

# South Carolina Department of Natural Resources



August 11, 2005

Mr. James M. Landreth, Vice President  
Fossil and HydroOperations  
South Carolina Electric and Gas Company  
111 Research Drive  
Columbia, South Carolina 29203

Attn: Mr. Bill Argentieri

Subject: Saluda Dam Project (FERC Project No. 516)  
First Stage Consultation Comments

Dear Mr. Landreth:

The South Carolina Department of Natural Resources (DNR) has reviewed the *First Stage Consultation Document* for the proposed relicensing of the Saluda Dam. We also participated in the October 26, 27, 28, workshops held in 2004, and attended the Joint Agency/Public meeting on June 16<sup>th</sup>, 2005. We appreciate the opportunity to provide comments on the Initial Consultation Document (ICD) and to present our information needs. We look forward to working with SCE&G in the development of the studies needed to satisfy appropriate information needs.

The current FERC license for the Saluda project expires on August 31, 2010. Many changes have occurred in the basin since the license was awarded in 1984. The Saluda basin has experienced high growth and development in Richland and Lexington counties, and is facing growing demands to meet the needs of industrial and municipal water supplies, wastewater assimilation, residential development, recreation, and natural resources.

Since the last license was issued, important Federal legislation was passed that reflects changes in the way we view our environment. The Clean Water Act reaffirmed the importance society places on water quality. The Federal Power Act granted natural resource agencies such as the DNR standing in the relicensing process. The DNR views the relicensing of the Saluda project as an opportunity to work with SCE&G to protect, enhance and restore natural resources and the associated recreational uses. Our mutual challenge will be to create and implement a vision that will last well into the future.

## **Project Overview**

The Saluda River Basin covers approximately 2,519 square miles and contains 21 watersheds with geographic regions that extend from the Blue Ridge Mountains to the Piedmont. The Saluda River Basin encompasses 1,612,395 acres of which most (67.4%) is forested land. The remainder includes agricultural land (16.2%), urban land (8.4%), scrub-shrub lands (3.4%), barren land

(0.5%), and 0.2% is forested wetland. About 4% is water (SCLRCC 1990). The urban land is comprised of the Cities of Greenville and Columbia, and to a lesser extent the Cities of Laurens and Newberry. There are a total of 2,416.2 stream miles in the Saluda River Basin.

The Saluda River and the Little Saluda River watersheds form the headwaters of Lake Murray. Lake Murray is approximately 48,000 acres and has over 600 miles of shoreline. The average depth of the lake is about 41 feet and the maximum depth is about 190 feet. The lake watershed includes about 1193 square miles.

The South Carolina State Legislature designated a 10-mile segment of the lower Saluda River as a State Scenic River on May 31, 1991. The Lower Saluda River, from the Saluda Dam downstream to the confluence of the Broad River, is recognized as an outstanding recreational resource. Trout and striped bass fishing as well as whitewater (class II to V rapids) and flatwater paddling are very popular on this piedmont river.

### **State Comprehensive Plans**

Five DNR plans relative to the relicensing of this project have been submitted to and accepted by the FERC as Comprehensive Plans. These are: *South Carolina Rivers Assessment* (1988), *Instream Flow Study, Phase I* (1986), *Instream Flow Study, Phase II* (1988), *South Carolina Instream Flow Studies: A Status Report* (1989), and *State Water Plan* (1998, 2004). We recommend that all relicensing activities and new license conditions are consistent with these plans. In addition to these plans, the lower Saluda River is designated as a State Scenic River, and two comprehensive plans have been submitted to the FERC for consideration. They are 1) *The Lower Saluda River Corridor Plan* (1990); and 2) *Lower Saluda Scenic River Corridor Plan Update* (2002).

