Department of Energy
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

OFFICE OF THE ADMINISTRATOR

In reply refer to:

December 1, 1980

To All Our Customers and
Other Interested Parties

The new Pacific Northwest Electric Power Planning and Conservation Act directs BPA to keep its customers and the public informed and to consult with them relative to decisions made and actions taken under the Act.

We therefore are enclosing three documents for your information and taking this opportunity to advise you of some forthcoming meetings at which we will be seeking views.

One of the documents is a basic summary of the Act. Another is a series of Questions and Answers relative to the Act. The third is a summary of tasks which BPA has begun or shortly will undertake to implement the Act. If you have any questions or comments concerning these documents, please contact you local BPA office or our Public Involvement Coordinator. The coordinator may be called toll free at the "800" telephone number listed on the attached sheet which also contains the names, addresses and telephone numbers of our Area and District offices.

We have scheduled four technical meetings in Portland, December 10, 11, 16, and 18, for investor-owned utilities, direct-service industrial customers, preference customers and environmental and consumer organizations, respectively.

In January there will be a series of Town Hall-type public meetings at many locations throughout the region. The dates, times and places will be announced as soon as possible.

At all these meetings, as well as others to be scheduled in the future, the new Act and steps to implement it will be explained and comments will be sought. There are actions which the Act directs BPA to undertake even before the initial regional power plan is adopted by the regional planning council established by the Act. The magnitude of the power problems facing our region and the nature of the decisions to be made require that we have the benefit of all points of view. Thank you for your interest.

Sincerely,

Sterling Munro
Administrator

4 Enclosures

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Pacific Northwest
Electric Power Planning
& Conservation Act

A Summary

Bonneville Power Administration
U.S. Department of Energy

Contents

Introduction

The Pacific Northwest Electric Power Planning and Conservation Act will help the Pacific Northwest achieve an adequate power supply, hold utility rates lower than they would otherwise be and place maximum reliance on conservation and renewable sources of energy in responding to growing demand for electricity.

The new Act provides the planning and financial tools to deal with these matters more effectively than they can be dealt with under existing power supply arrangements.

The region's hydro resources are no longer sufficient to meet all the electric power needs of the region as they once did. The thermal plants counted on to supplement the region's hydropower resources are running, typically, five years or more behind construction schedules, leaving potential deficits of 2,000 to 4,000 average megawatts in any year of the 1980's when streamflows happen to dip near the lowest level of record. That's enough power to supply the annual needs of two to four cities the size of Seattle. And streamflows have been near record lows in 1973, 1977, and 1979.

This fact sheet opens with a brief history of the development of the region's hydroelectric system, and outlines the evolving problems which led to adoption of the Act. Following the history is an explanation of major provisions of the Act.

Background

The development of the Columbia River system in the Pacific Northwest began in the 1930's under a program of regional cooperation to meet the needs of electric power production, land reclamation, flood control, navigation, recreation and other river uses.

From the beginning, the Federal Government has played a major role in the development of one of the largest multiple-use river systems in the world. Thirty multi-purpose dams on the Columbia River and its tributaries were built by the U.S. Army Corps of Engineers and the Bureau of Reclamation (now the Water and Power Resources Service). Investor-owned and publicly owned utilities also built a major system of dams and generating facilities. Congress directed the Bonneville Power Administration in the Bonneville Project Act of 1937 to build and operate transmission lines to deliver the power from dams, and to market electricity from Federal generating projects on the river at rates set only high enough to repay the Federal investment over a reasonable period of time.

As demand for power grew, the U.S. and Canadian governments recognized a need for development of dam sites in Canada. The governments of both nations negotiated a treaty in the early 1960's for the cooperative use of dams built by Canada on the upper reaches of the river. The three treaty dams, all completed by 1973, provide flood control downstream as well as reservoir storage for production of additional power at the U.S. dams downstream. By 1980 the treaty dams had enabled U.S. downstream dams to generate enough electricity for a city the size of Seattle for 15 years.

Also in the 1960's, Congress authorized the construction of three major powerlines linking the Columbia River hydro projects with power markets in California and the rest of the Pacific Southwest. The interties benefit the Pacific Northwest in several ways. Two major ways are to allow the sale of hydropower from the Columbia when it is not needed here and would otherwise be lost in the form of water spilled over dams without generating electricity and to permit this region to buy power from California when it is needed here during shortages and periods of heavy use. In the first instance, sales of surplus Northwest hydropower to California have saved some 200 million barrels of oil. In the second case, California utilities sold power to Pacific Northwest utilities in the drought years of 1973, 1977, and 1979.

With the dams developed in Canada as well as the United States, the river system provided virtually all the electricity needed by the region until the early 1970's. But by that time, all dam sites on the main stem of the Columbia that were economically feasible and environmentally acceptable were either developed or under development, and the region was looking for other ways to meet electric load growth. Shortages of electricity threatened the region unless thermal generating plants were brought on line in response to increasing demand.

The region's publicly owned utilities and investor-owned utilities turned mainly to coal-fired and nuclear plants to meet growth throughout the Pacific Northwest. Development of such plants was considered the most economic and environmentally acceptable option available at the time. Bonneville helped the utilities respond to these needs by participating in a Hydro-Thermal Power Plan for the continued development of electricity resources in the Pacific Northwest.

Under the plan, BPA agreed to acquire electricity by entering into "net billing" agreements with its publicly owned utility customers. These agreements made it possible for the publicly owned utilities which owned shares to sell to BPA all or part of the generating capacity of thermal projects. BPA credited, and continues to credit, the wholesale power bills of these utilities amounts sufficient to cover the costs of their shares in these plants. BPA then sells the output of these plants, melding the higher costs of this thermal power with the lower costs of hydropower, for the benefit of all customers. The plants were cooperative efforts of both publicly owned and investor-owned utilities, but BPA purchased only the shares of generating capacity owned by publicly owned utilities.

