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STATEMENT OF
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BEFORE THE
SUBCOMMITTEE ON GENERAL OVERSIGHT,
NORTHWEST POWER, AND FOREST MANAGEMENT
HOUSE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS
ON
HYDROELECTRIC DEVELOPMENT AT FEDERAL
FACILITIES IN THE PACIFIC NORTHWEST

Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to testify today on the development of hydroelectric and federal water projects in the Pacific Northwest. My statement this morning will focus on three broad policy issues:

- should the Bonneville Power Administration (Bonneville) and/or the Northwest Power Planning Council (Council) approve Corps of Engineers (Corps) and Bureau of Reclamation (Bureau) hydroelectric projects in the Pacific Northwest prior to their development?,
- should Bonneville be required to repay irrigation project construction costs from its power sales revenues?, and
- should the Bureau and the Corps allow private parties to develop power producing facilities at federal projects?

My statement today is not intended to resolve these issues, but rather to summarize past GAO work related to these issues.

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In addition, as you requested, I will summarize our work examining the Elk Creek dam and reservoir proposed for construction by the Corps in southern Oregon.

APPROVAL OF HYDRO-
ELECTRIC DEVELOPMENT

Concerning whether Bonneville and the Council should approve Corps and Bureau projects prior to their development, it is clear that Bonneville and the Council are in a position to know how new projects would fit into northwest regional power needs. Bonneville currently obtains the vast majority of its power from Corps and Bureau hydroelectric projects in the region. Bonneville is responsible for marketing the power from these projects and is required to repay to the Treasury the federal capital investment in the facilities. Historically, approval for the development of federal hydroelectric projects has been reserved for the Congress and has been carried out through the authorization and appropriations process on a project-by-project basis.

In 1980, the Congress enacted the Pacific Northwest Electric Power Planning and Conservation Act (P.L.96-501) (Northwest Power Act). A major purpose of this act is to provide an infrastructure for the orderly planning and development of electric power resources in the region. Under the act, the Council is charged with developing a 20-year regional power plan which forecasts future electric power needs and provides a strategy for acquiring the most cost effective mix of resources to meet those needs. The act provides for public involvement in the power planning process, and sets priorities for acquiring various types of resources. The act also requires the Council to include in the plan a program for the protection and enhancement of the region's fish and wildlife resources which have been seriously damaged by hydroelectric development in the region.

In its draft 1985 regional power plan the Council includes 255 megawatts of additional hydropower development in its 20-year resource development strategy. All of this power is assumed to come from either adding power generating facilities to existing nonpower producing water projects or from the expansion of facilities at existing hydropower projects. The plan projects that if the future growth in electricity use is high, the additional power would be needed around 1993. If the growth in use is low the plan does not project the need for this power through the year 2005. According to the Council's draft plan, any further hydropower development to be included in its plan will be based on the results of its ongoing Hydropower Data Base and its Hydropower Assessment Study.

The Northwest Power Act generally provides that Bonneville acquire resources to meet its power supply obligations consistent with the Council's plan. If instructed by the Congress, however, Bonneville must market power produced by Corps and Bureau projects regardless of their consistency with the plan. While Congress has retained the final approval authority for Corps and Bureau projects in the Pacific Northwest, it would--in our view--be reasonable to have the Council and Bonneville review and provide comments to the Congress on the projects' consistency with the regional power plan and fish and wildlife program required by the Northwest Power Act prior to a Congressional decision on appropriating funds for the project. This could be accomplished by the Council discussing the consistency of proposed Bureau and Corps hydroelectric projects in its power plan or by Bonneville and the Council providing their views directly to the Congress when Congress is considering specific projects for funding.

IRRIGATION ASSISTANCE

Turning now to the repayment of irrigation projects, the federal government, primarily through the Bureau, has been responsible for the development of irrigation projects in the Pacific Northwest. Many of these projects are multi-use facilities providing not only irrigation water but also power, flood control, and better navigation.

