

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
SAFETY RESOURCE CONSERVATION GROUP**

**LAKE MURRAY TRAINING CENTER
April 18, 2006**

final dka 05-15-06

ATTENDEES:

Name	Organization	Name	Organization
Bill Argentieri	SCE&G	Alan Stuart	Kleinschmidt Associates
Dave Anderson	Kleinschmidt Associates	Dave Anderson	Kleinschmidt Associates
Henry Mealing	Kleinschmidt Associates	J. Travis Carricato	Columbia Fire
Jeni Summerlin	Kleinschmidt Associates	Steve Bell	Lake Watch
Bret Hoffman	Kleinschmidt Associates	John Altenberg	Sea Tow Lake Murray
Ken Uschelbec	U.S. Coast Guard Auxiliary	Joy Downs	LMA
David Price	Lake Murray Power Squadron	Bill Mathias	LMA & LMPS
Kenneth Fox	LMA	Michael Waddell	Trout Unlimited
George Duke	LMHOC	Ed Schnepel	LMA
Karen Kustafik	Columbia Parks & Recreation	Charlene Coleman	American Whitewater
Tommy Boozer	SCE&G	Lee Mills Jr.	SCDNR
Bill Marshall	SCDNR & LSSRAC	Tom Eppink	SCANA Services
Jenn O'Rourke	SCE&G	Patrick Moore	CCL/AR

HOMEWORK ITEMS:

- Dave Anderson – put Safety Organizations and Responsibilities on relicensing web site
- Tommy Boozer – contact Southshore about mapping process
- Tom Eppink – locate agreement between SCE&G and SCDNR concerning navigation aids
- Tom Eppink – investigate funding of shoal marker program
- Dave Anderson – draft “straw man” of Recreational Safety Plan
- Dave Anderson – get GIS data for the Three Rivers Greenway
- Dave Anderson - send out Safety RCG Work Plan to all group members

PARKING LOT ITEMS:

- None

DATE OF NEXT MEETING:

July 20, 2006 at 9:30 a.m.

Located at the Lake Murray Training Center

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
SAFETY RESOURCE CONSERVATION GROUP**

LAKE MURRAY TRAINING CENTER

April 18, 2006

final dka 05-15-06

MEETING NOTES:

These notes serve to be a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.

Dave Anderson opened the meeting and new RCG attendees introduced themselves. Dave A. introduced the Safety RCG Work Plan (attached) and noted he developed a list of Identified Issues from previous meeting notes and comments on the ICD. Bill Mathias had a couple of specific suggestions for the Identified Issues. He wanted to change “lower lake levels” to “fluctuating lake levels” and take out winter, add “maintenance of shoal markers” as a new bullet, and add “systematic collection of accident/safety data” as a new bullet. Dave A. noted that it is not SCE&G’s responsibility to collect data, but we can address it as an issue. Bill M. then suggested adding “ingress/egress to potentially hazardous areas (e.g., Mill Race). Travis C. noted that the Columbia Fire Department is currently identifying areas where an access point is needed. Bill M. also suggested moving “unannounced river flows” to the top of the list. Steve B. suggested adding “boat traffic/congestion in cove areas due to development.” The group agreed to all changes made under Identified Issues.

Dave then focused attention to RCG Responsibilities and asked the group to provide comments. Bill M. suggested adding “creation of Recreational Safety Plan” as new bullet. For bullet five, he wanted to change “Downstream Flows TWC” to “Recreation RCG”. Through some discussion, the group agreed to the changes made under RCG Responsibilities. Dave briefly went over the Work Scope and Product. He read through and discussed tasks that have been completed and tasks that need to be addressed in the future. Dave A. noted that he would like to speed up the process by sending out the Work Plan for everyone to review and have it finalized as soon as possible.

Dave A. directed attention to shoal areas and the responsibility for marking shoal areas. Skeet Mills noted that there is a fish/hunt map that is very accurate and may be useful for identifying shoal markers on Lake Murray. Joy D. noted that Southshore has taken over the responsibility for updating the map. Dave A. noted that he would email Southshore to find out more information about the map.

Joy D. asked what is required in the license about marking shoal hazards. Tommy B. replied that Lake Murray is marked by SCDNR. He added that, in the license, SCE&G is not required to mark areas in the lake. Tommy B. mentioned there was an agreement made in the 1970s between SCDNR and SCE&G about marking shoal areas. Skeet noted that SCDNR has funding for buoy placement, but does not have the time and manpower for marking all hazardous areas on the lake. Dave A. noted that the group would try to find the agreement made between SCE&G and SCDNR and would investigate funding on the shoal marker program.

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
SAFETY RESOURCE CONSERVATION GROUP**

**LAKE MURRAY TRAINING CENTER
April 18, 2006**

final dka 05-15-06

Steve B. presented a letter to the group that SCDNR sent to the Federal Energy Regulatory Commission (FERC) on July 6, 1999 and also provided a reply letter from FERC to SCE&G (attached). Steve B. read two excerpts from the letters in order to clarify the issue. The SCDNR stated in its letter in response to complaints about unmarked hazards during low fall and winter levels,

“...the SCDNR attempts to work with the utility to mark some hazards to navigation at normal or nearly full pull levels. The size of Lake Murray and the extent of periodic drawdowns makes the marking of all hazards at all lake levels beyond the capability of SCDNR’s program. The SCDNR will continue to cooperate with the South Carolina Electric & Gas Company to place aids to navigation, but the SCDNR’s program is not intended to absolve the South Carolina Electric & Gas Company of any responsibility it may have to identify or mark hazards.”

The excerpt from FERC’s ruling on the complaint stated,

“Your policy of cooperating with the DNR to identify and mark hazards appears to be an acceptable approach to addressing this concern. We expect you to continue your active participation with the DNR. We remind you, however, that ultimately you are responsible for ensuring that appropriate public safety measures are implemented at your project.

