

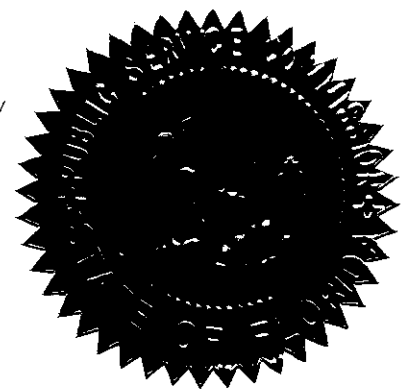
BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 080148-EI

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In the Matter of:

PETITION FOR DETERMINATION OF NEED FOR
LEVY UNITS 1 AND 2 NUCLEAR POWER PLANTS,
BY PROGRESS ENERGY FLORIDA, INC.



VOLUME 1

Pages 1 through 57

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PROCEEDINGS: HEARING

BEFORE: CHAIRMAN MATTHEW M. CARTER, II
COMMISSIONER LISA POLAK EDGAR
COMMISSIONER KATRINA J. McMURRIAN
COMMISSIONER NANCY ARGENZIANO
COMMISSIONER NATHAN A. SKOP

DATE: Wednesday, May 21, 2008

TIME: Commenced at 9:30 p.m.

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: JANE FAUROT, RPR
Official FPSC Reporter
(850) 413-6732

DOCUMENT NUMBER-DATE

04271 MAY 22 08

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CHAIRMAN CARTER: Good morning. I would like to convene this hearing and begin by asking staff to read the notice. Staff, would you please read the notice.

MS. FLEMING: Pursuant to notice issued by the Commission Clerk, this time and place has been set for a hearing in Docket Number 080148-EI.

CHAIRMAN CARTER: Thank you. At this point in time let's take appearances. I will start with you, Mr. Jacobs.

MR. JACOBS: Good morning, Commissioners. My name is Leon Jacobs. I'm here on behalf of the Southern Alliance for Clean Energy.

MR. BREW: Good morning, Commissioners. I'm James Brew of the firm of Brickfield, Burchette, Ritts and Stone, and I am here for PCS Phosphate-White Springs.

MR. BURGESS: Mr. Chairman, Commissioners, my name is Steve Burgess. I'm here on behalf of the Office of Public Counsel.

MR. GLENN: Alex Glenn on behalf of Progress Energy Florida.

MR. BURNETT: Good morning, Commissioners. John Burnett, Progress Energy Florida.

MR. WALLS: Good morning, Commissioners. Mike Walls and Dianne Triplett, behind me, with Carlton Fields on behalf of Progress Energy Florida.

1 **CHAIRMAN CARTER:** Before I go to staff, am I missing
2 someone? I guess not.

3 Staff.

4 **MS. FLEMING:** Katherine Fleming, Keino Young, and
5 Caroline Klancke on behalf of the Commission.

6 **CHAIRMAN CARTER:** Thank you. Thank you.
7 Staff, are there any preliminary matters?

8 **MS. FLEMING:** Chairman, there are some housekeeping
9 matters that we can take up at the beginning of the technical
10 portion of the hearing. I would like to note that we have a
11 comprehensive exhibit list that has been distributed to all
12 parties, and I would suggest that we mark Exhibit Number 1 as
13 the comprehensive exhibit list for the record.

14 This exhibit list also includes the service hearing
15 exhibits that were introduced at Crystal River on April 23rd,
16 and those are identified as 2 through 12. It also includes
17 staff's stipulated exhibit, a composite exhibit as Number 13,
18 and in addition it also includes all the prefiled exhibits.

19 **CHAIRMAN CARTER:** Show it done. And what we will do,
20 Commissioners, is at the concluding of the public testimony we
21 will give the parties an opportunity to look at those exhibits
22 that we took for identification down at Crystal River and then
23 maybe take a little break so they can have a chance to review
24 that, and at the beginning of the technical hearing we can take
25 those up. Any further matters, preliminary matters?

1 **MS. FLEMING:** Not that I am aware of, Mr. Chairman.

2 **CHAIRMAN CARTER:** Okay. Do we have anyone here that
3 wants to give testimony today for the public, public testimony?
4 Anyone here today, would you please stand if you want to give
5 public testimony today. We need to swear you all in. What a
6 handsome group. Would you please raise your hands.

7 (Witnesses sworn.)

8 **CHAIRMAN CARTER:** Thank you. You may be seated.
9 Okay.

10 Ms. Fleming.

11 **MS. FLEMING:** Yes, Chairman. I do have the list of
12 names, and I will call the speakers as they signed up. The
13 first one here is Phyllis Lott.

14 **CHAIRMAN CARTER:** Phyllis Lott.

15 PHYLLIS LOTT

16 appeared as a witness and, swearing to tell the truth,
17 testified as follows:

18 DIRECT STATEMENT

19 **MS. LOTT:** Good morning.

20 **CHAIRMAN CARTER:** Good morning. Just push the button
21 there. It's on. Okay.

22 **MS. LOTT:** There is something very intimidating about
23 going first. I really have a lot I could say, but I will just
24 hit the high points. I did speak at the meeting at Crystal
25 River on the 23rd.

1 A brief overview. Progress Energy executed a
2 purchase agreement for the land in November of 2006. They got
3 the county commissioners who, by the way, live at least 35 or
4 40 miles away, to change the comprehensive plan from
5 agricultural rural residential to public use in March of 2007.

6 In addition, in September of 2007, the county adopted
7 revisions to its zoning code to allow for the siting of the
8 nuclear facility on the property. All of this was pretty much
9 done before we even knew what was going on.

10 An aside to that, the county commissioners
11 simultaneously, by changing the land use and the zoning,
12 allowed Tarmac Mining to purchase 9,000 acres to mine for 100
13 years. All of this is in the same area. We feel that really
14 the Sunshine Law was blatantly violated.

15 We received in April of 2008, this notice that there
16 was a public hearing and we were invited to allow us to comment
17 on the proposed plant site. To me this is backwards. If this
18 procedure was started in 2006 and a year and five months later
19 we get notice that we may put in our comments concerning the
20 proposed plant site, it is for what reason? Are we going to
21 just halt the process after the land is bought and millions of
22 dollars have already been spent on this and now they want our
23 opinion on what we think in the area? To me that is pretty
24 much backwards to handle anything.

25 I propose that this plant will be a public nuisance.

1 A nuisance is defined as something that interferes with the use
2 of the property by being irritating, offensive, obstructive,
3 and dangerous. And nuisance includes a wide range of
4 conditions. This plant becomes a nuisance to all surrounding
5 property owners for those reasons and for the next eight years.
6 It effects our property value and desirability. It threatens
7 our way of life. We will have to deal with traffic and it will
8 be horrendous. Crime, noise pollution, safety features for
9 eight years. Disruption of quiet enjoyment may constitute a
10 nuisance. The right of a property owner to enjoy his or her
11 property without interference, public nuisance.

12 I am just going to skip to a lot of issues, and I
13 don't want to keep you here all day with what I could say. I
14 don't know if anyone has addressed the evacuation route if
15 there was an emergency. The Yankeetown school evacuation route
16 is north on Highway 19 to Bronson to Williston, which takes us
17 toward the plant.

18 I don't know if there were any figures pertaining to
19 the aquifer usage of water that has been given. If there are,
20 I can't find them. The amount of salt water taken from the
21 barge canal for cooling. Fresh water has to be used not only
22 for plant housekeeping, but for a major amount to dilute that
23 salty solution from the cooling to be able to put the water
24 back into the Gulf. Fresh water is the lifeblood of Florida,
25 not energy.

1 There is a possibility that the transmission lines
2 may run down through Yankeetown. I know this is one of the
3 sites that was mentioned, but even running in front of the side
4 next to your property is going to lower your property values
5 tremendously. There may be even cases where they will take
6 your property, eminent domain.

7 What is the solution? There is a nuclear power plant
8 in Crystal River. They have the land, they have the facility,
9 everything can be set up there. I know there is some talk
10 about the transmission lines and that they may be too close to
11 the others, but why not put those underground? It might be
12 expensive, but jumping across to another county and building a
13 nuclear power plant that is going to run into the billions of
14 dollars is going to be horribly expensive, as well.

