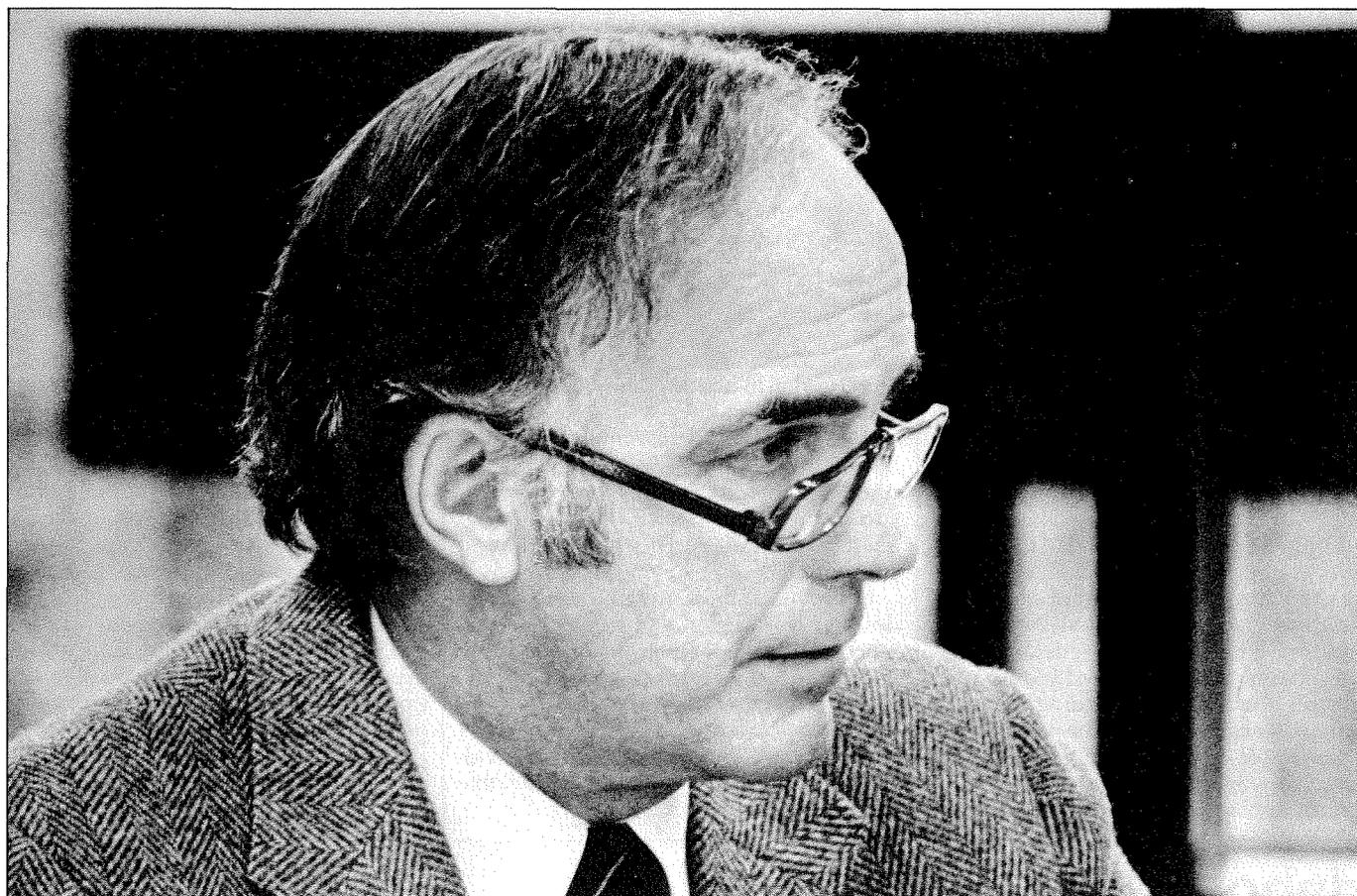


N O R T H W E S T ENERGY NEWS

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Northwest Power Planning Council

March, 1982



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Dan Evans on the NW's Energy Future

The press called him the Straight Arrow. For 12 years, during some of the nation's and the region's most turbulent times, Daniel J. Evans served as governor of Washington. Elected in 1964 after defeating the incumbent, Evans became a central force in a number of landmark measures protecting the environment, reorganizing state government and providing social services. Re-elected to three consecutive terms, he gained wide respect in the state and the nation. In fact, Evans was recently named one of the 10 best governors to serve during the 20th Century. In 1976, in an unusual move for an elected official, Evans announced that he would not seek re-election and retired from political office to spend more time with his wife, Nancy, and their three chil-

dren. In 1977, he was selected president of The Evergreen State College in Olympia, Washington. After Congress passed the Pacific Northwest Power Planning and Conservation Act there was much speculation about who would be appointed to the newly established Council. In Washington, one name came up: Dan Evans. Indeed, Washington Governor John Spellman did appoint his predecessor, and at the Council's initial meeting last April Evans was unanimously named the first chairman of the Northwest Power Planning Council. The following is an interview with Evans on his reflections on the region's past and his outlook on the region's energy future.

Q. First let's talk about why you decided to get back into the fray of public office.

A. Well, it's just a different kind of fray, of course. Higher education, I thought, was a retreat from politics, but public

higher education isn't much of a retreat. When the Power Act passed, I got more and more interested in what was about to take place and the potential it had for resolving what was rapidly becoming a major impediment to the growth and well

being of the Pacific Northwest: the adequacy of electric power.

The prime reason for saying yes is really two-fold. One is the question of electric power and the need for state involvement.

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What is the Northwest Power Planning Council?

It has come to be known simply as "The Council."

Its task, however, is anything but simple: to prepare and to enact a plan for the Northwest's electric energy future to the Year 2000. Eight people — two each from Washington, Oregon, Idaho and Montana — must, by April, 1983, chart a new path for the Bonneville Power Administration. It is a job that will affect the people and commerce of this region well into the next century.

The Council — officially, the Northwest Power Planning Council — came into being as a result of congressional passage of the 1980 Regional Power Act and legislation passed by each of the four Northwest states appointing its first members.

The Council has two primary purposes. First, to develop a comprehensive regional electric energy plan. Second, to develop a program for the enhancement of fish and wildlife in the Columbia River System. The Council must actively involve the public in both of these tasks. And all this must be accomplished by April, 1983, only two years after the Council was formed.

The regional plan must be built around a framework laid out in the law passed by Congress (Public Law 96-501). The law requires the Council and B.P.A. to give top priority to development of cost-effective conservation throughout the region. Thus, for the first time in federal legislation, conservation is treated as a power resource the same as building a power plant. After conservation, the next priority is renewable resources, followed by co-generation, and finally, conventional coal or nuclear plants. In developing the plan,



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The Council in action: Chuck Collins makes a point, as fellow Council member Gerald Mueller looks on.

the Council will pay most attention to the resources that are least expensive — ensuring the Northwest of having an adequate supply of electricity at the lowest possible cost.

In addition, the Council is required to develop an independent forecast of how much power the region will need between now and 2000, to establish model conservation standards, and to give "due consideration" to environmental impacts of energy projects, their compatibility with the existing system, and fish and wildlife requirements.

The Council's other principal task — one that may have a tremendous impact on the energy plan — is development of a program to "protect, mitigate, and enhance" fish and wildlife in and along the Columbia River and its tributaries. For the first time, the law brings together the often warring elements of utility and fisheries experts and requires the Council to come up with a plan that will supply adequate power and protect fish runs.

The law also requires the Council to work closely with B.P.A., local utilities, (Turn to page 5)

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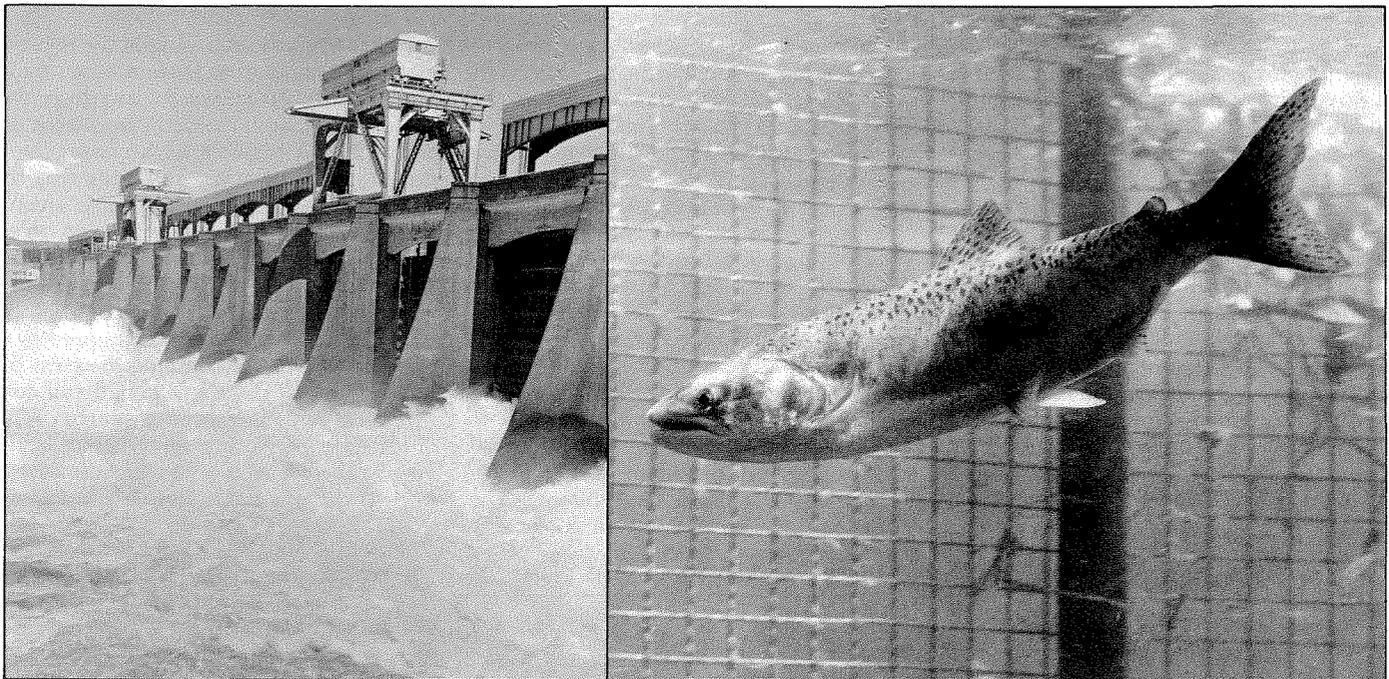
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Council Members:
Charles Collins
Daniel Evans

Comments sought on fish, wildlife program



Photos courtesy of Oregon Department of Fish and Wildlife.

