Washington Public Power Supply System
P.O. Box 968 3000 George Washington Way Richland, Washington 99352 (509) 372-5000

December 2, 1983

Mr. Jim Petersen
Nuclear Regulatory Commission
Room AR5037
Washington, D.C. 20555

Dear Mr. Petersen:

In response to a request from Bill Dircks which was transmitted to the Supply System from you to Jim Perko via November 23rd telephone conversation, enclosed is a copy of the WNP-2 Amended Annual Operating Budget for Fiscal Year 1984. In addition, enclosed is the Executive Board Action Memorandum No. 58 (which provides background information and summary data) and the responses from the Bonneville Power Administration and the Participants' Review Board.

It should be noted that this budget was based on a February 1, 1984 commercial operation date and contains only five months of operating cost. Page 5 of the document shows a summary of all costs in the budget and does specify the decommissioning amount.

Very truly yours,

G. C. Sorensen, Manager
Regulatory Programs

GCS/lbc

Attachments

cc: R. Auluck - NRC
N. S. Reynolds

Washington Public Power Supply System
P.O. Box 968 3000 George Washington Way Richland, Washington 99352 (509) 372-5000

ACTION MEMORANDUM NO. 58

AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984
NUCLEAR PROJECT NO. 2

ISSUE

The Executive Board is requested to approve the amended Annual Operating Budget, fiscal year 1984, (July 1, 1983 through June 30, 1984) for Nuclear Project No. 2.

BACKGROUND

The Executive Board approved the Annual Operating Budget, Fiscal Year 1984 for Nuclear Project No. 2 on May 13, 1983, by Resolution No. 139. For budgeting purposes, commercial operation is to be declared on February 1, 1984 for Project No. 2. The Annual Operating Budget included debt service and related expenditures for the succeeding period of July 1, 1983 through June 30, 1984 plus operating expenses for the initial operating period, February 1 through June 30, 1984. The operating expenses include all expenditures paid by the Supply System during the fiscal year associated with the ownership, operation, maintenance, repair, renewals or replacements of the project including all payments and deposits of whatever nature provided for in Bond Resolution No. 640.

This amended Annual Operating Budget has been prepared pursuant to the provisions of Bond Resolution No. 640 and the Project and Net-Billing Agreements to provide funding for the estimated cash requirements for fiscal year including annual costs (debt service and project operating costs) and the costs to complete construction. The Agreements provide that after September 1, 1977 ("date certain") debt service and certain related requirements (and such other amounts as may be agreed upon by the Supply System and the Bonneville Power Administration (BPA)) be net-billed. The inclusion of the estimated costs to complete construction in the amended annual operating budget per agreement with BPA was necessitated by the unavailability of conventional and/or alternative sources of financing. The scheduled bond sale of $149,000,000 in July 1983 has been eliminated; no additional bond sales are anticipated.

The Amended Annual Operating Budget is used to determine the Participants monthly share of project costs. Based on the budgeted expenditures, the Supply System will prepare and deliver to the Participants and the BPA, an amended billing statement reflecting the amount to be paid by the Participants on a monthly basis in accordance with the terms of the Net-Billing Agreements. Net-billing deficiencies, if any, will be paid by BPA.

This budget was mailed to the BPA Administrator and the Participants Review Board on June 30, 1983 for review and action. In accordance with the last paragraph of Section 6(b) of the WNP-2 Project Agreement, the amended Annual Operating Budget shall become effective unless disapproved within seven days after submittal.

SALIENT POINTS OF THE AMENDED ANNUAL BUDGET

The total amended net funding requirements are estimated to be $405,440,000; an increase of $123,440,000 as compared to the original approved fiscal year 1984 Budget. This increase resulted from the inclusion of the estimated costs to complete construction of $144,440,000 and a reduction in debt service and related costs of $21,000,000, due to the elimination of the planned bond sale in July 1983.

DISCUSSION

Approval of the Amended Annual Operating Budget, as submitted, will provide a formal basis upon which to sent amended billing statements to the Participants.

RECOMMENDATION

It is the recommendation of the Managing Director that the Executive Board approve the Amended Annual Operating Budget for Nuclear Project No. 2 as submitted, subject to the rights of BPA and the Participant's Review Board as stipulated in the Project and Net Billing Agreements.

ATTACHMENT

Washington Public Power Supply System Amended Annual Operating Budget, Nuclear Project No. 2, Fiscal Year 1984

CONCURRENCE

D. W. Mazur, Managing Director

June 30 1983
Date

ATTACHMENT

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

Corporate Budgets
June 30, 1983

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

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INTRODUCTION

This WNP-2 Fiscal Year 1984 Amended Annual Budget has been prepared by the Supply System pursuant to the provisions of Bond Resolution No. 640 and the Project and Net-Billing Agreements to provide funding for the estimated cash requirements for the fiscal year including annual costs and the costs to complete construction. The Agreements provide that after September 1, 1977 ("date certain") debt service and certain related requirements (and such other amounts as may be agreed upon by the Supply System and the Bonneville Power Administration (BPA)) be net-billed.

This amended budget includes revised annual costs of $261,000,000 as compared to $282,000,000 in the original budget, a reduction of $21,000,000 due to the elimination of the planned bond sale in July 1983. Accordingly, bond interest expense, reserve and contingency fund requirements, trustee and paying agent fees, and investment income were reduced. Additionally, the estimated cost to complete construction of $144,440,000 is included because conventional and/or alternative sources of financing are presently unavailable.

