07-2801

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BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
OF THE STATE OF WYOMING

IN THE MATTER OF: BASIN ELECTRIC POWER COOPERATIVE, DRY FORK STATION, AIR PERMIT CT-4631	)	PROTEST AND PETITION FOR HEARING

Pursuant to the Department of Environmental Quality's General Rules of Practice and Procedure, Chapter 1, Sections 3 and 16, Sierra Club, Powder River Basin Resource Council, and Wyoming Outdoor Council protest the Director's approval of Basin Electric Power Cooperative's Air Permit CT-4631 for the Dry Fork Station and request a hearing before the Environmental Quality Council ("Council"). Because Basin Electric has already begun surveying and constructing the Dry Fork Station, Protestants request an expedited hearing. This protest is timely filed within 60 days of the Director's issuance of the permit pursuant to Section 16(a).

PROTESTANTS

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STATEMENT OF FACTS

I. The Dry Fork Station

1. On October 15, 2007, the Director of the Wyoming Department of Environmental Quality ("WYDEQ") and Administrator of the Air Quality Division approved Basin Electric Power Cooperative's ("Basin Electric") application to construct a coal-fired electric power generating station to be known as the Dry Fork Station by issuing Air Quality Permit CT-4631 ("Permit").

2. The Dry Fork Station will consist of a 385 megawatt (MW) net subcritical pulverized coal (PC) furnace, boiler, turbine, and condenser; a coal unloading, storage, and handling system; air pollution control equipment; a solid waste disposal system; and a water supply, treatment and discharge system. It will be located adjacent to the Dry Fork Mine, approximately 7 miles north of Gillette, Wyoming.

3. According to the Draft Environmental Impact Statement ("DEIS") prepared by the U.S. Department of Agriculture, Rural Utility Service ("RUS"), the Dry Fork Station has the potential to emit 3.7 million tons of carbon dioxide (CO_2), 25.3 tons of methane, and 58.1 tons of nitrous oxide per year. These are all greenhouse gases that contribute to global warming.

4. WYDEQ's Permit authorizes the Dry Fork Station to emit from the PC boiler more than 832 tons of nitrogen oxides (NOx), 1,165 tons of sulfur dioxide (SO_2), 199 tons of particulate matter (PM/PM_{10}), 2,497 tons of carbon monoxide (CO), 320 pounds of mercury (Hg), 41 tons of sulfuric acid mist (H_2SO_4), 11 tons of fluorides (HF), 61 tons of volatile organic compounds ("VOCs"), and 85 tons of ammonia per year.

II. Environmental Impacts from Dry Fork Station.

5. Dry Fork Station will contribute millions of tons of greenhouse gases to the atmosphere each year, contributing to global warming. Reports from the Intergovernmental Panel on Climate Change ("IPCC") and numerous other scientific studies "unequivocally" confirm that global warming is occurring and humans are contributing to global warming in a significant way. Coal-fired power plants are one of the largest sources of CO_2 emissions and therefore one of the primary contributors to global warming. Global warming will have serious environmental, health, economic and ecological impacts including increased drought and flooding, extreme weather events, spread of infectious disease and pests, and species extinctions.

6. Other emissions from the Dry Fork Station will contribute to increased health risk in the Gillette area, especially for the young, elderly, and those with asthma or heart or lung disease. For example, the Dry Fork Station will emit significant amounts of particulate matter ("PM") and precursors to PM. Inhalation of PM_{10} and $PM_{2.5}$ has been linked to aggravated asthma, chronic bronchitis, heart attacks, and premature death in people with heart or lung disease. Coal mining already contributes significant amounts of particulate matter to the Gillette region. PM_{10} standards were exceeded in 2002, 2003, and 2005 at three different monitoring stations. The Dry Fork Station will further increase particulate matter emissions in this region.

7. The power plant will also emit pollutants such as SO_2 and NOx that lead to local air pollution and form acid rain and haze. Dry Fork emissions are expected to adversely impact visibility in Class I areas including the Northern Cheyenne Indian Reservation, Badlands National Park, and Wind Cave National Park.

