

Balancing Power Costs and Fisheries Values Under the Northwest Power Act

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I. INTRODUCTION

In addressing the anadromous fisheries resource affected by hydroelectric facilities in the Columbia River Basin, Congress directed that the Pacific Northwest Electric Power and Conservation Planning Council (Council) balance the values of this resource with the need for an economical electric power supply.¹ The central thesis of this Article is that Congress, in the Northwest Power Act, required that appropriate mitigation measures for the fisheries resource shall be determined by balancing the fisheries values that would be achieved against the costs that would be incurred by electric power consumers. While some commentators have urged that an appropriate balancing does not require such weighing of values and costs, in our view, it is mandatory as a matter of law under the Northwest Power Act. This is clear from the plain language of the statute and from the only reasonable interpretation of the relevant legislative history. Moreover, the Pacific Northwest's

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The authors wish to extend particular thanks to Pam Barrow, Judith Bearzi, and Larry Hittle for their comments. The authors are responsible for any errors contained herein.

1. "The [Council's] program shall consist of measures to protect, mitigate and enhance fish and wildlife affected by the development, operation and management of such [hydroelectric] facilities while assuring the Pacific Northwest an adequate, efficient, economical, and reliable power supply." Northwest Electric Power Planning and Conservation (Northwest Power) Act, § 4(h)(5), 16 U.S.C. § 839b(h)(5) (1988). The Northwest Power Act was passed on December 5, 1980.

declining energy surplus and a generally stabilized fishery in the Columbia River system dictate, as a matter of prudent public policy, a more careful and objective evaluation of the fisheries values to be achieved with the region's increasingly scarce ratepayer dollars. The historical background of the Northwest Power Act places the relevant power and fish interests in the proper context.

In the mid-1970s, Bonneville Power Administration's (BPA) power demand and supply projections indicated that federal power was running short even for its "preference customers."² Because BPA would no longer be able to guarantee preference customers that their load growth could be met beyond 1983, BPA issued a notice of insufficiency to these customers in 1976. In fact, it had become apparent even before this date that BPA would not be able to provide federal power to investor-owned utilities and direct service industries and still provide priority service to its preference customers.

Based on these power projections, BPA terminated sales of federal power to its private utility customers and notified its direct service industries that their power sales contracts would not be renewed. BPA was also faced with the difficult and politically painful task of allocating available federal power among its public utility customers.

To protect their interests BPA's customers could either

2. Preference customers are publicly-owned utilities that have priority to any power marketed by BPA that has not already been allocated either by Congress or by contract.

A few years ago, BPA had sufficient electricity to market to meet the full requirements of its preference customers, enough to supply large industrial customers on long-term contracts and even enough to supply substantial blocks of firm power to investor-owned utilities under 20-year contracts. The situation now is altogether different. BPA could not renew its firm power contracts with investor-owned utilities when they expired in 1973. . . . We have had to tell our *industrial customers* that, on the basis of presently assured BPA resources, we will not be able to renew our contracts with them as they expire one by one between 1981 and 1991. And we have had to tell our *preference customers* that, even with the expiration of the industrial contracts, we will not have enough assured power to meet their full anticipated load growth after 1983. We are underway with the almost impossible task of trying to develop a fair system for allocating the available Federal power that does not set preference customer against preference customer.

Pacific Northwest Electric Power Planning: Hearings on H.R. 3508 and H.R. 4159 Before the Subcomm. on Energy and Power of the House Comm. on Interstate and Foreign Commerce, 96th Cong., 1st Sess. 125 (1979) (statement of Sterling Munro, BPA Administrator) [hereinafter 1979 Power Planning Hearings] (emphasis in original).

engage in a protracted administrative and legal struggle with BPA over scarce power supplies, or they could pursue federal legislation. The region's utilities sought a legislative solution to the electricity shortage and associated problems through the Northwest Power Act.³

At the same time the region was pursuing a solution to the power shortage, certain species of Columbia Basin anadromous fish were being studied for listing as endangered species.⁴ In addition, other Columbia Basin fish runs were declining. Because of these concerns and the potential impact on fish resulting from growing energy demands on the Columbia River hydropower system, the fisheries interests also sought a legislative solution.

In our view, the Northwest Power Act was passed principally to respond to the regional electricity shortage and secondarily to provide protection for the fisheries resources. Congress established the Council to prepare a plan to meet electricity demand and, collaterally, to prepare a program to protect, mitigate, and enhance fish and wildlife.⁵ Congress directed the Council to appropriately balance the power and fisheries interests.

In this Article, Section II will examine briefly the relevant provisions of the Northwest Power Act.⁶ Section III will discuss how the Act has been misinterpreted by some commentators and will provide the correct interpretation of the Act's balancing provisions.⁷ Section IV will show that the legislative history confirms our interpretation of the fisheries provisions.⁸ Section V will examine whether the Council's implementation of the program has been consistent with these balancing requirements; it will also discuss future program activities and recommend how the Council should implement this

3. See, e.g., Tollefson, *BPA and the Struggle for Power at Cost 358-81* (1987) (a comprehensive history of the circumstances leading to the passage of the Northwest Power Act).

4. 43 Fed. Reg. 45,628 (1978). For a thorough discussion of the necessary steps for listing a species under the Endangered Species Act and a consideration of these issues during the period when the Northwest Power Act was being considered by Congress, see Bodi, *Protecting Columbia River Salmon Under the Endangered Species Act*, 10 ENVTL. L. 349 (1980).

5. Northwest Power Act, § 4(e)(3)(F), 16 U.S.C. § 839b(e)(3)(F) (1988), provides that the Council's program for fisheries mitigation is an element of the Council's power plan.

6. See *infra* text accompanying notes 9-23.

7. See *infra* text accompanying notes 24-112.

8. See *infra* text accompanying notes 113-52.

balancing.⁹

II. THE FISHERIES PROVISIONS OF THE NORTHWEST POWER ACT

After establishing six fundamental statutory purposes,¹⁰ the Northwest Power Act provides for the eight member council. The Council is comprised of two gubernatorial appointees each from Idaho, Montana, Oregon, and Washington.¹¹ Con-

9. See *infra* text accompanying notes 153-71.

10. Northwest Power Act, § 2, 16 U.S.C. § 839 (1988) lists the six purposes as follows:

- (1) to encourage, . . .
 - (A) conservation and efficiency in the use of electric power; and
 - (B) the development of renewable resources within the Pacific Northwest;
- (2) to assure the Pacific Northwest of an adequate, efficient, economical, and reliable power supply;
- (3) to provide for the participation and consultation of the Pacific Northwest States, local governments, consumers, customers, users of the Columbia River System (including Federal and State fish and wildlife agencies and appropriate Indian tribes), and the public at large within the region —
 - (A) the development of regional plans and programs related to energy conservation, renewable resources, other resources, and protecting, mitigating, and enhancing fish and wildlife resources,
 - (B) facilitating the orderly planning of the region's power system, and
 - (C) providing environmental quality;
- (4) to provide that the customers of the Bonneville Power Administration and their consumers continue to pay all costs necessary to produce, transmit, and conserve resources to meet the region's electric power requirements, including the amortization on a current basis of the Federal investment in the Federal Columbia River Power System;
- (5) to insure, subject to the provisions of this Act—
 - (A) that the authorities and responsibilities of State and local governments, electric utility systems, water management agencies, and other non-Federal entities for the regulation, planning, conservation, supply, distribution, and use of electric power shall be construed to be maintained; and
 - (B) that Congress intends that this act not be construed to limit or restrict the ability of customers to take actions in accordance with other applicable provisions of Federal or State law, including, but not limited to, actions to plan, develop, and operate resources and to achieve conservation, without regard to this Act; and
- (6) to protect, mitigate and enhance fish and wildlife, including related spawning grounds and habitat, of the Columbia River and its tributaries, particularly anadromous fish which are of significant importance to the social and economic well-being of the Pacific Northwest and the Nation and which are dependent on suitable environmental conditions substantially obtainable from the management and operation of the Federal Columbia River Power System and other power generating facilities on the Columbia River and its tributaries.

11. Northwest Power Act, § 4(a)(2)(B), 16 U.S.C. § 839b(a)(2)(B) (1988) authorizes

gress assigned the Council the task of preparing and submitting to the BPA a regional conservation and electric power plan which the BPA is responsible for implementing.¹² Concurrently with the preparation of the power plan, the Council was directed to prepare a program "to protect, mitigate, and enhance fish and wildlife."¹³ Section 4(h) of the Act mandates the balancing of power costs and fisheries values.¹⁴

Specifically, subsection 4(h)(5) directs the Council to prepare a fish and wildlife program based on recommendations submitted by fish and wildlife agencies, appropriate Indian tribes, and BPA customers.¹⁵ The second sentence of this subsection expressly requires that fisheries interests be balanced with power interests: "The program shall consist of measures to protect, mitigate, and enhance fish and wildlife affected by

the governors of Idaho, Montana, Oregon and Washington to appoint two members each to the Council. While funds for the Council's activities are provided by the BPA, a federal agency, the members and employees of the Council are not deemed to be federal officers or employees for any purpose.

12. Northwest Power Act § 4(d)(1), 16 U.S.C. § 839b(d)(1) (1988) directs the Council within two years of its establishment and appointment of its members to prepare and submit a regional electric conservation and electric power plan to the Administrator of the BPA. This plan is to be reviewed no less frequently than once every five years. The original plan was transmitted to BPA in 1983. The first set of amendments to the plan was incorporated in the 1986 Power Plan. A Supplement was prepared in 1989. The Council is now preparing for a third round of amendments in 1990. For a summary of the Council's planning actions through the 1989 Supplement see 1 Northwest Power Planning Council, *1989 Supplement to the 1986 Northwest Conservation and Electric Power Plan*, 1-7.

13. Northwest Power Act § 4(h)(5), 16 U.S.C. § 839b(h)(5) (1988). Section 4(h) details the steps required for preparation of the Columbia River Basin Fish and Wildlife Program ("Program"). The Council was directed to request recommendations for measures and objectives to be included in the program promptly after its establishment. Federal and state fish and wildlife agencies and tribes were given 90 days to respond to the request. The Council was obligated to adopt a program within one year after receipt of recommendations. The Council's original program was adopted on November 15, 1982, and amended on October 10, 1984, and February 11, 1987. See NORTHWEST POWER PLANNING COUNCIL, *COLUMBIA RIVER BASIN FISH AND WILDLIFE PROGRAM*, 1987.

14. While § 4(h)(5) explicitly describes the balance the Council is directed to achieve in the program, the purposes of the Act detailed in note 7, *supra*, also imply the need for balancing the interests of power and fish. A key purpose of the Act, as set forth in § 2(2), is "to assure the Pacific Northwest . . . an adequate, efficient, economical, and reliable power supply." The final purpose, included as § 2(6), is "to protect, mitigate and enhance the fish and wildlife . . . of the Columbia River and its tributaries, particularly anadromous fish." Both the Council and BPA are charged with carrying out their responsibilities to further the Act's purposes in §§ 4(e)(1) and 4(h)(10)(A) respectively. They have independent responsibilities to determine the correct balance between power and fish interests in their respective activities: the Council in adopting a program and BPA in implementing that program.

