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January 15, 2008

Peggy Fowler
President and Chief Executive Officer
Portland General Electric Company
121 SW Salmon Avenue
Portland, OR 97204
VIA HAND DELIVERY AND CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Loren E. Mayer
Plant Manager
Portland General Electric Company Boardman Power Plant
73334 Tower Road
Boardman, OR 97818
VIA CERTIFIED MAIL, RETURN RECEIPT REQUESTED

RE: Notice of intent to sue for violations of the Clean Air Act and Oregon State Implementation Plan at Portland General Electric's Boardman facility

Dear Ms. Fowler and Mr. Mayer:

Pursuant to 42 U.S.C. § 7604(b), this letter provides notice of the intent of the Oregon Chapter of the Sierra Club, the Northwest Environmental Defense Center ("NEDC"), Friends of the Columbia Gorge, Columbia Riverkeeper, and Hells Canyon Preservation Council to file suit against Portland General Electric ("PGE") for violations of the Clean Air Act ("CAA") and implementing regulations, the Oregon State Implementation Plan ("SIP"), and PGE's Title V Operating Permit for the Boardman coal-fired power plant, located at 73334 Tower Road, Boardman, Oregon, 97818 (hereinafter referred to as "PGE Boardman" or "the plant"). Specifically, PGE Boardman has violated and is violating the opacity requirements of the federal New Source Performance Standards ("NSPS"), Oregon's SIP, and the plant's Title V Permit. Additionally, PGE Boardman has violated and is violating the CAA, federal regulations, and Oregon's SIP by constructing, modifying and operating the plant without complying with the applicable Prevention of Significant Deterioration ("PSD") requirements; NSPS Subpart Da emission limitations, and compliance demonstration, monitoring, reporting and recordkeeping provisions; and the applicable notification, approval, and permitting requirements for construction and/or modifications. PGE Boardman's past and ongoing violations have injured and will continue to injure the health, aesthetic, recreational, spiritual, informational, and economic interests of the groups giving notice, and their members, staff and volunteers. The

groups plan to exercise their right to sue for these violations pursuant to 42 U.S.C. § 7604(a).

I. Persons Providing Notice

The organizations sending this notice letter have a direct stake in protecting Oregon's environment and residents from PGE Boardman's pollution.

The Sierra Club is the nation's oldest and largest environmental organization, founded in 1892 by John Muir. The Sierra Club has long been involved in air pollution issues. The Sierra Club has over 1.3 million members and supporters worldwide, with more than 24,000 members in Oregon. The Sierra Club's core mission is to explore, enjoy and protect the wild places of the earth. This entails promoting responsible use of the earth's ecosystems and resources, educating people to protect and restore the quality of the environment, and using all lawful means to carry out these objectives. Sierra Club seeks to protect Oregon's air, land, and water, including the human and non-human communities that depend upon these resources, from pollution from old, dirty, coal-fired energy production. The Sierra Club is devoted to protecting special places in Oregon that are threatened by pollution from PGE Boardman. For example, in 2000 a Sierra Club campaign resulted in the designation of the Hanford Reach National Monument, a 51-mile stretch of the Columbia River and the only free-flowing stretch left.

The Northwest Environmental Defense Center ("NEDC") was founded in 1969 by a group of professors, law students and attorney alumni at Lewis and Clark Law School. NEDC is dedicated to the preservation and protection of the Pacific Northwest's natural resources. NEDC's members are lawyers, scientists, students and citizens committed to using the law to advocate for cleaner water and air, and to preserve public lands and wildlife habitat across the region. Over the past several years, NEDC staff and volunteers have devoted substantial resources to address harms to the region's air, land, and water from PGE Boardman's pollution.

Friends of the Columbia Gorge ("Friends") has worked for decades to protect the scenic, natural, cultural, and recreational resources of the Columbia River Gorge. Poor air quality in the region contributes to acid deposition in the Gorge, impairs visibility, harms ecosystems, affects Native American petroglyphs, and threatens human health. Friends is working hard to remedy this situation and enhance air quality in the Gorge. As part of this ongoing effort, Friends helped create the broad-based Columbia Clean Air Alliance, composed of more than 20 environmental and social responsibility groups with a combined membership of more than 50,000 people, to advocate for improved air quality in the Gorge. Friends is also focused on reducing ambient mercury, nitrogen oxides, and sulfur dioxide levels in the Gorge. Because PGE Boardman lacks modern pollution control equipment, it is a major source of these pollutants.

Columbia Riverkeeper ("CRK") works to restore and protect the water quality of the Columbia River, and all life connected to it, through community outreach and public

involvement. CRK's dedication to water quality has accomplished a sharp decrease in heavy metal pollution from industries, and through CRK's advocacy, the cleanup at the Hanford Nuclear Site is now the most well-funded Superfund project in the nation. CRK strives to ensure the health of the Columbia River, and pollution from PGE Boardman impedes that goal.

Since 1965, Hells Canyon Preservation Council ("HCPC") has defended and restored the unique habitats and biodiversity of the Hells Canyon-Wallowa and Blue Mountains ecosystems. HCPC is dedicated to developing, promoting, and enforcing public policies that will protect these resources for all time. Breathable air and smog-free vistas are crucial to this mission, and HCPC is committed to ensuring that pollution spewing from PGE Boardman does not cloud that pristine vision.

Further, the members, staff, and volunteers of the Sierra Club, NEDC, Friends of the Columbia Gorge, Columbia Riverkeeper, and Hells Canyon Preservation Council (hereinafter collectively referred to as "Sierra Club") live, work, farm, fish, recreate, own property, and obtain spiritual and aesthetic pleasure from locations that are adversely affected by the air pollution emitted from PGE Boardman.

II. PGE Boardman

PGE Boardman is a 615 megawatt fossil fuel-fired electric steam generating plant. The plant consists of an old-fashioned, pulverized coal-fired boiler and associated equipment.