Regarding the issue of low lake levels below 354 msl that affect recreational use of the lake, we expect further evaluation of this issue during your re-licensing process when project operation will be evaluated in a comprehensive manner. Your project license expires on August 31, 2007. Your evaluation of the affects low lake levels have on boating recreational use should include consultation with the appropriate Federal, state and local agencies and other affected parties, such as represented by the various home owners’ association, sports clubs, etc., that are concerned about Lake Murray.”

[Note: The entire suite of letters concerning shoal areas has been attached to these meeting notes. Only the two letters referenced above were provided at the meeting.]

Alan Stuart made copies of the two letters and distributed them to the group. Through some discussion, Tom E. noted that SCE&G relies on SCDNR’s discretion as to where to place markers. Steve B. noted that the group needs to quantify the problem then look for solutions, which might include maintaining higher year round lake levels. Steve B. suggested forming a TWC to discuss hazardous shoal issues. David Price noted that regardless of lake levels, we need to look at how to maintain safety markers, because there will always be shoals. Through some discussion, the group agreed to form a Hazardous Areas TWC. The group’s purpose is to identify unmarked hazards and

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
SAFETY RESOURCE CONSERVATION GROUP**

**LAKE MURRAY TRAINING CENTER
April 18, 2006**

final dka 05-15-06

propose potential solutions for unmarked hazards on Lake Murray. Members of the Hazardous Areas TWC are summarized below.

Norman Nicholson	Larry K.
David Price	Joy Downs
Tommy Boozer	Tom Eppink
Kenneth Fox	Steve Bell
Skeet Mills	Alan Stuart

Dave then focused attention on the Recreation Safety Plan. The group briefly discussed safety issues that will be sent to the FERC. Henry M. recommended using a “straw man” to summarize the Recreational Safety Plan and employ the Identified Issues as an outline.

After lunch, the group concentrated on identifying high use areas for rising water sirens. Dave A. noted that they are currently in the process of developing a map that will identify possible areas for warning devices. Travis C. noted that Columbia Fire is currently working on the Three Rivers Greenway Plan, which will provide emergency access points on the lower Saluda River. Travis presented a map, prepared by Mike Dawson from the River Alliance, illustrating the future emergency access points along the river.

The group then discussed ramping at other FERC projects. Charlene C. provided a list of projects that are related to ramping and briefly discussed each.

Big Fork	Flaming Gorge (BLM)
PIH 345 (PG&E)	Chattahoochee
Summerville	Cheoah

She noted that studies on the use of ramping for safety purposes were not available. She mentioned that it may be helpful to examine historical generation records and reserve calls. Bill A. noted that he will find out in a few weeks if generation records are available. Charlene noted that an ideal ramping scenario for the lower Saluda River would be 1,000 cfs for 45 minutes, 4,000 cfs for another 45 minutes, and then full release. Bill A. noted that SCE&G’s goal in relicensing is to use Saluda to meet contingency reserve requirements, which will mean unannounced high flows at times. Bill A. further noted the Safety RCG should stay focused on the goal of making the river as safe as reasonably possible and should be looking at some kind of warning system for the times when SCE&G has to increase generation to meet system requirements, unless the goal of the other stakeholders in this RCG is the limit our generation capability. Dave A. noted that a recreational release schedule needs to be developed. Henry M. pointed out that the group should begin looking at possible solutions for those times of high flows, such as ramping and/or sirens. Patrick suggested

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
SAFETY RESOURCE CONSERVATION GROUP**

**LAKE MURRAY TRAINING CENTER
April 18, 2006**

final dka 05-15-06

that the group should put together a study examining the rate of change of the river for various flows at various river reaches and an analysis of different flows for various user groups and skill levels that provide the safest conditions. Dave A. noted that Patrick's suggested study will be discussed in the Downstream Flows TWC.

Dave A. reminded the group that the FERC representative would be at the Quarterly Public Meeting on Thursday, April 20th. He noted that everyone should submit any questions to prepare the representative. Dave A. briefly discussed the agenda for the next meeting and noted that he would try to have the lower Saluda River map and historical generation records available. The group agreed to schedule the next Safety RCG meeting once the Quarterly Public Meeting has been scheduled. Dave A. noted that he would set the date through email.

MEETING NOTES

**SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
SAFETY RESOURCE CONSERVATION GROUP**

**LAKE MURRAY TRAINING CENTER
April 18, 2006**

final dka 05-15-06

**Saluda Hydro Relicensing
Safety Resource Conservation Group**

Meeting Agenda

April 18, 2006

9:00 AM

Lake Murray Training Center

- **9:00 to 9:30** Review Safety RCG Work Plan
 - **9:30 to 10:30** Discussion of Shoal Areas and Responsibility for Marking Shoal Areas
 - **10:30 to 11:30** Discussion of Draft Outline for Safety Plan
 - **11:30 to 12:30** Lunch
 - **12:30 to 1:00** Update on Identifying High Use Areas for Rising Water Sirens
 - **1:00 to 1:30** Discussion of Ramping at Other FERC Projects
 - **1:30 to 1:45** Discussion of Questions for FERC Representative
 - **1:45 to 2:00** Develop an Agenda for Next Meeting and Set Next Meeting Date
- Adjourn



