

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT
Argued October 22, 1996 Decided December 20, 1996

No. 95-1534

CITY OF NEW MARTINSVILLE, WEST VIRGINIA,
PETITIONER

v.

FEDERAL ENERGY REGULATORY COMMISSION,
RESPONDENT

On Petition for Review of Orders of the
Federal Energy Regulatory Commission

Peter C. Kissel argued the cause for petitioner. With him on the briefs were *Nancy J. Skancke* and *Monique L. Penn-Jenkins*.

Eric Lee Christensen, Attorney, Federal Energy Regulatory Commission, argued the cause for respondent. With him on the brief was *Jerome M. Feit*, Solicitor.

Rex L. Burford, Senior Assistant Attorney General, State of West Virginia, argued the cause for *amicus curiae* West Virginia Division of Natural Resources.

Before: WILLIAMS, HENDERSON, and RANDOLPH, *Circuit Judges*.

Opinion for the Court filed by *Circuit Judge* RANDOLPH.

RANDOLPH, *Circuit Judge*: The City of New Martinsville, West Virginia, operates a hydroelectric generating project on the Ohio River. The river marks the boundary between West Virginia and Ohio. The project, located on the West Virginia side, is part of a dam and locks system. As water flows through the project's turbines, so do fish. Most of the fish survive. But the Federal Energy Regulatory Commission, believing that the project damaged the fishery, ordered the city to set aside \$156,924 yearly as compensation for the loss. *City of New Martinsville*, 73 F.E.R.C. ¶ 61,041 (1995). The city's petition for judicial review followed.

I

Article 52 of the city's license for the hydroelectric project, issued in 1984 under Part I of the Federal Power Act, 16 U.S.C. §§ 791a-823a (1982), required it to undertake a study of the project's

effects on fish and, if necessary, to propose "changes in project structures or operations ... to minimize adverse project effects on fish resources." *City of New Martinsville*, 27 F.E.R.C. ¶ 61,593, at 61,703 (1984). The Commission imposed similar obligations on the Ohio Power Company with respect to its Racine hydroelectric project, located about a hundred miles downriver. Fish populations in these two segments of the river were similar, as were some aspects of the hydroelectric projects. With the Commission's approval, the city therefore decided to engage in a joint study with Ohio Power, relying on results from the Racine project, as adjusted for local conditions. *New Martinsville Hydroelectric Project*, 31 F.E.R.C. ¶ 62,226, at 63,333 (1985).

Two years in the making, the study revealed that very few game fish passed through Racine's turbines. Ninety-nine percent of the fish so "entrained" consisted of two species of non-game fish. The most numerous (87%) were gizzard shad (*Dorosoma cepedianum*), a member of the herring family (*Clupeidae*), common throughout much of the upper Ohio River. Gizzard shad travel in constantly moving schools near the surface. They are prolific spawners, with each female producing from 60,000 to 380,000 eggs. Because they feed on plankton and algae, they are not caught on baited hooks. Freshwater drum (*Aplodinotus grunniens*), members of the *Sciaenidae* family, are so caught—and often tossed back. These unattractive fish made up the balance of the entrained fish at Racine. Freshwater drum dwell on the river bottom, grubbing for mollusks, aquatic insects and crayfish. They too have a large reproductive potential, with eggs per female ranging as high as 508,000.

About 94 percent of the gizzard shad and freshwater drum swept through Racine's turbines survived the journey. Most were small, averaging just a few inches in length. Awaiting them in the tailwater at Racine (and the tailwater at New Martinsville) were game fish who feed on these two species. The study concluded that the gizzard shad and freshwater drum who perished "may help maintain the piscivorous (i.e., fish-eating) fishes in the project tailwaters. These predators would likely consume available injured fish."

When the city submitted the study to the Commission's staff in 1987, the staff agreed that physical devices to prevent fish entrainment were too costly and held out "little assurance of ...

biological effectiveness." *City of New Martinsville*, 41 F.E.R.C. ¶ 62,208, at 63,459 (1987). "Alternative means of minimizing the effects of project operation on fish resources, such as replacement fish stocking or habitat improvement, would be an appropriate, less uncertain, and potentially effective measure for mitigating fish losses at the New Martinsville Project." *Id.* The staff ordered the city to consult with the West Virginia Department of Natural Resources, the Ohio Department of Natural Resources, and the U.S. Fish and Wildlife Service and to "develop a mitigative plan to compensate for turbine-induced mortality and injury to fish...." *Id.*

The city and the West Virginia Department of Natural Resources agreed on a plan requiring the city to pay \$40,000 annually, to escalate at 4.5% per year, to this State agency for unspecified purposes. Both the Ohio Department of Natural Resources and the Fish and Wildlife Service opposed the agreement, and the Commission staff issued an order substantially modifying it. *City of New Martinsville*, 58 F.E.R.C. ¶ 62,156 (1992). The order required the city to set aside \$156,924 annually, subject to adjustment for changes in the consumer price index.¹ *Id.* at 63,446. The money was to fund "resource enhancement plans," developed by the city after consultation with the two State natural resources departments and the Fish and Wildlife Service. *Id.* at 63,447. The Commission denied the city's petition for rehearing. *City of New Martinsville*, 73 F.E.R.C. ¶ 61,041 (1995).

