Kacie Jensen

From: bellsteve9339@bellsouth.net
Sent: Wednesday, December 07, 2005 6:40 AM
To: Dave Anderson
Subject: Re: Reminder: Safety Organizations and Responsibilities

Hi Dave- Here's info. you requested.

Name of Organization- Lake Murray Watch- Committed to protecting and enhancing the project's environmental and recreational resources

Type of Safety Activities Involved In (such as swift water rescue, boater safety education, etc.)
Lake Watch Volunteers report unsafe conditions and activities

Geographic Area Covered - Lake Murray and the Lower Saluda

Number of Personnel (dedicated to safety activities around the lake or LSR) Appx. 16 members on the Lake and 2 on the river.

Our goal in this committee - To seek changes in Saluda Hydro operations that will protect public safety for recreational users in the lake in the lower Saluda

>
> From: Dave Anderson <Dave.Anderson@KleinschmidtUSA.com>
> Date: 2005/12/02 Fri PM 05:47:54 EST
> To: Dave Anderson <Dave.Anderson@KleinschmidtUSA.com>, Alison Guth
> <Alison.Guth@KleinschmidtUSA.com>, "'arsbhs@bellsouth.net'"
> <arsbhs@bellsouth.net>, "'cfdwaxson@columbiasc.net'"
> <cfdwaxson@columbiasc.net>, Alan Stuart
> <Alan.Stuart@KleinschmidtUSA.com>, "'marshallb@dnr.sc.gov'"
> <marshallb@dnr.sc.gov>, "'bill25@sc.rr.com'" <bill25@sc.rr.com>,
> "'cheetahtrk@yahoo.com'" <cheetahtrk@yahoo.com>, "'pricedc@dhec.sc.gov'"
> <pricedc@dhec.sc.gov>, "'dchristie@infoave.net'" <dchristie@infoave.net>,
> "'eschnepel@sc.rr.com'" <eschnepel@sc.rr.com>,
> "'kayakduke@bellsouth.net'" <kayakduke@bellsouth.net>,
> "'gjobsis@americanrivers.org'" <gjobsis@americanrivers.org>,
> "'meddynamic@aol.com'" <meddynamic@aol.com>,
> "'kakustafik@columbiasc.net'" <kakustafik@columbiasc.net>,
> "'Skfox@Bellsouth.net'" <Skfox@Bellsouth.net>, "'Lbarber@sc.rr.com'"
> <Lbarber@sc.rr.com>, "'Malcolml@mailbox.sc.edu'"
> <Malcolml@mailbox.sc.edu>, "'miriam@lakemurraycountry.com'"
> <miriam@lakemurraycountry.com>, "'PatrickM@scccl.org'"
> <PatrickM@scccl.org>, "'bellsteve9339@bellsouth.net'"
> <bellsteve9339@bellsouth.net>, "'suzrhodes@juno.com'"
> <suzrhodes@juno.com>, "'tboozer@scana.com'" <tboozer@scana.com>,
> "'bargentieri@scana.com'" <bargentieri@scana.com>, "'rmahan@scana.com'"
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> Subject: Reminder: Safety Organizations and Responsibilities
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> > to compile the information and redistribute before the next meeting.
> >
> > Thanks for your response!
> >
> > ----------
> > David K. Anderson, Ph.D.
> > Recreation/Human Dimensions Specialist
> > Kleinschmidt Associates
> > 4958 Valleydale Rd., Ste. 250
> > Birmingham, AL 35242
> > Ph: 205-981-4547x240
> > FAX: 205-981-4549
> > Dave.Anderson@KleinschmidtUSA.com
> >
>
>

Kacie Jensen

From: Bill Marshall [MarshallB@dnr.sc.gov]
Sent: Monday, December 05, 2005 9:51 AM
To: Dave Anderson
Cc: Dick Christie; Charlene Coleman; kakustafik@columbiasc.net; Malcolm Leaphart
Subject: RE: Reminder: Safety Organizations and Responsibilities

Dave,
I will reply for those I represent regarding safety activities on the lower Saluda River

Organization:
Lower Saluda Scenic River Advisory Council in partnership with the SCDNR, River Conservation Program

Safety Activities:
> Provide river-user safety information at kiosks located at public access sites
> Provide safety information on website and in a river-map/brochure product
> Established water-level safety marker system painted on poles at access sites and on bridge supports (blue, yellow, red color-coded bands convey increasingly hazardous conditions with rising waters).

Geographic area:
Lower Saluda River and access sites, which include Hope Ferry (Metts) Landing, Saluda Shoals Park, Gardendale Landing, and Riverbanks Zoo.

Number of personnel dedicated to safety:
One staff person to periodically update and maintain information and water-level marker system described above

Thanks,

Bill Marshall
(803) 734-9096
marshallb@dnr.sc.gov

From: Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
Sent: Friday, December 02, 2005 5:48 PM
To: Dave Anderson; Alison Guth; 'arsbhs@bellsouth.net'; 'cfdwaxson@columbiasc.net'; Alan Stuart; Bill Marshall; 'bill25@sc.rr.com'; 'cheetahtrk@yahoo.com'; 'pricedc@dhec.sc.gov'; 'dchristie@infoave.net'; 'eschnepel@sc.rr.com'; 'kayakduke@bellsouth.net'; 'gjobsis@americanrivers.org'; 'meddynamic@aol.com'; 'kakustafik@columbiasc.net'; 'Skfox@Bellsouth.net'; 'Lbarber@sc.rr.com'; 'Malcolml@mailbox.sc.edu'; 'miriam@lakemurraycountry.com'; 'PatrickM@scccl.org'; 'bellsteve9339@bellsouth.net'; 'suzrhodes@juno.com'; 'tboozer@scana.com'; 'bargentieri@scana.com'; 'rmahan@scana.com'
Subject: Reminder: Safety Organizations and Responsibilities

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Number of Personnel (dedicated to safety activities around the lake or LSR)

If there is anything else you think would be beneficial for the group to know, just add it to the above list.

Please have your response to me by December 8th so that I have time to compile the information and redistribute before the next meeting.

Thanks for your response!

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Birmingham, AL 35242
Ph: 205-981-4547x240
FAX: 205-981-4549
Dave.Anderson@KleinschmidtUSA.com

Kacie Jensen

From: Suzanne Rhodes [suzrhodes@juno.com]

Sent: Monday, December 05, 2005 11:52 AM

To: Dave Anderson

Cc: ANGELA@SCWF.ORG; JENNO@SCWF.ORG; TBEBBER@SCPRT.COM; marshallb@dnr.sc.gov; cheetahtrk@yahoo.com; kayakduke@bellsouth.net; gjobsis@americanrivers.org; kakustafik@columbiasc.net; Malcolml@mailbox.sc.edu; PatrickM@scccl.org; bellsteve9339@bellsouth.net

Subject: Re: Reminder: Safety Organizations and Responsibilities

DAVE - BECAUSE OF ANNUAL LEAVE LIMITATIONS, I HAVE BEEN UNABLE TO ATTEND ANY OF THE MEETINGS. JENN O'ROARK MIGHT HAVE BEEN ABLE TO ATTEND FOR THE FEDERATION. PLEASE CONSIDER THIS AS A "DRAFT" UNTIL TONY BEBBER AND ANGELA VINEY AND JENN HAVE A CHANCE TO COMMENT. CONSIDER IT "FINAL" TUESDAY MORNING, PLEASE, IF NO COMMENTS HAVE BEEN RECEIVED. I HOPE TO PARTICIPATE AS MY WORK SCHEDULE ALLOWS IN 2006 WHEN I WILL HAVE SOME ANNUAL LEAVE FLEXIBILITY. MY DRAFT IS IN ITALIC CAPS. MANY THANKS. SUZANNE RHODES.

On Fri, 2 Dec 2005 17:47:54 -0500 Dave Anderson <Dave.Anderson@KleinschmidtUSA.com> writes:

> Just a reminder that we would like to receive this information by December 8th so that it can be distributed prior to next meeting. So far I have responses from William Axson (Columbia Fire Department), Jerry Wise (Power Squadron), Lee Barber (LMA/Power Squadron), Malcolm Leaphart (TU), Aaron Small (USCG), and Karen Kustafik (City of Columbia Parks and Recreation).
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> >
> > I thought this would be a good start:
> >
> > **Name of Organization** *SOUTH CAROLINA WILDLIFE FEDERATION*
> >
> > **Type of Safety Activities Involved In** (such as swift water rescue, boater safety education, etc.) *RIVER SPORTS - FISHING, CANOEING, OVERNIGHT CAMPING ON LOWER SALUDA*
> >
> > **Geographic Area Covered** (This could be as simple as Lake Murray vs. LSR, but if you have specific areas, these would be good to know also, like Columbia City limits, Lexington County, etc.) *LAKE MURRAY AND LOWER SALUDA RIVER*
> >
> > **Number of Personnel** (dedicated to safety activities around the lake or LSR) *NO DEDICATED PERSONNEL*
> >
> > If there is anything else you think would be beneficial for the group to know, just add it to the above list. *CONCERN THAT THERE IS WOEFULLY INSUFFICIENT NOTICE*

BELOW THE DAM WHEN THE WATER IS RELEASED FOR POWER PRODUCTION. THIS PUTS CITIZENS AT RISK - THOSE WHO ARE NOT PAYING ATTENTION, WHO ARE USING THE WATERS RECREATIONALLY - PERHAPS FOR THE FIRST TIME - AND ALSO THOSE WHO ARE THEN CALLED UPON TO RESCUE. THE FEDERATION'S PRIMARY CONCERN IS WILDLIFE HABITAT, BUT HABITAT OF PERSONS IS ALSO OF CONCERN. THE FEDERATION HAS RAISED THIS ISSUE PREVIOUSLY.

Please have your response to me by December 8th so that I have time to compile the information and redistribute before the next meeting.

Thanks for your response!

David K. Anderson, Ph.D.
Recreation/Human Dimensions Specialist
Kleinschmidt Associates
4958 Valleydale Rd., Ste. 250
Birmingham, AL 35242
Ph: 205-981-4547x240
FAX: 205-981-4549
Dave.Anderson@KleinschmidtUSA.com

Kacie Jensen

From: David Price [PRICEDC@dhec.sc.gov]
Sent: Monday, December 05, 2005 11:37 AM
To: Dave Anderson
Cc: meddynamic@aol.com; bill25@sc.rr.com; lbarber@sc.rr.com; MikeDuffy@sc.rr.com; eprice@scana.com; david.allen@scbar.org
Subject: Re: Reminder: Safety Organizations and Responsibilities

Lake Murray elicensing- LMPS ...

Dave, as requested, I have attached information about Lake Murray Power Squadron. We are looking forward to working with you and SCE&G to help promote boating safety on Lake Murray.

David Price
Commander
Lake Murray Power Squadron
(803) 206-6572 Cell
(803) 898-3993 Work
(803) 345-1847 Home

>>> Dave Anderson <Dave.Anderson@KleinschmidtUSA.com> 12/2/2005 5:47 PM
>>> >>>
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>

Name of Organization - Lake Murray Power Squadron (LMPS)

Geographic Area Covered - Midlands of South Carolina with emphasis on Lake Murray

Number of Personnel - LMPS has over 300 members who volunteer their time and resources to carry out the mission of the LMPS.

Activities Related to Lake Murray

- **Mission of the LMPS**

  The Lake Murray Power Squadron (www.lmpsonline.org), a unit of the United States Power Squadrons (USPS) (www.usps.org), is a non-profit boating organization dedicated to making boating safer and more enjoyable through education, civic service and fraternal boating activities among our members.

- **Education**

  - ***Boating Safety Courses for the General Public*** - LMPS offers a basic boating safety course (Boat Smart®) to the public in the fall and spring of each year. This course consists of 4 two-hour classroom sessions, followed by a proctored exam. Individuals unable to attend the classes can order America's Boating Course from the USPS website and contact a local squadron (LMPS for the SC midlands area) for assistance as they study the course material. A proctored exam is provided for the course ordered from the internet.
  - ***Courses for LMPS Members*** - Once a member of the LMPS, many other educational course are available to enhance one's boating skills. A list, along with a brief description, is as follows:
    - ***Seamanship*** - types of boats (motor and sail), trailering, maintenance, weather, navigational rules and aids to navigation, medical emergencies, and nautical customs
    - ***Piloting*** - course plotting, dead reckoning, marine radio use, chart reading, compass adjustment
    - ***Advanced Piloting*** - advanced navigational and charting skills, use of deviation tables, danger bearings and angles, tides and currents, fundamentals of electronic navigation
    - ***Junior Navigation*** - working knowledge of celestial navigation, concept of celestial sphere, identification of celestial bodies, and advanced plotting techniques
    - ***Navigation*** - advanced concepts and skills of navigation
    - ***Engine Maintenance*** - operating principles of gasoline and diesel engines, trouble shooting, temporary remedies, and safety procedures
    - ***Instructor Qualification*** - practical skills and use of teaching aids for teaching courses
    - ***Marine Electronics*** - essential knowledge about electrical and electronic systems

- ***Sail*** - terminology; types of hulls and rigs; running standing rigging; techniques for adjusting to wind and waves; sail handling, storm survival, sail instrumentation; marlinspike techniques; and sailboat emergencies
- ***Weather*** - awareness of weather phenomena and impact upon boating
- ***Compass Adjusting*** - various methods of ensuring precision of compass
- ***Skipper Saver*** - basic skills of operating a boat safely in an emergency
- ***Preparation for Coast Guard License*** - rules of the road, seamanship, weather, piloting, and damage control in preparation for USCG license exam
- ***Principles of Water Skiing Safety*** - basic techniques, safety procedures, types of skis, and skier responsibility
- **Additional courses are listed on LMPS website.**

- ***Future Boating Courses for the General Public*** - The USPS is considering making available to the public several of the above courses which are currently available to members only.

Civic Service

In addition to the boating safety courses, the LMPS performs a number of other civic service activities which are as follows:

- ***Reference lights*** - LMPS spends many hours each month inspecting and repairing the reference lights on Lake Murray to ensure they are operating within prescribed functional limits and are compliant with federal, state and local regulations.
- ***Shoal marker inspection*** - LMPS conducts annual checks of all shoal markers on Lake Murray to ensure presence, positioning. Any problems are reported to the SC Department of Natural Resources (SCDNR) for repair.
- ***Vessel Safety Checks*** - LMPS has many certified inspectors that examine recreational vessels to ensure the presence of functioning marine safety equipment, clarify boating regulations, emphasize safety procedures, and encourage boater education. This inspection program originally was conducted solely by the Coast Guard Auxiliary; however, in an effort to expand this important inspection program, the US Coast Guard enlisted the help of the USPS.
- ***Adopt an Island Program*** - LMPS conducts an annual clean-up of Rock Island in cooperation with SCDNR.
- ***Geodetic Marks*** - ensure presence of small brass plates that provide geographic framework for mapping and charting, boundaries and property lines, and setting precise positions of space craft and satellites.

Additional Information About LMPS and USPS

For additional information about LMPS and USPS, and the activities mentioned above as well as our fraternal boating activities, please visit our websites at: www.lmpsonline.org and www.usps.org.

Kacie Jensen

From: Patrick Moore [PatrickM@scccl.org]
Sent: Monday, December 05, 2005 9:33 AM
To: Dave Anderson
Subject: RE: Reminder: Safety Organizations and Responsibilities

Here you go Dave,
Let me know if there is anything else you need.

Patrick Moore
Water Quality Associate
Coastal Conservation League
1207 Lincoln St. Suite 203-C
Columbia, S.C. 29201
803.771.7102

-----Original Message-----
From: Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
Sent: Friday, December 02, 2005 5:48 PM
To: Dave Anderson; Alison Guth; 'arsbhs@bellsouth.net'; 'cfdwaxson@columbiasc.net'; Alan Stuart; 'marshallb@dnr.sc.gov'; 'bill25@sc.rr.com'; 'cheetahtrk@yahoo.com'; 'pricedc@dhec.sc.gov'; 'dchristie@infoave.net'; 'eschnepel@sc.rr.com'; 'kayakduke@bellsouth.net'; 'gjobsis@americanrivers.org'; 'meddynamic@aol.com'; 'kakustafik@columbiasc.net'; 'Skfox@Bellsouth.net'; 'Lbarber@sc.rr.com'; 'Malcolml@mailbox.sc.edu'; 'miriam@lakemurraycountry.com'; Patrick Moore; 'bellsteve9339@bellsouth.net'; 'suzrhodes@juno.com'; 'tboozer@scana.com'; 'bargentieri@scana.com'; 'rmahan@scana.com'
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Type of Safety Activities Involved In (such as swift water rescue, boater safety education, etc.)

Geographic Area Covered (This could be as simple as Lake Murray vs. LSR, but if you have specific areas, these would be good to know also, like Columbia City limits, Lexington County, etc.)

Number of Personnel (dedicated to safety activities around the lake or LSR)

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Dave.Anderson@KleinschmidtUSA.com

Name of Organization

American Rivers and Coastal Conservation League

Type of Safety Activities Involved In (such as swift water rescue, boater safety education, etc.) - **None**

Geographic Area Covered (This could be as simple as Lake Murray vs. LSR, but if you have specific areas, these would be good to know also, like Columbia City limits, Lexington County, etc.)- Full area of project impact

Number of Personnel (dedicated to safety activities around the lake or LSR) -0

While we do not have any personnel exclusively dedicated to safety, enhancing the public value of recreational safety is a goal of both organizations.

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Dave.Anderson@KleinschmidtUSA.com

Kacie Jensen

From: Aaron Small [arsbhs@bellsouth.net]
Sent: Thursday, December 01, 2005 9:43 AM
To: Dave Anderson
Subject: Satety meeting SCE&G

Enclosed is the letter you requested for the USCG Aux. LakeMurray. Aaron Small USCU Aux.

U.S. COAST GUARD AUXILIARY
LAKE MURRAY STATION

WHO ARE WE?

Since its creation by Congress in 1939, the U.S. Coast Guard Auxiliary has served as the civilian, non-military component of the Coast Guard. The Lake Murray Flotilla, which was chartered in 1947, is part of a 35,000 member force of volunteer men and women who are active on the waterways and classrooms in over 2,000 cities and towns across the nation. The Lake Murray Station is considered by U.S. Coast Guard Charleston Sector to be their presence on Lake Murray.

WHAT ARE OUR RESPONSIBILITIES?

The Lake Murray Station provides the following services for boaters on Lake Murray and the surrounding area residents:

**For twenty five plus years, the Flotilla has conducted safety patrols on the lake. These patrols are conducted from privately owned vessels which are specially equipped, inspected and certified by the USCG for handling emergency operations such as collisions, fires aboard and sinking boats.

**In 2004, the Flotilla was assigned a dedicated patrol boat by the Coast Guard for use on Lake Murray. This facility, Unit 1, is on 24/7 standby at Flotilla Island in the event of an on-water emergency.

**The Flotilla maintains the marine radio network for use by boaters on Lake Murray in the event of an emergency. This elaborate communications system allows for communications even in the far reaches of the lake by boaters who are in need of assistance.

**The Flotilla, through a mutual agreement with the National Weather Service, provides for a site and communications link to collect weather data on the shore of the lake. This data is collected and disseminated by the NWS on weather radio frequencies to boaters and residents on the lake.

**In the event of an emergency, the Flotilla will assist boaters who otherwise cannot receive towing services form the commercial tow boats now operating on the lake.

**The Flotilla has developed special skills through constant training to handle special events in conjunction with the law enforcements agencies on the lake. Such events as sailing regattas, triathlons, boat races, holiday events, etc. are handled when requested and require a high level of nautical skills on the part of the Auxiliary in order to perform those duties.

**The Flotilla has members who have completed U.S. Coast Guard developed training in crew, coxswain, pilot, air observer, radio watchstander, weather, search and rescue, advanced navigation, patrol operations, etc. The Flotilla membership has expended hundreds of volunteer hours in this training to assure that we are ready when the call comes to assist boaters on the lake.

**The on-water activities are only a portion of the services provided to the boating public. The Flotilla conducts numerous training classes each year which are available to the public for a minimal fee. We are in the process of adding to the number of available courses.

**The Flotilla inspects recreational boats as a courtesy to the owners when requested. This program assists in eliminating a problem before it develops into an on-water emergency. We schedule Vessel Courtesy Inspections at each of the major marinas and launch sites on the lake each year to assure public access to this important program.

**The Flotilla, after the September 11 disaster, now serves as the eyes and ears for the Coast Guard and law enforcement for suspicious activities on and around the shores of the lake. During the Sept. 11 crisis, at the request of the U.S. Coast Guard, we provided 24/7 patrols of the major inland lakes where critical power generation equipment is located.

**The Flotilla maintains a service of distributing water safety literature through periodic visits to the area marinas, marine supply stores, visitation centers ,etc. where we furnish counter displays stocked with the brochures. This is another Auxiliary effort to educate and reach out to the boating public in order to prevent accidents on the lake.

WHAT ARE OUR CAPABILITIES?

**We maintain seven patrol boats including the dedicated Unit 1. In addition, we have two other patrol boats, one each located at Lake Greenwood and Lake Wateree that can be transported to Lake Murray as required.

**We maintain six radio operational units in addition to the marine radios which are required equipment for each operational patrol boat.

**We currently have 41 members on our active roster and they can be responded through the use of our alert communications tree. Most members live on or close to the lake and can be under way in minutes.

**Each patrol boat is equipped with and annually inspected for a detailed list of U.S. Coast Guard required items such as towing bridles and lines, advanced first aid kits, PEPIRP location device, VHF radio, depth sounder, GPS, extra PFD's, signal flare kits, heaving lines, night operations equipment, etc. Each crew member who serves during the winter months is equipped with winter survival suits.

Kacie Jensen

From: Kustafik, Karen [kakustafik@columbiasc.net]
Sent: Wednesday, November 23, 2005 1:20 PM
To: Dave Anderson
Subject: RE: Safety Organizations and Responsibilities

Name of Organization: City of Columbia Parks and Recreation Department

Type of Safety Activities Involved In: COC-Instruction, whitewater kayak program; boating safety information; Park Ranger staff patrol. I also teach and volunteer on the LSR personally, outside of my COC duties.

Geographic Area Covered: Lower Saluda River and Three Rivers Greenway

Number of Personnel: Whitewater: ~10 volunteer coaches; Park Ranger Staff: 18

The park ranger staff will begin duties mid-December. They will cover Riverfront and Granby Parks at present. It is reasonable to assume that, as the Saluda portion of the 3RG is built, the ranger staff would also cover that area.

DAVE--

Sorry to no-show last Friday for the Recreation RCG. My ranger staff is set to start on 11/28, and I ran into some difficulties that had to be resolved immediately. I am very committed to this process; the timing with my new responsibilities here is tough. We should be on the ground Mid-December and my schedule will be less hectic.

In the meantime, I am strongly supportive of working within a river interests group. I know the safety RCG had discussed the functionality of splitting.

Thanks, enjoy the holiday weekend. Karen

Karen Kustafik
Park Ranger Coordinator
Outdoor & Environmental Programs
City of Columbia Parks & Recreation
1932 Calhoun St.
Columbia, SC 29201

803.255.8163 office
803.767.0788 cell
803.343.8744 fax

-----Original Message-----
From: Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
Sent: Thursday, November 17, 2005 4:56 PM
To: Alison Guth; 'arsbhs@bellsouth.net'; Axson, William; Alan Stuart; 'marshallb@dnr.sc.gov'; 'bill25@sc.rr.com'; 'cheetahtrk@yahoo.com'; 'pricedc@dhec.sc.gov'; 'dchristie@infoave.net'; 'eschnepel@sc.rr.com'; 'kayakduke@bellsouth.net'; 'gjobsis@americanrivers.org'; 'meddynamic@aol.com'; Kustafik, Karen;

'Skfox@Bellsouth.net'; 'Lbarber@sc.rr.com'; 'Malcolml@mailbox.sc.edu'; 'miriam@lakemurraycountry.com'; 'PatrickM@scccl.org'; 'bellsteve9339@bellsouth.net'; 'suzrhodes@juno.com'; 'tboozer@scana.com'; 'bargentieri@scana.com'; 'rmahan@scana.com'
Subject: Safety Organizations and Responsibilities

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Please have your response to me by December 8th so that I have time to compile the information and redistribute before the next meeting.

Thanks for your response!

David K. Anderson, Ph.D.
Recreation/Human Dimensions Specialist
Kleinschmidt Associates
4958 Valleydale Rd., Ste. 250
Birmingham, AL 35242
Ph: 205-981-4547x240
FAX: 205-981-4549
Dave.Anderson@KleinschmidtUSA.com

Kacie Jensen

From: Malcolm Leaphart [malcolml@mailbox.sc.edu]
Sent: Tuesday, November 22, 2005 10:29 AM
To: Dave Anderson
Cc: Norm@sc.rr.com
Subject: Fwd: Safety Organizations and Responsibilities

unnamed (6 KB)

Dave, I am not sure whether Norm or I or even another chapter representative will attend the Safety meetings, but keep us in the loop. Here is the information you requested:

1. Name of Organization

Saluda River Chapter Trout Unlimited
(see www.saludatu.org)
Conservation group, but with strong fisherman membership base...

2. Safety Isssues Involved In

River fishing safety, both by wading and by boat, paddle and motor; water flows for both recreation and for the fisheries; river safety education through articles and meeting programs; and river rescues.

3. Geographic Area Covered

Lower Saluda River

4. Number of Personnel

325 chapter members

----- Original Message -----
From: Malcolm Leaphart
To: Norm@sc.rr.com
Sent: Friday, November 18, 2005 1:37 PM
Subject: Fwd: Safety Organizations and Responsibilities

Norm - Dave Anderson of Kleinscmidt does not have you in his email list... Hope you can make future meetings for this and the other issues. Stay plug in to the relicensing web page and check your emails frequently for notices, etc. Thanks, Malcolm. Any questions, wk 777-7652 hm 781-4752

>>
As we discussed in the meeting yesterday, I am sending out an inquiry about the different groups represented in the Safety RCG. If you were not able to attend yesterday, we would still be interested in your organization.

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Thanks for your response!

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Kleinschmidt Associates
4958 Valleydale Rd., Ste. 250
Birmingham, AL 35242
Ph: 205-981-4547x240
FAX: 205-981-4549
Dave.Anderson@KleinschmidtUSA.com

----- End forwarded message -----

----- End forwarded message -----

Kacie Jensen

From: Norm [norm@sc.rr.com]
Sent: Tuesday, November 22, 2005 7:06 AM
To: Dave Anderson
Subject: Fw: Safety Organizations and Responsibilities

----- Original Message -----
From: Norm
To: Malcolm Leaphart
Sent: Tuesday, November 22, 2005 7:04 AM
Subject: Re: Safety Organizations and Responsibilities

1. Name of Organization

   Saluda River Chapter Trout Unlimited

2. Safety Isssues Involved In

   River wade fishing safety, water flows, boating and swift water rescue.

3. Geographic Area Covered

   Lower Saluda River

4. Number of Personnal

   325 chapter members

> ----- Original Message -----
> **From:** Malcolm Leaphart
> **To:** Norm@sc.rr.com
> **Sent:** Friday, November 18, 2005 1:37 PM
> **Subject:** Fwd: Safety Organizations and Responsibilities
>
> Norm - Did you attend the Safety RCG meeting Wednesday? If so, Dave Anderson of Kleinscmidt does not have you in his email list... let him know if you want to follow this issue.
>
> Would you complete the below safety questionaire for the chapter - whether you attended Wednesday or not??? CC me in your reply. And if you don't, please let me know so that I can see that it gets done for the chapter??? Thanks, Malcolm.
> Any questions,
> wk 777-7652
> hm 781-4752

----- Forwarded message from Dave Anderson <Dave.Anderson@KleinschmidtUSA.com> -
----
Date: Thu, 17 Nov 2005 16:56:17 -0500
From: Dave Anderson <Dave.Anderson@KleinschmidtUSA.com>
Reply-To: Dave Anderson <Dave.Anderson@KleinschmidtUSA.com>
Subject: Safety Organizations and Responsibilities
To: Alison Guth
<Alison.Guth@KleinschmidtUSA.com>, "'arsbhs@bellsouth.net'"
<arsbhs@bellsouth.net>, "'cfdwaxson@columbiasc.net'"
<cfdwaxson@columbiasc.net>, Alan Stuart
<Alan.Stuart@KleinschmidtUSA.com>, "'marshallb@dnr.sc.gov'"
<marshallb@dnr.sc.gov>, "'bill25@sc.rr.com'"
<bill25@sc.rr.com>, "'cheetahtrk@yahoo.com'"
<cheetahtrk@yahoo.com>, "'pricedc@dhec.sc.gov'"
<pricedc@dhec.sc.gov>, "'dchristie@infoave.net'"
<dchristie@infoave.net>, "'eschnepel@sc.rr.com'"
<eschnepel@sc.rr.com>, "'kayakduke@bellsouth.net'"
<kayakduke@bellsouth.net>, "'gjobsis@americanrivers.org'"
<gjobsis@americanrivers.org>, "'meddynamic@aol.com'"
<meddynamic@aol.com>, "'kakustafik@columbiasc.net'"
<kakustafik@columbiasc.net>, "'Skfox@Bellsouth.net'"
<Skfox@bellsouth.net>, "'Lbarber@sc.rr.com'"
<Lbarber@sc.rr.com>, "'Malcolml@mailbox.sc.edu'"
<Malcolml@mailbox.sc.edu>, "'miriam@lakemurraycountry.com'"
<miriam@lakemurraycountry.com>, "'PatrickM@scccl.org'"
<PatrickM@scccl.org>, "'bellsteve9339@bellsouth.net'"
<bellsteve9339@bellsouth.net>, "'suzrhodes@juno.com'"
<suzrhodes@juno.com>, "'tboozer@scana.com'"
<tboozer@scana.com>, "'bargentieri@scana.com'"
<bargentieri@scana.com>, "'rmahan@scana.com'" <rmahan@scana.com>

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Number of Personnel (dedicated to safety activities around the lake or LSR)

If there is anything else you think would be beneficial for the group to know, just add it to the above list.

Please have your response to me by December 8th so that I have time to compile the information and redistribute before the next meeting.

Thanks for your response!

David K. Anderson, Ph.D.
Recreation/Human Dimensions Specialist
Kleinschmidt Associates
4958 Valleydale Rd., Ste. 250
Birmingham, AL 35242
Ph: 205-981-4547x240
FAX: 205-981-4549
Dave.Anderson@KleinschmidtUSA.com

----- End forwarded message -----

Kacie Jensen

From: Aaron Small [arsbhs@bellsouth.net]
Sent: Tuesday, November 22, 2005 3:35 PM
To: Dave Anderson
Subject: Re: Safety Organizations and Responsibilities

Dr. Anderson, I am Aaron Small, Vice Commander of Lake Murray Coast Guard Aux.Lake Murray Station. Our primary mission is boating safety, education and water rescue on Lake Murray and we serve all of S.C. Inland and Coastal waters on request from USCG Sector Charleston. . We have 48 members and eight equipped Coast Guard Aux. boats that meet the USCG requirements. My concern is a major accident on Lake Murray that would involve 50 to 100 people.If that was to happen and Charleston Sector equipment is not on a mission we can get Helicopters and additional boats. Thanks Aaron Small

> ----- Original Message -----
> **From:** Dave Anderson
> **To:** Alison Guth ; 'arsbhs@bellsouth.net' ; 'cfdwaxson@columbiasc.net' ; Alan Stuart ; 'marshallb@dnr.sc.gov' ; 'bill25@sc.rr.com' ; 'cheetahtrk@yahoo.com' ; 'pricedc@dhec.sc.gov' ; 'dchristie@infoave.net' ; 'eschnepel@sc.rr.com' ; 'kayakduke@bellsouth.net' ; 'gjobsis@americanrivers.org' ; 'meddynamic@aol.com' ; 'kakustafik@columbiasc.net' ; 'Skfox@Bellsouth.net' ; 'Lbarber@sc.rr.com' ; 'Malcolml@mailbox.sc.edu' ; 'miriam@lakemurraycountry.com' ; 'PatrickM@scccl.org' ; 'bellsteve9339@bellsouth.net' ; 'suzrhodes@juno.com' ; 'tboozer@scana.com' ; 'bargentieri@scana.com' ; 'rmahan@scana.com'
> **Sent:** Thursday, November 17, 2005 4:56 PM
> **Subject:** Safety Organizations and Responsibilities
>
> As we discussed in the meeting yesterday, I am sending out an inquiry about the different groups represented in the Safety RCG. If you were not able to attend yesterday, we would still be interested in your organization.
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>
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> Please have your response to me by December 8th so that I have time to compile the information and redistribute before the next meeting.
>
> Thanks for your response!
>
> ---
> David K. Anderson, Ph.D.

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Birmingham, AL 35242
Ph: 205-981-4547x240
FAX: 205-981-4549
Dave.Anderson@KleinschmidtUSA.com

Kacie Jensen

From: Lee Barber [lbarber@sc.rr.com]
Sent: Monday, November 21, 2005 9:59 PM
To: Dave Anderson
Subject: Re: Safety Organizations and Responsibilities

David
Lee Barber responds. I represent the LMA. I am also a member of the Lake Murray Power Squadron. If for some reason you do not get a response from the latter please advise but I feel certain you will.
The LMA is an organization representing all homeowners and users of Lake Murray. We have been organized for nearly 12 years. Safety is one of our issues/concerns and we have a committee dedicated to this subject. A report is made to our board at each monthly meeting as it is a standing agenda item. We are interested in safety education and laws. We were quite instrumental in the enactment of "Drew's Law". Working with DNR we have sponsored Ladies Day on the Lake for several years This is a hands on boating course that has been especially successful. For a couple of years we also brokered a county fair safety program at the dam that was not well attented and thus interest was lost. Several years ago a number of agencies and activities involved or interested in Lake Safety met on a monthly basis to exchange information. For various reasons this activity ceased to function. As you probably are aware I want to see this reactivated. I have been involved in the LMA for about 10 years. For the first five I chaired a very active safety commitee. I have a 50 ton master's USCG Captain license for 200 miles off shore and have owned boats for 55 years. I have a personal and keen interest in safe boating. I see boating as a wonderful recreation but one that has great potential for disaster in the hands of the wrong persons.
I am thus most appreciative that SCE&G has agreed to make this a subject for relicensing.

----- Original Message -----
From: Dave Anderson
To: Alison Guth ; 'arsbhs@bellsouth.net' ; 'cfdwaxson@columbiasc.net' ; Alan Stuart ; 'marshallb@dnr.sc.gov' ; 'bill25@sc.rr.com' ; 'cheetahtrk@yahoo.com' ; 'pricedc@dhec.sc.gov' ; 'dchristie@infoave.net' ; 'eschnepel@sc.rr.com' ; 'kayakduke@bellsouth.net' ; 'gjobsis@americanrivers.org' ; 'meddynamic@aol.com' ; 'kakustafik@columbiasc.net' ; 'Skfox@Bellsouth.net' ; 'Lbarber@sc.rr.com' ; 'Malcolml@mailbox.sc.edu' ; 'miriam@lakemurraycountry.com' ; 'PatrickM@scccl.org' ; 'bellsteve9339@bellsouth.net' ; 'suzrhodes@juno.com' ; 'tboozer@scana.com' ; 'bargentieri@scana.com' ; 'rmahan@scana.com'
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Birmingham, AL 35242
Ph: 205-981-4547x240
FAX: 205-981-4549
Dave.Anderson@KleinschmidtUSA.com

Kacie Jensen

From: MedDynamic@aol.com
Sent: Friday, November 18, 2005 10:37 AM
To: Dave Anderson
Subject: Re: Safety Organizations and Responsibilities

Hello Dave:

I am Jerry Wise and serve in several capacities and will list them below.

Name of Organization

US Power Squadron. Safety Officer
Hollow Creek Fire Department: Rescue 2 and EMS First Response
Lex. Cty. EMS: CPR training and EMS part time. Work with them on Lake safety.

Type of Safety Activities Involved In (such as swift water rescue, boater safety education, etc.)

Boater Safety, CPR Training, Rescue, EMS First Response

Geographic Area Covered

For the Power Squadron, Lake Murray Squadron
For EMS and Fire Rescue Lexington County

Number of Personnel (dedicated to safety activities around the lake or LSR)

Power Squadron - 3, Fire Rescue at Hollow Creek - 24, EMS-100+

Thank you, Jerry Wise

Kacie Jensen

From: Axson, William [cfdwaxson@columbiasc.net]
Sent: Friday, November 18, 2005 8:54 AM
To: Dave Anderson
Subject: RE: Safety Organizations and Responsibilities

Subject: Safety Organizations and Responsibilities

Name of Organization Columbia Fire department

Type of Safety Activities Involved In Swiftwater rescue

Geographic Area Covered City of Columbia City Limits & Within Richland County- Outside richland County when called

Number of Personnel 36-40

If there is anything else you think would be beneficial for the group to know, just add it to the above list.

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Kacie Jensen

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Sent: Thursday, November 17, 2005 4:56 PM
To: Alison Guth; 'arsbhs@bellsouth.net'; 'cfdwaxson@columbiasc.net'; Alan Stuart; 'marshallb@dnr.sc.gov'; 'bill25@sc.rr.com'; 'cheetahtrk@yahoo.com'; 'pricedc@dhec.sc.gov'; 'dchristie@infoave.net'; 'eschnepel@sc.rr.com'; 'kayakduke@bellsouth.net'; 'gjobsis@americanrivers.org'; 'meddynamic@aol.com'; 'kakustafik@columbiasc.net'; 'Skfox@Bellsouth.net'; 'Lbarber@sc.rr.com'; 'MalcolmI@mailbox.sc.edu'; 'miriam@lakemurraycountry.com'; 'PatrickM@scccl.org'; 'bellsteve9339@bellsouth.net'; 'suzrhodes@juno.com'; 'tboozer@scana.com'; BARGENTIERI@scana.com; RMAHAN@scana.com
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Ph: 205-981-4547x240
FAX: 205-981-4549
Dave.Anderson@KleinschmidtUSA.com

Kacie Jensen

From: Alison Guth
Sent: Monday, November 14, 2005 4:18 PM
To: 'arsbhs@bellsouth.net'; 'cfdwaxson@columbiasc.net'; Alan Stuart; 'marshallb@dnr.sc.gov'; 'bill25@sc.rr.com'; 'cheetahtrk@yahoo.com'; Dave Anderson; 'pricedc@dhec.sc.gov'; 'dchristie@infoave.net'; 'eschnepel@sc.rr.com'; 'kayakduke@bellsouth.net'; 'gjobsis@americanrivers.org'; 'meddynamic@aol.com'; 'kakustafik@columbiasc.net'; 'Skfox@Bellsouth.net'; 'Lbarber@sc.rr.com'; 'Malcolml@mailbox.sc.edu'; 'miriam@lakemurraycountry.com'; 'PatrickM@scccl.org'; 'bellsteve9339@bellsouth.net'; 'suzrhodes@juno.com'; 'tboozer@scana.com'; 'bargentieri@scana.com'; 'rmahan@scana.com'
Subject: Safety Agenda & RSVP

Good Afternoon All:

Attached to this email is the agenda for the Safety Resource Conservation Group. If you know that you will **not** be able to attend Wednesday's meeting, please let me know by tomorrow morning, if at all possible. This will allow me enough time to make any adjustments with the catering service. Thanks so much, and hope to see you all there.

Sincerely,
Alison

Safety RCG Agenda.pdf (86 KB)

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
101 Trade Zone Drive
Suite 21A
West Columbia, SC 29170
P: (803) 822-3177
F: (803) 822-3183

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

November 16, 2005
9:30 AM
Lake Murray Training Center

- **9:35 to 9:45** Introduction
  - SCE&G and KA Staff
  - Resource Agency Representatives
  - NGO Representatives
  - Individuals
- **9:45 to 10:00** Purpose of Resource Groups
- **10:00 to 11:00** **Presentation – Saluda Hydro Operations – Lee Xanthakos SCANA Services**
- **11:00 to 11:45** Develop Safety RCG Mission Statement
- **11:45 to 12:45** Lunch
- **1:00 to 2:00** Discuss Safety RCG procedures
- **2:00 to 2:30** Develop List of Homework Assignments
- **2:30 to 2:45** Develop an Agenda for Next Meeting
- **2:45 to 3:00** Set Next Meeting Date

  Adjourn

Saluda HYDRO RELICENSING

Kacie Jensen

From: Dave Anderson
Sent: Monday, November 27, 2006 3:35 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 10-24-2006 Final Safety RCG Meeting Notes

Here are the final meeting notes from our October 24th meeting.

2006-10-24
Meeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
October 24, 2006

final dka 11-27-06

ATTENDEES:

Name	Organization	Name	Organization
Alison Guth	Kleinschmidt Associates	Dave Anderson	Kleinschmidt Associates
Bill Argentieri	SCE&G	Alan Stuart	Kleinschmidt Associates
Tom Eppink	SCANA Services, Inc.	Tommy Boozer	SCE&G
David Hancock	SCE&G	Steve Bell	Lake Watch
Ed Schnepel	LMA	Kenneth Fox	LMA
Tony Bebber	SCPRT	Joy Downs	LMA
Lee Barber	LMA	Richard Mikell	Adventure Carolina
George Duke	LMHOC	Malcolm Leaphart	TU
Bret Hoffman	Kleinschmidt Associates	Bill Mathias	LMA & LMPS
Bill Marshall	SCDNR, LSSRAC	Charlene Coleman	American Whitewater
Patrick Moore	SCCCL, Am. Rivers	Mike Waddell	TU

HOMEWORK ITEMS:

- Steve Bell—contact Winward Point Yacht Club and discuss whether or not there are any areas in which power lines pose a problem
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- Tom Eppink—research specifics of shoal marker law

PARKING LOT ITEMS:

- None

DATE OF NEXT MEETING: **March 20, 2007 (tentative) at 9:30 a.m.**
Located at the Lake Murray Training Center

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 welcomed the group. In reviewing a few of the past Action Items, Dave noted that he has issued the Final Study Plan for the Recreational Flow Assessment. He explained that this study will include both land and water based reconnaissance of the river and will include the placement of water level data loggers that will record water level changes in the river over a period of time. The group posed no questions on this document and moved to the next item on the agenda.

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- Education About
- What to do in an Emergency
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- Word of mouth
- Signage
- Internet
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- Tourism Department
- University South Carolina 101
- High Schools
- Local Outfitters
- Call Down System
- Marinas/Parks
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The group noted that the safety information that needed priority was the following:

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was the take-off and landing that raised concerns. Tom E. noted that the only way to resolve this was to ask the FAA to restrict the airspace. The group also discussed the potential for submarines in the future. Tom E. noted that he would research non-traditional vehicles and the laws that deal with them. The group also noted that unforeseen items can be addressed in the Safety Committee that is ongoing after relicensing.

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Accident Data Collection

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- Blood alcohol level
- Fatalities
- What type of vessel
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Dave noted that he was working on placing the existing information in some type of form. However, Dave noted that he had problems obtaining the information from DNR, who noted they could not release personal information. Tom E. noted that he felt confident that they could request redacted copies. Joy D. added that a Colonel Alvin Taylor could assist Dave in obtaining this information. Dave explained that this information could provide information on whether there were patterns to accidents, and what the causes are (shoals, congestion). He continued to explain that SCE&G could then take this information and use it in lake and land management decisions.

Develop an Agenda for Next Meeting and Set Next Meeting Date

Before adjourning the meeting, the group discussed the schedule. Dave noted that the group was waiting on a lot of data to come back. Therefore, it may be better to have the next RCG meeting in the spring of 2007. The group tentatively chose March 20th as the next meeting date. It was also

noted that there would be a meeting to discuss the safety program and that Dave would email the RCG to see who would be interested.

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

October 24, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 10:00** Downstream Recreation Flow Assessment Study Plan Questions (Dave Anderson)
- **10:00 to 10:30** Location of Additional Sirens on LSR (Dave Anderson)
- **10:30 to 10:45** BREAK
- **10:45 to 11:45** Communication System Needs (Dave Anderson)
- **11:45 to 12:00** HEC-ResSim Model Discussion (Dave Anderson)
- **12:00 to 1:00** LUNCH
- **1:00 to 2:00** Identified Issues – Power Lines and Amphibious Aircraft (Dave Anderson)
- **2:00 to 2:15** BREAK
- **2:15 to 2:45** Accident Data Collection (Dave Anderson)
- **2:45 to 3:00** Develop an Agenda for Next Meeting and Set Next Meeting Date

  Adjourn

Saluda HYDRO RELICENSING

Kleinschmidt
Energy & Water Resource Consultants

Comments from Charlene Coleman: I'd like to add using the inserts in SCE&G bills as a way to inform the public as to lake and river dangers, warnings, web site information and what they mean to the public using the resources. education should be a primary concern and target, just like Drivers Ed, investments, car buying and voting.

I don't think horns or sirens are the perfect answer to the problem. Both of these warning methods are much to intrusive for a normally peaceful river. Lights at key areas and a more something less obnoxious in the more remote areas would be worth investigating.

Markers, signage and a serious public information push would go a long way towards helping the situtation. I hate to throw water so to speak on everyone's stress but there is a certain amount of responsibility everyone has to there own safety too. the river or the lake are both oxygen poor environments and that's just a fact.

Saluda Hydro is not the silver bullet for all power issues for reserve capacity. This Summer after the lower Zoo siren was installed there was a reserve need, and the siren worked well with the first 2 inches of rise and length of time for each area. Also a less rapid rate of change was used than the normal, all at once, technique. As a result no rescues were needed, things went off with out any problems, power was covered and at a time when peak use and system use was at it's highest demand. the 20 minutes it took to raise the water a little slower at the onset, gave everyone time to get off the water. I find it hard to believe this technique can't be used more often if not, exceptionally so in high public use times of the year.

To note also, the recreational flow studies will need to be carefully thought through and a "meeting of the minds" for "known" levels should be compiled first before we waste any more time on shuffling issues.

Comments from Tom Eppink: Inserts may be worth exploring, if they can be targeted – we have more than 600,000 customers, most of who probably don't need to be educated as much as others.

From a legal stand point, SCE&G is interested in doing what is right and reasonable to make the Lower Saluda safer, understanding, of course, that no body of water can ever be made truly "safe." And just as the river can never be made perfectly safe, SCE&G can never completely escape liability. No matter what we do, we cannot reach everybody with our message of safety – some will continue to make uniformed, impaired, or just plain old dumb decisions, and those decisions will occasionally have dire consequences. Having just been treated to the spectacle of one Lexington County man shooting his friend over a $20 bet on the USC/Clemson game [Sadly, now national news:
http://sportsillustrated.cnn.com/2006/football/ncaa/11/26/bc.fbc.footballbet.shoo.ap/index.html?cnn

=yes] I become more and more convinced that there is a limit to what we can do to effectuate safety and a point beyond which that it is simply pointless to try.

Comments from Charlene Coleman: "you can lead a horse to water...."

All true, and that's a prime example of the shallower end of the local gene pool.

We have to understand those not bright enough, are why RESCUE became a profession and many have had to reinvent the wheel, mouse trap, napkin and a couple other things to save them from themselves and not get one of the rescuers killed.

But in the end of the day I can only rest when I know we did what we could.

one day that game will end up in a classroom being played on one of those vibrating football games from the dark ages....(made you laugh)....and you have to pass an emotional stability test to get the score afterwards.

Legend

- Existing Warning Devices
- Project Boundary
- Suggested Warning Devices

1 " equals 1,400 '

Scale	AS SHOWN
Project No	455-029
Filename Potential Warning System	
Drawn By	DKA
Date Drawn	10-17-2006

SOUTH CAROLINA ELECTRIC & GAS
COLUMBIA, SC

SALUDA HYDROELECTIC PROJECT
P-516

SUGGESTED LOCATION OF RISING WATER WARNING DEVICES IN THE LSR

Kleinschmidt
Energy & Water Resource Consultants
101 Trade Zone Dr., Ste. 21A
West Columbia, SC 29170
phone: (803) 822-3177
fax: (803) 822-3183
www.KleinschmidtUSA.com

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Kacie Jensen

From: Dave Anderson
Sent: Monday, November 20, 2006 12:04 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: Reminder: 10-24-06 Draft Safety RCG Meeting Notes

I have received a few comments on these notes. Although they are scheduled to be finalized on Friday, due to the holidays, they will not be finalized until next Monday.

2006-10-24 Meeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
October 24, 2006

draft dka 11-20-06

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ATTENDEES:

Name	Organization	Name	Organization
Alison Guth	Kleinschmidt Associates	Dave Anderson	Kleinschmidt Associates
Bill Argentieri	SCE&G	Alan Stuart	Kleinschmidt Associates
Tom Eppink	SCANA Services, Inc.	Tommy Boozer	SCE&G
David Hancock	SCE&G	Steve Bell	Lake Watch
Ed Schnepel	LMA	Kenneth Fox	LMA
Tony Bebber	SCPRT	Joy Downs	LMA
Lee Barber	LMA	Richard Mikell	Adventure Carolina
George Duke	LMHOC	Malcolm Leaphart	TU
Bret Hoffman	Kleinschmidt Associates	Bill Mathias	LMA & LMPS
Bill Marshall	SCDNR, LSSRAC	Charlene Coleman	American Whitewater
Patrick Moore	SCCCL, Am. Rivers	Mike Waddell	TU

HOMEWORK ITEMS:

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MEETING NOTES

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SALUDA HYDRO PROJECT RELICENSING
SAFETY RESOURCE CONSERVATION GROUP

LAKE MURRAY TRAINING CENTER
October 24, 2006

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Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

Kacie Jensen

From: Malcolm Leaphart [malcolml@mailbox.sc.edu]
Sent: Tuesday, November 14, 2006 2:55 PM
To: Dave Anderson
Cc: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; BARGENTIERI@scana.com; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; turnerle@dhec.sc.gov; Lee Barber; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; RMAHAN@scana.com; Roger Hovis; Skeet Mills; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: Re: 10-24-2006 Draft Safety RCG Meeting Notes

Dave, Additional comments to be added, under the section titled "Location of Additional Sirens on LSR". I remember the discussion and main points, but not every word. The following will hopefully provide a clear summary of what I intended. Thanks...

Malcolm Leaphart questioned the warning systems not being triggered until there is a two inch rise in the water level registered a short ways upstream, instead of being triggered when water is released at the dam. In some cases, such as a full release from all five turbines, the time from when the two inch rise is measured until it reaches the warning area could be too short for safe exit. There was a concern about the length of time before rising waters would reach the lower areas, but he noted that allowances for each of the warning areas could be calculated at different flows to factor them in so that the warning is not so long in duration that people would ignore it. Malcolm also suggested that the maximum amount of time possible be given for warnings, but for for the sake of consistency, a 30 minute sounding before an area is affected could be implemented - except of course for the upper areas where the time would be less. A possibility would be to use different colored lights. For example, orange or yellow flashing lights could mean that water has been released (that would raise the flow at least two inches), and red could mean that the gage registering the two inch increase upstream of the warning system had been triggered.

Quoting Dave Anderson <Dave.Anderson@KleinschmidtUSA.com>:

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> meeting. Please have any comments/changes back to me by November
> 24th.
>
> <<2006-10-24 Meeting Notes - Safety (DRAFT).doc>>
>

Kacie Jensen

From: Dave Anderson
Sent: Friday, November 10, 2006 11:44 AM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
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2006-10-24
Meeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
October 24, 2006

draft dka 11-10-06

ATTENDEES:

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David Hancock	SCE&G	Steve Bell	Lake Watch
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- None

DATE OF NEXT MEETING: **March 20, 2007 (tentative) at 9:30 a.m.**
Located at the Lake Murray Training Center

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.

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Location of Additional Sirens on LSR

Dave noted that the next topic of discussion was regarding the location of additional warning sirens on the lower Saluda River (LSR). The group examined a map of the LSR and Dave encouraged the group to indicate areas on the map where they felt additional warning sirens were most needed. Dave pointed out that Trout Unlimited has already provided dot locations where they believe sirens are most necessary. Bill Marshall noted that the section of the river near the tailrace was probably the section of river that needed the best warning system, as it has the most rapid rate of change. Dave replied that the level loggers will provide much needed information on this issue. Dave also noted that Corley Island appeared to be a high use area. He then asked the group if there were any needs for sirens in the stretch of river down to Gardendale. Malcolm Leaphart noted that it would probably not be necessary as it is flat water.

The group also discussed alternate warning systems. Leaphart suggested that strobe lights be used at certain sections of the river. Dave also noted that SCE&G is currently testing a phone call/email warning system as well. Bill Argentieri further pointed out that the purpose of the phone warning system is not to replace the sirens, but to add to the available information. Bill M. noted that he had received feedback on the call-down program and it was suggested that there be amount of discharge information with the message. Argentieri noted that they had discussed this, however there were legal issues involved with providing this information. Patrick Moore asked if the system could be configured in such a way that the sirens only functioned during the daylight hours and strobe lights functioned at night.

The group continued to discuss different methods of warning systems. There was extensive discussion on a multi-tiered type warning system. Bill A. noted that he believed that a complex multi-tiered warning system would send the wrong message to recreators. He explained that the idea that they wanted to focus on is “when the sirens go off, then the individuals need to exit the

water." Alan Stuart noted that an important component of the Safety RCG would be education on this issue. The group agreed.

Malcolm noted that more information on releases would help determine how to approach the river, whether to wade or go out by boat. Bill A. reiterated that they were concerned with informing the individuals that they needed to leave the water due to rising water levels. Bill A. explained that if they inform the individuals of cfs, and it is originally planned to be only 3000 cfs and SCE&G has to go up to 18000 cfs for some reason, then they could be distributing misleading information. Dave explained that the group was discussing two different items, immediately warning individuals of rising water levels, and providing more information for the more educated river users. The group was informed that SCE&G is currently working on developing a website that provides their 48-hour schedule for generation to their best possible knowledge. It was noted that reserve calls could not be predicted and thus could not be included on a long-range schedule. Many individuals agreed that the warning system had to be simple enough for the average recreating public to understand; however, the group was looking at ways of disseminating information to the more educated river users as well.

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After a short break the group discussed communication system needs. Through an interactive exercise, the following list was developed:

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The group noted that the safety information that needed priority was the following:

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- Reserve calls

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when discussing lake levels. First, that the Water Quality RCG was looking at a periodic drawdown for water quality benefits. Second, that even if SCE&G has a target range of 354' during the year, there still may be the need to take the lake down to 345' for maintenance on the dam or the towers. Dave noted that once an appropriate lake level is decided on, the group could then look at shoal issues at that lake level.

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Dave passed out the issues matrix and asked the group to look at it and let him know if there is anything else that the group would like to add to it.

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The final item on the agenda was to discuss accident data collection. Dave asked the group if there was any information besides location that the group would like to see DNR collect from an accident. The group compiled the following list:

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- Fatalities
- What type of vessel
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- Age
- Cause
- Time of day
- Time of year

Dave noted that he was working on placing the existing information in some type of form. However, Dave noted that he had problems obtaining the information from DNR, who noted they could not release personal information. Tom E. noted that he felt confident that they could request redacted copies. Joy D. added that a Colonel Alvin Taylor could assist Dave in obtaining this information. Dave explained that this information could provide information on whether there were patterns to accidents, and what the causes are (shoals, congestion). He continued to explain that SCE&G could then take this information and use it in lake and land management decisions.

Develop an Agenda for Next Meeting and Set Next Meeting Date

Before adjourning the meeting, the group discussed the schedule. Dave noted that the group was waiting on a lot of data to come back. Therefore, it may be better to have the next RCG meeting in the spring of 2007. The group tentatively chose March 20th as the next meeting date. It was also noted that there would be a meeting to discuss the safety program and that Dave would email the RCG to see who would be interested.

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

October 24, 2006
9:30 AM
Lake Murray Training Center

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Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

Kacie Jensen

From: Patrick Moore [PatrickM@scccl.org]
Sent: Friday, November 10, 2006 11:55 AM
To: Dave Anderson
Subject: RE: 10-24-2006 Draft Safety RCG Meeting Notes

Dave,
Changes included.

The minutes are a poor reflection of what people actually say.

Patrick

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SALUDA HYDRO PROJECT RELICENSING
SAFETY RESOURCE CONSERVATION GROUP

LAKE MURRAY TRAINING CENTER
October 24, 2006

draft dka 11-10-06

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Patrick Moore pointed out that while reserve capacity would probably be in the license application, the Safety RCG would ultimately be called on to make a recommendation on the safety of reserve capacity operations vs. non reserve scenarios. He noted that the warning system location exercise was valuable but was not necessary the safest option in light of all operational possibilities.

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Cheryl Balitz

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Sent: Friday, November 10, 2006 11:44 AM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
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water." Alan Stuart noted that an important component of the Safety RCG would be education on this issue. The group agreed.

