

No. 07-588, 07-589 & 07-597 (Consolidated)

IN THE
Supreme Court of the United States

ENTERGY CORP.,
PSEG LLC and PSEG NUCLEAR LLC, and
UTILITY WATER ACT GROUP,
Petitioners,

v.

RIVERKEEPER, INC., *ET AL.*,
Respondents.

**On Writs of Certiorari to the
United States Court of Appeals
for the Second Circuit**

**REPLY BRIEF OF PETITIONER
UTILITY WATER ACT GROUP**

KRISTY A. N. BULLEIT
Counsel of Record
HUNTON & WILLIAMS LLP
1900 K STREET, N.W.
WASHINGTON, DC 20006
(202) 955-1547

October 28, 2008

Counsel for Petitioner

RULE 29.6 STATEMENT

Pursuant to Rule 29.6, there is no change to the corporate disclosure statement previously filed by the Utility Water Act Group.

TABLE OF CONTENTS

	<u>Page</u>
RULE 29.6 STATEMENT	i
TABLE OF CITED AUTHORITIES	iii
ARGUMENT	1
I. Nothing in the Words “Best Technology Available for Minimizing Adverse Environmental Impact” Prohibits Comparing Costs to Benefits	3
A. Riverkeeper’s Argument That the Statutory Objective Precludes Comparison of Costs and Benefits Is Unsupported and Internally Inconsistent	5
1. Riverkeeper’s Argument Rests on an Interpretation of “Adverse Environmental Impact” That It Neither Reveals Nor Supports	5
2. Riverkeeper Relies on a False Premise About the Type of Cost-Benefit Comparison EPA Applied	6

3.	Riverkeeper Concedes that §316(b) Provides Flexibility Except for Comparing Costs to Benefits.....	8
B.	The Northeast States Erroneously Interpret “Minimize Adverse Environmental Impact” to Mean “Minimize Impingement Mortality and Entrainment”	10
C.	Respondents and Amici Fail to Show That Cost-Benefit Comparisons Are Unnecessary or Impractical.....	13
1.	Cost-benefit Comparisons Are Not Unnecessary	13
2.	Cost-benefit Comparisons Are Not Impractical	17
II.	The Structure and History of the Clean Water Act Do Not Support Respondents’ Claims	20

A. The Opinions of Congressional Staff Who Neither Vote on a Bill Nor Express their Views in a Forum Where Their Opponents Can Answer Them, Should Not Be Given Weight in Determining What Congress Meant by Statutory Language 20

B. Nothing in the Structure of §316 Supports Respondents’ Interpretation 22

C. Nothing in the Legislative History of §§301, 304, 306, or 316 Supports Respondents’ Interpretation of the Act..... 24

1. The Legislative History is Largely Silent on the Factors EPA May Consider Under §316(b) 24

2. The Legislative History Shows §316(b) Was an Afterthought..... 25

3. The Legislative Compromise on Technology-Based Regulation Does Not Support Riverkeeper’s Interpretation..... 27

III.	For Over Thirty Years, EPA and the Courts Have Interpreted §316(b) to Allow Cost-Benefit Balancing	30
A.	EPA Has Never Interpreted §316(b) to Prohibit Cost-Benefit Analysis	31
B.	State and Federal Regulators Weigh Costs and Benefits Using the “Wholly Disproportionate” Test, Which the First Circuit Upheld in Seacoast	32
	CONCLUSION	35

TABLE OF CITED AUTHORITIES

	<u>Page</u>
FEDERAL CASES	
<i>Exxon Mobil Corp. v. Allapattah Services</i> , 545 U.S. 546 (2005)	22
<i>Nipper v. Smith</i> , 39 F.3d 1494 (11th Cir. 1994), <i>citing Massachusetts v. Morash</i> , 490 U.S. 107 (1989)	6
<i>Rivera v. Commissioner</i> , Docket No. 41343- 85, 89 T.C. 343 (Tax Court 1987).....	21
<i>Riverkeeper, Inc. v. EPA</i> , 358 F.3d 174 (2d Cir. 2004).....	2
<i>Riverkeeper, Inc. v. EPA</i> , 475 F.3d 83 (2d Cir. 2007), <i>cert. granted, in part</i> , 128 S. Ct. 1867 (U.S. 2008) (No. 07-588)	2, 3, 22
<i>Seacoast Anti-Pollution League v. Costle</i> , 597 F.2d 306 (1st Cir. 1979).....	33
STATE CASES	
<i>In the Matter of Entergy Nuclear Indian Point 2 & 3</i> , Interim Decision of the Assistant Commissioner, DEC No. 3-5522-00011/00004 (August 13, 2008)	34

Voices of the Wetlands v. Cal. State Water Res. Control Bd., 69 Cal. Rptr. 3d 487 (Cal. App. 6th Dist. 2007), review granted, depublished by *Voices of the Wetlands v. Cal. State Water Res. Control Bd.*, 74 Cal. Rptr. 3d 453, 180 P.3d 223 (Cal. 2008) 34

STATUTES

33 U.S.C. § 1311 *passim*

33 U.S.C. § 1314 20

33 U.S.C. § 1316 *passim*

33 U.S.C. § 1326(a) *passim*

33 U.S.C. § 1326(b) *passim*

33 U.S.C. § 3162(6) 23

FEDERAL REGULATIONS

40 C.F.R. § 125.83 32

STATE STATUTES

Maryland Environmental Regulations
§ 26.08.03.05(D)(2) 34

OTHER AUTHORITIES

41 Fed. Reg. 17,387, 17,388 (April 26, 1976)..... 31, 32

*A Legislative History of the Water Pollution
Control Act Amendments of 1972*
(93d Cong., 1st Sess.) (1973) *passim*

California Independent System Operator,
*Mitigation of Reliance on Old Thermal
Generation Including Those Using
Once-Thru Cooling Systems Study
Plan*, Final Draft Version 5.0 (January
2, 2008), [http://www.aiso.com/1f52/
1f529c671a380.pdf](http://www.aiso.com/1f52/1f529c671a380.pdf).....16