15. Northwest Power Act, § 4(h)(5), 16 U.S.C. § 839b(h)(5) (1988).

the development, operation, and management of such facilities while assuring the Pacific Northwest an adequate, efficient, economical and reliable power supply."¹⁶

Subsection 4(h)(6) provides additional criteria that Council proposals must meet. The Council must determine that recommended measures: (a) complement existing and future activities of fish agencies and Indian tribes; (b) are based on and supported by the best available scientific knowledge; (c) utilize the least costly alternative for achieving the same biological objective where equally effective alternative means exist; (d) are consistent with the tribes' legal rights; (e) improve survival of anadromous fish at the Columbia system hydroelectric projects; and (f) provide flows between the projects so as to improve production, migration, and survival of anadromous fish.¹⁷

Section 4(h)(7) directs the Council to determine whether the recommendations for measures are consistent with the Act's purposes and establishes a mandatory basis for rejecting proposed measures. If a proposed measure is inconsistent with subsection 4(h)(5), which includes the key balancing standard, or fails to meet the criteria in subsection 4(h)(6), then the Council must reject, in writing, a proposed measure.¹⁸

Subsection 4(h)(8) contains four additional principles that govern the Council's development of the program:

16. *Id.*

17. Northwest Power Act, § 4(h)(6), 16 U.S.C. § 839b(h)(6) (1988). These standards apply only to the measures to be included in the Fish and Wildlife Program. They do not limit the Council's obligation to consider the economic impact of the program on the power supply in the region. This consideration is provided for in § 4(h)(5).

18. Northwest Power Act, § 4(h)(7), 16 U.S.C. § 839b(h)(7) (1988). Sections 4(h)(7)(A), (B) and (C) state the bases on which the Council may reject a proposed recommendation. A recommendation can be rejected if it is inconsistent with the balancing standard in § 4(h)(5), inconsistent with the six standards listed in paragraph 4(h)(6), or less effective than the adopted recommendations for the protection, mitigation, and enhancement of fish and wildlife. Section 4(h)(7)(A) expressly directs the Council to reject any recommendation that is inconsistent with *assuring* an "adequate, efficient, *economical*, and reliable power supply." In Webster's New Collegiate Dictionary, the word "assure" is defined to mean "to make sure or certain" and the word "economical" is defined to mean "careful, efficient, prudent use of resources." WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY 110 (9th ed. 1983). Thus, an economical power supply is one which makes "careful, efficient, and prudent" use of its resources. The Council is directed to reject a proposed program measure that utilizes ratepayer funds if it appears uncertain that such an expenditure is a careful, efficient, prudent use of these ratepayer funds. The only way to determine if a fish expenditure is efficient and prudent is to understand clearly the fisheries values which are to be achieved with any expenditure.

1. Enhancement measures to achieve offsite protection and mitigation are authorized.¹⁹

2. Consumers of electric power are only obligated to bear the cost of measures designed to deal with adverse impacts caused by the development and operation of electric power facilities and programs.

3. If the program requires coordination of its measures with additional measures designed to deal with nonhydroelectric impacts, these additional measures are to be implemented by agreements between the funding parties.

4. The BPA Administrator is directed to allocate costs and power losses consistent with individual project impacts and system-wide objectives.²⁰

Subsections 4(h)(10) and 4(h)(11) relate to the authority of the federal agencies to carry out their responsibilities under the Act. Subsection 4(h)(10) delineates the funding authority of the BPA Administrator in carrying out his responsibilities.²¹ The Administrator is to use the BPA fund, the authorities available under the Act, and any other pertinent laws to protect, mitigate, and enhance fish and wildlife to the extent affected by any hydroelectric project²² in a manner consistent with the program and the Act's purposes. BPA's expenditures are to be in addition to, not in lieu of, other expenditures

19. As used in § 4(h), "enhancement" is not a new or additional obligation, but a means of achieving improved protection and mitigation through (1) offsite compensation for losses arising from (2) the development and operation of hydroelectric facilities (3) of the Columbia River and its tributaries, considered as a system. Enhancement is thus a tool available under the Act as part of the program to assist in fulfilling *existing* protection and mitigation obligations that otherwise might go unmet because of practical limitations imposed by the present physical or operational characteristics of the Federal Columbia River Power System.

Enhancement measures that are designed to achieve protection and mitigation and that meet the criteria of § 4(h) are to be included in the program. "*The latter statement helps clarify that in this context enhancement is not a new or additional obligation, but a means of fulfilling existing protection and mitigation obligations under the unique circumstances presented by the Columbia River power system.*" H. R. REP. NO. 976, Part II, 96th Cong., 2d Sess. 44 (1980) [hereinafter INTERIOR REPORT] (emphasis added) *reprinted in* 1980 U.S. CODE CONG. & ADMIN. NEWS 6023, 6042.

20. Northwest Power Act, §§ 4(h)(8)(A)-(D), 16 U.S.C. §§ 839b(h)(8)(A)-(D) (1988).

21. *Id.* at § 4(h)(10)(A), 16 U.S.C. § 839b(h)(10)(A).

22. The phrase "to the extent affected by the development and operation of any hydroelectric project of the Columbia River" *limits* the funding authority of the Administrator to hydroelectric-impacts *only*. This language is not a charter which obligates the Administrator to fund all measures for all impacts caused by hydroelectric projects. *Id.*

required of other entities.²³

Subsection 4(h)(10)(B) instructs the Administrator to include expenditures for the program in his annual budgets, and subsection 4(h)(10)(C) directs an allocation of funds expended among the hydroelectric projects in accordance with project purposes and existing accounting procedures.

Subsection 4(h)(11)(A) obligates the federal agencies which manage, operate, or regulate federal and nonfederal hydroelectric facilities to (i) exercise their responsibilities consistent with the purposes of the Act and in a manner that gives equitable treatment for fish and wildlife along with the other purposes for which the system is managed, and (ii) exercise such responsibilities, taking into account the Council's program at each relevant stage of its decision making processes to the fullest extent practicable.²⁴ Subsection 4(h)(11)(B) mandates consultation and coordination of actions among the Administrator of BPA, the Bureau of Reclamation, and the Army Corps of Engineers with the Secretary of the Interior, the National Marine Fisheries Service, state fish and wildlife agencies in the region, tribes, and project operators in carrying out the provisions of 4(h)(11)(A).

This, in brief, is the statutory regime enacted by Congress to respond to the fisheries issues discussed in the introduction of this Article. The next part of the Article will discuss an

23. The "in lieu" language makes clear that other fisheries efforts outside the Act were expected to continue to be funded separately. The funding to be provided by BPA under the authority of the Act was to be new money. See INTERIOR REPORT, *supra* note 19, at 45.

24. Northwest Power Act, § 4(h)(11)(A)(i) & (ii), 16 U.S.C. § 839b(h)(11)(A)(i) & (ii) (1988). In *National Wildlife Federation v. FERC*, 801 F.2d 1505 (9th Cir. 1986) and *Confederated Tribes and Bands of Yakima Indian Nation v. FERC*, 746 F.2d 466, 473 (9th Cir. 1984), *cert. denied*, Public Utility District No. 1 of Chelan County, Washington v. *Confederated Tribes and Bands of Yakima Indian Nation*, 471 U.S. 1116 (1985), the Ninth Circuit interpreted the "equitable treatment" provision of the Northwest Power Act as imposing substantive as well as procedural obligations on the Federal Energy Regulatory Commission (FERC). By "substantive" the court meant that FERC had a new obligation to consider the Council's program, but not any other substantive obligation. This meaning is consistent with the intent of Congress as stated in the Interior Report wherein the Committee explained the effect of section 4(h): "This provision does not change the existing statutory authority of other Federal agencies such as the Corps of Engineers or FERC." INTERIOR REPORT, *supra* note 19, at 46. Congress did not create any new substantive mitigation obligation, only a new process to fulfill existing mitigation obligations. "Although this approach is not intended to create any new obligations with respect to fish and wildlife, it will provide a system for insuring that existing fish and wildlife obligations are fulfilled while simultaneously assuring the region an economical power supply." *Id.* at 37.

interpretation of the statute proposed by some commentators which we feel misinterprets the standard Congress intended the Council to use in evaluating recommendations for mitigation measures. We then will present the correct interpretation based on the plain language of the statute and the relevant legislative history.

III. FISHERIES ADVOCATES HAVE URGED THE COUNCIL TO IGNORE THE EXPRESS REQUIREMENT FOR BALANCING MITIGATION COSTS AND VALUES

Various commentators contend that Congress intended the fish runs to be restored to levels that existed prior to development of the hydroelectric projects on the Columbia River system. For example, Professor Blumm has argued that the "goal" of the Northwest Power Act is to restore runs to "pre-dam levels."²⁵ Mr. Lothrop has argued that Congress required BPA's ratepayers to restore all fisheries losses due to hydro-power development without regard to cost:

Congress did not say protect, mitigate and enhance fish if benefits of doing so outweighs such costs. . . . Nor did Congress say mitigate 'some' of the fish and wildlife impacts. In effect, Bonneville is the financial guarantor that the Council's program will be implemented, and that fish and wildlife impacts in the Basin will be fully redressed.²⁶

25. Blumm, *Beyond Mitigation-Restoring Federally Damaged Salmon Runs Under the Columbia Basin Fish and Wildlife program*, 14 ENVTL. L. 10011, 10013 (1984) [hereinafter *Beyond Mitigation*]. "Nothing in the language of the statute [the Northwest Power Act] suggests that Congress intended anything less than complete compensation for fish and wildlife losses incurred due to hydroelectric project development and operation." Blumm, *Fulfilling the Parity Promise: A Perspective on Scientific Proof, Economic Cost and Indian Treaty Rights in the Approval of the Columbia Basin Fish and Wildlife Program*, 13 ENVTL. L. 103, 109 (1982) [hereinafter *Parity*].

Professor Blumm is a self-described fisheries advocate. "I received a letter from a Council member accusing me of being an 'advocate' for Columbia Basin fish and wildlife. My answer is a confession: I am." Blumm, *The Northwest Power Act's Institutional Innovations and Unfulfilled Promises*, 2 J. ENVTL. L. & LITIGATION 165, 169 (1987) [hereinafter *Unfulfilled Promises*]. He has written extensively on the fisheries problem and the Northwest Power Act. See, e.g., Blumm, *Reexamining the Parity Promise: More Challenges Than Successes to the Implementation of the Columbia Basin Fish and Wildlife Program*, 16 ENVTL. L. 461 (1986); Blumm, *Implementing the Parity Promise: An Evaluation of the Columbia Basin Fish and Wildlife Program*, 14 ENVTL. L. 277 (1984); Blumm and Johnson, *Promising a Process for Parity: The Pacific Northwest Electric Power Planning and Conservation Act and Anadromous Fish Protection*, 11 ENVTL. L. 497 (1981).

26. Lothrop, *The Misplaced Role of Cost-Benefit Analysis in Columbia Basin Fishery Mitigation*, 16 ENVTL. L. 517, 548 n.121 (1986) [hereinafter *Misplaced Role of*

Mr. Lothrop's assertions, although often repeated as if undisputed fact or finding of law, are contrary to the express terms of the Northwest Power Act. Professor Blumm and Mr. Lothrop ask the Council to ignore the process which Congress created to determine appropriate mitigation—an objective balancing of the costs of mitigation against its value to the fishery.

The mischaracterization of the Northwest Power Act by these commentators is not limited to the scope of mitigation. They also contend, incorrectly, that BPA has no independent authority or duty to balance fisheries' needs against power costs;²⁷ that Congress intended ratepayers to pay a greater share of total mitigation costs;²⁸ and that the Council must defer to the "expertise" of the fisheries agencies and tribes in determining sound biological objectives.²⁹ As shown in Section IV below, these assertions are also contrary to the Northwest Power Act and its legislative history.

*A. The Northwest Power Act Expressly Requires that the
Obligation of BPA's Ratepayers to Fund Fisheries
Mitigation Shall Be Determined by
Balancing the Costs Imposed and
the Values Obtained by Mitigation*

The principal substantive standard for fisheries mitigation under the Northwest Power Act is that "[t]he [Council's] program shall consist of measures to protect, mitigate and enhance fish . . . while assuring the Pacific Northwest an adequate, efficient, economical and reliable power supply."³⁰

Economical means "marked by careful, efficient and prudent use of resources" or "operating with little waste or at a

Cost-Benefit Analysis]. Mr. Lothrop is a policy analyst for the Columbia River Inter-Tribal Fish Commission.