Safety Resource Conservation Group Work Plan Saluda River Project

Facilitator:			
Dave Anderson	Kleinschmidt Associates	dave.anderson@kleinschmidtusa.com	(205) 981-4547
Members:			
Name	Organization	E-mail	Work Phone
Aaron Small	US Coast Guard Auxiliary	arsbhs@bellsouth.net	
Alan Axson	Columbia Fire Department	cfdwaxson@columbiasc.net	
Alan Stuart	KA	alan.stuart@kleinschmidtusa.com	
Alison Guth	KA	alison.guth@kleinschmidtusa.com	
Amanda Hill	USFWS	amanda_hill@fws.gov	
Bill Argentieri	SCE&G	bargentieri@scana.com	
Bill Marshall	Lower Saluda Scenic River Advisory Council, DNR	marshallb@dnr.sc.gov	
Bill Mathias	LMA/LMPS	bill25@sc.rr.com	
Charlene Coleman	American Whitewater	cheetahrk@yahoo.com	
Dave Anderson	Kleinschmidt Associates	dave.anderson@kleinschmidtusa.com	
David C. Price	Lake Murray Power Squadron	pricedc@dhec.sc.gov	
Dick Christie	SCDNR	dchristie@infoave.net	
Edward D. Schnepel	LMA	eschnepel@sc.rr.com	
George Duke	LMHC	kayakduke@bellsouth.net	
Gerrit Jobsis	Coastal Conservation League & American Rivers	gerritj@sccl.org; gjobsis@americanrivers.org	
Jennifer O'Rourke	South Carolina Wildlife Federation	jenno@scwf.org	
Jerry Wise	Lake Murray Power Squadron	meddynamic@aol.com	
Jim Devereaux	SCE&G	jdevereaux@scana.com	
John and Rob Altenberg	Sea Tow	seatowlakemurray@seatow.com	
Joy Downs	LMA	elymay2@aol.com	
Karen Kustafik	City of Columbia Parks and Recreation	kakustafik@columbiasc.net	
Ken Uschelbec	US Coast Guard Auxiliary	colkenu@aol.com	
Kenneth G. Fox	LMA	skfox@sc.rr.com	
Larry Turner	SCDHEC	turnerle@dhec.sc.gov	
Lee Barber	LMA	lbarber@sc.rr.com	
Malcolm Leaphart	Trout Unlimited	malcolml@mailbox.sc.edu	
Mark Leao	USFWS	mark_leao@fws.gov	
Michael Waddell	TU - Saluda River Chapter	mwaddell@esri.sc.edu	
Mike Gillis	EMS		
Miriam S. Atria	Capitol City Lake Murray Country	miriam@lakemurraycountry.com	
Norm Nicholson	Lexington Resident Deputy	larana@mindspring.com	
Norm Ferris	Trout Unlimited	norm@sc.rr.com	
Patrick Moore	SCCCL AR	patrickm@sccl.org	
Ralph Crafton	LMA	crafton@usit.net	
Randy Mahan	SCANA	rmahan@scana.com	
Steve Bell	Lake Murray Watch	bellsteve9339@bellsouth.net	
Suzanne Rhodes	SC Wildlife Federation	suzrhodes@juno.com	
Tom Eppink	SCANA Services, Inc.	teppink@scana.com	
Tommy Boozer	SCE&G	tboozer@scana.com	

Safety Resource Conservation Group Work Plan Saluda River Project

Mission Statement

The Mission of the Safety Resource Conservation Group (SRCG) is, through good faith cooperation, to make Lake Murray and the lower Saluda River as safe as reasonably possible for the public. The objective is to develop a consensus-based Recreational Safety Plan proposal for inclusion in the FERC license application. This will be accomplished by gathering or developing data relevant to Saluda Hydroelectric Project safety-related interests/issues, seek to understand those interests/issues and that data, and consider all such interests/issues and data relevant to and significantly affecting safety on Lake Murray and the lower Saluda River.

Identified Issues

- creation of a public information system and improvement of communications about river flow conditions on the lower Saluda River
- lower lake levels in the winter and their effect on safety
- unannounced river flows

RCG Responsibilities

- Identifying specific areas where lake level fluctuations may be adversely affecting safety at the lake, including the nature and timing of the effect (e.g., shoal areas).
- Working with the Operations Resource Conservation Group to identify “reasonable” (based on hydrologic, structural, and other limitations identified) changes and alternatives for modifying project operations, including operations that affect safety.
- Identifying any studies, if applicable, that need to be performed for identifying and/or evaluating changes to Project operations.
- Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding modifications to current Project operations.
- Reviewing results from the Downstream Flows Technical Working Committee to make sure they are consistent with the mission statement of the Safety Resource Conservation Group.

Work Scope and Product

- **Task 1** – Review the operational constraints and current operations of the Saluda Project (see Initial Consultation Document).
- **Task 2** – Determine how Project operations affect safety.
- **Task 3** – Review applicable laws governing boating use.
- **Task 4** – Identify safety-related organizations concerned with Lake Murray and/or the lower Saluda River.
- **Task 5** – Invite those safety-related organizations identified in Task 4 to participate in the Safety Resource Conservation Group.
- **Task 6** – Review stakeholder requests for particular studies and/or enhancement measures to ensure that these are incorporated into study planning, if applicable.

Safety Resource Conservation Group Work Plan Saluda River Project

- **Task 7** – Develop and recommend operation scenarios to the Operations RCG for analysis. These scenarios should reflect initial thinking on potential solutions and be designed to narrow the focus of Task 12 below. Analysis by the Operations RCG will focus on an assessment of potential safety impacts associated with any suggested changes to operations.
- **Task 8** – Discuss results of the Operations RCG analyses.
- **Task 9** – Develop study designs/methods/plans and review agreed upon studies, literature reviews, etc.
- **Task 10** – Identify high use areas of the river for inclusion in the rising water warning system.
- **Task 11** – Identify safety concerns that can possibly be resolved outside of the relicensing process.
- **Task 12** – Provide recommendations for Project operations and recreation access, facilities, and use to be considered in conjunction with all ecological and recreational issues.
- **Task 13** – Develop a consensus based Recreational Safety Plan for the Saluda Project that addresses all of the issues and tasks identified above.

