110111J

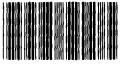


COMPTROLLER GENERAL OF THE UNITED STATES WASHINGTON, D.G. 20148

October 29, 1980

B-114858

The Honorable John D. Dingell
Chairman, Subcommittee on Energy
and Power
Committee on Interstate and Foreign
Commerce
House of Representatives



113753

Dear Mr. Chairman:

Subject: [Comments on Pacific Northwest Electric Power Planning and Conservation Act - H.R. 8157] (EMD-81-28)

Your recent request asked us to comment on the Pacific Northwest Electric Power Planning and Conservation Act (H.R. 8157) which is the substitute bill introduced on September 18, 1980 for consideration on the House floor. We previously reviewed certain aspects of an earlier version of this legislation for you and issued a report on our findings. 1/ Also, during the last 2 years at the request of other congressmen and under our statutory authority we have reported on a variety of matters related to electric power development in the Pacific Northwest. (See enc. I.)

H.R. 8157, among other things, broadens the Bonneville Power Administration's current authorities to market power from the Federal power system to include authority to encourage conservation and acquire additional power from conventional, renewable, and other resources. It also provides for the protection, mitigation, and enhancement of fish and wildlife resources.

Time limitations and the complexity of the proposed legislation precluded a detailed review of its 103 pages. We evaluated the bill in terms of how it responds in general to the major points raised in our previous reports. Our previous work addressed the need to improve regional power planning, update the charter of the Bonneville Power Administration, control the costs of large conventional power-plants, assure industrial conservation of electricity, and

512758

(005224)

^{1/&}quot;Impacts and Implications of the Pacific Northwest Power Bill," EMD-79-105, Sept. 4, 1979.

restore the region's anadromous fisheries. Based on our reading of the bill and discussions with knowledgeable Bonneville officials, the comments presented herein show how H.R. 8157 responds to the intent of our previous recommendations. Our comments recognize the fact that the bill grants Bonneville and the proposed regional planning council sufficient discretionary authority to carry out many of the recommendations made in our earlier reports.

REPRESENTATIVE POWER PLANNING BODY

Section 4 of the bill provides for a council (a Pacific Northwest Electric Power and Conservation Planning Council) composed of two appointed members from each of the States of Idaho, Oregon, Montana, and Washington. The responsibilities of the council include promptly preparing and adopting (1) a regional conservation and electric power plan, and (2) a program to protect, mitigate, and enhance fish and wildlife.

The council's responsibilities include preparing a demand forecast, planning to meet that demand, and assuring adequate public participation in the planning process. This is consistent with our previous recommendations.

ELECTRICITY MANAGEMENT PLAN FOR THE REGION

The regional conservation and electric power plan to be prepared by the planning council under section 4 is consistent with the recommendations we have made to develop a comprehensive electricity management plan for the region. The principal components of the plan--including a long-term demand forecast, an energy conservation program, projections of power needs which can be met by various energy sources, and a requirement for public hearings in each State prior to adoption of the plan--are appropriate and necessary. The planning priorities in section 4(e)(1) emphasizing cost-effective conservation, renewable resources, and utilization of waste heat, together with the working definition of "cost-effective" provided in section 3(4), parallel our previous recommendations and should help the region balance power supply and demand at the least cost to consumers.

Section 4(h)(12) requires the regional planning council to submit a detailed annual report to specified committees of the Congress describing all actions taken and planned by the council under the Act. We support this requirement. In

addition, section 4(h)(l2)(B) requires the Administrator to keep congressional committees informed of his actions under the bill. We support this requirement and believe Bonneville's annual report should include comments on the agency's progress in implementing the regional conservation and electric power plan developed by the council.

RECHARTERING BONNEVILLE TO EMPHASIZE NEW ENERGY PRIORITIES

H.R. 8157 is consistent with our recommendations that Bonneville be charged with the responsibility for working with State and regional interests to conserve electric power, develop renewable energy sources, and increase public involvement in power planning and policymaking. The legislation, section 4(d)(2), would direct Bonneville to emphasize energy conservation and renewable resources because it requires Bonneville's resource acquisition activities to be consistent with the plan adopted by the regional planning council. This requirement will assure that the council's planning priorities—first, conservation; second, renewable energy resources; third, waste heat utilization; and finally, conventional powerplants—will become Bonneville's priorities in acquiring resources to meet regional power needs.