PGE Boardman emits an array of air pollutants. According to data reported to the United States Environmental Protection Agency ("EPA") under the Acid Rain Program, PGE Boardman is the largest stationary source of carbon dioxide (CO_2), sulfur dioxide (SO_2), and nitrogen oxides (NO_x) in Oregon. *See* U.S. EPA Clean Air Markets (formerly "Acid Rain") website at http://www.epa.gov/airmarkets. PGE Boardman is also a major source of particulate pollution, and a large source of mercury. According to a recent national study, pollution from coal-fired power plants is responsible for 7 deaths, 11 heart attacks, 1 lung cancer death, 163 asthma attacks, 4 hospital admissions, 5 cases of chronic bronchitis, and 2 emergency room asthma visits per year in Oregon.[1] PGE Boardman is the only coal-fired power plant in Oregon.

PGE Boardman also pollutes more than ten protected parks and natural areas, including the Columbia River Gorge, Mount Hood, Mount Rainier, Hells Canyon and the Eagle Cap Wilderness.

Particulate pollution, also known as soot, causes a variety of adverse health effects

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[1] *See* http://www.cleartheair.og/dirtypower/ (click on "Launch the Power Plant Air Pollution Locator" icon).

including premature death, heart attacks, strokes, birth defects and asthma attacks. Particulate pollution has also been linked to Sudden Infant Death Syndrome and low birth weight. The elderly, children, and those with respiratory disease are the most affected by particulate pollution. Particulate pollution is also linked with environmental damage such as reduced visibility (haze) and altered nutrient balances in waters and soils.

Toxic heavy metals, including mercury, make up some of the particulate matter emitted from the plant. By accumulating on cloud droplets or precipitation, particulate mercury can migrate to waterways when it is raining or snowing. Even in dry weather, particulate mercury may dry deposit onto plants, land, or other structures. Mercury pollution from PGE Boardman is of particular concern because the plant is located just a few miles from the Columbia River, home to species of endangered fish and fish consumed by people and wildlife. Mercury is a potent neurotoxin that has been linked to a number of negative biological effects, including effects on fetuses, developmental delays in children, autism, and retardation. Mercury does not dissipate into the environment and bioaccumulates in fish and wildlife populations, ensuring that contamination today will remain a problem long into the future.

Sulfur dioxide is also harmful to people and the environment. Since the 1980's, courts have recognized that SO_2 pollution is "a medically recognized threat to human health" and that "high levels of pollution sustained for periods of days can kill." *Ohio Power Co. v. US EPA*, 729 F.2d 1096, 1097-98 (6th Cir. 1984). When sulfur dioxide emitted from power plant stacks reacts with other elements in the atmosphere, it forms sulfates, sulfuric acid mist and other chemical derivatives that tend to stay airborne for days and affect areas at great distances downwind. Like particulate matter, SO_2 aggravates respiratory illnesses. SO_2 also contributes to acid rain, and sulfate particles are the major cause of haze throughout the country, including in national parks, wilderness areas, and the Columbia River Gorge National Scenic Area.

Much like SO_2, NOx also contributes to acid rain, diminishes water quality, and impairs visibility. NOx is among the main ingredients of ground-level ozone, or smog, which can trigger serious respiratory problems. NOx emissions also exacerbate atmospheric ozone depletion, and cause eutrophication and dead zones in waters. In addition, NOx contributes to global climate change. PGE Boardman is responsible for 35% of the NOx emissions in Oregon.

The heat-trapping gases that cause global climate change, including CO_2, come largely from burning fossil fuels. Reducing dependence on fossil fuel-fired power plants is therefore an essential part of addressing global climate change. PGE Boardman is the largest stationary source of CO_2 in Oregon, and in 2003 released nearly 5 million tons of CO_2. Global climate changes are already occurring, and the effects of those changes are experienced in Oregon. These include increased frequency and intensity of storms, and more frequent and severe heat waves, droughts and floods. In addition, glaciers are rapidly retreating, and Cascade snowpack is melting earlier and faster each spring. These changes in the water cycle threaten crops, salmon,

recreation, fishing, and water supplies. Global climate changes also adversely affect the reproductive success, range, and diet of vulnerable species.

As described in detail below, PGE Boardman has been violating the CAA for decades. PGE's recently-released plans to act "voluntarily" through the Best Available Retrofit Technology ("BART") process to decrease the visibility-impairing pollution emitted by the plant do not address these violations. While PGE's plans may reduce pollution from the plant, they will not address the violations of the CAA outlined below.

III. Overview of Clean Air Act Citizen Suit Provisions

CAA § 304(a)(1), 42 U.S.C. § 7604(a)(1), authorizes Sierra Club to bring suit against PGE Boardman for violating an emission standard or limitation under the CAA. An emission standard or limitation is defined to include "any condition or requirement of a permit under part C of subchapter I of this chapter (relating to significant deterioration of air quality). . . or any requirement under section 7411 [New Source Performance Standards]. . . or. . . any other standard, limitation, or schedule established under any permit issued pursuant to [Title] V . . . or under any applicable State implementation plan approved by the Administrator, any permit term or condition, and any requirement to obtain a permit as a condition of operations . . . which is in effect under this chapter . . . or under an applicable implementation plan." CAA § 304(f)(4); 42 U.S.C. § 7604(f)(3) & (4). Thus, Sierra Club may bring suit against PGE Boardman for violating New Source Performance Standards, relevant conditions of the Oregon SIP or the plant's Title V permit, and for failing to obtain the proper permit.

Additionally, under CAA § 304(a)(3), 42 U.S.C. § 7604(a)(3), any person may file suit in federal district court against any person who proposes to construct or who constructs and operates a major emitting facility without a PSD permit and without complying with the requirements of the PSD program. Construction is defined to include modification. 42 U.S.C. § 7479(2)(C). Thus, Sierra Club may bring suit against PGE Boardman for constructing, modifying and operating the plant without a PSD permit and without complying with PSD requirements.

