

Hydro License Renewed Another 50 Years

The Federal Energy Regulatory Commission has renewed for another 50 years Entergy's license to generate hydroelectric power at Carpenter and Remmel Dams. The renewed license, which takes effect March 1, 2003, is the culmination of an effort that began in 1998 with the formation of a team of more than 20 stakeholders that have an interest in how the dams and the lakes they create are managed.

Remmel Dam, the older of the two dams, was the first major generating facility in Arkansas, built by Arkansas Power & Light under the leadership of Harvey Couch in 1923. Carpenter Dam was built nine years later by AP&L, which later became Entergy. Both are on the Ouachita River. Remmel Dam creates Lake Catherine and Carpenter Dam creates Lake Hamilton. The dams and lakes together form Federal Energy Regulatory Commission Project #271. The two hydroelectric stations can generate 65.3 megawatts of electricity, enough to power more than 50,000 homes.

Under the license issued by FERC, Entergy has numerous responsibilities regarding both the operation of the dams and the management of the shoreline of the associated lakes. "We're very pleased to have formal approval from FERC to continue operation of what has been a very beneficial project for Entergy, the people of



Remmel Dam

Arkansas who enjoy the lakes, and the environment, which benefits every day from the emission-free electricity generated by these hydro plants," said Doug Sikes, manager of Entergy Hydro Operations.

The renewed license is similar to the one that is set to expire in March 2003, but there are some differences. Those differences and other important license-related information are the reason for this special issue of *Life on the Lakes*. Entergy is proud to be a part of the history of Arkansas, and we look forward to being a part of a brighter future.



Carpenter Dam

Who is FERC?

FERC stands for the Federal Energy Regulatory Commission, a regulatory agency within the Department of Energy. FERC regulates the interstate commerce of natural gas and oil and the transmission and sale of electricity. FERC also inspects and licenses private, municipal and state hydroelectric projects, including Remmel and Carpenter Dams. FERC does not regulate the Corps of Engineers' federal hydropower projects, such as Blakely Mountain Dam.

The Commission is composed of five members, who are appointed by the president with the advice and consent of the Senate. The commissioners serve five-year terms. Visit the FERC Web site at <u>www.ferc.gov</u> for more information.

Hydro Relicensing

The traditional hydro relicensing process takes five years or more. It's a cumbersome undertaking requiring the licensee to identify and study numerous issues pertaining to the project and submit an application to FERC. FERC then begins an environmental analysis, requests comments from other agencies and decides what to include in the license. Miscommunication and disagreement between stakeholders typically delays the issuance of the license.

There is a better way - the Alternate Licensing Process (ALP). Entergy elected — and FERC allowed — this approach for relicensing Project 271.

By using the ALP, Entergy was able to get stakeholders involved from the very beginning by forming a team of local stakeholders, agencies and FERC specialists. The team identified issues, defined needed study scopes, analyzed information and reached agreement on what should be included in the new license before it was submitted to FERC. This process allowed more local input into the content of the license.

The 23-person Applicant-Prepared Environmental Assessment (APEA) Team was able to balance the competing needs of stakeholders and uses of the project to FERC's satisfaction, resulting in a new 50-year license.



Out With the Old ---- In With the New

So, what's different in the new FERC license? The general nature and purpose of the license hasn't changed. For example, Entergy is still responsible for facilitating general recreational use of the lakes and managing non-project use (docks, seawalls, etc.) in a manner that protects and enhances the project's scenic, recreational and environmental values.

However, the new license is more specific and, in some cases, more restrictive in how Entergy is required to fulfill its obligations. Many of the changes involve environmental considerations. The biggest of these is how water will be released from Remmel Dam into the Ouachita River.

Under the old license, Entergy was required to release an average 250 cubic feet per second (CFS) of water from Remmel Dam each day. Under the new license, we will release a minimum of 200 to 400 CFS continuously.

This change will improve fish habitat in the river, which should improve fishing. Canoeists should find this to be enough water to paddle from Remmel Dam to Malvern any day of the year. In fact, for those wanting to kayak on the Ouachita River, we are providing three hours of full-flow releases from Remmel Dam each weekend afternoon from Memorial Day to Labor Day. We have also begun issuing our weekly generation plans via telephone (501-620-5760), e-mail and on the Internet. Our Web site, www.entergy.com/hydro, has a real-time display of actual lake and tributary levels and flows.

Dams tend to release cold water. Fish native to this area tend to like warm water. Entergy is working with the Arkansas Game and Fish Commission (AGFC) and the Corps of Engineers to warm the cool water that passes from Blakely Mountain Dam through Lakes Hamilton and Catherine to the Ouachita River below Remmel Dam. One method called for in the new license is the addition of plates to Remmel Dam's intake structure. The plates will pull more warm water from the top of Lake Catherine when the dam is being used to generate electricity. The Corps of Engineers is also studying the possibility of installing small weirs (dikes) in the river to help warm the cool water to improve the temperature and flow downstream. Entergy has set aside \$105,000 in a special Environmental Enhancement Fund to help pay for this work, should it prove feasible.

