No. _____

In The
Supreme Court of the United States

UTILITY WATER ACT GROUP,

Petitioner,

v.

RIVERKEEPER, INC., *et al.*,

Respondents.

ON PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

PETITION FOR WRIT OF CERTIORARI

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QUESTIONS PRESENTED FOR REVIEW

1. Whether § 316(b) of the Clean Water Act, 33 U.S.C. § 1326(b), which specifies that standards set under §§ 301 or 306 of the statute shall require that cooling water intake structures reflect the "best technology available for minimizing adverse environmental impact," prohibits the United States Environmental Protection Agency ("EPA") from considering the cost of a technology in comparison to the level of control it achieves and to the environmental "benefit" of that level of control?

2. Whether § 316(b) prohibits EPA from authorizing existing facilities to use restoration measures (for example, fish stocking or habitat restoration) that, taken collectively with the existing characteristics of the cooling water intake structure, ensure that the intake structure minimizes "adverse environmental impact"?

PARTIES TO THE PROCEEDING

The Utility Water Act Group ("UWAG") is a petitioner in this Court and was a petitioner in the court of appeals.

Appalachian Power Company, Illinois Energy Association, PSEG Fossil LLC, PSEG Nuclear LLC, and Entergy Corporation are respondents in this Court per Rule 12.6 and were petitioners in the court of appeals. PSEG Fossil LLC, PSEG Nuclear LLC, and Entergy Corporation are expected to be petitioners in this Court as well.

The United States Environmental Protection Agency is a respondent in this Court and was a respondent in the court of appeals.

The following parties are respondents in this Court and were petitioners in the court of appeals:

Riverkeeper, Inc.
Natural Resources Defense Council
Waterkeeper Alliance
Soundkeeper, Inc.
Scenic Hudson, Inc.
Save the Bay-People for Narragansett Bay
Friends of Casco Bay
American Littoral Society
Delaware Riverkeeper Network
Hackensack Riverkeeper, Inc.
New York/New Jersey Baykeeper
Santa Monica Baykeeper
San Diego Baykeeper
California Coastkeeper
Columbia Riverkeeper

Conservation Law Foundation
Surfrider Foundation

The following States are respondents in this Court and were petitioners in the court of appeals:

Connecticut
Delaware
Massachusetts
New Jersey
New York
Rhode Island

The industry parties, environmental groups, and States jointly petitioned to intervene in the other petitioners' cases on August 27, 2004.

CORPORATE DISCLOSURE STATEMENT

Pursuant to Rule 29.6 of the Rules of the Supreme Court of the United States, counsel for petitioner Utility Water Act Group hereby provides the following Disclosure Statement:

The Utility Water Act Group ("UWAG") is a voluntary, *ad hoc*, non-profit, unincorporated group of individual energy companies and national trade associations of energy companies. The individual energy companies operate power plants and other facilities that generate, transmit, and distribute electricity to residential, commercial, industrial, and institutional customers. UWAG's purpose is to participate on behalf of its members in EPA rulemakings under the Clean Water Act. UWAG is not a parent, subsidiary, or affiliate of any corporation or other entity that has issued shares or debt securities to the public.

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PETITION FOR A WRIT OF CERTIORARI

The Utility Water Act Group respectfully petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Second Circuit in this case.

OPINION BELOW

The opinion of the court of appeals (App. 1a-100a) is *Riverkeeper, Inc. v. U.S. Environmental Agency*, 475 F.3d 83 (2d Cir. 2007).

JURISDICTION

The judgment of the court of appeals was entered January 25, 2007. The court of appeals denied requests for rehearing and rehearing *en banc* on July 5, 2007. On September 25, 2007, Justice Ginsburg extended the time to file this petition until November 2, 2007. The jurisdiction of the Supreme Court is invoked under 28 U.S.C. § 1254(1).

STATUTORY AND REGULATORY PROVISIONS INVOLVED IN THIS CASE

This case involves § 316(b) of the Clean Water Act, 33 U.S.C. § 1326(b), as well as §§ 301, 304, and 306, 33 U.S.C. §§ 1311, 1314, 1316, and EPA § 316(b) regulations for "Phase II" facilities, 69 Fed. Reg.

41,576 *et seq.* (July 9, 2004),[1] codified at 40 C.F.R. §§ 122.21(r)(ii)(1), (2), (3), (5), 123.25(a)(4), (36), 124.10(d)(1)(x), and 125, Subpart J (125.90-99) (suspended by notice dated July 9, 2007, 72 Fed. Reg. 37,107). These statutory provisions and regulations are reproduced in the appendix to this petition (App. 103a-124a (statutory provisions); App. 124a-141a (regulations)).

STATEMENT

1. This petition addresses two issues critical to EPA's ability to achieve the objectives of the Clean Water Act using the fundamental principles it has applied for the past thirty years. First, the Second Circuit decided that § 316(b) – which applies to thousands of cooling water intake structures nationwide – prohibits EPA from weighing costs against environmental results in selecting the "best technology available for minimizing adverse environmental impact." This result has no basis in the statute and is inconsistent with longstanding First Circuit precedent on which EPA and state agencies have relied in making permitting decisions for nearly thirty years. Second, the Second Circuit decided that § 316(b) prohibits EPA from considering the beneficial effects of "restoration" measures in deciding whether existing cooling water intake structures have "minimiz[ed] adverse environmental impacts."

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[1] The Federal Register notice of the rule is too lengthy (118 pages) to include in the Appendix. UWAG will make it available if the Court requests.

2. To attain the objectives of the Clean Water Act, Congress established substantive requirements, overwhelmingly directed at pollutant discharges from industrial facilities. Only one – § 316(b), the provision at issue here – regulates intake structures through which water enters a plant.

Section 316(b) provides that any standard established pursuant to §§ 301 or 306 of the Clean Water Act (which call for technology-based limits to reduce pollutants in industrial wastewater) "shall require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact." 33 U.S.C. § 1326(b), App. 121a. The standards at issue here apply to existing power plants, for which the intake structure features already have been chosen, thus significantly constraining technological changes.

3. Cooling water is vital to many industrial facilities, but particularly to steam electric plants, which compose 53 percent of the Nation's generating capacity. Economic and Benefits Analysis, DCN 4-0002, at A3-13. The turbines of these plants are driven by steam which is then condensed by cooling water. The cooling water is withdrawn through a "cooling water intake structure" ("intake structure" or "CWIS"). The amount of cooling water depends on the design of the condenser cooling system. "Once-through" systems pass cooling water through the condenser once or twice before discharge. "Closed-cycle" systems cool the water, usually using a tower or pond, and reuse it several times before discharge.

When cooling water is pumped into a power plant, aquatic organisms can be carried with it. Larger biota may be swept against the intake screens and "impinged." Smaller organisms (*e.g.*, eggs, larvae, and other early life stages) are carried through the cooling system, *i.e.*, "entrained." Some of the impinged or entrained fish, but not all, will be killed. 69 Fed. Reg. 41,586/2, 41,620/2-3.