Under the Hydro-Thermal Power Plan (Phase I), Pacific Power & Light Co. and other investor-owned utilities built the Centralia coal-fired plant with the co-ownership of several publicly owned utilities. Portland General Electric Co. built the Trojan nuclear powerplant, with 30-percent co-ownership by Eugene Water and Electric Board (EWEB) covered by a net billing agreement. And the Washington Public Power Supply System (WPPSS), under net-billing agreements, is building three nuclear plants in Washington state, one of which is co-owned with four investor-owned utilities. The Hanford N-reactor turbine generator, built by WPPSS, also came on line just prior to the formal initiation of the Hydro-Thermal Power Plan, and is considered a part of the overall effort. BPA became the agent for integrating these resources so the consumers of the region could benefit from the greatest efficiency and lowest costs from operation of the regional electric system.

In spite of the efforts of utilities and BPA to continue developing the region's generating resources in a systematic way, the region continued to lose ground to rapidly growing demand for electricity. The Hydro-Thermal program failed to meet the region's expectations for two basic reasons. A revision of regulations by the Internal Revenue Service denied tax exempt status to bonds sold by publicly owned utilities to finance their plants if power from the facilities was sold to BPA, a Federal body. And, BPA's financial ability to participate in net-billing agreements reached its limits far sooner than expected because of the climbing costs of new thermal plants.

In 1973, BPA and the region's utilities initiated a Hydro-Thermal program, Phase II, in which the utilities would finance their own plants without net-billing participation by BPA. Thus, WPPSS nuclear units 4 and 5, now under construction, are not covered by net-billing contracts. However, BPA expected to provide electric load management and power integration services and to supply peaking power and reserves from Federal facilities in order to bring about the most efficient mix of resources possible. BPA's participation in this program was enjoined by a Federal Court, which required that BPA complete an environmental impact statement on BPA's role in the region. Delays in the construction of new plants, costs higher than originally expected, and the realization that the Hydro-Thermal Program could not be adequate made it evident by 1973 that BPA would not be able to sell firm power to investor-owned utilities and still provide first priority to serving "preference customers" as directed by Federal law.

The Bonneville Project Act of 1937 directed that the co-ops and publicly owned utilities of the region be given first call on available Federal resources. They consequently came to be called "preference customers." Until recently, their legal preference had never been exercised, because there had been enough electricity for everyone. In 1973, when BPA's firm-power contracts with investor-owned utilities expired, BPA could not offer new ones if preference customers were to continue to have first call on Federal resources. So the firm power contracts with the investor-owned utilities were not renewed.

However, BPA continued to sell some peaking power to the private utilities—power they need to get through periods of heavy use in the winter heating season. BPA also sells "non-firm" power to the investor-owned utilities and utilities outside the region when electricity surplus to the needs of the preference customers is available.

In 1976, BPA's power demand and supply projections showed that Federal power supplies were running short for preference customers, and that BPA would no longer be able to guarantee preference customers that their load growth could be met beyond 1983. BPA issued a notice of insufficiency to the utilities.

With the investor-owned utilities relying on their own hydro and thermal resources to meet the demand of their customers, and with the prices of hydropower much lower than those of new thermal generation, a divisive struggle for access to limited Federal resources grew. Sixty percent of the residential and

farm customers of the region are served by investor-owned utilities. These customers were paying, on average, twice as much for electricity as customers of publicly owned utilities receiving wholesale power from BPA. The City of Portland sued BPA, claiming a right to a share of hydropower resources for its citizens. The State of Oregon passed a law authorizing formation of a statewide public utility—the Domestic and Rural Power Authority—to seek service as a preference customer from BPA so that all residential customers of private utilities could receive the rate benefits of Federal resources. Elected officials of other states talked of forming their own statewide public utilities.

Stimulated by rate disparities, the public power movement also experienced a renaissance. A strong public power move to buy out investor-owned utility service areas by means of elections in accordance with State law was revived in Oregon. All votes to form new PUDs failed in the November 1980 elections, but one long-inactive PUD, the Columbia Peoples Utility District just west of Portland, won voter approval for issuing bonds to buy out utility properties in Columbia County (however, the margin of passage was so narrow a recount was requested and had not been completed by the time this summary went to press). Meanwhile, planning for more resources to meet demand has been hamstrung by uncertainty over the allocation of low-cost Federal power among competing claimants, existing and new.

The pressures on an electric power supply which had seemed inexhaustible caused the residents of the Pacific Northwest to question the institutions governing the development, sale, and distribution of generating resources. Should new preference agencies be formed to replace private companies in given areas? How would the supply needs of new preference customers be met? Should private utilities undertake new generating projects in a hostile atmosphere of rapidly rising rates and the threatened shift to public power? How would large industrial customers in the region be served? Who ultimately would be responsible for planning and acquiring new resources to avoid impending electricity shortages?

The region continued to work for cooperative solution that preserved local options while obtaining regional efficiencies of an integrated electric system. Several alternatives were explored, but no agreement was reached. To avoid a court battle over allocation issues, the region turned to Congress for a solution.

Because of the extensive historical involvement of the Federal Government in the region's electric power system, Congress addressed these questions. The administrative and legal problems regarding the allocation of hydropower resources could best be answered by Congress, with the advice of all interested parties, in the law-making process.

After three years of deliberation, including many hearings in the region as well as in Washington, D.C., the Congress devised methods for protecting the preference which existing Federal law gives publicly owned utilities while at the same time providing the benefits of Federal hydropower to the residential and farm customers of private utilities.

The Act directs that Bonneville should continue its traditional role of transmitting and marketing power, but also carry out additional responsibilities. Under the Act, BPA must acquire all necessary energy resources to serve utilities who choose to apply to BPA for wholesale power supplies. The Act contains checks and balances to insure that all customers of BPA are treated equitably.

BPA remains accountable to the people of the Pacific Northwest for the actions it takes to meet the needs of residents and industry. By creating a regional planning Council consisting of two members from each of the four Northwest States to develop a regional plan, Congress provided a regional decision making system. It emphasizes local control of resource development and directs the Council and BPA to place a priority on the development of conservation and renewable resources.