15 There are other forms of energy. We could talk about
16 solar, but I will leave that to someone else to speak to.
17 Putting transmission lines underground would also remove the
18 risk of hurricanes. We wouldn't have to worry about that. The
19 Crystal River nuclear power plant and the new proposed power
20 plant eight miles apart. We are sandwiched in between two
21 nuclear power plants. I don't know if there are any other
22 nuclear power plants that are built that close together. There
23 may be. But I'm saying that to destroy us this way is just
24 unthinkable.

25 Also, I understand that Westinghouse Electric will be

1 the one who is going to be building, I guess, the nuclear
2 reactors. They are a unit of Toshiba out of Japan. So it's
3 not even going to be built by us.

4 As I said, there are so many things I could say, but
5 I think to build this nuclear power plant, the proposed site
6 where they have decided that it would be a good place to build
7 it is wrong. I think we should have had plenty of notice
8 before the land was bought, the comprehensive plans changed,
9 the zoning changed, everything done before the people around in
10 the area really knew what was going on.

11 I have heard that it will bring jobs into the area.
12 Well, yes, it will bring jobs in there temporarily, but that
13 land and the land surrounding it is beautiful land. There was
14 a developer interested in that land close to where the nuclear
15 power plant is going to be built, and when they got wind of
16 this plant, they pulled the plug on the development. The
17 development was going to be for upscale homes, possibly even a
18 golf course. That would have been what we needed in that area,
19 not another nuclear power plant. Nobody wants to live next
20 door to a nuclear power plant. I don't care how safe you say
21 it is, nobody wants to live next door to one. Thank you.

22 **CHAIRMAN CARTER:** Thank you, Ms. Lott. Would you
23 just remain there for a moment. Thank you. Good to see you
24 again.

25 Commissioners, before I ask the parties if they have

1 any questions, I will give the Commissioners an opportunity.
2 Okay. Any questions for the witness from any of the parties?
3 Hearing none. Commissioner Argenziano.

4 **COMMISSIONER ARGENZIANO:** Just one. Do you live in
5 Citrus or Levy?

6 **MS. LOTT:** I have a home in Levy County. Yankeetown,
7 Magnolia Avenue.

8 **COMMISSIONER ARGENZIANO:** Thank you.

9 **CHAIRMAN CARTER:** Staff, do you have any?

10 **MS. FLEMING:** No questions.

11 **CHAIRMAN CARTER:** Thank you, Ms. Lott.

12 Call your next witness.

13 **MS. FLEMING:** Art Jones.

14 **CHAIRMAN CARTER:** Say again?

15 **MS. FLEMING:** Art Jones.

16 **CHAIRMAN CARTER:** Art Jones.

17 ART JONES

18 appeared as a witness and, swearing to tell the truth,
19 testified as follows:

20 DIRECT STATEMENT

21 **MR. JONES:** Good morning.

22 **CHAIRMAN CARTER:** Good morning, Mr. Jones. Welcome.

23 **MR. JONES:** Art Jones from Crystal River, Florida.

24 Do I need to turn this on?

25 **CHAIRMAN CARTER:** It's on.

1 **MR. JONES:** Okay.

2 Dear Commissioners, Progress Energy has not done its
3 due diligence on this rate hike proposal and grandiose plan.
4 The numbers that they are using for future growth cannot be
5 proven and may paint a totally invalid picture of the needs and
6 solutions for the consumers of electricity in Florida. Florida
7 may not have population growth in the future because their plan
8 helps make it unaffordable for people to move here.

9 Due diligence has not been done thoroughly yet. This
10 is a bad, bad plan that will waste way too much money. Let us
11 try less expensive alternatives first. That is a better way.
12 So I say their plan to increase rates is unwarranted. There is
13 no need proven except to supply future growth that may never
14 come. The insidious creep of electric rates over the next
15 20 years will add to the cost of living and will only harm
16 Florida.

17 They are asking to increase rates now on senior
18 citizens for a future mega-nuclear plant that actually may
19 never be built in their lifetime, if ever. What happens if
20 Florida's population does not grow any more because it is no
21 longer affordable for the average retiree or middle class
22 working family to live here? Greedy insurance companies may
23 see to that. They have made record profits and are still
24 increasing rates.

25 How can we pay for this? People are leaving Florida

1 now. Property taxes have skyrocketed. Now we see our power
2 company asking for an increase this year and probably every
3 single year into the future if we take the bait on this
4 glorious nuclear plant that might as well be made out of gold
5 they are so outrageously expensive.

6 The last time the United States tried to build a
7 plant, we failed miserably. In their greed to make money, some
8 private contractors apparently cut corners to increase profits.
9 There were lots of major problems and the nuclear plant was
10 never built. What if substandard materials that cost less and
11 then fail are used again to fill unethical people's pockets
12 with cash? Will these people just walk away again, leaving the
13 citizens of Florida to pick up the bill? Cost overruns will
14 explode and there is not a thing we will be able to do to stop
15 them once this thing gets set in motion.

16 Please, let us not open Pandora's Box again. Due
17 diligence must be done on the electric needs of Florida. This
18 plan is bad. The solar option was never fully explored
19 properly and fully. Also, let's see some real hard numbers
20 comparing a new high-efficiency nonpolluting coal cogeneration
21 fired plant at the existing site that would cost billions less.
22 Coal can work even better with today's technology and
23 cogeneration plants and is much safer and less expensive than
24 nuclear. So if a big new plant really needs to be built
25 someplace, let's compare our options at today's costs.

1 Now, with solar power, another option, there would be
2 no need for new power line corridors through pristine areas,
3 another huge savings to ratepayers. Also, with a switch
4 installed in a meter box, consumers with photovoltaic cells on
5 their roofs could put power back into the grid and lower their
6 monthly electric costs. With solar we can see rates actually
7 go down next year instead of up.

8 We are the Sunshine State. Why don't we lead the way
9 in developing environmentally friendly solar power. There are
10 other people using solar power right now, why not us? If we
11 just invested one billion dollars into 195-watt solar panels
12 presently for sale on the market to the general public right
13 now for only \$819 apiece, that would buy over 1.2 million solar
14 panels with a combined output of over 238 million watts. Ten
15 panels on a house would power a lot of homes' energy needs and
16 allow excess energy back into the grid.

17 Imagine getting a check back in the mail from the
18 power company when you get back from vacation and you had your
19 house shut down. Besides, multiply that by \$17 billion
20 invested over the next ten years by Progress Energy, and you
21 would get over 4 billion watts of electricity produced, and
22 Florida could actually start exporting power and become a net
23 exporter of electricity. Just that would meet the needs of the
24 public today and in the future, bringing costs down to the
25 consumer. Why not give that a try?

1 You know I hate to say it, but we are at war.
2 Nuclear power is very, very dangerous. A nuclear power plant
3 could be used in the future as a WMD, a weapon of mass
4 destruction. Our country is at war right now with no end in
5 sight. Three huge nuclear power plants sitting like ducks in a
6 row on the Gulf of Mexico would make a very tempting target for
7 sea launched missiles. Is it really worth the risk? No, of
8 course not.

9 What would the cost to protect these plants be? I
10 haven't seen any numbers on that. Why paint a huge bull's-eye
11 on Florida, especially when there is no such better and less
12 expensive ways and much safer ways to generate power in
13 Florida.

14 Let's get some quotes for producing photovoltaic
15 energy from someone like General Electric, if Progress Energy
16 can't do it. I bet they can beat this plan hands down with a
17 photovoltaic system that will lower electric costs for the
18 regular people of Florida.

19 I also want to say this good neighbor argument that I
20 have heard does not hold up. Progress Energy, I'm sorry, has
21 not been a good neighbor. I have been told that their plants
22 here are some of the dirtiest in the country. This has been
23 going on for years. They are just now cleaning up two of them,
24 and still have two more to go with no plans to fix those that I
25 have heard of. And what about the cost of decommissioning the

1 old nuclear plant? When is that supposed to happen and how
2 much is that cost going to be? There are many unanswered
3 questions here.

