Urban Systems Research & Engineering, Inc.

36 Boylston Street, Cambridge, Mass. 02138 (617) 661-1550

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2 July 1979

Paul Leech
Senior Environmental Project Manager
for Skagit Nuclear Power Project
Office of Nuclear Reactor Regulation
Division of Site Safety and Environmental Analysis
Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Leech,

I want to thank you very much for the cooperation and assistance you gave our researcher in the preparation of the enclosed case study. This and similar case studies will be used in a Factbook being prepared under contract to the Department of Energy, and will help to illustrate the range of approaches currently being used to deal with the environmental impacts of energy development.

We are now in the process of verifying the accuracy of facts and interpretations contained in the cases. Please let us know if there are any errors of fact in the attached case, or if you disagree with any interpretations we have made. Because our deadline is rapidly approaching, we would appreciate hearing of any problems you might have with the case within the next two weeks. Please feel free to call me collect at (617)661-1550. If we have not heard from you at the end of this period, we will assume that the case is accurate as presented.

Again, thank you very much for your help.

Sincerely,

Sarah Weinstein

Sarah Weinstein
Senior Analyst

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PROTECTION OF WILD AND SCENIC RIVERS: The Wild and Scenic Rivers Act provides for the preservation, in their free-flowing condition, of rivers with outstanding wilderness, scenic, or recreational values; protection of designated rivers extends also to their surrounding environments. When Puget Sound Power and Light Company proposed, in 1974, to construct a nuclear power plant on the Skagit River, the project was delayed because the river was being considered for inclusion in the National Wild and Scenic River System. The river was later formally designated, and modifications were made to the power plant project to make it conform to the objectives of the Act.

FACILITY: SKAGIT NUCLEAR POWER PROJECT, Skagit County, Washington.

OWNERS: PUGET SOUND POWER AND LIGHT COMPANY, PACITY POWER AND LIGHT COMPANY, WASHINGTON WATER POWER COMPANY, and the WASHINGTON PUBLIC POWER SUPPLY COMPANY.

DISCUSSION: The Wild and Scenic Rivers Act protects designated rivers by imposing case-by-case restrictions on development. Rivers are added to the Wild and Scenic Rivers System after Congressional nomination and following a positive recommendation by either the National Parks Service or the U.S. Forest Service. Rivers under study are designated as "wild," "scenic," or "recreational," according to the degree they were developed when included in the system; wild rivers tolerate the least additional development, recreational rivers the most.

In 1974, Puget Sound Power and Light proposed to build two 1,288 MW nuclear units on the Skagit River, which flows through the northwest corner of Washington in the area between Puget Sound and the Cascade Mountains. This river was then under study for inclusion in the Wild and Scenic Rivers System because of its recreational values. The proposed plant site was 1,500 acres of forest lands and open meadow, much of which already had campsites, beaches, boat launches, and other recreational facilities. In 1975, the Forest Service found that 166.3 miles of the river qualified for designation, and in 1978, all but eight acres (which were set aside for a flood control project) were designated.

Following designation, the Nuclear Regulatory Commission asked the Agriculture Department, which administers the Wild and Scenic Rivers Act in this case, for a finding on the project's potential impacts. Their study found the major impacts to be (1) the visibility from the river banks of a 20 foot high pumphouse needed to draw reactor cooling water (which would be stored underground in caissons), (2) noise from the pumphouse, which would be a barely noticeable 16 dB(A) at the banks, but 40 dB(A) at the site, (3) more than half a mile of proposed additional riprap for stabilizing the river banks, which would not only be visible, but would also interfere with the river's free flow, and (4) a fish hatchery, proposed as part of the project, which might cause unwanted interbreeding between native and hatchery stocks.

In response to these impacts, the company revised its plans. It addressed the pumphouse visibility and noise problems by moving the structures inland, lowering their profile down to 9-13 feet, and screening them with plants and architectural barriers. It agreed not to construct any new riprap (although repairs to parts of the existing 2 miles of riprap would be allowed). And it agreed to operate the fish-rearing facility in conjunction with the State Departments of Fisheries and Game under the direction of professional biologists. In May of 1979, the Secretary of Agriculture accepted this proposal, requiring it as a condition to any Nuclear Regulatory Commission license.

SOURCES: Supplement to Final Environmental Statement Related to Construction of Skagit Nuclear Power Project, Units 1 and 2, U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, April 1974; Douglas Shenkyr, Staff Specialist, Land Management Planning, U.S. Forest Service, Department of Agriculture, P.O. Box 2417, Washington, D.C. Paul Leech, Senior Environmental Project Manager for Skagit Nuclear Power Project, Office of Nuclear Reactor Regulation, Division of State Safety and Environmental Analysis, Nuclear Regulatory Commission, Washington, D.C. 20555, (202)443-6990. Ben Burton, Associate Engineer, Puget Sound Power and Light Company, Nuclear Licensing and Safety, Puget Power Building, Commerce Building, Bellevue, Washington, 98008, 206-454-6363.