

BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
COLUMBIA, SOUTH CAROLINA

HEARING #10900

NOVEMBER 30, 2007

10:30 a.m.

ALLOWABLE EX PARTE BRIEFING

Requested by Duke Energy Carolinas, LLC, Progress Energy Carolinas, Inc., and South Carolina Electric & Gas Company concerning drought ramifications and utility mitigation actions

**TRANSCRIPT OF PROCEEDINGS
VOLUME 1 of 1**

COMMISSIONERS PRESENT: G. O'Neal HAMILTON CHAIRMAN, C. Robert MOSELEY, VICE CHAIRMAN; and COMMISSIONERS David A. WRIGHT, Elizabeth "Lib" FLEMING, Mignon L. CLYBURN, and Randy MITCHELL.

ADVISOR TO COMMISSION: Joseph Melchers, Esq.

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APPEARANCES:

Representing Duke Energy Carolinas, LLC, CATHERINE HEIGEL, ESQUIRE, STEVEN JESTER, and SAMUEL HOLEMAN

Representing Progress Energy Carolinas, Inc., LEN ANTHONY, ESQUIRE, CAREN ANDERS, and BYRON COVEY

Representing South Carolina Electric & Gas Company, CHAD BURGESS, ESQUIRE, JOSEPH TODD, and MARCUS HARRIS

Representing Office of Regulatory Staff, JEFFREY M. NELSON, ESQUIRE, and CAREY FLYNT

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

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P R O C E E D I N G S

1
2 **CHAIRMAN HAMILTON:** Please be seated. We'll
3 call the hearing to order, and we'll ask Mr.
4 Melchers if he would brief us on the procedure
5 today.

6 **MR. MELCHERS:** Thank you, Mr. Chairman. This
7 is an allowable ex parte communication briefing
8 with Duke Energy Carolinas, LLC, Progress Energy
9 Carolinas, Inc., and South Carolina Electric & Gas
10 Company concerning drought ramifications and
11 utility mitigation actions. Thank you, Mr.
12 Chairman.

13 **CHAIRMAN HAMILTON:** Thank you, very much, sir.
14 We've got a very distinguished panel in front of us
15 today. It's kind of overwhelming. We appreciate
16 each of you taking your time out of your busy
17 schedule to be here today and to bring us up to
18 speed on the subject matter.

19 I think at this time I'll just start with Ms.
20 Heigel and let her introduce herself and the other
21 folks introduce themselves around the panel.

22 **MS. HEIGEL:** Thank you, Mr. Chairman, and
23 members of the Commission. It's our pleasure to be
24 here today. I don't know whether you're picking me
25 up on this or not. We are obviously here to talk

1 about the drought, the current conditions, and the
2 utility actions in response to those conditions,
3 and we appreciate the opportunity to speak with you
4 all.

5 I have with me here from Duke our vice
6 president of hydro licensing and lake services, and
7 that's Mr. Steve Jester, and then seated in between
8 us is Mr. Sam Holeman and he's our director of
9 electric system operations. And what we'll do is
10 we'll go around and introduce folks and then Mr.
11 Jester will start the presentation.

12 **CHAIRMAN HAMILTON:** Okay. Mr. Anthony?

13 **MR. ANTHONY:** Thank you. Good morning,
14 Chairman Hamilton, members of the Commission. We
15 have here today Caren Anders, who is our vice
16 president of transmission planning and operations,
17 and included in that is resource management, as
18 well as operation of our energy control center, and
19 Byron Covey, who is manager of major projects and
20 integration, who is also supporting Caren in
21 explaining the drought situation.

22 **CHAIRMAN HAMILTON:** Thank you. Thank you,
23 very much. Mr. Burgess.

24 **MR. BURGESS:** Good morning, Mr. Chairman,
25 members of the Commission. On behalf of SCE&G, I

1 want to introduce Joseph Todd, who is our general
2 manager of fossil and hydro operations, and sitting
3 next to him is Marcus Harris, who is our manager of
4 operations planning, and they'll be conducting the
5 presentation on behalf of SCE&G this morning.

6 **CHAIRMAN HAMILTON:** Thank you. Happy to have
7 you. Mr. Nelson?

8 **MR. NELSON:** Good morning, Mr. Chairman and
9 Commissioners. I'm Jeff Nelson from the Office of
10 Regulatory Staff. I am here with Carey Sue Flynt
11 from our office.

12 **CHAIRMAN HAMILTON:** Thank you, very much.
13 Happy to have each of you. And I believe, Ms.
14 Heigel, you're going to kick off.

15 **MS. HEIGEL:** I believe Ms. Boyd is going to
16 pass around hard copies. Some of these slides may
17 be difficult to read up on the screen, so we're
18 going to give you hard copies and you can follow
19 along.

20 **CHAIRMAN HAMILTON:** Very good. Thank you.

21 **MR. JESTER:** Good morning. As you heard, I'm
22 Steve Jester with Duke Energy, and I get the honor
23 I guess of kicking this off this morning. If you
24 would, please turn to slide two in your handout.
25 And I wanted to take just a moment at the outset

1 here to sort of outline the presentation. There
2 are five parts to the presentation. We will start
3 with part one and conclude with part five. Both of
4 those parts contain comments that are applicable to
5 all three utilities. Parts two, three, and four
6 will give each utility a chance to share its
7 specific situation as relates to the drought and
8 its impacts. So that's just an overview.

9 If you would please, turn to slide three.
10 During the next few slides I will summarize the
11 current drought conditions, share information
12 regarding the weather forecast over the next 90
13 days, and review some of the ways that water is
14 used in the course of generating electricity.

15 If you would, move to slide four. This map
16 shows the North Carolina and South Carolina river
17 basins, and it also shows -- although it's a bit
18 difficult maybe -- it also shows the three
19 utilities' footprints, if you will. So you can see
20 the areas there for Progress Energy, South Carolina
21 Electric & Gas Company, and Duke Energy, as well --
22 Duke Energy Carolinas.

23 Since April, the Carolinas and other portions
24 of the Southeast have been experiencing an
25 unprecedented and acute drought. You may recall

1 that the previous drought of record lasted
2 approximately four years and ended in the fall of
3 2002. I really want to impart this morning, if
4 everyone doesn't know this already, that this
5 drought is very, very different than that four-year
6 drought. It has developed over a much shorter
7 period of time, and the intensity of this drought
8 is far more severe.

9 If you would, please move to slide five. As
10 you can see from the latest weekly U.S. drought
11 monitor map, much of both North and South Carolina
12 is categorized as experiencing either extreme or
13 exceptional drought conditions. The latter
14 category is the most severe of all the conditions
15 on the monitor scale. While you can see -- and you
16 can see the footprint areas for each of the
17 utilities represented here today, as well. While
18 it's true that drought conditions vary across both
19 states and, likewise, across the service areas of
20 the three utilities, many of the river basins
21 originate in North Carolina and eventually flow
22 south into South Carolina. The North Carolina
23 portions of some of those river basins are
24 experiencing exceptional drought condition, and
25 that impacts the amount of water that flows south.

1 If you would, please move to slide six. This
2 map provides sort of a seasonal forecast looking
3 out over the next 90 days, sort of giving us a
4 taste of what we might have in store. The period
5 covered is, of course, December through next
6 February, and one of the unfortunate things that we
7 are learning from this map and other sources is
8 that the drought conditions will persist through
9 that period. The short and intermediate weather
10 projections indicate that we will have a drier than
11 normal condition and that we will have above normal
12 weather -- or temperatures, I should say, through
13 February.

14 There is a bit of good news compared to the
15 past few months. The precipitation forecast calls
16 for less than long-term average rainfall. That
17 gives us reason to anticipate that we could get
18 more rainfall than we've gotten in each of the past
19 six or seven months when we have absolutely almost
20 gotten no rainfall. So we're a bit hopeful about
21 that.

22 If we could, move to slide seven. This slide
23 conveys some information about the dependency of
24 power generation upon water. Obviously, it's easy
25 for us all to immediately think that conventional

1 hydro generation and pumped storage generation are
2 very dependent upon water, because water is the
3 fuel for those kinds of generating assets. But in
4 fact, all of our electric generation plants are
5 dependent upon water, and significant quantities of
6 water. This slide lists some of the ways in which
7 water is used in the production of electricity.

8 Each of the three utilities represented here
9 today have been and continue to be very focused on
10 managing water resources in ways that extend the
11 remaining water for as long as possible. Doing so
12 buys more time for rainfall to return to the
13 Carolinas. This prudent use of water resources is
14 intended to strike an appropriate balance of key
15 regional interests. Our plans are intended -- our
16 plans and actions are intended to manage impacts on
17 municipal drinking water systems; obviously, on the
18 operation of our electric generating assets; and
19 certainly, industry is very dependent upon the
20 water in the river basins, as well. So we are
21 trying to strike an appropriate balance of all
22 those interests, and others.

23 During the next three parts of this
24 presentation, representatives from each of the
25 utilities will share information about the drought

1 impacts that they are experiencing. My fellow
2 panelists have asked me to continue speaking, but
3 from this point on I will shift to provide
4 information that is specific to Duke Energy
5 Carolinas only.

6 If you would, please, skip forward, I believe
7 we can skip slide eight since it is just a title
8 slide, and if you would please turn to slide nine.
9 In the Carolinas, Duke operates three nuclear
10 stations, eight fossil stations, 31 hydroelectric
11 stations, and a number of combustion turbines.
12 This map actually shows our service area footprint.
13 These assets collectively serve 2.2 million
14 customers over a 22,000-square-mile service
15 territory.

16 I would call your attention to two river
17 basins that are circled in blue on this map, and
18 that is the Catawba-Wateree basin, which lies
19 roughly in the center of our service area, and the
20 Keowee-Toxaway basin, which is in the southwest
21 portion of our service area. These two basins
22 collectively house or are home to 67 percent of
23 Duke Energy Carolinas' generating capability or
24 capacity, if you will. The remaining one-third of
25 our generation capacity is located on lakes and

1 rivers across the service area. You know, you have
2 things like Belews Creek Steam Station on Belews
3 Lake, Buck Station on the Yadkin River, and so
4 forth. But we do have, very, very much, a
5 consolidated group of 67 percent of our generation
6 capability in these two basins.

7 Specifically, along the Catawba-Wateree Basin,
8 we operate 11 reservoirs over a 225-mile stretch of
9 the river. The Keowee-Toxaway Basin also has
10 multiple reservoirs, but that basin is much
11 smaller. For example, the Keowee-Toxaway Basin, if
12 you will, the catchment area for rainfall is about
13 500 square miles, as compared to, on the Catawba-
14 Wateree, that basin is about 5,000 square miles.

