.S. 62-2(3a) vests the Commission with the duty to regulate public utilities and their expansion in relation to long-term energy conservation and management policies. These policies include assuring that "resources necessary to meet future growth through the provision of adequate, reliable utility service include use of the entire spectrum of demand-side options, including but not limited to conservation, load management and efficiency programs, as additional sources of energy

supply and/or energy demand reductions."

To meet the requirements of G.S. 62-110.1 and G.S. 62-2(3a), the Commission conducts an annual investigation into the electric utilities' integrated resource plans (IRPs). Commission Rule R8-60 requires that each of the electric utilities furnish the Commission with a biennial report in even-numbered years that contains the specific information set out in that Commission Rule. Further, Commission Rule R8-67(b) requires any electric power supplier subject to Rule R8-60 to file a Renewable Energy and Energy Efficiency Portfolio Standard (REPS) compliance plan as part of its IRP report. Within 150 days after the filing of each electric utility's biennial report, the Public Staff or any other intervenor may file its own plan or an evaluation of, or comments on, the electric utilities' IRP reports. Furthermore, the Public Staff or any other intervenor may identify any issue that it believes should be the subject of an evidentiary hearing.

Biennial reports on 2010 integrated resource plans (2010 biennial reports) have been filed in these proceedings by Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. (PEC), Duke Energy Carolinas, LLC (Duke), Virginia Electric and Power Company

d/b/a Dominion North Carolina Power (DNCP) (collectively, the electric utilities), and by the North Carolina Electric Membership Corporation (NCEMC) and the four independent electric membership corporations (EMCs), i.e., Piedmont EMC (Piedmont), Rutherford EMC (Rutherford), EnergyUnited EMC (EnergyUnited), and Haywood EMC (Haywood). In addition, REPS compliance plans have been filed herein by PEC, Duke, DNCP, GreenCo Solutions, Inc. (GreenCo), Halifax EMC (Halifax), and EnergyUnited.

The following parties have been granted intervenor status in these proceedings by Commission Order: The Carolina Industrial Groups for Fair Utility Rates I, II, and III (CIGFUR I, II, and III); the North Carolina Sustainable Energy Association (NCSEA); the Public Works Commission of the City of Fayetteville (FPWC); Nucor Steel-Hertford (Nucor); the North Carolina Waste Awareness and Reduction Network, Inc. (NC WARN); Southern Alliance for Clean Energy (SACE); and Carolina Utility Customers Association, Inc. (CUCA).

Attorney General Roy Cooper has given notice of his intervention in these proceedings on behalf of the using and consuming public pursuant to G.S. 62-20. Additionally as previously noted, the Public Staff is a party participating in these proceedings pursuant to G.S.

62-15(d) and Commission Rule R1-19(e).

On December 3, 2010, the Commission issued its Order Scheduling Public Hearing which scheduled this hearing with respect to the 2010 IRPs and REPS compliance plans that have been filed in this docket for this date, at this time, and in this place.

On December 13, 2010, SACE filed a Request for Evidentiary Hearing. On December 17, 2010, NC WARN filed a pleading voicing its support for SACE's request for an evidentiary hearing on the 2010 IRPs.

On December 28, 2010, PEC filed its Motion and Response to the Southern Alliance for Clean Energy and NC WARN's Request for Evidentiary Hearing.

On January 13, 2011, the Public Staff filed a Motion for Extension of Time requesting an Order extending the deadline for the filing of intervenor comments to February 20, 2011. This motion was granted by Commission Order issued January 19, 2011.

Pursuant to G.S. 138A-15(e) I remind members of the Commission of their duty to avoid conflicts of interest and inquire at this time as to whether any Commissioner has any known conflict of interest with respect to these proceedings.

(No response.)

I now call upon counsel for the parties to announce their appearances for record beginning with the investor-owned utility.

MR. KAYLOR: Thank you, Mr. Chairman, Members of the Commission. Robert Kaylor appearing on behalf of Duke Energy Carolinas and Dominion North Carolina Power.

MR. CASTLE: Good evening. Alex Castle appearing on behalf of Duke Energy Carolinas.

MR. SCHWENTKER: Good evening. Robert Schwentker on behalf of North Carolina Electric Membership Corporation.

MR. FEATHERS: Rick Feathers with North Carolina Electric Membership Corporation.

MR. ANTHONY: Mr. Chairman, Members of the Commission, Len Anthony appearing on behalf of Progress Energy Carolinas.

MR. OLSON: Good evening, I'm Kurt Olson appearing on behalf of the North Carolina Sustainable Energy Association.

MS. THOMPSON: Good evening. I'm Gudrun Thompson appearing on behalf of the Southern Alliance for Clean Energy.

MR. RUNKLE: Good evening. I'm John Runkle representing the North Carolina Waste Awareness and

Reduction Network. Commissioner Culpepper, I'd like to put on the record that a long-time witness in these proceedings John O. Blackburn passed away on January 16 at his home in Durham. He testified for us a number of times in the IRP hearings, Sav-A-Watt hearings and did reports for us on energy matters. There's a very nice tribute to him on the NC WARN website, www.ncwarn.org. I appreciate y'all letting me put that on the record. He was a great man. Thank you.

COMMISSIONER CULPEPPER: Thank you, Mr. Runkle. And the Commission does remember Dr. Blackburn and his testimony on behalf of your organization on numerous occasions. And please express to the Doctor's family the condolences of the Commission on account of the loss of their loved one.

MR. RUNKLE: I will. Thank you.

MR. GREEN: Mr. Chairman, Members of the Commission, I'm Len Green with the North Carolina Attorney General's office appearing on behalf of consumers.

MR. GILLAM: Mr. Chairman and Commissioners, I'm Bob Gillam with the Legal Division of the Public Staff representing the Using and Consuming Public.

COMMISSIONER CULPEPPER: Good evening Lady and Gentlemen. Now, I will inquire of you all together at one

time, does anybody know of any preliminary matters that the Commission needs to take up at this time before we commence this public hearing?

(No response.)

Mr. Gillam, have you identified any public witnesses that would like to participate and testify this evening in this docket?

MR. GILLAM: Yes. We have 26 so far. If there's anyone here that has not signed up to testify and would like to, you can sign in with Ms. Edmondson at the back of the room in the black dress.

COMMISSIONER CULPEPPER: Thank you, Mr. Gillam. In light of that, it might be beneficial for me to make this statement prior to you calling your first witness: Ladies and gentlemen, any of you that wish to come forward and testify in this proceeding this evening as a public witness, when you come forward -- Because the Commission functions in dockets like this as a court of law would function, if you wish to testify in this proceeding, it will be necessary for me to administer to you an oath much like an oath that would be administered to you if you were testifying in a court proceeding. And we have court reporter here who will be taking down all that testimony this evening.

That having been said, call your first witness.

MR. GILLAM: Tom Henkel. I'd like to have admitted into the record a statement as an exhibit.

COMMISSIONER CULPEPPER: Give the court reporter the original of whatever document you are holding there. How do you wish it to be identified for purposes of this proceeding?

MR. GILLAM: Public Staff Exhibit 1.

COMMISSIONER CULPEPPER: Well, do you want Public Staff Henkel Exhibit No. 1?

MR. GILLAM: Yes, that will be fine.

COMMISSIONER CULPEPPER: Let the document be so identified.

(Whereupon, Public Staff Henkel Exhibit 1 was marked for identification.)

TOM HENKEL; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record, please?

A Yes. My name is Thomas Henkel. I live at 3 Mt. Bolus Road in Chapel Hill, North Carolina.

Q And who is the electric supplier that serves you?

A Duke Energy serves Chapel Hill.

Q Do you have a statement to give tonight?

A Yes, I do.

Q Please do.

A Thank you. Chairman Finley, other Members of the Commission, thank you for this opportunity to share with you some personal suggestions for ways of addressing increasing demand for electric power in North Carolina over the coming decade.

For your information, I am a sustainable energy consultant with almost 35 years experience in solar energy and energy efficiency. I have designed and/or managed several successful pioneering solar-driven absorption HVAC systems since 1978, and this technology is now being commercialized. I have performed hundreds of energy audits of commercial, industrial, and institutional buildings since 1986.

In the months leading up to the passage of Renewable Energy and Efficiency Portfolio Standard legislation in 2008, several important studies were commissioned, including one by Duke Energy, that assess the potential for reducing electricity use through energy efficiency and the potential for deploying renewable energy power generation systems throughout North Carolina to meet the growing needs for electricity as our

population continues to increase and our economy begins, again, to grow. These studies show that present retail sales of electricity in North Carolina could be 20% less if common energy efficiency technologies were in use statewide. These can be deployed in the future for about 6 cents/kWh, which is less than the new power plants are projected to cost customers in rate increases.

Furthermore, renewable energy resources are shown to have even higher potential. The recent study by Dr. John Blackburn clearly demonstrates that no new coal or nuclear power plants will be needed in North Carolina for the foreseeable future if serious steps are taken to improve energy efficiency and if the deployment of renewable energy technologies is accelerated within all NC electricity markets. In order to do so, there must be a paradigm shift from utility-owned centralized to distributed energy plants.

In the limited time I have to comment, I would like to cite two examples of solar energy technologies that our electric utilities could deploy that could have a major impact on reducing coal and nuclear electricity use, yet would cause little or no increase in electric rates.

Duke Energy has a limited solar PV program in which the utility owns and operates electric generating

systems installed on participating customers' building rooftops. They capture federal and solar tax incentives in order to use the company's federal and state tax liabilities to buy down the first costs of these PV systems, which in NC can amount to almost 80%.

At a current installed cost of about $4000/kW for MW-size installations, the net 20-year levelized cost of the electricity produced by such a system here could be under 3 cents/kWh. This electricity is produced during daylight hours and displaces expensive peaking power produced by standby generating plants.

The following is Report Figure 9, Monthly Residential Loads by End-Use, taken from the energy efficiency market study commissioned by Duke Energy and prepared by Forefront Economics Inc., H Gil Peach & Associates LLC, and PA Consulting.

This diagram shows the residential electricity load for, I think, probably year 2008, maybe 2007. The shaded part of the figure between the values of 500 and 1,000 millions of kWh per month represents the use of electricity for water heating in the Duke Energy residential service area. This is the largest end-use application, greater than space heating or air-conditioning, and greater than cooking and

miscellaneous equipment use. Furthermore, along with lighting, running a washer and dryer, cooking and miscellaneous, these end-use applications are supplied by baseload power plants. Any significant reduction in these categories of electricity use could mitigate the need for building a new baseload power plant and even lead to the closing of one or more existing plants.

I suggest that the NC utilities could do a program, similar to the Duke Energy PV program, for solar hot water systems that displace electricity used for electric water heaters. But since these systems would produce hot water to be used directly by a participating customer, the amount of solar energy utilized for hot water can be metered and the customers billed monthly. Such a program has been in operation for several years by Lakeland Electric, a municipal utility in Lakeland, Fl. Since the major costs for these systems are the initial installation costs, Lakeland guarantees that the initial rate charged for solar energy remains constant for the life of the solar hot water system. In fact, about 10 years ago when they started this program it was about 7 cents a kilowatt hour. Now they are up to about 10, 11, 12 cents a kilowatt hour. So the early participants in this program still pay 7 cents a kilowatt hour for their

solar energy for hot water.

In addition to this monthly revenue, solar Renewable Energy Certificates (RECs) can also be aggregated and sold for more revenue. This program has been so popular that Lakeland Electric was authorized last year to expand the program from 80 to 5000 systems. I estimate that if Duke Energy and Progress Energy developed a similar program wherein they would also capture solar tax credits, meter the systems and bill customers monthly at a fixed rate equal to or less than the current electric rate, they would realize discounted simple paybacks on their investments of well under 5 years with very little impact on the rate base for this energy efficiency application.

I won't go into the details which are in the next paragraph, but if this were a serious program for Duke Energy and Progress and the other utilities, they could easily displace over a 1,000 megawatts of baseload coal-fired power plants, just one program alone.

There are other distributed solar thermal technologies I could mention which displace electricity for which the utilities could also own the assets and produce revenue with little impact of electric rates.

In conclusion, my feelings are the IRP

filings could be strengthened if our utilities would get serious about owning and operating renewable energy facilities. With the technology here today it's time to start paradigm shift from centralized power plants to distributed. Thank you very much.

MR. GILLAM: I have no questions.

COMMISSIONER CULPEPPER: Intervenor cross-examination?

(No response.)

Cross-examination on the utility side?

MR. ANTHONY: Just a couple.

CROSS-EXAMINATION BY MR. ANTHONY:

Q Good evening. How are you?

A Fine. Good to see you again.

Q Just to make sure I understand, assuming I'm capable of that, the top of your second page you referenced $4,000 a kW with producing energy of 3 cents a kWh?