IV. Opacity Violations

Federal regulations, the Oregon SIP, and PGE's Title V Permit impose opacity limitations on the plant as a means of controlling particulate matter emissions. *See* 40 C.F.R. § 60.42(a)(2); OAR 340-021-0015; Boardman 2001 Title V Permit at 5-6.[2] PGE Boardman exceeded these

[2] PGE Boardman's 2001 Title V Permit expired by its terms on July 1, 2006. On June 22, 2005, PGE Boardman submitted an application to renew its Title V Permit. As of the date of this letter, DEQ has not issued a final renewed Title V Permit, and the terms of the 2001 Title V

requirements thousands of times from 2003-2008. In addition, PGE Boardman exceeded these requirements many more times prior to 2003 and will continue to violate opacity requirements with regularity unless PGE takes corrective action. The opacity violations at the plant result in excess particulate matter emissions that endanger human health and the environment.

A. Applicable Opacity Limitations

First, every fossil fuel-fired steam generator constructed or modified after August 17, 1971 with more than 73 megawatts of heat input rate (250 MMBtu per hour) is subject to federal NSPS opacity limitations. 40 C.F.R. §§ 60.40(a) & (c), 60.42(a)(2). These limitations prohibit emissions that "exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity." 40 C.F.R. § 60.42(a)(2). PGE Boardman's main boiler unit meets the heat rate input qualification of 40 C.F.R. § 60.40(a) and was constructed after August 1, 1971. Thus, PGE Boardman is subject to the NSPS opacity limitations.[3]

Second, Oregon's SIP, as approved by EPA, imposes opacity limitations on all new sources. PGE Boardman is a "new source" under these regulations because it is an "air contaminant source installed, constructed, or modified after June 1, 1970." OAR 340-021-005(4). Opacity must not be as dark or darker in shade than that designated as No.1 on the Ringleman Chart or equal or greater than 20 percent for a period or periods aggregating more than three minutes in any hour. OAR 340-021-015. EPA approved these requirements in 1997. 62 Fed. Reg. 8385 (Feb. 25, 1997).[4]

Third, PGE Boardman's operating permit under Title V of the CAA imposes opacity requirements. Condition 4 of the permit prohibits PGE from "caus[ing] or allow[ing] the emissions of air contaminant[s] into the atmosphere from any activities or emissions units for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 20% opacity." 2001 Title V Permit Condition 4. Condition 10 of the Permit

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Permit remain in effect.

[3] As discussed in Section VII, below, construction and modification projects made 40 C.F.R. Part 60, Subpart Da applicable to the plant. Subpart Da includes the same opacity limitation as Subpart D. Therefore, violations of 40 C.F.R. § 60.42(a)(2) opacity standard after PGE commenced the modifications discussed in Section VII are also violations of 40 C.F.R. § 60.42Da(b).

[4] Oregon renumbered and slightly revised these opacity requirements in 2001. OAR 340-208-0110. The state submitted the revised standards to EPA for SIP approval in 2001, but EPA has not acted on the submission. *See* 68 Fed. Reg. 2892 (January 22, 2003) (expressly not acting on Division 208 of Oregon's submitted rules). The renumbered and revised rules retain the 20 percent opacity limit for all new sources.

requires that PGE not "cause to be discharged into the atmosphere from the main boiler . . . any gases which exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity." 2001 Title V Permit Condition 10. Thus, under PGE Boardman's Title V Permit, the state SIP opacity requirements[5] apply plant-wide (Condition 4), and the federal NSPS opacity requirements apply to the main boiler (Condition 10).

B. Evidence of PGE Boardman Opacity Violations

According to PGE's own emissions compliance reports, which PGE submitted to the Oregon Department of Environmental Quality ("DEQ"), PGE Boardman has exceeded NSPS opacity requirements thousands of times in the last five years. Sierra Club has prepared a summary of these exceedances from 2002 through the third quarter of 2007, attached as Table A. As Table A demonstrates, the plant exceeded NSPS opacity limitations for as many as **813.2 hours** from 2002 through the third quarter of 2007. Accordingly, PGE Boardman violated the NSPS opacity requirements as many as **8,132 times** during this period, and it violated the Oregon SIP opacity requirements and the Title V Permit as many as **16,264 times** during this period.[6]

Based on the frequency and magnitude of these exceedances, Sierra Club alleges that PGE Boardman has continued since the third quarter of 2007, and will continue after the date of this notice letter, to violate the opacity requirements of the NSPS regulations, the Oregon SIP, and the plant's Title V Permit.

V. Violations of the Reporting Requirements of the Oregon SIP and PGE Boardman's Title V Permit

Both Oregon's SIP and PGE's Title V Permit impose reporting requirements on the

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[5] The 2001 Title V Permit cites OAR 340-208-0110(2) and (3)(a) as the applicable state SIP opacity provisions. *See* 2001 Title V Permit Condition 4. Again, these cited provisions reflect the renumbering of Oregon's SIP, and are principally the same as the federally-approved opacity provisions.

[6] Sierra Club acknowledges that some of the opacity exceedances listed in Table A may be exempt from the NSPS regulations, and that certain limited affirmative defenses may be available to PGE. However, PGE must demonstrate that each exceedance meets the narrow exemptions or defenses specified in the applicable regulations. Moreover, PGE bears the burden of demonstrating that its exceedances are either not violations or that they qualify for affirmative defenses. *See United States v. First City Nat'l Bank of Houston*, 386 U.S. 361, 366 (1967) (explaining the general rule that the party claiming an exemption to a statute bears the burden of proof); *United States v. Ohio Edison Co.*, 276 F. Supp. 2d 829, 856 (S.D. Ohio 2003) (applying rule to CAA exemptions).

Boardman plant. PGE must submit periodic (quarterly, semi-annual, and annual) compliance certification reports, event-specific reports of all excess emissions, and deviations from permit requirements. OAR 340-028-1440; 2001 Title V Permit Conditions 54 through 62.

Oregon's SIP requires written, event-specific excess emission reports. OAR 340-028-1440(1).[7] The regulations require PGE to submit these reports within 15 days of the event, and the reports must contain the specific information set out at OAR 340-028-1440(1)(a)–(e). Oregon's SIP also requires annual submission of all upset log entries (including all planned and unplanned excess emissions), as well as current procedures to minimize emissions during startup, shutdown, and maintenance. OAR 340-028-1440(4)(a)–(b).