15 The reservoirs that I've mentioned in these
16 comments have been really key in our ability to
17 manage through this drought. Without them, I think
18 we'd be in a far different situation than we are
19 today. So those have been very helpful to us and
20 will be helpful if the drought persists.

21 If we could, move to slide ten please. Slide
22 ten actually just takes the information I just
23 shared and provides a bit more detail about the
24 generation assets that reside in each of those two
25 basins. I would call your attention to the fact

1 that in the Catawba-Wateree Basin, about 1.5
2 million people depend upon the water in those
3 reservoirs, those 11 reservoirs, and the stretches
4 of river between them, for drinking water. And
5 down in the Keowee-Toxaway Basin, those reservoirs
6 are -- particularly, Lake Keowee serves as drinking
7 water supply for Greenville, South Carolina, and
8 Seneca.

9 I've mentioned a couple of times that in the
10 Catawba-Wateree Basin, we have 11 reservoirs, and
11 at the very top of that chain of reservoirs lies
12 Lake James. And it really is, if you will, the
13 emergency water bank account for the entire basin.
14 It contains about 25 percent of the usable storage
15 contained in all 11 reservoirs.

16 If we could, move to slide 11 please. Very
17 often you'll hear folks in our business talk about
18 usable water storage, and quite simply, that is
19 nothing more than a reference to the amount of
20 water that lies between the surface of each
21 reservoir and the most shallow water intake. In
22 some cases, Duke Energy owns that most shallow
23 water intake and in a lot of cases it might be a
24 public water system or an industry. So when we
25 talk about usable water storage on the Catawba-

1 Wateree, in total, we are talking about the amount
2 of water that still is available above the most
3 shallow intakes up and down that basin, and the
4 surface of each of those reservoirs.

5 I guess at this point in time, with the
6 exception of Lake James, all of the lakes on the
7 Catawba-Wateree are reaching or quickly approaching
8 lake limits. So, you know, it's very fortunate
9 that we have the Lake James emergency water bank
10 account. We are taking water from Lake James to
11 keep all of the intakes south of Lake James
12 covered.

13 The things that are really driving the lake
14 level declines are, first and foremost, the near
15 absence of rainfall. Nothing has greater impact on
16 whether or not you have water in those reservoirs
17 than lack of rain. Obviously, we also are required
18 to do releases from our dams to satisfy downstream
19 requirements and, of course, the drinking water
20 needs and industry needs also take water from the
21 reservoirs.

22 We have, throughout history, developed sort of
23 a trend analysis, if you will, throughout each
24 month of the year. We'd like to have a certain
25 amount of water on hand in the Catawba-Wateree

1 chain of reservoirs. And certainly, sitting here
2 at the end of November, we would like to have a
3 certain amount of water on hand. And currently, we
4 have about 58 percent as much water, in terms of
5 usable water storage, as we would like to have
6 typically. In the Keowee-Toxaway Basin, which is a
7 very different basin in terms of how it is used --
8 we have two pumped storage reservoirs and one
9 traditional or conventional hydro unit associated
10 with our Lake Keowee reservoir -- we have about 31
11 percent of the amount of water that we would like
12 to have on hand this time of the year. Currently,
13 in the Catawba-Wateree Basin, we are at stage three
14 of the low inflow protocol. And there's only one
15 more stage beyond stage three, and that is stage
16 four, and we want to stay out of that for as long
17 as possible.

18 If we could, move on to the next slide. On
19 this next slide, we are actually sharing -- I would
20 like to share a little bit of information about our
21 external collaboration and other aspects of our
22 outreach efforts. We have been reaching out -- and
23 this is true across our whole service area -- we've
24 been reaching out to industries that use large
25 amounts of water, and the cities and counties who

1 depend upon the waterways for their drinking water
2 and other uses. And we are working with all of
3 those entities and other regional partners in an
4 attempt to aggressively conserve the remaining
5 water storage.

6 We are also encouraging the owners of those
7 water intakes, public drinking water systems and
8 industry, to develop contingency plans, the same
9 sort of things that we do for our own interest.
10 Sort of the what-if scenarios, to make sure people
11 are planning ahead in case the drought persists and
12 conditions do get worse.

13 There are some -- I guess the two things that
14 we promote in each of those interfaces is conserve
15 water and conserve energy. Use less electricity,
16 because the production of electricity does consume
17 water; so, to the extent people in our region can
18 use less water and less electricity, it's all, in
19 essence, the same effort. It goes to the same
20 cause.

21 There are some particularly good stories I
22 wanted to mention this morning, also, that grew out
23 of our recent hydro relicensing effort in the
24 Catawba-Wateree project. We have just concluded
25 several years of stakeholder work -- that is, work

1 with local government organizations, nongovernment
2 groups, and so forth, up and down the basin to
3 develop a comprehensive relicensing agreement.
4 That agreement has been filed as a part of our
5 license application with the FERC.

6 One of the things, in particular, that grew
7 out of that effort was something called the Drought
8 Management Advisory Group, or DMAG. The DMAG
9 organization, if you will, is composed of all the
10 owners of the large water intakes in the Catawba
11 Basin. As a matter of fact, 24 of those owners of
12 large intakes are public water systems. State
13 agencies are also a part of this group, USGS, and,
14 of course, Duke Energy.

15 The collaboration that we have experienced
16 there has led, thus far, up and down the basin, on
17 average, to 20 percent or greater conservation
18 results, in terms of water conservation. So that
19 has served us well. Now, we haven't started our
20 relicensing effort yet on Keowee-Toxaway. That
21 will be coming up here in the next few years. And
22 I am confident that we would end up with some kind
23 of low inflow protocol which specifies what Duke
24 and all the owners of those intakes will do in that
25 project, as well. So in the absence of that, we've

1 been reaching out individually to cities and other
2 owners of large intakes there.

3 In terms of other external outreach, at last
4 count we have now exceeded 500 interfaces with
5 regional and local media, and each of those -- I
6 think of them as an opportunity to get the word out
7 about conservation, and to provide drought updates
8 so that people, the public, have information they
9 need. We've also implemented a drought webpage and
10 there's a spring shot actually in the handout.
11 Visitors to the website can access information
12 about lake levels, water and energy conservation
13 tips, information about the closing of public
14 access areas that have -- access areas that have
15 been closed because of water levels making it
16 unsafe to keep them open, and so forth.

17 We have also conducted several public
18 information sessions and we're doing regular,
19 targeted communications to lake neighbors and
20 others who have an interest in what's going on with
21 water. Did I see a hand waving?

22 **COMMISSIONER CLYBURN:** Oh, was I that obvious?
23 I'm sorry.

24 **MR. JESTER:** No, you weren't that obvious. I
25 was being perceptive.

1 **COMMISSIONER CLYBURN:** I appreciate it. You
2 mentioned that the advisory group, I believe you
3 said, consisted of about 24 entities of -- I don't
4 want to say a hodgepodge, but a collaborative
5 process, and you mentioned the 20 percent, plus, in
6 terms of the conservation results. Did you have a
7 -- did you have a goal, initially? Did you have a
8 target, I guess, as it relates to that particular
9 figure? Are you on or off target, or --

10 **MR. JESTER:** Well, we are actually on target.
11 The low inflow protocol which I referenced
12 specifies what we, Duke, and what the owners of all
13 the large water intakes will do as drought
14 conditions become increasingly worse, if you will.

15 At each stage of the way, beginning at stage
16 two, each owner of an intake is asked to achieve
17 certain results, and we have been achieving those
18 results.

19 **COMMISSIONER CLYBURN:** Okay. Again, you
20 mentioned we're at stage three, so that that
21 threshold would --

22 **MR. JESTER:** Stage three, and the stages are
23 zero, which is a watch stage, one, two, three, and
24 four is the most severe category. So there's five
25 steps in the process. We are at stage three, which

1 is actually the fourth level, if you will.

2 **COMMISSIONER CLYBURN:** And again -- I'm sorry.

3 **MR. JESTER:** One other thing I wanted to make
4 sure was clear, there are more than 24 intakes on
5 that stretch of reservoirs; it's just that 24 of
6 them are public water systems.

7 **COMMISSIONER CLYBURN:** Okay, thank you. And
8 in terms of this advisory group, the formation came
9 after that 2002 -- that four-year -- how long has
10 this been in place? I guess that would be my --

11 **MR. JESTER:** Well, we just -- we filed in
12 August of 2006 our application for a new FERC
13 license on the Catawba-Wateree project.

14 **COMMISSIONER CLYBURN:** Right.

15 **MR. JESTER:** All of those reservoirs and all
16 the hydro units on them are one project. And we
17 went through a multiyear process, sort of a
18 stakeholder, you know, community involvement
19 process, leading up to the filing of that
20 application.

21 **COMMISSIONER CLYBURN:** Okay.

22 **MR. JESTER:** And it was during that public
23 process that this low inflow protocol was
24 developed.

25 **COMMISSIONER CLYBURN:** I see. And in terms of

1 -- again, you mentioned the public process. What
2 type of -- outside of what I would call the usual
3 suspects or the logical players, in terms of Public
4 Jane and, you know, John Q. Public, what type of
5 turnout did you have at these stakeholder sessions?

6 **MR. JESTER:** We had a huge turnout. There
7 were literally hundreds of meetings over that
8 multiyear timeframe. You had participating state
9 and federal agencies, local government groups --
10 you know, representatives from cities and counties
11 -- nongovernmental organizations who have an
12 interest in the basin, and just the general public,
13 as well. And of course, we were certainly there.

14 **COMMISSIONER CLYBURN:** Right. And in terms of
15 the themes -- and I see what, you know, has been
16 birthed from that. I guess I was trying to figure
17 out what the tenor -- what -- was there -- were
18 there two or three ongoing either themes or
19 concerns that either surprised you or troubled you
20 or, I guess, you know, just the opposite, pleased
21 you about the process? I guess I'm trying to
22 figure out, you know, during that process, were
23 there some recurring themes or issues that you
24 think we would -- that would wow us?

25 **MR. JESTER:** Well, I think the thing that is

1 impressive -- and please, I would say that I was in
2 a different assignment in our company during part
3 of that process, so I can't speak to the entire
4 period. But the thing that was impressive to me
5 was that while you had people with very differing
6 viewpoints on what should happen with this basin
7 over the next 50 years -- and that is the
8 application we've made, is for a 50-year license --
9 at the end of the day, if you will, people
10 collectively came together to build a plan that
11 represents a balanced set of interests for the
12 entire basin, for all the various interests, and,
13 for example, the low inflow protocol is a part of
14 our license application. And so, technically,
15 until FERC issues a new license, and if that
16 license includes the low inflow protocol as a
17 condition of the license, it's not in effect.
18 Currently, everybody, including Duke, is applying,
19 if you will, the guidance in that protocol on a
20 voluntary basis. So I think that speaks to the
21 buy-in that the process brought in the end.

