

FEDERAL ENERGY REGULATORY COMMISSION

COMMENTS OF GREAT RIVERS ENVIRONMENTAL LAW CENTER,
MISSOURI PARKS ASSOCIATION,
AND MISSOURI COALITION FOR THE ENVIRONMENT
ON THE TAUM SAUK PUMPED STORAGE PROJECT
DRAFT ENVIRONMENTAL ASSESSMENT
FOR HYDROPOWER LICENSE

AMEREN UE: Project no. 2277-023

March 31, 2013

Introduction

Great Rivers Environmental Law Center, the Missouri Parks Association, and the Missouri Coalition for the Environment submit the following comments on the Draft Environmental Assessment for AmerenUE's Hydropower License for the Taum Sauk Pumped Storage Project No. 2277-023. We argue that the Federal Energy Regulatory Commission must complete a full Environmental Impact Statement that includes an adequate evaluation of alternatives to and impacts from the Taum Sauk plant and ask that AmerenUE be required to transfer its holdings on Church Mountain and in the Taum Sauk Creek valley to the state of Missouri as mitigation for the significant degradation of natural resource, aesthetic, and recreational values.

Parties

Great Rivers Environmental Law Center (Great Rivers) is a nonprofit public interest environmental organization working to promote the public health by encouraging cleaner energy, thereby achieving cleaner air and water; preserve open spaces and forests for their recreational, aesthetic, and agricultural benefits; and aid and advise citizens and organizations in asserting and defending their interests in environmental values.

The Missouri Parks Association (MPA) is an independent citizens organization of more than 3,000 members dedicated to the protection, enhancement and interpretation of Missouri state parks and historic sites. Its members use and enjoy state parks and other public lands surrounding the Taum Sauk plant, including long distance trails interconnecting them.

Missouri Coalition for the Environment ("MCE") is a nonprofit membership organization composed of more than 1,000 members. The purposes of MCE include preserving and enhancing the physical environment, including the areas surrounding the Taum Sauk hydroelectric facility. MCE's members frequently use and enjoy Johnson's Shut-ins State Park, the East Fork Black River, and many other recreational destinations in the vicinity of the Taum Sauk facility.

For the past several years, Great Rivers, MPA, and MCE have engaged the Federal Energy Regulatory Commission (FERC) and AmerenUE on various matters involving the Taum Sauk pumped storage facility.

Background

Beginning in December 1959, Union Electric Company (now AmerenUE) purchased some 3,600 acres of land in southeast Missouri to construct and operate a pumped storage hydroelectric facility. The Taum Sauk plant's primary features were a mountaintop upper reservoir, a shaft and tunnel conduit to a 450-MW, two-unit pump turbine, a motor generator plant, a lower reservoir, and transmission facilities, including a 30-mile-long transmission line.

Although the Taum Sauk facility went into commercial operation in 1963, it managed to evade the scrutiny of the Federal Power Commission (FPC, FERC's predecessor) as well as the public because of its remote location and Union Electric's view that a federal license was not required. Following FPC litigation that went all the way to the Supreme Court and a 1965 ruling that the facility did require a license under the Federal Power Act, the FPC in an order dated August 26, 1965 issued a license retroactive to July 1, 1960, effective for fifty years.

In December 2005, as Ameren was already beginning the relicensing process, the Taum Sauk upper reservoir breached in one of the most catastrophic dam failures in American hydropower history. More than a billion gallons of water and debris surged down the mountain and tore the heart out of Johnson's Shut-Ins State Park, ruining park facilities, causing incalculable ecosystem damage, and necessitating closure of thousands of acres of public recreational lands for more than five years. After investigations by the Missouri Public Service Commission, FERC, and scientific groups suggested serious culpability and the Missouri attorney general filed suit against Ameren, the firm engaged in negotiations that led to a \$180 million settlement with the state, most of which was spent in rebuilding Johnson's Shut-ins State Park. Ameren also suspended relicensing and sought to rebuild the entire upper reservoir, characterizing it as merely a "repair."