Are you concerned about reduced fish runs on the Columbia River? Do you have ideas about how to increase the runs? The Northwest Power Planning Council would like to hear your comments.

The Council is required by law to establish a program to "protect, mitigate, and enhance" fish and wildlife dependent on the Columbia River. We have received recommendations for this program from federal and state fish and wildlife agencies, Indian tribes, and other interested organizations and agencies. We are now seeking comments on these recommendations, both written comments and testimony at public hearings.

The recommendations are available for public use at the following locations:

Northwest Power Planning Council

Central Office
700 S.W. Taylor, Suite 200
Portland, Oregon

Council State Offices

Towers Building, 3rd Floor
Boise, Idaho

155 Cottage Street Northeast
Salem, Oregon

Old Board of Health Building
1301 Lockey
Helena, Montana

Washington State Energy Office
400 East Union
Olympia, Washington

Bonneville Power Administration Offices

Suite 288, 1500 Plaza Building
1500 Northeast Irving Street
Portland, Oregon

Room 206, Federal Building
211 East Seventh Street
Eugene, Oregon

Suite 117, Morris Building
23 South Wenatchee Avenue
Wenatchee, Washington

1620 Regent
Missoula, Montana

Room 561
United States Courthouse
West 920 Riverside Avenue
Spokane, Washington

West 101 Poplar
Walla Walla, Washington

Highway 2 District Office
Kalispell, Montana

531 Lomax Street
Idaho Falls, Idaho

Copies may also be ordered from the Northwest Power Planning Council. Please contact Torian Donohoe at (503)

222-5161 for more information. Summaries of the recommendations are also available.

Public hearings have been scheduled as follows:

March 15 and 16, 1982
Hilton Hotel
921 S.W. 6th
Portland, Oregon

March 18, 1982
Yakima Indian Nation
Tribal Headquarters
Fort Road
Toppenish, Washington

March 23, 1982
Idaho Department of
Fish and Game
600 S. Walnut
Boise, Idaho

March 26, 1982
Village Red Lion Motor Inn
100 Madison
Missoula, Montana

Hearings will run from 8:30 a.m. to 5 p.m. and from 7 to 10 p.m. Those wishing to present oral testimony at a public hearing should register at least three weekdays before the hearing by calling Torian Donohoe at (503) 222-5161.

Council's technical work progresses

Work is underway on a number of technical studies to be used by the Council in drawing up the regional energy plan.

Contractors were chosen in December to carry out the full-scale studies. The individual studies and work which integrates the various study areas will continue into the fall.

There are six study areas. The first study focuses on developing a computer model for forecasting regional energy demand. This model will be used to create alternative forecasts, considering such issues as economic and population growth, increased use of conservation and renewable resources, and electricity rates. There are three contractors for study module I: Charles River Associates, Jerry Jackson & Associates, and Cambridge Systematics.

The second study area looks at electrical energy supply alternatives, including conservation. The contractor, Battelle

Northwest, is gathering information on a number of resources in order to assess their economic and technological feasibility, environmental impacts, major barriers to their use, and fisheries constraints.

Policies and programs are the focus of the third study area. Questions to be considered include: What programs can be developed that will promote increased use of conservation and renewable resources? What strategies can be used to implement these programs? This study will also develop model conservation standards. The contractors are Applied Management Sciences and Mathematical Sciences Northwest.

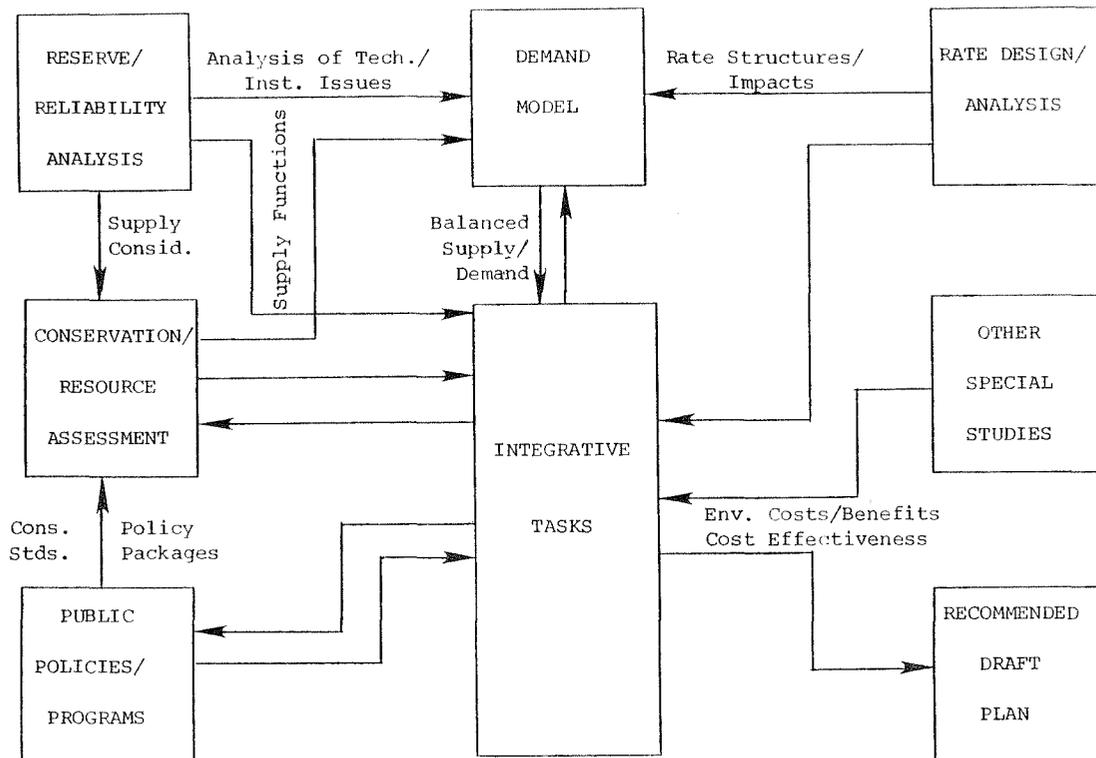
The goal of the fourth study area is to design a structure for electricity rates that will promote conservation and the development of renewable resources. The study is considering the impacts of a number of possible rate structures on elec-

tricity use. The contractor for this study is ICF.

The fifth study area looks at the region's electricity generating system as a whole. Energy supply planning for a hydropower system is unique. As other resources are added to the region's hydro base, questions need to be asked about the way the system is used to assure reliable electric power supply. This study focuses on issues related to electric power reserves and system reliability. The contractor for study module V is ICF.

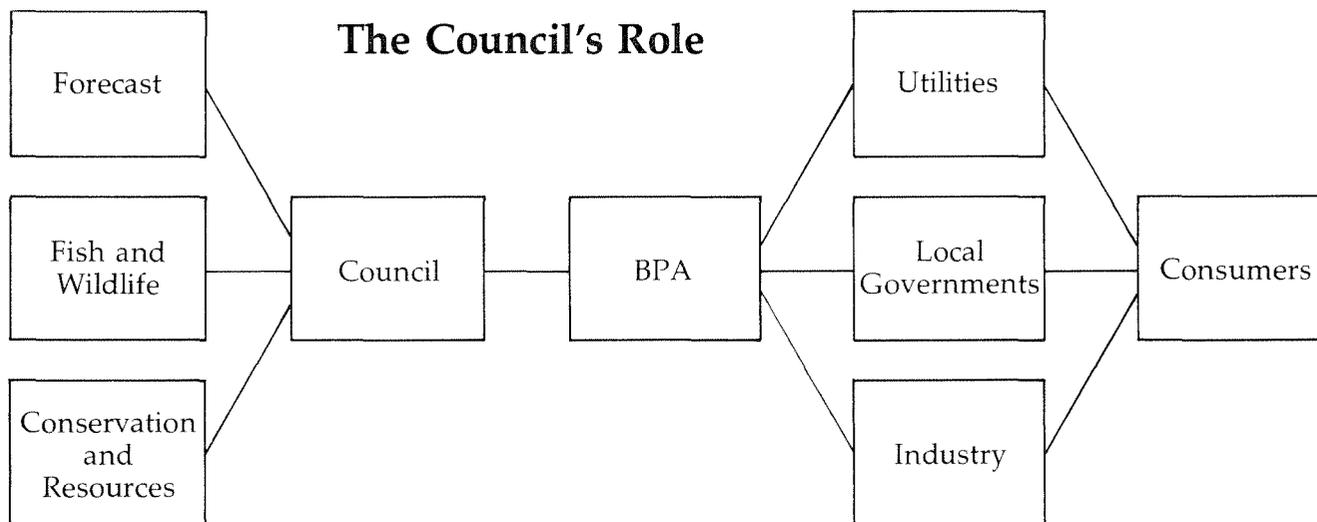
The goal of the sixth study area is to develop a consistent method to assess the environmental costs and benefits of conservation and all energy resources. This study extends work already begun in the area by the Bonneville Power Administration. The contractor is Nero & Associates.