4 Progress Energy may only like this mega-nuclear plant
5 because to them it is their ego. There will be lots of fat
6 profits and bonuses worth millions out there for its owners and
7 their big egos. They seem to care less about raising our
8 utility rates on the people of Florida as long as they get
9 their cut. There really has to be a better way.

10 Furthermore, you know, the mining of uranium is a
11 very dirty business. Who is Progress Energy trying to kid?
12 New mining claims within miles of the Grand Canyon have sprung
13 up. The price of uranium keeps going up as speculators step
14 in. Now people want to mine toxic uranium near and in our
15 national parks and forests where some miners want to take
16 mining right into bird sanctuaries and pristine areas of
17 wildlife. It would leave radioactive waste in millings across
18 hundreds of square miles of virgin lands. It is not logical to
19 use this outdated technology. There is a reason we stopped
20 building nuclear plants before, and all of those reasons are
21 still valid today.

22 Again, I'm sorry, but nuclear power is just not
23 competitive. Its start-up costs are way too high. They take
24 too long to build costing billions more in pure wasted money.
25 As a utility customer that always pays his bills on time and

1 tries not to waste money on late fees and charges, I don't want
2 my power company being fiscally irresponsible wasting
3 everybody's money in Florida. The carbon footprint for the
4 next ten years is huge to mine, process, and build a
5 mega-nuclear power plant. So for the next ten critical years
6 our carbon footprint is added to, not reduced.

7 Uranium is also a fossil fuel and the speculators are
8 already bidding up the price. It too will run out. Ten years
9 from now you cannot guarantee that it could be hundreds of
10 dollars more expensive to buy uranium. How will we be able to
11 afford to run the plant then? Solar and wind are much better.
12 No price increases from the sun or the wind.

13 Look, small efficient quickly built plants can be
14 paid for and are better. Huge mega-plants are built on
15 borrowed money which means we are again wasting money in
16 interest charges that add up in compounded rates. Who wants to
17 pay that? How stupid is that? When they would send power
18 hundreds ever miles away in these long power line corridors
19 losing power all along the way. Another stupid idea that is
20 totally outdated.

21 We know better now. Our power companies should build
22 small clean efficient cogeneration plants close to the places
23 that need the power in the future when they need it. We must
24 require detailed alternatives of cogeneration electric plants
25 where they expect it to be needed. We must demand a detailed

1 alternative to the central thermal plant with long transmission
2 corridors to cogeneration plants at the demanded sites.

3 We should keep our existing power line corridors and
4 upgrade them, but never allow a new corridor to be built in the
5 future. It is outdated, inefficient, and a big waste of power
6 and money, keeping rates high. Our goal must be to increase
7 productivity and lower rates in Florida, thus making it more
8 affordable to live here. Our public goal should be to have the
9 lowest rates in the country ten years from now using efficient
10 and clean power. Let's create so much solar electric power
11 here that Florida becomes a net exporter of energy. How about
12 that for a goal?

13 The power company cannot prove that more people will
14 be moving to Florida in the future if the cost of living is
15 going to go through the roof. What if present new trends in
16 declining growth continue for the next 50 years? I think all
17 it would take would be another good hit by a hurricane and the
18 sky high insurance rates will keep people from moving here,
19 then we have two huge nuclear plants and nobody wants them. It
20 is way too expensive to maintain and it gets shut down. What a
21 big waste of money that would be. There has to be a better
22 way.

23 I don't think the power company should be allowed to
24 squander our money. I think they should invest wisely and
25 seriously on small cogeneration plants where the demand is

1 actually needed. Small plants are fast, low risk, smart, and
2 higher in investment returns on our hard-earned dollars. You
3 know, someone once asked me who gives them the right to
4 squander our hard-earned monies? Well, in this case only the
5 state of Florida can give them that right. We want our money
6 invested wisely and smartly, not wasted. So, again, please
7 just say no. There must be a better way.

8 Cogeneration and efficiency are distributed resources
9 located close to where energy is used and they don't incur
10 energy losses of the electric grid. Capital costs are much
11 less, also. Making electricity from fuel creates large amounts
12 of extra heat that is normally wasted and lost. Building to
13 scale cogeneration can heat thousands of square feet of living
14 space in crowded neighborhoods and condo and apartment
15 developments keeping the cost of living more affordable. This
16 is a much better way.

17 It seems to me that the only people who want this are
18 the ones who have not done their homework, their due diligence
19 in this case. Nothing about this nuclear plan makes sense at
20 all. They cannot prove the need for this rate increase today
21 or tomorrow. Please deny this rate increase and stop this
22 waste of our time and money.

23 In conclusion, I, once again, point out the numbers
24 and challenge this proposal from Progress Energy as completely
25 unacceptable. Is this some kind of an Enron deal? Everybody

1 in Texas thought Enron was a good neighbor and it was a big
2 deception. This is a one-sided, distorted, crazy destructive
3 plan that will only raise our electric rates here in Florida.
4 The company has not done its due diligence on cogeneration of
5 small plants, including solar power, photovoltaic solar power,
6 wind power, simple small scale tidal generation. Is this the
7 best plan they can come up with for Florida? Let's see a plan
8 that can actually lower rates.

9 Please reject this proposal and send it back to the
10 drawing board. Let's see some real research in alternatives
11 presented in an intelligent and fair manner. Haste makes
12 waste. There is not a need to rush this proposal until all the
13 work has been done. And this need has not been proven beyond a
14 shadow of a doubt.

15 I thank you in advance for doing your jobs
16 intelligently and making the right decisions. All of us just
17 want to do the right thing and to be able to afford electricity
18 in the future. This plan is totally unaffordable. This is a
19 bad plan put forth by Progress Energy. They have not proven
20 the need for the construction of these two mega-nuclear plants
21 in Levy County. Do they think that we don't do our due
22 diligence? Afraid not. Reject it, please. Sincerely yours,
23 Art Jones.

24 **CHAIRMAN CARTER:** Thank you, Mr. Jones.

25 Commissioners, any questions? Any questions from the

1 parties? Staff?

2 **MS. FLEMING:** No questions.

3 **CHAIRMAN CARTER:** Thank you very much, Mr. Jones.

4 **MS. JONES:** Thank you.

5 **CHAIRMAN CARTER:** Ms. Fleming.

6 **MS. FLEMING:** The next witness is Cliff Wiggins.

7 **CHAIRMAN CARTER:** Cliff Wiggins.

8 CLIFF WIGGINS

9 appeared as a witness and, swearing to tell the truth,
10 testified as follows:

11 DIRECT STATEMENT

12 **MR. WIGGINS:** Good morning.

13 **CHAIRMAN CARTER:** Good morning and welcome, Mr.
14 Wiggins.

15 **MR. WIGGINS:** Mine is not as long as Mr. Art Jones,
16 but it is straight to the point.

17 I would like to say we, the citizens of Florida, are
18 being told on a daily basis what we need. We need more
19 shopping centers, office spaces, yet many are closing and there
20 are only a few people in them. That is because not as many
21 people are moving as projected, and technology is changing,
22 people take care of business in various manners, and finally
23 people are conserving.

24 We are told we need more mines because we need to
25 build more roads. At the same time we face skyrocketing fuel

1 costs and new construction is down. We need to think smart and
2 engineer new technologies to develop a mass transit system. We
3 need to reconstruct existing buildings to conserve energy, and
4 to use alternative energy, and saving devices. We are told
5 that Floridians need more electrical energy to be produced in
6 the future, yet by using better conservation methods,
7 retrofitting, designing buildings to be made energy efficient
8 we can reduce the need for more electrical energy. The type of
9 light bulbs we use can make a difference.

10 We are told that nuclear power will help solve the
11 problem of high energy costs in the future. Yet it is us, the
12 citizens, who start paying for the astronomical costs of these
13 power plants as early as next year, and it will be at least ten
14 years before we can get any electricity from them. However, by
15 allowing alternative energy production methods to have the same
16 ability to obtain money the way nuclear power generation seems
17 to be able to, Floridians could be using sustainable energy
18 sources in just a few years.