Major Provisions of the Act

Here are the major provisions of the Pacific Northwest Electric Power Planning and Conservation Act:

—A regional planning Council is formed with representation from each of the States. The Council will draw up a plan for meeting the electrical needs of the region, taking into account the social and economic effects of alternative courses of action. The plan must give highest priority to cost-effective conservation, treating it as a resource preferable to all other means of responding to demand for electricity. Renewable sources of energy must be given next highest priority in the region's power planning, to the extent that they are cost-effective, ranking ahead of conventional thermal generating resources. Among thermal options, fuel-efficient methods of producing energy must be given priority.

—Bonneville Power Administration becomes responsible for meeting the loads of customers and managing the regional electrical system to achieve the purposes of the Act relating to fish, system efficiency and experimental projects. BPA must give priority to cost-effective conservation and renewable resources in meeting the region's needs. BPA may also purchase the generating capabilities of new thermal projects, but only after determination that they are required in addition to all cost-effective conservation and renewables that can be achieved or developed in time. Such projects must also be found reliable and compatible with the regional electric system. BPA will spread the benefits and the costs of resources among all of its customers through its rates.

—The supply preference and resulting price advantages to co-ops and publicly owned utilities by Federal law are protected and enhanced. BPA is given the responsibility of meeting the full future requirements of preference customers—something BPA was not previously authorized to do.

—The residential and farm customers of investor-owned utilities receive rate relief. The utilities sell to Bonneville, at the average cost of their power, an amount of electric energy equal to their residential and farm loads. Bonneville sells to them, in return, enough energy at BPA standard rates to cover these residential and farm loads. The rate advantages cannot enhance company profits, but must be passed on directly to the customers.

—Direct service industries receive new 20-year contracts for power from BPA, but at a higher price than they are paying under existing contracts. They will, in effect, pay the cost of rate relief to the residential and farm customers of investor-owned utilities during the first four years, and a substantial portion thereafter, which they agreed to do in exchange for assurances of long-term supplies.

—BPA sells electricity at a rate that reflects the melded cost of Federal hydropower and more expensive thermal resources, conservation and renewable sources of energy. The Act contains incentives, as well, to encourage conservation and renewables. BPA may credit utilities for their individual actions to implement conservation and renewables.

—The regional Council establishes a program to protect and enhance the fisheries resources of the Columbia River and to mitigate damage already done to anadromous fish. Funding for the program is to come from BPA rate revenue.

—All planning for electric resources and fish protection must involve the public. State and local control of land use and water rights is protected under the Act and the decision to allow construction of new resources is left with utilities and State siting authorities.

—The new regional Council must provide a method for balancing environmental protection and the energy needs of the region. For each new energy resource the provisions of the National Environmental Policy Act must be complied with.

How the Act Will Work

The Planning Council

The Act establishes an eight-member Pacific Northwest Planning and Conservation Council comprising two voting members representing each State—Washington, Oregon, Idaho, and Montana. Each member would serve a term of three years, although initially Governors will designate one of their two representatives to serve only two years. The Congress, convinced that regional electric energy planning should be firmly in the hands of the people of the Pacific Northwest, made the Council members officers of their respective States, and subject to removal in accordance with State laws.

The major task of the Council is to adopt a Regional Electric Power and Conservation Plan within two years of the Council's formation and to update it periodically. The plan, requirements of which are described in more detail later in this summary, must contain an energy conservation program, a 20-year power demand forecast, an analysis of which resources BPA should acquire to meet forecasted loads, recommendations for research and development, and an analysis of reserve and reliability requirements. It also must contain a program for protecting and enhancing—and mitigating the damage to—fish in the Columbia River.

The region will go through a period of transition in which the Council forms and takes up its duties. BPA must negotiate contracts with utilities and mechanisms must be established for carrying out the Act with a greater level of regional cooperation.

The plan adopted by the Council becomes the basis for BPA's actions in meeting the loads of its customers in the Pacific Northwest. Congress would still exercise budget review of all proposed BPA expenditures, just as it does now. If BPA finds it necessary to acquire resources not consistent with the plan, specific Congressional approval would be required prior to any commitment by BPA.

Appointing a Council—If for some reason the states fail to appoint a Council, or if for some reason the Council is unable to act legally as a State-appointed body, planning for the region would not come to a halt. The Act provides a fallback plan, whereby the Secretary of Energy would appoint Council members from each State to adopt the initial regional plan, which must be updatd periodically. The Act provides that if three of the four governors request the Secretary of Energy to do so, he must terminate the Federally appointed Council after the initial plan has been adopted. This would happen if a way had been found to overcome the problems that required Federal appointments in the first place, or if the governors wished to abolish the Federally appointed Council and force a new solution.

Voting—The Act sets out voting procedures designed to protect the interests of each State, while also avoiding deadlocks. For adoption of the regional energy plan—the Council's most important task—the Council must agree either by a simple majority, with at least one member from each State voting in favor of adoption, or by six votes if both members from a particular State vote "no."

Staff—The Council may appoint its own staff and request the help of personnel from Federal agencies on a reimbursable basis. The Bonneville Power Administration plans to provide technical services if requested.

Council Funding—BPA must provide funds for the Council from the Bonneville budget. The Act specifies that the total amount of funds be 0.02 mills (two one-thousandths of one cent) times the kilowatthours sold by BPA during the year to be funded, unless the Council shows the Administrator that it cannot fulfill its obligations under the spending limitation, in which event the Administrator may raise the ceiling to as much as 0.10 mills (one one-hundredth of one cent). Based on projected 1981 sales, the highest expenditures at 0.02 mills would be $1.342 million. Given projected 1981 sales, the Council would have up to $6.71 million to spend at the 0.10 mills per kilowatthour level. The money necessary to finance the operations of BPA and the Council comes from wholesale power rates, not from taxes.