The total net funding requirements including annual (debt service and project operating costs) and construction completion costs for fiscal year 1984 are estimated to be $405,440,000. This amount will be reflected in the amended billing statements to be sent to the 94 Project Participants and will be paid on a monthly basis in accordance with the terms of the Net-Billing Agreements. Net-billing deficiencies, if any, will be paid by BPA.

For further information, see the Construction Budget, Fiscal Year 1984 Update, Nuclear Project No. 2 which identifies total project construction costs and related funding requirements.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

ASSUMPTIONS

1. The Annual Budget is prepared on a cash basis. Investment income is budgeted on a cash basis (recognized when received) to more accurately reflect the availability of the investment income to offset cash requirements.

2. Bond Issue

   Conventional financing for the completion of construction is not possible at this time. Estimated costs to complete construction of $138,948,000 will be funded by BPA in accordance with the terms of the Net-Billing Agreements; $144,440,000 will be required to fund construction costs in fiscal year 1984. It is expected that costs after fiscal year 1984 will be more than offset by receipts from contract recoveries, salvages and sales of excess construction materials. No additional bond sales are presently anticipated.

3. Working Capital

   In accordance with Bond Resolution No. 640 (Section 6.6), the Supply System's required amount of working capital shall be $3,000,000 or such greater amount as may be decided upon by the Supply System and the Bonneville Power Administration. The initial $3,000,000 working capital was provided via net-billings in fiscal year 1978. No increase in this amount is presently anticipated for fiscal year 1984.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

ASSUMPTIONS

4. Investment Income

Interest income and security gains and losses are combined to yield composite returns as follows:

Bond Fund Interest and Principal Account	8.5%
Bond Fund Reserve	9.25%
Reserve and Contingency Fund	9%
Revenue Fund	8%

5. For budgeting purposes, commercial operation is to be declared on February 1, 1984. Operating expenses are budgeted only during the period February 1 through June 30, 1984. Differentiation between construction and normal operating expenditures is predicated upon the nature of the expenditure, not necessarily the timing of it. The budget includes estimated costs for construction completion to be expended in fiscal year 1984. Construction costs subsequent to commercial operation include tasks associated with construction wrap-up (deferred construction items, plant unitization, execution of punchlist projects, settlement of backcharge claims and litigation, fine-tuning plant equipment to maximize generation). All costs to physically complete the plant will be designated as construction costs. Additionally, recoveries, salvages and sales of excess materials/construction equipment are credits against construction costs.

6. The Supply System's decommissioning plan reflects a 40-year plant life, 3 years to prepare for storage, 50 years of protective storage and 3.5 years for facility dismantlement and site restoration. The estimated total decommissioning cost of $114,000,000 in 1982 dollars ($74,308,000 in 1978 dollars) is based on a decommissioning study performed for the Nuclear Regulatory Commission by Battelle Pacific Northwest Laboratory in 1978. A sinking fund including all investment income earned thereon will be established for the 40-year operating life of the plant to provide funds necessary to pay for the preparation of passive safe storage, annual maintenance and final decommissioning. The sinking fund requirements at the year 2024 are based on:

   a. Six percent (6%) escalation of projected decommissioning cash flow requirements (stated in 1978 dollars) from 1978 through 2081.

   b. Nine percent (9%) present worth factor to state escalated decommissioning costs in 2024 dollars.

Payments to the sinking fund are assumed to be made on a graduated ascending rate using a 6 percent factor.

ASSUMPTIONS

7. Nuclear fuel is billed as needed at an amount to provide cash for new fuel acquisition. Contract prices and escalation formulas have been used to project requirements for materials and services under contract. Projections of market price have been used for the remainder of the plant requirements. Fabrication services for reload fuel are scheduled for acquisition to support a September 1985 refueling with annual refuelings thereafter. Enrichment services deliveries have previously been established through fiscal year 1988. Uranium and conversion services are expected to be delivered to meet the requirements of the enriching services contract. Because this requires uranium to be delivered earlier than the contract with Exxon Nuclear specifies, acquisition has been priced at market price rather than contract price. Later years will show adjustments to contract prices. Subsequent to 1988, deliveries of fuel are budgeted on a schedule consistent with project requirements for operation at a capacity factor of 70 percent.

8. Cost for shipping and disposal of spent nuclear fuel will be billed as they are incurred. The Nuclear Waste Policy Act of 1982 (PL 97-425) specifies that a fee of one mill be paid to the Department of Energy (DOE) for each kilowatt hour of electricity generated. In return, DOE will accept and dispose of spent nuclear fuel. Estimates of generated electricity are based on a planning schedule for operation of WNP-2 that has been reviewed by BPA staff. The "Act" provides for an adoption of an "assigned three-month period" for the purposes of reporting kilowatt hours generated and sold by the Purchaser's nuclear power reactor and for establishing fees due and payable to DOE. The Supply System has proposed an assigned three-month period beginning November 1983. The first period will be November 1983 thru January 1984; the second period will be February 1984 thru April 1984 and so on. Based on this schedule, the first accounting period applicable to the operating budget will be February 1984 thru April 1984. It is anticipated that the fees estimated to be $2,133,000 for this period will be paid in May. No additional payments are anticipated in fiscal year 1984. The waste disposal fee for nuclear fuel used during the power ascension tests is included in the construction budget.

