

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
WATER QUALITY TECHNICAL WORKING COMMITTEE**

***Via Conference Call  
March 6, 2006***

final csb 04032006

---

**ATTENDEES:**

Bill Argentieri, SCE&G  
Reed Bull, Midlands Striper Club  
Alison Guth, Kleinschmidt  
Shane Boring, Kleinschmidt\*  
Gerrit Jobsis, SCCCL & Am. Rivers

Tom Bowles, SCE&G  
Dan Tufford, USC  
Richard Kidder, LMA  
Ron Ahle, SCDNR

\*Facilitator

---

**ACTION ITEMS:**

- Incorporate agreed-to changes to study plan and distribute as final.  
*Shane Boring*

**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.*

Shane opened the meeting at approximately 2:00 pm, noting that its primary purpose would be to review the draft temperature study plan (attached), which was distributed to the TWC via e-mail on March 1<sup>st</sup>. The group then discussed needed changes to the plan, which are summarized below.

Sampling Locations

The group agreed that, in addition to the locations indicated in the draft study plan, Tidbit temperature loggers should be placed at the following locations:

- at the USGS gage below the dam to verify data recorded by the USGS Gage;
- on the Broad, at the head structure to the Columbia Canal; and
- in the Congaree between I-77 and the upstream extent of Congaree National Park.

Ron noted that an additional sampling location in the Broad is needed to ensure that data is available for the Broad should the sensor at the head of the Columbia Canal fail. Bill A. proposed, and the group agreed, that temperature data from the USGS gage below Parr Hydro (02160991) could be used for this purpose.

**MEETING NOTES**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY  
SALUDA HYDRO PROJECT RELICENSING  
WATER QUALITY TECHNICAL WORKING COMMITTEE**

***Via Conference Call  
March 6, 2006***

final csb 04032006

---

Gerrit noted that the sensors located in the vicinity of the I-77 bridge should be placed upstream of the Columbia wastewater treatment plant to avoid influence from the facility. It was similarly noted that the most downstream sensor (near the downstream extent of Congaree NP and the confluence with the Wateree) should be located far enough upstream to avoid backwater effects of the Wateree. It was also noted that the site added between I-77 and Congaree NP should be sufficient distance (approx. ½ mile) to avoid influence by the Eastman Kodak (Viridian) Plant. Gerrit also suggested placing a sensor adjacent to the USGS gage at Congaree NP (02169625) to examine correlations between stage and temperature. The group agreed that this location could be used that the upstream location for Congaree NP.

It was also noted that the USGS gage at Riverbanks Zoo should be added to the map.

**Study Reporting / Data Availability**

Gerrit requested a meeting of the TWC following each 6-month update report and that the data collected to date be shared with the TWC following each 6-month period. The group agreed and Shane agreed to incorporate these changes into the study plan.

**Study Implementation**

Several attendees enquired as to when the study would begin. Bill A. noted the purchase order would likely be issued by the end of the month, at which time the study will begin.

The meeting was closed the meeting at approximately 2:30 PM. Shane noted that he would incorporate the agreed-to changes into an updated study plan and distribute it along with the draft meeting notes.

## **Saluda Hydroelectric Project (FERC No. 516)**

### **Study Plan: Effects of Releases from the Saluda Hydroelectric Project Dam on the Temperature Regime of the Lower Saluda and Congaree Rivers**

Water Quality Technical Working Committee  
DRAFT February 28, 2006

#### **I. Study Objective**

The study objective is to characterize the effects of water releases from the Saluda Hydroelectric Project Dam on the temperature regime of the Lower Saluda River (LSR) and Congaree River, including downstream extent of temperature alteration, timing and duration of temperature alteration, and mixing characteristics.

#### **II. Geographic and Temporal Scope**

Temperature investigations will focus on the LSR from downstream of Saluda Hydro Dam to its confluence with the Broad River; the Congaree River from its origin at the confluence of the Saluda and Broad rivers to its terminus at the confluence with the Wateree River; and the lower Broad River from the Alston USGS gage (#02161000) to its terminus at the confluence with the Saluda (Figure 1).

The study is scheduled to begin in March 2006 and will continue through October 2007.