Malcolm noted that more information on releases would help determine how to approach the river, whether to wade or go out by boat. Bill A. reiterated that they were concerned with informing the individuals that they needed to leave the water due to rising water levels. Bill A. explained that if they inform the individuals of cfs, and it is originally planned to be only 3000 cfs and SCE&G has to go up to 18000 cfs for some reason, then they could be distributing misleading information. Dave explained that the group was discussing two different items, immediately warning individuals of rising water levels, and providing more information for the more educated river users. The group was informed that SCE&G is currently working on developing a website that provides their 48-hour schedule for generation to their best possible knowledge. It was noted that reserve calls could not be predicted and thus could not be included on a long-range schedule. Many individuals agreed that the warning system had to be simple enough for the average recreating public to understand; however, the group was looking at ways of disseminating information to the more educated river users as well.

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- Call Down System
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- Conservation Group

The group noted that the safety information that needed priority was the following:

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- Special drawdowns
- Reserve calls

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The next item on the agenda was a discussion of the operations model. Dave explained that he attended the presentation on the model earlier in the month and took notes on the items he felt were important for the committee to note. Dave continued to explain that the committee would need to decide upon what flows and lake levels were needed during certain times of the year to address safety issues. Dave then asked the group if 354', 355', and 356' were appropriate lake levels to examine. Joy Downs noted that the Lake Murray Association has deemed 354' an appropriate lake level, access wise. She continued to explain that as a whole, with more development stemming into the backs of coves and such, many individuals would like the standard to be set at 356'. However, Joy D. noted that as an organization, the Lake Murray Association has deemed 354' the most appropriate for all parties involved. Bill A. pointed out a couple things for the group to consider

when discussing lake levels. First, that the Water Quality RCG was looking at a periodic drawdown for water quality benefits. Second, that even if SCE&G has a target range of 354' during the year, there still may be the need to take the lake down to 345' for maintenance on the dam or the towers. Dave noted that once an appropriate lake level is decided on, the group could then look at shoal issues at that lake level.

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- Blood alcohol level
- Fatalities
- What type of vessel
- Type of accident

- Age
- Cause
- Time of day
- Time of year

Dave noted that he was working on placing the existing information in some type of form. However, Dave noted that he had problems obtaining the information from DNR, who noted they could not release personal information. Tom E. noted that he felt confident that they could request redacted copies. Joy D. added that a Colonel Alvin Taylor could assist Dave in obtaining this information. Dave explained that this information could provide information on whether there were patterns to accidents, and what the causes are (shoals, congestion). He continued to explain that SCE&G could then take this information and use it in lake and land management decisions.

Develop an Agenda for Next Meeting and Set Next Meeting Date

Before adjourning the meeting, the group discussed the schedule. Dave noted that the group was waiting on a lot of data to come back. Therefore, it may be better to have the next RCG meeting in the spring of 2007. The group tentatively chose March 20th as the next meeting date. It was also noted that there would be a meeting to discuss the safety program and that Dave would email the RCG to see who would be interested.

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

October 24, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 10:00** Downstream Recreation Flow Assessment Study Plan Questions (Dave Anderson)
- **10:00 to 10:30** Location of Additional Sirens on LSR (Dave Anderson)
- **10:30 to 10:45** BREAK
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- **2:45 to 3:00** Develop an Agenda for Next Meeting and Set Next Meeting Date

  Adjourn

Saluda HYDRO RELICENSING

Kleinschmidt
Energy & Water Resource Consultants

Cheryl Balitz

From: Dave Anderson
Sent: Friday, November 10, 2006 11:59 AM
To: Alison Guth
Subject: FW: 10-24-2006 Draft Safety RCG Meeting Notes

Just thought I would piss you off this morning...

-----Original Message-----
From: Patrick Moore [mailto:PatrickM@scccl.org]
Sent: Friday, November 10, 2006 10:55 AM
To: Dave Anderson
Subject: RE: 10-24-2006 Draft Safety RCG Meeting Notes

Dave,
Changes included.

The minutes are a poor reflection of what people actually say.

Patrick

> -----Original Message-----
> **From:** Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
> **Sent:** Friday, November 10, 2006 11:44 AM
> **To:** Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; turnerle@dhec.sc.gov; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
> **Subject:** 10-24-2006 Draft Safety RCG Meeting Notes
>
> Here are the draft meeting notes from our October 24th Safety RCG meeting. Please have any comments/changes back to me by November 24th.
>
> <<2006-10-24 Meeting Notes - Safety (DRAFT).doc>>

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
October 24, 2006

draft dka 11-10-06

ATTENDEES:

Name	Organization	Name	Organization
Alison Guth	Kleinschmidt Associates	Dave Anderson	Kleinschmidt Associates
Bill Argentieri	SCE&G	Alan Stuart	Kleinschmidt Associates
Tom Eppink	SCANA Services, Inc.	Tommy Boozer	SCE&G
David Hancock	SCE&G	Steve Bell	Lake Watch
Ed Schnepel	LMA	Kenneth Fox	LMA
Tony Bebber	SCPRT	Joy Downs	LMA
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HOMEWORK ITEMS:

- Steve Bell—contact Winward Point Yacht Club and discuss whether or not there are any areas in which power lines pose a problem
- Tom Eppink—research laws regarding non-traditional vehicles
- Dave Anderson—obtain redacted accident data from DNR
- Tom Eppink—research specifics of shoal marker law

PARKING LOT ITEMS:

- None

DATE OF NEXT MEETING: **March 20, 2007 (tentative) at 9:30 a.m.**
Located at the Lake Murray Training Center

Kleinschmidt
Energy & Water Resource Consultants

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 welcomed the group. In reviewing a few of the past Action Items, Dave noted that he has issued the Final Study Plan for the Recreational Flow Assessment. He explained that this study will include both land and water based reconnaissance of the river and will include the placement of water level data loggers that will record water level changes in the river over a period of time. The group posed no questions on this document and moved to the next item on the agenda.

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Safety Resource Conservation Group

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Saluda HYDRO RELICENSING

Kleinschmidt
Energy & Water Resource Consultants

Cheryl Balitz

From: Dave Anderson
Sent: Monday, November 20, 2006 12:04 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: Reminder: 10-24-06 Draft Safety RCG Meeting Notes

I have received a few comments on these notes. Although they are scheduled to be finalized on Friday, due to the holidays, they will not be finalized until next Monday.

2006-10-24
Meeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
October 24, 2006

draft dka 11-20-06

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Tom Eppink	SCANA Services, Inc.	Tommy Boozer	SCE&G
David Hancock	SCE&G	Steve Bell	Lake Watch
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DATE OF NEXT MEETING: **March 20, 2007 (tentative) at 9:30 a.m.**
Located at the Lake Murray Training Center

Kleinschmidt
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The group continued to discuss different methods of warning systems. Malcolm Leaphart questioned the warning systems not being triggered until there is a two-inch rise in the water level

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registered a short ways upstream, instead of being triggered when water is released at the dam. In some cases, such as a full release from all five turbines, the time from when the two-inch rise is measured until it reaches the warning area could be too short for safe exit. There was a concern about the length of time before rising waters would reach the lower areas, but he noted that allowances for each of the warning areas could be calculated at different flows to factor them in so that the warning is not so long in duration that people would ignore it. Malcolm also suggested that the maximum amount of time possible be given for warnings, but for the sake of consistency, a 30 minute sounding before an area is affected could be implemented - except of course for the upper areas where the time would be less. A possibility would be to use different colored lights. For example, orange or yellow flashing lights could mean that water has been released (that would raise the flow at least two inches), and red could mean that the gage registering the two inch increase upstream of the warning system had been triggered. Bill A. noted that he believed that a complex multi-tiered warning system would send the wrong message to recreators. He explained that the idea that they wanted to focus on is "when the sirens go off, then the individuals need to exit the water." Alan Stuart noted that an important component of the Safety RCG would be education on this issue. The group agreed.

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- Conservation Group

The group noted that the safety information that needed priority was the following:

- Special releases
- Special drawdowns
- Reserve calls

HEC-ResSim Model Discussion

The next item on the agenda was a discussion of the operations model. Dave explained that he attended the presentation on the model earlier in the month and took notes on the items he felt were important for the committee to note. Dave continued to explain that the committee would need to decide upon what flows and lake levels were needed during certain times of the year to address safety issues. Dave then asked the group if 354', 355', and 356' were appropriate lake levels to examine. Joy Downs noted that the Lake Murray Association has deemed 354' an appropriate lake level, access wise. She continued to explain that as a whole, with more development stemming into the backs of coves and such, many individuals would like the standard to be set at 356'. However, Joy D. noted that as an organization, the Lake Murray Association has deemed 354' the most appropriate for all parties involved. Bill A. pointed out a couple things for the group to consider when discussing lake levels. First, that the Water Quality RCG was looking at a periodic drawdown for water quality benefits. Second, that even if SCE&G has a target range of 354' during the year, there still may be the need to take the lake down to 345' for maintenance on the dam or the towers. Dave noted that once an appropriate lake level is decided on, the group could then look at shoal issues at that lake level.

Identified Issues – Power Lines and Amphibious Aircraft

After lunch the group discussed some issues that have been identified in the group, power lines, and non-traditional vehicles (amphibious aircraft, submarines). Dave noted that the first item they would discuss was power lines that cross the reservoir. Tommy Boozer gave the group a brief history on this topic and explained that of the 196 power lines crossing the reservoir, only 78 are SCE&G owned. He noted that all power lines that do not meet the codes on height are in the process of being phased out. Steve Bell suggested having the sailing clubs identify areas where they feel power lines pose a threat. Steve volunteered to discuss this with Winward Point Yacht Club as a homework item.

The group then moved on to discuss non-traditional vehicles. Tom Eppink noted that once an airplane touches water it is subject to the authority of the Coast Guard. Bill Mathias noted that it

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was the take-off and landing that raised concerns. Tom E. noted that the only way to resolve this was to ask the FAA to restrict the airspace. The group also discussed the potential for submarines in the future. Tom E. noted that he would research non-traditional vehicles and the laws that deal with them. The group also noted that unforeseen items can be addressed in the Safety Committee that is ongoing after relicensing.

Dave passed out the issues matrix and asked the group to look at it and let him know if there is anything else that the group would like to add to it.

Accident Data Collection

The final item on the agenda was to discuss accident data collection. Dave asked the group if there was any information besides location that the group would like to see DNR collect from an accident. The group compiled the following list:

- Location
- Blood alcohol level
- Fatalities
- What type of vessel
- Type of accident
- Age
- Cause
- Time of day
- Time of year

Dave noted that he was working on placing the existing information in some type of form. However, Dave noted that he had problems obtaining the information from DNR, who noted they could not release personal information. Tom E. noted that he felt confident that they could request redacted copies. Joy D. added that a Colonel Alvin Taylor could assist Dave in obtaining this information. Dave explained that this information could provide information on whether there were patterns to accidents, and what the causes are (shoals, congestion). He continued to explain that SCE&G could then take this information and use it in lake and land management decisions.

Develop an Agenda for Next Meeting and Set Next Meeting Date

Before adjourning the meeting, the group discussed the schedule. Dave noted that the group was waiting on a lot of data to come back. Therefore, it may be better to have the next RCG meeting in the spring of 2007. The group tentatively chose March 20th as the next meeting date. It was also

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noted that there would be a meeting to discuss the safety program and that Dave would email the RCG to see who would be interested.

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Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

October 24, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 10:00** Downstream Recreation Flow Assessment Study Plan Questions (Dave Anderson)
- **10:00 to 10:30** Location of Additional Sirens on LSR (Dave Anderson)
- **10:30 to 10:45** BREAK
- **10:45 to 11:45** Communication System Needs (Dave Anderson)
- **11:45 to 12:00** HEC-ResSim Model Discussion (Dave Anderson)
- **12:00 to 1:00** LUNCH
- **1:00 to 2:00** Identified Issues – Power Lines and Amphibious Aircraft (Dave Anderson)
- **2:00 to 2:15** BREAK
- **2:15 to 2:45** Accident Data Collection (Dave Anderson)
- **2:45 to 3:00** Develop an Agenda for Next Meeting and Set Next Meeting Date

  Adjourn

Kacie Jensen

From: Dave Anderson
Sent: Monday, August 14, 2006 12:40 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 07-20-06 Final Safety RCG Meeting Notes

Here are the final meeting notes from our July 20th Safety RCG meeting.

2006-07-20
Meeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
July 20, 2006

final dka 08-08-06

ATTENDEES:

Name	Organization	Name	Organization
Alan Stuart	Kleinschmidt Associates	Don Eng	TU
Kelly Miller	Kleinschmidt Associates	Dave Anderson	Kleinschmidt Associates
Bill Argentieri	SCE&G	Steve Bell	Lake Watch
Bret Hoffman	Kleinschmidt Associates	Charlene Coleman	American Whitewater
Karen Kustafik	Columbia Parks & Recreation	Kenneth Fox	LMA
Malcolm Leaphart	Trout Unlimited	Bill Mathias	LMA, LMPS
Gerrit Jobsis	American Rivers	Tom Eppink	SCANA Services
George Duke	LMHC	Norm Nicholson	Lex. Co. Sherrif's Dept.
Mike Waddell	TU	Joy Downs	LMA
Patrick Moore	SCCCL	David Price	LMPS
Am. Rivers		Alice Ammons	Palmetto Richland Hospital
Randy Mahan	SCANA Services	Tommy Boozer	SCE&G
Regis Parsons	Homeowner	Richard Mikel	Adventure Carolina
Mike Dawson	River Alliance	Randy Mahan	SCANA Services

HOMEWORK ITEMS:

- Dave Anderson – modify Safety RCG Work Plan and send to group for final approval

PARKING LOT ITEMS:

- None

DATE OF NEXT MEETING: **October 24, 2006 at 9:30 a.m.**
Located at the Lake Murray Training Center

Kleinschmidt
Energy & Water Resource Consultants

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 distributed meeting agendas to the group. He briefly went over the agenda and then turned the meeting over to Mike Dawson to give a presentation on the Three Rivers Greenway.

Mike began his presentation by detailing the construction of the riverwalk system. He showed a map that displayed the exact layout of the riverwalk, including the location of restrooms, parking lots, and boat access. Mike also explained how potential problems such as flooding and maximum flows were being considered. He showed a detailed drawing of the composting toilets that are being installed and explained they are designed to limit potential damage from flooding of the restrooms. He also addressed the issue of wetlands, mentioning that the pathway will circle the wetland areas in order to preserve them. Mike also specified the various smaller pathways that will lead to and from the riverwalk to allow for easy access. After Mike finished detailing the length of the riverwalk, he addressed the installation of emergency call boxes. He said these boxes would be installed along the riverwalk, providing immediate access to a 911 operator. Mike added that a light would turn on near the call box when activated. He also said that there would be a gate for firemen and other rescue workers to easily access the riverwalk. Mike concluded his presentation stating that the new portion of the Three Rivers Greenway was scheduled to be operational by early summer in 2007. Mike then added that the International Canoe Federation was considering the Saluda River as the site for its annual canoe race and that he would like to have the riverwalk functional for that event. Mike then opened the meeting for questions.

Malcolm Leaphart asked who had police jurisdiction in regards to the call boxes. Mike answered that police from the University of South Carolina and other city police have an agreement on who will take jurisdiction in the various areas. He said that the law enforcement wants to be proactive. Mike also added that there will be active patrolling around the river including security guards on golf carts.

Bret Hoffman asked if the walkway would be located above the high water mark during periods of high flows; Mike replied that they are not, but it should not matter as any flooding will not affect the walkway.

Steve Bell then asked if there was any idea of what to expect in the next thirty years in terms of recreational activity on the river. Mike answered that there was no accurate prediction of the amount of recreational activity that the Saluda River will see in thirty years. He said that a

probability analysis could be done based on population, but the accuracy would not be very reliable. Mike predicted that as many as 450 people per hour would use the greenway after completion.

Charlene Coleman brought up the issue of an increased budget for training rescuers. She stated that by adding more access to the river, there would be a rise in river use, causing an increased need for additional trained rescuers. Mike agreed that more resources were needed and that the budget did need to expand to include this issue. Charlene then asked if there would be some type of public education informing people on the new access routes. Mike answered that the State newspaper has already begun running articles about the greenway.

Dave asked if there were plans to expand the riverwalk above Interstate 26, towards Saluda Shoals. Mike answered that Saluda Shoals has put in grant requests to do their own expansions. He added that this would be funded by the cities of Columbia and West Columbia, highway funds, and local school districts. Mike added that the Three Rivers Greenway project does not have the budget to expand towards Saluda Shoals.

After a break, Dave reconvened the meeting and then turned it over to Bret Hoffman to give the group an update on the installation of the new warning siren on the Saluda River. Bret began by stating that the pole was in place and the rest of the equipment would be installed within the next week. He added that noise testing would be done on Thursday to determine if the siren noise could be reduced, in consideration of nearby neighborhoods. The new siren would be operational following that noise test. Malcolm then asked Bret where this new siren was located. Bret answered that it was at the left of the Riverbanks Zoo parking lot, covering the rapids in that area and the downstream side of the zoo. Mike Waddell then asked how long the siren will sound after activation. Bill Argentieri answered that it will sound for three minutes after initial activation. He added that the siren will be activated after a three inch rise in water level, changed from a ¾ inch rise, and that the siren will be reactivated after each rise. Bill then said that a strobe will also be triggered and will flash for sixteen minutes. Bill also added that this system runs on a three minute time delay. Charlene said that she felt that people in the river needed that extra three minutes to move to safety. Bill replied that the system can be adjusted. Malcolm asked if the siren and strobe were activated by a drop in water level. It was stated that the warning siren system was only initiated by rising water levels.

Dave then distributed copies of the Safety RCG Work Plan (attached) for discussion and the issue of having a safety plan versus a program was introduced. Bill Mathias said that a safety plan would be integrated into the FERC license, but the creation of a safety program would not, which would allow for easier modifications. Malcolm asked what assurance there is if a safety program is created. He wanted to know how it could be included into the license. Overall, the group expressed concern over the fact that a program could eventually be absolved, but a plan could not, since it

would be included in the license. Patrick M. pointed out that regardless of the plan vs. program decision, the final settlement terms will be enforceable in a court of competent jurisdiction by any signatory. Bill Mathias said that the safety program would be a partial liability absolver, and there would be no reason to terminate the program. Charlene added that the plan could include specifics about stakeholders involved and meeting times for the program. This would ensure that mention of the program was included as part of the license. Joy Downs said that some of the issues were like apples and oranges, and that some of the larger issues could be discussed in the FERC plan and the other issues could be dealt with in the program. Tom Eppink said that there were some issues that had to be included in the license, as required by FERC, but others could be dealt with in the program. Tom also reiterated that there will be unannounced releases in order for Saluda to meet reserve generation requirements and the group should move forward based on this. Patrick replied that this statement is erroneous and that no evidence has been presented to stakeholders that demonstrates operations are capable of compliance with state numeric water quality standards, state narrative standards, the Clean Water Act, Federal Power Act, Endangered Species Act, and other applicable law. Several other stakeholders also spoke up in disagreement with Tom's statement and restated their expectations the RCG would be an open forum where all issues and alternatives could be discussed. The group then agreed that we can amicably, yet seriously, disagree on this issue.

Dave Anderson then directed the discussion back to the specifics of the work plan. The group decided that the identified issues would be better separated into lower Saluda River issues and Lake Murray issues.

Before the group broke for lunch, Don Eng recounted his experience during a recent release on the Saluda River. Don explained that he was fishing when he saw a large amount of water rushing towards him, washing him downstream for approximately one block. He said that he clung to branches to stay above the water, and was eventually rescued by some kayakers. He added that during this struggle, he watched a family get washed downstream and out of his sight. Don wanted to state that real people are affected by the water releases on the river. After Don's recount, there was discussion regarding the need for in-stream recreators to use appropriate safety equipment and the lack thereof in this particular case.

After lunch, discussion on the work plan continued. During the discussion, the issue of how to attain accident information was raised. The Budget Control Board and SCDNR accident data were mentioned as possible sources for this information. Because of privacy issues and unreported accidents, accurate accident information is hard to acquire. The group agreed to continue thinking about this issue.

The RCG Responsibilities section of the Work Plan initiated a discussion on whether the Safety RCG takes hierarchy over the other RCGs. The group then decided that safety should be compatible with all of the RCGs, allowing for compromise between the groups.

The group agreed on the changes made to the Safety RCG Work Plan (The updated work plan is attached).

Dave then directed the discussion to focus on the Safety Program Outline (attached). Again, the issue of having a program versus a plan was raised. Dave stated that a safety program is acceptable to deal with issues that will continue beyond the FERC relicensing. Mike Waddell asked if the program would be submitted to FERC. Alan Stuart answered that it would be referenced through the safety plan. Dave agreed, stating that the safety program can be referenced to FERC, allowing FERC to be aware of the program. The group agreed that a safety program would be beneficial. Randy Mahan stated that this would be something good for the community. He added that including FERC in some cases would complicate the process and use extra time when making simple changes.

Malcolm asked Dave to develop 'deliverables' for each of the tasks in the Safety RCG Work Plan (Work Scope and Product Section) as those are reflective of the important issues raised to date and are the basis for the recommendations to be made to FERC. Dave indicated that he would do that. Malcolm pointed out that developing a safety program would take away from the limited time and resources of the Safety RCG in dealing with the issues and should be considered after relicensing, and definitely not as a replacement goal or deliverable of the Safety RCG as defined in the Mission Statement. Tentative revisions to the Mission Statement made earlier in the meeting to reflect a change in scope and product (deliverable) to a safety program to be administered outside of the FERC process and after license approval were removed. The language of the original mission to develop recommendations for the identified issues was reinserted to reflect that the group would continue to develop an "RCG Safety Plan" for submission to FERC for consideration to incorporate into the FERC Public Safety Plan. Tommy Boozer acknowledged that the safety program was an idea brought to SCE&G to simplify and allow for ongoing public discussions concerning safety issues on the lake. Tommy further stated that he understands, as Malcolm explained, the stakeholders want to develop recommendations for incorporation into the FERC license and not defer actions on issues until after the license is approved. Randy reiterated that FERC will want to look at alternatives in determining whether to grant a new license and explained this might include the potential to modify Saluda to get the most economic benefit possible from a minimum flow rather than just to keep spinning a unit or two with no generation and the potential to replace the runners to increase the units' maximum capacity.

Joy reiterated that the larger safety issues, such as flows, water levels, and shoal makers, should be included in the plan to FERC, and other issues should be included in the program. Tommy Boozer added that it is important to show that an effort is being made for safety in the future. The group ended the discussion by agreeing in favor of the safety program. The group agreed that developing a safety plan, addressing identified issues, and determining what recommendations need to be made back to Operations RCG should take priority, but that Bill Mathias can continue to work on the safety program. Malcolm suggested that developing a safety program after submitting the new license application might be more appropriate.

The group agreed to have the next RCG meeting in October, around the time of the next Quarterly Public Meeting. Dave suggested that the group have two separate meetings to discuss lake issues and river issues after the joint RCG meeting in September (after the operations model is finalized). No dates were set for any of these meetings. It was agreed that the group will continue to communicate by e-mail.

Comments received after this meeting are attached after the agenda.

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

July 20, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 10:30** Presentation on the Three Rivers Greenway (Mike Dawson)
- **10:30 to 10:45** BREAK
- **10:45 to 11:00** Update on Installation of Warning Siren (Bret Hoffman)
- **11:00 to 12:00** Discussion of Safety RCG Work Plan (Dave Anderson)
- **12:00 to 1:00** LUNCH
- **1:00 to 2:00** Discussion of Safety RCG Work Plan (Dave Anderson)
- **2:00 to 2:15** BREAK
- **2:15 to 3:00** Discussion of Safety Program Outline (Dave Anderson)
- **3:00 to 3:10** Develop an Agenda for Next Meeting and Set Next Meeting Date

  Adjourn

Saluda HYDRO RELICENSING

Kleinschmidt
Energy & Water Resource Consultants

Comments from Steve Bell: The Saluda Generation TWC is reviewing generation data and most likely will request additional information on specific releases. It seems a bit premature to suggest that we should agree to disagree before reviewing all the data. Also, it may be worth mentioning that all issues including SCE&G's are being tracked via spreadsheet which will result in a written record of the step by step process used to resolve the issue. I believe this will complement the meeting summaries as the official record. Finally, there appears to be no consensus, at this time, on SCE&G's issue of "maximum flexibility". We owe it to our members to review all the facts before considering an outcome.

Comments from Malcolm Leaphart: I have no further comments for either the Safety or Recreation summaries of the most recent meetings; but still have concerns about issues not addressed to date. For example, additional recreational sites as I raised to you earlier in the process, including extension of the Greenways Trail to the dam now that we have learned of the River Alliance's plans to build it up to I26, providing the needed 'safety' exit above Mill Race. You deferred those to SCE&G, but recreation sites should be discussed in the Recreation RCG and TWCs for it. Also, how will the rest of the river users out of hearing range of the 3 sirens be warned of rising water levels - and whether the sirens are a nuisance to homeowners that should not be used at all for warnings (as opposed to something less obtrusive and possibly more effective like warning lights)? Also, I am having to question Charlene about the warning system because it is not clearly documented. Recent questions have included the location of the sensors for the water level increases, whether the sirens can be triggered before water is actually released, the amount of time that a person on the river would have to exit it once a siren goes off at each location, and whether that amount of warning time is dependent on the amount or rate of water released??? That is, should there be a table created of warning times at varying flow releases? Bottom line - the current warning system and any intended changes should be clearly documented and updated as questions are raised and answered during the remainder of the relicensing process.

There will certainly be many other questions and issues once the warning system is documented thoroughly, such as the suitability of sirens in a largely residential area, how the entire tailrace down into the confluence will be alerted, etc. For example, with the 3 sirens in place now, I know of hundreds who still must 'watch the rocks' for rising water, and are extremely fearful now of the quick releases of large volumes like the over 13,000 cfs that washed Don Eng downstream in May without any chance of escaping it... see the Saluda River Trout Unlimited website for the article on river safety in the lower Saluda in the ATTENTION box - www.saludatu.org.

And of course, there is the issue of evolving to an operational mode that uses the hydro in the heavily populated Columbia metropolitan area only for base power needs, like the TVA does with announced schedules of moderate releases more in tune with the natural hydrology. The ultimate warning for this river at this point in time is of course not lights and sirens, but an announced

warning a day or more in advance as that mode of operation would allow. If I was a lawyer for the utility company, I would surely want that to be the case if I had to defend the company in a suit about a river drowning during a generation. Regardless of whatever decision is made, not even considering a change to a safer mode for the community during relicensing would certainly flaw the process.

I'm sure SCE&G would like to be considered a good corporate neighbor in the midlands, but their decisions about public safety, not words in ads, are the real factors in whether the public agrees with that description or not. And an open process with a clean slate approach will go a long way towards fostering a positive attitude for the company. Times have changed for the rivers, just as they have for Lake Murray, and continuing the past operating modes of peak power or reserve power usage should be closely examined given the heavy use of the river by the citizens, and the incorporation of the midlands rivers into the very fabric of the community as the greenways and parks are doing. In other words, it is time for a major re-thinking of the best usage of the Lake Murray hydro - for both SCE&G and the citizens who have placed their trust in them in managing public waters in an efficient and safe way.

Steve Bell has told me that there is a spreadsheet being kept by either SCE&G or Kleinschmidt of issues to make sure all issues are addressed. It would be good to have that clarified for all the stakeholders as I have only heard that from Steve, not from you or another committee leader. Would you confirm with a quick reply that a spreadsheet of issues is being kept, and follow up soon with information to all the stakeholders about it, including how it can be accessed, when it will be used in the process, etc.

Please share my comments with any others that you deem appropriate beyond my limited distribution and/or post as comments to the last Safety RCG meeting summary. However, please do not post as comments and fail to include them as topics for discussion at future meetings.

Comments from Charlene Coleman: I feel it is critical to include a **plan** to FERC on issues that do pertain to the safety of the public in regards to operation of the facility. I also agree with Steve Bell that with out the proper information to make sound decisions or agree to disagree on level ground is the only way for everyone to "feel" confident they did due process in the public's best interest, be that power or just surviving a family outing.

The program is an excellent idea and should be pursued, but not at the expense of guidelines that can not be change at whim. Therefore I do feel strongly a plan is to be offered with the program as part of the plan.

So much for semantics.

Comments from Mike Waddell: The word plan has to stay in the mission statement period. If it does not then I can assure you there will no consensus.

Safety Resource Conservation Group Work Plan
Saluda River Project

Facilitator:			
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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 concerning changes in river flows in the lower Saluda River
- creation of a public warning/notification system for river users during unannounced changes in river flows in the lower Saluda River
- fluctuating lake levels and their effect on safety
- boat traffic/congestion in cove areas related to nearby shoreline development
- fluctuating lake and river levels and their effect on recreational user safety
- placement and maintenance of shoal markers
- systematic collection of accident data on the lake and on the river
- ingress/egress to potentially hazardous areas (e.g., Mill Race)
- Lack of an advanced public information system of releases from the Lake Murray hydro plant that provides release information at least 12 hours in advance
- 'Rates of flow' from the Lake Murray hydro need a unit of measure established, and a determination of unacceptable rate levels for the safety of recreationists in the lower Saluda River
- consider alternate methods of operations besides the present "maximum flexibility" mode of operation
- Poor understanding the hazardous conditions in the river caused by hydro flows, how hazards vary from place to place, and who is affected
- Interest in managing river flows, particularly rates of increase in flow, to improve safety for river users
- fluctuating river levels and its effect on rescue resources
- flow rate recommendations for public safety concerns

Comment: Malcolm Leaphart suggests deleting this one in lieu of the item "Lack of an advanced…"

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Comment: Charlene Coleman: Redundant to #3

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Safety Resource Conservation Group Work Plan
Saluda River Project

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 on the lake and lower Saluda River.
- Identifying any studies, if applicable, that should be performed to identify and/or evaluate possible changes to Project operations (e.g., flow studies on the river).
- Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding possible modifications to current Project operations.
- Reviewing results from the Recreation Resource Conservation Group to make sure they are consistent with the mission statement of the Safety Resource Conservation Group.
- Developing a recreational safety plan for Lake Murray and the lower Saluda River that addresses all of the "Identified Issues"
- Developing a public information/warning system during unannounced changes in river flows in the lower Saluda River (including a phone call to Rescue One—Columbia Fire Department).
- Identify needed information products/systems/facilities to increase public awareness of potential hazards and necessary precautions

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Comment: Malcolm Leaphart suggests deleting.

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 and alternatives to present operations to enhance safety on the lower Saluda River.
- **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.
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- **Task 8** – Discuss results of the Operations RCG analyses.

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- **Task 9** – Develop study designs/methods/plans and review agreed upon studies, literature reviews, etc, if necessary.
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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
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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

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Safety Resource Conservation Group Work Plan
Saluda River Project

Facilitator:			
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Tommy Boozer	SCE&G	tboozer@scana.com	

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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 consensus-based recommendations to the 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

Lower Saluda River:

- level fluctuations and their effect on safety:
  - Lack of advance public information system and improvement of communications concerning changes in river flows in the lower Saluda River
  - enhancement of a public warning/notification system (warning devices) for river users during unannounced changes in river flows in the lower Saluda River
  - ingress/egress to potentially hazardous areas and its effect on rescue resources (e.g., Mill Race)
  - rate of change on the lower Saluda River for recreational safety
- systematic collection of accident data on the river

Lake Murray:

- levels and their effect on safety
- level fluctuations and their effect on safety
- boat traffic/congestion in cove areas related to nearby shoreline development
- placement and maintenance of shoal markers
- Power lines impeding sail boat navigation
- Water quality and its effect on safety being addressed by WQ RCG
- Amphibious aircraft using Lake Murray
- systematic collection of accident data on the lake

RCG Responsibilities

- Identifying specific areas where lake levels and 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 on the lake and lower Saluda River.

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- Identifying any studies, that should be performed to identify and/or evaluate possible changes to Project operations (e.g., flow studies on the river).
  - Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding possible modifications to current Project operations. (flow rate recommendations for public safety concerns)

- Reviewing recommendations from the Resource Conservation Groups for compatibility with the Safety Program/Plan.
- Developing a safety program/plan for Lake Murray and the lower Saluda River that addresses all of the "Identified Issues"
- Developing a public information/warning system (warning devices) for unannounced changes in river flows in the lower Saluda River (including a phone call to Rescue One—Columbia Fire Department).
- Identifying needed information products/systems/facilities to increase public awareness of potential hazards and necessary precautions

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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 current Project operations affect safety.
- **Task 3** – Review applicable laws governing boating use.
- **Task 4** – Identify and invite safety-related organizations concerned with Lake Murray and/or the lower Saluda River to participate in the Safety Resource Conservation Group.
- **Task 5** –
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- **Task 13** – Develop a consensus based Safety Program/Plan for the Saluda Project that addresses all of the issues and tasks identified above.

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Recreational Safety Plan proposal for inclusion in the FERC license application

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Determine if this should change to Safety Program.

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Malcolm Leaphart suggests deleting this one in lieu of the item "Lack of an advanced…"

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Charlene Coleman: Redundant to #3

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fluctuating lake levels and their effect on safety
boat traffic/congestion in cove areas related

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traffic/congestion in cove areas

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to nearby shoreline development

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fluctuating lake and river levels and their effect on recreational user safety
placement and maintenance of shoal markers
systematic collection of accident data on the lake and on the river

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fluctuating lake and river levels

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placement and maintenance of shoal markers
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on the lake and on the river

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ingress/egress to potentially hazardous areas

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Lack of an advanced public information system of releases from the Lake Murray hydro plant that provides release information at least 12 hours in advance

'Rates of flow' from the Lake Murray hydro need a unit of measure established, and a determination of unacceptable

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Lack of an advanced public information system of releases from the Lake Murray hydro plant that provides release information at least 12 hours in advance

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'Rates of flow' from the Lake Murray hydro need a unit of measure established, and a determination of unacceptable rate

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levels for the safety of recreationists in

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levels for the safety of recreationists in the lower Saluda River

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consider alternate methods of operations besides the present “maximum flexibility” mode of operation

Poor understanding the hazardous conditions in the river caused by hydro flows, how hazards vary from place to place, and who is affected

Interest in managing river flows, particularly rates of increase in flow, to improve safety for river users

fluctuating river levels and its effect on rescue resources

flow rate recommendations for public safety concerns

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SOUTH CAROLINA ELECTRIC & GAS COMPANY

SAFETY PROGRAM OUTLINE

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SALUDA PROJECT
(FERC NO. 516)

JULY 10, 2006

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SAFETY PROGRAM OUTLINE

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SAFETY PROGRAM OUTLINE

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9.0 SAFETY PLANS .....

10.0 EDUCATION PROGRAMS .....

11.0 USEFUL RESOURCES .....

12.0 ANNOTATED BIBLIOGRAPHY WITH WEB LINKS .....

Kacie Jensen

From: Dave Anderson
Sent: Tuesday, August 08, 2006 12:33 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 07-20-06 Draft Safety RCG Meeting Notes

We have a few edits to the meeting notes, so I am sending them around one more time before they become final on Friday.

2006-07-20
Meeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
July 20, 2006

draft dka 08-08-06

ATTENDEES:

Name	Organization	Name	Organization
Alan Stuart	Kleinschmidt Associates	Don Eng	TU
Kelly Miller	Kleinschmidt Associates	Dave Anderson	Kleinschmidt Associates
Bill Argentieri	SCE&G	Steve Bell	Lake Watch
Bret Hoffman	Kleinschmidt Associates	Charlene Coleman	American Whitewater
Karen Kustafik	Columbia Parks & Recreation	Kenneth Fox	LMA
Malcolm Leaphart	Trout Unlimited	Bill Mathias	LMA, LMPS
Gerrit Jobsis	American Rivers	Tom Eppink	SCANA Services
George Duke	LMHC	Norm Nicholson	Lex. Co. Sherrif's Dept.
Mike Waddell	TU	Joy Downs	LMA
Patrick Moore	SCCCL	David Price	LMPS
Am. Rivers		Alice Ammons	Palmetto Richland Hospital
Randy Mahan	SCANA Services	Tommy Boozer	SCE&G
Regis Parsons	Homeowner	Richard Mikel	Adventure Carolina
Mike Dawson	River Alliance	Randy Mahan	SCANA Services

HOMEWORK ITEMS:

- Dave Anderson – modify Safety RCG Work Plan and send to group for final approval

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PARKING LOT ITEMS:

- None

DATE OF NEXT MEETING: ~~October 24, 2006 at 9:30 a.m.~~ **Located at the Lake Murray Training Center**

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Kleinschmidt
Energy & Water Resource Consultants

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
July 20, 2006

draft dka 08-08-06

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 distributed meeting agendas to the group. He briefly went over the agenda and then turned the meeting over to Mike Dawson to give a presentation on the Three Rivers Greenway.

Mike began his presentation by detailing the construction of the riverwalk system. He showed a map that displayed the exact layout of the riverwalk, including the location of restrooms, parking lots, and boat access. Mike also explained how potential problems such as flooding and maximum flows were being considered. He showed a detailed drawing of the composting toilets that are being installed and explained that the pathway is being constructed above the maximum flow line. Mike said this will reduce the potential for flooding of the restrooms and pathway. He also addressed the issue of wetlands, mentioning that the pathway will circle the wetland areas in order to preserve them. Mike also specified the various smaller pathways that will lead to and from the riverwalk to allow for easy access. After Mike finished detailing the length of the riverwalk, he addressed the installation of emergency call boxes. He said these boxes would be installed along the riverwalk, providing immediate access to a 911 operator. Mike added that a light would turn on near the call box when activated. He also said that there would be a gate for firemen and other rescue workers to easily access the riverwalk. Mike concluded his presentation stating that the new portion of the Three Rivers Greenway was scheduled to be operational by early summer in 2007. Mike then added that the International Canoe Federation was considering the Saluda River as the site for its annual canoe race and that he would like to have the riverwalk functional for that event. Mike then opened the meeting for questions.

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Malcolm Leaphart asked who had police jurisdiction in regards to the call boxes. Mike answered that police from the University of South Carolina and other city police have an agreement on who will take jurisdiction in the various areas. He said that the law enforcement wants to be proactive. Mike also added that there will be active patrolling around the river including security guards on golf carts.

Steve Bell then asked if there was any idea of what to expect in the next thirty years in terms of recreational activity on the river. Mike answered that there was no accurate prediction of the amount of recreational activity that the Saluda River will see in thirty years. He said that a probability analysis could be done based on population, but the accuracy would not be very reliable. Mike predicted that as many as 450 people per hour would use the greenway after completion.

Charlene Coleman brought up the issue of an increased budget for training rescuers. She stated that by adding more access to the river, there would be a rise in river use, causing an increased need for additional trained rescuers. Mike agreed that more resources were needed and that the budget did need to expand to include this issue. Charlene then asked if there would be some type of public education informing people on the new access routes. Mike answered that the State newspaper has already begun running articles about the greenway.

Dave asked if there were plans to expand the riverwalk above Interstate 26, towards Saluda Shoals. Mike answered that Saluda Shoals has put in grant requests to do their own expansions. He added that this would be funded by the cities of Columbia and West Columbia, highway funds, and local school districts. Mike added that the Three Rivers Greenway project does not have the budget to expand towards Saluda Shoals.

After a break, Dave reconvened the meeting and then turned it over to Bret Hoffman to give the group an update on the installation of the new warning siren on the Saluda River. Bret began by stating that the pole was in place and the rest of the equipment would be installed within the next week. He added that noise testing would be done on Thursday to determine if the siren noise could be reduced, in consideration of nearby neighborhoods. The new siren would be operational following that noise test. Malcolm then asked Bret where this new siren was located. Bret answered that it was at the left of the Riverbanks Zoo parking lot, covering the rapids in that area and the downstream side of the zoo. Mike Waddell then asked how long the siren will sound after activation. Bill Argentieri answered that it will sound for three minutes after initial activation. He added that the siren will be activated after a three inch rise in water level, changed from a ¾ inch rise, and that the siren will be reactivated after each rise. Bill then said that a strobe will also be triggered and will flash for sixteen minutes. Bill also added that this system runs on a three minute time delay. Charlene said that she felt that people in the river needed that extra three minutes to move to safety. Bill replied that the system can be adjusted. Malcolm asked if the siren and strobe were activated by a drop in water level. It was stated that the warning siren system was only initiated by rising water levels.

Dave then distributed copies of the Safety RCG Work Plan (attached) for discussion and the issue of having a safety plan versus a program was introduced. Bill Mathias said that a safety plan would be integrated into the FERC license, but the creation of a safety program would not, which would allow for easier modifications. Malcolm asked what assurance there is if a safety program is created. He wanted to know how it could be included into the license. Overall, the group expressed concern over the fact that a program could eventually be absolved, but a plan could not, since it would be included in the license. Patrick M. pointed out that regardless of the plan vs. program decision, the final settlement terms will be enforceable in state court by any signatory. Bill Mathias said that the safety program would be a partial liability absolver, and there would be no reason to

terminate the program. Charlene added that the plan could include specifics about stakeholders involved and meeting times for the program. This would ensure that mention of the program was included as part of the license. Joy Downs said that some of the issues were like apples and oranges, and that some of the larger issues could be discussed in the FERC plan and the other issues could be dealt with in the program. Tom Eppink said that there were some issues that had to be included in the license, as required by FERC, but others could be dealt with in the program. Tom also reiterated that there will be unannounced releases in order for Saluda to meet reserve generation requirements and the group should move forward based on this. Patrick replied that this statement is erroneous and that no evidence has been presented to stakeholders that demonstrates operations are capable of compliance with state numeric water quality standards, state narrative standards, the Clean Water Act, Federal Power Act, Endangered Species Act, and other applicable law. Several other stakeholders also spoke up in disagreement with Tom's statement and restated their expectations the RCG would be an open forum where all issues and alternatives could be discussed. The group then agreed that we can amicably, yet seriously, disagree on this issue.

Dave Anderson then directed the discussion back to the specifics of the work plan. The group decided that the identified issues would be better separated into lower Saluda River issues and Lake Murray issues.

Before the group broke for lunch, Don Eng recounted his experience during a recent release on the Saluda River. Don explained that he was fishing when he saw a large amount of water rushing towards him, washing him downstream for approximately one block. He said that he clung to branches to stay above the water, and was eventually rescued by some kayakers. He added that during this struggle, he watched a family get washed downstream and out of his sight. Don wanted to state that real people are affected by the water releases on the river. After Don's recount, there was discussion regarding the need for in-stream recreators to use appropriate safety equipment and the lack thereof in this particular case.

After lunch, discussion on the work plan continued. During the discussion, the issue of how to attain accident information was raised. The Budget Control Board and SCDNR accident data were mentioned as possible sources for this information. Because of privacy issues and unreported accidents, accurate accident information is hard to acquire. The group agreed to continue thinking about this issue.

The RCG Responsibilities section of the Work Plan initiated a discussion on whether the Safety RCG takes hierarchy over the other RCGs. The group then decided that safety should be compatible with all of the RCGs, allowing for compromise between the groups.

The group agreed on the changes made to the Safety RCG Work Plan (The updated work plan is attached).

Dave then directed the discussion to focus on the Safety Program Outline. Again, the issue of having a program versus a plan was raised. Dave stated that a safety program is acceptable to deal with issues that will continue beyond the FERC relicensing. Mike Waddell asked if the program would be submitted to FERC. Alan Stuart answered that it would be referenced through the safety plan. Dave agreed, stating that the safety program can be referenced to FERC, allowing FERC to be aware of the program. The group agreed that a safety program would be beneficial. Randy Mahan stated that this would be something good for the community. He added that including FERC in some cases would complicate the process and use extra time when making simple changes.

Deleted: Malcolm stated that the stakeholders want to be part of the process and have a platform to make recommendations.

Malcolm asked Dave to develop 'deliverables' for each of the tasks in the Safety RCG Work Plan (Work Scope and Product Section) as those are reflective of the important issues raised to date and are the basis for the recommendations to be made to FERC. Dave indicated that he would do that. Malcolm pointed out that developing a safety program would take away from the limited time and resources of the Safety RCG in dealing with the issues and should be considered after relicensing, and definitely not as a replacement goal or deliverable of the Safety RCG as defined in the Mission Statement. Tentative revisions to the Mission Statement made earlier in the meeting to reflect a change in scope and product (deliverable) to a safety program to be administered outside of the FERC process and after license approval were removed. The language of the original mission to develop recommendations for the identified issues was reinserted to reflect that the group would continue to develop an "RCG Safety Plan" for submission to FERC for consideration to incorporate into the FERC Public Safety Plan. Tommy Boozer acknowledged that the safety program was an idea brought to SCE&G to simplify and allow for ongoing public discussions concerning safety issues on the lake. Tommy further stated that he understands, as Malcolm explained, the stakeholders want to develop recommendations for incorporation into the FERC license and not defer actions on issues until after the license is approved. Randy reiterated that FERC will want to look at alternatives in determining whether to grant a new license and explained this might include the potential to modify Saluda to get the most economic benefit possible from a minimum flow rather than just to keep spinning a unit or two with no generation and the potential to replace the runners to increase the units' maximum capacity.

Joy reiterated that the larger safety issues, such as flows, water levels, and shoal makers, should be included in the plan to FERC, and other issues should be included in the program. Tommy Boozer added that it is important to show that an effort is being made for safety in the future. The group ended the discussion by agreeing in favor of the safety program. The group agreed that developing a safety plan, addressing identified issues, and determining what recommendations need to be made back to Operations RCG should take priority, but that Bill Mathias can continue to work on the

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safety program. Malcolm suggested that developing a safety program after submitting the new license application might be more appropriate.

The group agreed to have the next RCG meeting in October, around the time of the next Quarterly Public Meeting. Dave suggested that the group have two separate meetings to discuss lake issues and river issues after the joint RCG meeting in September (after the operations model is finalized). No dates were set for any of these meetings. It was agreed that the group will continue to communicate by e-mail.

Comments received after this meeting are attached after the agenda.

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
July 20, 2006

draft dka 08-08-06

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

July 20, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 10:30** Presentation on the Three Rivers Greenway (Mike Dawson)
- **10:30 to 10:45** BREAK
- **10:45 to 11:00** Update on Installation of Warning Siren (Bret Hoffman)
- **11:00 to 12:00** Discussion of Safety RCG Work Plan (Dave Anderson)
- **12:00 to 1:00** LUNCH
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- **3:00 to 3:10** Develop an Agenda for Next Meeting and Set Next Meeting Date

  Adjourn

Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

Comments from Steve Bell: The Saluda Generation TWC is reviewing generation data and most likely will request additional information on specific releases. It seems a bit premature to suggest that we should agree to disagree before reviewing all the data. Also, it may be worth mentioning that all issues including SCE&G's are being tracked via spreadsheet which will result in a written record of the step by step process used to resolve the issue. I believe this will complement the meeting summaries as the official record. Finally, there appears to be no consensus, at this time, on SCE&G's issue of "maximum flexibility". We owe it to our members to review all the facts before considering an outcome.

Kacie Jensen

From: Patrick Moore [PatrickM@scccl.org]

Sent: Wednesday, July 26, 2006 3:11 PM

To: Dave Anderson; Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; turnerle@dhec.sc.gov; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Randy Mahan; Roger Hovis; Skeet Mills; Steve Bell; Suzanne Rhodes; Tom Eppink

Cc: vetaylor@adelphia.net; jgantenbein@n-h-i.org; allan.creamer@ferc.gov

Subject: RE: 07-20-06 Draft Safety RCG Meeting Notes

Dave,
Please include the part of the meeting where SCE&G counsel stated that there will be unannounced releases and stakeholders should accept that. The treatment of reserve capacity as a foregone conclusion is inappropriate and inaccurate and it is important that the record reflect attempts on the part of SCE&G to imply/declare consensus on this issue.

Also please include my reply that this statement was erroneous and that no evidence has been presented to stakeholders that demonstrates operations are capable of compliance with state numeric water quality standards, state narrative standards, the Clean Water Act, Federal Power Act, Endangered Species Act, and other applicable law. Until that information is before the group, there is no way we can possibly evaluate how reserve capacity does or does not meet our respective interests. Several other stakeholders also spoke up in disagreement with Tom's statement. The group all then agreed that we can amicably, yet seriously, disagree on these issues.

Also please include the point that regardless of the plan vs. program decision that the final settlement terms will be enforceable in state court by any signatory.

I know these minutes are not intended as a word for word recount, but as the official record they need to be more specific on known issues of contention.

Thanks for all your effort,

Patrick Moore

-----Original Message-----
From: Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
Sent: Wednesday, July 26, 2006 12:50 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis; Skeet Mills;

Steve Bell; Suzanne Rhodes; Tom Eppink
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<<2006-07-20 Meeting Notes - Safety (DRAFT).doc>> <<Draft Safety RCG Work Plan (07-20-06).doc>>

Kacie Jensen

From: bellsteve9339@bellsouth.net
Sent: Wednesday, July 26, 2006 7:20 PM
To: Dave Anderson; Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschel bec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Wadd ell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis; Skeet Mills; Suzanne Rhodes; Tom Eppink
Cc: bellsteve9339@bellsouth.net
Subject: Re: 07-20-06 Draft Safety RCG Meeting Notes

200607-20_Meeting _Notes_-_Safe...

Here is the attachment per previous email. Steve

> From: Dave Anderson <Dave.Anderson@KleinschmidtUSA.com>
> Date: 2006/07/26 Wed PM 12:50:09 EDT
> To: Tommy Boozer <tboozer@scana.com>, Aaron Small <arsbhs@bellsouth.net>,
> Alan Axson <cfdwaxson@columbiasc.net>, Alan Stuart
> <alan.stuart@kleinschmidtusa.com>, Alison Guth
> <alison.guth@kleinschmidtusa.com>, Amanda Hill <amanda_hill@fws.gov>,
> Bill Argentieri <bargentieri@scana.com>, Bill Marshall
> <marshallb@dnr.sc.gov>, Bill Mathias <bill25@sc.rr.com>, Bret Hoffman
> <bret.hoffman@kleinschmidtusa.com>, Charlene Coleman
> <cheetahtrk@yahoo.com>, Dave Anderson
> <dave.anderson@kleinschmidtusa.com>, David Price <pricedc@dhec.sc.gov>,
> Dick Christie <dchristie@infoave.net>, Edward Schnepel
> <eschnepel@sc.rr.com>, George Duke <kayakduke@bellsouth.net>,
> "Gerrit Jobsis (American Rivers)" <gjobsis@americanrivers.org>,
> Jennifer O'Rourke <jenno@scwf.org>, Jerry Wise <meddynamic@aol.com>,
> Jim Devereaux <jdevereaux@scana.com>, Joel Huggins
> <jbhuggins@lexhealth.org>, John and Rob Altenberg
> <seatowlakemurray@seatow.com>, Joy Downs <elymay2@aol.com>,
> Karen Kustafik <kakustafik@columbiasc.net>, Ken Uschelbec
> <colkenu@aol.com>, Kenneth Fox <skfox@sc.rr.com>,
> "Larry Turner (turnerle@dhec.sc.gov)" <turnerle@dhec.sc.gov>, Lee Barber
> <lbarber@sc.rr.com>, Malcolm Leaphart <malcolml@mailbox.sc.edu>,
> Mark Leao <mark_leao@fws.gov>, Mike Waddell <mwaddell@esri.sc.edu>,
> Miriam Atria <miriam@lakemurraycountry.com>, Norm Nicholson
> <larana@mindspring.com>, Norman Ferris <norm@sc.rr.com>, Patrick Moore
> <patrickm@scccl.org>, Randy Mahan <rmahan@scana.com>, Roger Hovis
> <rogerhovis@richlandonline.com>, Skeet Mills <MillsL@dnr.sc.gov>,
> Steve Bell <bellsteve9339@bellsouth.net>, Suzanne Rhodes
> <suzrhodes@juno.com>, Tom Eppink <teppink@scana.com>
> Subject: 07-20-06 Draft Safety RCG Meeting Notes
>
> Here are the draft meeting notes from our July 20th Safety RCG
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> the coming weeks.
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> Work Plan (07-20-06).doc>>
>
>

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
July 20, 2006

draft dka 07-26-06

ATTENDEES:

Name	Organization	Name	Organization
Alan Stuart	Kleinschmidt Associates	Don Eng	TU
Kelly Miller	Kleinschmidt Associates	Dave Anderson	Kleinschmidt Associates
Bill Argentieri	SCE&G	Steve Bell	Lake Watch
Bret Hoffman	Kleinschmidt Associates	Charlene Coleman	American Whitewater
Karen Kustafik	Columbia Parks & Recreation	Kenneth Fox	LMA
Malcolm Leaphart	Trout Unlimited	Bill Mathias	LMA, LMPS
Gerrit Jobsis	American Rivers	Tom Eppink	SCANA Services
George Duke	LMHC	Norm Nicholson	Lex. Co. Sherrif's Dept.
Mike Waddell	TU	Joy Downs	LMA
Patrick Moore	SCCCL	David Price	LMPS
Am. Rivers		Alice Ammons	Palmetto Richland Hospital
Randy Mahan	SCANA Services	Tommy Boozer	SCE&G
Regis Parsons	Homeowner	Richard Mikel	Adventure Carolina
Mike Dawson	River Alliance	Randy Mahan	SCANA Services

HOMEWORK ITEMS:

- None

PARKING LOT ITEMS:

- None

DATE OF NEXT MEETING: **TBA**

Kleinschmidt
Energy & Water Resource Consultants

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
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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 distributed meeting agendas to the group. He briefly went over the agenda and then turned the meeting over to Mike Dawson to give a presentation on the Three Rivers Greenway.

Mike began his presentation by detailing the construction of the riverwalk system. He showed a map that displayed the exact layout of the riverwalk, including the location of restrooms, parking lots, and boat access. Mike also explained how potential problems such as flooding and maximum flows were being considered. He showed a detailed drawing of the composting toilets that are being installed and explained that the pathway is being constructed above the maximum flow line. Mike said this will reduce the potential for flooding of the restrooms and pathway. He also addressed the issue of wetlands, mentioning that the pathway will circulate the wetland areas in order to preserve them. Mike also specified the various smaller pathways that will lead to and from the riverwalk to allow for easy access. After Mike finished detailing the length of the riverwalk, he addressed the installation of emergency call boxes. He said these boxes would be installed along the riverwalk, providing immediate access to a 911 operator. Mike added that a light would turn on near the call box when activated. He also said that there would be a gate for firemen and other rescue workers to easily access the riverwalk. Mike concluded his presentation stating that the new portion of the Three Rivers Greenway was scheduled to be operational by early summer in 2007. Mike then added that the International Canoe Federation was considering the Saluda River as the site for its annual canoe race and that he would like to have the riverwalk functional for that event. Mike then opened the meeting for questions.

Malcolm Leaphart asked who had police jurisdiction in regards to the call boxes. Mike answered that police from the University of South Carolina and other city police have an agreement on who will take jurisdiction in the various areas. He said that the law enforcement wants to be proactive. Mike also added that there will be active patrolling around the river including security guards on golf carts.

Steve Bell then asked if there was any idea of what to expect in the next thirty years in terms of recreational activity on the river. Mike answered that there was no accurate prediction of the amount of recreational activity that the Saluda River will see in thirty years. He said that a probability analysis could be done based on population, but the accuracy would not be very reliable. Mike predicted that as many as 450 people per hour would use the greenway after completion.

Charlene Coleman brought up the issue of an increased budget for training rescuers. She stated that by adding more access to the river, there would be a rise in river use, causing an increased need for additional trained rescuers. Mike agreed that more resources were needed and that the budget did need to expand to include this issue. Charlene then asked if there would be some type of public education informing people on the new access routes. Mike answered that the State newspaper has already begun running articles about the greenway.

Dave asked if there were plans to expand the riverwalk above Interstate 26, towards Saluda Shoals. Mike answered that Saluda Shoals has put in grant requests to do their own expansions. He added that this would be funded by the cities of Columbia and West Columbia, highway funds, and local school districts. Mike added that the Three Rivers Greenway project does not have the budget to expand towards Saluda Shoals.

After a break, Dave reconvened the meeting and then turned it over to Bret Hoffman to give the group an update on the installation of the new warning siren on the Saluda River. Bret began by stating that the pole was in place and the rest of the equipment would be installed within the next week. He added that noise testing would be done on Thursday to determine if the siren noise could be reduced, in consideration of nearby neighborhoods. The new siren would be operational following that noise test. Malcolm then asked Bret where this new siren was located. Bret answered that it was at the left of the Riverbanks Zoo parking lot, covering the rapids in that area and the downstream side of the zoo. Mike Waddell then asked how long the siren will sound after activation. Bill Argentieri answered that it will sound for three minutes after initial activation. He added that the siren will be activated after a three inch rise in water level, changed from a ¾ inch rise, and that the siren will be reactivated after each rise. Bill then said that a strobe will also be triggered and will flash for sixteen minutes. Bill also added that this system runs on a three minute time delay. Charlene said that she felt that people in the river needed that extra three minutes to move to safety. Bill replied that the system can be adjusted. Malcolm asked if the siren and strobe were activated by a drop in water level. It was stated that the warning siren system was only initiated by rising water levels.