9. RCW 54.28.025 requires payment of a tax for the act or privilege of engaging within the State of Washington in the business of generating electricity for use or sale equal to 1.5 percent of the wholesale value of energy produced for use or sale except for energy used in the operation of component parts of the power plant and associated transmission facilities. For the operating period (February 1 thru June 30, 1984), an accrued liability of $2,053,000 has been computed based on the total operating costs for the period. The tax period is based on a calendar year and the taxes are due the succeeding May. Taxes for fiscal year 1984 will not be paid until May 1985 and, therefore, are not included as a budget line item in fiscal year 1984.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

STATEMENT OF FUNDING REQUIREMENTS

($ in Thousands)

	1984 Original Budget	1984 Amended Budget
Annual Costs		
Nuclear Fuel	$ 13,015	$ 13,015
Waste Disposal	2,133	2,133
Operations	17,273	17,273
Maintenance	4,727	4,727
Administrative and General		
Direct (Insurance)	2,697	2,697
Overhead Allocation	2,724	2,724
Decommissioning	358	358
Taxes	-	-
Capital Additions	5,300	5,300
Bond Interest Expense	236,390	217,020
Provision for Bond Retirement	15,940	15,940
Reserve and Contingency Fund Requirements	25,233	23,296
Trustee and Paying Agent Fees	641	322
Subtotal	$326,431	$304,805
Less: Investment Income	$ 21,137	$ 20,511
Prior Year's Surplus: Reserve & Contingency Fund	23,294	23,294
Subtotal	$ 44,431	$ 43,805
Net Funding Requirements - Annual Costs	$282,000	$261,000
Construction Costs(a)		
Beginning Balance(b) - Construction Fund	$ -	$ 51,164
Receipts		
Investment Income	-	6,550
Fuel Sale	-	2,116
Other	-	6,700
Total Receipts	$ -	$ 15,366
Total Available	$ -	$ 66,530
Less: Disbursements		
Plant Design/Engineering	$ -	$ 21,673
Prepurchased Equipment	-	7,466
Plant Construction/Completion	-	84,755
Owner's Resources	-	54,208
Nuclear Fuel	-	7,786
Contingency	-	34,688
Financing	-	394
Total Disbursements	$ -	$210,970
Net Funding Requirements - Construction Costs	$ -	$144,440
TOTAL NET FUNDING REQUIREMENTS	$282,000	$405,440

(a) See Construction Budget, Fiscal Year 1984 Update, Nuclear Project No. 2 for detail information.

(b) The beginning balance includes actual receipts and disbursements through April 30, 1983 and an estimate of receipts and disbursements for the remainder of fiscal year 1983.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
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EXPLANATION OF ANNUAL COST ITEMS

NUCLEAR FUEL

The nuclear fuel cycle consists of four basic elements prior to insertion of the fuel assemblies in a nuclear reactor. These elements include acquisition of the uranium concentrates, conversion of the uranium concentrates to uranium hexafluoride, enrichment of the uranium hexafluoride and fabrication of the enriched uranium into fuel assemblies. Uranium and conversion services are expected to be delivered to meet the requirements of the fixed enriching services contract. See Assumptions 7 and 8 for additional information and a detailed explanation of the waste disposal fee.

The following schedule indicates the cash requirements for nuclear fuel:

($ in Thousands)

	1984 Budget
Uranium	$12,632
Conversion	373
Enrichment	-
Other	10
Total	$13,015
Waste Disposal	$ 2,133

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
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AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

EXPLANATION OF ANNUAL COST ITEMS

OPERATIONS

The following schedule outlines operation requirements by program:

($ in Thousands)

	1984 Budget
Plant Operations	$ 2,618
Technical	6,444
Training	663
Plant Administration	5,303
Health Physics/Chemistry	2,245
Total	$17,273

A scope description of each program is detailed below:

Plant Operations: Plant operations includes the cost of labor, supporting materials, supplies, services and related expenses required to safely, efficiently and economically operate the Project No. 2 power generation plant. The staff consists of managers, supervisors, operators and technicians who are responsible for operating the plant in compliance with federal, state and local laws. Included are expenses incurred for heat transfer materials and water used for production of steam and for cooling purposes and expenses incurred in the operation of turbo-generators, steam turbines and their auxiliary apparatus, switchgear and other electrical equipment.

Technical: Technical includes the cost of labor and expenses incurred in conducting technical/engineering activities in support of plant operation. This includes licensing/nuclear safety issues and plant engineering support in the areas of systems analysis, fuel management and performance engineering.

Training: Training includes the cost of labor, expenses and materials incurred in conducting training and requalification activities associated with the operation of the plant. Plant operator, health physics/chemistry, general site employee, emergency and security training are included in this category.

Plant Administration: Plant administration includes the cost of labor, materials and other expenses incurred in the general supervision and direction of the plant administration activities associated with operation of a nuclear power generation plant. This includes general administrative support (i.e., clerks, word processing, duplicating and transportation) and program support (i.e., security, industrial safety/fire protection, communications, quality assurance, computer service and procurement).

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
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AMENDED ANNUAL OPERATING BUDGET
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EXPLANATION OF ANNUAL COST ITEMS

OPERATIONS (Cont'd)

Health Physics/Chemistry: Health physics/chemistry includes the cost of labor, material and other expenses incurred by health physics/chemistry activities in support of plant operations. This includes emergency planning, surveillance, inspection, monitoring, and analysis activities.