Regional Planning

The Council's goal under the Act is to gather all the information necessary to draw up and adopt a blueprint for meeting the region's electrical energy needs. The body has two years to complete the task. Congress did not envision the plan as a static document—the Council may amend it from time to time, and must review its provisions at least every five years.

Public Involvement—The Act provides that the public be given opportunities to present information and views to the Council before any major decisions are made. The Council must regularly inform the public of its objectives, organization, and activities. Before adoption of the plan, the Council must hold hearings in Washington, Oregon, Idaho, and Montana, and in any other State where energy resources for the region might be located.

In formulating the plan, BPA and the Council must consult with utility customers of BPA and include their comments in the record relied on as a basis for decisions. The plan and BPA actions under it would not override State laws governing resource siting and regulation of utilities.

The Act requires public involvement in the process leading to adoption of a load growth forecast for the region, and in any decision by BPA to acquire a major resource (over 50 average megawatts of energy). The public must also be given opportunity to participate when new wholesale power rates are proposed.

The Council must maintain a comprehensive program to insure widespread public involvement in policy-making. It must inform the public of major power issues, obtain public views and solicit advice from utilities.

Planning Priorities—Congress made very clear that it expects the Council to adopt a plan which requires investment in all cost-effective conservation and renewable resources before investment in conventional resources, such as fossil-fuel and nuclear plants. The Act sets the following order of priorities: (1) conservation; (2) renewable resources; (3) resources relying on waste heat from industrial processes or on conventional fuel burned by highly efficient methods; and (4) other resources, such as coal and nuclear plants.

The Act states further that when BPA compares the costs of conservation with those of conventional generating resources, in carrying out the plan, the agency must give conservation a 10-percent advantage. For example, even if a program to save kilowatthours by weatherizing homes would cost 110 percent as much as a thermal project capable of producing those kilowatthours, BPA must choose the weatherization project. The 10-percent advantage is to be evaluated by the Council in five years to determine whether it is still needed to assure that all cost-effective conservation is indeed being achieved.

The Act requires that the plan outline ways to conserve energy throughout the region and provide new resources. The Council must make sure that residential and small business consumers are given opportunities to get involved in programs to save energy.

Essential Planning Considerations—Congress directed in the Act that in pursuing important energy goals, the Council and BPA protect the environment. In preparing a plan and carrying it out, the Council and Bonneville must examine all options in light of the following issues:

—Environment. The Act requires that the Council carefully weigh environmental impacts of proposed projects and adhere to the principles and procedures of the National Environmental Policy Act. Likewise, BPA's new authority to acquire resources does not override existing State laws pertaining to zoning and land and water management. The Congress intended that the Council and BPA in all of their decisions strike a healthy balance between the environment and energy needs.

—Fish and Wildlife. Because the question of migratory fish in the Columbia River has been before the region for many years, fish policy became an important issue when the Act was written. Congress provided the means for interested parties to help work out a plan for enhancing fish runs and wildlife dependent on the river. The Council must, in completing the regional plan, seek recommendations from Federal and State fisheries agencies and Indian tribes for a fish management program, and adopt a fish and wildlife program.

The Act directs that the recommendations be made available for public comment, and that they become the basis of the program. The program must complement activities of fish and wildlife agencies and Indian Tribes and must reflect the best available scientific knowledge for improving conditions for anadromous fish in the river. It must be consistent with the legal rights of Indian Tribes. The Council must report annually to the appropriate Congressional committees its progress and plans for carrying out the program.

—Compatibility with the Regional Energy System. The Council must consider whether proposed re-

sources are compatible with operating realities, that is, reliability, predictability and need for reserves.

The Plan Itself

Planning Elements—The Act sets forth a number of elements which must appear in the plan. They include:

—An energy conservation program. The Council must outline ways for BPA, the region's utilities, and State and local governments to establish conservation programs and assist the development of renewable energy resources. Th Act requires that the Council develop model conservation standards addressing such matters as building codes for reducing heating and cooling needs, taking into account geographic and climatic variations.

—Recommendations for research and development. The Council must identify promising technologies, and recommend to the Administrator for investment those that have the potential for being cost-effective when in full production and wide use.

—A methodology for measuring environmental costs. A given impact on the environment is sometimes given different weight by different observers. The Council must set up criteria for quantifying the physical and social costs of energy projects, to aid in the making of decisions.

—A 20-year demand forecast for the region. Completion of a forecast will involve reaching a regional consensus on matters such as regional economic growth, population and other social questions. The Council will determine the forecast methodology, but the work of the Council is not intended to supplement individual utility and local government responsibility to make their own forecasts. With 10- to 15-year lead times on the construction of major generating facilities, a good demand forecast is imperative. The forecast will include the Council's estimate of the potential of conservation and renewable resources available to meet demand.

—An analysis of cost-effective methods of providing reserves. The Council must analyze the lowest cost resources that the region might acquire to back up the primary generating capacity of the region. Reserves include not only generating resources, but also rights to restrict loads which can be relied on to meet short-duration shortages caused by scheduled or unscheduled outages of generating facilities, or longer-term shortages due to planning and construction delays. Large aluminum companies now purchase energy which provides a regional energy reserve. That is, portions of their firm power can be interrupted either to serve other customers in times of outage or when planned projects do not come on line as early as scheduled.

—Conservation surcharges. The Act contains carrot-and-stick provisions to encourage conservation. The Council may recommend surcharges as a means of inducing local governments and utilities to adopt conservation programs. The Administrator may impose the recommended surcharge if he determines that a given utility failed to achieve a level of conservation that could have been reached if model conservation standards had been followed. BPA may also reduce bills by credit to a utility which undertakes conservation measures which are not part of the BPA program. The Council would determine how to administer conservation surcharges and credits.

Monitoring Program Effectiveness—The Act directs the Council to review the conservation resources it buys and find out if they have been as cost-effective as anticipated. With this information, the Council would be able to update the conservation cost-effectiveness test it applies in the future and determine by October 1, 1987 whether the 10-percent advantage for conservation is still necessary.