Whether operation of a cooling water intake structure will cause environmental effects, and if so what they will be, depends on factors that have nothing to do with the type of industry, its products, or its raw materials. The number and type of organisms in the source water, the time of year, and currents in the waterbody largely determine what numbers, life stages, and species of fish are impinged or entrained. A power plant is unlikely to impinge many fish if its CWIS is located in an area that is not desirable habitat or where fish do not dwell in the water column. See 69 Fed. Reg. 41,592/2. Impingement also may be low where the velocity of the intake water is such that fish can perceive and avoid it. 69 Fed. Reg. 41,601/3. A plant is unlikely to entrain many eggs and larvae if the intake is not near a spawning area, or if the eggs and larvae are not free-floating. 69 Fed. Reg. 41,612/2. Eggs and larvae will be entrained only during species-specific spawning seasons. 69 Fed. Reg. 41,616/2.

With existing plants, technologies that reduce impingement or entrainment may not be available given site and facility constraints. See 69 Fed. Reg. 41,603/2, 41,628/1 ("more limited availability of other technologies"). Some technologies which decrease impingement and entrainment create other

adverse environmental and social effects. Barrier nets that prevent organisms from entering areas around the intake may foreclose use of those areas as habitat by organisms not susceptible to the intake. Large in-stream screen assemblages may create hazards to navigation. Enlarging intake structures to reduce velocity may require construction in wetlands or shoreline habitat. And technologies that increase power needs or produce wastes or emissions may create adverse environmental and energy effects that far outweigh any environmental benefits from reducing impingement and entrainment.

Recirculating cooling systems often have such effects, most notably the energy penalties and increased air emissions associated with the increased cooling system power needs. 69 Fed. Reg. 41,605/2-3, 41,606-07. For example, the Department of Energy has determined that approximately twenty new 400-megawatt plants would be required to compensate for lost generating capacity associated with closed-cycle retrofit. *Id.*

4. EPA first published regulations implementing § 316(b) in 1976. 41 Fed. Reg. 17,387 (Apr. 26, 1976). They were struck down by the Fourth Circuit on procedural grounds. *Appalachian Power Co. v. Train*, 566 F.2d 451 (4th Cir. 1977). Thereafter, EPA and state agencies implemented § 316(b) by developing standards site-by-site, based on their "best professional judgment" ("BPJ"). 69 Fed. Reg. 41,584.

For thirty years, BPJ determinations have been shaped by principles embodied in precedent

and EPA guidance. First, § 316(b) does not require selecting the technology that most reduces impingement and entrainment mortality, if its cost would be wholly disproportionate to the benefits obtained (that is, the number of organisms spared or the effects of reduced losses on the waterbody). 69 Fed. Reg. 41,606/1, 41,626-27; EPA, *Guidance for Evaluating the Adverse Impact of Cooling Water Intake Structures on the Aquatic Environment: Section 316(b) P.L. 92-500* (Draft May 1, 1977); *In the Matter of Public Service Company of New Hampshire, et al. (Seabrook Station, Units 1 and 2)*, NPDES Appeal No. 76-7, 1 E.A.D. 455, 1978 EPA App. LEXIS 17 (August 4, 1978), *aff'd, Seacoast Anti-Pollution League v. Costle*, 597 F.2d 306, 331 (1st Cir. 1979).

Second, in evaluating whether an existing CWIS reflects the best technology for "minimizing adverse environmental impact," the permitting agency may take into account measures that enhance the number, type, or condition of fish in the waterbody. These "restoration" or mitigation measures are designed to avoid or minimize "adverse environmental impact" resulting from impingement or entrainment. 69 Fed. Reg. 41,609/1, 41,627-28, 41,637/3; *see also infra* at 32.

5. In the mid-1990's, to resolve a lawsuit filed by environmental groups, EPA entered a consent decree obligating it to create § 316(b) regulations in three phases: Phase I (new facilities of all kinds, including new steam electric power plants); Phase II (electric power plants built before 2002 that withdraw over 50 million gallons per day of cooling water from the waters of the United States, as well

as expansions at such facilities); and Phase III (existing power plants and industrial facilities not subject to Phase II).[2] See 69 Fed. Reg. 41,583/3.

The Phase II regulations, and the Second Circuit's decision overturning the longstanding interpretation of § 316(b) reflected in those regulations and relied on by permitting agencies and power companies, are the subject of this petition.

EPA published final Phase II regulations on July 9, 2004, 69 Fed. Reg. 41,576, culminating a nine-year rulemaking during which the Agency and the regulated community spent millions of dollars to collect and analyze the biological, technological, and economic information on which EPA based its expert judgment. 69 Fed. Reg. 41,585. EPA estimates that the Phase II regulations apply to over 540 steam electric power plants. 69 Fed. Reg. 41,593/2. This is an important and far-reaching rule, by any measure.

a. To evaluate intake structure technologies and determine which were the "best" of those

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[2] EPA issued its § 316(b) determination for Phase III facilities on June 16, 2006. 71 Fed. Reg. 35,006. There, EPA determined that § 316(b) should continue to be implemented case-by-case for Phase III facilities (which encompass existing power plants and industry facilities not subject to Phase II), rather than by uniform standards. EPA reached this decision because the costs of applying uniform standards would be wholly disproportionate to the benefits. 71 Fed. Reg. 35,015/1. Environmental groups have filed petitions to review that rulemaking decision; those petitions have been consolidated in the Fifth Circuit. *ConocoPhillips Co., et al. v. EPA*, No. 06-60662 and consolidated cases.

"available," EPA "selected reductions in impingement and entrainment as a quick, certain, and consistent metric for determining performance at Phase II existing facilities." *Id.* at 41,586/1. The Agency then evaluated a variety of technologies to determine their ability to reduce impingement mortality and entrainment. One option considered was requiring all or some existing facilities with once-through cooling to retrofit closed-cycle systems. EPA recognized that retrofitting closed-cycle cooling at existing once-through units could reduce flow substantially – by EPA's estimate, 70-96 percent at facilities using salt water and 96-98 percent at facilities using fresh water. 69 Fed. Reg. 41,601 n.44. EPA estimated that flow reductions would achieve a comparable reduction in entrainment and, in some cases, impingement. 69 Fed. Reg. 41,612/2. Although recognizing that the range of reduction potentially achievable could be greater in some cases from closed-cycle cooling than from other technologies (barriers, behavioral devices, or screening), EPA chose not to base the Phase II standards on closed-cycle cooling. 69 Fed. Reg. 41,605/1.