A detailed schedule outlining the cost by program and major account follows on Page 9 . The schedule details the following major account categories: labor and overhead, materials/equipment, outside services, travel/training, and internal services and other. A description of the major account categories which applies to the detailed schedules for operation, maintenance, and administrative and general (direct and overhead allocation) follows. Labor and overhead includes salaries, benefits, overtime, administrative overhead, and other salary costs. Materials/equipment includes general and operating materials, office supplies, office furniture, general utilities, other miscellaneous administrative expenses, project equipment (i.e., operational spare parts), and project materials (i.e., fuels and oils). Outside services include costs of services by consultants for system design and programming, engineering/technical and legal assistance, and financial management. Travel and training includes business travel, training and fees; relocation travel; and operator reactor training and fees. Internal services include direct costs for unit billing services (i.e., duplicating, graphics, and vehicles) and computer services. Other includes property and liability insurance, regulatory, and impact payments.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

OPERATIONS

($ in Thousands)

Program Title (WBS)	Average Manmonths	Labor & Overhead	Materials/ Equipment	Outside Services	Travel/ Training	Internal Services & Other	Total
Plant Operations	72	$1,478	$1,085[a]	$ 50	$ 2	$ 3	$ 2,618
Technical	96	2,276	10	3,590[b]	88	480	6,444
Training	22	427	75	50	34	77	663
Plant Administration	241	3,732	533[c]	132	35	871[d]	5,303
Health Physics/Chemistry	51	1,058	306	756[e]	7	118	2,245
Total	482	$8,971	$2,009	$4,578	$166	$1,549	$17,273

(a) Includes fuels and oils, chemicals and gases, resins, and purchase of offsite electricity during outage in May.
(b) Includes contracts for nuclear safety and regulatory issues, environmental activities, system design engineering services, and general vendor support.
(c) Includes communication services, computer information systems, procurement services, safety and fire protection equipment, and security force material.
(d) Includes program services of quality assurance, word processing, and vehicle services.
(e) Includes contract for Rent-a-Tech HP personnel and HEPA/charcoal filter testing.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
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EXPLANATION OF ANNUAL COST ITEMS

MAINTENANCE

The following schedule outlines maintenance requirements by program:

($ in Thousands)

	1984 Budget
Plant Maintenance	
Technical	$4,082
Training	300
	345
Total	$4,727

Scope descriptions of each program are detailed below:

Plant Maintenance: Plant maintenance includes the cost of labor, supporting materials, supplies, services and related expenses required to safely, efficiently and economically maintain the Project No. 2 power generation plant. The staff consists of managers, supervisors, foremen, electricians, mechanics, instrument and control technicians, and laborers who are responsible for maintaining the plant in compliance with federal, state and local laws and corporate policy.

The materials, supplies and services costs relate to expenses incurred in maintaining the plant and associated equipment to produce electrical power via the nuclear process.

Technical: Technical includes the cost of labor and expenses incurred in conducting technical/engineering activities in support of plant maintenance. This includes the plant engineering support activities of performance and equipment engineering.

Training: Training includes the cost of labor and expenses incurred in the general supervision and direction of training and qualification activities associated with maintenance of a nuclear power generating station. Also includes the cost of labor, materials and expenses incurred in establishing and maintaining training programs related to maintenance of a nuclear plant.

A detailed schedule outlining the cost by program and major account follows on Page 11.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
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MAINTENANCE

($ in Thousands)

Program Title (WBS)	Average Manmonths	Labor & Overhead	Materials/ Equipment	Outside Services	Travel/ Training	Internal Services & Other	Total
Plant Maintenance	128	$2,316	$1,690[a]	$ 69	$ 3	$4	$4,082
Technical	7	189	-	94	17	-	300
Training	5	113	25	-	207[b]	-	345
Total	140	$2,618	$1,715	$163	$227	$4	$4,727

(a) Includes materials and supplies to operate the decontamination laundry and sanitary waste water plant, payment for operational spares which have been ordered, payment for BPA contract for relay meter calibration and consumables/materials for routine corrective/preventative maintenance.

(b) Includes training for development of simulator program and providing ongoing training for maintenance personnel.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

EXPLANATION OF ANNUAL COST ITEMS

ADMINISTRATIVE AND GENERAL - DIRECT

Administrative and general direct includes the cost categories of legal, auditing, finance, insurance, and fees and memberships.

Legal includes general support to the operating project and $200,000 of outside services to support expected litigation. Auditing is cost of the independent and State of Washington auditors. Finance is on-site project accounting supporting plant operation financial functions. Insurance is the premium cost of property and liability insurance for the plant. Fees and memberships include all costs for our participation in the Institute of Nuclear Power Operations (INPO).

See Page 13 for a detailed schedule of direct administrative and general costs.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
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ADMINISTRATIVE AND GENERAL - DIRECT

($ in Thousands)

Program Title (WBS)	Average Manmonths	Labor & Overhead	Materials/ Equipment	Outside Services	Travel/ Training	Internal Services & Other	Total
Finance	3	$ 72	$ -	$ -	$ -	$ -	$ 72
Legal	1	22	-	200	-	-	222
Auditing	-	-	-	20	-	23	43
Insurance	-	-	-	-	-	2,100[a]	2,100
Memberships	-	10	250[b]	-	-	-	260
Total	4	$104	$250	$220	$ -	$2,123	$2,697

(a) Includes five months of nuclear property ($1,965,000) and nuclear liability insurance ($135,000) premiums.

