



**ENERGY  
NORTHWEST**

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August 9, 2010  
GO2-10-108

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  
LICENSE RENEWAL APPLICATION**

- References:
1. Letter GO2-10-011, dated January 19, 2010, WS Oxenford (Energy Northwest) to NRC, "License Renewal Application"
  2. Letter dated July 8, 2010, D Doyle (NRC) to WS Oxenford (Energy Northwest), "Request for Additional Information Related to the Environmental Site Audit for Columbia Generating Station License Renewal" (ADAMS Accession No. ML101810091)

Dear Sir or Madam:

By Reference 1 Energy Northwest requested the renewal of the Columbia Generating Station operating license. In Reference 2 the Nuclear Regulatory Commission (NRC) requested that information made available during an environmental site audit of June 8-10, 2010 be submitted on the docket. The list of documents and information requested by the NRC is included as Attachment 1 with numbers added for identification.

Attachment 2 to this letter lists the requested documents and includes responses to questions selected by the NRC for submittal. Enclosures A through G provide various documents and information requested by the NRC in Enclosure 2 to Reference 2.

No new commitments are included in this response.

If you have any questions or require additional information, please contact Abbas Mostala at (509) 377-4197.

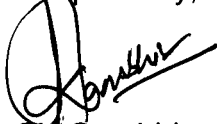
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I declare under penalty of perjury that the foregoing is true and correct. Executed on the date of this letter.

Respectfully,



SK Gambhir

Vice President, Technical Services

- Attachments: 1. Information Requested for Docketing at the Columbia Generating Station Environmental Site Audit  
2. Additional Information Related to the Environmental Site Audit for Columbia Generating Station License Renewal

- Enclosures: A. Meteorology and Air Compliance Documents  
B. Terrestrial Ecology Documents  
C. Aquatic Ecology Documents  
D. Hydrology Documents  
E. Nonradiological Waste Documents  
F. Archaeological and Cultural Resource Documents  
G. Cumulative Impact Documents

cc: NRC Region IV Administrator  
NRC NRR Project Manager  
NRC Senior Resident Inspector/988C  
EJ Leeds – NRC NRR  
EFSEC Manager

RN Sherman – BPA/1399  
WA Horin – Winston & Strawn  
D Doyle – NRC NRR  
BE Holian – NRC NRR  
RR Cowley – WDOH

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**Information Requested for Docketing at  
the Columbia Generating Station Environmental Site Audit**

No.	<b>Meteorology and Air Compliance</b>
1	Response to site audit needs question MET-1 (meteorological data). Note: please provide data in electronic .xls format.
2	Response to NRC request 3054 (EFSEC order 672 updates)
3	List of permitted air emission sources and associated emission quantities (NRC request 3055)
	<b>Terrestrial Ecology</b>
1	Ecological Monitoring Program for Columbia Generating Station, Summary Report for 1975 to 2002 (EN 2003)
2	Avian species list, e-mail communication from R.E. Welch to J.P. Chasse, 2009 (EN 2009b)
3	Rare Plant and Vegetation Survey, Riparian Zone, December 2008 (Link 2008)
4	Rare Plant and Vegetation Survey, Uplands, July 2009 (Link 2009)
5	Operational Ecological Monitoring Program -1987 Annual Report (WPPSS 1988)
6a-j	Responses to site audit needs questions TE-1 (photos and maps), TE-2 (t-line maintenance plans), TE-3 (pesticides/herbicides), TE-4 (surveys), TE-5 (tour), TE-6 (bird strikes), TE-7 (wildlife management plans), TE-8 (migratory bird nesting), TE-9 (invasive species), and TE-10 (ponds)
	<b>Aquatic Ecology</b>
1a-e	Response to site audit needs question AQ-1 (ER references): <ul style="list-style-type: none"> <li>• Technical Review of the Aquatic Monitoring Program of WWP-2, Washington Public Power Supply System, Richland, Washington, September 1982 (WPPSS 1982)</li> <li>• Operational Ecological Monitoring Program for Nuclear Plant 2 -1985 Annual Report, Washington Public Power Supply System, prepared April 1986 (WPPSS 1986)</li> <li>• Operational Ecological Monitoring Program for Nuclear Plant 2 -1986 Annual Report, Washington Public Power Supply System, prepared April 1987 (WPPSS 1987)</li> <li>• Operational Ecological Monitoring Program for Nuclear Plant 2 -1987 Annual Report, Washington Public Power Supply System, prepared April 1988 (WPPSS 1988)</li> <li>• Operational Ecological Monitoring Program for Nuclear Plant 2 -1995 Annual Report, Washington Public Power Supply System, prepared April 1996 (WPPSS 1996)</li> </ul>
2	Energy Northwest Columbia Generating Station Effluent Mixing Study, prepared June 2008 (EN 2008)
3	Response to NRC request 3007 (circulating water system)
	<b>Hydrology</b>
1	Discharge Monitoring Reports for the last six months
2	Table of estimated pumping rates for Wells 1 and 2 from October 2009 through May 2010
3	Procedure SWP-CHE-01
4	Site Certification Agreement for Hanford No.2, dated May 17, 1972
	<b>Nonradiological Waste</b>
1a-c	Responses to site audit needs questions NRW-1 (annual report summaries for waste streams), NRW-4 (Section 312 Tier II annual reports), and NRW-6 (universal waste)
	<b>Environmental Justice</b>
1a-b	Responses to site audit needs questions EJ-1 (subsistence consumption) and EJ-2 (wildlife sampling)
	<b>Socioeconomics</b>
1a-d	Responses to site audit needs questions SO-1 (payments), SO-2 (payment adjustments), SO-3 (height data), and SO-4 (noise)