A When you look at the latest cost of PV power plants in the megawatt size, these are not coming in at about $4,000 kW, that's the installed cost. If Duke Energy or Progress or any utility would use their tax liabilities to buy down the cost of that system about 80 percent buy down, and then you take the cost of that

system and divide it by roughly 1300 kWh per kW over 20 years, your levelized cost turns out to be less than 3 cents kWh. You will find this in Dr. Blackburn's work as well.

Q That was my question: What capacity factor for the solar generating are you assuming?

A You're assuming about 6, 7 hours a day of collection. There's 1300 kWh a year for every kW of installed capacity. That's the average for North Carolina.

Q About 20 percent, 25 percent capacity factor is what you're assuming?

A Yeah, that's right. I'm giving you roughly what the actual annual production of a system would be. It's produced during between 10:00 in the morning and 5:00 in the afternoon.

Q Further down you say along with lighting, running washer and dryer, cooking and miscellaneous, you were also referring to space heating, et cetera, all of these are supplied baseload power plant?

A Right.

Q What retail end-uses are left once you get that list that are not certified baseload power plants?

A The electric space heating and air conditioning.

The peaks on that diagram. Some of that is baseload, but most is peaking plants.

Q So your space heating and air-conditioning are served by peaking units --

A That's right.

Q Finally, with regard to your solar hot water, am I correct you are assuming the utilities would own and operate --

A Yes. The way Lakeland Electric does it, they have 2 or 3 people that run the program. They farm out the insulation, maintenance to local solar energy companies to install and maintain these systems. The utility, the install a meter and they bill the customer monthly.

Q And they bill the customer the standard tariff rate?

A That's right.

MR. ANTHONY: Thank you.

COMMISSIONER CULPEPPER: Redirect examination, Mr. Gillam?

MR. GILLAM: No questions.

COMMISSIONER CULPEPPER: Questions by the Commission?

(No response.)

All right. Thank you, Dr. Henkel, you may stand

down with our appreciation for having come and testify in this proceeding this evening.

Mr. Gillam, do you want to move to admit Public Staff Henkel Exhibit No. 1?

MR. GILLAM: Yes, please.

COMMISSIONER CULPEPPER: Let it be received.

(Whereupon, Public Staff Henkel Exhibit No. 1 was marked for identification.)

MR. GILLAM: Giles Blunden?

GILES BLUNDEN; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record, please?

A Giles Blunden. I am an architect. I have been designing energy efficient residential homes for the last 40 years. I live in a house for 15 years that is not connected to the energy grid, living off solar electricity.

Q So you do not have an electric supplier? You live entirely off the grid?

A Yes.

Q Do you have a statement you would like to make tonight?

A Yes, I do. I believe there's enough renewable energy resources in North Carolina with wind on the coast and sun in central North Carolina and wind in the mountains to provide a lot of electricity for North Carolina's needs. I think the Energy Department, the energy division has looked at these wind resources. They've just in the last couple of years done some studies and they're tremendous. There's a tremendous amount of wind. And there's a tremendous amount of sun. I think we've got to move toward those new systems. We have to move there because the systems we have, the coal systems and nuclear systems are olds system that produce poisons that are going into the environment.

The nuclear industry still has no way of looking after their waste. There's still a lot of end use, but there's still now way to take care of that poisonous waste. The coal industry has got coal ash they can't get rid of. There's arsenic and things in that. Basically all I'm saying is we need to, as a group of North Carolinians, move toward energy efficiency, solar, wind and coal and nuclear. I think it's going to be a mix for years and years and years. But if one group is subsidized or one system is subsidized like nuclear by having the ratepayers pay for that in advance, then you

are still taking away money that can go to the other system. In other words, every system is going to take a certain amount of investment. So it's important that all of those systems be equally funded. And there's nobody looking out for the existing utilities that have a business model based nuclear, based on coal. And they don't have a model based on wind or solar. I think we have to make sure that those systems are being funded equally well or at least the money not being taken away from them. That is what I think if the ratepayers are being asked to pay for nuclear plant up front, I think that taking money away that would go into investment in solar and wind.

From what I heard from what Tom Henkel just said right now with existing in today's system, a photovoltaic system takes 6 years to pay off with tax credits and just general business model. So you can produce with an investment of 6 years will pay back all of the photovoltaic system. After 6 years it starts producing income. And it will produce about a 35 percent return on that even after 6 years. So I think these systems are just in their infancy. So they really need to be supported. I think this, again, ratepayer advance, which I don't agree with anyway, and I'm not going to go into

that. But I think that's basically sucking money away from these other cleaner more progressive energy sources. Thank you.

MR. GILLAM: No questions.

COMMISSIONER CULPEPPER: Intervenor cross-examination?

MR. RUNKLE: Yes, sir, I have a couple.

CROSS-EXAMINATION BY MR. RUNKLE:

Q Mr. Blunden, are you an architect?

A Right.

Q Do you specialize in solar houses and solar buildings?

A I do.

Q How many have you done in your career?

A In my life?

Q I mean, 10 or --

A Two or three hundred.

Q Most of those in Orange County?

A Almost all in Orange County.

Q Based on your experience, does adding solar on a house increase the cost of that construction of that house?

A Does it increase the cost?

Q Yes.

A Well there are certain things you can do to the structure of the house that don't cost anything. But if you are talking about energy producing systems like photovoltaics or solar hot water, there is a front-end cost. There's always going to be a front-end cost on anything that produces energy. In other words any system, any engineering system that produces, you are going to have a front-end cost. Usually it's a matter of how long it takes to pay back that money or to make money.

Q What other kind of things can you do on a house, solar-related things, that don't cost more money?

A Well, two different scenarios: One is existing houses and one is new houses. New houses is simply facing them in the right direction and putting in the right kind of glass. And you can actually reduce the energy -- you are reducing the energy cost by 65 percent. Then if you add the systems on top of that, you had the photovoltaic systems of solar hot water systems, then you first reduce it 65 percent, so then you only have 35 percent of the energy to produce in the second place. I think these things aren't getting looked at. They are not getting on the table. As long as we keep pushing for these older technologies and not supporting the newer technologies, they are not going to come forward. It's frustrating for

me because I've been doing this for so long to hear the story over and over. Twenty, thirty years we've known this. Ever since the Iraq, the oil prices in 1975. There was a huge leak in knowledge at that point which sort of stuck and we don't go forward. Personally, I don't think the utilities should have a monopoly. I think it should be taken away from them. I think there are a lot of people out there that can produce electricity cheaper than these guys can. But that's not on the table today. Thank you very much.

COMMISSIONER CULPEPPER: Wait just a minute. We might have some more questions. Are there any other intervenor questions?

(No response.)

Utilities?

(No response.)

Questions by the Commission?

(No response.)

Any redirect?

MR. GILLAM: No redirect.

COMMISSIONER CULPEPPER: All right. Thank you, you may stand down with our appreciation.

MR. GILLAM: Barbara Janeway.

BARBARA JANEWAY; Being first duly sworn,

testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record, please?

A Barbara Janeway, and I reside at 302 Cedarwood Lane, Carrboro, North Carolina.

Q Who is your electric supplier?

A Duke Energy.

Q Do you have a statement you would like to make tonight?

A Yes.

Q Please do.

A Chairman and Commissioners. I am concerned if you allow Duke to raise our rates it does impact poor people the most. I wonder how it is Duke has the Share The Warm fund that I am encouraged as a ratepayer to contribute to that but at the same time Duke wants to raise rates and poor people will be more and more in need of charity.

The second point that I want to make is I have learned to my surprise that Duke and Progress executives have already agreed to work together to change North Carolina's laws in order to eliminate public hearings that might be lengthy and inconvenient. I am very concerned if that is true. I am concerned that we will just stop

hearing from Duke's customer. We might all be agreeing to this large company being able to legally cease public comment and expert's testimony. Are you Commissioners actually willing to give Duke the unbridled power to eliminate public participation in the energy issues facing our state? I ask you to consider that very carefully. There's an unprecedented nature to that.

My third and last point, the lead executives of Duke and Progress readily acknowledge that any future and nuclear project will be daunting even to a company as large as the new Duke will be. But they also say they have no choice but to expand the nuclear power. I submit to you that I think this is their opinion that they have no choice. They have completely dismissed as far as I can tell the research which shows that energy efficiency measures, solar, wind and cogeneration projects will take care of North Carolina's future energy needs. Right now at least 20 states are ahead of us in developing energy other than coal and nuclear. States with monopoly energy sales are the states that are still intending to build new nuclear plants. We know that rates will need to be raised to cover the increased cost of solar energy. But rates will need to be raised much higher to cover the cost of nuclear plants.

Solar installer record that Duke Energy has turned down a host of competitively priced proposals to sell electricity to Duke. And I ask why would Duke turn down electricity generated from the sun? Getting financing for the installation of a large solar project requires showing the lender that the developer has a contract to sell this power to a utility. I think that Duke is arguing for new nuclear plants by turning down solar projects. And they are rejecting solar energy that is priced below what nuclear power will cost. These are my concerns, and I ask you to please consider them. Thank you very much.

BY MR. GILLAM:

Q Where did you hear that Duke and Progress have agreed to change the laws to eliminate public comments?

A There's an article in the newspaper, and right now I can't remember which one it is, but I read that article on in NC WARN website.

MR. GILLAM: Thank you.

COMMISSIONER CULPEPPER: Is there Intervenor cross-examination of the witness?

(No response.)

Cross-examination by the utilities?

CROSS-EXAMINATION BY MR. KAYLOR:

Q So you are telling us this report that Duke and Progress were somehow agreeing that they would limit public input with regard to hearings comes from NC WARN; is that correct?

A No. It's on their website. But it's a newspaper article. I should have put it in here. I was very upset to hear that. I can't believe that can happen.

Q I don't believe they can. I don't believe the article has been recorded correctly. So you need to go back and do some more research, I believe.

COMMISSIONER CULPEPPER: Is that a question.

MR. OLSON: I'm going to object to that little dialogue.

COMMISSIONER CULPEPPER: Objection sustained on that. That wasn't a question. Do you have a question you want to ask the witness?

MR. KAYLOR: No.

COMMISSIONER CULPEPPER: Any other questions from the utilities?

(No response.)

Redirect?

MR. GILLAM: No, sir.

COMMISSIONER CULPEPPER: Questions by the Commission?

(No response.)

MR. GILLAM: I request to have admitted Public Staff Janeway Exhibit No. 1.

COMMISSIONER CULPEPPER: Let the exhibit be so identified. What is it? Is that a copy of her statement? You may step down from the witness chair now. Thank you with our appreciation.

MR. GILLAM: It is.

COMMISSIONER CULPEPPER: Let the exhibit be identified as Public Staff Janeway Exhibit No. 1. And without objection it is received into evidence.

(Whereupon, Public Staff Janeway Exhibit No. 1 was marked for identification and admitted into evidence.)

MS. BECK: I'm not speaking.

COMMISSIONER CULPEPPER: Mr. Gillam is your lawyer here. Let him handle -- you give him what you want to give him, and then sit down in the witness chair.

RACHEL BECK; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Is this the statement you would like to give tonight?

A Yes.

Q Are you Rachel Beck from 101 West Poplar Ext., Carrboro, North Carolina?

A Yes.

MR. GILLAM: That's all I have.

COMMISSIONER CULPEPPER: Could you spell your last name?

MS. BECK: B-e-c-k.

COMMISSIONER CULPEPPER: Is that Beck?

MS. BECK: Yes.

COMMISSIONER CULPEPPER: Mr. Gillam, this is your statement? These are your words you handed Mr. Gillam?

MS. BECK: Yes.

COMMISSIONER CULPEPPER: Let's let the exhibit be identified as Public Staff Beck Exhibit No. 1. Do you want it admitted?

MR. GILLAM: Yes, I would.

COMMISSIONER CULPEPPER: Let it be so received.

(Whereupon, Public Staff Beck Exhibit No. 1 was marked for identification and admitted into evidence.)

I believe that will take care of your participation here. You indicated you didn't wish to testify beyond having your statement introduced.

MR. ANTHONY: Mr. Chairman, could we at least see the statement that is being introduced, please?

COMMISSIONER CULPEPPER: Yes, sir. Mr. Gillam, do you have any copies?

MR. GILLAM: I gave my last copy to Mr. Kaylor. Perhaps he will make it available to them.

Melvin Whitley?

MELVIN WHITLEY; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q State your name and address for the record, please.

A Rev. Melvin Whitley. I live 2614 Harvard Ave, Durham, North Carolina.

Q Who is your electric supplier?

A Duke.

Q Do you have a statement you would like to make tonight?

A Yes, I do.

Q Please do.

A Honorable Members of the Utility Commission, lawyers, consumer advocates and public, time and time again we have heard from utility companies that if you allow us to do this, if you allow us to build utility

nuclear energy, we will return pennies on a dollar. Where is the penny on the dollar? Once again we are faced with utility increases, forecast of utility increases when clean efficient energy is available.