(b) Includes annual membership in INPO.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
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EXPLANATION OF ANNUAL COST ITEMS

ADMINISTRATIVE AND GENERAL - OVERHEAD ALLOCATION

Administrative and general overhead allocation budgeted at $2,724,000 for the Project No. 2 Annual Budget includes those items determined generic in nature rather than project specific and are required for administrative and general activities of the Supply System. Major items include costs for the Board of Directors, Administrative Auditor, Managing Director and staff, Internal Auditing, Legal, Public Affairs, General Accounting, Corporate Budgeting and Human Resources. Other minor functions such as Materials/Contracts Management, Capital Funding, Investments, Records Control, Technical, Safety, Power Generation and Quality Assurance are also included.

A schedule outlining total corporate expense for fiscal year 1984 and the overhead allocation for the period February 1 through June 30, 1984 is on Page 15. The overhead allocation is based on WNP-2 operation and maintenance direct labor dollars (after February 1, 1984) compared to total Supply System project direct labor dollars.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
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ADMINISTRATIVE AND GENERAL - OVERHEAD ALLOCATION

($ in Thousands)

Program Title (WBS)	Average Manmonths	Labor & Overhead	Materials/ Equipment	Outside Services	Travel/ Training	Internal Services & Other	Total
Finance Programs	81	$1,554	$ 31	$ 384	$ 44	$ 602	$2,615
Administration	96	2,006	262	876	250	463	3,857
Corporate Technical	29	722	14	61	47	244	1,088
Internal Services Variance	-	-	-	-	-	(29)	(29)
Management Adjustment[a]	(120)	(1,901)	-	-	-	-	(1,901)
Total to be Allocated (2/1 - 6/30/84)	86	$2,381	$307	$1,321	$341	$1,280	$5,630
Total Cost Allocated to Project No. 2 Operations							$2,724

(a) The management adjustment is an assumed reduction in manpower which will be determined at a later time through restructuring of the organization.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
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EXPLANATION OF ANNUAL COST ITEMS

DECOMMISSIONING

The decommissioning costs for the period February 1984 to June 1984 is estimated to be $358,000. The decommissioning cash requirements are based on Assumption 6, Page 3. Payments to the sinking funds are assumed to be made on a graduated ascending rate based on a 6 percent factor.

TAXES

Generation taxes have not been included in the Annual Operating Budget for fiscal year 1984. The taxes for generation for the period February 1 thru June 30, 1984 will not be paid until May 1985 and, therefore, are not a cash requirement of this fiscal year. See Assumption 9, Page 4 for further detail.

CAPITAL ADDITIONS

Formation of the fiscal year 1984 budget precedes commercial operation of Project No. 2 plant and associated equipment. Transition of the plant and equipment from a construction to operation phase provides that the plant, as designed and constructed, is licensable and ready to operate. Prudent practice and knowledge of the experience of other plants of similar design and capabilities, however, necessitate planning for some plant improvements/ modifications as early as the first year of operation.

The schedule on Page 17 is a representative listing of potential problem areas. The list is not intended to be all inclusive or specific, but is representative of the types of problem areas which have been experienced by other utilities.

Improvements/modifications will be made to satisfy new regulatory and licensing requirements as Project No. 2 continues operation. Other modifications will be necessary for safety, plant reliability and economic reasons. As these items are identified, they will be added to the list of capital additions for future plant improvements.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
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AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

CAPITAL ADDITION ITEMS

($ in Thousands)

Description	Amount
Planned Items[a]	
• Simulator Modifications and Certification	$1,600
• Design Engineering for Plant Modifications	800
• Capitalized Equipment (Including GELI Counter, Miscellaneous Plant Test and Monitoring Equipment, and Environmental Monitoring Equipment)	220
Potential Items[b]	
• Extended Fuel Cycle Provisions	
• Feedwater Heater Level Control Changes	
• Recirculating Flow Control Changes	
• Water Chemistry/Oxygen Control	
• Reactor Level Control/Feedwater Turbine Changes	2,680
• RWCU Pump Seal Replacement	
• Preparation of Recirculation Stress Improvement	
• Containment Atmospheric Control	
Total	$5,300

(a) Planned items include: (1) simulator modifications and certifications--improvements to simulator to match plant changes, improve fidelity and achieve certification per standards; (2) design engineering for plant modifications--engineering required to do initial design work on modifications; and (3) capitalized equipment--additional equipment, including GELI counter, various plant test and monitoring equipment, and environmental monitoring equipment.

(b) Potential items include a representative listing of potential problem areas of high probability which have been experienced by other utilities.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
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EXPLANATION OF ANNUAL COST ITEMS

BOND INTEREST EXPENSE

In accordance with Bond Resolution No. 640 (Section 6.2), funds sufficient to pay the interest on bond debt are transferred monthly from the Revenue Fund and the Bond Fund Interest Account. The annual interest expense is estimated to be as follows:

($ in Thousands)

Series	Outstanding Bonds 6/30/84	Weighted Average Coupon Rate %	Annual Interest Expense Original 1984	Annual Interest Expense Amended 1984
1973	$ 138,000	5.58	$ 7,777	$ 7,777
1974	70,700	7.05	4,991	4,991
1974A	116,000	7.57	8,811	8,811
1975A	119,000	6.77	8,069	8,069
1976	118,240	6.50	7,704	7,704
1976A	194,715	5.83	11,360	11,360
1978	176,395	6.52	11,535	11,535
1979	175,675	6.32	11,134	11,134
1979A	121,835	7.41	9,057	9,057
1980	200,000	9.33	18,659	18,659
1981A	210,000	11.21	23,537	23,537
1982A	300,000	14.43	43,326	43,326
1982B	178,720	13.45	24,040	24,040
1982C	196,280	13.77	27,020	27,020
1983 (Assumed)	149,000(a)	13.00	19,370	-
Total	$2,315,560	9.30	$236,390	$217,020

(a) The 1983 series is not included in the total for outstanding bonds, weighted average coupon rate percentage or amended 1984 annual interest expense.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
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EXPLANATION OF ANNUAL COST ITEMS

PROVISION FOR BOND RETIREMENT

The redemption obligation established by Bond Resolution No. 640 (Section 6.2) is satisfied by transferring the annual retirement in approximately equal monthly installments from the Revenue Fund to the Bond Fund Principal Account.