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No.	Land Use
	None
<b>Archaeological and Cultural Resources</b>	
1	Hanford Cultural Resources Management Plan, DOE/RL-98-10, Rev 0., U.S. Department of Energy, Richland, Washington, February 2003, Website: <a href="http://www.hanford.gov/doe/history=rmp">http://www.hanford.gov/doe/history=rmp</a> , accessed September 9, 2008 (USDOE 2003)
2	Rivers of North America, A.C. Benke and C.E. Cushing, Editors, Elsevier Academic Press, Burlington, MA and London, U.K. (Benke and Cushing 2005)
3	Cultural Resources Review for Security Upgrades/Easement to Energy Northwest, letter from PNNL to Fluor Hanford, dated May 13, 2002 (PNNL 2002)
4	Notice to Proceed, Columbia Generating Station Access Road Improvement, email communication from E.L. Kennedy, PNNL, to S.J. Urban, Energy Northwest, July 16, 2008 (PNNL 2008b)
5	Draft Supplement to the Environmental Statement, Fiscal Year 1975 Proposed Program, Ashe-Hanford 500 kV Transmission Line, Bonneville Power Administration, March 8, 1974 (BPA 1974a)
6	Draft Supplement to the Environmental Statement, Fiscal Year 1975 Proposed Program, Richland Area Electrical Service Transmission Lines and Substations, Bonneville Power Administration, March 1974 (BPA 1974b)
7a-b	Responses to site audit needs questions CR-9 (aerial photographs) and CR-14 (T-line vegetation management)
8	Map of leased land from DOE with a narrative about CGS related activities outside blocks A & B (NRC request 3046)
9	Written response from EN describing the work process and how procedures are implemented to ensure protection of cultural resources (NRC request 3049)
10	Letter transmitting cultural resource protection procedures (SWP-ENW-04) to SHPO and any response from SHPO (NRC request 3047)
11	Written response from EN describing routine activities that occur in the culturally sensitive areas around the river pump house (NRC request 3048)
12	Latitude and longitude for soil samples locations 1, 7, and 23
13	Map of siren locations and latitude and longitude of each siren location
<b>Alternatives</b>	
	None
<b>Cumulative Impacts</b>	
1	EN's unsolicited proposal to DOE for the Mid-Columbia Energy Initiative (NRC request 3043)

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**Additional Information Related to the Environmental Site Audit  
for Columbia Generating Station License Renewal**

**Meteorology and Air Compliance**

**Met & Air-1:**

**Request:**

Response to site audit needs question MET-1 (meteorological data). Provide hourly meteorological data from the onsite meteorological program for the most recent 5-year period, including the meteorological data used in the MACCS2/SAMA analysis. Notes: please provide data in electronic .xls format.

**Energy Northwest Response:**

Meteorological data are available as Excel spreadsheets on the CD included in Enclosure A. One data set [CGS\_MetData\_04-09.xls] includes all hourly data collected in 2004 through 2009 at 33 ft (10 m) and 245 ft (75 m) by redundant instruments (labeled "A" and "B"). Data that are judged to be invalid are replaced with a "-99" flag. Calendar year 2005 data are included for completeness; however, Energy Northwest has not used the 2005 data for frequency distribution calculations because of maintenance problems that resulted in low data recovery.

Another data set [file names ENH2003WB.CSV, ENH2004.CSV, ENH2005WB.CSV, ENH2006WB.CSV] is validated data for 2003, 2004, 2005, and 2006 that were evaluated for the MACCS2/SAMA analysis. Because of data recovery problems mentioned above, the 2005 data were not used in the SAMA analysis.

**Met & Air-2:**

**Request:**

Response to NRC request 3054 (EFSEC Order 672 updates)

**Energy Northwest Response:**

In accordance with WAC 173-400-091, Order No. 672 would need to be revised or reissued by the Energy Facility Site Evaluation Council (EFSEC) if Energy Northwest (EN) proposed any deviation from a condition contained in the order. A revision to Order No. 672 would be subject to the notice and comment procedures under WAC 173-400-171, Public Involvement.

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### Met & Air-3:

#### Request:

List of permitted air emission sources and associated emission quantities (NRC request 3055)

#### Energy Northwest Response:

Note: This duplicates a request for additional information in an NRC-to-EN letter dated July 2, 2010 (ADAMS Accession No. ML101750655).

EFSEC Order No. 672 (Order 672) specifically identifies the significant emission units – three large emergency diesel generators and the auxiliary steam boiler. Table 1 lists the emission units that are identified in Order 672. The permit application that preceded the order also identified insignificant emission sources such as three smaller standby diesel generators and two diesel driven fire pumps. In 2005, Order 672 was amended to recognize a new 400 kW standby diesel generator as an additional insignificant emissions source.

Order 672 establishes a diesel fuel usage limitation of 780,000 gallons per year. This fuel usage cap is based on calculative methods. EFSEC used a 90-tons-per-year emissions target for the cap to allow a 10-tons-per-year buffer between the calculated emissions and the threshold of 100 tons per year for a major source requiring an air operating permit.

Starting in 2006, EN has provided EFSEC an annual air emissions source registration for Columbia Generating Station (CGS) in accordance with WAC 463-78-100. The annual source registration includes total calculated emissions for the significant emission units. Calculated emissions are based primarily on emission factors published by the U.S. Environmental Protection Agency in *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources (AP-42)*. Table 2 lists annual diesel fuel usage by the significant units for the most recent five years and air emission estimates for the past four years.

**Table 1 List of EFSEC Order No. 672 Significant Emission Units**

Emission Unit Description	CGS Equipment Number
Diesel Generator 1	DG-GEN-DG1
Diesel Generator 2	DG-GEN-DG2
Diesel Generator 3	HPCS-GEN-DG3
Auxiliary Steam Boiler	AS-BLR-1

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**Table 2 Annual Fuel Use and Calculated Air Emission Estimates  
for Significant Emission Units**

Year	Fuel usage (gallons)	NO <sub>x</sub> (tons)	CO (tons)	SO <sub>2</sub> (pounds)	PM (pounds)	PM <sub>10</sub> (pounds)	VOC (pounds)	Pb (pounds)
2005	48,899	-	-	-	-	-	-	-
2006	56,582	10.5	2.8	264	473	398	585	0.4
2007	60,896	11.9	3.2	198	533	452	667	0.5
2008	59,030	8.6	2.3	341	406	333	472	0.3
2009	74,608	8.3	2.2	359	418	330	446	0.3

**Terrestrial Ecology**

**Terr Eco-1:**

**Request:**

Ecological Monitoring Program for Columbia Generating Station, Summary Report for 1975 to 2002 (EN 2003)

**Energy Northwest Response:**

See Enclosure B1.

**Terr Eco-2:**

**Request:**

Avian species list, e-mail communication from R.E. Welch to J.P. Chasse, 2009 (EN 2009b)

**Energy Northwest Response:**

See Enclosure B2.

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**Terr Eco-3:**

**Request:**

Rare Plant and Vegetation Survey, Riparian Zone, December 2008 (Link 2008)

**Energy Northwest Response:**

See Enclosure B3.

**Terr Eco-4:**

**Request:**

Rare Plant and Vegetation Survey, Uplands, July 2009 (Link 2009)

**Energy Northwest Response:**

See Enclosure B4.

