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ACCESSION NBR: 7910160509 DOC. DATE: 79/10/31 NOTARIZED: NO DOCKET #
FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397
50-460 WPPSS Nuclear Project, Unit 1, Washington Public Powe 05000460
STN-50-508 WPPSS Nuclear Project, Unit 3, Washington Public 05000508
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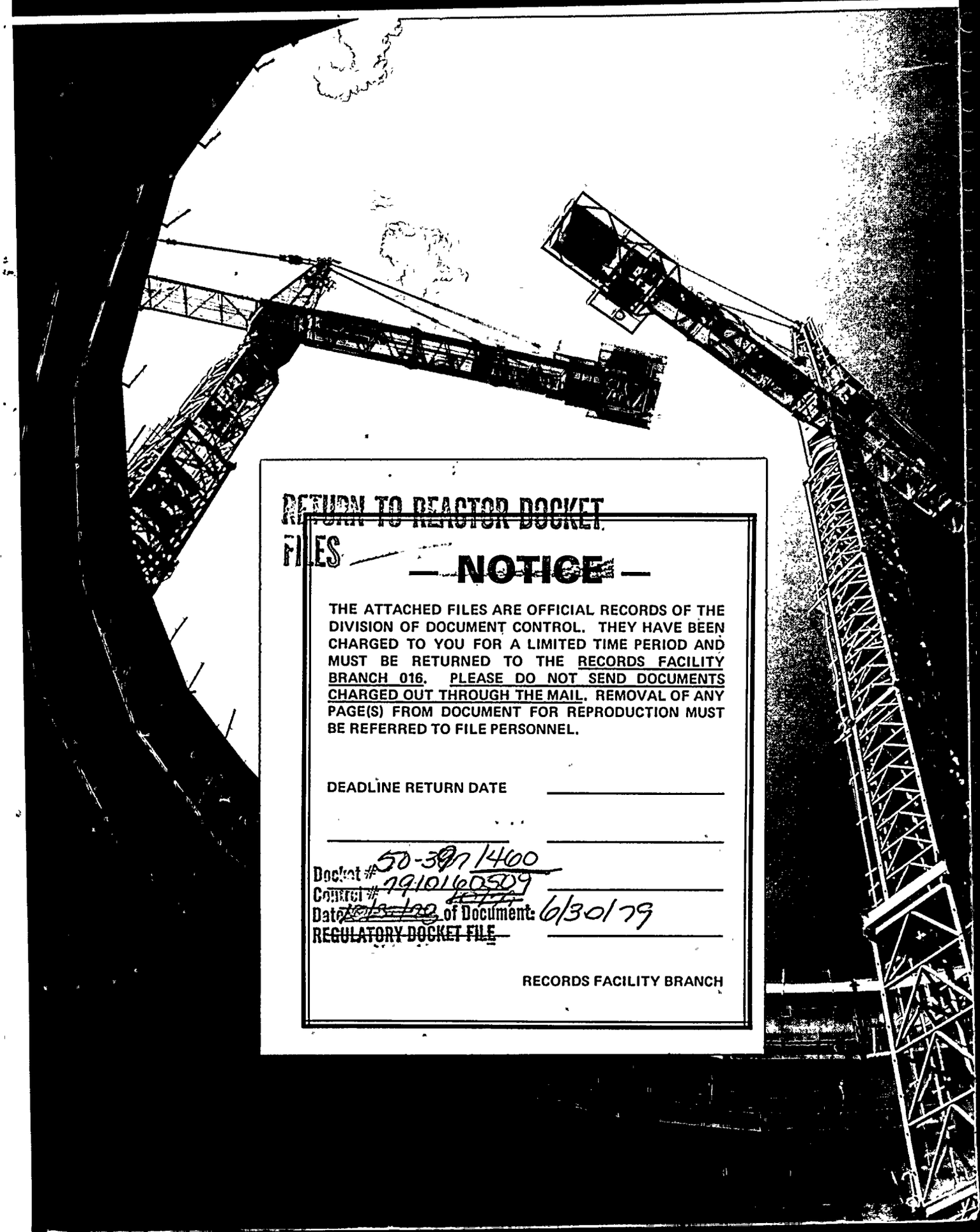
Washington Public Power Supply System Annual Report



The Supply System at a Glance

The Washington Public Power Supply System was created to supply power to publicly-owned utilities in the Pacific Northwest. The Supply System was established as an agency through which members could jointly finance, build and operate electrical generating facilities to meet their energy needs — facilities that would otherwise be beyond the financial capability of any single utility.

The Supply System, by law, is a municipal corporation — a statewide joint operating agency.

In reality, the Supply System is much more than this, and much more human than the lifeless text of the lawbooks might imply.

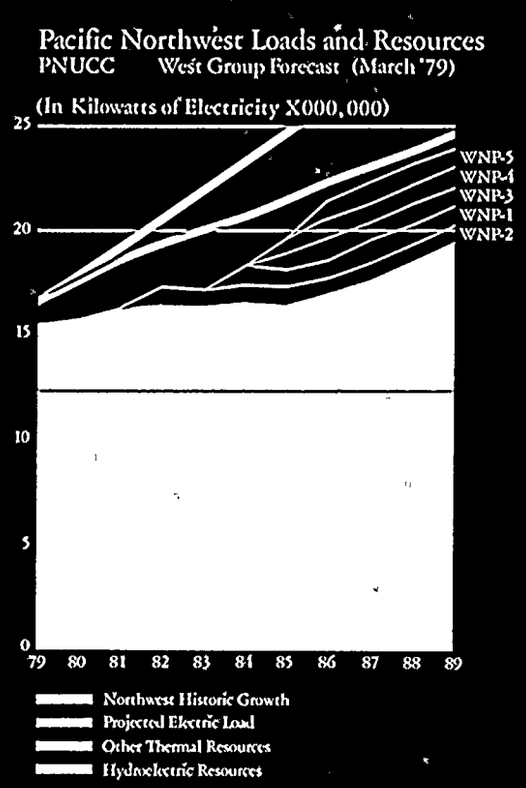
The Supply System is:

Its members — 19 Public Utility Districts (PUDs) and four municipalities in Washington.

Its participants — 115 utilities, both publicly and investor-owned, in seven states, who have contracted to purchase electricity produced by the Supply System.

Its employees — approximately 1,500-men and women along with a contract construction force, 8,500 strong.

Together, the Supply System staff, members and participants are working to complete five nuclear generating projects that in future years will benefit all the people of the Northwest. At the same time, they are providing electricty from the Hanford Generating project and the Packwood Lake Hydroelectric Project.



Cover:
This is the view from inside the containment structure of WNP-4, one of five nuclear plants being built by the Washington Public Power Supply System. When all five of the Supply System's generating projects are in operation — in the late 1980s — the energy they produce will provide more than 20 percent of all the energy generated in the Pacific Northwest.

Financial Highlights of 1979

($ in millions)

Construction Projects	WNP-1	WNP-2	WNP-3	WNP-4/5	Total
Revenue Bond Sales					
Par value of sales	$ 180	$ 360	$ 200	$ 345	$1,085
Number of issues	1	2	1	2	6
Borrowing cost	6.61%	6.60%	6.27%	6.99%	6.66%
Total Revenue Bonds Outstanding					
Outstanding at June 30, 1979	$ 895	$1,147	$ 680	$1,063	$3,785
Annualized interest expense	59	75	44	69	247
Borrowing cost	6.64%	6.52%	6.46%	6.52%	6.54%
Interest Earned—1979					
Interest on investments	$ 26	$ 19	$ 29	$ 30	$ 104
Annual rate of return	7.44%	7.23%	6.76%	7.58%	7.20%
Bond ratings—Moody's/ Standard & Poor's	Aaa/AAA	Aaa/AAA	Aaa/AAA	A-1/A+	

Board of Directors/Executive Committee Report

When the Washington Public Power Supply System was chartered by the state in 1957, the joint operating concept was unique.

Today, this idea of a single agency, governed by its members, working together to meet the needs of all has become widespread. There are more than 100 similar organizations in the nation and more are in the process of organizing.

Our own membership in Washington grew to 23 in Fiscal Year 1979, with the admission of the City of Ellensburg. Each member utility has one representative on the Board of Directors who in turn represents the local consumers. The Board meets quarterly. The Executive Committee, which is composed of seven representatives from the Board, administers the business of the Supply System at meetings held twice each month.

Ed Fischer
Chairman
Executive Committee
Commissioner, Clark County PUD

Mr. Fischer has been involved in the electric industry for 50 years, while directing a successful business for 40 of those years. A Public Utility District commissioner since 1964, Mr. Fischer has served as the chairman of the Supply System executive committee since 1970. He is an executive committee member of the Public Power Council and a former president of the Washington PUD Association.

As the Supply System construction and financing programs gain in size and impetus, Board members have become increasingly active in directing management and setting policy for the Supply System.

One of our most significant Board improvements has been the formation of a number of Board committees to study and give direction in such areas as project budgets, legislation, and public policy.

In addition, a management audit identified some areas for performance improvement and the Board has taken actions with regard to the audit recommendations.

The Board retained an independent consultant skilled in public administration and management to assist in professional management analysis.

In addition to the usual budget review, a special Board committee was appointed to review project construction budgets before adoption and a nationally recognized consulting firm was retained to make an independent assessment of the budgets.

As Board members, we are meeting the challenges of a large construction program and we believe we will meet the challenges of the future.

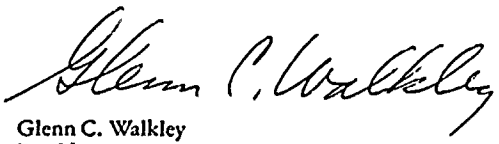
Officers of the Board of Directors serve two-year terms which expired in Fiscal 1979. Successors were elected at the quarterly meeting in April. Elected as President was Glenn C. Walkley. Mr. Walkley, a Franklin County PUD Commissioner, has represented the PUD on the Board since it was organized in 1957 and has served as President in two previous terms.

Other officers elected were Arnold James, Lewis County PUD Commissioner, Vice President; Marion Babb, Klickitat County PUD Commissioner, Secretary; and Howard Prey, Douglas

County PUD Commissioner, Assistant Secretary.

New representatives to the Board appointed by the member utilities during the year are Councilman Thomas Lineham, City of Ellensburg; William Kuehne, Ferry County PUD Commissioner; Hal Norman, Pacific County PUD Commissioner; Robert H. Murray, Seattle City Light Superintendent; and Paul J. Nolan, Tacoma Director, Department of Public Utilities.

Ed Fischer
Chairman



Glenn C. Walkley
President

Managing Director's Report

Although economists see a recession in the national economy, the economic activity in the Pacific Northwest continues at a high level. In fact, in discussions of the region's economy, the word "boom" tends to be used frequently.

Here are some examples.

Washington State's population is expected to increase by 1.5 million by the year 2000—200 new residents a day for the next 21 years. Oregon's is expected to grow by 600,000.

In the past three years, Seattle gained 124,600 new jobs—a rate that ranked it eighth out of 202 metropolitan areas. Portland gained 91,900 new jobs, ranking it 13th.

This kind of growth means increasing demand for energy. Despite aggressive utility programs to encourage conservation, demand for energy is increasing by about 3.9 percent a year.

Neil O. Strand
Managing Director

N.O. Strand, an executive of the Supply System since 1971, was named Managing Director in 1977. He holds a degree in mechanical engineering and has more than 27 years of experience in nuclear energy, including design and construction management.

With the region's hydroelectric system at capacity, there is substantial importance in the construction of the Washington Public Power Supply System thermal generating plants.

The total capacity of the completed plants will be 6 million kilowatts. This generation capacity will contribute 20 percent of the region's energy by 1988.

A number of significant changes have been made within the past year to provide greater depth to senior staff, improve management controls and assure appropriate checks and balances.

A new management position, Manager of Projects, was established to focus attention directly on meeting the scheduled dates for commercial operations of our projects.

A new Generation Group at the Assistant Director level was created. This new group is responsible for the safe and cost-effective start-up and operation of the five plants being built, as well as for the safe and efficient operation of facilities at Hanford and Packwood.

In addition, four new components, termed "Operations" were created in the areas of Organization Performance, Administration, Materials Management and Relations.

Managers of these new components report directly to the Managing Director. The realignment allows comprehensive reporting on key Supply System support activities and augments internal management controls.

In the Finance Group, a special assistant was appointed to the Assistant Director with a staff of estimators and specialists in cost control and cost and schedule modeling.

Our entire program of construction, generation and supporting technology requires talented and dedicated management and staff, with backgrounds in scientific, engineering, construction and administrative disciplines. At the end of the fiscal year, we had 1,500 Supply System employees. Our 700 person technical staff has a total of more than 4,000 man-years of experience in the nuclear field.

In Fiscal 1979, the Supply System continued its extensive activity in the municipal revenue bond market, with six separate issues totaling $1.085 billion. Bond issues maintained ratings of "Triple A" for the net-billed Projects 1, 2 and 3 and "A-1" and "A+" for Projects 4 and 5 which are financed as a single system.

The success of the sales and the continued high ratings are indicators of the confidence of the investment community in the Supply System.

The "Triple-A" bonds are secured by net-billing agreements with the Bonneville Power Administration which will market the electricity. Bonds for Projects 4 and 5 are secured by contracts with participating utilities.

While our financing program continued with marked success, a number of concerns still required close management attention. Close analysis of project construction budgets indicated that increases would have to be made because of several major factors: The increases are the result of more complete assessments of the costs of increased manhour requirements and changes to plant structures, systems and equipment; the effects of inflation; additional architect-engineer and construction management services; and additional generating plant operations staffing.

With the cost increases, schedule extensions of up to 12 months also were announced.

Our cost and schedule projections are realistic, but there still are factors which may cause further problems.

We do not know, for instance, what effect the Three Mile Island-2 accident of March will have on design or operating requirements.

I continue to believe the outlook for the Supply System is very good. We have an excellent organization.

While we have experienced schedule delays and cost increases, they have been within the range common in the industry.

I continue to be optimistic about the future of nuclear power. The Three Mile Island accident was serious and a setback for the nuclear industry. Recovery may be slow, but it will take place.

The fact is that there are really only two options presently open for central station generating plants: coal or nuclear.

The U.S. General Accounting Office reported to Congress that, if actions are taken to limit or halt the growth of nuclear power, they must be accompanied by actions to severely limit electricity requirements or programs to expand coal supply or other non-nuclear fuels. Otherwise, serious shortfalls of electricity are likely to occur within the next 5 to 10 years.

I believe the people of this nation will recognize that it is not in their best interests to permit this situation to develop and will not accept a low-growth, low-productivity society.

Similarly, I believe the people of the Pacific Northwest will support the Supply System as it continues to perform the vital services for which it was established . . . to build and operate those generating facilities necessary to meet the regional needs.

Neil O. Strand
Managing Director

The tide of the Pacific Northwest economy continues to rise faster than that of the United States as a whole. So does the growth in population.

Growing Together The public utilities of the Northwest, working together through the Supply System, are responding to that growth. Without an expanding supply of energy, sustained growth would not be possible.

Financing this needed energy capability extends the presence of the Supply System far beyond its members and participating utilities to the entire United States. Investors throughout the nation look to the Pacific Northwest to measure the soundness of their investments in the Supply System.

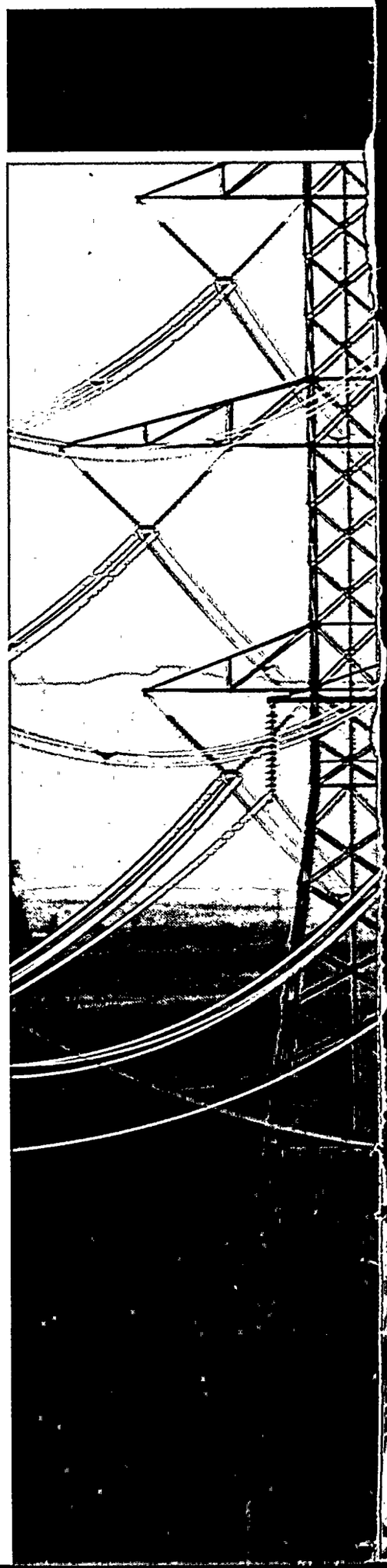
They look at what has happened; they look at what is anticipated in the next 20 to 30 years. What they see is encourag ing . . . a broad-based and diversified economy.