In 2008, Great Rivers, MCE and MPA sued FERC over its decision not to issue an Environmental Impact Statement (EIS) and to issue instead an inadequate Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI) for the reconstruction of the Taum Sauk hydroelectric facility. In the suit, when Great Rivers, MCE, and MPA argued to the U.S. Court of Appeals that FERC would be hard-pressed to evaluate, in any meaningful fashion, the decommissioning of the facility after AmerenUE expends vast sums of money to rebuild Taum Sauk, FERC assured the Court that it would give due consideration to decommissioning Taum Sauk. Specifically, FERC assured the Court that:

Approval of the reconstruction of the upper reservoir does not prejudice consideration of a future relicense application . . . because the statutory structure of the FPA (as well as the application of NEPA) requires the Commission to fully re-evaluate continued operation of the Taum Sauk project under a new license, when a relicensing application is filed, regardless of AmerenUE's decision to rebuild the project now.

Great Rivers, MCE, and MPA continued to press FERC for a comprehensive evaluation of impacts and alternatives in a full EIS in July 2011 comments to FERC's scoping document and in October 2011 comments on the application for relicensing.

FERC Has Failed to Evaluate Reasonable Alternatives

As a result of the Taum Sauk plant's initial construction without the benefit of a licensing proceeding and of FERC's decision to forego a full formal EIS process for the rebuilding of the upper reservoir, there never has been a comprehensive evaluation of the alternatives to and impacts from the construction and operation of the facility, nor adequate mitigation for its negative environmental impacts.

NEPA requires FERC to fully evaluate all reasonable alternatives to the licensing of the Taum Sauk facility. 42 U.S.C. § 4332(2)(E). FERC continues to dodge any meaningful evaluation of decommissioning the Taum Sauk facility. While in its EA for the rebuild of the upper reservoir FERC considered the No-Action alternative—decommissioning and dam removal—without selecting it on the grounds that Ameren had authority to resume operation under its existing license, in the draft EA for relicensing the No-Action Alternative morphs into continued operation

under terms of the existing license, and FERC summarily eliminates any meaningful consideration of decommissioning Taum Sauk on the grounds that the project continues to provide needed energy storage and no party has advocated decommissioning. Draft EA, pp. 10, 20-22. Nowhere does FERC acknowledge the repeated comments and the 2008 lawsuit by Great Rivers, MPA, and MCE regarding the need for a full EIS and consideration of decommissioning.

With its hasty dismissal of the decommissioning alternative, FERC is doing precisely what it assured the Eighth Circuit it would not do. In 2008, FERC's attorneys assured three Federal Judges that "the statutory structure of the FPA (as well as the application of NEPA) requires the Commission to fully re-evaluate continued operation of the Taum Sauk project under a new license, when a relicensing application is filed." Brief of Respondent Federal Energy Regulatory Commission at 33-34, *Missouri Coalition for the Environment v. Federal Energy Regulatory Commission*, No. 08-1390 (8th Cir. October 23, 2008).

FERC's determination here, to eliminate the decommissioning alternative from detailed analysis, is similar to what a federal agency attempted to do in *Manitoba v. Salazar*. There, the agency had represented to a Federal Judge that a project's anticipated construction would not hinder the agency from fully evaluating the no construction alternative. Years later, the agency attempted to back away from that assurance, telling the Court that its environmental analysis under NEPA "may acknowledge the existence of already-constructed project components as part of its description of the affected environment." The Court responded by first noting that the agency's position "compares, with unfortunate overtones, to the Federal Defendants' assurances in October 2010 that "[r]eview of the issues and preparation of the supplemental EIS will be conducted notwithstanding any part of the [] project that has been designed or constructed." The Court enjoined further construction of the project, holding that "[the agency] has twice now snubbed its obligations under NEPA in its haste to work with the [applicant]." As the Court made clear:

Properly understood, NEPA requires an environmental analysis of the full consequences of a large federal project —with the inevitable, and necessary, possibility that those consequences will result in a no-project determination. . . . The Court's duty . . . is to ensure that a no-go option receives the complete consideration it requires without undue influence from [the applicant's] impatience."