27. "I do not see how the [Council's fisheries mitigation] program can succeed if BPA is allowed to impede the pace of program implementation by second-guessing the Council with its own calculation of the costs and benefits of program measures." *Unfulfilled Promises*, *supra* note 25, at 173.

28. "Unlike traditional fish and wildlife measures funded through the congressional appropriations process, [wherein the mitigation cost is allocated among taxpayers and project purposes, including power] the Columbia Basin Fish and Wildlife program will be funded largely through electric power rates." *Beyond Mitigation*, *supra* note 25, at 10014.

29. The Council "has yet to heed the congressional admonition that the fisheries agencies and tribes are the biological experts and that it should defer to their expertise." *Unfulfilled Promises*, *supra* note 25, at 175.

30. Northwest Power Act, § 4(h)(5), 16 U.S.C. § 839b(h)(5) (1988).

savings.”³¹ By the plain meaning of its terms, Congress required the Council to determine the appropriate level of mitigation for the harm to the fishery by balancing fisheries values against the Pacific Northwest’s need for a power supply. Ordinary rules of administrative law require that the Council articulate in its decision how the fisheries values and power costs were balanced in its order promulgating the program.³²

B. The Fisheries Advocates’ Rationale for Reading Balancing Out of the Northwest Power Act is Insupportable

Professor Blumm recognized in an early article that subsection 4(h)(5) requires that a “balance . . . must be struck between fisheries protection and hydropower generation.”³³ To circumvent any meaningful balance he argues that Congress rejected a cost-benefit balancing.³⁴ Blumm contends that a cost-benefit balancing would “lead to poor policy choices.”³⁵ He apparently finds little public value in an economical power supply for the Pacific Northwest, but finds no public policy problem with a mitigation measure that may cost \$1,000 to \$3,300 per returning adult fish.³⁶

Blumm urges the Council to become a fisheries advocate.³⁷ He argues that the Council should adopt a “balancing” standard wherein the economic cost to power supply is not a sufficient reason for the Council to reject a recommended mitigation measure unless power becomes uneconomical for consumers to purchase.³⁸ This argument, however, is contrary to the Northwest Power Act.

Blumm identifies ten substantive standards for the Council’s program, which are found in subsection 4(h)(5) through § 4(h)(7) of the Act.³⁹ Blumm asserts that “standard No. 2

31. WEBSTER’S NINTH NEW COLLEGIATE DICTIONARY 395 (9th ed. 1983).

32. *Motor Vehicles Mfrs. Ass’n of the United States v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 42-43 (1983).

33. *Parity*, *supra* note 25, at 119.

34. The Northwest Power Act “does not give the Regional Council the authority to reject such measures on the basis of cost-benefit analysis.” *Parity*, *supra* note 25, at 108; *Misplaced Role of Cost-Benefit Analysis*, *supra* note 26, at 517.

35. *Parity*, *supra* note 25, at 147.

36. *Unfulfilled Promises*, *supra* note 25, at 165.

37. *Id.* at 169. Only three years earlier, Blumm had praised the Council for “supplying an impartial forum in which fish and wildlife interests and power interests could present their points of view.” *Beyond Mitigation*, *supra* note 25, at 10016.

38. *Parity*, *supra* note 25, at 123, 138.

39. *Id.* at 115-16. Blumm contends that the § 4(h)(8) principles that the Council “should consider” in adopting its program are not as significant as the standards in

(protect, mitigate, and enhance fish and wildlife while assuring an adequate, efficient, economical, and reliable power supply) may be viewed as inconsistent with other standards."⁴⁰ For example, Blumm contends that the balancing standard conflicts with the directive in subsection 4(h)(6)(C) to "achieve sound biological objectives at minimum economic cost."⁴¹ Blumm contends that this provision, unlike the balancing provision in subsection 4(h)(5), "does not allow the economic considerations of hydropower generation to override fish and wildlife protection measures"⁴² and, thus, shows that "Congress intended biological considerations to prevail over economic considerations."⁴³ To resolve this purported

§ 4(h)(5)-(7). *Id.* at 117-18. These principles require, *inter alia*, that the ratepayers shall bear the cost of measures designed to deal with the adverse impacts caused by electric power projects and programs only. Northwest Power Act, § 4(h)(8)(B), 16 U.S.C. § 4(h)(8)(B) (1988). This equitable principle—that ratepayers not pay for harm caused by others—cannot be ignored by the Council.

Another commentator has purported to find hydropower's obligation to restore the fishery to historic levels in § 4(h)(10)(A). This subsection was not identified by Blumm as a section providing any substantive mitigation standards. Subsection 4(h)(10)(A) establishes BPA's funding obligation. "This Subsection [§ 4(h)(10)(A)] requires that resources from the Bonneville Power Administration (BPA) Fund be used for protection, mitigation, and enhancement, to the 'extent affected by the development and operation of any [basin] hydroelectric project.' This seems to contemplate complete restitution of wildlife and habitat losses caused by hydroelectric development." Brown, *Breathing Life Back into a Drowned Resource: Mitigating Wildlife Losses in the Columbia Basin Under the Northwest Power Act*, 18 ENVTL. L. 571, 593 (1988) (footnotes omitted).

The phrase, "to the extent affected by," does not define the scope of BPA's substantive mitigation obligation. This qualifying phrase simply incorporates the limitation of § 4(h)(8)(B): BPA's ratepayers are responsible *only* for measures addressing the impacts of hydroelectric projects. BPA's ratepayers do not pay for the harm to fisheries caused by logging, agriculture, the commercial fish harvest or other factors. These express exclusions do not define the scope of BPA's mitigation obligation. The extent of this obligation is defined by a balancing of power costs and fisheries values for each mitigation measure.

40. *Parity*, *supra* note 25, at 118.

41. *Id.* Section 4(h)(6)(C) provides that "the Council shall include in the program measures which it determines, on the basis set forth in paragraph (5) [§ 4(h)(5)], will . . . utilize, where equally effective alternative measures of achieving the same sound biological objective exist, the alternative with the minimum economic cost."

42. *Parity*, *supra* note 25, at 132.

43. *Id.* at 108. Blumm notes that the Commerce Report states that "cost should not be a deterrent if a fish and wildlife need might be sacrificed to save dollars." *Id.* at 123 (quoting H. R. REP. NO. 976, Part I, 96th Cong., 2d Sess. 45, 57 (1980) [hereinafter COMMERCE REPORT] reprinted in U.S. CODE CONG. & ADMIN. NEWS 5989). Blumm's reliance is misplaced. As discussed below, *see infra* notes 88-92, the Commerce Committee Bill did not expressly require the balancing between power costs and fisheries values that was adopted by Congress in the Northwest Power Act. Congress, as a whole, rejected the Commerce Committee's suggestion that fisheries' values prevail over power needs.

inconsistency, he argues that the "balance that must be struck between fisheries and hydropower generation should not conflict with . . . any of the other program approval standards."⁴⁴

In support of his conclusion, Blumm argues that the substantive standards for the Council's program must be interpreted so that "the vague standards [are construed as] consistent with more specific standards."⁴⁵ Blumm does not contend that the balancing standard of subsection 4(h)(5) is vague. Rather, without explanation, he replaces "vague" standards in his formulation with "flexible" standards. "To apply the principle, it is necessary to determine which standards are flexible and which are specific."⁴⁶ The subsection 4(h)(5) standard, because it requires balancing, is by its nature more flexible. "Standard No. 2 [subsection 4(h)(5) balancing] appears to be the most flexible because the balancing it anticipates is notably absent from the other program approval standards."⁴⁷

To avoid the purported conflict, Blumm argues that the flexible balancing standard must be "defined" to accommodate the specific approval standards.⁴⁸ Thus, "an 'adequate, efficient, economical and reliable power supply' must be defined as one that includes the cost of providing long overdue accommodations to the Basin's fish and wildlife resources."⁴⁹

Under Blumm's "economic feasibility" standards,⁵⁰ a meaningful balance of fisheries values and power costs is foregone and, instead, "all feasible power accommodations [are made] to satisfy the more specific subsection 4(h) program approval standard."⁵¹ Blumm contends that Congress required the Council to adopt any biologically sound measure unless it would result in "large scale power outages (not simply increased power cost)",⁵² "a demonstrated BPA inability to fulfill [its] self-financing requirement",⁵³ or "an entire class of

44. *Id.* at 119.

45. *Id.*

46. *Id.* at 120.

47. *Id.*

48. *Id.*

49. *Id.* at 121.

50. Blumm proposes a "two-pronged test [that the Council should employ] in evaluating fish and wildlife measures: (1) is the measure biologically sound? and (2) is it economically and technologically feasible?" *Id.* at 108.

51. *Id.* at 122.

52. *Id.* at 123.

53. *Id.* at 123, 138.

power customers [being forced] out of business.”⁵⁴ Under Blumm’s formulation of the subsection 4(h)(5) balancing of fishery values and power costs, costs are irrelevant until BPA or the Pacific Northwest is pushed to the brink of ruin.

This argument is bad policy. The Pacific Northwest would be poorer as a region if program costs exceed their value. Moreover, Blumm’s argument is contrary to the express terms of the Northwest Power Act. There is no internal inconsistency in the Act which requires the emasculation of the balancing standard of subsection 4(h)(5). For example, the requirement of subsection 4(h)(6)(C) is that the Council shall not adopt a more expensive measure when a less expensive measure will achieve the same result. This is simply good sense.⁵⁵ Nothing in this common sense rule of subsection 4(h)(6)(C) conflicts, as Blumm asserts, with weighing the fisheries value to be achieved against its cost to decide whether the mitigation objective makes sense at all.⁵⁶ On the contrary, Congress provided that the outcome of the subsection 4(h)(5) process for balancing fisheries’ values against power costs may not be overridden by other program standards. The balancing process is the overriding standard.

The so-called specific substantive criteria in both subsections 4(h)(6) and 4(h)(7) are expressly subject to the balancing criteria of subsection 4(h)(5). The subsection 4(h)(6) criteria are subject to the condition that “[t]he Council shall include in the program measures which it determines, on the basis set forth in paragraph (5), will” achieve these criteria. Contrary to Blumm’s assertion, Congress did not intend that the Council’s subsection 4(h)(5) balancing should defer to the subsection 4(h)(6) criteria. The adoption of all measures was to be made “on the basis set forth in [subsection 4(h)(5)].”

Blumm attempts to dismiss this reference by arguing that the language “on the basis set forth in [subsection 4(h)(5)]” in

54. *Id.* at 138. Blumm’s standard does not “guarantee the continued existence of individual employers.” *Id.* at 138 n.154.

55. Even Blumm acknowledges that: “‘minimum economic cost’ implies a simple common sense standard: obviously, we should not spend more if spending less will achieve the same biological result.” *Id.* at 132. This common sense rule was expressly stated perhaps because the Council’s program is not funded with its own money or taxpayer money, but with ratepayer money.

56. *Id.* Blumm objects to the further common sense concept that “feasible and biologically sound fish and wildlife measures [could be rejected under § 4(h)(5)] solely on the basis of their purported cost.” *Id.* at 147. However, it is this concept that Congress incorporated in § 4(h)(5).

subsection 4(h)(6) refers only to that portion of subsection 4(h)(5) that provides that the program shall be developed on the basis of the recommendations submitted by fisheries agencies and tribes.⁵⁷ No basis exists for this selective reading of subsection 4(h)(5).⁵⁸ Moreover, it is inconsistent with the express requirements of subsection 4 (h)(7).