DOE, “Electricity Reliability Impacts of a
Mandatory Cooling Tower Rule for
Existing Steam Generating Units”
(Oct. 2008),
[http://www.oe.energy.gov/Documentsand
Media/Cooling_Tower_Report.pdf](http://www.oe.energy.gov/DocumentsandMedia/Cooling_Tower_Report.pdf) 17

EPA Office of Science and Technology,
*Considerations Affecting Steam Power
Plant Site Selection* 46 (Dec. 1968).....26

ARGUMENT

This is the reply of petitioner Utility Water Act Group (UWAG) to the briefs of Riverkeeper, Inc. *et al.* and the Northeast States Connecticut, Delaware, Massachusetts, New Jersey, New York, and Rhode Island, as well as to the *amicus* briefs supporting them.¹

As shown in UWAG’s opening brief, nothing in the language, structure, or legislative history of §316(b) limits the types of environmental impacts EPA may consider or the tools it may use to decide which impacts are “adverse.” UWAG 28, 32-34. Moreover, nothing prohibits EPA from comparing a wide range of “costs” and “benefits” to decide when “adverse environmental impacts” have been “minimized.” *Id.* Nor does the statute or its history forbid EPA to authorize alternative §316(b) requirements based on site-specific costs and benefits. *Id.* 27, 42-57. Therefore, EPA’s interpretation of §316(b) to authorize comparing costs and benefits when selecting “best technology available for minimizing adverse environmental

¹ We will refer to the briefs of parties and *amici* as Solicitor General (SG); Entergy Corp. *et al.* (Entergy); Riverkeeper, Inc. *et al.* (Riverkeeper); Connecticut *et al.* (NEStates); National Wildlife Federation *et al.* (NWF); State of Illinois *et al.* (State *Amici*); Voices of the Wetlands *et al.* (VoW); Environmental Law Professors (Envtl. Law Professors); Commercial Fishermen of America *et al.* (CFoA); and Ackerman *et al.* (Ackerman).

impact” at both the national and local levels was reasonable and entitled to deference.

Respondents and their *amici* do not refute these arguments. In fact, neither respondent even attempts to answer UWAG’s arguments in defense of EPA’s rule authorizing alternative standards when costs at a site are significantly greater than benefits (UWAG 42-57). Instead, Riverkeeper suggests that this issue concerns EPA’s general authority to set site-specific requirements, as opposed to categorical industrywide ones, and urges the Court to ignore it. Riverkeeper 32 n.17.

Although Riverkeeper is correct that EPA’s general authority to allow site-specific §316(b) requirements is not at issue,² its authority to allow site-specific requirements *based on cost-benefit analysis* clearly is. The petitions for certiorari raised this issue,³ and it falls squarely within the cost-benefit issue on which the Court granted certiorari.

² The Second Circuit has twice concluded that §316(b) authorizes site-specific requirements. *Riverkeeper, Inc. v. EPA*, 475 F.3d 83, 111 n.22 (2d Cir. 2007), *cert. granted, in part*, 128 S. Ct. 1867 (U.S. 2008) (No. 07-588); *Riverkeeper, Inc. v. EPA*, 358 F.3d 174, 193 (2d Cir. 2004); UWAG 43-44. Nevertheless, the Second Circuit set aside the Phase II provision authorizing alternative limits based on costs and benefits because it concluded, as it had for the national standards, that comparing costs and benefits is not allowed.

³ UWAG Petition for Writ of Certiorari 9-10 (Nov. 2, 2007); UWAG Reply 10 (Mar. 18, 2008); PSEG Petition for Writ of Certiorari 9-10 (Nov. 2, 2007).

See *Riverkeeper, Inc. v. EPA*, 475 F.3d 83 (2d Cir. 2007), *cert. granted, in part*, 128 S. Ct. 1867 (U.S. 2008) (No. 07-588). Riverkeeper’s assertion to the contrary is an attempt to avoid arguments for which it has no rebuttal.

I. Nothing in the Words “Best Technology Available for Minimizing Adverse Environmental Impact” Prohibits Comparing Costs to Benefits

Both Respondents concede that EPA has authority to consider cost in *some* fashion, even though §316(b) does not mention cost. Riverkeeper 26-27; NEStates 21. And neither disputes that EPA may consider an intake technology’s “benefits,” as long as they reduce impacts to individual organisms and no attempt is made to “value” the organisms in terms of their contribution to the economy or the health or productivity of a waterbody. See Riverkeeper 26-27; NEStates 35-36.

Nevertheless, Respondents argue that the “plain language” of §316(b) forbids any economic evaluation of environmental impacts and any comparison of costs and benefits for purposes of selecting “best technology available for minimizing adverse environmental impact.” They argue that “best” and “available” must be interpreted in light of “minimizing adverse environmental impact.”⁴ They

⁴ They also argue that only their preferred dictionary definitions of “best,” “available,” and “minimize” are reasonable. As Entergy’s reply at Section I shows, they are wrong.

argue that the result Congress intended by this objective is clear from the words. Riverkeeper 23-24; NEStates 19-20. Yet even they do not agree on what “minimizing adverse environmental impact” means, and neither explains why “plain language” compels its preferred interpretation. Nor do respondents provide evidence that Congress intended to prohibit the broad, flexible cost-benefit comparisons EPA performed and authorized here.

The Northeast States believe “minimizing adverse environmental impact” means minimizing the killing and injuring of individual fish and other aquatic life as much as technologically possible. NEStates 15. They do not mention, nor do they apparently believe, that §316(b) allows EPA to strike a balance, even in noneconomic terms, between reducing risks to aquatic organisms and increasing other environmental impacts.

In contrast, Riverkeeper never reveals what it thinks “adverse environmental impact” means, although it concedes at 28-29 that the term is broad enough to encompass nonaquatic environmental effects. Instead, Riverkeeper simply asserts that cost-benefit analysis cannot be used to distinguish “adverse environmental impact” from “permissible impact.” *See* Riverkeeper 26. While agreeing with the Northeast States that “costs” and “benefits” can never be compared to determine when “adverse environmental impact” has been minimized, Riverkeeper carves out so many exceptions as to virtually negate the argument.