19 It is important to remember that uranium and
20 construction materials such as titanium are nonrenewable
21 resources and if the demand on these materials increases then
22 the costs will increase. We are told that nuclear power will
23 help solve our world's climate changing problem because the
24 plants do not emit carbon. Yet, daily the uranium must be
25 mined, transported to the mill and processed, and then

1 transported to an enriched plant. The enriched uranium pellets
2 then must be transported to the site. All of these steps emit
3 carbon.

4 The largest producer of greenhouse gases is in the
5 transportation sector, so even building the two plants will not
6 cause any significant decrease in carbon emissions. We are
7 told that these plants will have no significant effect on
8 peoples' health in the surrounding area, that no significant
9 harm will occur to the Withlacoochee River, the sea grass beds,
10 or our drinking water. If you read about nuclear plants
11 located around bodies of water you will find that they are
12 experiencing water problems and water is vital to every human
13 being.

14 Nuclear plants do emit radioactive tritium routinely
15 both in the air and the water. There is potential for it to
16 accumulate in the local water supply. It is the citizens of
17 this area who are paying for these plants to be built and they
18 just are not needed. So please do not allow nuclear power
19 plants. Instead, move forward and use sustainable alternative
20 energy. Thank you.

21 **CHAIRMAN CARTER:** Thank you, Mr. Wiggins.
22 Commissioners, any questions? Any questions from the parties?
23 Staff?

24 **MS. FLEMING:** No questions.

25 **CHAIRMAN CARTER:** Thank you very kindly, Mr. Wiggins.

1 Ms. Fleming.

2 **MS. FLEMING:** The last speaker that I have signed up
3 is Mark Klutho, K-L-U-T-H-O.

4 **CHAIRMAN CARTER:** K-L-E-U --

5 **MS. FLEMING:** K-L-U-T-H-O.

6 **CHAIRMAN CARTER:** K-L-U-T-H-O.

7 **MS. FLEMING:** Yes.

8 **CHAIRMAN CARTER:** Good morning, Mark. Welcome. Have
9 a seat.

10 MARK KLUTHO

11 appeared as a witness and, swearing to tell the truth,
12 testified as follows:

13 DIRECT STATEMENT

14 **MR. KLUTHO:** Mark Klutho, Largo, Florida. Before I
15 start, a little quiz. How many light bulbs in the fixture
16 there?

17 **CHAIRMAN CARTER:** You are assuming that we can see
18 that.

19 **MR. KLUTHO:** Oh, come on. A fluorescent bulb.

20 **COMMISSIONER ARGENZIANO:** (Inaudible. Microphone
21 off.)

22 **MR. KLUTHO:** It's one bulb. You have three bulbs in
23 each one of those fixtures, 32 Watts each, because those
24 fixtures don't have energy specular reflecters. And that is
25 why the fools at Regressive Energy say they need nuclear power.

1 We had solar installed at our house for hot water on
2 December 27th. The first electric bill after that was \$20.69.
3 The next one was \$21.38. The next one was 21.14. The next one
4 was 21.38, and then 25.38. All compact fluorescent bulbs in
5 our house, see?

6 And then I would like to go to some of my favorite
7 quips from Amory Lovins. To heat your water with electricity
8 is like cutting butter with a chainsaw. And another one, the
9 engineers in this country need to be reeducated. And then my
10 very favorite is we are not looking to see how much energy we
11 can use, we are looking for a hot shower and a cold beer.
12 Which is to say energy is not an end, but a means. And if you
13 go and you look at Regressive Energy's new stupid building in
14 downtown St. Petersburg, you would think that they think that
15 energy is an end, see?

16 Here is Amory Lovins' book Energy Unbound. He signed
17 it for me at an energy conference that was held in Tampa in
18 1992. For Mark Klutho, partner in creating America's future.
19 And in the November issue of Popular Mechanics he received his
20 latest award. They call it the Leadership Award, and it states
21 here that the residential half of the Rocky Mountain Institute,
22 which was completed in 1983, has a five-dollar-a-month electric
23 bill. And it also talks about how he and the Rocky Mountain
24 Institute helped design the Hawaii Gateway Energy Center, and
25 it is a net zero energy building, which means it doesn't need

1 power lines going to it.

2 When I pulled up here today and I looked at all of
3 these stupid buildings, which are brand new, and all of that
4 new housing over there, it made me sick. The Rocky Mountain
5 Institute in Snow Mass, Colorado, where they have had
6 temperatures lower than 40 below zero, they saved \$6,000 in the
7 construction because they didn't buy a furnace or duct work.

8 The Solar Today here, Seven Trends in Green Building,
9 the seventh trend is the important one, beyond lead platinum.
10 It is a farce, a fraud. And then we have it is the
11 architecture, stupid. Here is a library demonstration project
12 which was funded by the Department of Energy in 1981. Day lit,
13 passively heated, passively cooled. When they compared this
14 building with others in the region, the utility bill was cut by
15 75 percent.

16 Now, did Regressive Energy utilize the science and
17 technology that they did? And, in fact, the utility bill would
18 have been cut by even more if they would have insulated that
19 building the way the Rocky Mountain Institute was insulated.
20 And then we have this Zion Park building, which is another
21 building paid for by the taxpayers, where the utility bill was
22 cut by 70 percent. And this article from Solar Today, I think
23 I have it here somewhere, the utility bill cut by 70 percent.
24 It costs the same as a conventionally designed building, and if
25 they would have invested another 3 percent or so in the

1 construction, the utility bill would have been cut by
2 90 percent.

3 And, when Amory Lovins wrote in Fine Home Building,
4 in 1991, if it is not efficient, it is not beautiful, what was
5 the net extra cost of saving more than 99 percent of our space
6 in water heating energy both solar heated and more than
7 90 percent of our household electricity just \$1.50 per square
8 foot, which was paid back in ten months.

9 Now, see, what needs to be done, because, you know,
10 as Amory Lovins' book, Nonnuclear Futures, the Case for an
11 Ethical Energy Strategy, copyright 1975. What needs to be done
12 is you need to be doing the things that allow the utilities,
13 for instance, like Southern California Edison did, and this was
14 reported in the Rocky Mountain Institute's newsletter many
15 years ago. They gave away more than a million compact
16 fluorescent bulbs to their customers because they said it was
17 cheaper for them to do that than it was to run existing power
18 plants. Not make new ones, but run existing power plants.

19 And to be doing a boondoggle, remember, the first
20 time nuclear came on the scene, the fools said it was going to
21 be too cheap to meter. That didn't happen. And just last
22 week, did you watch C-Span and see Lamar Alexander with his
23 hearing? And one of the questions was, well, what about
24 nuclear proliferation? Do you know what his response was?
25 Well, we are going to try to control it. Try to control it?

1 What do you mean try? What if you don't?

2 I mean, this isn't dropping a bag of peanuts on the
3 ground. You take \$17 billion, for instance, in energy unbound
4 here. Let me go to Page 137 here. Remember this is copyright
5 1987. And with the help of such groups as the Small Farm
6 Energy Project in Hardington, Nebraska, many farmers are also
7 drying their crops with solar heat, digesting manures to make
8 fuel gas, recycling crop waste, and integrating their energy
9 and feed production.

10 Why, there is one 450 cow dairy farm I know where a
11 biogas run generator has turned \$1,400 a month electric bill
12 into a several thousand dollar a month profit on the sales of
13 surplus power to the utility. Nevermind the milk and cream.

14 Now, you know, there isn't any one renewable energy
15 out there. The list is long. The list is long, and many of
16 them that people are talking about are all wrong, and there are
17 many renewable energy sources that are being completely wasted.
18 What Amory Lovins says about efficiency measures, they are
19 better than a free lunch. They are like getting paid to eat
20 your lunch.

