Donald W. Gregoire
Regulatory Affairs
P.O. Box 968, Mail Drop PE20
Richland, WA 99352-0968
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dwgregoire@energy-northwest.com

May 26, 2011
GO2-11-099

10 CFR 50.75(f)(1)

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Subject: **COLUMBIA GENERATING STATION, DOCKET NO. 50-397 RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING DECOMMISSIONING FUND STATUS REPORT**

References:
1) Letter GO2-11-055 dated March 22, 2011, DW Gregoire (Energy Northwest) to NRC, "Decommissioning Fund Status Report," (ADAMS Accession No. ML110880356)
2) Email dated May 03, 2011, from Mohan Thadani (NRC) to Don Gregoire (Energy Northwest), "Request for Additional Information by the Office of Nuclear Reactor Regulation 2011 Decommissioning Funding Status Report for Energy Northwest"

Dear Sir or Madam:

By Reference 1, Energy Northwest submitted the 2011 Decommissioning Funding Status (DFS) report for Columbia Generating Station as required by 10 CFR 50.75(f)(1). Via Reference 2, the NRC requested additional information related to the Energy Northwest submittal.

The Energy Northwest response to the Reference 2 request for additional information is provided in the attachment to this letter. There are no new commitments contained in this letter.

If you have any questions or require additional information, please contact LL Williams, (Acting) Licensing Supervisor, at (509) 377-8148.

Respectfully,

DW Gregoire
Manager, Regulatory Affairs

Attachment: Response to Request for Additional Information

cc: NRC Region IV Administrator
NRC NRR Project Manager
WA Horin – Winston & Strawn
NRC Senior Resident Inspector/988C
RN Sherman – BPA/1399
AJ Rapacz – BPA/1399

ADD1
NRR

Response to Request for Additional Information

Request for Additional Information (RAI):

The requests for additional information (RAIs) provided are in response to Energy Northwest's 2011 Decommissioning Funding Status (DFS) report. On March 22, 2011, Energy Northwest submitted to the Nuclear Regulatory Commission (NRC) the 2011 DFS report for Columbia Generating Station (Columbia), as required under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50.75(f)(1) [ML110880356] Energy Northwest should provide a response within 30 days from the date of this letter.

RAI #1: Minimum DFA calculation:

Provide the labor, energy, and burial factors used in your calculation of the minimum requirement for decommissioning financial assurance and, if necessary, a corrected submittal for that part of the DFS report.

On March 22, 2011, Energy Northwest reported, using June 30, 2010, factors an amount of decommissioning funds estimated to be required under 10 CFR 50.75(b) and (c) greater than from the amount calculated by the NRC staff.

According to 10 CFR 50.75(f)(1), the amount provided in the DFS report should be "the amount of decommissioning funds estimated to be required under 10 CFR 50.75(b) and (c)". The escalation factors should be the most recent available regional data from the U.S. Department of Labor Bureau of Labor Statistics, as stated in NUREG-1307, Rev. 14, "Report on Waste Burial Charges."

The formulas for the factors used by the staff can be found using NUREG-1307, Rev. 14. For example, the calculations for the Labor and Energy Adjustment Factors can be found on pages 7 and 8 of NUREG-1307, Rev. 14.

Response to RAI # 1:

When reviewing the U.S. Department of Labor Bureau of Labor Statistics in early 2011 in preparation of the DFS, it was noted that the light fuel oils and industrial electric power numbers were still listed as preliminary as far back as September 2010. As the Energy Northwest fiscal year ends on June 30, and given that some of the numbers through the third quarter were listed as preliminary data, the "finalized" numbers of the 2nd quarter 2010, and corresponding monthly values of June 30, 2010, were utilized in the Energy Northwest DFS calculation.

The labor costs (Lx) used in the Energy Northwest calculation was derived from section 3.1 of NUREG-1307, Rev. 14, as follows:

Lx = Base Lx * ECI / 100

Where:

Base Lx = 2.06 West regional factor, Table 3.2

ECI = 111.7 Obtained 3/3/11 from BLS ID ciu2010000000240i for 2nd Qtr. 2010 (as per Appendix C)

With the resulting calculation yielding an Lx value of 2.301.