They see that the traditional heart of that economy continues to be agriculture. Thousands of acres produce millions of bushels of wheat and other grains for domestic use and for export to help our balance of trade. Tree fruits from the Pacific Northwest have a strong identification throughout the nation. Row crops are an important source of other food products. These are the traditional crops and they continued to have a strong and growing impact on the Northwest economy.

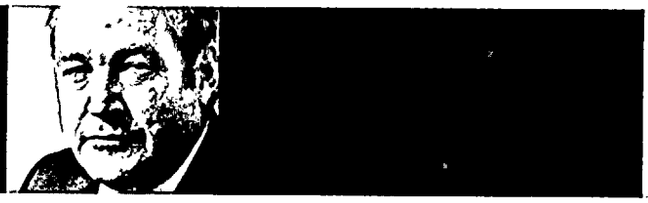
Another vital factor in the Northwest is the vigorous timber industry, which has a whole range of products including exported logs, lumber, plywood and paper products. Again, exports to other parts of the country and to the world are important to the economy.

The metals industry—principally aluminum, magnesium and nickel—continues to play a strong economic role.

Manufacturing is becoming even more important in the economic tapestry of the Northwest. The aircraft industry has always had a prominent role and the principal supplier, The Boeing Co., has, in the past year, announced significant plans for expansion. This affects not only the direct employment by Boeing, but it also involves numerous subcontractors throughout the Northwest.



John A. Goldsbury
Commissioner
Benton County PUD
Supply System Board



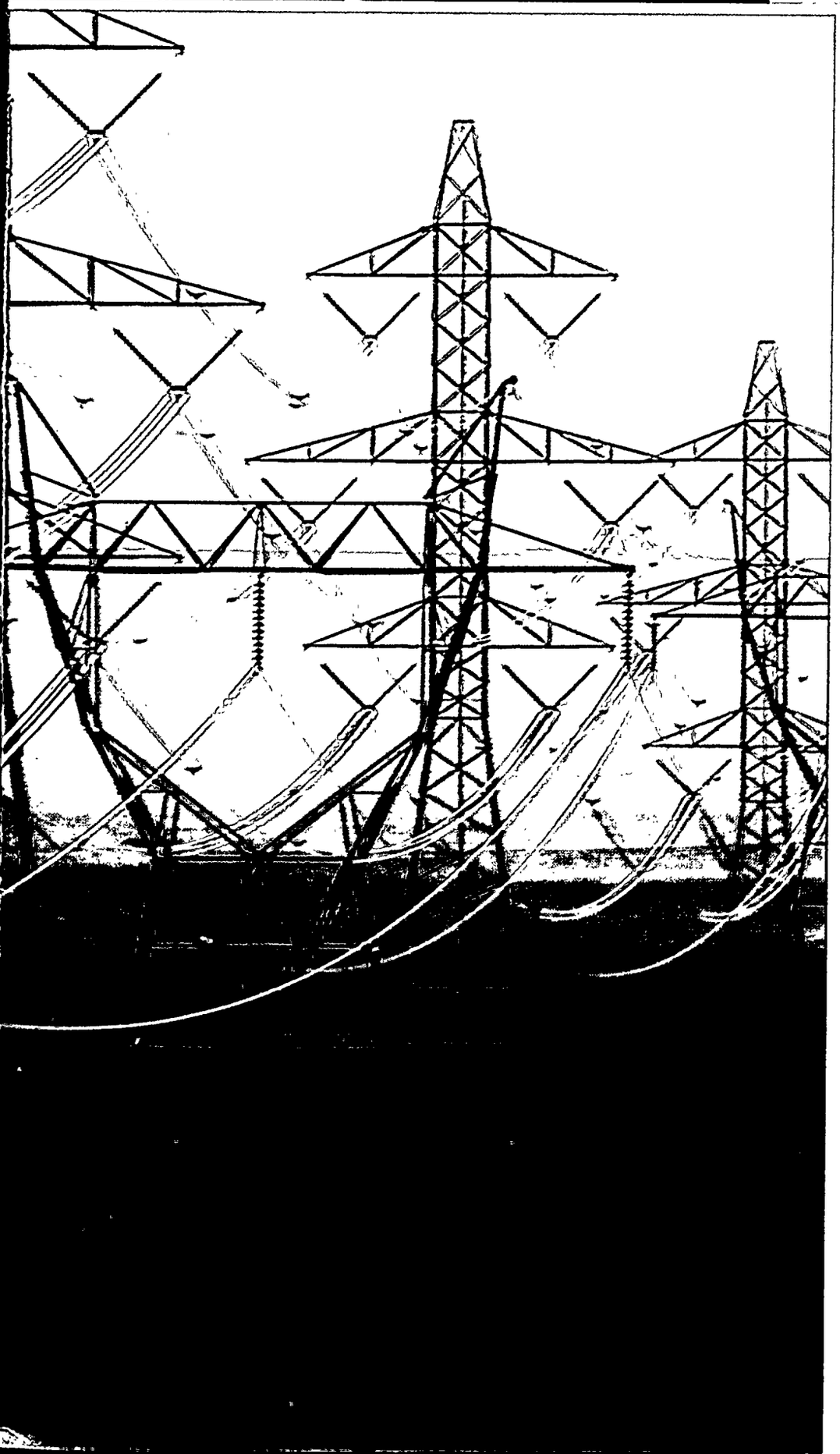
Robert O. Keiser
Commissioner
Chelan County PUD
Supply System Board

Highlights of Members' Operations

The Supply System's 23 member utilities range in size from metropolitan Seattle, with its 270,000 consumers, to Kittitas County PUD which serves 1,400 consumers in central Washington.

Benton County PUD— 11 percent growth in 1978, attributed chiefly to growth in residential and industrial customer demand. Thousands of acres have been brought under irrigation in recent years.

Chelan County PUD— 13 percent increase in kilowatt hour sales with a 5 percent increase in total customers in 1978. Fruit production is the main agricultural activity, with an aluminum company, fruit processing and lumber mills as major industrial activities. Construction of the new Rock Island second power house, a new hospital and numerous fruit storage warehouses added considerable generating capacity and load to the District's system.



There's a tendency for many to think of the Supply System in terms of its most obvious activity—the construction of massive and complex structures. But building is merely the mission: The objective is serving human needs. The Supply System's work touches the daily lives of all 6.5 million people in the Pacific Northwest whose homes and communities are served by electric utilities.

Another important factor in diversifying the economy is shipping which provides outlets for many of the foodstuffs and products grown and manufactured in the Northwest. The Ports of Portland, Tacoma, Seattle and Everett continue to expand this role. The new trade relations with China are expected to play an important part in the commerce of the Northwest.

Not to be overlooked is the opening of navigation from Idaho to the Pacific Ocean a few years ago. With the advent of containerized cargo, it is now possible to barge agricultural products from Lewiston, Idaho to Portland, Oregon for trans-shipment to foreign ports.

Above all, there is more room for growth. In timber, a high percentage of the forest lands are under sustained growth programs and research has resulted in ever increasing yields.

In agriculture, hundreds of thousands of acres are being opened to irrigation and new methods of irrigation permit additional hundreds of thousands of acres of what was formerly marginal but fertile land under dry-land farming, to be put into more productive uses.

These new methods, however, require extensive use of electric power to provide the pumping energy necessary to deliver water to these fertile acres.

The importance of labor cannot be overemphasized and the Northwest has an abundant pool. Both the population growth and the in-migration continue to provide a resource which is essential to every facet of the economy.

The Northwest has abundant land, water, raw materials and people—all resources necessary to maintain a healthy economy. The other vital ingredient in the recipe for economic well being is the supply of electric power. The Supply System, its members, and other utilities will provide that with the generating plants now being built.

Working Together At the close of the 1920s, only one in four farms in the State of Washington enjoyed electric service. Acceleration of rural electrification was an overwhelming desire of farmers across the state.

Legislation to permit the formation of public utility districts was passed by the initiative process in 1930 and, within a few years, 32 PUDs were formed—publicly owned and dedicated to providing power for the people they represent.

Formation of the Washington Public Power Supply System in 1957 extended their ability by permitting cooperative action to build and operate generating plants.

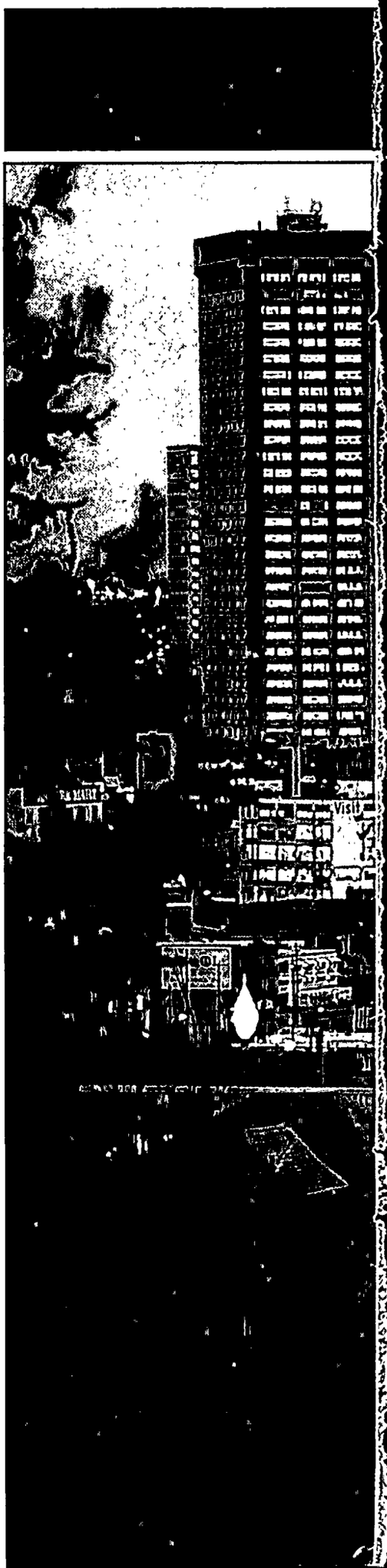
Today, almost all farms are served with electricity.

The initial purpose of the Supply System was to serve its member utilities—the State's public utility districts and municipal systems.

However, the Supply System, at the direction of the Board of Directors, has opened participation in these projects to other public utilities in the Northwest.

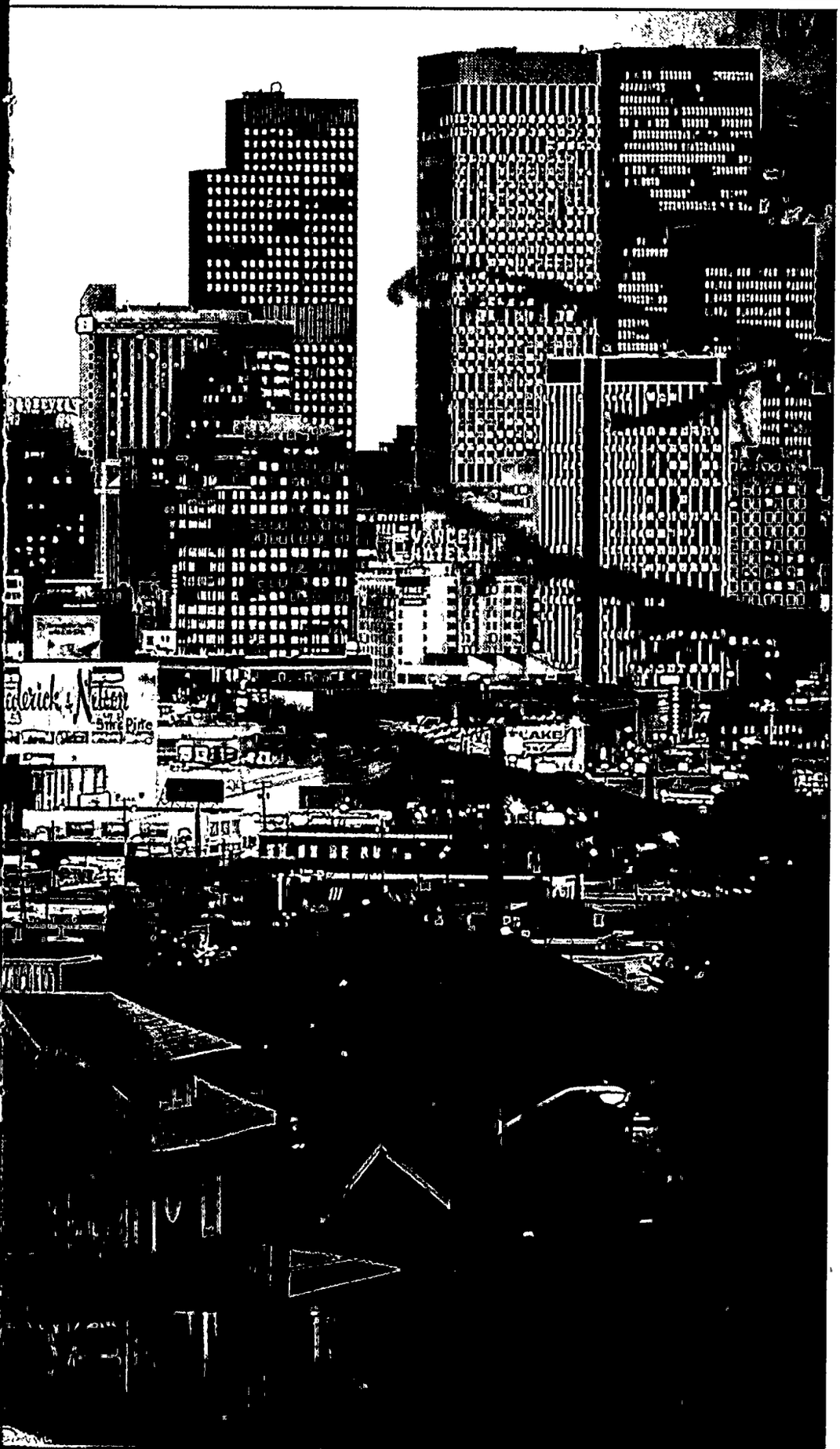
These include PUDs in Oregon; municipalities in Washington, Oregon and Idaho and cooperatives in Washington, Oregon, Idaho and Montana, and one each in the bordering states of Wyoming, Nevada and California.

In all, some 110 publicly owned utilities have a part in the various projects which the Supply System has in operation or under construction. The arrangement between the Supply System and its participants is two-way.



A.E. Fletcher
Commissioner
Clallam County PUD
Supply System Board

D.E. Hughes
Manager of Engineering & Planning
Cowlitz County PUD
Supply System Board



Clallam County PUD—8 percent growth and 1,239 new customers in 1978. Sales to residential accounts exceed sale to all other accounts. The scenic Olympic National Park covers much of the county.

Clark County PUD—4.9 percent increase in kilowatt hour sales and 6.6 percent in customers, with 4,683 new customers, for a total of 75,378. Clark County PUD is one of the largest that has no generation of its own. In 1978, the PUD observed its 40th anniversary, keyed to rapid growth in the county.

Cowlitz County PUD—3.4 percent growth in 1978, with 1,153 new customers, bringing the total to almost 35,000. Electric space heating is used by most residential customers. Local industrial sales constitute a major customer classification.

The communities of the Pacific Northwest are enjoying a period of robust good health, with a growing population and a strong commercial base to support it. But more people means more power demand. Washington State is gaining 200 new residents every day—1.5 million more people by the year 2000. Oregon is expected to gain 600,000 people over those same years.

The Supply System will provide an increasing share of the Region's energy. In turn, the utilities provide the security which allows the Supply System to finance projects.

Each of the participating utilities agrees to take a share of the output of the Supply System projects and agrees to pay that share of the annual budget of those projects whether they are operable or not. This promise is backed by agreements with participants to pay their share of the budget from revenues which they obtain from the operation of their own utilities. They agree to raise rates to whatever level necessary to make good on this promise.

Each of these utilities has a strong financial posture of its own. The security pledge is strengthened with the agreement of each utility to increase its own liability by as much as 25 percent if any encounters difficulties in meeting obligations.