In addition, section 4(g)(l) of the bill provides that, to ensure widespread public involvement in formulation of power policies, the regional planning council and the Bonneville Administrator will maintain comprehensive programs to inform the public of major regional power issues, obtain public views, and encourage the participation of Federal agencies, State entities, political subdivisions, and Indian tribes.

PRICING OF ELECTRICITY

We previously recommended that Bonneville price the electric power it sells so as to show its real value in today's market. We made this recommendation because Bonneville, like most utilities, sells its power at a melded rate based on historical costs. Under the melded pricing approach used by Bonneville, the high costs of new thermal powerplants are merged with the low costs of older hydropower plants and its customers are charged average rates which tend to understate the costs of new power supplies.

While H.R. 8157 does not direct that Bonneville or its customer utilities to use specific rate structures or billing practices to show consumers the cost of new power supplies,

it does include many provisions which could ultimately lead to rate reforms.) Section 7(e) provides that nothing in the bill prohibits Bonneville's Administrator from establishing peak power rates, time-of-day or seasonal rates, or other rate forms. Further, and more importantly, H.R. 8157 provides a comprehensive set of incentives which could motivate regional utilities to establish voluntarily retail rates encouraging conservation and renewable energy developments.

In section 6(h) the bill authorizes Bonneville's Administrator to grant billing credits for retail rate structures which regional utilities voluntarily implement and which induce conservation or consumer-owned renewable resources. The billing credits so authorized will be equivalent to the cost savings realized by the Administrator as a result of the revised rate structures. This incentive is supported by section 9 of the bill which provides that the regional planning council will prepare, as soon as practical a report and recommendations on various retail rate designs which will encourage cost-effective conservation and consumer-owned renewable resources. Furthermore, section 9(j) authorizes Bonneville's Administrator to (1) assist his customer utilities in analyzing and developing such retail rate structures and (2) estimate for his customers the billing credits they might realize by adopting such rates.

H.R. 8157 contains an array of incentives for Bonneville's customer utilities to establish voluntarily rate structures which will encourage conservation and renewable energy developments by their consumers. These efforts are consistent with the intent of our earlier recommendations.

BONNEVILLE BACKING FOR CON-VENTIONAL THERMAL POWERPLANTS

In previous reports and testimony we concluded that Bonne-ville should be authorized to participate financially in the construction of conventional thermal powerplants only when there is a clear showing that (1) conventional thermal plants are the region's most cost-effective alternative, (2) the region needs more conventional powerplants than those already-approved for construction, and (3) regional utilities are incapable of meeting this need without Bonneville sponsorship.

Our review of H.R. 8157 indicates that the planning and review requirements in sections 4, 6, 9, and 10 include regional demand forecasting, cost-effective resource planning, planning criteria emphasizing conservation and renewable resources, and comprehensive reviews prerequisite to major re-

source acquisitions. / The resource priorities established in section 4 would assure that cost-effective conservation and renewable resources would be pursued before thermal powerplants./ Similarly, the planning requirements for a regional demand forecast and a resource acquisition plan will enable the planning council to determine whether the region needs more conventional thermal powerplants than those already approved for construction. Thus, the bill authorizes Bonneville to financially participate in conventional powerplants, but only when there is a clear showing that such resources are needed, cost-effective, and appropriate for acquisition. Furthermore, sections 4, 6, 9, and 10 collectively establish a comprehensive set of administrative and judicial procedures to test and validate the propriety of major resource acquisitions consistent with the purposes of the bill. Such procedures include comprehensive public involvement processes for both Bonneville and the council, which include notices, hearings and record development. In addition, there are a number of other review and reporting responsibilities for informing the public and the Congress of proposed acquisition actions and provisions for subsequent judicial review. We support these requirements.