The energy factors (Ex) used in the Energy Northwest calculation was derived from section 3.2 of NUREG-1307, Rev. 14, as follows:

Ex = 0.54Px + 0.46Fx Ex calculation for BWR

Where

Px (industrial electric power) = 197.8 (June 2010 value of producer price index code 0543) ÷ 114.2 (January 1986 value of code 0543)

Px = 1.732

and

Fx (light oil fuel) = 212.4 (June 2010 value of producer price index code 0573) ÷ 82.0 (January 1986 value of code 0573)

Fx = 2.59

With the resulting calculation yielding an Ex value of 2.127.

The waste burial adjustment factor (Bx) used in the Energy Northwest calculation was selected from Table 2.1 of NUREG-1307, Rev. 14, from the Direct Disposal, BWR, Year 2010. The Bx value used in the Energy Northwest calculation is 7.423.

Utilizing the formula specified in section 3 of NUREG-1307, Rev. 14, and the cost adjustment factors described above, the Energy Northwest calculation is as follows:

Estimated Cost (2010) = [1986 $ Cost] * (A Lx + B Ex + C Bx)

= $135,000,000 * ([0.65*2.301] + [0.13*2.127] + [0.22*7.423])

= $459,700,839

Based on the above, Energy Northwest is not proposing a revision to the DFS reported value of $459.7 Million.

RAI #2: Citation for real rate of returns:

Provide the citation (e.g., an Order by the rate-regulatory authority) by the regulatory entity that allows for the for the assumptions used regarding rates of escalation in decommissioning costs, rate of earnings on decommissioning funds and rates of other factors assumed in your DFS report.

On March 22, 2011, Energy Northwest reported the following:

4 percent rate of escalation in decommissioning costs;
6 percent rates of earnings on decommissioning funds.

As stated in 10 CFR 50.75(f)(1),

> the information in [the DFS] report must include [. . .] the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections. . .

Response to RAI # 2:

Energy Northwest, formerly Washington Public Power Supply System (Supply System), is a municipal corporation and joint operating agency of the State of Washington that was established to build and operate Columbia (formerly WNP-2). As such Energy Northwest is not subject to a rate-regulatory authority. Various contracts and agreements have been established between Energy Northwest (Supply System), the Bonneville Power Administration (BPA), and purchasers of electricity (known as participants). These agreements designate that BPA has the ultimate obligation for payment of Columbia's (WNP-2's) project costs, including decommissioning.

On June 25, 1996, Energy Northwest (Supply System) and BPA met with the NRC staff to discuss a proposal to implement a decommissioning trust fund administered by BPA for Columbia (WNP-2). The NRC staff did not voice any objections to this approach as delineated in the published meeting summary (Reference 1). On November 4, 1996, Energy Northwest (as Supply System) provided to the NRC formal notification of establishment of the decommissioning trust fund for Columbia (WNP-2) along with a copy of the trust fund agreement (Reference 2). The following is an excerpt from the trust fund agreement which specifies the following:

> "Funding Schedule" means the schedule to accumulate funds for the Cost of Decommissioning..., and may be revised from time to time, by the Supply System in coordination with Bonneville. The schedule shall be based on estimates of the Cost of Decommissioning..., and shall reflect the projected annual balances in the Sub-accounts, and annual contributions and earnings assumptions necessary to meet

> those balances. At a minimum, the schedule applicable to Cost of Decommissioning shall coincide with the then-current NRC minimum funding requirements...

As specified in the trust agreement, the assumptions regarding rates of escalation and earnings are determined by Energy Northwest in coordination with BPA. The inflation assumptions selected by BPA and Energy Northwest are based on numerous long term projections of inflation. The current projections continue to be between 3 and 4%. BPA and Energy Northwest have selected the conservative 4% value. The escalation of disposal costs utilizing the Washington disposal site is expected to fall in line with the inflation projections.