Subsection 4(h)(7) requires that “[t]he Council shall determine whether each recommendation received is consistent with the purposes of the Act” and shall reject any recommendation that is “inconsistent with paragraph 5 of this subsection.” Each recommendation must pass muster under the subsection 4(h)(5) balancing. Balancing is expressly required because the Council must reject any measure that is inconsistent with subsection 4(h)(5) and is indirectly required because the Council must reject any recommendation which is inconsistent with the purposes of the Act. One important purpose of the Act includes creating an “adequate, efficient, economical, and reliable power supply.”⁵⁹

The Northwest Power Act provides no basis for limiting the role of power costs in the balancing required by subsection 4(h)(5). These costs must be considered before large scale power shortages occur, before the BPA is unable to pay its bills, and before customers are driven from the region due to high power costs. In subsection 4(h)(5) Congress provided a mandate for reasonable mitigation while satisfying the need for an economical power supply—not a mandate for imprudence or waste.

57. *Id.* at 120 n.71.

58. Blumm also claims that the so-called economic feasibility standard is supported by the Commerce Report. *Id.* at 122. As discussed in detail below, *see infra* notes 88-92, the Commerce Report did not include an express requirement for balancing power needs against fisheries values. This shortcoming was remedied in the Interior Bill which added the requirement of an economical power supply and expressly included this balancing in § 4(h)(5). Thus, the power interests' willingness to accommodate fisheries values, as noted in the Commerce Report, was not unbounded, but was based upon a balancing to determine an appropriate accommodation.

59. Northwest Power Act, § 2(2), 16 U.S.C. § 839(2) (1988).

IV. THE LEGISLATIVE HISTORY SUPPORTS ONLY ONE
REASONABLE INTERPRETATION: MITIGATION MUST
BE DETERMINED BY OBJECTIVELY
BALANCING THE COST OF
MITIGATION AGAINST ITS VALUE

Congress adopted the fisheries provisions of the Northwest Power Act within a certain context. The legislative history shows that Congress understood the fisheries' problem: The fishery was depleted, in part, because operators of the hydroelectric projects did not adequately consider fisheries values. The legislative history also shows that Congress understood and adopted the compromise provisions between fisheries and power representatives that were intended to address this problem: A new entity (the Council) and process were created to balance fisheries values against power costs and, in adopting or rejecting any mitigation proposal, the Council was directed to show how these values and costs were measured and balanced. Congress intended subsection 4(h) to address the fisheries problem in the manner that was acceptable to both fisheries and power interests in the Pacific Northwest. Insofar as any interpretation of subsection 4(h) is necessary, these fisheries provisions should be interpreted in a manner consistent with this intent.

A. The Columbia River Fishery Continued to Decline

In the broadest sense, the fisheries' problem was that the salmon runs in the Columbia River system were badly depleted.⁶⁰ The hydroelectric projects were seen as a major cause of the continued decline of these fish runs.⁶¹

Salmon begin their lives in freshwater streams. As juveniles, they migrate downstream to the sea. In the ocean the juveniles mature into adult fish over a three to five year period. After this period, the adults return to spawn in the stream where they were hatched. The cycle then begins again.

The hydroelectric projects on the Columbia River system have harmed the salmon. The hydroelectric projects were not the sole cause of the decline in the fishery, however. Other factors, for example, commercial fishing, agriculture, and mining, also contributed to the decline. The hydroelectric reser-

60. COMMERCE REPORT, *supra* note 43, at 45.

61. *Id.* at 46-48.

voirs may flood spawning habitats or the dams may block upstream access to spawning habitats.⁶² Alteration of naturally occurring seasonal variations in streamflows may slow the juveniles' downstream migration in the spring and increase losses to predation.⁶³ Many juveniles are killed as they pass through the generating turbines.⁶⁴

In order to minimize these effects, Congress required fish ladders and other specific mitigation measures in authorizing construction of the projects. Congress has directed federal agencies, when constructing or modifying hydroelectric projects, to include "justifiable means and measures" for mitigation.⁶⁵ The implementation of these measures, however, was not sufficient to prevent the continued decline of the fishery in the Columbia River system.

There were four basic reasons why the fishery continued to decline: (1) federal project operators (the Army Corps of Engineers and the Bureau of Reclamation) were perceived to have given too little weight to fisheries' values; (2) mitigation was planned on a project-by-project basis; (3) the Federal Energy Regulatory Commission (FERC) was not giving adequate weight to fisheries values in regulating non-federal hydroelectric projects on the Columbia River system; and (4) BPA lacked express authority to fund fisheries mitigation.⁶⁶

62. COMMERCE REPORT, *supra* note 43, at 45. The dam and reservoir serve all project purposes—flood control, navigation, irrigation, power, and recreation. The harm to the fishery caused by project features serving these purposes and the cost of mitigation measures addressing this harm must be allocated among the project purposes. Northwest Power Act, §§ 4(h)(8)(B), 4(h)(10)(C), 16 U.S.C. 839b(h)(8)(B), h(10)(C) (1988).

63. COMMERCE REPORT, *supra* note 43, at 45. Streamflows may be regulated to serve various project purposes, not just power production.

64. *Id.* at 46. The turbines are specific project features that serve only the power production purpose.

65. Fish and Wildlife Coordination Act, 16 U.S.C. § 662(b) (1988).

66. COMMERCE REPORT, *supra* note 43, at 48. The Columbia River Fisheries Council was comprised of the directors of the four state fish and wildlife agencies: Idaho Department of Fish and Game, Oregon Department of Fish and Wildlife, Washington Department of Fisheries, and Washington Department of Game; the regional directors of the two federal fisheries agencies: United States Fish and Wildlife Service and National Marine Fisheries Service; and the chairman of the Columbia River Inter-Tribal Fish Commission, representing four Indian tribes with fishing rights on the Columbia River: The Yakima, Warm Springs, Umatilla, and Nez Perce.

1. Federal Project Operators Did Not Adequately Consider Fisheries Values

Congress authorized construction and operation of federal hydroelectric projects to serve multiple purposes. The project purposes included flood control, navigation, irrigation, recreation and power supply. Fishery mitigation and enhancement was not an authorized purpose of the federal dams.⁶⁷

Because fisheries mitigation was not an authorized project purpose, some fisheries representatives felt that the fisheries interests were "ignored or treated with disdain" by the project operators.⁶⁸ Neither Congress nor the operators provided any formal process to consider recommendations submitted by the fisheries agencies for operation of the projects.⁶⁹ The operators established an ad hoc technical committee to consider their recommendations, but the decisions of the committee were not binding on the operators.⁷⁰ To assure that the operators adequately considered fisheries values, fisheries representatives asked Congress (1) to give fisheries a "status . . . equal to energy";⁷¹ (2) to establish a "formal procedure" to consider recommendations for project operation and management;⁷² and (3) to provide a reasoned explanation if their recommendations were rejected.⁷³

67. *Id.* at 46.

68. *Id.*

69.

For many years, the fisheries agencies represented in the Columbia River Fisheries Council have worked on an ad hoc basis with the water and energy management agencies to obtain adequate protective measures needed at the various dams. . . . [A] more formal mandate for managing the region's energy facilities in a manner that provides equal consideration for fisheries is needed. 1979 *Power Planning Hearings*, *supra* note 2, at 287 (statement of Terry Holubetz, Executive Secretary, Columbia River Fisheries Council).

70.

Presently, the FCRPS (Federal Columbia River Power System) operates within defined limits to accommodate the multi-purpose uses of the Columbia River and its tributaries. Some of these limits are imposed to protect anadromous fish. Additional measures are taken, including increases in streamflow or spill, when they are shown to be of significant benefit. These measures are developed and negotiated annually among the entities with an interest in the operation of the FCRPS through an *ad hoc* committee of technical representatives. This committee's recommendations have no formal status, and there are no sanctions for failure to implement them.

Letter from Sterling Munro, Administrator of BPA, to Rep. Dingell (Oct. 18, 1979).

71. COMMERCE REPORT, *supra* note 60, at 48 (quoting Terry Holubetz, Executive Secretary, Columbia River Fisheries Council).

72. *Id.*

73. *Id.*

For fisheries to achieve a "status . . . equal to energy," fisheries representatives envisioned a balancing of fisheries values and power costs and other project uses to obtain the optimum benefit from the project.⁷⁴

The legislation should provide for *balancing the interests of power revenues and anadromous fish . . .* [T]he bill should contain a policy that all Federal water projects on the main stem Columbia and Snake Rivers operated in whole or in part for the production of hydroelectric power shall be operated to obtain *an optimum balance between the major uses of hydro-electric energy production, irrigation and the production of anadromous salmon and steelhead resources.*⁷⁵

In balancing these interests, fisheries representatives envisioned that fisheries values and the costs of mitigation would be identified and measured.

We cannot . . . [obtain full consideration of fisheries' needs] without *a uniform standard basis for estimating benefits and costs.* We believe this concern has specific significance for our position that anadromous fisheries must be considered in all allocations of water use. Other agencies have been able to dismiss fisheries' needs as not particularly in their shop and therefore not a part of their analysis of benefits and costs. That benefit-cost analysis must give full consideration to the value of those fisheries for all the people in the Pacific Northwest in terms of food, jobs, recreation and aesthetic values which will be lost if those values are foregone.⁷⁶

74. This position was stated by representatives of major state and federal fisheries agencies: "In our opinion, the legislation must provide clearly for *balancing the interests of maximizing power revenues with the requirements of anadromous fish.*" *Pacific Northwest Electric Power Issues: Hearings on H.R. 13931 Before the Subcomm. on Energy and Power of the Comm. on Interstate and Foreign Commerce, 95th Cong., 2d Sess. 422 (1978)* (statement of Gordon Sandison, Washington Department of Fisheries) (emphasis added) [hereinafter *1978 Power Planning Hearings*].

[T]he bill should contain a policy statement to the effect that all Federal water projects in the Columbia River Basin above the Bonneville Dam, which are operated in whole or in part for the production of hydroelectric power, should be operated to obtain *a balance between hydroelectric energy production and other water uses, including the protection of anadromous salmon and steelhead resources.*

1978 Power Planning Hearings, supra, at 940 (statement of Dale Evans, National Marine Fisheries Service) (emphasis added).

75. *Id.* at 747 (statement of John Donaldson, Chairman, Columbia River Fisheries Council and Director, Oregon Department of Fish and Wildlife) (emphasis added).

76. *Id.* at 693 (statement of John Harville, Executive Director, Pacific Marine Fisheries Commission) (emphasis added).

This balancing of fisheries values and mitigation costs would require an economic trade-off within the region. "Consideration of salmon and steelhead in hydropower production will necessitate trade-offs of some power benefits for fisheries benefits. The exact dollar amount of these trade-offs cannot be accurately determined at this point in time."⁷⁷

Finally, fisheries representatives envisioned that the value of a mitigation proposal and its costs would be measured from the status quo—the existence of the hydroelectric projects. The appropriateness of mitigation would be determined in the context of today's environment and needs, not in the context of the world as it existed before the projects were built.⁷⁸ Thus, the balance envisioned was the incremental cost to power as measured from current power costs, against the incremental value to the fishery of the proposed mitigation measure.

2. Mitigation Was Not Planned On a System-Wide Basis

Responsibility for fisheries mitigation on the Columbia River system was "fragmented" among many state and federal agencies.⁷⁹ No single agency had system-wide oversight responsibility and authority for mitigation at both federal and nonfederal projects.⁸⁰ Fisheries representatives believed that mitigation had been inadequate because it was planned on a project-by-project basis. The representatives had not anticipated the system operation impacts on the fishery and the need for system-wide planning.⁸¹

77. 1979 *Power Planning Hearings*, *supra* note 2 at 827 (statement of Joseph Greenley, Director, Idaho Department of Fish and Game).

78. "We realize that power is a necessity and that years ago the people decided they wanted 11 dams on the Columbia River and we are going to make the best of it but we still have to have, I think, a greater recognition of the problems of fisheries than we do now." 1978 *Power Planning Hearings*, *supra* note 74, at 430 (statement of Gordon Sandison, Washington Department of Fisheries).