8. Coal-fired power plants are the largest human-caused source of mercury in the United States. Dry Fork will contribute to mercury contamination on both a local and national

scale. Some of the mercury emitted from the plant will be deposited near the site, while some will join the global ambient mercury pool with long-range deposition impacts. Mercury that is washed or deposited into water can transform into methyl mercury, which is highly toxic and bioaccumulates in fish and other animals that eat fish. Mercury from Dry Fork will be deposited and washed into water bodies in the vicinity of the plant, including the Powder River, which feeds into the Yellowstone River in Montana. The Powder River, one of the last remaining remnants of a relatively undisturbed, large prairie river in the United States, supports a number of native fish but has recently come under much stress from energy development within its watershed. The conservation group American Rivers designated the Powder River as one of the top ten most endangered rivers in the country in 2001 and 2002.

II. Adverse Impacts to Sierra Club, Powder River Basin Resource Council, and Wyoming Outdoor Council.

9. Increased pollution from the Dry Fork Station will adversely affect the interests of Sierra Club, Powder River Basin Resource Council, and Wyoming Outdoor Council and their members.

10. The Sierra Club is the nation's oldest grassroots environmental organization and has more than 750,000 members nationwide, including more than 1,000 in Wyoming. The Sierra Club is dedicated to protecting the earth's ecosystems and resources and educating the public about its mission. The Wyoming Chapter of the Sierra Club works to protect the air, public lands, and wildlife in the state for the citizens of Wyoming. Curbing global warming emissions is one of the Sierra Club's top priorities. The organization champions clean energy alternatives in the face of an unprecedented rush to build new coal-fired power plants throughout the country. As part of these efforts, the Sierra Club has taken the lead in fighting numerous proposed coal-

fired power plants in the U.S. that threaten to degrade air quality and contribute to global warming.

11. Powder River Basin Resource Council ("PRBRC") is a nonprofit organization with approximately 1,000 members, most of whom live in eastern Wyoming. PRBRC is dedicated to the protection of Wyoming's unique environmental resources and agricultural lands and lifestyle. PRBRC works to raise public awareness and to educate Wyoming citizens to understand and speak out for local conservation issues. PRBRC members live, ranch, farm, raise families, and enjoy outdoor activities in Wyoming.

12. The Wyoming Outdoor Council ("WOC") is a nonprofit membership organization with around 1,000 members founded by Wyoming residents in 1967 to advocate for natural resources conservation and environmental protection. WOC works to safeguard the state's national parks and protected areas, world-renowned wildlife and habitat, blue-ribbon fisheries, and air and water quality. To achieve its goals, WOC mobilizes grassroots campaigns, organizes and leads coalitions of conservation groups, advocates for progressive public policies, and pursues administrative and legal remedies to prevent or mitigate environmental harm.

13. With respect to the Dry Fork Station, the Protestants have led efforts to inform the public, elected officials, and WYDEQ about less polluting alternatives to building the proposed power plant. At every opportunity in the environmental review and permitting process, the Protestants have submitted comments and testimony urging responsible officials to deny the application as proposed, advocated clean energy alternatives, and urged reductions in emissions that threaten the public health and contribute to global warming. The Protestants submitted comments on both the draft air permit and the DEIS prepared by RUS. Their staff members and supporters also testified at the public hearing prior to WYDEQ's final approval of the air permit.

14. The Protestants' members will be adversely impacted and irreparably harmed by the Dry Fork Station's emissions. Members of these organizations live, work, ranch, and farm in the Gillette region. These members include the elderly, asthmatics, and other individuals that are especially vulnerable to increased air pollution. Pollution authorized by the challenged air permit will degrade the quality of the air that these members breathe, and will put these individuals at increased risk of illness or even premature death. Other members regularly visit Class I areas that will be impacted by the Dry Fork Station, including the Northern Cheyenne Indian Reservation, Badlands National Park, and Wind Cave National Park. The Dry Fork Station will contribute to decreased visibility in these areas, which harms the members' interests in recreation and sightseeing. Other members fish in water bodies near Gillette and eat the fish. Mercury emissions from the Dry Fork Station will be deposited and washed into these water bodies, where some mercury will transform into methylmercury and bioaccumulate in the tissue of fish. Therefore, members who eat fish in the vicinity of the plant will face an increased risk of exposure to mercury.