In a recent report¹ we discussed the recovery of federal irrigation project construction costs through revenues from federal power sales. This practice is referred to as irrigation assistance. In summary, we reported that under the Reclamation Project Act of 1939 (P.L.76-260), the Congress authorized the Secretary of the Interior to undertake projects to provide water not only for irrigation but also for other purposes such as flood control and the generation of power. The act provides that project construction costs associated with the various purposes of such projects were to be recovered from the parties receiving the benefits.

The Reclamation Project Act of 1939 is silent on the issue of irrigation assistance and consequently in our view does not authorize it. However, the specific legislation authorizing a substantial number of individual projects either requires or allows irrigation assistance. We found this to be the case both for projects where power is an authorized purpose as well as for projects where power generation is not an authorized purpose.

¹Recovering a Portion of Federal Irrigation Project Construction Costs Through Revenues From Department of Energy Electric Power Sales (GAO/RCED-85-128, July 26, 1985).

With respect to irrigation projects in the Pacific Northwest, Bureau documents indicate that about \$2.7 billion in irrigation assistance is to be provided from revenues received by Bonneville from federal power sales. Of this total, about \$750 million represents assistance to projects either completed or under construction. The first payment on this debt is scheduled for fiscal year 1997. The remainder of the \$2.7 billion is associated with projects which have either not been started or are suspended. We also noted in our July 1985 report that the Congress, in 1966 legislation, provided for irrigation assistance for any Pacific Northwest project authorized under the reclamation laws after 1966 (P.L. 89-448); but established limitations on Bonneville's authority to provide that assistance (P.L. 89-561).

Concerning whether Bonneville should be required to pay irrigation assistance for a project which produces no power, in many instances the Congress has authorized irrigation assistance for such projects when the costs allocated to the irrigation purpose of a project were found to be beyond the irrigators' ability to pay. In such cases, the Congress has required that Bonneville recover that portion of irrigation costs from power sales revenues.

PRIVATE DEVELOPMENT OF POWER AT FEDERAL PROJECTS

With respect to whether the Bureau and Corps should allow private parties to develop power facilities at federal projects, we stated in a 1980 report,² that before a private party can develop power resources at a federal water project, it must first obtain a license from the Federal Energy Regulatory Commission.

²Non-Federal Development Of Hydroelectric Resources At Federal Dams--Need To Establish A Clear Federal Policy (EMD-80-122, September 26, 1980).

It is our current understanding that the Commission will not issue such a license in cases where power development is a congressionally authorized purpose at the federal project.

Before issuing a license for hydropower development at a federal project where power is not an authorized purpose, the Commission reviews and incorporates into the license, appropriate comments from the Bureau and the Corps. Among other things, such comments could address possible conflicts which may arise in the operation of the project between meeting the project's original purposes--such as flood control and/or irrigation--and the generation of power. According to Bureau policy, such conflicts could also be resolved through a memorandum of understanding between the Bureau and the nonfederal power developer.

The Commission also determines the fees the developer will have to pay for the costs of the federal project at which the power generating facilities are installed. For Bureau projects, the Reclamation Project Act of 1939 specifically requires repayment of joint use costs which can be allocated to power. This is consistent with Corps criteria for supporting nonfederal development.

In 1980, we recommended that the Bureau and the Corps encourage nonfederal development of hydropower at federal water projects by fully cooperating with nonfederal developers and the Commission because this would develop the power production capability more quickly and would not entail large federal outlays. With respect to private power development in the Pacific Northwest, the Northwest Power Act requires the Commission to consider the Council's fish and wildlife program in making its licensing decisions. In addition, it appears to us that decisions by the Commission to license private hydropower development should

also consider any comments of Bonneville and the Council with regard to the consistency of such development with the regional power plan developed pursuant to the Northwest Power Act.