When the decommissioning fund was transferred to BPA in 1996 to allow for a mix of equity and debt instruments as investments, the projection of long term returns was 8%. After the economic down turn in 2007 and 2008, when actual returns experienced were below estimates, BPA and Energy Northwest undertook an effort to reevaluate the structure of the portfolio and expected returns. To assist in making those decisions BPA hired Wurts and Associates (W&A). The W&A study provided portfolio structure options and expected rates of return over a long term horizon for a dozen asset allocation strategies. A strategy was selected and is now in place that has an expected return over ten year time periods of just over 7%. Even though the estimated return is projected to be 7%, Energy Northwest utilizes a rate of return of 6% in the calculation to comply with 10 CFR 50.75(e)(1)(ii) which imposes a limit of 2% on the real return.

RAI #3

Provide the after-tax amount of funds accumulated through December 31, 2010.

Energy Northwest did not provide the after-tax amount of funds accumulated through December 31, 2010.

The provisions of 10 CFR 50.75(f)(1) and (2) require the licensee to report the amount of funds accumulated to the end of the calendar year preceding the report.

Response to RAI # 3:

Energy Northwest and BPA are tax exempt entities. Copies of the rulings provided by the Internal Revenue Service (IRS) related to the respective tax exempt status is provided in Enclosure 1. The reported value of $151.4 Million represents the after-tax amount of funds accumulated as of December 31, 2010.

REFERENCES:

1) Meeting Summary dated August 26, 1996, by Timothy G. Colburn (NRC) for Licensee: Washington Public Power Supply System, Facility: WPPSS Nuclear Project No. 2

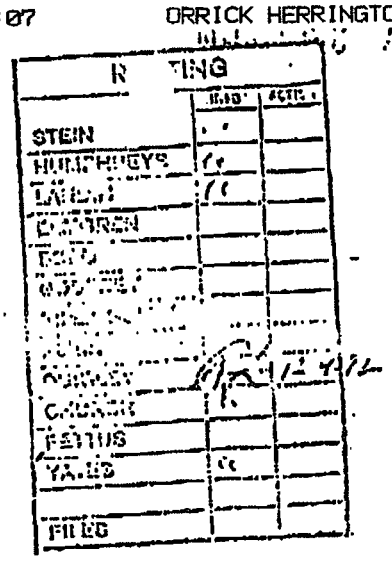
2) Letter GO2-96-219 dated November 4, 1996, G. J. Kucera (Energy Northwest as Supply System) to NRC, "WNP-2, Operating License NPF-21, Decommissioning Trust Fund"

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING DECOMMISSIONING FUND STATUS REPORT
Enclosure 1

This enclosure contains the following documents:

1) Copy of letter from Internal Revenue Service (IRS) to Energy Northwest (as Washington Public Power Supply System [WPPSS]), dated November 30, 1972

2) Copy of letter from IRS to Energy Northwest (as WPPSS), dated November 18, 1970



Department of the Treasury

Internal Revenue Service
Washington, DC 20224

Date: NOV 30 1972

In reply refer to: T:I:I:2:3

Mr. Richard Q. Quigley
Washington, Public Power Supply Syste
301 Fifth Avenue
P. O. Box 968
Richland, Washington, 99352

Dear Mr. Quigley:

This is in reply to your letter of October 26, 1972, requesting a ruling supplemental to our ruling letter of November 18, 1970. All of the facts and information set forth in our prior ruling letter are incorporated by reference herein.

The proposed project described in our prior ruling letter will be constructed pursuant to the "Ten-Year Hydro-Thermal Program for the Pacific Northwest". This Program was approved by Congress in the Public Works Appropriations Bill, 1970 (83 Stat. 323, 333) and the Public Works Appropriations Bill, 1971 (84 Stat. 890).

Portions of the Program have already been financed by obligations issued prior to August 3, 1972, with respect to which we had issued rulings that such obligations would be exempt from Federal income taxation as provided in section 103(a)(1) of the Internal Revenue Code of 1954. For instance, the preliminary costs of the proposed project described in our ruling letter of November 18, 1970, had been financed by the issuance of revenue notes in the amount of $15,000,000 issued by the Washington Public Power Supply System. Our prior ruling letter concluded that these notes would bear interest which is exempt from Federal income taxation. Also as part of the Program, the City of Eugene financed its participation in the Trojan Nuclear Project by issuing bonds. On September 24, 1970, we ruled these bonds to be tax exempt. Finally, we issued ruling letters in October of 1970 with respect to the bonds issued to fiance the Centralia coal-fired steam plant. The Centralia project is part of the Program.

