MEETING NOTES

SOUTH CAROLINA ELECTRIC & GAS COMPANY
Water Quality, Fish and Wildlife RCG Meeting

February 12, 2013

Final KDM 03-29-13

ATTENDEES:

Steve Summer (SCANA)
Milton Quattlebaum (SCANA)
Frank Henning (Congaree National Park NPS)
Hal Beard (SCDNR)
Dick Christie (SCDNR)
Bill Stangler (Congaree Riverkeeper)
Robert Stroud (SCDNR)
Mark Caldwell (USFWS)
Malcolm Leaphart (Congaree Riverkeeper)
Ron Ahle (SCDNR)
Tom McCoy (USFWS)
Pace Wilber (NOAA)
Joseph Wojcicki (By-PAS)
Gerrit Jobsis (American Rivers)
Rusty Wenerick (SCDHEC)
Prescott Brownell (NOAA)
Bill Marshall (SCDNR)
Ray Ammarell (SCE&G)
Randy Mahan (SCANA)
Bill Argentieri (SCE&G)
Shane Boring (Kleinschmidt)
Kelly Miller (Kleinschmidt)
Alan Stuart (Kleinschmidt)
Fritz Rohde (NOAA) via Conf. Call
Karla Reece (NOAA) via Conf. Call

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 opens the meeting by reviewing the agenda. The purpose of this meeting is to identify study needs and review, edit and finalize a mission statement for the Water Quality, Fish and Wildlife Resource Conservation Group.

The group begins with a draft mission statement and edits it until consensus is reached. The mission statement for the Water Quality, Fish and Wildlife RCG is as follows:

> "The mission of the Water Quality, Fish and Wildlife Resource Conservation Group is to develop recommendations relative to public trust resources (i.e. water quality, water quantity, fish and wildlife, etc) for inclusion in a Protection, Mitigation and Enhancement Agreement (PM&E Agreement). The purpose of the PM&E Agreement is to provide resource management recommendations for inclusion within the Parr Fairfield Hydroelectric Project license application."

After finalizing the WQFW RCG mission statement, Bill focuses the meeting toward identifying information and study needs for the group. He begins with listing all of the study needs the agencies and NGOs submitted during the project kick-off. These include:

- Entrainment and Impingement Study at FFPS and the Parr Dam

- Sediment Study
- Information about the mile long west side of the island located below the Parr Dam
- Temperature and other effects of the expanding VCS Nuclear Plant
- Instream flow requirements below Parr Dam
- Limited habitat assessment/characterization upstream of the Parr Project Boundary Line

Bill then asked the group to share any further study requests or information needs they had for the Project. Ron begins by discussing a potential spawning area for the Robust Redhorse, located just below the dam. He explains that in 5 years of sampling, that area has consistently shown the highest population, and would like to see a study developed to determine if the species is spawning in this area, when, under what conditions, etc. Ron also lists the need for fish community resource data for Lake Monticello, Parr Reservoir and the Broad River, and a study of the shoreline habitat on Lake Monticello. He believes the habitat has been degrading over time and would like to see if and how this has had an impact on fish communities. Other studies suggested include an American eel population dynamic study below Parr Dam, a waterfowl survey, spider lily survey, macroinvertebrate study, and a mussel and snail survey. Steve Summer mentions that a macro study and a mussel survey are being completed for the expansion of the nuclear plant, so this data will be available for the Parr Project as well. Mark Caldwell suggests a general rare, threatened and endangered species survey should be conducted as well, and notes that any surveys conducted for a listed species must be performed by someone permitted by the US Fish and Wildlife Service. Hal asks the group if an aquatic vegetation survey has been completed for Lake Monticello. An aquatic vegetation survey has not been done and it is added to the list. The idea of creating a water budget for the Project Vicinity is brought up, including historic pre-dam data and evaluating project effects of the downstream water budget. It is decided that this subject will be best dealt with in the Operations RCG. Robert mentions conducting a possible Creel survey. A general water quality study that includes historical to present data covering DO, pH, nutrients, metals and conductivity needs to be performed. Group discussion turned to any available bathymetry of Parr Reservoir. Bill indicated that GEL engineering collected some bathymetric profiles in Parr reservoir as part of a sediment study and indicated this information could be shared with the WQ TWC who was tasked with addressing sediment impacts on aquatic resources. The group concurred this information would be beneficial in moving forward to address this issue. Gerrit asks for an inventory to be developed listing all of the small dams located along tributaries that feed into the Project, but are located outside of the Project Boundary Line. This inventory could be used for evaluating the feasibility of removing some of the dams as a mitigation option. Discussion follows regarding this as outside of the PBL and not within FERC relicensing jurisdiction. Gerrit says that American Rivers already has a preliminary list that the group can build upon. Alan reiterated that this was not in the scope of relicensing but in the interest of maintaining open communication and information exchange between the interested parties and asks Gerrit if he would like the opportunity to give a presentation on the existing data. Gerrit agrees to this. Hal mentions that removing a dam is not always the best option in some cases, especially in regards to sediment release. This is something to keep in mind if dam removal does become an option.