Schedule

Late 2005/Early 2006—Finalize Mission Statement and Work Plan

Mid-2006—Complete identification of studies, literature reviews, etc. that need to be completed to address issues and tasks identified in the Work Plan

Late 2006—Begin compilation of existing information, review preliminary study results, and draft an outline of the Recreational Safety Plan

2007—Complete any studies identified in Task 9 and review results; draft recommendations to SHRG, complete draft Recreational Safety Plan

2008—Finalize Recreational Safety Plan and provide comments on Draft License Application

ORIGINAL

17 Mar 99

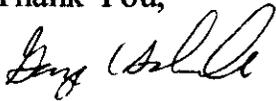
Federal Energy Regulatory Commission
The Secretary
Mail Code: DLC, HC-11
888 1st St. NE
Washington, DC 20426

FILED
OFFICE OF THE SECRETARY
99 MAR 22 PM 4:32
FEDERAL ENERGY
REGULATORY COMMISSION

To Whom I May Concern,

The attached letter and documents pertain to the Saluda River Hydro Project #516. Please forward this information to Mr. Jack Hannula in the Environmental Compliance Branch.

Thank You,



George C. Schmieler, Jr

* PHOTO / RIMS

990324.0225.3

FERC DOCKETED

MAR 22 1999



FROM: George C. Schmieler

15 Mar 99

SUBJECT: Safety at Lake Murray

TO: Mr. Jack Hannula

The purpose of this letter is to inform you of safety hazards on Lake Murray, located just outside of Columbia, South Carolina. Every fall the licensee, South Carolina Electric and Gas (SCE&G) substantially lowers the lake level. When the lake is dropped below 354' MSL (six feet below normal pool) there are unmarked obstacles in numerous areas of the lake, creating a safety hazard for visitors and residents. Not only are these obstacles in and around the marinas, but also the coves and in the open water. It is my opinion this safety matter deserves your immediate attention.

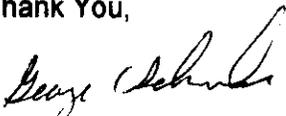
My suggestion is to keep the lake level between 354' MSL and 360' MSL year round ultimately providing a safe environment for all boaters. These lake levels would also increase the fish population, as their breeding habitat would be optimized. Additionally, keeping the lake at safe levels is cost effective. There would be less need for re-surveying and maintenance of several hundred shoal markers.

In the past SCE&G has lowered the lake for two reasons; hydro-electricity and hydrilla control. The hydrilla problem has been corrected and hydro-electricity serves only as a back up to nuclear energy. SCE&G's 1998 record profits required a rebate to customers. Despite this, the lake was once again lowered to 350' MSL. The lake was lowered for shoreline management. According to SCE&G's spokesman Rocky Sease, they planned since last summer to bring the lake down to 350' MSL for shoreline management. It appears SCE&G brought the lake down at the expense of boaters, homeowners and businesses to accommodate the Willow End project for shoreline clearing. This is unsafe; it puts at risk the people who use the lake throughout the year. This also destroys the fish habitat.

As a homeowner and year round boater I would like to know what I can do to ensure SCE&G doesn't recklessly abuse the water levels in Lake Murray. It is my goal to provide a safe environment and a better fish habitat for years to come.

I'm looking forward to hearing from you.

Thank You,



GEORGE C. SCHMIELER, JR.
484 Smallwood Dr.
Chapin, SC 29036
(803) 932-9404



FEDERAL ENERGY REGULATORY COMMISSION

WASHINGTON, D. C. 20426

DOCKETS

Project No. 516-South Carolina
Saluda Project
OFFICE OF HYDROPOWER LICENSING South Carolina Electric & Gas Company

Mr. Neville Lorick
V.P., Fossil/Hydro Operations
South Carolina Electric & Gas Company
P.O. Box 764
Columbia, SC 29218

APR 12 1999

Dear Mr. Lorick:

On March 22, 1999, we received an inquiry about possible submerged safety hazards on Lake Murray due to the low lake level. The inquiry states that when the lake level drops below 354 feet mean sea level (6 feet below full pool and 9 feet above minimum low pool), there are unmarked obstacles in numerous areas of the lake, creating a safety hazard for boaters. The obstacles likely consist of shoals and submerged woody debris which may also provide valuable fish habitat.

So we may address this inquiry about safety concerns raised by submerged obstacles during low water conditions, please file the following information within 30 days from the date of this letter:

- an explanation of your policy regarding identifying and marking potential safety hazards on Lake Murray. Please describe how the hazards are identified and marked and how boaters are warned of the potential hazardous areas on the lake. Please include photos or drawings of markers and signs that you use.
- a description of your criteria for marking submerged obstacles, including the type of obstacles that qualify for marking and minimum depth of the obstacles.
- a description of any additional measure you believe appropriate to ensure that currently unmarked submerged obstacles on the lake are marked, including a schedule for implementing the measures.

File the above information with:

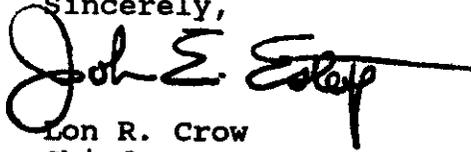
The Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

9904200579-3

FERC DOCKETED
APR 12 1999

Thank you for your time and attention to this request. If you have any questions, please call Jack Hannula at (202) 219-0116.

Sincerely,

A handwritten signature in black ink, appearing to read "Lon R. Crow". The signature is stylized with a large initial "L" and a long horizontal stroke extending to the right.