Bonneville's Activities—Bonneville cannot wait until the plan is adopted to launch far-reaching conservation and renewable energy projects. BPA is directed to provide financial help as soon as possible—for local utilities and governments to institute conservation programs and to provide seed money for sponsors of renewable resources projects of up to 50 average megawatts each. The Act directs BPA to plan for and purchase as much conservation, renewable energy and generating projects as are needed to prevent electricity shortages. The agency must, however, follow the purchase priorities established by Congress. Even if BPA were to find it necessary to acquire a generating resource, the agency cannot let up in the vigorous pursuit of conservation and renewable energy projects.

The Council may formally ask BPA to take specific actions to implement the regional energy plan. Within 60 days, BPA must respond in writing as to what it intends to do to carry out the plan.

Local Control Issues—The planning requirements of the Act do not set BPA and the Council above State and local governments in the region. The law leaves in place State and local laws governing siting and the environment. The local utility has the option to act on its own and can thereby limit the need for BPA to acquire resources.

Sales of Electric Energy

The Act seeks to avert a regional legal battle over the allocation of a short supply of low-cost Federal power by providing a formula for sale of available resources and by setting up the machinery to prevent shortages.

BPA puts the financial weight of the Federal Columbia River Power System behind conservation and generating projects, thus reducing financial risks and making possible lower financing costs. The Act mandates that BPA acquire electrical resources sufficient to serve the total loads of new preference customers in the region—something BPA could not do before passage of the Act.

This is the way BPA would market power under the Act:

Preference Customers—All power sales by BPA must continue to comply with the preference clause of the Bonneville Project Act of 1937. The heart of the clause is the guarantee that public bodies have first call on available Federal power.

The Act makes it possible for BPA to serve the residential loads of private utilities without increasing the cost of power to preference customers, or diminishing Federal resources available to the preference customers.

The Act contains several layers of protection for the preference status of publicly owned utilities. One provides that sales to preference customers must not be restricted to less than the full amount of power produced by the Federal base system. So, BPA must, if necessary, terminate on five years' notice the power exchange sales from the Federal system to investor-owned utilities, if BPA anticipates an insufficiency of power supply. This enables preference customers to call on the full amount of Federal base resources if necessary. Currently, the base resources consist of all Federal hydropower, some of the power from the N-reactor at Hanford, and 30 percent of the Trojan nuclear plant's output. It also includes the power to be produced by Washington Public Power Supply System's nuclear units 1 and 2, and 70 percent of unit 3, when those plants are completed.

The pull-back provisions of Federal resources provides for protection of the preference clause by which public systems get first call on Federal power.

The Act contains a rate test insuring that the exchange agreements with investor-owned utilities or any other result of the Act will not raise the cost of power to BPA's preference customers above what it would have been without the Act. If the test shows rates are climbing higher than they would have been without the law, BPA must put a ceiling on its wholesale rates for preference customers and obtain the additional revenue it needs from other customers.

The Act also authorizes BPA to continue to sell electricity to Federal agencies in the region which depend on BPA for service.

Investor-owned Utilities—The cost benefits of Federal hydropower will be made available to residential and small farm customers of investor-owned utilities, but this must be done in ways that do not adversely affect the cost and supply protections now enjoyed by preference customers of BPA. The residential and farm customers of private utilities are now paying, on average, more than twice as much for electricity as the customers of publicly owned utilities. The primary reason for this price difference is that private utilities had to rely more heavily on thermal generating plants to supply much of their customers' needs after they lost access to Federal firm hydropower in 1973. Having access to Federal firm power again, under terms of the Act, will mean rate relief for residential and farm customers of investor-owned utilities.

In order to receive power at the lower Federal rate, an investor-owned utility must offer to exchange with BPA an amount of energy equal to the utility's residential and farm load. In what is essentially a bookkeeping transaction, BPA would buy the power at the

utility's average wholesale cost, and sell the same amount back to the utility at the lower Federal rate. BPA will exchange no more power than the investor-owned utility sells to BPA. The private utility must pass on the savings from this exchange directly to its residential and rural customers, and is not allowed to profit from the transaction.

The increases in rates paid by direct-service industrial customers of BPA—called the DSIs—will cover all the costs of this exchange until 1985 and a substantial part thereafter. BPA will supply them with power at a higher rate than they pay under their existing contracts—a rate that reflects costs of power sold to BPA by the investor-owned utilities.

The private utilities will exchange their higher cost resources for lower cost Federal power in steps between now and 1985. The utilities will acquire enough electricity at low rates to serve 60 percent of their rural and residential loads initially, and the remainder in 10-percent increments until 1985. The DSIs will assume the costs of the exchange on the same schedule.

The calculation of average system cost is an important aspect of the exchange agreements between the private utilities and BPA. This cost will be averaged with the costs of other power resources available to BPA to determine wholesale rates for all customers of Bonneville in the region. BPA will develop a formula for determining the average system cost of the private utilities, in consultation with the Council, State public utility commissions and the region's utilities. The average system cost will include the costs of both hydropower and thermal plant resources the investor-owned utilities would otherwise use to serve their loads. The method is subject to approval by the Federal Energy Regulatory Commission, with the assistance of a board with representation from the States.

The Congress excluded from this computation some costs that would otherwise inflate the average. Specifically excluded are the costs of additional resources needed to serve new large single loads (10 or more average megawatts per year), costs of serving a utility's load growth outside the region, and the costs of any generating project that fails to get into operation.

Investor-owned utilities may terminate power exchange agreements on five years' notice. The private utilities could exercise this option if power sold by BPA reached a price higher than their own average system cost.

Direct-Service Industries—The DSIs make possible the rate relief for customers of investor-owned utilities by their willingness to trade in the remaining years of their existing low-cost power contracts. In turn they get new 20-year contracts at higher rates. The price of power sold to the industries by BPA will increase in yearly steps during a "ramping" period until July 1, 1985. Congress provided the gradual raising of rates to give the industries time to absorb higher costs.