### **DNR Objectives**

The Department's management objectives for the Saluda Project include the protection, enhancement and restoration of natural resources and their associated values. These objectives are to:

- 1) Insure that the FERC license recognizes that Lake Murray and the Lower Saluda River are important public trust resource, and that the Project is managed to achieve public benefits.
- 2) Maintain and/or enhance the water quality in Lake Murray to meet current use classifications that protect and provide for fish and wildlife habitat, contact recreation, and public water supply.
- 3) Insure the implementation of appropriate instream flows in the lower Saluda River to protect water quality, provide for reasonable navigation, protect fish and wildlife resources, and meet present and future water supply demands (municipal, industrial, agricultural).
- 4) Develop a Water Shortage Contingency Plan consistent with the State Drought Response Act and the State Water Plan.

- 5) Prevent the impairment of appropriate water uses (water supply, navigation, recreation, power generation) by invasive aquatic plants.
- 6) Protect and enhance fish and wildlife populations and their habitat.
- 7) Protect and enhance rare, threatened and endangered plant and animal species.
- 8) Protect and enhance opportunities for fishing, hunting, wildlife viewing and other outdoor recreation.
- 9) Increase recreational safety on the reservoir and the lower Saluda River.
- 10) Protect cultural and historic resources.

### **ICD comments**

Our comments, offered to correct or clarify the information provided in the ICD, follow:

Section 7.1 Project Modification for Consideration – since the Saluda project impacts public resources, we believe it is necessary to examine Project modifications that might enhance or restore those public resources, which include fish and wildlife resources, water resources, and associated public uses of those resources including recreational uses.

Section 7.4.3 Warning Systems – safety of river users below the project is a significant issue, and as recreational use of project resources increase, the safety warning systems and related information needs for river users will also increase. We think public safety should receive a high priority in the development of operational protocols.

Section 8.1 Geological Setting – this section would be improved with a more detailed description of the Eastern Piedmont Fault System. The terms Dreher Shoals terrane and Kiokee belt are used interchangeably. We suggest that you use one term or the other, and we prefer terrane.

Section 8.2 Late Paleozoic Orogeny Deformation Patterns - the list of lithologies seems out of place and should be included in the first section. The map, which is an excellent source of information, does not appear to be properly cited. Also, there are many significant faults in the project area, and we suggest that more information could be provided.

Section 8.3 Tectonic History - the statement that references a "28-30 km limit to earthquakes" is a very generalized statement, which is only partially correct.

Section 8.5 Climate - on average 40 days are above 90 degrees in July and August. There are an average of 73 days annually above 90 degrees. Temperatures may reach 100 degrees or more four or five days per year, not just two or three.

Section 9.1 – Applicable Water Quality Standards - in this section, SCE&G states that an excellent trout fishery exists in the lower Saluda River. While we may not agree that it is an excellent trout fishery, we would agree that this is a unique fishery made possible by the project. Our data indicates that there is a high mortality of trout during the first year of stocking, and that very few fish survive to the next year. We believe this is due to high water temperatures and/or

low dissolved oxygen in the late summer, and we are interested in knowing if the present facilities can be operated in a manner to provide cooler water in the summer months.

Also, it is true that based on the trout growth model, growth of 0.67 inches per month could be realized. While this is considered to be an excellent growth rate, a trout stocked in the river at a length of 7-8 inches will need about 18 months to reach 20 inches. Since most of the fish are gone by the fall of the year, few are left to grow beyond 12 or 13 inches in length. Also, this section states that based on the model, good trout growth is due in part to the 'relatively high average DO as a result of the aeration system initiated in 1999. We think that other factors could have significantly contributed to the growth observed during the modeling exercise, and we would like to see a graphical comparison of DO, temperature, and flow regimes for July-September for at least one-year prior, the year during, and one-year after the trout study, to validate this observation.

Section 9.2.2.1 – Lake Murray – Past Studies – this section should be updated to reflect the most current watershed assessment report, Technical Report No. 004-04.

Section 9.2.3.1 – Saluda Dam Tailwater – Past Studies – the low dissolved oxygen (DO) problems in the Saluda River caused by the summer-fall, hypolimnetic discharges from Lake Murray were well documented eight to ten years prior to the DHEC reports cited in the ICD. The DO problems are presented the July 1988 study report titled “Oxygen Dynamics in the Lower Saluda River” by H.N. McKellar, Jr. and Mary K. Stecker, from the Department of Environmental Health Sciences at the University of South Carolina. Recently, DHEC has published another report that documents continuing DO problems (excursions) resulting in conditions that only partially support aquatic life in the lower Saluda. The reported is the October 2004 DHEC Watershed Water Quality Assessment for the Saluda River Basin, Technical Report No. 004-04.