II

Both the city and the Commission view the yearly charge of \$156,964 as compensation for the fish killed by entrainment. The Commission arrived at this figure by estimating the number of fish destroyed annually—555,304 non-game fish, all gizzard shad and freshwater drum, and 3,219 game fish—and then multiplying those numbers by the values contained in AMERICAN FISHERIES SOCIETY, MONETARY VALUES OF FRESHWATER FISHES AND FISH KILL COUNTING GUIDELINES (1982). *City of New Martinsville*, 58 F.E.R.C. at 63,445. The city raises a host of complaints about these calculations, some of which are well-taken.

¹ The original order also required adjustments for new editions of the reference work used to calculate the \$156,924 figure, but the Commission eliminated this requirement on rehearing.

The city asks why the Commission used the American Fisheries Society guidelines to compute the proper level of compensation. The question is a good one. The Society's guidelines list estimated costs of hatchery production. Yet no one contemplates stocking the river with hatchery-bred gizzard shad or freshwater drum, and so far as we know there are no hatcheries breeding these fish. In what respect, then, may the \$156,964 be considered "compensation"? We know the money is to fund "resource-based enhancement activities ... [which] may include, but are not limited to, such activities as fish stocking and habitat improvement projects." *City of New Martinsville*, 58 F.E.R.C. at 63,446. But we also know that hatchery-bred shad and drum are not going to be stocked. So what fish may be stocked? Game fish seem the likely candidates. We can understand how increasing the supply of striped bass or walleye might make this stretch of river more attractive to anglers. But it is hard to see how stocking more game fish is, in any sense, "compensation" for the hydroelectric project's turning gizzard shad and freshwater drum into chum. Game fish feed on small gizzard shad and freshwater drum. Are we to suppose that the money the city must pay for killing these fish will be used to increase the number of predator fish who eat them? At oral argument, we heard of another suggested use for the city's payments—to make this stretch of river more accessible to fisherman by providing, for instance, boat ramps. This too is puzzling. Except in catch-and-release waters, the more heavily a stream is fished over time the fewer fish there will be. If the hydroelectric project were causing a decline in the game fish population, increasing the fishing pressure near the project would seem counterproductive.

Much of our difficulty with this aspect of the case stems from the fact that, as yet, there is no specific plan for using the \$156,964 to bring about what the Commission calls "resource enhancement." Another, related problem stems from confusion and doubt about the Commission's authority to order the city to pay anything for the losses of gizzard shad, which represents the bulk of the \$156,964 "compensation." In its final order, the Commission included among the "public interest factors" it must balance "the protection, mitigation of damage to, and enhancement of, fish and wildlife resources." *City of New Martinsville*, 73 F.E.R.C. at 61,100. This language tracks § 3 of the Electric Consumers Protection Act of 1986, Pub. L. No. 99-495, 100 Stat. 1243, 1243-45,

which significantly amended the Federal Power Act.² But that statute applies only to licenses issued after its enactment in 1986. Pub. L. No. 99-495, § 18, 100 Stat. 1259. The Commission issued the license for the New Martinsville project in 1984.

The correct source of the Commission's authority therefore must be the Federal Power Act as it stood before its 1986 amendment. Under 16 U.S.C. § 803(a) (1982), projects then had to be "adapted to a comprehensive plan for," among other things, "beneficial public uses, including recreational purposes." When the Supreme Court remanded *Udall v. FPC*, 387 U.S. 428, 436-43 (1967), to the Commission, it cited this provision as the basis for its ordering the agency to consider the adverse impact of a proposed hydroelectric project on salmon and steelhead, fish important "in our outdoor life as well as in commerce."

No commercial or recreational purposes support mitigating the effect of the New Martinsville project on gizzard shad. Unlike salmon or steelhead, gizzard shad are not game fish; they are, as the Commission staff recognized, "forage for game fishes." *City of New Martinsville*, 58 F.E.R.C. at 63,445. If there were a finding that gizzard shad entrainment mortality threatened game fish populations, then recreational considerations might justify efforts to protect gizzard shad populations. But the Commission made no such finding. In fact, the limited evidence on the subject, which comes from a Commission staff environmental impact statement discussed in more detail below, indicated that "[m]oderate numbers of killed and injured fish undoubtedly contribute to predation in tailwaters and thus to sustaining the highly productive predator populations there (a feature well documented at hydroelectric facilities on the Columbia River, for example)."