15. Furthermore, the Dry Fork Station will contribute to global warming, which has been linked to drought, less snowfall, and earlier annual snowmelt runoff. Protestant members farm and irrigate their land, and drought, less snowfall, and earlier snowmelt runoff adversely affects their agricultural and economic interests.

PREVENTION OF SIGNIFICANT DETERIORATION PERMITTING REQUIREMENTS

16. In 1977, Congress added the Prevention of Significant Deterioration ("PSD") program to the Clean Air Act to maintain air quality in areas that were still unspoiled by air pollution. The program was intended "to protect public health and welfare from any actual or potential adverse effect which . . . may reasonably be anticipate[d] to occur from air pollution or

from exposures to pollutants . . . notwithstanding attainment and maintenance of all national ambient air quality standards." 42 U.S.C. § 7470(1). Accordingly, the PSD program prevents polluters from driving air quality down to the level of the national ambient air quality standards ("NAAQS"), which set the minimum requirements for maintaining air quality under the Act.

17. A "major emitting facility" such as the Dry Fork Station is required to obtain a PSD permit. 42 U.S.C. § 7475. The facility must demonstrate that emissions from the facility will not cause or contribute air pollution in excess of either the NAAQS or allowable PSD increments. Id. § 7475(a)(3). It must also utilize the Best Available Control Technology ("BACT") for each pollutant subject to regulation. Id. § 7475(a)(4).

18. Under the Clean Air Act's framework of cooperative federalism, states may take responsibility for administering the Act if they have an EPA-approved State Implementation Plan ("SIP"). 42 U.S.C. §§ 7401(a)(3) & (4), 7410; 40 C.F.R. § 51.166. State requirements must be at least as stringent as any relevant federal requirements. 42 U.S.C. § 7416.

19. Wyoming has an EPA approved SIP that includes PSD regulations. 40 C.F.R. §§ 52.2620, 52.2630. Under state law, WYDEQ is authorized to promulgate air quality standards and emission control requirements pursuant to Wyo. Stat. § 35-11-202. This includes authority to promulgate PSD regulations. Id. § 35-11-202(b)(iii). The relevant air quality regulations are found at WYDEQ, Air Quality Division, Standards and Regulations ("WAQSR"), Chapter 6—Permitting Requirements. Chapter 6, Section 2 specifies the general permitting provisions; Chapter 6, Section 4 spells out the PSD requirements.

20. Under Wyoming regulations, any new facility that will cause an increase in air contaminants must obtain a construction permit from WYDEQ. 6 WAQSR § 2(a)(i). WYDEQ may not issue a construction permit unless the Administrator finds that the facility will (1) not

prevent attainment or maintenance of any ambient air quality standard for criteria pollutants, (2) not cause significant deterioration of existing ambient air quality in the Region, and (3) will utilize the Best Available Control Technology ("BACT"). Id. § 2(c)(ii), (iii), (v).

21. BACT is defined as

> an emission limitation (including a visible emission standard) based on the maximum degree of reduction of each pollutant subject to regulation under the Standards and Regulations or regulation under the Federal Clean Air Act, which would be emitted from or which results for any proposed major stationary source . . . which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source . . . through application o[f] production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

Id. § 4(a).

ISSUES PRESENTED FOR REVIEW—VIOLATIONS OF THE PSD PERMITTING REQUIREMENTS

22. In permitting the Dry Fork Station, WYDEQ failed to comply with Wyoming's PSD requirements and the Clean Air Act.

I. WYDEQ Failed to Consider Greenhouse Gas Emissions.

23. Although the Dry Fork Station will emit millions of tons of greenhouse gases each year, WYDEQ ignored this important issue during the air permitting process.

24. Under the federal Clean Air Act, no new major emitting facility may be constructed in any area subject to PSD requirements unless "the proposed facility is subject to [BACT] for each pollutant subject to regulation under [the Clean Air Act]." 42 U.S.C. § 7475(a)(4) (emphasis added). This requirement is included in Wyoming's regulations, which define BACT as "an emission limitation . . . based on the maximum degree of reduction of each pollutant subject to regulation under the Standards and Regulations or regulation under the Federal Clean Air Act." 6 WAQSR § 4(a) (emphasis added).