**Terr Eco-5:**

**Request:**

Operational Ecological Monitoring Program – 1987 Annual Report (WPPSS 1988)

**Energy Northwest Response:**

See Enclosure B5.

**Terr Eco-6a:**

**Request:**

Response to site audit needs question TE-1: Please provide any aerial photos and topographic maps you have of the right-of-ways (ROWs). Specifically, topographic maps of the site and in-scope transmission line segments that show any significant natural heritage areas, stream crossings, historical sightings of endangered species, and migratory bird rookeries. Additionally, please provide percentages of terrestrial communities on site (e.g. 20% of the site is forest habitat).



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### **Energy Northwest Response:**

There are no documented sightings of endangered species along the ½-mile transmission ROW segment from CGS to Ashe Substation. There is little to no suitable nesting habitat for raptors in this corridor. The transmission line structures do not present a desirable location for raptor/large bird (e.g., raven) nesting. One migratory bird utilizing the area for nesting that would be classified as gregarious or "rookery" forming is the cliff swallow, which routinely constructs nests on the arched style towers in the CGS transformer yard. Historically there have been seven to ten nests per tower. Migratory birds identified in the area during incidental/in-transit observations include the western meadowlark, horned-lark, Say's phoebe, and western kingbird. The western meadowlark and horned lark are the species most likely to use the corridor habitat (sagebrush, rabbit brush, grass, etc.) for nesting. Other species observed in the general area but outside the corridor include killdeer and common nighthawk. Killdeer have been known to nest in the gravel ballast of the railroad tracks. One observation of a burrowing owl (federal species of concern, state candidate) occurred in the gravel parking lot east of the transformer yard and railroad in the mid-1990s.

ROWs for the other Bonneville Power Administration (BPA) lines out of Ashe Substation were not included as part of any environmental monitoring program performed at CGS. However, non-documented incidental/in-transit observations include a few nests of red-tailed hawk and common raven, which had constructed nests in some of the powerline towers. Additionally, loggerhead shrike (federal concern, state candidate) were observed on a few occasions utilizing the sage-brush habitat occurring in some areas in the BPA ROWs.

Topography of the site area, including transmission ROWs, is shown on a map, included as Enclosure B6, that is taken from the USGS 7½-minute Wooded Island Quadrangle. Included as Enclosure B7 is an aerial photo that shows most of the transmission line segments.

### **Terr Eco-6b**

#### **Request:**

Response to site audit needs question TE-2: Please provide the in-scope transmission line ROW maintenance plans and the names of any ROW maintenance contractors.

### **Energy Northwest Response:**

All ROW maintenance on in-scope transmission lines is performed by BPA.

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### **Terr Eco-6c:**

#### **Request:**

Response to site audit needs question TE-3: What pesticides and/or herbicides are used onsite or within the in-scope transmission line ROWs? What protocol do contractors follow when applying chemicals near streams and wetlands? Are there any special procedures used in areas that contain species of concern (federal or state) or habitats identified as unique, rare, or a priority for protection by Native American tribal agencies?

#### **Energy Northwest Response:**

Herbicides applied onsite for weed control around buildings, transformer yards, outside storage areas, security fencing, roadway edges, and gravel parking lots include sulfentrazone (Wilbur Ellis Portfolio 4F), aminopyralid (Dow Milestone VM), sulfometuron (Agsurf Sulfomet or Nufarm Americas Spyder), glyphosate (Razor Pro), dichlobenil (Casoron), trifluralin (Dow Snapshot), and bromacil/diuron (DuPont Krovar IDF), 2,4D amine (Wilbur Ellis BaseCamp). Most applications are made by Energy Northwest maintenance staff; a contractor is engaged when large areas (e.g., gravel parking lots) require treatment. Control of insects, primarily ants and spiders, is through spot applications (cracks and crevices) as needed. Rodent control in and around buildings is accomplished with bait boxes containing the bromadiolone (Bell Labs Contrac).

With the exception of portions of the Sanitary Waste Treatment Facility (SWTF), no applications are made near waterbodies, including in the Columbia River riparian zone. Treatments within the SWTF avoid the ponds and any areas used by waterfowl and other birds. Outside of areas occupied by plant support facilities, Energy Northwest has made some spot applications of glyphosate (Monsanto Roundup PRO) and picloram (Dow Tordon) for selective control of noxious weeds.

### **Terr Eco-6d:**

#### **Request:**

Response to site audit needs question TE-4: Have surveys for state and/or federal threatened and endangered species been conducted within the transmission line ROWs?

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### **Energy Northwest Response:**

There have been no surveys specifically targeting the CGS-to-Ashe transmission ROW. This area is included in any incidental/in-transit observations of T&E species performed during routine environmental program monitoring activities.

### **Terr Eco-6e:**

#### **Request:**

Response to site audit needs question TE-5: During the transmission line tour, NRC staff would like to see representative examples of ROW land, including stream and wetland crossings (if applicable).

### **Energy Northwest Response:**

The CGS-to-Ashe ROW and 115 kV ROW were noted during the general site tour.

### **Terr Eco-6f:**

#### **Request:**

Response to site audit needs question TE-6: Please provide any information on any bird strikes (including birds of prey and migratory birds) that have occurred at the reactor building, the meteorological tower, or along the in-scope transmission line ROWs. Provide a description of reporting procedures for raptor and other bird strikes at transmission lines and cooling towers.

### **Energy Northwest Response:**

Energy Northwest's Environmental Services staff typically receive about two calls per year (spring/early summer) concerning dead birds in the protected area. Most have been cliff swallows that nest under the overhang high up on the reactor building. Over the past fifteen years or so a few cliff swallows have been picked up in the transformer yard along with a few starlings. We have no observations concerning bird strikes at the met tower, transmission ROWs, or the cooling towers. Site personnel encountering displaced or distressed birds are instructed to report the find to Environmental Services staff. Environmental Services will assess the bird's condition and, depending on the species, report the injury or death to the U.S. Fish & Wildlife Service or the Washington Department of Wildlife. Most incidents will be recorded through the corrective action program.

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**Terr Eco-6g:**

**Request:**

Response to site audit needs question TE-7: Please provide any wildlife management plans used on site.

**Energy Northwest Response:**

Procedural guidance relative to wildlife management is contained in:

- GIH-8.1.1 – Displaced, Distressed, or Dead Wildlife Program
- SOP 03.08 – Displaced, Distressed, or Dead Wildlife Guidelines
- SOP 11.23 – Protected Species Compliance Program
- SOP 11.24 – Migratory Bird Habitat Enhancement Plan

Copies of these procedures are included in Enclosure B.

