

PARR HYDROELECTRIC PROJECT

PARR SHOALS DEVELOPMENT & FAIRFIELD PUMPED STORAGE DEVELOPMENT

(FERC PROJECT No. 1894)

APRIL 14, 2015 JOINT AGENCY/PUBLIC MEETING

LEXINGTON, SOUTH CAROLINA



MEETING PURPOSE

- Overview of Parr Hydroelectric Project
- Video Site Tour
- Review Traditional Licensing Process
- Discuss Pre-Application Document (PAD) and Pre-PAD Activities
- Discuss Planned Studies
- Process Plan and Schedule
- Additional Data/Information Requests



PROJECT LOCATION





GENERAL PROJECT INFORMATION

- FERC Project Number 1894
- Owned and operated by South Carolina Electric & Gas Company
- Project consists of two developments:
 - Parr Shoals Development
 - Fairfield Pumped Storage Development
- FERC license issued in 1974; expires June 30, 2020
- There are 162.61 acres of U.S. Forest Service lands within the Project boundary



PROJECT HISTORY: PARR SHOALS DEVELOPMENT

- Parr Shoals Dam and powerhouse originally constructed between 1912 and 1914
- Parr Reservoir enlarged in 1970's to function as the Fairfield Pumped Storage Development's lower pool
- This involved raising the height of the Dam approximately 9 feet



PROJECT FACILITIES: PARR SHOALS DEVELOPMENT

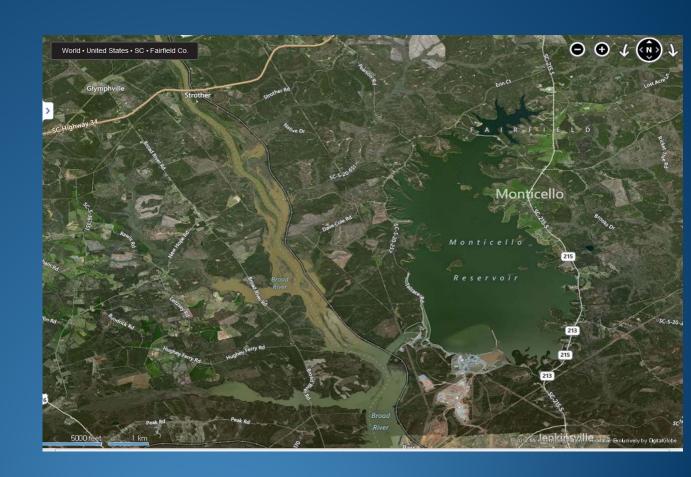
- Parr Dam: concrete gravity spillway, 37 ft. high, 2000 ft. long
- <u>Gates</u>: 10 bottom hinged bascule crest gates, each 200 ft. long and 9 ft. high
- Powerhouse: Steelframed brick building containing six vertical turbines with generators





PROJECT RESERVOIRS: PARR RESERVOIR

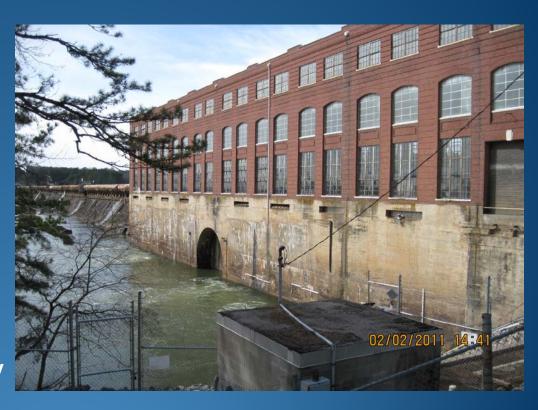
- 4,400 acres
- 13 miles long
- Lower pool to Fairfield Pumped Storage





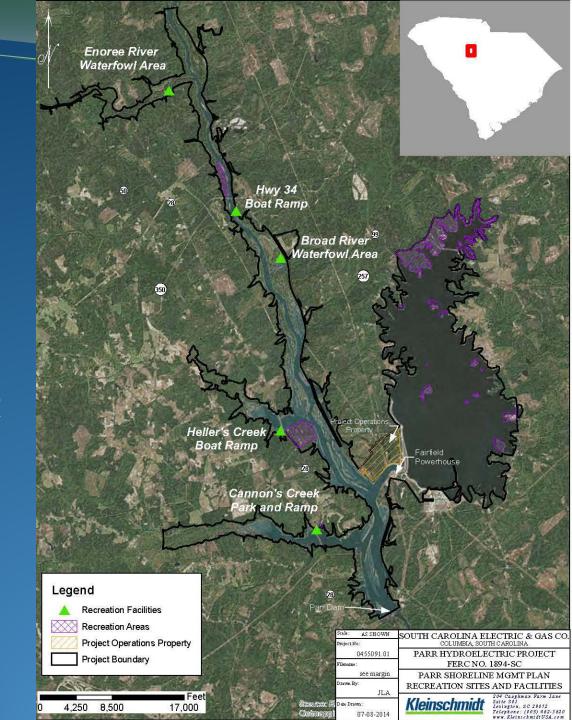
PROJECT OPERATIONS: PARR SHOALS DEVELOPMENT