25. WYDEQ cannot approve a permit unless the "proposed major stationary source . . . would meet an emission limit(s) or equipment standard(s) specified by the Administrator to represent the application of [BACT] for each pollutant regulated" under the Regulations or the federal Clean Air Act. Id. § 4(b)(ii). The regulations go on to define "regulated [new source review] pollutant" to include "[a]ny pollutant that otherwise is subject to regulation under the Federal Clean Air Act." Id. § 4(a) (emphasis added). Pollutants "subject to regulation" include those that the Clean Air Act already regulates, and those for which the Act requires regulation, but for which EPA or a State has not yet exercised its regulatory authority. For example, the EPA may regulate air pollutants from sources when the pollutants "may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. §§ 7411(b)(1)(A), 7521(a)(1).

26. As the U.S. Supreme Court has affirmed, CO_2 and other greenhouse gases are "pollutants" that are subject to regulation under the Clean Air Act. Massachusetts v. EPA, 127 S.Ct. 1438 (2007) ("[G]reenhouse gases fit well within the Clean Air Act's capacious definition of 'air pollutant.'"). The definition of pollutant is applicable to all Clean Air Act programs. 42 U.S.C. § 7602.

27. In fact, CO_2 has been subject to regulation under the Clean Air Act's acid rain program for well over a decade. In 1990, Congress directed EPA to "promulgate regulations to require that all affected sources subject to Title [IV][1] of the Clean Air Act shall also monitor carbon dioxide emissions." Pub. L. 101-549, Title IV, § 821, 104 Stat. 2699 (Nov. 15, 1990) (notes for 42 U.S.C. § 7651k). EPA's regulations, finalized on January 11, 1993, require CO_2 emissions monitoring. See, e.g., 40 C.F.R. §§ 75.1, 75.13, 75.57(e).

[1] According to the Reporter's notes, the references to Title V are meant to refer to Title IV, the acid rain program.

28. Because CO_2 and other greenhouse gases are "subject to regulation" under the CAA and Wyoming's PSD regulations, WYDEQ should have required Basin Electric to conduct a BACT analysis and set an emissions limit that reflects the best available control technology for these gases.

29. Furthermore, as part of the BACT analysis, WYDEQ and Basin Electric must "take into account energy, environmental, and economic impacts" of the proposed plant. 6 WAQSR § 4(a). Under this section, even if the Council finds that greenhouse gases are not subject to regulation under the Clean Air Act and Wyoming law, WYDEQ must still consider the collateral environmental impacts of greenhouse gas emissions in setting BACT limits for other pollutants.

30. As part of the BACT analysis, WYDEQ and Basin Electric also failed to consider the collateral costs of future, imminent carbon regulation. Representatives of Basin Electric have conceded that future regulation of CO_2 is likely, but they failed to consider this future cost of operating a PC power plant.

31. Wyo. Stat. § 35-11-213 is inapplicable to PSD permitting of coal-fired power plants. Moreover, even if it were applicable, it is preempted by the Clean Air Act.

32. By failing to consider greenhouse gases, WYDEQ violated its own governing regulations and failed to provide interested parties with a meaningful opportunity to comment on alternatives and control technology requirements.

II. WYDEQ Failed to Consider a Supercritical or Ultra-supercritical Boiler as BACT.

33. The air permit is flawed because WYDEQ failed to require Basin Electric to consider a supercritical or ultra-supercritical furnace, boiler, and steam turbine as BACT.

Instead, WYDEQ allowed Basin Electric to proceed with outdated and inefficient subcritical technology.

34. As part of a BACT analysis, WYDEQ must consider "production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of . . . pollutant[s]." 6 WAQSR § 4(a). Supercritical or ultra-supercritical boiler systems are a "production process" and "available method, system, or technique" for control of pollutants from coal-fired power plants.

35. Supercritical or ultra-supercritical boiler systems are more efficient than subcritical boilers, using less coal to produce the same amount of energy, thereby reducing emissions of greenhouse gases as well as criteria pollutants. Supercritical boiler systems are readily available and are standard equipment for many existing and proposed coal plants throughout the West. Accordingly, a supercritical or ultra-supercritical boiler system is BACT for the proposed facility.

36. WYDEQ did not require Basin Electric to include supercritical or ultra-supercritical boiler systems in its BACT evaluation, and Basin Electric never conducted this analysis. This failure violates Wyoming's PSD regulations.

