



**Department of Energy**  
Southwestern Power Administration  
One West Third Street  
Tulsa, Oklahoma 74103-3502

August 5, 2010

Via Fax: 903-683-5104

Ms. Terrie Gonzalez  
P.O. Box 475  
Rusk, TX 75785

Re: FOIA Request dated July 9, 2010 – FOIA #2010-09

Dear Ms. Gonzalez:

I have received your faxed FOIA request dated July 9, 2010 to Southwestern Power Administration (Southwestern). You requested a copy of Southwestern's comments submitted to the U.S. Army Corps of Engineers regarding an EIS on the proposed Lake Columbia. The comments are enclosed.

I am the person responsible for your request. If you have questions, please call me at 918-595-6609.

Sincerely,

A handwritten signature in cursive script that reads "Martha Ayers".

Martha Ayers  
Freedom of Information Officer

Enclosures



Department of Energy  
Southwestern Power Administration  
One West Third Street  
Tulsa, Oklahoma 74103-3519

SWF-1987-524

April 26, 2010

Mr. Brent Jasper  
Regulatory Branch, CESWF-PER-R  
Fort Worth District, U.S. Army Corps of Engineers  
819 Taylor Street, Room 3A37  
Fort Worth, TX 76102-0300

Dear Mr. Jasper:

This letter provides the comments of Southwestern Power Administration (Southwestern) on the Draft Environmental Impact Statement (DEIS) for the Lake Columbia Regional Water Supply Reservoir Project dated January 2010. Thank you for providing us the requested information on the HDR study on March 8, 2010, and for granting an extension of the public comment period through April 26, 2010. Southwestern has several major concerns with the DEIS which are summarized in the following paragraphs.

Southwestern is an agency of the U.S. Department of Energy that is responsible for marketing the hydropower from two projects that will be impacted by the proposed Lake Columbia project: Sam Rayburn, on the Angelina River, and Robert D. Willis (B.A. Steinhagen Lake), on the Neches River. Although neither Sam Rayburn nor Willis was identified within the "Downstream Impacts Area" in the DEIS, there will be impacts at both projects resulting from the proposed Lake Columbia project. Southwestern strongly disagrees with statements in the DEIS characterizing the impacts of the Lake Columbia project on downstream hydropower as "negligible." Southwestern's analysis revealed that the Lake Columbia project, as described in the DEIS, would have a significant impact on Federal hydropower at the downstream projects. Southwestern's evaluation of the data from the HDR study has raised concerns about the validity of the assumptions utilized in the study, the applicability of the model used for the study, and the accuracy of the study results. By not accounting for the loss of hydropower at the downstream projects, the DEIS fails to include the air quality impacts from increased fossil-fuel generation replacing the lost hydropower and the resulting increase in greenhouse gas emissions.

The HDR study utilized an annual energy target of 44,300 megawatt-hours (MWh) at Sam Rayburn. Documents supplied with the HDR study information describe that energy amount, provided by the Corps of Engineers, as "firm energy" at the project. Typically, firm energy represents the amount of energy that can be generated through the critical drought at the project. It is not surprising that the study would reveal minimal impacts with such a small energy target at Sam Rayburn. The original Corps studies cited in the Corps' reservoir regulation manual for Sam Rayburn estimated an average annual energy production of 106,500 MWh at Sam Rayburn. Historically, the average annual generation at Sam Rayburn from 1969 through 2009 has been

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nearly 123,000 MWh. In addition, it appears the HDR study does not consider the energy loss resulting from the initial filling of Lake Columbia or losses resulting from evaporation at Lake Columbia. The diversion of over 85,000 acre-feet annually from Lake Columbia as well as evaporation from the Lake Columbia surface area of over 10,000 acres will result in significant reductions in inflow into the downstream projects. Southwestern's preliminary estimate indicates an initial loss of about 10,000 MWh of energy due to filling Lake Columbia and an annual loss of 8,000 to 10,000 MWh of energy at Sam Rayburn due to reduced inflows, or 7 to 8 percent of the average annual generation at Sam Rayburn.

Southwestern recognizes that the Water Availability Modeling (WAM) System implemented by the Texas Commission on Environmental Quality (TCEQ) utilizing the Water Rights Analysis Package (WRAP) is the state standard for modeling and evaluating water rights issues in Texas. However, a model based on water rights is simply not applicable for simulating the system hydrology and the downstream hydropower impacts of the proposed project. Water rights are not at issue when evaluating hydrologic impacts. Recently, a representative for the Angelina and Neches River Authority raised the issue as to whether Federal hydropower requires a state water permit for Corps of Engineers reservoirs. Neither Southwestern nor its customers have ever obtained a State of Texas Water Use Permit for Sam Rayburn or Robert D. Willis because none is required. State water rights are subsidiary to the Federal government's right of navigation servitude. In a letter (enclosed) dated December 2, 1986, to Mr. Herman R. Settemeyer of the Texas Water Commission, Colonel A. J. Genetti, Jr., the District Engineer for the Fort Worth District of the Corps, clearly detailed the Corps' position that such a permit is not required for Federal hydropower at a Corps project. Southwestern fully concurs with the Corps' position.