OVERVIEW OF STUDY MODULES



The six study areas (or study modules) will serve as technical inputs to the Council's draft regional energy plan. Each of the studies will provide information for use in other studies. For example, the design of retail electricity rates will have an impact on the expected demand for electricity. Policies and programs for implementing conservation will directly affect the amount of conservation savings that can be expected in the region. The integration of all of these studies is being carefully planned.

The Council's Role



(From page 2)

the general public, and scores of others as it develops the regional plan.

The Council is a unique institution. Created by Congress, established by states, it will set policy for a federal (albeit regional) agency, the Bonneville Power Administration. (The Council's role and relationship to B.P.A. is analogous to that of a legislative body to the executive branch: the Council lays out a program; B.P.A. carries it out). Council members are appointed to three year terms, serving at the pleasure of the individual Governors, and paid for their work on either a full- or part-time basis. The Council is funded from a surcharge on B.P.A.'s wholesale rates.

The Northwest Power Planning Council is charged with bringing order and purpose to the region's energy future — making sure we have the power we need at the lowest possible price.

The Council's Planning Process

April 1981	Northwest Power Planning Council established
November 1981	Receipt of recommendations for fish and wildlife program
December 1981	Selection of contractors for technical studies
January-August 1982	Contractor work on studies
March 1982	Public hearings on fish and wildlife program
March-April 1982	Town hall meetings
July 1982	Energy workshops
July 1982	Draft fish and wildlife program
July-August 1982	Hearings on draft fish and wildlife program
November 1982	Draft regional energy plan
November 1982	Final fish and wildlife program
January 1983	Public hearings on draft energy plan
April 1983	Final regional energy plan

Broad representation on Council SSAC

The Council has established a Scientific and Statistical Advisory Committee (SSAC) to provide information to the Council on the scientific and technical aspects of the regional energy plan. The Regional Act requires a broad representation on the SSAC, including state and local governments, Indian tribes, consumer groups, utilities, and industry.

The SSAC was divided into five subcommittees: Conservation, Fish & Wildlife, Forecasting, Reserves & Reliability, and Resource Assessment & Programs. In addition, an Executive Committee, composed of the chairpersons and vice chairpersons of the various subcommittees, was formed to integrate the work of the

subcommittees. The chairperson of the SSAC is Jack Robertson, former regional director for U.S. Department of Energy, Region X.

The subcommittee chairpersons are:

- Conservation: Mike Gleason, City of Eugene, Oregon
- Fish & Wildlife: John Hough, International Telephone and Telegraph
- Forecasting: Belinda Pearson, Seattle First National Bank
- Reserves & Reliability: Merrill Schultz, Intercompany Pool
- Resource Assessment & Programs: Wendell Satre, Washington Water Power Company

Members of the SSAC represent a wide

variety of interests. Members include Wes Engstrom from the Boeing Company; Ron Eggers, Columbia River Inter-Tribal Fish Commission; Donna Klemka, Seattle City Council staff; Don Barclay, Idaho Power Company; Linc Wolverton, Public Power Council; Mark Reis, Northwest Conservation Act Coalition; Peter Shen, Washington Public Power Supply System; and Pat Graham, Montana Fish, Wildlife, and Parks Department.

The SSAC meets on a regular basis to consider technical issues involved in contractor work on study modules and to provide other technical assistance to the Council.

Townhall meetings announced

The Northwest Power Planning Council will be hosting a series of town hall meetings in the region during March and April.

The ratepayers of the Northwest represent the Council's largest constituency. The town hall meetings are directed at this constituency. The purpose of the meetings is to introduce the Council's members in the local communities and to discuss the Act and the Council's role in the region.

The town hall meetings will be open to the public and will provide an opportunity for the public to ask questions and make comments to the Council about critical energy choices that face the region.

The town hall meetings will also provide citizens with an opportunity to learn how they can become more involved with the Council and its work.

MEETING SCHEDULE

OREGON

- April 5 Pendleton, Blue Mountain Community College
- April 12 Medford, Court House Auditorium
- April 13 Coos Bay, Library Auditorium
- April 14 Eugene, City Council Chambers
- April 19 Portland, City Council Chambers

IDAHO

- March 30 Pocatello, Hilton Inn
- April 13 Lewiston, Lewis-Clark College
- April 15 Coeur d'Alene, North Shore
- April 27 Boise, Hall of Mirrors

MONTANA

- March 23 Kalispell, Outlaw Inn
- March 25 Missoula, City Council Chambers
- March 29 Billings, Northern Hotel
- March 31 Helena, City Commission Chambers
- April 2 Butte, Community Building

WASHINGTON

- April 29 Spokane
 - May 4 Yakima
 - May 13 Seattle
 - May 18 Bellingham
 - May 20 Longview
 - May 24 Tacoma
- (Sites not confirmed)

For further information and meeting locations, please contact Torian Donohoe at 1-800-547-0134 (in Oregon, call 1-222-5161).

Introducing the Northwest Power Planning Council

KEITH L. COLBO: Montana, served as Executive Assistant to Montana Governors Ted Schwinden and Tom Judge. He has been the director of four Montana Departments: Fish, Wildlife and Parks; Social and Rehabilitation Services; Budget and Program Planning; and Revenue.

CHARLES T. COLLINS: Washington. Between 1976 and 1979, he was Director of the Transit Municipality of Metropolitan Seattle. Mr. Collins was Chief Administrative Officer of King County 1973 to 1976 and Administrative Assistant to the King County Executive between 1969 and 1972.

DANIEL J. EVANS: Washington, now the President of the Evergreen State College in Olympia, WA. Mr. Evans was Governor of the state of Washington between 1965 and 1977. He served as Chairman of the Western Governors' Conference, 1968 to 1969, and Chairman of the National Governors' Conference, 1973 to 1974. Mr. Evans was a member of the Washington State House of Representatives between 1956 and 1965, serving as Republican Floor Leader 1961 through 1965. He was a partner in the structural engineering firm of Gray and Evans between 1960 and 1965.

ALFRED A. HAMPSON: Oregon, presently a partner in the Portland law firm of Hampson and Bayless. He has been a member of the State Energy Facility Siting Council (EFSC) since February 1, 1980, and chairman of that organization since September 11, 1981. Mr. Hampson has also been Chairman of the state Travel Information Council since 1971. He is chairman of the Portland Park Foundation, a founder and member of the board of the 1000 Friends of Oregon, and a member of the board, Trustees of Oregon Law Institute.

ROY H. HEMMINGWAY: Oregon, was Special Assistant to the Public Utility Commission of Oregon. Mr. Hemmingway was Deputy Public Utility Commissioner, Director of Utility Programs between 1977 and 1979. He was Assistant to Governor Robert Straub, 1976 to 1977. Between 1974 and 1976, Mr. Hemmingway was Legislative Director and Staff Attorney of the Oregon Environmental Council. He was an associate at a Portland law firm between 1972 and 1974.

GERALD H. MUELLER: Montana, has been Administrative Assistant and Energy Advisor to Montana Governor Ted Schwinden, and was Administrative Assistant and Energy Advisor to Lt. Governor Schwinden between 1978 and 1981. Mr. Mueller was Program Manager, Major Facilities Siting Act in 1978. He was Air Analyst for the Energy Planning Division, Montana Department of Natural Resources and Conservation between 1974 and 1977.

LARRY MILLS: Idaho, worked at Boise Cascade Corp. as Director of Governmental Affairs, Director of Corporate Relations, and Public Relations and Personnel Manager from 1954 through 1977. Mr. Mills was Administrative Assistant to Congressman Budge from 1951 through 1954. Mr. Mills was Idaho State Representative for Boise County 1940-1942, for Latah County 1946, 1948, 1950-52, and for Ada County 1962-1966. From 1951 to 1953 he was Speaker of the Idaho House of Representatives.

ROBERT W. SAXVIK: Idaho, served Idaho Governor John Evans as Chief of Staff from 1978 to 1981. He was Vice President and General Manager of KBAR in Burley, Idaho, from 1961 to 1978. Mr. Saxvik served three terms in the Idaho State Senate, where he was Assistant Senate Minority Leader. He was Legislative Liaison with the Governor from 1977 to 1978, and Director of the Office of Aging in 1978.



Photo courtesy of WPPSS

Better times: Here crews set the pressurizer to WPPSS 4 during work last April. Today, the plant stands ghostly still.

1982 brings WPPSS tough times and some bright spots *Plants 4 & 5 terminated; \$850 million record bond sale for 1-3*

For the Washington Public Power Supply System these early months of 1982 have resembled the Northwest winter — some good days; some bad.