It is generally believed that energy conservation is good public policy. But we hear from the poor and working poor concerned about their energy -- high energy cost. They see substandard housing, they see their neighbors putting newspaper in cracks and plastic on windows and doors just to stay warm. In our urban cities, we see large pools of substandard housing, and we have large pools of people being in poverty, yet we have a public utility policy, one is that this utility commission and others have endorsed that expect the landlords to repair property when they don't pay the utility bill. These renters pay at the same utility rate as homeowners. And in tune they pay more in utility -- they pay higher utility than the homeowner; the problem they cannot fix and this utility commission have chosen not to address. Without energy conservation they pay more. We don't see the cost of children that fight to stay warm at night. We don't see them the next day when they lose or they decrease participation in the classroom, and when their attention span wanders. We don't see the high insurance

rates of homeowners as it goes up because of people using kerosene heaters and electric heaters. And when the fire takes place, the neighbor and the community wear the burden of high increased insurance rates. And we don't see the increase in consumers losing insurance because of fire, property damage. All these things are connected to the problem of poverty, but yet both utility companies, have no policy that will meet the needs of the poor and the working poor.

Now there are those spoke very eloquent about kilowatts and how we get energy, but it seems to me that we need a policy at least a voice from the utility commission that will start the conversation of how to meet the needs of low income consumers. I know somebody might ask me the question, but I will go ahead and give it to you, what if landlords had to pay the utility bill? Would we get more energy conservation? Where does the voice for that policy or a policy like that come from? The poor and the working poor can no longer afford a policy that does not address utility consumers, low income consumers. We need a utility commission that starts the process in which all utility consumers can benefit from energy conservation. Thank you so much.

BY MR. GILLAM:

Q Is this your statement you would like to have admitted?

A Yes.

MR. GILLAM: Thank you.

COMMISSIONER CULPEPPER: Let the statement be identified as Public Staff Whitley Exhibit No. 1 for purposes of this proceeding.

(Whereupon, Public Staff Whitley Exhibit No. 1 was marked for identification.)

Any intervenor cross-examination?

(No response.)

Any utility cross-examination?

(No response.)

Questions by the Commission?

(No response.)

Thank you very much. You may stand down from the witness chair.

MR. GILLAM: We'd like to have this exhibit admitted.

COMMISSIONER CULPEPPER: Let it be received.

(Whereupon, Public Staff Whitley Exhibit No. 1 was admitted into evidence.)

MR. GILLAM: Jerry Markatos?

JERRY MARKATOS; Being first duly sworn,

testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record, please?

A My name is Jerry Markatos. I live at 800 Rock Rest Road in Pittsboro, North Carolina; rural Chatham County.

Q Who is your electric supplier?

A Progress Energy.

Q Do you have a statement you would like to make tonight?

A I do.

Q Please do.

A Mr. Chairman, Commissioners, there are 5 fronts on which I'd like to address the proposals, the planning that the utility companies are considering under your jurisdiction. Each one illustrates the urgency of applying available funds, the money that goes into paying utilities' costs to weatherization and all the manifold paths to reducing energy demands rather than increasing generating capacity.

The elevated temperatures that are melting the glaciers at the headwaters of the major river systems of the world and are lifting up huge amounts with our

agricultural fields and forests and on the surface of the oceans and then dropping vasts amount of water onto unfortunate communities and countries in the path of floods. These are new developments. These are unprecedented developments.

The water cycle is being driven into a frenetic mix of storm delivery and drought, yet our power plants are evaporating massive amounts of valuable water high quality water and making the maintenance of water supplies for our population more difficult each year. Rivers and lakes used for cooling power plants are often at such a high ambient temperature that nuclear plants will have to be shut down either to preserve water supplies or to prevent widespread kills of fish and other aquatic life forms.

I live in an old NC farmhouse. My family and I have been reducing energy use every year for decades, and still have a long list of additional weatherization and energy efficiency tactics to complete. We are not alone. A young couple in my neighborhood confided that their electricity bill for December was over $400. The NC Save$ proposals if implemented would accomplish the same kind of energy use reduction that states like ME, VT, OR, NY, NJ and WI have been enjoying, without escalating the electric

rates on a regular basis, and without choosing the irresponsible option of automatic rate increases now being proposed by Duke and Progress energy.

NC potential for wind power and solar electric has been carefully studied. Costs for nuclear and coal continue to increase while costs of wind power and solar electric continue to drop. The period of time during which nuclear and coal plant construction would take place is clearly the time during which crossover is taking place, with efficiency increases and drops in cost of solar electric and wind turbines making the old style sources obsolete.

It is embarrassing to be splitting the atom to boil an egg or to do a thousand other tasks that can be either made unnecessary through planning or be done at lower cost with existing generating capacity.

Some of the trees overhanging our shop, studio and home have been cut and used in our woodstove. To speed drying of firewood in times of short supply I have run wood across the table saw, slicing through the bark to help it dry faster. But after joking with a friend about the absurdity of splitting the atom to dry the wood, I shamed myself out of that practice. A little advance planning now provides us with plenty of dry firewood,

without adding to the electric demand.

Shame isn't a dominant concept in the corporate world, and that's a shame. Because, with all the urgent factors that argue for demand reduction - let's call it "smart use" - and all the economic hardship North Carolinians are experiencing, it would be shameful to tie up billions unnecessarily in new nuclear and coal plants, when money is so desperately needed for smarter long term investment. Thank you.

COMMISSIONER CULPEPPER: Can you spell your last name?

MR. MARKATOS: M-a-r-k-a-t-o-s. I should add, too, that my work is commercial photography. And most of my work is for architects photographing houses and sometimes commercial buildings. So I get to see some of the best and some of the occasionally careless designs that goes on today. I see a lot of opportunities some of them taken and some of them missed in implementing policies that are now available.

COMMISSIONER CULPEPPER: Does that conclude your statement?

MR. MARKATOS: Yes.

COMMISSIONER CULPEPPER: Mr. Gillam, is there an exhibit that you want --

BY MR. GILLAM:

Q Is this the exhibit summarizing your testimony that you would like to have admitted?

A Yes, it is.

Q Then one other question: Where did you hear that utilities were going to get together to eliminate any further public voice on their rate increases?

A I'm not sure the original source, but I did see discussion of it in emails that came through the community.

COMMISSIONER CULPEPPER: You want your exhibit identified as Public Staff Markatos Exhibit No. 1?

MR. GILLAM: Yes, Please.

(Whereupon, Public Staff Markatos Exhibit No. 1 was marked for identification.)

Is there intervenor cross-examination of the witness?

(No response.)

Utility cross-examination?

CROSS-EXAMINATION BY MR. ANTHONY:

Q How are you this evening?

A Yes, hi.

Q You mentioned that you still have a somewhat lengthy list of energy efficiency measures that need to be

done to your home. Did I hear you correctly?

A I live in log house that was built in the 1830s. There are portions of that house that are almost impossible to get at. In the early years in 70s when we first moved there, I spent a lot of time under the house in some strange spaces in the walls and attic. I was thinking at one point at the rate we were putting silicon caulk into that house that after 100 or 200 more years there would be this wobbly lattice standing there, this silicon caulk. It is a house that is still going to take a long time to bring up to the 21st century standards. But we are working on it.

Q What is holding you back from making those further energy efficiency improvements?

A The time it takes to work on it. And also in a way we are struggling between the historic nature of the house and how far we go in changing the appearance of it like -- I've been looking forward to adding more ventilation to the attic for example. We tightened up the attic last year and put substantial insulation in addition to what we did when we first moved in. So it's now that insulation in the attic is about a foot and a half deep. And there's vapor barrier and all caulk. It's a long-term project. I wish we were done.

Q How do you prioritize the energy efficiency measures that you perform, decide which ones to do first and which ones to do last?

A Well cost is one factor and just difficulty of access of some of the portions of the house I need to get to. It's time consuming projects. We hired somebody to work with the attic. And there are areas under the house where the space between the inside wall surfaces the way they are mounted on the log section is an unhappy job to get in those spaces under the house. I guess it's a psychological factor in there, too.

Q I gotta ask, have you thought about moving to a newer home?

A My wife has made that suggestion. We are in a great neighborhood and people care about their community. It would be hard to make that move.

MR. ANTHONY: Thank you.

CROSS-EXAMINATION BY MR. KAYLOR:

Q Do you heat primarily with wood?

A Yes.

Q Does that produce CO2 emissions?

A It speeds up the CO2 emerges that the trees that have fallen on our land were hitting for. I had that question myself because I have been involved in energy

issues ever since 1970. It's an important question. I will be happy when I just let the fungi and termites do more of that.

COMMISSIONER CULPEPPER: Additional questions?

(No response.)

Redirect?

MR. GILLAM: No redirect.

COMMISSIONER CULPEPPER: Questions by the Commission?

(No response.)

All right. Thank you very much, Mr. Markatos. You may stand down. The exhibit is identified as Public Staff Markatos Exhibit No. 1. That is a copy of his statement. Let the exhibit be received.

(Whereupon, Public Staff Markatos Exhibit No. 1 was marked for identification and admitted into evidence.)

MR. GILLAM: Mary Sherwood?

MARY SHERWOOD; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record, please?

A My name is Marywinne Sherwood. My address is 101 Circadian Way in Carrboro, North Carolina.

Q Who is your electric supplier?

A Duke Power.

Q Do you have a statement you would like to give tonight?

A I do.

Q Please do.

A Good evening, Commissioners. I am one of those people how have hot water solar panels on the roof of my house, now, for 15 years, and I turn the power off to heat my water in March and do not turn it on again until November or (this year) end of December. That is a much greater savings of energy than the power companies could ever provide. The state of NC needs to invest in these types of renewable energy sources. Please lead us into the future, not back into the past.

My experience with solar hot water panels is also proof that, with an investment that can be made up in a short time, individuals can supply a great deal of their own power. We do not need new nuke plants or coal plants that are exponentially expensive, are not needed and are harmful to the environment. And we do not need the rate payers to have to foot the bill of nuke plants that will

not be on line for 15 to 20 years (being of no help to the climate crises we are in), that are notorious for huge cost over runs, that pollute the air and land (coal and nukes with no place for the waste) and give off unknown amounts of radiation routinely (nuke plants) and are far more expensive to build that the costs of renewable energy sources. Nuclear fuel storage is also a great target for a terrorist.

The proposal that rate payers of North Carolina should foot the bill ahead of time for nuclear plants that may never be finished and are not needed because of electric use in this state as I understand it has been level for many years is a form of what I feel is financial rape. If Duke-Progress wants to build nuke plants, let them put up collateral and borrow the money themselves from the bank. Of course we know the bank won't loan the money to them because the banks don't have any faith in this form of power.

We also know that insurance companies will not insure nuclear plants either because they know they can't recoup or that there would be an extreme liability that would bury them basically if an accident happened. And accidents do happen.

I urge the utility commissioners to be smart,

not to let the dollars the power companies offer to them, sway them from their duty to support the people of this state.

BY MR. GILLAM:

Q Is this your version of your testimony you would like to have admitted?

A Yes.

COMMISSIONER CULPEPPER: Let the exhibit be identified as Public Staff Sherwood Exhibit No. 1.

(Whereupon, Public Staff Sherwood Exhibit No. 1 was marked for identification.)

Do you have any other questions of your witness, Mr. Gillam?

MR. GILLAM: No, I don't.

COMMISSIONER CULPEPPER: Intervenor cross-examination?

(No response.)

COMMISSIONER CULPEPPER: Utility cross-examination?

(No response.)

COMMISSIONER CULPEPPER: Questions by the Commission?

(No response.)

COMMISSIONER CULPEPPER: Thank you very much,

ma'am. You may stand down with our appreciation having come this evening. Let Public Staff Sherwood Exhibit No. 1 be received into evidence.

(Whereupon, Public Staff Sherwood Exhibit No. 1 was admitted into evidence.)

MR. GILLAM: Mark Marcopolos?

MARK MARCOPLOS; Being first duly sworn, testified as follows:

MR. MARCOPLOS: I run a residential building company --

COMMISSIONER CULPEPPER: Wait just a minute. Let the lawyer ask you a couple of questions.

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record, please?

A Mark Marcoplos, 7207 Southern Trail Bingham Township in Western Orange County, North Carolina.

Q Who is your electric supplier?

A I am. I have an onsite power facility photovoltaic. I use a little bit of Duke Energy. We are still connected to the grid. But we get most of our power from our own system.

Q Do you have a statement you would like to make tonight?

A Yes, I do.

Q Please do.

A I am builder, residential builder, doing a lot of remodeling; some custom homes, repairs, energy efficiency upgrades. I do energy audits. And I was telling somebody when I was getting ready to come over here that what I should do is offer each of you Commissioners a free energy audit of your house and show you how much energy can be saved through efficiency. And then somebody pointed out that's likely to be bribery. So then it occurred to me if I could get away with it, it would be one of the most effective bribes you could ever take. I would come in and spend about an hour or hour and a quarter in your house, and I would find like I find in virtually every house opportunities to save 10, 20, 30 percent of your energy bills which translate into not only real money but comfort and health. And I'm serious. I can write my report practically before I go in the house. I know what I'm going to find. It's useful for me to be there for the homeowner to actually point things out. But I find the same things in every home. That's just garden variety energy efficiency air leakage like the door to this building that has a gap in it about a half inch wide that us state tax payers are paying for that energy leakage

much to the benefit of the utilities.

