



Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

SECURITY AND CONTINUITY OF OPERATIONS

October 10, 2013

In reply refer to: NN-1

Charles Johnson
Physicians for Social Responsibility
812 SW Washington St, Ste 1050
Portland, OR 97205

FOIA #BPA-2014-00013-F

Dear Mr. Johnson:

This is a final response to your request for records that you made to the Bonneville Power Administration (BPA), under the Freedom of Information Act, 5 U.S.C. 552.

You requested the following:

“1980 MOU between Energy Northwest and BPA regarding oversight of the Columbia Generating Station.”

Response:

BPA is releasing the responsive document in its entirety.

Pursuant to 10 CFR 1004.8, if you are dissatisfied with the adequacy of the search, you may appeal this FOIA response in writing within 30 calendar days of receipt of a final response letter. The appeal should be made to the Director, Office of Hearings and Appeals, HG-1, Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585-1615. The written appeal, including the envelope, must clearly indicate that a FOIA Appeal is being made.

There are no fees associated with this request.

Please contact Kim Winn, FOIA Specialist, at 503-230-5273 with any questions about this letter.

Sincerely,

/s/Christina J. Munro
Christina J. Munro
Freedom of Information/Privacy Act Officer

Enclosure: Responsive document

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding, entered into this 25th day of April, 1980, by and between Washington Public Power Supply System (the "System"), a municipal corporation of the State of Washington, and the United States of America, Department of Energy, acting by and through the Bonneville Power Administrator ("BPA"), for the purpose of clarifying the roles and responsibilities of the parties under the Project Agreements relating to the construction and operation of the System's Nuclear Projects 1, 2 and 3 (the "Net Billed Projects"),

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein, the parties do mutually agree as follows:

I. BPA ADMINISTRATOR

(a) It is mutually agreed that full responsibility for management is with the System's Board of Directors. It is not the intent of BPA by this agreement to presume to engage in day-to-day management of the System. It is the intent of BPA to have full information, timely received, to protect BPA's Project responsibilities.

(b) The BPA Administrator (or his designated representative) may participate in all regular and special meetings of the System Board of Directors and Executive Committee.

BPA shall be provided on the same time basis as members of the Board or Committee with copies of all information distributed to the Board or Committee members which has a material bearing on cost, schedule or operation of the Net Billed Projects and may participate fully in the discussion of all issues brought before such meetings.

(c) The BPA Administrator shall distribute to the membership of the Board or Committee, as the case may be, and the Managing Director copies of pertinent materials and studies related to the Net Billed Projects or any of them which have been prepared by BPA. The BPA Administrator shall furnish such materials and studies at the earliest date possible.

(d) The Administrator shall use his best efforts to communicate to the System's Managing Director, as far in advance as is feasible, any differences which can be identified which may arise at such meetings between the views of BPA and the System's staff recommendations.

(e) The BPA Administrator shall have no voting privileges and shall not be held accountable or liable for actions taken by the Board of Directors or Executive Committee.

II. INFORMATION REQUIREMENTS

(a) In addition to the exchange of information between the staffs of BPA and the System contemplated by the physical presence of BPA personnel as referred to in Paragraph III,

the System shall, on a monthly basis during construction of the Net Billed Projects, provide BPA the following information in writing:

(1) Craft manhours for each Net Billed Project per unit of Project completion with trend analysis and explanation of variances;

(2) Project completion progress compared to schedule with explanation of variance;

(3) Construction contract costs per unit of completion with explanation of any variance from the most recent revised or updated Construction Budget;

(4) Project costs, cash flow and financing with explanation of any variance from the most recent revised or updated Construction Budget;

(5) Administrative and general expenses by organizational unit and major budget item with a concise explanation of any variances from the most recent revised or updated Construction Budget;

(6) Reports on manpower level changes and reorganizations of System and Architect-Engineer staffs that are charged to Net Billed Projects with concise explanation of purposes.

(b) In addition to such specific information as may be requested by BPA during the construction of the Net Billed Projects, the System staff shall provide to BPA all information with respect to Net Billed Projects which is provided

to the Board of Directors and Executive Committee of the System on the following matters: contract negotiations, rework and change orders, bid packages, audits, cost and schedule estimate adjustments and forthcoming press releases. This information will be provided as such information becomes available to the System.