Dave then distributed copies of the Safety RCG Work Plan (attached) for discussion and the issue of having a safety plan versus a program was introduced. Bill Mathias said that a safety plan would be integrated into the FERC license, but the creation of a safety program would not, which would allow for easier modifications. Malcolm asked what assurance there is if a safety program is created. He wanted to know how it could be included into the license. Overall, the group expressed concern over the fact that a program could eventually be absolved, but a plan could not, since it would be included in the license. Bill Mathias said that the safety program would be a partial liability absolver, and there would be no reason to terminate the program. Charlene added that the plan could include specifics about stakeholders involved and meeting times for the program. This

would ensure that mention of the program was included as part of the license. Joy Downs said that some of the issues were like apples and oranges, and that some of the larger issues could be discussed in the FERC plan and the other issues could be dealt with in the program. Tom Eppink said that there were some issues that had to be included in the license, as required by FERC, but others could be dealt with in the program.

Dave Anderson then directed the discussion back to the specifics of the work plan. The group decided that the identified issues would be better separated into Lower Saluda River issues and Lake Murray issues.

Before the group broke for lunch, Don Eng recounted his experience during a recent release on the Saluda River. Don explained that he was fishing when he saw a large amount of water rushing towards him, washing him downstream for approximately one block. He said that he clung to branches to stay above the water, and was eventually rescued by some kayakers. He added that during this struggle, he watched a family get washed downstream and out of his sight. Don wanted to state that real people are affected by the water releases on the river.

After lunch, discussion on the work plan continued. During the discussion, the issue of how to attain accident information was raised. The Budget Control Board and SCDNR accident data were mentioned as possible sources for this information. Because of privacy issues and unreported accidents, accurate accident information is hard to acquire. The group agreed to continue thinking about this issue.

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recommendations. Joy reiterated that the larger safety issues, such as flows, water levels, and shoal makers, should be included in the plan to FERC, and other issues should be included in the program. Tommy Boozer added that it is important to show that an effort is being made for safety in the future. The group ended the discussion by agreeing in favor of the safety program. The group agreed that developing a safety plan, addressing identified issues and a determining what recommendations need to be made back to operations RCG should take priority, but that Bill Mathias can continue to work on the safety program. Malcom suggested that developing a safety program after a the new license application might be more appropriate.

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The group agreed to have the next RCG meeting in October, around the time of the next Quarterly Public Meeting. Dave suggested that the group have two separate meetings to discuss lake issues and river issues after the joint RCG meeting in September (after the operations model is finalized). No dates were set for any of these meetings. It was agreed that the group will continue to communicate by e-mail.

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SALUDA HYDRO PROJECT RELICENSING
SAFETY RESOURCE CONSERVATION GROUP

LAKE MURRAY TRAINING CENTER
July 20, 2006

draft dka 07-26-06

Saluda Hydro Relicensing
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Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

Kacie Jensen

From: Dave Anderson
Sent: Wednesday, July 26, 2006 12:50 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
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2006-07-20 Meeting Notes - Saf..

Draft Safety RCG Work Plan (07...

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Kleinschmidt
Energy & Water Resource Consultants

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Dave asked if there were plans to expand the riverwalk above Interstate 26, towards Saluda Shoals. Mike answered that Saluda Shoals has put in grant requests to do their own expansions. He added that this would be funded by the cities of Columbia and West Columbia, highway funds, and local school districts. Mike added that the Three Rivers Greenway project does not have the budget to expand towards Saluda Shoals.

After a break, Dave reconvened the meeting and then turned it over to Bret Hoffman to give the group an update on the installation of the new warning siren on the Saluda River. Bret began by stating that the pole was in place and the rest of the equipment would be installed within the next week. He added that noise testing would be done on Thursday to determine if the siren noise could be reduced, in consideration of nearby neighborhoods. The new siren would be operational following that noise test. Malcolm then asked Bret where this new siren was located. Bret answered that it was at the left of the Riverbanks Zoo parking lot, covering the rapids in that area and the downstream side of the zoo. Mike Waddell then asked how long the siren will sound after activation. Bill Argentieri answered that it will sound for three minutes after initial activation. He added that the siren will be activated after a three inch rise in water level, changed from a ¾ inch rise, and that the siren will be reactivated after each rise. Bill then said that a strobe will also be triggered and will flash for sixteen minutes. Bill also added that this system runs on a three minute time delay. Charlene said that she felt that people in the river needed that extra three minutes to move to safety. Bill replied that the system can be adjusted. Malcolm asked if the siren and strobe were activated by a drop in water level. It was stated that the warning siren system was only initiated by rising water levels.

Dave then distributed copies of the Safety RCG Work Plan (attached) for discussion and the issue of having a safety plan versus a program was introduced. Bill Mathias said that a safety plan would be integrated into the FERC license, but the creation of a safety program would not, which would allow for easier modifications. Malcolm asked what assurance there is if a safety program is created. He wanted to know how it could be included into the license. Overall, the group expressed concern over the fact that a program could eventually be absolved, but a plan could not, since it would be included in the license. Bill Mathias said that the safety program would be a partial liability absolver, and there would be no reason to terminate the program. Charlene added that the plan could include specifics about stakeholders involved and meeting times for the program. This

would ensure that mention of the program was included as part of the license. Joy Downs said that some of the issues were like apples and oranges, and that some of the larger issues could be discussed in the FERC plan and the other issues could be dealt with in the program. Tom Eppink said that there were some issues that had to be included in the license, as required by FERC, but others could be dealt with in the program.

Dave Anderson then directed the discussion back to the specifics of the work plan. The group decided that the identified issues would be better separated into Lower Saluda River issues and Lake Murray issues.

Before the group broke for lunch, Don Eng recounted his experience during a recent release on the Saluda River. Don explained that he was fishing when he saw a large amount of water rushing towards him, washing him downstream for approximately one block. He said that he clung to branches to stay above the water, and was eventually rescued by some kayakers. He added that during this struggle, he watched a family get washed downstream and out of his sight. Don wanted to state that real people are affected by the water releases on the river.

After lunch, discussion on the work plan continued. During the discussion, the issue of how to attain accident information was raised. The Budget Control Board and SCDNR accident data were mentioned as possible sources for this information. Because of privacy issues and unreported accidents, accurate accident information is hard to acquire. The group agreed to continue thinking about this issue.

The RCG Responsibilities section of the Work Plan initiated a discussion on whether the Safety RCG takes hierarchy over the other RCGs. The group then decided that safety should be compatible with all of the RCGs, allowing for compromise between the groups.

The group agreed on the changes made to the Safety RCG Work Plan (The updated work plan is attached).

Dave then directed the discussion to focus on the Safety Program Outline. Again, the issue of having a program versus a plan was raised. Dave stated that a safety program is acceptable to deal with issues that will continue beyond the FERC relicensing. Mike Waddell asked if the program would be submitted to FERC. Alan Stuart answered that it would be referenced through the safety plan. Dave agreed, stating that the safety program can be referenced to FERC, allowing FERC to be aware of the program. The group agreed that a safety program would be beneficial. Randy Mahan stated that this would be something good for the community. He added that including FERC in some cases would complicate the process and use extra time when making simple changes. Malcolm stated that the stakeholders want to be part of the process and have a platform to make

recommendations. Joy reiterated that the larger safety issues, such as flows, water levels, and shoal makers, should be included in the plan to FERC, and other issues should be included in the program. Tommy Boozer added that it is important to show that an effort is being made for safety in the future. The group ended the discussion by agreeing in favor of the safety program. The group agreed that the safety plan should take priority, but that Bill Mathias can continue to work on the safety program.

The group agreed to have the next RCG meeting in October, around the time of the next Quarterly Public Meeting. Dave suggested that the group have two separate meetings to discuss lake issues and river issues after the joint RCG meeting in September (after the operations model is finalized). No dates were set for any of these meetings. It was agreed that the group will continue to communicate by e-mail.

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

July 20, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 10:30** Presentation on the Three Rivers Greenway (Mike Dawson)
- **10:30 to 10:45** BREAK
- **10:45 to 11:00** Update on Installation of Warning Siren (Bret Hoffman)
- **11:00 to 12:00** Discussion of Safety RCG Work Plan (Dave Anderson)
- **12:00 to 1:00** LUNCH
- **1:00 to 2:00** Discussion of Safety RCG Work Plan (Dave Anderson)
- **2:00 to 2:15** BREAK
- **2:15 to 3:00** Discussion of Safety Program Outline (Dave Anderson)
- **3:00 to 3:10** Develop an Agenda for Next Meeting and Set Next Meeting Date

  Adjourn

Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

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	cheetahtrk@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@scccl.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@scccl.org	
Ralph Crafton	LMA	crafton@usit.net	
Randy Mahan	SCANA	rmahan@scana.com	
Roger Hovis	Richland County Emergency Services	rogerhovis@richlandonline.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	

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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 consensus-based recommendations to the 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

Lower Saluda River:

- level fluctuations and their effect on safety:
  - Lack of advance public information system and improvement of communications concerning changes in river flows in the lower Saluda River
  - enhancement of a public warning/notification system (warning devices) for river users during unannounced changes in river flows in the lower Saluda River
  - Ingress/egress to potentially hazardous areas and its effect on rescue resources (e.g., Mill Race)
  - rate of change on the lower Saluda River for recreational safety
- systematic collection of accident data on the river

Lake Murray:

- levels and their effect on safety
- level fluctuations and their effect on safety
- boat traffic/congestion in cove areas related to nearby shoreline development
- placement and maintenance of shoal markers
- Power lines impeding sail boat navigation
- Water quality and its effect on safety being addressed by WQ RCG
- Amphibious aircraft using Lake Murray
- systematic collection of accident data on the lake

RCG Responsibilities

- Identifying specific areas where lake levels and 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 on the lake and lower Saluda River.

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Safety Resource Conservation Group Work Plan
Saluda River Project

- Identifying any studies, that should be performed to identify and/or evaluate possible changes to Project operations (e.g., flow studies on the river).
- Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding possible modifications to current Project operations. (flow rate recommendations for public safety concerns)

- Reviewing recommendations from the Resource Conservation Groups for compatibility with the Safety Program/Plan.
- Developing a safety program/plan for Lake Murray and the lower Saluda River that addresses all of the "Identified Issues"
- Developing a public information/warning system (warning devices) for unannounced changes in river flows in the lower Saluda River (including a phone call to Rescue One—Columbia Fire Department).
- Identifying needed information products/systems/facilities to increase public awareness of potential hazards and necessary precautions

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 current Project operations affect safety.
- **Task 3** – Review applicable laws governing boating use.
- **Task 4** – Identify and invite safety-related organizations concerned with Lake Murray and/or the lower Saluda River to participate in the Safety Resource Conservation Group.
- **Task 5** –
- **Task 6** – Review stakeholder requests for particular studies and/or enhancement measures to ensure that these are incorporated into study planning, if applicable (flow studies related to safety on the lower Saluda River).
- **Task 7** – Develop and recommend operations 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, if necessary.
- **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 safety-related recommendations for Project operations and recreation access, facilities, and use to be considered in conjunction with all ecological and recreational issues.

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- **Task 13** – Develop a consensus based Safety Program/Plan for the Saluda Project that addresses all of the issues and tasks identified above.

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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

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Recreational Safety Plan proposal for inclusion in the FERC license application

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Charlene Coleman: Redundant to #3

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fluctuating lake levels and their effect on safety

boat traffic/congestion in cove areas related

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traffic/congestion in cove areas

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to nearby shoreline development

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fluctuating lake and river levels and their effect on recreational user safety

placement and maintenance of shoal markers

systematic collection of accident data on the lake and on the river

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fluctuating lake and river levels

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placement and maintenance of shoal markers

systematic collection of accident data

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on the lake and on the river

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ingress/egress to potentially hazardous areas

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Lack of an advanced public information system of releases from the Lake Murray hydro plant that provides release information at least 12 hours in advance

'Rates of flow' from the Lake Murray hydro need a unit of measure established, and a determination of unacceptable

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Lack of an advanced public information system of releases from the Lake Murray hydro plant that provides release information at least 12 hours in advance

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'Rates of flow' from the Lake Murray hydro need a unit of measure established, and a determination of unacceptable rate

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levels for the safety of recreationists in

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levels for the safety of recreationists in the lower Saluda River

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consider alternate methods of operations besides the present “maximum flexibility” mode of operation

Poor understanding the hazardous conditions in the river caused by hydro flows, how hazards vary from place to place, and who is affected

Interest in managing river flows, particularly rates of increase in flow, to improve safety for river users

fluctuating river levels and its effect on rescue resources

flow rate recommendations for public safety concerns

Page 2: [27] Inserted **Mike Waddell** **7/10/2006 4:40 PM**

consider alternate methods of operations besides the present “maximum flexibility” mode of operation

Page 2: [28] Inserted **Bill Marshall** **7/10/2006 4:52 PM**

Poor understanding the hazardous conditions in the river caused by hydro flows, how hazards vary from place to place, and who is affected

Page 2: [28] Inserted **Bill Marshall** **7/10/2006 4:52 PM**

Interest in managing river flows, particularly rates of increase in flow, to improve safety for river users

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fluctuating river levels and its effect on rescue resources

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flow rate recommendations for public safety concerns

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Sorry that you couldn't make it. I don't know what's going on with the web link below; it's doing something strange on my computer also. Try this:

http://www.saludahydrorelicense.com

We have tentatively scheduled the next meeting for October 24th at 9:30 AM at the Lake Murray Training Center. If you don't have any objections, I will get Alison to add you to the distribution list for members of the Safety RCG. This way you will get all correspondence on meeting notes, agendas, etc.

Thanks for your interest.

> -----Original Message-----
> **From:** Joel Huggins [mailto:jbhuggins@lexhealth.org]
> **Sent:** Friday, July 21, 2006 2:08 PM
> **To:** 'Dave Anderson'
> **Subject:** RE: Saluda Safety Meeting
>
> David,
>
> I realize that yesterday was the scheduled meeting, but I have been in and out of the office for the last 2 weeks and just now getting a chance to get caught-up. I tried to access the web address you gave below. I was unable to open that address. Can you check to make sure that it is correct. If so, is there something else you have that would give me information regarding your organization.
>
> Thanks and have a great weekend.
>
> Joel
>
> > -----Original Message-----
> > **From:** Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
> > **Sent:** Tuesday, July 18, 2006 9:18 AM
> > **To:** Joel Huggins
> > **Cc:** Alison Guth; Alan Stuart
> > **Subject:** Saluda Safety Meeting
> >
> > I spoke to Pamela Williams last week to extend an invitation to your organization to participate in the Safety Resource Conservation Group. SCE&G is currently undergoing a federal process to obtain a new operating license for the Saluda Dam. The Safety RCG is a working group comprised of SCE&G and several stakeholders concerned with safety issues associated with Lake Murray and the lower Saluda River.
> >
> > If your organization is interested, I encourage you to visit the website that we have set up as the primary means of communication for relicensing:
> >
> > www.saludahydrorelicense.com
> >
> > The next meeting of the Safety RCG is on Thursday, July 20 at the Lake Murray Training Center. I have attached the agenda for the meeting. If you would like to be added to our e-mail distribution group, please reply to Alison Guth (cc'ed on this message) and she can get you set up.
> >
> > Thanks for your interest in this important process.
> >
> > ---
> > David K. Anderson, Ph.D.

Recreation/Human Dimensions Specialist
Kleinschmidt Associates
4958 Valleydale Rd., Ste. 250
Birmingham, AL 35242
Ph: 205-981-4547x240
FAX: 205-981-4549
Dave.Anderson@KleinschmidtUSA.com

<<2006-07-20 Safety RCG Agenda.pdf>>

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Kacie Jensen

From: Bret Hoffman
Sent: Monday, July 24, 2006 12:43 PM
To: 'Tommy Boozer'; 'Aaron Small'; 'Alan Axson'; Alan Stuart; Alison Guth; 'Amanda Hill'; 'Bill Argentieri'; 'Bill Marshall'; 'Bill Mathias'; Bret Hoffman; 'Charlene Coleman'; Dave Anderson; 'David Price'; 'Dick Christie'; 'Edward Schnepel'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Jennifer O'Rourke'; 'Jerry Wise'; 'Jim Devereaux'; 'John and Rob Altenberg'; 'Joy Downs'; 'Karen Kustafik'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Malcolm Leaphart'; 'Mark Leao'; 'Mike Waddell'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Patrick Moore'; 'Randy Mahan'; 'Roger Hovis '; 'Skeet Mills '; 'Steve Bell'; 'Suzanne Rhodes'; 'Tom Eppink'
Subject: Saluda cross-sections

Good afternoon,

At the request of Mike Waddell during last Thursday's Safety RCG meeting, I am forwarding the map of cross-sections on the lower Saluda River that will be evaluated by the HEC Res-Sim model.

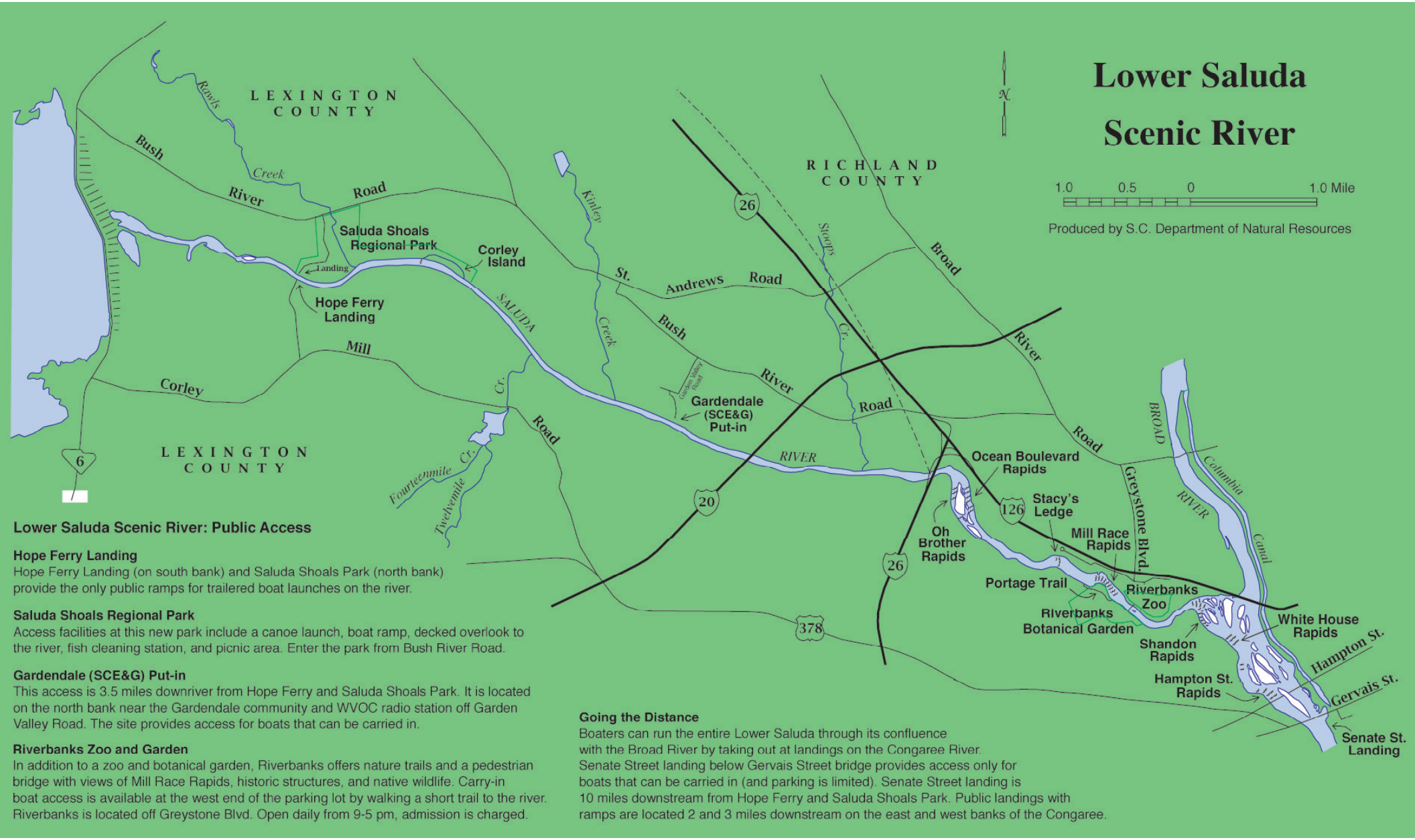
Thanks,

_____

Bret Hoffman, P.E.
Mechanical Engineer
Kleinschmidt
Energy & Water Resource Consultants
101 Trade Zone Drive, Suite 21A
West Columbia, SC 29170
(803) 822-3177
FAX (803) 822-3183
Bret.Hoffman@KleinschmidtUSA.com

cross-sections.pdf
(1 MB)

Lower Saluda Scenic River



Produced by S.C. Department of Natural Resources

Lower Saluda Scenic River: Public Access

Hope Ferry Landing
Hope Ferry Landing (on south bank) and Saluda Shoals Park (north bank) provide the only public ramps for trailered boat launches on the river.

Saluda Shoals Regional Park
Access facilities at this new park include a canoe launch, boat ramp, decked overlook to the river, fish cleaning station, and picnic area. Enter the park from Bush River Road.

Gardendale (SCE&G) Put-in
This access is 3.5 miles downriver from Hope Ferry and Saluda Shoals Park. It is located on the north bank near the Gardendale community and WVOC radio station off Garden Valley Road. The site provides access for boats that can be carried in.

Riverbanks Zoo and Garden
In addition to a zoo and botanical garden, Riverbanks offers nature trails and a pedestrian bridge with views of Mill Race Rapids, historic structures, and native wildlife. Carry-in boat access is available at the west end of the parking lot by walking a short trail to the river. Riverbanks is located off Greystone Blvd. Open daily from 9-5 pm, admission is charged.

Going the Distance
Boaters can run the entire Lower Saluda through its confluence with the Broad River by taking out at landings on the Congaree River. Senate Street landing below Gervais Street bridge provides access only for boats that can be carried in (and parking is limited). Senate Street landing is 10 miles downstream from Hope Ferry and Saluda Shoals Park. Public landings with ramps are located 2 and 3 miles downstream on the east and west banks of the Congaree.

Cheryl Balitz

From: Bret Hoffman
Sent: Tuesday, August 08, 2006 1:10 PM
To: Alison Guth
Subject: FW: 07-20-06 Draft Safety RCG Meeting Notes

-----Original Message-----
From: Bret Hoffman
Sent: Tuesday, August 08, 2006 1:09 PM
To: Dave Anderson
Subject: FW: 07-20-06 Draft Safety RCG Meeting Notes

Dave,

I removed a section because Mike Dawson did not address the walkway and high river elevations during his presentation. After his presentation, I specifically asked him about the walkway being above the high-water mark, hi response was that it would not matter to the walkway ("the walkway's not gonna care"). I raised this point because the other Greenway paths ARE below flows on frequent occasion, and Charlene had informed me that the plans show the Saluda walkway within high-water flow boundaries.

Not sure where to add this, as part of the meeting notes (during M. Dawson's Q&A) or as an added comment...
-Bret

-----Original Message-----
From: Dave Anderson
Sent: Tuesday, August 08, 2006 12:33 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 07-20-06 Draft Safety RCG Meeting Notes

We have a few edits to the meeting notes, so I am sending them around one more time before they become final on Friday.

2006-07-20
leeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
July 20, 2006

draft dka 08-08-06

ATTENDEES:

Name	Organization	Name	Organization
Alan Stuart	Kleinschmidt Associates	Don Eng	TU
Kelly Miller	Kleinschmidt Associates	Dave Anderson	Kleinschmidt Associates
Bill Argentieri	SCE&G	Steve Bell	Lake Watch
Bret Hoffman	Kleinschmidt Associates	Charlene Coleman	American Whitewater
Karen Kustafik	Columbia Parks & Recreation	Kenneth Fox	LMA
Malcolm Leaphart	Trout Unlimited	Bill Mathias	LMA, LMPS
Gerrit Jobsis	American Rivers	Tom Eppink	SCANA Services
George Duke	LMHC	Norm Nicholson	Lex. Co. Sherrif's Dept.
Mike Waddell	TU	Joy Downs	LMA
Patrick Moore	SCCCL	David Price	LMPS
Am. Rivers		Alice Ammons	Palmetto Richland Hospital
Randy Mahan	SCANA Services	Tommy Boozer	SCE&G
Regis Parsons	Homeowner	Richard Mikel	Adventure Carolina
Mike Dawson	River Alliance	Randy Mahan	SCANA Services

HOMEWORK ITEMS:

- Dave Anderson – modify Safety RCG Work Plan and send to group for final approval

Deleted: None

PARKING LOT ITEMS:

- None

DATE OF NEXT MEETING: **October 24, 2006 at 9:30 a.m.**
Located at the Lake Murray Training Center

Deleted: TBA

Kleinschmidt
Energy & Water Resource Consultants

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 distributed meeting agendas to the group. He briefly went over the agenda and then turned the meeting over to Mike Dawson to give a presentation on the Three Rivers Greenway.

Mike began his presentation by detailing the construction of the riverwalk system. He showed a map that displayed the exact layout of the riverwalk, including the location of restrooms, parking lots, and boat access. Mike also explained how potential problems such as flooding and maximum flows were being considered. He showed a detailed drawing of the composting toilets that are being installed and explained they are designed to limit potential damage from flooding of the restrooms. He also addressed the issue of wetlands, mentioning that the pathway will circle the wetland areas in order to preserve them. Mike also specified the various smaller pathways that will lead to and from the riverwalk to allow for easy access. After Mike finished detailing the length of the riverwalk, he addressed the installation of emergency call boxes. He said these boxes would be installed along the riverwalk, providing immediate access to a 911 operator. Mike added that a light would turn on near the call box when activated. He also said that there would be a gate for firemen and other rescue workers to easily access the riverwalk. Mike concluded his presentation stating that the new portion of the Three Rivers Greenway was scheduled to be operational by early summer in 2007. Mike then added that the International Canoe Federation was considering the Saluda River as the site for its annual canoe race and that he would like to have the riverwalk functional for that event. Mike then opened the meeting for questions.

Deleted: that the pathway is being constructed above the maximum flow line. Mike said this will reduce the potential for

Deleted: and pathway

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Malcolm Leaphart asked who had police jurisdiction in regards to the call boxes. Mike answered that police from the University of South Carolina and other city police have an agreement on who will take jurisdiction in the various areas. He said that the law enforcement wants to be proactive. Mike also added that there will be active patrolling around the river including security guards on golf carts.

Steve Bell then asked if there was any idea of what to expect in the next thirty years in terms of recreational activity on the river. Mike answered that there was no accurate prediction of the amount of recreational activity that the Saluda River will see in thirty years. He said that a probability analysis could be done based on population, but the accuracy would not be very reliable. Mike predicted that as many as 450 people per hour would use the greenway after completion.

Charlene Coleman brought up the issue of an increased budget for training rescuers. She stated that by adding more access to the river, there would be a rise in river use, causing an increased need for additional trained rescuers. Mike agreed that more resources were needed and that the budget did need to expand to include this issue. Charlene then asked if there would be some type of public education informing people on the new access routes. Mike answered that the State newspaper has already begun running articles about the greenway.

Dave asked if there were plans to expand the riverwalk above Interstate 26, towards Saluda Shoals. Mike answered that Saluda Shoals has put in grant requests to do their own expansions. He added that this would be funded by the cities of Columbia and West Columbia, highway funds, and local school districts. Mike added that the Three Rivers Greenway project does not have the budget to expand towards Saluda Shoals.

After a break, Dave reconvened the meeting and then turned it over to Bret Hoffman to give the group an update on the installation of the new warning siren on the Saluda River. Bret began by stating that the pole was in place and the rest of the equipment would be installed within the next week. He added that noise testing would be done on Thursday to determine if the siren noise could be reduced, in consideration of nearby neighborhoods. The new siren would be operational following that noise test. Malcolm then asked Bret where this new siren was located. Bret answered that it was at the left of the Riverbanks Zoo parking lot, covering the rapids in that area and the downstream side of the zoo. Mike Waddell then asked how long the siren will sound after activation. Bill Argentieri answered that it will sound for three minutes after initial activation. He added that the siren will be activated after a three inch rise in water level, changed from a ¾ inch rise, and that the siren will be reactivated after each rise. Bill then said that a strobe will also be triggered and will flash for sixteen minutes. Bill also added that this system runs on a three minute time delay. Charlene said that she felt that people in the river needed that extra three minutes to move to safety. Bill replied that the system can be adjusted. Malcolm asked if the siren and strobe were activated by a drop in water level. It was stated that the warning siren system was only initiated by rising water levels.

Dave then distributed copies of the Safety RCG Work Plan (attached) for discussion and the issue of having a safety plan versus a program was introduced. Bill Mathias said that a safety plan would be integrated into the FERC license, but the creation of a safety program would not, which would allow for easier modifications. Malcolm asked what assurance there is if a safety program is created. He wanted to know how it could be included into the license. Overall, the group expressed concern over the fact that a program could eventually be absolved, but a plan could not, since it would be included in the license. Patrick M. pointed out that regardless of the plan vs. program decision, the final settlement terms will be enforceable in state court by any signatory. Bill Mathias said that the safety program would be a partial liability absolver, and there would be no reason to

terminate the program. Charlene added that the plan could include specifics about stakeholders involved and meeting times for the program. This would ensure that mention of the program was included as part of the license. Joy Downs said that some of the issues were like apples and oranges, and that some of the larger issues could be discussed in the FERC plan and the other issues could be dealt with in the program. Tom Eppink said that there were some issues that had to be included in the license, as required by FERC, but others could be dealt with in the program. Tom also reiterated that there will be unannounced releases in order for Saluda to meet reserve generation requirements and the group should move forward based on this. Patrick replied that this statement is erroneous and that no evidence has been presented to stakeholders that demonstrates operations are capable of compliance with state numeric water quality standards, state narrative standards, the Clean Water Act, Federal Power Act, Endangered Species Act, and other applicable law. Several other stakeholders also spoke up in disagreement with Tom's statement and restated their expectations the RCG would be an open forum where all issues and alternatives could be discussed. The group then agreed that we can amicably, yet seriously, disagree on this issue.

Dave Anderson then directed the discussion back to the specifics of the work plan. The group decided that the identified issues would be better separated into lower Saluda River issues and Lake Murray issues.

Before the group broke for lunch, Don Eng recounted his experience during a recent release on the Saluda River. Don explained that he was fishing when he saw a large amount of water rushing towards him, washing him downstream for approximately one block. He said that he clung to branches to stay above the water, and was eventually rescued by some kayakers. He added that during this struggle, he watched a family get washed downstream and out of his sight. Don wanted to state that real people are affected by the water releases on the river. After Don's recount, there was discussion regarding the need for in-stream recreators to use appropriate safety equipment and the lack thereof in this particular case.

After lunch, discussion on the work plan continued. During the discussion, the issue of how to attain accident information was raised. The Budget Control Board and SCDNR accident data were mentioned as possible sources for this information. Because of privacy issues and unreported accidents, accurate accident information is hard to acquire. The group agreed to continue thinking about this issue.

The RCG Responsibilities section of the Work Plan initiated a discussion on whether the Safety RCG takes hierarchy over the other RCGs. The group then decided that safety should be compatible with all of the RCGs, allowing for compromise between the groups.

The group agreed on the changes made to the Safety RCG Work Plan (The updated work plan is attached).

Dave then directed the discussion to focus on the Safety Program Outline. Again, the issue of having a program versus a plan was raised. Dave stated that a safety program is acceptable to deal with issues that will continue beyond the FERC relicensing. Mike Waddell asked if the program would be submitted to FERC. Alan Stuart answered that it would be referenced through the safety plan. Dave agreed, stating that the safety program can be referenced to FERC, allowing FERC to be aware of the program. The group agreed that a safety program would be beneficial. Randy Mahan stated that this would be something good for the community. He added that including FERC in some cases would complicate the process and use extra time when making simple changes.

Deleted: Malcolm stated that the stakeholders want to be part of the process and have a platform to make recommendations.

Malcolm asked Dave to develop 'deliverables' for each of the tasks in the Safety RCG Work Plan (Work Scope and Product Section) as those are reflective of the important issues raised to date and are the basis for the recommendations to be made to FERC. Dave indicated that he would do that. Malcolm pointed out that developing a safety program would take away from the limited time and resources of the Safety RCG in dealing with the issues and should be considered after relicensing, and definitely not as a replacement goal or deliverable of the Safety RCG as defined in the Mission Statement. Tentative revisions to the Mission Statement made earlier in the meeting to reflect a change in scope and product (deliverable) to a safety program to be administered outside of the FERC process and after license approval were removed. The language of the original mission to develop recommendations for the identified issues was reinserted to reflect that the group would continue to develop an "RCG Safety Plan" for submission to FERC for consideration to incorporate into the FERC Public Safety Plan. Tommy Boozer acknowledged that the safety program was an idea brought to SCE&G to simplify and allow for ongoing public discussions concerning safety issues on the lake. Tommy further stated that he understands, as Malcolm explained, the stakeholders want to develop recommendations for incorporation into the FERC license and not defer actions on issues until after the license is approved. Randy reiterated that FERC will want to look at alternatives in determining whether to grant a new license and explained this might include the potential to modify Saluda to get the most economic benefit possible from a minimum flow rather than just to keep spinning a unit or two with no generation and the potential to replace the runners to increase the units' maximum capacity.

Joy reiterated that the larger safety issues, such as flows, water levels, and shoal makers, should be included in the plan to FERC, and other issues should be included in the program. Tommy Boozer added that it is important to show that an effort is being made for safety in the future. The group ended the discussion by agreeing in favor of the safety program. The group agreed that developing a safety plan, addressing identified issues, and determining what recommendations need to be made back to Operations RCG should take priority, but that Bill Mathias can continue to work on the

Deleted: the

safety program. Malcolm suggested that developing a safety program after submitting the new license application might be more appropriate.

The group agreed to have the next RCG meeting in October, around the time of the next Quarterly Public Meeting. Dave suggested that the group have two separate meetings to discuss lake issues and river issues after the joint RCG meeting in September (after the operations model is finalized). No dates were set for any of these meetings. It was agreed that the group will continue to communicate by e-mail.

Comments received after this meeting are attached after the agenda.

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

July 20, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 10:30** Presentation on the Three Rivers Greenway (Mike Dawson)
- **10:30 to 10:45** BREAK
- **10:45 to 11:00** Update on Installation of Warning Siren (Bret Hoffman)
- **11:00 to 12:00** Discussion of Safety RCG Work Plan (Dave Anderson)
- **12:00 to 1:00** LUNCH
- **1:00 to 2:00** Discussion of Safety RCG Work Plan (Dave Anderson)
- **2:00 to 2:15** BREAK
- **2:15 to 3:00** Discussion of Safety Program Outline (Dave Anderson)
- **3:00 to 3:10** Develop an Agenda for Next Meeting and Set Next Meeting Date

  Adjourn

Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

Comments from Steve Bell: The Saluda Generation TWC is reviewing generation data and most likely will request additional information on specific releases. It seems a bit premature to suggest that we should agree to disagree before reviewing all the data. Also, it may be worth mentioning that all issues including SCE&G's are being tracked via spreadsheet which will result in a written record of the step by step process used to resolve the issue. I believe this will complement the meeting summaries as the official record. Finally, there appears to be no consensus, at this time, on SCE&G's issue of "maximum flexibility". We owe it to our members to review all the facts before considering an outcome.

Kacie Jensen

From: Dave Anderson
Sent: Tuesday, July 18, 2006 9:18 AM
To: 'jbhuggins@lexhealth.org'
Cc: Alison Guth; Alan Stuart
Subject: Saluda Safety Meeting

I spoke to Pamela Williams last week to extend an invitation to your organization to participate in the Safety Resource Conservation Group. SCE&G is currently undergoing a federal process to obtain a new operating license for the Saluda Dam. The Safety RCG is a working group comprised of SCE&G and several stakeholders concerned with safety issues associated with Lake Murray and the lower Saluda River.

If your organization is interested, I encourage you to visit the website that we have set up as the primary means of communication for relicensing:

www.saludahydrorelicense.com

The next meeting of the Safety RCG is on Thursday, July 20 at the Lake Murray Training Center. I have attached the agenda for the meeting. If you would like to be added to our e-mail distribution group, please reply to Alison Guth (cc'ed on this message) and she can get you set up.

Thanks for your interest in this important process.

David K. Anderson, Ph.D.
Recreation/Human Dimensions Specialist
Kleinschmidt Associates
4958 Valleydale Rd., Ste. 250
Birmingham, AL 35242
Ph: 205-981-4547x240
FAX: 205-981-4549
Dave.Anderson@KleinschmidtUSA.com

2006-07-20 Safety RCG Agenda.p...

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

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Lake Murray Training Center

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  Adjourn

Saluda HYDRO RELICENSING

Kacie Jensen

From: Alison Guth
Sent: Thursday, July 13, 2006 11:04 AM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: FW: 07-20-2006 Safety RCG Meeting Agenda

-----Original Message-----
From: Dave Anderson
Sent: Tuesday, July 11, 2006 11:11 AM
To: Alison Guth
Subject: 07-20-2006 Safety RCG Meeting Agenda

Here is our agenda for the meeting next week. As you can see, we will be viewing a presentation about the Three Rivers Greenway given by Mike Dawson first thing in the morning. Please make every effort to be ready to start at 9:30 am so we can accommodate Mike's schedule.

2006-07-20 Safety RCG Agenda.p...

You can also see that we have a very busy day after the presentation. The objective of our meeting is to finalize the Safety RCG Work Plan and to begin discussions on the "Safety Program" we will develop over the course of the next year. I have attached both Word and PDF files of the Work Plan in order for you to see the changes that have been made via e-mail. These changes are color coded for your reading pleasure. If you have MS Word, you should be able to see who made the edit by hovering your cursor over the change. For those of you that don't have Word, the colors and their respective "editors" are:

Red - Dave A.
Blue - Alan S. (these are actually changes we made on Alan's computer at our last meeting)
Green - Randy M.
Purple - Bill A.
Orange - Charlene C.
Lt. Blue - Malcolm L.
Yellow - Mike W.
Grey - Bill M.

These colors may not match up to what you see in the Word document as Word changes the colors every time you open the document. They will correspond to the attached PDF file.

Draft Safety RCG Work Plan (07...

Draft Safety RCG Work Plan (07...

Finally we will discuss the "Safety Program" outline. I will be looking for your basic comments as to the components of this program and any additional "sections" you think should be included. I will provide verbal cues as to what each section will entail at the meeting.

Saluda Safety
Program Outline_...

As always, if you are planning on attending the meeting, please let Alison know ASAP so she can make arrangements for lunch (and for seating for Mike's presentation). Hope to see you next week!

David K. Anderson, Ph.D.
Recreation/Human Dimensions Specialist
Kleinschmidt Associates
4958 Valleydale Rd., Ste. 250
Birmingham, AL 35242
Ph: 205-981-4547x240
FAX: 205-981-4549
Dave.Anderson@KleinschmidtUSA.com

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

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  Adjourn

Saluda HYDRO RELICENSING

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	cheetahtrk@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@scccl.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@scccl.org	
Ralph Crafton	LMA	crafton@usit.net	
Randy Mahan	SCANA	rmahan@scana.com	
Roger Hovis	Richland County Emergency Services	rogerhovis@richlandonline.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	

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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 concerning changes in river flows in the lower Saluda River
- creation of a public warning/notification system for river users during unannounced changes in river flows in the lower Saluda River
- fluctuating lake levels and their effect on safety
- boat traffic/congestion in cove areas related to nearby shoreline development
- fluctuating lake and river levels and their effect on recreational user safety
- placement and maintenance of shoal markers
- systematic collection of accident data on the lake and on the river
- ingress/egress to potentially hazardous areas (e.g., Mill Race)
- Lack of an advanced public information system of releases from the Lake Murray hydro plant that provides release information at least 12 hours in advance
- 'Rates of flow' from the Lake Murray hydro need a unit of measure established, and a determination of unacceptable rate levels for the safety of recreationists in the lower Saluda River
- consider alternate methods of operations besides the present "maximum flexibility" mode of operation
- Poor understanding the hazardous conditions in the river caused by hydro flows, how hazards vary from place to place, and who is affected
- Interest in managing river flows, particularly rates of increase in flow, to improve safety for river users
- fluctuating river levels and its effect on rescue resources
- flow rate recommendations for public safety concerns

Comment: Malcolm Leaphart suggests deleting this one in lieu of the item "Lack of an advanced…"

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Comment: Charlene Coleman: Redundant to #3

Deleted: current project operations

Inserted: current project operations

Deleted: unannounced river flows

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Safety Resource Conservation Group Work Plan
Saluda River Project

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 on the lake and lower Saluda River.
- Identifying any studies, if applicable, that should be performed to identify and/or evaluate possible changes to Project operations (e.g., flow studies on the river).
- Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding possible modifications to current Project operations.
- Reviewing results from the Recreation Resource Conservation Group to make sure they are consistent with the mission statement of the Safety Resource Conservation Group.
- Developing a recreational safety plan for Lake Murray and the lower Saluda River that addresses all of the "Identified Issues"
- Developing a public information/warning system during unannounced changes in river flows in the lower Saluda River (including a phone call to Rescue One—Columbia Fire Department).
- Identify needed information products/systems/facilities to increase public awareness of potential hazards and necessary precautions

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Deleted: Downstream Flows Technical Working Committee

Comment: Malcolm Leaphart suggests deleting.

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 and alternatives to present operations to enhance safety on the lower Saluda River.
- **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 (flow studies related to safety on the lower Saluda River).
- **Task 7** – Develop and recommend operations scenarios to the Operations RCG for analysis (both lake and selected points (determine by the stakeholders) on the lower Saluda River). 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.

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- **Task 9** – Develop study designs/methods/plans and review agreed upon studies, literature reviews, etc, if necessary.
- **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 safety-related 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

DRAFT

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	
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Saluda River Project

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DRAFT

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SAFETY PROGRAM OUTLINE

DRAFT

SALUDA PROJECT
(FERC NO. 516)

JULY 10, 2006

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SAFETY PROGRAM OUTLINE

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SAFETY PROGRAM OUTLINE

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11.0 USEFUL RESOURCES .....

12.0 ANNOTATED BIBLIOGRAPHY WITH WEB LINKS .....

Kacie Jensen

From: Dave Anderson
Sent: Tuesday, July 11, 2006 11:11 AM
To: Alison Guth
Subject: 07-20-2006 Safety RCG Meeting Agenda

Here is our agenda for the meeting next week. As you can see, we will be viewing a presentation about the Three Rivers Greenway given by Mike Dawson first thing in the morning. Please make every effort to be ready to start at 9:30 am so we can accommodate Mike's schedule.

2006-07-20 Safety RCG Agenda.p...

You can also see that we have a very busy day after the presentation. The objective of our meeting is to finalize the Safety RCG Work Plan and to begin discussions on the "Safety Program" we will develop over the course of the next year. I have attached both Word and PDF files of the Work Plan in order for you to see the changes that have been made via e-mail. These changes are color coded for your reading pleasure. If you have MS Word, you should be able to see who made the edit by hovering your cursor over the change. For those of you that don't have Word, the colors and their respective "editors" are:

Red - Dave A.
Blue - Alan S. (these are actually changes we made on Alan's computer at our last meeting)
Green - Randy M.
Purple - Bill A.
Orange - Charlene C.
Lt. Blue - Malcolm L.
Yellow - Mike W.
Grey - Bill M.

These colors may not match up to what you see in the Word document as Word changes the colors every time you open the document. They will correspond to the attached PDF file.

Draft Safety RCG Work Plan (07...

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Finally we will discuss the "Safety Program" outline. I will be looking for your basic comments as to the components of this program and any additional "sections" you think should be included. I will provide verbal cues as to what each section will entail at the meeting.

Saluda Safety Program Outline_...

As always, if you are planning on attending the meeting, please let Alison know ASAP so she can make arrangements for lunch (and for seating for Mike's presentation). Hope to see you next week!

David K. Anderson, Ph.D.
Recreation/Human Dimensions Specialist
Kleinschmidt Associates
4958 Valleydale Rd., Ste. 250
Birmingham, AL 35242

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Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

July 20, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 10:30** Presentation on the Three Rivers Greenway (Mike Dawson)
- **10:30 to 10:45** BREAK
- **10:45 to 11:00** Update on Installation of Warning Siren (Bret Hoffman)
- **11:00 to 12:00** Discussion of Safety RCG Work Plan (Dave Anderson)
- **12:00 to 1:00** LUNCH
- **1:00 to 2:00** Discussion of Safety RCG Work Plan (Dave Anderson)
- **2:00 to 2:15** BREAK
- **2:15 to 3:00** Discussion of Safety Program Outline (Dave Anderson)
- **3:00 to 3:10** Develop an Agenda for Next Meeting and Set Next Meeting Date

  Adjourn

Saluda HYDRO RELICENSING

Safety Resource Conservation Group Work Plan
Saluda River Project

Facilitator:			
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DRAFT

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

DRAFT

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SAFETY PROGRAM OUTLINE

DRAFT

SALUDA PROJECT
(FERC NO. 516)

JULY 10, 2006

Prepared by:

Kleinschmidt
Energy & Water Resource Consultants

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SAFETY PROGRAM OUTLINE

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SALUDA PROJECT
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SAFETY PROGRAM OUTLINE

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Kacie Jensen

From: Mike Waddell [mwaddell@esri.sc.edu]
Sent: Friday, July 07, 2006 11:46 AM
To: Dave Anderson
Subject: RE: Reminder: Updated Safety RCG Work Plan

Dave attached are my comments to the work plan

From: Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
Sent: Monday, July 03, 2006 9:34 AM
To: 'Tommy Boozer'; 'Aaron Small'; 'Alan Axson'; 'Alan Stuart'; 'Alison Guth'; 'Amanda Hill'; 'Bill Argentieri'; 'Bill Marshall'; 'Bill Mathias'; 'Bret Hoffman'; 'Charlene Coleman'; 'Dave Anderson'; 'David Price'; 'Dick Christie'; 'Edward Schnepel'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Jennifer O'Rourke'; 'Jerry Wise'; 'Jim Devereaux'; 'John and Rob Altenberg'; 'Joy Downs'; 'Karen Kustafik'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Malcolm Leaphart'; 'Mark Leao'; Mike Waddell; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Patrick Moore'; 'Randy Mahan'; 'Roger Hovis '; 'Skeet Mills '; 'Steve Bell'; 'Suzanne Rhodes'; 'Tom Eppink'
Subject: Reminder: Updated Safety RCG Work Plan

Just a quick reminder that we have a due date coming up on the Work Plan.

-----Original Message-----

From: Dave Anderson

Sent: Tuesday, June 13, 2006 3:15 PM

To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink

Subject: Updated Safety RCG Work Plan

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If you have any questions on the suggested edits, feel free to contact me.

<< File: Draft Safety RCG Work Plan (06-13-06).doc >>

Safety Resource Conservation Group Work Plan
Saluda River Project

Facilitator:			
Dave Anderson	Kleinschmidt Associates	dave.anderson@kleinschmidtusa.com	(205) 981-4547
Members:			
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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	
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Bill Mathias	LMA/LMPS	bill25@sc.rr.com	
Charlene Coleman	American Whitewater	cheetahtrk@yahoo.com	
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George Duke	LMHC	kayakduke@bellsouth.net	
Gerrit Jobsis	Coastal Conservation League & American Rivers	gerritj@scccl.org; gjobsis@americanrivers.org	
Jennifer O'Rourke	South Carolina Wildlife Federation	jenno@scwf.org	
Jerry Wise	Lake Murray Power Squadron	meddynamic@aol.com	
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Norm Ferris	Trout Unlimited	norm@sc.rr.com	
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Suzanne Rhodes	SC Wildlife Federation	suzrhodes@juno.com	
Tom Eppink	SCANA Services, Inc.	teppink@scana.com	
Tommy Boozer	SCE&G	tboozer@scana.com	

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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 concerning changes in river flows in the lower Saluda River
- creation of a public warning/notification system for river users during unannounced changes in river flows in the lower Saluda River
- fluctuating lake levels and their effect on safety
- boat traffic/congestion in cove areas related to nearby shoreline development
- fluctuating lake and river levels and their effect on safety
- placement and maintenance of shoal markers
- systematic collection of accident data
- ingress/egress to potentially hazardous areas (e.g., Mill Race)

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 on the lake and lower Saluda River.
- Identifying any studies, if applicable, that should be performed to identify and/or evaluate possible changes to Project operations.
- Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding possible modifications to current Project operations.
- Reviewing results from the Recreation Resource Conservation Group to make sure they are consistent with the mission statement of the Safety Resource Conservation Group.
- Developing a recreational safety plan for Lake Murray and the lower Saluda River
- Developing a public information/warning system during unannounced changes in river flows in the lower Saluda River

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Safety Resource Conservation Group Work Plan
Saluda River Project

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 and alternatives to present operations to enhance safety on the lower Saluda River.
- **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.
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- **Task 7** – Develop and recommend operations scenarios to the Operations RCG for analysis (both lake and selected points (determine by the stakeholders) on the lower Saluda River). 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.
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Deleted: .

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

DRAFT

Kacie Jensen

From: C Coleman [cheetahtrk@yahoo.com]

Sent: Thursday, July 06, 2006 10:34 AM

To: Dave Anderson; 'Bill Marshall'; 'Gerrit Jobsis (American Rivers)'; 'Joy Downs'; 'Malcolm Leaphart'; 'Mike Waddell'; 'Patrick Moore'; 'Steve Bell'

Subject: Re: Reminder: Updated Safety RCG Work Plan

Dave,
my additions
sorry for the late notes--- prior obligations in legal narrative precluded progress.
Gentlemen and kind lady do these cover your latest concerns?
Charlene

Dave Anderson <Dave.Anderson@KleinschmidtUSA.com> wrote:

> Just a quick reminder that we have a due date coming up on the Work Plan.
>
> -----Original Message-----
>
> **From:** Dave Anderson
>
> **Sent:** Tuesday, June 13, 2006 3:15 PM
>
> **To:** Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
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> **Subject:** Updated Safety RCG Work Plan
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> << File: Draft Safety RCG Work Plan (06-13-06).doc >>

Learn to get in touch with the silence within yourself and know that everything in this life has a purpose.
- Elizabeth Kubler-Ross

Do you Yahoo!?
Next-gen email? Have it all with the all-new Yahoo! Mail Beta.

Identified Issues

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- creation of a public warning/notification system for river users during unannounced changes in river flows in the lower Saluda River
- fluctuating lake levels and their effect on safety
- boat traffic/congestion in cove areas related to nearby shoreline development
- fluctuating lake and river levels and its effect on recreational user safety (redundant in #3)
- fluctuating river levels and its effect on rescue resources
- placement and maintenance of shoal markers
- systematic collection of accident data on the lake and on the river
- ingress / egress to potentially hazardous areas (e.g., Mill Race)

* flow rate recommendations for public safety concerns

RCG Responsibilities

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Kacie Jensen

From: Bill Marshall [MarshallB@dnr.sc.gov]
Sent: Monday, July 03, 2006 3:55 PM
To: Dave Anderson
Cc: Dick Christie; Charlene Coleman; Malcolm Leaphart; kakustafik@columbiasc.net; Patrick Moore; Steve Bell
Subject: RE: Updated Safety RCG Work Plan

Dave,
I reviewed the Safety work plan ...again (after reviewing the recreation plan) ...and now have a few additions to suggest.

Under "Identified Issues" please add:

- Poor understanding the hazardous conditions in the river caused by hydro flows, how hazards vary from place to place, and who is affected.
- Interest in managing river flows, particularly rates of increase in flow, to improve safety for river users.

Under "RCG Responsibilities" consider adding:

- Identify needed information products/systems/facilities to increase public awareness of potential hazards and necessary precautions.

Thanks for allowing me to submit comments.

Bill Marshall
S.C. Department of Natural Resources
1000 Assembly Street, Suite 354
Columbia, SC 29201
(803) 734-9096
marshallb@dnr.sc.gov

From: Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
Sent: Tuesday, June 13, 2006 4:15 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis; Lee (Skeet) Mills; Steve Bell; Suzanne Rhodes; Tom Eppink
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<<Draft Safety RCG Work Plan (06-13-06).doc>>

Kacie Jensen

From: Malcolm Leaphart [malcolml@mailbox.sc.edu]
Sent: Tuesday, June 13, 2006 5:17 PM
To: Dave Anderson
Cc: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis; Skeet Mills; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: Re: Updated Safety RCG Work Plan {SpamScore: sss}

Dave,
Please include the following two "Identified Issues" for the Safety RCG that have been discussed many times at the meetings and via emails - including in the email discussion chain resulting from the unannounced high flow release in May that required river rescues.

The public warning system for unannounced releases listed as the second of the "Identified Issues" is not feasable for the entire stretch of the lower Saluda River, but is not unacceptable as an issue; however, the first issue for 'improved communications' is of no value if the communications cannot be provided in advance. Once a recreationist has reached the river, website and telephone information of rising water is of no value. Delete that issue in lieu of the first one listed below.

The next to last entry in the RCG Responsibilities:
"Develop a recreational safety plan for Lake Murray and the lower Saluda River"
should be expanded to:
"Develop a recreational safety plan for Lake Murray and the lower Saluda River that addresses all of the "Identified Issues".

The last entry in the "RCG Responsibilities" is redundant and should be deleted. The first issue listed below addresses a 'public information/warning system'.

"Identified Issues"
-- Lack of an advanced public information system of releases from the Lake Murray hydro plant that provides release information at least 12 hours in advance.

-- 'Rates of flow' from the Lake Murray hydro need a unit of measure established, and a determination of unacceptable rate levels for the safety of recreationists in the lower Saluda River.

Quoting Dave Anderson <Dave.Anderson@KleinschmidtUSA.com>:

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> have received to date. You should be able to see who made the edit
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>
> <<Draft Safety RCG Work Plan (06-13-06).doc>>
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Kacie Jensen

From: Dave Anderson
Sent: Tuesday, June 13, 2006 4:15 PM
To: 'Tommy Boozer'; 'Aaron Small'; 'Alan Axson'; Alan Stuart; Alison Guth; 'Amanda Hill'; 'Bill Argentieri'; 'Bill Marshall'; 'Bill Mathias'; Bret Hoffman; 'Charlene Coleman'; Dave Anderson; 'David Price'; 'Dick Christie'; 'Edward Schnepel'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Jennifer O'Rourke'; 'Jerry Wise'; 'Jim Devereaux'; 'John and Rob Altenberg'; 'Joy Downs'; 'Karen Kustafik'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Malcolm Leaphart'; 'Mark Leao'; 'Mike Waddell'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Patrick Moore'; 'Randy Mahan'; 'Roger Hovis '; 'Skeet Mills '; 'Steve Bell'; 'Suzanne Rhodes'; 'Tom Eppink'
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Draft Safety RCG Work Plan (06...

Safety Resource Conservation Group Work Plan
Saluda River Project

Facilitator:			
Dave Anderson	Kleinschmidt Associates	dave.anderson@kleinschmidtusa.com	(205) 981-4547
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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	cheetahtrk@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	
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George Duke	LMHC	kayakduke@bellsouth.net	
Gerrit Jobsis	Coastal Conservation League & American Rivers	gerritj@scccl.org; gjobsis@americanrivers.org	
Jennifer O'Rourke	South Carolina Wildlife Federation	jenno@scwf.org	
Jerry Wise	Lake Murray Power Squadron	meddynamic@aol.com	
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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@scccl.org	
Ralph Crafton	LMA	crafton@usit.net	
Randy Mahan	SCANA	rmahan@scana.com	
Roger Hovis	Richland County Emergency Services	rogerhovis@richlandonline.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	

DRAFT

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 concerning changes in river flows in the lower Saluda River
- creation of a public warning/notification system for river users during unannounced changes in river flows in the lower Saluda River
- fluctuating lake levels and their effect on safety
- boat traffic/congestion in cove areas related to nearby shoreline development
- fluctuating lake and river levels and their effect on safety
- placement and maintenance of shoal markers
- systematic collection of accident data
- ingress/egress to potentially hazardous areas (e.g., Mill Race)

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Deleted: current project operations
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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 should be performed to identify and/or evaluate possible changes to Project operations.
- Presenting a range of reasonable alternatives or recommendations to the Saluda Hydro Relicensing Group (SHRG) regarding possible modifications to current Project operations.
- Reviewing results from the Recreation Resource Conservation Group to make sure they are consistent with the mission statement of the Safety Resource Conservation Group.
- Developing a recreational safety plan for Lake Murray and the lower Saluda River
- Developing a public information/warning system during unannounced changes in river flows in the lower Saluda River

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Safety Resource Conservation Group Work Plan
Saluda River Project

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.
- **Task 7** – Develop and recommend operations 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, if necessary.
- **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 safety-related 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

DRAFT

Kacie Jensen

From: Malcolm Leaphart [malcolml@mailbox.sc.edu]
Sent: Monday, June 12, 2006 5:56 PM
To: Dave Anderson
Cc: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: Fatalities on the lower Saluda River

Forward of comments from Don Eng and I as suggested regarding the safety concerns of the 'big' releases from the Lake Murray hydro.