In this way, the utilities are combining their individual strengths to provide financial security for Supply System projects. Further, the Bonneville Power Administration has agreed to purchase 100 percent of the output of WNP-1 and WNP-2, and 70 percent of the output of WNP-3, which, in effect, adds the financial security of the federal hydro system.

The Supply System's projects also benefit the customers of investor-owned utilities. In the Supply System's Hanford Generating Project, one half of the output goes to five investor-owned utilities in the Northwest. They are: Puget Sound Power & Light, the Washington Water Power Co., Montana Power Co., Portland General Electric Co. and Pacific Power and Light Co.

In addition, investor-owned utilities own 30 percent of WNP-3 and 10 percent of WNP-5.

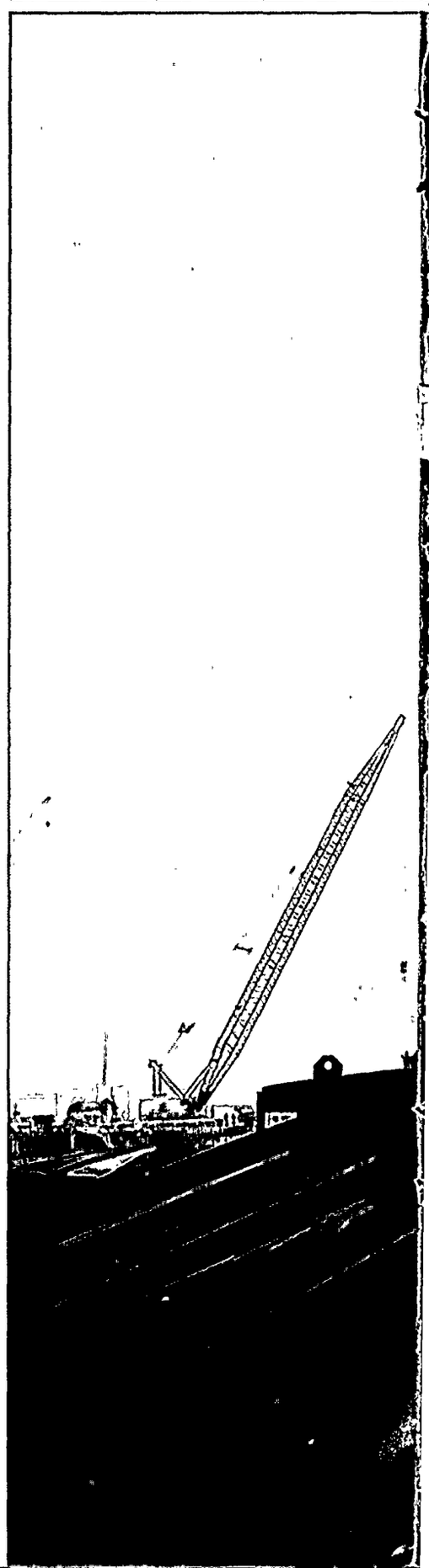
In this way, all 6.5 million people who live in the Northwest and are served by electric utilities are also served in one way or another by the Supply System.

The impact of the Supply System on the lives and fortunes of these people continues to grow. When all five projects now under construction are in operation in the late 1980s, the energy they generate will represent more than 20 percent of the energy generation in the Northwest.

Generation A realignment of management functions created a new Generation Group to focus on the tasks associated with operation of the two existing plants and with bringing the five plants under construction into operation.

Test and Startup These functions include inspecting, testing and accepting subsystems, systems and eventually the entire generating facility from the contractors. The test and startup staff will test the operation and bring it up to rated capability while phasing in the operating staff.

Generation Training With the startup of WNP-2 drawing near, special emphasis was placed on the thorough and adequate training of generation personnel. The training activities cover many plant operation disciplines, including health physics, chemistry and radiography.



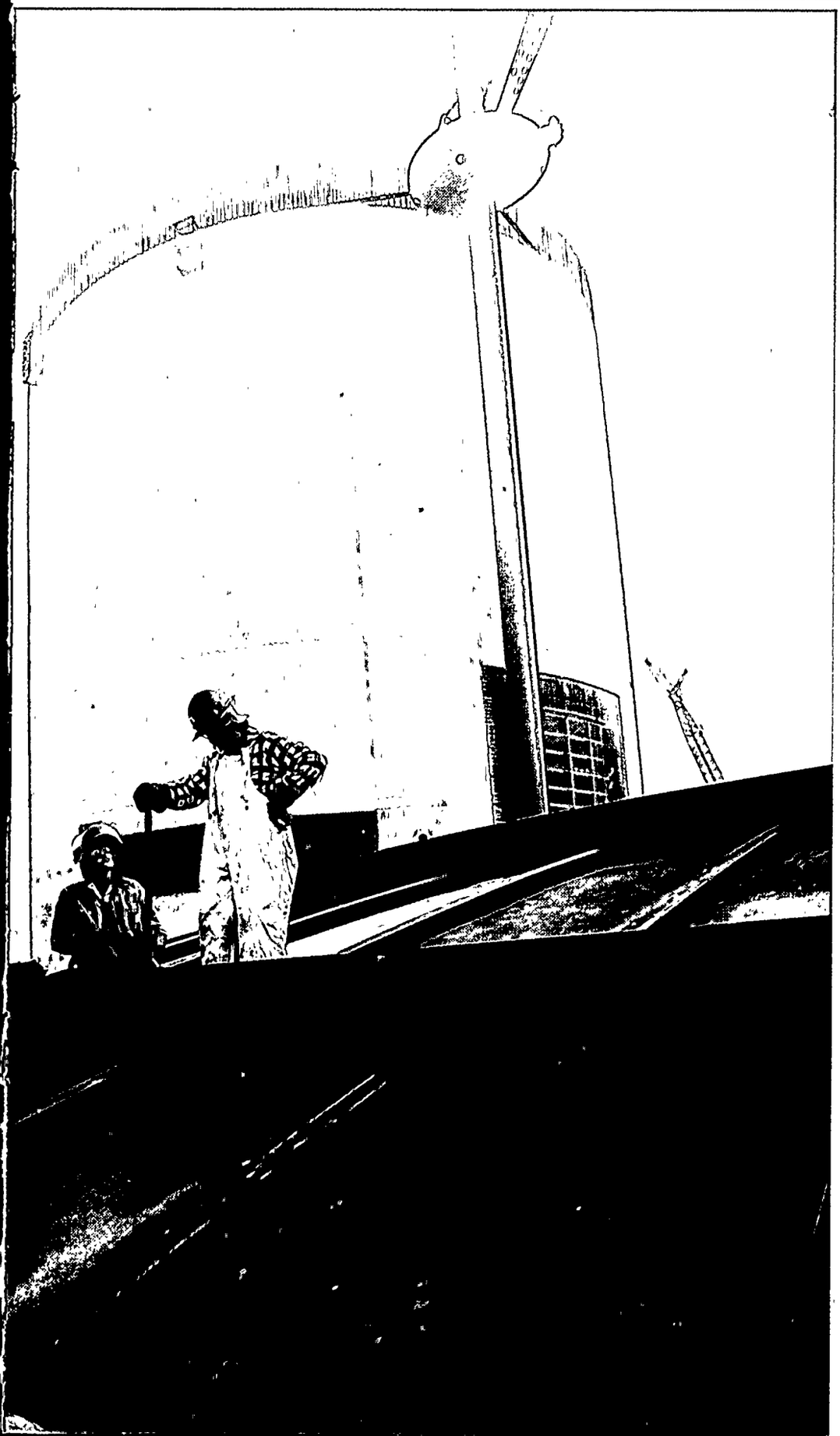
Howard Prey
Commissioner
Douglas County PUD
Supply System Board

Thomas Lineham
Councilman
City of Ellensburg
Supply System Board

Douglas County PUD—11 percent increase, with 405 new customers. Sales to a single mining company constituted 43 percent of the total sales during the year.

City of Ellensburg—Relatively stable sales over the past two years, with 5,000 customers. Sixteen percent of the total sales are to Central Washington University with its more than 5,000 students.

Ferry County PUD—6 percent growth in the service area in the northern county. Sales to commercial accounts exceed those to residential accounts. The Colville National Forest covers much of the county. William G. Kuehne, Commissioner and Supply System Board Member, is not pictured.



WNP 3 and 5 are duplicate generating plants being built in Grays Harbor County, Washington. The 212-foot-high concrete wall for WNP 3 was placed in a continuous, 21-day pour—a masterpiece of coordination. The work went on around the clock for the full three weeks.

Use of a nuclear plant simulator to train reactor operators is a requirement of the Nuclear Regulatory Commission to promote safe, reliable and efficient operation of nuclear power plants. The Supply System has purchased a simulator for the Babcock and Wilcox units WNP-1 and 4.

Operators for WNP-2, the General Electric Co. boiling water reactor, have completed their training at G.E.'s Morris, IL. training center.

Arrangements are being made to train future operators for our Projects 3 and 5 at an existing simulator in Arizona.

Preservice Examination As WNP-2 moves nearer to completion, preservice inspections have begun. Visual inspection of the pressure-retaining, internal surfaces on 90 percent of the WNP-2 valves was completed.

At the same time, work commenced on the pre-operational baseline inspection of the WNP-2 coolant system's major components and weld seams, using ultrasonic scanning, liquid penetrant coatings and magnetic particle checks.

The records from these examinations will be analyzed and the results approved before the coolant system is released for startup activities. The records also become a permanent part of the plant files for comparison purposes when examinations are repeated in the future.

Technology The Technology Group is responsible for a wide spectrum of activities, including engineering, quality assurance, technical and environmental studies, and fuel procurement and management.

Each of these is subdivided into a series of projects which take Supply System people into such diverse activities as exploring for uranium; environmental monitoring at project sites and studies of alternate energy sources.

In addition to its primary mission of performing the engineering on the five Supply System nuclear plants, the engineering staff is participating with other utilities and government agencies in the design and construction of a geothermal electric generating station; design and construction of a fish hatchery, using an advanced concept that promises a higher survival rate for salmon fry; and design and construction of a multi-purpose building which includes a simulator for training reactor operators.

Nuclear Fuel With the dates approaching for loading of nuclear fuel into reactors, fuel supply activities have increased. Uranium for the WNP-2 initial reactor core has been delivered and enriched for fabrication into fuel elements.

Uranium for the initial cores of WNP-1 and WNP-3 also has been delivered to a processor. The first uranium from Washington State for use in Supply System projects was delivered. The uranium was mined and milled at the new Sherwood facility on the Spokane Indian Reservation, operated by Western Nuclear under an arrangement with Tribal Council.

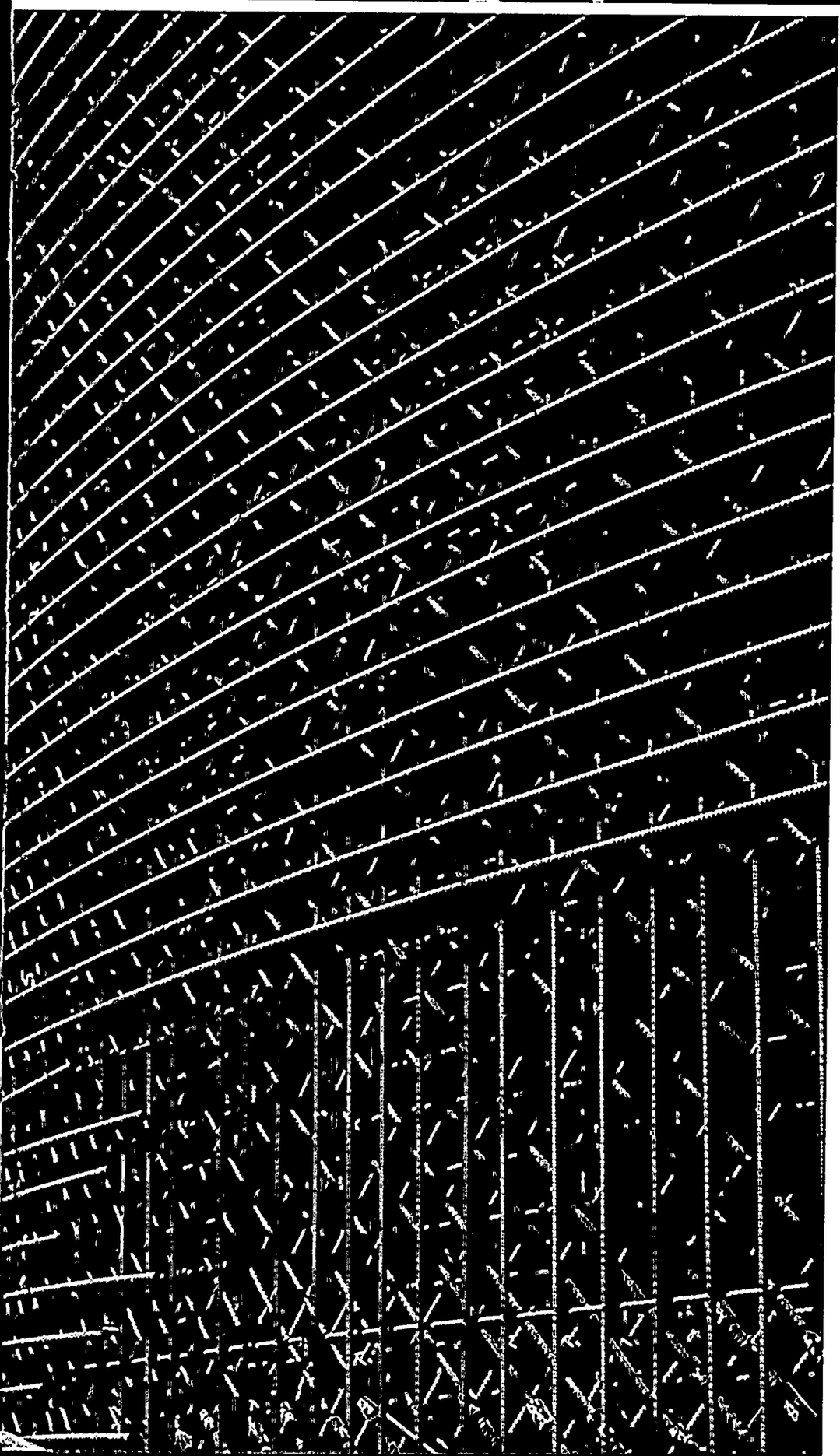
C.K. Jolly
Commissioner
Grant County PUD
Supply System Board

John J. Welch
Commissioner
Grays Harbor County PUD
Supply System Board

Franklin County PUD—50 percent growth since 1973, with industrial and residential growth leading. Large consumers are irrigation farms, food processing and food storage.

Grant County PUD—Stable growth of kilowatt hour sales, with 1,224 new customers. The PUD provides about 80 percent of its own energy from its reserve generation at Priest Rapids and Wanapum dams which it owns and operates on the Columbia River. Agriculture and related activities are the chief industries.

Grays Harbor County PUD—2.5 percent growth, down from 1977 primarily because of reduced activity among paper industries. The number of customers increased by 1,135. The PUD provides construction power to the Supply System's WNP-3 and -5 sites.



At WNP 1, the skeleton of the containment building was being completed—the reinforcing bar for the concrete structure is three inches in diameter and weighs about 13 pounds per foot. Four layers of bar can be seen here: two layers placed diagonally, one horizontally, one vertically. The completed wall will be 4¼ feet thick.

Although the Supply System has contracted for uranium to fuel its five nuclear projects into the 1990s, several million additional pounds will be needed before the year 2000.

Because of this, the Supply System considered it prudent to have its own exploration program.

Exploratory work is being conducted in Wyoming, Washington, Idaho, Colorado and Nevada.

Health, Safety and Security The federal Nuclear Regulatory Commission requires a high level of security at nuclear projects in operation. The Supply System is preparing to meet these requirements with its own security force of carefully screened and highly trained persons. The training course consists of more than 240 hours of classroom and practical instruction.

During Fiscal 1979, the security force was built up to 147 officers who were trained in first aid, fire fighting, safety, security procedures, law, communications and industrial sabotage. This enabled the Supply System to provide its own security at all construction sites during the fiscal year.

Additional emphasis was placed on industrial safety and fire protection with Supply System personnel at each site to monitor the safety performance.

One major contractor with 1,700 workers recorded one million man hours of work without a disabling injury. Awards were made in recognition of this rare, outstanding achievement.