The industries will gain the security of long-term contracts, which will enable them to continue doing business in the region and to plan plant improvements. Importantly, the DSIs will continue to play the unique and important role they assumed early in the development of the hydropower system—to provide electricity reserves for the region. Service to portions of their loads can be interrupted by BPA to make up for scheduled or unscheduled plant outages or transmission failures, or to make up for failure of planned generating resources to come on line as scheduled.

Under the Act, BPA may not take on new direct-service industrial customers. It also bars BPA from selling to existing DSIs more power than they are entitled to under existing contracts. This is a further incentive for the industries to improve the efficiency of their processes if they wish to increase production.

BPA entered into a contract in 1966 to serve directly a new aluminum plant proposed by Northwest Aluminum Co. This company sold out to Alumax Pacific Corp., which ultimately decided to locate a plant near Umatilla, Oregon. A court order enjoined BPA from delivering power to Alumax pending completion of an environmental impact statement. The aluminum plant has not been constructed. The Act allows BPA to serve Alumax if the company builds the plant and if BPA determines it can acquire adequate resources to serve that load.

However, BPA may not enter into contracts to supply any new large industrial customers.

Contracts—The Act requires that BPA offer its customers—public, private, and direct-service industrial—20-year contracts within nine months of enactment of the law. The customers have one year to accept the offers. The new contracts would require BPA to meet the load growth of utilities to the extent

that they request it when they apply. However, BPA is obligated to supply electricity only to meet demand that customers are unable to satisfy with their own existing firm power resources and those that they later commit to their own loads.

Periods of Insufficiency—If after a reasonable startup period, BPA sees that it cannot plan to acquire enough resources to meet the electrical needs of the region over the long term, BPA may declare a "period of insufficiency."

The Act requires that BPA have a reasonable period of experience with resource purchases before it notifies its customers of insufficient resources. Right now, the Pacific Northwest faces potential shortages of from 2,000 to 4,000 average megawatts in the 1980's if water is critically low. If these short-term shortages cannot be met by conservation and power purchases from inside and outside the region, existing State and utility procedures for curtailment would apply.

Providing for the Region's Electric Energy Needs

Priorities—With new responsibility to acquire the resources necessary to meet the Pacific Northwest's electricity needs, BPA must purchase conservation and generating resources that are consistent with priorities contained in the Act. Congress affirmed the importance of developing all cost-effective conservation, and made regional investment in conservation the top priority. Energy from renewable resource projects—those relying on sun and wind and biomass, for example—must come next in BPA's purchase scheme. Systems that use waste industrial heat are next in priority, followed by highly efficient fuel-conservation systems such as fuel cells and MHD (magnetohydrodynamics). Non-renewable resource projects, such as nuclear plants and coal-fueled facilities and all other fossil fuel resources, are last.

BPA will in effect purchase the electricity that a given conservation project saves. The reason BPA will pay for such savings is that they allow the agency to avoid having to buy costly new generation instead.

In acquiring electricity, BPA may not own or construct any generating facilities. Bonneville may purchase the capability of a project built by anybody else, or buy a specific amount of power from a plant, if the resource is consistent with the priorities and goals of the Act and the regional plan.

Buying Major Resources—Congress wanted to make sure that any decision by the Administrator to invest in a major resource (larger than 50 average megawatts) be made only after a full review of all options. For each proposal to invest in a project larger than 50 average megawatts, the Administrator must:

—Publish notice with copies to the Council and to the Governor of the State in which the project is proposed;

—Hold one or more public hearings and establish a record of testimony supporting or disapproving the acquisition;

—Prepare a written document showing that the purchase is consistent with the plan and is needed to fulfill BPA's obligations to provide electric energy.

Congressional Approval—Before BPA can sign a contract for purchase of a major resource, the purchase must be proposed in BPA's budget submitted to Congress. "Major resource" means not only a project capable of generating 50 average megawatts or more, but a conservation or renewable resource substitute for electricity capable of saving 50 average megawatts or more. If Congress does not reject this proposal in the budget process, BPA can sign the contract. If no regional plan is in effect and if either the Administrator or the Council decides purchase of a major resource runs counter to the purchase criteria of the Act, BPA may not proceed to spend money on the resource until Congress specifically approves the acquisition. Specific Congressional approval is necessary if at any time BPA proposes to make a purchase declared by the Council to be inconsistent with the plan.

The law allows BPA to invest in experimental, demonstration, or pilot projects, but the expenditure must be included in BPA's budget submitted to Congress for approval.

Financial Nudges for Renewables and Other Resources—Potential sponsors of renewable energy projects desiring to launch programs that have regional value might find it difficult to do so because of risks involved and State constitutional limits on "lending of credit." As an encouragement, the Act al-

lows BPA to pay for feasibility studies and preliminary engineering for projects of less than 50 average megawatts. This provision protects the sponsoring utilities against losses for resources that should be fully investigated for possible regional benefit.

BPA may also pay sponsors for front-end costs associated with large renewable or with non-renewable resource projects such as coal-fired plants, but with significant limitations. Among the limitations are a determination by the Administrator of economic need; a stipulation that BPA may buy the capacity of the resource; and an agreement that if the resource is later developed by the sponsor for its own use the sponsor will repay BPA any amount advanced by BPA.

Billing Credits—BPA can help any sponsor—public agency or private utility, local government or others—finance projects consistent with the Act by paying the sponsor for the energy saved or power produced by the projects. The principle at work here is that local utilities taking the initiative to provide new energy resources relieve BPA of some of its obligation to purchase power to meet regional needs. BPA may compensate utilities for costs of such projects by granting credits against energy bills of the sponsoring utilities.

The amount of the credit covers the costs avoided through purchase of the conservation, not to exceed the rate impact the customer would have experienced if BPA had been obligated to acquire some other resource. For renewables that either substitute for electricity or generate electricity, the credit will equal the net cost actually incurred by the customer, but no more than the rate impact experienced if BPA had been obligated to buy some other resource. In the case of any other generating resource, it covers the cost of the resource up to the level of the least costly alternative. However, BPA must first determine that a given project will reduce Bonneville's obligation to acquire other resources to meet loads. Further, the credits can be granted only on the condition that the costs, which BPA spreads among all customers in the region, will be no higher than the costs of other resources BPA might purchase for regional use (taking into account the 10-percent cost advantage for conservation).