PGE's Title V Permit sets out similar reporting requirements. Permit Conditions 54 through 56 specify the timing and content of quarterly, semi-annual, and annual reports. Permit Condition 58 incorporates by reference Oregon's current excess emissions reporting regulations (OAR 340-214-0300 through 0360), which are substantively similar to the federally-approved SIP provisions. Permit Condition 58.a clarifies that PGE must submit written follow-up reports of excess emissions events "in accordance with Department direction and OAR 340-214-0330(2) and 340-214-0340."

Upon information and belief, between at least 2003 and 2008, PGE did not submit all of these required reports, and the reports it did submit were vague and incomplete. The plant's Title V reports (including, but not limited to, event-specific excess emissions reports, quarterly excess emissions reports for the main boiler, permit deviation reports, semi-annual reports, and annual reports) have not met the detailed requirements set forth in Permit Conditions 54 through 62. Nor have the plant's reports complied with reporting requirements under the Oregon SIP. For instance, contrary to the requirements of Permit Condition 54.b, PGE's 2005 and 2006 annual

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[7] The regulation specifies that DEQ "may require" written, event-specific excess emission reports. Through the 2001 Title V Permit, however, DEQ has mandated that PGE submit these reports. After initially notifying DEQ by telephone or in person of an excess emission event, PGE must submit follow-up reports in accordance with OAR 340-214-0330(2) and OAR 340-214-0340. Title V Permit Condition 58.a. Oregon renumbered and revised its reporting and recordkeeping provisions in 2001, shifting OAR Division 28 to Division 214, but retaining the same substantive requirements. Oregon submitted the revised standards to EPA for SIP approval in 2001. 68 Fed. Reg. 2891 (January 22, 2003). On October 17, 2002, Oregon withdrew its request for approval of the excess emissions provisions (OAR 340-214-0300 through 0360) because Oregon was beginning the process of revising those rules. *Id.* at 2896. Though Division 28 remains the federally-approved SIP version of these requirements, PGE's Title V Permit cites to the revised and renumbered provisions. Thus, PGE Boardman is subject to the requirements of OAR 340-214-0300 through 0360 (as incorporated into the 2001 Title V Permit), under which DEQ requires the event-specific emissions reports described at OAR 340-028-1440.

reports do not include excess emissions upset logs or second semi-annual compliance certifications. Event-specific reports of planned and unplanned excess emissions events, rarely even submitted at all, also lack crucial details. For example, several "AQ Upset Log and Excess Emissions Report" forms from 2005 are, but for some cursory notations, mostly blank. The reports variously fail to specify required facts such as the magnitude and duration of increased emissions over normal rates, efforts made to minimize the amount/duration of emissions, and the duration or estimated time until return to normal operation. These omissions are indicative of a broader pattern of incomplete, erratic reporting. In sum, PGE's reports of excess emissions and plant upsets have been desultory and facially inadequate under its Title V Permit and OAR 340-028-1440.

Failure to comply with reporting requirements undermines the entire regulatory regime. Not only are full and accurate reports essential for DEQ to assess whether enforcement action is warranted, but Sierra Club and its members rely on such reports to stay informed about the plant's operations and emissions, and PGE's failure to supply such reports frustrates that mission.

VI. Violations of Federal and State Prevention of Significant Deterioration Requirements

A. Federal and State PSD Requirements

The Prevention of Significant Deterioration (PSD) program is designed to, *inter alia,* protect human health and welfare from the actual or potential adverse effects of reasonably anticipated air pollutants; to preserve, protect, and enhance the air quality in national parks and wilderness areas; and to ensure that economic growth will occur in a manner consistent with the preservation of existing air resources. 42 U.S.C § 7470(1)-(3). The PSD program also exists to ensure that any decision to permit an increase in air pollution is made only after a careful evaluation of all of the consequences of such a decision, including meaningful public review. 42 U.S.C. §§ 7470(5), 7475(a)(2).

The PSD program prohibits the construction or modification of major emitting facilities unless those sources first satisfy the requirements of the PSD permitting program. 42 U.S.C. § 7475; 40 C.F. R. §§ 51.166(a)(7)(iii), 52.21(a)(2)(iii). These requirements include analysis of and compliance with Best Available Control Technology ("BACT") emissions limits, demonstration that the source will not cause or contribute to a violation of the national ambient air quality standards ("NAAQS") or increment, and issuance of a major source PSD permit following the proper public participation requirements. 42 U.S.C. § 7475.

1. Initial Construction of Major Sources Under the PSD Program

In 1974, EPA promulgated regulations, effective January 6, 1975, to prevent the significant deterioration of air quality. 39 Fed. Reg. 42,510 (Dec. 5, 1974); 40 C.F.R. § 52.21 (1975) (superceded). EPA regulations included a "grandfather" clause, excluding certain plants from PSD review and permitting. The regulations provided that the PSD requirements therein applied to any plant that "has not commenced construction or expansion prior to June 1, 1975." 39 Fed. Reg. 42,510, 42,516. Construction was defined as "fabrication, erection or installation of an affected facility." *Id.* at 42,515. "Commenced" was defined as when the facility has "undertaken a continuous program of construction or modification or ... has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification." *Id.*; 40 Fed. Reg. 25,004 (June 12, 1975).

In 1977, Congress amended the CAA to create the statutory PSD provisions, effective August 7, 1977. Like EPA's regulations, Congress included a "grandfather" clause in the PSD amendments. The 1977 amendments defined "commenced" construction of a plant as when a source has:

> obtained all necessary preconstruction approvals or permits required by Federal, State, or local air pollution emissions and air quality laws or regulations and either has (i) begun, or caused to begin, a continuous program of physical on-site construction of the facility or (ii) entered into binding agreements of contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the facility to be completed within a reasonable time.

CAA Amendments of 1977, Pub.L. No. 95-95 § 127(a), 91 Stat. 685 (1977). The 1977 amendments also defined "necessary preconstruction approval or permits" as "those permits or approvals, required by the permitting authority as a precondition to undertaking any activity under clauses (i) and (ii) of" the statutory definition of "commenced." *Id.* These statutory provisions have remained unchanged since 1977. *See* 42 U.S.C. § 7479(2)(A) & (B).