79. COMMERCE REPORT, *supra* note 43, at 47-48 (quoting 1979 report by the General Accounting Office).

80. *Id.*

81. "We [The Columbia River Fisheries Council] also recognize that the system operation impacts were not anticipated when the fisheries effect of the individual projects were examined. The impacts of energy system operations on anadromous fish were not readily apparent until 1973." 1979 *Power Planning Hearings*, *supra* note 69, at 287 (statement of Terry Holubetz, Executive Secretary, Columbia River Fisheries Council).

3. FERC Also Planned Mitigation at Nonfederal Hydroelectric Projects On a Project-by-Project Basis

Because there are nonfederal projects on the Columbia River system, FERC must play a role in implementing a basin-wide mitigation program. Thus, the fisheries representatives requested that FERC use its authority under the Federal Power Act to ensure that nonfederal project operations were compatible with the basin-wide plan.⁸²

4. BPA Had No Express Authority to Fund Fisheries Mitigation

The fisheries agencies also requested that BPA include funds for "fisheries coordination, research and development" in its annual budget.⁸³ BPA already had implied authority to fund fisheries mitigation.⁸⁴

B. The Fisheries Provisions were a Compromise Between Fish and Power Interests

The legislative history of the fisheries provisions of the Northwest Power Act is a history of compromise. An ad hoc committee of Pacific Northwest fisheries and power interests drafted changes to the Commerce Committee Bill, including an express directive to determine appropriate mitigation objectives and measures by balancing fisheries values and power costs. These changes were adopted in the Interior Committee Bill and they ultimately became the law.

1. Senate Bill

A fisheries provision was first introduced into regional power legislation in the Senate Energy Committee.⁸⁵ Under this bill (S.885), the Council was responsible for preparing a regional electric power plan but not a separate fisheries mitigation program. State and federal fisheries agencies and regional Indian tribes were allowed to submit fisheries mitigation recommendations to the Council for inclusion in its power plan. However, the Council was not required to include these recom-

82. COMMERCE REPORT, *supra* note 43, at 48 (quoting Terry Holubetz).

83. *Id.* (quoting Terry Holubetz).

84. *Authority of Bonneville Power Administrator to Participate in Funding of Program to Help Restore the Columbia River Anadromous Fishery*, 83 INTERIOR DEC. 589 (1976).

85. S. REP. NO. 272, 96th Cong., 1st Sess. 1 (1979).

mendations in its power plan. The provision simply established a process to insure that these recommendations would be considered.⁸⁶

The Administrator was authorized to include in the BPA budget funds for fisheries research and development, to acquire and dispose of power, and to utilize the flexibility of its resources to assist in the preservation and enhancement of the fishery "while meeting his other obligations."⁸⁷ Thus, at its conception, the fisheries provisions of the regional power legislation had a balanced approach.

2. House Committee Bill

The House Commerce Committee, chaired by Congressman Dingell, provided that:

- 1) Protection, mitigation and enhancement of fish and wildlife became an express purpose of the bill;⁸⁸
- 2) The fisheries agencies and tribes were authorized to submit to the Council recommendations for measures to "protect, mitigate and enhance" fish, including relating spawning grounds, affected by the development and operation of any hydroelectric project on the Columbia River and its tributaries. Recommendations for sufficient quantities and qualities of water flows for successful migration, survival, and propagation of anadromous fish were expressly authorized;⁸⁹
- 3) The Council was directed to adopt such recommendations if the recommendations were not inconsistent with the purposes of this bill;⁹⁰
- 4) BPA's funding authority tracked the scope of allowable recommendations;⁹¹ and
- 5) BPA and other federal agencies responsible for management, operation or regulation of hydroprojects on the Columbia River system were directed to exercise these responsibilities, consistent with the purposes of the bill, to adequately protect, mitigate and enhance fish affected by such projects in a manner that provides "equitable treatment" of

86. *Id.* at 25.

87. *Id.* at 4.

88. H. R. REP. NO. 976, Part I, 96th Cong., 2d Sess. § 2(5) (1980) [hereinafter COMMERCE BILL].

89. COMMERCE BILL, *supra* note 88, § 4(h)(1)(A).

90. COMMERCE BILL, *supra* note 88, § 4(h)(1).

91. COMMERCE BILL, *supra* note 88, § 4(h)(2).

fish with other project purposes.⁹²

The Commerce Bill attempted to address the specific fisheries problems identified by the fisheries agencies.⁹³ To make project operators recognize the fisheries agencies and mitigate, even though it was not a stated project purpose, the Commerce Bill placed fisheries mitigation "on a par" with other project purposes. This Bill empowered a new agency, the Council, to receive and consider mitigation measures submitted by the fisheries agencies, and required the project operators to exercise their responsibilities to protect, mitigate, and enhance the fishery. These provisions were intended to ensure that the projects would be operated to achieve "a balance for all uses" including fish related uses.⁹⁴ But, unlike the testimony of the fisheries agencies, the Commerce Bill only suggested how it intended the Council to strike this balance.

The Commerce Committee chose not to define "protect, mitigate and enhance."⁹⁵ The Committee was concerned that a definition "might later prove more limiting than [it had] anticipated."⁹⁶ The Committee agreed that mitigation measures should "not result in unreasonable power shortages or loss of power revenues. Such losses . . . should not be a burden on the consumers of the region."⁹⁷ However, the Commerce Report asserted that "cost should not be a deterrent if a fish and wild-life need might be sacrificed to save dollars."⁹⁸

Finally, the Commerce Report suggested that the Council had almost no discretion to reject recommendations submitted by the fisheries agencies. Although the Commerce Bill required each recommendation to be accompanied by data, the inadequacy of these data was not a basis for rejecting the recommendation.⁹⁹

92. COMMERCE BILL, *supra* note 88, § 4(h)(3).

93. COMMERCE REPORT, *supra* note 43, at 48.

94. *Id.* at 56.

95. *Id.* at 57.

96. *Id.*

97. *Id.*

98. *Id.* The Commerce Committee also chose not to define "equitable treatment," but said that "this provision [like "protect, mitigate and enhance"] is also aimed at placing fish and wildlife on a par with these other purposes." *Id.* at 57.

99. "The quantity and quality of the data should not serve as a basis for turning down any recommendation." *Id.* at 56.

Without any basis to object to the data, it is unclear how the Commerce Committee expected that the Council could do otherwise than "to rubber stamp any recommendation." *Id.* at 57.

3. Interior Bill and the Northwest Power Act

BPA's ratepayers concluded that the Commerce Bill was unacceptable because it left unclear the "balance" of all water uses and suggested that the Council had little discretion to reject any recommendation proposed by fisheries agencies. An Ad Hoc Pacific Northwest Power and Fisheries Committee (Ad Hoc Committee) was formed to develop a compromise position. The Ad Hoc Committee was formed under the sponsorship of the Columbia River Fisheries Council and the Public Power Council, and it consisted of representatives from fisheries agencies (federal, state and tribal) as well as all classes of BPA customers, the Army Corps of Engineers, and BPA.¹⁰⁰

The Ad Hoc Committee reached agreement on the fisheries provisions and submitted three documents to the Interior Committee.¹⁰¹ The Interior Committee, relying on this regional consensus,¹⁰² adopted the Ad Hoc Committee Amendments and substantial portions of the Ad Hoc Report. "Section 4(h) [of the Interior Bill] . . . incorporates the recommendations proposed by an ad hoc committee of Federal, State and Tribal fisheries agencies, Federal power and water management agencies, and BPA customers."¹⁰³ The fisheries provisions of the Interior Bill were enacted as section 4(h) of the Northwest Power Act without substantial changes.

The Interior Report should be given great weight in interpreting subsection 4(h), particularly those sections making changes from the Commerce Bill. Further, the Council and BPA should consider the Ad Hoc Report and Summary.¹⁰⁴

100. Ad Hoc Pacific Northwest Power—Fisheries Committee, Summary of Fish and Wildlife Provisions Proposed For the Northwest Regional Power Bill by the Ad Hoc Committee (Aug. 15, 1980) (unpublished paper).

101. The three documents submitted to the Committee were the following: Ad Hoc Pacific Northwest Power—Fisheries Committee, Proposed Fisheries Provisions (Aug. 11, 1980) [hereinafter Ad Hoc Committee Amendments] (unpublished paper); Ad Hoc Pacific Northwest Power—Fisheries Committee, Summary of Fish and Wildlife Provisions Proposed for the Northwest Regional Power Bill by the Ad Hoc Committee (Aug. 15, 1980) [hereinafter Ad Hoc Summary] (unpublished paper); Ad Hoc Pacific Northwest Power—Fisheries Committee, Section-by-Section Analysis of Fisheries Provisions of Northwest Regional Power Bill (S. 885) if Amended in Accordance with the Ad Hoc Committee Proposals (Aug. 22, 1980) [hereinafter Ad Hoc Report] (unpublished paper).

102. "This bill provides, primarily through § 4(h), a mechanism agreeable to both the power and fisheries interests in the Pacific Northwest . . ." INTERIOR REPORT, *supra* note 19, at 37.

103. *Id.* at 43.

104. "When aid to construction of the meaning of words, as used in the statute, is

Reports of committees not connected to the legislature, but recommending legislation adopted by the legislature, "are considered valuable aids" because "[t]he legislature is assumed to have adopted the legislation with the same intent evidenced by the commission's report."¹⁰⁵

BPA, fisheries representatives, and utility representatives agreed on language that was adopted by Congress as subsection 4(h). The Council, when presented with conflicting interpretations of these provisions by fisheries and power representatives, should consider the mutual understanding of these parties, as stated in the Ad Hoc Report, on the meaning of these provisions of their agreement.¹⁰⁶ Congress, in adopting their compromise provisions, intended that the fisheries provi-

available, there certainly can be no 'rule of law' which forbids its use, however clear the words may appear on 'superficial examination.'" *Train v. Colorado Pub. Interest Research Group*, 426 U.S. 1, 10 (1976) (quoting *United States v. American Trucking Ass'ns*, 310 U.S. 534, 543-44 (1940)).

105. 2 A. SINGER, *SUTHERLAND STATUTORY CONSTRUCTION* § 48.11 (4th ed. 1984) (reports of committees, commissions and other sources not connected with the legislature).

Another commentator on the Northwest Power Act has noted that the Ad Hoc Committee was convened at Congressman Lujon's direction and that the Ad Hoc amendments represented an acceptable compromise by nearly all power and fisheries representatives. Blakley, *The Northwest Power Act: An Electric Bill for Anadromous Fish*, 24 GONZ. L. REV. 321, 332 (1989).

106. When Congress has enacted legislation that is essentially an agreement between the affected parties, the Supreme Court has held that the explanation of the agreement to Congress by the spokesmen for the parties is entitled to great weight in construing the statute. *Chicago and N.W. Ry. v. United Transp. Union*, 402 U.S. 570, (1971). In adopting their agreement, Congress intended it to have the effect agreed to by the parties.

As this Court has often noted, the Railway Labor Act of 1926 was, and was acknowledged to be, an agreement worked out between management and labor, and ratified by the Congress and the President. Accordingly, the statements of the spokesmen for the two parties made in the hearings on the proposed Act are entitled to great weight in the construction of the Act.

Id. at 576 (footnotes omitted).

In the present case, the Ad Hoc amendments were a compromise between power and fisheries representatives. The Ad Hoc Report explained the parties' mutual understanding of the result that these amendments were intended to achieve. In adopting these compromise amendments, it is reasonable to conclude that Congress intended to achieve the same result.