($ in Thousands)

Scheduled Retirement for July 1	1984 Original	1984 Amended
Series 1974A	$ 2,500	$ 2,500
1975	3,500	3,500
1976	1,030	1,030
1976A	2,820	2,820
1978	2,025	2,025
1979	2,355	2,355
1979A	1,710	1,710
Total	$15,940	$15,940

RESERVE AND CONTINGENCY FUND REQUIREMENTS

In accordance with Bond Resolution No. 640 (Section 6.5), funds equal to 10 percent of the aggregate bond interest and principal obligations are transferred monthly from the Revenue Fund to the Reserve and Contingency Fund. The unused money collected will be used to reduce the funding requirements in the subsequent year. The Reserve and Contingency Fund requirements are computed as follows:

($ in Thousands)

	1984 Original Budget	1984 Amended Budget
Interest Expense	$236,390	$217,020
Provision for Bond Retirement	15,940	15,940
Total	$252,330	$232.960
Reserve and Contingency Fund Requirements	$ 25,233	$ 23,296

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

EXPLANATION OF ANNUAL COST ITEMS

RESERVE AND CONTINGENCY FUND REQUIREMENTS (Cont'd)

Per the Resolution, moneys in the Reserve and Contingency Fund shall be used to makeup any deficiencies in the Interest Account, Principal Account or Bond Retirement Account in the Bond Fund for which funds are not available in the Construction Fund or the Reserve Account. To the extent not required for any such deficiency, moneys in the Reserve and Contingency Fund may be applied on and after commercial operation to any one or more of the following:

a. To pay the cost of renewals and replacements to the Project.

b. To pay the cost of normal additions to and extensions of the Project.

c. To pay extraordinary operation and maintenance costs, including extraordinary costs of fuel and the cost of preventing or correcting any unusual loss or damage (including major repairs) to the Project.

TRUSTEE AND PAYING AGENT FEES

Per Bond Resolution No. 640 (Section 6.10), services of the Bond Fund Trustee and Paying Agents are to be paid from the Construction Fund until September 1, 1977. Thereafter, these costs will be paid by the Participants via net billings.

The original fiscal year 1984 budget included $641,000 for Bond Fund Trustee and Paying Agent fees as compared to $322,000 in the amended 1984 budget. The decrease is related to the elimination of the planned bond sale in July 1983.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

EXPLANATION OF ANNUAL COST ITEMS

INVESTMENT INCOME

Investment income received by the Revenue Fund, Reserve and Contingency Fund, and various Bond Fund Accounts is estimated to be as follows:

($ in Thousands)

	1984 Original	1984 Amended
Bond Fund Reserve Account	$14,750	$14,295
Bond Fund Interest Account	4,108	3,937
Reserve and Contingency Fund	1,375	1,375
Bond Fund Principal Account	664	664
Revenue Fund	240	240
Total	$21,137	$20,511

Investment income is acquired through investing funds in the Bond Fund Reserve Account, Bond Fund Interest Account, Reserve and Contingency Fund, Revenue Fund and Bond Fund Principal Account. The decrease in the amended fiscal year 1984 budget as compared to the original 1984 budget is related to less money in the Interest and Reserve Accounts to invest without a bond sale. A brief description and restrictions of each fund account follows:

Bond Fund Reserve Account: The Bond Fund Reserve Account includes an amount with respect to each series of bonds then outstanding equal to the largest amount of interest required to be paid on the bonds of such series during any 6-month period from the date of such bonds to the final maturity date thereof. After September 1, 1977 (date certain), any excess may be transferred to the Supply System and deposited in the Revenue Fund. Prior to June 25th such excess for any interest received from July 1 thru May 31 will be transferred to the Revenue Fund, and interest accrued after June 1st may be transferred no earlier than June 30th.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

EXPLANATION OF ANNUAL COST ITEMS

INVESTMENT INCOME (Cont'd)

Bond Fund Interest Account: This account was created for the purpose of paying the interest on outstanding bonds as the interest becomes due and payable. Transfers of excess funds over needs are made to the Revenue Fund July 1st and January 1st.

Reserve and Contingency Fund: The fund includes an amount equal to 10 percent of the aggregate of the amounts required to be paid not later than the 25th day of each month from the Revenue Fund into the Interest Account, Principal Account and the Bond Retirement Account in the Bond Fund plus the amounts required to be used to makeup any deficiencies in the Interest Account, Principal Account or Bond Retirement Account for which funds are not available in the Construction Fund or Bond Fund Reserve Account. If moneys and value of government obligations exceed the then commitment for the purposes outlined above plus $3,000,000, the amount of the excess shall be paid in the Bond Fund Reserve Account for any deficiencies therein and any balance remaining after satisfaction of deficiencies shall be paid into the Revenue Fund no earlier than June 30th.