(c) Subject to prevailing law or regulation, BPA shall, on a routine basis and in a timely manner, provide the Managing Director or designated staff with the following information in writing, as well as such other information as the System shall reasonably request relating to the System's relationship with BPA, other agencies and constituencies:

(1) BPA analyses, studies, reports or memoranda on System documents and projects;

(2) Estimates, projections and supporting materials relating to BPA rate structures;

(3) Communications, contracts or negotiations that would involve other parties in BPA activities concerning the System;

(4) Copies of BPA testimony and hearings before state legislatures and/or in the U.S. Congress (including appropriations and legislative subcommittees) relating to System projects;

(5) Studies of BPA's role by GAO, DOE or other federal agencies.

III. BPA REPRESENTATIVES AT THE SYSTEM

(a) BPA has currently at the site of each of the Net Billed Projects a Project Engineer. It is agreed that during the construction period, BPA may employ, at its expense, representatives to be stationed at each of the project sites to be responsible for obtaining from the System's Project Managers and other personnel at the appropriate sites timely information pertaining to events which may affect cost or the schedule for completion of the Net Billed Projects and to evaluate for BPA the Project control techniques and progress. Such representatives shall have no authority regarding administration or inspection of project construction.

(b) In addition to the BPA employees referred to in Subsection (a) above, BPA will employ a Coordinator to be stationed in Richland, Washington. The function of such Coordinator will be to provide the System management staff, including the System's designated staff, immediate and direct access to BPA for the purposes of exchange of information and for interface between BPA and headquarters staff of the System. The Coordinator shall be responsible for maintaining effective contact with the System, including the liaison staff designated by the System and shall provide such designated staff with the copies of all forthcoming press releases by BPA pertaining to the Net Billed Projects

or the System in a timely manner, and shall receive copies of all forthcoming press releases to be issued by the System pertaining to the Net Billed Projects or BPA. The Coordinator shall report to the Assistant to the Administrator for Thermal Projects, and shall, through such reports, constitute a vehicle for advising BPA of matters relating to planning, engineering studies and construction of the Net Billed Projects, as well as copies of other plans or documents concerning policies relating to the construction or operation of the Net Billed Projects. To facilitate the execution of the Coordinator's duties, the System shall, to the extent not inconsistent with other duties, cooperate with the Coordinator in the discharge of the foregoing responsibilities.

(c) System shall exert every effort to ease the access of staff of BPA via System policies on site visits, passes and meetings. Attendance by BPA at System meetings arranged by Project Managers or their staffs or by the Managing Director or his staff may be left to the discretion of the appropriate Project Managers or the Managing Director, who must take responsibility for the tone, timing and results of such meetings; provided, however, that it is the policy of the System that, as a general rule, System meetings shall be open to BPA representation.

IV. BUDGET REVIEW MEETING

It is understood and acknowledged that as of August 23, 1979, the System's management has instituted monthly review meetings to discuss, explain and review matters affecting the construction budgets for all System projects, including the Net Billed Projects. These meetings are open to the public, and all interested parties are specifically invited to attend, including the Budget Committee of the System's Board of Directors, BPA, the Participants' Review Board for each Net Billed Project and the Owners' Committee on the System's Nuclear Projects 3 and 5 and the Participants' Committee for Projects 4 and 5. The purpose of these meetings is to provide all interested parties and participating agencies, including BPA, the opportunity for a continuous review of the total construction budgets, project goals and the System's performance. It is the intent of the System to continue to conduct such meetings throughout the construction periods of all projects, including the Net Billed Projects.

V. CONSTRUCTION BUDGETS

The construction budget should constitute a base against which schedules and costs can be measured. Funds may be committed or expended only for the purposes designated, including contingency, in the updated or revised construction budget applicable at the time, but commitments or expenditures from budgeted accounts which are not designated for specific uses or exceed the amount budgeted for

the specific use require submission to BPA for review and opportunity for disapproval except as provided in the last paragraph of Subsection (b) (5) and in Subsection (g) herein. All updated or revised construction budgets will be supported by detailed construction schedules, setting forth projections for completion of critical path objectives. When the difference between scheduled and actual critical path progress objectives in accordance with Project Control Schedules exceeds ten percent or an increase in projected costs for a Project exceeds ten percent, the System shall, at BPA's request, submit a revised construction budget to BPA for review and opportunity for disapproval. In order to provide BPA with sufficient detail to review revised or updated construction budgets for each Net Billed Project, and to ensure that said budgets contain adequate cost itemization, all updated or revised construction budgets prepared and submitted by the System pursuant to the Project Agreements shall contain the following budget line items:

(a) Direct Construction Costs.