The Supreme Court has already followed this reasoning once in interpreting the Northwest Power Act. In addressing another provision of the Northwest Power Act, the Supreme Court found that "BPA consulted with Congress during the consideration of the Regional Act, and that BPA and Congress shared an understanding of the terms on which the administration would sell power to DSIs under the Act." *Aluminum Co. of America v. Central Lincoln Peoples' Util. Dist.*, 467 U.S. 380, 397 (1984). The Court interpreted the Northwest Power Act to implement this shared understanding.

sions would address the fisheries problem in the manner that the drafters of these provisions represented to Congress.

The Interior Bill modified and clarified the Commerce Bill in at least seven significant respects. These differences were reflected in the provisions adopted by Congress in the Northwest Power Act. The Interior Bill did the following:

(1) expressly required that the program for fisheries mitigation be consistent with an economical power supply for the region;¹⁰⁷

(2) established BPA's independent duty to assure that the program is consistent with an economical power supply;¹⁰⁸

(3) required comprehensive planning to meet existing obligations.¹⁰⁹

(4) directed BPA and other federal agencies responsible for management, operation, and regulation of hydroprojects on the Columbia River system to take into account, to the fullest extent practicable, the Council's fish and wildlife program in their decision making process;¹¹⁰

(5) restated existing requirements for the allocation of mitigation costs among project purposes;¹¹¹

(6) adopted specific criteria for program measures which provided the Council with clear authority to reject or modify recommendations;¹¹² and

(7) expanded the scope of allowable recommendations and the program to include mitigation objectives.¹¹³

a. The Council Must Balance Fisheries Values and Power Costs and Articulate This Balance in Its Decision

The Commerce Bill's purposes included assuring the Pacific Northwest of an "adequate, efficient, and reliable"

107. H.R. REP. NO. 975, Part II, 96th Cong., 2d Sess. § 4(h)(1)(C)(iii) (1980) [hereinafter INTERIOR BILL].

108. INTERIOR BILL, *supra* note 107, §§ 2(2) and 4(h)(2)(A).

109. INTERIOR BILL, *supra* note 107, § 4(h)(1)(A). Despite this planning requirement, however, the phrases "protect, mitigate, and enhance" and "equitable treatment" did not impose any new substantive mitigation obligations. INTERIOR BILL, *supra* note 107, §§ 4(h)(1)(C)(iii) and 4(h)(1)(c)(vi)(1); INTERIOR REPORT, *supra* note 19, at 37.

110. INTERIOR BILL, *supra* note 107, § 4(h)(3)(A)(ii).

111. INTERIOR BILL, *supra* note 107, §§ 4(h)(1)(C)(vi)(2), (3) and (4); 4(h)(1)(C)(vii).

112. INTERIOR BILL, *supra* note 107, § 4(h)(1)(C)(iv).

113. INTERIOR BILL, *supra* note 107, § 4(h)(1)(B)(ii) and § 4(h)(1)(C)(iii).

power supply.¹¹⁴ In contrast, the Interior Bill and the Northwest Power Act expressly state that one purpose is "to assure the Pacific Northwest an adequate, efficient, *economical* and reliable power supply."¹¹⁵ "Economical" was added by the Ad Hoc Committee to "emphasize in the case of fish and wildlife measures that such measures are not intended to create unreasonable power costs."¹¹⁶ "A balancing is sought through this and other provisions of the bill."¹¹⁷

A balancing requirement was made express in the fisheries provisions of the Interior Bill by directing that the Council's program shall "protect, mitigate and enhance fish and wildlife . . . while assuring the Pacific Northwest of an adequate, efficient, economical and reliable power supply."¹¹⁸ The fishery value of a mitigation proposal and the accompanying costs that enter into this balance are measured from the status quo. Congress' intent was not to "undo" the hydroelectric development of the past.¹¹⁹

114. COMMERCE BILL, *supra* note 88, § 2(1).

115. INTERIOR BILL, *supra* note 107, § 2(2); Northwest Power Act, § 2(2), 16 U.S.C. § 839(2) (1988) (emphasis added).

116. Ad Hoc Report, *supra* note 101, at 2.

117. *Id.* at 2.

118. INTERIOR BILL, *supra* note 107, § 4(h)(1)(C)(iii); Northwest Power Act, § 4(h)(5), 16 U.S.C. § 839b(h)(5) (1988).

Balancing economic and environmental factors was a familiar process to all federal agencies by 1980. The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321, 4370 (1988), mandated a set of action-forcing procedures that require federal agencies to take a hard look at the environmental consequences of major federal actions. Although the balancing process that is required by NEPA may affect the agency's substantive decision, NEPA itself does not mandate particular results. *Robertson v. Methow Valley Citizens Council*, 109 S.Ct. 1835 (1989). As long as the environmental effects are identified and evaluated, NEPA does not preclude the agency from deciding that other values outweigh the environmental costs. *Id.* The agency's obligation is to assess the economic benefits and environmental costs of a planned action and then balance these costs and benefits. "In each individual case, the particular economic and technical benefits of planned action must be assessed and then weighed against the environmental costs. . . . The point of the individualized balancing analysis is to ensure that, with possible alterations, the optimally beneficial action is finally taken." *Calvert Cliffs Coordinating Comm. v. United States Atomic Energy Comm'n*, 449 F.2d 1109, 1123 (D.C. Cir. 1971).

The general substantive policy of NEPA, however, was flexible—leaving room for responsible exercise of agency discretion. *Id.* at 1112. A mathematical valuation is not required because some environmental amenities are difficult to value. *Trout Unlimited v. Morton*, 509 F.2d 1276, 1286 (9th Cir. 1974). Consideration of environmental factors along with economic factors must involve a balancing process, but the weight given to those factors is determined by the agency.

119. "The bill cannot and should not undo the power developments of the past." 126 CONG. REC. E5105 (daily ed. Dec. 1, 1980) (statement of Congressman Dingell, Chairman, House Commerce Committee).

Under the Northwest Power Act, the Council must articulate in its program the fisheries values and power costs for each measure and show how it struck the balance. The Council must: "determine whether each recommendation received is consistent with the purposes of this Act . . . [and] shall explain in writing, as part of the program, the basis for its finding that the adoption of such recommendation would be inconsistent with [the subsection 4(h)(5) balancing provision]."¹²⁰ This provision assures that recommendations of fisheries agencies are not ignored or dismissed without reason. This comports with general administrative law, which requires that the Council explain the balance of fisheries values and power costs in adopting its program.

The Council's program is adopted pursuant to rulemaking proceedings under the Administrative Procedure Act¹²¹ and is subject to review under the "arbitrary and capricious" standard.¹²² "The scope of review under the 'arbitrary and capricious' standard . . . [requires the agency to] examine the relevant data and articulate a satisfactory explanation of its action including a 'rational connection between the facts found and the choice made.'"¹²³ "[T]he key to the arbitrary and capricious standard is its requirement for reasoned decision-making: we will uphold the Commission's decision if, but only if, we can discern a reasoned path from the facts and considerations before the Commission to the decision it reached."¹²⁴

In adopting its program, the Council must "examine the relevant data" including fisheries values and power costs, and "articulate a satisfactory explanation of its action" by showing how it balanced these values and costs to comply with the statutory standard.

120. INTERIOR BILL, *supra* note 107, § 4(h)(1)(C)(V); Northwest Power Act, § 4(h)(7), 16 U.S.C. § 839b(h)(7) (1988).

121. Northwest Power Act, § 4(d)(1), 16 U.S.C. § 839b(d)(1)(1988). The Administrative Procedure Act is at 5 U.S.C. § 553 (1988).

122. Northwest Power Act, § 9(e)(1) allows for review of the Council's program under 5 U.S.C. § 706. An agency action may be set aside if the reviewing court finds that the agency action was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706 (1988).

123. *Motor Vehicle Mfrs. Assoc. of the United States v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)).

124. *Neighborhood TV Co. v. FCC*, 742 F.2d 629, 639 (D.C. Cir. 1984).

b. BPA Has an Independent Duty to Assure That the Mitigation Program is Consistent With an Economical Power Supply

The Interior Bill and Northwest Power Act made an economical power supply an express purpose of the Northwest Power Act. BPA was directed to assure that program objectives and measures were consistent with an economical power supply. For example, BPA's obligation to fund fish and wildlife mitigation must be consistent with the purposes of the Act.¹²⁵ BPA's responsibilities (if any) for management, operation, and regulation of projects must be exercised consistent with the purposes of the Act.¹²⁶

c. Congress Imposed No New Substantive Obligations but Adopted a Comprehensive Approach to Fulfill Existing Obligations

The Commerce Bill was unclear about how the Council should balance all project uses. The Interior Report clarified that the Council must balance an "economical" power supply with fisheries values and, thereby, provided a meaning for "protect, mitigate and enhance" and "equitable treatment."

The Interior Report states that subsection 4(h) "was not intended to create any new obligations with respect to fish and wildlife, it will provide a system for insuring that existing fish and wildlife obligations are fulfilled while simultaneously assuring the region of an economical and reliable power supply."¹²⁷ The mitigation required by the subsection 4(h)(5) balance fulfills, but does not exceed, existing substantive standards for mitigation.¹²⁸ An "economical" power supply

125. INTERIOR BILL, *supra* note 107, § 4(h)(2)(A); Northwest Power Act, § 4(h)(10)(A), 16 U.S.C. § 839b(h)(10)(A) (1988).

126. INTERIOR BILL, *supra* note 107, § 4(h)(3)(A)(i); Northwest Power Act § 4(h)(11)(A)(i), 16 U.S.C. § 839b(h)(11)(A)(i) (1988).

127. INTERIOR REPORT, *supra* note 19, at 37. "The program is to consist of measures that protect, mitigate, and enhance fish and wildlife while satisfying the power supply purposes of the Act." *Id.* at 44.

128. In *Public Util. Dist. No. 1 of Chelan County, Washington*, 34 F.E.R.C., ¶ 63,044 (CCH 1986), a FERC Administrative Law Judge approved balancing between power costs and fisheries values, but objected to exclusive reliance on a "cost-benefit analysis" to strike that balance. As noted earlier in the discussion of the NEPA cases, *supra* note 118, a balance of power costs and fisheries values does not require reduction of all fisheries values to a mathematical formula. However, some objective valuation and balancing must be done; an "economic feasibility" standard is not sufficient.

FERC's new hydroelectric relicensing rules, implementing provisions of the

emphasizes one particular constraint on existing substantive standards for mitigation: only "justifiable means and measures" to achieve "maximum overall project benefits" were required by existing substantive mitigation obligations at federal hydroelectric projects.¹²⁹ Under this standard, the incremental fisheries values (or avoided losses) of a mitigation measure were balanced against the costs imposed on other project purposes.¹³⁰

The Interior Committee required only a comprehensive approach to mitigation on the Columbia River system.¹³¹ The intent was not to increase mitigation obligations, but to go beyond the project-by-project approach which had proven unsatisfactory.¹³²

*d. Federal Operators, Managers and Regulators of Projects
Must Consider the Council's Program*

Federal operators, managers, and regulators are directed, as they were under the Commerce Bill, to exercise their responsibilities consistent with the purposes of the Northwest Power Act and other applicable laws, in a manner that provides "equitable treatment" for fish and wildlife with other

Electric Consumer Protection Act of 1986, Pub. L. No. 99-495, 100 Stat. 1243 (codified as amended in scattered sections of 16 U.S.C.), that were modeled on the fisheries provisions of the Northwest Power Act, provide better guidance with respect to what FERC believes "protect, mitigate, and enhance" means. FERC will balance power costs and fisheries values "in the context of today's environment and in relation to today's needs and problems, not in the context of the world as it existed 50 years ago." Order No. 513, *Hydroelectric Relicensing Regulations Under the Federal Power Act*, Docket No. RM87-33-00 (May 17, 1989) (Mimeo at 99). FERC will balance the interests by weighing incremental power costs against incremental fisheries values, starting from the status quo, to determine equitable treatment for the fishery.

