Development of Recreational and Related Resources at Hydro-Electric Projects Licensed by the Federal Power Commission

Sherman S. Poland

Follow this and additional works at: https://scholarship.law.uwyo.edu/land_water

Recommended Citation
Available at: https://scholarship.law.uwyo.edu/land_water/vol4/iss2/3

This Article is brought to you for free and open access by Law Archive of Wyoming Scholarship. It has been accepted for inclusion in Land & Water Law Review by an authorized editor of Law Archive of Wyoming Scholarship.
Nonfederal development of hydroelectric power has not until recently been required in any systematic way to serve the needs of the people through development of recreational uses and conservation of natural resources. Mr. Poland, in the article which follows, explores the scope and exercise of the Federal Power Commission's authority, when licensing hydroelectric projects, to assist development of related water resources and to foster conservation measures.

DEVELOPMENT OF RECREATIONAL AND RELATED RESOURCES AT HYDRO-ELECTRIC PROJECTS LICENSED BY THE FEDERAL POWER COMMISSION

Sherman S. Poland*

Every stream should be used to its utmost. No stream can be used unless such use is planned for in advance. When such plans are made we shall find that, instead of interfering, one use can often be made to assist another. Every river system from its headwaters, in the forest to its mouth on the coast, is a single unit and should be treated as such.¹

This statement, among several others of President Theodore Roosevelt,² demonstrates a clear recognition that our nation's rivers constitute a combination of a valuable public resource which should be developed for optimum public benefit.

Despite this early call for comprehensive development of all resources of the nation's rivers, multiple resource develop-


ment has been slow. Although navigable rivers have long been held to belong to the people and not to be subject to private ownership, nonfederal development of hydroelectric power has not, until recently, been required, in any systematic way, to serve the needs of the people through development of recreational uses and conservation of natural resources. However, the last five to ten years have seen an awakening of the need to develop public purposes, such as recreation, and to conserve our related natural resources. A continuation and expansion of the current trend, implemented by the Federal Power Commission through its licensing procedures and guided by court review, will do much to ensure that private or nonfederal hydroelectric projects can serve multiple public purposes in a comprehensive scheme of river basin development. It is the purpose of this article to explore the scope and exercise of the Federal Power Commission's authority, when licensing hydroelectric projects, to assist development of related water resources and to foster conservation measures. In these activities development of recreational uses and protection of fish and wildlife assume major roles.

1. **Background of Federal Power Commission Licensing Authority**

   The Commission's authority to require licensed projects to assist in comprehensive development of water resources of navigable river stems from the Federal Water Power Act of 1920. Prior to that date private hydroelectric development was authorized by special acts of Congress and often projects were constructed without any authorization. Thus, as early as 1879, Congress authorized the leasing of water power at an Army Engineers' dam near Moline, Illinois. Five years later, in 1884, Congress first authorized a private hydroelectric project on a navigable river. During the next twenty years many similar projects were specially authorized. Usually, these special acts permitting the private development of water power also required some consideration be given to protection of navigation. In 1906 the General Dam Act made

---

construction of all private dams subject to approval by the Secretary of the Army which could require construction of navigation facilities and fishways.⁷ Similarly, the River and Harbor Acts of 1890 and 1899 prohibited construction of dams on navigable waters without permission of the Secretary of the Army. The emphasis here was upon protection of navigation uses of the rivers.⁸

The Federal Water Power Act, as amended in 1935 and incorporated as Part I of the Federal Power Act,⁹ establishes the Commission's basic authority to assure comprehensive development while licensing private or nonfederal power projects. The Commission is empowered to issue licenses for projects "necessary or convenient for the development and improvement of navigation and for the development, transmission, and utilization of power across, along, from or in any of the streams or other bodies of water over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several States, or upon any part of the public lands and reservations of the United States, or for the purpose of utilizing the surplus water or water power from any Government dam. . . ."¹⁰ And the Act expressly makes it unlawful for any person to construct, operate, or maintain a dam or other project works on navigable waters of the United States for the purpose of developing electric power unless a license is first obtained.¹¹

---

8. The Reclamation Act of 1902, 43 U.S.C. 391, et seq., deals with many aspects of federal development of water resources which are beyond the scope of this paper. Aside from the licensing authority of the Federal Power Commission, federal activity in this area is beyond the scope of this paper.
11. 16 U.S.C. § 816 (1964). Under Section 3 navigable waters are defined as follows:

(8) 'Navigable waters' means those parts of streams or other bodies of water over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several States, and which either in their natural or improved condition are navigable and do not suffer interruptions between the navigable parts of such streams or waters by falls, shallows, or rapids compelling land carriage, are used or suitable for use for the transportation of persons or property in interstate or foreign commerce, including therein all such interrupting falls, shallows, or rapids, together with such other parts of streams as shall have been authorized by Congress for improvement by the United States or shall have been recommended to Congress for such improvement after investigation under its authority.
Project works include primary transmission lines as well as the dam and appurtenant facilities.12

An important expansion of Commission jurisdiction has resulted from an interpretation of Section 23(b) of the Federal Power Act. In FPC v. Union Electric Co.13 the Supreme Court affirmed Commission assertion of jurisdiction over a pumped storage project, holding that projects on non-navigable streams must be licensed if the electric energy generated by the project affects the interests of interstate or foreign commerce.14 In dealing with projects on non-navigable streams Commission jurisdiction is not limited to projects where the interests of interstate or foreign commerce on navigable waters are affected. In today’s technology with interconnected electric systems, this decision means that almost all hydroelectric projects are subject to the Federal Power Commission’s licensing power. Obviously, in terms of Commission authority to control recreational development and to protect fish and wildlife, this extension of its jurisdiction may be of considerable significance.