Section 9.2.2.6 – DO and Temperature – Lake Murray - in this section, temperature and DO profiles for one year (1998) are presented. Similar data for dry, normal, wet, and drawdown year(s) would be very useful in helping us to better understand the effect of project operations on summer striped bass habitat in the reservoir. Also, a definition of what constitutes a dry, normal or wet year should be included.

Section 9.2.3.2 – DO Enhancements of the Project Turbine Releases - the inclusion of daily DO and Temperature values for lower Saluda River June- September, 1999-2004 would help to support the exceedance figure (Figure E-12) and to further support the statement that operational protocols have benefited DO levels in the lower Saluda River, which in turn has benefited the growth of trout. We believe that both adequate DO and water temperature are needed to maintain trout habitat.

Section 9.2.3.3 – Water uses – while this section describes project water resources as high quality and exceptional, there is no mention of the current fish advisory. SCDHEC issued a 2005 fish consumption advisory in affect for the lower Saluda for largemouth bass and bowfin.

Section 10.3.1 – Lake Murray - the spring sampling for largemouth bass discussed in this section is conducted on a rotational basis, every 5 years, and is scheduled to resume in 2006 (was postponed one year due to drawdown). It is not done annually as stated in this section.

Section 10.3.2 – Lower Saluda River Fishery - a statement made in this section implies that there have been no periods of low DO in the lower Saluda River since 1996. It is our understanding that short periods of low DO have continued to occur since 1996. This statement needs clarification.

Section 10.3.2.1 – Fisheries Community - the first trout stocking in the lower Saluda River occurred in the mid 1960s, not 1950s as stated. Also, the DNR recommendation regarding the establishment of a smallmouth bass fishery in the lower Saluda River was based on the findings that the system would not support a self-sustaining population and would rely on annual stocking. At that time DNR lacked facilities capable of reliable production necessary to establish and maintain a smallmouth bass population in the lower Saluda River. We are producing smallmouth bass at one of our State fish hatcheries, and the increased availability of smallmouth bass may influence future management decisions.

Section 10.3.2.3 – Trout Stocking - the ratio of rainbow trout (RBT) to brown trout (BNT) stocked annually is incorrect. The correct ratio ranges from 2:1 to 3:1 RBT vs. BNT. Also, the trout stocking season occurs late November through April.

Section 10.3.2.4 – Trout Growth Studies - we acknowledge the trout growth study was an acceptable exercise to evaluate trout growth in the lower Saluda River. However, the timing of this study was short in duration, the study occurred at the end of a drought which may have created pre-study conditions conducive to trout carryover and growth, and the environmental conditions in the lower Saluda River were far from “normal”. We suggest caution in drawing correlative conclusions between turbine venting and trout carryover and growth. As agreed by all parties, follow-up studies are needed to further assess trout carryover and growth. Based on DNR and SCE&G population survey data in the lower Saluda River, some of which are presented in the ICD, trout occurrence over time has been variable with no marked increase in abundance since turbine venting was initiated.

Section 10.3.2.6 – Fisheries Management Goals - creel survey economics: Cumulative value of the LSR recreational fishing was estimated to be \$784,600. With the durable goods component added, the fishery would generate in excess of \$1 million. It is important to note that the trout fishery was responsible for the majority of these revenues.

Section 11.1.6 - Invasive Aquatic Plants - the variety of hydrilla in Lake Murray (Dioecious) does not reproduce by seed, only vegetatively. The local common name for *Najas minor* is slender naiad or brittle naiad not brittle water nymph. We recommend including the scientific names in addition to the common names. Aquatic plant surveys on Lake Murray have been conducted periodically beginning in the early 1990's by plane and boat. Eurasian watermilfoil no longer appears to be a problem. There should be discussion of water primrose in the Lake Murray section. There is very little discussion of management activities on the lake. That is

unusual considering the variety and cost (\$1.5 million) of control methods used from 1993-2002. Triploid grass carp were stocked in Lake Murray in 2003 and not in 2002.

