



A SOUTHERN COMPANY



Water Quality & Quantity MIG

September 26, 2007

MIG 2 Agenda

- Introductions
- Feedback on Issue Sheet
- FERC Study Plan Criteria
- Summary of Draft Study Plans
- Summary of Study Plan Process
- MIG membership
- Next steps

MIG Sheet Feedback



FERC ILP Study Criteria

- Describe the goals and objectives of each study proposal and the information to be obtained;
- If applicable, explain the relevant resource management goals of the agencies or Indian tribes with jurisdiction over the resource to be studied;
- If the requester is a not resource agency, explain any relevant public interest considerations in regard to the proposed study;
- Describe existing information concerning the subject of the study proposal, and the need for additional information;
- Explain any nexus between project operations and effects (direct, indirect, and/or cumulative) on the resource to be studied, and how the study results would inform the development of license requirements;
- Explain how any proposed study methodology (including any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate filed season(s) and the duration) is consistent with generally accepted practice in the scientific community or, as appropriate, considers relevant tribal values and knowledge; and
- Describe considerations of level of effort and cost, as applicable, and why any proposed alternative studies would not be sufficient to meet the stated information needs.

MIG 2 Studies

- Water Quality Adaptive Management
- Erosion and Sedimentation
- Location of NPDES Permits
- Water Quantity, Water Use, and Water Withdrawals



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Lake Martin

Water Quality Adaptive Management

Study Goals

- Prepare an adequate baseline of water quality information for Lake Martin and the Project tailrace
- Evaluate any proposed Project operation changes

Description

- Study area includes all of the waters located within the Martin Project Boundary and the Project tailrace
- Specific study sites will align with the historical data sites so that deviations in long-term trends can be discerned

Proposed Methodology

- Develop an Adaptive Management Plan (AMP)
- Gather a baseline of water quality data and measure and monitor any changes in that baseline with an adjusted rule curve
- ADEM will develop the types of data and frequency of data collection that will be needed for the AMP

Study Implementation Schedule

- January – May 2008: Identify baseline data needs
- June 2008 – September 2009: Collect additional baseline data
- October 2009-February 2010: Develop AMP
- March – August 2010: Finalize AMP
- October 2010: Final report



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Lake Martin

Erosion & Sedimentation

Study Goals

- Gather information on erosion areas within the lake or tailrace that are related to project operations
- Gather information on the amount of sedimentation that is occurring on the upper portion of the lake and in the tributaries
- Determine if nuisance aquatic vegetation is becoming a problem in these areas of sedimentation

Description



- The study area would include erosion “hotspot” sites
- Typically limited to the area between the full pool elevation to the lowest level of winter drawdown and the immediate tailrace downstream

Proposed Methodology

- Erosion “hotspot” sites will be identified
- Each “hotspot” will be examined to determine the cause of erosion (using the field data sheet)
- Draft report will be issued to the MIG 2 for their input

Study Implementation Schedule

- May 2009: Request MIG 2 input on locations of potential erosion spots
- November 2009 - January 2010: Field surveys
- April 2010: Draft report to MIG 2
- December 2010: Final report



Location of NPDES Permits on Lake Martin

Study Goals

- Develop a list of all NPDES permits on Lake Martin and identify their location
- Determine the amount and type of effluent for each discharger and add to Geographic Information System (GIS) overlay

Description

- Study area would encompass Lake Martin and significant point sources on specific tributaries

Proposed Methodology

- A request for up-to-date NPDES data from ADEM
- Other literature will be gathered and reviewed on an as needed basis
- Draft report will be given to MIG 2 for their input
- GIS overlays may be compared with areas of Lake Martin experiencing water quality problems

Study Implementation Schedule

- July 2009: Draft report
- September 2009: MIG 2 review
- January 2010: Final report



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Lake Martin

Water Quantity, Water Use, and Water Withdrawals

Study Goals

- Develop a comprehensive report:
 - detailing APC's water withdrawal policy
 - current known water withdrawals from the Martin Project
 - ecological and navigational flow requirements in the Tallapoosa River basin
 - drought contingency operations at the Martin Project