129. Fish and Wildlife Coordination Act, 16 U.S.C. § 662(b) (1988).

130. K. Stutzman, *Issues in Fish and Wildlife Planning: Water Resources Planning Under the Fish and Wildlife Coordination Act* 10-11 (Aug. 1980) (unpublished report prepared for the Fish and Wildlife Service, U.S. Department of the Interior) [hereinafter U.S. Fish and Wildlife Service Report].

The failure of this approach to prevent further decline of the fishery was not in the method but in its application. Too little value was given to fisheries values. Under the Northwest Power Act, the Council determines the fisheries values and balances these against the power cost.

131. INTERIOR BILL, *supra* note 107, § 4(h)(1)(A); Northwest Power Act, § (h)(1)(A), 16 U.S.C. § 839b(h)(1)(A) (1988).

132. INTERIOR REPORT, *supra* note 19, at 38. The Fish and Wildlife Coordination Act did not require FERC to develop a comprehensive plan when licensing hydroelectric projects within a single river basin. Washington State Dept. of Fisheries v. FERC, 801 F.2d 1516, 1519 (9th Cir. 1986).

project purposes.¹³³ The Interior Bill and Northwest Power Act provide further that these same federal agencies are required to take into account, "to the fullest extent practicable," the Council's program in exercising their responsibilities.¹³⁴

The "equitable treatment" provision must be interpreted in view of Congress' addition of "economical" power supply to the Northwest Power Act's purposes. In this context, Congress did not intend to change the substantive obligation of these federal agencies. The agencies are required only to consider the Council program within the bounds of their independent authority over project operations and mitigation.¹³⁵ "This provision [§ 4(h)(3)(A) of the Interior Bill; subsection 4(h)(11)(A) of the Northwest Power Act] does not change the existing statutory authority of other Federal agencies, such as the Corps of Engineers or FERC."¹³⁶

e. BPA's Ratepayers Should Not Pay for Mitigation Caused by Factors Other Than Hydropower Development

The Interior Bill and The Northwest Power Act restated existing limitations on ratepayer funding of mitigation costs. First, ratepayers are to bear only the cost of mitigation measures designed to deal with adverse impacts caused by the development and operation of electric power facilities and programs.¹³⁷ Ratepayers are not required to pay for mitigation of impacts caused by other factors.¹³⁸

133. INTERIOR BILL, *supra* note 107, § 4(h)(3)(A)(i); Northwest Power Act, § 4(h)(11)(A)(i), § 4(h)(11)(A)(i), 16 U.S.C. § 839b(h)(11)(A)(i) (1988).

134. INTERIOR BILL, *supra* note 107, § 4(h)(3)(A)(ii); Northwest Power Act, § 4(h)(11)(A)(ii), 16 U.S.C. § 839b(h)(11)(A)(ii) (1988).

135. California, *ex rel.* State Water Resources Bd. v. FERC, 877 F.2d 743, 750 (9th Cir.), *cert. granted*, 110 S. Ct. 537 (1989). The court held that FERC, under the Federal Power Act, has exclusive authority in setting water flow rates on hydroelectric projects. This authority preempts any attempts by the states to order different flows for fish and wildlife mitigation.

The Council cannot dictate mitigation measures such as spill rates to FERC. In this context "to the fullest extent practicable" recognizes that Congress intended final authority to rest with federal agencies—not with the Council.

136. INTERIOR REPORT, *supra* note 19, at 46.

137. INTERIOR BILL, *supra* note 107, § 4(h)(1)(C)(vi)(2); Northwest Power Act, § 4(h)(8)(B), 16 U.S.C. § 839b(h)(8)(B) (1988).

138. INTERIOR BILL, *supra* note 107, § 4(h)(1)(C)(vi)(4); Northwest Power Act, § 4(h)(8)(C), 16 U.S.C. § 839b(h)(8)(C) (1988). "Consumers of electric power should bear only those costs attributable to electric power facilities and programs (but not the cost of measures designed to deal with impacts caused by other factors)." INTERIOR REPORT, *supra* note 19, at 45.

Second, mitigation program costs and losses are to be allocated by the Administrator.¹³⁹ Specifically, the costs of each mitigation activity are to be allocated among federal projects and project purposes in accordance with existing allocation procedures.¹⁴⁰ "The allocation of particular costs to individual projects and among different project purposes, as required by existing law, is preserved."¹⁴¹ Thus, ratepayers would continue to pay only a share of the cost of each mitigation measure. Other project purposes, including nonreimbursable purposes paid by the taxpayer, would continue to pay their share of the cost of each mitigation activity.

Third, BPA's funding obligation was not to be in lieu of other expenditures authorized or required from other entities under other agreements or provisions of law.¹⁴²

f. The Council Must Reject Measures That Do Not Meet Specific Criteria

The Interior Bill proposed and Congress adopted "specific criteria that recommendations must meet in order to be included in the program."¹⁴³ First, the measures must be consistent with the legal rights of appropriate Indian tribes in the region.¹⁴⁴ This criteria recognized:

[t]he possibility that some treaty rights may be established in an absolute manner not subject to the balancing of purposes contemplated by the fish and wildlife provisions of the bill. It was adopted because both the fisheries and power interests in the region believe it is preferable for the bill to recognize this possibility as an exception to the balancing philosophy, rather than to alter the basic philosophy because of this special case.¹⁴⁵

139. INTERIOR BILL, *supra* note 107, § 4(h)(1)(C)(vi)(3); Northwest Power Act, § 4(h)(8)(D), 16 U.S.C. § 839b(h)(8)(D) (1988).

140. INTERIOR BILL, *supra* note 107, § 4(h)(2)(C); Northwest Power Act, § 4(h)(10)(C), 16 U.S.C. § 839b(h)(10)(C) (1988).

141. INTERIOR REPORT, *supra* note 19, at 45. The Interior Report did not say, as Blumm's so-called economic feasibility test would require, that any recommendation meeting these criteria must be included. As discussed *supra*, the Council may adopt only measures meeting the § 4(h)(6) criteria and the § 4(h)(5) balancing standard.

142. INTERIOR BILL, *supra* note 107, § 4(h)(2)(A); Northwest Power Act, § 4(h)(10)(A), 16 U.S.C. § 839b(h)(10)(A) (1988).

143. INTERIOR REPORT, *supra* note 19, at 46.

144. INTERIOR BILL, *supra* note 107, § 4(h)(1)(C)(iv)(4); Northwest Power Act, § 4(h)(6)(D), 16 U.S.C. § 839b(h)(6)(D) (1988).

145. Ad Hoc Report, *supra* note 101, at 5.

This specific criteria emphasizes the primacy of the subsection 4(h)(5) balancing test.

Second, program measures should complement existing and future activities of federal and state fish and wildlife agencies and appropriate Indian tribes.¹⁴⁶ The Council's program is not a replacement for current or future programs otherwise required by law. "The establishment of this program does not modify or limit existing . . . responsibilities of Federal, State and tribal agencies . . . for the protection, mitigation, and enhancement of fish and wildlife."¹⁴⁷

Third, measures must "be based on and supported by the best available scientific knowledge."¹⁴⁸ Recommendations must be accompanied by "detailed information and data in support of the recommendations."¹⁴⁹ Because this is a mandatory criterion, the Council must reject any recommendation that is not supported by adequate data.

Fourth, measures must achieve sound biological objectives at minimum economic cost for each objective.¹⁵⁰ The criterion was modified, in the Northwest Power Act, to require the Council to "utilize, where equally effective alternative means of achieving the same sound biological objectives exist, the alternative with the minimum economic cost."¹⁵¹ Thus, the Council may adopt only the most cost effective measure to achieve a biological objective and, of course, only if the fisheries value obtained at this cost satisfies the region's need for an economical power supply.

g. Program Objectives

The Interior Bill and the Northwest Power Act expanded the scope of allowable recommendations to include both measures and "objectives."¹⁵² Mitigation measures are the means to

146. INTERIOR BILL, *supra* note 107, § 4(h)(1)(C)(iv)(1); Northwest Power Act, § 4(h)(6)(A), 16 U.S.C. § 839b(h)(6)(A) (1988).

147. Ad Hoc Report, *supra* note 101, at 5.

148. INTERIOR BILL, *supra* note 107 § 4(h)(1)(C)(iv)(2); Northwest Power Act, § 4(h)(6)(B), 16 U.S.C. § 839b(h)(6)(B) (1988).

149. INTERIOR BILL, *supra* note 107, § 4(h)(1)(C)(i); Northwest Power Act, § 4(h)(3), 16 U.S.C. § 839b(h)(3) (1988).

150. INTERIOR BILL, *supra* note 107, § 4(h)(C)(1)(iv)(3); Northwest Power Act, § 4(h)(6)(C), 16 U.S.C. 839b(h)(6)(C) (1988).

151. Northwest Power Act, § 4(h)(6)(C), 16 U.S.C. § 839b(n)(6)(C) (1988).

152. INTERIOR BILL, *supra* note 107, § 4(h)(B)(ii); Northwest Power Act, § 4(h)(2)(B), 16 U.S.C. § 839b(h)(2)(B) (1988).

meet specific objectives. Program objectives are mitigation goals.

In setting program objectives, the Council must consider the costs to meet those objectives. "The evaluation of the objectives themselves [must be] based on the purposes of the Act"¹⁵³ In other words, permissible objectives must protect, mitigate, and enhance fish and wildlife while assuring an economical power supply. Accordingly, recommended program objectives must be accompanied by a proposed measure to achieve that objective and be supported by adequate cost data and information. This enables the Council to determine whether the objective can be achieved (using the proposed measure) while assuring the region an economical and reliable power supply.

V. THE COUNCIL'S PROGRAM AND ITS FUTURE DEVELOPMENT

The Council issued its first Columbia River Basin Fish and Wildlife Program in 1982 and amended the Program in 1984 and 1987. Between 1983 and 1989, EPA expenditures on program measures have totaled \$429 million. When added to fish and wildlife expenditures outside the program of \$263 million, the region's electric ratepayers have contributed a total of \$692 million to fish and wildlife activities between 1983 and 1989.¹⁵⁴

A substantial portion (\$228 million) of the Program costs are the result of lost revenues on power sales foregone by BPA to provide "water budget" and "spill." The water budget is the release of stored water to increase flows to speed fish migration between the dams. The cost of the water budget to BPA's ratepayers is currently measured as the difference between the value of this power as nonfirm power instead of firm power.¹⁵⁵ Spill is water that is passed over the dams, drawing the fish

153. Ad Hoc Report, *supra* note 101, at 5.

154. Northwest Power Planning Council, Draft Salmon and Steelhead Round Table Summary of Proceedings (Nov. 21, 1989). Costs of fish and wildlife expenditures outside the program during 1975-1982 were about \$108 million. These activities include Corps projects such as the Lower Snake River Compensation Plan hatcheries, bypass systems, fish ladders, and juvenile fish transportation programs (barging or trucking fish past the dams). BPA repays the United States Treasury for federal investments in fish and wildlife facilities and activities at federal hydropower projects, including associated annual operation and maintenance costs, incurred by the Corps, the Bureau of Reclamation, and the United States Fish and Wildlife Service.

155. Firm power is power or power-producing capacity intended to be available at all times during the period covered by a commitment, even under adverse conditions. Edison Electrical Institute, PUB. NO. 70-40, *Glossary of Electric Utility Terms* 63.

with it, which allows the fish to pass the dam without going through the turbines. The water budget alone results in an average annual loss of approximately 300 average megawatts. At typical operating levels, this is equivalent to the loss of a large coal-fired power plant. But, because the region has energy surplus, these programs did not require construction of replacement generating resources or curtailments of power consumption by regional customers—only the loss of out-of-region power sales and revenues. However, the power and fish conditions in the region are now substantially different.