STATUS OF THE ELK CREEK
DAM AND RESERVOIR

Finally, you asked that we summarize our past work examining the Elk Creek dam and reservoir. In 1982 we reviewed, at your request³, the Corps' Elk Creek dam and reservoir benefit-cost study. As you know, Elk Creek was one part of the Corps' three dam Rogue River Basin project in Oregon approved by the Congress in 1962. The other two dams, Lost Creek and Applegate, were completed in 1977 and 1980, respectively. While some construction-related activities have occurred on Elk Creek, dam construction has not begun. As you know, \$15 million has been appropriated in fiscal year 1985 supplemental appropriations for dam construction.

For its fiscal year 1982 budget, the Corps estimated a benefit-cost ratio of 1.15 to 1 for Elk Creek. While we did not attempt to recompute the benefit-cost ratio in our 1982 review, we examined the Corps benefit and cost calculations for each of Elk Creek's purposes. As a result of our work, we questioned about 76 percent of the total annual benefits estimated by the Corps. Our primary concern centered on the Corps' calculation of flood control benefits which represented about two-thirds of the total estimated benefits for Elk Creek. More specifically, we disagreed with the Corps use of a 3.7 percent annual growth rate⁴ in

³Corps of Engineers Should Reevaluate the Elk Creek Project's Benefits and Costs (CED-82-53, March 15, 1982).

⁴The growth rate is a composite of the population growth in the affected area and the increased value (in constant dollars) of property.

calculating flood control benefits when Corps' regulations required use of rates based on Bureau of Census data; at that time 2.8 percent. This was a significant difference in that a 0.1 percent growth rate reduction results in a 7 percent benefit reduction.

In addition, in assessing flood control benefits, the Corps used a systems approach which involved calculating an accumulated benefit from the three dams in the Rogue River Project and then distributing that benefit to each of the three dams according to each's flood storage capability. This approach was used because the Congress authorized Elk Creek as part of a three dam system in 1962. We believed that calculating flood control benefits on an incremental approach, whereby benefits attributable to Elk Creek would be only those that Elk Creek adds to the existing system, would be appropriate because the other two dams in the Rogue River project were in operation at the time the benefit/cost analysis was done. We stated that using an incremental approach would result in a 30-percent reduction in the flood control benefits estimated by the Corps. Because of the above and other concerns, we recommended that the Corps reevaluate Elk Creek's economic feasibility.

In February 1984 the Corps completed a reevaluation of the benefits and costs of Elk Creek. The Corps' reevaluation showed that Elk Creek was economically feasible using a systems approach of calculating total benefits and costs but was not economically feasible using a incremental approach.

In preparing for these hearings we briefly examined the results of the Corps' 1984 reevaluation, in particular, the flood control benefits calculated by the Corps. We noted that the Corps continued to use 3.7 percent annual growth rate in its flood control benefit calculation--as it had done in its 1982 evaluation--and that the Corps continues to support the systems

approach in calculating the benefits and costs of Elk Creek. Based on this limited review, it appears that the Corps did not adjust its flood control benefit calculation to resolve the questions we raised in our 1982 report.

In another matter with regard to Elk Creek, you asked us to address whether or not Bonneville would be authorized to provide irrigation assistance. The Rogue River Project, of which Elk Creek is a part, was authorized by the Flood Control Act of 1962 (P.L.87-874) "substantially in accordance with the recommendations of the Chief of Engineers" contained in an accompanying House document. With respect to irrigation assistance, the House document indicated that irrigation costs beyond the irrigators' ability to pay would have to be assigned for repayment from the power revenues of "some federal source," but that special Congressional authorization would be required to permit such financial assistance.

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In summary Mr. Chairman, we believe that both federal and nonfederal hydroelectric development in the Pacific Northwest should be viewed in light of their consistency with the regional power plan and fish and wildlife program developed under the requirements of the Northwest Power Act. Since Bonneville and the Council are involved in planning and marketing the regions power resources, they are appropriate entities for commenting on these matters. In regards to Bonneville providing irrigation assistance from power revenues, the Congress has decided for which projects assistance is appropriate. Legally, Bonneville must meet the repayment obligations for those projects.

That concludes my prepared statement. I will be happy to respond to any questions the Subcommittee may have.

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