22 **COMMISSIONER CLYBURN:** And maybe I should've
23 asked this question before, but in terms of the
24 process, there were no intervenors or there was no
25 one fighting -- fighting the process? I mean,

1 there were no outside entities in terms of, you
2 know, the -- I don't want to blame everything on
3 environmentalists, but, you know, those type --
4 those entities, or whomever? Was there any
5 friction that escalated to the application level?

6 **MR. JESTER:** Well, not everyone is of the same
7 viewpoint.

8 **COMMISSIONER CLYBURN:** Right.

9 **MR. JESTER:** But we had unprecedented support
10 when we signed this comprehensive relicensing
11 agreement. The percentage of our participants who
12 signed the agreement is sort of unprecedented. So,
13 did we achieve 100 percent happy and willingness to
14 sign the agreement? No, but the percentage is
15 above 80 percent, and we were very pleased.

16 **COMMISSIONER CLYBURN:** Thank you.

17 **CHAIRMAN HAMILTON:** Thank you. I think it
18 might be well, if other Commissioners have
19 questions, if we would allow each one to finish
20 their presentation and then have questions. Many
21 of them possibly would be answered prior to that
22 finishing.

23 **COMMISSIONER CLYBURN:** I'm always getting in
24 trouble. I apologize.

25 **CHAIRMAN HAMILTON:** Thank you.

1 **MR. JESTER:** if we could move on to slide 13,
2 and I'll wrap up and pass the baton to someone
3 else. To summarize for Duke Energy Carolinas, we
4 have developed a very regimented reservoir strategy
5 and we've reduced downstream flows from our dams.
6 We've reduced the use of conventional hydro
7 generation assets and we started that reduction in
8 terms of using those assets back in April. And
9 that has been something that served us well. It
10 allowed us to keep more water in the river basins
11 than would have otherwise been there, but at the
12 same time we've released enough water to serve the
13 downstream interests, as well.

14 If you look at that reduction in use of our
15 conventional hydro, if you look at the period
16 January through October, we've used those assets
17 about 61 percent as much as we would typically.
18 More importantly, since the drought really came on
19 with force in April, we've used those assets about
20 39 percent as often as we would typically.

21 I would point out that these are very key, as
22 is our full mix of generation assets. These are
23 very key assets, but they do represent only 5
24 percent of our total generating capability. And if
25 you look at the year 2006, at the energy that we

1 actually generated, the hydro -- conventional hydro
2 was about 1.5 percent of the actual energy that was
3 generated. So I didn't want to leave the sense
4 that we've curtailed the use of those assets and
5 that's been hugely impactful to the amount of
6 energy we can produce. That is not the case.

7 We did experience, this past summer, towards
8 the end of the summer, some de-rates at some of the
9 fossil plants. We were able to manage those
10 situations and de-rate or reduce the output of
11 those plants at non-peak times, and were able to
12 weather that period, if you will.

13 And in closing, I would say we have been very
14 much able to meet our customers' demand for
15 electricity. I know in business we often refer to
16 it as we've met our native load obligations, and
17 certainly we have done that.

18 And unless there are questions specifically at
19 this time --

20 **CHAIRMAN HAMILTON:** Thank you, Mr. Jester. Do
21 we have any additional questions of Mr. Jester at
22 this time?

23 [No response]

24 **CHAIRMAN HAMILTON:** We will have a final
25 question-and-answer session of all parties at the

1 end, for those that need to be asked. All right,
2 sir. Thank you, very much.

3 **MR. JESTER:** If no questions for me, I'll
4 pass the baton to Progress Energy, then, and Ms.
5 Anders.

6 **MS. ANDERS:** Thank you. I'm Caren Anders, and
7 I will be continuing with the Progress Energy
8 overview.

9 If we can move to slide 15, that's a pictorial
10 representation of our generation facilities, and we
11 have it -- we show the river basins for each of
12 them. And what I'll do in my presentation is go
13 through each of the basins and give you the
14 highlights of the situation that we're in.

15 So continuing on page 16, the first river
16 basin, the Cape Fear River Basin, where we have
17 three plants, the flows and the elevation of that
18 basin have been normal. We have not seen a lot of
19 degradation, and we have not had impact to
20 generation, so we feel very good about the
21 generation in that basin.

22 The next one is our French Broad River Basin,
23 which is out where our Asheville Plant is in
24 western North Carolina. It is lower than normal;
25 however, it has been more than adequate for

1 pumping, and again, we have no impact expected to
2 our generation in that area.

3 The Neuse River Basin, which includes our Lee
4 Plant, the releases from Falls Lake are controlled
5 by the Army Corps of Engineers, and they have been
6 reduced, but we have been able to meet downstream
7 flow requirements by being supplemented through
8 releases from alternate watersheds. The Corps of
9 Engineers estimates that they can maintain minimum
10 flow for approximately 115 days, given current
11 weather conditions, and we would be impacted -- if
12 they were to stop those releases, we would have an
13 additional 45 days of water inventory in the
14 cooling lake before the Lee Plant would be
15 impacted.

16 Finally on this slide, the Yadkin/Pee Dee
17 River Basin, which is where we have some of our
18 hydro generation, our hydro assets have been -- we
19 have reduced output approximately 30 percent this
20 year from our average, and should the drought
21 continue, we would continue to have reduced inflows
22 and would have impact to those hydro facilities.
23 However, the other plants on that basin are not
24 having problems right now, and we would not expect
25 an impact to them.

1 Page 17 goes over some other concerns that we
2 have. Our Walters Plant is our additional hydro
3 generation plant and it has also been reduced about
4 45 percent from the normal average, and again, it
5 would be expected to continue. This mainly affects
6 our western North Carolina region. We would need
7 to run alternate generation, which could increase
8 the fuel cost associated with serving that regional
9 load.

10 Harris Nuclear Plant is served by a lake, and
11 the lake elevation is currently 217.8 feet. It has
12 an operational limit from its NRC license of 215
13 feet. And if we are not able to get discretion on
14 that limit and if there is no rainfall -- which is
15 not what is expected -- the Harris Plant output
16 could be impacted as early as April of 2008. So
17 that's a worst-case scenario.

18 And the final impact is the Roxboro Plant on
19 Hyco Lake, is about three feet below normal. And,
20 again, assuming worst conditions, which is no
21 rainfall, normal temperatures, normal output, we
22 again could have problems as early as April 2008.

23 So for the summary, you know, similar to Duke,
24 we talked about that our hydro generation
25 facilities are impacted, but from a system

1 perspective, hydro generation comprises less than 2
2 percent of our installed winter capacity, so it's a
3 very small percentage, and it's only 1 percent of
4 our annual energy usage. So, though it is impacted
5 the most, it really has very little impact to the
6 system as a whole.

7 And the other piece is that, overall, we feel
8 we're in very good shape to get us through the
9 winter, the winter peak and through the winter, and
10 were there no generation, it would be spring before
11 we'd really start to look at needing to purchase
12 alternate generation to make up for some reductions
13 in our fossil and nuclear facilities. But that
14 would be extended with any amount of rainfall, so
15 we think we're in very good shape right now. We
16 are monitoring closely to make sure that we
17 understand the impact of the weather conditions to
18 our generation.

19 And that is the summary for Progress Energy.

20 **CHAIRMAN HAMILTON:** Thank you, Ms. Anders. Do
21 we have any questions of Ms. Anders at this time?

22 **COMMISSIONER CLYBURN:** Ms. Anders, I wanted
23 ask -- you mentioned the less than 2 percent of the
24 installed capacity. I'm wondering in terms of over
25 the next, say, 7 to 20 years, do you anticipate any

1 changes or any enhancements or any type of growth
2 in that particular area, especially as we start
3 talking about, you know, alternatives -- natural
4 alternatives to energy production, and the
5 limitations or the uniqueness of our region as it
6 relates to what type of flexibility we may have,
7 you know, looking forward, in terms of long-term?

8 **MS. ANDERS:** We are looking at growth in the
9 area and we are planning for other generation
10 facilities. But increasing hydro is not in our
11 plan, currently, and is limited by the natural
12 resources.

13 **COMMISSIONER CLYBURN:** Thank you.

14 **CHAIRMAN HAMILTON:** Any other questions?

15 [No response]

16 **CHAIRMAN HAMILTON:** Thank you, Ms. Anders.
17 Mr. Burgess.

18 **MR. BURGESS:** Mr. Todd is going to deliver, on
19 behalf of SCE&G.

20 **MR. TODD:** Thank you. Good morning, Chairman
21 Hamilton and members of the Commission. It's a
22 pleasure to be before you again today.

23 **CHAIRMAN HAMILTON:** Yes, sir.

24 **MR. TODD:** SCE&G is set up differently from
25 Duke and Progress in that we have six different

1 river basins on our system. I'm going to provide
2 an overview of the river basins and the generating
3 stations located in each basin.

4 We're going to start with the Savannah Basin.
5 This basin supports Stevens Creek, Urquhart, and
6 our Jasper Stations. Urquhart and Jasper are two
7 combined-cycle gas-fired plants. Currently our
8 flows into the SCE&G system are 58 percent below
9 the normal yearly average, and you can see it on
10 the western part of the State there. U.S. Army
11 Corps of Engineers controls these flows. At this
12 point they've advised us that they're going to
13 continue with the current flows for the foreseeable
14 future, and if they keep that flow level up, we
15 should not have a problem. We've had no impact on
16 generation at present and don't foresee it for the
17 near term.

18 The Edisto Basin is the next slide. It
19 includes the Cope and Canadys Stations, and as you
20 can see from the map, there are no reservoirs above
21 these rivers; it's the north and south fork of the
22 Edisto River. And the current levels are 88
23 percent below normal average. We obviously depend
24 on rainfall here for our inflows.

25 Cope has a closed-cycle cooling system, and we

1 also take makeup water from deep-water wells at the
2 site, so we have no concerns at present with our
3 Cope Station. Canadys, fortunately, also has
4 closed-cycle cooling, but we do take makeup water
5 from the Edisto River, and our main concern with
6 this basin is keeping the river level up at Canadys
7 to support makeup water for the plant.

8 The next basin is the Saluda Basin, which a
9 lot of us around Columbia are familiar with. It
10 consists of the Saluda River, which starts up in
11 Greenville, flows through Lake Greenwood, and into
12 Lake Murray. Flows are 80 percent below normal
13 averages right now. We are obviously dependent
14 upon releases from Lake Greenwood above us, which
15 we don't control.