21 You do those efficiency measures. You give the
22 incentives to the utility companies to allow the people to do
23 the efficiency measures, and maybe they pay more for the energy
24 they use, but they use less energy. And, I mean, one source of
25 energy that is just flowing by the state every day, that Gulf

1 Stream. A much better way to get energy than nuclear power. I
2 mean, and this idea about burning all kinds of waste material,
3 taking those solids, that is not a good idea. See, with this
4 dairy farm what they are doing is they are taking the methane
5 from the cow manure and they are burning the gas. That methane
6 is a gas that is more than 20 times more potent a greenhouse
7 gas than is carbon dioxide, but then they have the cow manure
8 as a fertilizer to use, which is a better fertilizer after the
9 methane is removed. So, you have all these benefits that keep
10 accruing. And this plan is going to hit people. It is just
11 sheer stupidity. I mean, absolutely ridiculous.

12 Here is the book written about my ancestor, Henry
13 Klutho. The first person from the state of Florida to be a
14 member of the American Institute of Architects. In 1901, he
15 said in the land of the blind the one-eyed man is king. And
16 here is his personal residence in Jacksonville on the National
17 Register of Historical Places. Way back 100 years ago this man
18 was really the first planner that the state of Florida had, and
19 he said you need to build for the climate. Well, you see, what
20 I am doing and what the utility bills at our house are. This
21 is before I have done the retrofit of the house, which is going
22 to demonstrate how you have utility bills that don't total more
23 than \$20 a month, and at the same time you have a structure
24 that will stand up to a Hurricane 5. And this house, like
25 Henry Klutho's, will one day be on the National Register of

1 Historical Places.

2 But, these buildings you have to first do the things
3 like Amory Lovins says, the efficiency measures are better than
4 a free lunch, they are like getting paid to eat your lunch. So
5 you don't have fixtures up here with 92 Watts, 96 Watts of
6 lighting in them. And then, for instance, right up the street
7 is Bell's outlet mall. They had old four bulb fixtures, four
8 foot long T-12 bulbs with old magnetic ballasts. They had
9 somebody come in and do a retrofit, put in electronic ballasts,
10 put in the imaging specular reflecters. They became two bulbs
11 fixtures. They now had the same light intensity with two
12 bulbs, and then not only are you cutting the electricity used
13 by more than half for the lighting, because the electronic
14 ballasts don't draw the electricity the magnetic do, the
15 T-8 bulbs don't draw the electricity that the T-12s do, but
16 then you also are cutting your electric bill because you don't
17 have the heat that the air conditioning is going to have to
18 remove because the magnetic ballast isn't there and you only
19 have half the bulbs. So you have effectively lowered your
20 electric bill for lighting by more than 90 percent.

21 Now, that is profit for those people. And this is a
22 new building and you didn't have the good sense to do it. And
23 they didn't have the good sense to do it, the new Regressive
24 Energy building that they just moved into last year. I have
25 coined a term. Like I say, Henry Klutho, 1901, in the land of

1 the blind the one-eyed man is king. I have coined a term.
2 This is not the information age, this is the second dark age.

3 If we don't get on the right track, you know, solar
4 today here confronting the climate change crisis, why renewable
5 energy and efficiency will play the major roles in addressing
6 global warming. If it doesn't happen soon, Florida is going
7 under water.

8 I have been studying passive solar design for 37
9 years, and there have been lots of advancements, but, you know,
10 when I look at that Regressive Energy building, and I look at
11 what I learn, how to do reading Popular Science in 1971, it is
12 sad. It is really sad.

13 And then I have for you in this talk about, you know,
14 high performance schools. I have this for you. This is the
15 front page of the article. You can get it, the Solar Today.
16 This is my guest column that appeared in the Tampa Tribune in
17 August of 2000. Hillsborough County could save money by
18 building more efficient schools. This guest column is
19 unprecedented. It never happened with any publication that has
20 ever existed in this country. I was invited to write my guest
21 column in July of '97, and they told me they couldn't print it
22 because it was too technical. But three years later it got
23 printed without editing anything that could be considered
24 technical. And then here is the article from Fine Home
25 Building. If it is not efficient, it is not beautiful. Amory

1 Lovins, the Rocky Mountain Institute. And then the Climate:
2 Making Sense and Making Money. It's a lie. Everybody is
3 talking about how, oh, we can't cut the emissions. We can't --
4 we can't stop the global warming without some kind of great
5 cost. We can be creating jobs, people can be making money. In
6 fact, one of the things he points out in there, in a typical
7 building lighting circuit, code says you use a 12-gauge wire,
8 you put 15 amps of lighting on that. That is a 100 foot run,
9 and that is done because you won't start a fire. But that
10 doesn't mean you are using the electricity efficiently.

11 If you go to the next size larger, a 10-gauge wire,
12 you will get a 193 percent annual return on your investment, a
13 193 percent annual return on your investment. Because you will
14 allow the electrons to flow more freely through that wire and
15 it will go to lighting the lights instead of getting the wire
16 hot. Do you think the people at Regressive Energy did that? I
17 doubt that seriously. Do you know anything that gives you
18 193 percent annual return on your investment?

19 And then, here, this is the Environmental Defense
20 Fund newsletter. Algae made fuel. Fools are talking about
21 making biodiesel from things like soybean and stuff like that.
22 It says here, it was algae's appetite for CO2 that first caught
23 the attention of Isaac Bursin (phonetic), a chemical engineer
24 who co-founded Green Fuel Technologies that began the Red Hawk
25 experiment. The potential yields from algae dwarf those of any

1 other biofuel. While an acre of soybeans yields about
2 60 gallons of biodiesel, an acre of algae could yield 5,000
3 gallons.

4 **CHAIRMAN CARTER:** Mr. Klutho, are you close to
5 finishing?

6 **MR. KLUTHO:** Yeah, yeah. The one thing that I don't
7 think I brought up here, but I have 12 copies of it, is that
8 one about the Zion Park building. But, you know, like I say, I
9 have been following every move that the Public Service
10 Commission has made since I moved here to Florida in 1984.
11 Every single move. I read the paper every day, both the
12 Tribune and the Times. And, you know, it would be a big, big
13 mistake if this plant, if any nuclear plant was to be built.

14 **CHAIRMAN CARTER:** Thank you, Mr. Klutho. The
15 documents that you have laid out there, do you want to give
16 those to us?

17 **MR. KLUTHO:** Yes, 12 copies of each.

18 **CHAIRMAN CARTER:** Just leave them on the desk and we
19 will have staff to pick those up.

20 Commissioners, any questions of Mr. Klutho?

21 Commissioner Argenziano, you are recognized.

22 **COMMISSIONER ARGENZIANO:** You obviously have a lot of
23 research that you have done, and you mentioned the Zion Park
24 building. Could you tell me where that is so that I can look
25 that up?

1 **MR. KLUTHO:** Zion National Park.

2 **COMMISSIONER ARGENZIANO:** Oh, the Zion National Park.
3 Okay. I didn't know you were talking about the national park.
4 I have actually been there. Thank you.

5 **CHAIRMAN CARTER:** Staff, any questions?

6 **MS. FLEMING:** Staff recommends that we mark
7 Mr. Klutho's exhibits as Hearing Exhibit 61.

8 **CHAIRMAN CARTER:** Hearing Exhibit 61. Commissioners,
9 we will just make it a composite and put them all as one.

10 **MS. FLEMING:** Yes, Chairman.

11 (Exhibit 61 marked for identification.)

12 **MS. FLEMING:** And I will make sure that all the
13 Commissioners and all the parties have an opportunity to look
14 at the documents.

15 **CHAIRMAN CARTER:** Okay. Thank you, Mr. Klutho.

16 **MR. KLUTHO:** I just want to end with this. One
17 solution comes up every morning.

18 **CHAIRMAN CARTER:** Thank you. Ms. Fleming.

19 **MS. FLEMING:** I don't have any other witnesses that
20 have signed up to speak, however, they may have arrived after.

21 **CHAIRMAN CARTER:** Are there any witnesses that didn't
22 get a chance to sign up to speak that wanted to speak? We are
23 in our public hearing testimony. Any witnesses out there that
24 wanted to speak? Okay. Hearing none. Let's do this, let's
25 give staff an opportunity to get these documents together and

1 mark them, and let's give the court reporter a break.