III. WYDEQ Failed to Consider IGCC as BACT.

37. WYDEQ's analysis is flawed because it failed to require Basin Electric to consider Integrated Gasification Combined Cycle ("IGCC") as BACT.

38. As part of a BACT analysis, WYDEQ must consider "production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of . . . pollutant[s]." 6 WAQSR § 4(a). IGCC is a

"production process" and "available method, system, or technique" for control of pollutants from coal-fired power plants.

39. IGCC is an inherently cleaner process than pulverized coal technology for the generation of electricity from coal. IGCC results in lower emissions of criteria pollutants, mercury and other hazardous pollutants, and greenhouse gases. Additionally, IGCC uses less water and produces less waste. It is also the only coal-fueled electricity generation technology for which capture of CO_2 emissions for potential sequestration is currently available at a commercial scale.

40. IGCC is a proven and commercially available technology. There are currently at least 15 IGCC plants in operation worldwide, including at least 8 IGCC plants using solid fuel feedstock, such as coal. There are also numerous IGCC plants in the pre-construction evaluation and permitting stage in the United States.

41. Accordingly, WYDEQ violated its own regulations by failing to require consideration of IGCC in the BACT analysis for the Dry Fork Station. Although WYDEQ did not require it, Basin Electric conducted an "Equivalent BACT Analysis." This analysis is outdated, inadequate, and rests on flawed assumptions. Furthermore, WYDEQ did not consider it in the agency's analysis.

IV. WYDEQ's BACT limits for NOx and SO_2 are flawed.

42. For each pollutant subject to regulation, WYDEQ must adopt "an emission limitation . . . based on the maximum degree of reduction . . . achievable for [the] source." 6 WAQSR § 4(a).

43. The approved NOx and SO_2 BACT limits do not represent the maximum degree of reduction that can be achieved while generating electricity from coal.

44. Section 302(k) of the Clean Air Act defines the term "emissions limitation" as a limitation on emissions of air pollutants "on a continuous basis." 42 U.S.C. § 7602. Accordingly, BACT must continuously limit emissions of air pollutants. The proposed BACT limits for NOx of 0.05 lb/MMBtu (12 month rolling) and for SO_2 of 0.070 lb/MMBtu (12 month rolling) do not meet this standard.

45. Although WYDEQ added 30-day rolling limits for NOx and SO_2 in the permit (as well as a 3-hour rolling limit for SO_2) in response to adverse comments by the Environmental Protection Agency and others, these lb/hr limits are not BACT. BACT requires that the boiler be controlled to the maximum extent at all times. In other words, efficiency for control equipment, such as low NOx burners and SCR or scrubbers, must be maintained at the highest levels at all times. Simply having a mass-based limit (such as the lb/hour limits) in the permit does not ensure that the controls will be operating at their maximum level at all times. WYDEQ must replace the mass-based limits either by control efficiency values or by lb/MMBtu values on a short term basis.

46. Additionally, wet scrubber technology can achieve greater control efficiency for SO_2 emissions than the circulating dry scrubber WYDEQ approved for Dry Fork. WYDEQ must consider wet scrubber technology as BACT.

47. Control of SO_2 emissions is particularly important in light of the potential for Dry Fork Station to increase haze in Class I areas, including the Northern Cheyenne Indian Reservation, Badlands National Park, and Wind Cave National Park.

V. WYDEQ's Mercury BACT limit is flawed.

48. Mercury is an extremely hazardous neurotoxin that is dangerous to humans at very low levels. It can also transform into methylmercury, which is harmful to wildlife and bioaccumualtes in the food chain.

49. Wyoming's EPA-approved SIP requires BACT analysis for mercury, and WYDEQ included a BACT limit for mercury in the final air permit. However, this limit does not reflect the "maximum degree of reduction achievable" for a coal-fired power plant as required under Wyoming's PSD regulations. 6 WAQSR § 4(a).

50. WYDEQ has failed to set an enforceable and immediate BACT limit for mercury. Instead, WYDEQ relies on the fact that mercury emissions are limited by federal New Source Performance Standards to 0.000090 pounds per megawatt-hour. This standard does not impose any limitation on emissions from Dry Fork, and is not representative of BACT.