Section 11.0 - Botanical Resources – considerable effort and attention has been directed to Lake Murray shoreline management and the classification of environmentally sensitive areas on the lake. However, the ICD seems to indicate that SCE&G has very little information about the natural/sensitive areas or ecologically significant resources along the lower Saluda River; therefore, we think that additional inventory, assessment, and conservation planning for these resources is needed on the river.

Section 11.1.2 – Lower Saluda River – the ICD indicates that SCE&G has little information about the habitats, botanical species, and environmental sensitive areas (ESA) of the lower Saluda River corridor; therefore, we think that additional inventory, assessment, and conservation planning for these resources is needed on the river.

Section 15.0 - Land Use and Aesthetics – the DNR believes improved management and protection of shoreline areas are needed to maintain the lake's natural resource values and public benefits. Also, the lower Saluda is a State Scenic River, and a considerable amount of information is available to describe the river and its surrounding lands in the lower Saluda River Corridor Plan. We found very little information in the ICD that addressed the planning strategies incorporated in this plan.

G-3 – Project maps- all project maps should reflect current conditions as of April 29, 2005.

## **Information Needs**

### **Project Operations**

The DNR needs to develop a thorough understanding of the relationship between inflows and operations. It is important that we have a tool in which both SCE&G and the DNR can evaluate different operational scenarios. Our information needs include, but are not limited to: (1) an operations hydraulic model that reflects a basin-wide management capability, (2) a dataset that includes a sufficient period of record, preferably the life of the project, (3) a definition of dry, normal and wet water years, (4) water level management strategies for the reservoir, (5) spillway operation procedures, (6) hydroelectric generation protocol, (7) stage/storage relationships for the reservoir, (8) runoff/storage relationships, (9) critical lake level elevations and streamflow requirements for all water use interests (water supply, navigation, fish and wildlife, aquatic plants, hydropower, flood control, drought, boating access, recreation, etc., and (10) project inflows. Other project related information, such as sediment control/flushing plans or facilities maintenance plans, should be provided if they result in significant water level manipulation or impacts to aquatic resources.

### **Instream Flows**

Flow regime is the dominant variable that shapes the physical, chemical and biological processes critical to maintenance of a functioning river. A high priority for the DNR will be the establishment of continuous flows in the Saluda River in accordance with the State Water Plan. To adequately address the plan, it will be important to establish the geographic area under project influence, which may extend well downstream of the confluence of the Broad and Saluda rivers.

The DNR has previously conducted site-specific flow studies to evaluate the needs of aquatic habitat and navigation for the Lower Saluda River. In those studies, we determined that an instantaneous flow of at least 470 cfs is needed to support one-way downstream navigation, and flows of 590 cfs (July – November), 1170 cfs (Jan-April), and 880 cfs (May, June and December) are needed to provide seasonal aquatic habitat. Based on the State Water Plan, the higher of these flows should be provided to meet all uses.

In lieu of implementing these recommendations, site-specific studies may be conducted in coordination with the Resource agencies. These studies could include wetted perimeter, Instream Flow Incremental Methodology (IFIM), Physical Habitat Simulation (PHABSIM), or other at a variety of flow conditions. These studies would provide information to further identify the relationship between discharge and channel characteristics such as water depth and velocity, substrate, cover, available habitat for fish and other aquatic organisms and the effects of drought and flooding. Also, the effects of peaking operations on habitat should be evaluated using a dual flow analysis.

Floodplain connectivity is another important ecological issue. The Congaree National Park is a resource of significant State and Federal importance that we believe is under project influence. We would like to know how the project has affected the duration and frequency of flood plain inundation in the Congaree River basin and specifically at the Park. If possible, we recommend that the hydrologic record associated with the operation of the project be compared to the unregulated hydrology that would have occurred under a natural flow regime over the life of the project. An estimate of the timing, duration and magnitude of flood events that occurred and that would have occurred in absence of the project is needed.