Importantly, in terms of multiple resource development, all licenses are subject to the following statutory condition:15

That the project adopted, including the maps, plans, and specifications, shall be such as in the judgment of the Commission will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water power development, and for other beneficial public uses, including recreational purposes. . . .

The reference to recreational purposes was not included in the Federal Water Power Act of 1920 but was added in the 1935 amendment.16 Additionally a licensee is required to con-

14. Id. at 96-98.
struct and operate such fishways as the Secretary of the Interior may direct.\(^\text{17}\)

At this juncture it is significant to note that the term "recreational" has been interpreted broadly to include aesthetics such as natural scenic beauty as well as the more commonly considered recreational purposes such as boating, swimming, fishing, hiking, picnicking, and the like.\(^\text{18}\) With the increasing urbanization and industrial development of our society this broad interpretation can assume great importance in licensing proceedings. For example, where overhead transmission lines would mar the scenic beauty of an area or where a dam would destroy the natural beauty of a free-flowing stream the balancing of interest may require substantial modification of a project or even denial of the license.\(^\text{19}\)

Pursuant to its licensing power the Federal Power Commission had, as of the end of the fiscal year 1967, licensed 599 hydroelectric projects.\(^\text{20}\) At that date, 405 applications were pending, many covering projects which had been constructed without license. Licensed projects account for approximately 75 percent, or 20.2 million kw, of nonfederal hydroelectric capacity. Based upon applications on file, additional capacity to be licensed will increase substantially.\(^\text{21}\)

Moreover, the Commission's inventory of developed and undeveloped hydroelectric power resources reflects an estimated 175 million kw of conventional generating capacity of which about 44 million kw has been developed. The 131 million kw of undeveloped conventional capacity is located principally in the Pacific Northwest, Alaska, and the Moun-


\(^{18}\) In *Scenic Hudson*, id., the Court noted, "'Recreational purposes' are expressly included among the beneficial public uses to which the statute refers. The phrase undoubtedly encompasses the conservation of natural resources, the maintenance of natural beauty, and the preservation of historic sites." 354 F.2d at 614.

\(^{19}\) *See*, *Namekagon Hydro Co. v. FPC*, 216 F.2d 509 (7th Cir. 1954); *Scenic Hudson Preservation Conference v. FPC*, 354 F.2d 606, 623 (2d Cir. 1965).

\(^{20}\) Annual Report of Federal Power Commission, 26 (Fiscal Year 1967). This figure includes 324 major (excess of 2000 hp) and 61 minor project licenses, as well as 188 licenses for transmission lines and 26 for minor parts of hydropower projects, exclusive of power plants, located on federal land. At this writing, the annual report for fiscal 1968 had not been issued.

\(^{21}\) Id. at 25. For a recent publication containing detailed information as to developed and potential hydroelectric power in the United States *see*, *Hydroelectric Power Resources of the United States—Developed and Undeveloped, January 1, 1968* (published by the Federal Power Commission, Washington, D.C., Nov. 1968).
tain States with relatively minor amounts in the South Atlantic states and other areas throughout the country.\(^22\) Obviously, if a substantial portion of this capacity were to be developed under Federal Power Commission licenses, there remains a considerable area of Commission responsibility to ensure comprehensive development.\(^23\)

Finally, the Commission's power to renew licenses at the expiration of their license periods and to amend existing licenses where additions or modifications are involved will afford the Commission with an added opportunity to assure appropriate comprehensive development for recreational and other public purposes.\(^24\) The terms of 63 licensed projects are scheduled to expire between 1968 and 1973.\(^25\)

2. AD HOC DEVELOPMENT OF COMMISSION POLICY TO AID RECREATIONAL PURPOSE AT LICENSED PROJECTS

After 1935 when "recreational purposes" was added to Section 10(a), and for nearly 20 years after World War I the Commission's protection of recreational and other public purposes was generally limited to an ad hoc consideration of the issues. For example, in City of Tacoma\(^26\) the Commission considered the effects of two dams upon anadromous fish, such as salmon, in the Cowlitz River in Washington. It concluded that substantial power benefits, important flood control and navigation benefits with incidental recreation and intangible benefits outweighed fish losses or retention of the stream in its natural state until economic pressures force its full utilization.\(^27\) In another case, however, recreational uses and conservation of fishlife were considered to be of overriding importance so that the Commission denied a license because of the adverse effect of the project upon fishing,

\(^{22}\) Id. at 32.


\(^{24}\) 16 U.S.C. § 808 (1964). Pursuant to Section 14 of the Act, the United States has the right, subject to certain conditions, at the expiration of a license to take over the project. 16 U.S.C. § 807 (1964).


\(^{26}\) City of Tacoma, Washington, 10 F.P.C. 424 (1951).