16 Our generating stations associated with this
17 lake are McMeekin Station, a coal-fired facility,
18 and also the Saluda Hydro facility. Saluda Hydro
19 is used to satisfy system reserves, and in the case
20 of McMeekin, the intake pipes for this station are
21 at the bottom of the lake, so we see low potential
22 for impact at this point. It's worth noting also
23 that Lake Murray is a source of drinking water for
24 the Midlands, but we anticipate no possible impacts
25 until we hit the 345 elevation, and we are

1 currently at approximately 352 on Lake Murray. Our
2 main concern, obviously, with this basin, is
3 maintaining the level in the reservoir to support
4 Saluda Hydro reserve use and also drinking water
5 use for the Midlands.

6 The next basin is the Santee Basin. It drains
7 into the Cooper River, and this supports Williams
8 Station down near Bushy Park, South Carolina. This
9 basin, as you can see, is fed by the Saluda, Broad,
10 and Wateree Basins, which are in turn fed coming
11 out of North Carolina. Our main source of water
12 for Williams Station is the Back River Reservoir.
13 Our levels are okay at present. Our only potential
14 concern with Williams Station would be the
15 possibility of salinity coming up, if the water
16 levels drop in the Back River and the salt water
17 comes up. We are monitoring that at present, but
18 we see a low potential for the near term for that
19 happening.

20 The Catawba-Wateree Basin consists of our
21 Wateree Station, which you can see on the slide.
22 That's one of our -- it's about a 720-megawatt
23 coal-fired station. Flows from Lake Wateree are 86
24 percent below the normal yearly average at this
25 time. There has been no impact on Wateree to date,

1 primarily due to the fact that we installed closed-
2 cycle cooling on these units over the last two
3 years. And it's worth noting also that we do
4 believe that we would have been de-rated over the
5 summer if we had not had closed-cycle cooling on
6 these units.

7 Our main concern with the Wateree River is
8 maintaining river levels to support makeup cooling
9 water for the plant. And we are dependent on
10 releases from Duke at Lake Wateree to provide those
11 flows, but that's another reason why we're here
12 today and why we're trying to work together.

13 The final basin I will talk about is the Broad
14 Basin. I call it Broad River Basin. Like the
15 Edisto Basin, there are no reservoirs upstream of
16 us -- no significant reservoirs. Flows are
17 dependent on rainfall, like the Edisto Basin.
18 SCE&G has several small hydros on the river. Our
19 major generating facilities that we're concerned
20 with are Fairfield Pumped Storage and VC Summer
21 Nuclear Station, which are located near
22 Jenkinsville, South Carolina.

23 We have seen an impact on our ability to pump
24 Lake Monticello full in the evenings, due to low
25 levels in the Parr Reservoir below, which is fed by

1 the Broad River. We've seen no impacts on VC
2 Summer at present and don't anticipate any for the
3 foreseeable future, and we have been able to manage
4 the lower levels at Fairfield Pumped Storage. The
5 output is the same; it just means that we have a
6 little less time pumping. But our main concern is
7 that if the drought continues, our ability to use
8 Fairfield Pumped Storage will continue to decrease.

9 And that's it for the SCE&G portion, and I
10 will stop and see if anybody has any questions
11 before we go into the final wrap-up.

12 **CHAIRMAN HAMILTON:** Thank you, Mr. Todd. Do
13 we have any questions of Mr. Todd?

14 **COMMISSIONER FLEMING:** Yes.

15 **CHAIRMAN HAMILTON:** Commissioner Fleming.

16 **COMMISSIONER FLEMING:** I wanted to find out --
17 you said the water levels are low, I believe, on
18 Catawba, Edisto, Saluda, and Broad, or below the
19 average significantly, it seems like.

20 **MR. TODD:** Yes, ma'am.

21 **COMMISSIONER FLEMING:** How long -- if there's
22 no improvement in the rainfall situation, how long
23 do you expect to be able to continue at a normal
24 level?

25 **MR. TODD:** It's hard to predict accurately

1 because there are so many variables, but at this
2 point we believe we should be okay for the next
3 three to four months. And if we don't get any
4 rainfall in that time, we think that we could be
5 getting to a point where we could have some
6 problems.

7 **COMMISSIONER FLEMING:** And what would you do
8 to deal with that?

9 **MR. TODD:** We are looking right now at various
10 ways to try to mitigate the issues. One of the
11 things we've started, in the case of Wateree, is
12 we've started the process -- we're trying to get
13 deep-water wells put in there, and that would take
14 us off of the dependence on the river. And we're
15 looking at various options at the other stations.
16 In the case of Canadys Station, we already have a
17 dredging permit in place, and we did already dredge
18 from the river to the intakes down there, back in
19 August. And if the canal builds up again, we'll go
20 back and dredge that one also. Those are some of
21 the main things we're doing at this point.

22 **COMMISSIONER FLEMING:** It seems like the next
23 three to four months is critical for all of you,
24 pretty much. And what I've heard is they are
25 predicting low rainfalls during that period of

1 time. So, I guess there's a real concern among all
2 of you?

3 **MR. TODD:** Yes, ma'am. I think that's why
4 we're here today. I think it's worth going back to
5 Duke's point, though, they are predicting low
6 rainfalls, but if we get the lower than average,
7 we'll still be a lot better than we have been in
8 the last three to four months.

9 **COMMISSIONER FLEMING:** But you would be going
10 to looking for purchasing that power in other areas
11 if this happens? Isn't that what Duke said -- or
12 maybe it was Progress Energy, I believe, said that.

13 **MS. ANDERS:** That is an option.

14 **COMMISSIONER FLEMING:** Uh-huh.

15 **CHAIRMAN HAMILTON:** I believe we might
16 possibly cover these questions in part five,
17 Commissioner.

18 **MR. TODD:** We'll hit some of the other
19 options, also, but purchase of power is one of them
20 that we're going to talk about.

21 **COMMISSIONER CLYBURN:** One quick question --
22 and you might have made mention of this, Mr. Todd.
23 If you would remind me, could you tell me in terms
24 of generational mix, what we're looking at in terms
25 your generational mix?

1 **MR. TODD:** For hydro?

2 **COMMISSIONER CLYBURN:** Hydro.

3 **MR. TODD:** Conventional hydro, we're similar
4 to Duke in that our capacity is around probably a
5 little less than 5 percent.

6 **COMMISSIONER CLYBURN:** Okay.

7 **MR. TODD:** And if you look at it on a
8 generation basis, it's going to be much lower than
9 that number. I don't have the exact number today.

10 **COMMISSIONER CLYBURN:** In terms of generation,
11 okay.

12 **MR. TODD:** Yes.

13 **CHAIRMAN HAMILTON:** Any other questions,
14 Commissioners?

15 [No response]

16 **CHAIRMAN HAMILTON:** Thank you, very much, Mr.
17 Todd.

18 **MR. TODD:** Thank you. I'm going to step back
19 from SCE&G now and summarize for the group. They
20 can punch me if they need to.

21 For 2007, just in closing, we have not
22 adversely impacted our ability to meet native load
23 obligations, as we have all addressed here today.
24 For 2008, we are continuing to monitor our
25 generation availability and demand, and we are

1 evaluating our options. And four of those include
2 continued reduced use of hydro generation, possible
3 thermal de-rate issues for fossil plants, increased
4 usage of combustion turbines -- which obviously use
5 natural gas as a fuel -- and off-system purchases,
6 which is the question you asked earlier.

7 For collaboration and strategy, we are, as a
8 group and individually, deploying a strategy to
9 maintain storage in key reservoirs. We're
10 implementing modifications to generation to
11 mitigate drought-related risk. We are
12 incorporating drought-related risk in our power
13 supply plans. We are monitoring regional drought
14 impacts in coordination with our neighboring
15 utilities, as you've heard today. We are
16 continuing to execute the appropriate stage of the
17 drought contingency plans at our affected plants.
18 We are monitoring river flows and lake elevations
19 of those watersheds that impact the companies, and
20 you can see those figures today. And we are also
21 monitoring the drought impacts from a regional
22 perspective, through our VACAR Reliability Group.

23 And in closing, we'll again emphasize we are
24 working together to formulate drought plans and
25 we're hoping for the best but we're planning for

1 the worst, both individually and in conjunction
2 with our neighbors. And that concludes the
3 presentation, and I guess we are back to the
4 general questions.

5 **CHAIRMAN HAMILTON:** All right. Thank you, Mr.
6 Todd, very much.

7 **MR. TODD:** Thank you.

8 **CHAIRMAN HAMILTON:** All right. Commissioners,
9 questions that we have?

10 **COMMISSIONER WRIGHT:** I've got one.

11 **CHAIRMAN HAMILTON:** All right. Commissioner
12 Wright?

13 **COMMISSIONER WRIGHT:** And Mr. Todd, I don't
14 really mind if you answer, or if somebody else on
15 the panel answers it. If we get four months down
16 the road and we have less than average rainfall, or
17 even below that, and you're not able to extend this
18 much further, as you were talking about -- if you
19 get a little bit of rain, it just drags out a
20 little longer, which is good. If you have to
21 change course or move your mix differently, is
22 that, in all probability, going to raise the cost
23 of power to the consumer in the areas? Is that
24 what we're looking at here?

25 **MR. JESTER:** My answer to that would be yes.

1 I mean, obviously, we have used our combustion
2 turbine fleet, for example, more than we maybe
3 would typically, and certainly looking into 2008 at
4 Duke, if the drought persists, then you would see
5 greater use of the combustion turbine fleet, and
6 that is a higher cost. That's why it's not a base
7 load asset for us.

8 **COMMISSIONER WRIGHT:** Right. Have you done
9 any kind of study or guessing as to, you know, what
10 that impact might be to the customer yet?

11 **MR. JESTER:** I do not have that information
12 with me, no.

13 **COMMISSIONER WRIGHT:** Okay. Thank you.

14 **CHAIRMAN HAMILTON:** Okay. I understand that
15 there is a joint committee, North Carolina/South
16 Carolina committee, probably headed up by Natural
17 Resources, that had worked with municipalities and
18 large industry that are being affected. I assume
19 you're a part of that same group also?

20 **MR. JESTER:** Are you referring to the Catawba
21 Bi-State Commission?

22 **CHAIRMAN HAMILTON:** Right.

23 **MR. JESTER:** Yes, we're very active in that.