Manitoba v. Salazar, 2013 WL 765621 (D.D.C. 2013).

FERC is attempting to do here what the federal agency attempted to do in *Manitoba v. Salazar*. In this matter, in 2008, FERC assured a three judge panel that it would "fully re-evaluate continued operation of the Taum Sauk project under a new license." Instead, FERC has eliminated the decommissioning alternative from detailed analysis.

FERC Has Failed to Evaluate Reasonably Foreseeable Cumulative and Secondary Environmental Impacts

When reviewing an agency's impacts analysis and decision to forego the preparation of an Environmental Impact Statement the courts apply a four-part test: (1) whether the agency took a hard look at the problem; (2) whether the agency identified the relevant areas of environmental concern; (3) for the problems studied and identified, whether the agency made a convincing case that the impact was insignificant; and (4) if there was an impact of significance, whether the agency convincingly established that changes in the project sufficiently reduced the impact to a minimum. *Audubon Society of Cent. Ark. v. Dailey*, 977 F.2d 428, 434 (8th Cir. 1992).

Because FERC has decided to forego preparation of a full EIS and the baseline for analysis—or the No Action alternative—in the draft EA is defined as continued operation under terms and conditions of the existing license and the analysis is restricted in almost all cases to the project area, FERC makes little to no effort to evaluate the cumulative and secondary reasonably foreseeable environmental impacts extending beyond the strictly delimited project boundary.

Air Pollutants and Other Combustion Wastes

FERC's analysis makes no mention of the impacts from the release of air pollutants arising from the operation of the Taum Sauk facility, either singularly or cumulatively.

The Taum Sauk facility is a 408 – megawatt pump generating power plant. The energy the facility consumes in order to pump water from the lower reservoir to the upper reservoir exceeds the power the facility is capable of generating. Table 13 in the draft EA, required by FERC policy as articulated in *Mead Corp*, indicates that the annual cost to operate the facility significantly exceeds the cost of alternative power. It requires 1.4 times as much energy to pump the water to the upper reservoir as is generated when the turbines are reversed. Draft EA at pp. 106-109. The energy required to pump the water uphill comes from the grid, and in Ameren's system and region it is generated predominantly by coal-fired plants. This is noted in a backhanded way in footnote 41, p. 106, but without any acknowledgement of its implications given the energy demands of a pumped storage plant such as Taum Sauk and without any acknowledgement or analysis in the draft EA of the environmental impacts of burning all this coal.

The air pollution impacts arising from the operation of a 408 – megawatt power facility are substantial. On December 15, 2009, EPA formally found that six greenhouse gases (including CO₂), taken in combination, endanger both the public health and the public welfare of current and future generations. 74 Fed. Reg. 66496 (December 15, 2009). EPA determined further that the "body of scientific evidence compellingly supports this finding," and that the "major assessments by the U.S. Global Climate Research Program (USGCRP), the Intergovernmental Panel on Climate Change (IPCC), and the National Research Council (NRC) serve as the primary scientific basis" for the finding. 74 Fed. Reg. at 66497.

Additionally, the steam electric power generating industry is the second largest discharger of toxic pollutants, and the toxicity of these discharges is primarily driven by metals associated with coal combustion waste.

Inexplicably, FERC has taken no look at the air pollution and other impacts that arise from the operation of the Taum Sauk facility, let alone the "hard look" NEPA requires.

Wildland Natural Resource, Aesthetic, and Recreational Impacts

The Taum Sauk plant is located in the midst of the largest and most significant complex of state parks and other public wild lands in the state of Missouri including Taum Sauk Mountain and Johnson's Shut-ins state parks, Proffitt Mountain Conservation Area, and portions of the Mark Twain National Forest. The extraordinary ecosystem and biodiversity values of this array of wild lands has been recognized by establishment of the St. Francis Mountains Natural Area to the north and east of the upper reservoir. At 7,028 acres spanning several jurisdictions, it is the largest designated natural area in Missouri. Ameren's Church Mountain property in the heart of the area was sought for inclusion in the natural area, but Ameren declined. Both Taum Sauk Creek east of the plant and East Fork Black River to the west have been designated State Outstanding Resource

Waters—high quality waters with significant aesthetic, scientific, and recreational values. The historic Boy Scout Trail, the most beloved long-distance trail in the state, runs along Taum Sauk Creek from Taum Sauk Mountain to Johnson's Shut-ins, while the popular Ozark Trail traverses the slopes.