\(^{27}\) Id. at 432. But cf., Udall v. FPC, 387 U.S. 428 (1967), where the Court laid heavy emphasis on the value of fish and wildlife and suggested the possibility of deferral of any development on the Snake River at the High Mountain Sheep project site near the confluence of the Snake and Salmon Rivers. Infra, at 389.
canoeing, and scenic beauty of the Namekagon River in Wisconsin.\(^{28}\)

Another case involved the failure of a licensee to take adequate steps to protect fishlife during construction of a licensed project. Thus, Idaho Power Company was authorized by the Commission to construct three relatively low dams on the Snake River instead of a single high dam. The Commission’s decision to authorize the low dams was based, in part at least, upon the potentially greater risk to fish from construction of the high Hell’s Canon Dam.\(^{29}\) Yet, during construction of the Oxbow Dam, the Snake River was almost literally turned off for a short period of time while repair work was being attempted on fish trapping facilities. In what proved to be a disastrous consequence, the licensee blocked off the diversion tunnel around the Oxbow Dam during the fall run of salmon in the river. As a result, about 60 miles of the Snake River below the Oxbow Dam virtually ran dry and trapped fish died. This experience, tragic as it was, undoubtedly provided impetus for the later regulations which are designed to assure more complete protection of fishlife.\(^{30}\)

\(^{28}\) Namekagon Hydro Co. v. FPC, 216 F.2d 509 (7th Cir. 1954). In its opinion the Seventh Circuit noted that Namekagon River is a fast flowing stream providing an increasingly rare habitat for small mouth black bass. Moreover, the Court remarked:

But perhaps the uniqueness of the river is more apparent to those who take a float trip. Many of such persons are from urban centers and to see wild life in a natural setting is a thrill indeed. Such a float trip is exciting as well as peaceful. Passing by heavily wooded banks on either side, with no noise or sound to be heard from highways or railroads, the canoeist has the illusion of being in a forest primeval, far from civilization. Each bend of the river is watched with anticipation for a deer may be seen on the bank, or, occasionally, a black bear scurrying for the timber. There are very few, if any, comparable stretches of river left in Wisconsin. A canoe trip on the Namekagon often calls for a repeat performance, one witness testifying that he had made 90 canoe trips thereon.

The Court concluded that “No modification of the project short of its prohibition would serve the public interest. We think that it is a necessary corollary to the power of the Commission to grant a license when certain conditions are met, that the Commission has the right to deny such license for failure to comply.” \textit{Id.} at 513.


\(^{30}\) Idaho Power Co., F.P.C. 571, and 29 F.P.C. 572 (1963). In a concurring statement attached to the order dismissing a complaint by the State of Oregon (the Commission held that it has no power to award money damages) Commissioner Morgan graphically described the “Oxbow incident” and noted with some feeling:

Perhaps this is not the place to comment on the licensee’s suggestion that all this is attributable to ‘an unknown and unforeseeable condition of nature, namely, fish behavior’ and, more specifically, that the fish did not ‘follow the receding water’ downstream. I have no idea whether it is reasonable to expect fish driven by the \textit{upstream} migratory instinct to turn around and
3. **Increased Public Awareness of Need to Protect Natural Resources**

The decade of the '60's has been marked by an increasing public awareness that our natural resources are limited and must be protected. This has been reflected in numerous acts of Congress. Examples are the 1961 amendment to the Federal Water Pollution Control Act, the Clean Water Restoration Act of 1966, the Clean Air Act of 1963, the Air Quality Control Act of 1967, and the Wild and Scenic Rivers Act of 1968, and Executive Order No. 11278, "Establishing a President's Council and a Committee on Recreation and Natural Beauty."

The need for unified planning of river basin development has found expression in enactment of the Water Resources Planning Act of 1965 and creation of the Water Resources Council. This Council is composed of the Secretaries of the Interior, Agriculture, Army, Health, Education and Welfare, Transportation, and the Chairman of the Federal Power Commission. The Secretaries of Commerce and Housing and Urban Development are associate members while the Director of the Bureau of the Budget and the Attorney General are observers. It is the duty of the Water Resources Council to maintain a continuing study of water requirements in each region of the United States and to review water and related land resource policies of the several federal agencies. The Council is also directed to establish principles, standards, and procedures for federal participants in preparation of comprehensive regional or river basin plans. Upon the request of the Council, the President may establish river basin commissions and related land resource commissions which shall serve as the principal agency to

---

31. 75 Stat. 264.
32. 80 Stat. 1246.
34. 81 Stat. 485.
35. 82 Stat. 906.
37. 79 Stat. 244.
38. Id. at 245, § 102.
39. Id. at 245, § 103.
coordinate federal, regional, state, local and nongovernmental plans for development of the river basin so established. The river basin commissions are authorized to prepare, and keep up to date, a comprehensive, coordinated joint plan for development of water and related resources, including an evaluation of all reasonable alternative means of achieving optimum development of water and related land resources in the river basin.

Since the Federal Power Commission refers applications for hydroelectric licenses to the Water Resources Council for review and advice, the Council has an excellent opportunity to ensure that each project is "best adapted to a comprehensive plan for improving or developing" the waterways. In the absence of more extended experience—the Council has been in existence for only two years—it is perhaps too early to tell what influence it will have on licensed projects. However, it may be anticipated that influence of the federal agencies, particularly the Department of the Interior (the Secretary of the Interior is Chairman of the Council) will emphasize conservation and recreational aspects of private development.

In this regard, in 1962 Congress established in the Department of Interior a Bureau of Outdoor Recreation which is given authority to formulate a nationwide recreation plan, to provide technical assistance to State, local, and private interests and to cooperate with other federal agencies in

40. The following river basin commissions have been established: Pacific Northwest River Basin Commission; Great Lakes Basin Commission; Souris-Red-Rainy River Basins Commission.


There be protection and rehabilitation of resources to insure availability for their best use, when needed.