24 **CHAIRMAN HAMILTON:** Okay. I know, being from
25 a border county, that we do have some issues and

1 that -- I know Progress Energy is more aware of the
2 ones that we have in my home county, things with
3 industry and -- I know, Duke, you stated that you
4 had excellent participation and cooperation between
5 the industry you serve and the municipalities that
6 use this water. I just wonder if Progress and
7 SCE&G are finding the same type of cooperation.

8 **MR. COVEY:** We had excellent cooperation
9 during our hydro relicensing process on the Pee Dee
10 River, very similar to the process that Duke
11 described. We've had a similar process underway,
12 and we've had excellent cooperation on that.

13 **CHAIRMAN HAMILTON:** Okay.

14 **MR. TODD:** We've had good cooperation, also.

15 **CHAIRMAN HAMILTON:** Okay. I know the last
16 major drought that we had, many of the large
17 industrial users had put in reservoirs. And I
18 assume these still are operational and are helping
19 the situation somewhat? I know in Marlboro we had
20 a paper mill that we were fearful was going to have
21 to go off-line because of the drought earlier, and
22 they did put in a pretty large reservoir, and I'm
23 sure other industries that use it have done the
24 same thing -- Nucor and some of those. I just
25 wonder if those things are playing a part now, the

1 planning that was done earlier, is it helping us
2 now, the reason that maybe we're not in as bad
3 shape as -- the report we've heard today is more
4 encouraging than I expected to hear when I came in
5 here.

6 **MR. JESTER:** I can respond just in our service
7 area. We saw a fair amount of activity after the
8 drought of record that ended in '02 --

9 **CHAIRMAN HAMILTON:** Right.

10 **MR. JESTER:** -- industrial customers taking
11 actions to become a little more water efficient,
12 and that has served us well. I mean, if you
13 compare the amount of rainfall that was received
14 even in the driest January-through-October period
15 during the four-year drought, it was considerably
16 more than what we have received this year. So it's
17 good that we've all taken steps to be more
18 efficient in our usage of water.

19 **CHAIRMAN HAMILTON:** Right. Well, I think that
20 -- and I know I received a phone call this week
21 that a watershed that we had, a regional watershed
22 that had been planned for the Pee Dee area, that we
23 have had a great deal of problem trying to find any
24 support, financial support, through grants and
25 whatnot, and that we've received a letter just this

1 past week from Congress that they are interested in
2 now bringing these things back to light. So some
3 good comes out of all shortcomings.

4 MR. JESTER: Yeah.

5 CHAIRMAN HAMILTON: But I do feel extremely
6 good about the reports. It appears that the
7 preplanning that you folks have made over the years
8 are paying off. And anything that we can do to be
9 a part of any efforts to help, we certainly want
10 you to know we're available. We thank each and
11 every one of you for appearing today. And with
12 that, we'll close this hearing. Thank you, very
13 much.

14 [WHEREUPON, at 11:30 a.m., the
15 proceedings in the above-captioned
16 matter were concluded.]

CERTIFICATE

I, Jo Elizabeth M. Wheat, CVR-CM-GNSC, do hereby certify that the foregoing is, to the best of my skill and ability, a true and correct transcript of all the proceedings had and testimony adduced in a hearing held in the above-captioned matter before the Public Service Commission of South Carolina.

Given under my hand, this the 30th day of November, 2007.



Jo Elizabeth M. Wheat, CVR-CM-GNSC



2007 – 2008 Drought Ramifications and Mitigation Actions

***Allowable Ex Parte Communication Briefing before the
Public Service Commission of South Carolina***

November 30, 2007

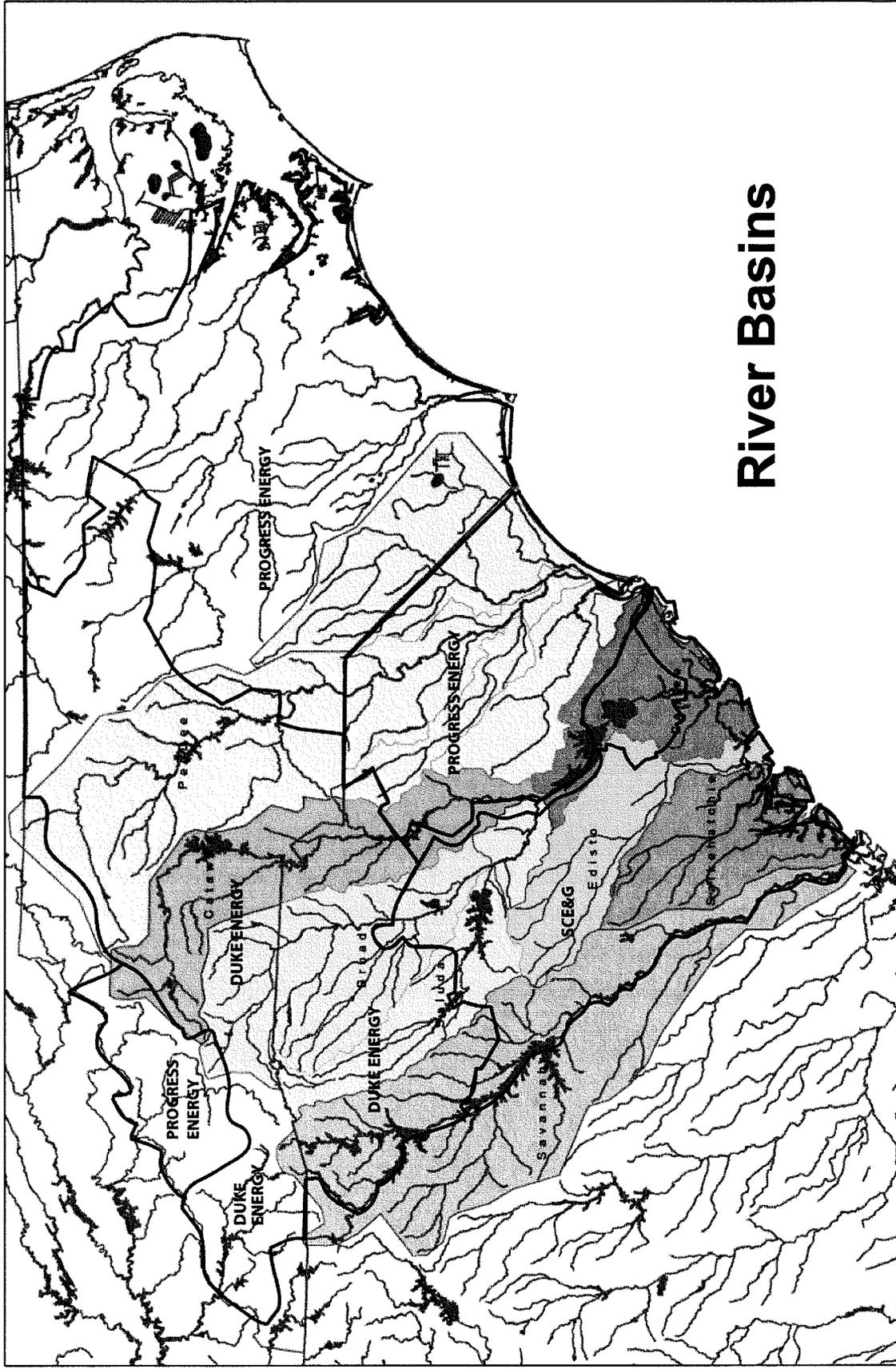
PRESENTATION FORMAT

- **Part I** – Drought Conditions, Weather Forecast and Water Uses
- **Part II** – Duke Energy Carolinas, LLC – Overview and Drought Impacts
- **Part III** – Progress Energy Carolinas, Inc. – Overview and Drought Impacts
- **Part IV** – South Carolina Electric & Gas Company– Overview and Drought Impacts
- **Part V** – Possible Drought Impacts, Mitigation and Collaboration



PART I

Drought Conditions, Weather Forecast and the Role of Water in Power Generation

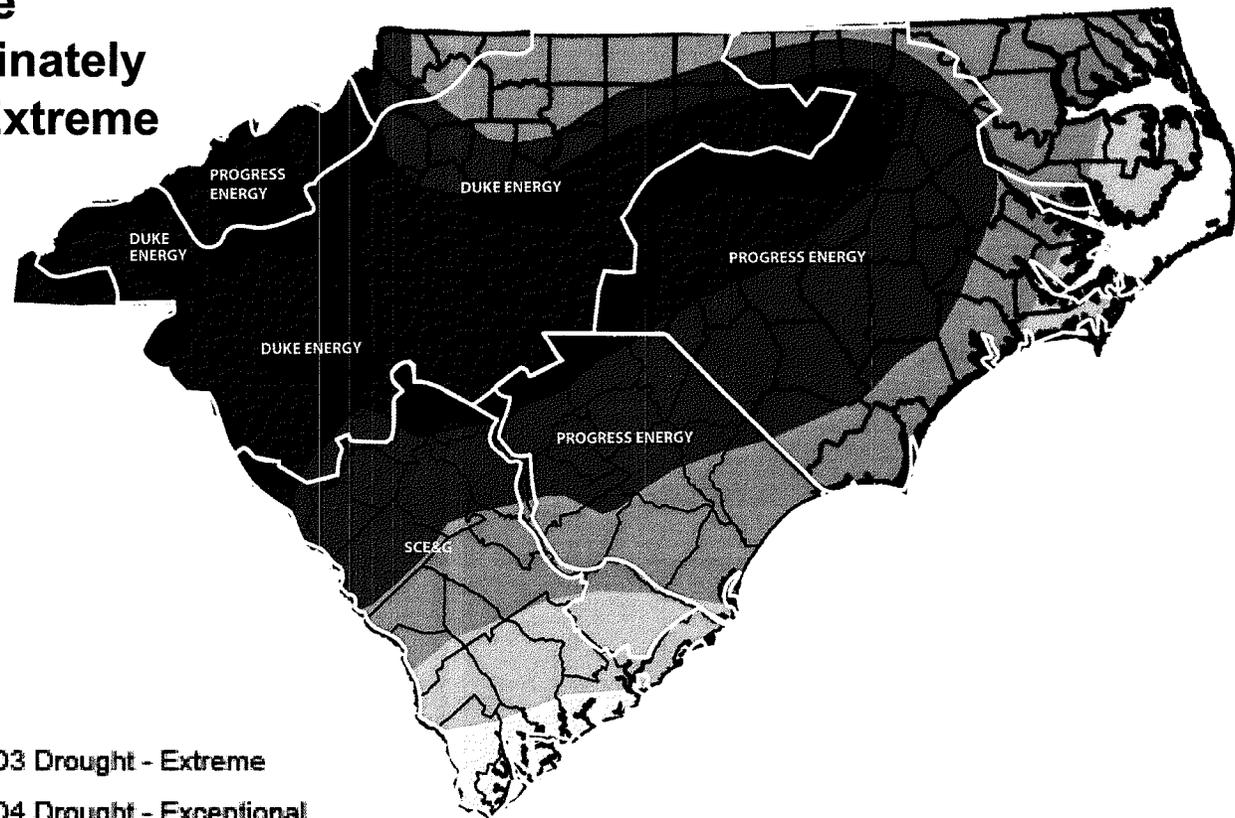


River Basins

U.S. Drought Monitor

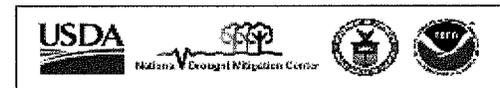
November 20, 2007
Valid 7 a.m. EST

The Southeast and the Carolinas are predominately in an Exceptional or Extreme Drought Condition;