CONTROLLING FINANCIAL RISKS ON LARGE POWERPLANTS

In a previous report we recommended that if the Congress grants Bonneville authority to finance construction of large conventional powerplants, the financial risks to which Bonneville's customers are exposed should be reduced by

- --requiring that Bonneville's contracting and oversight capabilities be strengthened before such authority is exercised, and
- --limiting (1) the extent to which Bonneville can participate in constructing large powerplants, and (2) the construction costs which Bonneville can pass on to its customers.

We made these recommendations because, at the time of our review, Bonneville was not adequately prepared to construct or oversee construction of large generating facilities.

H.R. 8157 provides that Bonneville, according to the prescribed resource planning criteria, will develop conservation, renewable energy resources, and waste heat utiliza-

tion before participating in conventional coal-fired or nuclear powerplants. The bill also provides that Bonne-ville can agree to purchase the actual or planned capability of generating facilities, but cannot construct or own any electric generating facility. Thus, Bonneville can be a sponsor/purchaser, but not a builder/operator; i.e., it will never have direct control over powerplant construction and operation. Bonneville will only have such indirect control over the cost and schedule of plant construction, and the efficiency of plant operation/maintenance, as is provided in its contracts with the regional interests who build and operate such facilities.

We reviewed H.R. 8157 to determine whether the amended bill requires Bonneville to contract for the generating capability of large powerplants in a prudent, risk-reducing manner. The bill provides in section 6(i) that Bonneville's contracts for the acquisition of resources will contain terms and provisions which should ensure

- --timely construction, scheduling, completion, and
 operation of resources;
- --costs of acquisition which are as low as reasonably possible; and
- --effective oversight, inspection, audit, and review of all aspects of such construction and operation.

Section 6(i) also requires contract provisions that assure the Administrator has (1) authority to approve all costs and proposals for major modifications in construction, scheduling, or operations, and (2) such current information as he considers necessary to evaluate construction and operation. Our review of these provisions indicates that H.R. 8157 clearly intends Bonneville to contract in a prudent manner and to exercise as much control over the construction and operation of the powerplants it sponsors as is feasible.

BONNEVILLE SALES TO DIRECT SERVICE INDUSTRIAL CUSTOMERS

We earlier recommended that the regional power bill be amended to assure that Bonneville's direct service industrial customers would modernize their plants to meet commercial standards for production efficiency. H.R. 8157 contains provisions encouraging industrial efficiency and we support them.

Section 4(e) provides that the regional planning council will undertake studies of conservation measures available to Bonneville's direct service industrial customers and other major consumers of electric power within the region, and estimate the reduction in energy use which would result from the implementation of such measures. Section 4(f) provides that model conservation standards will be included in the regional conservation and electric power plan and that Bonneville's Administrator, if recommended by the regional council, may impose a surcharge on customers who have not achieved energy savings comparable to those obtainable under the model conservation standards.

We also recommended that Bonneville be required to undertake a thorough analysis to determine the most cost-effective means of providing system reserves and the value of such reserves. This recommendation resulted from our findings that Bonneville had conducted no comprehensive studies to determine whether interrupting industrial power deliveries is the best means of providing system reserves. The study we recommended has been incorporated as a planning requirement in H.R. 8157. Section 4(e) provides that the regional conservation and electric power plan will include "an analysis of reserve and reliability requirements and cost-effective methods of providing reserves designed to ensure adequate electric power at the lowest probable cost."

RESTORATION OF COLUMBIA SYSTEM ANADROMOUS FISHERIES

We reported earlier that the development of hydropower facilities in the Columbia River System was a major
factor in the decline of some salmon and steelhead runs to
a point of near extinction. We pointed out that the regional
power bill could be an effective vehicle for restoring these
anadromous fisheries. We recommended that the legislation be
amended to

- --modify existing dams to effectively reduce the mortality of migrating juvenile salmon and steelhead;
- --consolidate the fragmented support of anadromous fisheries into one Federal/State/Indian council funded from power resources with planning and policymaking responsibilities for fisheries restoration;
- --establish minimum stream flows-on the main-stream Columbia River system adequate to protect and enhance the anadromous salmon and steelhead fisheries;

--require a report to the Congress on actions needed to consolidate and make more effective the efforts of the many Federal agencies relating to the region's anadromous fisheries.