## **Water Quality**

The project has a variety of issues associated with water quality. The upper end of the reservoir is impacted by developmental and industrial uses in the Saluda basin, while the water quality in the Lower Saluda River is directly influenced by operations. While the lake as a whole is one of the least eutrophic lakes in South Carolina, we are concerned that there are some problematic areas.

According to the Watershed Water Quality Assessment, 1998 (SCDHEC 1998), some of the sampling sites did not meet standards for copper, and other pollutants associated with point-source dischargers were present in sediments and included copper, chromium, nickel, lead, and various pesticides. The Saluda River Basin Water Quality Assessment dated October 2004, DHEC reported that of the 13 stations sampled, five did not support aquatic life uses and three others only partially supported aquatic life uses. The reason for these non-attainment values was

excursions in pH and elevated levels of phosphorous. The Department is concerned that the majority of these sampling stations showed impacts to aquatic life uses even though the sample set was small.

The DNR is also concerned with increasing trends in fecal coliform bacteria. While recreation use is fully supported at most of the sampling sites on Lake Murray, increasing trends in fecal bacteria jeopardize the recreational potential of the lake.

The Department believes that shoreline development has and will continue to contribute to the existing non-point source pollution. The actions of homeowners in managing lawns, septic tanks, and pet waste, as well as the application of herbicides and insecticides, can adversely impact the waters in the Lake. This problem can be exacerbated due to the lack of shoreline buffers, a decision that is also project influenced.

The occasional but significant summer die-off of large striped bass in the lake indicates that in some years habitat is severely limited. Steve Summer (personal communication) indicated SCE&G will revise its operational protocol this fall. It is our understanding that the current protocol was developed with two units capable of turbine venting, and now that all units are vented, there will be more flexibility in operations. We request information that will help to 1) forecast habitat reductions, and 2) help develop an operational protocol to minimize impacts on striped bass habitat.

We need to have a better understanding of the relationship between project operations and water temperature and dissolved oxygen as they pertain to our management programs. We need to have temperature profiles, on at least a monthly basis, at the unit intakes in the reservoir (specifically June-September).

State water quality standards for Dissolved Oxygen (DO) are not always met in the river below the project. SCE&G is in the process of upgrading turbine runners for the Saluda project, because minimizing the percent of time when DO is less than 5 ppm is important in protecting aquatic habitat. The cold water released from Lake Murray provides a unique opportunity to manage for trout, which are a popular sport fish well suited to a put, grow and take management strategy. The flowing water in the tailrace also attracts a variety of other fish species, including seasonally important sport species such as striped bass.

We recommend that trends in water quality data associated with Lake Murray and the Lower Saluda River be reviewed and summarized. Special attention should be given to the stations and parameters that did not meet State standards or are declining. Also, the role of project operations, if any, in contributing to the current water quality should be assessed. We also recommend that water quality models be developed to identify any relationships between point and non-point pollutants and operations. We request to participate in the review of data and the development and verification of any models, and we request a copy of the data set and the model so we can conduct an independent analysis.



## **Reservoir Fluctuation**

We are interested in enhancing spawning success of shallow water nest builders, such as crappie, sunfish and bass. These species spawn primarily in the spring, and spawning success can be jeopardized if lake levels fluctuate more than about 6 inches during the spring spawning season. We request a summary of water level fluctuations for the months of March, April and May for the period of the current license.

## **Project Lands**

We believe that developmental and non-developmental activities must be balanced to ensure that public access and recreational opportunities are provided now and into the future. Shoreline development has occurred on at least 65% of the shoreline, and we believe that this development has impacted the visual aesthetics of the reservoir, reduced natural shallow water habitat, reduced riparian habitat, reduced areas available for waterfowl hunting, impacted water quality, and discouraged the public use of project lands.

The Department recognizes the effort on behalf of the licensee to balance environmental needs with recreational uses through a detailed SMP. However, we are concerned with the lack of completion of the plan update. Parts of the plan that have not been resolved include: (1) an erosion and sedimentation control plan, (2) a map identifying intermittent and perennial streams and their associated 75' buffer, (3) guidelines for restrictions within the 50' buffer surrounding the ESA's, (4) a map showing the location of all ESA's in front of all easement properties, (5) a woody debris and stump management plan, (6) a buffer zone restoration plan for buffer zone areas that have been improperly cleared by landowners, (7) the designation of new waterfowl hunting areas to compensate for those lost to land sales and development.