Even if the Commission had authority to protect gizzard shad simply for the sake of preserving the population of those fish in the pool above the dam, and even if we did not find the

² Section 3(a) of the Electric Consumers Protection Act amended 16 U.S.C. § 797(e) to require that, in making licensing decisions, "the Commission, in addition to the power and development purposes for which licenses are issued, ... give equal consideration to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of, fish and wildlife...." Section 3(b) amended 16 U.S.C. § 803(a) to require that licensed projects be "best adapted to a comprehensive plan ... for the adequate protection, mitigation, and enhancement of fish and wildlife...." And § 3(c) added 16 U.S.C. § 803(j)(1), which requires "[t]hat in order to adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife ..., each license issued ... shall include conditions for such protection, mitigation, and enhancement."

Commission's notion of "compensation" so bewildering, we still could not sustain the orders. The Commission offered no adequate reply to the city's argument, resting on agency precedent, that entrainment mortality at the levels found by the study would not adversely affect the gizzard shad and freshwater drum populations. In its petition for rehearing, the city emphasized the apparent inconsistency between this case and *Allegheny Electric Cooperative*, 48 F.E.R.C. ¶ 61,363 (1989), *order on reh'g*, 51 F.E.R.C. ¶ 61,268 (1990), *aff'd sub nom. Department of the Interior v. FERC*, 952 F.2d 538 (D.C. Cir. 1992). In *Allegheny*, the Commission staff prepared an environmental impact statement in connection with twenty-four applications for licenses for hydroelectric projects in the upper Ohio River basin, many in the vicinity of the New Martinsville project. *See* 48 F.E.R.C. at 62,312-16. Relying in part on the Racine project study, the staff found that the highest possible entrainment mortality rate for gizzard shad and freshwater drum was approximately 10%. *Id.* at 63,330. The staff concluded that "since gizzard shad and freshwater drum are prolific spawners, the estimated ten percent maximum mortality rate would be unlikely to impair their populations." *Id.*

If a 10% mortality rate does not significantly affect the populations of these fish, why order compensation here, where the mortality rates were only 6.5% for gizzard shad and 6% for freshwater drum? The city asked this question of the Commission. This is the response it received: "[W]here a licensee proposes an appropriate form and level of compensatory mitigation, we will consider that proposal. Here, in the presence of what all parties agree is an impact on the fishery that warrants redress ... we will affirm the Compliance Director's decision...." *City of New Martinsville*, 73 F.E.R.C. at 61,100. The Commission seems to be saying that because the city conceded that it had to pay for losses of gizzard shad and freshwater drum, the only issue was how much. But the city made no such concession. True enough, the city did not ask for reconsideration of the 1987 order requiring it to "develop a mitigative plan to compensate for turbine-induced mortality and injury to fish," *City of New Martinsville*, 41 F.E.R.C. at 63,459. And the city did later agree to pay West Virginia \$ 40,000 annually. But the 1987 order said that the city should "develop a plan to compensate the Ohio River fishery for losses established by the fish passage study...." *Id.* Entrainment mortality that has no appreciable impact on fish populations can hardly be characterized

as "losses" to the fishery. As for the city's agreement with its State natural resources department, the city's submissions show that it understood the \$40,000 sum to represent the value of game fish killed through entrainment. In any event, it makes no sense for the Commission to treat the city's attempt to reach a negotiated settlement as some sort of waiver of the city's objections to the Commission's liability determination.

As to *Allegheny*, Commission counsel tells us that, despite the staff's finding that entrainment mortality would not "impair" the gizzard shad or freshwater drum populations, the Commission required the licensees to study ways to mitigate fish mortality, including possible long-term compensation, and to compensate for fish mortality during the study period. *See Allegheny*, 48 F.E.R.C. at 62,377, 62,381-82. The significance of this point eludes us. Unlike this case, the Commission acted in *Allegheny* without the licensees recording any objection. *Allegheny* reached this court on petitions from government entities and environmental organizations challenging the Commission's decision to issue the licenses, not from licensees complaining of the conditions placed on their licenses. *See Department of the Interior*, 952 F.2d at 540. Furthermore, *Allegheny* dealt with compensation requirements placed in project licenses. We have recognized the Commission's broad authority to impose conditions on licenses. *See Department of the Interior*, 952 F.2d at 547-48. Perhaps the Commission could legally condition a license on the licensee's paying for fish kills that had no lasting impact on the fishery. Even so, it would not follow that New Martinsville's license, which obligated it to take measures "to minimize adverse project effects on fish resources," required compensation when there were no adverse effects.