51. Rather than requiring emissions limitations from the commencement of emissions from the plant, WYDEQ is requiring Basin Electric to implement a one-year study with an unenforceable target emission of 0.000020 pounds per megawatt-hour.

52. WYDEQ offers no justification for this deviation from its "top-down" approach to BACT analysis. WYDEQ must follow this approach and set a continuous, enforceable limit for mercury that represents the maximum degree of mercury reduction that is achievable considering energy, economics, and environmental issues before the permit is issued.

53. For example, sorbent injection is an available and effective control measure for reducing mercury emissions. At a minimum, WYDEQ must require Basin Electric to consider sorbent injection. The permit should also include a percentage of removal requirement.

VI. WYDEQ's PM_{10} BACT Limits are Flawed.

54. "Particulate matter" (PM) includes both solid particles and liquid droplets found in air. These particles come in a wide range of sizes; those less than 10 micrometers in diameter are referred to as PM_{10}. These particles pose a serious health concern because people can inhale them, and they can accumulate in the respiratory system. Exposure to PM_{10} can lead to cardiopulmonary diseases, increased respiratory symptoms, and premature death.

55. PM_{10} is one of seven "criteria" pollutants subject to NAAQS under the Clean Air Act. Accordingly, WYDEQ must require BACT for PM_{10}. 6 WAQSR §§ 2(c)(v), 4(b)(ii).

56. Dry Fork Station particulate emissions will include both "filterable" and "condensable" PM in various size fractions, including PM_{10}. Filterable PM_{10} includes particles that can be captured on a filter, while condensable PM_{10} forms only when the exhaust air has cooled sufficiently.

57. Since condensable PM_{10} is part of the Dry Fork Station's PM emissions, WYDEQ must include a limit on condensable PM_{10} and/or total PM_{10}. By failing to do so, WYDEQ has underestimated the PM_{10} impact.

58. WYDEQ's analysis is also flawed because it failed to require a continuous emissions monitoring system ("CEMS") for PM. CEMS are the preferred method for ensuring compliance with PM emission limits, and are the only proven method to continuously monitor PM emissions. See, e.g., 40 CFR §§ 60.42 et seq. The final permit must require continuous monitoring where feasible. See EPA, New Source Review Workshop Manual: Prevention of Significant Deterioration and Nonattainment Area Permitting (Oct. 1990), at H.10, I.3, and App. C, c.4 – c.5. Indeed, EPA recommended PM CEMS in its comments on the Permit.

59. These systems are demonstrated and commercially available. They have been widely used in the United States for many years. EPA has promulgated a final performance specification for PM CEMS, and several recent PSD permits have required PM CEMS.

60. In addition, Basin Electric must demonstrate that "the technological system of continuous emission reduction ... to be used will enable [their proposed plant] to comply with [new source performance standards]." 42 U.S.C. § 7410(j). In light of the deficiencies in the monitoring and enforcement conditions identified above, the Permit violates section 110(j), as it lacks an adequate demonstration that the pollution control systems proposed will enable the new source to meet permit limits on a continuous basis.

VII. WYDEQ Failed to Regulate $PM_{2.5}$ Emissions.

61. $PM_{2.5}$ is comprised of tiny solids or liquid droplets less than 2.5 micrometers in diameter that can lodge deep into the lungs and cause serious health problems. It is one of the seven "criteria" pollutants.

62. Over the past ten years, nearly 1,000 peer-reviewed studies have documented the causal link between short-term inhalation of $PM_{2.5}$ and premature death, heart attacks, and respiratory diseases, including lung cancer and asthma. This extensive body of medical research convinced EPA to adopt more stringent regulations limiting $PM_{2.5}$ emissions. On October 17, 2006, EPA finalized a new NAAQS for $PM_{2.5}$, revising the former 24-hour standard of 65 micrograms per cubic meter to 35 micrograms per cubic meter. 71 Fed. Reg. 61,144 (Oct. 17, 2006).

63. Before issuing a PSD permit, WYDEQ must ensure compliance with the NAAQS. 6 WAQSR § 2(c)(ii). WYDEQ must also evaluate BACT for all NAAQS pollutants. Id. §§ 2(c)(v), 4(b)(ii).