Intensity:

-  D0 Abnormally Dry
-  D1 Drought - Moderate
-  D2 Drought - Severe
-  D3 Drought - Extreme
-  D4 Drought - Exceptional



Released Wednesday, November 21, 2007
Author: Richard Helm/Liz Love-Brotak, NOAA/NESDIS/NCDC



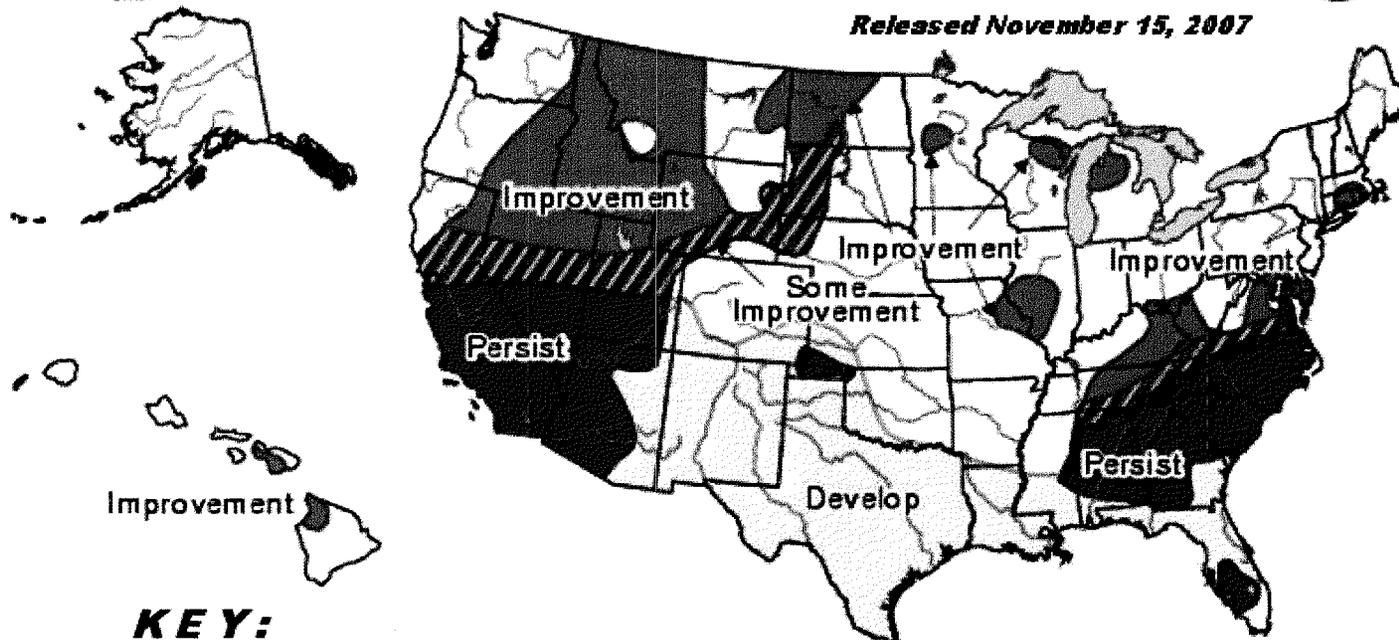
U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid November 15, 2007 - February, 2008



Released November 15, 2007



KEY:

-  Drought to persist or intensify
-  Drought ongoing, some improvement
-  Drought likely to improve, impacts ease
-  Drought development likely

NOAA forecast for December, 2007-February 2008 predict:

“the Southeast will likely remain drier-than-average due to La Niña, while temperatures are expected to be above average.”

Power Generation is Dependent upon Water

- Plants use water to condense the steam cycle and to cool the power producing equipment.
- Plants use water in wet scrubbers to control sulfur emissions.
- Plants use water to inject into the combustion process to control the formation of oxides of nitrogen.
- Plants use highly purified water in the steam cycle.
- Plants use potable water for human consumption and for sanitary purposes.

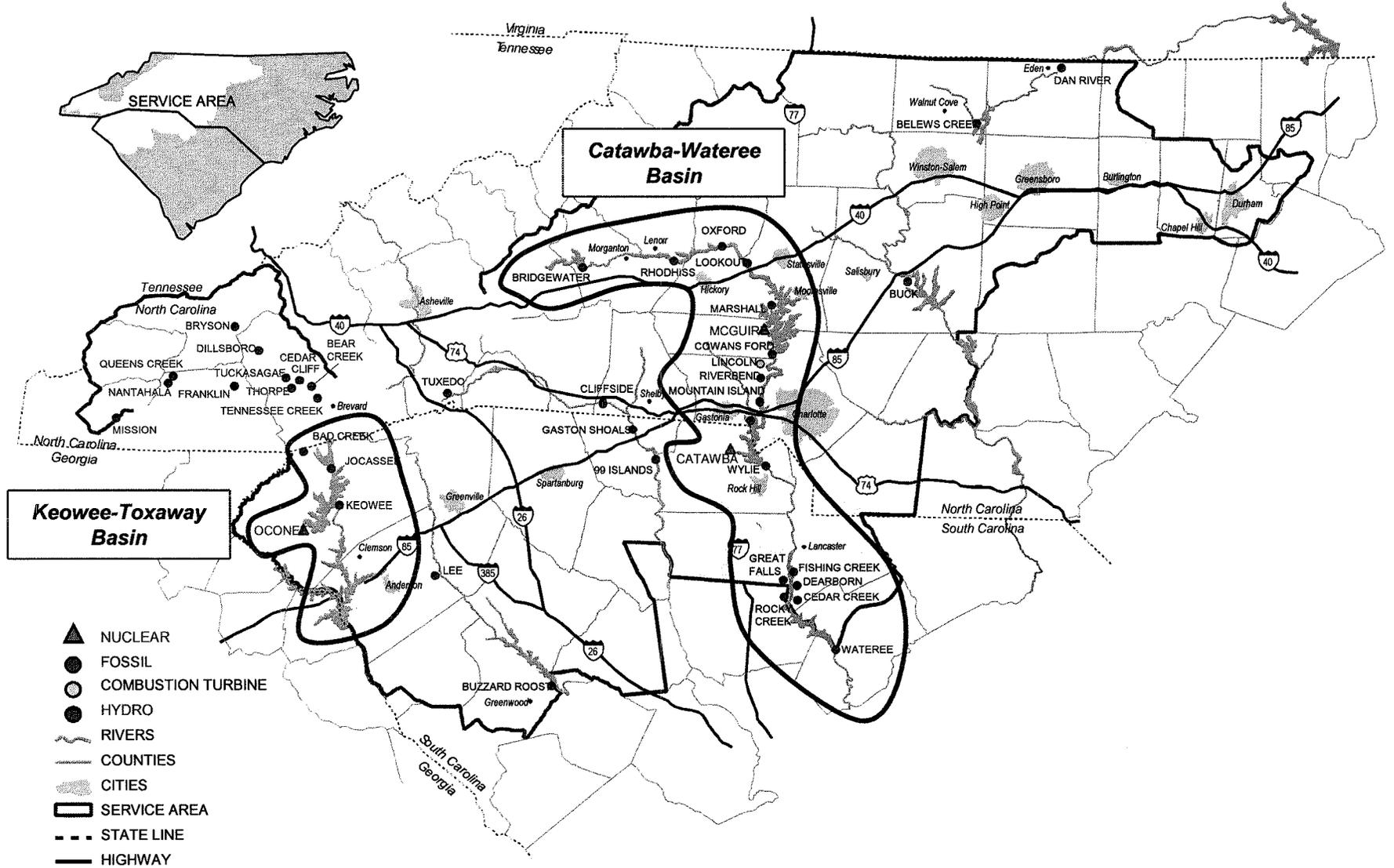


PART II

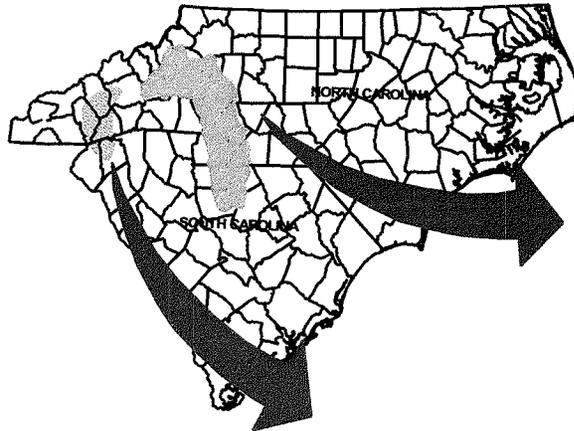
DUKE ENERGY CAROLINAS, LLC

Overview and Drought Impacts

Duke Energy Carolinas Generation Facilities



Keowee-Toxaway / Catawba-Wateree Basins



Keowee-Toxaway Basin

Approximately 22% of Duke Energy Carolinas generation capacity

- 1 hydroelectric station, 2 pump storage
1 nuclear station
- 4700 MW of generation assets
- 3 interconnected reservoirs