Lon R. Crow
Chief

Environmental Compliance Branch

cc: U.S. Fish and Wildlife Service
P.O. Box 12559
217 Fort Johnson Road
Charleston, SC 29442-2559

South Carolina Department of Natural Resources
P.O. Box 12559
Charleston, SC 29442-2559

George C. Schmieler, Jr.
484 Smallwood Drive
Chapin, SC 29036

Public Files



ORIGINAL

FILED
OFFICE OF THE SECRETARY

99 MAY 17 PM 4: 47

FEDERAL ENERGY
REGULATORY
COMMISSION

May 14, 1999

Randolph R. Mahan
SCANA Legal Department
(803) 217-9538

Secretary David. P. Boergers
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: Project No. 516 - South Carolina
Saluda Project
South Carolina Electric & Gas Company

Dear Secretary Boergers:

On April 16, 1999, South Carolina Electric & Gas Company, Licensee for Project No. 516, received a letter from the Chief of the Environmental Compliance Branch (ECB) of the Office of Hydropower Regulation. In that letter, Licensee was asked to provide certain information relative to safety concerns raised by a resident of the area of Lake Murray, the name by which Project No. 516 is commonly known in the area. Please accept this letter and its contents as Licensee's response to the ECB letter. Licensee apologizes if it is received beyond the requested response date. Licensee believed it best to consult with appropriate personnel prior to responding. Personnel availability was a problem.

The information requests are repeated below. Licensee's responses follow each request.

- **Request.** Provide "an explanation of your [Licensee's] policy regarding identifying and marking potential safety hazards on Lake Murray. Please describe how the hazards are identified and marked and how boaters are warned of the potential hazards areas on the lake. Please include photos or drawings of markers and signs that you use."

SCANA Corporation
Columbia, South Carolina
29218

803.217.9000
www.scana.com

FERC DOCKETED

MAY 17 1999

9905210276-3

Response. Licensee's policy is to cooperate with the South Carolina Department of Natural Resources (DNR) in DNR's boating safety program, including its program of identifying and marking underwater hazards. DNR has assumed responsibility for hazards marking throughout the State of South Carolina for all waters of the State. The waters of Lake Murray are waters of the State. Licensee has cooperated with DNR for as many years as it has had a boating-safety program, and anticipates continuing that cooperation. Licensee grants to DNR whatever permissions are necessary for the location of marker buoys, signs, etc on Licensee property as DNR deems necessary. Licensee has provided manpower and equipment supplementation for DNR's efforts from time to time. Licensee either refers citizen inquiries and comments relative to boating safety, including hazards marking, to DNR, or passes such inquiries on directly to DNR. Licensee informs DNR when it finds that buoys are missing or damaged, as do the various local law enforcement agencies who have officers on the lake. While Licensee is informed that DNR will supply information directly to the Commission to supplement Licensee's response, Licensee understands DNR's hazards marking program to include buoys and signs placed where DNR judges them to be necessary. They include shoal markers, markers for other dangerously located underwater obstructions, "no-wake" zone markers, etc.

Inasmuch as Licensee places no markers, it has no "photos or drawings of markers that [Licensee] uses." DNR likely will provide information regarding the buoys and signs it uses. Should the Commission not find such information sufficiently demonstrative, Licensee will provide such further information as the Commission requests. Actually, with regard to Project works and hazards associated with them, i.e. spillways, tailrace areas, intakes, etc, Licensee does place appropriate buoys and signs. However, Licensee perceives the Commission's request not to be intended to address those matters, which are subject to regular review by the Commission's Regional Office.

- **Request.** Provide "a description of your criteria for marking submerged obstacles, including the type of obstacles that qualify for marking and minimum depth of the obstacles."

Response. Inasmuch as Licensee does no marking, it has no criteria. It assumes that DNR's expected letter will supply that information. Licensee does point out that its mode of operation of Project No. 516 has remained consistent over the past twenty years. In that regard, the Lake Murray levels generally operate between the levels, measured above mean sea level (msl), of 352' msl and

358' msl. Obviously, system electrical demand, weather and rainfall affect significantly Licensee's operation of the lake and even the ability to control lake levels at all. When Licensee plans to bring the lake level to abnormally low levels, as it has done several times within the past ten years for maintenance and aquatic weed control reasons, it widely publicizes the fact well in advance of such action. In addition, the levels of all major lakes in South Carolina are a standard part of television newscasts in the area. Also, Licensee has instituted a direct, call-in number for members of the public to be able to call in to get current and anticipated lake and tailrace levels on a daily basis.

- **Request.** Provide "a description of any additional measure you believe appropriate to ensure that currently unmarked submerged obstacles on the lake are marked, including a schedule for implementing the measures."

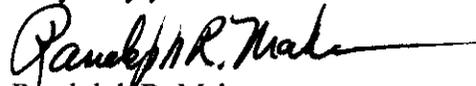
Response. Licensee relies upon the expertise of the agency exercising jurisdiction over boating safety matters on state waters. That agency is DNR. Licensee will not presume to insert itself into the decision-making process of that agency. Licensee will continue to supply information it has regarding possible areas deserving of attention, whether that information is generated by it, or supplied by third parties. Licensee will continue to consult and cooperate with DNR on issues relative to boating safety, including the identification and marking of special boating hazard areas.

Licensee urges the Commission to consider the personal responsibility which does and should belong to members of the boating public to practice safe boating, which includes the responsibility to know the waters they are going to recreate upon or to exercise special care. If they do not, the solution is not to attempt to make boating upon waters absolutely foolproof. It is to remedy ignorance or tendencies to foolish behavior through education and training. DNR has a very good program to promote safe boating in South Carolina. Licensee urges the Commission Staff to investigate this by going to DNR's internet web site @ <http://water.dnr.state.sc.us/>. Lake Murray has been in operation since 1932. There has been much more stability in the operation of the lake over the past two decades than during the first four. The predictability of lake levels and matters affected thereby, such as the exposure of navigational hazards, has thus likewise been relatively stable. The marking of those hazards over time reflects that fact. As the need to identify and mark underwater structures increases because of increasing numbers of boaters, especially novice and unsafe boaters, Licensee expects DNR's statewide and uniform program of boating safety to reflect these factors as well. Licensee will cooperate. Licensee will not attempt to duplicate or supplant DNR's program. It believes that to be the wrong thing to do. Licensee has neither the expertise nor the manpower to do so.