Revenue Fund: This fund includes all income, revenues, receipts derived by the Supply System from its ownership and operation of the Project. The fund shall be used and applied for the purpose of paying the principal of and premium, if any, and interest on the bonds issued pursuant to Bond Resolution No. 640, paying the cost of operating and maintaining the Project including making repairs, renewals, replacements, additions, betterments and improvements to and extensions of the Project and for paying all other charges or obligations. Any excess may be applied to reduce annual power costs or the purchase or redemption of bonds.

Bond Fund Principal Account: This account was created for the purpose of paying outstanding serial bonds as they mature. Excess moneys in the account are transferred each July 1st to the Revenue Fund.

PRIOR YEAR'S SURPLUS

Reserve and Contingency Fund: To satisfy the Bond Resolutions's Reserve and Contingency Fund requirements, $23,294,000 was collected during fiscal year 1983. Amounts collected and unused reduce the funding needs of the next fiscal year. The entire amount collected in fiscal year 1983 constituted such excess.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 3
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

EXPLANATION OF CONSTRUCTION COST ITEMS

During the financial planning process for fiscal year 1982, a zero base estimate and schedule development concept was used to establish baselines clearly defining project scope, schedule and cost. The fiscal year 1984 construction costs reflect the baseline budgeting concept in lieu of zero base estimating. The costs have been updated to reflect: (1) changes authorized through the change management process, (2) experience to date, and (3) new or revised management direction. Escalation has been calculated separately for each individual contract and/or major segment of the budget. Escalation for prepurchased equipment, construction contracts, architect-engineer/construction manager services and Supply System resources was calculated in accordance with contract terms, applicable actual published indices for the fiscal year, and the following assumptions:

	Compound Annual % Rate Calendar Year	
	1983	1984
Labor - Manual	7	7
- Nonmanual	6	6
Equipment/Materials	6	6

An explanation including scope descriptions for the receipt budget line items is detailed below:

Investment Income: The current effective yield on the construction funds is approximately 9 percent. It is assumed that the shape of the yield curve will remain normal as it has recently trended. This means that the short-term instruments will yield less. These rates are projected to decrease so that an average return of 9 percent is achieved in fiscal year 1984. Funds for construction from BPA will be received monthly as required and will generate minimal construction fund income. In the months of June and July 1983, all accrued interest income will be received as investments mature.

Fuel Sale: Fuel sales include the sale of uranium originally procured for the initial core, but presently not needed either for the initial core or subsequent reloads.

Other: Other receipts include anticipated contract recoveries, salvages and sales of excess construction materials.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

EXPLANATION OF CONSTRUCTION COST ITEMS

DISBURSEMENTS

Financing costs include all expenditures incurred in connection with the issuance (planned and actual), initial sale and subsequent servicing of revenue bonds and notes. Included in the fiscal year 1984 estimate are amounts incurred for legal expenses and financial advisor's fees during preparation work for the bond sale previously scheduled for July 1983.

For scope descriptions and further detail information for plant design/engineering, prepurchased equipment, plant construction/completion, owner's resources, nuclear fuel and contingency see Construction Budget, Fiscal Year 1984 Update, Nuclear Project No. 2.

NET FUNDING REQUIREMENTS - CONSTRUCTION COSTS

The net amount to be funded in fiscal year 1984 through the net-billing process for construction costs is $144,440,000. The schedule below outlines the balance to complete construction through net-billing:

($ in Thousands)

Fiscal Year	Amount
1984	$144,440
1985	7,802
1986	(15,494)
1987	2,200
Total	$138,948

Fiscal year 1986 includes a net anticipated receipt of $18,250,000 for cost contract recovery.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
AMENDED ANNUAL OPERATING BUDGET
FISCAL YEAR 1984

MONTHLY STATEMENT OF FUNDING REQUIREMENTS

($ in Thousands)