Malcolm
I'm fine with you sending it out to the group; it seems to fit in as a reply to the "Fatalities on the lower Saluda River" thread.

-----Original Message-----
From: Malcolm Leaphart [mailto:malcolml@mailbox.sc.edu]
Sent: Thursday, May 25, 2006 9:56 AM
To: Dave Anderson
Subject: Safety/Flows

Dave,
Thanks for your reply noting the rescue information previously provided. Unfortunately it does not include the many times the grave situations have occurred over the years such as the rescues Saturday at the Zoo and the one related by Don Eng below. I have requested that Columbia try to pull together additional information such as the number of people rescued, even if not injured or drowned. That data may not be available, and the many incidents like Mr. Eng's are obviously not recorded anywhere either; but we cannot ignore them as 'anecdotal' and inconsequential. Also, we must acknowledge the dangers of the very rapid rises in the lower Saluda water levels and the fact that releases are not announced at least a day in advance for safe planning by the public of river activities. Mr. Eng would not have fished Saturday afternoon, and I hate to think of the sad ending to his story if the flows had been in the 18,000 cfs range...

Science based decision making is obviously preferred, but we have to make sure that we don't overlook evaluating issues to make sure that personal knowledge and experiences are factored in, and that solutions pass the 'common sense' test to those with first-hand experience.

I can only say a prayer that Don Eng is okay as I point out to you that he is one of the strongest, most experienced wading fishermen I have ever known. And very vigilant too, always watching the water levels in the lower Saluda as I do. For him to barely escape with his life Saturday is disconcerting to say the least... These types of threats to human life from the 'wall of water' he experienced must be factored into the relicensing decision making...

Please let me know if there is an appropriate way you would like to share Don's experience and my comments to the others on the Safety and Recreation RCGs? Or, if I should forward my note on to them?

Thanks for your efforts in moderating the groups and committees. Look forward to future correspondence and meetings.

----- Forwarded message from DEngFF@aol.com -----
Date: Wed, 24 May 2006 23:27:01 EDT
From: DEngFF@aol.com
Reply-To: DEngFF@aol.com
Subject: Fwd: Final Meeting Notes for the Generation Review TWC
To: MALCOLML@mailbox.sc.edu

For your information: 600 cu ft per sec to 13,000+ cu ft per sec. in just a few minutes Saturday. The advancing wall of water must have been over 2 feet and total release was over 6 feet. I am lucky to be still here. I was
fishing below Corley Island (downstream from Saluda Shoals Park).
Don Eng

----- End forwarded message -----

Kacie Jensen

From: Dave Anderson
Sent: Tuesday, December 05, 2006 3:09 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; Joel Huggins ; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Roger Hovis ; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: Safety RCG Issues Matrix

I handed this out in our last meeting, but wanted to give everyone the chance to look at the "e-version." I have updated it a little since our meeting. If anyone thinks something is missing, let me know.

Safety RCG Issues Matrix (2006...

Safety RCG
Issues Matrix

Issue/Request	Requested by:	Description
river level fluctuations and their effect on safety lack of advance public information system and improvement of communications concerning changes in river flows in the lower Saluda River enhancement of a public warning/notification system (warning devices) for river users during unannounced changes in river flows in the lower Saluda River ingress/egress to potentially hazardous areas and its effect on rescue resources (e.g., Mill Race) rate of change on the lower Saluda River for recreational safety	CCL/AR, Lake Watch, LSSRAC, SCPRT, TU, AW	Request of studies to improve the water level rise safety warning systems on the LSR, as well as implementing additional measures to improve safety. It is requested that SCE&G "should examine various types of warning systems at all sites used by the public for recreation" and "should include the amount of time required for various volumes of release to reach the recreation sites to give an idea of exactly how much time river users have to react. The study should also examine signs, lights and other visual warnings as well as horns or sirens to meet the needs of river users of all abilities." Request of studies in order to explore and decide the best way to disseminate Project operations information to river users as well as decide what information to release. CCL/AR suggests that the public information system should include an annual schedule of minimum flow requirements, recent rainfall, weekly forecasts of expected operations, real-time operations and flow information, and other useful information. The information should include what rapids require what levels of paddling expertise at different water levels and include warnings about dangers present in varying flow scenarios.
lake levels and their effect on safety	LMHC, Lake Watch	Requested in order to determine the impacts that lake drawdowns pose on public safety, economics, recreation, erosion, sedimentation and other resources.
lake level fluctuations and their effect on safety	LMHC, Lake Watch	

boat traffic/congestion in cove areas related to nearby shoreline development	Lake Watch, LHMC, LMA	Boat traffic and congestion in cove areas related to nearby shoreline development was expressed as a concern.
placement and maintenance of shoal markers	Lake Watch, LHMC, LMA	Group expressed concern as to the placement and maintenance of shoal markers.
power lines impeding sail boat navigation		
amphibious aircraft using Lake Murray		Group expressed concern as to the use of the lake by amphibious aircraft and the possible safety issues that could result.
systematic collection of accident data	DNR	All project related accidents that occurred during the existing license period and any accommodations in project operations or facilities by the licensee to address these accidents should be listed.

Safety RCG
Issues Matrix

Status/Date Discussed	Current Action Items	Resolutions
Initial discussions on warning siren system occurred on **January 10, 2006**. Discussions included an explanation of how sirens function as well as their locations. **April 18, 2006** - group identified high use areas for possible locations for warning sirens. Group in process of developing map of locations. **April 18th, 2006** - Fire Department is currently identifying an area where access is needed. Lake and Land Management RCG had significant discussion on Public Outreach Programs on **August 22, 2006**. Several options for public outreach were favored including a newsletter. SCE&G in the process of testing a email/phone call system for water level rise. **October 24, 2006** - Additional locations of warning devices were discussed; communications plan was discussed; update on rate of change from level logger analysis	Types and placement of additional warning devices are in discussion. Results from rate of change analysis will assist with how additional warning devices will be activated. Communication Plan is being drafted.	Ongoing
	Hazardous Areas TWC formed to examine issue in more detail.	Ongoing
	Hazardous Areas TWC formed to examine issue in more detail.	Ongoing

Lake and Land Management TWC is in the process of revising criteria intended to lessen congestion issues related to multi-slip facilities.		Ongoing
February 14, 2006 - concern was raised about unmarked shoals on Lake Murray. Item placed in parking lot until Steve Bell can gather information on specific potential hazardous shoals below 354' msl. Tom Eppink to review DNR authority concerning shoal markers on Lake Murray.	Steve Bell to gather information on specific potential hazardous shoals below 354' msl. Tom Eppink to review DNR authority concerning shoal markers on Lake Murray.	Ongoing
October 24, 2006 - this issue was discussed; standards are in place for power lines; Steve Bell is going to talk to sailing clubs to see if there are any existing lines that are a problem.	Steve Bell to talk to sailing clubs about existing problems.	Ongoing
October 24, 2006 - issue was discussed; Tom Eppink is researching applicable laws.		Ongoing
Information on Fatalities on the LSR was distributed to the group on **May 23, 2006** by email. Accident logs also handed out at the **February 14, 2006** meeting.	Dave Anderson trying to contact person at DNR to request boating accident data.	Ongoing

Alan explained that SCE&G was in the process of developing a presentation on alternative energy sources. Bill Argentieri further explained that they hope to have a presentation ready in June or July that addresses the issues associated with alternative energy sources, energy sources that could replace Saluda, the permitting issues related to replacement energy sources, as well as their environmental impacts. Bill continued to explain that there would also be a dollar analysis that would address capital costs, fuel costs and O&M costs.

Gerrit Jobsis explained that he believed that although it was important to look at reserve, he was concerned with how the Saluda Project operates as it relates to compliance with water quality standards, minimum flow requirements, ESA standards, and recreation and safety needs. He noted that he believed that overall project operations need to be evaluated. Bill Argentieri replied that those issues would be addressed in an upgrade study. He noted that they were looking at runner improvements that would improve the water quality.

Bill Argentieri began to explain how Saluda was used for reserve. He noted that SCE&G started using Saluda to meet reserve requirements in the late 1990's. He noted that this was mainly due to requirement changes of VACAR. Bill informed the group that according to SCE&G's records, SCE&G was called on for reserve capacity by neighboring utilities 22 times since 1998. Bill further clarified that the records did not specify whether it was Saluda that was used to meet the reserve or if another plant was used. It also did not specify how many times Saluda was used for internal reserve needs. It was noted that in the past year SCE&G has been putting out a weekly report that specifies more information on how Saluda is used due in part to a settlement agreement with American Rivers and the South Carolina Coastal Conservation League (SCCCL). Bill explained that it was SCE&G's goal in relicensing to maintain the flexibility to use Saluda for reserve.

Steve Bell and Patrick Moore requested to form a technical committee (TWC) to explore the uses of Saluda. Patrick suggested acquiring USGS data in order to link it to Saluda operations. Charlene Coleman noted that weather patterns may also be needed when evaluating the use of Saluda Theresa Thom pointed out that it would be difficult to link flow data to operations at Saluda until recently as the reports have been put out in the past year.

Bill Cutler recommended the development of a statistical model that would predict the future use of Saluda by looking at past uses at Saluda as well as other facilities. Randy noted that the group could look at the historical data but it would be difficult to predict the unpredictable need for reserve. Gerrit Jobsis added that he did not believe the information was available at this point to develop a model.

Ray Ammarell explained to the group what information was issued in the weekly generation reports. He noted that dispatch provides any explanations for why Saluda is used and distinguishes if it is used for reserve.

The group briefly reviewed the goal of the proposed TWC. Gerrit noted that he believed the goal of the TWC would be to evaluate operational flexibility at Saluda and understand how it affects other interests. Gerrit further noted that once information is collected on the operations, the group could work towards an agreement on how they would move forward with operations. Steve Bell also added that it was Lake Watch's goal to obtain the operational flexibility information in a physical report form. The group concluded that the new TWC would serve to accomplish the following two goals:

- To better understand Saluda operations
- To review existing operations data
- To develop a process for using input from other RCG's to develop alternatives for operation.

Charlene Colman suggested that the committee start by obtaining the operations information from the past year. She explained that all the weather events and circumstances were still fresh in everyone's memories, and the occurrence of Katrina would show what would happen under an extreme event. Randy noted that that was agreeable to SCE&G as well.

Alan then asked the group who was interested in being a member of the TWC. The following people volunteered:

Mike Waddell
Steve Bell
Bill Cutler
Jennifer O'Rourke
Theresa Thom
Karen Kustafik
Patrick Moore
Bill Marshall
Bill Argentieri

The group then began to discuss safety on the river and the group collectively brainstormed ideas for the collection of information on this topic. Alan suggested developing a questionnaire that Trout Unlimited could distribute among its members. Tony Bebber pointed out that the recreation committee would be performing onsite studies, he noted that a few safety questions could be

incorporated as a component of the questionnaire such as "how the individual perceived the water level that day in terms of safe recreation".

Charlene Colman addressed the issue of safety on the lower Saluda River and noted that even if flow changes are implemented, the limiting factor will still be the responsibility of the public. She explained that people using the river, in majority, do not heed any warning, even personal. Randy Mahan mentioned that he would be in support of legislation that requires individuals who recreate below the hydro to wear a personal floatation device. The group agreed. Gerrit Jobsis added that warnings and operations can be improved and modified to limit unsafe conditions on the river.

Charlene then distributed information to the group addressing flows and recreation (attached below). She explained that the information was approximations made from 14 years of research. She noted that she worked with Bill Marshall and the SCE&G dispatchers to develop the information. Charlene agreed that the most helpful thing in regards to safety is to implement legislation that requires safety vests. She also noted that on May 13th there would be a 10,000 cfs recreation release if an individual wanted to see the effects of this.

Patrick Moore noted that he would be interested in obtaining information on fatalities on the lower Saluda River, he noted that he would be interested to find out if operations was effecting that. Alan Stuart noted that they would look into obtaining that information and that Alan Axson with the Columbia Fire and Rescue may have that information.

In closing Alan noted that the Technical Working Committee would meet directly after in order to quantify what information was needed and proceed with the next steps in data acquisition.

On a different note, Alan noted that Jim Landreth had asked him to note that if any members felt that their questions were not being answered in the group setting that Jim would be happy to talk with them personally.

The group adjourned.

Just for info for tomorrow

Flows--safety

250-1000 CFS is wade able but never recommended in rescue venues.

1,000-3,500 CFS an average swimmer stands a chance to get to the bank.

1,000-4,000 Rescue is not a great risk level for the Fire Dept.. Strong swimmers would struggle and most likely swim at least 1/8 of a mile to get to land from the middle of the river.

4,500 + for every 1,000 CFS increment the danger level is increased greatly

12,000 –18,000+ a Raft could get to you, but only by experienced raft paddlers. The Fire Dept Zodiac can't do Mill Race without serious risk and would most likely flip.

Hyperthermia is loss of body heat during a long swim and the Saluda is 50 degrees year round.

It takes the water 2 hours from the tail race to the Zoo. It takes approx 20 mins for water at the warning Float (trigger) for the siren to make it to the zoo.

Flows—Rec—these are approximates but close.

250- 1000 wade fishing is possible.
250-2,000 approx –novice boaters/floaters
2,000+--4,000 intermediate level Boaters.
4,500- 6,000—experienced boaters w/ river knowledge
250—8,000 bank fishing relatively safe
10,000 –release for Canoeing for Kids Fund raiser on the Day before Mother's day
10,000—16,000 Rafting is possible with a guide.
16,000---18,000---rafting is only for the experienced guide on big water rivers.
250—18,000 experienced advanced canoeist and kayakers
8,000—16,000 Bank fishermen are at risk for slipping in the river.
16,000—18,000 nice viewing of skilled boaters at Mill Race.

Kacie Jensen

From: Dave Anderson
Sent: Thursday, May 25, 2006 10:02 AM
To: Dave Anderson; 'Tommy Boozer'; 'Aaron Small'; 'Alan Axson'; Alan Stuart; Alison Guth; 'Amanda Hill'; 'Bill Argentieri'; 'Bill Marshall'; 'Bill Mathias'; Bret Hoffman; 'Charlene Coleman'; Dave Anderson; 'David Price'; 'Dick Christie'; 'Edward Schnepel'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Jennifer O'Rourke'; 'Jerry Wise'; 'Jim Devereaux'; 'John and Rob Altenberg'; 'Joy Downs'; 'Karen Kustafik'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Lee Barber'; 'Malcolm Leaphart'; 'Mark Leao'; 'Mike Waddell'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Patrick Moore'; 'Randy Mahan'; 'Skeet Mills '; 'Steve Bell'; 'Suzanne Rhodes'; 'Tom Eppink'
Subject: RE: Fatalities on the lower Saluda River

It was pointed out to me that the information from Incident 2 was missing from the previous file. Here is an updated version with the missing information.

Fatalities on the Lower Saluda...

-----Original Message-----
From: Dave Anderson
Sent: Tuesday, May 23, 2006 5:32 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: Fatalities on the lower Saluda River

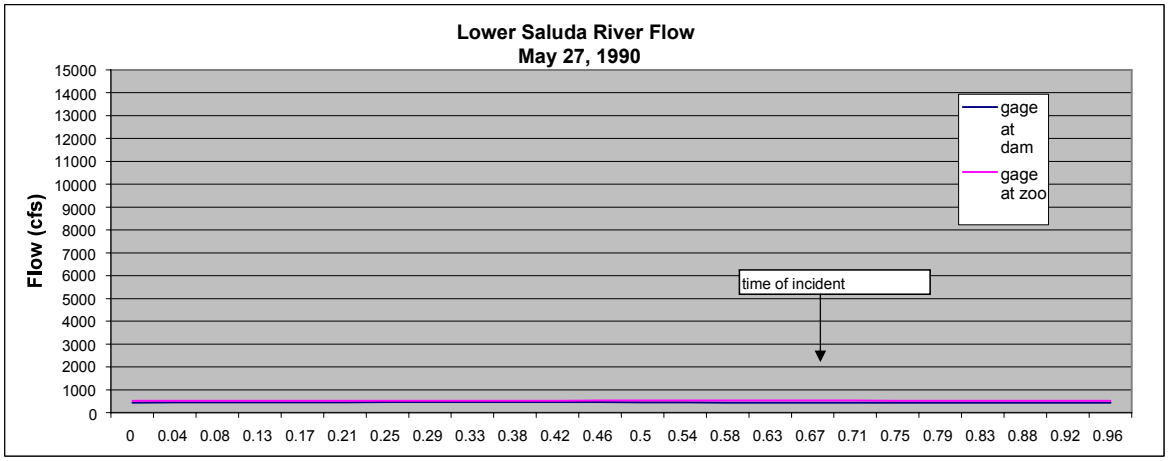
Alan S. and Bill A. have provided us with some information concerning fatalities on the lower Saluda River going back to 1990. The attached file correlates the time of the incident with the gage conditions at the dam and at the zoo. I will post this to the website.

<< File: Fatalities on the Lower Saluda River.pdf >>

Deaths Reported on the Saluda River from 1990 - 2006

INCIDENT 1

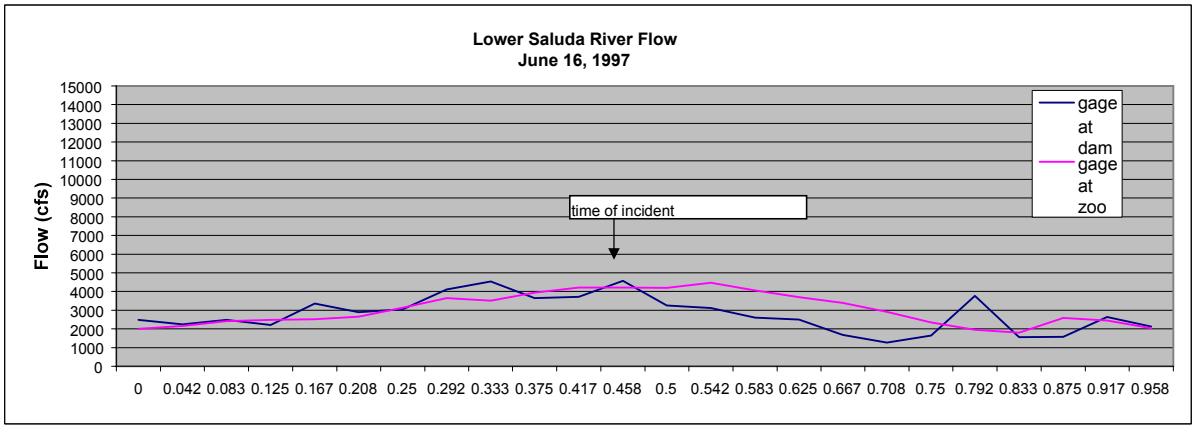
Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
5/27/1990	Ronald Sims	37	4:45 PM	swimming	near Mill Race	440	518



Notes: None

INCIDENT 2

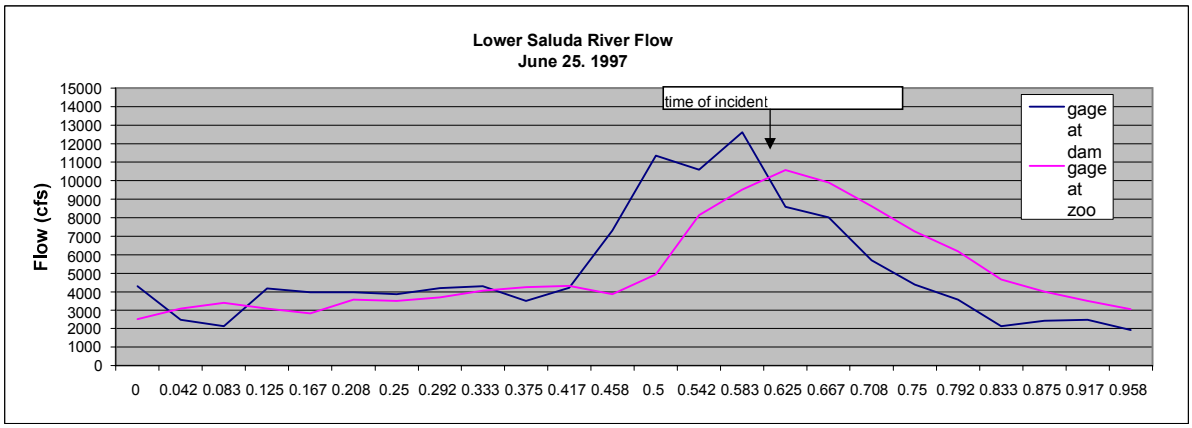
Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
6/16/1997	Lewis Morris	65	11:00 AM	boat fishing	near Hope Ferry	4,572	4,217



Notes: Person attempted to dislodge anchor, turned back end of boat towards current and capzied;no PFD's

INCIDENT 3

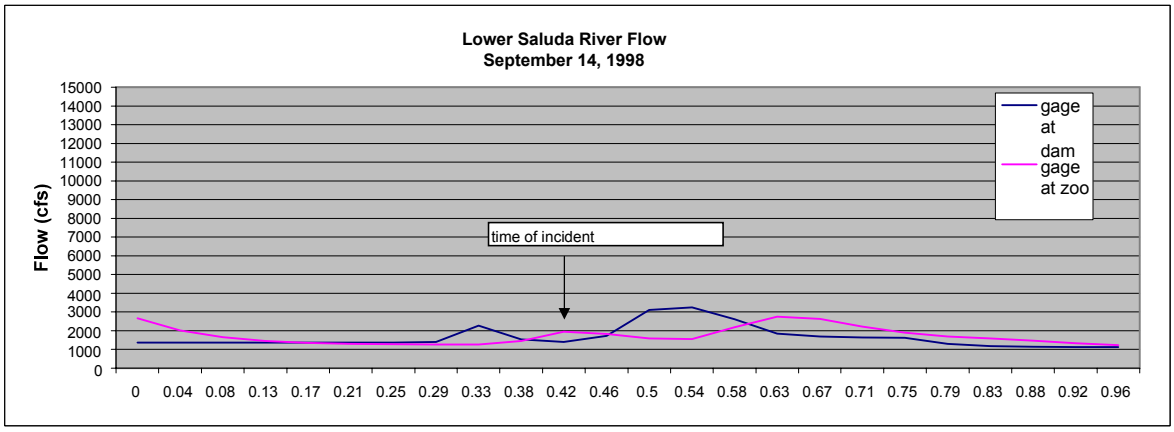
Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
6/25/1997	Clint Wingard	20	3:00 PM	tubing	near Mill Race	8,580	10,574



Notes: Family made claims a Rottweiler scared individual off of inner tube; never proven

INCIDENT 4

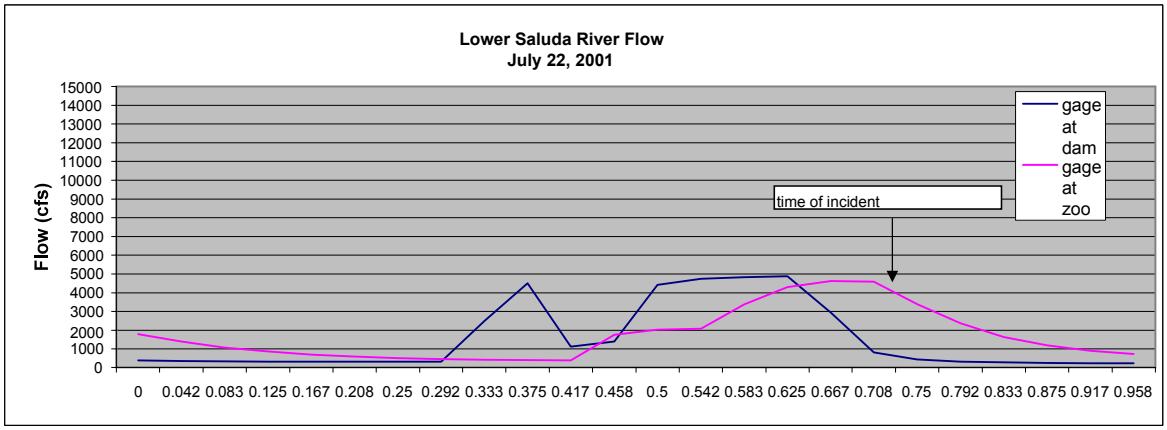
Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
9/14/1998	Richard Metts	65	10:00 AM	Boating	near Hope Ferry	1,408	1,940



Notes: Capsized Canoe, no PFD

INCIDENT 5

Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
7/22/2001	Brian Shealy	21	5:30 PM	attempted rescue	near Mill Race	800	4,885



Notes: Individual had alcohol in system

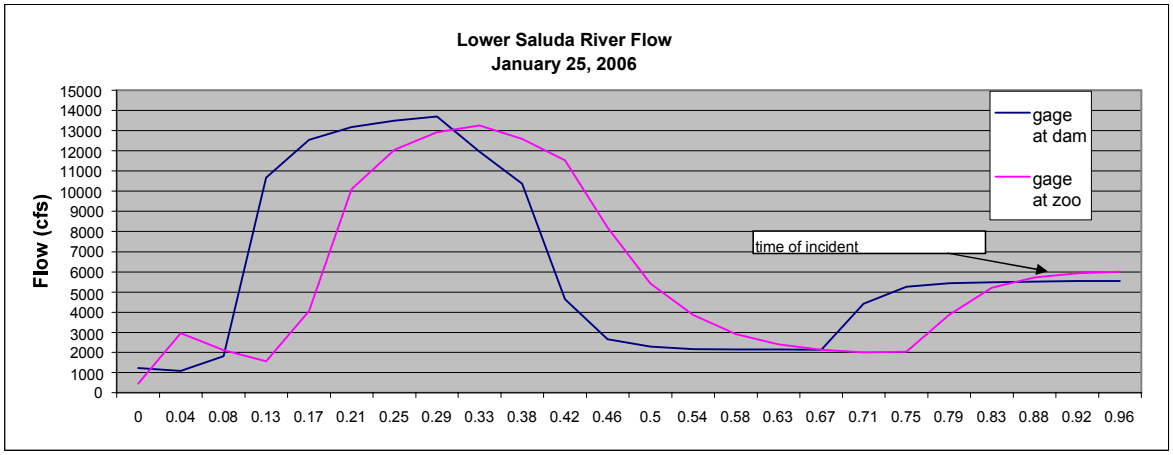
INCIDENT 6

Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
unknown between March 9 - April 3, 2003	Christopher Glen	25	unknown	apparent suicide	Hope Ferry	unknown	unknown

Notes: Individual apparently drove car off Hope Ferry or Saluda Shoals Park Boat ramp into the Lower Saluda River

INCIDENT 7

Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
25-Jan-06	Maurice Conyers	23	10:29 PM	robbery suspect	upstream of Mill Race	5,548	5,928



Notes: Individual was auto theft suspect pursued by police; attempted to flee along Candi Lane and into the LSR

Kacie Jensen

From: Alison Guth
Sent: Wednesday, May 24, 2006 4:40 PM
To: Wenonah Haire; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Andy Miller; Bertina Floyd; Bill Argentieri; Bill Cutler; Bill East; Bill Green (BGreen@smeinc.com); Bill Hulslander; Bill Marshall; Bill Mathias; Bob Olsen; Bob Seibels (bseibels@yahoo.com); Brandon Stutts ; Bret Hoffman; Brett Bursey; btrump@scana.com; Bud Badr; Buddy Baker ; Cam Littlejohn; Chad Long; Charlene Coleman; Charles Floyd; Charlie Compton; Charlie Rentz; Chris Judge; Chris Page; Craig Stow; Daniel Tufford; Dave Anderson; Dave Landis; David Allen; David Hancock; David Jones; David Price; Dell Isham; Dick Christie; Don Tyler; Donald Eng; Ed Diebold; Ed Fetner; Edward Schnepel; Feleke Arega (aregaf@dnr.sc.gov); George Duke; Gerrit Jobsis (American Rivers); Gerrit Jobsis (CCL); Gina Kirkland; Guy Jones; Hal Beard; Hank McKellar; Irvin Pitts (ipitts@scprt.com); Jay Robinson; Jeanette Wells; Jeff Duncan; Jennifer O'Rourke; Jennifer Price ; Jennifer Summerlin; Jerry Wise; Jim Devereaux; Jim Glover; Jim Goller; Jim Ruane ; JoAnn Butler; Joe Logan; John and Rob Altenberg; John Davis (johned44@bellsouth.net); Jon Leader; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Ken Uschelbec; Kenneth Fox; Kim Westbury; Kristina Massey; Larry Michalec; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Marianne Zajac; Mark Leao; Marty Phillips; Mary Kelly; Michael Murrell; Mike Duffy; Mike Sloan; Mike Summer (msummer@scana.com); Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Parkin Hunter; Patricia Wendling; Patrick Moore; Prescott Brownell; Ralph Crafton; Randal Shealy; Randy Mahan; Ray Ammarell; Rebekah Dobrasko; Reed Bull (rbull@davisfloyd.com); Rhett Bickley; Richard Kidder; Richard Mikell; Robert Keener (SKEENER@sc.rr.com); Robert Lavisky; Ron Ahle; Ronald Scott; Roy Parker; Russell Jernigan; ryanity@scana.com; Sam Drake; Sandra Reinhardt; Sean Norris; Shane Boring; Stanley Yalicki; Steve Bell; Steve Leach; Steve Summer; Suzanne Rhodes; Theresa Powers (tpowers@newberrycounty.net); Theresa Thom; Tim Flach; Tim Vinson; Tom Bowles (tbowles@scana.com); Tom Brooks; Tom Eppink; Tom Ruple; Tom Stonecypher; Tommy Boozer; Tony Bebber; Van Hoffman; Wade Bales (balesw@dnr.sc.gov); Mike Schimpff; Brandon Kulik; Marty Phillips
Subject: Final Meeting Notes for the Generation Review TWC

Hello all,

Attached are the final meeting notes from the Generation Review TWC Meeting on April 6, 2006. I am still waiting on a couple comments on the notes from the Safety and Operations RCG meeting that same day, but the final copy should be issued soon. Thanks and take care, Alison

2006-04-06 final Meeting Minut...

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
101 Trade Zone Drive
Suite 21A
West Columbia, SC 29170
P: (803) 822-3177
F: (803) 822-3183

MEETING NOTES

SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
GENERATION REVIEW TWC

Saluda Shoals Park
April 6, 2006

5-24-06 final acg

ATTENDEES:

Alan Stuart, Kleinschmidt Associates
Alison Guth, Kleinschmidt Associates
Bill Argentieri, SCE&G
Bill Marshall, DNR, LSSRAC
Michael Waddell, TU
Patrick Moore, SCCCL, Am. Rivers
Steve Bell, Lake Watch
Theresa Thom, Congaree National Park
Jennifer O'Rourke, SC Wildlife Federation
Bill Cutler, Lake Watch, LM Homeowners Coalition

DATE: April 6, 2006

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

HOMEWORK

Provide response to list of questions from TWC participants
Bill Argentieri

DISCUSSION

After the April 6th Combined Safety and Recreation meeting, the TWC members began the technical meeting. Bill Argentieri opened the meeting by asking what info the group felt that it needed and he would check to see if that information was available. Patrick Moore noted that he would like to see information on the operation of Saluda from a wet year, a dry year, and a normal year. He also noted that it would be beneficial to obtain operations information from a normal, wet, and dry year from the time in which Saluda was used for peaking.

Steve Bell asked if weekly generation reports were available for all plants on SCE&G's system. Bill Argentieri replied that they were available for Saluda because they are being sent out as part of the settlement agreement. Steve further explained that they would like to see reports from the entire system in order to see if Saluda was run for reserve or for some other reason. Patrick further noted that he would like to see if Saluda truly was the last option for reserve. Mike Waddell explained that it was his interest to expand the range of options and to better grasp how the system operates.

The group began discussing what date ranges of information was needed. Mike Waddell suggested that the group begin by looking at information from January of 2005 to the following January, with the understanding that there may be more questions once the group is able to look at the information. Bill Argentieri explained that the generation reports alone would not explain why other plants were or were not operated. The group began to go over options for deciphering why a particular plant was run. Mike Waddell suggested looking at Broad River flows in order to see how many times it was flowing over 40,000 cfs.

Steve Bell noted that his goal for the committee would be to have a specific report that was part of the record and that other groups could refer to. The group also requested a round table discussion with Lee Xanthakos to discuss in more detail how he uses Saluda as well as the other facilities.

Bill Marshall mentioned that he also would be interested in learning different scenarios for the use of Saluda and Fairfield and asked if that would be a part of what was brought to the table in an alternatives analysis. Bill Argentieri replied that it was not a part of the alternative analysis which would look at the alternatives for replacing Saluda all together.

The group continued to discuss the uses of Saluda and Fairfield. Patrick Moore requested to see information on rate ranges for the purchase of power. Alan noted that this information could not be disseminated in the presence of Lee Xanthakos according to FERC guidelines.

Steve Bell noted that he would also like to see information on the drawdowns for hurricane season. He continued to explain that he would be interested to see what time of day or month SCE&G began to take the lake down, and to what level. Steve also asked what was done if there was an emergency downstream where someone's life was at risk, and if they could stop generation in that case. Bill Argentieri replied that they have received a call of that nature before and the generation was shut down.

After more brief discussion on the use of Saluda the group compiled a list of requested information. Bill noted that he would meet with Lee Xanthakos in order to compile the answers to these questions.

List of Requested Information:

- Weekly generation reports for all plants on SCE&G's system between January and December of 2005 (The group will start this process by looking at one weeks worth or information and decide what more is needed)

- Reasons why certain plants on the system were operated.
- Time periods during which Broad River flows were greater than 40,000 cfs
- How and when the gas turbines are used on the system
- How Fairfield is used
- Ranges of costs for the purchase of megawatt hours.
- Reserves that were requested in 2005 by other utilities and the amounts of megawatts that were called upon.
- How is it determined when and at what rate Lake Murray is lowered during the annual drawdown.

Kacie Jensen

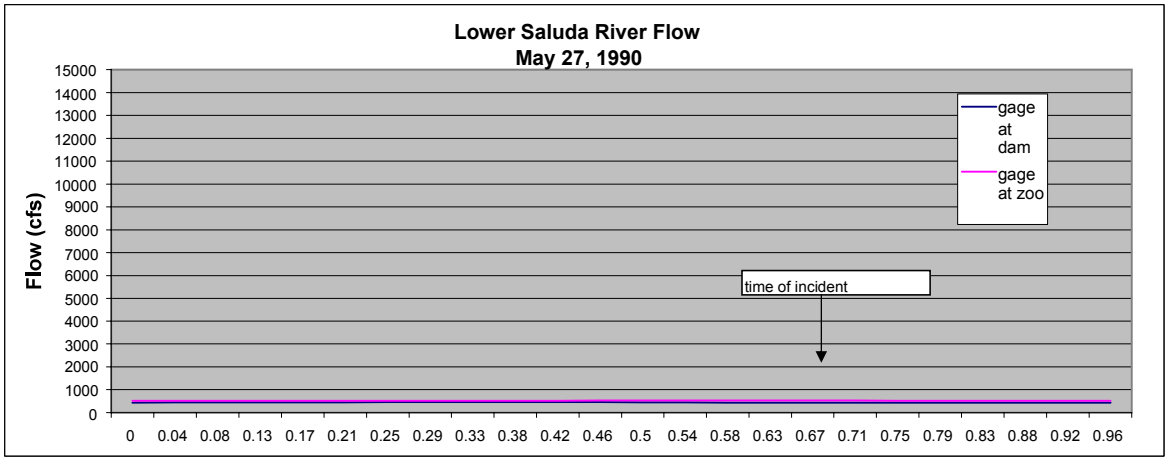
From: Dave Anderson
Sent: Tuesday, May 23, 2006 6:32 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Skeet Mills ; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: Fatalities on the lower Saluda River

Alan S. and Bill A. have provided us with some information concerning fatalities on the lower Saluda River going back to 1990. The attached file correlates the time of the incident with the gage conditions at the dam and at the zoo. I will post this to the website.

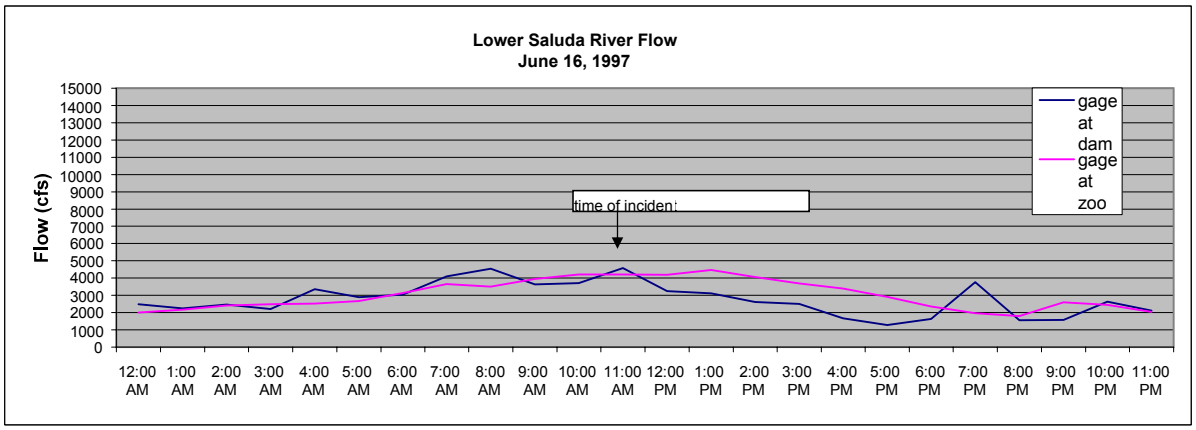
Fatalities on the Lower Saluda...

INCIDENT 1

Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
5/27/1990	Ronald Sims	37	4:45 PM	swimming	near Mill Race	440	518

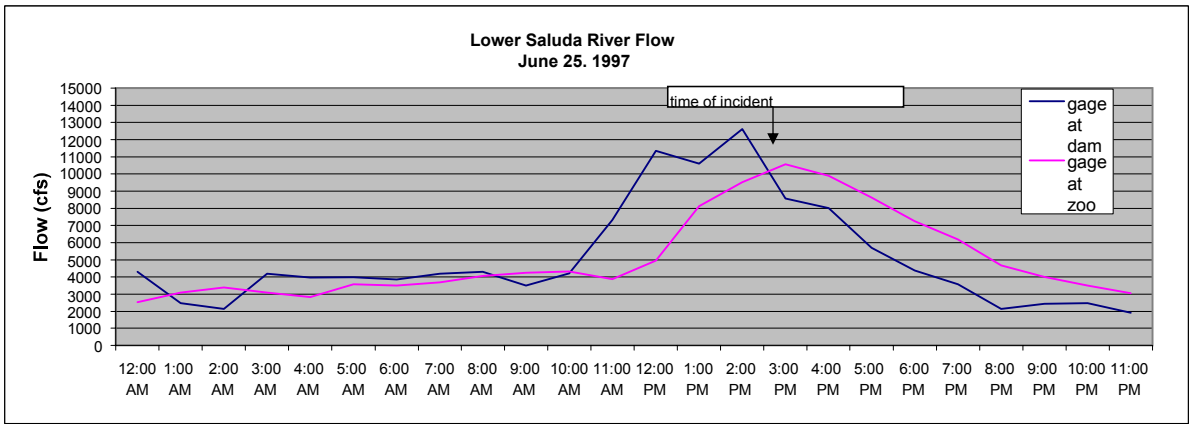


Notes: None



INCIDENT 3

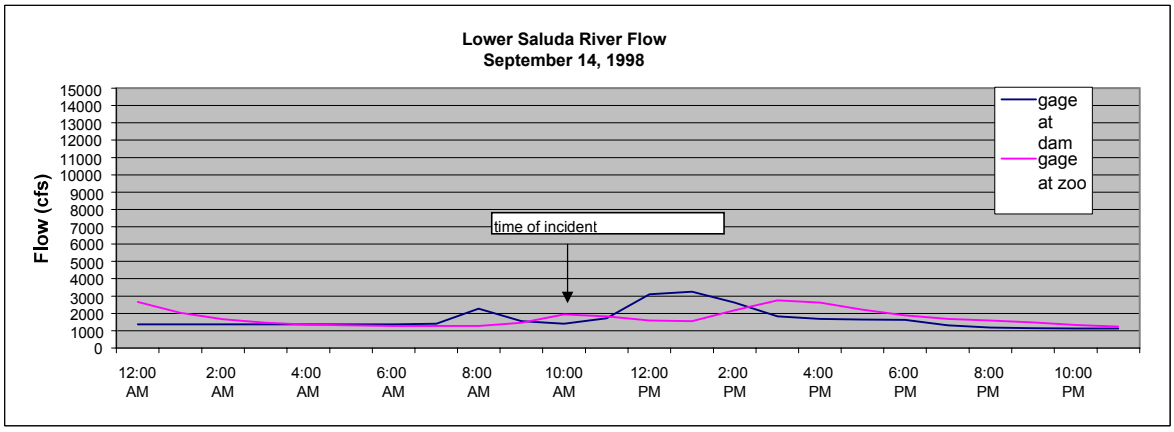
Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
6/25/1997	Clint Wingard	20	3:00 PM	tubing	near Mill Race	8,580	10,574



Notes: Family made claims a Rottweiler scared individual off of inner tube; never proven

INCIDENT 4

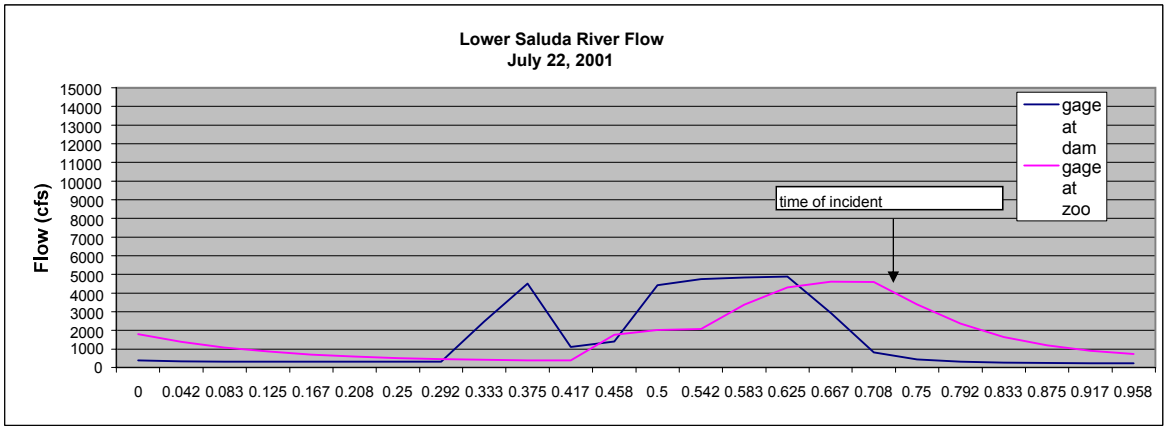
Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
9/14/1998	Richard Metts	65	10:00 AM	Boating	near Hope Ferry	1,408	1,940



Notes: Capsized Canoe, no PFD

INCIDENT 5

Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
7/22/2001	Brian Shealy	21	5:30 PM	attempted rescue	near Mill Race	800	4,885



Notes: Individual had alcohol in system

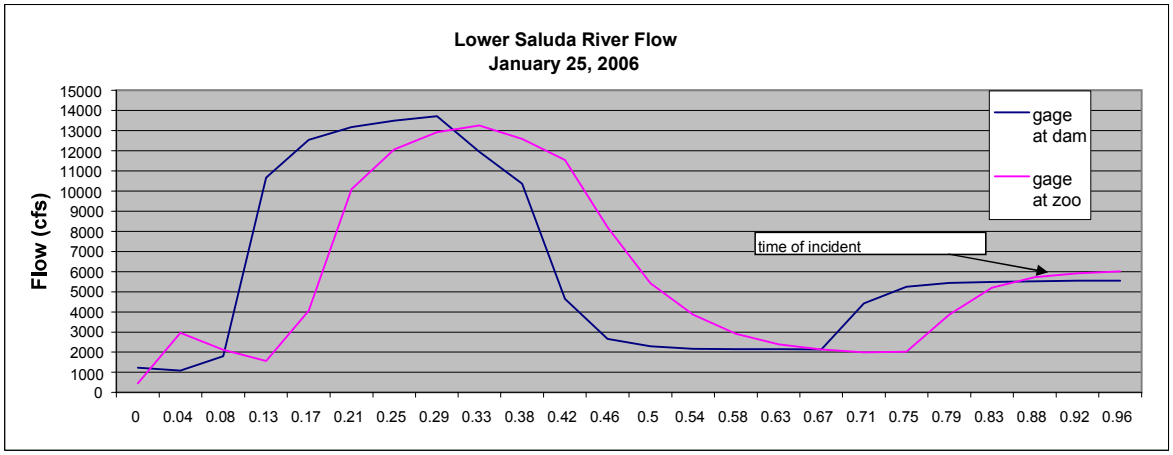
INCIDENT 6

Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
unknown between March 9 - April 3, 2003	Christopher Glen	25	unknown	apparent suicide	Hope Ferry	unknown	unknown

Notes: Individual apparently drove car off Hope Ferry or Saluda Shoals Park Boat ramp into the Lower Saluda River

INCIDENT 7

Date	Person	Age	Time of Incident	Activity	Location	Flow at Dam	Flow at Zoo
25-Jan-06	Maurice Conyers	23	10:29 PM	robbery suspect	upstream of Mill Race	5,548	5,928



Notes: Individual was auto theft suspect pursued by police; attempted to flee along Candi Lane and into the LSR

Kacie Jensen

From: Elymay2@aol.com

Sent: Tuesday, May 16, 2006 3:17 AM

To: Elymay2@aol.com; Dave Anderson; tboozer@scana.com; arsbhs@bellsouth.net; cfdwaxson@columbiasc.net; Alan Stuart; Alison Guth; amanda_hill@fws.gov; bargentieri@scana.com; marshallb@dnr.sc.gov; bill25@sc.rr.com; Bret Hoffman; cheetahtrk@yahoo.com; Dave Anderson; pricedc@dhec.sc.gov; dchristie@infoave.net; eschnepel@sc.rr.com; kayakduke@bellsouth.net; gjobsis@americanrivers.org; jenno@scwf.org; MedDynamic@aol.com; jdevereaux@scana.com; seatowlakemurray@seatow.com; kakustafik@columbiasc.net; Colkenu@aol.com; skfox@sc.rr.com; turnerle@dhec.sc.gov; lbarber@sc.rr.com; malcolml@mailbox.sc.edu; mark_leao@fws.gov; mwaddell@esri.sc.edu; miriam@lakemurraycountry.com; larana@mindspring.com; norm@sc.rr.com; patrickm@scccl.org; rmahan@scana.com; bellsteve9339@bellsouth.net; suzrhodes@juno.com; teppink@scana.com

Subject: Re: 04-18-06 Draft Safety RCG Meeting Notes

Sorry about not attaching the Draft Safety Meeting notes with comments. I was out of town for the past three days and did not realize I had not made the attachment.

Joy Downs
Executive Director
The Lake Murray Association, Inc.
803-781-8411 (fax or phone)
E-mail Elymay2@aol.com

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
April 18, 2006

draft jms 4-27-06

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: **TBA**

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
April 18, 2006

draft jms 4-27-06

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. Dave A. clarified to the group that

Comment: I don't think this is entirely accurate as it was made clear that safety is the responsibility of SCE&G and that there is only a possible agreement for SCDNR to mark shoals. They have the expertise but unfortunately not the time and money always. I think this statement is misleading and not what the attached letters indicate. Please change the absolute responsibility for the markers to SCE&G or make clear it is only a loose agreement with DNR with SCE&G responsible according to the FERC

when the lake is down in the winter, it is SCDNR's responsibility to make sure makers are placed in hazardous areas.

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). 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 should look at solutions to quantify the problem. 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 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 that are related to ramping and briefly discussed each.

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

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. 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 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 GROUP

LAKE MURRAY TRAINING CENTER
April 18, 2006

draft jms 4-27-06

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

Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

Kacie Jensen

From: Dave Anderson
Sent: Monday, May 15, 2006 5:45 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 04-18-06 Final Safety RCG Meeting Notes

Here are the final meeting notes from our April 18th meeting.

2006-04-18
leeting Notes - Saf..

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
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- 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:

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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.

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

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

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.

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

Saluda HYDRO RELICENSING

Kleinschmidt
Energy & Water Resource Consultants

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	cheetahtrk@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@scccl.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	
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Norm Ferris	Trout Unlimited	norm@sc.rr.com	
Patrick Moore	SCCCL AR	patrickm@scccl.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	

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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.

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- **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

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

17 Mar 99

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

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 (SGE&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
South Carolina Electric & Gas Company

OFFICE OF HYDROPOWER LICENSING

APR 12 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 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,

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

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

OFFICE OF THE SECRETARY
FILED
99 MAY 17 PM 4:47
FEDERAL ENERGY REGULATORY COMMISSION

May 14, 1999

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.

SCANA Corporation
Columbia, South Carolina
29218

803.217.9000
www.scana.com

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."

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 not the manpower to do so.

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."

FERC DOCKETED
JUN 29 1999

9906300528-5

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 on 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

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

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

Re: Project No. 516 - South Carolina
Lake Murray

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

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(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 form 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

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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

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

Kacie Jensen

From: bellsteve9339@bellsouth.net
Sent: Thursday, May 11, 2006 8:08 PM
To: Dave Anderson; Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Suzanne Rhodes; Tom Eppink
Cc: bellsteve9339@bellsouth.net
Subject: Re: 04-18-06 Draft Safety RCG Meeting Notes

Track changes for 04-18_Meetin...

Dave- Lake Watch request that track changes attached below be incorporated in the final meeting meetings. In addition we will be submitting comments to clarify the "ummarked" hazard issue including a background on citizen complaints filed in 1999. Also please include along with the letter from the FERC and SCDNR, SCE&G's letter to the FERC.

> From: Dave Anderson <Dave.Anderson@KleinschmidtUSA.com>
> Date: 2006/05/10 Wed AM 10:56:42 EDT
> To: Tommy Boozer <tboozer@scana.com>, Aaron Small <arsbhs@bellsouth.net>,
> Alan Axson <cfdwaxson@columbiasc.net>, Alan Stuart
> <alan.stuart@kleinschmidtusa.com>, Alison Guth
> <alison.guth@kleinschmidtusa.com>, Amanda Hill <amanda_hill@fws.gov>,
> Bill Argentieri <bargentieri@scana.com>, Bill Marshall
> <marshallb@dnr.sc.gov>, Bill Mathias <bill25@sc.rr.com>, Bret Hoffman
> <bret.hoffman@kleinschmidtusa.com>, Charlene Coleman
> <cheetahtrk@yahoo.com>, Dave Anderson
> <dave.anderson@kleinschmidtusa.com>, David Price <pricedc@dhec.sc.gov>,
> Dick Christie <dchristie@infoave.net>, Edward Schnepel
> <eschnepel@sc.rr.com>, George Duke <kayakduke@bellsouth.net>,
> "Gerrit Jobsis (American Rivers)" <gjobsis@americanrivers.org>,
> Jennifer O'Rourke <jenno@scwf.org>, Jerry Wise <meddynamic@aol.com>,
> Jim Devereaux <jdevereaux@scana.com>, John and Rob Altenberg
> <seatowlakemurray@seatow.com>, Joy Downs <elymay2@aol.com>,
> Karen Kustafik <kakustafik@columbiasc.net>, Ken Uschelbec
> <colkenu@aol.com>, Kenneth Fox <skfox@sc.rr.com>,
> "Larry Turner (turnerle@dhec.sc.gov)" <turnerle@dhec.sc.gov>, Lee Barber
> <lbarber@sc.rr.com>, Malcolm Leaphart <malcolml@mailbox.sc.edu>,
> Mark Leao <mark_leao@fws.gov>, Mike Waddell <mwaddell@esri.sc.edu>,
> Miriam Atria <miriam@lakemurraycountry.com>, Norm Nicholson
> <larana@mindspring.com>, Norman Ferris <norm@sc.rr.com>, Patrick Moore
> <patrickm@scccl.org>, Randy Mahan <rmahan@scana.com>, Steve Bell
> <bellsteve9339@bellsouth.net>, Suzanne Rhodes <suzrhodes@juno.com>,
> Tom Eppink <teppink@scana.com>
> Subject: 04-18-06 Draft Safety RCG Meeting Notes
>
> We have a few edits to the meeting notes, so I am sending them around
> one more time before they become final on Friday.
>
> <<2006-04-18 Meeting Notes - Safety (DRAFT2).doc>>
>
>

Kacie Jensen

From: Dave Anderson
Sent: Wednesday, May 10, 2006 12:11 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: Draft Safety RCG Work Plan

Here is the document we were working on in our last meeting (with "track changes" left on). I would like to collect any comments on this work plan via e-mail by **June 1.** This will give everyone three weeks to make comments. At that time, I will compile all of the comments and re-submit the document to the RCG. My goal is to have this finalized by the next RCG meeting so we can discuss if we are on track to complete our responsibilities.

If anyone feels they need longer than three weeks for this initial set of comments, let me know and we can discuss an alternate method of collecting your comments.

Draft Safety RCG Work Plan (04...

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
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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	cheetahtrk@yahoo.com	
Dave Anderson	Kleinschmidt Associates	dave.anderson@kleinschmidtusa.com	
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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@scccl.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	
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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		
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Ralph Crafton	LMA	crafton@usit.net	
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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	

DRAFT

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 concerning unannounced river flows in the lower Saluda River
- fluctuating lake levels and their effect on safety
- boat traffic/congestion in cove areas due to development
- current project operations and their effect on safety
- placement and maintenance of shoal markers
- systematic collection of accident data
- ingress/egress to potentially hazardous areas (e.g., Mill Race)

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Deleted: 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 Recreation Resource Conservation Group to make sure they are consistent with the mission statement of the Safety Resource Conservation Group.
- Develop a recreational safety plan for Lake Murray and the lower Saluda River

Deleted: Downstream Flows Technical Working Committee

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.

DRAFT

- **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.
- **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, if necessary.
- **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

DRAFT

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
April 18, 2006

draft jms 4-27-06

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**

Deleted: TBA

Kleinschmidt
Energy & Water Resource Consultants

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
April 18, 2006

draft jms 4-27-06

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. Dave A. clarified to the group that

when the lake is down in the winter, it is SCDNR's responsibility to make sure makers are placed in hazardous areas.

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. DNR's stated in its letter in response to complaints about unmarked harzards 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 SCE&G to place aids to navigation, but the SCDNR's program is not intended to absolve the South Carolina Electric and Gas Co. 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."

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

Deleted: Steve B. noted that the group should look at solutions to quantify the problem

Deleted: propose

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.

Deleted: that

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

Deleted: w

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 our contingency reserve requirement, which will mean unannounced high flows at times. The Safety RCG should stay focused on the goal of making the river as safe as reasonably possible. This RCG should be looking at some kind of warning system for the times when SCE&G has to increase generation to meet our 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 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 GROUP

LAKE MURRAY TRAINING CENTER
April 18, 2006

draft jms 4-27-06

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
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- **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

Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
April 18, 2006

draft jms 4-27-06

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. Dave A. clarified to the group that

when the lake is down in the winter, it is SCDNR's responsibility to make sure makers are placed in hazardous areas.

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). 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 should look at solutions to quantify the problem. 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 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 that are related to ramping and briefly discussed each.

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PIH 345 (PG&E)	Chattahoochee
Summerville	Cheowa

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. 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 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.