2 In the meantime, let's give the parties an
3 opportunity to look at the documents that we marked for
4 identification while we were at Crystal River.

5 Commissioners, I am going to look up the ones on the
6 wall this time. And I think we will give staff and the parties
7 about 15 minutes so they can review everything, and then when
8 we come back in for the technical portion, Ms. Fleming, what we
9 may like to do is maybe take that up preliminarily in terms of
10 those documents, and there may be some possible stipulations.

11 So, I am looking at ten till. Thank you,
12 Commissioner. We are on recess until ten of.

13 (Recess.)

14 **CHAIRMAN CARTER:** We are back on the record. And
15 here we are. We had just concluded our public testimony.

16 Ms. Fleming, you are recognized.

17 **MS. FLEMING:** Commissioner, I have had an opportunity
18 to talk with all the parties regarding the service hearing
19 exhibits, as well as the exhibit that was presented this
20 morning, Exhibit Number 61. It is my understanding that there
21 are no objections to these exhibits, so at this time staff
22 would ask that Exhibit 1, which is the comprehensive exhibit
23 list, Exhibits 2 through 12, which are the service hearing
24 exhibits from April 23rd, Exhibit 13, which is staff stipulated
25 composite exhibit, and Exhibit 61, which was introduced by

1 Mr. Mark Klutho, be moved into the record.

2 **CHAIRMAN CARTER:** Any objections? Show it done.

3 (Exhibits 1 through 13 and Exhibit 61 admitted into
4 the record.)

5 **CHAIRMAN CARTER:** Any more preliminary matters,
6 Ms. Fleming?

7 **MS. FLEMING:** I'm not aware of any other preliminary
8 matters, Mr. Chairman.

9 **CHAIRMAN CARTER:** Okay. So we are now getting ready
10 for our opening statements. And, according to the prehearing
11 order, the parties were allowed ten minutes each if for their
12 opening statements. Mr. Glenn, you're recognized, sir.

13 **MR. GLENN:** Good morning. My company needs base load
14 capacity in the 2016 time frame. Adding two Westinghouse
15 AP1000 power plants at the company's Levy County site meets
16 that need in the most cost-effective manner.

17 Building these plants is the right choice for the
18 state, our company, and our customers. Moving forward meets
19 Congress's intent of fostering greenhouse gas emissions free
20 nuclear generation, the state legislature's intent to promote
21 new nuclear, as it did in 2006, and in its passage not 20 days
22 ago of House Bill 7135.

23 Moving forward meets this Commission's rules
24 implementing the Legislature's 2006 act, and it meets Governor
25 Crist's support for new nuclear plants to help achieve his

1 greenhouse gas reduction targets in his 2007 executive orders.
2 The company's prefiled testimony and need study show, and we
3 will show at this hearing, that Levy Units 1 and 2 constitute
4 the most cost-effective generating option when taking into
5 account, as the legislature directed, the need for base load
6 generating capacity, the need to improve fuel diversity, reduce
7 Florida's dependence on fuel oil and natural gas, and the need
8 to reduce air emissions compliance costs, and to contribute to
9 the long-term stability and reliability of the grid.

10 Now, indeed, Potash Corporation of Saskatchewan's
11 attorney, Mr. Brew, admitted as much during the prehearing
12 conference last week when he said, and I quote, "In the context
13 of need criteria, certainly the questions from our perspective
14 are easy. If you are looking for base load capacity with no
15 greenhouse gas emissions and relatively low fuel cost, the need
16 criteria for a new nuclear plant are pretty straightforward."
17 We agree.

18 Now, in considering the Levy project, the company has
19 not ignored the importance of renewable energy and energy
20 efficiency. We have achievable aggressive goals. While Mr.
21 Masiello and his team continue maximizing energy efficiency,
22 and Mr. Niekum, who you will hear from, and his group continue
23 to leverage available renewable energy resources in the state,
24 these alone are not enough to meet our customers' growing
25 needs.

1 So, what are our options today? As a practical
2 matter, we can't build coal plants in Florida today. As a
3 practical matter, IGCC plants of the size that are needed are
4 not technologically proven, they still emit carbon and other
5 air emissions, and no technology exists to capture that carbon.
6 So we have really got two options. We can abandon the path of
7 building new nuclear in the state as some might argue here
8 today, and build for the foreseeable future natural gas as the
9 state has done for the last decade, or we can build new nuclear
10 plants. We choose the latter.

11 Why do we do that? As our witnesses will show, these
12 units will add critical base load capacity to our system. In
13 fact, the last time we added new base load capacity was nearly
14 a quarter a century ago on our system. They are going to allow
15 us to make meaningful reductions. Meaningful reductions in
16 greenhouse gas emissions and avoid those costs. In fact,
17 without new nuclear it is going to be impossible for our
18 company to meet the aggressive targets that the Governor set in
19 his 2007 executive orders.

20 These units are going to play a critical role in
21 improving our fuel diversity and security and lessen the price
22 volatility of that fuel mix. And these units, as our witnesses
23 will show, are going to generate about a billion dollars a year
24 in annual fuel savings when they go on-line, and about a total
25 of \$92 billion over the life of these plants. So, when you

1 contrast those benefits with the risk of relying solely on
2 fossil fuels, primarily natural gas over the long-term, which
3 still emits carbon, which is volatile in price, and which is
4 not really base load power, nuclear is the appropriate choice
5 in the 2017/2016 time frame, with, of course, gas being a
6 bridge to that time. That is what you are going to hear from
7 our witnesses.

8 You are going to also hear that we do not make this
9 decision lightly. That we have already spent tens of millions
10 of dollars on this project to keep this option open for our
11 customers because it is the right choice today. That we
12 recognize and take very seriously the large initial capital
13 costs of this project, which is one of the reasons why we
14 continue to engage and negotiate in meaningful and significant
15 negotiations with potential joint owners.

16 Joint ownership from our perspective can have the
17 benefit of spreading a portion of the capital risk from our
18 customers to others, it can have the effect of lowering the
19 overall price impact to our customers, and of smoothing out
20 some of the lumpiness of your reserve margins when the
21 22 megawatts comes into service.

22 Now, what you are going to hear from SACE and Potash
23 are in effect that we should never build new nuclear or that
24 the Commission should simply rewrite Florida law. Let's change
25 nonbinding cost estimate in the statute to binding cost

1 estimate and cost cap. They do this under the guise of seeking
2 a conditional need order, which is not appropriate and which
3 would make it impossible for us to build a nuclear plant or any
4 large project for that matter. Their arguments aren't
5 consistent with Florida law, the rules of this Commission, and
6 really the practicalities of licensing, financing, and building
7 a project of this magnitude. Remember, while they appose
8 nuclear power generation, they have presented you with no
9 evidence, no evidence of a realistic alternative to meet our
10 customers' future energy needs in a carbon constrained and
11 volatile fossil fuel cost world.

12 So, when all is said and done after this hearing
13 there ought to be no reasonable dispute that we need some type
14 of generation. That renewables and energy efficiency have been
15 maximized by the company, but those alone aren't enough. There
16 ought to be no reasonable dispute that we can't build coal or
17 IGCC to meet this need. There really ought to be no reasonable
18 dispute that building natural gas solely is not in the best
19 interest of the state and we shouldn't take that short-sighted
20 approach.

21 There really ought to be no reasonable dispute that
22 greenhouse gas emissions and associated costs are and will
23 continue to be part of our state and our country's energy
24 policy. And there ought to be no reasonable dispute really
25 that this leads you to new nuclear generation for our company.

1 The Levy project is the right one at the right time for our
2 state, our company, and our customers. Thank you.

3 **CHAIRMAN CARTER:** Thank you, Mr. Glenn.