**Terr Eco-6h:**

**Request:**

Response to site audit needs question TE-8: Please provide any best management procedures followed for ground-disturbing activities and activities that could disturb nesting migratory birds.

**Energy Northwest Response:**

Earth-disturbing activities require completion of a pre-excavation approval sheet that is reviewed by the Environmental and Regulatory Programs (E&RP) lead for natural and cultural resources. Such activities are governed by the requirements in GIH 8.1.9, Resource Protection. This GIH prescribes project reviews for the protection of natural and cultural resources before construction activities are commenced. Projects or activities that involve grading, construction of buildings, excavations, landscaping, placement of any fill or spoil, vegetation removal, roadway and parking lot construction, soil borrowing or stockpiling, and work within 500 feet of a river, stream, or canal are potentially subject to resource protection requirements described in this procedure.

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### Terr Eco-6i:

#### Request:

Response to site audit needs question TE-9: Have any invasive species been seen or documented on the site or in the transmission line ROWs? Are any invasive species populations being managed, or have any been managed in the past?

#### Energy Northwest Response:

The following invasive noxious weed species of plants have been observed on the site: Dalmation Toadflax (*Linaria dalmatica*), Rush Skeletonweed (*Chondrilla juncea*), Yellow Starthistle (*Centaurea solstitialis*), Diffuse knapweed (*Centaurea diffusa*), Spotted Knapweed (*Centaurea maculosa*), Longspine Sandbur (*Cenchrus longispinus*), Perennial Pepperweed (*Lepidium latifolium*), and Puncturevine (*Tribulus terrestris*).

Management control practices are in place for all species including mechanical, chemical and biological controls. Control areas are mapped and species densities are trended when appropriate.

### Terr Eco-6j:

#### Request:

Response to site audit needs question TE-10: Please provide any information on wildlife use of the onsite ponds (described on pages 2-22 and 3-9 of the ER) –

- Unlined evaporation/percolation pond
- Sanitary Waste Ponds
- Outfall 003

#### Energy Northwest Response:

Observations by knowledgeable EN staff who routinely visit these locations indicate the following wildlife use at the ponded areas:

##### Unlined evaporation/percolation pond

The thick stand of willows provides cover for primarily small passerines. Typical sightings include the white-crowned sparrow, robin, western kingbird, and house finch. A few red-winged blackbirds have been observed at this location for the past several years. Coyote and black-tailed jack-rabbit are also observed at the site. Deer were observed prior to installation of the fence surrounding the outfall.

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### **Sanitary Waste Ponds**

The sanitary waste ponds provide a stop-over/rest site for many waterfowl during spring and fall migrations and limited habitat for breeding. Historically, one to three broods of Mallard ducks have been observed at the ponds. Typical spring sightings include Brewer's blackbird, killdeer (which do nest at the site), American avocet (one to three pairs nested here in the late 1990's; none recently), black-necked stilt, waterfowl and many of the waterbirds listed in Table 2.4-1 of the License Renewal Environmental Report. Deer and coyote use the ponds as a water site.

### **Outfall 003**

Other than for brief intermittent periods during which the outfall was in use, this location has never had standing water.

### **Aquatic Ecology**

#### **Aqua Eco-1a:**

##### **Request:**

Technical Review of the Aquatic Monitoring Program of WNP-2, Washington Public Power Supply System, Richland, Washington, September 1982 (WPPSS 1982)

##### **Energy Northwest Response:**

See Enclosure C1.

#### **Aqua Eco-1b:**

##### **Request:**

Operational Ecological Monitoring Program for Nuclear Plant 2 – 1985 Annual Report, Washington Public Power Supply System, prepared April 1986 (WPPSS 1986)

##### **Energy Northwest Response:**

See Enclosure C2.

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**Aqua Eco-1c:**

**Request:**

Operational Ecological Monitoring Program for Nuclear Plant 2 – 1986 Annual Report, Washington Public Power Supply System, prepared April 1987 (WPPSS 1987)

**Energy Northwest Response:**

See Enclosure C3.

**Aqua Eco-1d:**

**Request:**

Operational Ecological Monitoring Program for Nuclear Plant 2 – 1987 Annual Report, Washington Public Power Supply System, prepared April 1988 (WPPSS 1988)

**Energy Northwest Response:**

This document is included as Enclosure B5.

**Aqua Eco-1e:**

**Request:**

Operational Ecological Monitoring Program for Nuclear Plant 2 – 1995 Annual Report, Washington Public Power Supply System, prepared April 1996 (WPPSS 1996)

**Energy Northwest Response:**

See Enclosure C4.

**Aqua Eco-2:**

**Request:**

Energy Northwest Columbia Generating Station Effluent Mixing Study, prepared June 2008 (EN 2008)

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**Energy Northwest Response:**

See Enclosure C5.

**Aqua Eco-3:**

**Request:**

Response to NRC request 3007 (AQ-3): Describe any general maintenance procedures, if any, for the makeup water and discharge lines for the circulating water system. Are there any issues with biofouling, debris accumulation, or other issues with the submerged makeup water and discharge lines?

**Energy Northwest Response:**

The tower makeup line and the cooling tower blowdown line are included in the CGS buried piping integrity program and subject to periodic monitoring of pipe wall thickness. Blowdown flow control valves are periodically inspected and rebuilt as part of the preventative maintenance programs.

The makeup water intake screens in the river are inspected under a preventative maintenance task at least every three years to verify that the screens are free of algae and debris. All observations have found the screens to be free of debris. Some algal growth occurs during the late summer and early fall periods when river flows are low. In February 2010 the U.S. Coast Guard (USCG) identified the intake screens as potential hazards to navigation. In response, EN has installed USCG-approved signs near the makeup water pump house to warn boaters of the submerged structures.

There are no issues with the buried blowdown outfall structure.

**Hydrology**

**Hydro-1:**

**Request:**

Discharge Monitoring Reports for the last six months

**Energy Northwest Response:**

See Enclosure D1.



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**Hydro-2:**

**Request:**

Table of estimated pumping rates for Wells 1 and 2 from October 2009 through May 2010

**Energy Northwest Response:**

See Enclosure D2.

**Hydro-3:**

**Request:**

Procedure SWP-CHE-01

**Energy Northwest Response:**

See Enclosure D3.

**Hydro-4:**

**Request:**

Site Certification Agreement for Hanford No. 2, dated May 17, 1972

**Energy Northwest Response:**

See Enclosure D4.