As UWAG has demonstrated, nothing in the words Congress chose compels the conclusion that Congress intended a single-minded focus on reducing impingement and entrainment at all costs. UWAG 33-34. Moreover, nothing in §316(b) limits EPA’s discretion to decide how to measure and weigh costs and benefits in deciding which technology is “best available” for “minimizing adverse environmental impact.” EPA’s interpretation of §316(b) is consistent with a natural reading of the words Congress used, as their dictionary definitions show. *Id.*

Respondents make no effort to show why “adverse environmental impact” means only what they say it does or why costs and benefits cannot be compared in determining which available technology is best. Rather, they rely on unsupported, and often inconsistent, assertions.

A. Riverkeeper’s Argument That the Statutory Objective Precludes Comparison of Costs and Benefits Is Unsupported and Internally Inconsistent

1. Riverkeeper’s Argument Rests on an Interpretation of “Adverse Environmental Impact” That It Neither Reveals Nor Supports

Nowhere does Riverkeeper parse the phrase “adverse environmental impact” or offer a plausible explanation why that phrase, by its terms, precludes

cost-benefit comparisons. Instead, Riverkeeper avoids the issue, suggesting that the Court should not construe “adverse environmental impact” at all. Riverkeeper argues that “[t]he full range of ‘adverse environmental impacts’ EPA can consider and the weight each is assigned are not before the Court.” Riverkeeper 29 n.14.

This argument is internally inconsistent, because Riverkeeper and the States agree that the object of “minimizing adverse environmental impact” is relevant to interpreting other words like “best,” “available,” and “minimize.” And it is absurd, because a court must construe statutory provisions as a whole, not piecemeal. *Nipper v. Smith*, 39 F.3d 1494, 1515 (11th Cir. 1994), *citing Massachusetts v. Morash*, 490 U.S. 107 (1989).

2. Riverkeeper Relies on a False Premise About the Type of Cost-Benefit Comparison EPA Applied

Riverkeeper argues that *any* comparison of costs and benefits is inconsistent with the objective of “minimizing adverse environmental impact,” because “cost-benefit analysis” is based on “the policy premise that the cost of reduction *should not be greater than the corresponding benefits.*” Riverkeeper 26 (emphasis added). Riverkeeper assumes that the broad, flexible cost-benefit comparison EPA made in setting the national standards, and authorized permit writers to make in setting alternate standards, is the mathematically

precise, purely economic cost-benefit equation that Riverkeeper describes. Many of the arguments made by respondents' supporters have the same misperception about what EPA did.⁵

EPA's comparison of costs and benefits at the national level involved both qualitative and quantitative balancing of a wide range of environmental, energy, and economic costs against environmental, economic, and social benefits. UWAG 51-57; SG 6-7. Rather than requiring that benefits exceed costs, EPA issued a final rule for which the quantifiable economic costs were almost five times the quantifiable economic benefits. UWAG 21; Pet.App. 526a. Similarly, for site-specific standards, the Phase II rule allows alternative standards only where costs are "significantly" greater than benefits. Clearly, EPA did not use "benefits exceed costs" as a decision rule.

Even though EPA never relies on a formal cost-benefit analysis or establishes rigid cost-benefit criteria for decisions, even though EPA always tilts its cost-benefit comparisons in the environment's favor, still Riverkeeper and the Northeast States argue that §316(b) forbids *any* comparison of costs to benefits. Riverkeeper 27-29.

⁵ See, e.g., NWF 29 (arguing the rule would "result in a degree of protection no more stringent than can be proven to lead to a quantifiable benefit"); Ackerman 12 (regulators can use CBA to select the point of marginal equivalence between social costs and benefits).

3. Riverkeeper Concedes that §316(b) Provides Flexibility *Except* for Comparing Costs to Benefits

Riverkeeper's position conflicts with its own concession that the phrase "adverse environmental impact" gives EPA room to decide which impacts are adverse and when adverse impact has been minimized. For example, Riverkeeper concedes that §316(b) is flexible (ambiguous) enough to authorize EPA to:

- Consider energy efficiency and environmental impacts other than impingement and entrainment mortality (Riverkeeper 28-29);
- Conclude that some level of impact is *de minimis* or without meaningful environmental consequence and does not warrant further reduction (*id.* 29-30);
- Reject technologies for which costs are "wholly disproportionate" to "insubstantial" environmental "benefits" (*id.* 45);
- Consider site-specific factors, such as type of waterbody and size of the cooling water withdrawal relative to instream flow (*id.* 32-33).

Having conceded that the supposedly plain language of §316(b) allows all this discretion, Riverkeeper still argues that the same plain

language forbids using economic tools for measuring or comparing costs (including adverse environmental impacts) to benefits (including beneficial environmental impacts). But if EPA is allowed to consider these factors, courts consistently have said, it is up to the Agency to decide which tools to use to consider them. *See* Entergy 40-41; Entergy Reply §I.A.

In essence, Riverkeeper is saying that EPA may do everything in cost-benefit analysis *except* assign a dollar value to environmental costs and benefits and use it to facilitate an “apples-to-apples” comparison of all costs and benefits. For example, EPA apparently may not decide that some waterbodies need no entrainment reduction because the number of fish harmed is insignificant in broader ecological or economic terms and the cost of saving those fish is high. Similarly, EPA may not use an economic analysis to decide that the impact of increased air pollution “outweighs” the fish saved, even though that would mean EPA could not “minimize adverse environmental impact.”

The fine distinctions Riverkeeper draws are, we submit, irrational. There is no textual basis for presuming that Congress intended them.

B. The Northeast States Erroneously Interpret “Minimize Adverse Environmental Impact” to Mean “Minimize Impingement Mortality and Entrainment”

The Northeast States at 15-16 assert that “minimize adverse environmental impact” is a hard-and-fast mandate to “promulgate a national rule that minimizes the killing and injuring of fish and other aquatic life” subject only to the limits of what is technologically achievable. Elsewhere, though, the Northeast States appear to concede that §316(b) does not have to focus on individual organisms. *See* NEStates 28-29 (§316(b) requires minimizing impact on “aquatic ecosystem”).

Aside from this unresolved inconsistency, the problem with the Northeast States’ argument is that it is little more than bare assertion. An attempt to tease out some overarching rationale, however, yields the following:

(1) Aquatic organisms may be harmed by impingement and entrainment (*id.* 3-4);

(2) The word “impact” can be defined as “the act of impinging or striking” and “a concentrated force producing change” (*id.* 20); therefore,

(3) Congress’s use of “impact” demonstrates its “understanding of the nature of the environmental injuries associated with intake structures” (*id.*).