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MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
April 18, 2006

draft jms 4-27-06

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

April 18, 2006
9:00 AM
Lake Murray Training Center

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- **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

Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

Kacie Jensen

From: Alison Guth
Sent: Wednesday, April 12, 2006 5:50 PM
To: Van Hoffman; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Charlene Coleman; Charlie Rentz; Dave Anderson; David Hancock; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Guy Jones; Irvin Pitts (ipitts@scprt.com); Jeff Duncan; Jennifer O'Rourke; Jennifer Summerlin; Jim Devereaux; JoAnn Butler; Joy Downs; Karen Kustafik; Keith Ganz-Sarto; Kelly Maloney; Larry Michalec; Larry Turner (turnerle@dhec.sc.gov); Lee Barber; Malcolm Leaphart; Mark Leao; Marty Phillips; Mike Waddell; Miriam Atria; Norman Ferris; Patricia Wendling; Patrick Moore; Ralph Crafton; Randy Mahan; Richard Mikell; Stanley Yalicki; Steve Bell; Suzanne Rhodes; Tim Flach; Tim Vinson; Tom Brooks; Tommy Boozer; Tony Bebber; Aaron Small; Bill Mathias; Bret Hoffman; David Price; Edward Schnepel; Jerry Wise; John and Rob Altenberg; Ken Uschelbec; Kenneth Fox; Norm Nicholson; Tom Eppink
Subject: Recreation and Safety Agendas

Hello All

Attached are the meeting agendas for the Recreation and Safety meetings for next week. In you plan on attending and have not yet RSVP'd, please let me know by tomorrow morning. I apologize for the duplicate emails if you are a member of both RCG's. Thanks, Alison

2006-04-17 ecreation RCG Agen...

2006-04-18 Safety RCG Agenda.p...

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
101 Trade Zone Drive
Suite 21A
West Columbia, SC 29170
P: (803) 822-3177
F: (803) 822-3183

Saluda Hydro Relicensing
Recreation Resource Conservation Group

Meeting Agenda

April 17, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 10:30** Review of Standard Process and Development of Vision Statement
- **10:30 to 11:30** Review Recreation RCG Work Plan
- **11:30 to 12:30** Lunch
- **12:30 to 1:00** Update from Downstream Flows TWC
- **1:00 to 1:45** Update from Recreation Management TWC (to include presentation on ADA design standards)
- **1:45 to 2:00** Discussion of Questions for FERC Representative
- **2:00 to 2:15** Develop an Agenda for Next Meeting and Set Next Meeting Date

  Adjourn

Saluda HYDRO RELICENSING

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

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  Adjourn

Saluda HYDRO RELICENSING

Kacie Jensen

From: Alison Guth
Sent: Monday, April 03, 2006 1:56 PM
To: Tony Bebber; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Hulslander; Bill Marshall; Bud Badr; Charlene Coleman; Dave Landis; Dick Christie; George Duke; Gerrit Jobsis (American Rivers); Gina Kirkland; Hank McKellar; James Smith; Jeff Duncan; Jennifer O'Rourke; Joy Downs; Kristina Massey; Larry Michalec; Larry Turner (turnerle@dhec.sc.gov); Mark Leao; Mike Summer (msummer@scana.com); Mike Waddell; Parkin Hunter; Patrick Moore; Ralph Crafton; Randal Shealy; Randy Mahan; Ray Ammarell; Russell Jernigan; Steve Bell; Suzanne Rhodes; Theresa Thom; Tom Ruple; Tom Stonecypher; Bret Hoffman; Tommy Boozer; Aaron Small; Alan Axson; Bill Mathias; Bret Hoffman; Dave Anderson; David Price; Edward Schnepel; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Lee Barber; Malcolm Leaphart; Miriam Atria; Norm Nicholson; Norman Ferris; Tom Eppink
Subject: Safety/Ops Meeting

Hello All,

Attached is the agenda for Thursday's meeting. It is very brief with no time allotments, Thursday will consist mainly of round-table discussion. Thank you to all who have RSVP'd. Do not be worried if I have not responded to your RSVP, I receive quite a few of them, as you can imagine, and simply check you off a list once I have received it. It is not too late to let me know if you are coming so please do so if you have not. Thanks, Alison

ɔperations & Safety RCG Agenda...

Alison Guth
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West Columbia, SC 29170
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Saluda Hydro Relicensing
Operations and Safety Resource Conservation Groups Meeting

Meeting Agenda

April 6, 2006
9:00 AM – 3:00PM
11:30 Lunch
Saluda Shoals Park – Environmental Education Center

This Meeting Will Consist Of Open Discussion On Topics That May Include But Are Not Limited To The Following:

- Discussion on Reserve Generation Needs and Saluda
- Introductory Discussion on Reserve Alternatives
- Identification of Information Needs
- A Forward Look Towards Issue Resolutions

Saluda HYDRO RELICENSING

Kacie Jensen

From: Alan Stuart
Sent: Thursday, March 23, 2006 12:29 AM
To: 'Tony Bebber'; Alan Stuart; Alison Guth; 'Amanda Hill'; 'Bill Argentieri'; 'Bill Hulslander'; 'Bill Marshall'; 'Bud Badr'; 'Charlene Coleman'; 'Dave Landis'; 'Dick Christie'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Gina Kirkland'; 'Hank McKellar'; 'James Smith'; 'Jeff Duncan'; 'Jennifer O'Rourke'; 'Joy Downs'; 'Kristina Massey'; 'Larry Michalec'; 'Larry Turner (turnerle@dhec.sc.gov)'; 'Mark Leao'; 'Mike Summer (msummer@scana.com)'; 'Mike Waddell'; 'Parkin Hunter'; 'Patrick Moore'; 'Ralph Crafton'; 'Randal Shealy'; 'Randy Mahan'; 'Ray Ammarell'; 'Russell Jernigan'; 'Steve Bell'; 'Suzanne Rhodes'; 'Tom Ruple'; 'Tom Stonecypher'; Bret Hoffman; 'Tommy Boozer'; 'Aaron Small'; 'Alan Axson'; 'Bill Mathias'; Bret Hoffman; Dave Anderson; 'David Price'; 'Edward Schnepel'; 'Jerry Wise'; 'Jim Devereaux'; 'John and Rob Altenberg'; 'Karen Kustafik'; 'Ken Uschelbec'; 'Kenneth Fox'; 'Lee Barber'; 'Malcolm Leaphart'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Tom Eppink'
Subject: ADHOC Meeting

Good evening all,

I wanted to get back and respond to Steve Bell's request to convene an emergency meeting of the Operations RCG. Based on Steve's request and the flurry of emails that I've noticed going back and forth I support Steve's request to have a meeting. In monitoring the emails, I sense quite of bit of misunderstanding/miscommunication between all of the Parties in this process. I have heard no unreasonable operational alternatives requests proposed by the stakeholders and believe these need to be evaluated as part of this process. To steal a quote from Steve “everything is on the table for consideration" and well it should be during this process. All of the groups have done an outstanding job developing reasonable operational alternatives to evaluate and in my experiences this is half the battle. You have a great deal of participants in this process with very diverse backgrounds which are a great tool in defining the issues and developing potential alternatives for analysis. You should utilize these resources that you have at your disposal to the fullest extent otherwise you are cheating yourselves. Part of our job as Kleinschmidt is to ensure that each and every reasonable alternative is given serious and due consideration throughout this process. Make no mistake; I assure you this will happen because we do not want to leave any stone unturned when it comes time to evaluate the options for your comprehensive Protection, Mitigation and Enhancement Agreement (PM&EA). Remember our job as Kleinschmidt is to try and bring everyone to the table, keep everyone there, work through the issues/information needs, make sure all reasonable alternatives are given their due consideration and analysis, and ultimately assist the group's endeavors to reach consensus on recommendations.

You all have done an outstanding job identifying and scoping of the issues/interests. This is another huge step in the process that should not be taken lightly. You should be proud of this accomplishment. I have seen a lot of progress made in the Technical Working Committees and RCG's and you should not want all of the positive efforts to deteriorate . One item I would like to touch on, it is becoming very apparent that some of the correspondence we have noticed of late may be directed on a more personal level. Folks, I made this comment early on that there are two major things (among many things) that we must all recognize in the other to make this process move forward to reach a common goal, RESPECT for each other and OPEN and HONEST communication. I know in the "heat of the argument" personalities and emotions tend to take over but let's not loose sight that everyone is in this process because they feel strongly about some issue or issues. We should RESPECT them for their opinion, the time and effort they are putting forth and just because they care that much about the project to be involved. No matter how frustrated we become at times what must be maintained is mutual respect for each other, period no questions asked. Therefore, in the future in an effort to eliminate the potential for personal attacks, I am requesting that all email correspondence for recommendations, operational alternatives analysis etc be directed by all parties to Kleinschmidt (me). I think this will help eliminate the personalize and provide more fruitful results. I'd also like to challenge everyone that in the future we all try to leave the egos and differences at the door and get back to the matter of going through the process in a very stepwise manner in working toward the common goal, the PM&EA .

Now I'll step down from the soapbox and get to the matter at hand. Since there appears to be a strong relationship between the Operations and Safety RCG's regarding operation of Saluda Hydro (with respect to potential alternatives including ramping etc) I'm proposing both the Operations and Safety groups conduct a joint RCG meeting. I believe a meeting will help to re-establish the working relationships and make sure there are no misunderstandings between the parties. Additionally, we can address the items/alternatives/issues raised in the bevy of emails which have been circulating. With that being said, I would like to convene the joint Operations/Safety RCG meeting on **Wednesday March 29, 2006 at 9:30 at the Lake Murray Training Center**. I have confirmed with Rita that space is available.

I know this is very short notice but feel this is extremely important before moving forward. Please let Alison know no later than Monday March 27 by COB that you are attending so she can get a headcount for lunch. If you have questions please email or give me a call.

Have a great evening all and my apologies for the novel,

Alan

Alan Stuart
Senior Licensing Coordinator
Kleinschmidt Energy and Water Resources
101 Trade Zone Drive Suite 21A
West Columbia, SC 29170

Phone 803.822.3177
Cell 803.640.8765

Kacie Jensen

From: Dave Anderson
Sent: Friday, March 17, 2006 4:52 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jennifer O'Rourke; Jerry Wise; Jim Devereaux; John and Rob Altenberg; Joy Downs; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 02-14-06 Safety RCG Final Meeting Notes

Here are the final meeting notes for the February 14th meeting. Don't forget about homework assignments for the next meeting!

2006-02-14
Meeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
February 14, 2006

final dka 03-17-06

ATTENDEES:

Name	Organization	Name	Organization
Bill Argentieri	SCE&G	Dave Anderson	Kleinschmidt Associates
Alan Stuart	Kleinschmidt Associates	George Duke	LMHOC
Tom Eppink	SCANA	David Price	LMPS
Alison Guth	Kleinschmidt Associates	Randy Mahan	SCANA
Ed Schnepel	LMA	Alan Axson	Columbia Fire Dept.
Kenneth Fox	LMA	Bill Marshall	SCDNR/LSSRAC
Bill Mathias	LMA & LMPS	Karen Kustafik	CoC P&R
Ken Uschelbec	USCG Auxiliary	Lee Barber	LMA
Norm Nicholson	LCSD	Steve Bell	Lake Watch
Bret Hoffman	Kleinschmidt Associates	Mike Waddell	TU

HOMEWORK ITEMS:

- Steve Bell – identify specific potential hazardous shoals below 354' msl
- Dave Anderson – continue to try to contact area hospitals
- Dave Anderson – better boating accident data from SCDNR
- Patrick Moore – identify safety plans at other FERC projects
- Charlene Coleman – list FERC projects where ramping is a requirement for safety reasons
- Tom Eppink – review DNR authority concerning shoal markers on Lake Murray
- Alan Axson – review accident data for incidents at Candy Lane
- All – Identify high use areas on maps for possible improvement to warning system

PARKING LOT ITEMS:

- Equipment regulations for the LSR
- Discussion of shoal markers and lake levels

DATE OF NEXT MEETING: **April 18, 2006 at 9:00 a.m.**
Located at the Lake Murray Training Center

Kleinschmidt
Energy & Water Resource Consultants

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 opened the meeting by reviewing the meeting notes from January 10th, particularly the comments received from Bill M. concerning group decisions on priority safety issues. Randy M. disagreed with Bill M.'s wording on the priority items determined at the January meeting; Randy acknowledged the concerns, but suggested that meeting notes should accurately reflect what occurred in the meeting. Bill M. agreed and noted that his comments were a reflection of concerns expressed at the January meeting but did not reflect decisions made by the group to define priorities. The group decided on some alternate wording for the meeting notes and Dave agreed to redistribute the January 10th meeting notes before finalizing them.

Steve B. asked about written comments submitted after the meeting and if they could be appended to the meeting notes. Dave noted that Charlene and Malcolm L. had also submitted written comments, and asked if the group had received copies of those comments. The group decided that attaching the submitted comments to the meeting notes is acceptable as long as they remain separate from the events that occurred during the meeting.

Steve B. noted operation of the project is a priority issue of this group. Dave noted that this group would not be proposing any operating plans for the Saluda project but would consider any operational changes recommended by the Operations RCG and consider the safety aspects of their recommendation. Dave further noted that it was beyond the means of the group to determine the safest operational plan. Steve B. remarked that he believed we need to determine how project operations affect safety and then quantify those impacts and determine how project operations need to be modified. Dave agreed and commented that we would begin that process today.

The group then reviewed the homework items from the previous meeting. Dave noted that he called both area hospitals but has not been able to speak to anyone. Norm noted that he had been told that SeaTow would be in attendance.

Tom E. presented his homework assignment on boating laws in the state of South Carolina. Tom observed that there is one state statute that covers boating and that counties can make ordinances that are identical to the state statute, but could not find any examples where this had been done. Counties can also pass ordinances not specifically aimed at boating but affecting it, for example, noise ordinances that may affect boating in certain areas. Tom also went over some of the laws related to enforcement and observed that any state law enforcement office may enforce boating regulations. Norm noted that any Class One officer could put a blue light on a boat and be official.

Mike W. asked if they could board a documented vessel; Norm replied that documented vessels had to pull over when asked. Someone asked why there is only one sheriff's department patrolling the lake; the answer given dealt with avoiding duplicate efforts. Norm commented that it was also because of budget constraints and the perception that Lexington County contained the majority of the lake.

Tom continued his presentation and moved into boating safety and educational programs and towing laws. Bill Mathias noted that 107 percent is added to fines for court fees. Lee B. noted that changing any of these laws is very difficult in South Carolina because the legislature believes the laws are adequate. Steve B. asked if we could make better laws through the relicensing process. Tom E. replied that this might be something to do after the relicensing process, but is probably not necessary for the license application. Tom further commented that FERC has no authority over water; Charlene observed that the TVA is the only entity she can think of that has authority over water and they are not governed by FERC.

Mike W. asked how no wake zones are established. Norm replied that the SCDNR was the only one that could do that. The group then began to talk about reckless operation of water devices and went over some examples. Dave asked how it was possible for violators to lose the privilege of boating when there are no laws about boating licenses. Norm noted that they are entered into a database, which will flag them if they are pulled over and their name is taken. Tom continued going over boating under the influence laws and the mechanism for punishment for these crimes.

Tom went on and defined Reckless Homicide by Operation of a Boat, which can be charged if a person dies within three years due to injuries caused by the operation of a boat in a reckless disregard of the safety of others. Lee B. noted it is interesting the offender did not lose their license. Tom further explained laws concerning operation of a boat while a license suspended and the duties of boat livery, which covers rentals of boats. Tom discussed the laws concerning swimming near a public boat landing or in the vicinity of a hydro generation plant and the laws governing no-wake zones. Alan S. commented that if FERC wanted to establish a 100 foot no swimming zone around a public boat ramp, they could not because it is a state law.

Tom continued and talked about the "good Samaritan" clause and the relationship between state and federal regulations. Tom observed that state laws incorporate U.S. Coast Guard regulations.

Norm began to discuss some of the authority he has concerning trespassing and noted that he could use maritime law if needed. Lee noted that an inspection of the Southern Patriot about 10 years ago resulted in a requirement for ballast so that the boat would be evenly weighted. Tom continued his presentation and talked about the placing of aid and regulatory markers, towing water skiers, windsurfers, and personal watercraft. Tom also discussed the fact that DNR has set out further

boating requirements beyond the state statutes. The group then briefly noted that we can continue to discuss these laws and that, in the past, these laws have only been changed as a result of an incident.

The group then began looking at the accident data collected as part of the homework assignments. Dave presented the boating accident data on Lake Murray, data provided by the SCDNR, and noted his surprise that better data were not available on boating accidents (data presented are attached). The group agreed that further homework needs to be done to see if better data can be collected. Norm remarked his department is required to collect GPS coordinates of accidents and he believed the SCDNR had the same thing. Bill Marshall said the DNR probably had more information in the paperwork.

The group then discussed some information it would be nice to have in order to analyze effects of project operations on safety. Norm believed that most problems were at the swimming beaches and the rocks inside this area. George wondered if there was a difference in reported accidents between daytime and night. Dave agreed to further question the SCDNR to see if the group could get some better information from them. The group then looked at the accident report generated by Bill A. (attached) and Bill A. noted none of the incidents on his report were wearing a PFD. Only one incident on his list was classified as project-related according to FERC's definition. Randy M. commented that the group does not need to get caught up in project versus non-project related accidents.

Dave reported that Patrick M. (not in attendance) was not able to locate any "safety plans" at other FERC projects. Patrick had contacted some other sources of information to see if he can find an example of a safety plan. Patrick is continuing his search. Charlene reported that Duke and Carolina Power have ramping for project safety and wanted to know if this is what the group wanted to locate. Charlene agreed to list other FERC projects that have specific ramping procedures for downstream safety. Steve B. inquired whether there are any FERC regulations or standard license articles that require licensee's to operate safely. Bret H. identified the Part 12 inspections related to dam safety. Randy clarified that it states that FERC has the authority to specify flows and such for power production. Steve B. remarked that one of his concerns is that there are safety issues when the lake level drops in the winter. Steve B. brought up some letters where he believes FERC stated the licensee is responsible for safety at the project.

Dave A. noted that FERC is going to be interested in specific areas on the lake where project operations make it unsafe. There was a discussion on responsibility for marking shoal areas in the lake.. Steve B. noted that an individual with SCDNR told him it was SCE&G's responsibility. Norm disagreed and commented that only the SCDNR has the authority to put out buoys. The group decided to look at the issue further and to attempt to get someone from SCDNR law

enforcement to attend the next meeting. There are several letters of interest to the discussion that will be examined. Bill A. noted that according to the data he collected, there are fewer accidents when the lake is down. David P. remarked that this was because many of the amateurs stayed away during this time. Steve B. noted that the reason the shoal markers do not work is the drawdown. George D. made the point that if SCDNR felt it was necessary to mark shoal areas at high water, then that same logic should apply to low water also. Lee B. remarked that we need to find out if this a safety issue and see if there is evidence that lake levels have any effect on safety.

After some further discussion on the shoal marker issue, the group agreed to put the issue into the parking lot so that Steve B. can gather some additional information. It should be noted that Randy M. identified the partnership between SCE&G and SCDNR for placing navigational aids on Lake Murray and other reservoirs. Steve B. agreed to talk to his constituents and identify shoal areas that are unsafe due to the lake going below the 354' msl mark.

Alan A. then reviewed the data he collected from the 911 database maintained by the Columbia Fire Department (attached). The CFD uses a specific address (500 Wildlife Drive) to record calls from the Riverbanks Zoo area. Alan queried the database for incidents at this address from 2000 until February 2006. The data are attached to these meeting notes.

The group then discussed other possible sources of information for accidents on Lake Murray and/or the LSR. American Whitewater maintains an accident database, which Charlene described in some detail.

After lunch, Bret H. presented information on the rising water warning system that SCE&G has installed on the LSR. There are two sirens: one at Mett's Landing across from Saluda Shoals Park and another just upstream of the Riverbanks Zoo. SCE&G had these sirens tested in 2004 to calibrate the loudness of the sirens. Bret noted that the system was designed to cover an area 1500 ft. upstream and downstream of the siren at the Zoo and 500 ft. upstream and downstream of the siren at Mett's Landing. There was some discussion about testing station #4 associated with the Zoo siren. No sirens were heard at this location during the testing; Charlene noted that most of the emergency calls are to this area. Dave A. asked about the radio transmitters that send signals from the float switches to the siren. He wondered if it would be possible to use this signal to warn users and/or emergency personnel that the river is rising. The group agreed that this would be worth looking into.

Mike W. asked about including high-intensity strobe lights as part of the warning system. Mike W. felt it would provide an additional level of warning for river users. Mike W. also wanted the group to focus on the flow scenarios that are the cause of the rapidly rising water. The group then discussed the placement and coverage area of an additional siren in the area of testing station #4.

The group then examined a series of maps to begin identifying possible areas of concern that should be included in the warning system. Mike W. provided some maps that Trout Unlimited produced with possible locations of lights along the river. The group identified several areas below the I-26 bridge for consideration. The group agreed that the area between the I-20 bridge and the I-26 bridge is a low use area. Above the I-20 bridge, the group talked about the area of Corley Island as a possible siren location as well as the area of Sandy Beach above Saluda Shoals Park.

The group then discussed changing the operations of Saluda. Mike W. asked if SCE&G could look at gas turbines to meet their reserve capacity. Bill A. said they have been doing some studies and will share the cost information for replacing Saluda as their reserve capacity requirement when the information is available. Steve B. asked if Charlene could explain what ramping is and how it would work at Saluda. Bill M. had some information on how fast the water rises in the river. The USGS gauge below the dam showed an 8 foot rise in 30 minutes and a 4.5-foot rise in 15 minutes when the river flow was released rapidly at the dam on January 1, 2006[1]. Someone noted that these numbers would not apply to the Zoo area because of the morphology of the river. Bill M. agreed and said that the USGS data for January 1 show a two-hour delay for this pulse of water to reach the downstream gage above the zoo, and the most rapid rise there was about a 3-foot rise in 30 minutes and a 1.5-foot rise in 15 minutes.

The group then discussed ramping and if it would actually provide a safer experience on the river. Alan S. asked if ramping just rewards people for staying on the river as long as possible after the sirens are activated. Randy M. pointed out that we need to keep the message simple; if the sirens go off, get off the river. Charlene remarked that ramping is an acceptable method for increasing public safety in hydropower tailraces and that the river warning system is somewhat defective. She reported the sirens sometimes are activated on falling water as well as rising water. The group agreed that ramping will be an alternative that is analyzed in the environmental assessment, but hopefully a group decision will be made so that the relicensing team can present one preferred alternative to FERC.

The group then agreed on the next meeting date and reviewed the homework assignments that need to be completed before the next meeting.

[1] The water-level changes mentioned above represent how quickly water levels can rise on the lower Saluda River; thus the figures mentioned represent the most rapid increases that occurred on January 1, 2006. As flows climbed that day from 750 to 18,200 cfs, the total rise in river levels was 12 feet at the USGS gage below the dam and 5.5 feet at the gage located above the zoo.

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

February 14, 2006
9:00 AM
Lake Murray Training Center

- **9:00 to 9:15** Discussion of 01-10-2006 Meeting Notes
- **9:15 to 10:30** Presentation and Discussion of State Boating Laws
- **10:30 to 12:00** Discussion of Existing Boating Accident Data
- **12:00 to 12:30** Lunch
- **12:30 to 1:00** Presentation on Existing Rising Water Sirens
- **1:00 to 2:50** Discussion on Improving Existing Rising Water Warning System
- **2:50 to 3:00** Develop an Agenda for Next Meeting and Set Next Meeting Date

Adjourn

Saluda HYDRO RELICENSING

Kleinschmidt
Energy & Water Resource Consultants

MEMORANDUM

FOR: Project 516 Relicensing Safety Resource Group

RE: Watercraft Safety – Applicable Law

FROM: Thomas G. Eppink

DATE: January 17, 2006

ASSIGNMENT

My assignment from the January 10, 2006 Safety Committee Meeting was to review applicable ordinances from the four counties surrounding Lake Murray, as well as State law and regulation, relating to watercraft safety.

S.C. STATE WATERCRAFT LAW GENERALLY

S.C. Code §§ 50-21-10 *et seq.*, "Equipment and Operation of Watercraft" is the primary source of legal authority for regulating the operation of watercraft in Project 516 and surrounding waters. Pursuant to S.C. Code § 50-21-30, counties and municipalities are essentially preempted from enacting any ordinances or local law governing the use of watercraft on the navigable waters of the state that are not *identical* to state law. Given that, it is not surprising that I could find no local law or ordinances directly regulating watercraft. Case law, however, suggests that counties and municipalities are not necessarily preempted from passing local laws or ordinances that restrict launching or beaching watercraft. (*See* Barnhill v. City of North Myrtle Beach, 333 S.C. 482, 511 S.E.2d 361 (1999). Additionally, local law and ordinance may incidentally regulate watercraft, such as Lexington County's noise ordinance that imposes limits on, *inter alia*, watercraft, requiring that exhaust noise be kept to a level at or below that provided by the original equipment manufacturer.

SPECIFIC STATE LAW LISTED

The entire text of the law can be found at http://www.scstatehouse.net/code/t50c021.doc. Key sections are highlighted below:

SECTION 50-21-80. Enforcement of chapter; authority to stop and board vessels, make arrests and issue summonses.

SECTION 50-21-90. Boating safety and educational program.

SECTION 50-21-105. Towing of watercraft by department.

SECTION 50-21-110. Negligent operation of water device.

SECTION 50-21-111. Reckless operation of water device.

SECTION 50-21-112. Operation of moving motorized water device or water device under sail while under the influence of drugs and/or alcohol.

SECTION 50-21-113. Operation of moving water device while under the influence of alcohol or drugs resulting in property damage, great bodily injury or death.

SECTION 50-21-115. Reckless homicide by operation of boat; persons convicted of certain offenses prohibited from operating boat.

SECTION 50-21-117. Operation of water device while privileges suspended.

SECTION 50-21-120. Duty of boat livery as to equipment, registration and the like; liability of owner for negligent operation of vessel.

SECTION 50-21-125. Restriction on swimming near public boat landing or ramp in vicinity of utility for hydroelectric generation; establishment of no wake zone.

SECTION 50-21-130. Duties of vessel operator involved in collision; immunity of person rendering assistance; accident reports; suspension of privileges.

SECTION 50-21-148. Prohibition against obstruction of pier, dock, wharf, boat ramp, or access areas; erection of signs.

SECTION 50-21-170. Relationship between state and federal regulations; effect of changes in federal law or regulations.

SECTION 50-21-175. Watercraft required to heave to; cooperation of operator, crew and passengers.

SECTION 50-21-610. Regulations of Division as to construction, equipment and other safety standards.

SECTION 50-21-710. Placing of aids to navigation and regulatory markers; certain conduct prima facie evidence of negligence; prohibited acts.

SECTION 50-21-810. Motorboat towing person on water skis or similar device shall have observer or rear-view mirror.

SECTION 50-21-820. Water skiing, surfboarding and similar activity prohibited during certain hours.

SECTION 50-21-840. Certain conduct which endangers person on water skis, surfboard or similar device prohibited.

SECTION 50-21-850. Ski belt, life preserver or similar equipment required; exceptions.

SECTION 50-21-855. Enforcement of regulations affecting windsurfers and sailboarders.

SECTION 50-21-870. Personal watercraft and boating safety.

DNR REGULATIONS

In addition to the statute, limited regulations have been promulgated by the Department of Natural Resources. Significantly, they incorporate by reference the federal Inland Navigation Rules Act (33 U.S.C. §§ 2001 *et seq*.) and the regulations promulgated pursuant thereto, as well as the International Navigation Rules Act (33 U.S.C. §§ 1601 *et seq*.) and the regulations promulgated pursuant thereto. *See* S.C. Reg. § 123-1. The regulations further set out requirements for Accident Reports (S.C. Reg. § 123-2), Lights (S.C. Reg. § 123-3), and vessel numbering (S.C. Reg. § 123-6). Significantly, there are also a number of regulations imposing restrictions on certain parts of Lake Murray. *See* S.C. Reg. §§ 123-19.2 (Pine Island), 19.4 (Lakeside Marina), 19.9 (Lake Murray Marina), 19.11 (SCE&G Public Park No.1), 19.12 (Dreher Island Launching Ramp), 19.14 (Dreher Island State Park Swimming Area), 19.15 (SCE&G Public Park No. 3), and 19.26 (Dreher Island State Park marina docking facilities).

Boating Accidents on Lake Murray
Lexington / Richland / Newberry / Saluda Counties
1994-2005
Data provided by SCDNR

Year	# Accidents	# Injuries	# Fatalities
1994	11	6	2
1995	14	9	1
1996	11	9	2
1997	13	10	5
1998	17	9	2
1999	10	10	1
2000	10	5	1
2001	8	2	4
2002	11	10	0
2003	7	1	4
2004	6	4	0
2005	13	11	1

* We had a total of 35 River Rescue calls answered from 1999 – 2004 on the Lower Saluda.

ACCIDENT REPORT INDEX

Date Reported	Date of Incident	Victim	Description
9/2/2005	8/29/2005	Sam E. Goodwin III	Drowned
8/24/2005	8/22/2005	Enoch Harding, Jr.	Drowned
8/2/2005	7/29/2005	Annette Lee Fitts	Drowned
7/14/2005	7/10/2005	Inver Lopez-Roblero	Drowned
6/15/2005	6/12/2004	Edna J. Smith	Death caused by Heart-Related Issues while Boating
8/6/2004	7/31/2004	Travis Eugene Niles	Drowned
8/3/2004	8/1/2004	Lawrence Shealy	Drowned
12/1/2003	11/16/2003	Jim Lindsay	Drowned
9/23/2003	9/22/2003	Allen Jeter	Drowned
9/9/2003	9/1/2003	Michael Jones	Drowned
6/16/2003	6/9/2003	Timothy J. McLamore	Drowned
4/4/2003	4/2/2003	Christopher M. Glenn	Man Inside Car Found in River
3/14/2003	3/4/2003	Manual Salazar	Severe Electrical (Burn) Injury on Construction Site
6/10/2002	6/2/2002	Lamont Worthy	Drowned
6/10/2002	6/2/2002	Christopher Paul Brayboy	Drowned
5/29/2002	5/24/2002	Keith Busbee	Injury Caused by Boating Accident
5/29/2002	5/25/2002	James Howell	Injury Caused by Watercraft Accident
9/4/2001	8/12/2001	James A. Alderman	Drowned
8/15/2001	7/26/2001	Benjamin Thomas	Death Caused by Boating Accident
8/2/2001	7/22/2001	Brian Keith Shealy	Drowned
7/18/2001	7/7/2001	Charles Randall Brayboy	Drowned
3/26/2001	2/11/2001	Michael Spoon & David Koprowski	Drowned
8/22/2000	8/19/2000	David & Marie Shumpert	Rescued After Boat Sank
7/5/2000	7/2/2000	Rodrizques Terrace Danley	Drowned
5/16/2000	5/12/2000	Cedric Lamont Gilmore	Drowned
4/26/2000	4/24/2000	Steven Patrick Xayasane	Death Caused by Injuries from Boating Accident
8/30/1999	8/21/1999	Thomas David Wright	Death Caused by Boating Accident
6/1/1999	5/30/1999	Glen & Linda Folsom	Accident - Plane Struck Power Line & Crashed into Lake
9/16/1998	9/14/1998	Henry Richard Metts	Drowned
6/10/1998	6/3/1998	James Albert Donnelly	Body Found in Lake Murray
5/19/1998	5/14/1998	R. Gregory Jowers	Drowned
4/14/1998	4/12/1998	Virgil R. Sarine	Drowned
3/3/1998	2/25/1998	Laurence A. Savage, Robert Welt, Robert van Dewatern	Injuries Caused by Plane Crash
9/2/1997	8/30/1997	Kevin Laster, Sr. & Weskey Daniels	Death Caused by Boating Accident
8/7/1997	8/6/1997	George Ernest Cole	Drowned
7/21/1997	7/19/1997	Joseph Drew Smith	Death Caused by Boating Accident
7/17/1997	6/15/1997	Allen W. Flath	Injury Caused by Watercraft Accident
7/11/1997	7/4/1997	Benjamin Harley, Jr.	Drowned
6/30/1997	6/25/1997	Walter Oliver White, Jr.	Drowned
6/30/1997	6/25/1997	Clinton Wingard	Drowned
6/20/1997	6/15/1997	Lynn Kempson Wingard	Death Caused by Boating Accident

ACCIDENT REPORT INDEX

Date Reported	Date of Incident	Victim	Description
5/27/1997	5/23/1997	Chase Thornhill	Electrocuted While Swimming
1/28/1997	1/24/1997	Farron Taylor	Drowned
8/13/1996	8/10/1996	Caleb Emanuel Middleton	Drowned
6/24/1996	6/22/1996	Steve Dial, Jr.	Death Caused by Boating Accident
6/19/1996	5/25/1996	Foster Hamilton & Family	Sail Boat Hit Power Line; Power Coompany Response
6/3/1996	6/2/1996	Yan Wei Guo	Drowned
5/28/1996	5/25/1996	Foster Hamilton & Family	Sail Boat Hit Power Line
4/10/1996	4/8/1996	Jared Ferguson	Drowned
3/13/1996	3/11/1996	Charles Andrew Soos	Drowned
9/27/1995	8/7/1995	Terrence G. Morrison	Found Dead in Car @ Park Site 1
9/15/1995	4/29/1995		FERC Response to Sailboat Incident
9/12/1995	9/4/1995	Phillip D. Lekvoff	Injury Caused by Watercraft Accident
8/3/1995	4/29/1995		Recreational Report
6/27/1995	4/29/1995	Brian Adam Pawlicki	Suicide, Body Found in Lake
6/27/1995	4/29/1995	Lyndal Timmie Matthews	Homicide, Body Found on Boat Ramp
5/12/1995	4/29/1995	Brian Adam Pawlicki	Suicide, Body Found in Lake
5/12/1995	4/29/1995	Lyndal Timmie Matthews	Homicide, Body Found on Boat Ramp
5/12/1995	4/29/1995	Eric B. Moore	Drowned
7/15/1994	6/7/1994	Allen Strickland	Drowned
6/20/1994	6/7/1994	Allen Strickland	Drowned
7/20/1993	7/6/1993	Donald R. Hinson	Drowned
7/13/1993	7/6/1993	Donald R. Hinson	Presumed Drowned
7/27/1992	7/26/1992	Carolyn Anwell Williams	Drowned
7/10/1992	7/8/1992	William E. Amick	Drowned
7/7/1992	7/4/1992	Trent Avery Smith	Drowned
6/25/1992	3/21/1992	Joseph Schepsisk, Jr.	Update: Found Alive in Bermuda
3/30/1992	3/21/1992	Joseph Schepsisk, Jr.	Drowned
1/15/1992	1/10/1992	Willie Scott Sr.	Drowned
7/17/1991	7/13/1991	Julian Colter	Drowned
7/3/1991	6/29/1991	Matthew Gerald Meetze, Jr.	Drowned
9/7/1990	8/24/1990	Audie Lee Jay	Drowned
7/10/1990	6/30/1990	Cindy Pickard	Death Caused by Boating Accident
6/19/1990	5/27/1990	Ronald Michael Sims	Drowned
6/19/1990	6/7/1990	Marshall Mayers	Drowned
5/29/1990	5/19/1990	Leigh Ann Rodgers Derek Sommer, Mark Sommer,	Death Caused by Boating Accident
3/30/1990	2/24/1990	Gregory Young	Drowned
7/16/1987	6/27/1987	Kevin Stroud	Drowned
6/4/1987	5/31/1987	Leslie Ann Truesdale	Death Caused by Boating Accident

City of Columbia Fire Dept.

901 Code Summary Report
Type of Situation

Date greater than or equal to 01/01/2000 and Date less than or equal to 02/10/2006 and Street Name equal to "Wildlife Pw"

Type of Situation		Count	Percent
** 1 Fire/Explosion			
13 Vehicle Fire		1	1.0%
14 Trees, Brush, Grass Fire		2	2.0%
15 Refuse Fire		1	1.0%
19 Fire/Explosion Not Classified		1	1.0%
	Subtotals:	**5**	**5.1%**
** 3 Rescue Call			
30 Rescue Call		20	20.6%
31 Inhalator Call		1	1.0%
32 Emergency Medical Call		45	46.3%
34 Search		2	2.0%
35 Extrication		2	2.0%
39 Ambulance Assist		1	1.0%
	Subtotals:	**71**	**73.2%**
** 4 Hazardous Condition			
41 Spill/Leak No Ignition		2	2.0%
44 Power Line Down		1	1.0%
45 Arcing/Shorted Elec. Equip.		1	1.0%
	Subtotals:	**4**	**4.1%**
** 6 Good Intent Call			
60 Good Intent Call		6	6.1%
61 Smoke Scare		1	1.0%
69 Good Intent Call		1	1.0%
	Subtotals:	**8**	**8.2%**
** 7 False Call			
70 False Call		4	4.1%
71 Malicious/Mischievous False Ca		1	1.0%
74 Unintentional False Call		2	2.0%
79 False Call Not Classified		1	1.0%
	Subtotals:	**8**	**8.2%**
** 9 Other Situation			

City of Columbia Fire Dept.

901 Code Summary Report
Type of Situation

Date greater than or equal to 01/01/2000 and Date less than or equal to 02/10/2006 and Street Name equal to "Wildlife Pw"

Type of Situation	Count	Percent
99 Situation Found Not Classified	1	1.0%
Subtotals:	**1**	**1.0%**

Total Incident Count: **97**

City of Columbia Fire Dept.

901 Code Detail Report
Type of Situation

Date greater than or equal to 01/01/2000 and Date less than or equal to 02/10/2006 and Street Name equal to "Wildlife Pw"

Incident	Date	Alarm	Response	Act	Ign	Prop Use	
** 13 Vehicle Fire							
03-018746-00	09/21/2003	13:16:00	00:08:00	1	54	962	Paved Public Street
Situation Count	**1**	**Percent All**	**1.0%**				
** 14 Trees, Brush, Grass Fire							
02-013745-00	07/06/2002	20:22:17	00:04:54	1	00	961	Limited Access/Divid Hwy
02-013827-00	07/08/2002	15:58:29	00:06:35	1	11	950	Railroad Property
Situation Count	**2**	**Percent All**	**2.0%**				
** 15 Refuse Fire							
05-006931-00	04/05/2005	19:12:43	00:07:06	1	11	930	Outdoor Property
Situation Count	**1**	**Percent All**	**1.0%**				
** 19 Fire/Explosion Not Classified							
01-010822-00	05/17/2001	12:59:51	00:08:13	1	73	593	Medical, Research Office
Situation Count	**1**	**Percent All**	**1.0%**				
** 30 Rescue Call							
00-009229-00	04/30/2000	12:32:53	00:05:41	2		593	Medical, Research Office
00-017998-00	08/07/2000	14:20:06	00:07:13	2		946	Inland Water Area
01-004624-00	02/28/2001	17:42:07	00:07:20	3		593	Medical, Research Office
01-013848-00	06/26/2001	14:31:52	00:01:11	2		940	Water Areas
01-014024-00	06/28/2001	19:01:15	00:13:28	2		940	Water Areas
01-015779-00	07/22/2001	17:34:18	00:12:17	2		593	Medical, Research Office
01-015835-00	07/23/2001	14:08:13	00:10:06	2		940	Water Areas
01-016319-00	07/29/2001	17:50:47	00:26:23	2		940	Water Areas
01-016974-00	08/07/2001	12:24:03	00:00:16	2		940	Water Areas
02-015622-00	08/04/2002	17:49:25	00:08:38	2		593	Medical, Research Office
03-008411-00	04/29/2003	17:54:20	00:05:39	2		940	Water Areas
03-009113-00	05/09/2003	18:06:00	00:05:00	3		940	Water Areas
03-011833-00	06/17/2003	19:03:00	00:05:00	2		946	Inland Water Area
03-013894-00	07/17/2003	08:21:29	00:02:38	3		946	Inland Water Area
03-015107-00	08/01/2003	20:17:00	00:07:00	2		940	Water Areas

City of Columbia Fire Dept.

901 Code Detail Report
Type of Situation

Date greater than or equal to 01/01/2000 and Date less than or equal to 02/10/2006 and Street Name equal to "Wildlife Pw"

Incident	Date	Alarm	Response	Act	Ign	Prop Use	
04-008355-00	04/17/2004	18:42:22	00:07:37	2		593	Medical, Research Office
04-014402-00	07/10/2004	05:22:52	00:09:25	3		940	Water Areas
05-006935-00	04/05/2005	19:57:53	00:08:11	3		940	Water Areas
05-010918-00	05/30/2005	15:41:21	00:06:10	4		946	Inland Water Area
05-011805-00	06/11/2005	18:26:43	00:06:43	3		946	Inland Water Area
Situation Count	**20**	**Percent All**	**20.6%**				
** 31 Inhalator Call							
01-017157-00	08/06/2001	17:34:42	00:00:00	3		930	Outdoor Property
Situation Count	**1**	**Percent All**	**1.0%**				
** 32 Emergency Medical Call							
00-005861-00	03/24/2000	12:19:00	00:04:00	2		110	Fixed Use Amusement
00-006179-00	03/27/2000	10:37:38	00:05:14	2		939	Outdoor Prop. Not
00-008494-00	04/21/2000	12:35:52	00:05:27	3		109	Public Assembly (not
00-009540-00	05/04/2000	11:13:39	00:06:51	5		965	Uncovered Parking Area
00-011616-00	05/27/2000	16:03:57	00:18:25	3		593	Medical, Research Office
00-013748-00	06/20/2000	13:43:40	00:06:53	3		965	Uncovered Parking Area
01-003302-00	02/11/2001	13:36:20	00:05:55	3		100	Public Assembly Property
01-005462-00	03/11/2001	14:43:17	00:06:08	3		009	Not Classified
01-007823-00	04/10/2001	14:06:30	00:04:57	5		962	Paved Public Street
01-009397-00	04/29/2001	19:45:21	00:01:13	3		100	Public Assembly Property
01-016075-00	07/26/2001	11:27:08	00:01:08	3		119	Not Classified
01-016304-00	07/29/2001	13:50:42	00:11:27	3		900	Special Property
01-016585-00	08/02/2001	09:21:14	00:06:00	3		109	Public Assembly (not
01-017364-00	08/11/2001	17:23:45	00:06:56	3		109	Public Assembly (not
01-017700-00	08/16/2001	06:50:00	00:00:01	3		949	Water Areas - Not
01-023288-00	10/18/2001	15:40:42	00:00:00	2		915	Vacant Property
02-011818-00	05/25/2002	15:19:27	00:12:48	5		940	Water Areas
02-011825-00	05/25/2002	17:44:07	00:09:34	2		940	Water Areas
03-002556-00	10/03/2002	16:30:00	00:00:00	9		593	Medical, Research Office
03-006639-00	04/05/2003	15:15:05	00:04:55	3		100	Public Assembly Property
03-007414-00	04/16/2003	13:58:24	00:09:01	3		965	Uncovered Parking Area
03-008227-00	04/27/2003	12:44:31	00:01:01	5		414	2-family Dwelling-year
03-011817-00	06/17/2003	15:48:39	00:05:57	3		009	Not Classified
03-015434-00	08/06/2003	11:53:19	00:05:51	3		100	Public Assembly Property
04-005749-00	03/13/2004	08:21:38	00:05:22	2		965	Uncovered Parking Area

City of Columbia Fire Dept.

901 Code Detail Report
Type of Situation

Date greater than or equal to 01/01/2000 and Date less than or equal to 02/10/2006 and Street Name equal to "Wildlife Pw"

Incident	Date	Alarm	Response	Act	Ign	Prop Use	
04-007086-00	03/30/2004	11:30:15	00:06:09	2		113	Amusement Center
04-008595-00	04/20/2004	20:27:55	00:10:36	3		129	Not Classified
04-008567-00	04/20/2004	13:47:33	00:05:19	3		129	Not Classified
04-010384-00	05/15/2004	15:25:11	00:02:39	3		109	Public Assembly (not
04-011769-00	06/05/2004	18:25:54	00:06:29	3		949	Water Areas - Not
04-012878-00	06/20/2004	11:53:42	00:05:31	2		931	Open Land/Field
04-015558-00	07/26/2004	12:33:40	00:08:55	3		100	Public Assembly Property
04-015932-00	07/31/2004	15:49:13	00:05:32	2		129	Not Classified
04-015984-00	08/01/2004	15:09:12	00:05:41	2		593	Medical, Research Office
04-016392-00	08/07/2004	13:38:32	00:06:39	3		593	Medical, Research Office
04-016401-00	08/07/2004	14:46:17	00:06:30	2		593	Medical, Research Office
04-017307-00	08/19/2004	07:43:30	00:06:58	3		593	Medical, Research Office
04-020857-00	10/05/2004	15:26:30	00:06:44	3		593	Medical, Research Office
05-008558-00	04/27/2005	20:14:10	00:06:37	5		593	Medical, Research Office
05-008677-00	04/29/2005	09:48:23	00:06:11	3		100	Public Assembly Property
05-010540-00	05/24/2005	18:09:51	00:06:47	3		100	Public Assembly Property
05-012078-00	06/15/2005	20:11:03	00:05:39	2		965	Uncovered Parking Area
05-014419-00	07/17/2005	15:03:57	00:07:32	3		100	Public Assembly Property
05-015207-00	07/27/2005	18:10:33	00:05:27	3		965	Uncovered Parking Area
05-019793-00	09/27/2005	14:23:11	00:06:03	3		100	Public Assembly Property
Situation Count	**45**	**Percent All**	**46.3%**				
** 34 Search							
00-013467-00	06/17/2000	13:46:00	00:07:53	9		940	Water Areas
03-013663-00	07/13/2003	16:00:00	00:05:00	2		930	Outdoor Property
Situation Count	**2**	**Percent All**	**2.0%**				
** 35 Extrication							
00-007566-00	04/10/2000	17:00:43	00:04:54	2		940	Water Areas
01-008296-00	04/16/2001	14:12:50	00:02:04	2		940	Water Areas
Situation Count	**2**	**Percent All**	**2.0%**				
** 39 Ambulance Assist							
00-012862-00	06/10/2000	22:31:19	00:05:39	9		949	Water Areas - Not

City of Columbia Fire Dept.

901 Code Detail Report
Type of Situation

Date greater than or equal to 01/01/2000 and Date less than or equal to 02/10/2006 and Street Name equal to "Wildlife Pw"

Incident	Date	Alarm	Response	Act	Ign	Prop Use
Situation Count	**1**	**Percent All**	**1.0%**			
** **41 Spill/Leak No Ignition**						
05-007961-00	04/19/2005	16:32:42	00:06:36	9	962	Paved Public Street
05-012055-00	06/15/2005	15:16:18	00:06:45	3	965	Uncovered Parking Area
Situation Count	**2**	**Percent All**	**2.0%**			
** **44 Power Line Down**						
01-008854-00	04/23/2001	08:26:52	00:06:25	3	965	Uncovered Parking Area
Situation Count	**1**	**Percent All**	**1.0%**			
** **45 Arcing/Shorted Elec. Equip.**						
05-021823-00	10/23/2005	20:44:38	00:07:18	3	962	Paved Public Street
Situation Count	**1**	**Percent All**	**1.0%**			
** **60 Good Intent Call**						
04-000227-00	01/03/2004	17:16:55	00:09:26	3	962	Paved Public Street
04-008021-01	04/13/2004	07:37:14	00:08:47	3	940	Water Areas
04-008021-00	04/13/2004	07:37:14	00:08:47	3	940	Water Areas
04-013990-00	07/04/2004	20:56:55	00:07:44	3	940	Water Areas
05-008867-00	05/01/2005	13:04:05	00:08:03	3	593	Medical, Research Office
05-013923-00	07/11/2005	08:19:03	00:06:33	3	100	Public Assembly Property
Situation Count	**6**	**Percent All**	**6.1%**			
** **61 Smoke Scare**						
05-024610-00	11/30/2005	10:45:59	00:02:12	3	965	Uncovered Parking Area
Situation Count	**1**	**Percent All**	**1.0%**			
** **69 Good Intent Call**						
00-006180-00	03/27/2000	11:04:51	00:06:18	3	939	Outdoor Prop. Not

City of Columbia Fire Dept.

901 Code Detail Report
Type of Situation

Date greater than or equal to 01/01/2000 and Date less than or equal to 02/10/2006 and Street Name equal to "Wildlife Pw"

Incident	Date	Alarm	Response	Act	Ign	Prop Use
Situation Count	**1**	**Percent All**	**1.0%**			
** **70 False Call**						
02-010477-00	05/09/2002	15:13:49	00:03:53	3		940 Water Areas
03-007013-00	04/10/2003	19:06:43	00:13:08	3		940 Water Areas
03-009105-00	05/09/2003	15:47:00	00:12:00	3		940 Water Areas
05-008291-00	04/24/2005	12:13:18	00:05:44	3		593 Medical, Research Office
Situation Count	**4**	**Percent All**	**4.1%**			
** **71 Malicious/Mischievous False Ca**						
01-004779-00	03/02/2001	20:35:49	00:06:13	3		960 Road, Parking Property
Situation Count	**1**	**Percent All**	**1.0%**			
** **74 Unintentional False Call**						
02-020086-00	10/01/2002	12:02:16	00:05:09	3		593 Medical, Research Office
05-011338-00	06/05/2005	19:32:27	00:06:36	3		100 Public Assembly Property
Situation Count	**2**	**Percent All**	**2.0%**			
** **79 False Call Not Classified**						
05-025087-00	12/07/2005	05:05:16	00:01:34	3		962 Paved Public Street
Situation Count	**1**	**Percent All**	**1.0%**			
** **99 Situation Found Not Classified**						
01-017165-00	08/09/2001	17:34:00	00:00:00	9		593 Medical, Research Office
Situation Count	**1**	**Percent All**	**1.0%**			

Total Incident Count **97**

City of Columbia Fire Dept.

Fire Incident Summary

Date greater than or equal to 01/01/2000 and Date less than or equal to 02/10/2006 and Type of Situation contained in "30","32","34","35" and Street Name equal to "Wildlife Pw"

Incident	Date	Alarm	Location	Type of Situation
05-006935-00	04/05/2005	19:57:53	500 Wildlife Pw/Columbia, SC 29210	30 Rescue Call - SELF RESCUE
05-008558-00	04/27/2005	20:14:10	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
05-008677-00	04/29/2005	09:48:23	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
05-010540-00	05/24/2005	18:09:51	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
05-010918-00	05/30/2005	15:41:21	500 Wildlife Pw/Columbia, SC 29203	30 Rescue Call - REMOVED 1 PER
05-011805-00	06/11/2005	18:26:43	500 Wildlife Pw/Columbia, SC 29210	30 Rescue Call - NOTHING FOUND
05-012078-00	06/15/2005	20:11:03	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
05-014419-00	07/17/2005	15:03:57	500 Wildlife Pw/Eleph/Columbia, SC 29210	32 Emergency Medical Call
05-015207-00	07/27/2005	18:10:33	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
05-019793-00	09/27/2005	14:23:11	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
04-005749-00	03/13/2004	08:21:38	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
04-007086-00	03/30/2004	11:30:15	500 Wildlife Pw/Columbia, SC 29021	32 Emergency Medical Call
04-008355-00	04/17/2004	18:42:22	500 Wildlife Pw/Columbia, SC 29210	30 Rescue Call - RECOVERY
04-008567-00	04/20/2004	13:47:33	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
04-008595-00	04/20/2004	20:27:55	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
04-010384-00	05/15/2004	15:25:11	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
04-011769-00	06/05/2004	18:25:54	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
04-012878-00	06/20/2004	11:53:42	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
04-014402-00	07/10/2004	05:22:52	500 Wildlife Pw/Columbia, SC 29201	30 Rescue Call - MEDICAL
04-015558-00	07/26/2004	12:33:40	500 Wildlife Pw/Columbia, SC 29201	32 Emergency Medical Call
04-015932-00	07/31/2004	15:49:13	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
04-015984-00	08/01/2004	15:09:12	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
04-016392-00	08/07/2004	13:38:32	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
04-016401-00	08/07/2004	14:46:17	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
04-017307-00	08/19/2004	07:43:30	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
04-020857-00	10/05/2004	15:26:30	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
03-006639-00	04/05/2003	15:15:05	500 Wildlife Pw/Columbia, SC 29021	32 Emergency Medical Call
03-007414-00	04/16/2003	13:58:24	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
03-008227-00	04/27/2003	12:44:31	500 Wildlife Pw/Columbia, SC 29202	32 Emergency Medical Call
03-008411-00	04/29/2003	17:54:20	500 Wildlife Pw/Columbia, SC 29210	30 Rescue Call - REMOVED 1 PERS
03-009113-00	05/09/2003	18:06:00	500 Wildlife Pw/Columbia, SC 29201	30 Rescue Call - ONSHORE
03-011817-00	06/17/2003	15:48:39	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
03-011833-00	06/17/2003	19:03:00	500 Wildlife Pw/Columbia, SC 29201	30 Rescue Call REMOVED 2 PEOPL
03-013663-00	07/13/2003	16:00:00	500 Wildlife Pw/Columbia, SC 29201	34 Search
03-013894-00	07/17/2003	08:21:29	500 Wildlife Pw/Columbia, SC 29210	30 Rescue Call - GOOD INTENT
03-015107-00	08/01/2003	20:17:00	500 Wildlife Pw/Columbia, SC 29201	30 Rescue Call REMOVED 2 PEOP
03-015434-00	08/06/2003	11:53:19	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
02-011818-00	05/25/2002	15:19:27	500 Wildlife Pw/Columbia, SC 29201	32 Emergency Medical Call
02-011825-00	05/25/2002	17:44:07	500 Wildlife Pw/Columbia, SC 29201	32 Emergency Medical Call
02-015622-00	08/04/2002	17:49:25	500 Wildlife Pw/Columbia, SC 29210	30 Rescue Call - REMOVED 2 PEOPL
03-002556-00	10/03/2002	16:30:00	500 Wildlife Pw/Columbia, SC 29201	32 Emergency Medical Call

City of Columbia Fire Dept.

Fire Incident Summary

Date greater than or equal to 01/01/2000 and Date less than or equal to 02/10/2006 and Type of Situation contained in "30","32","34","35" and Street Name equal to "Wildlife Pw"

Incident	Date	Alarm	Location	Type of Situation
01-003302-00	02/11/2001	13:36:20	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
01-004624-00	02/28/2001	17:42:07	500 Wildlife Pw/Columbia, SC 29210	30 Rescue Call - WRECK
01-005462-00	03/11/2001	14:43:17	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
01-007823-00	04/10/2001	14:06:30	100 Wildlife Pw/Columbia, SC 29201	32 Emergency Medical Call
01-008296-00	04/16/2001	14:12:50	500 Wildlife Pw/On the Saluda River/Columbia, SC 29201	35 Extrication - REMOVED 2 PEOPL
01-009397-00	04/29/2001	19:45:21	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
01-013848-00	06/26/2001	14:31:52	500 Wildlife Pw/Columbia, SC 29201	30 Rescue Call - REMOVED 10 PEOP
01-014024-00	06/28/2001	19:01:15	600 Wildlife Pw/Columbia, SC 29201	30 Rescue Call - 3 WALKED OUT
01-015779-00	07/22/2001	17:34:18	500 Wildlife Pw/Columbia, SC 29201	30 Rescue Call - RECOVERY
01-015835-00	07/23/2001	14:08:13	500 Wildlife Pw/Columbia, SC 29206	30 Rescue Call - REMOVED 5 PEOPL
01-016075-00	07/26/2001	11:27:08	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
01-016304-00	07/29/2001	13:50:42	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
01-016319-00	07/29/2001	17:50:47	500 Wildlife Pw/Columbia, SC 29201	30 Rescue Call - REMOVED 2 PEOPLE
01-016585-00	08/02/2001	09:21:14	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
01-016974-00	08/07/2001	12:24:03	500 Wildlife Pw/Columbia, SC 29201	30 Rescue Call - REMOVED 3 PEOPLE
01-017364-00	08/11/2001	17:23:45	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
01-017700-00	08/16/2001	06:50:00	500 Wildlife Pw/Columbia, SC 29201	32 Emergency Medical Call
01-023288-00	10/18/2001	15:40:42	500 Wildlife Pw/Columbia, SC 29205	32 Emergency Medical Call
00-005861-00	03/24/2000	12:19:00	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
00-006179-00	03/27/2000	10:37:38	500 Wildlife Pw/Columbia, SC 29169	32 Emergency Medical Call
00-007566-00	04/10/2000	17:00:43	500BK Wildlife Pw/Columbia, SC 29201	35 Extrication - REMOVED 1 PERSON
00-008494-00	04/21/2000	12:35:52	500 Wildlife Pw/BKCafe/Columbia, SC 29205	32 Emergency Medical Call
00-009229-00	04/30/2000	12:32:53	500 Wildlife Pw/Columbia, SC 29201	30 Rescue Call - REMOVED 1 PERSON
00-009540-00	05/04/2000	11:13:39	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
00-011616-00	05/27/2000	16:03:57	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
00-013467-00	06/17/2000	13:46:00	500 Wildlife Pw/Columbia, SC 29210	34 Search - RECOVERY
00-013748-00	06/20/2000	13:43:40	500 Wildlife Pw/Columbia, SC 29210	32 Emergency Medical Call
00-017998-00	08/07/2000	14:20:06	500 Wildlife Pw/Columbia, SC 29210	30 Rescue Call - REMOVED 3 PEOP

Total Incident Count 69

Kacie Jensen

From: Dave Anderson
Sent: Monday, March 13, 2006 10:16 AM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; John and Rob Altenberg; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 02-14-06 Draft Safety RCG Meeting Notes

We have a few edits to the meeting notes, so I am sending them around one more time before they become final on Wednesday.