Open spaces, green space, and wild areas of rivers, lakes, beaches, mountains, and related land areas be maintained and used for recreational purposes; and

Areas of unique natural beauty, historical and scientific interest be preserved and managed primarily for the inspiration, enjoyment and education of the people. (S. Doc. No. 97, Id. at 2)

This policy statement declared that the "well-being of all of the people shall be the overriding determinant in considering the best use of water and related land resources."
coordinating plans relating to outdoor recreation.\textsuperscript{42} Importantly, the Federal Power Commission requires that licensees consult with the Bureau of Outdoor Recreation in the preparation of their recreation exhibits submitted with their applications.\textsuperscript{43}

Further, under the Land and Water Conservation Act of 1965,\textsuperscript{44} the Bureau of Outdoor Recreation is authorized to provide financial assistance to States for planning, acquisition, and development of land and water resources for recreational purposes. And under an act providing for conservation of anadromous fish, the Secretary of the Interior is authorized to enter into cooperative agreements with States and other non-federal agencies providing for development, conservation and enhancement of anadromous fish.\textsuperscript{45} Both of these recent acts provide examples of federal activity which may assist licensees in protection and enhancement of fishlife at licensed projects.

4. \textbf{COMMISSION POLICY EXPRESSED THROUGH RULE MAKING}

\textit{A. Recreation Regulations}

During this period also the Federal Power Commission, through adoption of comprehensive regulations has expressed its concern with the conservation and enhancement of recreational and fish and wildlife resources at hydroelectric projects. Effective as of June 30, 1963, it adopted a regulation which requires all applicants for major licensed projects to present a plan for full public utilization of project waters and adjacent lands for recreational purposes.\textsuperscript{46} This regulation, which was amended in 1965, requires that applicants submit a recreation plan as Exhibit R to their application.\textsuperscript{47}

\textsuperscript{44} 78 Stat. 897 (1965).
\textsuperscript{47} Order No. 292, 33 F.P.C. 32, 30 Fed. Reg. 523 (1965). Exhibit R requires:

Exhibit R. A proposed plan for full public utilization of project waters and adjacent lands for recreational purposes so far as consistent with proper operation of the project for the development of water power and other public purposes. The exhibit shall include:

1) A map or maps on an appropriate scale, one of which covers the entire project area, clearly delineating by use of symbols, shading, cross-hatchings, etc.
The data required are detailed, including maps, the type of land and water recreational facilities to be provided initially and in the future, and the estimated use of the facilities. Additionally, applicants are required to indicate the extent of their consultation and cooperation with federal, state and local agencies. Moreover, as indicated previously, all applications are referred by the Federal Power Commission to the Department of Interior for review by the Bureau of Outdoor Recreation.

Later, in 1965, the Commission issued a regulation requiring licensees to publicize the recreational aspects of hydroelectric projects. This includes notification to prospective purchasers of land in the vicinity of project works and informs the public of the recreational facilities available. The notice takes the form of publication in local newspapers of the project's recreation conditions and the posting of the project lands. Pursuant to the regulation also, licensees are required to permit equal and unobstructed use of recreational facilities to all members of the public without regard to race, color, religious creed, or national origin.

(a) The location of project lands and waters (i) already developed, (ii) designated for initial development, and (iii) those ultimately planned for recreational use.

(b) The location, type, and number of the various recreational facilities in existence and those planned for immediate development, i.e., access roads and trails, and facilities for camping, picnicking, bathing, boating and boat launching, fishing, hunting, and similar recreational activities, as well as provisions for sanitation and waste disposal.

(c) The location, type, and number of the various recreational facilities planned for future development according to anticipated demand. (These plans may be revised during the license period subject to approval by the Commission.)

(2) On the map, or on separate sheets to be filed as part of the exhibit, the following information:

(a) Which of the facilities shown are to be provided by the applicant or licensee at its sole cost, or in cooperation with others, consistent with the economics of the project and the potential recreational opportunities.

(b) Estimated present or initial recreational use and projected ultimate recreational use, in daytime or overnight visits. (These figures will be used in the economic analysis of the project.)

(c) The nature and extent of consultation and cooperation with Federal agencies having supervision over lands of the United States affected by the project and with appropriate State and local agencies. Copies of cooperative agreements entered into with such agencies shall be included as part of the Exhibit R.

(3) Except to the extent and in such particulars as the requirements may be expressly waived or modified by the Commission, Exhibit R maps are to be filed in conformity with the specifications for drawings contained in § 4.42.


In December, 1965, the Commission issued a statement of policy on outdoor recreational development at licensed projects. This statement declares the Commission policy to apply its recreation regulation—Exhibit R—to all new major licensees for constructed or unconstructed projects and to any licensee requesting a substantial amendment to an existing project which was not required to submit a recreation plan at the time of original licensing. Further, a licensee’s request to dispose of project lands will not be approved unless such disposal is found not inconsistent with an approved recreational plan. As noted in its order adopting the Statement of Policy, the Commission amended its regulations to require licensees to extend project boundaries beyond the 200 foot exterior margin of reservoirs normally specified, whenever appropriate to effectuate a recreational plan—and it is expected that the licensee will acquire such lands in fee.