From the premise that Congress understood that intake structures cause impingement and entrainment, the Northeast States leap to several other unwarranted conclusions, namely that Congress intended to focus only on individual aquatic organism losses, as opposed to other environmental impacts; to classify every such loss to an intake structure, regardless of the nature of the organism,⁶ as an “adverse environmental impact”; and to require power plants to reduce individual losses as much as technologically possible. This, the Northeast States contend at 31, is the “certain” impact that Congress intended to regulate without considering cost. But that is not what §316(b) says,

⁶ *Amici* NWF agree that the harm done by nonnative species is often substantial (NWF 20) but argue that invasive and harmful species nevertheless should be protected because of the “interconnectedness of life” (*id.* 5). But there is no evidence Congress intended to classify impacts to invasive or nuisance species as “adverse environmental impact.” UWAG 10.

UWAG is not arguing that fish are not valuable just because they are not sought by commercial or recreational fishermen. Nor are we arguing that §316(b) is a regulatory tool for eradicating nuisance species. Still, it is a fact that state and federal wildlife managers routinely make decisions about what species are valuable and should be protected and what species are harmful. It makes no sense to require NPDES permit writers to save harmful fish when the wildlife agencies are tasked with suppressing them. Cost-benefit analysis can help avoid this, as EPA recognized when it authorized alternative standards based on site-specific cost-benefit comparisons. Response to Comments (Author Version) (“RTC”) 315.

nor is there any basis for concluding it is what Congress meant.

Had Congress intended to “minimize impingement and entrainment” or even “minimize adverse impacts to aquatic organisms,” it would have said so. Instead, Congress focused broadly on “minimizing adverse environmental impact” and gave EPA discretion to decide which environmental impacts to consider, which tools to use for evaluating them, and which technology best minimizes “adverse environmental impact” overall. UWAG 12. Exercising such discretion involves the sort of “risk assessment” in which the Northeast States at 30-31 agree cost-benefit analysis can play a role.

We are not suggesting that killing or injuring aquatic organisms is not “adverse” or cannot be regulated – only that reducing harm to all individual organisms as much as possible is not necessarily the measure of when “adverse environmental impact” is minimized. EPA chose to focus on reducing impingement mortality and entrainment, but it could have chosen other ways to measure “adverse environmental impact.” Indeed, it could have decided to measure adverse environmental impact (for example) by the dollar value of damage to the aquatic ecosystem or other parts of the environment. By focusing on impingement mortality and entrainment, the Agency did not forfeit its right to use other measures of adverseness. UWAG 33.

C. Respondents and *Amici* Fail to Show That Cost-Benefit Comparisons Are Unnecessary or Impractical

1. Cost-benefit Comparisons Are Not Unnecessary

To bolster their interpretation, Riverkeeper and its supporters struggle to show how EPA can have the advantages of cost-benefit analysis without using it. Riverkeeper 28-33. A power plant need not spend millions of dollars to save a single organism, Riverkeeper says, because EPA could specify some “*de minimis* level” or limit harm to a prescribed number of fish. Riverkeeper 29-31. Also, EPA can set requirements for “less broad categories” or set different standards for different locations. *Id.* 32-33. Likewise, EPA need not impose a “one-size-fits-all rule,” Riverkeeper says, because §316(b) authorizes requirements expressed as a range. And plants that impinge or entrain few fish (or none) will be able to meet the standards without expensive controls. *Id.* 30-31.

In suggesting that EPA could simply designate some *de minimis* level of organisms that each facility can affect, Riverkeeper ignores reality. As EPA has recognized repeatedly, the type, lifestage, and number of fish affected by a power plant are highly site-specific, as are the health and stability of their aquatic ecosystem. *See* UWAG 7. Unlike pollutant discharges, the number of organisms affected and the potential for “adverse environmental impact”

from such effects are not easy to predict by industry or facility type or even from withdrawal rate. UWAG 8-10. That is why EPA expressed the national performance standards as ranges of percentage reductions of impingement mortality and entrainment (regardless of amount). Pet.App. 234a. That is also why EPA authorized alternative standards based on cost-benefit balancing. Pet.App. 250a. Without them, even plants that impinge or entrain few organisms will not, as Riverkeeper claims at 30, be able to meet the standards without expensive controls.

Nor could EPA have avoided cost-benefit comparisons by expressing performance standards as ranges, distinguishing among different locations, or subcategorizing, as the Phase II rule's use of all three techniques demonstrates. UWAG 22, 23, 42. EPA had to set the performance standards as ranges to accommodate the uncertainties and variability in technologies. Pet.App. 228a. That it did so provided no relief for facilities that cause impacts less severe than those EPA anticipated. Similarly, EPA did not apply entrainment standards to facilities located on waterbody types that present less risk of entrainment. Pet.App. 227a, 229a-234a. But that in no way accounts for the variability in impacts from site-to-site for those facilities to which the standards *do* apply. And cost-benefit comparisons are important for subcategorization, as evidenced by EPA's decision to treat facilities with a low capacity utilization rate as a separate subcategory based both on its risk assessment and its judgment that

entrainment control for these facilities is not “economically practicable” (Pet.App. 233a).

Riverkeeper concedes at 28-29 that EPA may consider other environmental and energy trade-offs but never explains why EPA cannot use cost-benefit comparisons to do so. Riverkeeper’s preferred technology – closed-cycle cooling – reduces the impact on individual fish but may or may not benefit the aquatic resource as a whole. *See, e.g.*, UWAG 9-10. Moreover, closed-cycle cooling increases environmental impacts like air pollution, habitat destruction, and noise and exacts an energy penalty. UWAG 10-11, 56; Entergy 49-51. As we have shown, cost-benefit comparison is an important tool for deciding which trade-offs are consistent with “minimizing adverse environmental impact.” *Id.*

Riverkeeper and its supporters minimize the need for a cost-benefit mechanism to make rational decisions about the relative merits of these trade-offs, suggesting they are unlikely to be important or that they can be managed in other ways. For example, State *Amici* argue at 15-16 that EPA can protect Florida manatees, which depend on heated effluent for habitat, by granting a §316(a) variance from discharge limits for heat. But once a cooling tower is installed to reduce intake effects under §316(b), it will necessarily reduce heated effluent, to the manatees’ detriment.