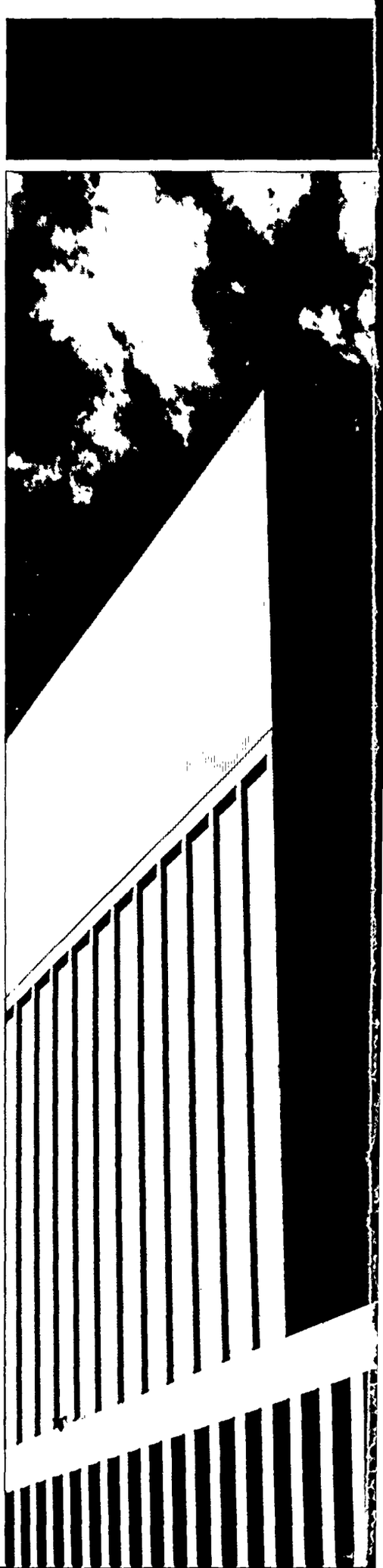
The Safety Program is fulfilling its motto: "Quality Work in a Safe Manner."

Alternate Sources In addition to the near-term possibilities of coal and nuclear fired generating plants, the Supply System continued its study of other energy sources.

One potential source is geothermal energy from deep within the earth. The Supply System continued its participation in the Raft River Geothermal Electric Project in Idaho, through funding from the Public Power Council and a Department of Energy contract.

Seven wells, some as deep as one mile, were drilled at the site while work began on the facilities to generate electricity. The 5,000 kilowatt project is expected to be in operation in mid-1980. Its purpose is to study the feasibility of using moderate temperature geothermal fluid to generate electricity through a binary system which uses isobutane as the heat transfer medium.

During Fiscal year 1979, an earlier comparison of nuclear and coal-fired electricity generation costs was brought up to date. The report concludes that both coal and nuclear plants are viable alternatives for a plant starting up in 1989 with the cost of these alternatives being similar.



Harold W. Jenkins
Commissioner
Kittitas County PUD
Supply System Board

Marion Babb
Commissioner
Klickitat County PUD
Supply System Board

Kittitas County PUD—6.3 percent growth, with 108 new customers. Primary uses are residential, industrial and irrigation. The PUD serves a largely mountainous area noted for its recreational opportunities and timber harvesting.

Klickitat County PUD—2.5 percent growth, with 108 customers added in 1978. Primary users of electricity are residential, industry and irrigation, in that order. The high Horse Heaven Hills, with fertile wheat growing land, traverse the county.

WNP 2 was about 73 percent complete at the end of the fiscal year, and the training and instruction programs for startup were already begun. The work force on the project reached 4,000 persons during the year, then began to decline. Most of the remaining work is inside where 2,000 workers are installing piping, cable and mechanical equipment.

Studies also continued on solar energy, wind, biomass, fuel cells, coal gasification, advanced nuclear reactors, and conservation.

Pre-Operation Environmental Monitoring Pre-operational monitoring of the environment at the WNP-2 site continued, establishing a data base to be used in the future.

Information is being gathered on aquatic and terrestrial organisms, and the productivity of plant species. Analyses are being made of edible vegetation and Columbia River fish and sediment and the existing background direct radiation.

Engineering and Licensing The application for an Operating License for WNP-2, which includes a 21-volume Final Safety Analysis Report, is under review by the Nuclear Regulatory Commission. Engineering personnel are actively working with the NRC in this review.

As a result of the March 28, 1979 accident at the Three Mile Island, Unit 2 (TMI-2) reactor, an "Engineering Strategic Planning" committee was established to review information obtained from TMI-2. In addition, the Supply System is participating with an industry group in reviewing information from TMI-2, in search of items which would indicate that changes in design or operation should be recommended.

A Supply System designed fish rearing facility near Priest Rapids Dam was placed in service in the fall of 1979 and the first young salmon from the facilities—more than 800,000 of them—were released to the Columbia River.

The water supply in the rearing facility is designed to mix water from underground sources with colder Columbia River water to maintain optimal pond temperatures which results in rapid fish growth. The hatchery reared fish, at release, were about twice as large as fish hatched in the river at the same time.

Projects in Operation Fiscal 1979 proved to be a remarkable year for the Hanford Generating Project (HGP) which produced a total of almost four billion kilowatt hours. Total generation since HGP began operating in 1966 went past 43 billion kilowatt hours before it was shut down on May 4, 1979 for the annual 10-week maintenance program.

The record for 24-hour net generation for HGP kept rising throughout the year, with a peak of 20,747,000 kilowatt hours generated on April 3, for an average gross hourly rate of 878,750 kilowatt hours.

Arnold J. James
Commissioner
Lewis County PUD
Supply System Board

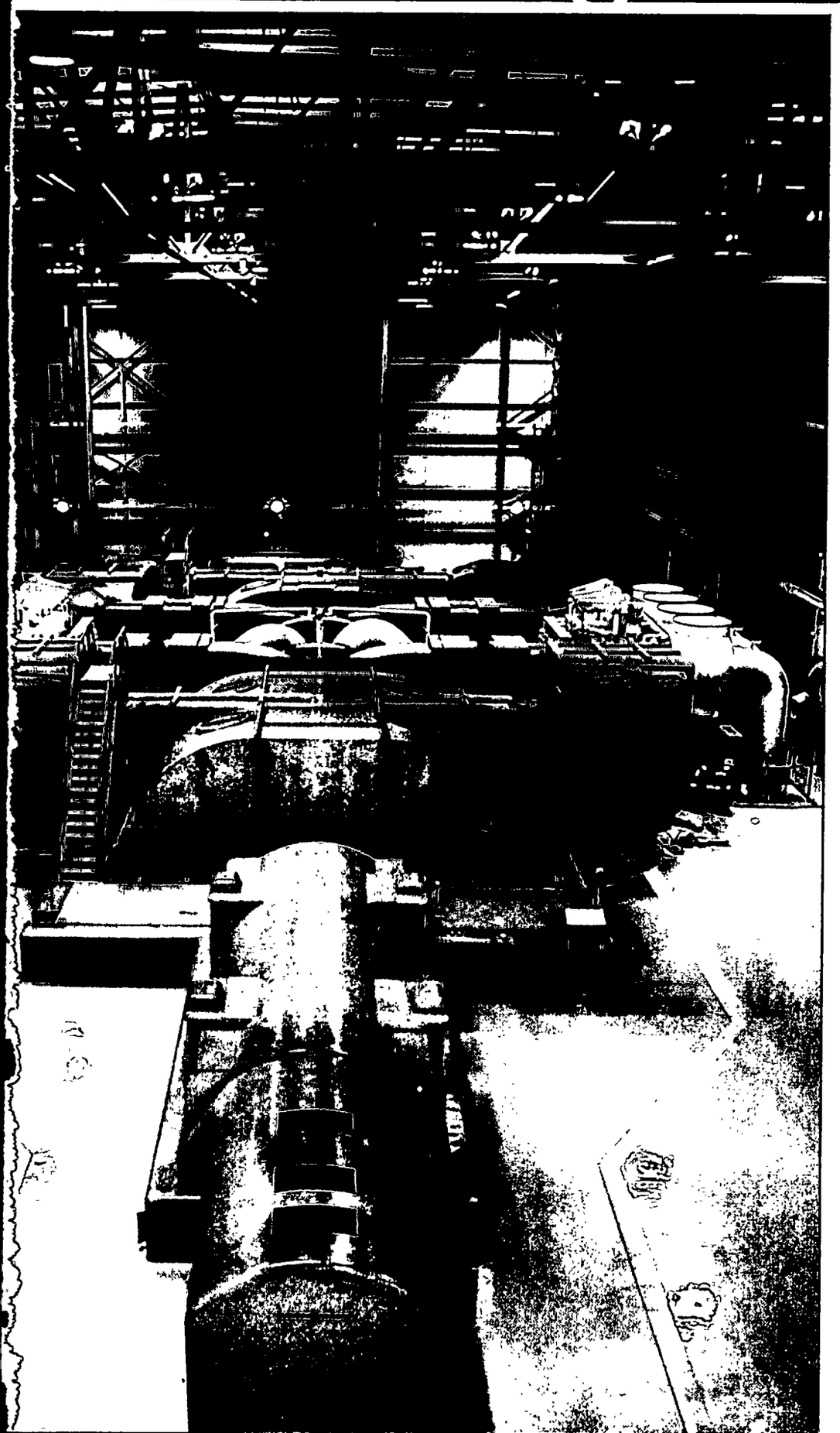
Edwin W. Taylor
Commissioner
Mason County PUD NO. 3
Supply System Board

Stanton H. Cain
Commissioner
Okanogan County PUD
Supply System Board

Lewis County PUD—5.3 percent growth, primarily in residential usage, with 632 new customers added in 1978. The county is largely rural, with small towns and logging as a principal activity.

Mason County PUD No. 3—6 percent growth in 1978, with 833 customers added. Primary uses of electricity are residential, recreational and in the wood products industry.

Okanogan County PUD—3.6 percent power sales increase and a customer growth of 530 in 1978. Power use was 53 percent residential, 35 percent commercial-industrial, 10 percent irrigation. The county is one of the largest in the nation and contains large areas of wilderness and forest in North Central Washington. The economy is based on fruit, cattle, lumber and recreation.



It was another excellent year for the Hanford Generating Project—a plant that uses steam from a nuclear reactor to power turbines. Since it went on line in 1966, the plant has generated more than 43 billion kilowatt hours. Last year it provided full generation 99.97 percent of its possible operating time.

Neither snow nor subzero temperature could keep HGP off the line. In early February, during a prolonged period of abnormal cold, ice formed on the circulating water intake screens. Despite the bitter cold, HGP workers kept the plant in operation by chipping and melting the ice from the screens. Prompt action by operations personnel in reducing load and stabilizing conditions avoided a complete shutdown of the plant and enabled them to maintain full generation 99.97 percent of the time when steam was available from N-Reactor. This extra effort made it possible for HGP to keep on generating electricity and thereby play a major role in meeting the record demand for electricity in the Northwest during the cold winter months.

The Packwood Hydroelectric Project, a small Supply System project nestled in the Gifford Pinchot National Forest in the Cascade Mountains of Washington State, continued to demonstrate its reliability and versatility during Fiscal Year 1979.

Though small in comparison to the projects on the larger rivers, the net generation at Packwood since it started in 1964 went over 1.5 billion kilowatt hours.

In August, the total amount of water which had flowed through the turbine surpassed one million acre feet, enough to cover the entire state of Rhode Island with more than a foot of water.

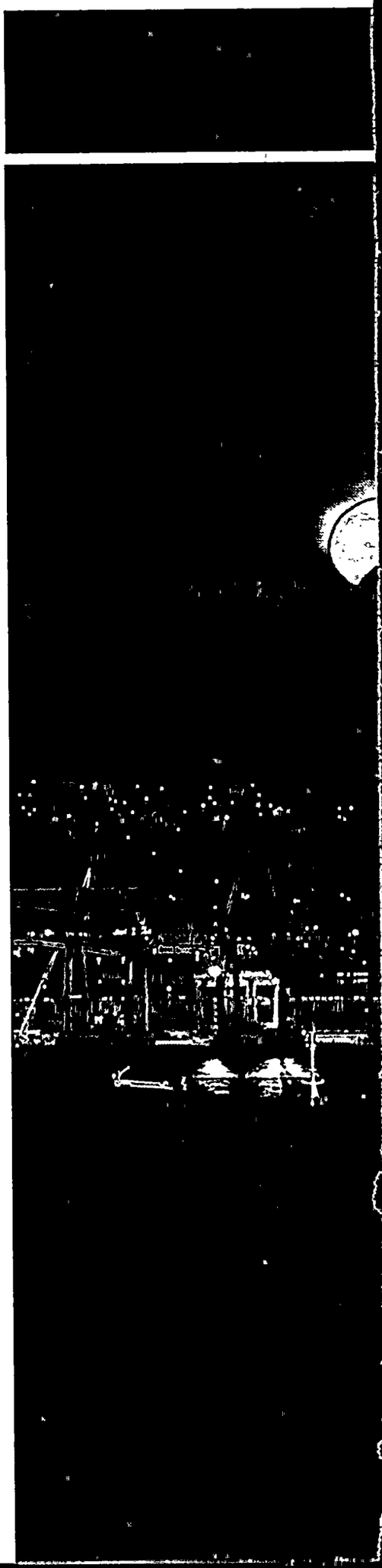
Its versatility is demonstrated in its ability to go into "isolated operation." This term is applied to times when the project is disconnected from the Bonneville Power Administration system and serves the surrounding area only, enabling BPA, or Lewis County, which owns the 50-mile-long connecting line, to work on the transmission system.

The project is operated in harmony with the mountain environment, and facilities built at Packwood Lake by the Supply System enhance the recreational value of the area.

Water from Packwood Lake, which is used to run the turbine-generator, is carried via an underground system of pipes and tunnels to the powerhouse which is at an elevation 1,800 feet below the lake.

Projects Under Construction In the 1960s, a nuclear generating project could be in operation about six years after the decision was made to build. Today, it takes 12 to 15 years.

In this context, progress is more easily discerned by statistics than by visual examination. We can report significant progress on the five Supply System projects under construction using either method.

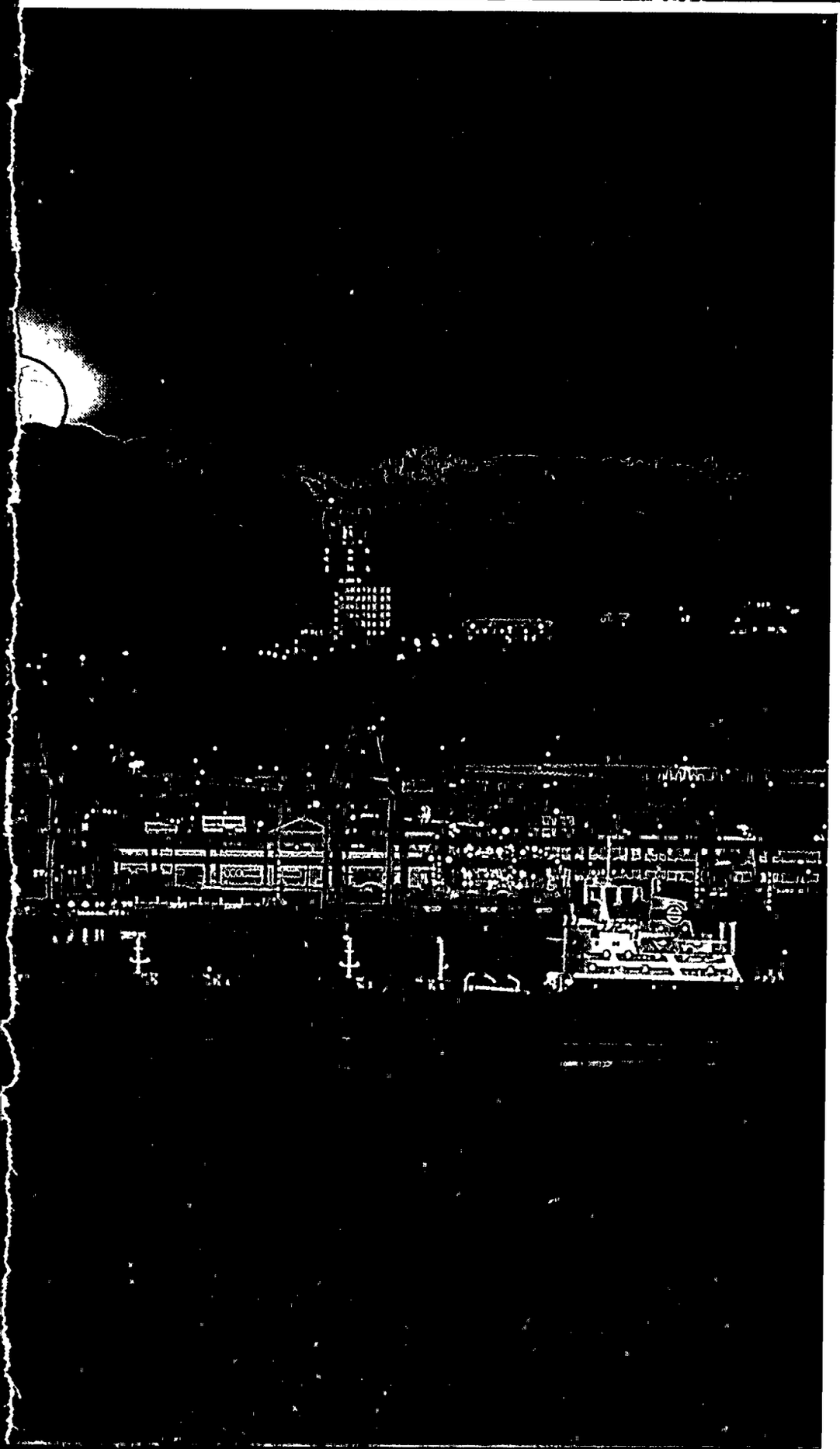


Hal Norman
Manager
Pacific County PUD
Supply System Board

Thomas M. Logston
Mayor
City of Richland
Supply System Board

Pacific County PUD No. 2—4.8 percent growth in kilowatt hour sales, with an increase of 831 customers, bringing the total to more than 13,000. Principal usage was residential. Pacific County is on the Pacific Ocean coast, where the Columbia River enters the ocean.