One other point I'd like to make install solar water heaters, every house I've built takes me about 3 minutes to talk somebody into putting a solar water heater on their house. I tell them that the amount of money it adds to their mortgage will be less than the amount of money that the save every month. Think about that. The amount of money that they will pay in their mortgage is less than the amount of money they save by putting that solar water heater on their home, they have more money at the end of the month. Water heating is 25 to 25 percent of household energy. If we took these large sums of money and simply put solar water heaters on thousand upon thousand of houses, we would be clearly very economically effecting demand.

I had the opportunity to speak to a guy who is in charge of demand management for the Tallahassee City Utility. I was down looking at a company that sells solar water heater and their business is beginning to thrive down there. Tallahassee is a municipally owned utility. That means that their charge to provide the highest quality service at the best price for their customers. There are no stockholders involved. There is no profit that they are looking to gain on behalf of their

stockholders. They are faced with the need for more capacity. And they understand that more capacity can be gained in the form of energy savings. They are offering rebates on solar water heaters. They are offering very low discount insulation upgrades customers. Five-day, hundred dollars worth of energy air ceiling and installation for $50. When someone installs a solar water heater in Tallahassee they call up the town, a representative drives out and verifies that they actually did it and has hands them $450 on the spot. They've got solar water heaters on most of their fire stations. They understand that the least expensive way to provide power is to utilize energy efficiency techniques.

Now this doesn't fatten any stockholders profits. But it does keeps electrical costs down for the ratepayers who don't have to foot the bill for a new plant. And they give good service. The people feel proud to be part of their city's utility and be part owners of the utility. From my perspective, just as a businessman doing this in houses close to the ground apart from the higher economics of energy use, I really think I see all that really needs to be understood in some way, that there is just vast amounts of energy to be saved. These methods of saving energy upgrades, energy efficiency, insulation,

putting solar water heaters on homes provide jobs, it is so clear to me that is the path to go that would benefit the citizens. The stockholders will be okay. I think they will survive. But it's the citizens that we need to implement this policy for. Thank you.

COMMISSIONER CULPEPPER: Mr. Gillam, do you have any questions of your witness?

MR. GILLAM: No questions.

COMMISSIONER CULPEPPER: Mr. Marcoplos, would you spell your name for the court reporter so we can make sure we got it right on the record?

MR. MARCOPLOS: Yes. First I will tell you I first met Jerry Markatos when he got my mail. I didn't know him and he called me up. So my name is spelled M-a-r-c-o-p-l-o-s.

COMMISSIONER CULPEPPER: Is there intervenor cross-examination?

(No response.)

Utility cross-examination?

CROSS-EXAMINATION BY MR. ANTHONY:

Q How are you doing?

A Not bad.

Q Do you know how the City of Tallahassee decides how much money to offer to its citizens for the various

energy efficiency and solar hot water heating measures they offer?

A I don't have a complete answer, but I do have one answer. The guy was telling me that just before the last election one of the county commissioners that was up for election prevailed upon its fellow Commissioners to raise the rebate to $900 during the election season and had a lot of traffic. A lot of people put up solar water heater. But then they decided that was really stretching their finances a bit and they were picking up enough with the $450 rebate. I didn't go into all the details on that.

Q How do you think they should determine that amount of incentive they give their citizens for those type measures?

A Well I think they need to look at what the cost of the new power plant is they are trying to avoid and base it on that.

Q The avoided cost is what they should use, is that what you are saying they should use as a measure?

A They could use that. There is all kinds of ways you could look at it. There's health benefits to not building a coal or nuclear plant. You could factor in health benefits. I don't think there's any one way to do

it. The benefits are many. And the value you can place on those benefits, I guess, would be debated.

MR. ANTHONY: Thank you.

COMMISSIONER CULPEPPER: Any additional utility questions of the witness?

(No response.)

Redirect?

MR. GILLAM: No.

COMMISSIONER CULPEPPER: Questions by the Commission?

(No response.)

Thank you very much, sir. You may stand down.

MR. MARCOPLOS: Give me a call. I'll give you an energy audit.

MR. GILLAM: William Delamar?

WILLIAM DELAMAR; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record, please?

A My name is Bill Delamar. I live at 5708 Glenfiddich Way in Raleigh, North Carolina.

Q Who is your electric supplier?

A Progress Energy.

Q Do you have a statement you would like to make?

A I do.

My name is William (Bill) Delamar, and I am a licensed home inspector and general contractor. My company is Residential Consulting, inc. and we offer Home Inspections, Radon gas measurement and mitigation. We incorporated in 1994. I previously worked for Piedmont as a building inspector.

I've been involved in these issues for quite a while and I was here and was here when Amory Lovins of the Rocky Mountain Institute spoke to this commission before, I believe in 1986 or '87, and he explained how the Harris plant was not needed as we approached the need for energy through efficiency. Now, more than 20 years later, renewables are coming more and more into the mix so the approach of utilizing efficiency and renewables offers an even greater opportunity now than at that time. He spoke of energy efficient light bulbs and appliances and the exponential effect they would have on energy demand. We now have compact fluorescent light bulbs and soon we will see more and more LED lighting. Our appliances today are typically energy star, and we can assume that they will continue to improve.

Now it is my understanding that Duke and

Progress are preparing a bill that will let them charge customers an annual rate hike to pre-pay for nuclear plants that would not be completed for more than a decade or more to build or maybe it will never be built. For many that money will be a hardship, but that is not the primary reason that going in that direction is the wrong path. And, it is not just the reality that insurance companies still will not cover a nuclear plant and that "we the people" are forced to take that responsibility. And, it is not just that the final waste issue remains unresolved and the dangerous issue of cooling ponds that remains. It is not just the reality that the cost of decommissioning a plant and the ongoing cost once it is producing no power is still unknown, but will undoubtedly be expensive. It is not just the fact that a nuclear plant is a potential terrorist target or that there is always a possibility of an accident. And, it is not just the fact that there are well documented problems with the newer reactor designs. Of course, it is all these issues. I believe that we are at a crossroads, and that taking the same direction we have in the past will take monies away from and slow the inevitable path to renewables.

With a recent study by the late Dr. John Blackburn showing that solar is becoming less costly than

nuclear. We need to take this opportunity to go in that direction with the idea in mind that solar will continue to improve in both cost and efficiency. Nuclear always goes way over the initial estimate, and the Federal Energy Information Administration recently reported that the cost of building a nuclear plant rose 37% in 2010. What additional costs will that mean in the future? I think we have to ask that question. The costs are undefined.

Obviously, solar alone will not be the answer. It will take building more efficient homes, beginning to retrofit existing homes, wind power, and empowering homeowners through knowledge and tax credits to turn their homes into their Victory Gardens.

By choosing this path we will create jobs that cannot be outsourced and keep money in North Carolina. This stronger foundation will provide more tax dollars and make people ultimately more secure in their homes and with greater protection from rising energy costs. That means that the poor or those on fixed incomes will be able to purchase the food and medicines that they need. But, it is not just the most desperate among us that will benefit. There will be a trickle-up effect, and that will make us a stronger nation.

Arjun Makhijani of the Institute of Energy and

Environmental Research produced his book *Carbon-Free and Nuclear-Free* that outlines some of the many diversified ways that we can produce safe, clean energy. Just one example described in the book is how a parking lot was covered with solar panels, producing electricity far about 600 homes and creating shade for cars below. This is just one of many examples how thinking outside of the box can exponentially produce energy. And maintenance, of course, will be necessary, creating jobs, and replacement over time will not involve the issues that a nuclear plant will and will likely mean that efficiency over time will improve.

His book should be required for all legislators and regulators and, if you haven't already, it can be downloaded for free by searching, *Carbon-Free and Nuclear-Free*. It is truly eye opening.

Thank you for the opportunity to speak. I hope this Commission will help define North Carolina as a leader in renewables. That distinction will serve this state and the nation well.

COMMISSIONER CULPEPPER: Mr. Gillam, do you have any questions of the witness?

BY MR. GILLAM:

Q Is this the written version of your testimony?

A Yes.

Q Would you like to have it admitted in evidence?

A Yes, please.

COMMISSIONER CULPEPPER: Let the exhibit be identified as Public Staff Delamar Exhibit No. 1.

(Whereupon, Public Staff Delamar Exhibit No. 1 was marked for identification.)

Any further questions?

MR. GILLAM: No.

COMMISSIONER CULPEPPER: Intervenor cross-examination?

(No response.)

COMMISSIONER CULPEPPER: Utility cross-examination?

CROSS-EXAMINATION BY MR. KAYLOR:

Q Did you prepare your own talking points or did someone give you some of the points that you've provided tonight?

A Well, I read a lot. No, nobody gave me any.

Q The reason I ask is because several of the witnesses seem to mention the same points, and I wondered how y'all seemed to have the same points about the fact there's no insurance for nuclear plants. And you also talk about the fact that Duke and Progress are trying to

provide a way they could pay for their power plants without public input.

A I never mentioned that.

Q What about the issue of the insurance?

A That's been around for quite a while. I think it was the Price Anderson Act was the initial supplementing of these power plants if I recall correctly. That's something that has been common knowledge for quite a while.

Q Are you familiar with Nuclear Mutual Limited?

A No, I'm not.

Q Are you familiar with companies pay into that and provide coverage and NRC requires that to operate the plants?

A I'm not familiar with those details.

MR. KAYLOR: Thank you.

COMMISSIONER CULPEPPER: Additional utility cross-examination?

CROSS-EXAMINATION BY MR. ANTHONY:

Q Mr. Delamar, how are you?

A I'm fine.

Q Have you had an opportunity to review Progress Energy Carolina's Integrated Resource Plan?

A I looked at some of it, but no, not really.

Q Do you remember seeing that as far as Progress Energy Carolina's nuclear plant being built, it's completely gone from the resource plan?

A Well, this has been an issue that comes and goes over time. It is my understanding that there are -- I think I read in the *News and Observer* that there's going to be some move to go back to nuclear in the future, yes. Whether or not that was in that report, I'm not sure.

Q Well, I would just offer up if you were to review it you might be encouraged and not quite as concerned about nuclear investment if you see what we are proposing to construct over the next 15 years.

A You are not going to propose to build a nuclear power plant?

COMMISSIONER CULPEPPER: Ask him a question now, don't get into dialogue. Ask him a question.

MR. ANTHONY: As the Chairman rightly points out I'm not on the witness stand. Thank you for that. I would ask you to please reed the IRP as we filed it when you have a chance. Thank you.

COMMISSIONER CULPEPPER: Additional questions by the utilities?

(No response.)

Redirect?

REDIRECT EXAMINATION BY MR. GILLAM:

Q Mr. Delamar, did anybody give you any testimony to file?

A No.

Q Did you write your own testimony?

A Absolutely.

MR. GILLAM: Thank you.

COMMISSIONER CULPEPPER: Questions by the Commission?

(No response.)

Thank you, Mr. Delamar. That will conclude your testimony. You may stand down with our appreciation for having come this evening and take part of these proceedings.

Let Public Staff Delamar Exhibit No. 1 be received into evidence.

(Whereupon, Public Staff Delamar Exhibit No. 1 was admitted into evidence.)

MR. GILLAM: Pam Schwingl?

PAM SCHWINGL; Being first duly affirmed, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q State your name and address for the record.

A My name is Pam Schwingl. I live at 5121

Murphyville Road, Durham. It's in Orange County.

Q Who is your electric supplier?

A Piedmont Cooperative.

Q Do you have a statement you would like to make tonight?

A Yes, I do.

Q Please do.

A What I am going to do is present minutes that is from the Environmental Concerns Committee of a Religious Society Friends in Chapel Hill. As member of the Religious Society Friends we value sustaining the environmental health of our region and planet. We believe our energy future should be decentralized and for renewable sources not from nuclear and fossil fuels exclusively.

As Duke Energy is the largest provider of energy in the southeast we feel that it is environmentally and morally imperative that Duke take leadership and provide exemplary means of power production through sustainable and renewable sources.

So and this aside from this statement I have a few other things to say. We would like your foresight and your leadership and sense of social responsibility to take on this issue of increasing the renewable resource that

are used to provide power in this state. We would encourage you to look to the models in other parts of the country in so many states that are providing more and more alternatives for coal and for fossil fuels.

In a piece from Union of Concerned Scientists, in 2008 they say North Carolina is one of two states that have spent more than $2 million to import coal yet we have the technical potential to generate two and a half times the electrical needs for renewable resources bio-energy and offshore wind. So we would really like to encourage you to take leadership because you have the power and we want you to take the lead.