For the benefit of lakefront property residents, Entergy has agreed to limit the amount of daily lake level fluctuations to 24 inches on Lake Catherine and 12 inches on Lake Hamilton and to consult with the AGFC on annual lake drawdowns. We have installed a new boat ramp below Carpenter Dam and continue to work to lease the associated park to the city of Hot Springs. Remmel Dam Park will be leased to the AGFC. A couple of changes that will impact lakefront property owners are the requirement for the development of a Shoreline Management Plan and a Historic Preservation Management Plan (see related articles for details). These plans require Entergy to provide additional management oversight of these important resources.

Entergy believes this new license strikes the proper balance between the power and non-power values of the project. We look forward to the continued opportunity to positively impact this community, which we are proud to call home.

Protecting the Value of the Lakes

Accommodating a wide range of interests while protecting the lakes and shorelines is a weighty responsibility. Property owners want to build; anglers want to fish. Boating enthusiasts seek high-speed aquatic excitement while nature lovers are just looking for some peace and quiet in a place of scenic beauty.

With increasing shoreline development and public use, threats to the lakes' environmental and cultural resources are also increasing. It is becoming increasingly difficult to strike an appropriate balance between shoreline development and protecting and enhancing the lake's scenic, recreational and environmental values.

The new license from FERC requires Entergy to develop a Shoreline Management Plan (SMP) for Lakes Hamilton and Catherine. This plan is being developed through consultation between FERC, project stakeholders (agencies, non-governmental organizations, lakefront property owners, etc.) and Entergy. The SMP will spell out criteria and processes for balancing the numerous uses of the lakes with project purposes. Typically an SMP will impose some restrictions along shorelines where sensitive natural and cultural resources exist. The guidelines and requirements of the SMP will apply only to Entergy's shoreline lands and waters within the project boundary.

The plan will designate multiple classifications of shorelines, and it will specify what shoreline facilities and activities will be allowed in each of the classifications. In addition, the plan will offer suggestions that lakefront property owners can implement voluntarily to help preserve the beauty of the lakes. This new management tool will help ensure that the lakes' scenic, recreational and environmental values we enjoy today are not only protected, but also enhanced for future generations.

Protecting Our Cultural History

The Hot Springs/Malvern area is rich in cultural history, and the new license from the FERC assigns Entergy a role in preserving that history for the benefit of future generations.

Much of our heritage involves the Americans who lived here before the first Europeans arrived. Both the Caddo and Quapaw Indians lived along the Ouachita River. In fact, archeological findings provide evidence that Indian

tribes from other parts of the country came to visit this section of Arkansas. Before the dams were built, the Ouachita River was used extensively for barge travel. So it's a long-standing tradition that the Hot Springs/Malvern area – with its hot mineral springs and the Ouachita River — serves as a major tourist destination.

The National Historic Preservation Act of 1966 created the National Register of Historic

Places. Being placed on the register – or even meeting the criteria for eventual placement on the register – places certain restrictions on use of those places. The new license assigns certain responsibilities to Entergy for protecting historical properties, including archeological sites, within the project boundary.

Now, you may be wondering, "What historical places?" Actually, there are several. Both Carpenter and

Remmel Dams are listed on the National Register. Remmel Dam, built in the early '20s, was one of the first electrical power stations in Arkansas. Also, there are archaeological sites found in and around Lakes Hamilton and Catherine.

How will this requirement affect the public? The new FERC license requires Entergy to develop a Historical Protection Management Plan (HPMP). The plan must extend reasonable protection to all existing and future Historic

> Properties within the Project boundaries of Lakes Hamilton and Catherine. What this means is that certain construction activities will require more extensive review by Entergy, the Arkansas State Historical Preservation Office, as well as the Caddo and Quapaw Indian Tribes. This includes not only activities at the dams but also construction activities associated with shoreline docking, seawalls, dredging and access facilities. This new requirement will add additional steps in reviewing requests for such

shoreline facility and activity permits.

As we develop the HPMP, Entergy will strive to minimize the burden on lakefront property owners when requesting shoreline permits. However, additional time will be required to process requests for permits for certain shoreline facilities or activities that will require major ground disturbances.



Ouachita River Improvements

The changes in dam operations are expected to improve the smallmouth bass fishing in the Ouachita River below Remmel Dam. This has always been an excellent stretch of river to fish, but it might just get even better.

And now, with the published flow release plans, both fishermen and whitewater paddlers will know when the flow will be just right for them. This will help everyone plan

their trip to the river with more certainty than ever before. Whitewater paddlers should enjoy the summer weekend flows, while novice paddlers and fishermen will find that the new continuous-release flow is deep enough to paddle a canoe from Remmel to Malvern at any time - including those times when the dams are not releasing water for electric generation.

It is important to remember, though, that sometimes water levels change very rapidly, forcing us to deviate from the published plan.



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