Richland City Light—7.7 percent growth in 1978, with 1,380 new customers, for a total of 14,000. Growth is principally in residential. Richland City Light serves the Supply System headquarters buildings. Industrial users include a nuclear fuels fabrication plant, a food processing plant, an irrigation pumping station and scientific laboratories.



The coastal cities of the Northwest are gateways to the trading nations of the Pacific Rim and the world beyond. That's one reason Seattle has provided 124,600 new jobs in the last three years, ranking it eighth in the nation. Portland is 13th with 91,900 new jobs.

Three of the projects, WNP-2 and WNP-1 and WNP-4, are being built on the federally owned Hanford Reservation near Richland, in eastern Washington. Two are being built in Grays Harbor County in western Washington, near the town of Satsop.

With the completion of the WNP-2 Reactor Building in November 1978, the skyline on the WNP-2 site changed dramatically. The end of the major civil construction work at the site also marked the end of the forest of crane booms.

Attention is focused now on the project interior where about 2,000 workers are installing piping, cable and mechanical equipment.

The project was approximately 73 percent complete at the end of the fiscal year.

The work force reached its peak of 4,000 during the fiscal year and began a gradual decline toward project completion.

In recognition of the approaching startup date, and the completion of some systems within the project, the Supply System moved its Test and Startup force to the site.

When commercial operation begins, WNP-2 will generate 1.1 million kilowatts for the 94 participating publicly owned utilities who serve nearly a million customers in the Northwest.

WNP-1 and WNP-4 are duplicate generating projects which were still in the civil construction phase during the fiscal year. In the original construction schedule, WNP-4 was deliberately scheduled about 18 months behind WNP-1. This scheduling provided for maximum efficiency of the construction work force who would complete a segment of WNP-1 and then move to WNP-4.

Progress can be measured statistically in reporting how many tons of concrete were placed or how many tons of reinforcing steel were installed, or what the work force size is at a given time.

The turbine generator, containment and general services buildings at WNP-1 are well along in construction and the three large cooling towers are almost complete. Piping and electrical work has started.

The installation of the 150,000 pound stainless steel refueling canal liner was a milestone in WNP-1 construction. The unit arrived at the site in seven subassemblies which were assembled on the ground and lifted into place as a single unit. This is expected to save two to three months on the work schedule.

In 1977, the "Hanford Giant," a one-of-a-kind, heavy duty luffing rig was used to set the 966-ton reactor pressure vessel at WNP-2 by lifting it over the top and into the containment. Because of the success of this method, and the development of more versatile lifting rigs, plans were developed for similar "over-the-top" setting of the WNP-1 and WNP-4 nuclear steam Supply System components weighing hundreds of tons. The method used at most other similar projects involves leaving a large opening in the containment building and moving the components in horizontally. The high lift and vertical placement permits earlier completion of the containment building and saves time on the construction schedule.

Bob Murray
Superintendent
Seattle City Light
Supply System Board

Rolf E. Jemptegaard
Commissioner
Skamania County PUD
Supply System Board

W. G. Hulbert, Jr.
Manager
Snohomish County PU
Supply System Board

Seattle City Light—An aggressive conservation program helped hold power sales at a stable level, despite the addition of 3,745 customers. Seattle City Light has about 230,000 residential customers who use about half of the energy sold. Among the major industrial and commercial customers are the Boeing Co., Bethlehem Steel, the University of Washington, major downtown office buildings and the city itself. The utility normally generates about two thirds of the power consumed in its service area, primarily from hydroelectric sources.

Skamania County PUD—4 percent average annual load growth over the past three years, with 303 customers added in 1978. The PUD serves a largely mountainous area noted for its recreational opportunities and timber harvesting. Bonneville Dam, the first in the federal hydroelectric system, joins Skamania County and Oregon.

Snohomish County PUD—Largest Public Utility District in the state with 130,734 customers in the 2,200-square-mile service area and 6.6 percent growth in 1978. Residential customers accounted for more than 60 percent of the electricity consumed in 1978. The PUD also serves a diversified industrial base, dominated by the paper, pulp and forest products industries, but also includes a large Boeing aircraft assembly plant and a growing electronics industry.

In recent years, the region's hydroelectric system has operated at the thin edge of its capacity. The continued, rapid growth in the region's population and economy makes wise conservation and new, thermal generation absolute necessities if shortages are to be avoided.

At WNP-4, there was significantly visible and measurable progress. The 380-ton reactor pressure vessel and its 100-ton closure head arrived at the site in February 1979 and the steam generators arrived in May from the fabrication plant in Indiana. The reactor pressure vessel was shipped by barge to New Orleans, then by ship through the Gulf of Mexico and the Panama Canal to Longview, and, finally, by barge up the Columbia River to Richland. The steam generators were shipped on a special 15-car train with reinforced cars carrying the heaviest components.

The components will be stored at the site until they are set in place in 1981.

At the end of the fiscal year, construction completion was approximately 26 percent for WNP-1 and 9 percent for WNP-4. Total manpower at the construction site was 4,100 and increasing toward the peak which is expected to be reached in 1981.

WNP-1 will generate 1,250,000 kilowatts for its 104 publicly owned participants when it goes into commercial operation in late 1983. Five investor-owned utilities have contractual rights to purchase 32.5 percent of the output until 1996.

WNP-4 also will generate 1,250,000 kilowatts for 88 publicly owned participating utilities in the Northwest when it begins commercial operation in mid-1985.

WNP-3 and WNP-5 also are duplicate generating plants being built in Grays Harbor County, near the town of Satsop, and are in the early stages of civil construction.

As with WNP-1 and WNP-4, the construction schedules establish completion dates 18 months apart.

A significant change in construction emphasis occurred during the fiscal year when earthwork was completed and construction of major plant structures began.

An outstanding achievement was the erection of the 212-foot-high, 165-foot-diameter, concrete shield wall for the WNP-3 containment in a continuous 21-day placement. It was described as a "masterpiece of coordination" as ironworkers placed 3,000 tons of reinforcing steel while the concrete workers followed closely behind to place 11,000 cubic yards of concrete. The work proceeded 24 hours a day, seven days a week, for 21 days. The 3-foot-thick wall went up at the rate of about 10 feet a day.

With the benefit of this experience, an identical shield wall for WNP-5 was erected even more rapidly in a continuous 15-day concrete placement.

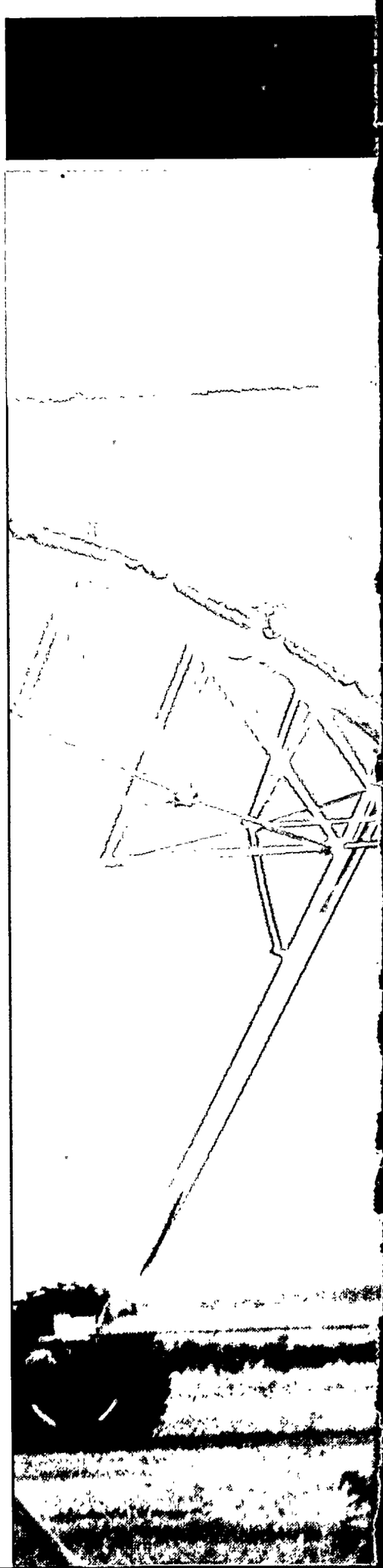
Immediately after the completion of the WNP-3 shield wall, work began on the welded steel, free-standing containment structure which will be 150 feet in diameter and will rise 271 feet above the reactor auxiliary building base slab.

The first concrete for the 500-foot-high natural draft cooling tower of WNP-3 was placed in June 1979.

At the end of the fiscal year, construction completion was approximately 14 percent for WNP-3 and 3 percent for WNP-5. Total manpower at the construction site was 2,100.

WNP-3 will generate 1,240,000 kilowatts for its 103 publicly owned utility participants and the four investor-owned utilities which have purchased ownership shares equaling 30 percent of the project.

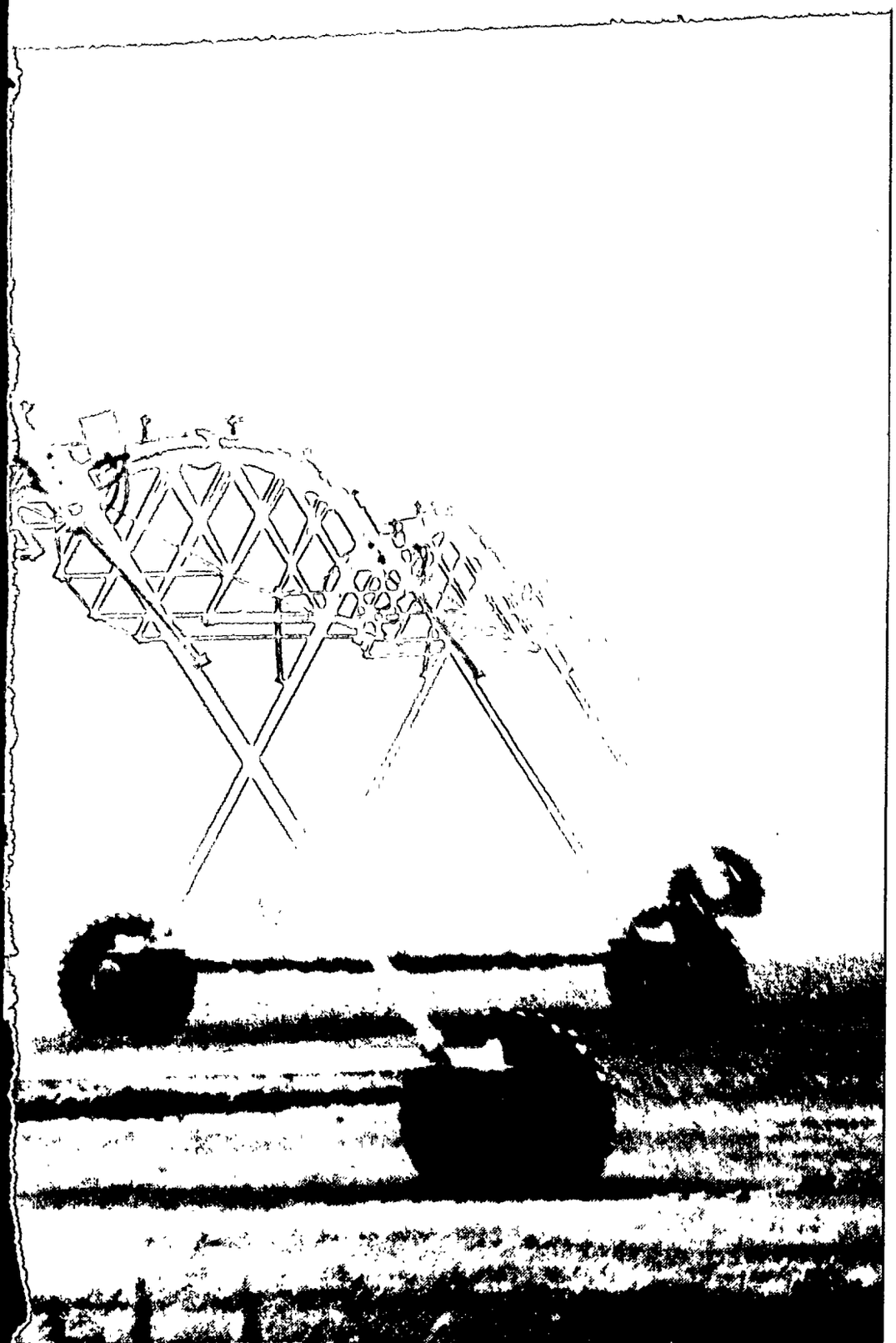
WNP-5 will generate 1,240,000 kilowatts for its 88 publicly owned utility participants and the one investor owned utility which has purchased ownership shares equaling 10 percent of the project. Commercial operation begins in 1986.



Paul Nolan
Director
Department of Public Utilities
Tacoma City Light
Supply System Board

Tacoma City Light—5 percent growth in 1978, with 3,710 customers added in 1978. Unprecedented growth in the service area reflects a booming housing market. Estimates indicate that without an active conservation program, Tacoma City Light would have exceeded the 1977 load by more than 12 percent. Energy conservation will continue to play an important role in Tacoma City Light activities, while alternate energy resources are examined. The utility owns and operates six hydroelectric projects. Diversified industries accounted for the largest portion of the power sold.

Wahkiakum County PUD—Energy usage and the number of customers remained at a stable level in the small and remote PUD service area on the Columbia River in the southwestern part of the state. Almost all sales are to residential customers. Charles Emerick, Commissioner and Supply System Board Member, is not pictured.



Over much of the arid west, water is the limiting factor to agriculture. Hundreds of thousands of acres are being opened to irrigation now, permitting use of land that once was considered marginal. The long term challenge is to provide food for a growing nation and a hungry world. Water makes the land bloom; electrical energy moves the water.

The Finance Staff has the essential task of planning, controlling and reporting the Supply System's financial activities. With one of the most ambitious nuclear power construction programs in the country, the Finance Group's primary responsibility is acquiring and managing the funds needed to finance construction of our five projects.

Fiscal Year 1979 was another successful year for the Supply System's financing program. A total of $1.085 billion of long-term revenue bonds were sold in six separate trips to the municipal bond market. These sales increased the Supply System's outstanding revenue bonds to approximately $3.8 billion at an average weighted borrowing cost of 6.54 percent.

Of the $1.085 billion, four issues totaling $740 million were sold for the net billed projects (WNP Nos. 1, 2 and 3) bringing our financing program for these projects to approximately 58 percent complete on June 30, 1979. Two issues totaling $345 million were sold for WNP Nos. 4 and 5 bringing the financing program for these projects to approximately 20 percent complete as indicated in Table I.

Additional information on annual debt service requirements, issue dates, maturity dates, and the security for the bonds is included in the Financial Section of this report.

With such a large financing program, a sophisticated investment program has been developed. During Fiscal Year 1979, the Supply System maintained an average daily investment balance of $1.45 billion at an average rate of return of 7.20 percent.

Equally important as the acquisition of funds is the management and control of expenditures. This control includes the annual preparation or updating of detailed construction, operating, administrative and special program budgets based on established goals and action plans. Periodic financial measurement reports are also issued.

With the growth and magnitude of the Supply System programs, emphasis is being placed on increasing the financial overview function. The establishment of project controller positions at each project site was one of the first steps in strengthening the financial check and balance function.