(1) Construction and Prepurchased Equipment Contracts

The System shall submit as items:

- o Estimated or actual award amount, including performance bond;
- o Executed, pending or anticipated contract modifications;

- o Escalation (as defined in the Appendix);
- o Identified other amount to equal total contract cost for each construction and each prepurchased equipment contract for each Net Billed Project. These amounts, together with the amounts submitted under Subsection (3) below, "WPPSS - Controlled Costs", will reflect costs in accounts which are described as follows and defined in the Appendix:
"Structures and Improvements", "Reactor Plant Equipment", "Turbogenerator Unit", "Accessory Electric Equipment", "Miscellaneous Power Plant Equipment", "Station Equipment", "Other Tangible Property" and "Escalation".
"Construction Contracts", "Prepurchased Equipment Contracts", "Contract Base Value" and "Contract Cost" are also defined in the Appendix.

(2) Contingency: The System will submit a total budget for each Net Billed Project which reflects costs in an account described as "Contingency"; provided, however, that not more than 10 percent of the current budgeted amount for each specific contract may be expended from "Contingency" for such specific contract without prior submission to BPA for review and opportunity for disapproval.

(3) WPPSS-Controlled Costs: The System will submit a budget for each Net Billed Project which reflects the costs described as "WPPSS-Controlled Costs" as defined in the Appendix.

(4) Land and Land Rights: The System will submit a total budget amount which reflects costs for Nuclear Project 3 only in an account described as "Land and Land Rights" and defined in the Appendix.

(5) Other Tangible Property: The System will submit a total budget amount for each Net Billed Project which reflects costs in an account described as "Other Tangible Property" as defined in the Appendix to the extent not covered by "WPPSS-Controlled Costs".

(b) Other Construction Costs.

(1) Operational Spare Parts: The System will submit a budget for each Net Billed Project which reflects the costs in an account described as "Operational Spare Parts" and identified in the Appendix, separately stating the items allowed for escalation, contingency and sales tax applicable to this account.

(2) Sales Tax: The System will submit a total budget amount for each Net Billed Project which reflects costs in an account described as "Sales Tax" and defined in the Appendix.

(3) Architect-Engineer: The System will submit a total budget account for each Net Billed Project which

reflects costs in an account described as "Architect-Engineer" and defined in the Appendix.

(4) Construction Manager: The System will submit a total budget amount for each Net Billed Project which reflects costs in an account described as "Construction Manager" and defined in the Appendix.

(5) Owner's Cost: The System will submit a budget for each organizational activity, itemized by major expense items for each such activity as set forth below:

Managing Director and Staff

Managing Director

Legal

Auditing

Finance Group

Assistant Director

Management Control

Finance Division

Treasury Division

Corporate Information Systems

Administrative Services Operation

Operations Manager

Administrative Division

Personnel Programs Division

Health, Safety & Security Division

Technology Group

Assistant Director

TMI Working Committee

Technical Division

Engineering Division

Quality Assurance Division

Generation Group

Assistant Director

Plant Operations for WNP-1, WNP-2,
or WNP-3, as appropriate

Generation Services Division

Hanford Generation Project

Test & Startup Programs Division

Projects Group

Assistant Director

Project Planning & Measurement

Project Business Staff

Construction Industrial Relations

Project Division for WNP-1, WNP-2,
or WNP-3, as appropriate

Materials Management Operation

Operation Manager

Materials Management Division

Organization Performance Operation

Operation Manager

Corporate Performance

Relations Operation

Operation Manager

Communications Division

The foregoing represents the System's organization in effect as of the date of this Memorandum of Understanding. Any budgets submitted shall reflect and be consistent with reorganizations that may be effected by the System.

It is understood and agreed that the System may transfer between the foregoing organizational activities or between major expense items of each organizational activity up to 10 percent of the amounts budgeted therefor provided, however, that the total amount budgeted for "Owner's Cost" shall not be exceeded as a result of such transfer(s).