Based solely upon the foregoing, we conclude that, for purposes of the bonds and notes proposed to be issued by the Washington Public Power Supply System, as described in our ruling letter of November 18, 1970, the Bonneville Power Administration shall qualify as a "governmental unit" and, therefore, shall be considered an "exempt person" within the meaning

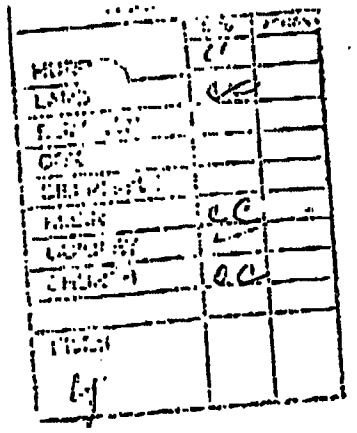
Mr. Richard Q. Quigley

of section 103(c)(3) of the Internal Revenue Code of 1954.

Sincerely yours,

Lester C. Utter

Chief, Individual Income Tax Branch



RECEIVED

NOV 1 6 1970 T:I:I:2:3

Mr. Richard Q. Quigley
P.O. Box 6510
Kennewick, Washington 99336

Dear Mr. Quigley:

This is in reply to your letter of August 29, 1970 requesting a ruling on behalf of Washington Public Power Supply System (the "System"). You specifically request that we rule as follows:

> Interest on the $450,000,000 principal amount Revenue Bonds (the "Bonds") to be issued by the System is excludable from the gross income of the recipients under section 103(a)(1) of the Internal Revenue Code of 1954.

The information submitted indicates that the System is a municipal corporation and a joint operating agency of the State of Washington (the "State"), organized in 1957 pursuant to Chapter 43.52 of the Revised Code of Washington (the "Enabling Act"), by sixteen public utility districts of said State. Since its organization, Public Utility District No. 1 of Skamania County and the City of Richland, both municipal corporations of the State, have become members of the System, and they and the organizing public utility districts, are hereinafter referred to as the "Members".

Under the Enabling Act, a joint operating agency is authorized to acquire, construct, operate and own plants, systems and other facilities and extensions thereof for the generation and transmission of electric power and energy, such generation to be by water power, steam power, atomic power or by any other means whatsoever. A joint operating agency is empowered to construct, own and operate facilities for the generation and transmission of power and energy at wholesale, but is not authorized to sell power and energy to retail customers. The System, among other things, is authorized under the Enabling Act to negotiate and enter into contracts for the purchase, sale, exchange, transmission or use of electric energy with any person, firm or corporation, including political subdivisions and

agencies of any state, of Canada, or of the United States, at fair and non-discriminatory rates. The System is authorized to make contracts for any term relating to the purchase, sale, interchange of wheeling of power with the government of the United States, or any agency thereof, and with any municipal corporation, person, firm or corporation, political subdivision or governmental subdivision, including cities, towns and public utility districts, engaged in or authorized to be engaged in the business of generating, transmitting or distributing electric energy.

Members of the System have a preference right to purchase all electric energy generated by the System. Energy not contracted for by the Members may be sold to any person, firm or corporation, political subdivision or governmental subdivision, including cities, towns and public utility districts, engaged in or authorized to engage in the business of generating, transmitting or distributing electric energy.

The System proposes to acquire and construct a large nuclear electric generating station and associated facilities in the State of Washington (the "Project"); under the "Ten Year Hydro-Thermal Program for the Pacific Northwest," proposed by the United States Department of the Interior, acting through the Bonneville Power Administration ("Bonneville") in January, 1969 (the "Hydro-Thermal Program"). The Hydro-Thermal Program was approved by the President of the United States in October 1969, and thereafter funds required by Bonneville in connection with certain of the proposed agreements with respect to the Program were appropriated by Congress.

The Hydro-Thermal Program contemplates a coordinated effort by all segments of the electric utility industry in the Pacific Northwest, including Bonneville, to meet the future power needs of the region.

The System will sell the entire capability of the Project to preference customers of Bonneville, who, in turn, will sell this capability to Bonneville for use in the Federal system in order to insure such preference customers a long term power supply at then prevailing Bonneville rates. Bonneville will pay for the capability it purchases from the Project by means of "net billing".