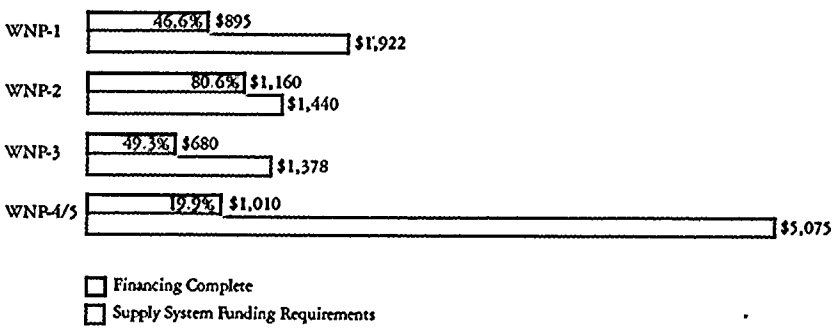
In addition to traditional financial responsibilities, Finance personnel are also responsible for the data systems and risk management functions.

The design, financing, construction and operation of nuclear power plants are extremely complex. Sophisticated and diverse computer systems are in use to support the technical, operating, construction and financial systems.

The Corporate Information Systems function involves the development, implementation and maintenance of mechanized information and control systems. The basic operating philosophy has been to contract with outside companies providing computer hardware and software services rather than purchasing the basic computer hardware ourselves. This approach has resulted in lower computer costs and reduced lead-time necessary to implement and maintain systems.

The risk management function involves the assessment of the maximum probable loss of Supply System properties, the determination of self-insurance levels and purchase of insurance. With nuclear fuel coming on the project site in the near future, the Supply System is currently developing its nuclear insurance program.

Supply System
Funding Requirements
($ in Millions) June 30, 1979



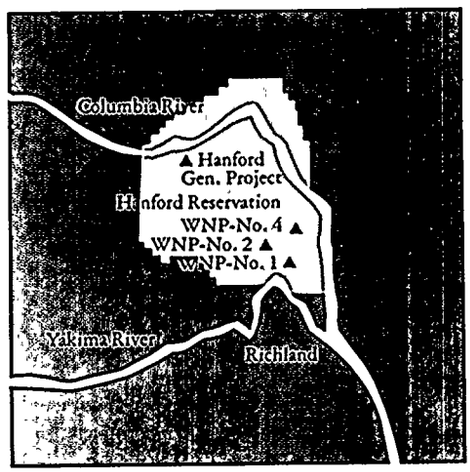
Washington Public Power Supply System is an organization whose activities touch the lives of millions of individuals in seven states.

A total of 115 utilities participate in the Supply System's projects. Combined, they represent about 6.5 million consumers.

The average energy growth rate expected over the next 10 years for the 110 publicly owned utilities participating in Supply System projects is 330,000 kilowatts a year, requiring an annual addition of 470,000 kilowatts of capacity.

In all, the five new generating facilities, when complete, will provide about one fifth of all the electrical energy in the Pacific Northwest.

- Public Agencies
- Private Utilities
- Public and Private Combined
- Municipalities
- ▲ WPPSS Nuclear Projects
- ● Packwood Lake Hydroelectric Project



Project Participants

Public & Peoples Utility Districts

Oregon
Central Lincoln Peoples Utility District
Clatskanie Peoples Utility District
Northern Wasco County Peoples Utility District
Tillamook Peoples Utility District

Washington
Benton County PUD
Chelan County PUD
Clallam County PUD
Clark County PUD
Cowlitz County PUD
Douglas County PUD
Ferry County PUD
Franklin County PUD
Grant County PUD No. 2
Grays Harbor County PUD
Kittitas County PUD
Klickitat County PUD
Lewis County PUD
Mason County PUD No. 1
Mason County PUD No. 3
Okanogan County PUD
Pacific County PUD No. 2
Pend Oreille County PUD
Skamania County PUD
Snohomish County PUD
Wahkiakum County PUD
Whatcom County PUD

Cooperatives

California
Surprise Valley Electrification Corp.

Idaho
Clearwater Power Co.
East End Mutual Electric Co., Ltd.
Fall River Rural Electric Cooperative, Inc.
Farmers Electric Co. Ltd.
Idaho County Light & Power Cooperative Assn., Inc.
Kootenai Electric Cooperative, Inc.
Lost River Electric Cooperative, Inc.
Northern Lights, Inc.
Prairie Power Cooperative, Inc.
Raft River Rural Electric Cooperative, Inc.
Riverside Electric Co., Ltd.
Rural Electric Co.
Salmon River Electric Cooperative, Inc.
South Side Electric Lines, Inc.
Unity Light & Power Company

Montana
Flathead Electric Cooperative, Inc.
Glacier Electric Cooperative, Inc.
Lincoln Electric Cooperative, Inc.
Missoula Electric Cooperative, Inc.
Ravalli County Electric Cooperative, Inc.
Vigilante Electric Cooperative, Inc.

Nevada
Wells Rural Electric Cooperative, Inc.

Oregon
Blachly-Lane County Cooperative Electric Assn.
Columbia Basin Electric Cooperative, Inc.
Central Electric Cooperative, Inc.
Columbia Power Cooperative Assn., Inc.
Consumers Power, Inc.
Coos-Curry Electric Cooperative, Inc.
Douglas Electric Cooperative, Inc.
Harney Electric Cooperative, Inc.
Hood River Electric Cooperative, Inc.
Lane County Electric Cooperative, Inc.
Midstate Electric Cooperative, Inc.
Salem Electric
Umatilla Electric Cooperative Assn.
Wasco Electric Cooperative, Inc.
West Oregon Electric Cooperative, Inc.

Washington
Alder Mutual Light Company
Benton Rural Electric Assn., Inc.
Big Bend Electric Cooperative, Inc.
Columbia Rural Electric Assn., Inc.
Elmhurst Mutual Power & Light
Inland Power & Light Co.
Lincoln Electric Cooperative, Inc.
Nespelem Valley Elec. Cooperative, Inc.
Ohop Mutual Light
Okanogen County Electric Cooperative, Inc.
Orcas Power & Light Company
Parkland Light & Water Company
Tanner Electric

Wyoming
Lower Valley Power & Light, Inc.

Municipalities

Idaho
Albion
Bonners Ferry
Burley
Declo
Heyburn
Idaho Falls
Minidoka
Rupert

Oregon
Bandon
Canby
Cascade Locks
Drain
Eugene
Forest Grove
McMinnville
Milton-Freewater
Monmouth
Springfield Utility Board

Washington
Blaine
Centralia
Cheney
Coulee Dam
Ellensburg
McCleary
Port Angeles
Richland
Seattle
Steilacoom
Sumas
Tacoma

Irrigation Districts
Consolidated Irrigation District 19
Vera Irrigation District 15

Investor Owned Utilities
Montana Power Company
Pacific Power & Light Company
Portland General Electric Company
Puget Sound Power & Light Company
The Washington Water Power Company

Total Participants by classification:

Cooperatives:	52
Municipalities:	32
Public Utility Districts:	26
Investor Owned Utilities:	5
Total	115

In many respects, the Washington Public Power Supply System is a unique organization. Certainly its creation marked an innovative departure in the history of electrical energy generation in America.

Yet, the Supply System rests on a concept that is as old, and as reliable, as the very first social contract: individuals can do some things better by working together than they can by going it alone.

That's really what the Supply System is all about. The challenges of energy supply in the future are simply too great for any of our individual members to meet successfully alone.

But those challenges are not too big for all of us, when we work in concert to achieve agreed-upon goals.

Washington Public Power Supply System
Annual Report - Financial Section
June 30, 1979

Contents

Balance Sheets

June 30, 1979 ($ in thousands)	Hanford Project	Packwood Lake Hydroelectric Project	Nuclear Project No. 1	Nuclear Project No. 2	Nuclear Project No. 3 Note A	Nuclear Projects Nos. 4 & 5 Note A	General Fund	Combined
Assets								
Utility Plants and Equipment—Note B:								
In service	$67,013	$12,205		$ 2,646			$2,325	$ 84,189
Modifications and additions to facilities owned by the U.S. Government	14,411							14,411
Less allowances for depreciation and amortization	(41,582)	(3,846)		(325)			(1,977)	(47,730)
	39,842	8,359		2,321			348	50,870
Construction work in progress			$580,683	913,843	$390,009	$ 734,108		2,618,643
Nuclear fuel			43,018	32,733	11,696	3,179		90,626
Prepayments for nuclear fuel enrichment services			5,336		5,040	10,980		21,356
Less amount charged to joint owners					(115,506)	(28,952)		(144,458)
	39,842	8,359	629,037	948,897	291,239	719,315	348	2,637,037
Special Funds—Note C:								
Cash and investment securities—Note B	3,203	317	226,702	254,902	273,365	258,523		1,017,012
Receivable from joint owners and other assets			4,920	252	10,899	3,349		19,420
Due from other Projects and General Fund—Note D			975		367	1,394		
Net amount due from other funds			4,162		6,457	8,565		19,184
	3,203	317	236,759	255,154	291,088	271,831		1,055,616
Sinking Funds—Note C:								
Cash and investment securities—Note B	6,903	697	102,329	38,448	165,167	179,867		493,411
Current Assets:								
Cash and investment securities	5,973	158		12,881			7,875	26,887
Accounts receivable	183	106		29			159	477
Prepaid insurance and other current assets	348	10					1,132	1,490
Due from General Fund	171	8						
Due from other funds	995	59		1,340				2,394
Cash deposit—matured interest and principal	4	3	162	55,443	1,045	20,384		77,041
	7,674	344	162	69,693	1,045	20,384	9,166	108,289
Other Asset—Unbilled reimbursable costs	2,131	2,946						5,077
Deferred Charges:								
Costs associated with abandoned plant site—Note B			4,290					4,290
Preliminary survey and investigation costs						7,503		7,503
Unamortized debt expense	176	32	1,410	1,443	987	2,654		6,702
	176	32	5,700	1,443	987	10,157		18,495
	$59,929	$12,695	$973,987	$1,313,635	$749,526	$1,201,554	$9,514	$4,317,925

See notes to financial statements.

	Hanford Project	Packwood Lake Hydroelectric Project	Nuclear Project No. 1	Nuclear Project No. 2	Nuclear Project No. 3 Note A	Nuclear Projects Nos. 4 & 5 Note A	General Fund	Combined
Liabilities								
Revenue Bonds—Note C:								
Principal amount	$51,565	$12,228	$895,000	$1,147,000	$680,000	$1,063,140		$3,848,933
Unamortized debt discount	(969)	(119)	(5,893)	(5,046)	(4,295)	(8,213)		(24,535)
	50,596	12,109	889,107	1,141,954	675,705	1,054,927		3,824,398
Special Funds—Note C:								
Accounts payable and accrued expenses		26	29,883	23,177	31,639	59,588		144,313
Amounts withheld from contractors			20,544	24,247	13,021	22,684		80,496
Amounts due to other Projects and General Fund				196	17	960		
Net amount due to other funds	702	11		140				853
	702	37	50,427	47,760	44,677	83,232		225,662
Sinking Funds—Note C:								
Accrued interest on debt	545	149	30,129		21,642	34,446		86,911
Net amount due to other funds	292	47	4,162	1,200	6,457	8,565		20,723
	837	196	34,291	1,200	28,099	43,011		107,634
Current Liabilities:								
Accounts payable and accrued expenses	4,670	226		11,250			$7,475	23,621
Due to other Projects							1,742	
Matured interest on debt	4	3	162	48,943	1,045	3,014		53,171
Matured long-term debt				6,500		17,370		23,870
	4,674	229	162	66,693	1,045	20,384	9,217	100,662
Other Liability— Unearned revenue				12,780				12,780
Deferred Credits and Advances:								
Deferred gain on revenue bonds	2,220	124						2,344
Advances from members and participants	900			43,248			297	44,445
	3,120	124		43,248			297	46,789
Commitments and Contingencies— Note D								
	$59,929	$12,695	$973,987	$1,313,635	$749,526	$1,201,554	$9,514	$4,317,925

The interproject due to and from balances have been eliminated from the combined column.

Statements of Operations

Hanford and Packwood Projects

Year Ended June 30, 1979

($ in thousands)	Hanford Project	Packwood Project	Combined
Operating Revenues	$35,820	$830	$36,650
Operating Expenses:			
Reactor availability	29,695		29,695
Power production and transmission	1,094	171	1,265
Maintenance	843	40	883
Administrative and general	904	59	963
	32,536	270	32,806
	3,284	560	3,844
Interest and Other Income	976	154	1,130
	4,260	714	4,974
Other Expenses:			
Depreciation and amortization	1,703	257	1,960
Interest and debt discount amortization	2,557	457	3,014
	4,260	714	4,974
Net Revenue	$ -0-	$ -0-	$ -0-

See notes to financial statements.

Statements of Changes in Financial Position

Hanford and Packwood Projects

Year Ended June 30, 1979

($ in thousands)	Hanford Project	Packwood Project	Combined
Source of Funds:			
Operations			
Net Revenue	$ -0-	$ -0-	$ -0-
Items not affecting working capital:			
Depreciation and amortization	2,613	260	2,873
Decrease (increase) in costs reimbursable from power purchasers	214	(67)	147
Less gain on redemption of revenue bonds	(129)	(64)	(193)
Total from operations	2,698	129	2,827
Contributions for improvements and additions	4,209	5	4,214
Advances from participants for working capital	618		618
Decrease in unbilled reimbursable costs	434		434
	$7,959	$134	$8,093
Application of Funds:			
Net improvements and additions	$4,209	$ 5	$4,214
Cost of revenue bonds purchased and retired	2,635	139	2,774
Net increase in Special Funds	434		434
Net increase (decrease) in Sinking Funds	63	(10)	53
	7,341	134	7,475
Changes in Working Capital:			
Cash and investment securities	(1,686)	43	(1,643)
Receivables and other current assets	306	18	324
Cash deposit—matured interest and principal	6		6
Payables and other current liabilities	1,998	(61)	1,937
Matured interest on debt	(6)		(6)
Net Change in Working Capital	618	-0-	618
	$7,959	$134	$8,093

See notes to financial statements.

Statements of Source and Use of Funds

Nuclear Projects Nos. 1 through 5

Year Ended June 30, 1979 ($ in thousands)	Nuclear Project No. 1	Nuclear Project No. 2	Nuclear Project No. 3	Nuclear Projects Nos. 4 & 5	Combined
Source of Funds:					
Collected under net billing		$ 81,377			$ 81,377
Bonds proceeds	$178,457	356,468	$200,272	$343,774	1,078,971
Interest income	26,411	19,156	28,952	30,054	104,573
Charged to joint owners			56,571	11,844	68,415
Decrease in Special Funds	50,728				50,728
Decrease in Sinking Funds	33,966				33,966
Revaluation of investment securities		233		722	955
Other	3,439				3,439
	$293,001	$457,234	$285,795	$386,394	$1,422,424
Use of Funds:					
Construction costs	$226,633	$227,662	$189,145	$275,651	$ 919,091
Interest expense	52,823	65,006	40,265	59,744	217,838
Nuclear fuel	13,047	96	5	3,149	16,297
Financing expense	498	517	298	852	2,165
Bonds redeemed		6,500		24,170	30,670
Increase in Special Funds		142,130	47,294	9,341	198,765
Increase in Sinking Funds		11,553	8,788	10,254	30,595
Increase in amounts due participants		3,689			3,689
Preliminary survey and investigation costs (Energy and Uranium Programs)				3,233	3,233
Other		81			81
	$293,001	$457,234	$285,795	$386,394	$1,422,424

See notes to financial statements.

Notes to Financial Statements

Note A—Organization

The Washington Public Power Supply System was organized in 1957 as a municipal corporation and joint operating agency of the State of Washington. Its membership consists of 19 public utility districts and 4 municipalities that own and operate electric systems within the State of Washington. It is empowered to acquire, construct and operate facilities for the generation and transmission of electric power and energy.

The Supply System has constructed and is now operating the Packwood Lake Hydroelectric Project (Packwood) and the Hanford Project and has five nuclear electric generating plants under construction (Nuclear Projects 1, 2, 3, 4 and 5). In addition, the Supply System has a General Fund. The Hanford Project and Nuclear Projects Nos. 1, 2 and 4 are situated on land leased from the United States Department of Energy (DOE). Rental for each project's property is a nominal amount each year plus any taxes or assessments that may be imposed upon the leasehold. Nuclear Projects Nos. 3 and 5 are being constructed on land owned by the projects.