(6) Potential Exposure: The System will submit a total budget amount for each Net Billed Project which reflects the costs in an account described as "Potential Exposure" and defined in the Appendix. Proposed commitments or expenditures from this category for purposes which are not specifically stated must be submitted to BPA for review and opportunity for disapproval.

(7) Plant Relocation Cost: The System shall submit a total budget amount which reflects costs for Nuclear Project 1 only in an account described as "Plant Relocation Cost" and defined in the Appendix.

(8) DOE Settlement: The System shall submit a total budget amount which reflects costs for Nuclear Project 1 only in an account described as "DOE Settlement" and defined in the Appendix.

(c) Nuclear Fuel:

The System will submit an itemized breakdown for each Net Billed Project which represents costs in an account described as "Nuclear Fuel" and defined in the Appendix.

The breakdown is as follows:

Initial Core

Uranium
Conversion
Enrichment
Fabrication
Other
Contingency
Sales Tax

Reload

Uranium
Conversion, Storage and Insurance
Enrichment
Contingency
Other

(d) Interest, Financing and Reserves:

(1) Reserves and Working Capital: The System will submit an itemized breakdown for each Net Billed Project which reflects costs in an account described as

"Reserves and Working Capital" and defined in the Appendix. The breakdown will state the amount funded by BPA and the amount funded by the System.

(2) Interest and Financing Cost: The System will submit an itemized breakdown for each Net Billed Project which reflects costs in accounts which are described as follows and defined in the Appendix. "Net Capitalized Interest/Construction," "Net Capitalized Interest/Fuel," "Financing Cost" and "Amount Funded by BPA."

(e) In addition to the above-described items, the System will continue to furnish backup documentation prepared in detail sufficient to support a comprehensive review of the construction budgets.

(f) The updated Construction Budget shall contain an estimate of the amounts summarized by major categories to be expended therefor for each quarter of the forthcoming budget year and annual allotments thereafter. If a revised budget is necessary new quarterly allotments for the remainder of the current budget year shall be submitted and new annual allotments for succeeding years.

(g) With respect to WNP-3, items subject to review by the Owner's Committee under the Ownership Agreement shall not be subject to further review by BPA, hence it is understood that the System shall submit the construction budgets and any deviations therefrom to the Owner's Committee in

accordance with the Ownership Agreement for WNP-3 and shall submit to BPA only budget items described under Section V(d) hereof which are not subject to review by the Owner's Committee.

VI. MODIFICATION

The parties agree that this working agreement may be modified from time to time as circumstances may require. Either party may notify the other party in writing of any proposal for modification or expansion of this Memorandum of Understanding, and the party receiving such a proposal agrees to respond within thirty days.

VII. CONFLICTS

In any conflict between the terms and conditions of this Memorandum of Understanding and those of the Project Agreements, the terms and conditions of the Project Agreements shall prevail.

VIII. TERMINATION

This agreement will terminate for each project as each project reaches its commercial operation date.

WASHINGTON PUBLIC POWER SUPPLY
SYSTEM

BY: Glenn C. Walker
President, Board of Directors

BONNEVILLE POWER ADMINISTRATION

BY: Stirling Myrnes
Administrator

APPENDIX

General Definitions

CONSTRUCTION CONTRACTS

Contracts which involve either the erection of project-related structures and improvements or the fabrication and on-site installation of project components and equipment or a combination of both and services contracts in direct support of construction and whose administration is primarily the responsibility of the Architect-Engineer/Construction Manager for each Net Billed Project.

PREPURCHASED EQUIPMENT CONTRACTS

Contracts which involve the fabrication and/or delivery (but no installation) of project supplies, equipment and materials and whose administration is primarily the responsibility of the Architect-Engineer/Construction Manager for each Net Billed Project.

CONTRACT BASE VALUE

This includes the award amount, executed contract modifications, pending modifications, other anticipated changes and specific claims, where applicable.

CONTRACT COST

The sum of the contract base value and the escalation amount.

WPPSS-CONTROLLED COSTS

This includes miscellaneous System contracts, purchase orders and agreements which cover items such as construction and startup power, startup materials and equipment, Department of Energy services, laboratory equipment, plant maintenance and operations equipment, and other capital equipment and services including related escalation and contingency allowances, but whose administration is the sole responsibility of the System.