**Nonradiological Waste**

**Nonrad Waste-1a:**

**Request:**

Response to site audit needs question NRW-1: Please provide a description of all non-radioactive (hazardous and non-hazardous) waste streams at CGS including types and quantities for the past 5 years (2005-2009).

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**Energy Northwest Response:**

Copies of annual dangerous waste reports submitted to the Washington Department of Ecology for calendar years 2005 through 2009 are included in Enclosure E. A summary page for each report lists the top five waste streams by weight. The Generation and Management (GM) forms in the annual reports provide the types and quantities (in lbs) for all hazardous and mixed wastes generated during the year.

**Nonrad Waste-1b:**

**Request:**

Response to site audit needs question NRW-4: Please provide hard copies of the Section 312 (TIER II) annual reports to EPA with a list of hazardous and toxic chemicals for past 3 years.

**Energy Northwest Response:**

Copies of Tier II reports for the past three years (2007-2009) are included as Enclosure E2.

**Nonrad Waste-1c:**

**Request:**

Response to site audit needs question NRW-6: Does CGS generate universal waste? If yes, provide list of waste and how these are handled and disposed/recycled for the past 5 years.

**Energy Northwest Response:**

CGS generates universal wastes. Major waste streams are lamps (e.g., fluorescent, mercury vapor, low-pressure sodium) and batteries (e.g., alkaline, Ni-Cd). Disposal records for the last five years are included as Enclosure E3.

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### **Environmental Justice**

#### **Envir Justice-1a:**

##### **Request:**

Response to site audit needs question EJ-1: Information about any observed subsistence consumption behavior patterns — specifically fish and wildlife consumption — by minority and low-income populations in the vicinity of CGS. This subsistence consumption behavior could consist of hunting, fishing, and trapping of game animals and any other general food gathering activities (e.g., collecting nuts, berries, and other plant material) conducted by minority and low-income individuals in the vicinity of CGS.

##### **Energy Northwest Response:**

The area surrounding CGS provides limited opportunities for subsistence hunters and gatherers. Access to, and activities on, a large fraction of the surrounding land is restricted by the U.S. Department of Energy (USDOE). Roughly 60% or more of the area within 10 miles of CGS is within the USDOE Hanford Site. Areas to the south include the nearby urban communities of Richland and West Richland. Between the city residential areas and the Hanford Site are the Port of Benton's science and technology park, the City of Richland's Horn Rapids industrial park, and the Richland Airport industrial/commercial area. Land to the east of CGS in Franklin County is mostly in developed agriculture. Refer to ER Sections 2.1 and 2.9.4.2. The land uses around CGS suggest that the subsistence consumption of wildlife and gathering of edible plants in the vicinity will occur much less frequently than in more remote areas or communities in Washington State or the Pacific Northwest.

Fishing for subsistence consumption is likely to occur in the vicinity of CGS. Columbia River fishes have historically been an important food source for the Mid-Columbia Native Americans and fish continue to be especially important to this population segment. A fish consumption survey in the early 1990s of local tribes revealed that fish consumption rates for tribal members were much higher than the estimated national fish consumption rate. The rate was nine times higher for adults and three times higher for children (**CRITFC 1994**, Pages 59 and 62). Both adult and children consumed salmon and resident trout more than any other fish species. The survey also revealed that there have been historical changes in fish consumption. In general, a significant portion of tribal members consumed less fish than 20 years before, due mainly to a decrease in fish populations (**CRITFC 1994**, Page 66). This indicates a direct relationship between tribal harvest and fish consumption.

**CRITFC 1994.** A Fish Consumption Survey of the Umatilla, Nez Perce, Yakama, and Warm Spring Tribes of the Columbia River Basin, Columbia River Inter-Tribal Fish Commission, Technical Report 94-3, October 1994.

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Although subsistence fishing is known to occur throughout the Mid-Columbia region, Energy Northwest staff is not aware of any occurrences in the vicinity of CGS.

### **Envir Justice-1b:**

#### **Request:**

Response to site audit needs question EJ-2: Information about current or past wildlife sampling and testing of game animals such as deer, squirrel, turkey, pheasant, duck, fish and other game birds and animals that may have been conducted in the vicinity of CGS. Wildlife sampling and testing may have been conducted before, during, and after plant construction and in the early days of plant operation, but was discontinued after determining that tissue samples consistently showed no significant or measurable radiological impact on the environment from plant operations.

#### **Energy Northwest Response:**

The environs surrounding CGS are monitored on an ongoing basis by Energy Northwest (EN) and USDOE. EN's radiological environmental monitoring program (REMP) at CGS is designed to assess the radiological impact of site operations on the environment. Samples are collected from aquatic and terrestrial pathways. The aquatic pathways include surface waters, sediment, and fish. The terrestrial pathways include air, soil, milk, garden produce, and direct radiation. The CGS REMP has not included wildlife tissue as a sampled media. As in previous years, analyses of REMP samples collected in 2009 showed no significant radiological impact on the environment attributable to CGS operations (**EN 2010**, Sec. 1.0).

The USDOE has a comprehensive environmental monitoring program for the Hanford Site managed by the Pacific Northwest National Laboratory (PNNL). Radiological monitoring includes facility liquid and airborne emissions as well as sampling surface water and sediment on and near the site, Columbia River shoreline spring water and associated sediment, drinking water and groundwater, nearby food and farm products (milk, potatoes, tomatoes, and cherries), vegetation around the site, and fish and wildlife on and around the site. Results of the sampling and analyses have been published annually at least back to 1959 (see <http://hanford-site.pnl.gov/envreport>). Tissue samples collected in 2008 included carp, bass, suckers, mule deer, and Corbicula clams (**PNNL 2009**, Sec. 10.12.4). Strontium-90 concentrations in bass samples collected between USDOE 100-N and 100-D Areas in the northern portion of the Hanford Site were elevated compared to previous years and higher than in samples from background locations. Other than clams, median radionuclide content of other fish and animal tissue from the Hanford Site was not higher than in samples taken from background locations. The clam studies were focused on uranium-contaminated springs at the USDOE 300 Area. PNNL also sampled non-food species and pests (e.g., mice, pigeons, gophers, wasps).

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Additional monitoring around CGS and the Hanford Site is conducted by the Washington Department of Health (**WDOH 2008**). A study of Columbia River contaminants in fish was conducted by the U.S. Environmental Protection Agency (USEPA) from 1996 through 1998 to assess the risks to Native Americans associated with fish consumption. The study focused mostly on organic chemicals and metals. Radionuclide concentrations in tissue of fish collected from the Hanford Reach and from Hanford Site ponds were similar to concentrations in samples taken from the Snake River (**USEPA 2002**, Page E-7).