Because of Bonneville Power Administration's (BPA—an agency of the United States Government) obligations under the Net Billing and Exchange Agreements, as described in Note C, the Supply System and BPA have entered into Project Agreements with respect to Nuclear Projects Nos. 1, 2 and 3, and Exchange Agreements with respect to the Hanford Project. These agreements provide, among other things, standards for the design, licensing, financing, construction, fueling, operation and maintenance of each of the aforementioned projects. The agreements also provide for the approval of certain replacements, repairs or capital additions thereto.

Nuclear Projects Nos. 3 and 5 are being constructed and will be operated by the Supply System pursuant to terms of Ownership Agreements between the Supply System and investor-owned utilities. Nuclear Project No. 3 will be 70% owned by the Supply System and 30% by four investor-owned utilities: Pacific Power & Light Company-10%, Portland General Electric Company-10%, Puget Sound Power & Light Company-5% and The Washington Water Power Company-5%. Nuclear Project No. 5 will be 90% owned by the Supply System and 10% by Pacific Power & Light Company. Each of the joint owners is responsible for its own financing costs, providing its share of the costs of construction and operation and will be entitled to its ownership share of the projects' capability. The parties to the Ownership Agreements have designated the Supply System to act as their agent to construct, operate and maintain the projects.

All projects heretofore undertaken by the Supply System have been separately financed except for Nuclear Projects Nos. 4 and 5. Nuclear Project No. 4 and the Supply System's ownership share of Nuclear Project No. 5 are being financed together as one utility system. Proceeds from the Generating Facilities Revenue Bonds (Nuclear Projects Nos. 4 and 5) may also be used for paying the cost of certain work in connection with the acquisition and development of uranium-bearing lands and with the development of additional energy resources, shown as Preliminary Survey and Investigation Costs on the accompanying balance sheets. The obligations issued with respect to each project are payable solely from the revenues of that project.

Note B —Summary of Significant Accounting Policies

The Supply System has adopted accounting policies and practices that are in accordance with generally accepted accounting principles applicable to the utility industry. Separate books of account are maintained for each project except for Nuclear Projects Nos. 4 and 5, which are accounted for as one entity.

Capitalization of Costs and Overhead Expenses

During the construction phase of a project, the Supply System will capitalize all costs of the project including general, administrative, interest, certain depreciation and other overhead expenses. Payments received under the Nuclear Project No. 2 Net Billing Agreements for interest on revenue bonds, as described in Note C, are recorded as a reduction in construction costs during the construction period. All overhead expenses of the Supply System are allocated from the General Fund to the various projects primarily on the basis of direct labor cost.

Debt Discount, Premium and Expenses

Debt discount or premium and expenses relating to the issuance of revenue bonds are amortized by the straight-line method over the terms of the respective issues. Such provisions for amortization, net of accretion of premiums, are capitalized as costs of utility plant until net billing begins at which time the net amortization is accounted for as further described under Revenues.

Gains on Redemption of Revenue Bonds —Packwood and Hanford Projects

Gains from the early extinguishment of debt occurring prior to 1973 have been recorded in the balance sheet as deferred credits less the annual straight-line accretion to income over the terms of the respective bonds. Gains occurring after January 1, 1973 are recorded as income in the fiscal year the debt is redeemed.

Current Assets and Current Liabilities

Assets and liabilities shown as current in the accompanying balance sheets exclude current maturities on revenue bonds and accrued interest thereon because sinking funds are provided for their payment.

Investment Securities

Investment securities include time certificates of deposit, repurchase agreements (secured by U.S. Government securities) and United States Government and Government agencies securities. Investment securities are stated at cost or amortized cost as appropriate and include accrued interest.

Investment securities owned by the Hanford and Packwood Projects and Nuclear Projects Nos. 2, 4 and 5 Bond Fund Reserve Accounts (included in Sinking Funds) and Reserve and Contingency Funds (included in Special Funds) are stated at the lower of amortized cost or market as provided by their respective bond resolutions. Because these funds are to be maintained at specific levels, any required revaluation of the carrying amount of the investment securities is charged or credited to the participants of Hanford, Packwood and Nuclear Project No. 2. Revaluations in the carrying value of these funds in Nuclear Projects Nos. 4 and 5 are charged or credited to the cost of construction.

The market values of investment securities held in Sinking and Special Funds and in Current Assets approximate amortized cost as of June 30, 1979.

Income Earned on Investment Securities

Income earned on securities includes gains and losses from the sale of securities. Income earned on securities held in Nuclear Projects Nos. 1, 3, 4 and 5 Special and Sinking Funds is recorded as a reduction in construction costs during the period of construction. Income earned on securities held in the Nuclear Project No. 2 Construction Fund (included in Special Funds) is recorded as a reduction of construction costs during the construction period and all income earned on securities held in other funds accrues to the Revenue Fund.

Utility Plants and Equipment —At Cost

The Hanford and Packwood Projects' provisions for depreciation of utility plant are computed by the straight-line method based on the estimated useful lives of the projects, which approximate the term of the related revenue bonds. The final redemption of each project's revenue bonds occurs in 1996 and 2012, respectively.

If the Hanford Project ceases operations after June 1983, as discussed in Note D, the carrying value of the plant will continue to be depreciated over the remaining term of the outstanding revenue bonds. Regardless of continued operations, the purchasers of power from the Project will continue to be obligated to pay the principal amount of bonded debt, among other costs, until July 1, 1980 when participants in Nuclear Project No. 1 assume this obligation.

Provisions for amortization of modifications and additions to facilities owned by the U.S. Government are being amortized over the period covered by the contract for dual-purpose operation of the New Production Reactor.

Costs associated with the abandoned plant site have been recorded as deferred charges. These costs will be charged to income over the life of the new facilities beginning with the commencement of commercial operations, to the extent they have not been recovered from certain private utilities and BPA industrial customers benefiting from the continued operation of the Hanford Project. During the year ended June 30, 1979, $3,439,000 was recovered from the industrial customers.

The administrative office building and warehouse facilities that are accounted for on the records of Nuclear Project No. 2 and the office equipment and vehicles that are accounted for on the records of the General Fund are being depreciated by the straight-line method based on their estimated useful lives.

Contributions Used for Purchase of Equipment — Packwood and Hanford Projects

Monies provided by participants to acquire equipment since completion of the Projects are recorded and accounted for as a reduction of the carrying value of such equipment included in Utility Plant.

Revenues

Member purchasers of power are contractually obligated to pay project annual costs including debt service. The Supply System records these reimbursable annual costs as operating revenues for the Hanford and Packwood Projects. In addition to recovery of project annual costs the Supply System records as revenue each year an amount equal to the provisions for depreciation and amortization, less the recorded gains on bond redemption. This accounting policy is used in order to spread such revenues equally over the full term of the bonds.

Cumulative reimbursable annual costs less payments by member purchasers for future bond redemption are reflected as Unbilled Reimbursable Costs in the accompanying balance sheets.

For Project No. 2, payments received from member purchasers for bond redemption less the annual amortization of debt discount are shown as Unearned Revenue in the accompanying balance sheets.

Retirement Plan

The Supply System participates in the Washington State Public Employees' Retirement System that provides retirement benefits to eligible employees. Cost of the plan to the Supply System is determined by the Retirement System's Board. The actuarially computed value of pension benefits exceeds the fund assets for the Retirement System. However, because the Retirement System is a multi-employer system, the amount of such excess, if any, that relates to the Supply System is not available.

Note C—Revenue Bonds

Outstanding revenue bonds of the various projects as of June 30, 1979 are presented on Pages 14 and 15.

Security—Agreements and Contracts

The United States of America, Department of Energy (DOE), acting by and through the Bonneville Power Administration (BPA) has purchased the entire capability of the Hanford Project and the Supply System's ownership share of the projects' capability in Nuclear Projects Nos. 1, 2 and 3 from its statutory preference customers and, in addition, with respect to Project No. 1, five of its private utility customers. Each of these customers has, in turn, purchased such capability from the Supply System, all under the Net Billing and Exchange Agreements. BPA is obligated to pay the participants, and the participants are obligated to pay the Supply System its pro rata share of the total annual costs of the projects including debt service on the bonds, whether or not the projects are completed, operable or operating and notwithstanding the suspension, reduction or curtailment of the projects' output.

The Supply System's Packwood Project Revenue Bonds are secured by Power Sales Contracts between the Supply System and each of its 12 member purchasers. Pursuant to these agreements, each member purchases and pays the percentage allocation of power specified therein at rates sufficient to operate and maintain the Project, including debt service on the bonds. Such payments will continue until the bonds are paid or provision is made for their payment or retirement.

The contracts also provide that if any of the 12 members, because of insolvency or bankruptcy, fails to pay its respective share of project annual costs, 8 of the 12 members, which account for 94.75 percent of the Project's power output, are liable for an automatic pro rata increase of the shares not so paid. The remaining four member purchasers are limited in their liability for a pro rata increase to an aggregate amount equal to double their original percentages.

As security for the Generating Facilities Revenue Bonds for Nuclear Projects Nos. 4 and 5, the Supply System has entered into Participants' Agreements with 88 utilities operating principally in the western United States. Pursuant to the Participants' Agreements, the participants are obligated to pay their respective share of project annual costs, including debt service. The agreements stipulate the percentages of project output allocated to such utilities. Billings to the participants for Nuclear Projects Nos. 4 and 5 will begin on July 1, 1988, or the date of commercial operation for the respective projects, whichever is earlier.

If the Supply System is unable to issue and sell bonds to obtain funds to pay the principal of the revenue bonds when due, or is unable to proceed with the financing of Nuclear Projects Nos. 4 and 5 because of such matters as inability to obtain necessary licenses, each of the participants will pay its proportionate share of the principal due on the revenue bonds together with any other costs associated with the termination of the projects.

Security—Creation of Funds

As other security, the Supply System has been required to establish trustee-administered sinking funds for the sole purpose of paying principal and interest on the bonds.

With respect to the projects under construction, proceeds of revenue bonds not specifically required to meet principal and interest payments have been placed in Special Funds. Except for the Reserve and Contingency Fund discussed below, the Special Funds are to be used for construction purposes. The Special Funds may also be used, if necessary, to make required interest and principal payments.

Hanford, Packwood and Nuclear Projects Nos. 2, 4 and 5 have each established a Reserve and Contingency Fund. As provided in the bond resolutions, these funds are to be used, among other things, to make up any deficiencies in the Sinking Funds and to pay for extraordinary operation and maintenance costs, replacements and contingencies.

On September 1, 1977, the participants in Nuclear Project No. 2 began funding debt service, working capital and reserve requirements as provided in the Net Billing Agreements. In addition to payments for debt service, $3,000,000 was deposited in the Revenue Fund to provide working capital; $3,000,000 was deposited to the Reserve and Contingency Fund; and $37,247,865 was deposited in the Bond Fund to satisfy reserve requirements. These advances, totaling $43,247,865, will reduce future amounts otherwise payable by participants for operating costs and debt service.

Note D —Commitments and Contingencies

Contracts

The Supply System has entered into substantial contracts covering a portion of total estimated costs for certain major equipment and material, and for services relating to financing, design and the supply of nuclear fuel for the projects under construction.

Hanford Project and its Relationship to Nuclear Project No. 1

The Department of Energy owns and operates a nuclear reactor, the New Production Reactor. This reactor provides the steam to the Hanford Project. The Supply System has an agreement with DOE to continue dual-purpose operation of the reactor through June 1983.

It was initially intended that Nuclear Project No. 1 would be constructed adjacent to the Hanford Project and would provide the energy source to operate the Project when DOE ceased operation of the New Production Reactor. It was necessary that the Hanford Project be shut down on October 31, 1977 to allow for construction of Nuclear Project No. 1. Because studies indicated that generating resources in the Pacific Northwest would be inadequate in the late 1970's and early 1980's, the Supply System determined that the Hanford Project should be kept available for power production after October 1977. Therefore, the Nuclear Project No. 1 Net Billing, Exchange and Project Agreements were amended to provide for the separation of Nuclear Project No. 1 from the Hanford Project. Such amendments provide that Hanford Project costs, to the extent not otherwise provided for, will be treated as Nuclear Project No. 1 costs having a first claim on the revenues of that Project.

The amended agreements provide for the payment by Nuclear Project No. 1 participants of deactivation costs (contractually limited to $6,286,000) and all debt service costs of the Hanford Project, commencing July 1, 1980, regardless of continued operation of the reactor. Outstanding revenue bonds will then aggregate approximately $48,000,000. If the plant ceases operations, revenues arising from the aforementioned payments will nevertheless be recorded each year thereafter in amounts that will result in full realization of the carrying value of the plant.

The U.S. Government has an option to acquire ownership of the Hanford Project upon obtaining Congressional approval. If the Government exercises its option, it must assume all rights and obligations of the Project, including the obligation to pay all revenue bonds.

Litigation —Nuclear Project No. 2

In January 1976, the Supply System terminated its contract with the contractor responsible for the civil construction work on Nuclear Project No. 2 for breach of contract. In February 1976, the contractor filed a lawsuit against the Supply System. In its complaint, the contractor is asking for damages of not less than $24,500,000 together with interest thereon, attorney fees, and other undetermined amounts of damages. The Supply System filed its answer and counterclaim against the contractor and its surety denying liability and seeking damages of $13,970,000 plus substantial consequential damages. Legal counsel for the Supply System have confidence as to the merits of the Supply System's position, but decline to assign probability as to the amounts that might be recovered, if any, by the Supply System or the contractor in this case. In two related matters, subcontractors of the aforementioned contractor have filed suit

against the contractor for alleged breach of contract and against the Supply System for alleged interference. In one complaint, the subcontractor seeks recovery of alleged damages of approximately $31,900,000 and punitive damages of $20,000,000. The Supply System's legal counsel are of the opinion that the claim for punitive damages is without any merit. Counsel believe that the Supply System should not be held liable on any of the remaining claims but cannot assign probabilities or values to the claims.

A local plumbers and steamfitters union and others have filed actions in Federal District Court against the Supply System and several other companies and individuals. These actions are based upon alleged violations of the Federal antitrust laws in connection with a 1976 strike at Nuclear Project No. 2 by plumbers and steamfitters. The relief requested includes, among other things, treble damages in an unspecified amount. The Supply System has filed an answer denying liability and the litigation is in the discovery stages. Counsel are confident of the Supply System's position but cannot assign probabilities or values to the claims.

Net Billing Agreements

On November 14, 1977, the City of Portland, Oregon and five residents of the City commenced a lawsuit against Bonneville and the Secretary of the Department of Energy. The Supply System and the Participants have been added as defendants in this lawsuit. The action is brought under the National Environmental Policy Act of 1969 (NEPA) and alleges, among other things, that Bonneville did not prepare, publish, circulate and file detailed environmental impact statements concerning each of its Net Billing Agreements entered into after NEPA became effective on January 1, 1970. The Supply System projects involved are Nuclear Projects Nos. 1, 2 and 3. The complaint seeks, among other things, (1) a declaratory judgment declaring the Net Billing Agreements null and void; (2) an order enjoining the performance of the Net Billing Agreements; and (3) an order requiring the defendants to prepare, publicly circulate, file and consider a final and adequate environmental impact statement for each such Net Billing Agreement.

Legal counsel for the Supply System have advised that there is a possibility that the court might find non-compliance with NEPA in some respect and that in such event the court might enter an order designed to enforce compliance. However, counsel are of the opinion that even if the court should decide that Bonneville has not fully complied with the provisions of NEPA, under applicable legal principles the Net Billing Agreements will not be declared null and void nor will performance of the obligations thereunder of the Participants to make payments and Bonneville to make credits or make payments be enjoined. Accordingly, legal counsel are of the opinion that the lawsuit is without substantial merit insofar as it deals with the Net Billing Agreements.

Other

In addition, there are other litigation matters pending against the Supply System that management and counsel believe are either without merit or if decided adversely would not have a material effect on the financial statements of the Projects.

The estimated cost of the Projects may either be increased or decreased as a result of the outcome of the above litigation.