Pace requests a copy of a GIS map of the Project Boundary Line. Gerrit also requests a map of SCE&G land holdings downstream of the Parr Dam. Bill A mentioned that these lands are outside of the Parr Project boundary and not within the FERC relicensing jurisdiction.

The group then focuses on developing Technical Working Committees and deciding which studies need to be addressed in which TWCs, versus the RCG as a whole. The group also evaluates which

study requests can be addressed by existing data and which issues should be dealt with in a different RCG. It is decided that the aquatic vegetation survey should be included as part of the Lake and Land Management and Recreation RCG. Information regarding water temperatures and anticipated effects of the new nuclear facilities can be found in the FEIS for that project and the thermal plume study conducted for the new nuclear project's NPDES.

Four TWCs are identified as follows; the Instream Flows TWC; the Water Quality TWC; the Fisheries TWC; and the RT&E TWC. A complete list including all study requests identified and which TWC they have been assigned to is attached at the end of the notes. The TWCs are composed of the following WQFW RCG stakeholders:

- Instream Flows TWC – Gerrit Jobsis, Dick Christie, Bill Marshall, Ron Ahle, Bill Stangler, Prescott Brownell, Tom McCoy, Scott Harder, Steve Summer, Milton Quattlebaum, Bill Argentieri, Alan Stuart, Kelly Miller
- Water Quality TWC – Gerrit Jobsis, Bill Marshall, Ron Ahle, Bill Stangler, Jaclyn Daly, Rusty Wenerick, Tom McCoy, David Eargle, Scott Castleberry, Steve Summer, Milton Quattlebaum, Bill Argentieri, Alan Stuart, Kelly Miller
- Fisheries TWC – Milton Quattlebaum, Steve Summer, Gerrit Jobsis, Ron Ahle, Dick Christie, Tom McCoy, Fritz Rohde, Hal Beard and/or Robert Stroud, Chad Altman, Bill Argentieri, Alan Stuart, Kelly Miller
- RT&E TWC – Gerrit Jobsis, Bill Marshall, Bill Stangler, Tom McCoy, Karla Reece, David Eargle, Scott Castleberry, Steve Summer, Milton Quattlebaum, Bill Argentieri, Alan Stuart, Kelly Miller

During discussion of the various studies, an evaluation of diadromous fish passage alternatives was mentioned as a possible study to be included as part of the Santee River Basin Accord for Diadromous Fish Protection, Restoration, and Enhancement. Sometime in the near future it is proposed that SCDNR present to the group an overview of current studies completed and ongoing as part of the Santee River Basin Accord.

The WQ TWC members decide that a WQ TWC meeting should be held before the float trips that are scheduled for March. Gerrit asks if it will be possible to set up recurring meeting dates for some of the groups, bunched together over a few days in a week. Bill says this idea will be considered.

With this, the meeting adjourned. Action items stemming from this meeting are listed below.

ACTION ITEMS:

- SCE&G will develop a conceptual plan for an Entrainment and Impingement study for the Fisheries TWC to review.
- SCE&G will develop a conceptual plan for a Waterfowl Survey for the RCG to review.
- Bill A will provide GIS data of Parr PBL

- Gerrit will schedule a time to present information about small dams located within the Project Vicinity.
- SCDNR will present an overview of the current studies being conducted under the Santee Basin Accord
- Kelly will set up a Doodle Poll and schedule a WQ TWC meeting for late February/early March.

Water Quality, Fish and Wildlife RCG Study Requests

Instream Flows TWC

- Information of in-stream flow requirements below Parr Dam
- Information about aquatic habitat conditions in mile-long section on west side of island of the Broad River immediately below the dam.
- Habitat assessment upstream of Parr Dam to the end of the Project Boundary
- Limited habitat assessment upstream of Parr Project Boundary

RT&E TWC

- Mussel and snail survey
- Crayfish survey
- RT&E survey
- Spider lily survey

Fisheries TWC

- American shad spawning below Parr Dam
- Diadromous fish passage alternatives evaluation
- Information about fish entrainment and impingement at Fairfield PSS and Parr Dam - SCE&G develop conceptual for RCG review
- Robust Redhorse spawning area just below Parr Dam
- Fish community resource data on Parr, Monticello reservoirs and Broad River
- Shoreline habitat on Monticello Reservoir
- American eel abundance (population dynamics)

Water Quality TWC

- Any study or report about the dynamics of the sediment/sand movements and load throughout a year with the operations of the Project
- Historical water quality data
- Project effects on water quality
- Description of water temperatures and anticipated effects of existing and expanding nuclear facilities – FEIS and thermal plume study for new nuclear
- Macroinvertebrate survey

WQFW RCG

- Inventory of small dams for feasibility of removal potential offsite mitigation – evaluate details for RCG review
- Waterfowl survey - SCE&G develop study plan for RCG review and approval