**EN 2010.** Columbia Generating Station 2009 Annual Radiological Environmental Operating Report, Energy Northwest, Environmental Services, May 2010.

**PNNL 2009.** Hanford Site Environmental Report for Calendar Year 2008, PNNL-18427, Pacific Northwest National Laboratory, September 2009.

**WDOH 2008.** Hanford Environmental Oversight Program 2007 Data Summary Report, Report No. DOH 320-050, Washington Department of Health, Office of Radiation Protection, December 2008.

**USEPA 2002.** Columbia River Basin Fish Contaminant Survey 1996-1998, Report No. EPA 910-R-02-006, U.S. Environmental Protection Agency, Region 10, July 2002.

### **Socioeconomics**

#### **Soc Ec-1a:**

##### **Request:**

Response to site audit needs question SO-1: In addition to privilege tax payment information presented in Section 2.7 of the ER, please describe any other major annual support payments, one-time payments, and other significant forms of non-tax compensation (if any) provided to local organizations, communities, and jurisdictions (e.g., county, municipality, townships, villages, incorporated places, and school districts) on behalf of CGS.

##### **Energy Northwest Response:**

As the holder of the CGS Site Certification Agreement (SCA), Energy Northwest is required by state law (RCW 80.50.071) to reimburse the state for expenses that are incurred by the State of Washington Energy Facility Site Evaluation Council (EFSEC) in overseeing compliance with the SCA and for emergency planning services. A portion of the fees are forwarded to Benton and Franklin Counties as reimbursement for the costs incurred by their respective emergency services departments in maintaining preparedness for responding to radiological emergencies associated with CGS. Over

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the last two fiscal years the average annual reimbursements received by Benton and Franklin Counties were \$178,203 and \$187,951, respectively.

As a joint operating agency of the State of Washington, Energy Northwest is statutorily restricted from providing financial assistance to local community organizations and jurisdictions. The Executive Board and senior management, however, encourage Energy Northwest employees to actively support community organizations. Three charitable organizations are given special emphasis for agency-wide annual campaigns. These organizations and the average annual contributions (2007-2009) from Energy Northwest employees are:

United Way — \$134,000

March of Dimes — \$30,000

Head Start — 10 Christmas parties and gifts for 390 preschool children.

**Soc Ec-1b:**

**Request:**

Response to site audit needs question SO-2: Also, please provide information about any other recent or anticipated payment adjustments that could result in notable increases or decreases in tax or other payments.

**Energy Northwest Response:**

EN is aware of no pending or proposed changes to state tax laws that would notably affect the taxes paid by EN.

**Soc Ec-1c:**

**Request:**

Response to site audit needs question SO-3: Data on the height of the tallest (visible from offsite locations) structures at CGS and general information on the visibility of plant facilities from various offsite locations.

**Energy Northwest Response:**

The CGS Reactor Building has a height of 230 feet above ground level. This is the most visible structure from offsite locations. The next tallest building is the Turbine-Generator Building at 139 feet. The meteorological tower located about 2,500 feet west of the Reactor Building is slightly higher (240-ft tower with 5-ft mast) but not as prominent a structure.

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### **Soc Ec-1d:**

#### **Request:**

Response to site audit needs question SO-4: Information on noise impact analyses (if conducted) to offsite receptors or any noise emission studies on CGS.

#### **Energy Northwest Response:**

We are not aware of any monitoring of noise emission sources located on, or in the vicinity of, the CGS site for the purposes of determining impacts attributable to CGS operations. Special surveys have been conducted to ensure that emergency alerting sirens are audible at selected work locations.

The nearest offsite noise receptors are at Energy Northwest's Industrial Development Complex located about one mile east of CGS.

### **Archaeological and Cultural Resources**

#### **Arch & Cult Resources-1:**

##### **Request:**

Hanford Cultural Resources Management Plan, DOE/RL-98-10, Rev 0., U.S. Department of Energy, Richland, Washington, February 2003, Website: <http://www.hanford.gov/ doe/history=rmp>, accessed September 9, 2008 (USDOE 2003):

##### **Energy Northwest Response:**

See Enclosure F1.

#### **Arch & Cult Resources-2:**

##### **Request:**

Rivers of North America, A.C. Benke and C.E. Cushing, Editors, Elsevier Academic Press, Burlington, MA and London, U.K. (Benke and Cushing 2005)

##### **Energy Northwest Response:**

See Enclosure F2.

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**Arch & Cult Resources-3:**

**Request:**

Cultural Resources Review for Security Upgrades/Easement to Energy Northwest, letter from PNNL to Fluor Hanford, dated May 13, 2002 (PNNL 2002)

**Energy Northwest Response:**

See Enclosure F3.

**Arch & Cult Resources-4:**

**Request:**

Notice to Proceed, Columbia Generating Station Access Road Improvement, email communication from E.L. Kennedy, PNNL, to S.J. Urban, Energy Northwest, July 16, 2008 (PNNL 2008b)

**Energy Northwest Response:**

See Enclosure F4.

**Arch & Cult Resources-5:**

**Request:**

Draft Supplement to the Environmental Statement, Fiscal Year 1975 Proposed Program, Ashe-Hanford 500 kV Transmission Line, Bonneville Power Administration, March 8, 1974 (BPA 1974a)

**Energy Northwest Response:**

See Enclosure F5.

**Arch & Cult Resources-6:**

**Request:**

Draft Supplement to the Environmental Statement, Fiscal Year 1975 Proposed Program, Richland Area Electrical Service Transmission Lines and Substations, Bonneville Power Administration, March 1974 (BPA 1974b)



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**Energy Northwest Response:**

See Enclosure F6.

**Arch & Cult Resources-7a:**

**Request:**

Response to site audit needs question CR-9: Provide pre- and post-construction aerial photographs, if available.

**Energy Northwest Response:**

Aerial photos are included as Enclosure F7.

**Arch & Cult Resources-7b:**

**Request:**

Response to site audit needs question CR-14: Provide a copy of the transmission line vegetation management program plan, including timing of mowing, herbicide application, and clearing; inspections and repair activities conducted by helicopters or other vehicles; standard operating procedures or guidelines for the Applicant and any contractors; technician training programs, and any regulations that restrict maintenance activities (e.g., looking for the depth of disturbance, especially with tree removal in a portion of the corridor). Of particular importance are vegetation management procedures for the site and associated transmission line(s) to avoid impacts to historic and archaeological resources.