Since last spring's recommendation by managing director, Bob Ferguson, to reevaluate WPPSS plants 4 and 5, the Supply System has been wrestling with what to do about the last two of its five nuclear projects under construction.

But the debate came to an abrupt end in January when a number of Northwest public utilities balked at making any contribution to a proposed "mothballing" of the last plants. The death of the mothballing plan came despite the efforts of a number of re-

gional officials, including Northwest Power Planning Council chairman, Dan Evans. Evans, speaking for himself and fellow Washington Council member, Charles Collins, urged the 88 participants in WPPSS 4 and 5 to mothball the plants until the Council completed its plan in April of 1993. While the mothballing would have given the Council time to fully evaluate the need for new power generation in the region, some utility people also saw the deferral program as a way of putting together an orderly termination if the plants were indeed going to be eventually scrapped.

The mothballing plan evaporated, however, when the Clark County Public Utility

District and the City of Tacoma, two of the largest holders in WPPSS 4 and 5, said no to any loans for the mothball period.

On January 22, the WPPSS board of directors voted to terminate the plants. The board estimated that termination of plants — in which \$2.25 billion dollars has already been invested — would cost the 88 participating utilities roughly \$340 million dollars. But because the sponsoring utilities are not required to put up any money for the first year after termination is declared, WPPSS found itself in a position of having to borrow money in order to close the plants down and settle outstanding contracts. To go

along with money already in WPPSS coffers, the Supply System said it needed \$70.5 million dollars from the various sponsors.

The efforts to secure the loans, however, ran into some trouble. Oregon utilities questioned whether they would be able to pay any of the termination costs because of an Oregon law preventing payment for plants not yet finished. In addition, a number of small utilities and consumer co-ops throughout the region, holding small portions of WPPSS but very large cost obligations, objected to making any loan to the Supply System beyond what was required in their participant agreements.

The potential financial fall-

out from a default on the \$2.25 billion dollars in outstanding bonds on plants 4 and 5 prompted a unanimous resolution by the Northwest Power Planning Council, urging the participants to do all they could to execute a "controlled termination." In addition, a number of Wall Street analysts cautioned that the bond market could take a very adverse view of the Supply System's remaining plants if a default occurred on WPPSS 4 and 5.

At a January Council meeting in the TriCities, Ferguson told the eight-member panel that the termination of 4 and 5 would be carried out in a three phase method — and he added that termination might not mean the end of WPPSS 4 and 5. Ferguson said if the plants were shown to be needed and cost-effective even as late as April 1983, when the Council's final plan is adopted, there would still be a chance of reviving the projects if the licenses could be retained in the interim period. Meanwhile, Ferguson said, he would look to sell the projects to some other consortium of perhaps public or private utilities. This would provide the participants in 4 and 5 with the greatest return on money already spent. If that failed, Ferguson told the Council, he would be forced to cannibalize the plants and try to sell the parts individually. If neither of the first two options work, Ferguson said they would finally have to totally scrap the plants, perhaps as far as restoring the Washington sites at Hanford and Satsop.

In fact, as late as February 26, WPPSS still was having trouble with termination when they came up \$1.5 million short for the needed loans.

While the drama was playing out over the termination of plants 4 and 5, WPPSS was also headed to the bond market to replenish the money spent for plants 1, 2, and 3 since their last bond sale in September. With plants 1 and 2 due to run out of money by the first of March without a new infusion of cash, it was vital for WPPSS to stabilize termination of plants 4 and 5 so that they could enter the bond market again.



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Good news: Ferguson tells the Council work is running ahead of time, within budget.

By mid-February WPPSS was back at Wall Street, this time with the largest single public offering of municipal bonds on record — \$850 million. The bonds, carrying an average interest rate of approximately 15.12%, sold quickly and provided the consortium with the needed infusion of cash. At that interest rate it will cost ratepayers \$4.6 billion for the long-term bonds which come due beginning 2012.

But the latest financial trans-

fusion still won't be enough to complete the projects, now estimated to cost roughly \$12 billion. In fact the Supply System plans on going back to the bond market within the next 90 days with a \$520 million bond offer. WPPSS says that would keep them on schedule and carry on construction through December.

Meanwhile, WPPSS plans on going to Washington State voters in September under the first election required by Initia-

tive 394. Passed last year, the initiative requires voter approval of any bond sale for major power projects. WPPSS figures it needs an additional \$3 billion in order to complete the first three plants.

The September vote will come against a backdrop of rising rates due to the costs of termination and Bonneville's latest wholesale price increase, and protests from ratepayers in Public Utility Districts around the region.

In Springfield, Oregon, two ratepayers have filed suit against the Springfield Utility Board seeking a court ruling to throw out their existing contract with WPPSS and to prevent the city-owned utility from paying any of its obligations on plants 4 and 5. In mid-February, roughly 3,000 ratepayers assembled in Grays Harbor County to protest the estimated cost increase that would be coming their way because of Grays Harbor PUD's participation in WPPSS 4 and 5. Further, a Wenatchee, Washington man, Dan Leahy, has formed a political action group called People Under Democracy, to help finance candidates running against incumbent PUD commissioners in Washington State.

Meanwhile, there was some good news for the beleaguered consortium. Ferguson said management changes he made since coming to WPPSS in August, 1980, have resulted in dramatic increases in production and quality. He said construction progress at WPPSS 1, located on the Hanford Reservation in Eastern Washington, was running ahead of the industry average and was coming in within the 1982 budget despite a five month work stoppage and a change in management. In addition, Ferguson said work at WPPSS 2, 87% finished and set for fuel loading in late 1983, has received a recent green light from the Nuclear Regulatory Commission following an NRC inspection in August.

So with spring just around the corner, it appears that WPPSS has managed to weather the worst of winter. But as so often has been the case, it is unclear whether the skies have cleared for good.

Council statement on WPPSS 4, 5

The Council has not decided whether WPPSS 4 and 5 will be acquired under the Act and will not decide until April, 1983; however, the Council is deeply concerned about the consequences of an abrupt, uncontrollable "termination" of the WPPSS 4 and 5 plants. If WPPSS becomes unable to pay its bills, a default condition could be triggered, imperiling financing of WPPSS 1, 2 and 3; threatening huge rate increases; eroding the ability of Northwest utilities to do any financing (even for conservation and renewables); causing all public borrowing from the Northwest to be viewed with apprehension by investors; and removing control from utilities and public authorities over the Northwest's future power supplies.

The chaos that would result from default would endanger the economy of the region, the standard of living of every Northwesterner, and the future of public power, both regionally and nationally. The orderly planning role envisioned by the Regional Act for this Council would be rendered impossible.

The Council does not urge a particular solution on the WPPSS participants, whether a "mothballing" or a "controlled termination" or some other option.

The Council urges the region's utilities and all Northwest citizens to devote their fullest efforts to finding a responsible solution to the WPPSS 4 and 5 problem.

T.V.A. weighs mothballing 3 N-plants

The board of directors at the Tennessee Valley Authority, re-evaluating their own ambitious nuclear power program, will meet later this month to decide whether they should defer three of their multi-billion dollar projects.

"Forecasts of load growth have become successively lower," said a TVA spokesman. In fact, a TVA revised forecast shows that the federal agency may have a long term surplus of 3,000 megawatts if it continues on its present construction schedule for three nuclear facilities now underway but not yet completed, Hartsville Units 1 and 2 and Yellow-Creek 1.

TVA, the Depression era cousin of the Bonneville Power Administration, has already spent \$2.2 billion on the three projects, which are anywhere from 42 to 33% completed. The federal power authority estimates it will need another \$8 to 10 billion dollars to finish the projects, bringing them in at a cost of about \$2,000 per kilowatt. By comparison, TVA's Browns Ferry Unit 1, finished in 1974, came in at under \$300 per kilowatt, and TVA officials believe that Yellow-Creek 1, the plant farthest from completion, could cost as much as \$3,000 per kilowatt.

The board of directors will be looking at whether to defer the plants or continue building them with the intent of either using the surplus power to offset present coal generation or to sell a surplus to other utilities in the region. The possible deferrals would come after TVA has already mothballed five units at earlier construction stages.

TVA officials say that in large part the deferral decisions are coming about because of the agency's aggressive conservation programs over the last few years.

B.P.A. estimated rate hikes

	CENTS PER KWH July 1, 1981	CENTS PER KWH Oct. 1, 1982
PUBLICLY OWNED UTILITIES AND INVESTOR OWNED UTILITIES (PRIORITY FIRM)	1.14	1.85 To 2.05
DIRECT SERVICE INDUSTRIES	1.73	2.1 To 2.25
NEW RESOURCE RATE (IOU LOAD GROWTH & NEW LARGE, SINGLE LOADS)	3.24	3.5 To 3.9

*REPRESENTS PERCENTAGES OF INCREASE UP TO 80% FOR PRIORITY FIRM, 30% FOR DSI's, AND 20% FOR NEW RESOURCES.

B.P.A. rates may jump 80% next year

The wholesale cost of Bonneville Power Administration power will jump by perhaps as much as 80% this fall, B.P.A. Administrator Peter Johnson announced in early February.

For public utilities that will mean a wholesale increase from an average of 1.14 cents to between 1.85 and 2.05 cents per kilowatt-hour, Johnson said. This rate would also apply private utilities wholesale purchases to meet residential and farm customers power demands.