With its statement of recreational policy the Commission issued a report entitled “Criteria and Standards for Outdoor Recreation Development at Hydroelectric Projects,” which is comprised of a selection of standards developed by federal and state agencies and provides a guide for licensees in preparing their recreation plans. These criteria and standards suggest the types of recreation facilities to be provided, such as camping, picnicking, swimming, fishing, boat launching, sanitation and refuse disposal. However, no attempt is made to set forth criteria or standards for determining whether

---

51. The policy as summarized in Section 2.7 of the Commission’s Statement of Policy provides:

The Commission will evaluate the recreational resources of all projects under federal license or applications therefor and seek, within its authority, the ultimate development of these resources, consistent with the needs of the area to the extent that such development is not inconsistent with the primary purpose of the project. Reasonable expenditures by a licensee for public recreational development pursuant to an approved plan, including the purchase of land, will be included as part of the project cost. The Commission will not object to licensees and operators of recreational facilities within the boundaries of a project charging reasonable fees to users of such facilities in order to help defray the cost of constructing, operating, and maintaining such facilities.

Note that the Commission seeks ultimate development of recreational resources “to the extent that such development is not inconsistent with the primary purpose of the project.” The question will arise, as illustrated by the Scenic Hudson and High Mountain Sheep cases, infra, at 389, whether or to what extent the Commission should give priority to “the primary purpose of the project”—presumably development of hydroelectric power—in assuring comprehensive development under Section 10(a).

ther the effect of the project upon recreational and fish and wildlife resources would require modification or denial of a proposed hydroelectric project.

The Statement of Policy was amended in 1968 to make express provision for safety features for protection of the public using the recreational facilities. The same amendment requires that the licensee provide for adequate facilities to process sewage, litter, and other wastes, including wastes from watercraft. 53

To assist the Commission in ensuring that its recreational policies are carried out the Commission requires licensees to submit an inventory of existing and potential recreational use at hydroelectric projects. 54 This inventory report (Form 80) is required of all licensees as of June 30, 1967, and biennially thereafter. Data made available pursuant to this inventory include population in vicinity of the project, features affecting recreational uses such as size of reservoir, quality of water, type of land, type of shoreline control, identity of cooperating agencies, types of recreation fees, estimated use of facilities, costs of recreational development, safety and sanitation facilities provided, and identification of land based facilities in the area owned by others which require access to project facilities. The results of the initial inventory are being collated by the Commission and a report is expected to be issued within the next few months.

Finally, in implementing its recreation policy the Commission has adopted standardized conditions for hydroelectric projects. 55 Although these conditions may be varied depending upon the circumstances, the standard conditions typically require the licensee to construct, operate, and maintain such recreational facilities as may be prescribed by the Commission during the term of the license, after notice and opportunity for hearing. Likewise, standard conditions require, to the

55. Through a series of "L Forms" and "P Forms" the Commission has set forth standard conditions applicable to different types of projects, such as constructed and unconstructed major and minor projects affecting lands of the United States, constructed and unconstructed major and minor projects affecting navigable waters, minor part projects (transmission lines), and constructed and unconstructed projects affecting interests of interstate and foreign commerce. See Order No. 348, Statement of Policy Providing Citations to L-Forms, 18 C.F.R. § 2.9 (1968), 37 F.P.C. 1037 (1967).
extent consistent with proper operation of the project, that the licensee allow the public free access to project water and adjacent project lands for navigation and recreational purposes.

B. Fish and Wildlife Regulation

The Commission has long included standard conditions in licenses with respect to fish and wildlife. Recently, also it has adopted new regulations, similar to the regulations respecting recreation, which require licensees to include with their applications, a report of the effect of the project on fish and wildlife. The regulation, which prescribes Exhibit S for applications, requires a report of measures necessary to conserve and to enhance fish and wildlife resources affected by the project. This includes design drawings of fish ladders to be constructed in accordance with Section 18 of the Federal Power Act, and such other facilities as may be necessary for the protection, conservation, improvement or mitigation of losses of fish and wildlife resources in accordance with Section 10(a) of the Federal Power Act. Cost estimates of such facilities are also to be reported.

Further, the applicant is directed to prepare Exhibit S on the basis of studies made after consultation with the United

56. Order No. 323, 18 C.F.R. §§ 4.31, 4.41, 4.50 (1968), 35 F.P.C. 1038 (1965). This regulation has been made applicable to all major and minor projects both constructed and unconstructed. See Order No. 350, 18 C.F.R. § 131.6 (1968), 37 F.P.C. 1125 (1967), Order No. 358, 18 C.F.R. §§ 4.50, 131.6 (1968), 39 F.P.C. ___, (1968). Exhibit S provides:

Exhibit S. A report on the effect, if any, of the project upon the fish and wildlife resources in the project area or in other areas affected by the project and proposals for measures considered necessary to conserve and, if practicable, to enhance fish and wildlife resources affected by the project. The exhibit shall include functional design drawings of any fish ladders proposed to be constructed in compliance with section 18 of the Federal Power Act, such other facilities or developments as may be necessary for the protection, conservation, improvement and mitigation of losses of fish and wildlife resources in accordance with section 10(a) of the Act, and cost estimates for such facilities and developments. The Applicant shall prepare this exhibit on the basis of studies made after consultation and in cooperation with the U.S. Fish and Wildlife Service, Department of the Interior, and appropriate state fish and wildlife agencies and in the case of public lands, advise Federal Agencies having jurisdictional responsibilities therefor of its proposed plans. The exhibit shall include a statement on the nature and extent of applicant's consultation and cooperation with the above agencies. To the extent those aspects of fish and wildlife related to recreation are covered in Exhibit R, a specific reference to Exhibit R will suffice.