The Department believes the completion and implementation of the various management plans will have beneficial ecological, recreational and aesthetic results. Therefore, we believe these plans need to be completed as soon as possible. Although these management plans will contribute to better shoreline management, there are other still issues to address. Our primary concern with the SMP plan continues to be rebalancing of shoreline classifications. In a 2004 order, FERC recognized that the shoreline classifications are weighted heavily towards development and stated that rebalancing is needed. We, along with other resource agencies and stakeholders, have repeatedly asked for and continue to recommend that rebalancing be completed. We also request that specific management restrictions be developed and incorporated into the SMP that would control encroachments into ESA's, conservation areas, and other natural areas. SCE&G is in the process of revising land classifications, and we request an updated classification that clearly describes the existing use of the property, acreage and mileage of shoreline associated with each classification.

Project lands associated with the Lower Saluda River have been less developed, and the riparian buffers and natural features associated with most of these lands are still intact. We request a

summary of project lands and their current classifications, to include acreage and mileage of shoreline.

### **Fish and Wildlife**

Habitat - the project area provides a diversity of fish and wildlife habitat in the central piedmont of South Carolina. Besides creating over 50,000 acres of reservoir, there are about 600 miles of shoreline. Shoreline management mapping has identified the shoreline miles of habitat types such as environmental, forest and game, and vegetated. We would like to know how many acres, within the project boundary, are associated with these land classifications, as well as wetlands. Additionally, we would like to know the relationship between lake levels and shallow water habitat. This knowledge will allow us to evaluate the impacts of any proposed operations on this important habitat. Aquatic habitat for pelagic fish species is compromised in certain years. The combination of increasing water temperature and decreasing dissolved oxygen results in a decrease in available cool-water habitat for some species. It is important that we understand the reasons and contributing factors of this seasonal habitat decline. A model should be developed that will help us to better understand the causative factors that result in habitat declines, and to evaluate scenarios that could reduce or eliminate this problem.

Fish and Wildlife populations - the project area provides a diversity of fish and wildlife populations in the central piedmont of South Carolina. While a summary of fisheries information is provided in the ICD, additional information is needed for other species to evaluate both the current status and the effects of the project. These include:

Diadromous fish - historically, the Saluda River was a regional fishery for diadromous fish species, such as American shad. This area has been known to support important sport and commercial fisheries since pre-European settlement. Although we have evidence that American shad do utilize the Saluda River for spawning, this use appears to be limited. To make informed resource decisions regarding the potential restoration of the Saluda River, information is needed to quantify the present diadromous fish utilization, by numbers and species, in and immediately below the project. Spawning and nursery habitat for diadromous fish species in the river and the lake should be identified and quantified.

Mussels – habitat for many species of mussels has been altered or degraded in the Southeast. Mussel surveys have been conducted in the project area, in both tributaries to the lake and in the lower Saluda River. However the information provided from these surveys is limited, and a thorough evaluation of the species composition and distribution has not been completed. Also, the relationship between project operations and mussel habitat was not presented in the ICD. The present status of mussels in the project area should be evaluated, their habitat needs should be assessed, and any project impacts on habitat should be identified.

Invertebrates – the improved water quality as a result of turbine venting should result in a higher numbers and diversity of invertebrates in the lower Saluda River. However, the high flows associated with peaking power operations can result in low numbers and diversity for some

distance downstream. We are interested in knowing if invertebrate fauna have increased in either number or species diversity, and how far downstream they are impacted.

### **Fish Entrainment and Associated Mortality**

The DNR is concerned that large numbers of fish are being entrained at the Saluda Dam. Entrained fish can experience injury or death. No measure of entrainment was provided in the ICD. We recommend that SCE&G conduct a desktop study of potential entrainment using previous studies conducted at other similar facilities. The objectives of the study should be to (1) quantify the numbers and sizes of fish entrained, by species, (2) estimate mortality rates associated by species, and (3) provide recommendations for project design and operation that can reasonably be made to prevent or minimize fish entrainment and associated injury/mortality.