#### **III. Methodology**

Water temperature data will be acquired at 15 minute intervals (or lowest time duration above 15 minute intervals allowable by the instrumentation) from 8 locations in the study area, as determined in consultation with the resource agencies (Figure 1). Specifically, the USGS gages at Alston (#02161000) and below Lake Murray (# 02168504 and #02169000) will be used to characterize the temperature regime in the lower Broad and the lower Saluda rivers, respectively. In addition, paired temperature probes (StowAway<sup>®</sup> TidbiT<sup>™</sup>) will be deployed along the north and south riverbank at the following locations to provide temperature data for the remainder of the study area:

- the LSR upstream of the confluence with the Broad (possible in the vicinity of Riverbanks Zoo);
- the Congaree River in the vicinity of the USGS gage adjacent to downtown Columbia (#2169500);
- the Congaree River in the vicinity of the Interstate-77 bridge;
- the Congaree River at the upstream extent of the Congaree National Park;
- the Congaree River midway of the Congaree National Park; and
- the Congaree River near the downstream extent of the Congaree National Park (near the confluence with the Wateree).

Temperature data will be compared by location using appropriate statistical methods to determine timing, duration, magnitude, and spatial extent of temperature alterations.

**IV. Schedule and Required Conditions**

The study is scheduled to begin in March 2006 and will continue through October 2007.

A brief report summarizing the study’s status will be issued at 6-month intervals, with a final report upon completion of the study period. Study methodology, timing, and duration may be adjusted based on consultation with the resource agencies.

**V. Use of Study Results**

Study results will be used as an information resource during discussion of relicensing issues with the SCDNR, USFWS, Water Quality RCG and TWC, and other relicensing stakeholders.

**VI. Study Participants**

NAME	ORGANIZATION	PHONE	E-MAIL
<i>Water Quality Technical Working Committee</i>			
Gina Kirkland	SCDHEC	(803) 898-4250	<a href="mailto:KIRKLAGL@dhec.sc.gov">KIRKLAGL@dhec.sc.gov</a>
Gerrit Jobsis	American Rivers	(803)771-7114 x 22	<a href="mailto:gjobsis@americanrivers.org">gjobsis@americanrivers.org</a>
Reed Bull	Midlands Striper Cl.	(803)256-4121	<a href="mailto:bbull@sc.rr.com">bbull@sc.rr.com</a>
Ron Ahle	SCDNR	(803)743-2728	<a href="mailto:ahler@scdnr.gov">ahler@scdnr.gov</a>
Roy Parker	LMA	(803)808-7188	<a href="mailto:royparker38@earthlink.net">royparker38@earthlink.net</a>
Dan Tufford	USC Dept. of Biol.	(803)777-3292	<a href="mailto:tufford@sc.edu">tufford@sc.edu</a>
Tom Bowles	SCE&G	(803)217-9615	<a href="mailto:tbowles@scana.com">tbowles@scana.com</a>
Andy Miller	SCDHEC	(803)898-4031	<a href="mailto:millerca@dhec.sc.gov">millerca@dhec.sc.gov</a>
Alan Stuart	Kleinschmidt	(803)822-3177	<a href="mailto:Alan.stuart@kleinschmidtusa.com">Alan.stuart@kleinschmidtusa.com</a>
Richard Kidder	LMA	(803)892-6539	<a href="mailto:rkidder@pbtcomm.net">rkidder@pbtcomm.net</a>
Jim Ruane	REMI	(423)266-5217	<a href="mailto:jimruane@comcast.net">jimruane@comcast.net</a>
Amanda Hill	USFWS	(843)727-4707, x303	<a href="mailto:Amanda_hill@fws.gov">Amanda_hill@fws.gov</a>
Shane Boring	Kleinschmidt	(803)822-3177	<a href="mailto:shane.boring@kleinschmidtusa.com">shane.boring@kleinschmidtusa.com</a>
<i>Applicant Contacts</i>			
Stephen E. Summer	SCANA Services	(803)217-7357	<a href="mailto:ssummer@scana.com">ssummer@scana.com</a>
William Argentieri	SCE&G	(803)217-9162	<a href="mailto:bargentieri@scana.com">bargentieri@scana.com</a>
Randy Mahan	SCANA Services	(803)217-9538	<a href="mailto:rmahan@scana.com">rmahan@scana.com</a>

**VII. List of Attachments**

Figure 1: Temperature Probe Locations in the Lower Saluda, Congaree and Lower Broad River