57. 16 U.S.C. § 812 (1964). This section requires that a licensee construct and maintain at its project such fishways as may be prescribed by the Secretary of the Interior.
Development of Recreational and Related Resources

States Fish and Wildlife Service of the Department of the Interior.

Obviously, these regulations requiring applicants to file Exhibit R and S, plus the policy statement on development of recreational resources constitute a long step toward effectuating Section 10(a) of the Federal Power Act. They place a substantial burden upon licensees to initiate and implement plans for development of recreation and for conservation and enhancement of fish and wildlife at licensed projects. Furthermore, they assure coordination with the Department of the Interior and State and local agencies.

Yet, the question may be asked, does compliance with these regulations assure that the licensed hydroelectric project will be best adapted for a comprehensive plan for development of the entire river system? Alternatively, how can an applicant for a license determine in advance whether his proposal, which may have adverse effects upon recreational resources, or fish and wildlife, or even upon aesthetic considerations, will meet the test as the best adapted to a comprehensive plan for the river?

5. **Judicial Review Emphasizes Comprehensive Development**

Two landmark cases indicate that the answers to these questions are not easily discerned either by applicants or by the Commission itself. Thus, in *Scenic Hudson Preservation Conference v. FPC*, 354 F.2d 608 (2d Cir. 1965) and *Udall v. FPC*, 387 U.S. 428 (1967). Commission orders granting licenses were reversed for failure to give sufficient consideration to whether the plans were best adapted to comprehensive development. The timing of these decisions in

---

58. The Commission reviews and approves Exhibit R in orders separate from the licensing order. For examples of recent orders approving Exhibit R see: South Carolina Electric and Gas Company 38 F.P.C. 828, 38 F.P.C. 1035 (1968). The Commission also reviews and approves related exhibits in orders separate from the licensing order. In an "Order Approving Revised Exhibits J and K Drawings for Project," Holyoke Water Power Company—Project No. 2004, issued January 10, 1968, 41 F.P.C. ___ (1969), the Commission approved a fill area on a canal that would be faced with gravel "for both aesthetic reasons and for rodent control."

59. This case is referred to as the Scenic Hudson case or as the Storm King case. Storm King refers to the location of the reservoir at Storm King Mountain near Cornwall, New York.

60. Popularly termed the High Mountain Sheep case after the name of the project on the Snake River at the Idaho-Oregon border.
relationship to adoption of the regulations relating to recreation and fish and wildlife may be significant. The Second Circuit’s decision in Scenic Hudson was issued December 29, 1965, only two days after the Commission adopted its Statement of Policy on development of recreational resources.61 Likewise, the High Mountain Sheep case was decided June 5, 1967, after the Commission had prescribed Exhibit S relating to protection and enhancement of fish and wildlife at major unconstructed projects but before its application to all licensed projects.62 However, the application for the High Mountain Sheep license was filed in 1958 and hearings were held considerably prior to adoption of the regulations relating to Exhibit S.

In this context, it may be argued that the Commission has already taken corrective steps indicated by the Court decisions. On the other hand, as reference to the Court opinions will show, there are strong indications that the Courts have interpreted Section 10(a) of the Federal Power Act as imposing more stringent obligations upon the Commission, perhaps raising considerations of recreational and fish and wildlife resources to nearly equal importance with hydroelectric power in comprehensive development of river basin resources. In these cases, the emphasis shifts from—How does development of recreational and fish and wildlife resources fit within the primary purpose to develop hydroelectric power? to—How does the proposal to develop hydroelectric power fit within a comprehensive plan for development of the river where development of all resources must be accorded due weight?

The Scenic Hudson case involved an application by Consolidated Edison Company of New York for a license to construct and operate a pumped storage project on the Hudson River approximately 40 miles from New York City. The project would withdraw up to 1,080,000 cubic feet of water per minute from the Hudson River during off-peak periods.

61. Statement of General Policy, 18 C.F.R. § 2.7 (1968). Of course, the Commission’s opinion was issued even earlier, on March 9, 1965.

62. Exhibit S was made applicable to unconstructed major projects (those having 2000 h.p. or more) on June 17, 1966, 35 F.P.C. 1038 (1966). It was extended to unconstructed minor licenses on June 28, 1967, 37 F.P.C. 1128 (1967), and finally to constructed major and minor licenses on January 24, 1968, 39 F.P.C. ___ (1968). See supra, n. 56.
The water would be stored in a reservoir on Storm King Mountain for use during peak periods when it would be returned to the Hudson passing through generators to produce the power. The proposed project would consist of the storage reservoir and tunnel, a powerhouse, a cable crossing to the east side of the river, and overhead transmission lines leading to a junction with ConEd's existing system.

After extended hearings, the Commission issued the license to ConEd in March, 1965. The Commission frankly recognized that under Section 10(a) the public interest required consideration of the effect of the project, including the overhead transmission lines, on scenic considerations on the Hudson River; the effect upon fish and wildlife, the safety of the structures, possibility of pollution of local water supplies, the adequacy of the recreation plan, and the effect of the project upon navigation. Citing to the Namekagon case, the Commission noted that if the impact of a project upon scenic and recreational purposes were sufficiently adverse, it would deny the license. However, based upon detailed analysis of the record, the Commission concluded that the adverse impact upon these features was slight, but remanded to the examiner for further hearings on the questions of the location of overhead transmission lines and the design of fish protection facilities.