EPA based its decision partly on its conclusion that "other technologies approach the performance of [closed-cycle cooling]" at about one-ninth the cost of closed-cycle cooling. *Id.; cf.* 69 Fed. Reg. 41,605/2 to 41,650/2. Other factors also influenced EPA's decision: the huge plant-specific and national cost of retrofitting existing facilities with cooling towers and their potential to cause plant closures; the energy penalties associated with retrofitting existing facilities and the resulting risks to national energy reliability; increases in air emissions from additional

generation needed to compensate for such penalties; the fact that retrofitting would be physically impossible at some plants; and other adverse effects such as fog, icing, and noise. See 69 Fed. Reg. 41,606.

b. EPA found that "best technology" varies among sites but is reflected by national performance standards that require reducing impingement mortality 80-95%. 40 C.F.R. § 125.94(b)(1), App. 132a, 69 Fed. Reg. 41,686/1. At many sites, the standards also require entrainment to be reduced 60-90%. 40 C.F.R. § 125.94(b)(2), App. 132a, 69 Fed. Reg. 41,686. These standards reflect EPA's judgment that, "given the wide range of various factors that affect the environmental impact posed by Phase II existing facilities, different technologies or different combinations of technologies can be used and optimized to achieve the performance standards." 69 Fed. Reg. 41,598/2.

c. EPA provided various compliance options, including setting alternative standards where site conditions justified different treatment. Notably, EPA allowed site-specific standards to be set where the costs of meeting the national standards would be substantially greater than the benefits. 40 C.F.R. §§ 125.94(a)(5)(ii), App. 131a, 125.95(b)(6)(ii), App. 140a, 69 Fed. Reg. 41,685-86. This provides the rule's only mechanism for testing EPA's assumption that the net environmental benefits of reducing impingement mortality and entrainment will outweigh other adverse environmental impacts created by an intake alternative. The rule provides detailed instructions for assessing benefits both

quantitatively (in economic terms) and qualitatively. *Id.*

This provision reflects EPA's recognition that its national estimate of impingement mortality and entrainment levels at Phase II plants was unlikely to hold true for all sites. Thus, "because of the location of the intake, the characteristics of a particular waterbody, or the behavioral patterns of the fish or shellfish in that particular waterbody, there may be little or no impingement mortality or entrainment occurring at the site." 69 Fed. Reg. 41,604/1. The Agency found legal authority for site-specific requirements taking costs and benefits into account in the statute and its legislative history, as well as EPA's longstanding interpretation of § 316(b), which had been approved by the First Circuit in *Seacoast*. 69 Fed. Reg. 41,625-27.

Further, instead of requiring changes in intake hardware, EPA allowed use of restoration measures capable of achieving in-stream substantially the same environmental benefits that would result from reducing impingement mortality and entrainment. The record shows that such measures can, in appropriate cases, be superior to hardware changes, because they can be scaled to more than make up for losses, can produce or protect more important species, and often last longer than the life of the facility. See New Jersey Department of Environmental Protection ("NJDEP") Comment 2.002 at 24; New Jersey Department of Environmental Protection and Energy, Response to Comments Document, PSEG Salem Generating Station NJPDES/DSW Draft Permit NJ0005622, at 13-14, DCN:1-5024-PR; USEPA Phase I Response to

Comments (Author Version), 508.011. Restoration is available only where the permittee shows that such measures are "more feasible, cost-effective, or environmentally desirable" than changing the location, design, construction, and capacity of the existing cooling water intake structure. 69 Fed. Reg. 41,638/1; see 40 C.F.R. § 125.94(c)(1), App. 134a. For over two decades, facilities have made extensive investments in restoration projects, based on EPA's authorization of restoration measures under § 316(b).

EPA recognized that the Second Circuit, in an earlier case involving the Phase I regulations for new facilities (*Riverkeeper, Inc. v. EPA*, 358 F.3d 174, 189-91 (2d Cir. 2004) (*Riverkeeper I*)), concluded that § 316(b) does not authorize restoration for new facilities. EPA explained in detail why that decision did not determine the outcome for existing facilities. EPA noted that the Second Circuit itself had explicitly stated that "[i]n no way [does it] mean to predetermine the factors and standard applicable to Phase II and III of the rulemaking." 69 Fed. Reg. 41,628/1 (citations omitted). EPA then explained why restoration is consistent both with the overarching objective of the Act and with the terms of § 316(b) itself, especially the broad injunction to "minimize adverse environmental impact." 69 Fed. Reg. 41,627-28. Further, it concluded that restoration is consistent with longstanding federal and state interpretation and application of § 316(b) (69 Fed. Reg. 41,627/3) and is necessary given the narrower range and higher cost of hardware options available to existing facilities. 69 Fed. Reg. 41,628/1.

6. Environmental groups and several Northeastern states, as well as three power companies, a State energy association, and UWAG, sought review of the Phase II rule, albeit on different grounds. Petitions for review were filed in several different circuits, pursuant to § 509(b)(1)(E) of the Clean Water Act, 33 U.S.C. § 1369(b)(1)(E), and, ultimately, consolidated in the Second Circuit.

7. The Second Circuit reversed and remanded virtually every important feature of the Phase II regulation. The court (1) narrowly prescribed how EPA may consider costs for purposes of selecting the best technology available at the national level, (2) prohibited EPA from allowing any site-specific consideration of costs and benefits in determining what intake technology best minimizes adverse environmental impacts, and (3) prohibited consideration of restoration efforts that reduce or eliminate the environmental impacts of impingment and entrainment in assessing whether an existing intake "minimizes adverse environmental impact."

a. On both cost issues, the Second Circuit recognized that § 316(b) "does not itself set forth ... the specific factors that the EPA must consider in determining" what technology is "BTA." App. 24a-25a. Indeed, the court in *Riverkeeper I* had emphasized that § 316(b) is *suorum generum*; it concluded that the paucity of legislative history, combined with the brevity of the section itself, "counsels against imputing much specific intent to Congress beyond the section's words themselves." *Riverkeeper I*, 358 F.3d at 187 n.12. Thus, "[t]o the extent the provision is silent on issues to which other sections speak, we hesitate to draw the negative

inference that the brevity of section 316(b) reflects an intention to limit the EPA's authority rather than a desire to delegate significant rulemaking authority to the Agency." *Id.*

Faced with the palpable ambiguity of § 316(b), the Second Circuit in *Riverkeeper II*, after reciting the standard of review this Court articulated in *Chevron U.S.A. Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842-43 (1984), proceeded to substitute its own interpretation of the Act for EPA's. Based primarily on its reading of §§ 301 and 306, the court concluded that consideration of cost-benefit analysis "was not 'based on a permissible construction of the statute.'" App. 41a. According to the Second Circuit, § 316(b) requires EPA first to identify the technology that most effectively reduces impingement and entrainment (based on the optimally performing, not the average, facility) and can "reasonably be borne" by the industry. App. 30a. EPA then may base its standards on a less costly technology only if the level of performance achievable by that technology is "essentially the same" as the more costly technology. App. 31a. This approach, the court says, constitutes the *only* allowable "cost-effectiveness" analysis. App. 30a-31a.