2. Major Modifications

Although certain sources were excluded initially from the PSD program, Congress intended the program to capture these sources when they performed "major modifications." A major modification for PSD purposes is "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such a source or which results in the emissions of any air pollutant not previously emitted." 42 U.S.C. § 7411(a)(4) (as incorporated by 42 U.S.C. § 7479(2)(C)). Under the federal regulations that set the national floor for state PSD programs, a major modification is "any physical change in or

change in the method of operation of a major stationary source" that results in a significant emissions increase and a net emissions increase. 40 C.F.R. §§ 51.166(b)(2)(i), 52.21(b)(2).

Oregon's SIP also prohibits the construction or major modification of stationary sources unless the source has first obtained the correct permit, and otherwise met the requirements of applicable law, including PSD requirements. OAR 340-224-0010(2).[8] From initial EPA approval until 2003, the definition of major modification in the Oregon SIP provided in pertinent part:

> "Major modification" means any physical change or change of operation of a source that would result in a net significant emission rate increase for any regulated air pollutant. This criteria also applies to any pollutants not previously emitted by the source. Calculations of net emission increases shall take into account all accumulated increases and decreases in actual emissions occurring at the source since the baseline period, or since the time of the last construction approval issued for the source pursuant to the New Source Review Regulations. . . for that pollutant, whichever time is more recent.
> . . .

OAR 340-028-0110(57) (1997) (superceded). In 2003, EPA approved revisions to Oregon's PSD regulations, including revisions to the definition of "major modification." 68 Fed. Reg. 2903 (Jan. 22, 2003) (approving revisions to Oregon's SIP, federally-effective March 24, 2003). Since then, the Oregon SIP has defined "major modification" to include the following:

> For new or modified major sources that were permitted to construct and operate after the baseline period and were not subject to New Source Review, a major modification means. . . [t]he addition or modification of any stationary source or sources after the initial construction that have cumulative potential emissions greater than or equal to the significant emission rate, excluding any emission decreases.

OAR 340-200-0020(66)(c)(B).[9] "'Stationary source' means any building, structure, facility, or installation at a source that emits or may emit any regulated air pollutant." OAR 340-200-

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[8] Prior to Oregon's 2003 SIP revisions, approved by EPA on January 22, 2003 and made effective on March 24, 2003, this provision was codified at OAR 340-028-1900(1).

[9] The definition of "major modification" may currently be found at OAR 340-200-0020(67). This notice letter will refer throughout to subsection (66) rather than (67), however, because the EPA-approved definition may be found in subsection (66).

0020(131).[10]

B. Illegal Construction, Modification, and Operation of the Plant

First, PGE's initial construction of the Boardman plant was illegal. Because PGE had not commenced construction of the Boardman plant within the meaning of either the 1974 regulations or the 1977 statutory definition, PGE violated the CAA and federal regulations by constructing the Boardman plant without a PSD permit and without meeting the applicable PSD requirements. PGE has never applied for or received a PSD permit, operated with or complied with BACT emissions limits, or otherwise complied with applicable PSD requirements. Thus, PGE constructed and has been operating the plant in violation of 42 U.S.C. § 7475, the PSD regulations set forth at 40 C.F.R. Parts 51 and 52, and the requirements of OAR 340-224-0010 through 340-224-0040, 340-224-0070, and 340-224-0100.[11]

Second, upon information and belief, PGE has modified the plant without obtaining a PSD permit, applying BACT and operating with BACT emissions limits, or otherwise complying with the PSD requirements, federal regulations and the Oregon SIP. These modifications include but are not limited to: 1) an upgrade of the main boiler, including the addition of approximately 9,000 tons of tubing, which was completed between 1997-1998, and related projects; 2) the retrofit of both double-flow, low-pressure turbine rotors in 2000, and related projects; 3) a plant turbine upgrade project, about which PGE notified DEQ on July 25, 2003, and related projects; 4) the retrofit of the high pressure/intermediate pressure rotor and slip ring shaft in 2004, and related projects; 5) a generator overhaul project in 2004 and 2005, and related projects; 6) steam turbine rotor and generator rotor repairs in 2005 and 2006, and related projects; and 7) low pressure turbine unit repairs in 2006, and related projects.[12]

These projects constitute "major modifications" within the meaning of 40 C.F.R. §§ 51.166(b)(2)(i), 52.21(b)(2), OAR 340-028-0110(57) (superceded), and OAR 340-200-0020(66).

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[10] Similarly, the definition of "stationary source" may currently be found at OAR 340-200-0020(133). This notice letter cites to the EPA-approved SIP provision numbering, OAR 340-200-0020(131).

[11] All references to the PSD provisions and the Oregon SIP provisions throughout should be interpreted to mean the version of the regulation in place at the time of construction or operation.

[12] PGE is in the best position to know the precise dates of the commencement and completion of the modifications referenced in this notice letter and the scope of the projects. Sierra Club has provided general descriptions and dates to the best of its knowledge simply to aid PGE in identifying the project to which Sierra Club refers. Sierra Club intends to seek through discovery detailed information regarding these modifications and others yet unknown to Sierra Club.

These modifications resulted in "significant net emissions increases" of sulfur dioxide, and/or nitrogen oxides, and/or particulate matter, within the meaning of 40 C.F.R.§ 52.21(b)(3) and (23). They also resulted in "net significant emission rate increase[s]," taking into account "all accumulated increases and decreases in actual emissions occurring at the source since the baseline period," within the meaning of OAR 340-028-0110(57) (for modifications made prior to March 24, 2003); and they resulted in cumulative potential emissions greater than or equal to the significant emission rate, within the meaning of OAR 340-200-0020(66)(c)(B) (for modifications made after March 24, 2003). Thus, PGE modified and has been operating the plant in violation of 42 U.S.C. § 7475, the PSD regulations set forth at 40 C.F.R. Parts 51 and 52, the requirements of OAR 340-028-1900 through OAR 340-028-1920, 340-028-1940, and 340-028-1980 through 340-028-2000 (prior to March 24, 2003), and OAR 340-224-0010 through 340-224-0040, 340-224-0070, and 340-224-0100 (after March 24, 2003).