Drinking water intakes for Greenville, SC and Seneca, SC

Catawba-Wateree Basin

Approximately 45% of Duke Energy Carolinas generation capacity

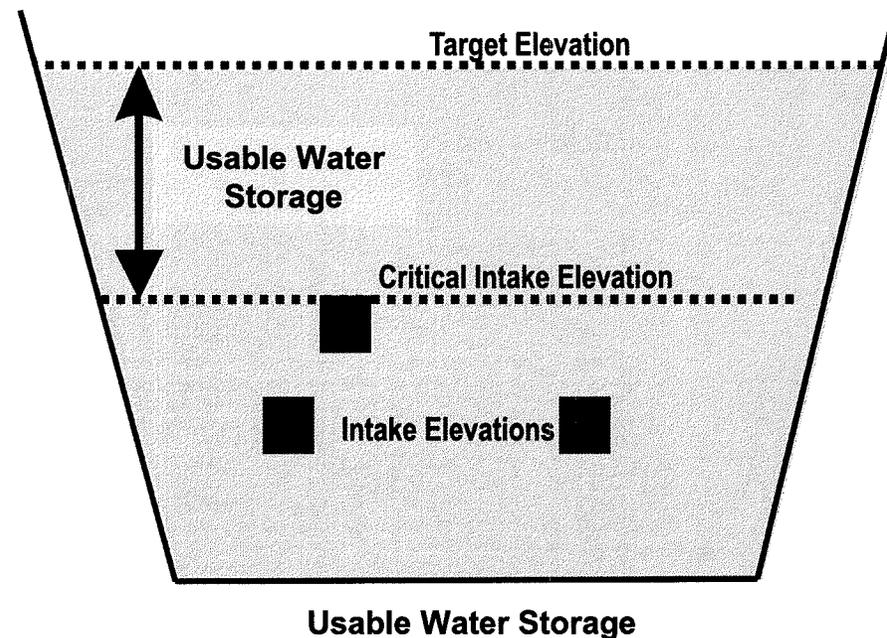
- 13 hydroelectric stations, 3 fossil stations,
2 nuclear stations
- 11 interconnected reservoirs
- 9000 MW of generation assets

Drinking water for 1.5 million people

Drought Impacts on Reservoirs



- The current usable storage volume is below target level for this time of year
 - Catawba-Wateree ~ 58% of target
 - Keowee-Toxaway ~ 31% of target
- Factors driving lake level declines:
 - Record low rainfall (~ 58% year-to-date of long term average)
 - Water releases
 - Municipal water use
- Currently at the Catawba-Wateree's Stage 3 low inflow condition



Collaboration - External

- Collaborative drought management efforts are achieving conservation results.
- Catawba-Wateree basin
 - Drought Management Advisory Group (DMAG) – owners of all large water intakes, state resource agencies, USGS, and Duke Energy Carolinas
 - Collaboration on contingency plans and achieving conservation results
- Collaboration in other areas for all 3 utilities is still developing
- Water and energy conservation communications



Summary for Duke Energy Carolinas, LLC

- **Conventional hydro generation has been impacted by the drought. Conventional hydro represents 5% of our total generating capability and accounted for only 1.5% of actual generation during 2006.**
 - **January – October 2007 = 61% of long term average**
 - **April – October 2007 = 39% of long term average**
- **We did experience de-rates at some fossil plants late last summer. We were able to manage these de-rates such that there were no impacts during peak demand periods.**
- **We have been able to meet our customer's (native load) demand for electricity.**

PART III

PROGRESS ENERGY CAROLINAS, INC. Overview and Drought Impacts

- Cape Fear River Basin (*Cape Fear, Sutton, and Brunswick Plants*)
 - Flow and elevation of Cape Fear River are normal with little degradation expected. No impacts to generation expected.
- French Broad River Basin (*Asheville Plant*)
 - French Broad River level is lower than normal, however more than adequate for pumping. No impacts to generation expected.
- Neuse River Basin (*Lee Plant*)
 - Releases from Falls Lake (Raleigh watershed) have been reduced by the Corp of Engineers. Downstream flow requirements are being supplemented through releases from alternate watersheds. The COE estimates that minimum flow can be maintained for approximately 115 days. If the releases to sustain Neuse River flow stop, Lee Plant has approximately 45 days of water inventory in its cooling lake.
- Yadkin/ Pee Dee River Basin (*Tillery, Blewett, Richmond County, Darlington County, and Robinson Plants*)
 - Tillery and Blewett hydro generation year to date is approximately 30% below the last 5 year average. Should the severe drought conditions continue, this reduction in MWh is expected to continue due to reduced inflows from sources upstream. Otherwise, no impacts to Richmond County, Darlington County, or Robinson plant generation is expected.

Other Concerns:

- *Walters Plant*
 - Walters hydro generation year to date is approximately 45% below the last 5 year average. This reduction in MWh is expected to continue and will increase the fuel cost associated with serving West region load.
- *Harris Plant*
 - Current Harris Lake elevation is 217.8 ft with an operational limit of 215 ft. If discretion on the current operating limit cannot be obtained and the drought conditions worsen (**no rainfall**), Harris Plant output could be impacted as early as April 2008.
- *Roxboro Plant*
 - Hyco Lake is over 3 ft below normal. Assuming normal temperatures, normal generating unit performance, **no rainfall**, and with alternate water pumps in place and functioning, Roxboro 3 output could be impacted as early as April 2008.

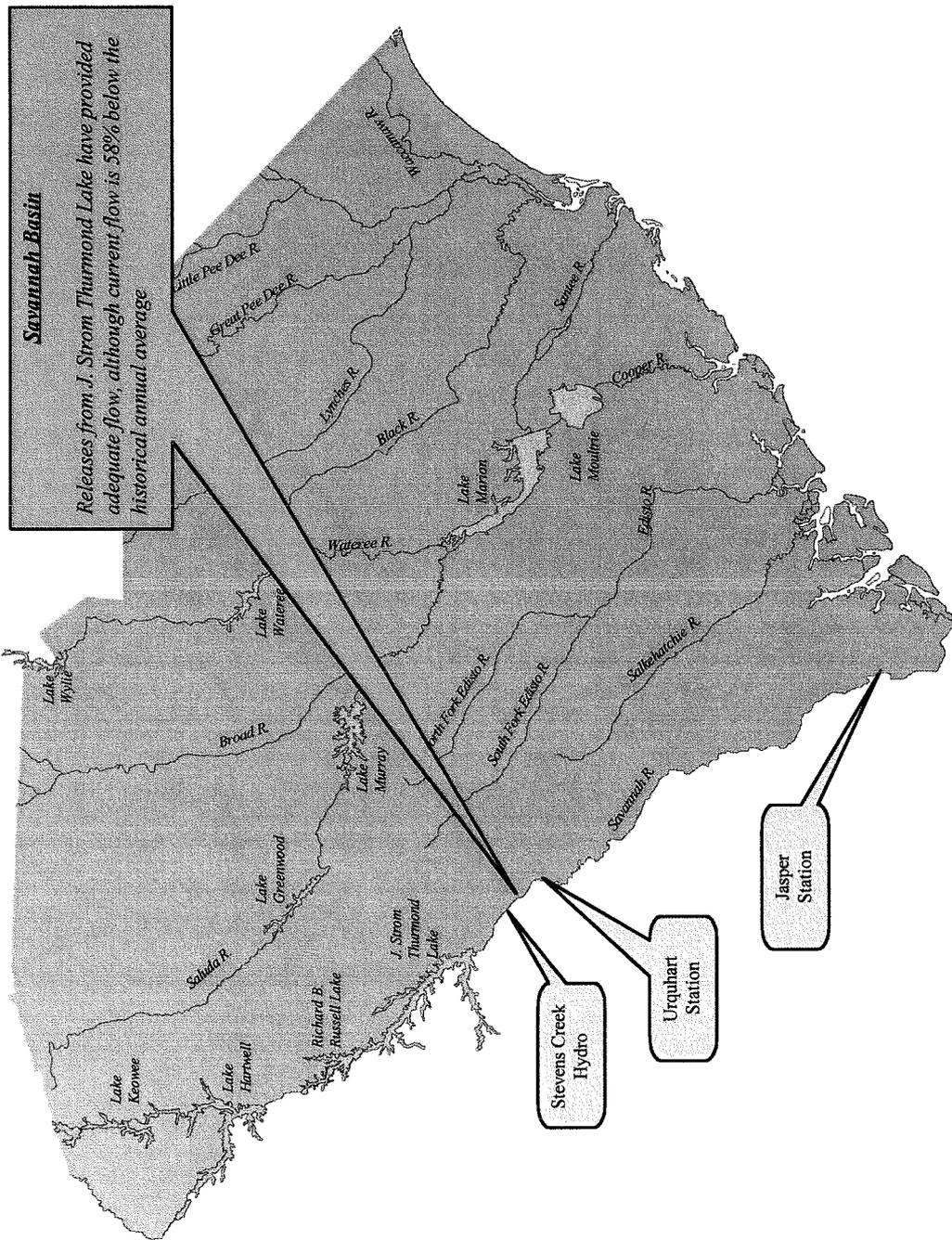
Summary for Progress Energy:

- Hydro generation has been impacted by the drought, however for Progress, hydro generation capacity comprises less than 2% of installed winter capability for the PEC system and approximately 1% of the total annual energy.
- If there is no rainfall through the winter 07/08 period, fossil and nuclear generation capability could be impacted and we may have to purchase power and/or re-dispatch generation to conserve water and meet environmental limits as early as Spring 2008.