Page 4
Secretary David. P. Boergers
May 14, 1999

Licensee trusts that this response, as it will be supplemented by DNR's separate, following submittal satisfies the Commission's inquiry. Licensee stands ready to respond to any further inquiry, and to clarify any matter not made clear by this response.

Very truly yours



Randolph R. Mahan
Attorney for South Carolina
Electric & Gas Company

cc Lon R. Chow, Chief, Environmental
Compliance Branch - FERC
John E. Estep, Environmental
Compliance Branch
U.S. Fish and Wildlife Service
South Carolina Department of
Natural Resources
George C. Schmieler, Jr,
Brian J. McManus, Esq.
N.O. Lorick
G. Soult
K. Massey
T.C. Boozer

ORIGINAL

FILED
OFFICE OF THE SECRETARY
99 JUN 29 PM 2:48
FEDERAL ENERGY
REGULATORY COMMISSION

Mr. Jack Hannula
Federal Energy Regulatory Commission
Mail Code DLC, HC-11
888 First Street, N. E.
Washington, D.C. 20426

Re: **Saluda River Hydro Project 516-308**
Lake Murray, SC

Dear Mr. Hannula:

This letter is in reference to an article that appeared on the front page of "The STATE" newspaper (SCE&G Asked to Explain Lake Safety Practices) on April 24th, 1999. It discusses Lake Murray resident, George Schmieler's, complaint to the Federal Energy Regulatory Commission about safety hazards due to water levels below 354' msl. The tone of Mr. Schmieler's letter, we believe, is representative of the many frustrated lake users who have similar concerns and have seen nothing done about it.

We support Mr. Schmieler's concern about safety, and his suggestion that lake levels should not drop below 354' msl. during winter draw downs. Sgt. Lee Mills, the DNR officer responsible for buoy placement on Lake Murray recently commented on Mr. Schmieler's concern, stating that it would be impractical, if not impossible to mark the hundreds of hazardous areas on Lake Murray which occur when water levels drop below 354' msl. He added that boaters should use extreme caution during those times.

Latest figures from DNR indicate that there are in excess of 40,000 registered boats in the four counties bordering Lake Murray. Many of these boaters are not aware of the hundreds of unmarked hazards which occur when lake levels drop. Lake Murray increasingly host major bass tournaments, with many participants unfamiliar with these unmarked hazards below the 354 msl level. Each winter countless boats and motors are damaged by these hidden obstacles. It is just a matter of time before someone gets seriously injured or killed and we believe this situation needs immediate attention.

Chris Petersen, the manager of Lakeside Marina, made these comments concerning low lake levels. "I consider Lake Murray an April to October lake. During the other months, people are simply afraid to go out there for fear of damaging their boats or injuring themselves. If winter draw downs were kept to a minimum of 354' msl, this lake would be a year round attraction for boaters, providing an economic boost to lake businesses, which normally suffer due to low levels."

9906300528-5

 SERIALIZED
INDEXED
JUN 29 1999

Considering the effects (of establishing a winter minimum of 354' msl) on hydro operations, it appears to us that this would actually increase the efficiency of production. Higher levels carried over into January should allow inflows to be used for production of electricity rather than bringing water levels back up. Since January and February are our coldest months, production of electricity then would be much more efficient than production during the fall when the weather is mild, system loads are down, and electricity can be bought on the grid very cheaply. Also, records indicate that during the Fall, an abundance of rainfall in the Saluda watershed above Lake Murray, results in sufficient inflows to allow SCE&G to take care of scheduled maintenance and normal load following. Lake Greenwood above Lake Murray is also on the Saluda River in the same watershed as Lake Murray. Duke Power Company operates it for hydro-electric production, but Lake Greenwood only fluctuates about four feet per year. Duke power has similar requirements for maintenance and flood control that SCE&G, but manages to accommodate them with significantly less variance in water levels.

Considering the effects on the fisheries, Gene Hayes, DNR's fish biologist for Lake Murray stated that establishing a minimum winter draw down of 354' msl would not negatively impact Lake Murray's fisheries. His major concerns are when and at what rate lake levels come up prior to spawning. This past December, lake levels went down to 350'. Because of dry conditions in the first four months of the year, lake levels did not come up enough for the water to rise into the shallow vegetative areas where fish spawn. This would not have happened if lake levels had stayed at a minimum of 354' msl. Mr. Hayes also agrees that higher water levels would bring more fishermen out on the lake.

According to DNR, the hydrilla problem is under control, but establishing a minimum draw down of 354' could negatively affect this situation. A draw down every three or four years may be needed to control growth around the shoreline. DNR states that they would have to study the matter.

Lake Murray has approximately 12,000 water front homeowners. These lake residents make up the majority of recreation users. As water levels recede during the fall and winter, residents begin to cease using the lake because of safety concerns and concerns that sudden drops will leave their boats high and dry. In December of 1998, an aerial survey was done by a member of this group. With levels at 351 msl, the overwhelming majority of home owners could not use their boats or even fish off their docks. Establishing a minimum winter level at 354' would eliminate these problems, resulting in a safe year round, recreational lake.

One additional area that must be addressed is the so-called "lowering of the pond to give room for winter and spring rains". A quick look at inflows indicates that going into the new year with levels at 354' msl would not create a situation which would necessitate spilling of water through the flood gates. In fact, SCE&G routinely brings water levels back up to 354'+ msl in January.

We believe that SCE&G as licensee of the Saluda River Project has the ultimate responsibility to provide a safe year round lake for the public to use. All of these concerns have been brought to the attention of SCE&G by the Lake Murray Association many times during the past five years. A survey taken by LMA indicated that an overwhelming majority of its 1400 + members agreed on "higher levels longer" and that a minimum winter level at 354' msl is needed to ensure a more safe and active recreational facility.