4 Mr. Burgess. I started this way, now I am doing this
5 now.

6 **MR. BURGESS:** Yes. Mr. Chairman, that is fine, and I
7 appreciate it. And, Commissioners, I just want to take about
8 one minute to first recognize the complexity of the challenge
9 that you face in trying to apply the standards of Chapter 403.
10 I think the most difficult standard to apply is probably that
11 of the requirement of cost-effectiveness. You have got
12 difficulties there because of the duration, the number of years
13 you have to look out and try to determine what the cost of
14 various costs are going to be because of the -- also, as well
15 because of the elusiveness or the unpredictability of some of
16 these costs.

17 Nevertheless, we urge you to consider all the costs
18 and use your best adjustment in seeking to determine the
19 closest, most accurate expectation of all the costs that are
20 going to be involved and consider this in determining the
21 proper determination to meet the power needs of the service
22 area for Progress Energy.

23 Thank you.

24 **CHAIRMAN CARTER:** Thank you, Mr. Burgess.

25 Mr. Brew.

1 **MR. BREW:** Thank you. Good morning. There are
2 104 existing nuclear reactors in the country, including five in
3 Florida. The fuel cost diversity and emissions benefits of
4 those units are well established, and yet you haven't built a
5 nuclear plant in this country in 30 years. The reason for that
6 is very simple. No one would take the financial risk. Not the
7 reactor designers, not utilities, not the investment community.
8 But we are now looking at a rebirth of nuclear power starting
9 in Florida.

10 Congress has offered to mitigate investor risk with
11 loan guarantees, the NRC is consolidating its licensing review,
12 and we have the Florida statute enacted in 2006. But, the 2006
13 legislation added additional criteria for you to consider in
14 your need determination, but it did nothing to diminish the
15 Commission's basic mission to protect consumers. In fact, the
16 statute directs the Commission to take into account any matter
17 within its jurisdiction that you deem is relevant in making a
18 need determination.

19 The basic problem is that the risks of building these
20 units haven't changed in 30 years. We don't have credible
21 estimates. The estimates that we have today are stunning in
22 the initial capital costs, and they are subject to regular
23 revision upward. And actually Progress has been fairly candid
24 in acknowledging that those costs may be going up much higher.

25 You don't have really the information you need on how

1 those costs will be managed in terms of the contracts,
2 performance guarantees, what if any of the components might be
3 fixed price. As Progress says, they are working on it, but you
4 don't have that information.

5 There is a very high risk that construction schedule
6 delays will occur because the infrastructure and supply chain
7 required for nuclear plant construction is just now being
8 reestablished. This means likely bottlenecks not only for the
9 ultralarge forgings that are made by Japan Steel and only Japan
10 Steel that is talked about relatively commonly, but virtually
11 every component that goes into a nuclear steam supply system
12 that has to follow an NRC pedigree.

13 So, just looking at most recent developments, last
14 December, Moody's Investor Service estimated the likely cost of
15 units at 5,000 plus per kilowatt hour, about 40 percent higher
16 than what you saw a year ago. Last month, the Nuclear Energy
17 Institute, which is the trade group for nuclear utilities,
18 estimated that we are now looking at \$78 billion a reactor or
19 about \$7,000 a kW. Last week when we were sitting at this
20 prehearing conference, the Wall Street Journal published an
21 article in which investors and a number of parties indicated
22 their concern over the likelihood of costs running out of
23 control for the reasons that I mentioned. And as I mentioned
24 earlier, Progress has acknowledged a lot of these concerns in
25 their petition.

1 So with the record in front of you virtually
2 screaming that today's cost estimates are not realistic and the
3 project costs will likely be much higher, the first question is
4 what can and should be done to protect consumers from the
5 project turning into economic millstones. The changes enacted
6 in 2006, particularly with the nuclear cost-recovery rule,
7 provide the needed push to get nuclear off the ground, but it
8 does so by shifting the risks of those costs over onto
9 consumers. That makes the issue in this need determination of
10 whether this is the most cost-effective alternative, whether
11 the units are likely to provide power at a reasonable cost, the
12 Commission has to address how are these risks going to be
13 managed, and that is really why PCS Phosphate is here.

14 Earlier this month at that same NEI conference, John
15 Rowe, the CEO of Exelon, which is the utility that owns the
16 most nuclear generation in the country, and he is chairman of
17 that organization currently, said that disciplined project
18 execution is critical for the success of new nuclear
19 construction. Nothing will chill the rebirth of nuclear power
20 more quickly than finding ourselves 18 months into construction
21 on a project and 18 months behind schedule. Every utility
22 contemplating building a new nuclear unit must have a sense of
23 urgency about cost and schedule, and so should the Commission.
24 That is why that is an issue that has to be addressed here.

25 We are now looking at -- taking a quick look at the

1 Progress need study, three concerns immediately jump out. The
2 first is that the economic benefit scenarios rely heavily on a
3 60-year period in order to make the numbers work. Most don't
4 show a net positive benefit for at least 30 years. So what we
5 are looking at is billions of dollars being spent before the
6 units go into service and at least a generation passing before
7 we see a net positive benefit. And this is assuming no delay
8 in the schedule and it is assuming that Unit 2 is completed
9 within 18 months of Unit 1.

10 The second is that while Progress acknowledges a
11 considerable assortment of factors that can cause schedule
12 delays, their analysis in the need study doesn't address that
13 at all. There was a sensitivity that looks at some changes in
14 the capital cost estimate of 5, 15, and 25 percent, but those
15 assume the same in-service dates, and anyone who has followed
16 the history of nuclear construction know that it is all about
17 controlling schedule. And so you have a very big hole in the
18 record here in terms of not only what are the risks to
19 consumers, but how are those costs likely to change. It hasn't
20 been addressed.

21 Finally, even if you were comfortable with the
22 60-year period for assessing the economic benefits of the
23 units, Progress' estimates have been badly skewed by using CO2
24 compliance numbers that not even their source will sponsor
25 today, and that is something that we plan to address in the

1 hearing.

2 So this brings us back to what are we saying the
3 Commission should be doing here. First is we can't really rely
4 on the annual nuclear cost prudence review to accomplish what
5 needs to be done here, because as Mr. Bradford explains in his
6 testimony, unlike a power plant explosion, where you can look
7 at a discreet event and address the prudence issues in a timely
8 fashion, in construction instances, the costs have been
9 incurred many years oftentimes before a prudence issue becomes
10 manifest.

11 The second is the annual ongoing feasibility
12 assessments that are part of the nuclear cost-recovery rule
13 also is not the appropriate way to address this concern. I
14 can't imagine a more difficult decision for the Commission than
15 in that context to be trying to conclude that the projects once
16 they hit \$25 billion aren't worth going forward. So using that
17 as a vehicle for addressing these cost risk concerns is not
18 really, I think, where anybody wants to be, so they need to be
19 addressed here.

20 Taking all of that into account, what we are
21 recommending first is that the Commission should limit any
22 finding of need to Unit 1. You are looking at a 33 percent
23 reserve margin with Unit 2 going into service under the
24 schedule that is proposed, so it is placing simply too great an
25 economic burden on the consumers in the area to have that much

1 excess capacity.

2 The second is that any determination of need for
3 either unit has to address these risk issues, and that can only
4 be done through conditions that the Commission determines to be
5 appropriate. Now, that is fully consistent with your
6 jurisdiction under the Florida laws. There is no reason why
7 you can't require, for example, an updated filing before
8 construction actually breaks ground requiring Progress to
9 justify moving forward once you have got better information on
10 the contracts, on the EPC terms, where the schedule actually
11 is, and likely in-service dates. Or any other factor that you
12 consider to be appropriate.

13 We know that there are other things that the
14 Commission could do in other contexts that aren't part of the
15 need case. Certainly, the shifting of risk to consumers
16 suggested in base rate cases, we need to look at rate of return
17 adjustments, but in talking about this docket and the need
18 criteria under the statute, the question is how can you make a
19 determination as to whether these units will provide power at a
20 reasonable cost and the cost-effectiveness alternative if you
21 haven't addressed the risks that the estimates that you are
22 working to today don't resemble what the actual costs of the
23 plants will be, and that is what we plan to address at this
24 hearing. Thank you.

25 **CHAIRMAN CARTER:** Thank you, Mr. Brew.