COMMISSIONER CULPEPPER: Does that conclude your statement?

MS. SCHWINGL: Yes.

MR. GILLAM: Can you spell your last name for the court reporter to make sure we've got that right?

MS. SCHWINGL: Sure. S-c-h-w-i-n-g-l.

COMMISSIONER CULPEPPER: Mr. Gillam, do you have any additional questions?

MR. GILLAM: No.

COMMISSIONER CULPEPPER: Intervenor cross-examination?

(No response.)

Utility cross-examination?

(No response.)

Questions by the Commission?

(No response.)

That will complete your testimony, Ms. Schwingl.

MR. GILLAM: Mary McDowell?

MS. MCDOWELL: I would like to send my testimony in. When should that be in?

MR. GILLAM: I don't think there's a specific deadline.

COMMISSIONER CULPEPPER: Let me just say this to you now: The general public can always send in comments and they will be filed in the docket of the case. But you have to understand those comments are considered to be expressions of opinion. They are not considered to be evidence of the proceeding. But they are considered to be expression of opinion although they are on file in the docket and therefore the Commission and parties to see and to read. If you want to put evidence into the record you are going to have to come forward and testify or at least identify your statement for purposes of the record.

MS. MCDOWELL: I don't have it. I can't do it now.

COMMISSIONER CULPEPPER: Obviously if you don't

have it now you can't put it before the Commission. But, again, any time prior to a decision if you wish to send a letter expressing your opinion with regards to the matters that are at issue in this docket, you can do that. It will be filed in the docket and will be considered an expression of your opinion. But it is not evidence of this proceeding because it's not sworn. Do you understand that?

MS. MCDOWELL: Witness nods.

COMMISSIONER CULPEPPER: All that having been said, you do not wish to testify this evening?

MS. MCDOWELL: No.

COMMISSIONER CULPEPPER: Thank you very much. Call another witness.

MR. GILLAM: Kathy Shea?

KATHY SHEA; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record, please?

A My name is Kathy Shea. I live in Chapel Hill, North Carolina.

Q Who is your electric supplier?

A Duke Energy.

Q I notice you have given me a paper with North Carolina Interfaith Power and Light. Are you appearing on their behalf?

A I am. We are not experts. We're faith communities.

Q Do you have a statement you would like to give?

A I do.

Q Please do.

North Carolina Interfaith Power & Light
a program of the NC Council of Churches

27 Horne Street
Raleigh, NC 27607
(919) 828-6501

Comments to NC Utilities Commission
24 January 2011, 7 pm, Dobbs Building, Hearing Room 2115, Raleigh, NC

Re Proposed IRPs Duke Energy and Progress Energy Docket # E-100 Sub 128

Good Evening. My name is Dr. Kathy Shea. I reside at 1 Buttons Rd in Chapel Hill and practice medicine at NC State University student health services. I am here tonight in my capacity as Director of North Carolina Interfaith Power and Light. NCIPL is a non-profit program of the North Carolina Council of Churches which works with communities of all faiths throughout NC to address the causes and consequences of global climate change and promote practical solutions through education, outreach and public policy advocacy. As one of 38 state affiliates of national Interfaith Power and Light, we seek to mobilize a religious response to global warming in congregations through the promotion of renewable energy, energy efficiency and conservation.

Included in the Utilities Commission mission statement are the following responsibilities which are critical to the mission of NCIPL. The Commission exists to:

- Provide fair regulation of public utilities in the interest of the public
- Promote least cost energy planning
- Provide just and reasonable rates and charges for public utility services and promote conservation of energy

NCIPL is concerned that the proposed Duke Energy and Progress Energy IRPs fall short in these areas and should be modified significantly before being adopted. I will discuss each point briefly.

Fair regulation...in the interest of the public should begin with maximum energy conservation through energy efficiency. NCIPL has previously submitted analysis to the Commission indicating that energy efficiency can reduce demand in NC by 15% by 2020. Reduced demand means reduced burning of fossil fuels, reduced greenhouse gas (GHG) emissions and progress toward stabilizing climate change. The public interest can only be served by measures that quickly reduce GHG emissions which we know are the major drivers of accelerating climate change. As a physician and environmental health specialist, I agree with Margaret Chang, director of World Health Organization, and many other public health professionals that climate change is the most dangerous global threat to public health ever faced by humanity. Representing communities of faith and as a person of faith, I know that we are called to care not only for "the least among us" but also for Creation. If we do not act aggressively to curb GHG emissions; the public interest not only of current but of all future generations is seriously threatened. We must insist that our utilities are more committed to the public interest than the profit interest; and the Utilities Commission is charged with the job making sure that happens.

Promote least cost energy planning should also be first of all about energy efficiency as it is in monetary terms cheaper than any kind of energy production from old or new plants, either fossil fuel or the much more expensive and financially risky nuclear options. But there are more than monetary costs associated with energy production; there are the health and safety costs to coal miners, the ecosystem and community costs of mountain top removal, the public health cost of fossil fuel air and water pollution, and the toxic threats from coal ash ponds – all of which are ignored in the simple monetary cost estimates. These costs disproportionately affect the most vulnerable among us. The very young, the

elderly, the poor and the medically infirm suffer most from exposure to air and water pollution. The fetus is particularly vulnerable to toxic exposures related to air, water and food pollution linked to burning of fossil fuels. Poor communities near power plants and rural communities near mountain top removal sites are at extreme risk of both ecological and health harms. Representing communities of faith and as a person of faith, I know we need to make a rapid transition away from these dirty, dangerous and destructive practices and invest heavily in clean renewable energy alternatives like wind and solar to meet our energy needs. The immediate health harms to the most vulnerable populations should be enough to stimulate action, but there is more. Again, the continued burning of fossil fuels takes us ever closer to a climate tipping point that, within just a few generations, could make the world a very different place than the bountiful, though "groaning" creation we all grew up with. We must insist that our utilities include all the costs, monetary, human health, community health, ecosystem health and climate, in their analyses and develop the least costly alternatives rapidly and aggressively; and the Utilities Commission is charged with the job of making sure that happens.

Promote just and reasonable rates…and promote conservation of energy means that we do not use the general public to foot the bill for developing new power generation in a way that protects the utilities and their stockholders from all risk. This model not only protects the profits of investors at the general public's expense, it also disproportionately harms low and fixed income households who already spend proportionally more of their monthly income on energy bills during high demand seasons and frequently need assistance. The very expensive and risky proposals to build nuclear facilities under this finance model are especially troubling, as they involve financing through increases in utility rates without any guarantee of cost containment, completion of the facility or time limits. This approach is particularly unjust and burdensome to the "least among us" – those whom we as people of faith are told to care for. Representing communities of faith and as a person of faith, I know this is neither just nor is it "loving my neighbor," and that the correct approach is to develop least expensive and permanent long term capacity thought conservation, energy efficiency and clean renewable technologies. Interestingly, when we follow the faith based, value choices, we also reduce GHG emissions, and move toward a low-carbon future that stabilizes the climate for future generations and the Creation. We must insist that our utilities operate in a fair and equitable way, sharing the financial burden and risk of new power source development so that it is in their best interest to seek least cost, permanent and sustainable solutions; and the Utilities Commission is charged with the job of making sure that happens.

The mission of NCIPL is to promote the Care of Creation in the face of accelerating climate change. We are truth tellers and we call people of faith to action through a values-based approach to education, empowerment and advocacy. The mission of the Utilities Commission is also a values-based mission and the choices before the Commission are in essence moral choices. The power and responsibility vested in the Commission are a public trust which should be met with the best interests of the public, current and future generations, as the primary consideration. To help ensure this, I support the call for a full evidentiary hearing on these issues and choices. I would hope that the outcome of such a comprehensive hearing would be choices that are truly in the best public interest. Broad desirable outcomes would be: 1) steering clear of expensive and risky nuclear power plants in favor of cheaper and more certain alternatives like energy efficiency, particularly in this troubled and uncertain economy; and, 2) moving rapidly away from coal and other fossil fuels to a low-carbon, renewable energy future as the best way to create jobs, protect people and restore the environment.

Thank you for your attention this evening and for inviting public comments at this pivotal time in North Carolina's, indeed the world's history.

COMMISSIONER CULPEPPER: Does that conclude your statement.

MS. SHEA: It does.

MR. GILLAM:

BY MR. GILLAM:

Q Is this the written version of your statement?

A Yes.

Q Would you like to have it admitted?

A Yes, please.

COMMISSIONER CULPEPPER: Let the witness statement be identified as Public Staff Shea Exhibit No. 1.

(Whereupon, Public Staff Shea Exhibit No. 1 was marked for identification.)

COMMISSIONER CULPEPPER: Intervenor cross-examination?

(No response.)

Utility cross-examination?

(No response.)

Questions by the Commission?

(No response.)

Thank you very much. You may stand down with our appreciation for having come this evening.

Let Pubic Staff Shea Exhibit No. 1 be admitted

into evidence.

(Whereupon, Public Staff Shea Exhibit No. 1 was admitted into evidence.)

MR. GILLAM: Zell McGee?

ZELL MCGEE; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q My apologies for having overlooked you there. State your name and address for the record.

A My name is Zell McGee. I live at 750 Weaver Dairy Road in Chapel Hill, North Carolina.

Q Who is your electric supplier?

A Duke Power.

Q Do you have a statement to make tonight?

A I do.

Q Please do.

A Mr. Chairman, ladies and gentlemen, I am a graduate of UNC Chapel Hill School of Medicine and have relocated to Carrol Woods in Chapel Hill from being a Professor of Internal Medicine at the University of Utah School of Medicine in Salt Lake City, Utah. I have attended a number of hearings of citizens and citizen groups before this Commission.

And as a physician I am concerned about the

physical and emotional well being of the citizens of North Carolina. I have major concerns about what I perceive to be a rather cavalier attitude of Duke Power and threatening the health of North Carolinians ranging in age from children to adults, specially woman of age to be wives, mothers, and grandmothers.

I am aware that their legal name is Duke Energy but because Duke stubbornly maintains their plan to build the Cliffside coal-fired power plant, they have the power to destroy the essentially and generally lifestyle of citizens down wind of Cliffside. That includes two major populations; Charlotte and Research Triangle and as far east as Wake County and probably beyond. The prevailing west to east winds have been demonstrated to bring poisonous potentially lethal molecules with them for long distances.

For instance in the 1950's during nuclear testing in southern Nevada radioactive iodine, I-131, appeared in the mother's milk in Mecklenburg County, Orange County and Wake County. Note it incorporated into the bodies of woman. If it can get from Nevada into the bodies of woman in Wake County, which it did, it will be easy to get poisonous material from Cliffside about 40 miles west of Charlotte to Wake County, the population in

between and down wind. Who will be at greatest risk of this poisonous material coming from coal fire plant? There are three main groups.

When the coal-fire industry opened up in Utah, the rate of admission to the hospital with respiratory disease of children increased 300 percent.

Further, mercury released from burning coal damages kids' brains. One paper concludes toxic energy to the fetal brain caused by mercury emitted by coal-fired powered plants exacts a significant human and economic toll on American children. I can think of no better way to shackle the future development of North Carolina than to let Duke Power open coal-burning power plant at Cliffside and damage the brains of our future North Carolinians.

A second group that will be at an increased risk from a coal-fired power plant will be women of the age to be wives, mothers and grandmothers. The death rate from stroke and heart attack goes up 2 to 12 times when the level important particulate pollutant PMD45 goes over 13 micrograms per metered cube of air as it likely will. The potential for death to woman goes up. Let me make a point that I'm not distinguishing women being more at risk than men. I did not learn that from the data. These data

incidents will be in a reprint which I will give you for distribution to the Commission and the scientific backup for what I am telling is on the NC WARN website under health and pollution. It's easily available there. I have annotated the scientific articles, but you can get the reference right from that NC WARN website.

The third group at risk is young couples who want to have children. There's increase in data showing that pollution is associated with infertility and premature birth. Premature birth is not only a risk to the life of the infant but also an immense expense, thousands of dollars a day. Again, we have the actions of Duke Power affecting the economics of citizens of North Carolina. I hope that the Commission will particularly look at that with regard coal-fired power plants.

The Duke propagandas, of course, will say that the scrubbers and cleaning devices will keep all these bad things from happening. But the credentials are as likely to be as effective and the so-called advanced technology of the devices used to protect British petroleum deep water horizon well that exploded in the Gulf of Mexico. We all know that disastrous consequences of that corporate misadventure based on misplaced faith and technology. Why take a chance? We have wind and solar resources in

eastern and central North Carolina with geothermal energy already being tapped in central North Carolina. We need to take no chances at all.