Account Definitions
(In Alphabetical Order)

ACCESSORY ELECTRIC EQUIPMENT

This account includes the installed cost of 13.8kV, and 4.16kV switchgear, 480 V substations, motor control centers, normal and standby transformers, electrical penetrations, load break switch, isolated phase bus, raceways, diesel generators, DC power supply equipment, protection devices and associated power and control cable.

AMOUNT FUNDED BY BPA

WNP-1: Interest and principal on outstanding bonds from September 1, 1980 to December 1983 will be paid by BPA under the Net Billing Agreements.

WNP-2: All interest and principal payments subsequent to September 1, 1977 have been and will be paid by BPA under the Net Billing Agreements.

WNP-3: Interest and principal on outstanding bonds from September 1, 1982 to December 1, 1984 will be paid by BPA under the Net Billing Agreements.

ARCHITECT-ENGINEER

United Engineers & Constructors, Inc. is the Architect-Engineer for WNP-1. Burns and Roe, Inc. is the Architect-Engineer for WNP-2. Ebasco Services, Inc. is the Architect-Engineer for WNP-3. Cost

included is for project management, site selection, NSSS selection, licensing, engineering and design, estimating and cost reporting, planning and scheduling, procurement, expediting, quality assurance, vendor quality compliance and other related services, as applicable.

CONSTRUCTION MANAGER

United Engineers & Constructors, Inc. is the Construction Manager for WNP-1. Burns and Roe, Inc. is the Construction Manager for WNP-2. Ebasco Services, Inc. is the Construction Manager for WNP-3. Cost included is for construction management, site quality compliance, assistance in plant testing and startup and other related services. Also included is cost of other field expense, i.e., construction surveys, medical and safety supplies, automobile maintenance and supplies, office stationery and supplies and office janitorial service, as applicable.

CONTINGENCY

An allowance for contingencies is included in the "Total Direct Construction Cost" to cover potential increases in cost to construction and prepurchased equipment contracts that may occur due to any of the following:

- o Actual quantities differing from estimated quantities of material, equipment or installation manhours due to drawings at time of estimate being preliminary, incomplete or unavailable.
- o Changes in material, equipment, installation manhours or procedures from that estimated, resulting from the development of engineering and design.

- o Actual initial cost of material, equipment, subcontracts and/or wage rates differing from those estimated.
- o The actual craft labor performance and productivity being different from that estimated.
- o Other uncertainties such as weather conditions, force majeure.

DOE SETTLEMENT (WNP-1 Only)

DOE Settlement cost per agreement between WPPSS and DOE includes the cost of deactivating N-Reactor to standby or abandonment status as directed by DOE; and the cost of removing DOE contractor personnel.

ESCALATION

An allowance for expected future inflation of prepurchased equipment and construction contract base values.

FINANCING COST

Financing Cost includes the costs of retaining Bond Counsel, Special Counsel, Financial Advisor and Consulting Engineer for preparation of agreements, contracts, resolutions, official statements and notices of sales to issue bonds, evaluation of bids and closing and delivery of the bonds. Total Financing Cost also includes the net of discounts or premiums bid on the bonds at sale date.

LAND AND LAND RIGHTS (WNP-3 Only)

This account includes cost of all land acquisitions and/or easements associated with general plant site, access road, exclusion zone, water intake and barge slip areas and other related land parcels.

MISCELLANEOUS POWER PLANT EQUIPMENT

This account includes installed cost of valves, piping, pumps and motors, instrumentation and controls, tanks and vessels, cranes and hoists, power and control cable and miscellaneous equipment associated with the plant Auxiliary, Instrumentation Control, Fire Protection and Security Systems; installed cost of machine shop equipment, office and lunchroom furnishings and fixtures, laboratory equipment, bulk gas and fuel storage tanks, communications, and other miscellaneous power plant equipment.

NET CAPITALIZED INTEREST/CONSTRUCTION

WNP-1: Net Capitalized Interest/Construction includes interest expense associated with all debt financing of WNP-1 (excluding the amount allocated to Nuclear Fuel) decreased by the amount of reinvestment income received from the investment of available funds until required for payment of construction costs. Interest expense is capitalized to September 1, 1980 in accordance with Resolution No. 769. All interest expense subsequent to that date will be paid by BPA under the Net Billing Agreements.