Based on this interpretation, the court held that EPA violated the statute if it selected BTA based partly on its determination that the marginal difference between the levels of impingement mortality and entrainment reduction achievable by closed-cycle cooling was insufficient to justify the marginal increase in cost and significant decrease in generating capacity compared with other technology

alternatives. App. 41a. The court concluded that this analysis, which EPA explained is the same type of cost-effectiveness analysis it uses to set other technology-based guidelines and standards (see Final Brief for Respondents at 54 (April 17, 2006)), was an impermissible "cost-benefit" analysis. Having reached the conclusion that even weighing cost and performance was impermissible when setting the national standards, the court also struck down the compliance alternative of evaluating site-specific costs and benefits. App. 62a. For ease of reference, we will refer to both these issues as involving "cost-benefit" analysis, although in truth they involve distinct methods of weighing costs against results.

The Second Circuit reached this conclusion based not on any statement in § 316(b) or its legislative history, but instead on the court's own interpretation of different statutory provisions (§§ 301, 304, and 306) that govern effluent guidelines for pollutant discharges. App. 24a-27a. Those provisions, it said, constrain EPA's discretion.

The court claimed to find support for this proposition in *Riverkeeper I*, even though the earlier panel interpreted both §§ 301 and 306 (to which the court said EPA could look for guidance) as allowing EPA to weigh costs and results. There, the Second Circuit rejected claims that § 316(b) required EPA to select "dry cooling" as BTA for new facilities because dry cooling, although 95% more effective at reducing entrainment, also was ten times as expensive as wet closed-cycle cooling. *Riverkeeper I*, 358 F.3d at 194 nn.22-23. The court characterized the marginal improvement, compared to anticipated once-through

levels, as "a relatively small improvement ... at a very significant cost." *Id.* at 195. Citing § 306's instruction that EPA consider "the cost of achieving such effluent reduction," the panel concluded that EPA could weigh the cost of technologies and the "level of reduction" they achieve (that is, their "benefit") in deciding which was best. *Id.* (citing *BP Exploration & Oil, Inc. v. EPA*, 66 F.3d 784, 802 (6th Cir. 1995)).

Industry petitioners' May 11, 2007 requests for rehearing and rehearing *en banc* highlighted this inconsistency, but they were denied July 5, 2007. App. 102a. Thus, the Second Circuit appears to have embraced the new and radical interpretation of the statute of *Riverkeeper II*.

The Second Circuit's interpretation of § 316(b) conflicts with the First Circuit's in *Seacoast*. The decision also conflicts with the decisions of other circuits construing §§ 301, 304, and 306.

b. The court's determination on restoration reflects a similar lack of consideration for the terms and purpose of § 316(b), and lack of deference to EPA's longstanding interpretation of the statute and prevailing precedent. Citing the decision in *Riverkeeper I* for new facilities (which the panel in *Riverkeeper II* viewed as dispositive), the court reasoned that § 316(b) prohibits restoration measures because they "are not part of the location, design, construction, or capacity of cooling water intake structures, ... and a rule permitting compliance with the statute through restoration measures allows facilities to avoid adopting *any* cooling water intake structure technology at all...."

App. 53a (emphasis in original). The court rejected EPA's determination that existing facilities, which already have intake structures in place, have less flexibility, and thus require a different approach. The court also dismissed with little analysis EPA's decision that § 316(b)'s directive to "minimize adverse environmental impact" affords the Agency discretion to determine that a facility has met the standard where it has compensated for impingement and entrainment using restoration measures.

8. Because of the Second Circuit's decision, on July 9, 2007, EPA suspended virtually all the Phase II rule. 72 Fed. Reg. 37,107 (July 9, 2007). The only part not suspended is 40 C.F.R. § 125.90(b), which directs permit writers to develop BPJ controls for existing CWIS not subject to categorical § 316(b) regulations. Thus, 543 Phase II facilities will now be regulated case-by-case.

REASONS FOR GRANTING THE PETITION

I. The "Cost-Benefit" Issue

This case presents an important issue having ramifications far beyond § 316(b). That is, when Congress instructs EPA to identify the "best" technology "available" to achieve an outcome (minimization of adverse environmental impact), has it thereby shown a clear intent to strip EPA of any discretion to weigh costs against the level of performance achieved or the marginal environmental "benefit" of that performance? The Second Circuit, ignoring decisions of other circuits and its own precedent, said that is what Congress intended. The Second Circuit's ruling compels EPA

to use tunnel vision when it considers costs in setting BTA standards.

That ruling is erroneous. It is not based on § 316(b)'s plain language or its legislative history. Rather, it is based on the Second Circuit's own new and highly selective interpretation of different statutory provisions referenced by § 316(b), despite the fact that those provisions have a different structure, use different terms, and specify a different objective to address a different type of activity. That interpretation is unsupported even by the Second Circuit's own earlier interpretation of § 316(b) in *Riverkeeper I,* which properly concluded that EPA could reject an intake technology for new facilities that was more effective, but far more costly, than the technology ultimately chosen. Equally important, the court's interpretation is unsupported by the statutes on which the court relies (§§ 301, 304, and 306) or the decisions of other circuits construing those provisions.

Consequently, the Second Circuit ruling creates a double conflict. First, it creates a conflict with the First Circuit, whose decision in *Seacoast* has been good law for nearly three decades. Second, it creates a conflict in principle with the Fifth, Sixth, and D.C. Circuits, which recognize that other Clean Water Act provisions directing EPA to set effluent limitations reflecting the "best available technology," although not requiring cost-benefit analysis, nevertheless afford EPA broad discretion to consider cost, performance, and other factors.

The Second Circuit's decision also has serious implications for EPA's Phase III determination. *See*

infra at 29. Appeals of that determination now pending in the Fifth Circuit raise *precisely the same issue*; yet, because of the procedural juxtaposition of that case with this one, even if the Fifth Circuit disagrees with the Second, neither the government nor UWAG will have the right to ask this Court to resolve the further split among the circuits.

Equally important, until EPA can complete a new rulemaking, the uncertainty created by this split in the circuits will have widespread consequences for administration of the NPDES permit process for hundreds of Phase II and Phase III facilities, because § 316(b) continues to apply nationwide even without uniform standards. And, should the Second Circuit's new legal standard ultimately result in a rule that requires existing plants to retrofit cooling towers, the national energy, environmental, and economic implications would be enormous.

Review by the Court on this issue therefore is warranted by the errors in the Second Circuit's ruling; the conflict it creates with other circuit decisions interpreting not only § 316(b) but also §§ 301, 304, and 306; the need to provide clarity to the Fifth Circuit in the Phase III case; the cost to permittees and regulators and the permitting delays the Second Circuit's decision will generate as permit writers and reviewing courts nationwide struggle to decide which circuit's interpretation of § 316(b) to follow; and the national energy, environmental, and economic implications of the decision and the constraints it imposes as EPA rewrites its regulations to conform with the decision.

A. The Plain Language of § 316(b) Does Not Contradict, and the Legislative History Supports, an "Economic Practicability" Test

Section 316(b) calls only for features of intake structures to reflect the "best technology available for minimizing adverse environmental impact." Nothing in that section limits EPA's ability to consider and weigh costs against other factors such as the level of performance or the environmental benefit of that performance. Given § 316(b)'s ambiguity, under *Chevron* EPA's interpretation was entitled to deference. The Second Circuit gave it none.