B.P.A.'s direct service industries, largely the region's aluminum plants, will be paying about 30% more for their lower grade interruptible power, or roughly 2.1 to 2.25 cents from the present 1.73. The federal power marketer's most expensive power, for load growth of private utilities and new single loads of 10 megawatts or more, will be going up 20%, from 3.24 to between 3.5 and 3.9 cents per kilowatt-hour.

Johnson said the rate increases "reflect the new economic realities," and largely attributed the hike to B.P.A.'s growing tab for the first three

Washington Public Power Supply System plants, which Bonneville is financially underwriting.

Johnson said the increased WPPSS costs included the first interest payments on bonds sold for Plant No. 3, of which B.P.A. is covering 70% of the costs, construction cost inflation, higher than expected interest on recent bond sales, and some of the so-called "twinning" costs of terminated Plants Nos. 4 and 5 falling back on the B.P.A.-underwritten Plants Nos. 1 and 3.

The remaining portion of the increase is to pay for conservation programs, acquisition of new power resources and general inflation in the operation and maintenance of the federal power system, the B.P.A. chief said.

"While B.P.A. rates will be higher than any of us would like to see," said Johnson, B.P.A.'s wholesale power rates will still be among the lowest in the nation. To keep rate increases down, Johnson said the federal agency was tightening its fiscal control on the WPPSS projects and looking at other avenues to control cost.

As for consumers, public utility ratepayers, depending on how much B.P.A. power their utility buys, could be looking at anywhere from 15%

to 40% retail rate increases to cover the higher wholesale power.

The B.P.A. wholesale rates, set to go into effect October 1, 1982, must first be approved by the Federal Energy Regulatory Commission.

PGE raps B.P.A. conservation efforts

The Bonneville Power Administration's conservation programs recently came under attack from an unexpected source — Portland General Electric Chairman Robert Short.

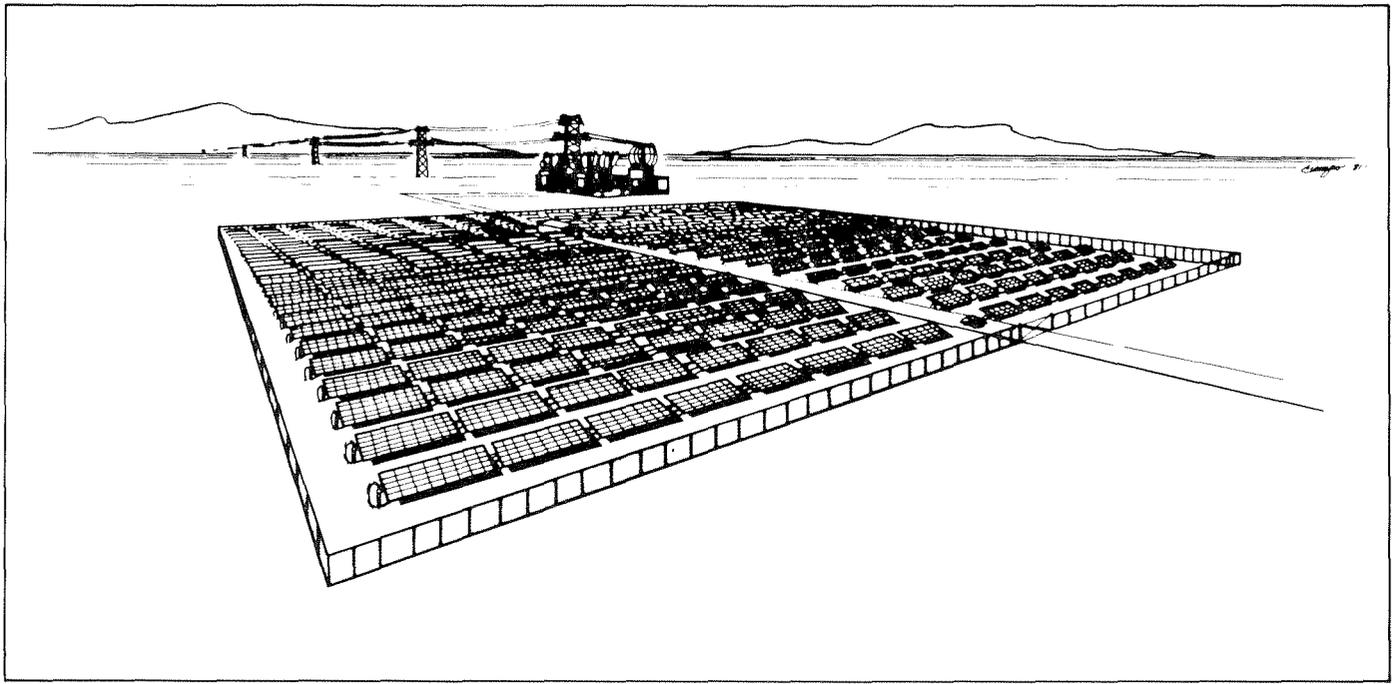
"B.P.A. has elected to pay less for conservation than the cost of new resources, despite the seemingly clear language in the Act saying that it can pay for up to 110 percent of the cost of other resources for conservation," Short told members of Portland's City Club January 22.

Short noted that the Northwest Power Act was supposed to encourage conservation efforts financed by B.P.A. "So far," said Short, "we're disappointed." The private utility exec said of the \$1.2 billion revolving fund B.P.A. can spend on conservation and renewable resources the federal power marketing agency intends to spend less than half that amount for 1982 and 1983.

Short said B.P.A. won't let utilities tap into the agency's conservation programs until utilities agree to sign long-term power purchase contracts, a potential sticking point for a number of private utilities in the Northwest.

"We can't make this commitment because B.P.A. will not clarify the rules regarding what costs are allocated to the rate pool that lies behind the power purchase contract," Short added.

So far, new B.P.A. requirements contracts — which commit customers to meeting their future power needs by purchase of B.P.A. power — haven't been selling very fast. The majority of the energy-



Down on the solar farm: Artist's conception of a photovoltaic "farm" proposed by several NW utilities.

intensive direct service industries and two small public utilities have signed contracts although the majority of public and private utilities are holding back. While a number of the public utilities appears likely to sign requirements accords, private utilities, such as Short's P.G.E., are apparently waiting to see what Bonneville plans to plug in as new resource costs and what conditions can be negotiated to provide an escape if the privates think it would be cheaper to go their own way some time later.

Meanwhile, as Short pointed out, consumers are caught in a Catch-22 as far as B.P.A.'s conservation programs.

NW Utilities offer B.P.A. 4 renewable plants

Several Northwest utilities, responding to a request from Bonneville Power Administration, have submitted proposals for BPA funding assistance under the Regional Power Act for four renewable power generating projects.

Classified as research and development projects, BPA has been asked to share the costs of feasibility studies for all but one of the projects and buy the power if they are built.

The four projects are in addition to a proposed 80,000-kilowatt windfarm on the southern Oregon coast submitted to Bonneville late last year by Pacific Power & Light, Portland General Electric and a southern California developer of wind-power generation.

The projects cover a wide range of renewable energy technology, including geothermal, central station solar, photovoltaic solar and fuel cells.

The proposals submitted to BPA, listing the developer and

the utility sponsors:

- A 10,000-kilowatt geothermal electric generating plant in northern Nevada, proposed for construction by Pacific Power, Eugene Water and Electric Board, Sierra Pacific Power Company and Sacramento Municipal Utility District. Feasibility studies for this project already have been completed. The four companies have organized a joint venture called NORNEV Demonstration Geothermal Company for construction and operation of the plant.

- An 11,000-kilowatt fuel cell project co-sponsored by United Technologies, Tektronix, Pacific Power and PGE. In a fuel cell, an electrochemical process combines oxygen and hydrogen to form water and emit electrical energy as a by-product.

- A 2,500-kilowatt central station solar plant, using 270 mirror-like devices focused on a solar receiver atop a 200-foot tower, heating air to operate a gas turbine. The project would be built by the Boeing Engineering and Construction Company for Pacific Power, PGE, CP National and Harney Electric Cooperative.

- A 2,000-kilowatt direct solar conversion photovoltaic

power plant in the Northwest, to be designed and built by the Acurex Solar Corporation of Mountain View, California. Photovoltaic technology uses a large number of panels containing silicon wafers which convert sunlight into electric energy.

Utility co-sponsors of the photovoltaic unit are Pacific Power, PGE, Pacific Northwest Generating Company, Harney Electric Cooperative, Inc., Burns, and Surprise Valley Electrification Corp., Alturas, California.

NRDC drafts 'model plan;' seeks comments

The Natural Resources Defense Council, a San Francisco-based environmental group long active in Northwest energy matters, is circulating a draft "model" plan, which calls for the deferral of all but one of the Washington Public Power Supply System plants and the addition of only two more coal plants in the Northwest.

While the NRDC forecast stays away from any fixed percentage, the NRDC draft plan lays out high and low scenarios. In the high demand scenario, the environmental group's tentative estimate is that total average megawatt demand will go from 16,541 in 1980 to only 17,376 by the year 2000. In the low demand scenario, power use drops from the 16,541 figure to only 12,993. Only three of the eight large scale plants now under construction in the region (Valmy Unit 2, Coal Strip Unit 3, and WPPS Unit 2) are counted in the NRDC report.

"If vigorous efforts were undertaken to increase the efficiency of energy use," the draft report says, the vast majority of the central station coal or nuclear plants now under consideration could be deferred or scrapped totally.

The draft report, still being circulated, was commissioned by the Northwest Conservation Act Coalition, a group of environmental groups in the Pacific Northwest that have

been following the work of the Northwest Power Planning Council.