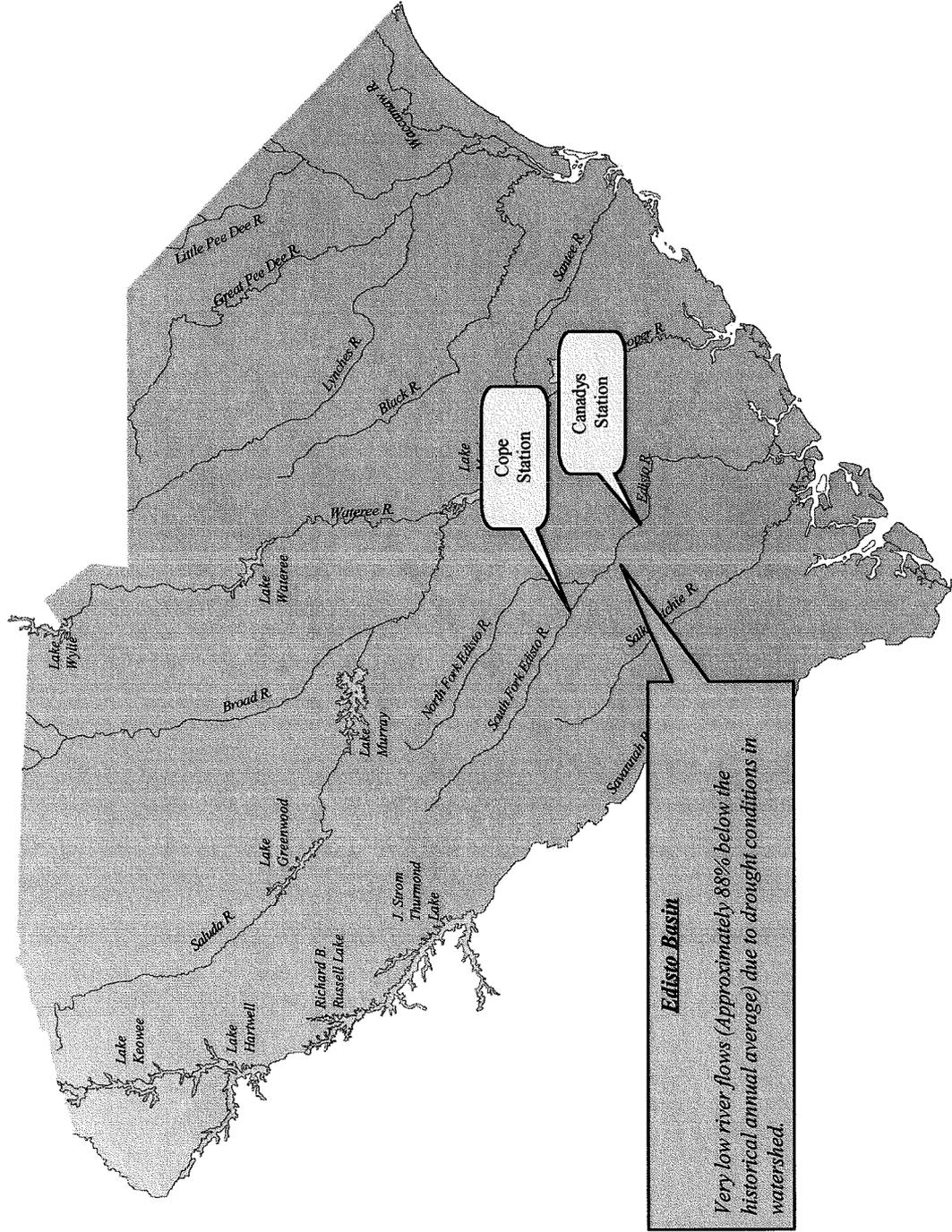
PART IV

SOUTH CAROLINA ELECTRIC & GAS COMPANY **Overview and Drought Impacts**

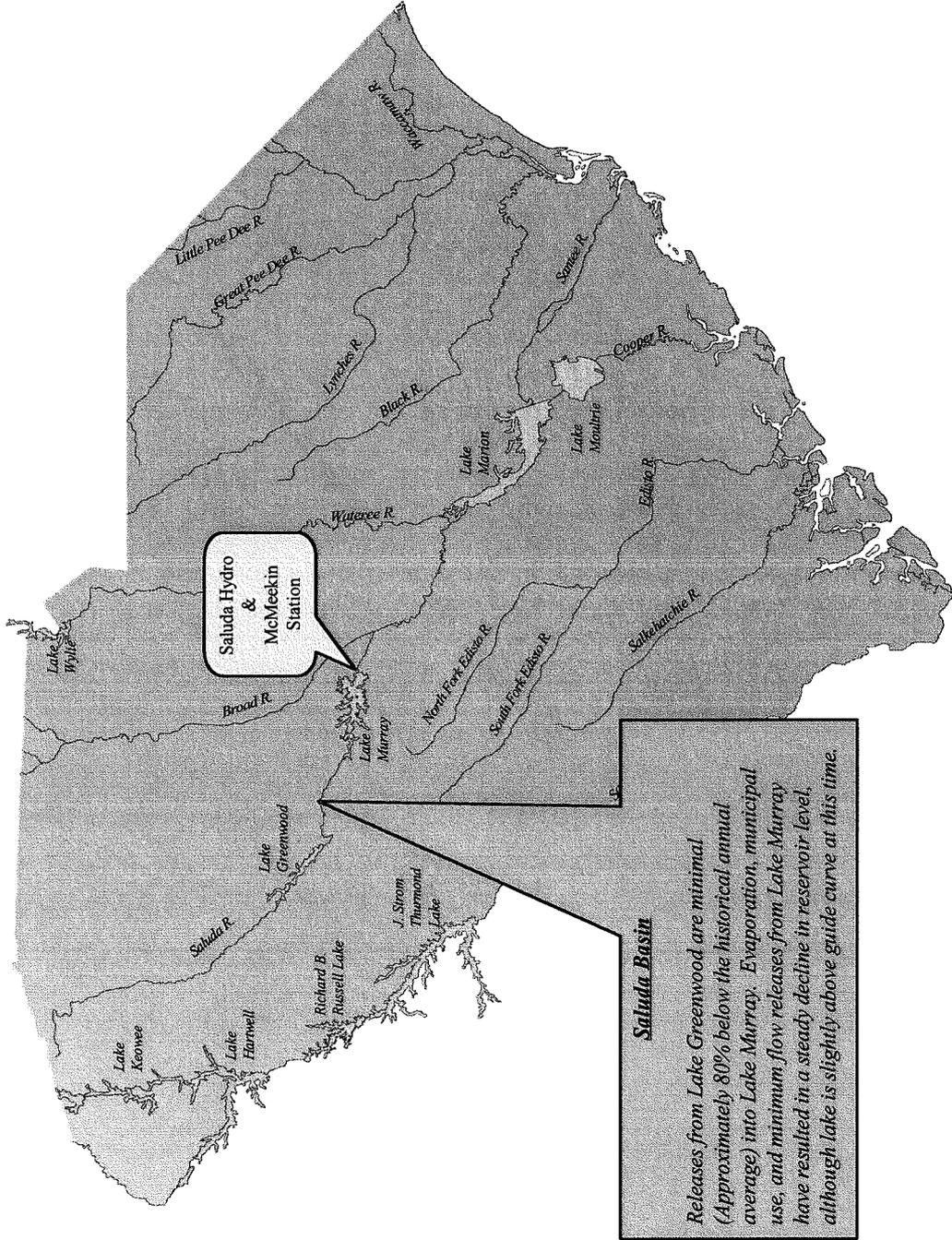
Savannah Basin



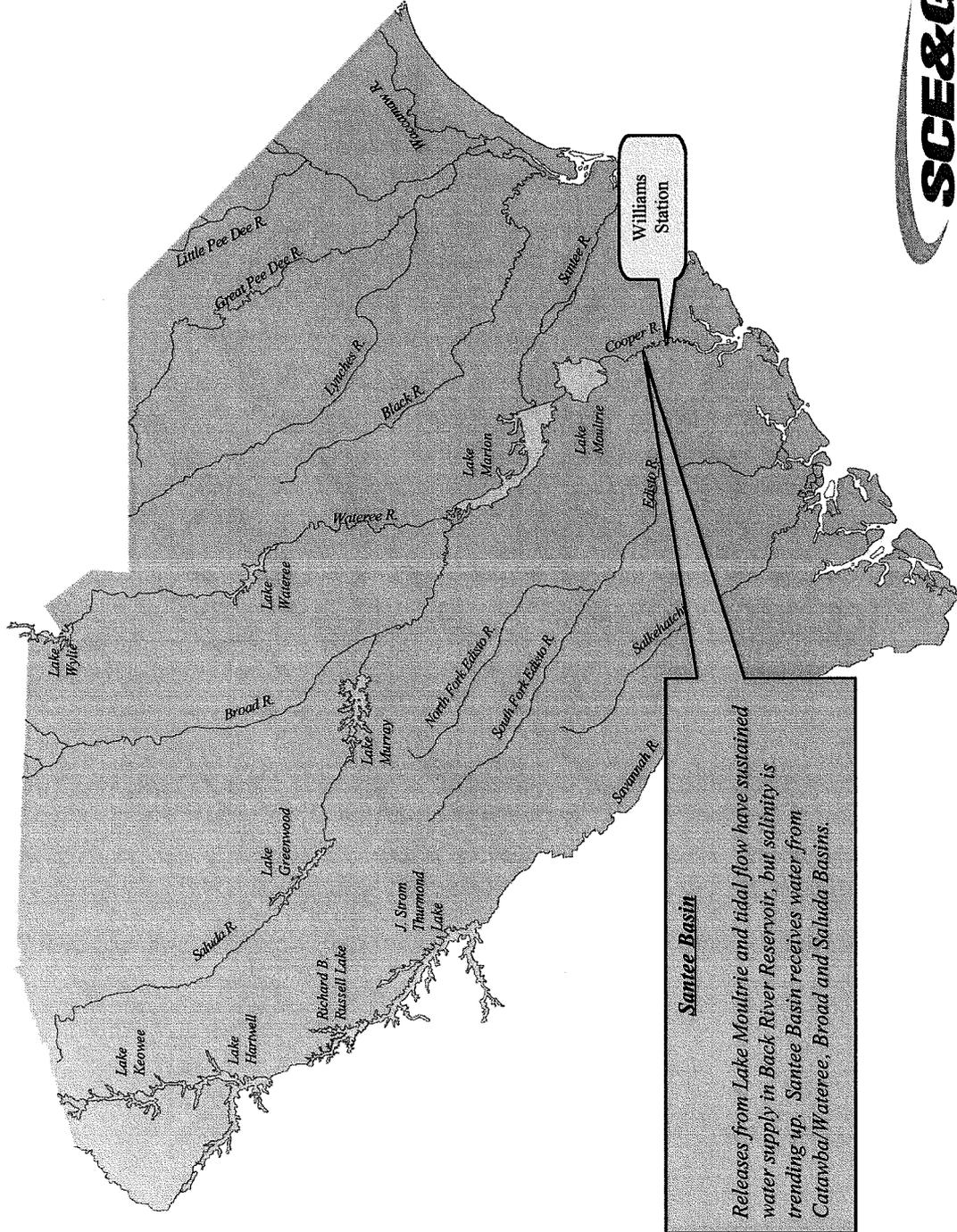
Edisto Basin



Saluda Basin



Santee Basin





PART V

POSSIBLE DROUGHT IMPACTS, MITIGATION & COLLABORATION

Possible Drought Impacts

- **2007: Has Not Adversely Impacted Ability To Meet Native Load Obligations**
- **2008: Monitor Generation Availability/Demand and Evaluate Options**
 - Continued reduced use of hydro generation
 - Thermal de-rates issues for fossil plants
 - Increased usage of CTs
 - Off-system purchases

Collaboration and Strategy

- Deploying strategy to maintain storage in key reservoirs
- Implementing modifications to generation to mitigate drought-related risks
- Incorporating drought-related risks in power supply plans
- Monitoring regional drought impacts in coordination with neighboring utilities
- Continuing to execute appropriate stage of drought contingency plans at affected plants
- Monitoring river flows and lake elevations of those watersheds that impact the companies
- Monitoring the drought impacts from a regional perspective through an external team made up of VACAR Reliability Group members in order to preserve reliability



Questions