2006-02-14
leeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
February 14, 2006

draft dka 02-27-06

ATTENDEES:

Name	Organization	Name	Organization
Bill Argentieri	SCE&G	Dave Anderson	Kleinschmidt Associates
Alan Stuart	Kleinschmidt Associates	George Duke	LMHOC
Tom Eppink	SCANA	David Price	LMPS
Alison Guth	Kleinschmidt Associates	Randy Mahan	SCANA
Ed Schnepel	LMA	Alan Axson	Columbia Fire Dept.
Kenneth Fox	LMA	Bill Marshall	SCDNR/LSSRAC
Bill Mathias	LMA & LMPS	Karen Kustafik	CoC P&R
Ken Uschelbec	USCG Auxiliary	Lee Barber	LMA
Norm Nicholson	LCSD	Steve Bell	Lake Watch
Bret Hoffman	Kleinschmidt Associates	Mike Waddell	TU

HOMEWORK ITEMS:

- Steve Bell – identify specific potential hazardous shoals below 354' msl
- Dave Anderson – continue to try to contact area hospitals
- Dave Anderson – better boating accident data from SCDNR
- Patrick Moore – identify safety plans at other FERC projects
- Charlene Coleman – list FERC projects where ramping is a requirement for safety reasons
- Tom Eppink – review DNR authority concerning shoal markers on Lake Murray
- Alan Axson – review accident data for incidents at Candy Lane
- All – Identify high use areas on maps for possible improvement to warning system

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PARKING LOT ITEMS:

- Equipment regulations for the LSR
- Discussion of shoal markers and lake levels

DATE OF NEXT MEETING: **April 18, 2006 at 9:00 a.m.**
Located at the Lake Murray Training Center

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Kleinschmidt
Energy & Water Resource Consultants

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
February 14, 2006

draft dka 02-27-06

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 opened the meeting by reviewing the meeting notes from January 10th, particularly the comments received from Bill M. concerning group decisions on priority safety issues. Randy M. disagreed with Bill M.'s wording on the priority items determined at the January meeting; Randy acknowledged the concerns, but suggested that meeting notes should accurately reflect what occurred in the meeting. Bill M. agreed and noted that his comments were a reflection of concerns expressed at the January meeting but did not reflect decisions made by the group to define priorities. The group decided on some alternate wording for the meeting notes and Dave agreed to redistribute the January 10th meeting notes before finalizing them.

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Steve B. asked about written comments submitted after the meeting and if they could be appended to the meeting notes. Dave noted that Charlene and Malcolm L. had also submitted written comments, and asked if the group had received copies of those comments. The group decided that attaching the submitted comments to the meeting notes is acceptable as long as they remain separate from the events that occurred during the meeting.

Steve B. noted operation of the project is a priority issue of this group. Dave noted that this group would not be proposing any operating plans for the Saluda project but would consider any operational changes recommended by the Operations RCG and consider the safety aspects of their recommendation. Dave further noted that it was beyond the means of the group to determine the safest operational plan. Steve B. remarked that he believed we need to determine how project operations affect safety and then quantify those impacts and determine how project operations need to be modified. Dave agreed and commented that we would begin that process today.

The group then reviewed the homework items from the previous meeting. Dave noted that he called both area hospitals but has not been able to speak to anyone. Norm noted that he had been told that SeaTow would be in attendance.

Tom E. presented his homework assignment on boating laws in the state of South Carolina. Tom observed that there is one state statute that covers boating and that counties can make ordinances that are identical to the state statute, but could not find any examples where this had been done. Counties can also pass ordinances not specifically aimed at boating but affecting it, for example, noise ordinances that may affect boating in certain areas. Tom also went over some of the laws related to enforcement and observed that any state law enforcement office may enforce boating regulations. Norm noted that any Class One officer could put a blue light on a boat and be official.

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Mike W. asked if they could board a documented vessel; Norm replied that documented vessels had to pull over when asked. Someone asked why there is only one sheriff's department patrolling the lake; the answer given dealt with avoiding duplicate efforts. Norm commented that it was also because of budget constraints and the perception that Lexington County contained the majority of the lake.

Tom continued his presentation and moved into boating safety and educational programs and towing laws. Bill Mathias noted that 107 percent is added to fines for court fees. Lee B. noted that changing any of these laws is very difficult in South Carolina because the legislature believes the laws are adequate. Steve B. asked if we could make better laws through the relicensing process. Tom E. replied that this might be something to do after the relicensing process, but is probably not necessary for the license application. Tom further commented that FERC has no authority over water; Charlene observed that the TVA is the only entity she can think of that has authority over water and they are not governed by FERC.

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Mike W. asked how no wake zones are established. Norm replied that the SCDNR was the only one that could do that. The group then began to talk about reckless operation of water devices and went over some examples. Dave asked how it was possible for violators to lose the privilege of boating when there are no laws about boating licenses. Norm noted that they are entered into a database, which will flag them if they are pulled over and their name is taken. Tom continued going over boating under the influence laws and the mechanism for punishment for these crimes.

Tom went on and defined Reckless Homicide by Operation of a Boat, which can be charged if a person dies within three years due to injuries caused by the operation of a boat in a reckless disregard of the safety of others. Lee B. noted it is interesting the offender did not lose their license. Tom further explained laws concerning operation of a boat while a license suspended and the duties of boat livery, which covers rentals of boats. Tom discussed the laws concerning swimming near a public boat landing or in the vicinity of a hydro generation plant and the laws governing no-wake zones. Alan S. commented that if FERC wanted to establish a 100 foot no swimming zone around a public boat ramp, they could not because it is a state law.

Tom continued and talked about the "good Samaritan" clause and the relationship between state and federal regulations. Tom observed that state laws incorporate U.S. Coast Guard regulations.

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Norm began to discuss some of the authority he has concerning trespassing and noted that he could use maritime law if needed. Lee noted that an inspection of the Southern Patriot about 10 years ago resulted in a requirement for ballast so that the boat would be evenly weighted. Tom continued his presentation and talked about the placing of aid and regulatory markers, towing water skiers, windsurfers, and personal watercraft. Tom also discussed the fact that DNR has set out further

boating requirements beyond the state statutes. The group then briefly noted that we can continue to discuss these laws and that, in the past, these laws have only been changed as a result of an incident.

The group then began looking at the accident data collected as part of the homework assignments. Dave presented the boating accident data on Lake Murray, data provided by the SCDNR, and noted his surprise that better data were not available on boating accidents (data presented are attached). The group agreed that further homework needs to be done to see if better data can be collected. Norm remarked his department is required to collect GPS coordinates of accidents and he believed the SCDNR had the same thing. Bill Marshall said the DNR probably had more information in the paperwork.

The group then discussed some information it would be nice to have in order to analyze effects of project operations on safety. Norm believed that most problems were at the swimming beaches and the rocks inside this area. George wondered if there was a difference in reported accidents between daytime and night. Dave agreed to further question the SCDNR to see if the group could get some better information from them. The group then looked at the accident report generated by Bill A. and Bill A. noted none of the incidents on his report were wearing a PFD. Only one incident on his list was classified as project-related according to FERC's definition. Randy M. commented that the group does not need to get caught up in project versus non-project related accidents.

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Deleted: the

Dave A. noted that FERC is going to be interested in specific areas on the lake where project operations make it unsafe. There was a discussion on responsibility for marking shoal areas in the lake.. Steve B. noted that an individual with SCDNR told him it was SCE&G's responsibility. Norm disagreed and commented that only the SCDNR has the authority to put out buoys. The group decided to look at the issue further and to attempt to get someone from SCDNR law enforcement to attend the next meeting. There are several letters of interest to the discussion that

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will be examined. Bill A. noted that according to the data he collected, there are fewer accidents when the lake is down. David P. remarked that this was because many of the amateurs stayed away during this time. Steve B. noted that the reason the shoal markers do not work is the drawdown. George D. made the point that if SCDNR felt it was necessary to mark shoal areas at high water, then that same logic should apply to low water also. Lee B. remarked that we need to find out if this a safety issue and see if there is evidence that lake levels have any effect on safety.

After some further discussion on the shoal marker issue, the group agreed to put the issue into the parking lot so that Steve B. can gather some additional information. It should be noted that Randy M. identified the partnership between SCE&G and SCDNR for placing navigational aids on Lake Murray and other reservoirs. Steve B. agreed to talk to his constituents and identify shoal areas that are unsafe due to the lake going below the 354' msl mark.

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Mike W. asked about including high-intensity strobe lights as part of the warning system. Mike W. felt it would provide an additional level of warning for river users. Mike W. also wanted the group to focus on the flow scenarios that are the cause of the rapidly rising water. The group then discussed the placement and coverage area of an additional siren in the area of testing station #4.

The group then examined a series of maps to begin identifying possible areas of concern that should be included in the warning system. Mike W. provided some maps that Trout Unlimited produced with possible locations of lights along the river. The group identified several areas below the I-26 bridge for consideration. The group agreed that the area between the I-20 bridge and the I-26 bridge is a low use area. Above the I-20 bridge, the group talked about the area of Corley Island as a possible siren location as well as the area of Sandy Beach above Saluda Shoals Park.

The group then discussed changing the operations of Saluda. Mike W. asked if SCE&G could look at gas turbines to meet their reserve capacity. Bill A. said they have been doing some studies and will share the cost information for replacing Saluda as their reserve capacity requirement when the information is available. Steve B. asked if Charlene could explain what ramping is and how it would work at Saluda. Bill M. had some information on how fast the water rises in the river. The USGS gauge below the dam showed an 8 foot rise in 30 minutes and a 4.5-foot rise in 15 minutes when the river flow was released rapidly at the dam on January 1, 2006[1]. Someone noted that these numbers would not apply to the Zoo area because of the morphology of the river. Bill M. agreed and said that the USGS data for January 1 show a two-hour delay for this pulse of water to reach the downstream gage above the zoo, and the most rapid rise there was about a 3-foot rise in 30 minutes and a 1.5-foot rise in 15 minutes.

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The group then discussed ramping and if it would actually provide a safer experience on the river. Alan S. asked if ramping just rewards people for staying on the river as long as possible after the sirens are activated. Randy M. pointed out that we need to keep the message simple; if the sirens go off, get off the river. Charlene remarked that ramping is an acceptable method for increasing public safety in hydropower tailraces and that the river warning system is somewhat defective. She reported the sirens sometimes are activated on falling water as well as rising water. The group agreed that ramping will be an alternative that is analyzed in the environmental assessment, but hopefully a group decision will be made so that the relicensing team can present one preferred alternative to FERC.

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[1] The water-level changes mentioned above represent how quickly water levels can rise on the lower Saluda River; thus the figures mentioned represent the most rapid increases that occurred on January 1, 2006. As flows climbed that day from 750 to 18,200 cfs, the total rise in river levels was 12 feet at the USGS gage below the dam and 5.5 feet at the gage located above the zoo.

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
February 14, 2006

draft dka 02-27-06

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

February 14, 2006
9:00 AM
Lake Murray Training Center

- **9:00 to 9:15** Discussion of 01-10-2006 Meeting Notes
- **9:15 to 10:30** Presentation and Discussion of State Boating Laws
- **10:30 to 12:00** Discussion of Existing Boating Accident Data
- **12:00 to 12:30** Lunch
- **12:30 to 1:00** Presentation on Existing Rising Water Sirens
- **1:00 to 2:50** Discussion on Improving Existing Rising Water Warning System
- **2:50 to 3:00** Develop an Agenda for Next Meeting and Set Next Meeting Date

Adjourn

Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

Kacie Jensen

From: bellsteve9339@bellsouth.net
Sent: Friday, March 10, 2006 8:48 AM
To: Bill Marshall; Dave Anderson; Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Mathias; Bret Hoffman; Charlene Coleman; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; John and Rob Altenberg; Karen Kustafik; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Suzanne Rhodes; Tom Eppink
Subject: Re: RE: 02-14-06 Draft Meeting Notes - Saftey RCG - Saluda Hydro

Dave- Below is suggested changes to summary. In addition, I would recommend that actual quotes from members regarding the lake levels/safety be included for instance, Lee Barber said "we need to find out if there is a safety factor, we have made an assumption that there is an issue based on no data", George Duke said said " I am assuming that there is a reason that DNR has marked the lake for 354, if would make sense to mark it a lower levels." etc.

Delete-- "Most of the group agreed that lake levels are probably not a safety issue, and the inherent dangers of boating are the cause for people not knowing about the existing shoal markers" Include comments from those members who indicated that "lake levels are probably not a safety issue"

Thanks Steve Bell

> From: "Bill Marshall" <MarshallB@dnr.sc.gov>
> Date: 2006/03/07 Tue PM 03:04:05 EST
> To: "Dave Anderson" <Dave.Anderson@KleinschmidtUSA.com>,
> "Tommy Boozer" <tboozer@scana.com>,
> "Aaron Small" <arsbhs@bellsouth.net>,
> "Alan Axson" <cfdwaxson@columbiasc.net>,
> "Alan Stuart" <alan.stuart@kleinschmidtusa.com>,
> "Alison Guth" <alison.guth@kleinschmidtusa.com>,
> "Amanda Hill" <amanda_hill@fws.gov>,
> "Bill Argentieri" <bargentieri@scana.com>,
> "Bill Mathias" <bill25@sc.rr.com>,
> "Bret Hoffman" <bret.hoffman@kleinschmidtusa.com>,
> "Charlene Coleman" <cheetahtrk@yahoo.com>,
> "David Price" <pricedc@dhec.sc.gov>,
> "Dick Christie" <dchristie@infoave.net>,
> "Edward Schnepel" <eschnepel@sc.rr.com>,
> "George Duke" <kayakduke@bellsouth.net>,
> "Gerrit Jobsis \(American Rivers\)" <gjobsis@americanrivers.org>,
> "Jerry Wise" <meddynamic@aol.com>,
> "Jim Devereaux" <jdevereaux@scana.com>,
> "John and Rob Altenberg" <seatowlakemurray@seatow.com>,
> "Karen Kustafik" <kakustafik@columbiasc.net>,
> "Kenneth Fox" <skfox@sc.rr.com>,
> "Lee Barber" <lbarber@sc.rr.com>,
> "Malcolm Leaphart" <malcolml@mailbox.sc.edu>,
> "Mark Leao" <mark_leao@fws.gov>,
> "Mike Waddell" <mwaddel@attglobal.net>,
> "Miriam Atria" <miriam@lakemurraycountry.com>,
> "Norm Nicholson" <larana@mindspring.com>,
> "Norman Ferris" <norm@sc.rr.com>,
> "Patrick Moore" <patrickm@scccl.org>,
> "Randy Mahan" <rmahan@scana.com>,
> "Steve Bell" <bellsteve9339@bellsouth.net>,
> "Suzanne Rhodes" <suzrhodes@juno.com>,
> "Tom Eppink" <teppink@scana.com>
> Subject: RE: 02-14-06 Draft Meeting Notes - Saftey RCG - Saluda Hydro
>

> Dave and others,
>
> FYI - I have attached the draft mtg notes of the Feb 14 Safety RCG mtg
> with my suggested changes.
>
> Thanks,
>
> Bill Marshall
>
> _____
>
> From: Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
> Sent: Tuesday, February 28, 2006 11:27 AM
> To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth;
> Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman;
> Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward
> Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim
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> Subject: 02-14-06 Draft Meeting Notes
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> Changes to the notes can only be made by attendees; comments on what
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>
> Here are the draft meeting notes from our Feb. 14 Safety RCG. Please
> have any comments/changes back to me by March 15th.
>
> <<2006-02-14 Meeting Notes - Safety (DRAFT).doc>>
>
>
>

Kacie Jensen

From: Bill Marshall [MarshallB@dnr.sc.gov]
Sent: Tuesday, March 07, 2006 3:04 PM
To: Dave Anderson; Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Mathias; Bret Hoffman; Charlene Coleman; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; John and Rob Altenberg; Karen Kustafik; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: RE: 02-14-06 Draft Meeting Notes - Saftey RCG - Saluda Hydro

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Here are the draft meeting notes from our Feb. 14 Safety RCG. Please have any comments/changes back to me by March 15th.

<<2006-02-14 Meeting Notes - Safety (DRAFT).doc>>

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
February 14, 2006

draft dka 02-27-06

ATTENDEES:

Name	Organization	Name	Organization
Bill Argentieri	SCE&G	Dave Anderson	Kleinschmidt Associates
Alan Stuart	Kleinschmidt Associates	George Duke	LMHOC
Tom Eppink	SCANA	David Price	LMPS
Alison Guth	Kleinschmidt Associates	Randy Mahan	SCANA
Ed Schnepel	LMA	Alan Axson	Columbia Fire Dept.
Kenneth Fox	LMA	Bill Marshall	SCDNR/LSSRAC
Bill Mathias	LMA & LMPS	Karen Kustafik	CoC P&R
Ken Uschelbec	USCG Auxiliary	Lee Barber	LMA
Norm Nicholson	LCSD	Steve Bell	Lake Watch
Bret Hoffman	Kleinschmidt Associates	Mike Waddell	TU

HOMEWORK ITEMS:

- Steve Bell – identify specific potential hazardous shoals below 354' msl
- Dave Anderson – continue to try to contact area hospitals
- Dave Anderson – better boating accident data from SCDNR
- Patrick Moore – identify safety plans at other FERC projects
- Charlene Coleman – list FERC projects where ramping is a requirement for safety reasons
- Tom Eppink – review letters concerning shoal markers on Lake Murray
- Alan Axson – review accident data for incidents at Candy Lane
- All – Identify high use areas on maps for possible improvement to warning system

PARKING LOT ITEMS:

- Equipment regulations for the LSR
- Discussion of shoal markers and lake levels

DATE OF NEXT MEETING: **April 19, 2006 at 9:00 a.m.**
Located at the Lake Murray Training Center

Kleinschmidt
Energy & Water Resource Consultants

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
February 14, 2006

draft dka 02-27-06

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 opened the meeting by reviewing the meeting notes from January 10th, particularly the comments received from Bill M. concerning group decisions on priority safety issues. Randy M. disagreed with Bill M's wording about the priority items determined at the January meeting; ~~but noted his concern is the~~ Randy acknowledged the concerns, but suggested that meeting notes should accurately reflect what occurred in the meeting. Bill M. agreed and noted that his comments were a reflection of concerns expressed at the January meeting but did not reflect decisions made by the group to define priorities. The group decided on some alternate wording for the meeting notes and Dave agreed to redistribute the January 10th meeting notes before finalizing them.

Steve B. asked about written comments submitted after the meeting and if they could be appended to the meeting notes. Dave noted that Charlene and Malcolm L. had also submitted written comments, and asked if the group had received copies of those comments. The group decided that attaching the submitted comments to the meeting notes is acceptable as long as they remain separate from the events that occurred during the meeting.

Steve B. noted operation of the project is a priority issue of this group. Dave noted that this group would not be proposing any operating plans for the Saluda project but would consider any operational changes recommended by the Operations RCG and consider the safety aspects of their recommendation. Dave further noted that it was beyond the means of the group to determine the safest operational plan. Steve B. remarked that he believed we need to determine how project operations affect safety and then quantify those impacts and determine how project operations need to be modified. Dave agreed and commented that we would begin that process today.

The group then reviewed the homework items from the previous meeting. Dave noted that he called both area hospitals but has not been able to speak to anyone. Norm noted that he had been told that SeaTow would be in attendance.

Tom E. presented his homework assignment on boating laws in the state of South Carolina. Tom observed that there is one state statute that covers boating and that counties can make ordinances that are more strict than the state statute, but could not find any examples where this had been done. Counties can also pass noise ordinances that may affect boating in certain areas. Tom also went over some of the laws related to enforcement and observed that any state law enforcement office may enforce boating regulations. Norm noted that any Class One officer could put a blue light on a

boat and be official. Mike W. asked if they could board a documented vessel; Norm replied that documented vessels had to pull over when asked. Someone asked why there is only one sheriff's department patrolling the lake; the answer given dealt with avoiding duplicate efforts. Norm commented that it was also because of budget constraints and the perception that Lexington County contained the majority of the lake.

Tom continued his presentation and moved into boating safety and educational programs and towing laws. Bill Mathias noted that 107 percent is added to fines for court fees. Lee B. noted that changing any of these laws is very difficult in South Carolina because the legislature believes the laws are adequate. Steve B. asked if would make better laws through the relicensing process. Tom E. replied that this might be something to do after the relicensing group continues, but is probably not necessary for the license application. Tom further commented that FERC has no authority over water; Charlene observed that the TVA is the only entity she can think of that has authority over water and they are not governed by FERC.

Mike W. asked how no wake zones are established. Norm replied that the SCDNR was the only one that could do that. The group then began to talk about reckless operation of water devices and went over some examples. Dave asked how it was possible for violators to lose the privilege of boating when there are no laws about boating licenses. Norm noted that they are entered into a database, which will flag them if they are pulled over and their name is taken. Tom continued going over boating under the influence laws and the mechanism for punishment for these crimes.

Tom went on and defined Reckless Homicide by Operation of a Boat, which can be charged if a person dies within three years due to injuries caused by the operation of a boat in a reckless disregard of the safety of others. Lee B. noted it is interesting the offender did not lose their license. Tom further explained laws concerning operation of a boat while a license suspended and the duties of boat livery, which covers rentals of boats. Tom discussed the laws concerning swimming near a public boat landing or in the vicinity of a hydro generation plant and the laws governing no-wake zones. Alan S. commented that if FERC wanted to establish a 100 foot no swimming zone around a public boat ramp, they could not because it is a state law.

Tom continued and talked about the "good Samaritan" clause and the relationship between state and federal regulations. Tom observed that state laws incorporate laws set by the U.S. Coast Guard.

Norm began to discuss some of the authority he has concerning trespassing and noted that he could use maritime law if needed. Lee noted that an inspection of the Southern Patriot about 10 years ago resulted in a requirement for ballast so that the boat would be evenly weighted. Tom continued his presentation and talked about the placing of aid and regulatory markers, towing water skiers, windsurfers, and personal watercraft. Tom also discussed the fact that DNR has set out further

boating requirements beyond the state statutes. The group then briefly noted that we can continue to discuss these laws and that, in the past, these laws have only been changed as a result of an incident.

The group then began looking at the accident data collected as part of the homework assignments. Dave presented the boating accident data on Lake Murray, data provided by the SCDNR, and noted his surprise that better data were not available on boating accidents (data presented are attached). The group agreed that further homework needs to be done to see if better data can be collected. Norm remarked his department is required to collect GPS coordinates of accidents and he believed the SCDNR had the same thing. Bill Marshall said the DNR probably had more information in the paperwork.

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Saluda Hydro Relicensing
Safety Resource Conservation Group

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Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

Kacie Jensen

From: Dave Anderson
Sent: Monday, March 06, 2006 12:37 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; John and Rob Altenberg; Karen Kustafik; Ken Uschelbec; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Cc: Cheryl Balitz
Subject: 01-10-06 Safety RCG Meeting Notes

It looks like we have agreement to that one statement we talked about at the last meeting, so these notes are final.

Cheryl, can you please post these to the website under the Safety RCG?

2006-01-10
Meeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
January 10, 2006

final dka 03-06-06

ATTENDEES:

Name	Organization	Name	Organization
Bill Argentieri	SCE&G	George Duke	Lake Murray Homeowners Coalition
Alison Guth	Kleinschmidt Associates	Bill Marshall	SCDNR/LSSRA
Tom Eppink	SCANA	Jim Devereaux	SCE&G
Aaron Small	USCG Auxiliary	Tommy Boozer	SCE&G
Norm Nicholson	Lexington County Sheriffs Dept.	Mike Waddell	Trout Unlimited
Patrick Moore	American Rivers/CCL	Bret Hoffman	Kleinschmidt Associates
Randy Mahan	SCANA	Karen Kustafik	Columbia Parks and Recreation
Alan Axson	Columbia Fire Dept.	Lee Barber	LMA
David Price	Lake Murray Power Squadron	Alan Stuart	Kleinschmidt Associates
Bill Mathias	LMPS & LMA	Dave Anderson	Kleinschmidt Associates
Kenneth Fox	LMA		

HOMEWORK ITEMS:

- Dave Anderson – contact local hospitals to see if they are interested in participating
- Dave Anderson – start locating data on project related accidents
- Tommy Boozer and/or Norm Nicholson – contact Sea Tow to see if they are interested in participating
- Patrick Moore – attempt to locate other "safety plans" at FERC projects
- Jim Devereaux – contact Mike Dawson to see if he is interested in participating
- Aaron Small – bring copies of DNR pamphlets related to boating/safety
- Alan Axson – begin getting data on emergency responses on the LSR
- Tom Eppink – look into state laws about boating safety

PARKING LOT ITEMS:

- None

DATE OF NEXT MEETING: **February 14, 2006 at 9:00 a.m.**
Located at the Lake Murray Training Center

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.

The meeting began with a recap of organizations and their responsibilities for safety around Lake Murray and the Lower Saluda River (LSR). Alan Axson with the Columbia Fire Department began by explaining the CFD responds to anything in Richland County related to swiftwater rescue, mainly below the I-20 bridge. The CFD also responds to some calls in the Congaree River in West Columbia, occasionally responding to calls down to State Highway 601. Alan talked about how the number of visitors at the Columbia Canal have increased (from 5 to 10 per hour to 100 per hour). The CFD is in the process of putting another station at the Broad River and Greystone. The CFD has two Zodiacs and about 30 people trained for swiftwater rescue.

Jerry Wise was absent, but Dave went over the information he submitted reporting his involvement with various safety related organizations around the lake (especially on the Lexington County side and the Saluda River above the lake).

Lee Barber explained the LMAs involvement with safety around the lake, mainly dealing with education and legislation. He briefly explained Drew's Law, one of LMAs successes, which deals with boating laws and boating under the influence.

Mike Wadell told the groups about Trout Unlimited's concern with safety education, mainly with their members.

Aaron Small gave a short presentation about the U.S. Coast Guard Auxiliary, which is under the jurisdiction of the USCG base in Charleston, SC. The Auxiliary are located at Lake Murray to assist with boating safety and emergencies until the Charleston-based unit arrives. They also maintain the weather link for the U.S. Weather Bureau and have an unofficial reporting station on the lake. They presently have one unit on-duty (Unit 1) available twenty-four hours a day, seven days a week, which is available to assist with emergencies. They also have seven other USCG certified boats and have about 41 members who work closely with the Lake Murray Power Squadron. They also have boats on Lake Greenwood and Wateree; additional boats can be requested from the Charleston base. Education is their major concern for promoting boating safety. Aaron noted that the National Weather Service issues small craft advisories for the lake. While the Auxiliary does not have any authority for punishing boating violations, when members from the Charleston base ride with them, they have that authority. Tommy B. noted that SCE&G has a long standing positive relationship with the USCG Auxiliary and appreciate the work they do; Aaron expressed similar sentiments about SCE&G.

Karen Kustafik talked about her efforts teaching whitewater kayaking to prevent emergencies and is coordinating park rangers for assistance with the riverfront area in Columbia. She also has a few ACA-certified instructors doing instruction for kids These park rangers are not able to issue citations, but may eventually be able to and will start patrolling within the city limits of the Three Rivers Greenway. The rangers are funded by the city of Columbia. Further information on the whitewater program is available through the city's website: www.columbiasc.net.

Patrick Moore explained that while American Rivers/CCL don't have any staff who deal directly with safety, they are concerned with water quality and its possible effects on public health.

Bill Marshall talked about the Lower Saluda River Scenic River Advisory Council and their responsibility for advising the Department of Natural Resources regarding the management of the State Scenic River. Two Lower Saluda River corridor plans have been developed from this effort and the 1990 plan contains a section with recommendations dealing specifically with safety. Objectives range from improving information and warning systems to removing rebar from rocks in the river[1]. The Council has worked with SCE&G to put river markers in place on poles and bridge pilings to help users interpret danger associated with rising water levels. They have put this information at all public access points and have the information available on their website: http://www.dnr.sc.gov/water/envaff/river/low_saluda_scenic.htm. Bill noted that the river marker project was accomplished with leadership from Charlene Coleman of American Whitewater and with cooperation from SCE&G who provided various flows for evaluation. The color-coding on the poles equates to river flows as follows: top of blue/bottom of yellow is approximately 2600 cfs; top of yellow/bottom of red is approximately 8800 cfs.. He also noted that this information is probably not being handed out at local outfitters, but has been in the past.

David Price talked about the Lake Murray Power Squadron. They offer safe boating courses to everyone and specific courses to their members on anything from taking care of engines to navigating the ocean. They also offer a weather course and work with other groups, such as the Boy Scouts. The Squadron helps to maintain the emergency center on Lake Murray, including the helipad. They also maintain reference lights and day markers (with the help of the Lake Murray Association). The Squadron is completely volunteer organization and rely on their members for continuing education opportunities related to boating.

[1] The 1990 Lower Saluda River Corridor Plan, User Safety Recommendations identify the following needs: improved warning systems, river map signs at access points, training programs for river rescue personnel, improved access to flow release information, portage path around majors rapids, and river safety education materials for the public. Most of these safety-related needs have been addressed to some degree but the needs merit ongoing attention and upgrading of solutions through time.

Steve Bell explained that his organization is mainly concerned with safety on the lake but has concerns on the LSR as well. Steve would like to focus on public education and changes in project operations to make things safer. They have about 16 volunteers who provide reports of hazards on the lake.

Norm Nicholson discussed the Lexington County Sheriffs Department's involvement with safety issues around the lake and the upper Saluda River. They have patrol boats and fire rescue boats on the lake and have a helicopter to use located at the substation on Lake Murray. Tommy B. explained that SCE&G leases the land for the sub-station and have been since the late 1990s. This substation is a very important part of maintaining safety on the lake since it allows responsible parties to keep emergency boats on the lake. Norm continued explaining that the LCSD also covers Saluda and Newberry counties and they have jurisdiction in all four counties (Lexington, Saluda, Newberry, and Richland). David P. noted that his organization has started Harbor Watch to keep an eye out for terror related activities. Alan S. noted they patrol heavily around the water intake structures to the dams. It was noted that all agencies work together when there is an emergency. Lee B. noted that the LMA sells dock signs, at the request of the Sheriff's Dept., that indicate the property's street address to assist with location of emergency situations.

Dave A. listed the organizations that are responsible on the lake, the river, or both.

Lake	Both	River
Hollow Creek FD	AR	Columbia Fire Dept.
Lexington County EMS	CCL	Trout Unlimited
LMA	SCWF	CoC Parks and Recreation
Lake Murray CG	LMW	American Whitewater
Lake Murray PS	SCDNR	LSSRAC
LMHOC	Lexington County Sheriff	

The group then discussed the need to contact the Richland, Saluda, and Newberry County Sheriffs office, as well as Providence Hospital, Richland Hospital, and West Columbia Rescue.

Randy M. questioned the group concerning a registry of certified first responders and who is responsible for contacting them in case of an emergency. Norm N. indicated the fire departments should have a list. There was some discussion between Tommy B. and Norm N. about getting someone from SeaTow to attend the RCG meetings. Norm N. further explained that he helps get first responders to the location. However, the bottom line is that the number to call in case of emergencies is 911.

Dave A. asked the group about statutory authority and who is able to issue citations. Someone responded that the only people that have that authority were the USCG, SCDNR, and the Sheriffs Depts. (anyone who is a class one certified law enforcement officer).

Tommy B. explained that there is a FERC safety plan that deals with warning signage and is being updated right now. It was noted that signs don't necessarily mean that people will act responsibly. Tommy B. showed some examples of the signs that SCE&G uses at their sites. The group talked about the need to increase public education about the signs. It was noted that the USCG Auxiliary and the SCDNR have created a safe boating checklist and that would be a good beginning for education efforts. Norm N. and Tommy discussed the idea about getting a package together that the DNR could give to people when they register a boat. Tommy B. also asked if the DNR could enforce the signs on the back of the dam in the tailrace. Norm N. replied that if there are four signs up; then it could be enforced. Tommy talked a little about the idea of putting a positive barrier across the tailrace so people could not approach the dam.

The discussion turned to the warning system that is in place on the LSR to warn river users of rising water. Bill A. explained the sirens are activated by a float switch upstream; on every three-inch rise of the river, the sirens are activated. The sirens stay on for three minutes and there are some controls in place that keep the sirens from sounding continuously if there is a prolonged rise in water. After this delay, the sirens will activate on the next three-inch rise in water. The sirens will sound 24 hours a day; SCE&G received many complaints, so they have performed studies that resulted in a lowering of the volume. The sirens are located upstream of Riverbanks Zoo and at Hope Ferry (Metts) Landing.

The group then proceeded to talk about ramping and the pros and cons of ramping releases at Saluda. Randy M. made the point that ramping is a double-edged sword; it gives the river user a false sense of security when they know they have "more" time to get off the river. In addition, if SCE&G needs the reserve capacity of Saluda, then ramping is not an option. Patrick M. noted we need to approach the ramping issue like FERC will approach it and made the point that SCE&G has options for offline capacity if Saluda cannot be operated safely. Bill M. suggested the group should study and understand how fast the water actually rises below the dam, in areas such as Hope Ferry Landing, to see how rapidly conditions can change for people in the river when the turbines are opened.

The group then looked at the mission statement and decided to finalize the statement and post it to the website.

The discussion turned to the difference between the FERC required safety plan and the expected deliverable from this RCG. The group wondered if there had been another safety plan of this type

at other FERC projects. Patrick M. agreed to search e-Library to see if there have been any other plans at a FERC project (besides the FERC required safety plan). Alan S. stated that he envisions some type of plan that summarizes the safety personnel and equipment around the lake and what is available and a way to get this information out to the public. Tommy B. noted that this would probably be the only committee that continues after the licensing process is over. Steve B. asked about if this committee will examine ramping and higher lake levels. It was explained that lake levels will be addressed in the Operation RCG and that this group can make recommendations to the Operations RCG as it relates to safety. The Operations RCG can then balance all the factors before making a recommendation to FERC. Alan asked what is the main cause of accidents on Lake Murray. David P. replied that there is probably not one main cause attributable to operations, most of it is alcohol related. There was some discussion on ramping and lake levels. Norm N. made the point that it does not matter how the project is operated; the bottom line is that we need to educate lake/river users on how to be safe. Someone mentioned it would be useful to get data on calls to the fire department from the lake/river. Dave A. agreed and noted we would be getting these kinds of data.

After lunch, Dave A. led a discussion about what happens when there is an emergency on the lake or river. Norm N. talked about 911 and enhanced 911 and the differences between them. When a 911 call is placed, the dispatcher forwards the call to the appropriate authority depending on what the emergency is. If there is an on-water emergency, the call goes to the Lexington County Sheriffs Dept.; if a call is for the river, the call usually goes to the Columbia Fire Dept. There are a lot of problems with people knowing where they are on the water and with emergency personnel locating accidents (i.e., there are different names for the same coves, people don't know distances on the water, etc.). It was noted that the USCG monitors channel 16 on the lake usually, and the two on-water towing companies monitor it all the time. Dave A. inquired as to what information is generated when an accident occurs. Norm N. said that the DNR usually writes reports for the lake; Alan A. said they keep a record of the 911 calls they receive. It was also noted that a big problem is when a new semester starts at the University of South Carolina and there is an influx of thousands of new people that don't know the hazards of the river. It was noted that we should contact someone from the university to participate in this group. Alan S. wondered if we should also invite Mike Dawson from the Rivers Alliance. Jim D. agreed to get in touch with him.

The discussion then turned back to the need for better education of lake/river users. Randy M. noted that if we can get people to use certain access areas, we can get the information to them at those areas.

The group then entered into a question and answer session about safety and accidents around the lake. It was noted that all the agencies work together to make sure emergencies are taken care of and they are in constant communication when they are patrolling the lake. Questions were raised as

to how best promote safety and the group discussed a public education campaign and the possibility of monthly meetings about safety on the lake. Tommy B. noted that this would be good for SCE&G as well as they can get input on future access points. There was a discussion as to data that show how fast the water rises on the river.

The discussion then turned to laws that govern boating use in South Carolina. Aaron S. agreed to bring in some DNR pamphlets that cover boating laws. Dave A. questioned the group on warning buoys and the process for getting them installed. The DNR has criteria for placing new buoys.

The group then turned to listing specific issues they will be dealing with in the RCG meetings. The group talked about water release response time and the issue of ramping. It was mentioned that ramping provides a false sense of security and the rate of water rise will not encourage people to get off the river. Alan S. made the point that if the sirens start going off, it's time to get off the water. Karen K. noted there are some places where the sirens cannot be heard and the group agreed that is an issue worth exploring. The issue of egress from the river when the water starts rising was also discussed. The group agreed to look at maps of the river next time and the estimated coverage of the current warning system to begin examining if there are areas where the sirens should be heard. There was some discussion if the confluence needs to be included. The group would like some more information from Mike Dawson before looking at this issue.

The group then returned to applicable laws that might affect water recreation and use. Tom E. agreed to look up these applicable laws. Alan S. reminded the group that we need to prioritize the issues so that we can deal with them in the license application. We don't necessarily have to have the safety plan in place, but the issues that will be affected by the application need to be the first to be resolved. The group agreed that improvements to the information/warning systems for river-user safety is a priority safety issue. There was also a discussion about the management of river flows as a safety issue.

The group agreed to meet next month and be prepared to discuss the warning system and the siren coverage on the LSR. The agenda for this meeting is attached below.

Comments received after this meeting are attached after the agenda.

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

January 10, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 11:30** Discussion on Safety Organizations and Responsibilities
- **11:30 to 12:00** Group Discussion of Mission Statement for Finalization Purposes
- **12:00 to 12:30** Lunch
- **12:30 to 3:00** Discussion on Prioritized Issues

Saluda HYDRO RELICENSING

Kleinschmidt
Energy & Water Resource Consultants

Comments from Steve Bell: Probably, the most important issue that must be addressed in the re-licensing is the impact project operations have on public safety. It is apparent that dangerous situations occur as a result of lake level management and releases downstream. We recommend this committee be given the task of identifying and quantifying these unsafe conditions. This information should then be sent to an operations technical committee assigned the task of determining alternatives to the existing operational scheme which could reduce or eliminate the unsafe conditons. In addition the committee should review all FERC regs and articles that address public safety at these projects.

Comments from Malcolm Leaphart: There has been much discussion about the topics and approaches discussed at the last Safety meeting. There is a real concern from Trout Unlimited and other stakeholders that the emphasis is being placed on developing public education and warning systems to deal with the huge fluctuations in flows, without a true consideration of eliminating the source of the danger. The flows from Lake Murray into the lower Saluda River ranging from 180 cfs to over 18,000 cfs, often in extremely short time frames, are simply unacceptable in a new FERC license because of the grave danger that flow regime presents to the public, especially with the lack of advanced notice. Trying to deal with the safety concerns with the confinements of maintaining the current operational framework is too limited and will not succesfully address the threats to public life, including those involved in river rescues; and, also the expense to the taxpayers who bear the costs for those.

The safety problems being raised now by all involved will continue until the flow range is either significantly reduced or eliminated, preferably to a more natural, 'run of the river' flow, altered only by hydrological conditions, and managed for constant flows. See the IDC comments from Trout Unlimited of 8-15- 05 for further concerns and suggestions for safety issues - http://saludatu.org/news/www/articles.cfm?fo=Articles&method=story&RecordID=322

A more constant minimum flow was discussed in the the 1980's with several from SCE&G, including engineers and also Mr. Mahan who suggested that could be accomplished with the purchase of a new, smaller generator that could run more efficiently at lower flow levels than the existing turbines. His valid comment then was that his company would want a definitive flow level determined and set for a long term so that they could maximize any purchased equipment without altering or even replacing it for new flow requirements. A maximum flow limit also needs to be established for many reasonss, especially safety, and the new FERC license would be the opportune time to set both upper and lower flow limits from the hydro at Lake Murray.

Using the hydro to meet SCE&G's regional power reserves has obviously changed thinking from the time when it was used for 'peak power'; but, ways to meet the regional power demands outside of the hydro at Lake Murray should be developed. Until those demands can be met with other

alternatives in the SCE&G power system, the Saluda will never be safe to the public. Plus, the extremely low and high flows are very detrimental to the fisheries, through scouring of the river cobble and fish spawning sites, de-watering of spawning sites, erosion of the river banks, and other frequently documented factors from studies such as the one done on the Smith River in Virginia. See the following link for the study on the effects on that river from releases at the Philpott Dam near Martinsville, Virgina.
http://www.cnr.vt.edu/fisheries/Smith_River/

Also, in addition to public safety and fisheries, the dangers from the current flow regime affects or is directly linked to overall operations, management of the lake, and the provision for recreational opportunities on a public lake and river in a safe atmosphere. So, all of the RCG's need to be open to the optimum solution to safe operations, not just the current lowest cost mode. I am recommending through copies of this note, that all of the above mentioned RCG's add this request to their agendas as the Operations RCG has for Mike Waddell's request to study gas turbines for regional power demand.

We would appreciate a Safety agenda item for February 14 for consideration of alternatives to drastically reducing the fluctations in the flows, or at least reducing them to no more than a few thousand cfs in a 24 hour period, with an advanced release schedule. And we certainly hope that as a meeting facilitator, that you will foster a serious discussion of how to elimiate the safety problems, not continue to live with them as the public has for over 75 years; that is, please encourage all to 'think outside the box' rather than trying to maintain the current unacceptable level of danger for the way flows have been managed. I would ask you also to try to reach a consensus from the Safety RCG member whether the new FERC license is the time to place more importance on human life than power production, especially for temporary regional power needs which could be met by other means. A consensus 'vote' on that question would probably provide the proper direction to the entire current FERC guidelines process that many think is missing now.

Comments from Charlene Coleman: I must say that after reading the minutes I have a few serious concerns:

1) SCE&G, at first impression, values reserve capacity needs greater than human life. I sincerely hope that is not the case.
2) ramping does NOT create a false sense of security, it is a responsible operational procedure during high seasonal public use periods.
3) the present siren system does create a false sense of security for SCE&G. Where technological testing is useful for equipment, in this situation it is not. Until someone from SCE&G physically stands at the rapids and has a sensory acceptance that this system is, has

been and may always be a "cry wolf" to the public, we will get no resolution as to the actual response of this "system" to actual water fluctuation.

4) The present warning system does not cover many high use areas and that type of system may not fit all areas, making ramping an even more critical option during the summer and trout stocking seasons.
5) Education must be universal, everyone (SCE&G, DNR, CPD, CFD, City governments, development groups, and the public) needs an education on the river, it's dangers, its resources, its subculture, and its very critical place in the community as more than just a power source. The river has an important role in this area as a food source for many poorer families, water for numerous areas, recreation for generations, a habitat for threatened, redeveloping, and endangered species and a natural treasure of seeming remoteness in an urban area. Yet in its beauty is the fact, it is formidable whitewater.
6) the local boaters are the unidentified/unpaid/highly skilled rescuers of the public at the major rapid. I have included a message from American Whitewater on river safety and who we are in the US [attached]. I represent local boaters and their concerns. The Saluda also provides a training ground for some of the best whitewater paddlers in the world. Several US Olympic and Free style Team members are either from here or have come here to train. Several pioneers in extreme "creek" boating are from the area. But most important is the fact, we average over 35 rescues each summer alone. Rescues that don't make the news, don't cause the water to be turned off, and go unnoticed for the skill required to make those rescues non news worthy.
7) the whitewater boating community has a good relationship with SCE&G, CPD, DNR, and CFD Rescue units. The "rock people" consider us their guardians. Most boaters on the Saluda are Swift and Whitewater rescue trained and have first responder and wilderness responder first aid training by the same schools that train CFD and DNR. Not to mention certifications as instructors in rescue and boating and years of experience in whitewater, a different animal than swiftwater. We offer our skills as the first line of defense and would like to suggest cooperative training with all rescue sources on the river.
8) all river users must be identified and how they interact with the river must be examined, to better understand the impact of reserve capacity rapid high water fluctuation, through out the project's effected areas.

PO Box 1540, Cullowhee, NC 28723
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(828) 293-9791 Phone
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For Immediate Release

Contact: Charlie Walbridge,
AW Safety Editor
PH 304-379-9002
e-mail ccwalbridge@cs.com

American Whitewater's Accident Database and Safety Code

The Most Comprehensive Source for
Whitewater Safety Education...*Anywhere*!

Cullowhee, NC -- February 7, 2006 -- Safety has been at the core of American Whitewater's mission since 1954. "We've been reporting and analyzing accidents since our earliest days and today we are leaders in whitewater safety education based on that research. Our Accident Database is the most comprehensive collection and analysis of whitewater accidents and close calls anywhere," explains Charlie Walbridge, American Whitewater's Safety Editor. He goes on to say, "The freedom to take calculated risks, in business, love, or whitewater, is one of the most cherished prerogatives of a free people. We support the right of knowledgeable paddlers to push their limits, and at the same time help give uninformed paddlers the information they need to have fun and stay safe." The Accident Database is online at http://www.americanwhitewater.org/accidents/.

Accident analysis is the foundation for the AW Safety Code which outlines whitewater safety guidelines applicable to all skill levels. First written in 1957 and regularly updated, it is the most complete set of guidelines for whitewater paddlers in existence. It also contains the International Scale of River Difficulty which is in use throughout North America and the world. AW's listing of Standard Rated Rapids helps make river classification more consistent across the country. It was developed by former AW Safety Chair Lee Belknap by scientifically analyzing forms filled out by hundreds of paddlers across the country. Paddlers across the nation use it to know what to expect when traveling to an unfamiliar river.

Safety often becomes an issue in river stewardship work; AW's key programmatic focus. The challenge is often explaining whitewater paddling to the non-paddling public. Commonly asked questions are: "How safe is whitewater paddling? Where does AW stand on riverbed modification or boat registration? What are the most important issues for legislators, river managers, and emergency responders?" All of these questions are answered in the safety section of the stewardship toolkit online at AW Stewardship.

To Report an Accident:

Accident reporting is vital to American Whitewater's mission. But more importantly, it's a sure antidote to the rumor, gossip, and innuendo that always follows a serious accident. AW's Accident Database works with individuals who were on the scene and is thus able to set the record straight.

The Accident Database contains reports of fatal accidents, serious injuries, and near-misses. A serious injury is one requiring hospitalization; a near miss is an event which could easily have been fatal. The Safety Committee examines all submissions prior to the final posting and decides which incidents will be added to the database.

There are several ways to report an accident:

1) Each witness can post their own account to the AW web site and the Safety Committee will create a report.

2) Groups or individuals can create their own report and post it. If you would like help in crafting your report, contact Charlie Walbridge, AW Safety Editor, at ccwalbridge@cs.com or by phone at 304-379-9002.

3) You can post emails, message board and chat room postings, and newspaper articles here. In addition to providing a link, please cut and paste the text from the article. The links may be dead when someone from Safety Committee follows it up. Always be sure that the SOURCE and DATE is clearly indicated.

4) If you want to pass on information that you DON'T want the public to see, please specify on the report form that the material is private. If so designated, it will not be released without your OK.

If you have corrections, questions or comments about any accident please email Charlie Walbridge at ccwalbridge@cs.com.

The recent improvements and updates of the AW Accident Database were made possible by the Andy Banach Memorial Safety Fund. AW thanks the family and friends of Andy Banach.

Kacie Jensen

From: Dave Anderson
Sent: Tuesday, February 28, 2006 11:27 AM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; John and Rob Altenberg; Karen Kustafik; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 02-14-06 Draft Meeting Notes

I am resending this to the entire RCG (originally went out yesterday). Changes to the notes can only be made by attendees; comments on what transpired will be taken from all members.

Here are the draft meeting notes from our Feb. 14 Safety RCG. Please have any comments/changes back to me by March 15th.

2006-02-14
leeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
February 14, 2006

draft dka 02-27-06

ATTENDEES:

Name	Organization	Name	Organization
Bill Argentieri	SCE&G	Dave Anderson	Kleinschmidt Associates
Alan Stuart	Kleinschmidt Associates	George Duke	LMHOC
Tom Eppink	SCANA	David Price	LMPS
Alison Guth	Kleinschmidt Associates	Randy Mahan	SCANA
Ed Schnepel	LMA	Alan Axson	Columbia Fire Dept.
Kenneth Fox	LMA	Bill Marshall	SCDNR/LSSRAC
Bill Mathias	LMA & LMPS	Karen Kustafik	CoC P&R
Ken Uschelbec	USCG Auxiliary	Lee Barber	LMA
Norm Nicholson	LCSD	Steve Bell	Lake Watch
Bret Hoffman	Kleinschmidt Associates	Mike Waddell	TU

HOMEWORK ITEMS:

- Steve Bell – identify specific potential hazardous shoals below 354' msl
- Dave Anderson – continue to try to contact area hospitals
- Dave Anderson – better boating accident data from SCDNR
- Patrick Moore – identify safety plans at other FERC projects
- Charlene Coleman – list FERC projects where ramping is a requirement for safety reasons
- Tom Eppink – review letters concerning shoal markers on Lake Murray
- Alan Axson – review accident data for incidents at Candy Lane
- All – Identify high use areas on maps for possible improvement to warning system

PARKING LOT ITEMS:

- Equipment regulations for the LSR
- Discussion of shoal markers and lake levels

DATE OF NEXT MEETING: **April 19, 2006 at 9:00 a.m.**
Located at the Lake Murray Training Center

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
February 14, 2006

draft dka 02-27-06

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.

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Steve B. noted operation of the project is a priority issue of this group. Dave noted that this group would not be proposing any operating plans for the Saluda project but would consider any operational changes recommended by the Operations RCG and consider the safety aspects of their recommendation. Dave further noted that it was beyond the means of the group to determine the safest operational plan. Steve B. remarked that he believed we need to determine how project operations affect safety and then quantify those impacts and determine how project operations need to be modified. Dave agreed and commented that we would begin that process today.

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Tom E. presented his homework assignment on boating laws in the state of South Carolina. Tom observed that there is one state statute that covers boating and that counties can make ordinances that are more strict than the state statute, but could not find any examples where this had been done. Counties can also pass noise ordinances that may affect boating in certain areas. Tom also went over some of the laws related to enforcement and observed that any state law enforcement office may enforce boating regulations. Norm noted that any Class One officer could put a blue light on a boat and be official. Mike W. asked if they could board a documented vessel; Norm replied that documented vessels had to pull over when asked. Someone asked why there is only one sheriff's department patrolling the lake; the answer given dealt with avoiding duplicate efforts. Norm

commented that it was also because of budget constraints and the perception that Lexington County contained the majority of the lake.

Tom continued his presentation and moved into boating safety and educational programs and towing laws. Bill Mathias noted that 107 percent is added to fines for court fees. Lee B. noted that changing any of these laws is very difficult in South Carolina because the legislature believes the laws are adequate. Steve B. asked if would make better laws through the relicensing process. Tom E. replied that this might be something to do after the relicensing group continues, but is probably not necessary for the license application. Tom further commented that FERC has no authority over water; Charlene observed that the TVA is the only entity she can think of that has authority over water and they are not governed by FERC.

Mike W. asked how no wake zones are established. Norm replied that the SCDNR was the only one that could do that. The group then began to talk about reckless operation of water devices and went over some examples. Dave asked how it was possible for violators to lose the privilege of boating when there are no laws about boating licenses. Norm noted that they are entered into a database, which will flag them if they are pulled over and their name is taken. Tom continued going over boating under the influence laws and the mechanism for punishment for these crimes.

Tom went on and defined Reckless Homicide by Operation of a Boat, which can be charged if a person dies within three years due to injuries caused by the operation of a boat in a reckless disregard of the safety of others. Lee B. noted it is interesting the offender did not lose their license. Tom further explained laws concerning operation of a boat while a license suspended and the duties of boat livery, which covers rentals of boats. Tom discussed the laws concerning swimming near a public boat landing or in the vicinity of a hydro generation plant and the laws governing no-wake zones. Alan S. commented that if FERC wanted to establish a 100 foot no swimming zone around a public boat ramp, they could not because it is a state law.

Tom continued and talked about the “good Samaritan” clause and the relationship between state and federal regulations. Tom observed that state laws incorporate laws set by the U.S. Coast Guard.

Norm began to discuss some of the authority he has concerning trespassing and noted that he could use maritime law if needed. Lee noted that an inspection of the Southern Patriot about 10 years ago resulted in a requirement for ballast so that the boat would be evenly weighted. Tom continued his presentation and talked about the placing of aid and regulatory markers, towing water skiers, windsurfers, and personal watercraft. Tom also discussed the fact that DNR has set out further boating requirements beyond the state statutes. The group then briefly noted that we can continue to discuss these laws and that, in the past, these laws have only been changed as a result of an incident.

The group then began looking at the accident data collected as part of the homework assignments. Dave presented the boating accident data on Lake Murray and noted his surprise that better data were not available on boating accidents (data presented are attached). The group agreed that further homework needs to be done to see if better data can be collected. Norm remarked his department is required to collect GPS coordinates of accidents and he believed the SCDNR had the same thing. Bill Marshall said the DNR probably had more information in the paperwork.

The group then discussed some information it would be nice to have in order to analyze effects of project operations on safety. Norm believed that most problems were at the swimming beaches and the rocks inside this area. George wondered if there was a difference in reported accidents between daytime and night. Dave agreed to further question the SCDNR to see if the group could get some better information from them. The group then looked at the accident report generated by Bill A. and Bill A. noted none of the incidents on his report were wearing a PFD. Only one incident on his list was classified as project-related according to FERC's definition. Randy M. commented that the group does not need to get caught up in project versus non-project related accidents.

Dave reported that Patrick M. (not in attendance) was not able to locate any "safety plans" at other FERC projects. Patrick had contacted some other sources of information to see if he can find an example of a safety plan. Patrick is continuing his search. Charlene reported the Duke and Carolina Power have ramping for project safety and wanted to know if this is what the group wanted to locate. Charlene agreed to list other FERC projects that have specific ramping procedures for downstream safety. Steve B. inquired whether there are any FERC regulations or standard license articles that require licensee's to operate safely. Bret H. identified the Part 12 inspections related to dam safety. Randy clarified that it states that FERC has the authority to specify flows and such for power production. Steve B. remarked that one of his concerns is that there are safety issues when the lake level drops in the winter. Steve B. brought up some letters where he believes FERC stated the licensee is responsible for safety at the project.

Dave A. noted that FERC is going to be interested in specific areas on the lake where project operations make it unsafe. The group decided, based on Tom's presentation, that the SCDNR has the responsibility for marking shoal areas. Steve B. noted that an individual with SCDNR told him it was SCE&G's responsibility. Norm disagreed and commented that only the SCDNR has the authority to put out buoys. Bill A. noted that according to the data he collected, there are fewer accidents when the lake is down. David P. remarked that this was because many of the amateurs stayed away during this time. Steve B. noted that the reason the shoal markers do not work is the drawdown.

After some further discussion on the shoal marker issue, the group agreed to put the issue into the parking lot so that Steve B. can gather some additional information. It should be noted that Randy M. identified the partnership between SCE&G and SCDNR for placing navigational aids on Lake Murray and other reservoirs. Steve B. agreed to talk to his constituents and identify shoal areas that are unsafe due to the lake going below the 354' msl mark. Most of the group agreed that lake levels are probably not a safety issue, and the inherent dangers of boating are the cause for people not knowing about the existing shoal markers.

Alan A. then reviewed the data he collected from the 911 database maintained by the Columbia Fire Department. The CFD uses a specific address (500 Wildlife Drive) to record calls from the Riverbanks Zoo area. Alan queried the database for incidents at this address from 2000 until February 2006. The data are attached to these meeting notes.

The group then discussed other possible sources of information for accidents on Lake Murray and/or the LSR. American Whitewater maintains an accident database, which Charlene described in some detail.

After lunch, Bret H. presented information on the rising water warning system that SCE&G has installed on the LSR. There are two sirens: one at Mett's Landing across from Saluda Shoals Park and another just upstream of the Riverbanks Zoo. SCE&G had these sirens tested in 2004 to calibrate the loudness of the sirens. Bret noted that the system was designed to cover an area 1500 ft. upstream and downstream of the siren at the Zoo and 500 ft. upstream and downstream of the siren at Mett's Landing. There was some discussion about testing station #4. No sirens were heard at this location during the testing; Charlene noted that most of the emergency calls are to this area. Dave A. asked about the radio transmitters that send signals from the float switches to the siren. He wondered if it would be possible to use this signal to warn users and/or emergency personnel that the river is rising. The group agreed that this would be worth looking into.