Likewise, State *Amici* at 16 think EPA does not need cost-benefit analysis to account for increased water consumption by cooling towers,

because closed-cycle cooling systems “withdraw far less water.” Here, State *Amici* confuse “withdrawal” with “consumptive use.” Once-through cooling “withdraws” more water but returns most of it to the waterbody; cooling towers evaporate more of the water they withdraw. UWAG 6. As Maryland’s Department of Natural Resources noted in its comments on the Phase II rule, such “evaporative losses can have a significant impact, ... in rivers and lakes.” RTC 3087.

Other *amici* argue cost-benefit analysis is unnecessary to account for adverse energy impacts of closed-cycle cooling, because such impacts are unlikely. For example, VoW at 19 claims that California already has determined once-through cooling systems “can be converted to alternative cooling technologies without major economic dislocation or disruption of the electricity transmission system.” VoW’s argument is both wrong and contradicted by a less parochial report recently issued by the Department of Energy (“DOE”). California has not made any final determination about close-cycle cooling’s impacts; indeed, it is still awaiting an evaluation of how retrofitting affects reliability.⁷ More important, DOE’s examination of the energy impacts of

⁷ California Independent System Operator, *Mitigation of Reliance on Old Thermal Generation Including Those Using Once-Thru Cooling Systems Study Plan*, Final Draft Version 5.0 (January 2, 2008), <http://www.caiso.com/1f52/1f529c671a380.pdf>.

mandatory retrofitting concludes the adverse impacts to energy reliability nationally would be substantial. See DOE, “Electricity Reliability Impacts of a Mandatory Cooling Tower Rule for Existing Steam Generating Units” (Oct. 2008), http://www.oe.energy.gov/DocumentsandMedia/Cooling_Tower_Report.pdf.

VoW also argues at 16 that two repowering California plants show that retrofitting is feasible and painless. But they ignore the fact that repowering a steam electric plant means replacing all or most of the generating unit. It is costly, far from painless, and infeasible for many facilities that have years of useful life remaining or that, although needed when demand is high, do not operate enough to justify retrofitting.

2. Cost-benefit Comparisons Are Not Impractical

Besides arguing that cost-benefit comparisons are unnecessary, Riverkeeper and others argue that evaluating and quantifying the benefits of reducing impingement mortality and entrainment is too uncertain, complex, and burdensome a task for Congress to have authorized under §316(b). Riverkeeper 52; State *Amici* 17-18; CFoA 13-24. In support, they allege a variety of defects either in EPA’s national cost-benefit assessment or in cost-benefit comparison methods in general. None of those arguments has merit.

For example, Riverkeeper at 52 and some of its supporters allege (incorrectly) that EPA’s national

analysis assigned a value only to fish that could be caught and sold commercially and excluded forage species. In fact, EPA's analysis estimated the direct use value of all impingement and entrainment impacts, including impacts to recreational and forage species. Pet.App. 482a-485a. The Agency addressed forage species by using a "trophic-transfer model" based on the conservative assumption that all forage organisms are eaten by commercial and recreational predators. Pet.App. 483a.

EPA had less success assigning "non-use" values to organisms that would more likely reach age 1 by virtue of the rule or its alternatives but would never be caught recreationally or commercially. This difficulty was predictable, given the amount of site-specific information needed to make such estimates (which gauge the willingness of those who will never use the resource to pay for protecting or improving it). *See, e.g.*, Pet.App. 343a, 484a-485a. In any case, that EPA encountered such difficulties at the national level is not evidence that non-use values cannot be accounted for, quantitatively or qualitatively, at specific sites.

Riverkeeper at 34 and its *amici* also argue that understanding the ecological significance of impingement and entrainment is so complex and uncertain a task that Congress must have meant to prohibit it. In support, they cite EPA's rationale for deciding against a more "population-based" approach to national § 316(b) performance standards. *See, e.g.*, Ackerman 34-35; NWF 25-27. But EPA's decision to pursue a more administratively streamlined and

conservative approach at the national level is not evidence that making such assessments at the site-specific level is infeasible, nor have Respondents or their *amici* shown that it is.⁸

State *Amici* at 17-22 also argue that §316(b) should not be interpreted to allow site-specific balancing of costs and benefits because it would be administratively burdensome. But Congress has imposed more onerous “burdens” related to States’ resource management responsibilities (like developing and implementing individualized water quality standards). And Congress specifically considered the burden of making case-by-case § 316(a) determinations and concluded they were not unmanageable. 1 *A Legislative History of the Water Pollution Control Act Amendments of 1972*, 93d Cong., 1st Sess. (hereinafter *Leg. Hist.*), 263 (1973). So it is hard to see why Congress would have thought this type of review too burdensome.

Also, State *Amici* overlook the fact that EPA anticipated the “burdensomeness” objection and addressed it in the rule. The Phase II Rule requires a permittee seeking an alternate standard both to

⁸ *Amici* CFoA at 19-21 oppose the site-specific cost-benefit provision because they say it allows permit writers to consider only the local benefits of achieving the national standards, thereby preventing full consideration of the impact on migratory or regional fish stocks. Its argument misreads the rule, which tells the permittee and regulator to consider all benefits (quantitative or qualitative, local or otherwise) of the facility’s compliance with the national standards.

prepare a cost-benefit analysis that identifies significant sources of uncertainty *and* to convene, at the state's request, an independent peer-review panel to review the analysis. Pet.App. 579a.

II. The Structure and History of the Clean Water Act Do Not Support Respondents' Claims

Even though they argue that the consequence of §316(b)'s reference to §§301 and 306 is only procedural (NEStates 20; Riverkeeper 37 n.19), Respondents base much of their argument on §§301, 304, and 306 and their legislative history. Respondents contend that these technology-based requirements for pollutant discharges reveal Congress's intent to allow cost-benefit comparisons *only* when explicitly authorized. As Entergy showed in its initial brief at 38-42 and reply at §II.A, Respondents are wrong. Indeed, the evidence, including the documents written by Senate staff, indicates that Congress intended to give EPA discretion to weigh costs and benefits.