Regardless of state water rights, the construction and operation of Lake Columbia will result in a reduction of the inflows into Sam Rayburn and Robert D. Willis. The DEIS should accurately state the total reduction of inflow into the downstream projects. Reduced inflows will result in reduced generation at Sam Rayburn and Willis. That loss of generation must be *properly* quantified. Southwestern does not believe the WAM/WRAP model is an appropriate model for evaluating the hydrologic and hydropower impacts for the Lake Columbia DEIS. The Southwestern Division of the Corps of Engineers currently utilizes two simulation models for hydrologic studies, SUPER and RiverWare. Either one of those Corps-approved models would be much more appropriate and should be utilized to properly model the hydrology and quantify the impacts to hydropower at the Sam Rayburn and Robert D. Willis projects. An evaluation properly using either of those models will more accurately reflect the true downstream energy losses associated with the proposed project similar to those calculated by Southwestern.

As a result of misidentifying the lost hydropower at Sam Rayburn and Robert D. Willis, the DEIS has failed to fully capture the true environmental impacts on air quality. Generation that is lost at the Sam Rayburn and Willis projects will have to be replaced by the Federal hydropower customers. The replacement generation will likely be produced at a thermal-based generating facility utilizing fossil fuels. Generation of that replacement energy will result in increased greenhouse gas emissions. By assuming a negligible impact on hydropower, the DEIS has failed

to account for that increase in emissions. The DEIS must properly quantify the amount of the loss of renewable hydropower and the resulting increase in greenhouse gas emissions.

Southwestern appreciates the opportunity to provide these comments. As stated at the public hearing in Jacksonville, Texas, on March 2, 2010, Southwestern does not oppose the construction of the Lake Columbia project. However, based on our review, the DEIS as currently written fails to provide a substantial factual basis for the issuance of a Corps permit for the project. Federal hydropower will suffer a significant loss of energy resulting from the Lake Columbia project. The hydropower impacts must be properly quantified and the DEIS must be corrected to accurately capture and value that loss and identify the resulting environmental impacts. Please contact Mr. Michael Denny at 918-595-6683 or michael.denny@swpa.gov if you have any questions.

Sincerely,



George Robbins

Director

Division of Resources and Rates

Enclosure

cc: Ted Coombes, Southwestern Power Resources Association  
Al Armendariz, U.S. Environmental Protection Agency  
Dr. Benjamin Tuggle, U.S. Fish and Wildlife Service



Department of Energy  
Southwestern Power Administration  
One West Third Street  
Tulsa, Oklahoma 74103-3519

MAR 19 2010

Mr. Brent Jasper  
Regulatory Branch, CESWF-PER-R  
Fort Worth District, U.S. Army Corps of Engineers  
819 Taylor Street, Room 3A37  
Fort Worth, TX 76102-0300

Dear Mr. Jasper:

Southwestern Power Administration (Southwestern) is requesting an extension to respond to a Public Notice from the U.S. Army Corps of Engineers (Corps), Fort Worth District, dated January 29, 2010, requesting comments on the Draft Environmental Impact Statement (DEIS) associated with an application for a Department of the Army Permit. The application was made under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 to discharge dredged and fill material into waters of the United States in conjunction with the construction of Lake Columbia in Cherokee and Smith Counties, Texas. The notice stated that the public comment period ends on March 30, 2010. Subsequently, the Corps extended the comment period to April 3, 2010.

Southwestern is an agency of the U.S. Department of Energy that is responsible for marketing the hydropower from the Federal Sam Rayburn and Robert D. Willis projects, both which would be impacted by the Lake Columbia project. The DEIS, on page 4-63, states that the impact on hydropower would be "negligible," citing a study conducted by HDR Engineering, Inc. to model the impacts of Lake Columbia on hydropower generation. In contrast, Southwestern's preliminary analysis revealed that the Lake Columbia project, as described in the DEIS, would have a significant impact on Federal hydropower at the downstream projects. In order to evaluate the statements in the DEIS, Southwestern requested a copy of the HDR study from the Corps on February 5, 2010. However, the Corps did not receive a copy of the study from the EIS contractor until March 4, 2010, and Southwestern did not receive it from the Corps until March 8, 2010. Due to the complexity of the HDR study, it will take some time to analyze the information. The delay in receiving the information has severely shortened the time available for Southwestern to properly review and comment on the DEIS.

In light of the delay in receiving the HDR study information, Southwestern requests a 30-day extension of the public comment period so that we may complete a thorough review and develop comments on the DEIS. We appreciate the opportunity to comment on the DEIS and would be grateful for the additional time to complete our review. Please contact Mr. Michael Denny at (918) 595-6683 or [michael.denny@swpa.gov](mailto:michael.denny@swpa.gov) if you have any questions.

Sincerely,

  
for George Robbins  
Director  
Division of Resources and Rates