Revenue Bonds

Outstanding Revenue Bonds of the various projects as of June 30, 1979 consist of the following:

Project	Series	Date of Sale	Effective Interest Rate	Offering Prices	Coupon Rate	Serial or Term Maturities	Amount Outstanding (in $000's)
Hanford Project							
Revenue Bonds ($2,710,000 due within one year)	1963	05-08-63	3.26%	(A)	2.90-3.10%	9-1-79/1986	$ 23,980
				98	3.25	9-1-1996	27,585
							$ 51,565
Packwood Lake Hydroelectric Project							
($101,250 due within one year)							
Revenue Bonds	1962	03-20-62	3.66	99.425	3.625	3-1-2012	$ 9,278
Revenue Bonds	1965	11-04-65	3.76	100.5	3.75	3-1-2012	2,950
							$ 12,228
WPPSS Nuclear Project No. 1							
Revenue Bonds	1975	09-18-75	7.73	(A)	5.75-7.40	7-1-81/2000	$ 42,000
				100	7.70	7-1-2010	58,300
				100	7.75	7-1-2017	74,700
							175,000
Revenue Bonds	1976A	02-04-76	6.84	(A)	6.00-6.25	7-1-81/1998	37,020
				100	6.90	7-1-2010	66,485
				100	7.00	7-1-2017	76,495
							180,000
Revenue Bonds	1976B	08-31-76	6.37	(A)	5.00-5.90	7-1-81/1998	41,825
				100	6.50	7-1-2010	66,940
				99.50	6.50	7-1-2017	71,235
							180,000
Revenue Bonds	1978A	03-21-78	5.69	(A)	5.00-5.50	7-1-84/2002	64,270
				100	5.80	7-1-2010	50,920
				100	5.875	7-1-2017	64,810
							180,000
Revenue Bonds	1978B	12-05-78	6.61	(A)	5.50-6.00	7-1-84/1998	38,355
				100	6.35	7-1-2003	22,305
				100	6.60	7-1-2009	38,190
				99.50	6.80	7-1-2017	81,150
							180,000
WPPSS Nuclear Project No. 2							$ 895,000
Revenue Bonds ($3,000,000 due July 1, 1979)	1973	06-26-73	5.66	(A)	5.00-5.10	7-1-80/2010	$ 19,600
				100	5.70	7-1-2012	124,400
							144,000
Revenue Bonds ($2,500,000 due July 1, 1979)	1974	07-23-74	7.21	(A)	6.50-6.90	7-1-80/1994	23,000
				100	7.00	7-1-1999	15,000
				100	7.375	7-1-2012	37,000
							75,000
Revenue Bonds ($1,000,000 due July 1, 1979)	1974A	11-26-74	7.67	(A)	7.20	7-1-80/1994	30,000
				100	7.40	7-1-1999	15,000
				100	7.75	7-1-2012	78,000
							123,000
Revenue Bonds	1975A	03-06-75	6.71	(A)	6.60	7-1-82/1994	32,000
				100	6.60	7-1-1999	15,000
				100	6.875	7-1-2012	78,000
							125,000
Revenue Bonds	1976	06-03-76	6.63	(A)	5.40-6.25	7-1-82/1998	27,840
				99.25	6.625	7-1-2006	42,300
				100	6.75	7-1-2012	49,860
							120,000
Revenue Bonds	1976A	11-18-76	5.87	(A)	5.50-5.875	7-1-82/2002	94,195
				100	6.00	7-1-2007	44,815
				99.50	6.00	7-1-2012	60,990
							200,000

Project	Series	Date of Sale	Effective Interest Rate	Offering Prices	Coupon Rate	Serial or Term Maturities	Amount Outstanding (in $000's)
WPPSS Nuclear Project No. 2 (Continued)							
Revenue Bonds	1978	07-11-78	6.71	(A)	5.50-6.60	7-1-82/2000	68,250
				100	6.80	7-1-2006	45,520
				100	6.875	7-1-2012	66,230
							180,000
Revenue Bonds	1979	03-13-79	6.49	(A)	5.50-6.00	7-1-82/1999	62,905
				100	6.40	7-1-2004	33,490
				100	6.75	7-1-2012	83,605
							180,000
							$1,147,000
WPPSS Nuclear Project No. 3							
Revenue Bonds	1975	12-03-75	7.87	(A)	5.40-7.25	7-1-83/1998	$ 26,145
				100	7.875	7-1-2010	52,695
				100	7.875	7-1-2018	71,160
							150,000
Revenue Bonds	1976	04-13-76	6.48	(A)	5.50-6.00	7-1-83/1998	19,605
				99.625	6.50	7-1-2010	35,100
				100	6.60	7-1-2018	45,295
							100,000
Revenue Bonds	1977	09-12-77	5.71	(A)	5.00-5.30	7-1-85/2000	59,305
				99.50	5.70	7-1-2009	63,535
				99.50	5.80	7-1-2018	107,160
							230,000
Revenue Bonds	1978	09-12-78	6.27	(A)	5.90-6.00	7-1-85/2004	66,385
				100	6.375	7-1-2010	42,985
				99	6.40	7-1-2018	90,630
							200,000
Nuclear Projects Nos. 4 and 5							$ 680,000
Revenue Bonds ($25,740,000 due within one year)	1975	07-24-75	7.04	(A)	6.75-6.90	6-1-80/1981	$ 53,140
Revenue Bonds	1977A	02-03-77	5.93	(A)	5.50-5.75	7-1-89/2001	42,105
				100	5.90	7-1-2008	40,605
				100	6.00	7-1-2015	62,290
							145,000
Revenue Bonds	1977B	05-24-77	6.32	(A)	6.00-6.20	7-1-89/2001	33,485
				100	6.40	7-1-2012	56,515
							90,000
Revenue Bonds	1977C	09-13-77	5.96	(A)	5.20-5.70	7-1-89/2001	20,480
				100	6.00	7-1-2018	109,520
							130,000
Revenue Bonds	1978A	01-31-78	6.07	(A)	5.50-5.75	7-1-89/2000	27,700
				99.75	6.00	7-1-2010	43,900
				100	6.125	7-1-2018	78,400
							150,000
Revenue Bonds	1978B	05-23-78	6.86	(A)	6.00-6.60	7-1-89/2003	37,785
				100	6.80	7-1-2010	32,960
				100	6.90	7-1-2018	79,255
							150,000
Revenue Bonds	1978C	10-12-78	6.81	(A)	6.00-6.50	7-1-89/2003	45,225
				99.50	6.75	7-1-2010	42,970
				100	7.00	7-1-2018	81,805
							170,000
Revenue Bonds	1979A	02-14-79	7.16	(A)	6.30-6.90	7-1-89/2003	47,515
				100	7.125	7-1-2010	43,140
				100	7.25	7-1-2018	84,345
							175,000
							$1,063,140

(A) Various prices

Report of Independent Accountants

Board of Directors
Washington Public Power Supply System
Richland, Washington

We have examined the individual and combined financial statements, as listed in the financial statements section of the table of contents, of Washington Public Power Supply System's Hanford Project, Packwood Lake Hydroelectric Project, Nuclear Project No. 1, Nuclear Project No. 2, Nuclear Project No. 3, Nuclear Projects Nos. 4 and 5 and the General Fund for the year ended June 30, 1979. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements listed in the aforementioned table of contents present fairly the respective individual and combined financial positions of Washington Public Power Supply System's Hanford Project, Packwood Lake Hydroelectric Project, Nuclear Project No. 1, Nuclear Project No. 2, Nuclear Project No. 3, Nuclear Projects Nos. 4 and 5 and the General Fund at June 30, 1979 and the respective individual and combined results of operations and changes in financial position of the operating projects and sources and uses of funds of the construction Projects Nos. 1, 2, 3 and 4 and 5 for the year then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Ernst & Whinney

Seattle, Washington
August 31, 1979

Statement of the State Auditor

To Whom it May Concern:

The Washington State Auditor's Division of Municipal Corporations conducts a continuous examination of all of the operations of the Washington Public Power Supply System, including each and every project. Reports are issued covering each fiscal year and are public documents.

On every such examination, state law requires that inquiry shall be made as to the financial condition and resources of the Supply System, whether the Constitution and laws of the state, the resolutions and orders of the Supply System, and the requirements of the Division of Municipal Corporations have been properly complied with; and into the methods and accuracy of the accounts and reports.

Very truly yours,

Robert V. Graham, State Auditor

Richard L. Husk
Chief Examiner
Division of Municipal Corporations

Statement of Debt Service Requirements

June 30, 1979 ($ in thousands)

Year	*Hanford* Principal	*Hanford* Interest	*Hanford* Annual Debt Requirements	*Packwood* Principal	*Packwood* Interest	*Packwood* Annual Debt Requirements	*WNP-1* Principal	*WNP-1* Interest	*WNP-1* Annual Debt Requirements
1980	$ 2,710	$ 1,567	$ 4,277	$ 101	$ 446	$ 547		$ 58,318	$ 58,318
1981	2,810	1,483	4,293	140	441	581	$ 3,695	58,318	62,013
1982	2,915	1,393	4,308	145	436	581	3,815	58,114	61,929
1983	2,915	1,303	4,218	155	431	586	4,045	57,903	61,948
1984	3,010	1,210	4,220	160	425	585	8,075	57,679	65,754
1985	3,125	1,114	4,239	170	419	589	8,530	57,244	65,774
1986	3,240	1,014	4,254	175	413	588	9,020	56,782	65,802
1987	3,255	913	4,168	180	406	586	9,535	56,290	65,825
1988	3,360	806	4,166	190	400	590	10,085	55,768	65,853
1989	3,485	693	4,178	195	393	588	10,670	55,214	65,884
1990	3,455	580	4,035	265	385	650	11,290	54,621	65,911
1991	5,065	425	5,490	275	375	650	11,960	53,987	65,947
1992	5,585	246	5,831	290	364	654	12,665	53,310	65,975
1993	5,835	58	5,893	300	354	654	13,425	52,587	66,012
1994	800	4	804	315	343	658	14,235	51,811	66,046
1995				330	331	661	15,100	50,974	66,074
1996				340	319	659	16,030	50,078	66,108
1997				360	306	666	17,025	49,114	66,139
1998				380	293	673	18,095	48,082	66,177
1999				400	279	679	19,225	46,980	66,205
2000				465	263	728	20,490	45,741	66,231
2001				490	246	736	21,835	44,417	66,252
2002				515	228	743	23,285	42,991	66,276
2003				540	209	749	24,830	41,465	66,295
2004				565	189	754	26,505	39,818	66,323
2005				590	168	758	28,290	38,047	66,337
2006				615	146	761	30,200	36,155	66,355
2007				640	123	763	32,235	34,135	66,370
2008				665	99	764	34,415	31,976	66,391
2009				690	75	765	36,740	29,671	66,411
2010				715	49	764	39,220	27,206	66,426
2011				676	24	700	41,875	24,559	66,434
2012				196	5	201	44,730	21,712	66,442
2013							47,780	18,669	66,449
2014							51,040	15,417	66,457
2015							54,525	11,939	66,464
2016							58,250	8,221	66,471
2017							62,235	4,248	66,483
2018									
	$51,565	$12,809	$64,374	$12,228	$9,383	$21,611	$895,000	$1,599,561	$2,494,561

WNP-2

Principal	Interest	Annual Debt Requirements
$ 6,500	$ 73,726	$ 80,226
6,500	73,342	79,842
12,590	72,958	85,548
13,385	72,193	85,578
14,230	71,380	85,610
15,125	70,517	85,642
16,075	69,601	85,676
17,085	68,628	85,713
18,110	67,642	85,752
19,195	66,596	85,791
20,355	65,483	85,838
21,590	64,292	85,882
22,910	63,021	85,931
24,330	61,644	85,974
25,850	60,173	86,023
27,475	58,597	86,072
29,215	56,903	86,118
31,075	55,090	86,165
33,065	53,144	86,209
35,190	51,064	86,254
37,470	48,834	86,304
39,930	46,404	86,334
42,570	43,793	86,363
45,385	41,009	86,394
48,405	38,028	86,433
51,620	34,849	86,469
55,055	31,428	86,483
58,715	27,778	86,493
62,640	23,868	86,508
66,830	19,695	86,525
71,300	15,241	86,541
76,070	10,488	86,558
81,160	5,414	86,574
$1,147,000	$1,682,823	$2,829,823

WNP-3

Principal	Interest	Annual Debt Requirements
	$ 43,284	$ 43,284
	43,284	43,284
	43,285	43,285
$ 1,680	43,285	44,965
1,785	43,193	44,978
6,175	43,094	49,269
6,530	42,759	49,289
6,900	42,403	49,303
7,300	42,024	49,324
7,725	41,620	49,345
8,175	41,191	49,366
8,655	40,734	49,389
9,165	40,247	49,412
9,710	39,727	49,437
10,295	39,170	49,465
10,925	38,571	49,496
11,600	37,929	49,529
12,315	37,239	49,554
13,090	36,501	49,591
13,910	35,711	49,621
14,815	34,843	49,658
15,785	33,912	49,697
16,830	32,908	49,738
17,945	31,837	49,782
19,135	30,695	49,830
20,405	29,475	49,880
21,755	28,152	49,907
23,200	26,740	49,940
24,745	25,233	49,978
26,390	23,625	50,015
28,140	21,909	50,049
30,025	20,068	50,093
32,040	18,096	50,136
34,190	15,991	50,181
36,485	13,744	50,229
38,940	11,343	50,283
41,555	8,780	50,335
44,350	6,044	50,394
47,335	3,121	50,456
$680,000	$1,231,767	$1,911,767

WNP-4&5

Principal	Interest	Annual Debt Requirements
$ 25,740	$ 68,251	$ 93,991
27,400	66,513	93,913
	64,623	64,623
	64,623	64,623
	64,623	64,623
	64,623	64,623
	64,623	64,623
	64,623	64,623
	64,623	64,623
12,315	64,623	76,938
13,050	63,905	76,955
13,830	63,145	76,975
14,655	62,340	76,995
15,530	61,487	77,017
16,455	60,582	77,037
17,435	59,623	77,058
18,485	58,601	77,086
19,600	57,505	77,105
20,795	56,335	77,130
22,065	55,081	77,146
23,430	53,734	77,164
24,880	52,297	77,177
26,440	50,750	77,190
28,120	49,079	77,199
29,915	47,295	77,210
31,850	45,364	77,214
33,905	43,308	77,213
36,095	41,119	77,214
38,430	38,788	77,218
40,915	36,306	77,221
43,565	33,655	77,220
46,390	30,831	77,221
49,435	27,781	77,216
52,680	24,528	77,208
56,110	21,088	77,198
59,765	17,423	77,188
63,655	13,519	77,174
67,860	9,307	77,167
72,345	4,807	77,152
$1,063,140	$1,891,331	$2,954,471

Construction Projects Expenditures

($ in thousands)	Cumulative Costs Thru June 30, 1979	1980 Construction Budget	Percent Expended
Nuclear Project No. 1			
Construction and Fuel	$ 491,829	$1,539,465	31.9
Engineering & Construction Management	64,127	108,092	59.3
Owner's Cost	26,426	136,959	19.3
Net Interest, Financing & Reserves	46,655	556,884	8.4
Total Funding Requirements	629,037	2,341,400	26.9
Less: Interest, Financing & Reserves Funded by BPA		419,400	
Total WPPSS Funding Requirements	$ 629,037	$1,922,000	32.7
Nuclear Project No. 2			
Construction and Fuel	$ 725,790	$1,101,689	65.9
Engineering & Construction Management	124,110	150,148	82.7
Owner's Cost	66,883	149,835	44.6
Net Interest, Financing & Reserves	201,162	420,064	47.9
Total Funding Requirements	1,117,945	1,821,736	61.4
Less: Interest, Financing & Reserves Funded by BPA	169,048	381,736	44.3
Total WPPSS Funding Requirements	$ 948,897	$1,440,000	65.9
Nuclear Project No. 3			
Construction and Fuel	$ 311,071	$1,440,310	21.6
Engineering & Construction Management	57,516	104,999	54.8
Owner's Cost	18,759	156,582	12.0
Net Interest, Financing & Reserves*	27,716	554,299	5.0
Total Funding Requirements	415,062	2,256,190	18.4
Less: Interest, Financing & Reserves Funded by BPA		217,200	
Private Utilities' Funded Ownership*	162,623	660,990	24.6
Total WPPSS Funding Requirements	$ 252,439	$1,378,000	18.3
Nuclear Project No. 4			
Construction and Fuel	$ 314,817	$1,491,205	21.1
Engineering & Construction Management	64,127	108,092	59.3
Owner's Cost	26,426	136,959	19.3
Net Interest, Financing & Reserves	52,685	775,718	6.8
Other Authorized Cost	3,751	67,962	5.5
Total WPPSS Funding Requirements	$ 461,806	$2,579,936	17.9
Nuclear Project No. 5			
Construction and Fuel	$ 214,805	$1,566,635	13.7
Engineering & Construction Management	57,516	105,000	54.8
Owner's Cost	18,742	156,582	12.0
Net Interest, Financing & Reserves*	43,717	852,307	5.1
Other Authorized Cost	3,751	72,469	5.2
Total Funding Requirements	338,531	2,752,993	12.3
Less: Private Utility's Funded Ownership*	31,208	257,929	12.1
Total WPPSS Funding Requirements	$ 307,323	$2,495,064	12.3

*Assumes that net financing costs applicable to the private utilities' ownership shares are proportionately the same as the Supply System's.