Study Area

- The study area would include Lake Martin and all of the current permitted withdrawals on the lake

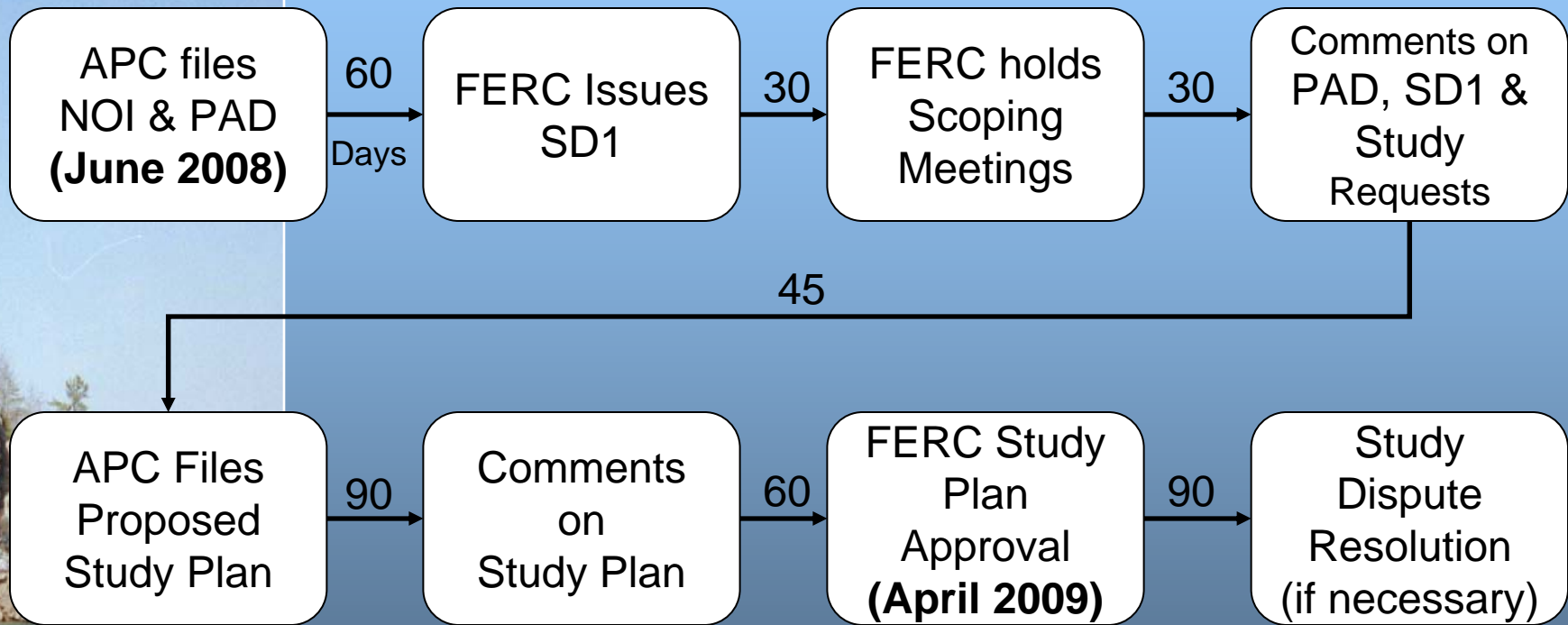
Proposed Methodology

- Obtain up-to-date “Declaration of Beneficial Use” data from the OWR
- Identify other withdrawals on the Lake.
- Draft report will be issued to MIG 2 for their discussion

Study Implementation Schedule

- May 2009: Obtain OWR and other withdrawal data
- September 2009: Report to MIG 2 for discussion
- February 2010: Draft Report
- December 2010: Final report

Study Plan Process



Next Steps

- MIG membership
- Review MIG feedback with Agencies
- Continue to work on draft study plans
- Distribute draft study plans to MIG members for review and comment