These recommendations are incorporated in the bill. Section 4(h) provides that the regional planning council will promptly develop and adopt, and Federal agencies will implement, a program to protect, mitigate, and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries. The program will be developed after recommendations are received from Federal agencies and from the region's State fish and wildlife agencies, and appropriate Indian tribes, on actions which can be taken to enhance fish and wildlife. Such recommendations by these and other groups and the subsequent plan prepared by the council could help consolidate the fragmented actions of the various fishery agencies. Based on the recommendations, the council will then develop the program which will include

- --improved survival of such fish at hydroelectric facilities located on the Columbia River system, and
- --flows of sufficient quality and quantity between such facilities to improve production, migration, and survival of such fish as necessary to meet sound biological objectives.

H.R. 8157 further provides that consumers of electric power will bear the cost of measures designed to deal with adverse impacts caused by the development and operation of electric power facilities and programs. In addition, the regional planning council is required to submit a detailed annual report to the interested committees of the Congress on actions taken and to be taken by the council and on the effectiveness of the fish and wildlife restoration.

SUMMARY

Our brief review showed H.R. 8157 to be a substantial improvement over H.R. 3508, which we reviewed for you-in the summer of 1979. (H.R. 8157 provides for planning mechanisms, resource priorities, conservation incentives, public involvement goals, and fisheries enhancement provisions which are consistent with the intent of our previous recommendations. Furthermore, we believe that discretionary

authority granted to Bonneville and the regional planning council, along with the appropriate staff capability, can help to carry out our earlier recommendations.

Sincerely yours,

Comptroller General of the United States

Enclosure

BIBLIOGRAPHY OF GAO REPORTS

ON NORTHWEST POWER ISSUES

- Report to the Congress, "Region at the Crossroads--The Pacific Northwest Searches for New Sources of Electric Energy," EMD-78-76, Aug. 10, 1978.
- Letter Report to Congressman Max Baucus, "GAO comments on H.R. 13931, the Pacific Northwest Electric Power Planning and Conservation Act," EMD-79-4, Oct. 26, 1978.
- Report to Congressman James H. Weaver, "Analysis of Estimated Cost for Three Pacific Northwest Nuclear Power Plants," EMD-79-95, July 30, 1979.
- Letter Report to Congressman James H. Weaver, "Review to Determine if Issue Papers Issued by the Bonneville Power Administration Correctly Presented and Adequately Responded to the Recommendations made in the GAO Report to the Congress, EMD-78-76, Aug. 10, 1978," EMD-79-96, July 30, 1979.
- Report to the Chairman, Subcommittee on Energy and Power, Committee on Interstate and Foreign Commerce, "Impacts and Implications of the Pacific Northwest Power Bill," EMD-79-105, Sept. 4, 1979.
- Report to Senator Max Baucus, "Montana's Libby Dam Project: More Study Needed Before Adding Generators and a Reregulating Dam," EMD-80-25, Nov. 20, 1979.
- Letter Report to the Chairman of the Subcommittee on Energy and Power, Committee on Interstate and Foreign Commerce, "Alignment of Recommendations in EMD-79-105 with Senate Bill 885," EMD-80-35, Jan. 2, 1980.
- Letter Report to the Congressman Pat Williams, "Review of Peaking Power in the Pacific Northwest," EMD-80-46, Jan. 4, 1980.
- Letter Report to the Congressman James H. Weaver, "Administrative Feasibility of the Two-Tiered Pricing by the Bonneville Power Administration," EMD-80-57, Feb. 6, 1980.
- Letter Report to Congressman James H. Weaver, "Hypothetical Transfer of Construction Funds from Nuclear Powerplants to Electricity Conservation and Renewable Energies," EMD-80-71, Apr. 4, 1980.
- Report to Charles W. Duncan, Jr., Secretary of Energy, "Oil Savings from Greater Intertie Capacity Between the Pacific Northwest and California," EMD-80-100, Sept. 24, 1980.