Moreover, the only apposite legislative history supports EPA's interpretation, saying that best technology available means "best technology available commercially at an economically practicable cost." 118 Cong. Rec. 33,762 (1972), *reprinted in* A Legislative History of the Water Pollution Control Act Amendments of 1972, at 264 (1973) (statement of Congressman Don H. Clausen). The Second Circuit rejected this statement (App. 34a), though Congressman Clausen was a member of the conference managers group for the statute.

B. The First Circuit Affirmed EPA's Consideration of Costs In Comparison to Results

Other courts have upheld EPA's authority to weigh costs against environmental results under § 316(b). The First Circuit – the only other circuit that has decided the § 316(b) issue presented here –

upheld EPA's authority to weigh costs against environmental results in implementing § 316(b). Its 1979 decision in *Seacoast* (as well as the EPA administrative decisions on which it was based) focused properly on the specific terms of § 316(b) and its legislative history, concluding that § 316(b) authorizes EPA to consider both costs and benefits (whether in terms of the number of organisms saved or the effect of impingement and entrainment on affected populations) when it selects "best technology available for minimizing adverse environmental impact."

The *Seacoast* case arose from the EPA Administrator's decision *In the Matter of Public Service Company of New Hampshire, et al. (Seabrook Station, Units 1 and 2)*, NPDES Appeal No. 76-7, 1 E.A.D. 455, 1978 EPA App. LEXIS 17 (August 4, 1978). The proposed intake for the Seabrook Station was about 7,000 feet offshore in 58 feet of water. An environmental group argued that the intake tunnel should be extended another 4,000 feet to water 75 feet deep. EPA's Administrator decided that moving the intake structure "could result in undesirable environmental consequences and be very expensive and time-consuming" and that not much would be gained in terms of minimizing adverse effects. *Id.* at n.22. His conclusion was based squarely on a comparison of costs to benefits:

> I conclude that, based on this record, the costs of any further movement of the intake beyond the presently proposed far site location would be wholly disproportionate to any environmental benefit.

Id. at 66. The First Circuit Court of Appeals affirmed, embracing the "wholly disproportionate" approach of the Administrator and adding:

> Petitioners, wisely, do not argue that the cost may not be considered, and no harm is done by noting that there would be other costs. The legislative history clearly makes cost an acceptable consideration in determining whether the intake design "reflect(s) the best technology available" [footnote omitted].

Seacoast Anti-Pollution League v. Costle, 597 F.2d 306, 311 (1st Cir. 1979); *accord United States Steel Corp. v. Train*, 556 F.2d 822, 850 (7th Cir. 1977) ("we trust that EPA will conduct a limited cost-benefit analysis" under § 316(b)).

In permitting decisions over the past thirty years, EPA and the states have relied on the "wholly disproportionate" test in *Seacoast* in making § 316(b) decisions. *E.g.*, *Boston Edison Co. (Pilgrim Power Plant),* Determination Regarding Issuance of Proposed NPDES Permit No. MA0025135 at 19 (EPA Region I 1977) ("decision regarding the required degree of minimization calls for a determination that the costs involved are not wholly out of proportion to the adverse environmental impact being avoided"); *Florida Power Corp. (Crystal River Power Plant),* NPDES No. FL0000159 (EPA Region IV 1988), DCN:2-025N (closed-cycle cooling costs "wholly disproportionate" to environmental benefits; permit required intake flow reduction and fish hatchery instead); *Tennessee Valley Authority*

(John Sevier Steam Plant), NPDES No. TN0005436 (EPA Region 1986), DCN:2-025J (costs associated with intake modification "would be wholly disproportionate to the anticipated benefits"; different measures, primarily restoration, required instead); *Potomac Electric Power Company (Chalk Point Generating Station)*, NPDES No. MD0002658B (Maryland DNR 1987), DCN:1-5023-PR (cost of closed-cycle cooling "exceedingly high" compared to benefits; fish stocking and removal of barriers to fish migration required instead); *Fact Sheet for Draft NJPDES Permit Renewal Including Section 316(a) Variance Determination and Section 316(b) "BTA" Decision*, (NJ DEPE 1993), DCN:2-025E ("estimated cost of closed cycle cooling is wholly disproportionate to the environmental benefit to be realized"; wetland restoration, fish ladders, and baywide biological monitoring required instead).

After *Seacoast*, no challenge to the wholly disproportionate test has been brought in any federal court, nor are we aware of any in a state court. The cost-benefit test is established law, repeatedly applied and never challenged. It has been relied on by EPA, state permitting agencies, and the power industry as foundation of § 316(b) for almost thirty years.

Instead of following its own previous decision and the First Circuit's decision in *Seacoast*, the Second Circuit has now chosen to go in a new and wholly unsupported direction, thereby creating a split between the First and Second Circuits.

Rather than reviewing EPA's well-founded interpretation of § 316(b) by looking to the terms and

history of the section itself, the court relied on its own erroneous interpretation of the language, structure, and history of Clean Water Act §§ 301, 304, and 306. Those sections, unlike § 316(b), list the factors that EPA must at a minimum consider when setting standards for reducing pollutant discharges. The *Riverkeeper I* panel concluded that those sections, while providing helpful guidance, were not binding. 358 F.3d at 187. *Riverkeeper II* concluded otherwise and, compounding the error, ignored the broad reservation of authority explicitly conferred by those sections.

The court focused on Congress's use of "available" in § 316(b) and other statutory provisions. Its reasoning went something like this: The statutes governing effluent limitations reflecting "best practicable control technology currently available" (BPT) (§§ 301(b)(1)(A) and 304(b)(1)) specifically require EPA to compare costs to effluent reduction benefits. The statutory provisions (§§ 301(b)(2)(B) and 304(b)(2)) governing effluent limitations reflecting the "best available technology economically achievable" (BAT) do not. Instead, the BAT provisions instruct EPA to consider "the cost of achieving such effluent reduction." Since Congress specifically required comparison of costs and effluent reduction benefits in the BPT provisions, but not in the BAT provisions, the court concluded Congress must have forbidden weighing costs and benefits when EPA adopts BAT limits. And, because Congress used the words "best," "available," and "technology" in both § 316(b) and the BAT provisions (as well as in the BPT provisions – a fact the Second Circuit ignored), Congress also must have intended to prescribe a wholly "technology-driven" result

(App. 29a), with which the court said any "cost-benefit analysis" would be inconsistent. App. 31a-32a.

However, as this Court has stressed repeatedly in recent decisions, Congress's use of the same word or phrase in different provisions within the same statute is not determinative, even where there is a specific cross-reference. *Envtl. Def. v. Duke Energy Corp.*, 127 S. Ct. 1423, 1437-38 (2007); *S. D. Warren Co. v. Maine Bd. of Envtl. Prot.*, 126 S. Ct. 1843, 1848 (2006). The Second Circuit ignored that instruction here.