- Licensed capacity 14.88 MW
- Maximum hydraulic capacity ~6,000 CFS
- Parr Hydro operates in modified run-of-river mode
- Development primarily used for base load





PROJECT RECREATION FACILITIES AT PARR RESERVOIR





PROJECT HISTORY: FAIRFIELD PUMPED STORAGE DEVELOPMENT

- Fairfield Pumped Storage Development was authorized by the 1974 FERC License
- Construction included creation of Fairfield Pumped Storage Development's upper pool: Monticello Reservoir
- Construction was completed in 1978



PROJECT FACILITIES: FAIRFIELD PUMPED STORAGE DEVELOPMENT

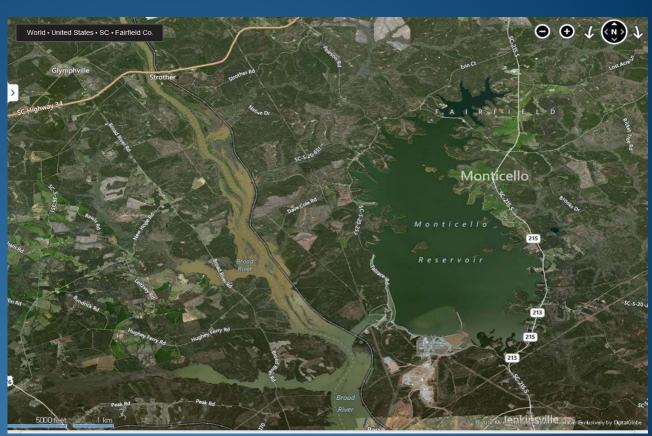
- Dams: Four earthen dams (A, B, C, and D)
- Powerhouse: Four steel penstocks lead from intake to powerhouse containing 8 units





PROJECT RESERVOIRS: MONTICELLO RESERVOIR

- 6,800 acres
- Upper pool to Fairfield Pumped Storage





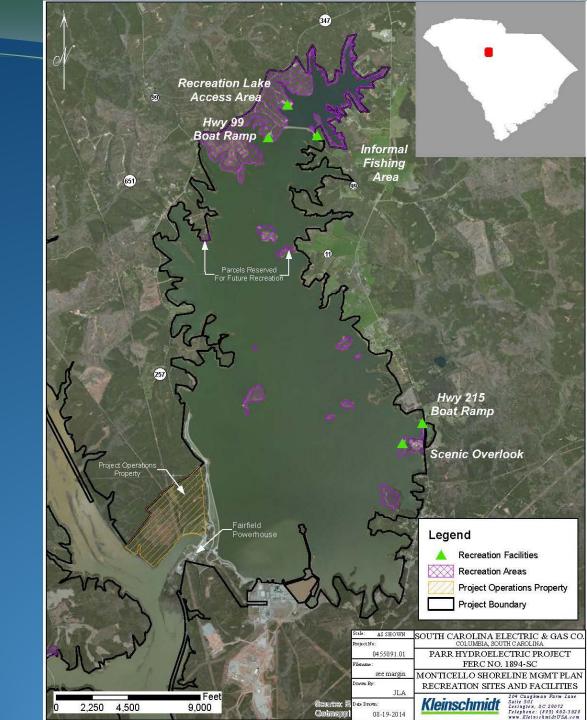
PROJECT OPERATIONS: FAIRFIELD PUMPED STORAGE DEVELOPMENT

- Licensed capacity 511.2 MW
- Maximum hydraulic capacity 50,400 CFS generating & 41,800 CFS pumping
- Development primarily used for peaking, reserve generation, off-peak power usage





PROJECT RECREATION FACILITIES AT MONTICELLO RESERVOIR





PROJECT INTERCONNECTION INFORMATION

- Parr Shoals Development has a 13.8-kV tie to the Parr Steam Plant 115 kV substation and a 13.8-kV tie to the 13.8/24.9-kV Parr distribution substation
- Fairfield Development has two 230-kV interconnecting transmission lines between the powerhouse and the non-project V C Summer Nuclear Station switchyard



VIDEO SITE VISIT

• (Video tour of Project shown)



THE RELICENSING PROCESS

FERC Approved use of the Traditional Licensing Process (TLP) on February 20, 2015.

- TLP has three stages:
 - 1) Initial Consultation
 - PAD
 - JAM
 - Stakeholder and agency opportunity to submit study/information requests to the Licensee and to FERC.
 - 2) Perform Studies and develop Draft Application
 - 3) File Final Application



THE ENHANCED TLP PROCESS

- Early stakeholder collaborations
- Early issues scoping with applicant and stakeholders

- Periodic public meetings
- Stakeholders and licensee develop studies collaboratively

PRE-PAD CONSULTATION

- Agency/NGO Kickoff Meeting
- Public Outreach Workshops (Issue Identification Meetings)
- Formation of Resource Conservation Groups (RCG's) and Technical Working Committees (TWC's).