Mike W. asked about including high-intensity strobe lights as part of the warning system. Mike W. felt it would provide an additional level of warning for river users. Mike W. also wanted the group to focus on the flow scenarios that are the cause of the rapidly rising water. The group then discussed the placement and coverage area of an additional siren in the area of testing station #4.

The group then examined a series of maps to begin identifying possible areas of concern that should be included in the warning system. Mike W. provided some maps that Trout Unlimited produced with possible locations of lights along the river. The group identified several areas below the I-26 bridge for consideration. The group agreed that the area between the I-20 bridge and the I-26 bridge is a low use area. Above the I-20 bridge, the group talked about the area of Corley Island as a possible siren location as well as the area of Sandy Beach above Saluda Shoals Park.

The group then discussed changing the operations of Saluda. Mike W. asked if SCE&G could look at gas turbines to meet their reserve capacity. Bill A. said they have been doing some studies and will share the cost information for replacing Saluda as their reserve capacity requirement. Steve B. asked if Charlene could explain what ramping is and how it would work at Saluda. Bill M. had some information on how fast the water rises in the river. The USGS gauge showed an 8 foot rise in 30 minutes when the river flow went from XXX to XXX. Someone noted that these numbers would not apply to the Zoo area because of the morphology of the river.

The group then discussed ramping and if it would actually provide a safer experience on the river. Alan S. asked if ramping just rewards people for staying on the river as long as possible after the sirens are activated. Randy M. pointed out that we need to keep the message simple; if the sirens go off, get off the river. Charlene remarked that ramping is an acceptable method for increasing public safety in hydropower tailraces and that the river warning system is somewhat defective. She reported the sirens sometimes are activated on falling water as well as rising water. The group agreed that ramping will be an alternative that is analyzed in the environmental assessment, but hopefully a group decision will be made so that the relicensing team can present one preferred alternative to FERC.

The group then agreed on the next meeting date and reviewed the homework assignments that need to be completed before the next meeting.

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
February 14, 2006

draft dka 02-27-06

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

February 14, 2006
9:00 AM
Lake Murray Training Center

- **9:00 to 9:15** Discussion of 01-10-2006 Meeting Notes
- **9:15 to 10:30** Presentation and Discussion of State Boating Laws
- **10:30 to 12:00** Discussion of Existing Boating Accident Data
- **12:00 to 12:30** Lunch
- **12:30 to 1:00** Presentation on Existing Rising Water Sirens
- **1:00 to 2:50** Discussion on Improving Existing Rising Water Warning System
- **2:50 to 3:00** Develop an Agenda for Next Meeting and Set Next Meeting Date

Adjourn

Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

Kacie Jensen

From: Dave Anderson
Sent: Monday, February 27, 2006 4:06 PM
To: Bill Argentieri; Alan Stuart; Tom Eppink; Alison Guth; Edward Schnepel; Kenneth Fox; Bill Mathias; Norm Nicholson; Bret Hoffman; Dave Anderson; George Duke; David Price; Randy Mahan; Alan Axson; Bill Marshall; Karen Kustafik; Lee Barber; Steve Bell; Mike Waddell; Ken Uschelbec
Subject: 02-14-06 Draft Meeting Notes

Here are the draft meeting notes from our Feb. 14 Safety RCG. Please have any comments/changes back to me by March 15th.

2006-02-14
leeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
February 14, 2006

draft dka 02-27-06

ATTENDEES:

Name	Organization	Name	Organization
Bill Argentieri	SCE&G	Dave Anderson	Kleinschmidt Associates
Alan Stuart	Kleinschmidt Associates	George Duke	LMHOC
Tom Eppink	SCANA	David Price	LMPS
Alison Guth	Kleinschmidt Associates	Randy Mahan	SCANA
Ed Schnepel	LMA	Alan Axson	Columbia Fire Dept.
Kenneth Fox	LMA	Bill Marshall	SCDNR/LSSRAC
Bill Mathias	LMA & LMPS	Karen Kustafik	CoC P&R
Ken Uschelbec	USCG Auxiliary	Lee Barber	LMA
Norm Nicholson	LCSD	Steve Bell	Lake Watch
Bret Hoffman	Kleinschmidt Associates	Mike Waddell	TU

HOMEWORK ITEMS:

- Steve Bell – identify specific potential hazardous shoals below 354' msl
- Dave Anderson – continue to try to contact area hospitals
- Dave Anderson – better boating accident data from SCDNR
- Patrick Moore – identify safety plans at other FERC projects
- Charlene Coleman – list FERC projects where ramping is a requirement for safety reasons
- Tom Eppink – review letters concerning shoal markers on Lake Murray
- Alan Axson – review accident data for incidents at Candy Lane
- All – Identify high use areas on maps for possible improvement to warning system

PARKING LOT ITEMS:

- Equipment regulations for the LSR
- Discussion of shoal markers and lake levels

DATE OF NEXT MEETING: **April 19, 2006 at 9:00 a.m.**
Located at the Lake Murray Training Center

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
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MEETING NOTES

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SALUDA HYDRO PROJECT RELICENSING
SAFETY RESOURCE GROUP

LAKE MURRAY TRAINING CENTER
February 14, 2006

draft dka 02-27-06

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

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Adjourn

Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
January 10, 2006

draft dka 02-02-06

ATTENDEES:

Name	Organization	Name	Organization
Bill Argentieri	SCE&G	George Duke	Lake Murray Homeowners Coalition
Alison Guth	Kleinschmidt Associates	Bill Marshall	SCDNR/LSSRA
Tom Eppink	SCANA	Jim Devereaux	SCE&G
Aaron Small	USCG Auxiliary	Tommy Boozer	SCE&G
Norm Nicholson	Lexington County Sheriffs Dept.	Mike Waddell	Trout Unlimited
Patrick Moore	American Rivers/CCL	Bret Hoffman	Kleinschmidt Associates
Randy Mahan	SCANA	Karen Kustafik	Columbia Parks and Recreation
Alan Axson	Columbia Fire Dept.	Lee Barber	LMA
David Price	Lake Murray Power Squadron	Alan Stuart	Kleinschmidt Associates
Bill Mathias	LMPS & LMA	Dave Anderson	Kleinschmidt Associates
Kenneth Fox	LMA		

HOMEWORK ITEMS:

- Dave Anderson – contact local hospitals to see if they are interested in participating
- Dave Anderson – start locating data on project related accidents
- Tommy Boozer and/or Norm Nicholson – contact Sea Tow to see if they are interested in participating
- Patrick Moore – attempt to locate other "safety plans" at FERC projects
- Jim Devereaux – contact Mike Dawson to see if he is interested in participating
- Aaron Small – bring copies of DNR pamphlets related to boating/safety
- Alan Axson – begin getting data on emergency responses on the LSR
- Tom Eppink – look into state laws about boating safety

PARKING LOT ITEMS:

- None

DATE OF NEXT MEETING: **February 14, 2006 at 9:00 a.m.**
Located at the Lake Murray Training Center

Kleinschmidt
Energy & Water Resource Consultants

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.

The meeting began with a recap of organizations and their responsibilities for safety around Lake Murray and the Lower Saluda River (LSR). Alan Axson with the Columbia Fire Department began by explaining the CFD responds to anything in Richland County related to swiftwater rescue, mainly below the I-20 bridge. The CFD also responds to some calls in the Congaree River in West Columbia, occasionally responding to calls down to State Highway 601. Alan talked about how the number of visitors at the Columbia Canal have increased (from 5 to 10 per hour to 100 per hour). The CFD is in the process of putting another station at the Broad River and Greystone. The CFD has two Zodiacs and about 30 people trained for swiftwater rescue.

Jerry Wise was absent, but Dave went over the information he submitted reporting his involvement with various safety related organizations around the lake (especially on the Lexington County side and the Saluda River above the lake).

Lee Barber explained the LMAs involvement with safety around the lake, mainly dealing with education and legislation. He briefly explained Drew's Law, one of LMAs successes, which deals with boating laws and boating under the influence.

Mike Wadell told the groups about Trout Unlimited's concern with safety education, mainly with their members.

Aaron Small gave a short presentation about the U.S. Coast Guard Auxiliary, which is under the jurisdiction of the USCG base in Charleston, SC. The Auxiliary are located at Lake Murray to assist with boating safety and emergencies until the Charleston-based unit arrives. They also maintain the weather link for the U.S. Weather Bureau and have an unofficial reporting station on the lake. They presently have one unit on-duty (Unit 1) available twenty-four hours a day, seven days a week, which is available to assist with emergencies. They also have seven other USCG certified boats and have about 41 members who work closely with the Lake Murray Power Squadron. They also have boats on Lake Greenwood and Wateree; additional boats can be requested from the Charleston base. Education is their major concern for promoting boating safety. Aaron noted that the National Weather Service issues small craft advisories for the lake. While the Auxiliary does not have any authority for punishing boating violations, when members from the Charleston base ride with them, they have that authority. Tommy B. noted that SCE&G has a long standing positive relationship with the USCG Auxiliary and appreciate the work they do; Aaron expressed similar sentiments about SCE&G.

Karen Kustafik talked about her efforts teaching whitewater kayaking to prevent emergencies and is coordinating park rangers for assistance with the riverfront area in Columbia. She also has a few ACA-certified instructors doing instruction for kids These park rangers are not able to issue citations, but may eventually be able to and will start patrolling within the city limits of the Three Rivers Greenway. The rangers are funded by the city of Columbia. Further information on the whitewater program is available through the city's website: www.columbiasc.net.

Patrick Moore explained that while American Rivers/CCL don't have any staff who deal directly with safety, they are concerned with water quality and its possible effects on public health.

Bill Marshall talked about the Lower Saluda River Scenic River Advisory Council and their responsibility for advising the Department of Natural Resources regarding the management of the State Scenic River. Two Lower Saluda River corridor plans have been developed from this effort and the 1990 plan contains a section with recommendations dealing specifically with safety. Objectives range from improving information and warning systems to removing rebar from rocks in the river[1]. The Council has worked with SCE&G to put river markers in place on poles and bridge pilings to help users interpret danger associated with rising water levels. They have put this information at all public access points and have the information available on their website: http://www.dnr.sc.gov/water/envaff/river/low_saluda_scenic.htm. Bill noted that the river marker project was accomplished with leadership from Charlene Coleman of American Whitewater and with cooperation from SCE&G who provided various flows for evaluation. The color-coding on the poles equates to river flows as follows: top of blue/bottom of yellow is approximately 2600 cfs; top of yellow/bottom of red is approximately 8800 cfs. He also noted that this information is probably not being handed out at local outfitters, but has been in the past.

Deleted: Lower Saluda River advisory council and their responsibility for advising the Department of Natural Resources

Deleted: had some recommendation

Deleted: : providing more information to river users and getting rebar out of the river.

Deleted: put

Deleted: that they have worked with SCE&G to determine safe water levels and that about 2500 to 2600 cfs to the top of the blue stripe on the poles

David Price talked about the Lake Murray Power Squadron. They offer safe boating courses to everyone and specific courses to their members on anything from taking care of engines to navigating the ocean. They also offer a weather course and work with other groups, such as the Boy Scouts. The Squadron helps to maintain the emergency center on Lake Murray, including the helipad. They also maintain reference lights and day markers (with the help of the Lake Murray Association. The Squadron is completely volunteer organization and rely on their members for continuing education opportunities related to boating.

[1] The 1990 Lower Saluda River Corridor Plan, User Safety Recommendations identify the following needs: improved warning systems, river map signs at access points, training programs for river rescue personnel, improved access to flow release information, portage path around majors rapids, and river safety education materials for the public. Most of these safety-related needs have been addressed to some degree but the needs merit ongoing attention and upgrading of solutions through time.

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
January 10, 2006

draft dka 02-02-06

Steve Bell explained that his organization is mainly concerned with safety on the lake but has concerns on the LSR as well. Steve would like to focus on public education and changes in project operations to make things safer. They have about 16 volunteers who provide reports of hazards on the lake.

Norm Nicholson discussed the Lexington County Sheriffs Department's involvement with safety issues around the lake and the upper Saluda River. They have patrol boats and fire rescue boats on the lake and have a helicopter to use located at the substation on Lake Murray. Tommy B. explained that SCE&G leases the land for the sub-station and have been since the late 1990s. This substation is a very important part of maintaining safety on the lake since it allows responsible parties to keep emergency boats on the lake. Norm continued explaining that the LCSD also covers Saluda and Newberry counties and they have jurisdiction in all four counties (Lexington, Saluda, Newberry, and Richland). David P. noted that his organization has started Harbor Watch to keep an eye out for terror related activities. Alan S. noted they patrol heavily around the water intake structures to the dams. It was noted that all agencies work together when there is an emergency. Lee B. noted that the LMA sells dock signs, at the request of the Sheriff's Dept., that indicate the property's street address to assist with location of emergency situations.

Dave A. listed the organizations that are responsible on the lake, the river, or both.

Lake	Both	River
Hollow Creek FD	AR	Columbia Fire Dept.
Lexington County EMS	CCL	Trout Unlimited
LMA	SCWF	CoC Parks and Recreation
Lake Murray CG	LMW	American Whitewater
Lake Murray PS	SCDNR	LSSRAC
LMHOC	Lexington County Sheriff	

The group then discussed the need to contact the Richland, Saluda, and Newberry County Sheriffs office, as well as Providence Hospital, Richland Hospital, and West Columbia Rescue.

Randy M. questioned the group concerning a registry of certified first responders and who is responsible for contacting them in case of an emergency. Norm N. indicated the fire departments should have a list. There was some discussion between Tommy B. and Norm N. about getting someone from SeaTow to attend the RCG meetings. Norm N. further explained that he helps get first responders to the location. However, the bottom line is that the number to call in case of emergencies is 911.

Dave A. asked the group about statutory authority and who is able to issue citations. Someone responded that the only people that have that authority were the USCG, SCDNR, and the Sheriffs Depts. (anyone who is a class one certified law enforcement officer).

Tommy B. explained that there is a FERC safety plan that deals with warning signage and is being updated right now. It was noted that signs don't necessarily mean that people will act responsibly. Tommy B. showed some examples of the signs that SCE&G uses at their sites. The group talked about the need to increase public education about the signs. It was noted that the USCG Auxiliary and the SCDNR have created a safe boating checklist and that would be a good beginning for education efforts. Norm N. and Tommy discussed the idea about getting a package together that the DNR could give to people when they register a boat. Tommy B. also asked if the DNR could enforce the signs on the back of the dam in the tailrace. Norm N. replied that if there are four signs up; then it could be enforced. Tommy talked a little about the idea of putting a positive barrier across the tailrace so people could not approach the dam.

The discussion turned to the warning system that is in place on the LSR to warn river users of rising water. Bill A. explained the sirens are activated by a float switch upstream; on every three-inch rise of the river, the sirens are activated. The sirens stay on for three minutes and there are some controls in place that keep the sirens from sounding continuously if there is a prolonged rise in water. After this delay, the sirens will activate on the next three-inch rise in water. The sirens will sound 24 hours a day; SCE&G received many complaints, so they have performed studies that resulted in a lowering of the volume. The sirens are located upstream of Riverbanks Zoo and at Hope Ferry (Metts) Landing.

Deleted: at Saluda Shoals/Hope Ferry

Deleted: the Riverbanks Zoo area

The group then proceeded to talk about ramping and the pros and cons of ramping releases at Saluda. Randy M. made the point that ramping is a double-edged sword; it gives the river user a false sense of security when they know they have "more" time to get off the river. In addition, if SCE&G needs the reserve capacity of Saluda, then ramping is not an option. Patrick M. noted we need to approach the ramping issue like FERC will approach it and made the point that SCE&G has options for offline capacity if Saluda cannot be operated safely. Bill M. suggested the group should study and understand how fast the water actually rises below the dam, in areas such as Hope Ferry Landing, to see how rapidly conditions can change for people in the river when the turbines are opened.

The group then looked at the mission statement and decided to finalize the statement and post it to the website.

The discussion turned to the difference between the FERC required safety plan and the expected deliverable from this RCG. The group wondered if there had been another safety plan of this type

at other FERC projects. Patrick M. agreed to search e-Library to see if there have been any other plans at a FERC project (besides the FERC required safety plan). Alan S. stated that he envisions some type of plan that summarizes the safety personnel and equipment around the lake and what is available and a way to get this information out to the public. Tommy B. noted that this would probably be the only committee that continues after the licensing process is over. Steve B. asked about if this committee will examine ramping and higher lake levels. It was explained that lake levels will be addressed in the Operation RCG and that this group can make recommendations to the Operations RCG as it relates to safety. The Operations RCG can then balance all the factors before making a recommendation to FERC. Alan asked what is the main cause of accidents on Lake Murray. David P. replied that there is probably not one main cause attributable to operations, most of it is alcohol related. There was some discussion on ramping and lake levels. Norm N. made the point that it does not matter how the project is operated; the bottom line is that we need to educate lake/river users on how to be safe. Someone mentioned it would be useful to get data on calls to the fire department from the lake/river. Dave A. agreed and noted we would be getting these kinds of data.

Deleted: Bill M.

After lunch, Dave A. led a discussion about what happens when there is an emergency on the lake or river. Norm N. talked about 911 and enhanced 911 and the differences between them. When a 911 call is placed, the dispatcher forwards the call to the appropriate authority depending on what the emergency is. If there is an on-water emergency, the call goes to the Lexington County Sheriffs Dept.; if a call is for the river, the call usually goes to the Columbia Fire Dept. There are a lot of problems with people knowing where they are on the water and with emergency personnel locating accidents (i.e., there are different names for the same coves, people don't know distances on the water, etc.). It was noted that the USCG monitors channel 16 on the lake usually, and the two on-water towing companies monitor it all the time. Dave A. inquired as to what information is generated when an accident occurs. Norm N. said that the DNR usually writes reports for the lake; Alan A. said they keep a record of the 911 calls they receive. It was also noted that a big problem is when a new semester starts at the University of South Carolina and there is an influx of thousands of new people that don't know the hazards of the river. It was noted that we should contact someone from the university to participate in this group. Alan S. wondered if we should also invite Mike Dawson from the Rivers Alliance. Jim D. agreed to get in touch with him.

The discussion then turned back to the need for better education of lake/river users. Randy M. noted that if we can get people to use certain access areas, we can get the information to them at those areas.

The group then entered into a question and answer session about safety and accidents around the lake. It was noted that all the agencies work together to make sure emergencies are taken care of and they are in constant communication when they are patrolling the lake. Questions were raised as

to how best promote safety and the group discussed a public education campaign and the possibility of monthly meetings about safety on the lake. Tommy B. noted that this would be good for SCE&G as well as they can get input on future access points. There was a discussion as to data that show how fast the water rises on the river.

The discussion then turned to laws that govern boating use in South Carolina. Aaron S. agreed to bring in some DNR pamphlets that cover boating laws. Dave A. questioned the group on warning buoys and the process for getting them installed. The DNR has criteria for placing new buoys.

The group then turned to listing specific issues they will be dealing with in the RCG meetings. The group talked about water release response time and the issue of ramping. It was mentioned that ramping provides a false sense of security and the rate of water rise will not encourage people to get off the river. Alan S. made the point that if the sirens start going off, it's time to get off the water. Karen K. noted there are some places where the sirens cannot be heard and the group agreed that is an issue worth exploring. The issue of egress from the river when the water starts rising was also discussed. The group agreed to look at maps of the river next time and the estimated coverage of the current warning system to begin examining if there are areas where the sirens should be heard. There was some discussion if the confluence needs to be included. The group would like some more information from Mike Dawson before looking at this issue.

The group then returned to applicable laws that might affect water recreation and use. Tom E. agreed to look up these applicable laws. Alan S. reminded the group that we need to prioritize the issues so that we can deal with them in the license application. We don't necessarily have to have the safety plan in place, but the issues that will be affected by the application need to be the first to be resolved. The group agreed that improvements to the information/warning systems for river-user safety is a priority safety issue. There was also a discussion about the management of river flows as a safety issue.

Deleted: Everyone agreed that the warning siren system should be first to be resolved.

The group agreed to meet next month and be prepared to discuss the warning system and the siren coverage on the LSR. The agenda for this meeting is attached below.

Comments received after this meeting are attached after the agenda.

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
January 10, 2006

draft dka 02-02-06

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

January 10, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 11:30** Discussion on Safety Organizations and Responsibilities
- **11:30 to 12:00** Group Discussion of Mission Statement for Finalization Purposes
- **12:00 to 12:30** Lunch
- **12:30 to 3:00** Discussion on Prioritized Issues

Saluda HYDRO RELICENSING

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Kleinschmidt Energy & Water Resource Consultants

Comments from Steve Bell: Probably, the most important issue that must be addressed in the re-licensing is the impact project operations have on public safety. It is apparent that dangerous situations occur as a result of lake level management and releases downstream. We recommend this committee be given the task of identifying and quantifying these unsafe conditions. This information should then be sent to an operations technical committee assigned the task of determining alternatives to the existing operational scheme which could reduce or eliminate the unsafe conditons. In addition the committee should review all FERC regs and articles that address public safety at these projects.

Comments from Malcolm Leaphart: There has been much discussion about the topics and approaches discussed at the last Safety meeting. There is a real concern from Trout Unlimited and other stakeholders that the emphasis is being placed on developing public education and warning systems to deal with the huge fluctuations in flows, without a true consideration of eliminating the source of the danger. The flows from Lake Murray into the lower Saluda River ranging from 180 cfs to over 18,000 cfs, often in extremely short time frames, are simply unacceptable in a new FERC license because of the grave danger that flow regime presents to the public, especially with the lack of advanced notice. Trying to deal with the safety concerns with the confinements of maintaining the current operational framework is too limited and will not succesfully address the threats to public life, including those involved in river rescues; and, also the expense to the taxpayers who bear the costs for those.

The safety problems being raised now by all involved will continue until the flow range is either significantly reduced or eliminated, preferably to a more natural, 'run of the river' flow, altered only by hydrological conditions, and managed for constant flows. See the IDC comments from Trout Unlimited of 8-15- 05 for further concerns and suggestions for safety issues - http://saludatu.org/news/www/articles.cfm?fo=Articles&method=story&RecordID=322

A more constant minimum flow was discussed in the the 1980's with several from SCE&G, including engineers and also Mr. Mahan who suggested that could be accomplished with the purchase of a new, smaller generator that could run more efficiently at lower flow levels than the existing turbines. His valid comment then was that his company would want a definitive flow level determined and set for a long term so that they could maximize any purchased equipment without altering or even replacing it for new flow requirements. A maximum flow limit also needs to be established for many reasonss, especially safety, and the new FERC license would be the opportune time to set both upper and lower flow limits from the hydro at Lake Murray.

Using the hydro to meet SCE&G's regional power reserves has obviously changed thinking from the time when it was used for 'peak power'; but, ways to meet the regional power demands outside of the hydro at Lake Murray should be developed. Until those demands can be met with other

alternatives in the SCE&G power system, the Saluda will never be safe to the public. Plus, the extremely low and high flows are very detrimental to the fisheries, through scouring of the river cobble and fish spawning sites, de-watering of spawning sites, erosion of the river banks, and other frequently documented factors from studies such as the one done on the Smith River in Virginia. See the following link for the study on the effects on that river from releases at the Philpott Dam near Martinsville, Virgina.
http://www.cnr.vt.edu/fisheries/Smith_River/

Also, in addition to public safety and fisheries, the dangers from the current flow regime affects or is directly linked to overall operations, management of the lake, and the provision for recreational opportunities on a public lake and river in a safe atmosphere. So, all of the RCG's need to be open to the optimum solution to safe operations, not just the current lowest cost mode. I am recommending through copies of this note, that all of the above mentioned RCG's add this request to their agendas as the Operations RCG has for Mike Waddell's request to study gas turbines for regional power demand.

We would appreciate a Safety agenda item for February 14 for consideration of alternatives to drastically reducing the fluctations in the flows, or at least reducing them to no more than a few thousand cfs in a 24 hour period, with an advanced release schedule. And we certainly hope that as a meeting facilitator, that you will foster a serious discussion of how to elimiate the safety problems, not continue to live with them as the public has for over 75 years; that is, please encourage all to 'think outside the box' rather than trying to maintain the current unacceptable level of danger for the way flows have been managed. I would ask you also to try to reach a consensus from the Safety RCG member whether the new FERC license is the time to place more importance on human life than power production, especially for temporary regional power needs which could be met by other means. A consensus 'vote' on that question would probably provide the proper direction to the entire current FERC guidelines process that many think is missing now.

Comments from Charlene Coleman: I must say that after reading the minutes I have a few serious concerns:

1) SCE&G, at first impression, values reserve capacity needs greater than human life. I sincerely hope that is not the case.
2) ramping does NOT create a false sense of security, it is a responsible operational procedure during high seasonal public use periods.
3) the present siren system does create a false sense of security for SCE&G. Where technological testing is useful for equipment, in this situation it is not. Until someone from SCE&G physically stands at the rapids and has a sensory acceptance that this system is, has

been and may always be a "cry wolf" to the public, we will get no resolution as to the actual response of this "system" to actual water fluctuation.

4) The present warning system does not cover many high use areas and that type of system may not fit all areas, making ramping an even more critical option during the summer and trout stocking seasons.
5) Education must be universal, everyone (SCE&G, DNR, CPD, CFD, City governments, development groups, and the public) needs an education on the river, it's dangers, its resources, its subculture, and its very critical place in the community as more than just a power source. The river has an important role in this area as a food source for many poorer families, water for numerous areas, recreation for generations, a habitat for threatened, redeveloping, and endangered species and a natural treasure of seeming remoteness in an urban area. Yet in its beauty is the fact, it is formidable whitewater.
6) the local boaters are the unidentified/unpaid/highly skilled rescuers of the public at the major rapid. I have included a message from American Whitewater on river safety and who we are in the US [attached]. I represent local boaters and their concerns. The Saluda also provides a training ground for some of the best whitewater paddlers in the world. Several US Olympic and Free style Team members are either from here or have come here to train. Several pioneers in extreme "creek" boating are from the area. But most important is the fact, we average over 35 rescues each summer alone. Rescues that don't make the news, don't cause the water to be turned off, and go unnoticed for the skill required to make those rescues non news worthy.
7) the whitewater boating community has a good relationship with SCE&G, CPD, DNR, and CFD Rescue units. The "rock people" consider us their guardians. Most boaters on the Saluda are Swift and Whitewater rescue trained and have first responder and wilderness responder first aid training by the same schools that train CFD and DNR. Not to mention certifications as instructors in rescue and boating and years of experience in whitewater, a different animal than swiftwater. We offer our skills as the first line of defense and would like to suggest cooperative training with all rescue sources on the river.
8) all river users must be identified and how they interact with the river must be examined, to better understand the impact of reserve capacity rapid high water fluctuation, through out the project's effected areas.

PO Box 1540, Cullowhee, NC 28723
http://www.americanwhitewater.org
(828) 293-9791 Phone
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For Immediate Release

Contact: Charlie Walbridge,
AW Safety Editor
PH 304-379-9002
e-mail ccwalbridge@cs.com

American Whitewater's Accident Database and Safety Code

The Most Comprehensive Source for
Whitewater Safety Education...*Anywhere*!

Cullowhee, NC -- February 7, 2006 -- Safety has been at the core of American Whitewater's mission since 1954. "We've been reporting and analyzing accidents since our earliest days and today we are leaders in whitewater safety education based on that research. Our Accident Database is the most comprehensive collection and analysis of whitewater accidents and close calls anywhere," explains Charlie Walbridge, American Whitewater's Safety Editor. He goes on to say, "The freedom to take calculated risks, in business, love, or whitewater, is one of the most cherished prerogatives of a free people. We support the right of knowledgeable paddlers to push their limits, and at the same time help give uninformed paddlers the information they need to have fun and stay safe." The Accident Database is online at http://www.americanwhitewater.org/accidents/.

Accident analysis is the foundation for the AW Safety Code which outlines whitewater safety guidelines applicable to all skill levels. First written in 1957 and regularly updated, it is the most complete set of guidelines for whitewater paddlers in existence. It also contains the International Scale of River Difficulty which is in use throughout North America and the world. AW's listing of Standard Rated Rapids helps make river classification more consistent across the country. It was developed by former AW Safety Chair Lee Belknap by scientifically analyzing forms filled out by hundreds of paddlers across the country. Paddlers across the nation use it to know what to expect when traveling to an unfamiliar river.

Safety often becomes an issue in river stewardship work; AW's key programmatic focus. The challenge is often explaining whitewater paddling to the non-paddling public. Commonly asked questions are: "How safe is whitewater paddling? Where does AW stand on riverbed modification or boat registration? What are the most important issues for legislators, river managers, and emergency responders?" All of these questions are answered in the safety section of the stewardship toolkit online at AW Stewardship.

To Report an Accident:

Accident reporting is vital to American Whitewater's mission. But more importantly, it's a sure antidote to the rumor, gossip, and innuendo that always follows a serious accident. AW's Accident Database works with individuals who were on the scene and is thus able to set the record straight.

The Accident Database contains reports of fatal accidents, serious injuries, and near-misses. A serious injury is one requiring hospitalization; a near miss is an event which could easily have been fatal. The Safety Committee examines all submissions prior to the final posting and decides which incidents will be added to the database.

There are several ways to report an accident:

1) Each witness can post their own account to the AW web site and the Safety Committee will create a report.

2) Groups or individuals can create their own report and post it. If you would like help in crafting your report, contact Charlie Walbridge, AW Safety Editor, at ccwalbridge@cs.com or by phone at 304-379-9002.

3) You can post emails, message board and chat room postings, and newspaper articles here. In addition to providing a link, please cut and paste the text from the article. The links may be dead when someone from Safety Committee follows it up. Always be sure that the SOURCE and DATE is clearly indicated.

4) If you want to pass on information that you DON'T want the public to see, please specify on the report form that the material is private. If so designated, it will not be released without your OK.

If you have corrections, questions or comments about any accident please email Charlie Walbridge at ccwalbridge@cs.com.

The recent improvements and updates of the AW Accident Database were made possible by the Andy Banach Memorial Safety Fund. AW thanks the family and friends of Andy Banach.

Kacie Jensen

From: Dave Anderson

Sent: Thursday, February 23, 2006 3:58 PM

To: 'Bill Marshall'; Dave Anderson; 'Tommy Boozer'; 'Aaron Small'; 'Alan Axson'; Alan Stuart; Alison Guth; 'Amanda Hill'; BARGENTIERI@scana.com; 'Bill Mathias'; Bret Hoffman; 'Charlene Coleman'; 'David Price'; 'Dick Christie'; 'Edward Schnepel'; 'George Duke'; 'Gerrit Jobsis (American Rivers)'; 'Jerry Wise'; 'Jim Devereaux'; 'Karen Kustafik'; 'Kenneth Fox'; 'Lee Barber'; 'Malcolm Leaphart'; 'Mark Leao'; 'Mike Waddell'; 'Miriam Atria'; 'Norm Nicholson'; 'Norman Ferris'; 'Patrick Moore'; RMAHAN@scana.com; 'Steve Bell'; 'Suzanne Rhodes'; 'Tom Eppink'

Subject: RE: 01-10-06 Draft Meeting Notes

Like we talked about in our meeting last week, please review these draft meeting notes from the January 10th meeting to make sure those in attendance agree with that one sentence on page seven.

I have also included those written comments submitted in response to the draft meeting notes.

Please have any changes back to me by March 3 (one week from today) so that we can finalize these and get them on the web.

Kacie Jensen

From: Patrick Moore [PatrickM@scccl.org]
Sent: Thursday, February 23, 2006 4:21 PM
To: Dave Anderson
Subject: RE: 01-10-06 Draft Meeting Notes

Hey Dave,
I am back from my hiatus and would like to help out in any way I can. No word on good safety plans yet. Supoosedly I am being sent a few but we will see. I think the minutes look good after the additional comments and changes. As things go forward it will be harder and harder to peg an issue as "priority" just because it is talked about by SCE&G ad naseum. I find it abundantly clear that the stakeholders priority is stopping deadly flow releases from the SCE&G dam when SCE&G has actual and constructive knowledge of the dangerous conditions they create on the entire Saluda and the attractive nuisance at mill race rapids. I digress, we will talk all about this at length I am sure.
One rec study I want to put on your radar is to wait until it is peak "rock people" season and then do a test where the sirens are set off and we count how many river users actually take heed. This would be useful regardless of the eventual solution. Thanks, Patrick

-----Original Message-----
From: Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
Sent: Thu 2/23/2006 3:58 PM
To: Bill Marshall; Dave Anderson; Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Mathias; Bret Hoffman; Charlene Coleman; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; Karen Kustafik; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Cc:
Subject: RE: 01-10-06 Draft Meeting Notes

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Please have any changes back to me by March 3 (one week from today) so that we can finalize these and get them on the web.

Kacie Jensen

From: Malcolm Leaphart [malcolml@mailbox.sc.edu]
Sent: Friday, February 17, 2006 11:47 AM
To: Dave Anderson
Subject: RE: 02-14-06 Safety RCG Meeting Agenda

Dave -
Please follow through also with posting my comments on Safety on the relicensing website, preferably with the meeting summary notes.

Since my concerns were not added to the agenda as distributed via email, what did you do to raise those issues and to foster some discussion of my main point that eliminating the dramatic changes in flow levels would eliminate many of the safety concerns??

It is imperative that as a meeting facilitator that you make sure that there is a level of objectivity and fairness to the meeting and issues development process - including seriously considering all viewpoints, including those submitted in writing. I know SCE&G does not especially want to discuss changing their basic current operation, but they can not claim a consensus on views on issues if all alternatives raised are not given serious discussion. For example, the rate of water allowed to be released from similar sized reservoirs and tailraces around the country in say an hourly range could be researched and a comparison made to see if SCE&G is in line with those rates. Until that is done, stakeholders will always have the concern that the rate of increase and decrease in flows is much too high for public safety for recreation of any sort and for fisheries too (which unfortunately is an issue for another of the RCG's set up for this relicensing that must be coordinated across RCG's as now structured).

I would appreciate your reply so that I can evaluate whether the process will actually produce the open discussions needed for consensus building. That is important as meeting attendance is simply not workable for all issues of concern as now set up for the many RCGs, and the eventual technical committees. If participating in writing is not going to be effective, then we will basically not have enough 'voice' in the process to matter as far as developing a consensus to 'buy into' to warrant further participation.

Dave Anderson <Dave.Anderson@KleinschmidtUSA.com>:

I am either going to hand your comments out to the group on Tuesday, or just forward the email to the entire group before then. Do you know if you Acrobat Reader on you computer? That's the only thing I can think of. Did you get the file and couldn't read it, or did it just not make it through? I tend you send PDF files a lot because all of this will end up going in the license application, and the PDF files are easier to work with for such a large document.

Kacie Jensen

From: Dave Anderson
Sent: Friday, February 10, 2006 4:53 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; John and Rob Altenberg; Karen Kustafik; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 02-14-06 Safety RCG Meeting Agenda

Here is the agenda for next weeks meeting. I hope to see you there.

2006-02-14 Safety RCG Agenda.p...

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

February 14, 2006
9:00 AM
Lake Murray Training Center

- **9:00 to 9:15** Discussion of 01-10-2006 Meeting Notes
- **9:15 to 10:30** Presentation and Discussion of State Boating Laws
- **10:30 to 12:00** Discussion of Existing Boating Accident Data
- **12:00 to 12:30** Lunch
- **12:30 to 1:00** Presentation on Existing Rising Water Sirens
- **1:00 to 2:50** Discussion on Improving Existing Rising Water Warning System
- **2:50 to 3:00** Develop an Agenda for Next Meeting and Set Next Meeting Date

Adjourn

Saluda HYDRO RELICENSING

Kacie Jensen

From: C Coleman [cheetahtrk@yahoo.com]

Sent: Thursday, February 09, 2006 8:58 AM

To: Dave Anderson; Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; BARGENTIERI@scana.com; Bill Marshall; Bill Mathias; Bret Hoffman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; Karen Kustafik; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; RMAHAN@scana.com; Steve Bell; Suzanne Rhodes; Tom Eppink

Subject: Re: 01-10-06 Draft Meeting Notes

Dave and RCG Safety members,

I must say that after reading the minutes I have a few serious concerns.

1) SCE&G, at first impression, values reserve capacity needs greater than human life. I sincerely hope that is not the case.

2) ramping does NOT create a false sense of security, it is a responsible operational procedure during high seasonal public use periods.

3) the present siren system does create a false sense of security for SCE&G. Where technological testing is useful for equipment, in this situation it is not. Until someone from SCE&G physically stands at the rapids and has a sensory acceptance that this system is, has been and may always be a “cry wolf” to the public, we will get no resolution as to the actual response of this “system” to actual water fluctuation.

4)The present warning system does not cover many high use areas and that type of system may not fit all areas, making ramping an even more critical option during the summer and trout stocking seasons.

5) Education must be universal, everyone (SCE&G, DNR, CPD, CFD, City governments, development groups, and the public) needs an education on the river, it’s dangers, its resources, its subculture, and its very critical place in the community as more than just a power source. The river has an important role in this area as a food source for many poorer families, water for numerous areas, recreation for generations, a habitat for threatened, redeveloping, and endangered species and a natural treasure of seeming remoteness in an urban area. Yet in its beauty is the fact, it is formidable whitewater.

6) the local boaters are the unidentified/unpaid/highly skilled rescuers of the public at the major rapid. I have included a message from American Whitewater on river safety and who we are in the US. I represent local boaters and their concerns. The Saluda also provides a training ground for some of the best whitewater paddlers in the world. Several US Olympic and Free style Team members are either from here or have come here to train. Several pioneers in extreme “creek” boating are from the area. But most important is the fact, we average over 35 rescues each summer alone. Rescues that don’t make the news, don’t cause the water to be turned off, and go unnoticed for the skill required to make those rescues non news worthy.

7) the whitewater boating community has a good relationship with SCE&G, CPD, DNR, and CFD Rescue units. The “rock people” consider us their guardians. Most boaters on the Saluda are Swift and Whitewater rescue trained and have first responder and wilderness responder first aid training by the same schools that train CFD and DNR. Not to mention certifications as instructors in rescue and boating and years of experience in whitewater, a different animal than swiftwater. We offer our skills as the first line of defense and would like to suggest cooperative training with all rescue sources on the river.

8) all river users must be identified and how they interact with the river must be examined, to better understand the impact of reserve capacity rapid high water fluctuation, through out the project’s effected areas.

Respectfully
Charlene Coleman
American Whitewater
Regional Coordinator
Whitewater Rescue Technician Rescue 3
Swift Water I & II Tenn Assoc of Rescue Squads
American Canoe Assoc Whitewater Kayak Instructor

Dave Anderson <Dave.Anderson@KleinschmidtUSA.com> wrote:

> Attached are the draft meeting notes for the January 10th meeting. Please have any comments back to me by February 17th.
> <<2006-01-10 Meeting Notes - Safety (DRAFT).doc>>

Learn to get in touch with the silence within yourself and know that everything in this life has a purpose.
- Elizabeth Kubler-Ross

What are the most popular cars? Find out at Yahoo! Autos

PO Box 1540, Cullowhee, NC 28723
http://www.americanwhitewater.org
(828) 293-9791 Phone
(828) 227-7422 Fax

For Immediate Release

Contact: Charlie
Walbridge,
AW Safety Editor
PH 304-379-9002
e-mail ccwalbridge@cs.com

American Whitewater's Accident Database and Safety Code

The Most Comprehensive Source for
Whitewater Safety Education...*Anywhere*!

Cullowhee, NC -- February 7, 2006 -- Safety has been at the core of American Whitewater's mission since 1954. "We've been reporting and analyzing accidents since our earliest days and today we are leaders in whitewater safety education based on that research. Our Accident Database is the most comprehensive collection and analysis of whitewater accidents and close calls anywhere," explains Charlie Walbridge, American Whitewater's Safety Editor. He goes on to say, "The freedom to take calculated risks, in business, love, or whitewater, is one of the most cherished prerogatives of a free people. We support the right of knowledgeable paddlers to push their limits, and at the same time help give uninformed paddlers the information they need to have fun and stay safe." The Accident Database is online at http://www.americanwhitewater.org/accidents/.

Accident analysis is the foundation for the AW Safety Code which outlines whitewater safety guidelines applicable to all skill levels. First written in 1957 and regularly updated, it is the most complete set of guidelines for whitewater paddlers in existence. It also contains the International Scale of River Difficulty which is in use throughout North America and the world. AW's listing of Standard Rated Rapids helps make river classification more consistent across the country. It was developed by former AW Safety Chair Lee Belknap by scientifically analyzing forms filled out by hundreds of paddlers across the country. Paddlers across the nation use it to know what to expect when traveling to an unfamiliar river.

Safety often becomes an issue in river stewardship work; AW's key programmatic focus. The challenge is often explaining whitewater paddling to the non-paddling public. Commonly asked questions are: "How safe is whitewater paddling? Where does AW stand on riverbed modification or boat registration? What are the most important issues for legislators, river managers, and emergency responders?" All of these

questions are answered in the safety section of the stewardship toolkit online at AW Stewardship.

To Report an Accident:

Accident reporting is vital to American Whitewater's mission. But more importantly, it's a sure antidote to the rumor, gossip, and innuendo that always follows a serious accident. AW's Accident Database works with individuals who were on the scene and is thus able to set the record straight.

The Accident Database contains reports of fatal accidents, serious injuries, and near-misses. A serious injury is one requiring hospitalization; a near miss is an event which could easily have been fatal. The Safety Committee examines all submissions prior to the final posting and decides which incidents will be added to the database.

There are several ways to report an accident:

1) Each witness can post their own account to the AW web site and the Safety Committee will create a report.

2) Groups or individuals can create their own report and post it. If you would like help in crafting your report, contact Charlie Walbridge, AW Safety Editor, at ccwalbridge@cs.com or by phone at 304-379-9002.

3) You can post emails, message board and chat room postings, and newspaper articles here. In addition to providing a link, please cut and paste the text from the article. The links may be dead when someone from Safety Committee follows it up. Always be sure that the SOURCE and DATE is clearly indicated.

4) If you want to pass on information that you DON'T want the public to see, please specify on the report form that the material is private. If so designated, it will not be released without your OK.

If you have corrections, questions or comments about any accident please email Charlie Walbridge at ccwalbridge@cs.com.

The recent improvements and updates of the AW Accident Database were made possible by the Andy Banach Memorial Safety Fund. AW thanks the family and friends of Andy Banach.

#

Kacie Jensen

From: bellsteve9339@bellsouth.net
Sent: Wednesday, February 08, 2006 2:45 PM
To: Dave Anderson; Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; Karen Kustafik; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Suzanne Rhodes; Tom Eppink
Cc: bellsteve9339@bellsouth.net
Subject: Re: 01-10-06 Draft Meeting Notes

Dave- Here are additional comments regarding safety issues.

Probably, the most important issue that must be addressed in the re-licensing is the impact project operations have on public safety. It is apparent that dangerous situations occur as a result of lake level management and releases downstream. We recommend this committee be given the task of identifying and quantifying these unsafe conditions. This information should then be sent to an operations technical committee assigned the task of determining alternatives to the existing operational scheme which could reduce or eliminate the unsafe conditons. In addition the committee should review all FERC regs and articles that address public safety at these projects.

> From: Dave Anderson <Dave.Anderson@KleinschmidtUSA.com>
> Date: 2006/02/03 Fri PM 12:57:21 EST
> To: Tommy Boozer <tboozer@scana.com>, Aaron Small <arsbhs@bellsouth.net>,
> Alan Axson <cfdwaxson@columbiasc.net>, Alan Stuart
> <alan.stuart@kleinschmidtusa.com>, Alison Guth
> <alison.guth@kleinschmidtusa.com>, Amanda Hill <amanda_hill@fws.gov>,
> Bill Argentieri <bargentieri@scana.com>, Bill Marshall
> <marshallb@dnr.sc.gov>, Bill Mathias <bill25@sc.rr.com>, Bret Hoffman
> <bret.hoffman@kleinschmidtusa.com>, Charlene Coleman
> <cheetahtrk@yahoo.com>, Dave Anderson
> <dave.anderson@kleinschmidtusa.com>, David Price <pricedc@dhec.sc.gov>,
> Dick Christie <dchristie@infoave.net>, Edward Schnepel
> <eschnepel@sc.rr.com>, George Duke <kayakduke@bellsouth.net>,
> "Gerrit Jobsis (American Rivers)" <gjobsis@americanrivers.org>,
> Jerry Wise <meddynamic@aol.com>, Jim Devereaux <jdevereaux@scana.com>,
> Karen Kustafik <kakustafik@columbiasc.net>, Kenneth Fox <skfox@sc.rr.com>,
> Lee Barber <lbarber@sc.rr.com>, Malcolm Leaphart
> <malcolml@mailbox.sc.edu>, Mark Leao <mark_leao@fws.gov>, Mike Waddell
> <mwaddel@attglobal.net>, Miriam Atria <miriam@lakemurraycountry.com>,
> Norm Nicholson <larana@mindspring.com>, Norman Ferris <norm@sc.rr.com>,
> Patrick Moore <patrickm@scccl.org>, Randy Mahan <rmahan@scana.com>,
> Steve Bell <bellsteve9339@bellsouth.net>, Suzanne Rhodes
> <suzrhodes@juno.com>, Tom Eppink <teppink@scana.com>
> Subject: 01-10-06 Draft Meeting Notes
>
> Attached are the draft meeting notes for the January 10th meeting.
> Please have any comments back to me by February 17th.
>
> <<2006-01-10 Meeting Notes - Safety (DRAFT).doc>>
>
>

Kacie Jensen

From: Bill Marshall [MarshallB@dnr.sc.gov]

Sent: Tuesday, February 07, 2006 4:08 PM

To: Dave Anderson; Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Mathias; Bret Hoffman; Charlene Coleman; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; Karen Kustafik; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink

Subject: RE: 01-10-06 Draft Meeting Notes

Dave and others,

I have attached the meeting notes from our Jan 10 Safety RCG mtg with suggested edits. These are to clarify what I recall saying in our meeting. Near the end, where the discussion of priorty issues is presented, I have added a sentence that captures the priority safety issues, as I heard them expressed from the group; those issues being -- management of flows and improvement of information/warning systems for river-user safety.

I've also included additional notes (inserted at end of mtg notes) to give a better explanation of the User Safety Recommendations of the 1990 Lower Saluda River Corridor Plan.

Thanks,

Bill Marshall

From: Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
Sent: Friday, February 03, 2006 12:57 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; Karen Kustafik; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 01-10-06 Draft Meeting Notes

Attached are the draft meeting notes for the January 10th meeting. Please have any comments back to me by February 17th.

<<2006-01-10 Meeting Notes - Safety (DRAFT).doc>>

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
January 10, 2006

draft dka 02-02-06

ATTENDEES:

Name	Organization	Name	Organization
Bill Argentieri	SCE&G	George Duke	Lake Murray Homeowners Coalition
Alison Guth	Kleinschmidt Associates	Bill Marshall	SCDNR/LSSRA
Tom Eppink	SCANA	Jim Devereaux	SCE&G
Aaron Small	USCG Auxiliary	Tommy Boozer	SCE&G
Norm Nicholson	Lexington County Sheriffs Dept.	Mike Waddell	Trout Unlimited
Patrick Moore	American Rivers/CCL	Bret Hoffman	Kleinschmidt Associates
Randy Mahan	SCANA	Karen Kustafik	Columbia Parks and Recreation
Alan Axson	Columbia Fire Dept.	Lee Barber	LMA
David Price	Lake Murray Power Squadron	Alan Stuart	Kleinschmidt Associates
Bill Mathias	LMPS & LMA	Dave Anderson	Kleinschmidt Associates
Kenneth Fox	LMA		

HOMEWORK ITEMS:

- Dave Anderson – contact local hospitals to see if they are interested in participating
- Dave Anderson – start locating data on project related accidents
- Tommy Boozer and/or Norm Nicholson – contact Sea Tow to see if they are interested in participating
- Patrick Moore – attempt to locate other "safety plans" at FERC projects
- Jim Devereaux – contact Mike Dawson to see if he is interested in participating
- Aaron Small – bring copies of DNR pamphlets related to boating/safety
- Alan Axson – begin getting data on emergency responses on the LSR
- Tom Eppink – look into state laws about boating safety

PARKING LOT ITEMS:

- None

DATE OF NEXT MEETING: **February 14, 2006 at 9:00 a.m.**
Located at the Lake Murray Training Center

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
January 10, 2006

draft dka 02-02-06

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.

The meeting began with a recap of organizations and their responsibilities for safety around Lake Murray and the Lower Saluda River (LSR). Alan Axson with the Columbia Fire Department began by explaining the CFD responds to anything in Richland County related to swiftwater rescue, mainly below the I-20 bridge. The CFD also responds to some calls in the Congaree River in West Columbia, occasionally responding to calls down to State Highway 601. Alan talked about the frequency of calls around the Columbia Canal have increased (from 5 to 10 per hour to 100 per hour). The CFD is in the process of putting another station at the Broad River and Greystone. The CFD has two Zodiacs and about 30 people trained for swiftwater rescue.

Jerry Wise was absent, but Dave went over the information he submitted reporting his involvement with various safety related organizations around the lake (especially on the Lexington County side and the Saluda River above the lake).

Lee Barber explained the LMAs involvement with safety around the lake, mainly dealing with education and legislation. He briefly explained Drew's Law, one of LMAs successes, which deals with boating laws and boating under the influence.

Mike Wadell told the groups about Trout Unlimited's concern with safety education, mainly with their members.

Aaron Small gave a short presentation about the U.S. Coast Guard Auxiliary, which is under the jurisdiction of the USCG base in Charleston, SC. The Auxiliary are located at Lake Murray to assist with boating safety and emergencies until the Charleston-based unit arrives. They also maintain the weather link for the U.S. Weather Bureau and have an unofficial reporting station on the lake. They presently have one unit on-duty (Unit 1) available twenty-four hours a day, seven days a week, which is available to assist with emergencies. They also have seven other USCG certified boats and have about 41 members who work closely with the Lake Murray Power Squadron. They also have boats on Lake Greenwood and Wateree; additional boats can be requested from the Charleston base. Education is their major concern for promoting boating safety. Aaron noted that the National Weather Service issues small craft advisories for the lake. While the Auxiliary does not have any authority for punishing boating violations, when members from the Charleston base ride with them, they have that authority. Tommy B. noted that SCE&G has a long standing positive relationship with the USCG Auxiliary and appreciate the work they do; Aaron expressed similar sentiments about SCE&G.

Karen Kustafik talked about her efforts teaching whitewater kayaking to prevent emergencies and is coordinating park rangers for assistance with the riverfront area in Columbia. She also has a few ACA-certified instructors doing instruction for kids These park rangers will not be able to issue citations, but will eventually be able to do that and will start patrolling the Columbia Canal. The rangers are funded by the city of Columbia. Further information on the whitewater program is available through the city's website: www.columbiasc.net.

Patrick Moore explained that while American Rivers/CCL don't have any staff who deal directly with safety, they are concerned with water quality and its possible effects on public health.

Bill Marshall talked about the Lower Saluda River Scenic River Advisory Council and their responsibility for advising the Department of Natural Resources regarding the management of the State Scenic River. Two Lower Saluda River corridor plans have been developed from this effort and the 1990 plan contains a section with recommendations dealing specifically with safety with objectives ranging from improving information and warning systems to removing rebar from rocks in the river. (See additional notes on LSR Corridor Plan below*) The Council has worked with SCE&G to put river markers ~~put~~ in place on poles and bridge pilings to help users interpret danger associated with rising water levels. They have put this information at all public access points and have the information available on their website: http://www.dnr.sc.gov/water/envaff/river/low_saluda_scenic.htm. Bill noted ~~that they have worked with SCE&G to determine safe water levels and that about~~ that the river marker project was accomplished with leadership from Charlene Coleman of American Whitewater and with cooperation from SCE&G who provided various flows for evaluation. The color-coding on the poles equates to river flows as follows: top of blue/bottom of yellow is approximately 2600 cfs; top of yellow/bottom of red is approximately 8800 cfs. He also noted that this information is probably not being handed out at local outfitters, but has been in the past.

David Price talked about the Lake Murray Power Squadron. They offer safe boating courses to everyone and specific courses to their members on anything from taking care of engines to navigating the ocean. They also offer a weather course and work with other groups, such as the Boy Scouts. The Squadron helps to maintain the emergency center on Lake Murray, including the helipad. They also maintain reference lights and day markers (with the help of the Lake Murray Association. The Squadron is completely volunteer organization and rely on their members for continuing education opportunities related to boating.

Steve Bell explained that his organization is mainly concerned with safety on the lake but has concerns on the LSR as well. Steve would like to focus on public education and changes in project

operations to make things safer. They have about 16 volunteers who provide reports of hazards on the lake.

Norm Nicholson discussed the Lexington County Sheriffs Department's involvement with safety issues around the lake and the upper Saluda River. They have patrol boats and fire rescue boats on the lake and have a helicopter to use located at the substation on Lake Murray. Tommy B. explained that SCE&G leases the land for the sub-station and have been since the late 1990s. This substation is a very important part of maintaining safety on the lake since it allows responsible parties to keep emergency boats on the lake. Norm continued explaining that the LCSD also covers Saluda and Newberry counties and they have jurisdiction in all four counties (Lexington, Saluda, Newberry, and Richland). David P. noted that his organization has started Harbor Watch to keep an eye out for terror related activities. Alan S. noted they patrol heavily around the water intake structures to the dams. It was noted that all agencies work together when there is an emergency. Lee B. noted that the LMA sells dock signs that indicate the property's street address to assist with location of emergency situations.

Dave A. listed the organizations that are responsible on the lake, the river, or both.

Lake	Both	River
Hollow Creek FD	AR	Columbia Fire Dept.
Lexington County EMS	CCL	Trout Unlimited
LMA	SCWF	CoC Parks and Recreation
Lake Murray CG	LMW	American Whitewater
Lake Murray PS	SCDNR	LSSRAC
LMHOC	Lexington County Sheriff	

The group then discussed the need to contact the Richland, Saluda, and Newberry County Sheriffs office, as well as Providence Hospital, Richland Hospital, and West Columbia Rescue.

Randy M. questioned the group concerning a registry of certified first responders and who is responsible for contacting them in case of an emergency. Norm N. indicated the fire departments should have a list. There was some discussion between Tommy B. and Norm N. about getting someone from SeaTow to attend the RCG meetings. Norm N. further explained that he helps get first responders to the location. However, the bottom line is that the number to call in case of emergencies is 911.

Dave A. asked the group about statutory authority and who is able to issue citations. Someone responded that the only people that have that authority were the USCG, SCDNR, and the Sheriffs Depts. (anyone who is a class one certified law enforcement officer).

Tommy B. explained that there is a FERC safety plan that deals with warning signage and is being updated right now. It was noted that signs don't necessarily mean that people will act responsibly. Tommy B. showed some examples of the signs that SCE&G uses at their sites. The group talked about the need to increase public education about the signs. It was noted that the USCG Auxiliary and the SCDNR have created a safe boating checklist and that would be a good beginning for education efforts. Norm N. and Tommy discussed the idea about getting a package together that the DNR could give to people when they register a boat. Tommy B. also asked if the DNR could enforce the signs on the back of the dam in the tailrace. Norm N. replied that if there are four signs up; then it could be enforced. Tommy talked a little about the idea of putting a positive barrier across the tailrace so people could not approach the dam.

The discussion turned to the warning system that is in place on the LSR to warn river users of rising water. Bill A. explained the sirens are activated by a float switch upstream; on every three-inch rise of the river, the sirens are activated. The sirens stay on for three minutes and there are some controls in place that keep the sirens from sounding continuously if there is a prolonged rise in water. After this delay, the sirens will activate on the next three-inch rise in water. The sirens will sound 24 hours a day; SCE&G received many complaints, so they have performed studies that resulted in a lowering of the volume. The sirens are located at ~~Saluda Shoals~~ upstream of Riverbank Zoo and at Hope Ferry (Metts) Landing.

The group then proceeded to talk about ramping and the pros and cons of ramping releases at Saluda. Randy M. made the point that ramping is a double-edged sword; it gives the river user a false sense of security when they know they have "more" time to get off the river. In addition, if SCE&G needs the reserve capacity of Saluda, then ramping is not an option. Patrick M. noted we need to approach the ramping issue like FERC will approach it and made the point that SCE&G has options for offline capacity if Saluda cannot be operated safely. Bill M. suggested that the group should study and understand how fast the water actually rises below the dam, in areas such as Hope Ferry Landing, to see how rapidly conditions can change for people in the river when the turbines are opened.

The group then looked at the mission statement and decided to finalize the statement and post it to the website.