The entire project is surrounded by the St. Francis Knobs Conservation Opportunity Area, one of the best places to conserve Missouri's native wildlife species and their habitats. The Missouri Department of Conservation's Natural Heritage Program has identified forty-seven high-quality communities in the Black River upper sub-basin. Populations of the federal and state-listed Mead's Milkweed are known to occur on Proffit Mountain, including where AmerenUE's transmission line intersects a glade complex, and on Church, Wildcat, and Taum Sauk mountains. These are probably the largest populations of the species to survive in modern times, and among very few that still produce viable seeds.

The Taum Sauk project has always been an unfortunate intrusion of industrial America in the heart of the most dramatic wildland in the state, but nowhere in the draft EA does FERC acknowledge or analyze the ecological, recreational, or cultural values of this extraordinary—and increasingly rare—wildland resource. Moreover, because the remaining wildlands in the region necessarily fall outside the project boundary and their degradation by the project is already occurring under the continued operation of the terms and conditions of the existing license, FERC assiduously excludes these impacts from analysis. Time and again FERC refuses to analyze impacts or require mitigation because "Commission regulations only apply to lands within the project boundary." This is even the case with respect to most aspects of the newly rebuilt upper reservoir.

The old upper reservoir on Proffit Mountain was visible from the trail to the popular Mina Sauk Falls on Taum Sauk Mountain and from numerous vantage points along the Ozark Trail, but its dark color and surrounding mature trees left only its flat top as a peculiar intrusion. But the new reservoir built in the wake of the breach is taller, the walls 100 feet high and starkly white by day, ungentled by trees, and brightly lit at night, so it is far more obvious and jolting and intrudes on the wild viewscape from many more vantage points, including the new public campground at Johnson's Shut-ins and as far away as the Bell Mountain Wilderness.

The FERC assessment acknowledges the visual impact of the new reservoir on aesthetic resources as reported in Ameren's study of aesthetics—"a large, geometric, light-colored shape in a natural forested landscape" (EA p. 98)—but gives no hint of its impact on the natural, cultural, and recreational resource of wildland or wilderness for which this region is by far the most iconic in the state. FERC suggests that Ameren mitigate this impact by reforesting the area at the base of the wall and has extended their five-year time allowed to plant and monitor trees, since only 5 percent of the trees already planted have survived feral hogs and drought, though it will require many decades for trees to grow to even half the height of the wall. FERC also acknowledges the visual impact of the new lights along the access road and on top of the reservoir and recommends that conversion to infrared technology and motion-activated lights to mitigate some of the impact. These reforestation and light-mitigation measures should be mandatory.

Though it acknowledges visual impacts by day and by night, FERC does not accept that there is any impact on recreational resources, even accepting Ameren's plan to close its museum and public access to its former popular overlook out onto the wild landscape from the top of the reservoir, visited by an estimated 6000 people in 2005 before the breach. FERC argues that museum exhibits are now available at Johnson's Shut-ins and that groups will still, by advance arrangement, be able to schedule visits to the upper reservoir where they can look out from the

parking lot. Thus FERC proposes that the state can mitigate impacts of the Ameren project at Johnson's Shut-ins, so there is no need to require any mitigation by Ameren—totally ignoring cumulative impacts and in effect expecting the victim to mitigate for the perpetrator. EA pp. 86-88.