	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
Annual Costs													
Nuclear Fuel	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2	$ 2,860	$ 3	$ 375	$ 9,775	$ 13,015
Waste Disposal	-	-	-	-	-	-	-	-	-	-	2,133	-	2,133
Operations	-	-	-	-	-	-	-	3,455	3,451	3,506	3,558	3,303	17,273
Maintenance	-	-	-	-	-	-	-	933	987	966	949	892	4,727
Admin. & General													
Direct	-	-	-	-	-	-	-	750	500	499	480	468	2,697
Overhead Alloc.	-	-	-	-	-	-	-	622	578	534	499	491	2,724
Decommissioning	-	-	-	-	-	-	-	-	-	-	-	358	358
Taxes	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Additions	-	-	-	-	-	-	-	1,060	1,060	1,060	1,060	1,060	5,300
Bond Interest Expense	18,085	18,085	18,085	18,085	18,085	18,085	18,085	18,085	18,085	18,085	18,085	18,085	217,020
Bond Retirement	1,328	1,328	1,328	1,329	1,328	1,328	1,328	1,329	1,328	1,328	1,329	1,329	15,940
Reserve & Cont. Fund	1,941	1,941	1,941	1,942	1,941	1,941	1,941	1,942	1,941	1,941	1,942	1,942	23,296
Trustee & Paying Agent Fees	-	55	104	-	-	-	-	59	104	-	-	-	322
Subtotal	$ 21,354	$ 21,409	$ 21,458	$ 21,356	$ 21,354	$ 21,354	$ 21,354	$ 28,237	$30,894	$27,922	$30,410	$37,703	$ 304 805
Less:													
Investment Income	$ 9,164	$ 20	$ 20	$ 20	$ 20	$ 20	$ 1,942	$ 20	$ 20	$ 20	$ 20	$ 9,225	$ 20,511
Prior Yr.'s Surplus: Reserve & Cont.	23,294	-	-	-	-	-	-	-	-	-	-	-	23,294
Subtotal	$ 32,458	$ 20	$ 20	$ 20	$ 20	$ 20	$ 1,942	$ 20	$ 20	$ 20	$ 20	$ 9,225	$ 43,805
Net Funding Req. - Annual Costs	$(11,104)	$ 21,389	$ 21,438	$ 21,336	$ 21,334	$ 21,334	$ 19,412	$ 28,217	$30,874	$27,902	$30,390	$28,478	$ 261,000
Construction Costs													
Beginning Balance - Construction Fund	$ 51,164	$ 16,963	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 51,164
Receipts:													
Investment Income	$ 6,550	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,550
Fuel Sale	2,116	-	-	-	-	-	-	-	-	-	-	-	2,116
Other	100	100	100	200	200	3,600	300	300	300	300	500	700	6,700
Total Receipts	$ 8,766	$ 100	$ 100	$ 200	$ 200	$ 3,600	$ 300	$ 300	$ 300	$ 300	$ 500	$ 700	$ 15,366
Total Available	$ 59,930	$ 17,063	$ 100	$ 200	$ 200	$ 3,600	$ 300	$ 300	$ 300	$ 300	$ 500	$ 700	$ 66,530
Less: Disbursements													
Plant Design/Engrg.	$ 4,375	$ 3,285	$ 3,115	$ 2,175	$ 1,250	$ 6,348	$ 740	$ 385	$ -	$ -	$ -	$ -	$ 21,673
Prepurchased Equip.	1,265	1,532	1,019	976	905	547	523	393	306	-	-	-	7,466
Plant Constr./Compl.	21,013	19,946	16,146	11,364	6,183	4,179	3,693	1,358	586	287	-	-	84,755
Owner's Resources	8,169	9,025	8,021	6,010	5,589	5,663	4,647	4,259	1,100	637	566	522	54,208
Nuclear Fuel	4,720	97	1,312	48	42	2	3	1,562	-	-	-	-	7,786
Contingency	3,425	3,800	4,000	3,900	3,900	3,300	3,300	3,363	1,300	1,300	1,400	1,700	34,688
Financing	-	200	85	-	10	-	-	10	79	-	10	-	394
Total Disbursements	$ 42,967	$ 37,885	$ 33,698	$ 24,473	$ 17,879	$ 20,039	$ 12,906	$ 11,330	$ 3,371	$ 2,224	$ 1,976	$ 2,222	$ 210,970
Ending Balance	$ 16,963	$(20,822)	$(33,598)	$(24,273)	$(17,679)	$(16,439)	$(12,606)	$(11,030)	$(3,071)	$(1,924)	$(1,476)	$(1,522)	$(144,440)
Net Funding Required from BPA - Construction Costs	$ -	$ 20,822	$ 33,598	$ 24,273	$ 17,679	$ 16,439	$ 12,606	$ 11,030	$ 3,071	$ 1,924	$ 1,476	$ 1,522	$ 144,440
TOTAL NET FUNDING REQ.	$(11,104)	$ 42,211	$ 55,036	$ 45,609	$ 39,013	$ 37,773	$ 32,018	$ 39,247	$33,945	$29,826	$31,866	$30,000	$ 405,440

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

OFFICE OF THE ADMINISTRATOR

In reply refer to: DLP
BPWP-G-83-14

NOV 2 1983

Mr. D. W. Mazur, Managing Director
Washington Public Power Supply System
P.O. Box 968
Richland, Washington 99352

Dear Mr. Mazur:

We have reviewed the Supply System's WNP-3 FY 1984 Interim Amended Annual Budget as requested in your October 26, 1983, letter. This document was prepared to include WNP-3's cash requirements through June 30, 1984, for the extended construction delay and is consistent with the Management Plan for Extended Construction Delay of WNP-3 and our May 27, 1983, proposal regarding the project.

The FY 1984 WNP-3 funding requirement contained in the Interim Amended Annual Budget is $207,009,000. Of this amount, $159,000,000 is for payment of debt service and $48,009,000 is for payment of the Supply System's share of extended construction delay costs.

Cash requirements will be provided either by the 103 participants through net billing or by net billing deficiency payments by Bonneville Power Administration as required.

We do not disapprove the FY 1984 WNP-3 Interim Amended Annual Budget.

Sincerely,

Peter T. Johnson

Administrator

cc:
Supply System Executive Board
Supply System Board of Directors
Participants' Review Board

BENTON COUNTY
PUBLIC UTILITY DISTRICT NO. 1

524 SOUTH AUBURN STREET
P. O. Box 6270
KENNEWICK, WASHINGTON
99336
AREA CODE 509 PHONE 582-2175

PARTICIPANTS' REVIEW BOARD

Project No. WNP-3 Specification No. _____

Description: WNP-3 Interim Amended Annual Budget, Fiscal Year 1984

Contract Awarded to: _____

Cost: _____

Engineer Recommendations: _____

PRB Comments: No recommendations.

Participants' Review Board Action:

The Participants' Review Board members have reviewed your request and recommendation on the above modification. Pursuant to the Net Billing Agreement, the members of the Participants' Review Board have no recommendations.

Robert G. Graves
Robert G. Graves
Chairman
Participants' Review Board

11-10-83

cc: PRB members

. Mr. W. M. Hoberg
Bonneville Power Administration
. Mr. J. Read
Washington Public Power Supply System

Use Electricity Wisely