Coalition to hold meeting April 2-4

The Northwest Conservation Act Coalition is holding a regionwide conference in Spokane, Washington on April 2-4, 1982. The conference, "Energy and the Northwest Economy; A Platform for Change," will focus on the regional economic implications of a Northwest Conservation and Power Plan. It will be held at Fort George Wright College and is open to the general public.

The Coalition, made up of over thirty citizens, labor, environmental, solar energy and consumer groups throughout the Northwest, coordinates

the work of its member groups on the implementation of the Northwest Power Act.

At the conference, the Coalition will adopt a "Model Conservation and Power Plan."

The Coalition will later present the Model Plan to the Council for its consideration.

The main program of the conference is scheduled for Saturday, April 3. In the morning, two panel discussions are planned: "Economic Implications of Energy Investments" and "The Power Act to Date: Promise or Disappointment?"

The luncheon speaker will be Oregon state Senator Ted Kulongoski, Chairman of the Senate Energy and Utilities Committee. Dr. John Holdren, Director of the Energy and Resources Program at the University of California, Berkeley, is tentatively scheduled as the dinner speaker.

Organizational workshops will be held on April 4.

For further information, contact:

Conference Coordinator
Northwest Conservation Act Coalition
P.O. Box 20458
Seattle, WA 98102
(206) 624-2875

Puget panels to consider conservation

Puget Sound Power & Light Company's newly formed Consumer Panels will be addressing energy conservation standards for residential and non-residential buildings within its service area, company president John W. Ellis has announced.

"The recommendations of the Panels on this subject will be used as a resource for planning and preparation of the company's recommendations to the Northwest Power Planning Council," Ellis said. The

PGE's Short on Utilities and Public Trust

The following are excerpts from a speech by Robert Short, chairman of Portland General Electric, given to the Portland City Club in January.

Since becoming chairman of PGE a little over a year ago, I've been trying to develop public attitude sensitivities in our management and employees.

For it is my contention that unless we and the other utilities in the Northwest — and here, I include the Bonneville Power Administration — become more sensitive to the desires of the public, we will be rendered ineffective by the fumes of public distrust.

Our failure to anticipate and respond effectively to public concern has brought us ballot measure after ballot measure, in Oregon and Washington. Some passed, others failed, but all should serve to give us a potent message:

"Failure to give weight to public concerns in making business decisions is to put your business at risk."

Now to some of you, that may seem so obvious that it is a point barely worth stating.

To others, who still believe that the only business of business is business, it may appear that PGE is trying to transfer its responsibility to provide an essential service from itself to the electorate.

Let me assure you, we are not. We are *not* running our

business as a popularity contest, or by public opinion polls. We're not going to defer to the slightest indication of opposition. We intend to express our views on how best to serve the electricity needs of our customers . . .

Last year I implemented an "attitude change" to accomplish this. Instead of our previous method of trying to sell the public on our decision through confrontation, we sought their opinion *before* we made a final decision.

In the past year, we proposed construction of two new hydroelectric facilities, one at Willamette Falls, the other at Marmot, near Mt. Hood . . .

While in both cases the decisions were not to build, the results were positive for PGE in two ways:

First, the experience of weighing public concerns along with technical and economic ones has made our management alive to issues that it had previously discounted.

Second, by going into the community and seeking advice, we have opened pathways of communications that will be invaluable to us in future decision making . . .

Our new attitude is not a weakness on our part, nor a lack of conviction in our decisions, present or past. The attitude is good business practice. We cannot afford confrontation.

As I said earlier, it's not just PGE, but all Northwest utilities, including BPA, which must develop sensitivity to the public if we are to earn the public trust that will allow us to continue supplying needed electricity to our customers. ♪

Council is preparing a plan, scheduled to be available in April 1983, that will determine future energy needs of the Pacific Northwest.

Each of the five panels consists of 30 to 40 consumers, representing a variety of diverse interests within Puget Power's nine-county service area. They were formed from nominations submitted by various clubs and organizations, as well as business and government leaders.

"To date, we have had a tremendous response for participation, and we continue to welcome those interested to contact their local Puget Power office," Ellis said.

Tri-Cities group chides Council for SSAC members

A recent newsletter from a Tri-Cities group of scientists says that the Northwest Power Planning Council may be off to a "poor start" and "not grasp the urgency of its charter."

The article, written by Mike Fox, a board member of Washington Voice of Energy, criticizes the Council for even

considering possible "fuel switching" or the conversion to oil or natural gas for such uses as hot water heating.

"To compound the issue, the Council chairman, former Washington Governor Dan Evans has suggested that shortages of energy may be preferable to surpluses. This dangerous statement not only carries an ominous ring, it flies in the face of studies like the 1978 Northwest Energy Policy Project," says Fox in his article in the January issue of Wave-length, a publication of the Washington Voice of Energy.

"Moreover, the Council apparently does not realize that because of energy uncertainties, industries are already discouraged from expanding or moving to the Northwest," the article continues. "We are not optimistic that the Council is concerned about this problem or will adequately deal with it."

Fox, a Tri-Cities scientist, said that WAVE is also concerned about the composition of the Council's Scientific and Statistical Advisory Committee. "While intended to include science advisors, the only university representative from a scientific discipline is one noted for his anti-nuclear position," Fox writes.

CALENDAR

- March 1**, Resources Subcommittee Meeting, 7:00 p.m., Council Offices, Portland.
- March 4**, Council Meeting, 8:30 a.m., Holiday Inn, Missoula, Montana.
- March 15-16**, Fish and Wildlife Public Hearing, 8:30 a.m.-5 p.m. and 7-10 p.m., Hilton Hotel, Portland.
- March 16**, Executive Committee Meeting (SSAC), 1:00 p.m., Council Offices, Portland.
- March 17-18**, Council Meeting, 8:30 a.m., Council Offices, Portland.
- March 18**, Fish and Wildlife Public Hearing, 8:30 a.m.-5 p.m. and 7-10 p.m., Eagle-Seelatsee Auditorium, Yakima Indian Reservation, Toppenish, Washington.
- March 23**, Fish and Wildlife Public Hearing, 8:30 a.m.-5 p.m. and 7-10 p.m., Idaho Department of Fish and Game, Boise, Idaho.
- March 23**, Townhall Meeting, 7:30 p.m., Outlaw Inn, Kalispell, Montana.
- March 25**, Townhall Meeting, 7:30 p.m., City Council Chambers, Missoula, Montana.
- March 26**, Fish and Wildlife Public Hearing, 8:30 a.m.-5 p.m. and 7-10 p.m., Village Red Lion Motor Inn, Missoula, Montana.
- March 29**, Townhall Meeting, 7:30 p.m., Northern Hotel, Billings, Montana.
- March 30**, Townhall Meeting, 7:30 p.m., Hilton Inn, Pocatello, Idaho.
- March 31**, Townhall Meeting, 7:30 p.m., City Commission Chambers, Helena, Montana.
- April 2**, Townhall Meeting, 7:30 p.m., Community Building, Butte, Montana.
- April 2-4**, Northwest Conservation Act Coalition Regional Conference, Fort George Wright College, Spokane, Washington.
- April 5**, Townhall Meeting, 7:30 p.m., Morrow Lecture Hall, Blue Mountain Community College, Pendleton, Oregon.
- April 12**, Townhall Meeting, 7:30 p.m., Court House Auditorium, Medford, Oregon.
- April 13**, Townhall Meeting, 7:30 p.m., Library Auditorium, Coos Bay, Oregon.
- April 13**, Townhall Meeting, 7:30 p.m., Lewis-Clark College, Lewiston, Idaho.
- April 14**, BPA Workshop: Financing Conservation, Renewable Resources, and Cogeneration Symposium, 8:00 a.m.-4:30 p.m., Benson Hotel, Portland.
- April 14**, Townhall Meeting, 7:30 p.m., City Council Chambers, Eugene, Oregon.
- April 15**, Townhall Meeting, 7:30 p.m., North Shore, Coeur D'Alene, Idaho.
- April 15**, BPA/ODOE/WSEO Workshop: Financing and Marketing for Geothermal Energy, 8:00 a.m.-4:30 p.m., Benson Hotel, Portland.
- April 19**, Townhall Meeting, 7:30 p.m., City Council Chambers, Portland.
- April 27**, Townhall Meeting, 7:30 p.m., Hall of Mirrors, Boise, Idaho.
- April 29**, Townhall Meeting, (Location not confirmed), Spokane, Washington.

BRIEFLY

FORMALDEHYDE INSULATION BANNED — The federal Consumer Products Safety Commission, in a four-to-one vote last month, voted to ban insulation manufactured using formaldehyde. The vote came after four years of inquiries into complaints by consumers who had the formaldehyde insulation installed in their homes that the substance was causing eye, nose and throat irritations and other side effects. Urea-formaldehyde is a foam-based insulation commonly pumped into the wall cavities of existing homes. It is estimated that about 500,000 U.S. homes contain formaldehyde insulation.

CONSERVATION CUT 90% — Under the proposed dismantling of the federal Department of Energy and shifting of duties, conservation is coming up particularly short. 98% short, in fact. The Administration is slashing federal conservation efforts for Fiscal Year 1983 to \$4 million from the previous year's \$240 million. Renewable resource efforts receive similar treatment — cut from \$518 million to \$101 million, or an 81% cut. Meanwhile, the Administration includes \$252 million for development of the controversial Clinch River Breeder Reactor.