Yet, on review the court reversed basing its decision squarely upon the requirement of Section 10(a) that a project must be "best adapted to a comprehensive plan for improving or developing a waterway." The court detailed the considerations which the Commission must take into account. It noted that the Storm King project is located in an area of unique beauty and major historical significance and accordingly, the effect of the project on these aesthetic factors must be weighed. Obviously, the aesthetic factor could assume vital importance when considering the overhead transmission
lines, for the court stated that the Commission should "seriously weigh the aesthetic advantages of underground transmission lines against the economic disadvantages." 68

Referring to the requirement of Section 10(a) that a project be best adapted "for other beneficial public uses, including recreational purposes," the court concluded, without limiting the term "beneficial public uses," that recreational purposes "encompasses the conservation of natural resources, the maintenance of natural beauty, and the preservation of historical sites." 69

The court also adverted to the possible adverse effect upon fish in the Hudson River and required that, upon remand, the Commission "take the whole fisheries question into consideration before deciding whether the Storm King project should be licensed." 70

Moreover, in its deliberations the Commission is obligated to give full consideration to other possible sources of power which might be utilized in lieu of the pumped storage project. 71 Can the electric energy be provided by gas turbine generation? Is it available from interconnected sources? These factors must be weighed on the scales along with the effects on conservation, recreation, and scenic beauty.

In summary, the court requires that "the totality of a project's immediate and long-range effects, and not merely the engineering and navigation aspects, are to be considered in a licensing proceedings." 72 The Commission's proceedings "must include as a basic concern the preservation of natural beauty and of national historic shrines, keeping in mind that, in our affluent society, the cost of a project is only one of several factors to be considered." 73

Plainly, the court is concerned that adequate consideration be given to recreation, conservation, fishlife, and natural scenic beauty. Plainly also, these considerations are raised

68. Id. at 623.
69. Id. at 615. Citing, with apparent approval, the Namekagon case, supra, note 18.
70. Id. at 624.
71. Id. at 617-621.
72. Id. at 620.
73. Id. at 624.
to a level nearly co-equal to the basic purpose of the Act—licensing of hydroelectric projects.\(^7\)

The *Scenic Hudson* case is again before the Commission on remand. Additional hearings have been held, and an examiner's decision, which extensively considered the effect of the project upon recreation, fish, and wildlife, and scenic beauty, was issued on August 6, 1968. By order issued November 19, 1968, the Commission returned the case to the examiner for further consideration of a possible alternative location suggested by the Commission's Staff and of the possible effect of the project tunnel upon the Catskill aqueduct which supplies water to New York City. These supplemental hearings were scheduled to begin March 4, 1969. Consequently, it is too early to know how the Commission will apply the court's directive, especially as it relates to preservation of aesthetic values.\(^7\) All prospective licensees can hope that the Commission will establish a definitive policy which will serve as a guide for complementary development of all river and related land resources and giving appropriate weight to aesthetic factors.\(^7\)

The *High Mountain Sheep* case involved an application by Pacific Northwest Power Company for a license to construct and operate a power dam on the Snake River between Idaho and Oregon a short distance upstream from the confluence of the Salmon River. Also involved was a competitive application of Washington Public Power Supply System to construct and operate a dam at the Nez Perce site just below the confluence of the Salmon River. The proceedings had a long history commencing in 1955. The Commission's opinion

---

74. *Supra*, note 62. If the court's opinion were read out of context with the Commission's basic Opinion No. 452 in the case, as supplemented by Opinion Nos. 452-A and 452-B which predated the court's decision, one might think that the Commission had given only cursory attention to the requirements of Section 10(a). In fact, the major portion of the opinion was addressed to these issues. In view of the Commission's own consideration of these matters, the court's reversal becomes even more significant.

75. In his initial decision the examiner concluded that the applicant's plans will be consistent with a broad program for balanced development of the Hudson River. His adoption of a plan requiring that the transmission lines be placed underground for a portion of the distance is clearly a compromise based upon a balancing of interests.

76. Of course, the determination of what weight should be ascribed to aesthetic factors may not be capable of precise measurement. Scenic beauty is in the eye of the beholder and there may be some to whom overhead transmission lines and towers appear beautiful. Under standard concepts of administrative law this judgment should rest with the Commission subject to court review only for abuse of discretion.
granting the license to Pacific Northwest Power Company contains an extensive analysis of the relative merits of the competing proposals. The opinion also contains a detailed discussion of the effect of the competing projects upon fish-life, primarily anadromous fish such as salmon. After a review of the evidence, the Commission found that "the high dams and reservoirs present major obstacles to anadromous fish." Apparently without optimism, the Commission concluded:

We can hope for the best and we will continue to insist that any licensee building a high dam at a site which presumably involves major fish runs do everything possible within the limits of reasonable expense to preserve the fish runs. But as of now we understandably must assume that the best efforts will be only partly successful and that the real damage may and probably will be done to any such fish runs.

The Secretary of the Interior took a belated interest in the proceedings, arguing that the power project should be developed by the federal government. Accordingly, he urged the Commission to defer action on the applications for private projects to give the federal government an opportunity to obtain Congressional authorization and undertake the development.