Mr. Chairman, I implore you not to condone the proposed corporate child abuse and corporate metra-side by allowing Duke Power to slither pass development of renewable sources of energy by sinking resources into the nuclear power plants that produce so-called spent nuclear fuel, In fact, if you will look carefully, is not innocuous. It still contains neptunium 237 which has a half-life of 2,000,140 years. We could all wait for that nuclear fuel to become safe again, forget it. Even minute amounts of nuclear material are said by the National Academy of Medicine to bear danger. I won't go into the biology of that, but those routes are dangerous to all of us. And I urge you to diminish that danger by following the example of Nancy Reagan and simply saying, no. That concludes my comments, sir.

COMMISSIONER CULPEPPER: Let's see if we have any questions for you here.

BY MR. GILLAM:

Q Did I understand you to say that you have a written exhibit that you would like to have admitted?

A I do. I have two. These are data showing that

radioactive made it to Wake County, North Carolina and appeared in mother's milk starting off in Nevada. This is an article from the *New England Journal of Medicine* showing that long term exposure to air pollution caused cardiovascular risks in women.

COMMISSIONER CULPEPPER: Let's the first exhibit as identified by the witness be Public Staff McGee Exhibit No. 1, and the second as identified by the witness as Public Staff McGee Exhibit No. 2.

(Whereupon, Public Staff McGee Exhibits 1 and 2 were marked for identification.)

Any objections to the introduction to either one of these exhibits?

(No response.)

Without objection, Public Staff McGee Exhibits 1 and 2 are admitted into evidence.

(Whereupon, Public Staff McGee Exhibits 1 and 2 are admitted into evidence.)

Intervenor cross-examination?

(No response.)

Utility cross-examination?

(No response.)

Questions by the Commission?

(No response.)

Thank you very much, Dr. McGee. You may stand down.

Ladies and gentlemen, we've been at this hearing now for 2 hours and my court reporter needs a break. I'm going to take a 10 minute recess in order to allow her time to rest up.

(Whereupon, off the record.)

(Whereupon, a recess was taken.)

(Whereupon, back on the record.)

COMMISSIONER CULPEPPER: Let's come back to order, please and go back on the record. Mr. Gillam, call your next witness.

MR. GILLAM: Herman Green?

HERMAN GREEN; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record, please?

A My name is Herman Green. I live at 2516 Winninghelm Road. Chapel Hill post office, but I live in Orange County. My utility provider is Piedmont Electric and Piedmont Cooperative.

Q Do you have a statement you would like to make tonight?

A Yes, I do.

Q Please do.

A I am Herman Greene, President of the Center for Ecozoic Studies, a research and education center on human culture and ecology, Chair of the Earth Ministry Committee of the United Church in Chapel Hill, and for 31 years a business, tax and securities lawyer presently practicing through Greene Law. PLLC of Chapel Hill. I began my law practice in New York with Shearman & Sterling and I later joined Mayer Brown where I become a banking and corporate partner. Both of these law firms are considered to be among the best in the world. I have also served as Director of Public Responsibility of American Express Company in its headquarters in New York City.

I am here to address this Commission in regard to policy considerations regarding the IRPS filed by electric power utility companies in North Carolina. A portion of those IRPs concerns nuclear power and the financing thereof. In the notice of hearing the Commission States that IRP is intended to identify electric resource options that have the least cost and are adequate, and that the IRP also considers conservation, efficiency, load management and supply-side options. I will assume that consistent with Section 62-2 of the North

Carolina General Statutes, the IRP also seeks to encourage and promote harmony between public utilities, their users and the environment, promote renewable energy, provide for local energy security and provide improved air quality and other benefits to energy consumers and citizens.

A little over a year ago I read a book on global warming called *Down to the Wire* by David Orr. He gave a list of three matters that he thought should be of concern to transformational leaders in our time. He wrote

1. We will need leaders first, with the courage to help people understand and face what will be increasingly difficult circumstances.

2. Second in the "long emergency" leaders will need uncommon clarity about our best economic and energy options.

3. The third quality of leadership in these circumstances is the capacity to foster a vision of a humane and decent future.

I realized I was deficient in one key area, and that was clarity regarding our energy options. As one who has read environmental and renewable literature on a consistent basis for over twenty years, of course I had a general knowledge of this area, but I realized that I could not say that I had really studied the issue. While

in the last year I hardly became an expert. I easily more than doubled my knowledge and I wrote a 30-page paper on energy and global warming that I gave at the EcoSophia conference in Tokyo this past December. I'm attaching as Appendix A to my remarks the three pages of that paper devoted to nuclear energy.

I have read the IRP filed by Progress Energy in September. It is very thoughtful and well written. Talk about increasingly difficult circumstances. In the past all utility planners had to consider was "cheap, reliable, continuous, and sufficient to meet future demand," and now as described on Page 1 of their IRP they new have to take into consideration such things as price volatility, economic uncertainty, changing customer behavior and usage, potential federal legislation dealing with carbon emissions, state and proposed federal renewal energy portfolio standards, the proposed new EPA transport, mercury rule, and coal ash rules, to say nothing of potential EPA regulation of carbon dioxide which was not mentioned in their IRP and global negotiations concerning the same.

I have three statements to make that may benefit you in your considerations.

1. First, I agree with David Orr that in the

broadest sense we must choose between energy policies that emphasize efficiency, renewable energy, and better design that eliminate much of the need for energy in the first place and on the other hand 'hard expensive, and large-scale options such as continued use of coal with carbon sequestration and nuclear power.

2. Second, new baseload power should be provided with natural gas. We should not pursue nuclear, and in particular we should not have the public finance what the private markets will not. Further, as utility regulators you shouldn't impose costs on customers that will give utilities a blank check for uneconomical ventures. Further, I believe a basic rule should be that we should not provide electric power to our communities with something that can destroy our communities. I'll read briefly from the report I wrote, the 2010 world energy outlet projects that while nuclear power will double between 2008 and 2035, it's share of total primary power will increase from 6 percent in 2008 to only 8 percent in 2035. So nuclear is not the energy of the future. Joseph Romm of the Center for American Progress Action Fund gives these reasons that growth in nuclear power will be limited: Prohibitively high and escalating, capital costs; production bottlenecks in key components needed to

build plants; very long construction times; concerns about uranium supplies and importation issues; unresolved problems with the availability and security of waste storage; large-scale water use amid shortages; high electricity from new plants.

In 2009 Craig Severance an expert in the costs of nuclear power plants released a study that showed the costs of constructing nuclear plants more than doubled between 2000 and 2008.

In 2008 *Wall Street Journal* article stated that the cost of a single nuclear plant would cost 5 to 12 billion dollars. Any cost estimate is, however, uncertain as actual costs of nuclear plants built in the 1960s and 70s were more than 200 percent of the original estimates. The uncertainty of costs is such that contractors for plants will not give fixed estimates of construction costs. Further time delays are the norm, and in some cases plants under construction are never completed. As a result it is primarily economic factors that have limited new construction in the United States and even today not a single new nuclear plant is under construction. That's as of December 28, 2010. Thus, not even one could be completed by 2020 by making nuclear a non-factor in reducing carbon emissions in the United States in the next

10 years. This is true for the OECD countries generally.

In addition to the cost and supply issues, the safety of nuclear is a serious concern. Proponents argue that the historical record of current nuclear facilities has been good. Opponents point out that the historical record is, however, incomplete, given that aging reactors are still in operation and the very long-live of nuclear waste. Opponents also argue that the catastrophic potentials of nuclear energy are so great the risk of more Chernobylis, nuclear terrorism spread of nuclear weapons and environmental and human health concerns related to nuclear materials from mining to transport to operations to disposal that even low probabilities of risks are intolerable.

And finally, if we think ahead to utilities to the next 10 to 20 years, we move more and more to, how do we produce energy as efficiently and with the least cost, and utilities would become a partner with all the initiatives we talked about tonight.

3. I know from listening to Jim Rogers and others that utilities are willing to take on a new role in meeting our energy needs in clean, sustainable ways. None of us is so naive as to believe that we can provide energy with no environmental impact, but we can do better, and

then better and then better. Those who provide energy through utilities and environmentalists should not be in an adversarial relationship. There are thousands of people around the state who are serious about reducing energy demand and providing clean energy. The Commission must do more to allow utilities to change their revenue model to engage in energy saving and clean energy measures. There are millions and millions of dollars of energy opportunity in these fields and they will find grateful North Carolina citizens and community leaders ready to work with them.

We can change. We can have a new energy future. It can happen here in North Carolina.

COMMISSIONER CULPEPPER: Does that conclude your statement?

MR. GREEN: That does conclude my statement.

COMMISSIONER CULPEPPER: Mr. Gillam, do you want to talk to him about identifying any exhibits you may have?

BY MR. GILLAM:

Q Was this a summary of your testimony together with your nuclear with it?

A Yes, it is.

Q Would you like that admitted as an exhibit?

A Yes, I would.
Q Do you have a copy of your exhibit with you?
A The Appendix is the 3rd page.
Q Do you have a copy so I can ask you a question about it?
A Yes, I do.
Q On the 3rd page you give the grams of carbon dioxide for these per kilowatt hour for different kinds of fuel, do you not?
A Yes, I do.
Q It shows 9 to 10 grams for wind.
A Yes. That's very difficult to read, but that's correct.
Q And 13 for solar concentrated?
A Yes.
Q And 32 for solar photovoltaic?
A Yes.
Q And 38 for geothermal?
A Right.
Q And 443 for gas?
A Yes, that's correct?
Q And 986 to 1050 for coal?
A Yes.
Q But nuclear the amount that is given is 1 to 288;

is that right?

A That is what it says.

Q That's a wide range.

A That is a wide range. I don't understand that.

Q You don't have any explanation for that?

A I don't. I would -- I think -- the bar graph is based on 288, so I always assumed it was the 288 figure. And that's included in embodied cost and nuclear power.

MR. GILLAM: I request this exhibit be identified.

COMMISSIONER CULPEPPER: All right. Let the exhibit be identified by the witness be marked as Public Staff Green Exhibit No. 1.

(Whereupon, Public Staff Green Exhibit No. 1 was marked for identification.)

MR. GILLAM: I request it be admitted.

COMMISSIONER CULPEPPER: Motion allowed.

(Whereupon, Public Staff Green Exhibit No. 1 was admitted into evidence.)

Intervenor cross-examination?

(No response.)

Utility cross-examination?

(No response.)

Questions by the Commission?

(No response.)

MR. GILLAM: Jon Haebig?

JON HAEBIG; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record, please?

A My name is Jon Haebig. I live at 100 Essex Drive in Chapel Hill.

Q Who is your electric supplier?

A Duke Energy.

Q Do you have a statement you would like to make?

A I do.

Q Please proceed.

A Mr. Chairman, Commissioners, I am retired research chemist. I am speaking for an organization called Transition Carrboro Chapel Hill. We are part of the worldwide transition movement that is working to make sure our local communities are strong and resilient and can meet the challenges of economic instability, climate change and the end of cheap oil. We build this resilience over the next 20 years, finding a pathway toward more sustainable solutions in areas such as transportation, food, waste, and above all energy. For example, we are

now working with the Towns of Chapel Hill and Carrboro to promote their new energy efficiency retrofit incentives for homeowners and businesses.

As local utility ratepayers, Transition members believe that energy conservation measures and renewable energy sources such as solar, wind and biomass are a much better investment than new nuclear power plants. They are cleaner, cheaper, and can be implemented more quickly.

Transition Carrboro Chapel Hill feels that the proposed rate changes for a new nuclear plant would be a terrible mistake and would represent yet another barrier to citizens trying to build a clean, sustainable energy future. That concludes my statement.

COMMISSIONER CULPEPPER: Would you mind spelling your last name so we can make sure we have it right for the record?

MR. HAEBIG: H-a-e-b-i-g.

BY MR. GILLAM:

Q Is this a written version of your testimony that you would like to have admitted as an exhibit?

A Yes.

MR. GILLAM: We request that it be identified.

COMMISSIONER CULPEPPER: All right. Let the exhibit be identified as Public Staff Haebig Exhibit No.

1.

(Whereupon, Public Staff Haebig Exhibit No. 1 was marked for identification.)

Intervenor cross-examination?

(No response.)

Utility cross-examination?

(No response.)

Thank you very much. You may stand down.

Public Staff Haebig Exhibit No. 1 is admitted into evidence.

(Whereupon, Public Staff Haebig Exhibit No. 1 was admitted into evidence.)

MR. GILLAM: Ruth Zalph?

RUTH ZALPH; Being first duly affirmed, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record?

A My name is Ruth Zalph. My address is 750 Weaver Dairy Road, Apartment 3106, Chapel Hill.

Q Who is your electric supplier?

A Duke Energy.

Q Do you have a statement you would like to make?

A Yes, I do.

Q Please do.

A I'd like to thank Chairman Finley and Members of the Commission for the opportunity to speak with you this evening. I speak to as a concerned citizen of N.C. for about 20 years. I believe that global warming is a genuine and measurable threat that can no longer be ignored by policy makers.