Further, these modifications did not constitute routine maintenance, repair, or replacement, or qualify for any other exemptions under 40 C.F.R. §§ 51.166(b)(2)(iii)(a), (b)(2)(iii)(f), and 52.21(b); nor did they qualify for the related exemptions under OAR 340-200-0020(66). Moreover, PGE, not Sierra Club, bears the burden of proving that any modification constituted routine maintenance, repair or replacement, or otherwise met the terms of a federal or state exemption. *See United States v. Ohio Edison Co.*, 276 F. Supp. 2d 829, 839 (S.D. Ohio 2003); *United States v. Cinergy Corp.*, 2006 WL 372726 * 4 (S.D. Ind. Feb. 16, 2006).

Each of these violations has continued from the start of the construction or modification and will continue until PGE obtains the appropriate PSD permit, begins operating with BACT emissions limits, and otherwise operates in compliance with PSD requirements. *See National Parks Conservation Association v. Tennessee Valley Authority*, 480 F.3d 410, 416-19 (6th Cir. 2007).

VII. Violations of Federal New Source Performance Standards Subpart Da

PGE is in violation of the emission limitations and compliance demonstration, monitoring, reporting and recordkeeping provisions of Subpart Da of the NSPS for power plants. 42 U.S.C. § 7411(e). Owners or operators of "new sources" subject to a standard promulgated pursuant to the NSPS program are prohibited from operating those sources in violation of the NSPS after the effective date of the NSPS. 42 U.S.C. § 7411(e).

EPA has promulgated general NSPS regulations that contain compliance, monitoring, testing, reporting and recordkeeping provisions applicable to any stationary source that contains an affected facility subject to an NSPS standard. 40 C.F.R. §§ 60.1-60.19. EPA has also promulgated NSPS standards specifically applicable to electric utility steam generating units capable of combusting more than 73 megawatts (250 million Btu/hour) heat input of fossil fuel. 40 C.F.R. §§ 60.40- 60.46 (Subpart D) & 60.40Da-60.52Da (Subpart Da). These NSPS

standards are applicable to "new sources" constructed or modified after August 17, 1971 (Subpart D) and September 18, 1978 (Subpart Da).

A "new source" is any stationary source "the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance . . . applicable to that source." 42 U.S.C. § 7411(a)(2); 40 C.F.R. § 60.1. The statute defines "modification" for purposes of the NSPS program as "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutants not previously emitted."[13] 42 U.S.C. § 7411(a)(4); 40 C.F.R. § 60.2. For an existing electric utility steam generating unit, such as PGE Boardman, a physical change is a modification if the change increases the maximum hourly emissions achievable at the unit during the 5 years prior to the change. 40 C.F.R. § 60.14(h). Under 40 C.F.R. § 60.14, upon modification, an existing facility becomes an "affected facility" for which any applicable NSPS must be satisfied. Moreover, the owner or operator of an affected facility must furnish written notice to EPA of any physical or operational change, containing specific information, before the change is made. 40 C.F.R. § 60.7. A modified source must also submit an initial performance test under 40 C.F.R. § 60.8.

Subpart Da includes emission limitations for particulate matter, sulfur dioxide and nitrogen oxides. 40 C.F.R.§§ 60.42Da, 60.43Da, 60.44Da. Subpart Da also includes specific compliance demonstration, monitoring, reporting and recordkeeping provisions, in addition to the general provisions applicable to all facilities subject to a NSPS. 40 C.F.R. §§ 60.7, 60.8, 60.11, 60.13, 60.48Da, 60.49Da, 60.50Da, & 60.51Da. The applicable NSPS sulfur dioxide emission limitation is either 1.2 lb/MMBtu heat input and 10 percent of the potential combustion concentration (90 percent reduction), or 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 0.60 lb/MMBtu heat input.[14] 40 C.F.R. § 60.43Da(a). A source subject to Subpart Da must demonstrate compliance with the particulate matter, sulfur dioxide, and nitrogen oxide emission limitations according to the provisions of 40 C.F.R. §§ 60.8, 60.11, 60.48Da(e)-(h), 60.50Da(a)-(e). A source subject to Subpart Da must monitor its emissions pursuant to the requirements in 40 C.F.R. §§ 60.13, 60.49Da(a), (b), (c), (d), (e), (f)(1), (g), (h), (i), (j), (l), (m) & (s). A source subject to Subpart Da must report sulfur

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[13] Certain exceptions to the definition of modification are enumerated in 40 C.F.R. § 60.14(e). Again, PGE, not Sierra Club, bears the burden of proving that any modification qualifies for an exemption to the NSPS regulations. *See United States v. Ohio Edison Co.*, 276 F. Supp. 2d 829, 839 (S.D. Ohio 2003); *United States v. Cinergy Corp.*, 2006 WL 372726 * 4 (S.D. Ind. Feb. 16, 2006).

[14] The sulfur dioxide emission limit translates into 0.12 lb/MMBtu when emissions are more than 0.60 lb/MMBtu at the inlet to a pollution control device, and 0.18 lb/MMBtu when emissions are between 0.60 lb/MMBtu and 1.2 lb/MMBtu.

dioxide, nitrogen oxides and particulate matter emissions performance test data, performance evaluation test data from monitors, and other information as specified by 40 C.F.R. §§ 60.7, 60.80, 60.51Da(a)-(f) & (h)-(k).

Upon information and belief, the construction and modification projects described in Section VI.B, above, increased the maximum hourly emissions achievable from PGE Boardman and those changes are therefore "modifications" as defined by 40 C.F.R. § 60.14(h).[15] Moreover, upon information and belief, the construction and modification projects described above were commenced after September 18, 1978. Therefore, each of the above cited sections became applicable to PGE Boardman when PGE commenced the construction and modification projects described above.[16]

Upon information and belief, the emissions from PGE Boardman have exceeded the sulfur dioxide NSPS emission limit since PGE commenced the construction and modification projects described above, and these violations will continue until PGE installs equipment necessary to comply with the limit. These violations are enumerated in the data reported by PGE to EPA pursuant to the acid rain program and available on EPA's Clean Air Market's Website.[17] This notice also covers any and all violations of the sulfur dioxide emission limit which may have occurred, but for which data was not available publicly at the time of this notice. PGE Boardman has also been in continual violation of the Subpart Da compliance demonstration, monitoring, reporting and recordkeeping requirements identified above since that Subpart became applicable to the plant. Moreover, PGE violated the written notice and initial testing provisions of 40 C.F.R. §§ 60.7-60.8 when it commenced the construction and modification projects described above without providing the proper notice to EPA before those projects, and when it failed to conduct and report the results of the required tests.