**Energy Northwest Response:**

The transmission right-of way between CGS and Ashe Substation consists of built environment (laydown yard, roads, etc.) and low shrubs and grasses. This ROW has not required vegetation control measures. Transmission line maintenance is provided by the Bonneville Power Administration (BPA). BPA has issued an Environmental Impact Statement for its vegetation management program (**BPA 2000**). The EIS describes the manual, mechanical, herbicidal, and biological methods that may be employed to control vegetation in ROWs and electrical substations throughout BPA's diverse transmission network. Specific, localized maintenance activities are subject to a supplemental environmental analysis that evaluates the impacts of the planned activity.

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An example of an environmental analysis prepared by BPA for control of noxious weeds in transmission line segments in Benton County is included as Enclosure F8.

**BPA 2000.** Bonneville Power Administration Transmission System Vegetation Management Program Final Environmental Impact Statement, Report DOE/EIS-0285, May 2000.

### **Arch & Cult Resources-8:**

#### **Request:**

Map of leased land from DOE with a narrative about CGS related activities outside blocks A & B (NRC request 3046)

#### **Energy Northwest Response:**

A map showing the USDOE land leased by Energy Northwest (EN) is included as Enclosure F9. CGS leased land boundaries are indicated in blue and WNP-1/4 boundaries are shown in red. CGS related activities that occur outside the CGS lease area include the following:

- EN vehicle access to various locations within the CGS 10-mile emergency planning zone (EPZ) for field team measurements during CGS emergency preparedness drills and exercises.
- EN access to, and maintenance of, public emergency alerting sirens at various locations within the CGS EPZ.
- In support of the CGS Emergency Preparedness Program, the Joint Information Center (JIC), alternate Emergency Operating Center, and CGS evacuation staging area are maintained and operated at EN's Multi-Purpose Facility at 3000 George Washington Way in Richland.
- EN vehicle access to Radiological Environmental Monitoring Program (REMP) air and sediment sampling stations.
- EN Environmental Services and contractors conduct studies and collect samples in the Columbia River from powerboats.
- Maintenance and use of paved site access roads from USDOE Route 4S to CGS and the Industrial Development Complex (WNP-1/4). This includes installation and maintenance of signs and lights along the roadways. In addition to personnel vehicle access, the roads are used for emergency response ingress and egress and transportation of materials and equipment.

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- The CGS concrete vehicle security barrier and adjacent access road extend north from CGS leased lands to completely enclose the BPA Ashe Substation. Vehicle access is maintained 24/7 by the CGS Security Department.
- Energy Northwest operates and maintains a Combined Community Communication Facility (CCCF) on Rattlesnake Mountain in the Fitzner-Eberhardt Arid Lands Ecology Reserve west of the CGS site. The CCCF consists of two communications towers and a support building. The CCCF houses multiple public safety and commercial radio systems including those supporting CGS.
- Installation and maintenance of a fiber optic cable from CGS to 350 Hills St., Richland.
- 500kV, 230kV, and 115kV transmission lines are maintained by BPA.
- Several CGS related activities occur within the WNP-1/4 lease area. Activities on this site, now referred to as the Industrial Development Complex (IDC), are as follows:
  - The CGS Maintenance Coatings Department operates and maintains a coating and blast facility in a building within the WNP-1 leased lands.
  - The CGS Security Training Department operates and maintains a firing range, with associated parking lot and buildings, within WNP-4 leased lands.
  - Two water supply wells located within the WNP-1 site are maintained to support ongoing activities at the IDC. The IDC water system is cross-tied to the CGS site potable water system and is used to supply CGS during infrequent maintenance and repair activities that make the CGS river water supply unavailable.
  - The two water supply wells on the WNP-1 site are sampled and analyzed in support of the CGS REMP.
  - Training for CGS rigging and lifting equipment is conducted in Bldg. 121 on WNP-1 leased lands.
  - In-process training for contractor and Energy Northwest personnel who support the CGS refueling outages is conducted in Bldg. 356 on WNP-4 leased lands.
  - CGS records, furniture, critical spare parts, and miscellaneous valves and components are stored in buildings on WNP-1/4 leased properties.

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- Non-Energy Northwest tenants who lease buildings on the IDC site are trained in accordance with the CGS Emergency Preparedness Program, and participate in drills and exercises and are subject to evacuation from the sites if directed.
- Maintenance of unpaved roads providing access to the CGS makeup water pump house.

### **Arch & Cult Resources-9:**

#### **Request:**

Written response from EN describing the work process and how procedures are implemented to ensure protection of cultural resources (NRC request 3049)

#### **Energy Northwest Response:**

The following procedures describe the Cultural Resource Protection Program at Columbia Generating Station (CGS):

- GIH 8.2.1 – Environmental Aspects Identification
- GIH 8.1.9 – Resource Protection
- SWP-ENV-04 – Cultural Resources Protection Program
- PPM 10.2.32 – Soil Excavation, Backfill and Compaction
- SWP-CAP-08 – Stop Work Authority
- PPM 1.3.76 – Integrated Risk Management
- CMS 3.1.10 – Environmental Management in the Work Planning and Process
- RPI 20.0 – Environmental Program Description

GIH-8.2.1, Environmental Aspects Identification, is a corporate procedure that drives the annual Environmental Management System (EMS) process of Significant Aspects Determinations. EMS Representatives for line organizations annually assess their organizations' activities in relation to the Energy Northwest (EN) Environmental Aspects. The Environmental Aspects include land use as a Significant Environmental Aspect. In this exercise the organization also identifies how significantly and in what way their activities relate to the Environmental Aspect. For example, an evaluation is conducted on whether their activities may "damage or disturb historical/cultural resources."

GIH-8.1.9, Resource Protection, is a corporate procedure that provides a framework for coordination with Environmental & Regulatory Programs (E&RP) to ensure federal, state, and local agency regulatory requirements associated with natural and cultural resource protection are appropriately reviewed and considered in the project planning process. Projects or activities that involve land disturbing activities are potentially

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subject to resource protection regulations, and coordination with E&RP ensures that natural and cultural resources are considered and applicable permits obtained prior to work being performed.