A. The Opinions of Congressional Staff Who Neither Vote on a Bill Nor Express their Views in a Forum Where Their Opponents Can Answer Them, Should Not Be Given Weight in Determining What Congress Meant by Statutory Language

Statutory construction starts with the words of the statute because majorities in both houses of

the legislature have agreed on those words and voted for them. Conference and committee reports have weight because they are agreed to by legislators who are most likely to have considered the drafts of the bills and be familiar with the arguments that produced the final language. Debates have some weight because they provide an opportunity to counter ambiguities and self-serving interpretations.

Documents written by Congressional staff have none of these indicia of reliability. Staff do not vote on bills. Staff do not participate in the recorded debates on bills. Staff may help write Committee and conference reports, but the value of those reports lies in the fact that they were adopted by the legislators. The views of staff that are not adopted by Senators or Representatives are not a guide to the legislators' opinions of the meaning of a bill and the reasons they voted for it. *See Rivera v. Commissioner*, Docket No. 41343-85, 89 T.C. 343, 349 (Tax Court 1987) (General Explanation of a statute "does not technically rise to the level of legislative history because it was authored by a congressional staff and not by Congress").

The notes and memoranda of Senate staff that Riverkeeper has produced from the National Archives are in this second category. These documents are not included in the compendium of legislative history that Senator Muskie requested be printed and which was to include "important explanatory materials." 1 *Leg. Hist.* III. As the Court has recognized, considering this sort of material is akin to "looking over a crowd and picking out your

friends,” which invites “strategic manipulation” by “unelected staffers.” *Exxon Mobil Corp. v. Allapattah Servs.*, 545 U.S. 546, 568 (2005).

Nevertheless, should this Court choose to examine those documents, it will find nothing to support Respondents’ interpretation of the statute, as the analysis below shows.

B. Nothing in the Structure of §316 Supports Respondents’ Interpretation

Accepting, for argument’s sake, Respondents’ theory that Congress rejected cost-benefit balancing under §§301 and 306, it does not follow that Congress felt the same way about §316(b). Section 316(b), as even the Second Circuit agreed (475 F.3d 83, 91), is different from other technology-based provisions in important ways. It regulates intakes, not discharges, under a standard that does not become more stringent with time and does not limit the factors EPA may consider and balance. All these distinctions weigh against making the simple-minded assumption that, by using the word “available” instead of “practicable,” Congress intended to prohibit cost-benefit comparisons.

Nevertheless, Respondents argue that §316, read as a whole, reveals Congress’s intent to split the difference between “technology-based” and “biologically based” requirements by subjecting intake structures to the first and thermal discharges to the second. NEStates at 41-42; Riverkeeper 13-14. As evidence, they cite how §316(b) differs from

§316(a), which provides a water quality-based variance from technology-based effluent limitations for heated water. But their finely wrought theory is not plausible.

Although there is agreement that §316(a) is a biologically-based variance, Congress did not, as the Northeast States claim, regulate thermal discharges based solely on biology and excluding costs and benefits. Rather, Congress authorized EPA first to establish *technology-based* controls for thermal discharges under §§301 and 306,⁹ then provided a water quality-based variance to ensure that the cost of further controls, even where affordable, would not be imposed if not justified by the water quality benefits. Biology outweighs technology. This is a cost-benefit approach, as even Riverkeeper seems to concede. Riverkeeper at 49.

Nor does it follow that §316(b), simply by requiring EPA to consider technology, shows that Congress intended to prohibit considering the size or value of biological or other environmental impacts. To the contrary, §316(b) *requires* EPA to consider “environmental impact.” Having imposed no technology-based requirements for intake structures in §§301 and 306, it is perfectly understandable that Congress combined evaluating technology with evaluating environmental impact in a single provision. No §316(a)-style variance was needed,

⁹ Clean Water Act §§301, 306, 33 U.S.C. §§1311, 1316. “Pollutant” is defined in 33 U.S.C. §3162(6) to include heat.

because consideration of environmental benefits is built into §316(b).

The main difference between Congress's approach to thermal discharges and its approach to intake structures was its choice of different biological criteria. For thermal discharges, Congress set a more specific biological criterion for deciding when costs are not justified by benefits. For intake structures it established a more open-ended criterion, which it trusted EPA to interpret.

C. Nothing in the Legislative History of §§301, 304, 306, or 316 Supports Respondents' Interpretation of the Act

Both Riverkeeper at 47 and the Northeast States at 38-39 say that §316(b)'s legislative history is not important in light of the "plain language" of the statute. Nevertheless, both make a considerable effort to show that the legislative history of the statute, particularly of §316, reveals Congress's intent to prohibit comparisons of costs and benefits under §316(b). Riverkeeper 33-41; NEStates 39-41. None of their arguments is persuasive.

1. The Legislative History is Largely Silent on the Factors EPA May Consider Under §316(b)

None of the sources Riverkeeper cites contains instructions about the factors Congress intended EPA to consider under §316(b) – a fact that

Riverkeeper ignores. As Entergy showed in its initial brief at 7, the only legislative statement with a substantive discussion of Congress's intent was by Representative Clausen, a Conferee. Mr. Clausen explained that Congress intended "best technology available" to mean "the best technology available commercially at an economically practicable cost." 1 *Leg. Hist.* 264.

Riverkeeper at 47 urges the Court to disregard this statement, arguing that it adds language to the statute. But it simply explains what "best available" means, using the word "practicable" (which the Northeast States agree at 21 is a synonym for "available").

2. The Legislative History Shows §316(b) Was an Afterthought

Discounting Representative Clausen's statement, Riverkeeper at 47 focuses on the history surrounding the "intense and protracted debate" on costs and benefits for *pollutant discharges*. From the results of that debate on discharge requirements, Riverkeeper concludes that Congress intended to preclude any comparison of costs and benefits for cooling water intake structures.

Riverkeeper reaches this conclusion despite the fact that §316(b) was hardly discussed, let alone "debated," by either House. That is because §316(b) was an afterthought, first appearing in the Conference Report. When the Senate considered the Conference Report, §316(b) was not even mentioned.