The Commission stresses the following statement in the 1992 order: "While it is generally considered that gizzard shad populations are not affected (i.e., controlled) by predation mortality ... it does not necessarily follow that turbine- induced mortality would be similarly benign. Turbine mortality affects all size classes of shad and, importantly, operates simultaneously with predation and other sources of mortality. The combined mortality from all these sources may be sufficient to impact gizzard shad abundance." *City of New Martinsville*, 58 F.E.R.C. at 63,445. This excerpt is scarcely sufficient to support ordering the city to pay compensation for these fish. The statement of the

Commission staff just quoted deals in possibilities not probabilities. Entrainment mortality at the New Martinsville project "may" have an adverse effect on the gizzard shad population, and then again it may not. The Commission offered no assessment of the likelihood of either consequence. And there is no mention at all of freshwater drum. Besides, the 1992 order nowhere disagrees with the staff's finding in *Allegheny* that a 10% entrainment mortality would not likely impair gizzard shad or freshwater drum populations.

For these reasons, the Commission's orders cannot stand insofar as they require the city to set aside money to fund measures to mitigate losses of gizzard shad and freshwater drum. As to the various species of game fish for which the Commission also required compensation, the Commission made no findings of any kind about the effects of entrainment on their populations. We must, therefore, vacate the Commission's orders in their entirety.

We recognize that the Commission must often work with incomplete information. In many cases, the information provided by a licensee will support no determination one way or the other about the effect of entrainment mortality on fish populations. This does not necessarily bar the Commission from requiring compensation for fish losses. But the mere fact of uncertainty does not, without more, give the Commission unlimited power to issue orders requiring whatever compensation it deems proper. The Commission must still demonstrate that adverse impacts on fish populations are more than purely speculative, and it must respond adequately to a licensee's plausible arguments that fish populations will not be affected. In this case, it has done neither.

III

Since the case must be remanded to the Commission, we address briefly three remaining issues the city will likely raise again in any further proceedings.

First, the city argues that the Commission departed from long-standing Commission policy in rejecting the agreement that the city negotiated with the West Virginia Department of Natural Resources. The Commission generally encourages negotiated settlements between licensees and state agencies. *See, e.g., Magic Reservoir Hydroelectric, Inc.*, 72 F.E.R.C. ¶ 61,010, at 61,024 (1995); *Consumers Power Co.*, 68 F.E.R.C. ¶ 61,077, at 61,372 (1994). But the Commission is not obliged

to accept all negotiated settlements presented to it, and it has never suggested otherwise. In this case, both the Ohio Department of Natural Resources and the U.S. Fish and Wildlife Service complained that the plan proposed by the city and its State natural resources department was not developed in consultation with them, as required, and both opposed the plan. *See City of New Martinsville*, 58 F.E.R.C. at 63,444. Under those circumstances, the Commission was hardly bound to accept it.

Second, the city complains that the Commission inadequately evaluated the impact of the compensation requirement on the economics of the New Martinsville project. The Commission staff determined that the value of the electricity generated by the New Martinsville project in 1992 would be approximately \$5.4 million, of which the \$156,924 compensation amount represents only about 2.9%. *City of New Martinsville*, 58 F.E.R.C. at 63,446. We certainly would have preferred it if the Commission staff had conducted a more thorough economic analysis and had explained why an expense equal to almost 3% of expected revenues does not significantly alter project economics. However, the city has given us no reason to think that the compensation requirement makes the New Martinsville project economically infeasible. Absent some such evidence, we will not second-guess the Commission's decision.

Third, the city claims that the compensation requirement constitutes a unilateral amendment of the license for the New Martinsville project in violation of 16 U.S.C. § 799. If the city means that Article 52 of the license does not authorize the Commission to impose a compensation requirement regardless of the harm actually done to fish populations, we agree. Article 52 only addresses "adverse project effects on fish resources," and entrainment mortality that has no impact on the fish population does not count. However, as counsel made clear at oral argument, the city does not concede that Article 52 would ever authorize a compensation requirement. Apparently, the city understands the "changes in project structures or operations" contemplated by Article 52 to include physical changes to the project's design but not resource enhancement measures like fish stocking and habitat improvement. We think that the city's reading of Article 52 is too narrow. If the Commission may require the city to install physical devices to protect fish, then it may also require the city to stock the river with fish if appropriate. Initiating such a fish stocking program is a change in project

"operations" under Article 52. And if the Commission may require the city itself to conduct activities like fish stocking, surely the Commission can require the city to fund such activities conducted by state and federal environmental agencies. Having said this, we still do not understand, for the reasons mentioned earlier, how stocking game fish by anyone serves to compensate for the project's killing of gizzard shad.

* * *

The orders under review are vacated and this case is remanded to the Commission for further proceedings consistent with this opinion.