SWP-ENV-04, Cultural Resources Protection Program, is a CGS-specific, site-wide procedure that describes how impacts to potential or existing historic/cultural sites are assessed and considered when planning and performing work activities. It establishes a process to protect identified cultural resources and culturally sensitive areas. The procedure outlines requirements triggered by inadvertent discovery of potential historic/cultural material or human remains, including stoppage of work in accordance with SWP-CAP-08, protection of remains, notification and communication with Department of Energy/Richland Operations Office (USDOE), Washington Department of Archaeology and Historic Preservation (WDAHP), affected Native American tribes, Benton County Sheriff, and Benton County Coroner, and coordination with these agencies on how items should be dispositioned if they are discovered. It applies to all employees and persons working for or on behalf of EN who perform activities with the potential to affect culturally sensitive areas, undisturbed lands, historic/cultural materials, and human remains on land CGS leases from USDOE, and CGS sponsored activities that may occur on adjacent USDOE land.

PPM 10.2.32, Soil Excavation, Backfill and Compaction, is a CGS-specific procedure that requires completion of a pre-excavation approval sheet that includes a Cultural Resources Clearance from E&RP for land disturbing activities that occur on undisturbed lands or within culturally sensitive areas, as described in SWP-ENV-04. This approval sheet must accompany the applicable work package and be present at the job site. The procedure also requires notification to E&RP when potential historic/cultural objects or materials are encountered.

SWP-CAP-08, Stop Work Authority, is a CGS-specific procedure that establishes steps to immediately stop work in an orderly manner on any activity being performed, including when historic/cultural material or human remains are inadvertently discovered.

PPM 1.3.76, Integrated Risk Management, is a CGS-specific procedure that establishes the administrative controls, responsibilities, and duties for direction, control, and oversight of risk significant activities at CGS, including activities with environmental risk due to potential damage or inadvertent discovery of historical/cultural resources. The procedure strives to eliminate or mitigate the unanticipated and undesirable impact caused by the conduct of work. Attachment 8.2, Planner Risk Assessment Worksheet, contains an Environmental Risk Assessment checklist that assists the planner in evaluating the environmental risk level of planned. One item on the checklist specifically addresses cultural and historical resources.

CMS 3.1.10, Environmental Management in the Work Planning Process, is a procedure that applies to CGS activities conducted by the Construction and Maintenance Services (C&MS) organization. This procedure requires completion of an environmental checklist

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that includes answering land use questions which, if answered affirmatively, refers C&MS to E&RP for assistance.

RPI-20.0, Environmental Program Description, is a Regulatory Programs instruction that describes the EN environmental programs owned by E&RP that have been established to ensure compliance with applicable environmental laws and regulations. Cultural and natural resource protection programs are described in Sections 6.8 and 6.9, respectively.

In addition to the procedures above, E&RP environmental staff perform routine environmental reviews of CGS work orders and contract requisitions. These reviews include the identification of activities that may result in environmental impacts, including inadvertent discovery of cultural/historic resources, to ensure that controls to mitigate these impacts are included in these documents.

### **Arch & Cult Resources-10:**

#### **Request:**

Letter transmitting cultural resource protection procedures (SWP-ENW-04) to SHPO and any response from SHPO (NRC request 3047):

#### **Energy Northwest Response:**

See Enclosure F10.

### **Arch & Cult Resources-11:**

#### **Request:**

Written response describing routine activities that occur in the culturally sensitive areas around the river pump house (NRC request 3048)

#### **Energy Northwest Response:**

The following types of routine Energy Northwest activities are conducted by Energy Northwest in the vicinity of the CGS makeup water pump house:

- Vehicle use of the roadway and parking lot for various maintenance, operations, security, and environmental assessment activities in and around the pump house.
- Maintenance of roadway and parking lot.

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- Maintenance and inspection of a cathodic protection well.
- Boat launching from the shoreline for sampling/research.
- Semiannual collection of sediment samples near the river shoreline for the CGS Radiological Environmental Monitoring Program (REMP).
- Annual noxious weed survey and periodic noxious weed control.
- Periodic avian counts.
- Annual endangered and threatened species survey.
- Access to and maintenance of public emergency alerting sirens and signs.
- Access for field team measurements during emergency preparedness exercises and drills.

Many of the above activities were summarized in a January 2005 letter from Energy Northwest to the U.S. Fish & Wildlife Service. The letter (included as Enclosure F11) provided a summary of Energy Northwest activities considered to fall within the definition of "valid and existing rights." These activities were previously authorized by USDOE or occur on lands leased by Energy Northwest that are now designated as the Hanford Reach National Monument.

### **Arch & Cult Resources-12:**

#### **Request:**

Latitude and longitude for soil sample locations 1, 7, and 23

#### **Energy Northwest Response:**

GPS coordinates (mapped to WGS84 datum) for soil sample stations are as follows:

Station 1: Lat 46.453667° N, Long 119.335200° W

Station 7: Lat 46.481750° N, Long 119.391350° W

Station 23: Lat 46.458317° N, Long 119.273133° W

### **Arch & Cult Resources-13:**

#### **Request:**

Map of siren locations and latitude and longitude of each siren location

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**Energy Northwest Response:**

A map of siren locations and list of latitude/longitude coordinates is included as Enclosure F12.

**Cumulative Impacts**

**Cumulative Impacts-1:**

**Request:**

EN's unsolicited proposal to DOE for the Mid-Columbia Energy Initiative (NRC request 3043)

**Energy Northwest Response:**

Included in Enclosure G are Energy Northwest's letter proposal to USDOE to lease Hanford Site land for the energy park component of the Mid-Columbia Energy Initiative (MCEI). Also included in the enclosure is a presentation by the Tri-City Development Council that outlines the mission and goals of the MCEI.



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Enclosure A**

**Enclosure A  
Meteorology and Air Compliance Documents**

CD with CGS hourly meteorological data in two folders (re: Site Audit Needs Request MET-1):

- CGS Met Data 2004–2009: raw data for 2004 through 2009
- CGS MACCS2-SAMA Data: validated data for 2003 through 2006

<b>Document Components Meteorology and Air Compliance Documents</b>		
<b>File Name</b>	<b>Size (bytes)</b>	<b>Availability</b>
001 CGS_MetData_04-06.pdf	29,543,020	Publicly Available
002 CGS_MetData_07-09.pdf	24,860,507	Publicly Available
003 CGS_MetData_04-06.xls	45,510,656	Publicly Available
004 CGS_MetData_07-09.xls	45,317,632	Publicly Available
005 ENH2003WB.pdf	245,616	Publicly Available
006 ENH2004.pdf	244,681	Publicly Available
007 ENH2005WB.pdf	241,703	Publicly Available
008 ENH2006WB.pdf	250,207	Publicly Available
009 ENH2003WB.xls	774,144	Publicly Available
010 ENH2004.xls	776,192	Publicly Available
011 ENH2005WB.xls	805,888	Publicly Available
012 ENH2006WB.xls	807,936	Publicly Available