Saluda Hydro Project 516 is a multi-purpose project. Hydro electric production is important, but also recreational values are of equal importance if not more important considering the economic impact recreation on the lake has on the midlands of South Carolina. The Electric Consumers Protection Act states that **FERC must give the same level of consideration to the environment, recreation, fish and wildlife, and other non-power values that it gives to power and development objectives in making a licensing decision.**

South Carolina Electric and Gas in their response to Mr. Schmeiler's concerns, stated that its mode of operation has remained consistent over the past twenty years, and that lake levels on the average fluctuate between 352' and 358' msl. Also, system electrical demand, weather, and rainfall affect significantly their operation of the lake and their ability to control lake levels.

The above simplified explanation of how the Licensee operates the hydro-electric facility in relation to lake levels has no practical use in trying to resolve this serious matter. SCE&G should provide factual information and records to the Commission and thus to the public so we can come to our own conclusion. A solution to a problem cannot occur unless factual information is available for everyone to examine.

This issue before us is not whether the Department of Natural Resources can identify and mark hazardous areas which occur at water levels below 354' msl, but whether the Licensee can modify its "rule curve" thus keeping water levels higher and making Lake Murray a safer and more active recreational facility.

Therefore, we respectfully request that the Commission require SCE&G to justify their current operational policies by providing accurate information to the public, and if this information establishes that the Licensee can operate at higher minimum levels without adverse affects on power production, we request that the Commission order them to do so..

Sincerely,

Steve Bell
President - Lake Watch on 516
2116 Kennedy St.
Columbia, SC 29205
803-254-0955

ORIGINAL

South Carolina Department of Natural Resources



Paul A. Sandifer, Ph.D.
Director
Office of Chief Counsel
Buford S. Mabry, Jr.
Paul S. League
Ester F. Haymond
James A. Quinn*
Charleston Office

July 6, 1999

Secretary David P. Boergers
Federal Energy Regulatory Commission
888 First Street, NE
Washington, SC 20426

Re: Project No. 516 - South Carolina
Lake Murray

FILED
OFFICE OF THE SECRETARY
99 JUL - 8 PM 2:19
FEDERAL ENERGY
REGULATORY
COMMISSION

Dear Secretary Boergers:

This letter follows up the May 14, 1999 letter to you from Randolph R. Mahan, attorney for South Carolina Electric & Gas Company. Mr. Mahan's letter was in response to a request for information from the FERC in connection with safety concerns at Lake Murray (Project No. 516). Mr. Mahan's letter indicated that the South Carolina Department of Natural Resources (hereinafter SCDNR), would provide some follow up comments on his letter. Therefore, this letter will provide general comments on the program undertaken by the SCDNR to install certain aids to navigation on Lake Murray.

The SCDNR does administer a program to place and maintain various aids to navigation on a number of water bodies in South Carolina. This program is authorized under South Carolina statutory law; however, the undertaking of the program is entirely discretionary with the agency. This program is merely one component of a larger water safety program authorized in Chapter 21 of Title 50, Code of Laws of South Carolina, 1976, as amended. Chapter 21 deals generally with the topic of equipment and operation of watercraft. For example, § 50-21-90 states, "The department is hereby authorized to inaugurate a comprehensive boating safety and boating educational program, and to seek the cooperation of boatmen, the federal government and other states."

Only one section in Chapter 21 addressees the topic of marking potential hazards to navigation. Section 50-21-710 provides in part:

FERC DOCKETED

JUL - 8 1999

Post Office Box 167 • Columbia, S.C. 29202 • 803-734-4006 • Fax 803-734-6310
* Post Office Box 12559 • Charleston, S.C. 29422 • 803-762-5061 • Fax 803-762-5412

EQUAL OPPORTUNITY AGENCY

PRINTED ON RECYCLED PAPER ♻️

9907090258-3

(2) The department may make rules for the uniform marking of the water areas in this State through the placement of aids to navigation and regulatory markers. Such rules shall establish a marking system compatible with the system of aids to navigation prescribed by the United States Coast Guard.

The statute just quoted provides authority for the SCDNR to regulate placement of markers in aid of navigation. However, in delegating this authority the General Assembly made implementation of the program discretionary rather than mandatory. As a discretionary program, the SCDNR is under no obligation to place aids to navigation in any water body in South Carolina.

Pursuant to the authority in § 50-21-710, the SCDNR has promulgated a regulation to establish a uniform marking system. This regulation states:

123-19.32. State Waterways Uniform Marking System

Pursuant to Section 50-21-710 which requires that a uniform marking system of state waterways be compatible with the system prescribed by the United States Coast Guard for the marking of state waters; and the United States Coast Guard having promulgated the system known as the Uniform State Waterway Marking System for the marking of State waterways (33CFR66); and, the State being the recipient of Federal Boating Funds under a program requiring the marking of state waters with aids to navigation, a federal grant program of the type described in Section 1-23-120, Code of Laws of South Carolina (1976) as amended.

The Uniform State Waterway Marking System, as described in 33CFR66, is adopted to be the system used to mark the waters of this State in compliance with Section 50-21-710.

Additionally, the SCDNR has promulgated a number of regulations, whereby it restricts the operation of water craft in specified ways. In some instances, these regulations require identifying the restricted areas. These regulations are not requirements for the marking of navigational hazards. See, for example, R.123-19.15, relating to South Carolina Electric & Gas Company Public Park No. 3.

Congress has delegated authority for a program of navigational aids to the United States Coast Guard. The Coast Guard in turn has entered into a "Statement of Understanding" with the SCDNR, whereby the SCDNR is permitted to regulate private aids to navigation on Lake Murray. The "Statement" in no way requires the SCDNR to place any navigational aids on the lake to mark boating hazards.

The SCDNR has exercised its discretionary authority and has placed a number of aids to navigation in various waters, including Lake Murray. Reasonable effort is made to maintain those markers in a safe and appropriate manner. The SCDNR is not obligated to continue the program for any particular period of time and is not obligated to mark every hazard to navigation. The SCDNR works with the South Carolina Electric & Gas Company to mark potential boating hazards; however, the program is limited by certain factors, including manpower availability and funding. The program does not receive any appropriations from the South Carolina General Assembly. The SCDNR does receive some financial assistance from the federal government, but it is on a year-to-year basis with no guarantee of future availability.