PRE-PAD CONSULTATION

Three primary RCGs and six "issues focused" TWCs were developed:

- Water Quality, Fish & Wildlife RCG
 - Instream Flow TWC;
 - Fisheries TWC;
 - Rare, Threatened & Endangered Species (RT&E) TWC; and
 - Water Quality (WQ) TWC
- Recreation, Lake & Land Management RCG
 - Recreation TWC; and
 - Lake & Land Management TWC
- Operations RCG



PRE-PAD TRIBAL/CULTURAL CONSULTATION

Section 106 of the National Historic Preservation Act - informal consultation and Phase 1 Investigations:

- Consultation with SHPO and the Cherokee and Catawba Indian Nations
- SCE&G performed Phase 1 Cultural Resource Investigations in consultation with these entities
- Final Phase I Cultural Resource Report was submitted to SHPO, Catawba and Cherokee Indian tribes, FERC and USFS on August 7, 2014



PRE-PAD CONSULTATION

Federal & State Agencies/ Governmental Organizations

- NOAA/National Marine Fisheries Service
- NPS/Congaree National Park
- US Fish & Wildlife Service
- US Forest Service
- SC Dept of Health & Environmental Control
- SC Dept of Natural Resources
- SC Dept Parks Recreation & Tourism
- SC State Historic Preservation Office
- Catawba Indian Nation
- Cherokee Indian Nation
- City of Columbia
- Fairfield County
- Newberry County
- Town of Winnsboro

Non-Governmental Organizations/ Public

- American Rivers
- American Whitewater
- By-Pas
- Chestnut Hill Plantation HOA
- Congaree Riverkeeper
- Environmentalists, Inc.
- Gills Creek Watershed
- SC Coastal Conservation League
- Tyger-Enoree River Alliance
- University of South Carolina
- Property Owners



BASELINE STUDY REPORTS

- Baseline Fisheries Resource Report
- Baseline Water Quality Report
- Baseline Macroinvertebrate and Mussel Report
- Mesohabitat Assessment Memorandum
- Robust Redhorse Spawning Memorandum



PRE-APPLICATION DOCUMENT

- Filed on January 5, 2015
- Provides existing, relevant, and reasonably available information on potentially affected resources
- Includes baseline study reports developed during Pre-PAD consultation
- Includes study plans developed during Pre-PAD consultation
- Copies of PAD available today on CD



PLANNED STUDIES

Pre-PAD consultation resulted in the development of study plans:

- Project Operations & Hydraulic Model
- Parr & Monticello SMP Outline
- Downstream Recreational Flow
- Downstream Navigational Flow Assessment
- Recreation Use & Needs (park site usage survey)
- American Eel Abundance
- Fish Entrainment & Mortality (desktop)
- Reservoir Fluctuation

- Instream Flow Incremental Measurement (IFIM)
- Robust Redhorse Spawning Areas (part of IFIM)
- Broad River Spiny Crayfish
- Freshwater Mussels (Monticello Reservoir)
- Rocky Shoals Spider Lily
- RT&E Literature Search (desktop)
- West Channel Water Quality
- Waterfowl Surveys



PROCESS PLAN AND SCHEDULE

- April 14, 2015: Joint Agency Meeting and Site Visit
- June 15, 2015: Agency and stakeholder PAD comments due (60 days)
- April 2015
 – December 2016: Conduct studies and prepare reports.
 Continue to meet with RCGs/TWCs
- Late Summer/Fall 2017: Issue Draft License Application and Settlement Agreement
- Late Fall 2017: Agency/Stakeholder comments on DLA due
- May 2018: File Final License Application.
- May/June, 2020: FERC issues New License.



FERC GUIDELINES FOR STUDY OR INFORMATION REQUESTS - 18 C.F.R. 4.38(B)(5)

- Identify the purpose of the information.
- Demonstrate how the information is related to operation and maintenance of the Project, and therefore necessary.
- Discuss your understanding of resource issues and your goals and objectives for these resources.
- Explain why each recommended study methodology is more appropriate than alternatives, including any that the licensee has proposed.
- Document that each proposed study methodology is a generally accepted practice.
- Explain how the study will be used to further resource goals and objectives that may be affected by continued operation of the Project.



PROJECT RELICENSING WEBSITE WWW.PARRFAIRFIELDRELICENSE.COM



Welcome!

South Carolina Electric & Gas Company (SCE&G) has begun a multiyear, mandatory federal process known as "Relicensing" for its Parr Hydroelectric Project. This process is governed by the Federal Energy Regulatory Commission (FERC) and will ultimately result in a new operating license that will determine operations and guide the management of the multiple resources associated with the Project for the next 30 to 50 years.

The FERC Relicensing Process for the Parr Hydro Project involves a variety of stakeholders, including state and federal resource agencies, state and local government, non-governmental organizations ("NGOs"), as well as individual home and boat owners. Together with SCE&G, these stakeholders work to address the many

Latest News & Information:

<u>Pre-Application Document</u> <u>Cover Letter</u> Notice of Intent

Meeting Calendar





PROJECT ISSUES AND INFORMATION DISCUSSION

Questions regarding the Project?

Questions regarding the PAD?



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