MEETING NOTES

SOUTH CAROLINA ELECTRIC & GAS COMPANY Operations RCG Meeting

February 19, 2013

Final KDM 03-29-13

ATTENDEES:

Milton Quattlebaum (SCANA) Dick Christie (SCDNR) Robert Stroud (SCDNR) Malcolm Leaphart (Congaree Riverkeeper) Gerrit Jobsis (American Rivers) Tom McCoy (USFWS) Joseph Wojcicki (By-PAS) Bill Stangler (Congaree Riverkeeper) Bill Argentieri (SCE&G) Ray Ammarell (SCE&G) Kelly Miller (Kleinschmidt) Alan Stuart (Kleinschmidt) Bret Hoffman (Kleinschmidt) Prescott Brownell (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.

The meeting opened with the group working to develop a mission statement for the Operations RCG. Dick presented an initial mission statement and the group tweaked it until consensus was reached. The mission statement for the Operations RCG is as follows:

"The Mission of the Operations Resource Conservation Group (ORCG) is to develop consensus based recommendations for inclusion in the FERC license application that will balance the need for flexible, efficient hydropower operation with the interests of stakeholders as identified in the Lake and Land Management, Recreation and Water Quality, Fish and Wildlife RCGs."

The group then shifts focus to discussing the possibility of developing a water budget/model for the Broad River in the Project Vicinity, using as much information as is available. The State may be creating a water budget for all of South Carolina within the next two years. This is something to stay aware of, as it will provide information for the Project water budget. The consideration of Project effects on the downstream water budget is an important piece of the overall model. Bret mentions that the information used to create the model needs to include any upstream changes, such as withdraws or changes in upstream project operations, as these could shift the curve of the model. The group also wants to find information regarding the projected long term water demands on the Broad River.

Now that the Operations RCG is formed, Bill A will provide a reference sheet with the Fairfield Pumped Storage and Parr Shoals Hydroelectric Plant standard Project numbers information. Dick asks if there are any future plans for changing plant operations. Bill and Ray answer that no changes have been identified at this point.



The group continues to discuss issues and information requests as related to operations. A request is made for instream flow compliance records. Discussion of whether or not a sediment management plan should be included in the operations RCG or in the WQFW RCG. The group decides to keep development of any plan as an operations issue and will decide how to address it in the future if sediment is determined to be problem. Addressing potential sedimentation impacts on the ecosystem will be evaluated in the WQFW TWC and that information will be shared with the Operations RCG. Other issues the group is concerned with are the effects dam operations have on the Congaree River and how project operations affect instream flows. Ray says he will pull together some information sheets for the next meeting to use as a starting point for developing some study plans on these issues. Gerrit mentions that an operational model will be a great tool for aiding the other RCGs and TWCs with some of their issues/decisions. A complete list of Operations Information Needs is included at the end of this document.

Dick asks about trash management at the Parr Dam. Ray explains that the trash rakes are cleaned off periodically, and the collected material is carted off to a separate location to decompose.

Alan asks if anyone wants or needs a presentation on anything to get a better understanding of operations at the Project. Gerrit says he has questions on how the projects operate, considering the nuclear plant, the high flows allowed, and daily operations of the plant during various conditions. Ray says he will get with John Knight and Tom Hanzlik to get this information for the group. Prescott mentions he would like a presentation that shows upstream and downstream habitats and flow conditions in each area. Alan suggests this would be a good presentation for the WQFW RCG. Prescott says he will send some example presentations that include the type of information he wants. Bill S. says he will provide the group with an updated paper that details interactions between the Broad, Saluda, and Congaree Rivers.

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

ACTION ITEMS:

- Bill A will provide a standard Project numbers reference sheet at the next meeting
- Ray will develop a presentation with Project operations information for the next meeting.
- Kelly and Ray will get together to determine the next appropriate meeting time, according to the information Ray is able to find. A doodle poll will then be sent out to the group.
- Bill S. will provide the updated paper on the Broad, Saluda, and Congaree interactions.
- Prescott will provide example presentations showing upstream and downstream habitats and flow conditions in each area.
- Bill A will provide instream flow license compliance records by the next meeting.

Operations Information Needs

- What effects do dam operations have on the Congaree River? It is noted that operations appear to affect the minimum (lower) and maximum (higher) outflows relative to corresponding inflows and that flow pulses increase with flow. Are these measureable at Congaree? The Jobsis (Erich Miarka) study is referenced. (Operations)
- Description of current operations and proposed future operations at the project and related effects on instream flows. (Operations)
- Water budget/allocation model- (Operations)
- Project effects on downstream water budget (Operations)
- What are the projected long term water demands on the Broad River? This will require coordination with the City of Columbia and analysis of their plans for projected population growth and water supply demands. It will also have to consider future demand from facilities like VC Summer and other water users. (Operation)
- o daily operations, low flows, drought, & flood
- o operational constraints
- Information sheet: A comprehensive explanation of the hydro operations at the Parr Shoals Project. Including: daily operations, low flows, drought, flood and status on existing units (working condition) (Operation)
- Information sheet: A comprehensive explanation of the operations at the Fairfield Pump Storage station. Including: daily operations, low flows, drought, & flood. (Operation)
- Future operational plans
- o Instream flow compliance records
- o Sediment management plan
- Low Flow Protocol LFP