Instead, it mistakenly relied on this Court's holdings in *Russello v. United States*, 464 U.S. 16, 23 (1983), and *American Textile Manufacturers Institute v. Donovan*, 452 U.S. 490 (1981). It looked to *Russello* to support its view that the omission of "practicable" from § 316(b) was determinative. App. 35a-36a. But *Russello* does not apply when the statute confers discretion on the administrative agency or when other provisions of the statute are directed at a markedly different type of regulatory program.

It cited *American Textile* for the proposition that cost-benefit analysis is prohibited absent a specific Congressional authorization. App. 63a. Here too, its reliance is misplaced, as the Court there held only that cost-benefit analysis was not *required* absent a clear Congressional statement to the contrary. *American Textile*, 452 U.S. at 509-12. *See also NRDC v. EPA*, 824 F.2d 1146, 1159 n.6 (D.C. Cir. 1987) (en banc) ("*American Textile* would seem to be limited to the finding that ... the agency is

not *required* to employ cost-benefit analysis.") (emphasis added); *Massachusetts v. Hayes*, 691 F.2d 57, 61 n.4 (1st Cir. 1982) ("The Court there held only that the statute ... did not *require* ... cost/benefit analysis").

By conflating § 316(b) with the effluent guidelines provisions, the court ignored fundamental differences between the two regulatory schemes. As *Riverkeeper I* recognized, § 316(b) is the only section applicable to intake structures rather than to effluents; it sets a standard markedly different from those used in §§ 301 and 306 – *one that focuses specifically on environmental impacts*; it is structurally different from those sections, in that it does not specifically anticipate increasingly stringent levels of control; it is located in a separate section concerned generally with the uniqueness of heat as a pollutant; and it lacks the explanatory detail which accompanies the sections governing effluents. *Riverkeeper I*, 358 F.3d at 186-87. EPA acknowledged both the similarities and the differences between § 316(b) and the other sections and explained why, in light of the record evidence, its interpretation was appropriate to the terms of § 316(b).

C. The BAT/NSPS Requirements Do Not Compel the Second Circuit's Decision on Costs, and Other Circuits Have Disagreed

Even if the Second Circuit were justified in substituting its judgment for EPA's based on the court's interpretation of other statutory provisions governing different regulatory programs, that

interpretation was itself erroneous for several reasons. First, nothing in the BAT or NSPS provisions either compels or forbids EPA to weigh costs against effluent reductions or environmental results. Indeed, § 304(b)(2)(B) tells *EPA* to "specify factors to be taken into account in determining" BAT, identifying "the cost of achieving such effluent reduction" as one such factor. 33 U.S.C. § 1314(b)(2)(B), App. 114a. Further, it explicitly authorizes EPA to specify "such other factors as the Administrator deems appropriate." *Id.* This broad reservation of authority suggests that EPA retains discretion to weigh costs against "benefits" in appropriate cases. *See Weyerhaeuser Co. v. Costle*, 590 F.2d 1011, 1046 (D.C. Cir. 1978) (section 304 "cannot logically be interpreted to impose on EPA a specific structure of consideration or set of weights because it gave EPA authority to 'upset' any such structure by exercising its discretion to add new factors to the mix").

Indeed, the 1977 addition of § 301(g) is an explicit signal of Congress's intent that EPA weigh costs and water quality benefits to avoid unnecessary treatment for treatment's sake by existing facilities. 33 U.S.C. § 1311(g). Section 301(g) provides a variance from BAT limits for non-toxic, non-conventional pollutants where the discharger can show that relaxed limits will, *inter alia*, protect water quality.

The Second Circuit ignored all these statutory signals, instead overruling EPA's judgment that comparing costs and benefits is an "appropriate" factor here. Other courts, including the Third Circuit in *Consolidated Rail Corp. v. United States*,

855 F.2d 78, 85-86 (3d Cir. 1988), have recognized that an agency is entitled to *Chevron* deference when determining whether a statute permits cost-benefit analysis.

To support its interpretation of the BAT provisions, the Second Circuit cited this Court's decision in *EPA v. National Crushed Stone Ass'n*, 449 U.S. 64, 71 n.10 (1980). App. 26a. Here, too, it was wrong. In *National Crushed Stone*, the Court considered what economic factors EPA must consider when deciding whether a variance from "best practicable technology" ("BPT") guidelines is warranted. The Court was not called on to decide nor did it opine on whether the BAT provisions, which do not require cost-benefit balancing, nevertheless afford EPA discretion to weigh costs and benefits as the Agency deems necessary.

Second, the Second Circuit's decision is directly at odds with decisions of many circuits that have upheld EPA's discretion to weigh costs and results or "benefits" in selecting BAT. Indeed, although several courts have held that EPA is not *required* to do a cost-benefit analysis under §§ 301, 304, and 306, *no* court until now has said EPA is *forbidden* to do cost-benefit analysis. Instead, both the statute and the case law call for deference to EPA's judgment about how costs and environmental benefits should be taken into account.

Most notably, in *BP Exploration & Oil, Inc. v. EPA*, 66 F.3d 784, 796-97 (6th Cir. 1995), the Sixth Circuit, relying on a D.C. Circuit case, held that EPA has discretion to use cost-benefit analysis in making "best available technology" (BAT) determinations.

The Sixth Circuit explained that Congress "left EPA with discretion to decide how to account for the consideration factors, and how much weight to give each factor." *Id.* at 796. Because these "consideration factors" included costs and benefits, the Sixth Circuit held that environmental petitioners were "wrong to contend that EPA is not permitted to balance factors such as cost against effluent reduction benefits." *Id.* (*citing Weyerhaeuser Co.*, 590 F.2d at 1045); *see also Am. Petrol. Inst. v. EPA*, 787 F.2d 965, 972 (5th Cir. 1986) (EPA would "disserve its mandate" if it imposed "possibly disabling costs" in return for removing only "de minimis" amounts of pollutants); *Nat'l Wildlife Fed'n v. EPA*, 286 F.3d 554, 563 (D.C. Cir. 2002) (EPA need not on its own undertake more than a "net cost-benefit balancing"). The Second Circuit itself cited *BP Oil* and *National Wildlife* with approval in *Riverkeeper I*, 358 F.3d at 195, yet failed in *Riverkeeper II* to convincingly distinguish those cases or its own past decision. App. 28a-30a.

This Court should grant certiorari to resolve this conflict in principle on the interpretation of §§ 301, 304, and 306. If it does not, EPA and reviewing courts will be forced to choose between the majority approach to considering costs in setting effluent limitation guidelines and the *Riverkeeper II* approach. Moreover, if this conflict festers, any effluent limitation guideline may be subject to a different legal standard depending on where a petition for review is heard.

D. The Split in the Circuits Will Cause Serious Problems

Review by this Court also is essential to avoid the disruption of the NPDES permit process for hundreds of power plants and industrial facilities nationwide and to ensure that § 316(b) is interpreted consistently from one facility to another.