'I had personally asked our siting council to go back and review several times the projected growth rates . . . At that time, no matter how conservative we became, it didn't appear to be low enough to make any of these plants unnecessary.'

(From page 1)

I look back at a speech I gave in 1970 where I advocated then that Bonneville have as part of its governance — at that time I was suggesting — an input or participation by the states of the Northwest. At that time, many of the decisions Bonneville was making had impact on our economic growth potential, but the states had no input in what was happening. So here, ten years later, was an opportunity for states to be directly involved, and I thought what a great chance to help improve what I had advocated a long time ago as being necessary.

And the second one is from purely political science concept. This is a brand new and unique organization. It's born out of a federal act, made viable by four separate state acts and yet the end result is clearly a regional being. So, it's a new format to resolve regional issues and I think that our success lies not only in the opportunity to do something as far as our electric power future is concerned, but also in showing that this may be an effective alternative in an organizational sense to resolve some regional problems. Two very different, but I think important, reasons to take part.

How has the region's power scene changed from when you were governor to today as Council chairman?

Oh, remarkably. Let me go back to 1970, which was the year in which we passed and put into law the Energy Facilities Site Evaluation Council. In fact, it initially was a nuclear facility siting council and was later broadened to include all major energy facilities. We recognized then with the advent of a new phase of power development in the Northwest, the hydro-thermal system, that a series of new, complex power facilities were going to be proposed. So, in many respects, in 1970 we were trying to expedite what appeared to be badly needed new power facilities as we rapidly reached the end of acceptable major hydro sites.

The next several years saw the first applications for nuclear plants come before the Siting Council and they were approved. By the time I left office, we had approved all five of what subsequently became the WPPSS plants. As I remember, we approved at least one of the Skagit plants for Puget Power. Those approvals were given only after I had personally asked our siting council to go back and

review several times the projected growth rates and electrical usage to see if we really needed these plants. At that time, no matter how conservative we became in the growth of electricity, it didn't appear to be low enough to make any of these plants unnecessary. We had come out of the Boeing recession, we were in a period of strong economic and population growth in the mid 1970's, and there was every expectation that that would continue. We had to prepare for that with the necessary electric power to support increased population and increased industry.

So that period of time was one of expediting, of attempting to get the necessary power on line in time for its need. There was a recognition that new electric power would cost more — that the marginal cost would be higher than the average cost — but not significantly more because the estimates at that time were moderate in terms of cost of new plants, and there was nothing on the horizon that would have told us the extensive delays that have ensued. Now we are in a stage where I think we have reached the end of the hydro-thermal system development concept in the Northwest. We are entering a new phase which is broader and has more individual elements to it than just the hydro-thermal system concept.

What about the Council's role and how it relates to Bonneville and the utilities?

We're in many respects the new kid on the block because the Council is the one new agency involved in this picture, where Bonneville is a continuing body although with some very large new responsibilities. Various utilities (public and private), the direct service industries, the other elements mentioned in the Act are essentially all existing. So, suddenly we're fitting a new body into this picture and it has changed relationships. I guess the most important continuing one is with Bonneville. Someone suggested that the Council is really a board of directors of Bonneville, but that's not an accurate perception. Bonneville has operating responsibilities, the Council has planning responsibilities. The intertie, of course, is where the Council's planning responsibilities have an effect on the operation of Bonneville, the various utilities, and the direct service industries. There are numerous places where that occurs. There is little wonder that in the initial stages of

this we are finding some frictions, some misunderstandings as we attempt to find these appropriate relationships and roles.

The Council, for its first seven or eight months of existence, has spent most of its time asking questions. At times we've seemed rather contentious when we have done that, but it has been in search for as much information as we could get. The relationship with Bonneville always is going to be one of — I've called it creative tension. We are going to have differences of opinion because we have different roles to play, but as long as there is a healthy exchange of information between the two groups and an understanding of each other's different roles, I think we'll get along increasingly well.

Utilities, of course, and the direct service industries are watching both the Council and Bonneville because they are subject to both the planning proposals which come from the Council as well as the operating and management style that comes out of Bonneville. They are subject to both of us in some respects. So they are watching this change with great interest. At times I think they have felt that the Council initially looked as if it was going to get too far into the whole planning and operating of the Northwest utilities. I think maybe as again we build better communication between the two, that's beginning to relax somewhat.

What should the region's energy policy then look like in the next twenty years?

I think we're entering a period of great uncertainty, both nationally and regionally. It's difficult to predict ahead with any accuracy what the actual use of electric power will be. It's going to be affected by population growth, by economic growth, by new technologies which may actually reduce dependence on electric energy. It is going to depend on national fuels policies, fuel switching — there are a whole host of things which will affect our policy and all of these add up to more and more uncertainty.

The response to that is, I think, to see what we can do to prepare ourselves to respond to these uncertainties. That means planning for a future with a greater variety of resources, with resources that have shorter lead times than the major thermal plants we are now contemplating. Then our energy policy ought to be, a portion of it, devoted to carefully tracking

*'I think we're entering a period of great uncertainty . . .
That means planning for a future with a greater
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these changing variables so that we can get early warning of a new trend in electrical usage, whether up or down. If the trend is down, we can delay or hold back on any new resource development. If the trend is up, then we ought to be prepared to move rapidly with these new facilities and, for the most part, new facilities which have short lead times, quick response to this uncertainty.

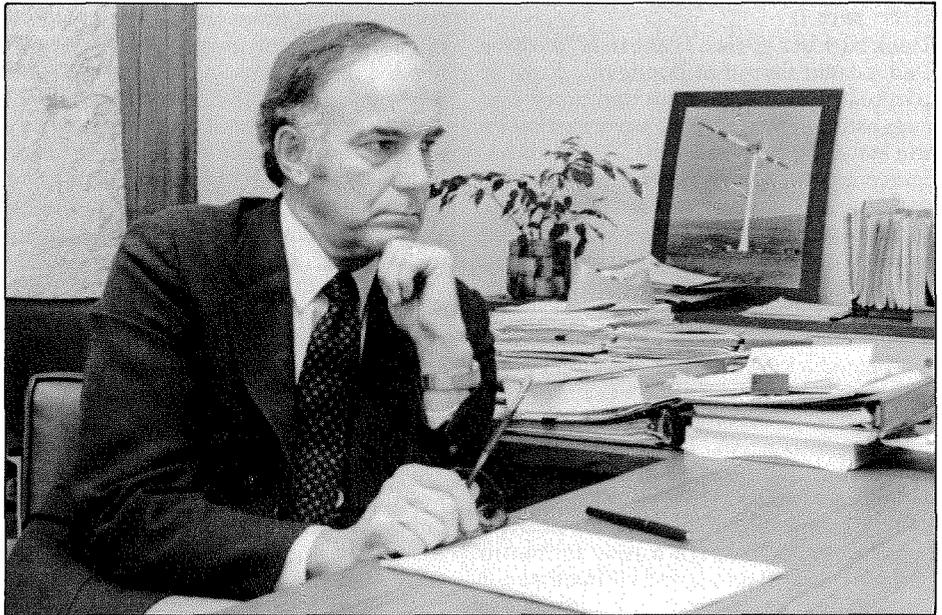
I'm using resource in a very broad sense because to me, new resources, in other words, the gaining of available kilowatts for assignment to a new customer, can come from a major new thermal plant. They can come from small hydro facilities or solar or a whole variety of other renewable resources. It can also come from conserving an existing use somewhere else, greater efficiencies in appliances, even fuel switching where that is appropriate to other fuels. These all represent resources because in each case it frees up kilowatts to be used for new needs. To most people, when you talk about new resources, they contemplate new plants or new generating facilities, but I think that's far too narrow a view.

How do you go about getting conservation on a broad scale?

Oh, I think price does more than anything else to convince people to conserve. It certainly has worked in gasoline and oil supplies. As prices have gone up, people find alternative ways to carry out their needs. It's not a case necessarily of reducing your lifestyle or freezing in the dark as someone suggested. We have found more efficient automobiles. We have developed ways of doing things that just don't use as much fuel. I think the same thing will happen as people understand that the price of electricity, and especially the price of new generating resources, is going to be much more expensive. I think it is important to get that accurate price signal so people understand it, then I think we'll see a significant increase in efficiencies of electrical use and conservation.

There's lots of potential conservation out there. Some people are taking pretty fair advantage of conservation and better efficiencies, and they're finding that it's cost effective. I think a very rapidly increasing percentage of our population will find the same thing once they feel the full impact of price increases.

Now I think along with price increases,



it will be valuable and feasible for utilities to offer price incentives as sort of the other side of the price increase stick that forces you to conserve — a price incentive, either a low cost or no interest loan or even a direct dollar rebate to engage in certain kinds of conservation. That's the carrot. It's certainly related to price, just in a different way.

I think that if we can do those two things — provide adequate incentives which are meaningful to the consumer and at the same time cost effective for the utility because it's cheaper to do that than to find some other way to get the electricity — then I think we can let the market itself do most of the rest of the effort. For instance, if, and I'm not suggesting this would ever be the case, but if utilities found that it was cheap, relatively, to offer a financial incentive or bonus to a consumer to buy a new efficient refrigerator and throw out their old one — and if they were to offer some one enough money toward the purchase of a new refrigerator to make it attractive, we would see refrigerator manufacturers respond pretty rapidly to build energy-efficient refrigerators which in turn would be the ones eligible for this kind of price incentive and the market development would happen pretty rapidly.