64. WYDEQ violated these requirements by not including $PM_{2.5}$ in its BACT analysis, failing to set an emissions limit for $PM_{2.5}$, and failing to ensure the plant will not violate the $PM_{2.5}$ NAAQS. No provision in the Clean Air Act or the Wyoming Air Regulations provides any justification for exempting $PM_{2.5}$ from the requirements of the PSD program. On the contrary, given scientific consensus regarding the very grave risks posed by $PM_{2.5}$, strict compliance is essential to safeguard the public health.

65. PM_{10} is not an adequate surrogate for $PM_{2.5}$. For example, using PM_{10} as a surrogate does not account for secondary emissions that produce approximately half of $PM_{2.5}$ concentrations. Fine particles emitted directly into the air are considered "primary" $PM_{2.5}$ whereas particles formed by chemical reactions of gases in the atmosphere are considered "secondary" $PM_{2.5}$. WYDEQ has ignored secondary $PM_{2.5}$. In doing so, WYDEQ underestimates $PM_{2.5}$ concentrations by as much as 50%.

66. These failures violate Wyoming's PSD Regulations.

VIII. WYDEQ's SO_2 Increment Analysis is Flawed.

67. Wyoming law authorizes the issuance of a PSD permit only if the source will not cause or contribute to an exceedance of the applicable SO_2 increment or otherwise interfere with the measures of the SIP designed to prevent significant deterioration of air quality.

68. WYDEQ erred by determining that the project will not cause or contribute to an exceedance of the applicable SO_2 increment or otherwise interfere with the measures of the SIP designed to prevent significant deterioration of air quality, including omitting certain major sources of cumulative SO_2 emissions from its analysis and relying on revised modeling supplied by the applicant.

69. WYDEQ also erred in determining that the project will not cause or contribute to an exceedance of the applicable SO_2 increment or otherwise interfere with the measures of the SIP designed to prevent significant deterioration of air quality by relying on unpromulgated "Significant Impact Levels" to define the contribution of the project to deterioration of air quality.

RESERVATION OF RIGHTS

70. Protestants reserve the right to raise any issue set forth in their comments to WYDEQ on the Permit in this Protest and Petition for Hearing.

71. Protestants reserve the right to amend this Protest and Petition for Hearing to clarify, amend, or supplement the existing objections to the Permit or to add new objections.

72. Protestants reserve the right to later file a legal memorandum of points and authorities in support of their Protest and Petition for Hearing.

REQUEST FOR HEARING

73. Pursuant to WYDEQ's General Rules of Practice and Procedure, Chapter 1, §§ 3 and 4, Protestants request that the Council hold a hearing in this matter in accordance with WYDEQ's Rules of Practice and Procedure Applicable to Hearings in Contested Cases, Chapter 2. Because Basin Electric has announced that it has commenced surveying and constructing the Dry Fork Station, Protestants request an expedited hearing.

REQUESTED RELIEF

Based on the foregoing legal violations, the Protestants request that the Environmental Quality Council:

1. Immediately stay WYDEQ's approval of the Permit for the Dry Fork Station pending the Council's final disposition of this matter;

2. Vacate and remand the Permit for the Dry Fork Station to WYDEQ pending compliance with all applicable laws and regulations; and

3. Provide any and all other relief the Council determines appropriate.

Respectfully submitted October 31, 2007,

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CERTIFICATE OF SERVICE

I hereby certify that I served a copy of the foregoing Protest and Petition for Hearing via Federal Express on October 31, 2007 and via first class mail, return receipt requested, on November 1, 2007, upon the following:

Certified Mail/Return Receipt Request:
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Certified Mail/Return Receipt Request:
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Mr. Jerry Menge
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I also certify that I served a copy of the foregoing Protest and Petition for Hearing via first class certified mail, return receipt requested, on November 1, 2007, on the following parties who submitted public comments or participated in the hearing:

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7005 1160 0004 1390 0456
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7005 1160 0004 1390 0463
Jane Eakin
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Certified Mail/Return Receipt Request:
7005 1160 0004 1390 0470
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Certified Mail/Return Receipt Request:
7005 1160 0004 1390 0487
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7005 1160 0004 1390 0494
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7005 1160 0004 1390 0500
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7005 1160 0004 1390 0517
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7005 1160 0004 1390 0586
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Gillette, WY 82716

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Robin Cooley