Generally, the SCDNR attempts to work with the utility to mark some hazards to navigation at normal or nearly full pool levels. The size of Lake Murray and the extent of periodic draw downs makes the marking of all hazards at all lake levels beyond the capability of the SCDNR's program. The SCDNR will continue to cooperate with the South Carolina Electric & Gas Company to place aids to navigation, but the SCDNR's program is not intended to absolve the South Carolina Electric & Gas Company of any responsibility it may have to identify or mark hazards.

I hope this information will be useful to you. Please contact me if you require any additional information.

Sincerely,



Paul S. League
Assistant Chief Counsel

COPY: Major Alvin Taylor
Gerrit Jobsis
Ed Duncan
Randy Mahan

FEDERAL ENERGY REGULATORY COMMISSION

WASHINGTON, D. C. 20426

OFFICE OF HYDROPOWER LICENSING

Project No. 516-308--South Carolina
Saluda Project
South Carolina Electric & Gas Company

AUG 31 1999

Mr. Neville Lorick
V.P., Fossil/Hydro Operations
South Carolina Electric & Gas Company
P.O. Box 764
Columbia, SC 29218

Dear Mr. Lorick:

On April 12, 1999, we notified you of an inquiry about possible submerged safety hazards on Lake Murray due to low lake levels. The inquiry stated when the lake level drops below 354 feet mean sea level (6 feet below full pool and 9 feet above minimum low pool), there are unmarked obstacles in numerous areas of the lake, creating a safety hazard for boaters. The obstacles consist of shoals and submerged debris which may also provide valuable fish habitat.

In our letter, we requested information about your hazard marking policy, description of marking criteria and any measures you could take to improve lake safety. In a report filed May 17, 1999, you responded to our request for information.

Regarding your hazard marking policy, you state you cooperate with the South Carolina Department of Natural Resources (DNR) which has assumed responsibility for hazards marking on all waters in the state of South Carolina. You grant permission to the DNR to promote boating safety, including installing signs and warning buoys and marking hazards, and you assist the DNR by providing manpower and equipment from time to time.

The criteria for marking hazards (i.e., minimum depth, etc.) is also determined by the DNR. You state that over the years, the lake level has operated between 352 feet mean sea level (msl) and 358 feet. You occasionally bring the lake to abnormally low levels (several times in the past ten years) for maintenance and aquatic weed control, and you publicize this event well in advance. Lake levels are televised in the region and you also have a direct call-in number for the public to obtain lake and tailrace levels on a daily basis.

~~FERC DOCKETED~~

AUG 31 1999

9910250431-3

Concerning any additional measures you may take to ensure that any unmarked hazards are marked, you state you rely on the DNR's expertise. However, you provide information to, and continue to consult with, the DNR in issues of boating safety and hazards marking. You also state the public has a personal responsibility to practice safe boating by being knowledgeable of lake conditions. You rely on the DNR which offers boating safety programs to educate the public on personal responsibilities in boating safety.

In addition to the initial inquiry letter regarding lake levels and boating hazards, we received further comments from "Lake Watch on 516" (Lake Watch), an homeowners association located on Lake Murray. Lake Watch, in a letter filed June 16, 1999, stated that, although unmarked hazards are a problem on the lake, the real issue is low lake levels below 354 msl which allows the exposure of hazards. Lake Watch believes the lake can be operated efficiently and profitably at higher levels. Lake Watch recommends modification of your license "rule curve" to keep lake levels higher. This would make Lake Murray safer and extend the recreational use season.

The DNR, in a letter filed July 8, 1999, confirmed that it does assist in placing navigation aids and markers in Lake Murray. However, the DNR states the size of Lake Murray and the extent of periodic draw downs makes the marking of all hazards at all lake levels beyond the capability of the DNR's program. The DNR will continue to cooperate with you to place aids to navigation, but the DNR's program is not intended to absolve you of any responsibility you may have to identify or mark hazards.

Your policy of cooperating with the DNR to identify and mark hazards appears to be an acceptable approach to addressing this concern. We expect you to continue your active participation with the DNR. We remind you, however, that ultimately you are responsible for ensuring that appropriate public safety measures are implemented at your project.

Regarding the issue of low lake levels below 354 msl that affect recreational use of the lake, we expect further evaluation of this issue during your re-licensing process when project operation will be evaluated in a comprehensive manner. Your project license expires on August 31, 2007. Your evaluation of the affects low lake levels have on boating recreational use should include consultation with the appropriate Federal, state and local agencies and other affected parties, such as represented by the various home owners' association, sports clubs, etc., that are concerned about Lake Murray.

Thank you for your time and attention to this matter. If you have any questions, please call Jack Hannula at (202) 219-0116.

Sincerely,



Lon R. Crow
Chief
Environmental Compliance Branch

cc: Cristina L. Massey, PE
SCE & G Technical Services
111 Research Drive
Columbia, SC 29203

U.S. Fish and Wildlife Service
P.O. Box 12559
217 Fort Johnson Road
Charleston, SC 29442-2559
ATTN: Steve Gilbert

South Carolina Department
of Natural Resources
P.O. Box 12559
Charleston, SC 29442-2559
ATTN: Gerrit Jobsis

George C. Schmieler, Jr.
484 Smallwood Drive
Chapin, SC 29036

Steve Bell
President, Lake Watch on 516
2116 Kennedy Street
Columbia, SC 29205

Dan Wojoski, President
Hawley Creek Homeowners Association
P.O. Box 876
Chapin, SC 29036

Robert E. Keener
Lake Murray Southside
Community Association
117 Beulah Church Road
Gilbert, SC 29054