WNP-2: Net Capitalized Interest/Construction includes interest expense associated with all debt financing of the project (excluding the amount allocated to Nuclear Fuel) decreased by the amount of reinvestment income received from the investment of available funds until required for payment of construction costs. Interest expense was capitalized to September 1, 1977 in accordance with Resolution No. 640. All interest expense subsequent to that date has been and will be paid by BPA under the Net Billing Agreements.

WNP-3: Net Capitalized Interest/Construction includes interest expense associated with all debt financing for WPPSS' 70% ownership share of WNP-3 (excluding the amount allocated to Nuclear Fuel) decreased by the amount of reinvestment income received from the investment of available funds until required for payment of construction costs. Interest expense is capitalized to September 1, 1982 in accordance with Resolution No. 775. All interest expense subsequent to that date will be paid by BPA under the Net Billing Agreements.

NET CAPITALIZED INTEREST/FUEL

WNP-1: Net Capitalized Interest/Fuel represents the amount of interest expense associated with all debt financing of WNP-1 allocated to cash payments for capitalized Nuclear Fuel. Interest expense is capitalized to September 1, 1980 in accordance with Resolution No. 769. All interest expense subsequent to that date will be paid by BPA under the Net Billing Agreements.

WNP-2: Net Capitalized Interest/Fuel represents the amount of interest expense associated with all debt financing of WNP-2 allocated to cash payments for capitalized Nuclear Fuel. Interest expense was capitalized to September 1, 1977 in accordance with Resolution No. 640. All interest expense subsequent to that date has been and will be paid by BPA under the Net Billing Agreements.

WNP-3: Capitalized Interest/Fuel represents the amount of interest expense associated with all debt financing of WPPSS' 70% ownership

share of WNP-3 allocated to cash payments for capitalized Nuclear Fuel. Interest expense is capitalized to September 1, 1982 in accordance with Resolution No. 775. All interest expense subsequent to that date will be paid by BPA under the Net Billing Agreements.

NUCLEAR FUEL

Nuclear Fuel consists of the capitalized cost of the procurement of uranium concentrates and the costs of conversion, enrichment and fabrication services relating to the initial fuel core, and similar costs relating to reload fuel incurred prior to commercial operation of the plant. Contingency is included to cover pricing uncertainties of future contract commitments. Base costs for uranium concentrates and processing have been escalated on the basis of contract provisions or estimates provided by WPPSS' nuclear fuel consultant. Washington State sales tax is included at the appropriate rate for the applicable fuel cost.

OTHER TANGIBLE PROPERTY

This account includes installation and maintenance cost of all temporary construction buildings and furnishings, facilities and equipment, and materials testing and cleanup services. Also included is the cost of all utilities, materials, test equipment, vendor technical assistance and craft support required for pre-operational testing and startup.

OPERATIONAL SPARE PARTS

This account includes cost of initial spare parts inventory purchased prior to commercial operation for plant operation and maintenance use. It excludes construction spare parts which are consumed during construction and budgeted in direct construction accounts. Allowances for future escalation, contingency and sales tax applicable to operational spare parts are included.

OWNER'S COST

Owner's Cost represents administrative and general expenses incurred by WPPSS to support plant construction activities, and to prepare for commercial operation of the plant upon completion of construction. Owner's Cost includes functional expenses incurred by project management, engineering, quality assurance, licensing, fuel and technical studies, health safety and security, test and startup, plant operations, and generation services functions. Owner's Cost also includes allocations of indirect expenses incurred by the finance, treasury, administration, personnel programs, materials management, legal, communications and other executive staff functions.

PLANT RELOCATION COST (WNP-1 Only)

Plant Relocation Cost includes all sunk costs incurred for engineering, design and related transmission line requirements for WNP-1 when originally planned for location at the N-Reactor site.

POTENTIAL EXPOSURE

Potential Exposure includes cost allowances for contingencies and business sensitive items, such as contractor claims, not quantified in other account classifications. Based on probability analysis, funds are also included to assure that the overall Budget falls within the "most likely" probability range.