Senator Muskie's exhibit describing the Conference Report describes only §§316(a) and (c). 1 *Leg. Hist.* 175. On the House side, the only substantive discussion was the Clausen statement.

Riverkeeper disagrees that §316(b) was an afterthought, citing reports from the 1960s and early '70s that it claims show Congress's awareness of intake structures. Riverkeeper 5-6, 13-14 n.8. Congress may have known that intake structures have environmental impacts. But nothing in the documents Riverkeeper proffers suggests that Congress was concerned about the effect of intake structures on every aquatic organism of whatever type. Indeed, to the extent those documents bear on intake structures at all, they suggest that the commentators thought about the issue from a broader environmental and resource management standpoint. *See, e.g.,* EPA Office of Science and Technology, *Considerations Affecting Steam Power Plant Site Selection* 46 (Dec. 1968) (describing adverse effects of closed-cycle cooling and resource managers' consideration of intake effects).

Moreover, nothing in the legislative history suggests that, in adopting §316(b), Congress thought carefully about the level of control or the factors EPA could consider in setting the standards.

3. The Legislative Compromise on Technology-Based Regulation Does Not Support Riverkeeper's Interpretation

Riverkeeper argues that the resolution of the difference between the Senate and House over how technology-based effluent limitations should be set, especially for thermal discharges, shows that Congress intended to prohibit comparisons of costs and benefits under §316(b). But that is not what either the legislative history or Riverkeeper's collection of unpublished documents shows.

a. The Legislative History

Senate Bill 2770 focused on what technology could achieve and whether industry (as a whole, for best practicable technology (BPT), and at the plant level, for best available technology (BAT)) could afford it. 2 *Leg. Hist.* 1608-10, 1614-16. In neither case did it include a provision for considering energy or environmental impacts. For new sources, the Senate bill did not require EPA to consider either costs or energy and environmental impacts in setting new source performance standards (NSPS). However, it did authorize new sources to petition for relief from the standards when the economic and social costs of the standard bore no reasonable relationship to the social and economic benefits. *Id.* 1626.

House Bill 11896 provided for a full-scale, front-end analysis of costs and benefits for which the government would be responsible. 1 *Leg. Hist.* 981.

For BPT, H.R. 11896 required EPA to set effluent guidelines only after comparing costs to economic, social, and environmental benefits. *Id.* 980-81. For BAT, the bill required the National Academies of Sciences and Engineering to evaluate the technological feasibility, costs, and benefits of eliminating pollutant discharges. *Id.* 1042. It would have required EPA to develop BAT guidelines requiring elimination of pollutant discharges by 1981. But those limits would apply *only* if Congress, after reviewing the study, voted to make them applicable. *Id.* 1042-43. For thermal discharges, the House bill further required EPA to develop alternative limits for specific sites if a permittee demonstrated that the costs bore no reasonable relationship to the benefits. *Id.* 1044-45. For new sources, the House bill paralleled the Senate in all pertinent respects except one: the House bill required an up-front consideration by EPA of the costs and economic, social, and environmental impacts of achieving the standards. *Id.* 993.

With respect to thermal discharges, the Senate wanted all the technology-based provisions to apply. The House wanted to regulate thermal discharges separately by including a separate §316 in H.R. 11896. That provision would have required EPA, in adopting regulations for thermal discharges, to perform a cost-benefit analysis of the alternatives. 1 *Leg. Hist.* 348. It also would have provided relief from the limits where a discharger's costs bore no reasonable relationship to the social and economic benefits. *Id.*

The final legislation was a compromise, and the House gave more ground than the Senate. But the House got much of what it wanted. Most important, the House won with respect to *thermal discharges*.

All this history reveals is the Senate's aversion to requiring EPA, as a predicate to rulemaking, to demonstrate that the cost of the regulations would equal or exceed the benefits. It does not show a rooted aversion, by either chamber, to allowing EPA to make a cost-benefit comparison where the Agency thought it reasonable or necessary. Nothing in the documents Riverkeeper offers shows anything to the contrary.

b. Riverkeeper's Senate Staff Documents

Riverkeeper contends that the documents it has uncovered reveal that including the "technology-based" provision for intake structures was a pivotal development, breaking the logjam between the two chambers. Riverkeeper 13-14 n.8. But none of the documents says anything about why Congress included §316(b) or how the Conferees expected it to be implemented.

Riverkeeper wants the Court to conclude that the House and Senate intended §316(b) to prohibit EPA from comparing costs and benefits, because otherwise the Senate wouldn't have achieved what it wanted from the compromise. But the legislative record demonstrates only that the two sides compromised, each giving a little with respect to how

thermal discharges should be regulated. It reveals nothing, beyond the words of the statute, about what they expected of §316(b).

It is not credible to conclude, as Riverkeeper suggests, that the compromise approved variances to reduce costs of controlling discharges if fish populations were protected but required the same technology without regard to cost-benefit to control the intakes at the other end of the cooling system. It is beyond credulity to suppose that the House, having fought for and won a significant concession on cooling water discharges, would have agreed to a regulatory approach for intake structures that undid what it had accomplished.

Taken together, the language, context, and legislative history of §316(b) demonstrate that the statute is at least ambiguous as to whether EPA may compare costs and benefits in regulating cooling water intake structures. EPA's interpretation was reasonable and is entitled to deference.

III. For Over Thirty Years, EPA and the Courts Have Interpreted §316(b) to Allow Cost-Benefit Balancing

As shown in our initial brief at 37-41, for over 30 years EPA, the States, and the courts have recognized that §316(b) authorizes cost-benefit balancing. Riverkeeper's attempts (Riverkeeper 46) to marginalize or distinguish this longstanding interpretation are unavailing.

A. EPA Has Never Interpreted §316(b) to Prohibit Cost-Benefit Analysis

EPA has consistently said that a formal cost-benefit analysis, demonstrating that benefits at least equal costs, is not *required* to choose best technology available (or best available technology for pollutants). But it also has said, just as consistently, that some weighing of costs and benefits is *allowed*. That is all EPA did in the Phase II rule. *See supra*, section I.A.2.