According to NASA's James Hansen and head of the Intergovernmental Panel on Climate Change, R.K. Pachauri, global emissions must start downward by 2015 or the climate crisis will move beyond humanity's control. I have reviewed the IRP of Duke Power, some of which I don't understand, but I now that North Carolina is at the crossroads regarding energy policy. The current IRP of Duke and Progress Energy must be greatly revised to reflect the Commission's job to regulate utilities for the good of the people.

We live under a capitalist economic system. When you go into business you take the risk, you reap the rewards. Shareholders have been reaping the rewards regularly during these difficult business years when many other have suffered. According to William D. Johnson, Chairman, President and CEO of Progress Energy, the Company has approximately $10 billion in annual revenues,

about one and a half million customers and approximately 12,500 MW capacity in North Carolina alone.

In 2009, the U.S. Department of Energy selected Progress Energy to get a $200 million stimulus grant for smart grid programs.

When the merger of Duke and Progress goes through, the Company will be the largest utility company in the nation. They will have tremendous power, which must be channeled for the good of our state and nation.

CWIP(Construction work in progress) must be denied. Progress Energy has filed a COL(Combined operating license) application to keep open the option of building two nuclear plants. The utility company would then under CWIP have the customers, you and I, pay for the planning and construction costs of the nuclear plants that can take up to ten years to build, have cost overruns, and risk the possibility that it will be abandoned and never go online. The risks of building new nuclear plants are being shifted on to the consumers. This sounds like socialism for the utilities and capitalism for the taxpayers and customers.

Nuclear is the wrong way to go. There is no workable evacuation plan for Shearon Harris in the case of an emergency. The storage of spent nuclear rods continues

to be a national problem and a terrorist attack on a nuclear facility must never be ignored. Nuclear uses a tremendous quantity of water,(which is in short supply), and is not sustainable.

The NC Save$ Energy is an initiative by many organizations to create a state wide, independent (non utility) energy efficiency program that will keep energy bill savings in the residential customer's pockets, while serving the most needy. It would create a publicly-managed, independent fund to pay for energy efficiency projects for homes, government buildings, hospitals aand schools. NC Save$ Energy is based on the experiences of six other states' cost-effective independent energy efficiency programs. It would be administered by a non-profit organization and governed independently of energy provider interests. I want to see NC Save$ Energy passed by the NC. General Assembly this term. When N.C. Save$ Energy H. B. 1050 came before the energy committee a few years ago,eighteen utility company lobbyists descended on the committee and influenced several members to change their votes, and the bill failed.

Energy efficiency uses no fuel, does no harm and saves consumers money. Alternative energy costs keep going

down, while nuclear costs rise.

Present solar and wind technologies are renewable. Tax incentives would make distributive energy more attractive. Net metering (selling back excess power to the utilities grid) should be available.

And bottom line: Progress Energy and Duke Power would be compensated for the differential between the saving in energy efficiency and alternative energy and the profits they would have made without energy efficiency and alternative energy. This would be a Win-Win situation.

In addition, I think I mentioned the energy needs have been flat for the past few years, not going up.

BY MR. GILLAM:

Q Is this a written version of your statement and would you like that admitted into evidence?

A Yes, it is. And, yes, I would like to have it submitted.

COMMISSIONER CULPEPPER: Would you mind spelling your last name for the record?

MS. ZALPH: Z-a-l-p-h.

COMMISSIONER CULPEPPER: Let the exhibit be identified as Public Staff Zalph Exhibit No. 1.

(Whereupon, Public Staff Zalph Exhibit No. 1 was marked for identification.)

Cross-examination from any intervenors?

(No response.)

Utility cross-examination?

CROSS-EXAMINATION BY MR. ANTHONY:

Q How are you this evening?

A Fine, thank you.

Q Would you please tell me what CWIP is?

A Let me tell you exactly what it is: It's called construction work in progress. In other words what I read is that during the whole process of developing the plans and working through the various companies going to provide these different parts for it that the money would be with construction work in progress and combined operating license application, the utility companies would have customers be paying for the all of this planning work that goes on before the plant is built. Is that correct?

Q I'm not quite sure how to respond to that. It's a fairly complex issue.

COMMISSIONER CULPEPPER: Ask her a question.

Q Where did you learn about CWIP?

A I read it yesterday, and today, again, I was going through the IRP and through all of the information I generally get through North Carolina WARN website as well. There were a number of other projects I wanted to write

about but didn't have time do so.

Q Would you support CWIP if it was associated with solar or wind generation?

A It would depend how it was written and what the timeframe was. In other words if you are going to provide money for one, then you should for another. So I think we are dealing with what is fair for one is fair for the other. But in the case of solar, I doubt you would have that great need for construction work in progress the length of time you would for nuclear plants. If nuclear plants may not go online for 10 or 12 years and you would be paying up front -- ratepayers would be paying up front for this, it would be quite different than if you were paying for one year of associated with planning for solar.

MR. ANTHONY: Thank you.

COMMISSIONER CULPEPPER: Other questions?

(No response.)

Redirect?

MR. GILLAM: No.

COMMISSIONER CULPEPPER: Questions by the Commission?

(No response.)

Thank you very much. You may step down from the witness chair.

MR. GILLAM: We request the exhibit be admitted.

COMMISSIONER CULPEPPER: Motion allowed.

(Whereupon, Public Staff Zalph Exhibit No. 1 was admitted into evidence.)

MR. GILLAM: Henry Elkins?

HENRY ELKINS; Being first duly affirmed, testified as follows:

MR. ELKINS: My last name is Elkins, E-l-k-i-n-s.

DIRECT EXAMINATION BY MR. GILLAM:

Q Since you gave us your name, would you give your address for the record?

A My name is Henry Elkins. I live at 750 Weaver Dairy Road, Chapel Hill.

Q Who is your electric supplier?

A Duke Energy.

Q Do you have a statement you would like to make?

A I do. It's a very simple and straightforward statement. It simply is that for us in collaboration with Duke Energy conservation is working. Our representative for Duke Energy, Donald Corbett has worked with us for 4 years to suggest a number of innovation in the way we are using energy. We started out in 2006. I should say I have been Chairman of our Residence Energy Committee. We

are a retirement community of some 470 residents. That committee is now merged with our Buildings and Facilities Committee in which I serve. What we have been concerned with is to reduce our energy usage in kilowatt hours.

In 2006, our usage was per day 20,647 kWh per day. As of 2010, our average usage per day was 19,337 kW, a reduction of 6.5 percent. I wish I could have reported to you that it was lower. In fact, last year using 2006 as a baseline we reduced our usage 13.5 percent. The message is simply that with Mr. Corbett and other advise we've reduced what is, in our view, is largely our lighting use of our electricity. We have not had any major changes, no capital expenditures for solar or geothermal. We have discussed these and hope in the future we will be able to get something of this nature. So our message is simply this: With the use of constructive advise to our residence -- who by the way do not receive individual bills from Duke Energy, we receive a single bill at Carol Woods Retirement Community -- so our effort has been to encourage our residents to use electricity conservatively; to use CFL; use conservatively washers and dryers; and also to switch to off-peak usage. But basically it's been a reduction in lighting and for that we are thankful for the help we've go from others and

particularly Don Corbett. We think what Duke Energy has done with us, they could do with other customers. We believe conservation is working.

COMMISSIONER CULPEPPER: Questions, Mr. Gillam?

MR. GILLAM: No.

COMMISSIONER CULPEPPER: Intervenor questions?

(No response.)

Utility cross-examination?

(No response.)

Commission questions?

(No response.)

Thank you very much.

MR. GILLAM: Harry Phillips?

HARRY PHILLIPS; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record, please?

A My name is Harry Phillips. I live AT 21 Harvey Day Circle, Chapel Hill.

Q Who is your electric supplier?

A Duke Energy.

Q Do you have a statement you would like to make.

A Yes, sir.

Q Please do?

N. C. Utilities Commission Public Hearing

Dobbs Building, Room #2115, Raleigh

Jan. 24, 2011

Good evening. My name is Harry Phillips and I am associated with the North Carolina Waste Awareness Reduction Network, the Progressive Democrats of North Carolina, and the North Carolina Green Party. Members of these groups are deeply concerned with Duke Energy's and Progress Energy's plan to bring forth a bill that ostensibly would burden its customers with construction costs for proposed nuclear plants. This bill would call for limited review by this commission and would fail to protect ratepayers in the events of cost overruns or plant cancellations. Disturbingly, new nuclear plants would create many fewer jobs than would efforts to build in renewable energy sources to what should be our expanding energy portfolio. Everyone knows that when big ticket items, like new energy plants, are on the discussion table we need the assurance that substantial numbers of new jobs will be created. This is one of the appeals of solar and wind projects--more jobs--and a matter that Duke and Progress appear to evade.

Some brief context is important here. First, we live in a time when cost risks associated with corporations' new ventures are now regularly transferred to workers and customers. This is the tact that Duke and Progress will take should nuclear plants be approved with their intention to foist onto working people the costs for nuclear plant construction. That Wall Street is backpedaling from bankrolling nuclear plants sends a clear signal that the high cost of such construction is too great a risk. Second, just-released census data reveals that more North Carolinians live in perilous economic

conditions. For example, the poverty rate has grown in our state from 12 percent in 1999 to over 16 percent in 2009. Adjusting for inflation, a median household income of $50,441 in 1999 has shrunk to $43,674 in 2009, a fall of 13.4 percent. Collectively, residents of our state earn 83.6 percent of the national average of median household income. Third, many highly skilled workers in North Carolina recently have been canned from good-paying jobs, especially in the financial and technology industries, among others. With this context in mind, and in spite of their customer-friendly public relations programs, Duke and Progress appear spectacularly insensitive to the everyday people affected by these conditions.

As it is the charge of the Utilities Commission to keep the best interests of ratepayers in mind when reviewing a utility's Integrated Resource Plan, I hope that you will acknowledge the dangers to our air and water that coal burning plants across the state cause. If new nuclear plants are approved, this will produce another kind of danger, one that will force hard financial decisions on working folks. To counter the exploitation that new nuclear plants would bring, we can look to safe, cost-efficient ways to produce energy, and there is no shortage of models. Washington state leads the country in renewable energy sources, California generates more electricity from renewables than any other state, Germany aims to produce 35 percent of its electricity from renewable sources within the decade, Portugal currently produces 45 percent of its energy from renewables, and Iceland is now independent of fossil fuels for its energy production. In our own state, the late Dr. John Blackburn, former chair of the Economics Department at Duke University, provides compelling scientific analysis that argues that because of our potential for producing electricity from renewable sources, especially solar, and because

the projected need for electricity in our state typically exceeds our actual use, a crossover to renewable sources could eliminate the need for new nuclear and coal plants.

To conclude, I urge the Utilities Commission to respond to requests for a formal evidentiary hearing as a way to fully evaluate the nuclear agenda of Duke and Progress and its potential effects on the hard-working people of our state. North Carolina is now at a crossroads regarding its energy future. If we maintain our present course and continue on with coal and nuclear, we'll continue to dirty our air and water and reduce the spendable income of our people. But if we take advantage of our intellectual capital, good business sense, and natural resources we can put into place a system of energy production that safeguards our climate and economy. Thank you.

BY MR. GILLAM:

Q Is this a written version of your testimony that you would like admitted?

A Yes, it is.

COMMISSIONER CULPEPPER: Let the exhibit be identified as Public Staff Phillips Exhibit No. 1.

(Whereupon, Public Staff Phillips Exhibit No. 1 was marked for identification.)

Intervenor cross-examination?

(No response.)

Utility cross-examination?

(No response.)

Commission questions?

(No response.)

Thank you very much. Public Staff Phillips Exhibit No. 1 was admitted into evidence.

(Whereupon, Public Staff Phillips Exhibit No. 1 was admitted into evidence.)

MR. GILLAM: Bob Rodriquez?

BOB RODRIQUEZ; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q Would you state your name and address for the record, please?

A Bob Rodriquez. I live at 2400 Countrywood Road, Raleigh, North Carolina.

Q Who is your electric supplier?

A Progress Energy.

Q Do you have a statement you would like to make?

A I will try to paraphrase some parts of my statement.

As a concerned citizen, Steering Committee member for North Carolina Interfaith Power and Light - a program of the NC Council of Churches, businessman, shareholder and utilities customer, I am asking you and the commission to consider the moral imperatives and impacts of the latest Integrated Resource Plans from Progress Energy and Duke Energy. I am also asking you look at the impacts of the proposed merger of both these companies and what this means to existing customers.

In some ways, what I am asking for today is no different then one year ago - increasing the scope and pace of implementing energy efficiency and conservation as the fastest least cost method for obtaining power, championing the use of CHP (combined heat and power), integrating more renewable power into the mix, why customers are being asked to pay upfront for potential new power plants without first dramatically driving down

demand and finally how our fuel choices affect other communities both inside and outside of North Carolina.