First, projections for electricity demand and supply indicate that the region's available generating resources essentially match the region's current load.¹⁵⁶ BPA estimates that the region and BPA may need more resources as early as 1993.¹⁵⁷

Second, recent fishery data show that overall runs are increasing and that the previously endangered runs have stabilized.¹⁵⁸ Nonetheless, 1990-95 program expenditures are projected to be \$546 million. These costs may be understated because they do not reflect the cost of the water budget and spill programs when BPA is in load/resource balance. The cost of these programs is no longer the foregone revenues on lost sales, but the cost of building new generating resources, including any environmental costs. Other fish and wildlife expenditures which ratepayers are asked to pay are estimated at \$332 million, for a 1990-95 total of \$878 million.¹⁵⁹ Thus, by 1995 ratepayers are projected to have spent \$1.57 billion on fish and wildlife mitigation.

In view of these changed conditions, it is imperative that the Council carefully weigh the fisheries values that would be achieved with the cost to the ratepayers. Even during the period of surplus, the Council recognized that ratepayer dollars must be well spent. The Council's recent decision on a request to increase the spill program demonstrates that the Council

156. Letter from Rick Applegate, the Council's Fish and Wildlife Director, to addressees (May 18, 1989) (asking for comments on results of Council staff analysis of power impacts of water budget).

157. *BPA Predicts Power Shortfall*, *The Oregonian*, Nov. 28, 1989, at A2, col. 4.

158. See K. L. Pratt & D.W. Chapman, *Progress Toward the Run Doubling Goal of the Northwest Power Planning Council* (Sept. 10, 1989).

159. *Id.* These figures do not include "emerging activities," for example, bypass systems, the recently adopted wildlife program, system planning implementation, Mitchell Act hatchery funding, etc., projected at \$195 million or more.

had begun to recognize that fisheries values must be significant to warrant any expenditure of ratepayer funds.

The Northwest Power Act calls for improved survival of anadromous fish at the hydroelectric projects, subject to the subsection 4(h)(5) balancing standard.¹⁶⁰ The Council has determined that the best long-term solution to juvenile fish mortality resulting from passage through the hydropower turbines is the installation of mechanical bypass systems at all mainstem Columbia and Snake River dams.¹⁶¹ As an interim solution, the Council adopted a spill program designed to achieve a 90 percent survival rate at each dam.¹⁶²

In 1985 and 1986, the fisheries agencies and Indian tribes sought to increase the fish survival level from 90 percent to 92-94 percent. The Council twice rejected these recommendations because this higher survival rate, achieved by a sizeable increase in spilled water, would not have a significant biological benefit. "[T]he Council disagrees with the suggestion that no survival standard less than 94 percent can provide adequate protection for upriver runs. Information developed through the MPAC does not demonstrate a significant biological benefit from increasing the survival standard to 90 percent."¹⁶³

160. Northwest Power Act, § 4(h)(6)(E)(i), 16 U.S.C. § 839b(h)(b)(E)(i) (1988).

161. Mechanical bypass systems use travelling screens which are placed in front of the turbine intakes. These screens move like a vertical conveyor belt, diverting the juvenile fish into special conduits or sluiceways that bypass the fish through or around the dam. They can divert as much as 70 to 80 percent of the fish away from the turbines. Pacific Northwest Utilities Conference Committee, *PNUCC Dams & Fish* 12 (1987).

162. Northwest Power Planning Council, *Columbia River Basin Fish and Wildlife Program*, § 403, 25 (1984).

The program required enough spill to achieve at least a 90 percent fish survival rate at each dam. This requirement results in spill at some dams of as much as 40-50 percent of the river's flow when sufficient numbers of fish are present. Spill occurs during the spring and summer migration but not past August 15.

163. Pacific Northwest Electric Power and Conservation Planning Council, *Notice of Final Amendments* (Feb. 13, 1986) (amending §§ 304, 404, and 1504 of the program).

The MPAC (Mainstream Passage Advisory Committee), a Council-chartered advisory committee, was comprised of representatives of the fisheries agencies, Indian tribes, the Corps, BPA, and the Pacific Northwest Utilities Conference Committee (PNUCC). Its members developed much of the information on which the Council based its decision. *Id.* at 1.

While the Council retained the 90 percent standard, it did accept the agencies' recommendations for summer spill and extended the spill program beyond June 15 to August 15. "The Council agrees that upriver runs, particularly wild and natural runs and those originating in the Snake River system, merit additional protection, and for that reason has decided to insure that the spill program protects summer migrants." *Id.* at 25.

Council member Gerald Mueller subsequently explained the Council's decision:

The Council's decision as well as my own was not based upon cost-benefit determination. I believe that, while cost-benefit analyses are prohibited by the Northwest Power Act, the credibility of the program depends upon a demonstration that ratepayer money spent on fish and wildlife is well spent. This means that when the best available scientific knowledge predicts negligible benefits for actions such as interim spill, then ratepayers should not be expected to fund them.¹⁶⁴

The Council's decision on spill and Council member Mueller's explanation both recognize that ratepayer funds must be "well spent." The Council has not followed the "economic feasibility" standard; rather, it has decided that it is necessary to consider costs in adopting any mitigation measure. To insure that ratepayer funds are well spent in the future, the Council should undertake a more explicit evaluation of fisheries values that would be gained by the expenditure of ratepayer dollars. The Northwest Power Act and administrative law applicable to rulemaking proceedings require the Council to identify fisheries values and power costs and to explain, in its program decision, why it adopted or rejected measures on the basis of the statutory balancing standard.¹⁶⁵

The Council has an important opportunity to apply the statutory balancing requirement in its sub-basin planning process.¹⁶⁶ It is gratifying to note that Council Chairman, Tom

164. *A Colloquy on Columbia Basin Fish and Wildlife Program Implementation*, 39 ANADROMOUS FISH LAW MEMO (Nat. Resources L. Inst.) 16 (Feb. 1987). The Council refused to evaluate the spill alternatives under a "traditional cost benefit analysis." Pacific Northwest Electric Power and Conservation Planning Council, *Notes of Final Amendments* 29 (Feb. 13, 1986). This "traditional" cost-benefit analysis refers to the method used by many government agencies to quantify the positive and negative effects of a proposed measure and convert these to economic values (dollars). See Scott, *Columbia River Salmon: Benefit-Cost Analysis and Mitigation*, 3 NW ENVTL. J., 121, 124 (1987).

The PNUCC commented to the Council that increasing the 90 percent survival standard to 92 percent in less than average water years and to 94 percent in average or greater water years "is very expensive considering the extremely low biological benefits, if any. The cost estimates seem to range from \$25 to \$35 million per year in an average water condition and over \$50 million per year in a low water condition." Letter from PNUCC to Robert Saxvik (Jan. 24, 1986) (comments on the proposed amendments to the spill program).

165. *Motor Vehicle Mfrs. Ass'n of the United States v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29 (1983).

166. Sub-basin planning is intended to provide a framework for achieving the

Trulove, is prepared, in the sub-basin planning process, to build on the Council's willingness to consider costs. He expects the Council to "frankly and rather definitively establish the set of objectives to [sic] which we want to manage." He believes these objectives, coupled with structured economic analyses,

should make the inevitable trade-offs much more apparent as well as help us separate the achievable from the unachievable. Hopefully, it will focus us on strategies that allocate our scarce funds and time toward activities most likely to produce success. . . . Will the Council establish any economic constraints? I hope the answer is yes, but that such constraints will be established cooperatively by everyone involved and not just by the Council.¹⁶⁷

Recommendations for long-term objectives in the sub-basin planning process should be accompanied by proposed measures and be supported by cost information and estimates of effectiveness in terms of returning adult fish. The Council should objectively balance the costs and fisheries values of this objective. Any recommendation should be denied if the fishery value does not justify the accompanying costs.

The Council's discretion resides in how the objective is framed and how the power costs and fisheries benefits are valued. Objectives can be framed along a continuum from micro-management, *e.g.*, to increase runs in a particular stream or to increase smolt production at a particular hatchery, to basin-wide objectives, *e.g.*, doubling the fish run in the basin.

Fisheries representatives suggested, in their testimony before Congress, that appropriate long-term objectives should be framed in terms of the underlying values and uses of the fishery.

[O]ur position [is] that anadromous fisheries must be considered in all allocations of water use. Other agencies have been able to dismiss fisheries' needs as not particularly in their shop and therefore not a part of their analysis of benefits and costs. That benefit cost analysis must give full con-

program's goal to double the Columbia River Basin fish run size. Northwest Power Planning Council, *Columbia River Basin Fish and Wildlife Program* § 205 (1987). This planning is to result in a system-wide integrated plan covering 31 sub-basins that is to provide guidance for program planning, implementation, and evaluation. Northwest Power Planning Council, *System Planning Work Plan* at 1-2, (July 16, 1987).

167. Letter from Tom Trulove, Council Chairman, to David P. Piper (Oct. 23, 1989).

sideration to the value of those fisheries for all the people in the Pacific Northwest in terms of food, jobs, recreation and aesthetic values which will be lost of those values are foregone.¹⁶⁸

The Fish and Wildlife Service has characterized the fisheries resource as having three distinct values: A cultural value, a recreational value (sport fishing), and an economic or commercial value.¹⁶⁹

The outcome of the balance may be different for each objective. Preservation of adequate fish necessary to meet tribal ceremonial needs, although an intrinsically high value objective, is difficult to quantify in economic terms. In contrast, production of more fish for commercial harvest is a quantifiable objective. When the incremental cost to produce more fish for commercial harvest exceeds the value of these fish as a commercial product, then additional measures to increase such production should be rejected.¹⁷⁰ This balance of costs and fisheries values defines an appropriate long-term objective consistent with the purposes of the Act: adequate mitigation to produce fish for commercial harvest at a cost to the power supply system that does not exceed the commercial value of the fish. Incurring power costs in excess of this level for this objective would not be a prudent use—it would not be a characteristic of an “economical” power supply.

Mitigation to produce fish for sport fishing is not as readily quantifiable. At some point, the value of additional sport fish, however measured, becomes less than the incremental cost of production. Further, additional fish are not “marked” as either commercial or sport, unless commercial harvests are controlled. Thus, measures which may be justified for additional sport fishing may simply produce a greater non-economic commercial harvest. This fact must be considered in the fishery value of a measure intended to produce more sport

168. *1978 Power Planning Hearings*, *supra* note 74, at 693 (statement of John Harville, Executive Director, Pacific Marine Fisheries Commission).

169. *Id.* at 180-82 (statement of Lynn Greenwalt, Director, U.S. Fish and Wildlife Service).

170. Measure costs (*i.e.*, cost per fish) must be based on realistic estimates of effectiveness in terms of returning adult fish. Thus, objectives must realistically assess the impact of intervening factors on returns. For example, illegal commercial fishing or weather conditions could reduce the effectiveness of mitigation measures. If not accounted for, the Council could incorrectly determine the point at which the cost and benefits of the objective and measure balances.

fish— *i.e.*, the number of sport fish produced may be less than projected without consideration of the commercial harvest.

Biological factors may impose additional constraints on these objectives. For example, the value of the commercial fishery may justify large downstream hatcheries to produce additional fish for harvest. But, the mixed stock ocean harvest, if allowed to expand, would take an increasing percentage of the wild stocks, unless wild stocks were also increased at the same rate of hatchery stocks. Thus, maintenance of wild stocks may raise the cost of producing additional fish for commercial harvest and change the balance of costs and fisheries values for that objective.

VI. CONCLUSION

A balancing of power costs and fisheries values is neither easy nor precise. The Council must exercise responsible judgment in framing objectives and estimating these costs and values. As the region moves to load/resource balance, it is imperative that the Council's program clearly identify and disclose the facts and consequences of proposed mitigation measures. On the basis of these costs and values, the Council should act in the interests of all the citizens of the Pacific Northwest. This is the balance expected by utility and fisheries representatives in drafting subsection 4(h). This is the balance required by the Northwest Power Act.