Because of the Second Circuit's decision, EPA is considering another rulemaking. Even if EPA makes that rulemaking a priority, it will take time. In any case, until EPA decides how to proceed, state and federal permit writers must continue to make BPJ § 316(b) determinations for the over 540 facilities covered by the Phase II rule. EPA's Phase III determination also calls for BPJ decisions for over 140 industrial and power plants. 71 Fed. Reg. 35,017/3.

In each case, the permit writer will have to decide which circuit's interpretation of the statute to follow. Inevitably, this uncertainty will lead to permitting authorities applying different legal standards under § 316(b) to sources across the country. Such asymmetrical application of § 316(b) will increase the likelihood that permits will be challenged. Reviewing courts will then be forced to choose between the *Riverkeeper II* and *Seacoast* interpretations of § 316(b). Review by this Court will avoid that inconsistency, delay, and litigation.

Moreover, the Court of Appeals for the Fifth Circuit must now rule on petitions for review raising *precisely the same issue* with respect to the Phase III rule. The government has argued forcefully in that

case that the Second Circuit was wrong. Perversely, if the Fifth Circuit rejects the Second Circuit's reasoning, only the environmental petitioners will have the right to seek this Court's review. Unless they choose to exercise that right, § 316(b) would be interpreted and implemented differently for existing power plants (which fall within either Phase II or III based on the amount of flow they require) solely on the order in which EPA adopted the rules and the circuits reached their decisions. In this circumstance, granting certiorari is essential to promote proper judicial administration and prevent disparate treatment of similarly situated plants.

II. Restoration

In equally peremptory fashion, the Second Circuit concluded that § 316(b) bars EPA from counting improvements to a waterbody that increase the supply of fish ("restoration") when considering whether "adverse environmental impact" is "minimized." This strips EPA of a tool that has long been used under § 316(b) and that the Agency concluded is necessary to achieve § 316(b)'s mandate and the objectives of the Act. It also conflicts with the analysis underlying the First Circuit's decision in *Seacoast*, and with agency and judicial interpretations of similar provisions in § 404 of the Act. Thus, review by this Court is warranted.

A. Restoration Is Compatible with the Words of § 316(b), as the *Seacoast* Decision Recognized

EPA made a reasoned judgment that § 316(b) taken as a whole is ambiguous and could reasonably

be interpreted to allow mitigation or "restoration" for several reasons. 69 Fed. Reg. 41,628/2. First, nothing in the statute instructs EPA to evaluate intake location, design, or any other feature in the abstract, without reference to water quality. Section 316(b)'s objective is to minimize "adverse environmental impact" – a term that encompasses water quality and does not focus on reducing any specific type of stressor or impact. *Id.; see also* 69 Fed. Reg. 41,586/3, 41,612/1. Thus, in-stream measures that ameliorate the risk of adverse environmental impact stemming from impingement and entrainment are consistent with the "plain language" of the statute.

The First Circuit recognized this principle in *Seacoast* by affirming EPA's discretion to measure "adverse environmental impact" at the level of fish populations, rather than individual fish. *See Seacoast*, 597 F.2d at 309-11. If EPA has this discretion, it necessarily has authority to determine that restoration – which typically minimizes the loss of fish through replacement and thus minimizes "adverse environmental impact" – is a lawful compliance option.

Second, EPA focused on Congress's instruction that intake structure features such as location and design "reflect" BTA, and the absence of any statutory definition of "technology" or "cooling water intake structure." It reasoned that those attributes allow the Agency to consider both technologies which are incorporated into the intake structure and those which are physically independent but nevertheless influence the use and effectiveness of the structure. EPA gave as examples barrier nets and closed-cycle

cooling, neither of which is part of the CWIS but which nevertheless influence the environmental effects of the CWIS. 69 Fed. Reg. 41,628.

Third, EPA explained that the rule deals with *existing* intake structures. Congress has consistently recognized that existing facilities have limited options for minimizing their impacts, thus meriting a broader range of approaches. 69 Fed. Reg. 41,628/1. For an existing plant, the task is not to decide what features the intake structure must possess in the first instance; those features have already been decided. Rather, the question is whether existing features need to be changed to "minimize adverse environmental impact." Nothing in § 316(b) limits EPA's authority to decide that "environmental impacts" from an existing intake either are not adverse or have been otherwise minimized.

Fourth, use of restoration is consistent with EPA's longstanding interpretation of the statute, as reflected in the fact that federal and state permit writers for years have considered restoration in assessing whether impingement mortality and entrainment are causing adverse environmental impacts. 69 Fed. Reg. 41,627-28; *see also Barnhart v. Walton*, 535 U.S. 212, 220 (2002) (particular deference to an agency interpretation of longstanding duration). By deciding to focus on impingement and entrainment in setting § 316(b) standards, EPA did not, as the Second Circuit appears to assume, lose its authority to decide how "adverse environmental impact" should be evaluated. That is precisely what EPA did by taking restoration measures into account. Such measures

are part of the environment to be considered in determining whether a CWIS is having adverse effect. Indeed, nothing in § 316(b) suggests EPA must focus exclusively on minimizing impingement and entrainment, as the *Riverkeeper I* panel acknowledged. *See Riverkeeper I*, 358 F.3d at 196. If that is what Congress had intended, it could easily have said so. Instead, the "plain language" leaves EPA discretion to consider the net result of impingement and entrainment or other intake technology effects on the broader "environment."

The Second Circuit split with the First Circuit when it overruled EPA's interpretation of the statute. It ignored EPA's interpretation of "adverse environmental impact," see App. 52a-53a, instead treating that phrase as a surrogate for impingement and entrainment. App. 51a-52a. It also dismissed the Agency's construction of other statutory terms, finding instead that the Act requires a purely "technology-driven" approach focused solely on changes to the CWIS. App. 29a, 53a. And it dismissed EPA's explanation of the inextricable link between waterbody characteristics (which restoration enhances) and intake impacts on the environment, holding that § 316(b) forbids consideration of water quality effects. App. 63a-64a. To reach this conclusion, the court again relied heavily on its interpretation of §§ 301 and 306, which it construed as barring consideration of water quality. App. 52a, 63a.

B. Like § 316(b), the BAT/NSPS Provisions Allow EPA to Consider Ambient Conditions

The Second Circuit's assumption that EPA is forbidden from considering water quality when it sets technology-based requirements for pollutant discharges is similarly unfounded. Indeed, several circuits have upheld EPA's authority to consider water quality both in deciding whether to establish guidelines and in evaluating technologies. For example, in *Nat'l Wildlife Fed'n v. EPA*, 286 F.3d 554, 566 (D.C. Cir. 2002), the D.C. Circuit upheld EPA's decision to regulate "color" pollutants case-by-case because the Agency found that the potential for significant aesthetic or aquatic impacts from color discharges is driven by site-specific conditions. Likewise, in *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486, 515 (2d Cir. 2005), the Second Circuit allowed EPA to regulate case-by-case because variability and topography, climate, distance to surface water, and geologic factors influence whether and how pollutant discharges at a particular site enter surface water by way of groundwater. *Id.* at 515. And in *Citizens Coal Council v. EPA*, 447 F.3d 879, 902-03 (6th Cir. 2006), the Sixth Circuit affirmed EPA's rejection of sedimentation ponds as treatment for settleable solids because the ponds could disrupt the natural sediment and hydrologic balance, cause stream channel instability, and increase evaporative losses.