Also, fish mortality associated with the operations of the project spill gates has occurred in the past. We believe that this mortality is related to the time of year and the presence of fish near the dam. We request a summary of emergency spill gate testing protocol to include the frequency, time of year, and any adaptive measures that are used to reduce fish mortality.

### **Rare Fish, Wildlife and Plants**

All rare, threatened and endangered species associated with the project should be identified. The DNR database (<http://www.dnr.state.sc.us/heritage>) should be reviewed. An assessment of how project operations may affect these species should be prepared. The habitat requirements of all species identified should be compared to habitats available within the project boundary. Management plans for species that are in the project boundary or are under project influence should be developed and included as part of the license application.

### **Aquatic Plant Management**

Aquatic plants provide important aquatic habitat in the project. Some of the plant species present are more desirable than others. The presence of hydrilla presents a high risk to native plant species and a variety of resource users in South Carolina. In the past, SCE&G, in conjunction with the SCDNR, has performed effective control of this species. The large amount of potential habitat available to hydrilla in the reservoirs presents a cause for concern. According to the ICD, aquatic plants have been surveyed and mapped in the past. It is not clear when or how often these surveys were conducted, and no plans for future surveys were provided. Information such as species composition, location, and acreage of aquatic plants in the project is needed to develop an aquatic plant management plan.

### **Recreational Assessment**

Ensuring the public has adequate access to the project is a high interest of the agency. A description of public recreation sites is provided in the ICD (Table E-15). However, no

indication of capacity or handicapped accessibility is provided, and we request that information be included.

Population trends for 1990 through 2000 (Table E-18) indicate that the local area grew by as much as 2.8 % per year. While no growth projections were provided, it appears that additional public recreational facilities may be needed to accommodate future growth. Information regarding recreational use and needs, projected for at least 10 years, is needed to plan for future recreational enhancements.

According to the ICD, there are 20 public recreation sites in the project area. Of these, 15 provide boat access, 10 provide for picnicking, 3 provide for pier fishing, and one provides a swimming beach. We are interested in ensuring that adequate shore based recreational activities are available for public use. Information regarding future plans to develop shore based recreational access is needed. Also, the location and property for a large, multi-lane boating event site should be explored.

In the lower Saluda River, flows are needed to support wade fishing and paddling. Information is needed regarding the flows that provide optimal recreational opportunity and when they should be provided.

### **Public Safety**

The DNR is charged with administering recreational boating and safety laws and regulations. We are interested in identifying any practical means to increase boating safety. In addition, we are interested in identifying ways to reduce the number of water related deaths and accidents associated with the project. We request that a list of all project related accidents that occurred during the existing license period be provided, as well as any accommodations in project operations or facilities by the licensee to address these accidents.

### **Historic/Cultural Resources**

There are many known prehistoric, historic and cultural resources located within the project boundary. There are likely many more unknown sites. Many of these resources have not been fully studied or protected. A plan to identify and protect these valuable resources should be developed in coordination with the DNR and other appropriate agencies.

### **Conclusion**

The Department looks forward to working with SCE&G in the relicensing process. We recommend that all study planning and related activities be closely coordinated with our staff and other relevant natural resource agencies. We request that all data collections, data analyses, and draft and final reports be provided to the SCDNR in both printed and electronic formats for review, verification and comment.

The Department believes the first stage of the consultation has had many positive results. We understand the magnitude of our information needs described in the proceeding pages; however, we believe they are commensurate with the scale of the Saluda Project and the state and national significance of its natural resources. Our staff looks forward to continued close communication during the duration of this relicensing process. The SCDNR project manager for the Saluda Project is Mr. Dick Christie. He can be contacted at: (803) 289-7022.

Sincerely,

*Ed Duncan*

Environmental Programs Director

cc: The Secretary – FERC  
Quinton Epps - SCDHEC  
Amanda Hill - USFWS  
David Rackley - NMFS  
Tony Bebbler – SCPRT