Riverkeeper at 15 claims that EPA conceded in the preamble to the 1976 §316(b) rule (which was remanded by the Fourth Circuit in 1977) that it “had no discretion” to compare monetary costs with social benefits. Riverkeeper bases its argument on EPA’s statement that “once such adverse effects have been identified ... the effort must be to select the most effective means of minimizing (*i.e.*, ‘reducing to the smallest amount or degree’) those adverse effects.” 41 Fed. Reg. 17,387, 17,388 (April 26, 1976).

Contrary to Riverkeeper’s claim, nothing in that statement indicates the Agency believed that §316(b) required EPA to select the technology that most effectively reduces impingement mortality and entrainment without regard to environmental impact or economic value. As pointed out in UWAG’s brief at 38-39, EPA also recognized that “there are many factors that should be considered when determining whether an adverse environmental impact exists or is likely to exist,” 41 Fed. Reg. 17,388. The Agency therefore concluded that, “rather than reliance on a

single factor,” “all pertinent factors” (including the number of organisms affected and the level of any resulting damage to the aquatic ecosystem) “should receive adequate consideration.” *Id.* Nowhere did EPA say that “adequate consideration” could not include the broader environmental or economic value of the organisms affected. Thus, EPA declined to require closed-cycle cooling, even for power plants in “biologically sensitive areas such as estuaries.” *Id.*

Even if EPA’s 1976 statement could plausibly be construed as acknowledging some limit on the Agency’s authority to weigh costs and benefits, that has not been EPA’s interpretation in practice over the past 30 years. Indeed, as explained in our initial brief at 15, EPA has since defined “minimize” in 40 C.F.R. §125.83 as “reduce to the smallest amount, extent, or degree *reasonably* possible.” Determining what is “reasonably possible” encompasses some comparison of costs and benefits.

B. State and Federal Regulators Weigh Costs and Benefits Using the “Wholly Disproportionate” Test, Which the First Circuit Upheld in *Seacoast*

As our initial brief at 37-41 showed, regulators and courts have consistently interpreted §316(b) to authorize comparison of costs and benefits, showing that EPA’s interpretation in the Phase II rule was reasonable. Riverkeeper’s attempts to discount these interpretations are unpersuasive.

Riverkeeper begins by arguing at 45 n.22 that the First Circuit “did not uphold” the “wholly disproportionate” test. But the court affirmed the Administrator’s decision that further minimizing entrainment would be wholly disproportionate to any environmental benefit. *Seacoast Anti-Pollution League v. Costle*, 597 F.2d 306, 311 (1st Cir. 1979). To uphold the Administrator’s decision, the First Circuit *must* have decided that it was correct both as to law and as to the facts.

Riverkeeper also claims at 44-46 that the wholly disproportionate test is nothing more than a “cost-effectiveness” test in disguise. But deciding whether the costs of an alternative are “wholly disproportionate to any benefits” means examining whether the costs are bigger than the benefits, not whether the benefits are “essentially the same” while the costs are different.

Riverkeeper at 46 argues that the longstanding interpretation of §316(b) in many permit decisions is irrelevant, because those permit decisions are not EPA rules adopted with notice and comment procedures. This argument ignores the fact that permits too are subject to notice-and-comment procedures, as well as to EPA oversight. Even if that were not so, some states have adopted EPA-approved NPDES *regulations* for §316(b) that include cost-benefit balancing. For example, the State of Maryland’s regulations implementing §316(b) expressly call for weighing costs against benefits. Dollar values are assigned to fish lost to impingement, and dischargers must mitigate the loss

if the additional cost over a five-year period does not exceed five times the estimated annual value of impingement loss. Maryland Environmental Regulations §26.08.03.05(D)(2).

Even states that have not adopted cost-benefit comparison in their §316(b) regulations have used it as a matter of practice. For example, a California court recently concluded that “[o]ver the years, a standard for economic considerations has emerged, commonly referred to as the wholly disproportionate test” (though review has been deferred pending Supreme Court review of the cost-benefit issue). *Voices of the Wetlands v. Cal. State Water Res. Control Bd.*, 69 Cal. Rptr. 3d 487, 543 (Cal. App. 6th Dist. 2007), *review granted, depublished by Voices of the Wetlands v. Cal. State Water Res. Control Bd.*, 74 Cal. Rptr. 3d 453, 180 P.3d 223 (Cal. 2008). And New York State has long incorporated the “wholly disproportionate” test into its own §316(b) law. *In the Matter of Entergy Nuclear Indian Point 2 & 3*, Interim Decision of the Assistant Commissioner, DEC No. 3-5522-00011/00004 (August 13, 2008).

Indeed, agencies of three of the Northeast States endorsed the “wholly disproportionate” test in commenting on the Phase II rule. “The former criterion [‘costs wholly disproportionate to benefits’] has been applied to these Phase II and all other facilities since the 1970s and is supported by a substantial body of case law, permit decisions and legal opinions.” New York State Dept. of Env’tl. Conservation comments, at 4 (August 7, 2002). New Jersey likewise recommended using the “wholly

disproportionate” test. NJDEP comments, at 6 (Aug. 8, 2002); *see also* Massachusetts Office of Coastal Zone Management comments, 2 (June 14, 2002) (opposing EPA’s change from “wholly disproportionate” to “substantially greater than”). Indeed, New Jersey has declined to require closed-cycle cooling at PSEG’s Salem facility because “the estimated cost ... is wholly disproportionate.” NJ Fact Sheet NJ0005622 (June 24, 1993), at 138-39.

In short, even the Phase II rule’s most vociferous opponents have read §316(b) as authorizing at least *some* comparison of costs and benefits. Their endorsement is strong evidence that the “plain language” of §316(b) does not preclude cost-benefit balancing and that EPA’s interpretation was reasonable.

CONCLUSION

For the reasons given above, UWAG urges the Court to affirm EPA’s authority to compare costs and benefits both in setting national technology-based standards and for site-specific standards. For the reasons Entergy discusses in its reply at §III, a remand is unnecessary.

Respectfully submitted,

KRISTY A. N. BULLEIT
Counsel of Record
HUNTON & WILLIAMS LLP
1900 K STREET, N.W.
WASHINGTON, DC 20006-1109
(202) 955-1547

Counsel for Petitioner

OCTOBER 29, 2008