The discussion turned to the difference between the FERC required safety plan and the expected deliverable from this RCG. The group wondered if there had been another safety plan of this type at other FERC projects. Patrick M. agreed to search e-Library to see if there have been any other plans at a FERC project (besides the FERC required safety plan). Alan S. stated that he envisions some type of plan that summarizes the safety personnel and equipment around the lake and what is

available and a way to get this information out to the public. Tommy B. noted that this would probably be the only committee that continues after the licensing process is over. Steve B. asked about if this committee will examine ramping and higher lake levels. It was explained that lake levels will be addressed in the Operation RCG and that this group can make recommendations to the Operations RCG as it relates to safety. The Operations RCG can then balance all the factors before making a recommendation to FERC. Alan asked what is the main cause of accidents on Lake Murray. David P. replied that there is probably not one main cause attributable to operations, most of it is alcohol related. There was some discussion on ramping and lake levels. Norm N. made the point that it does not matter how the project is operated; the bottom line is that we need to educate lake/river users on how to be safe. ~~Bill M.~~ Someone (?) mentioned it would be useful to get data on calls to the fire department from the lake/river. Dave A. agreed and noted we would be getting these kinds of data.

After lunch, Dave A. led a discussion about what happens when there is an emergency on the lake or river. Norm N. talked about 911 and enhanced 911 and the differences between them. When a 911 call is placed, the dispatcher forwards the call to the appropriate authority depending on what the emergency is. If there is an on-water emergency, the call goes to the Lexington County Sheriffs Dept.; if a call is for the river, the call usually goes to the Columbia Fire Dept. There are a lot of problems with people knowing where they are on the water and with emergency personnel locating accidents (i.e., there are different names for the same coves, people don't know distances on the water, etc.). It was noted that the USCG monitors channel 16 on the lake usually, and the two on-water towing companies monitor it all the time. Dave A. inquired as to what information is generated when an accident occurs. Norm N. said that the DNR usually writes reports for the lake; Alan A. said they keep a record of the 911 calls they receive. It was also noted that a big problem is when a new semester starts at the University of South Carolina and there is an influx of thousands of new people that don't know the hazards of the river. It was noted that we should contact someone from the university to participate in this group. Alan S. wondered if we should also invite Mike Dawson from the Rivers Alliance. Jim D. agreed to get in touch with him.

The discussion then turned back to the need for better education of lake/river users. Randy M. noted that if we can get people to use certain access areas, we can get the information to them at those areas.

The group then entered into a question and answer session about safety and accidents around the lake. It was noted that all the agencies work together to make sure emergencies are taken care of and they are in constant communication when they are patrolling the lake. Questions were raised as to how best promote safety and the group discussed a public education campaign and the possibility of monthly meetings about safety on the lake. Tommy B. noted that this would be good for

SCE&G as well as they can get input on future access points. There was a discussion as to data that show how fast the water rises on the water.

The discussion then turned to laws that govern boating use in South Carolina. Aaron S. agreed to bring in some DNR pamphlets that cover boating laws. Dave A. questioned the group on warning buoys and the process for getting them installed. The DNR has criteria for placing new buoys.

The group then turned to listing specific issues they will be dealing with in the RCG meetings. The group talked about water release response time and the issue of ramping. It was mentioned that ramping provides a false sense of security and the rate of water rise will not encourage people to get off the river. Alan S. made the point that if the sirens start going off, it's time to get off the water. Karen K. noted there are some places where the sirens cannot be heard and the group agreed that is an issue worth exploring. The issue of egress from the river when the water starts rising was also discussed. The group agreed to look at maps of the river next time and the estimated coverage of the current warning system to begin examining if there are areas where the sirens should be heard. There was some discussion if the confluence needs to be included. The group would like some more information ~~before~~ from Mike Dawson before looking at this issue.

The group then returned to applicable laws that might affect water recreation and use. Tom E. agreed to look up these applicable laws. Alan S. reminded the group that we need to prioritize the issues so that we can deal with them in the license application. We don't necessarily have to have the safety plan in place, but the issues that will be affected by the application need to be the first to be resolved. ~~Everyone agreed that the warning siren system should be first to be resolved.~~

The priority safety issues that the group identified included: the management of flows and the improvement of information/warning systems for river-user safety.

The group agreed to meet next month and be prepared to discuss the warning system and the siren coverage on the LSR. The agenda for this meeting is attached below.

(Additional notes from Bill Marshall: The 1990 Lower Saluda River Corridor Plan, User Safety Recommendations identify the following needs: improved warning systems, river map signs at access points, training programs for river rescue personnel, improved access to flow release information, portage path around majors rapids, and river safety education materials for the public. Most of these safety-related needs have been addressed to some degree but the needs merit ongoing attention and upgrading of solutions through time.)

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

January 10, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 11:30** Discussion on Safety Organizations and Responsibilities
- **11:30 to 12:00** Group Discussion of Mission Statement for Finalization Purposes
- **12:00 to 12:30** Lunch
- **12:30 to 3:00** Discussion on Prioritized Issues

Saluda HYDRO RELICENSING

Kleinschmidt
Energy & Water Resource Consultants

Kacie Jensen

From: Lee Barber [lbarber@sc.rr.com]
Sent: Tuesday, February 07, 2006 5:11 PM
To: Dave Anderson
Subject: Re: 01-10-06 Draft Meeting Notes

Dave
I would like to see added to that part of the discussion related to LMA selling street address signs for the docks that as pointed out in the meeting this was done at the request of the Sheriff's department.
Also please keep in mind that the imeptus for the safety RCG was the need for the resurrection of the regular safety meetings involving interested parties. This was discussed on several occasions, to include Randy Mahan, and I will stay on this like a dog on a bone.
Thanks
Lee Barber
Lee Barber

> ----- Original Message -----
> **From:** Dave Anderson
> **To:** Tommy Boozer ; Aaron Small ; Alan Axson ; Alan Stuart ; Alison Guth ; Amanda Hill ; Bill Argentieri ; Bill Marshall ; Bill Mathias ; Bret Hoffman ; Charlene Coleman ; Dave Anderson ; David Price ; Dick Christie ; Edward Schnepel ; George Duke ; Gerrit Jobsis (American Rivers) ; Jerry Wise ; Jim Devereaux ; Karen Kustafik ; Kenneth Fox ; Lee Barber ; Malcolm Leaphart ; Mark Leao ; Mike Waddell ; Miriam Atria ; Norm Nicholson ; Norman Ferris ; Patrick Moore ; Randy Mahan ; Steve Bell ; Suzanne Rhodes ; Tom Eppink
> **Sent:** Friday, February 03, 2006 12:57 PM
> **Subject:** 01-10-06 Draft Meeting Notes
>
> Attached are the draft meeting notes for the January 10th meeting. Please have any comments back to me by February 17th.
>
> <<2006-01-10 Meeting Notes - Safety (DRAFT).doc>>

Kacie Jensen

From: Kustafik, Karen [kakustafik@columbiasc.net]
Sent: Monday, February 06, 2006 7:44 AM
To: Dave Anderson; Axson, William
Subject: RE: 01-10-06 Draft Meeting Notes

Thanks, Dave. If Alan Axson has not already qualified it, your canal figures pertain to the number of visitors--not incidents--at Riverfront Park. Overall numbers of visitors have increased with expansion of the Three Rives Greenway. Alan, I would bet that you were using numbers Mike Dawson quotes. If CFD caught that many actual calls at the Columbia Canal per hour, something would be very very wrong.

Whether or not the city's park rangers will ever cite folks for littering or possession of alcoholic beverages in the park has yet to be decided. Because these documents are public record, I want to be careful about what we say we will do. Please note that we MAY be able to write citations in the future, and not that we WILL. Park rangers will be present along all of the city's sections of Three Rivers Greenway: Riverfront Park (canal) as well as Granby Park---and other sections as they are added.

Thanks, happy Monday to you both.
KAK

Karen Kustafik
Park Ranger Coordinator
City of Columbia Parks and Recreation Department
1932 Calhoun St.
Columbia, SC 29201

office: 803.545.3117
cell: 803.315.7938
kakustafik@columbiasc.net

-----Original Message-----
From: Dave Anderson [mailto:Dave.Anderson@kleinschmidtusa.com]
Sent: Friday, February 03, 2006 12:57 PM
To: Tommy Boozer; Aaron Small; Axson, William; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; Kustafik, Karen; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 01-10-06 Draft Meeting Notes

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<<2006-01-10 Meeting Notes - Safety (DRAFT).doc>>

Kacie Jensen

From: Bill Marshall [MarshallB@dnr.sc.gov]
Sent: Monday, February 06, 2006 1:59 PM
To: Dave Anderson
Subject: FW: Boating Accidents Region 3.doc

Boating Accidents Region 3_.do...

Dave,
Harvin Brock provided the attached information related to boating accidents on Lake Murray.

Bill Marshall

-----Original Message-----
From: Harvin Brock
Sent: Monday, February 06, 2006 1:27 PM
To: Bill Marshall
Subject: Boating Accidents Region 3.doc

Boating Accidents on Lake Murray
Lexington / Richland / Newberry / Saluda Counties
1994-2005

Year	# Accidents	# Injuries	# Fatalities
1994	11	6	2
1995	14	9	1
1996	11	9	2
1997	13	10	5
1998	17	9	2
1999	10	10	1
2000	10	5	1
2001	8	2	4
2002	11	10	0
2003	7	1	4
2004	6	4	0
2005	13	11	1

* We had a total of 35 River Rescue calls answered from 1999 – 2004 on the Lower Saluda.

Kacie Jensen

From: Dave Anderson
Sent: Friday, February 03, 2006 12:57 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall; Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; Karen Kustafik; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 01-10-06 Draft Meeting Notes

Attached are the draft meeting notes for the January 10th meeting. Please have any comments back to me by February 17th.

2006-01-10
Meeting Notes - Saf..

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
January 10, 2006

draft dka 02-02-06

ATTENDEES:

Name	Organization	Name	Organization
Bill Argentieri	SCE&G	George Duke	Lake Murray Homeowners Coalition
Alison Guth	Kleinschmidt Associates	Bill Marshall	SCDNR/LSSRA
Tom Eppink	SCANA	Jim Devereaux	SCE&G
Aaron Small	USCG Auxiliary	Tommy Boozer	SCE&G
Norm Nicholson	Lexington County Sheriffs Dept.	Mike Waddell	Trout Unlimited
Patrick Moore	American Rivers/CCL	Bret Hoffman	Kleinschmidt Associates
Randy Mahan	SCANA	Karen Kustafik	Columbia Parks and Recreation
Alan Axson	Columbia Fire Dept.	Lee Barber	LMA
David Price	Lake Murray Power Squadron	Alan Stuart	Kleinschmidt Associates
Bill Mathias	LMPS & LMA	Dave Anderson	Kleinschmidt Associates
Kenneth Fox	LMA		

HOMEWORK ITEMS:

- Dave Anderson – contact local hospitals to see if they are interested in participating
- Dave Anderson – start locating data on project related accidents
- Tommy Boozer and/or Norm Nicholson – contact Sea Tow to see if they are interested in participating
- Patrick Moore – attempt to locate other "safety plans" at FERC projects
- Jim Devereaux – contact Mike Dawson to see if he is interested in participating
- Aaron Small – bring copies of DNR pamphlets related to boating/safety
- Alan Axson – begin getting data on emergency responses on the LSR
- Tom Eppink – look into state laws about boating safety

PARKING LOT ITEMS:

- None

DATE OF NEXT MEETING: **February 14, 2006 at 9:00 a.m.**
Located at the Lake Murray Training Center

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
January 10, 2006

draft dka 02-02-06

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.

The meeting began with a recap of organizations and their responsibilities for safety around Lake Murray and the Lower Saluda River (LSR). Alan Axson with the Columbia Fire Department began by explaining the CFD responds to anything in Richland County related to swiftwater rescue, mainly below the I-20 bridge. The CFD also responds to some calls in the Congaree River in West Columbia, occasionally responding to calls down to State Highway 601. Alan talked about the frequency of calls around the Columbia Canal have increased (from 5 to 10 per hour to 100 per hour). The CFD is in the process of putting another station at the Broad River and Greystone. The CFD has two Zodiacs and about 30 people trained for swiftwater rescue.

Jerry Wise was absent, but Dave went over the information he submitted reporting his involvement with various safety related organizations around the lake (especially on the Lexington County side and the Saluda River above the lake).

Lee Barber explained the LMAs involvement with safety around the lake, mainly dealing with education and legislation. He briefly explained Drew's Law, one of LMAs successes, which deals with boating laws and boating under the influence.

Mike Wadell told the groups about Trout Unlimited's concern with safety education, mainly with their members.

Aaron Small gave a short presentation about the U.S. Coast Guard Auxiliary, which is under the jurisdiction of the USCG base in Charleston, SC. The Auxiliary are located at Lake Murray to assist with boating safety and emergencies until the Charleston-based unit arrives. They also maintain the weather link for the U.S. Weather Bureau and have an unofficial reporting station on the lake. They presently have one unit on-duty (Unit 1) available twenty-four hours a day, seven days a week, which is available to assist with emergencies. They also have seven other USCG certified boats and have about 41 members who work closely with the Lake Murray Power Squadron. They also have boats on Lake Greenwood and Wateree; additional boats can be requested from the Charleston base. Education is their major concern for promoting boating safety. Aaron noted that the National Weather Service issues small craft advisories for the lake. While the Auxiliary does not have any authority for punishing boating violations, when members from the Charleston base ride with them, they have that authority. Tommy B. noted that SCE&G has a long standing positive relationship with the USCG Auxiliary and appreciate the work they do; Aaron expressed similar sentiments about SCE&G.

Karen Kustafik talked about her efforts teaching whitewater kayaking to prevent emergencies and is coordinating park rangers for assistance with the riverfront area in Columbia. She also has a few ACA-certified instructors doing instruction for kids These park rangers will not be able to issue citations, but will eventually be able to do that and will start patrolling the Columbia Canal. The rangers are funded by the city of Columbia. Further information on the whitewater program is available through the city's website: www.columbiasc.net.

Patrick Moore explained that while American Rivers/CCL don't have any staff who deal directly with safety, they are concerned with water quality and its possible effects on public health.

Bill Marshall talked about the Lower Saluda River advisory council and their responsibility for advising the Department of Natural Resources. Two plans have been developed from this effort and the 1990 plan had some recommendation dealing specifically with safety: providing more information to river users and getting rebar out of the river. The Council has worked with SCE&G to put river markers put in place on poles and bridge pilings to help users interpret danger associated with rising water levels. They have put this information at all public access points and have the information available on their website: http://www.dnr.sc.gov/water/envaff/river/low_saluda_scenic.htm. Bill noted that they have worked with SCE&G to determine safe water levels and that about 2500 to 2600 cfs to the top of the blue stripe on the poles. He also noted that this information is probably not being handed out at local outfitters, but has been in the past.

David Price talked about the Lake Murray Power Squadron. They offer safe boating courses to everyone and specific courses to their members on anything from taking care of engines to navigating the ocean. They also offer a weather course and work with other groups, such as the Boy Scouts. The Squadron helps to maintain the emergency center on Lake Murray, including the helipad. They also maintain reference lights and day markers (with the help of the Lake Murray Association. The Squadron is completely volunteer organization and rely on their members for continuing education opportunities related to boating.

Steve Bell explained that his organization is mainly concerned with safety on the lake but has concerns on the LSR as well. Steve would like to focus on public education and changes in project operations to make things safer. They have about 16 volunteers who provide reports of hazards on the lake.

Norm Nicholson discussed the Lexington County Sheriffs Department's involvement with safety issues around the lake and the upper Saluda River. They have patrol boats and fire rescue boats on the lake and have a helicopter to use located at the substation on Lake Murray. Tommy B.

explained that SCE&G leases the land for the sub-station and have been since the late 1990s. This substation is a very important part of maintaining safety on the lake since it allows responsible parties to keep emergency boats on the lake. Norm continued explaining that the LCSD also covers Saluda and Newberry counties and they have jurisdiction in all four counties (Lexington, Saluda, Newberry, and Richland). David P. noted that his organization has started Harbor Watch to keep an eye out for terror related activities. Alan S. noted they patrol heavily around the water intake structures to the dams. It was noted that all agencies work together when there is an emergency. Lee B. noted that the LMA sells dock signs that indicate the property's street address to assist with location of emergency situations.

Dave A. listed the organizations that are responsible on the lake, the river, or both.

Lake	Both	River
Hollow Creek FD	AR	Columbia Fire Dept.
Lexington County EMS	CCL	Trout Unlimited
LMA	SCWF	CoC Parks and Recreation
Lake Murray CG	LMW	American Whitewater
Lake Murray PS	SCDNR	LSSRAC
LMHOC	Lexington County Sheriff	

The group then discussed the need to contact the Richland, Saluda, and Newberry County Sheriffs office, as well as Providence Hospital, Richland Hospital, and West Columbia Rescue.

Randy M. questioned the group concerning a registry of certified first responders and who is responsible for contacting them in case of an emergency. Norm N. indicated the fire departments should have a list. There was some discussion between Tommy B. and Norm N. about getting someone from SeaTow to attend the RCG meetings. Norm N. further explained that he helps get first responders to the location. However, the bottom line is that the number to call in case of emergencies is 911.

Dave A. asked the group about statutory authority and who is able to issue citations. Someone responded that the only people that have that authority were the USCG, SCDNR, and the Sheriffs Depts. (anyone who is a class one certified law enforcement officer).

Tommy B. explained that there is a FERC safety plan that deals with warning signage and is being updated right now. It was noted that signs don't necessarily mean that people will act responsibly. Tommy B. showed some examples of the signs that SCE&G uses at their sites. The group talked about the need to increase public education about the signs. It was noted that the USCG Auxiliary and the SCDNR have created a safe boating checklist and that would be a good beginning for

education efforts. Norm N. and Tommy discussed the idea about getting a package together that the DNR could give to people when they register a boat. Tommy B. also asked if the DNR could enforce the signs on the back of the dam in the tailrace. Norm N. replied that if there are four signs up; then it could be enforced. Tommy talked a little about the idea of putting a positive barrier across the tailrace so people could not approach the dam.

The discussion turned to the warning system that is in place on the LSR to warn river users of rising water. Bill A. explained the sirens are activated by a float switch upstream; on every three-inch rise of the river, the sirens are activated. The sirens stay on for three minutes and there are some controls in place that keep the sirens from sounding continuously if there is a prolonged rise in water. After this delay, the sirens will activate on the next three-inch rise in water. The sirens will sound 24 hours a day; SCE&G received many complaints, so they have performed studies that resulted in a lowering of the volume. The sirens are located at Saluda Shoals and Hope Ferry.

The group then proceeded to talk about ramping and the pros and cons of ramping releases at Saluda. Randy M. made the point that ramping is a double-edged sword; it gives the river user a false sense of security when they know they have "more" time to get off the river. In addition, if SCE&G needs the reserve capacity of Saluda, then ramping is not an option. Patrick M. noted we need to approach the ramping issue like FERC will approach it and made the point that SCE&G has options for offline capacity if Saluda cannot be operated safely.

The group then looked at the mission statement and decided to finalize the statement and post it to the website.

The discussion turned to the difference between the FERC required safety plan and the expected deliverable from this RCG. The group wondered if there had been another safety plan of this type at other FERC projects. Patrick M. agreed to search e-Library to see if there have been any other plans at a FERC project (besides the FERC required safety plan). Alan S. stated that he envisions some type of plan that summarizes the safety personnel and equipment around the lake and what is available and a way to get this information out to the public. Tommy B. noted that this would probably be the only committee that continues after the licensing process is over. Steve B. asked about if this committee will examine ramping and higher lake levels. It was explained that lake levels will be addressed in the Operation RCG and that this group can make recommendations to the Operations RCG as it relates to safety. The Operations RCG can then balance all the factors before making a recommendation to FERC. Alan asked what is the main cause of accidents on Lake Murray. David P. replied that there is probably not one main cause attributable to operations, most of it is alcohol related. There was some discussion on ramping and lake levels. Norm N. made the point that it does not matter how the project is operated; the bottom line is that we need to educate lake/river users on how to be safe. Bill M. mentioned it would be useful to get data on calls

to the fire department from the lake/river. Dave A. agreed and noted we would be getting these kinds of data.

After lunch, Dave A. led a discussion about what happens when there is an emergency on the lake or river. Norm N. talked about 911 and enhanced 911 and the differences between them. When a 911 call is placed, the dispatcher forwards the call to the appropriate authority depending on what the emergency is. If there is an on-water emergency, the call goes to the Lexington County Sheriffs Dept.; if a call is for the river, the call usually goes to the Columbia Fire Dept. There are a lot of problems with people knowing where they are on the water and with emergency personnel locating accidents (i.e., there are different names for the same coves, people don't know distances on the water, etc.). It was noted that the USCG monitors channel 16 on the lake usually, and the two on-water towing companies monitor it all the time. Dave A. inquired as to what information is generated when an accident occurs. Norm N. said that the DNR usually writes reports for the lake; Alan A. said they keep a record of the 911 calls they receive. It was also noted that a big problem is when a new semester starts at the University of South Carolina and there is an influx of thousands of new people that don't know the hazards of the river. It was noted that we should contact someone from the university to participate in this group. Alan S. wondered if we should also invite Mike Dawson from the Rivers Alliance. Jim D. agreed to get in touch with him.

The discussion then turned back to the need for better education of lake/river users. Randy M. noted that if we can get people to use certain access areas, we can get the information to them at those areas.

The group then entered into a question and answer session about safety and accidents around the lake. It was noted that all the agencies work together to make sure emergencies are taken care of and they are in constant communication when they are patrolling the lake. Questions were raised as to how best promote safety and the group discussed a public education campaign and the possibility of monthly meetings about safety on the lake. Tommy B. noted that this would be good for SCE&G as well as they can get input on future access points. There was a discussion as to data that show how fast the water rises on the water.

The discussion then turned to laws that govern boating use in South Carolina. Aaron S. agreed to bring in some DNR pamphlets that cover boating laws. Dave A. questioned the group on warning buoys and the process for getting them installed. The DNR has criteria for placing new buoys.

The group then turned to listing specific issues they will be dealing with in the RCG meetings. The group talked about water release response time and the issue of ramping. It was mentioned that ramping provides a false sense of security and the rate of water rise will not encourage people to get off the river. Alan S. made the point that if the sirens start going off, it's time to get off the water.

Karen K. noted there are some places where the sirens cannot be heard and the group agreed that is an issue worth exploring. The issue of egress from the river when the water starts rising was also discussed. The group agreed to look at maps of the river next time and the estimated coverage of the current warning system to begin examining if there are areas where the sirens should be heard. There was some discussion if the confluence needs to be included. The group would like some more information before Mike Dawson before looking at this issue.

The group then returned to applicable laws that might affect water recreation and use. Tom E. agreed to look up these applicable laws. Alan S. reminded the group that we need to prioritize the issues so that we can deal with them in the license application. We don't necessarily have to have the safety plan in place, but the issues that will be affected by the application need to be the first to be resolved. Everyone agreed that the warning siren system should be first to be resolved.

The group agreed to meet next month and be prepared to discuss the warning system and the siren coverage on the LSR. The agenda for this meeting is attached below.

MEETING NOTES

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

LAKE MURRAY TRAINING CENTER
January 10, 2006

draft dka 02-02-06

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

January 10, 2006
9:30 AM
Lake Murray Training Center

- **9:30 to 11:30** Discussion on Safety Organizations and Responsibilities
- **11:30 to 12:00** Group Discussion of Mission Statement for Finalization Purposes
- **12:00 to 12:30** Lunch
- **12:30 to 3:00** Discussion on Prioritized Issues

Saluda HYDRO RELICENSING

Kleinschmidt Energy & Water Resource Consultants

Cheryl Balitz

From: C Coleman [mailto:cheetahtrk@yahoo.com]
Sent: Thursday, February 09, 2006 8:58 AM
To: Dave Anderson; BOOZER, THOMAS C; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda
Hill; ARGENTIERI, WILLIAM R; Bill Marshall; Bill Mathias; Bret Hoffman; Dave Anderson; David Price;
Dick Christie; Edward Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; DEVEREAUX,
JAMES; Karen Kustafik; Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam
Atria; Norm Nicholson; Norman Ferris; Patrick Moore; MAHAN, RANDOLPH R; Steve Bell; Suzanne Rhodes; EPPINK, THOMAS G
Subject: Re: 01-10-06 Draft Meeting Notes

Dave and RCG Safety members,

I must say that after reading the minutes I have a few serious concerns.

1) SCE&G, at first impression, values reserve capacity needs greater than human life. I sincerely hope that is not the case.

2) ramping does NOT create a false sense of security, it is a responsible operational procedure during high seasonal public use periods.

3) the present siren system does create a false sense of security for SCE&G. Where technological testing is useful for equipment, in this situation it is not. Until someone from
SCE&G physically stands at the rapids and has a sensory acceptance that this system is, has
been and may always be a “cry wolf” to the public, we will get no resolution as to the actual
response of this “system” to actual water fluctuation.

4)The present warning system does not cover many high use areas and that type of system
may not fit all areas, making ramping an even more critical option during the summer and trout
stocking seasons.

5) Education must be universal, everyone (SCE&G, DNR, CPD, CFD, City governments, development groups, and the public) needs an education on the river, it’s dangers, its resources,
its subculture, and its very critical place in the community as more than just a power source. The
river has an important role in this area as a food source for many poorer families, water for
numerous areas, recreation for generations, a habitat for threatened, redeveloping, and endangered species and a natural treasure of seeming remoteness in an urban area. Yet in its
beauty is the fact, it is formidable whitewater.

6) the local boaters are the unidentified/unpaid/highly skilled rescuers of the public at the major rapid. I have included a message from American Whitewater on river safety and who we
are in the US. I represent local boaters and their concerns. The Saluda also provides a

training
ground for some of the best whitewater paddlers in the world. Several US Olympic and Free
style Team members are either from here or have come here to train. Several pioneers in extreme “creek” boating are from the area. But most important is the fact, we average over 35
rescues each summer alone. Rescues that don’t make the news, don’t cause the water to be
turned off, and go unnoticed for the skill required to make those rescues non news worthy.
7) the whitewater boating community has a good relationship with SCE&G, CPD, DNR, and
CFD Rescue units. The “rock people” consider us their guardians. Most boaters on the Saluda
are Swift and Whitewater rescue trained and have first responder and wilderness responder first
aid training by the same schools that train CFD and DNR. Not to mention certifications as
instructors in rescue and boating and years of experience in whitewater, a different animal than
swiftwater. We offer our skills as the first line of defense and would like to suggest cooperative
training with all rescue sources on the river.
8) all river users must be identified and how they interact with the river must be examined, to
better understand the impact of reserve capacity rapid high water fluctuation, through out the
project’s effected areas.

7/11/2007
Respectfully
Charlene Coleman
American Whitewater
Regional Coordinator
Whitewater Rescue Technician Rescue 3
Swift Water I & II Tenn Assoc of Rescue Squads
American Canoe Assoc Whitewater Kayak Instructor
Dave Anderson <Dave.Anderson@KleinschmidtUSA.com> wrote:
Attached are the draft meeting notes for the January 10th meeting. Please have any comments back to
me by February 17th.
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Learn to get in touch with the silence within yourself and know that everything in this life has a
purpose.
- Elizabeth Kubler-Ross
What are the most popular cars? Find out at Yahoo! Autos

Learn to get in touch with the silence within yourself and know that everything in this life has a purpose.
- Elizabeth Kubler-Ross
What are the most popular cars? Find out at Yahoo! Autos

Cheryl Balitz

From: Bill Marshall [mailto:MarshallB@dnr.sc.gov]
Sent: Tuesday, February 07, 2006 4:08 PM
To: Dave Anderson; BOOZER, THOMAS C; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill;
ARGENTIERI, WILLIAM R; Bill Mathias; Bret Hoffman; Charlene Coleman; David Price; Dick Christie; Edward
Schnepel; George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; DEVEREAUX, JAMES; Karen Kustafik;
Kenneth Fox; Lee Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman
Ferris; Patrick Moore; MAHAN, RANDOLPH R; Steve Bell; Suzanne Rhodes; EPPINK, THOMAS G
Subject: RE: 01-10-06 Draft Meeting Notes

Dave and others,

I have attached the meeting notes from our Jan 10 Safety RCG mtg with suggested edits. These are to clarify
what I recall saying in our meeting. Near the end, where the discussion of priorty issues is presented, I have
added a sentence that captures the priority safety issues, as I heard them expressed from the group; those issues
being -- management of flows and improvement of information/warning systems for river-user safety.

I've also included additional notes (inserted at end of mtg notes) to give a better explanation of the User Safety
Recommendations of the 1990 Lower Saluda River Corridor Plan.

Thanks,
Bill Marshall

From: Dave Anderson [mailto:Dave.Anderson@KleinschmidtUSA.com]
Sent: Friday, February 03, 2006 12:57 PM
To: Tommy Boozer; Aaron Small; Alan Axson; Alan Stuart; Alison Guth; Amanda Hill; Bill Argentieri; Bill Marshall;
Bill Mathias; Bret Hoffman; Charlene Coleman; Dave Anderson; David Price; Dick Christie; Edward Schnepel;
George Duke; Gerrit Jobsis (American Rivers); Jerry Wise; Jim Devereaux; Karen Kustafik; Kenneth Fox; Lee
Barber; Malcolm Leaphart; Mark Leao; Mike Waddell; Miriam Atria; Norm Nicholson; Norman Ferris; Patrick
Moore; Randy Mahan; Steve Bell; Suzanne Rhodes; Tom Eppink
Subject: 01-10-06 Draft Meeting Notes

Attached are the draft meeting notes for the January 10th meeting. Please have any comments back to me by
February 17th.

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Kacie Jensen

From: Alison Guth
Sent: Monday, January 09, 2006 12:10 PM
To: 'arsbhs@bellsouth.net'; 'cfdwaxson@columbiasc.net'; Alan Stuart; 'marshallb@dnr.sc.gov'; 'bill25@sc.rr.com'; 'cheetahtrk@yahoo.com'; Dave Anderson; 'pricedc@dhec.sc.gov'; 'dchristie@infoave.net'; 'eschnepel@sc.rr.com'; 'kayakduke@bellsouth.net'; 'gjobsis@americanrivers.org'; 'meddynamic@aol.com'; 'kakustafik@columbiasc.net'; 'Lbarber@sc.rr.com'; 'Malcolml@mailbox.sc.edu'; 'miriam@lakemurraycountry.com'; 'PatrickM@scccl.org'; 'bellsteve9339@bellsouth.net'; 'suzrhodes@juno.com'; 'tboozer@scana.com'; 'bargentieri@scana.com'; 'rmahan@scana.com'; 'mark_Leao@fws.gov'; 'Amanda_Hill@fws.gov'; 'Elymay2@aol.com'; 'skfox@sc.rr.com'; 'mwaddell@esri.sc.edu'
Subject: Safety Agenda

Hello Safety Group

I have attached below the Agenda for tomorrow's meeting. Thanks, and I will see many of you tomorrow. Alison

Safety RCG Agenda 11006.doc (3...

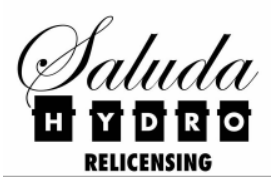
Alison Guth
Licensing Coordinator
Kleinschmidt Associates
101 Trade Zone Drive
Suite 21A
West Columbia, SC 29170
P: (803) 822-3177
F: (803) 822-3183

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

January 10, 2005
9:30 AM
Lake Murray Training Center

- **9:30 to 11:30** Discussion on Safety Organizations and Responsibilities
- **11:30 to 12:00** Group Discussion of Mission Statement for Finalization Purposes
- **12:00 to 12:30** Lunch
- **12:30 to 3:00** Discussion on Prioritized Issues


Saluda
HYDRO
RELICENSING

interest in safe boating. I see boating as a wonderful recreation but one that has great potential for disaster in the hands of the wrong persons.

Geographic Area Covered:

Number of Personnel:

Response From: Malcolm Leaphart/Norm

Name of Organization: Saluda River Chapter Trout Unlimited

Safety Activities Involved In: River fishing safety, both by wading and by boat, paddle and motor; water flows for both recreation and for the fisheries; river safety education through articles and meeting programs; and river rescues

Geographic Area Covered: Lower Saluda River

Number of Personnel: 325 chapter members

Response From: Aaron Small

Name of Organization: Lake Murray Coast Guard Auxiliary—Lake Murray Station

Safety Activities Involved In: boating safety, education, and water rescue on Lake Murray

Geographic Area Covered:

Number of Personnel: 48 members and eight equipped boats that meet USCG requirements; Helicopters and additional boats (if available)

Response From: Karen Kustafik

Name of Organization: City of Columbia Parks and Recreation Department

Safety Activities Involved In: COC-Instruction, whitewater kayak program; boating safety information; Park Ranger staff patrol. I also teach and volunteer on the LSR personally, outside of my COC duties.

Geographic Area Covered: Lower Saluda River and Three Rivers Greenway

Number of Personnel: Whitewater: ~10 volunteer coaches; Park Ranger Staff: 18
The park ranger staff will begin duties mid-December. They will cover Riverfront and Granby Parks at present. It is reasonable to assume that, as the Saluda portion of the 3RG is built, the ranger staff would also cover that area.

Response From: Charlene Coleman

Name of Organization: American Whitewater (Regional Coordinator)

Safety Activities Involved In: Training: Rescue 3 International Whitewater Rescue Technician; Tennessee Association of Rescue Squads Swiftwater I & II Technician; American Canoe Association Swiftwater/Whitewater Rescue; American Canoe Association Whitewater Kayak Instructor; 17 Years Whitewater Boater Class V (that includes 15 years of "on time" whitewater rescue experience); Safety/Councilor and guide Canoeing for Kids (charity);, Palmetto Paddlers Safety & Instruction Director; River Safety Consultant for SCE&G; Lower Scenic Saluda River Advisory Council; Volunteer Oconee County Tactical Special Rescue Team (Whitewater Technician); National First Responder Response Organization; American Whitewater consultant on access, recreation, safety, water quality, etc; USFS Chattooga River safety consultant as AW representative; National Whitewater Team judge and safety/rescue boater.

Geographic Area Covered: Southeastern US; Chattooga River; Saluda River; Wherever I teach; Wherever I'm boating; Wherever requested.

Number of Personnel: 1 and the entire whitewater boating community

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Response From: Patrick Moore

Name of Organization: American Rivers and Coastal Conservation League

Safety Activities Involved In: None

Geographic Area Covered: Full area of project impact

Number of Personnel: 0

Other: While we do not have any personnel exclusively dedicated to safety, enhancing the public value of recreational safety is a goal of both organizations.

Response From: Bill Marshall

Organization: Lower Saluda Scenic River Advisory Council in partnership with the SCDNR, River Conservation Program

Safety Activities Involved In: Provide river-user safety information at kiosks located at public access sites; Provide safety information on website and in a river-map/brochure product; Established water-level safety marker system painted on poles at access sites and on bridge supports (blue, yellow, red color-coded bands convey increasingly hazardous conditions with rising waters)

Geographic Area Covered: Lower Saluda River and access sites, which include Hope Ferry (Metts) Landing, Saluda Shoals Park, Gardendale Landing, and Riverbanks Zoo.

Number of Personnel: One staff person to periodically update and maintain information and water-level marker system described above

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Response From: David Price

Name of Organization: Lake Murray Power Squadron (LMPS)

Type of Safety Activities Involved In:

- Mission of the LMPS

The Lake Murray Power Squadron (www.lmpsonline.org), a unit of the United States Power Squadrons (USPS) (www.usps.org), is a non-profit boating organization dedicated to making boating safer and more enjoyable through education, civic service and fraternal boating activities among our members.

- Education

    - **Boating Safety Courses for the General Public** - LMPS offers a basic boating safety course (Boat Smart®) to the public in the fall and spring of each year. This course consists of 4 two-hour classroom sessions, followed by a proctored exam. Individuals unable to attend the classes can order America's Boating Course from the USPS website and contact a local squadron (LMPS for the SC midlands area) for assistance as they study the course material. A proctored exam is provided for the course ordered from the internet.
    - **Courses for LMPS Members** - Once a member of the LMPS, many other educational courses are available to enhance one's boating skills. A list, along with a brief description, is as follows:
        - Seamanship - types of boats (motor and sail), trailering, maintenance, weather, navigational rules and aids to navigation, medical emergencies, and nautical customs
        - Piloting - course plotting, dead reckoning, marine radio use, chart reading, compass adjustment
        - Advanced Piloting - advanced navigational and charting skills, use of deviation tables, danger bearings and angles, tides and currents, fundamentals of electronic navigation
        - Junior Navigation - working knowledge of celestial navigation, concept of celestial sphere, identification of celestial bodies, and advanced plotting techniques
        - Navigation - advanced concepts and skills of navigation
        - Engine Maintenance - operating principles of gasoline and diesel engines, trouble shooting, temporary remedies, and safety procedures

        - Instructor Qualification - practical skills and use of teaching aids for teaching courses
        - Marine Electronics - essential knowledge about electrical and electronic systems
        - Sail - terminology; types of hulls and rigs; running standing rigging; techniques for adjusting to wind and waves; sail handling, storm survival, sail instrumentation; marlinspike techniques; and sailboat emergencies
        - Weather - awareness of weather phenomena and impact upon boating
        - Compass Adjusting - various methods of ensuring precision of compass
        - Skipper Saver - basic skills of operating a boat safely in an emergency
        - Preparation for Coast Guard License - rules of the road, seamanship, weather, piloting, and damage control in preparation for USCG license exam
        - Principles of Water Skiing Safety - basic techniques, safety procedures, types of skis, and skier responsibility
        - Additional courses are listed on LMPS website.

    - **Future Boating Courses for the General Public** - The USPS is considering making available to the public several of the above courses which are currently available to members only.

- Civic Service

In addition to the boating safety courses, the LMPS performs a number of other civic service activities which are as follows:

    - **Reference lights** - LMPS spends many hours each month inspecting and repairing the reference lights on Lake Murray to ensure they are operating within prescribed functional limits and are compliant with federal, state and local regulations.
    - **Shoal marker inspection** - LMPS conducts annual checks of all shoal markers on Lake Murray to ensure presence, positioning. Any problems are reported to the SC Department of Natural Resources (SCDNR) for repair.
    - **Vessel Safety Checks** - LMPS has many certified inspectors that examine recreational vessels to ensure the presence of functioning marine safety equipment, clarify boating regulations, emphasize safety procedures, and encourage boater education. This inspection program originally was conducted solely by the Coast Guard Auxiliary; however, in an effort to expand this important inspection program, the US Coast Guard enlisted the help of the USPS.
    - **Adopt an Island Program** - LMPS conducts an annual clean-up of Rock Island in cooperation with SCDNR.

- **Geodetic Marks** - ensure presence of small brass plates that provide geographic framework for mapping and charting, boundaries and property lines, and setting precise positions of space craft and satellites.

- Additional Information About LMPS and USPS

For additional information about LMPS and USPS, and the activities mentioned above as well as our fraternal boating activities, please visit our websites at: www.lmpsonline.org and www.usps.org.

Geographic Area Covered: Midlands of South Carolina with emphasis on Lake Murray

Number of Personnel: LMPS has over 300 members who volunteer their time and resources to carry out the mission of the LMPS.

Response From: Suzanne Rhodes

Name of Organization: South Carolina Wildlife Federation

Safety Activities Involved In: River Sports - Fishing, Canoeing, Overnight Camping On Lower Saluda

Geographic Area Covered: Lake Murray and Lower Saluda River

Number of Personnel: No dedicated personnel

Other: Concern that there is woefully insufficient notice below the dam when the water is released for power production. This puts citizens at risk - those who are not paying attention, who are using the waters recreationally - perhaps for the first time - and also those who are then called upon to rescue. The Federation's primary concern is wildlife habitat, but habitat of persons is also of concern. The Federation has raised this issue previously.

Response From: Steve Bell

Name of Organization: Lake Murray Watch- Committed to protecting and enhancing the project's environmental and recreational resources

Safety Activities Involved In: Lake Watch Volunteers report unsafe conditions and activities

Geographic Area Covered: Lake Murray and the Lower Saluda

Number of Personnel: Approximately 16 members on the Lake and 2 on the river.

Other: Our goal in this committee - To seek changes in Saluda Hydro operations that will protect public safety for recreational users in the lake in the lower Saluda

Response From: Harvin Brock

Name of Organization: South Carolina Department of Natural Resources

Safety Activities Involved In: Richland and Lexington County Officers are trained in Swift Water Rescues. This training was done in conjunction with the Columbia Fire Dept. and incorporated the DNR helicopter. The helicopter was been given to SLED so our involvement is by boat and from the river bank. Lexington County has a river rescue boat with a jet motor and Richland has a Zodiac boat.

Geographic Area Covered: Richland and Lexington County Officers respond to emergencies in LSR and Lake Murray.

Number of Personnel: Lexington County has 5 Officers with 1 a member of the DNR AIR Team (Ken Simmons)

Richland County has 5 Officers with 1 member of the DNR AIR Team (Tony Walker)

U.S. COAST GUARD AUXILIARY
LAKE MURRAY STATION

WHO ARE WE?

Since its creation by Congress in 1939, the U.S. Coast Guard Auxiliary has served as the civilian, non-military component of the Coast Guard. The Lake Murray Flotilla, which was chartered in 1947, is part of a 35,000 member force of volunteer men and women who are active on the waterways and classrooms in over 2,000 cities and towns across the nation. The Lake Murray Station is considered by U.S. Coast Guard Charleston Sector to be their presence on Lake Murray.

WHAT ARE OUR RESPONSIBILITIES?

The Lake Murray Station provides the following services for boaters on Lake Murray and the surrounding area residents:

**For twenty five plus years, the Flotilla has conducted safety patrols on the lake. These patrols are conducted from privately owned vessels which are specially equipped, inspected and certified by the USCG for handling emergency operations such as collisions, fires aboard and sinking boats.

**In 2004, the Flotilla was assigned a dedicated patrol boat by the Coast Guard for use on Lake Murray. This facility, Unit 1, is on 24/7 standby at Flotilla Island in the event of an on-water emergency.

**The Flotilla maintains the marine radio network for use by boaters on Lake Murray in the event of an emergency. This elaborate communications system allows for communications even in the far reaches of the lake by boaters who are in need of assistance.

**The Flotilla, through a mutual agreement with the National Weather Service, provides for a site and communications link to collect weather data on the shore of the lake. This data is collected and disseminated by the NWS on weather radio frequencies to boaters and residents on the lake.

**In the event of an emergency, the Flotilla will assist boaters who otherwise cannot receive towing services form the commercial tow boats now operating on the lake.

**The Flotilla has developed special skills through constant training to handle special events in conjunction with the law enforcements agencies on the lake. Such events as sailing regattas, triathlons, boat races, holiday events, etc. are handled when requested and require a high level of nautical skills on the part of the Auxiliary in order to perform those duties.

**The Flotilla has members who have completed U.S. Coast Guard developed training in crew, coxswain, pilot, air observer, radio watchstander, weather, search and rescue, advanced navigation, patrol operations, etc. The Flotilla membership has expended hundreds of volunteer hours in this training to assure that we are ready when the call comes to assist boaters on the lake.

**The on-water activities are only a portion of the services provided to the boating public. The Flotilla conducts numerous training classes each year which are available to the public for a minimal fee. We are in the process of adding to the number of available courses.

**The Flotilla inspects recreational boats as a courtesy to the owners when requested. This program assists in eliminating a problem before it develops into an on-water emergency. We schedule Vessel Courtesy Inspections at each of the major marinas and launch sites on the lake each year to assure public access to this important program.

**The Flotilla, after the September 11 disaster, now serves as the eyes and ears for the Coast Guard and law enforcement for suspicious activities on and around the shores of the lake. During the Sept. 11 crisis, at the request of the U.S. Coast Guard, we provided 24/7 patrols of the major inland lakes where critical power generation equipment is located.

**The Flotilla maintains a service of distributing water safety literature through periodic visits to the area marinas, marine supply stores, visitation centers ,etc. where we furnish counter displays stocked with the brochures. This is another Auxiliary effort to educate and reach out to the boating public in order to prevent accidents on the lake.

WHAT ARE OUR CAPABILITIES?

**We maintain seven patrol boats including the dedicated Unit 1. In addition, we have two other patrol boats, one each located at Lake Greenwood and Lake Wateree that can be transported to Lake Murray as required.

**We maintain six radio operational units in addition to the marine radios which are required equipment for each operational patrol boat.

**We currently have 41 members on our active roster and they can be responded through the use of our alert communications tree. Most members live on or close to the lake and can be under way in minutes.

**Each patrol boat is equipped with and annually inspected for a detailed list of U.S. Coast Guard required items such as towing bridles and lines, advanced first aid kits, PEPIRP location device, VHF radio, depth sounder, GPS, extra PFD's, signal flare kits, heaving lines, night operations equipment, etc. Each crew member who serves during the winter months is equipped with winter survival suits.

Kacie Jensen

From: Alison Guth
Sent: Thursday, January 05, 2006 4:07 PM
To: 'arsbhs@bellsouth.net'; 'cfdwaxson@columbiasc.net'; Alan Stuart; 'marshallb@dnr.sc.gov'; 'bill25@sc.rr.com'; 'cheetahtrk@yahoo.com'; Dave Anderson; 'pricedc@dhec.sc.gov'; 'dchristie@infoave.net'; 'eschnepel@sc.rr.com'; 'kayakduke@bellsouth.net'; 'gjobsis@americanrivers.org'; 'meddynamic@aol.com'; 'kakustafik@columbiasc.net'; 'Lbarber@sc.rr.com'; 'Malcolml@mailbox.sc.edu'; 'miriam@lakemurraycountry.com'; 'PatrickM@scccl.org'; 'bellsteve9339@bellsouth.net'; 'suzrhodes@juno.com'; 'tboozer@scana.com'; 'bargentieri@scana.com'; 'rmahan@scana.com'; 'mark_Leao@fws.gov'; 'Amanda_Hill@fws.gov'; 'Elymay2@aol.com'; 'skfox@sc.rr.com'
Subject: Draft Safety RCG Mission Statement

Dear Safety Group,

In our last meeting we both discussed and revised a mission statement for the group. Please look over the attached copy and let me know of any more comments that you may have on it. Please send me your comments by Jan. 19th. Thanks, and let me know if you have any questions. ~ Alison

Group Input Safety RCG Mission...

Alison Guth
Licensing Coordinator
Kleinschmidt Associates
101 Trade Zone Drive
Suite 21A
West Columbia, SC 29170
P: (803) 822-3177
F: (803) 822-3183

SAFETY RESOURCE CONSERVATION GROUP

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 safer 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.

Kacie Jensen

From: Alison Guth
Sent: Tuesday, January 03, 2006 4:49 PM
To: Alan Stuart; Dave Anderson; Bret Hoffman; 'gjobsis@americanrivers.org'; 'arsbhs@bellsouth.net'; 'bargentieri@scana.com'; 'marshallb@dnr.sc.gov'; 'bellsteve9339 @bellsouth.net'; 'dchristie@infoave.net'; 'meddynamic@aol.com'; 'playinhookyii@aol.com'; 'Bill Mathias'; 'skfox@sc.rr.com'; 'lbarber@sc.rr.com'; 'kakustafik@columbiasc.net'; 'cheetahtrk@yahoo.com'; 'kayakduke@bellsouth.net'; 'rmahan@scana.com'; 'dhancock@scana.com'; 'Norm@sc.rr.com'; 'tboozer@scana.com'
Subject: Draft Safety Meeting Notes

Good Afternoon All,

Attached is a copy of the draft November 16th Safety RCG Meeting Notes for your review. Please have comments back to me by January 17th for revisions. You may also present any comments you have on the meeting notes to me before or after the Safety RCG meeting next Tuesday. Thanks for your time, and as always, feel free to email me with any questions. ~Alison

2005-11-16 draft Meeting Minut...

Alison Guth
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MEETING NOTES

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

SCE&G Training Center
November 16, 2005

Draft acg 12-22-06

ATTENDEES:

Bill Argentieri, SCE&G
Alison Guth, Kleinschmidt Associates
Dave Anderson, Kleinschmidt Associates
Randy Mahan, SCANA Services
Gerrit Jobsis, SCCCL & Am. Rivers
Dick Christie, SCDNR
David Price, Lake Murray Power Squadron
Kenneth Fox, LMA
George Duke, LMHOC
Karen Kustafik, City of Cola. Parks & Rec.
Norman Ferris, Saluda Trout Unlimited
Bill Marshall, SCDNR & LSSRAC
Alan Stuart, Kleinschmidt Associates
Steve Bell, Lake Watch
Bret Hoffman, Kleinschmidt Associates
Ken Uschelbec, U.S. Coast Guard Auxiliary
Aaron Small, U.S. Coast Guard Auxiliary
Jerry Wise, Lake Murray Power Squadron
Bill Mathias, LMA & LMPS
David Hancock, SCE&G
Lee Barber, LMA
Charlene Coleman, American Whitewater
Tommy Boozer, SCE&G

HOMEWORK ITEMS:

- Each organization is to come up with a description of its organization and background information on its organization to present to the group – forward to Dave Anderson
- Each entity will list the issues and goals they feel are valuable and important – forward to Dave Anderson
- Review the ICD

PARKING LOT ITEMS:

- Cover operational procedures

DATE OF NEXT MEETING: **January 10, 2006 at 9:30 a.m.**
Located at the Lake Murray Training Center

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.

Alan Stuart opened the meeting and noted that this group was formed as an ad-hoc group at the request of many individuals. There was brief discussion on the possibility of the Safety group continuing to meet after Relicensing. SCE&G explained that there was a committee in the late 80's that met to discuss safety issues around the lake. Alan explained that he expected that the role of this group would be to discuss project related safety issues.

The group then began to discuss the operating procedures and Alan was asked to discuss the format of the TWC. He noted that once an issue comes up, and a study is required, a technical working committee is formed out of those individuals that are knowledgeable of those particular subjects.

In a discussion on some of the particular safety issues associated with the reservoir, Randy noted that SCE&G was working to develop a system to provide as much information to individuals as was reasonably possible. However, he explained that because the Project is used as reserve there was going to be the need to release at a moments notice which could change what they may have originally projected. Randy pointed out that it was important that people did not function completely on the assumption that any projected flows that may be given do not have the possibility of changing. He further noted that if any projected flows were given, it did not take away the need for personal responsibility.

A stakeholder noted that he believed that during Relicensing the group would look at a wide range of operations not excluding run of the river. SCE&G replied that safety was a major concern for them but it would not be possible to operate the project run of river due to the huge reservoir. SCE&G explained that a run of river project generally has little to no storage and is more like Columbia Canal or Neal Shoals.

Operations Presentation

Lee began his presentation on the operation of Saluda Hydro. The group discussed several questions that came up during the course of the presentation.

One discussion centered around the role that weather events have on lake levels. The group considered that SCE&G does not control inflow to the lake. It was pointed out that through operation they could decrease the lake a couple feet in a few days, however they could not let the lake fill up in a few days without a rainfall event. Lee Xanthakos pointed out that because the

project was operated for reserve, if a plant trips and Saluda is needed for 90 minutes, the impact on the Lake is miniscule. Lee further pointed out that sometimes more than one plant trips and, hypothetically, if Saluda is fully loaded for a 24 hour period of time the Lake would only drop about 6 inches.

Discussions turned to the external factors that cause lake levels to drop other than generation. It was noted that certain times of year necessitate an intentional lake level drop to accommodate a potential storm. It was also noted that evaporation takes large quantities of water out of the lake on a hot summer afternoon. Lee noted that in the summer they typically lose about 6 inches a week in evaporation

In a discussion on hurricanes and the release of water from the lake, questions arose as to why a drawdown is necessary if you could open the spillway gates in an emergency. SCE&G noted that they are required to use the resource in a prudent manner according to the Public Service Commission and FERC.

Mission Statement & Other Discussions

Alan Stuart noted that the group would now begin to discuss the mission statement and come up with issues. He added that they have put together a draft mission statement for consideration and they have listed goals and issues as a group. He noted that he would like everyone to read the draft and note any changes that need to be made. As the group considered the mission statement there were several topics brought up for discussion. Randy Mahan noted that the scope of this group has the potential to be very broad, however it may be important to focus on what would be involved in Relicensing and what will be addressed in the application. Eventually, the group could focus on broader issues as it continues on after Relicensing. Tommy Boozer noted that he believed that the safety issues on the lake will mainly focus on the public use of the Lake and recreational facilities. Gerrit Jobsis reiterated that he believed that the group needs to let SCE&G coordinate and discuss with safety agencies on those non-relicensing situations but focus on relicensing issues for now.

The group began to briefly discuss the Emergency Action Plan and discussions turned to the option of merging the safety and recreation groups. The group also discussed the option of combining the recreation and safety groups but separating the Lake and River issues into two separate groups. It was concluded that a decision regarding this issue would be made at a later date; however, the group did note that it may be beneficial to split up the agenda and discuss River related safety issues in the morning and Lake safety issues in the afternoon.

The group began to discuss the mission statement in more detail and some word changes were made. Lee Barber noted that he understood that there was a degree at which people had exercise

personal responsibility and judgment, although added education may be helpful or necessary, which in turn might be mentioned in the mission statement. The group did note however that there could be numerous more sirens put and place and it still may not effect how some individuals choose to act. It was also asked as to where the project boundary extended to on the LSR. It was noted that it extends to the transmission lines at the rapids.

Steve Bell asked what would happen to a safety plan once the group came to a consensus on it. The group replied that it would go in as an element of the comprehensive PM&E agreement. If agreement was not reached on it then SCE&G would have to state their reasons for not including it in the application and individuals could submit letters to the FERC separately. Dick Christie pointed out that by his definition, the only way you could have consensus as a group is if it is something that everyone can live with, maybe not love, but live with. He noted that if it is something that SCE&G disagrees with then it is not going to be a consensus. Randy Mahan also noted that one should not always assume that the public interests and SCE&G's interests are completely different, and that the goal is to go through the interests and come up with a balance.

Bill Marshall expressed concern as to whether what was being accomplished in the group would ultimately be vetoed by SCE&G management and noted that he believed it was incumbent that SCE&G note what they could not live with during the group sessions. Randy Mahan agreed and noted that it was also the responsibility of the individuals in the group to let the group know if it was something that they could not live with as well.

Alan briefly noted that Kleinschmidt Associates and SCE&G was coming up with a Workplan that will be based on the mission statement of the group. He noted that it will identify items that need to accomplish in the group and how the group is going to go about accomplishing the items.

Discussions then turned to presentations and one individual questioned whether or not any participating member would have the ability to make presentations to the group. Alan noted that they would have the opportunity to place the topic item on an agenda for the next meeting. Alan also began to discuss the "Parking Lot" and noted that all of the parking lot issues would be addressed at the appropriate time. He noted that the Parking Lot was in place in order to promote the flow through the agenda.

The group then began to briefly discuss confidentiality as it has to do with settlement negotiations. A group member noted concern as to compromised issues, and noted that if concessions had to be made it was important that confidentiality was in place. Randy agreed that that was fair and it would be looked into. One individual asked if they could bring a tape recorder into group meetings. Consequently, the group decided that tape recorders should not be allowed in part because it may discourage individuals from speaking freely.

The group then began to discuss the need for more county representatives and local law enforcement officials at the group meetings. It was noted that a special invitation may be necessary. Aaron Small noted that he would contact the resident deputy of Lake Murray and Tommy Boozer noted that he would contact Skeet Mills and the DNR law enforcement. The group also noted that it may be beneficial to include the Lexington County Sheriff and West Columbia Rescue.

Alan noted that comments were received on the Operating Procedures and Kleinschmidt Associates and SCE&G are working on a second version.

As a homework item the group decided that a representative from each of the participating organizations should present a list of their interests to the group at the next meeting. It was also requested that enough copies be provided so that they can be passed out to the group. The group also decided that each entity represented would provide a group description and background that would be sent to Dave Anderson at Kleinschmidt Associates with a deadline of December 7th.

The agenda for this meeting is attached below.

MEETING NOTES

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

SCE&G Training Center
November 16, 2005

Draft acg 12-22-06

Saluda Hydro Relicensing
Safety Resource Conservation Group

Meeting Agenda

November 16, 2005
9:30 AM
Lake Murray Training Center

- **9:35 to 9:45** Introduction
  - SCE&G and KA Staff
  - Resource Agency Representatives
  - NGO Representatives
  - Individuals
- **9:45 to 10:00** Purpose of Resource Groups
- **10:00 to 11:00** **Presentation – Saluda Hydro Operations – Lee Xanthakos SCANA Services**
- **11:00 to 11:45** Develop Safety RCG Mission Statement
- **11:45 to 12:45** Lunch
- **1:00 to 2:00** Discuss Safety RCG procedures
- **2:00 to 2:30** Develop List of Homework Assignments
- **2:30 to 2:45** Develop an Agenda for Next Meeting
- **2:45 to 3:00** Set Next Meeting Date

  Adjourn