REACTOR PLANT EQUIPMENT

This account includes cost associated with engineering design, delivery, installation and testing of the Nuclear Steam Supply System ("NSSS"); installed cost of all valves, piping, pumps and motors, vessels and tanks, cranes and hoists, instrumentation and controls, power and control cable and other miscellaneous equipment associated with the Reactor Primary, Auxiliary, Safety, Containment, Instrumentation/Controls, Monitoring and Waste Processing Systems.

RESERVES AND WORKING CAPITAL

WNP-1: Payments are required to be made in accordance with Resolution No. 769 to the Reserve Account in the Bond Fund for each series of bonds issued, in an amount equal to the largest amount of interest due during any six-month period, prior to September 1, 1980. These required payments will be funded by WPPSS from bond proceeds as authorized by the Resolution. Payments are required to be made in accordance with Resolution No. 769 to establish Working Capital in the Revenue Fund. These required payments will be

funded by WPPSS from bond proceeds as authorized by the Resolution. Resolution No. 769 requires the minimum balance of \$3 million to be deposited into the Reserve and Contingency Fund prior to commercial operation of the project. This required payment will be made by BPA under the Net Billing Agreements.

WNP-2: Payments are required to be made, in accordance with Resolution No. 640, to the Reserve Account in the Bond Fund for each series of bonds issued, in an amount equal to the largest amount of interest due during any six-month period, prior to September 1, 1977. Payments to date have been made by BPA under the Net Billing Agreements. Requirements for additional bonds issued will be funded by WPPSS from bond proceeds. Required payments, in accordance with Resolution No. 640, have been made to establish Working Capital in the Revenue Fund by BPA under the Net Billing Agreements. Resolution No. 640 required the minimum balance of \$3 million to be deposited into the Reserve and Contingency Fund prior to September 1, 1977. This required payment was made by BPA under the Net Billing Agreements.

WNP-3: Payments are required to be made in accordance with Resolution No. 775 to the Reserve Account in the Bond Fund for each series of bonds issued, in an amount equal to the largest amount of interest due during any six-month period, prior to September 1, 1982. These required payments will be funded by WPPSS from bond proceeds as authorized by the Resolution. Payments are required to be made in accordance with Resolution No. 775 to establish Working Capital in the Revenue Fund. These required payments will be

funded by WPPSS from bond proceeds as authorized by the Resolution. Resolution No. 775 requires the minimum balance of \$3 million to be deposited into the Reserve and Contingency Fund prior to commercial operation of the project. This required payment will be made by BPA under the Net Billing Agreements.

SALES TAX

This account includes Washington State sales tax calculated at the appropriate rate for applicable direct construction costs.

STATION EQUIPMENT

WNP-1: This account includes installed cost of main step-up transformers, protective equipment and transformer yard. Also included is the installed cost of the 230 kV tie-line between the transformer yard and Bonneville Power Administration's H. J. Ashe Substation.

WNP-2: This account includes installed cost of main step-up transformers and certain transmission system tie-line equipment between the transformer yard and Bonneville Power Administration's H. J. Ashe Substation.

WNP-3: This account includes installed cost of main step-up transformers, protective equipment and transformer yard. Also included is the installed cost of the tie-lines between the transformer yard and the Bonneville Power Administration's switchyard.

STRUCTURES AND IMPROVEMENTS

This account includes cost of structural excavation, backfill and general construction of the following structures:

WNP-1: Reactor Containment, Turbine-Generator and General Services Buildings, Circulating Water Pump House and other miscellaneous structures;

WNP-2: Reactor, Turbine-Generator, Radwaste, Diesel Generator and Service Buildings and other miscellaneous structures;

WNP-3: Reactor, Reactor Auxiliary, Turbine-Generator, Fuel Handling and Administration/Service Buildings and other miscellaneous structures.

Also included is the cost of all finished grading, drainage, paving, fencing and lighting required for general plant area, roadways and railroads.

TURBOGENERATOR UNIT

This account includes cost associated with engineering, design, delivery, installation and testing of the Turbine-Generator and accessories. Also included is installed cost of the turbine pedestal, surface condenser and mechanical draft cooling towers; installed cost of valves, piping, pumps and motors, instrumentation and controls, tanks and vessels, cranes and hoists; power and control cable and other miscellaneous equipment associated with the Steam, Condensate, Feedwater and Circulating Water Systems.