1 Mr. Jacobs.

2 **MR. JACOBS:** Good morning, Commissioners. The
3 Southern Alliance for Clean Energy wants to thank you for the
4 opportunity to address the issues in this proceeding, a
5 proceeding which we believe represents a fundamental point of
6 departure in this state's energy policy, and also in your
7 authority.

8 You are being asked to render a final decision that
9 Progress Energy Florida has specified need for additional
10 substantial capacity, and that the proposed two nuclear units
11 represents the most cost-effective means of meeting that
12 demand. The Southern Alliance for Clean Energy asserts that
13 you do not have before you the requisite proof to make a final
14 binding agency decision on this matter.

15 We argue that should you grant this petition based on
16 the level of proof that you have before you, you will
17 eviscerate the traditional need determination procedure and
18 replace it with a process totally inconsistent with reasonable
19 energy planning, and which is significantly contrary to the
20 best interest of ratepayers of this company and of the best
21 interest of the public in general.

22 This petition begins by acknowledging that this
23 resource decision is not the most cost-effective resource
24 available to the company's ratepayers, but asks you to approve
25 the request in order to boost its reserve margins and ensure

1 energy diversity and reliability. We assert that the approval
2 of this petition would be detrimental to the statewide energy
3 diversity and reliability for reasons that we hope to make
4 obvious to you.

5 Further, we assert that you have before you
6 reasonable alternatives to manage -- that the company could
7 invoke to manage its reserve margin in a much more constructive
8 and cost-effective manner than the proposed plant additions.

9 Let's take a brief look at some of the specific
10 issues you have before you. The ultimate cost of this plant.
11 The proof you have before you as to the ultimate cost borders
12 on pure speculation. Yes, the statute does allow nonbinding
13 projections of costs. In these proceedings you are
14 establishing and furthering the legal precedent as to an
15 interpretation of nonbinding. If you do so by the petition in
16 this proceeding you will have removed, essentially removed the
17 total burden of going forward on that proof and defer all
18 authority for your determinations to an elongated high
19 maintenance process that could go on ad nauseam. And I suggest
20 to you that will have significant overall effect not only on
21 the state's energy planning, but on your overall authority.

22 The impact of risk. The risks associated with this
23 decision are phenomenal, and I won't go into all of them here,
24 but let's talk briefly about the company's ratepayers. It is
25 acknowledged and almost unrefuted that their customers are in

1 for deep rate shock as a result of the proposal here. Contrary
2 to times in past where they maybe could have taken a look at
3 the thing that they just bought, maybe kick the tires, and then
4 complain about it, they don't have the ability to do that.
5 They don't even know what it will be, yet they will be asked to
6 bear that expense ad nauseam.

7 And, I would suggest to you a different kind of risk
8 that is present in this proceeding, one that you may not have
9 considered totally. The risk of backlash. At some point, some
10 portion of the capacity of these units will be absorbed by as
11 yet unnamed partners, probably through wholesale contracts to
12 municipally-owned and cooperative utilities. I suggest to you
13 that when these ratepayers see that bill there will be
14 ramifications. Their recourse will be to go to the
15 decision-makers who made those contracts and hold them
16 accountable, and I suggest to you that that reaction will be
17 formidable.

18 We can look here in the capital city recently and see
19 how intricately a factor public activism was in resource
20 allocation decisions for the city's utility. I suggest to you
21 that with the onset of this renaissance of nuclear, that
22 backlash risk will be substantial throughout the state.

23 Now, I think we should also take some thought to look
24 at the impact on markets. You have been spending a lot of
25 energy and devoted major resources to exploring energy

1 diversity through new markets and renewable energy and energy
2 efficiency. If you approve this application, we suggest that
3 you send a message to the markets that basically nuclear power
4 is a diversity mechanism at a time when the markets for energy
5 efficiency and renewables are at their infancy, and when they
6 are desperately in need of infusion of investment probably
7 mostly from outside investors. You will send a clear message
8 to outside investors as to where the priorities lie, and I
9 suggest to you it could not be at a worst time.

10 It is clear that the economies of scale in energy
11 efficiency and renewables are at a premium state based on
12 activities around the nation and around the world. You have
13 the opportunity to join in this trend. The evidence is clear
14 that the emergence of renewables and energy efficiency is
15 having a specific impact on utilities service costs. They are
16 seeing reductions in their costs to serve by the introduction
17 of and expansion of renewables in energy efficiency.

18 In Florida we have not seen that. The evidence is
19 clear there have been credible efforts, we accept, but we have
20 not seen the level of impact and the level of bottom line
21 reductions that could be done. This decision at this time, I
22 believe, would certainly defer if not eliminate the possibility
23 that we will see such a result.

24 As an aside, even if you do this, if you let these
25 ratepayers essentially invest in this asset at this point in

1 time, my suggestion to you then is to be fair about that. In
2 the back end of this deal when revenues and profits begin to
3 show up from the wholesale contracts, then the ratepayers ought
4 to get a benefit from that. Their rates ought to get rolled
5 back based on revenues from wholesale. If they incurred the
6 level of risk that they are picking up on the front end, they
7 have to have some payback on that, or else this whole deal is
8 patently and consistently unfair to the ratepayers.

9 Finally, as a matter of public policy, we urge you to
10 walk this path carefully. You are setting fundamental policy
11 for a long time to come. As my co-counsel enunciated, these
12 decisions are going to have long-term binding impacts.

13 We ask that you give innovation a try. Think
14 constructively here. You have the ability to do that. You can
15 go back to the Legislature and give them guidance on how to
16 implement their intent. Give them the benefit of your wisdom
17 and your knowledge about how to bring these markets along and
18 cover their concerns about base load capacity. I suggest to
19 you to do this wholesale effort is very premature, very
20 overbearing, and I think detrimental to the public. Thank you.

21 **CHAIRMAN CARTER:** Thank you so kindly.
22 Commissioners, before we go further, let me just kind of see
23 what staff -- I believe that we have, I kind of want to see if
24 we have got another preliminary matter. Do we need to -- I
25 think we have got two, was it two witnesses that have been

1 stipulated?

2 **MS. FLEMING:** Yes, Chairman. I would like to note
3 that Witnesses Siphers and Weintraub were stipulated and have
4 been excused from the hearing.

5 **CHAIRMAN CARTER:** Okay. All right. Any objection by
6 any of the parties, by the way? Thank you so kindly. Any
7 other preliminary matters?

8 **MS. FLEMING:** I'm not aware of any others.

9 **CHAIRMAN CARTER:** Commissioners, we are looking at
10 the court reporter, and I really would wait -- I hate to get
11 started with a witness and then have to make a break with them,
12 because I know our first witness up will be Mr. Lyash, is that
13 correct? I don't know how long his testimony is going to be.
14 I know we have got on here that the witnesses can do a five
15 minute opening and cross examination. That may take some time
16 as well both from the parties as well as staff, and I'm trying
17 to juggle the court reporter schedule, as well.

18 So I guess we are at a breaking point. It is
19 probably best to just break now and start afresh right after
20 lunch, and pick up with a new court reporter and new witness
21 and go from there. Any objection, Commissioners? Okay.

22 Well, then I need a recommendation on our return
23 time. You notice I have been pointing at -- there is a
24 different clock here and there is a different clock there.
25 12:45. Is that fine, Commissioners? Okay, recess until 12:45.

(Transcript continues in sequence with Volume 2.)

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STATE OF FLORIDA)

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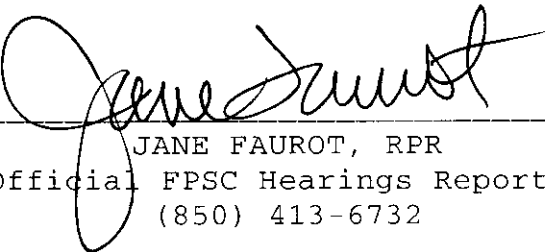
COUNTY OF LEON)

I, JANE FAUROT, RPR, Chief, Hearing Reporter Services Section, FPSC Division of Commission Clerk, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 22nd day of May, 2008.



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