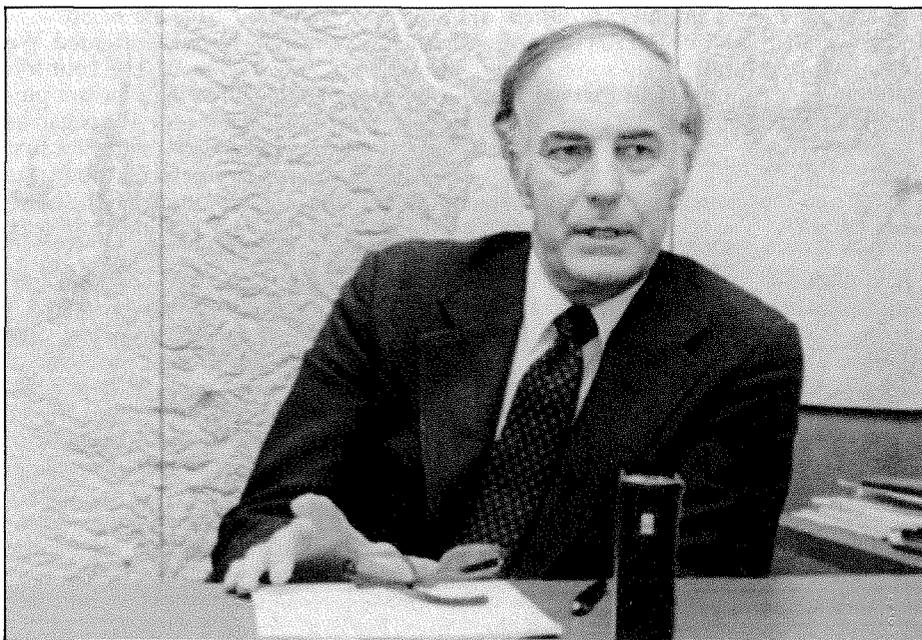
I think that that's a lot better approach than any governmental agency, whether it's the Council, Bonneville, or anybody else, saying here is a grand plan for precisely how we are going to do all these things and we are going to go through it

from step one through 200 and we're going to tell you how to do it and what to do and when to do it. I just don't think that is going to work anywhere near as well as the response of the market place — if people are understanding.

What is your impression of Bonneville's and the utilities' conservation efforts to date?

Well, I think everybody wants to have instant and almost miraculous response. I do think it is important to remember that Bonneville is into the conservation game for the first time. They have not had very much opportunity yet to develop these programs. They did not have that responsibility before. I think that they have moved relatively well. I think if anything they have moved surely because they wanted to be sure of the kind of program they put into effect and whether it made sense and was prudent. Remembering that any expenditures they make for conservation come out of the ratepayer's pocketbook as a cost. I think that the jury is still out on whether they have moved rapidly enough or not. But I do think we'll see an acceleration, that the planning state is coming to a close, that they're beginning to reach out now with operating programs. If we see an appropriate acceleration of those programs as they become better known and as people have a chance to respond to them — then, I think, we'll be in pretty good shape. If that doesn't

'The way in which you manage the dams has a great potential impact on fish runs . . . We may well have to operate the hydro system in a way that reduces its power producing capabilities . . . We are going to have to balance fish runs against power production.'



happen, then we're going to have to figure out some better, newer ways to push out and get a real response.

Utilities have moved faster than Bonneville because they have had the opportunity at least to engage in conservation for a long time. It's all a price kind of thing for them. If they run short of electrical production for the utilities, they can meet it through purchase of new electricity from someone else, whether it's Bonneville or outside the region or someone else in the region. Or they can reduce their load through conservation practices, and many utilities have found that that is the cheapest way to do it. And they have engaged in some rather innovative and worthwhile programs. But again, I think we are at just the beginnings of that. There is a lot more to be done. I think that, too, we'll accelerate in the next few years. I personally think that the combined effects of conservation programs and incentives developed by Bonneville and by the utilities with the price related conservation practices will add up to a lot more conservation than anybody is contemplating currently.

What's the importance of fish in the Council's plan?

They are exceedingly important because the law itself, in essence, says they're important. Also because of court decisions which have established very strongly the

rights of Indian tribes to maintain their fish catch guaranteed under treaties. That has an effect on what we do because the bulk of the fishery, of course, is from the Columbia River and its tributaries. That river is almost totally controlled by dams, from Bonneville clear to the Canadian border. The main stem of the Columbia, except for one small stretch, is tailwater behind various dams. The way in which you manage the dams has a great potential impact on fish runs: both on the upstream migrants, and to a greater degree on the downstream fingerlings. I think we're going to have to come up with a plan which minimizes damage to those fish runs. In doing so, we may well have to operate the hydro system in a way that reduces to some degree its power producing capabilities. In other words, we are going to have to balance fish runs against power production. That's where they interrelate, and that is why what happens to fish is exceedingly important to us in our deliberations.

What's going to go into the Council's plan as far as the forecast in determining how much power we need? What are things that need to be considered?

I think the most fundamental is whether we make a definitive forecast or not. That's been the past practice — to make fairly definitive forecasts based on the best information you had and then try to build

or respond to that specific forecast out a twenty-year time span. Given the current nature of change and the rapidity of change, I think it's increasingly difficult to make any kind of a long-range forecast and be remotely certain of its accuracy. So I think the Council is coming more and more to the conclusion that the best we can do is a forecast which narrows the range of uncertainty. There will still be a fairly broad uncertainty in exactly how much power will be required ten or fifteen or twenty years from now.

Once we have done the best forecasting job we can — utilizing some of the best current techniques and even some new techniques of modeling which are apparent in the studies which we are now carrying out — we still end up with a fairly broad range. And then the heart of our report or our plan will have to be the array of potential resources that can fit that whole range of uncertainties.

One way to put it is that we need a supermarket of potential resources that can be cataloged, put on the shelf, identified as to the load they would produce, the costs and the time span within which they could come on line. As we track very carefully what actually happens, as each year passes, we will be able to look more accurately into the year 1990 and 2000 as we get closer to them. We can detect, and I think that is an important thing for us to achieve, a method of tracking that detects early changes in population, in the economy, in whatever else will have an effect on the demands for electric power. Then we've got to be able to reach up on our shelves and find the right product — the right combination — in price, in amount, in lead time that will help plug the gap and keep us up-to-date with needs as they occur and as they change.

It seems to me if we do that job properly, we'll have considerably more flexibility in how we respond, and we'll be able to respond faster than we can today when we're depending so heavily on very large, very complex plants which produce a lot of electricity but have an inordinately long lead time. Because of that we are very uncertain as to the actual needs of those plants out ten or twelve years from now.

Some people say, why not just build in large quantities to make sure you got the buffer built if you need a bit more than you projected?

That's always been a guiding tenet of the utility industry, and it made all sorts of

'If we are successful, and that success is measured in ensuring an adequate supply of electricity at the lowest possible cost, then the Council means a great deal to the Northwest.'

sense when the marginal cost of electricity — the cost, in other words, of those new plants — was lower than the average cost of all of the existing facilities they had. Then you could afford to build extra. The rate of growth of electricity was such that it would soon use up that extra, and the average cost kept coming down because the marginal costs were lower. But now we are at a point where the marginal costs of electricity in the Northwest are so much higher than today's average cost that the economic consequences of overbuilding are very, very large. In fact, we're finding that right now in our inability to finance the five public power supply system plants.

We are in a dangerous time, at least for an intermediate period, in our energy planning. The dangers on the one hand are of insufficient energy supply that would put a damper on economic growth. But on the other hand, an overinvestment in exceedingly expensive plants could drain so much of the investment resources of the Northwest that that too could cripple our economy. I guess all of which means that the decisions are a lot tougher today and will require the best thinking of everybody in the Northwest and, I think, make the advent of the Pacific Northwest Power Act very important. It came at the right time, late if anything, and it finally has brought together the various entities

who will play a role in power production and power distribution. The Act has given us a new opportunity to do some power planning on a regional basis that we simply didn't have before.

What's all this matter to the average rate-payer though?

I think it can matter a great deal if the result of what we have set out to do is successful and the success would be measured by our assuring that there would be adequate supplies of power as we grow and as the needs grow with it. And that that power comes at the lowest possible cost. That doesn't mean that costs won't go up, because they will go up. But we've got to keep the cost from going up any more than is necessary. As I say, if we are successful, and that success is measured in insuring an adequate supply of electricity at the lowest possible cost, then the Council means a great deal to the Northwest.

What do you see as the region's future — you hear some people say that there is no help out of the morass we seem to be in — is there help?

Oh, of course. I am as optimistic as I can be about the future of the Northwest. It's

making a transition from its beginnings which were heavily resource oriented. We are a very new region of the country. There are people still living who are pioneers here in many respects. We began as almost any new land does with the first people mining the minerals, cutting the timber, fishing — working from the natural resource base because that's the only base they had initially.

We are rapidly, however, changing into a much more sophisticated economy. I would guess that twenty or twenty-five years from now the cyclical problems of the lumber industry will be of less and less importance to the Northwest because we will have built a much more stable and diversified economic base. We learn from each set of experiences and by the turn of the century I think this region of the country will be in the happy position of having an economic base which is in close tune with the international needs we will face then. We're a very productive food basket and we already ship a good share of that overseas. The Asian markets will continue to grow and be of greater importance to us as well as to the world, and our ports are particularly well located for that. In many respects, we will become the center of activity rather than being isolated out on the northwest shores of the continent.

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