Each preference customer's long-term need for power exceeds the amount of power which it can reasonably expect to purchase from Bonneville if the Project and the other proposed projects in the Hydro-Thermal Program are not constructed. Participating in the Hydro-Thermal Program through the projects is a more economical way of assuring ability to meet the preference customers' long-term electrical demand than by the independent development of generating facilities.

The cost of the Project, including interest during construction, cost of nuclear fuel to the date of commercial operation and the funding of the reserves hereinafter mentioned is expected to exceed $450,000,000. To provide for the acquisition, construction, operation and financing of the Project, the System proposes to enter into agreements with the United States of America, Department of the Interior, acting by and through the Bonneville Power Administrator (the "Administrator"), and approximately 95 preference customers of the Administrator, all of which are political subdivisions, cooperatives or non-profit corporations performing utility functions and are situated in the States of Washington, Oregon, Idaho and Montana. In addition, it is expected that there will be one cooperative in each of the States of California and Wyoming executing Net Billing Agreements. All of such preference customers are hereafter called the "Participants."

Under the Net Billing Agreements, the System sells the entire capability of the Project to the Participants, each Participant purchasing a designated percentage share of the capability. The Participants, in turn, sell their designated percentage shares to the Administrator. Each participant agrees to pay to the System for its share of said capability a share of the System's annual costs incurred in the ownership, operation and maintenance of the Project equal to the percentage share of Project capability which each Participant purchases. Such costs include debt service on the bonds issued to acquire and construct the Project. In payment for the percentage shares of capability purchased by the Administrator from the Participants, the Administrator agrees to pay to each Participant, by means of net billing, an amount equal to the amount which the Participant is required to pay to the System for the percentage share of the capability which the Participant purchases from the System.

The payments to be made by the Participants to the System and the net billing credits by Bonneville to the Participants are required to be made whether or not the Project is completed, operable or operating and notwithstanding any interruption, reduction or curtailment of output of the Project. The sales of Project capability under the Net Billing Agreements to Bonneville and the Participants are on a cost basis.

Approximately 47 of the Participants who will purchase capability from the Project are either municipal corporations or political subdivisions of a state and, thus, are "exempt persons" as defined in section 103(c)(3) of the Code. These "exempt persons" will initially purchase about 82 percent of the Project's capability and after five years will purchase about 78 percent of the Project's capability. The balance of the Participants are cooperatives and non-profit corporations.

The System is authorized to issue $450,000,000 of its revenue obligations for the purpose of financing the costs of acquiring and constructing the Project including the cost of nuclear fuel up to the date of commercial operation of the Project. The Bonds will be long and short term bonds. To finance preliminary costs, short term bonds in the amount of $15,000,000 have heretofore been issued. The short term bonds will be payable from the proceeds of the long term bonds or from other moneys of the System that may be lawfully applied to such purposes.

The Bonds will be issued as both serial bonds and term bonds. The term bonds will be retired from annual mandatory sinking fund payments which will be applied at least annually to the retirement of the term bonds in advance of their stated maturity date.

The System agrees that:

1. The System will promptly proceed to utilize the proceeds of the sale of the Bonds (other than accrued interest to date of delivery and any premium) for the purposes for which the Bonds are being issued.

2. No portion of the Bonds is issued as part of an issue, all or a major portion of the proceeds of which are reasonably expected to be used directly or indirectly:

(a) to acquire securities (within the meaning of section 165(g)(2)(A) or (B) of the Code) or obligations (other than obligations described in section 103(a)(1) of the Code) which may be reasonably expected at the time of issuance of such issue of Bonds to produce a yield over the term of the issue of Bonds which is materially higher (taking into account any discount or premium) than the yield on obligations of the issue of Bonds or

(b) to replace funds which were used directly or indirectly to acquire securities or obligations described in subparagraph (a).

Based solely on the information submitted, we conclude that the interest on the $450,000,000 principal amount Revenue Bonds to be issued by the System is excludable from the gross income of the recipients under section 103(a)(1) of the Code.

Sincerely yours,

Chief, Individual Income Tax Branch