C. Other Parts of the Clean Water Act, Including its "Objectives," Support EPA's Interpretation

EPA's decision to allow restoration also finds support in the objectives of the statute, and in agency and judicial interpretations of § 404, which like § 316(b) instructs EPA and the Army Corps of Engineers to ensure that "adverse environmental impacts" from a specific type of activity are minimized.

The objective of the Clean Water Act is to "restore" the "biological integrity of the Nation's waters." 33 U.S.C. § 1251(a), App. 103a. Used correctly, restoration is as capable as hardware of achieving this objective, and in some cases better. See *supra* at 10. Thus, EPA properly interpreted the ambiguity in § 316(b) to maximize attainment of the statute's objectives.

This is exactly what EPA and the United States Army Corps of Engineers ("Corps") have done when faced with almost identical statutory instructions in § 404 of the Clean Water Act. For example, § 404(e)(1) allows the Corps to issue general permits for discharges of dredged and fill material where the Corps determines that the "activities ... will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment." 33 U.S.C. § 1344(e)(1), App. 123a-124a. Both agencies and courts have interpreted this to allow a permit applicant to mitigate the impact of its activities using restoration, enhancement, or creation of wetlands

offsite or onsite, so as to ensure minimal adverse impacts. 67 Fed. Reg. 2020/1, 2092-93 (Jan. 15, 2002); *Sierra Club v. U.S. Army Corps of Eng'rs,* 464 F. Supp. 2d 1171, 1211 (M.D. Fla. 2006) (citing *Ohio Valley Envtl. Coalition v. Bulen*, 429 F.3d 493, 502 (4th Cir. 2005); 40 C.F.R. § 230.75(d) (2005), App. 141a (habitat development and restoration techniques can be used to minimize adverse impacts and compensate for destroyed habitat); *see also* 33 C.F.R. § 325.4(a)(3), App. 125a, and § 320.4(r)(1), App. 124a.

In short, the court's determination that § 316(b) forbids restoration is not supported by the statutory language, is incompatible with other circuit interpretations of § 316(b) and analogous statutory provisions, and undermines EPA's ability to ensure that the statutory mandate is achieved.

III. Practical Implications for the Nation

For approximately thirty years, EPA and state permitting authorities have used cost-benefit analysis to make permitting decisions under § 316(b). In reliance on those decisions, existing facilities have invested billions of dollars in compliance measures. The Phase II rule reflects nearly a decade of study by EPA; significant input by environmental groups, states, and industry; and a painstaking effort to craft comprehensive nationwide standards consistent with EPA's longstanding interpretation.

The Second Circuit decision sets that effort back by years. It also threatens to impose billions of dollars of retrofit costs on the power industry,

consumers, and the economy, with little benefit. Although UWAG does not believe that retrofitting closed-cycle cooling can be justified even after *Riverkeeper II*, if retrofitting should be required, the costs and energy impacts would be enormous. Retrofitting would saddle the economy with billions of dollars in costs, lose significant electric generating capacity, and increase greenhouse gas emissions.

A study submitted by UWAG, for example, estimated that the nationwide cost of retrofitting would be $40 billion, about 18 percent of the industry's revenues. Other consultants estimated $44 to $66 billion. *See* UWAG Comments on Proposed § 316(b) Rule for Existing Facilities, Comment 1.41, Aug. 7, 2002. EPA, which admits that its estimates of costs may be too low, cited a nuclear plant in Michigan where retrofitting cost $18.8 million in 1973-74 dollars plus $683,000 in abandoned equipment. Consumers Responses to EPA Questions Regarding the Conversion of Palisades Nuclear Plant from A Once-Through Cooling System to A Cooling Tower System, DCN 4-2529, p. 7.

And this was just one plant. Many facilities, especially those with short remaining lives, may be forced to shut down or cancel planned repowering rather than incur the costs of cooling tower retrofits or other measures required by the Second Circuit's severely limiting decision. Other facilities may be physically unable to install cooling towers or other measures required by the decision. Much of the cost would be passed on to consumers of electricity, who already face rate increases from rising fuel costs.

These are not the only costs. Retrofitting existing plants with closed-cycle cooling extracts a significant energy penalty, which EPA estimated as 2.4 to 4.0 percent. 69 Fed. Reg. 41,605/2. The North American Electric Reliability Corporation ("NERC"), in its *2007 Long-Term Reliability Assessment* (page 97), uses Department of Energy estimates to warn that retrofitting cooling towers could reduce available capacity margin by 12 percent. See http://www.nerc.com/~filez/rasreports.html.

The plants that may be forced to shut down and the energy penalties imposed by retrofitting raise serious concerns about electric system reliability. The nation's electric system depends on a balanced array of generation and transmission facilities to provide a reliable supply of electricity. Already, according to the NERC study cited above, large areas of the United States are operating with thin generation and transmission capacity margins. In the study (page 10) NERC observes that "projected increases in peak demands continue to exceed projected committed resources beyond the first few years of the ten-year planning horizon." NERC also notes (page 10) that "[a]reas of the most concern include [the Western Electricity Coordinating Council]-Canada, California, Rocky Mountain States, New England, Texas, Southwest and the Midwest." The Second Circuit's decision threatens to exacerbate this problem by forcing generating plants to close or curtail operations.

To minimize or compensate for those penalties, power producers must burn more fuel, creating additional air emissions, 69 Fed. Reg. 41,605/3, as well as other impacts of extracting,

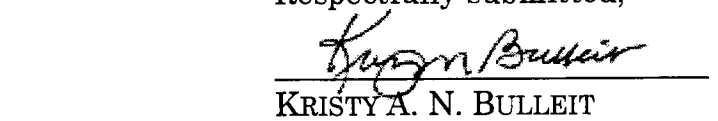
transporting, and burning fuel. Closed-cycle cooling also increases evaporative water losses, concentrates pollutants in intake water, and creates noise, drift, fogging, and other adverse environmental effects. *Id.* at 41,606/1. The Second Circuit decision does not suggest that these environmental impacts are irrelevant under § 316(b). Indeed, it acknowledges EPA's right to consider them. App. 30a n.11, 31a n.12. Yet its decision in *Riverkeeper II* robs EPA of an important tool – cost-benefit analysis – that the Agency often uses to evaluate disparate types of costs and benefits using a "common currency."

The resulting energy, economic, and environmental harms will not, in many cases, be offset by appreciable environmental benefit to aquatic life. EPA's comprehensive nationwide standards control impingement and entrainment without disregarding other critical values. This Court should not allow the court below to set EPA's judgment aside.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,



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