Before granting any credit, BPA must notify the public and explain the method proposed for determining the amount of credit. The costs of the credit must be included in BPA's annual or supplemental budget. BPA must also require that a generating project from which BPA will acquire electricity is operated in a way compatible with the regional power system.

Billing credits are intended to provide an incentive for utilities to institute strong conservation programs for consumers and to develop renewable resources.

Borrowing Authority—The Act expands BPA's authority to borrow from the Federal Treasury, but BPA must continue to repay the Treasury entirely from its revenue. The Federal Government does not guarantee BPA's obligations with its tax revenue.

By law, BPA cannot borrow money except by selling its bonds to the Treasury. At present, BPA is limited to borrowing for the purpose of building transmission lines. Under the new Act, BPA will be able to borrow for four additional purposes: first to finance conservation and renewable resources; second, to carry out improvements for fish and wildlife in the Columbia River System; third, to provide financial assistance for generating projects of less than 50 average megawatts, from which BPA will buy power; and fourth, for research and development projects.

The Act specifically prohibits BPA from borrowing to support its purchase of power from large generating facilities, such as coal and nuclear plants. But the costs of all borrowing as well as all of BPA's operating costs including purchases will be paid by the region's ratepayers, not by the nation's taxpayers.

The Act establishes $1.25 billion in new borrowing capacity, which becomes available October 1, 1981, to invest in conservation and renewables. It also opens up for such investments the existing transmission construction borrowing authorization of $1.25 billion. About $570 million of uncommitted borrowing capacity is currently projected to remain under the transmission authorization by September 30, 1981, which could be used initially for funding conservation and renewables.

The Act also makes possible a lower interest rate on funds BPA borrows for financing conservation and renewable resources. BPA previously paid a rate equivalent to triple-A private utility bonds, but now will pay the lower rate available to government corporations, such as the Tennessee Valley Authority.

Again, BPA must repay the money it borrows from the Treasury with revenue from power sales. The Act further states that if BPA fails to increase its rates by enough to cover all of its costs, including repayment of the Federal investment in Northwest power resources, then the agency must pay a one percent interest penalty.

Eligible Expenses—All expenses associated with the planning, engineering, construction and operation of a plant may be covered under a purchase agreement between a sponsoring utility and BPA.

Dry Hole—If BPA purchases the capability of a major generating resource, the costs of the project will be borne regionwide by the consumers through BPA's wholesale rates whether or not the plant ever produces a single kilowatthour. The ratepayers will receive the plant's benefits if it produces electricity, and those who stand to benefit must take the risk that it might fail to operate. With the benefits go the risks, and the ratepayers assume both, just as they do now when the utility serving them builds a new generating facility to serve their needs. When the risks are spread regionwide, it usually means lower interest rates than otherwise obtainable, and that in turn means lower power costs.

No projects can be acquired unless they are expected to work and the decision to acquire is based on deliberations of the Council, BPA, developers, and licensing authorities. There must be broad public involvement in the decisions, and Congress would review the proposed projects.

Conservation through Rates—Retail rate structures which utilities adopt on their own to encourage conservation activities or customer-owned renewable resources may qualify for billing credits. For example, if a utility adopted rates which encourage conservation by its customers, BPA would be required to provide a wholesale billing credit to the utility equal to the savings from BPA not having to buy as much electric power.

Searching for the Best Deal Outside the Region—BPA must investigate opportunities for joining in cooperative efforts to develop renewable resources outside the region, and acquire such resources if they are consistent with the Act and if they are needed to meet demand in the Pacific Northwest.

BPA may also agree to exchange power with utilities outside the region when such exchanges are of benefit to BPA's Pacific Northwest customers. BPA now exchanges power with utilities in California, to the advantage of both BPA's customers and the California utilities. The Act would allow BPA to expand such arrangements if exchanging or buying power helps meet loads in the Pacific Northwest and relieves the region's utilities of some of the need to construct new generating facilities. California utilities experience high demand during the summer because of air-conditioning loads, and Pacific Northwest utilities experience high winter peaks because of space heating. Cooperation between the regions on timely exchanges of power could avoid the construction of plants that would otherwise sit idle during respective low-demand seasons.

Broad Participation in Plants—The Act requires that all utilities be given the opportunity to acquire a financial interest in plants from which BPA will purchase power to meet regional needs. The Act thus gives each utility a chance to acquire enough power resources to meet its own needs. Each utility's entitlement to power from BPA during a period of insufficiency will be based in large part on the amount of power the utility has sold to BPA to meet regional needs.

Any utility remains free to build plants and not sell the output to BPA, without endangering its rights to get from BPA any additional power supply it may wish. Nothing in the Act prohibits utilities from acting on their own to provide conservation, renewables, or generating resources.

BPA's Oversight Role—BPA will not simply buy the capability of new generating resources without regard for the speed and cost with which the facilities are installed or built. The Act gives BPA the tools necessary to oversee project construction schedules and costs.

BPA's purchase contracts must contain requirements for timely completion of projects at the lowest costs possible, giving BPA authority to approve major modifications in construction scheduling or operation of projects.

Rates

The Act establishes a rate-setting policy for three types of customers. The first type includes cooperatives, publicly owned utilities and Federal agencies. The other two types are investor-owned utilities and direct-service industrial customers of BPA.

Preference Customers—BPA's wholesale rates for Federal agencies, publicly owned utilities and co-ops cannot be higher than would have been the case without the Act—the Act specifies a formal rate test. The rates of publicly owned utilities and co-ops will increase in the future, but the Act should help keep the increases lower than they would otherwise have been. Generally this class of customers will receive the lowest Federal wholesale power rate available, except for new large loads.