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[15] PGE is in the best position to know the exact dates of the above described projects and the precise increase in hourly emissions resulting from those projects. Sierra Club intends to seek through discovery detailed information regarding these construction and modification projects, and others yet unknown to Sierra Club.

[16] Pursuant to 40 C.F.R. Part 60, Subpart Da, PGE Boardman may also be subject to other emission limitations and associated compliance determination, monitoring, recordkeeping and reporting provisions of Subpart Da if PGE commenced any of the previously described modification or construction projects after dates specified in the applicable requirements. Sierra Club lacks sufficient information at this time to determine the exact date PGE commenced construction on the projects described above. PGE is in the best position to know the exact dates that construction commenced on the projects identified above and, therefore, to determine with specificity what requirements of Subpart Da - beyond those cited above - apply to PGE Boardman.

[17] *See* http://camddataandmaps.epa.gov/gdm/index.cfm?fuseaction=emissions.wizard.

VIII. Violations of Oregon SIP and Title V Construction/Modification Notification, Approval, and Permitting Requirements

Under the Oregon SIP and PGE's Title V Permit, PGE must follow various notification and approval procedures prior to modification of the plant. PGE must also apply for and receive a new or modified permit(s) prior to operating a modification at the plant. As described above, PGE has made several modifications to the Boardman plant. PGE has performed these modifications without following the required procedures and has been operating the modified plant in violation of Oregon's SIP and PGE's Title V Permit.

First, upon information and belief, PGE has not complied with the "Notice of Construction and Approval of Plans" provisions of Division 210 of Oregon's SIP.[18] Oregon's SIP expressly states that "[n]o person is allowed to make a physical change or change in operation of an existing stationary source that will cause an increase, on an hourly basis at full production, in any regulated pollutant emissions without first notifying the Department in writing." OAR 340-210-0215(2). For modifications such as those made by PGE Boardman, this notice to DEQ must be made in a permit application prior to modifying the facility. OAR 340-210-0230(2). Oregon's SIP further requires that sources must obtain a new or modified standard Air Contaminant Discharge Permit prior to proceeding with a modification at a source (OAR 340-210-0240(1)(d)), and prior to operating the facility with the modification (OAR 340-210-0250(3)). Sources which are currently operating under a Title V permit must also follow the Title V permit revision rules prior to operating the modification at the source. OAR 340-210-0250(3)(c). When construction or modification is completed at a source, the owner or operator must notify DEQ in writing. OAR 340-210-0240(3). Finally, the permitting provisions in Division 216 of Oregon's SIP also make clear that sources must comply with Division 210's notification and approval provisions prior to modifying or operating a source. OAR 340-216-0020.

The projects identified above as "major modifications" triggered these notice and approval requirements, OAR 340-210-0215 through 0250, and OAR 340-216-0020(3), because they were "physical change[s] to, or change[s] in the method of operation of, a stationary source

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[18] EPA approved these versions of the regulations on January 22, 2003, and they became effective on March 24, 2003. 68 Fed. Reg. 2891, 2895 (Jan. 22, 2003). Prior to March 24, 2003, the federally-approved versions of OAR 340-210-0215 and 0225 were codified at OAR 340-028-0800 and 0820, respectively. 62 Fed. Reg. 10,457, 10,461 (Mar. 7, 1997) (approving OAR 340-028-0800 and 0820 as part of Oregon's SIP). These older versions differ in structure from the current versions, but contain the same substantive requirements. OAR 340-210-0230 through 0250 were new in 2003, and had no predecessor versions. This notice cites to the current federally-approved regulations for clarity, but all citations to the current versions encompass prior versions as well.

that result[ed] in an increase in the stationary source's potential to emit any regulated air pollutant on an hourly basis," within the meaning of OAR 340-200-0020(69).[19] Upon information and belief, however, PGE failed to submit proper notice or obtain DEQ approval. PGE's violations of these sections of Divisions 210 and 216 include, but are not limited to, the modification events described above. PGE is in the best position to know when any modifications occurred, and Sierra Club intends to seek this information during discovery.

Second, upon information and belief, PGE has not complied with the modification notice and approval rules incorporated into its 2001 Title V Permit. Condition G18 of PGE's Title V Permit provides that "[n]o permittee shall construct or make modifications required to be reviewed under OAR 340-218-0190, the construction/operation modification rules, without receiving a Notice of Approval in accordance with OAR 340-218-0190." In turn, OAR 340-218-0190(1) specifies that "the owner or operator of a major stationary source must obtain approval from the Department prior to construction or modification of any stationary source or air pollution control equipment in accordance with OAR 340-210-0200 through OAR 340-210-0250." Thus, under Condition G18 of the Title V Permit, PGE must comply with the stationary source notification requirements of Division 210. Additionally, OAR 340-218-0190(2)(d) provides that "[w]here an existing Oregon Title V Operating Permit would prohibit such construction or change in operation, the owner or operator must obtain a permit revision before commencing operation." Condition G19 of PGE's Title V Permit prohibits constructing or making modifications requiring review under the New Source Review provisions of Division 224. Therefore, PGE was required to obtain a Title V permit revision before operation of the modifications discussed above.

Finally, PGE has not complied with the Title V permitting requirements contained in Division 224. "Where an existing Oregon Title V Operating Permit would prohibit construction or change in operation, the owner or operator must obtain a permit revision before commencing construction or operation." OAR 340-224-0030(2)(d). Again, PGE's Title V permit prohibits constructing or making modifications requiring review under OAR 340 Division 224. 2001 Title V Permit Condition G19. Therefore, PGE was required to obtain a Title V permit revision before making major modifications to the plant or operating the plant with the modifications. Upon information and belief, PGE failed to apply for or receive the required revision, and has thus violated and continues to violate OAR 340-224-0030.