The EA uses similar reasoning with regard to trails, saying that now that the trails in Taum Sauk Mountain and Johnson's Shut-ins state parks have been reopened (they were closed for more than five years after the 2005 breach), "there is not a demonstrated need to develop new trails on Church Mountain" as requested by nearly all responders including MDNR, DOC, Great Rivers, MPA, MCE, L-A-D, and EOAS. EA pp. 88-89 and 103-104. Yet the Missouri Statewide Comprehensive Outdoor Recreation Plan 2013-2017 (SCORP), not cited in the EA, clearly indicates the growth in popularity of trails. FERC goes on to dismiss the request of these responders to include preservation and development of trails on Church Mountain in the recreation management plan to be developed by Ameren in consultation with MDNR and DOC by stating "Church Mountain is not within the project boundary, and the lands are not necessary for project purposes or for enhancement of environment resources. Therefore, decisions on allowable public uses of that property are not within the scope of this draft EA" (p. 88).

Similar contorted reasoning is used with regard to invasive species, including feral hogs, endangered species, ATVs, and a host of other issues. The EA argues that feral hogs and other invasives are ubiquitous in Missouri, so nothing can be done. This is patently not true; successful efforts at elimination are being made in many places—what it requires is will and skill. FERC argues that "because the project does not directly contribute to the proliferation of feral hogs, Ameren should not be required to implement comprehensive trapping and other eradication efforts," yet FERC goes on to admit in the very next sentence that fertilizer packets used by Ameren in its effort to promote growth of recently planted trees "have attracted feral hogs to the upper reservoir," so Ameren's cooperation in allowing DNR access to the project to trap or kill the hogs would help promote survivability goals of its reforestation plan. EA p. 72. ATV use where it is unauthorized, anywhere off of public roads in the area, is another type of invasive species, but FERC argues that 19.6 percent of Missourians participate in ATV recreation (a dubious figure), nowhere acknowledging the far, far larger number of people who use trails. FERC then admits that ATV users exploit lands with easy trail access from public roads (not admitting that the roads have been improved to provide access to Ameren's power plant), but the ATV use "does not occur as a result of the operations of the project." EA, pp. 91-92.

The full extent to which the Taum Sauk facility impacts the surrounding environment has evaded review since the facility's inception. Although the Plant went into commercial operation in 1963, the facility evaded the scrutiny of the Federal Power Commission and the public because Union Electric was engaged in litigation with the Commission over whether the Taum Sauk Plant was required to be licensed under the Federal Power Act. As accurately summarized by the State in prior comments,

The project is an industrial intrusion within an area people visit to hike, camp, backpack and view spectacular mountain scenery. The mountaintop reservoir, utility corridors, roads and lights potentially have substantial impact on these very important uses of the surrounding public lands.

Missouri Department of Natural Resources to FERC, October 25, 2011.

NEPA requires FERC to prepare a full EIS if the impacts arising from the Taum Sauk facility are significant. If substantial questions are raised regarding whether the proposed action may have a significant effect upon the human environment, a decision not to prepare an EIS is unreasonable. *Save the Yaak Comm. v. Block*, 840 F.2d 714, 717 (9th Cir. 1988). Given the full range of potential

impacts raised by Great Rivers, MPA, MCE, the State of Missouri, and others, there should be no question of whether the Taum Sauk plant may have a significant impact. To this day, FERC has not analyzed the full extent of the facility's impacts in an EIS.

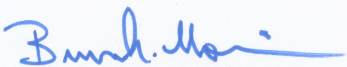
To adequately mitigate Taum Sauk's impacts to Missouri's natural resource, aesthetic, and recreational values, FERC should require AmerenUE to transfer its holdings on Church Mountain and in the Taum Sauk Creek valley to the people of Missouri. The state Missouri has articulated the significance of the issue in this fashion:

The single most important wild land protection issue for the State of Missouri is the preservation of Church Mountain. The State's preference is to accomplish this through public ownership.

Missouri Department of Natural Resources to FERC, October 25, 2011. The issue is as important today as FERC is poised to issue a fifty year operating license to Ameren.

Conclusion

The Federal Energy Regulatory Commission must complete a full Environmental Impact Statement that includes an adequate evaluation of alternatives to and impacts from the Taum Sauk plant. In addition, FERC should require AmerenUE to transfer its holdings on Church Mountain and in the Taum Sauk Creek valley to the state of Missouri as mitigation for the significant degradation of natural resource, aesthetic, and recreational values.



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