This last point matters because our actions impact not only human communities but also natural communities as well. We have a strong moral responsibility for taking care of creation, our impact on the natural world, our contribution to climate disruption and other neighboring communities. I know that our decisions will be felt for generations to come. That when I turn on a power switch, a community in Appalachia feels the effects of mountain top removal, that children in North Carolina shouldn't eat fish from our rivers and streams due to mercury contamination, that some indigenous community pays the price of uranium mining, that a community out West might lose its aquifer to hydraulic fracturing for natural gas production. We need to remember that these external costs are not included in our current cost calculations. They need to be.

There has been some improvement from last year. Duke Energy is offering home energy audits along with HVAC upgrades; Progress Energy is offering incentives for upgrading your insulation, windows, and HVAC systems along with their new Sun Sense program for photovoltaic installations. Progress Energy does offer rebates for

cool roofs in Florida. I think this is very important because roofing has improved in terms of reduction cooling cost in California.

The California Utilities Commission offers a program an Energy Star program as well. And from my own work at home, I have reduced cooling cost by 40 percent. Progress is looking at a hot water program, but it is not ready yet. Given my own experience with solar hot water for the past five years - along with other states and countries like China, Germany, and Israel -1 hope the wait won't be much longer.

Those are the improvements. Now the shortcomings: Progress Energy is not offering on-site energy audits like Duke Energy. We are still weak on assistance for renters. The level of seeking demand reductions needs to accelerate. I am looking for major initiatives promoting CHP beyond using wood waste and not getting that sense from either IRP document. Given this technology is probably the safest investment to make in generating capacity - the system is already working, the fuel is free, no line losses, and a way to strengthen your customer's competitiveness.

Given the potential in this state and what the rest of the world is doing here - Denmark gets around 45%

of its total power from CHP, Germany approximately 18% - we need to promote and increase the adoption of this home grown power source.

Last year the National Academy of Science Report, the Academy states that 25% to 31% savings can be accomplished by 2030 through energy efficiency. Given the number of industrial, governmental and commercial customers where combined heat and power makes sense - such as hospitals, campuses, other industrial sites - we can generate power from the waste heat and use the steam for other functions.

Currently North Carolina gets around 5% of its total power from CHP. Yet according to a recent Oak Ridge National Labs study, nationally it was technically and economically feasible to move this figure to 20% across the US from a current level of around 7%. For North and South Carolina they identified around 3,000 MW which could raise that 5% upward toward 17% of power generation. That is a lot of power.

In the area of renewable energy, we need to champion above the proposed 7% level currently called out in Senate Bill 3. The reasons I will cite will be the following: life time fuel costs, resiliency in time of drought, carbon fees and scalability. These four areas

make the renewable choices of solar, wind, CHP and biomass cost competitive since over a 50 year period the fuel costs for solar, wind and CHP are zero, while biomass is typically using waste feed stocks from either the agricultural or timber sector, or harvesting methane from existing landfills. Most of our renewable source do not require water for cooling, making them drought resistant as our weather patterns continue to change. Who Using both utilities' 2009 annual reports, Progress Energy and Duke Energy spent around $7.6 billion dollars a year for fuel. Over a fifty year time line, that cost comes out to $3$0 Billon and that is assuming no price increases or additional carbon fees.

Another major impact for driving demand down is the proposed building codes for residential and commercial buildings. Residential customers - especially after this past summer and now this cold winter - are interested in protecting themselves against higher energy bills. These trends coupled with families looking for smaller, significantly more energy and water efficient homes, that are affordable, are the fastest growing area for real estate. That coupled with growing awareness and efforts being placed on high efficiency retrofits, we are seeing major shifts in demand for today and in the future.

The big question now is the impact of the proposed merger and on generating capacity. The open desire by both companies as one aspect of this merger is to fund new nuclear power plants. In addition they are asking customers to pay for new construction early on before the power plants are finished and brought on line.

To me this seems unfair and unsound. If both companies feel this is the way to go, then they should be able to muster the financial resources to do this construction without asking for help from customers. If you think power plants are expensive, try pricing a semiconductor fabrication plant. Companies like RFMD, Intel, Samsung, Texas Instruments spend billions on building new capabilities which will have lifetimes around 3 to 7 years yet they aren't able to saddle customers with the construction of new plants whether they work or not. They can certainly try but customers have the ability to switch to another supplier which is something customers can't easily do in North Carolina today.

My biggest fear is with the provision of CWIP in Senate Bill 3, the cost of these new power plants projects can be passed onto customers without the utilities having to experience the investment pain if demand continues to drop and the customer ends up holding the bag. In my

business, if you make a winning investment, we - employees and customers - get rewarded. If we make a poor decision, we - the employees and not the customer - collectively feel the pain.

Given the potential price tag of tens of billions of dollars to actually build these power plants, I feel you would see a whole group of customers who today are not actively pursuing energy efficiency today become very interested. In one sense this would hasten the move toward energy efficiency if customer knew their bills could possibly double or more to pay for these new power plants - not to mention have to retire the $41.5 billion dollars in long term debt that both companies already have on their books. What would happen is a death spiral where as customers continue to use less energy or start to co-generate themselves, the utilities would ask for higher rates to pay for the power plants that have been started but would not be needed by their completion. In the end a losing proposition for customers and creation.

Chairman Finley, I call upon you and your fellow Commissioners to be bold in asking for more from our utilities, to continue to forge a different path. I urge you to redouble your efforts to champion energy efficiency and conservation, to continue to promote the adoption of

home grown renewable energy and to be the voice of the customer during this merger transition. You have an opportunity to break new ground while better serving the people of North Carolina both now and for generations to come. Thank you.

BY MR. GILLAM:

Q Is this written version of your testimony that you would like to have admitted.

A Yes, sir, it is.

COMMISSIONER CULPEPPER: Let it be identified as Public Staff Rodriquez Exhibit No. 1.

(Whereupon, Public Staff Rodriquez Exhibit No. 1 was marked for identification.)

Q Towards the bottom of the first page you say, we are still weak on assistance for renters.

A Yes, I do. That was mentioned by Rev. Whitley. That is a very good point that I think that is going to face the greatest burden.

Q You have an economic problem situation with rental property in that which you agree that for most of the energy saving measures that the utilities recommend you have to spend money up front to save money in the future. And a landlord is not eager to do that because he will receive rent either way and a tenant is not eager to do

that because he may be moving out next month. So it goes undone?

A You are absolutely right. I think that is the place where strong moral imperative is -- I think beyond my home, my thinking the power that comes from our friends at the utility doing their jobs, that fuel comes from some place. And by and large it's a disruptive process. Somebody's community takes a hit for it.

MR. GILLAM: No further questions.

COMMISSIONER CULPEPPER: Intervenor cross-examination?

(No response.)

Utility cross-examination?

(No response.)

Commission questions?

(No response.)

Thank you. Public Staff Rodriquez Exhibit No. 1 was admitted into evidence.

(Public Staff Rodriquez Exhibit No. 1 was admitted into evidence.)

MR. GILLAM: Nick Meyer?

NICK MEYER; Being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q State your name and address for the record, please.

A My name is Nick Meyer. I live at 988 Boothill Road in Chatham County.

Q Who is your electric supplier?

A Progress Energy most of the time. I live down a gravel road.

Q Do you have a statement you would like to make tonight?

A Well, basically, all this stuff about global warming that people said I affirm. I firmly think that is happening. We need to do something about it.

But the thing that really disturbs me in recent times is all these activities of getting ratepayers and taxpayers to pay the capital cost of utilities. In capitalism, I understand you make an investment you should get a return -- if you're capable you get a return on your investment. One of the things you do is guarantee your return on the investment that these gentlemen company's do. But now everybody wants to make the ratepayers capitalize additional construction. That is not capitalism. The ratepayers are the people who do the capitalization. The people pay the return on the capitalization, but they are not the people who do the

initial capitalization. I think it's unfair to expect ratepayers to do that when they don't get any control over how it is the money is going to be spent or who they hire to be lawyers or which politician or legislature they give donations to. That's not the way capitalism is supposed to work. It actually transforms to investors in your companies into speculator to a license to steal. Anyway that is what I wanted to say. Thank you very much.

MR. GILLAM: No further questions.

COMMISSIONER CULPEPPER: Intervenor cross-examination?

(No response.)

Utility cross-examination?

CROSS-EXAMINATION BY MR. ANTHONY:

Q How are you doing?

A Witness nods.

Q What makes you think that the utilities are wanting the customers that they serve to provide the capital to finance the construction of these --

A Isn't that what it's all about?

Q No, sir.

A What is it about?

Q The Chairman's about to stop me.

COMMISSIONER CULPEPPER: No, sir, Mr. Anthony.

You can ask him all the questions you want to.

Q Where have you read the definition or what is your understanding of construction --

A I read it in many places about this. This is my interpretation of the facts. I'm not a member of some conspiracy against Progress Energy or Duke Power. I have a real basic question: Duke Power maintains it does not have the capital to build these nuclear power plants and needs to get further financing from the ratepayers. Yet they seem to have the capital to buy all of Progress Energy. So how in the heck do we have a lack of capital? Okay? This is just a wrong thing to be done. It's not capitalism. It's not socialism. It's actually basically criminal enterprise.

Q . Can I ask another question? Would it set your mind at ease if you were to understand that construction work in progress we have been discussing only --

A I'm not just talking about construction work in progress. I'm talking about all of the activity by which the corporations are asking ratepayers to capitalize further construction. That's not just construction work in progress. That's the proposal of Duke Power to get the ratepayers to pay into the actual capitalization of the company. I know you are trying make distinctions without

a difference. Your distinctions are irrelevant. I know what it is. I have studied economics for a long time. I studied history and politics. And your attempt to make me look ignorant, which I am not or a member of conspiracy, which I am not of some conspiring group that is misinforming me is all you are trying to do. I am getting upset, which I shouldn't. Thank you very much. I made my statements.

COMMISSIONER CULPEPPER: We are under cross-examination. That is part of the deal when you take the stand.

Q I am trying to make sure I understand what you believe the construction work in progress is about. Just to be clear, you believe that the concept of including construction work in progress in the utility's rate base is designed to allow the utility to rate the capital it needs to finance these plants from its customers?

A Yes.

MR. ANTHONY: No further questions.

COMMISSIONER CULPEPPER: Any other utility have cross-examination?

(No response.)

Questions by the Commission?

(No response.)

Thank you very much. You may stand down.

MR. GILLAM: Mary McDowell?

MARY MCDOWELL; Being first duly affirmed, testified as follows:

DIRECT EXAMINATION BY MR. GILLAM:

Q State your name and address for the record.

A Mary McDowell, 604 Hatch Road, Chapel Hill.

Q Who is your electric supplier?

A Seventy percent is Duke, my electricity; 20 percent from Progress. I have Piedmont Electric Cooperative as my supplier. But they purchase those percentages of energy from the large utility.

Q Do you have a statement you would like to make?

A Yes.

Q Please do.

A Just since I didn't bring a written statement, I would like to submit the front and back cover of Carolina Country, the electric cooperative's magazine because it shows the most recent of three programs to help customers save energy: My Usage, FlexPay, and the $20 sack full of compact fluorescent bulbs and hot water electric heater wrap, a $65 value for only $20 being offered before Christmas. I didn't see this until well after Christmas. We have been using compact fluorescent bulbs for years and

everywhere we can.

We live near a low-income community. I took a compact fluorescent and a little poinsettia to a friend of mine there hoping to tell her about the benefits of them. And I knew that Piedmont Energy had been giving customers a chance to send in receipts for compact fluorescents for two or three years and people would get a discount on their bill. I didn't know her family was also Piedmont customers that they were in the same electric cooperative. And so I gave her my little compact fluorescent and she said, well I've got compact in every light in my house except one and she was very appreciative of that one. And she sent all of her receipts in to Piedmont and had gotten reduction on her bill. This just shows that, you know, simple kinds of encouragements and incentives work in all kinds of communities. And a lot more can be done. So I'd like to submit this.

COMMISSIONER CULPEPPER: Let the exhibit be identified as Public Staff McDowell Exhibit No. 1.

(Whereupon, Public Staff Exhibit No. 1 was marked for identification.)

BY MR. GILLAM:

Q The sack full of compact fluorescents for $20, how many do you get in a sack?

A I think it's 12.

MR. GILLAM: Thank you.

COMMISSIONER CULPEPPER: Intervenor cross-examination?

(No response.)

Utility cross-examination?

(No response.)

Commission questions?

(No response.)

Anything further from the lawyers we need to take up before we adjourn this evening?

(No response.)

Public Staff McDowell Exhibit No. 1 is admitted into evidence.

(Public Staff McDowell Exhibit No. 1 was admitted into evidence.)

Thank you and we are adjourned.

Whereupon, the hearing was adjourned.

CERTIFICATE

The undersigned Court Reporter certifies that this is the transcription of notes taken by her during this proceeding and that the same is true, accurate and correct.

Sandi Mayer
Court Reporter II