Investor-owned Utilities—Investor-owned utilities may exchange power with BPA to receive at the same low wholesale rates as preference customers for wholesale power in an amount needed to serve their residential and farm customers. The investor-owned utilities will pay a higher rate for whatever additional power they choose to buy from BPA to serve their other loads.

The availability of electricity at BPA's low wholesale rate to investor-owned utilities for their residential and farm customers will not mean equality in retail prices charged by publicly owned and investor-owned utilities. In arriving at its own retail price per kilowatthour, each utility must add its own costs of doing business, such as distribution, operating and maintenance costs.

After power contracts with BPA are signed in 1981, wholesale rates for residential and farm customers of investor-owned utilities will be lower than they otherwise would be to the extent that the power from BPA costs less than the electricity exchanged by the investor-owned utilities.

Direct-service Industries—The rate relief for the residential and farm customers of the investor-owned utilities is made possible by the higher rates paid by the direct-service industrial customers of BPA. The Act requires that prior to July 1, 1985, BPA rates for DSIs must cover the costs of serving them, plus the costs of power exchanges between BPA and the investor-owned utilities.

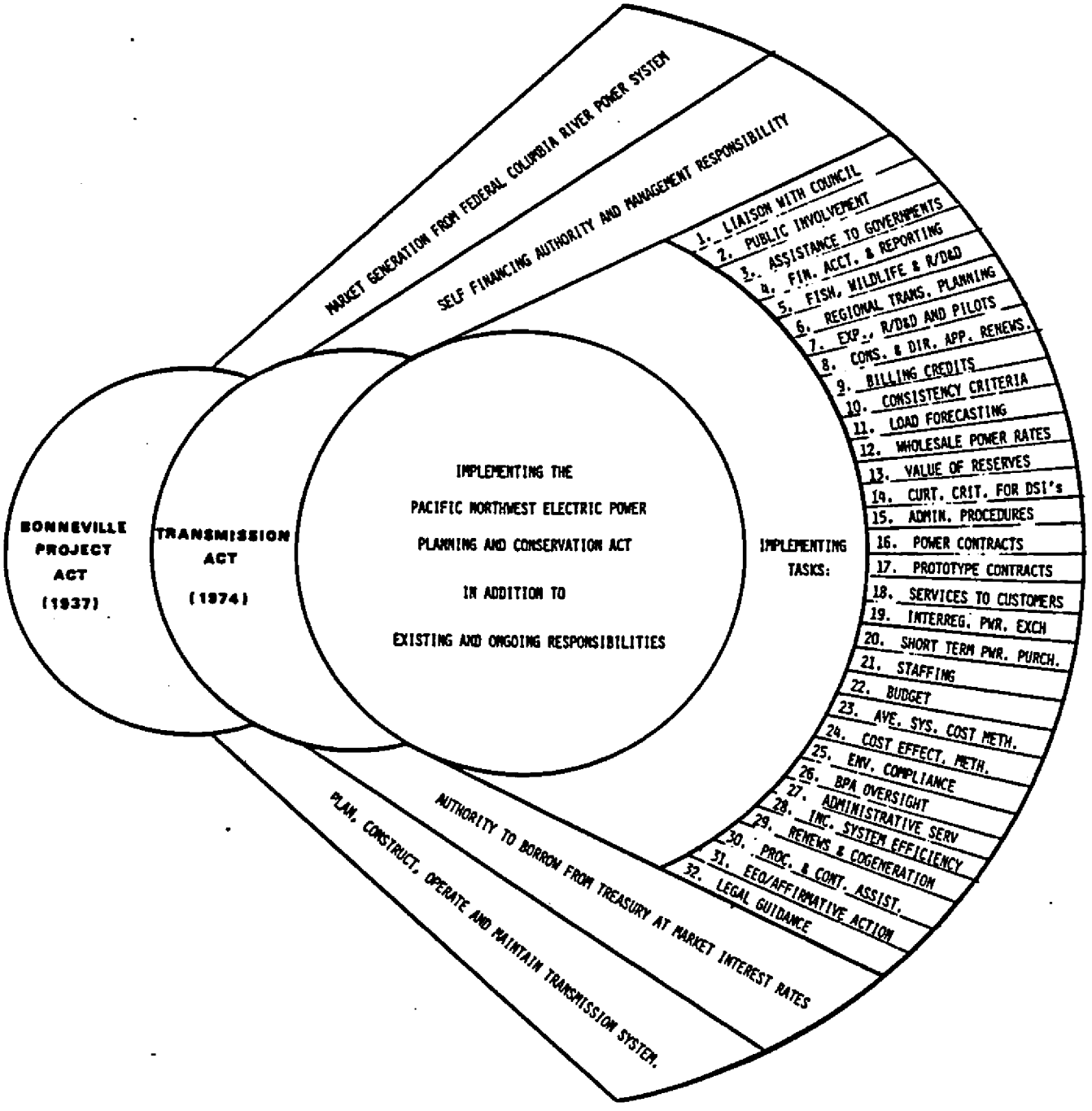
After July 1, 1985, when the residential and farm customers of investor-owned utilities are receiving the full benefit of Federal base rates, the DSI rates must be at a level commensurate with the retail rates paid by industrial customers of publicly owned utilities in the region. The DSI rate is expected to be several times greater than it is today.

Setting Rates—BPA must, from time to time, adust rates to cover the costs of the Federal investment in the Columbia River Power system, plus the costs of resources purchased to meet regional electrical needs as well as other costs incurred under the law. This responsibility does not change under the Act.

The Act provides for public involvement in the ratemaking process. BPA must call public hearings, allow reasonable cross examination of witnesses. Participants in hearings must be given adequate opportunity for rebuttals. After hearings, BPA may propose revised rates and must publish them in the Federal Register. More hearings can be held, and a final decision must be made on the basis of the record. The new rate becomes final after approval by the Federal Energy regulatory Commission, but the Commission may allow rates to take effect on an interim basis, pending a final decision.

IMPLEMENTATION PLANNING

"SUMMARY"



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