On review, the Supreme Court reversed the lower court which had affirmed the Commission's grant of the license for High Mountain Sheep. The launching point for the Court's opinion was the question raised by the Secretary of the Interior, namely, whether, under Section 7(b) of the

78. The fact that the Nez Perce dam would affect fish runs both on the Snake and the Salmon Rivers while the High Mountain Sheep dam would affect only the fish on the Snake River upstream of the confluence with the Salmon River apparently weighed in favor of the High Mountain Sheep project, 31 F.P.C. 247, at 261-262 (1964).
79. 31 F.P.C. at 252 (1964).
80. The Secretary of the Interior did not actively participate in the hearings, petitioning to intervene only after the examiner's decision had been issued. Perusal of the Commission's opinion indicates that the Secretary's contention was based upon an assumption that federal development would afford superior correlation of existing federal dams already constructed downstream.
Federal Power Act, the development should be undertaken by the United States.  

Consideration of this question led the Court to inquire whether any dam at all should be constructed. To reach an answer to this question the Court found it necessary to consider the requirement of Section 10(a) that a project be best adapted to comprehensive development. Construing “recreational purposes” as used in Section 10(a) to include fish and wildlife, the Court stressed the adverse effect of the high dam upon salmon. It pointed to the possibility of alternate sources of power, including nuclear energy, and suggested that in the absence of compelling reasons for immediate development, the project should be deferred. It concluded:  

The grant of authority to the Commission to alienate federal water resources does not, of course, turn simply on whether the project will be beneficial to the licensee. Nor is the test solely whether the region will be able to use the additional power. The test is whether the project will be in the public interest. And that determination can be made only after an exploration of all issues relevant to the ‘public interest’, including future power demand and supply, alternate sources of power, the public interest in preserving reaches of wild rivers and wilderness areas, the preservation of anadromous fish for commercial and recreational purposes, and the protection of wildlife.  

Clearly, although the Court in High Mountain Sheep goes a step farther than Scenic Hudson, the basic concept is the same. Private development of water power must accommodate other resources. Recreational resources, in the broad sense including fish and wildlife and aesthetic values such as scenic beauty, weigh heavily in the scales of comprehensive development.  

The High Mountain Sheep proceedings, like those in Scenic Hudson, are again before the Commission. Further hearings are scheduled for May 1, 1969. The Commission’s
action here, as in *Scenic Hudson*, should provide a pattern of Commission policy for development of recreational resources and other related land and water uses.

6. **Possible Future Areas of Concern in Assuring Comprehensive Development at Licensed Projects**

These two cases, taken together with the Commission's extensive rulemaking over the last few years, signal a vital awareness of the need to protect and develop all uses and resources of our nation's rivers. Moreover, there are distinct indications that the Commission's concern is not static. Additional areas, such as pollution control, may provide expanded compass for Commission activity. Thus, although hydroelectric projects do not, in themselves, cause pollution, the regulation of stream flow may have a decided effect upon the degree of pollution downstream from the dam. Perhaps even more important will be Commission action to control thermal pollution by fossil fuel or nuclear steam plants which use water for cooling purposes. In such cases, although steam plants are not directly subject to the Commission's licensing authority, the Commission can exercise its jurisdiction if the thermal pollution affects project waters.\(^87\) Illustrative of this exercise of jurisdiction is a recent Commission order involving use of project waters at Lake Catherine, Arkansas, for cooling purposes. In that order, the Commission recognized that thermal pollution is an important consideration in project use.\(^88\) It noted that a temperature rise of approximately 14.8 degrees did not violate water quality standards as approved by the Federal Water Pollution Control Administration of the Department of the Interior so long as the temperature at discharge would not exceed 95 degrees. However, because of the possible adverse ecological effects of the increase in temperature of the project waters, the Commission approved

---

87. Notably, the Commission has urged Congress to enact legislation which would authorize it to regulate diversions of water from navigable streams for use as cooling water at steam-electric generating stations. Such authority would enable the Commission to determine whether the diversion of water for steam plants would be in the public interest, and presumably whether such use would be best adapted to comprehensive development of the entire river. See Annual Report of the Federal Power Commission, 8-9 (1966). The requested legislation has not been enacted.

a further study to be undertaken by the utility, Arkansas Power & Light Company, and reserved the right to take interim action if adverse effects of thermal pollution are demonstrated.

The impact of the Commission policy with respect to thermal pollution may be far-reaching. Aside from the possibility of new legislation, an examination of case law relating to Commission jurisdiction under the navigability test reveals that the scope of Commission jurisdiction is sufficiently broad to encompass new situations. Perhaps the Taum Sauk case forecasts a future extension of Commission jurisdiction. In that case, jurisdiction attached by reason of the effect of the project upon interstate commerce. Is it not conceivable that the next step may be to hold that any utilization of navigable waters, either directly or indirectly in generating electricity, is jurisdictional, thus permitting the Commission to determine the relationship of water diversion facilities at steam generating plants to the public interest and comprehensive development of river resources?

Regardless of jurisdictional determinations, the need for actions affecting national environment is being felt. For example, a recent report of the Working Committee on Utilities of the Presidents' Council on Recreation and Natural Beauty, headed by Commissioner Bagge, expresses the pressing national need for guidelines for protection of natural, historic, scenic, and recreational values. The Commission, itself, has recognized the need for protection of these values in a recent statement of Chairman Lee White to a Congressional subcommittee setting forth the Commission's aims and policy. Undoubtedly, recreational resources, fish and wild-

89. Annual Report supra, note 84.
92. Id. at 101.
93. Working Committee on Utilities, Report to the Vice President and to the President's Council on Recreation and Natural Beauty, December 27, 1968.
life, and aesthetic considerations will continue to play an increasingly important role in license proceedings as they become increasingly important in national life.