IX. Penalties and Injunctive Relief

Pursuant to 42 U.S.C. § 7604(a), Sierra Club plans to seek declaratory and injunctive relief, including corrective action to prevent future violations. Sierra Club also intends to seek penalties for violations occurring at least within the past five years. 28 U.S.C. § 2462. PGE may

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[19] This definition is currently numbered as OAR 340-200-0020(70)(c).

be liable for penalties up to $31,500 per day per violation for violations before March 15, 2004 (67 Fed. Reg. 41343), and up to $ 32,500 per day per violation after March 15, 2004 (69 Fed. Reg. 7121). 42 U.S.C. § 7413(e) (as amended by the Civil Penalties Inflation Adjustment Act, 28 U.S.C. § 2461 n.); 40 C.F.R. §§ 19.2, 19.4.

X. Persons/Attorneys Giving Notice

The full names, addresses, and telephone numbers of the parties providing this notice are:

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XI. Conclusion

As set forth above, Sierra Club has evidence that PGE Boardman has violated and remains in violation of the federal CAA and implementing regulations, the Oregon SIP, and PGE Boardman's Title V Permit. PGE is in the best position to know detailed information about the alleged violations and Sierra Club intends to seek this information through discovery. Sierra Club anticipates filing suit against PGE 60 days from the date of this notice in Oregon Federal District Court, and requesting declaratory and injunctive relief and penalties. During the sixty-day notice period, Sierra Club will be available to discuss effective remedies and actions that might be taken to assure PGE Boardman's compliance in the future. If you wish to discuss any aspect of this notice or to discuss settlement of this matter prior to commencement of suit, please contact undersigned counsel.

Sincerely,

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VIA ELECTRONIC MAIL AND FIRST CLASS MAIL

Table A*

Start Date of Exceedances	Hours in Exceedance	Number of 6-minute Exceedances	Potential Number of 3- minute Exceedances	Maximum Opacity During Exceedance
12/15/02	4	40	80	94%
1/11/03	38	380	760	93%
1/31/03	18	180	360	93%
2/3/03	1	10	20	59%
3/1/03	1	10	20	35%
3/16/03	.2	2	4	27%
6/27/03	39	390	780	91%
8/5/03	1	10	20	34%
9/22/03	1	10	20	81%
9/22/03	1	10	20	28%
12/14/03	4	40	80	93%
12/31/03	22	220	440	93%

Start Date of Exceedances	Hours in Exceedance	Number of 6-minute Exceedances	Potential Number of 3- minute Exceedances	Maximum Opacity During Exceedance
1/16/04	4	40	80	93%
1/28/04	8	80	160	93%
4/30/04	1	10	20	81%
7/23/04	92	920	1840	94%
7/28/04	7	70	140	95%
8/1/04	16	160	320	99%
8/7/04	15	150	300	99%
8/12/04	1	10	20	41%
8/31/04	11	110	220	99%
9/26/04	7	70	140	99%
11/10/04	11	110	220	100%
11/17/04	1	10	20	58%
12/26/04	18	180	360	100%

Start Date of Exceedances	Hours in Exceedance	Number of 6-minute Exceedances	Potential Number of 3- minute Exceedances	Maximum Opacity During Exceedance
3/22/05	1	10	20	29%
3/30/05	14	140	280	100%
4/29/05	1	10	20	
5/27/05	33	330	660	100%
7/18/05	6	60	120	100%
7/21/05	1	10	20	35%
7/22/05	1	10	20	20%
7/23/05	12	120	240	100%
8/21/05	15	150	300	100%
10/23/05	11	110	220	100%
10/27/05	2	20	40	73%
10/31/05	44	440	880	100%
11/16/05	28	280	560	100%

Start Date of Exceedances	Hours in Exceedance	Number of 6-minute Exceedances	Potential Number of 3- minute Exceedances	Maximum Opacity During Exceedance
11/18/05	1	10	20	100%
2/5/06	36	360	720	88%
5/15/06	10	100	200	85%
5/16/06	33	330	660	100%
5/22/06	16	160	320	100%
5/24/06	9	90	180	100%
5/31/06	23	230	460	100%
6/1/06	4	40	80	100%
6/29/06	15	150	300	100%
6/30/06	8	80	160	100%
6/30/06	11	110	220	100%
7/1/06	1	10	20	53%
7/19/06	5	50	100	100%

Start Date of Exceedances	Hours in Exceedance	Number of 6-minute Exceedances	Potential Number of 3- minute Exceedances	Maximum Opacity During Exceedance
7/27/06	1	10	20	35%
9/23/06	1	10	20	71%
9/27/06	13	130	260	100%
10/17/06	1	10	20	33%
10/29/06	20	200	400	100%
10/31/06	16	160	320	100%
11/25/06	1	10	20	99%
11/26/06	14	140	280	100%
1/27/07	16	160	320	100%
2/19/07	14	140	280	100%
4/5/07	15	150	300	100%
5/29/07	10	100	200	100%
7/24/07	4	40	80	100%

Start Date of Exceedances	Hours in Exceedance	Number of 6-minute Exceedances	Potential Number of 3- minute Exceedances	Maximum Opacity During Exceedance
8/4/07	14	140	280	100%
9/9/07	1	10	20	43%
9/10/07	1	10	20	100%
9/12/07	1	10	20	23%
9/23/07	7	70	140	100%
Totals	**813.2**	**8132**	**16264**	

*Data compiled from PGE quarterly NSPS excess emissions reports filed with Oregon Department of Environmental Quality. Number of 6-minute exceedances calculated using DEQ methodology. Potential number of 3-minute exceedances derived from possible number of 3-minute increments during each exceedance. Within each 6-minute period that constitutes a violation of federal NSPS opacity limit, at least one and perhaps two violations of the Oregon SIP provisions incorporated into PGE Boardman's Title V permit occurred.