

February 8, 2006

Stephen L. Johnson, Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue , N.W.
Mail Code 1101A
Washington, D.C. 20460

RE: December 13, 2005 Memorandum “Best Available Control Technology Requirements for Proposed Coal-Fired Power Plant Projects,” signed by Stephen D. Page, Director, EPA Office of Air Quality Planning and Standards.

Administrator Johnson:

American Lung Association of Metropolitan Chicago, Clean Air Task Force, Montana Environmental Information Center, Natural Resources Defense Council, Ohio Environmental Council, Sierra Club, and Valley Watch, Inc. write you to strenuously object to your Agency’s publication of a significant new statement of the law governing the permitting of new coal-fired power plants, entitled “Best Available Control Technology Requirements for Proposed Coal-Fired Power Plant Projects,” signed by Stephen D. Page, Director of EPA’s Office of Air Quality Planning and Standards (OAQPS) on December 13, 2005 (the Page memo) (attached hereto as Appendix 1).

The Page memo was issued in response to an inquiry from an industry consultant, and was developed through an entirely internal Agency process, without the benefit of public deliberation as required by the Clean Air Act (CAA). As such, it is contrary to law and represents unreasoned decisionmaking by EPA. Additionally, in part as a result of this closed process and incomplete review, the substance of the Page memo is directly in conflict with the CAA’s clear language and legislative history, and with legal precedent adopted by EPA, either in prior Agency rulemakings, or through adjudicatory decisions issued by the Environmental Appeals Board (EAB) and in the federal courts.

EPA's unlawful statements in the Page memo also directly undermine the authority of states with primary responsibility for new source permitting, and that have required consideration of IGCC and other low-emitting technologies or strategies in BACT determinations. EPA's failure to subject its new pronouncements to notice and comment rulemaking means that those states, including Georgia, Illinois, Kentucky, Montana, New Mexico, West Virginia, and Wisconsin have had no opportunity to bring their unique perspective as the permitting authorities to bear on the substantive, legal, and policy questions addressed by the Page memo.

It is a serious legal and policy mistake for the Agency to promulgate important new rules based on closed, internal deliberations, without the benefit of full public disclosure and comprehensive substantive and legal analysis. We call on you to intervene and withdraw the Page memo immediately.

Background.

The Page memo was issued in response to a February, 2005 letter from Mr. Paul Plath, of E3 Consulting, LLC to Mr. Page, containing a specific inquiry as to "whether an analysis of Best Available Control Technology (BACT) for a proposed coal-fired plant (Anywhere, USA) must include evaluation of coal-fueled processes which are considered inherently lower-emitting processes such as . . . IGCC." Letter from Mr. Paul Plath, Senior Partner, E3 Consulting, LLC, to Mr. Steve Page and Mr. Dan Deroeck, U.S. EPA, "Analysis of Best Available Control Technology for a Non-Specific Coal-Fired Power Project," February 28, 2005 at 1 (attached hereto as Appendix 2).

In response, Mr. Page states:

EPA's view is that . . . Congress distinguished 'production processes and available methods, systems and techniques' that are potentially applicable to a particular type of facility and should be considered in the analysis of BACT from 'alternatives' to the proposed source that would wholly replace the proposed facility with a different type of facility. . . . Therefore, where an applicant proposes to construct a [pulverized coal-fired] unit, we believe the IGCC process would redefine the basic design of the source being proposed.

[A]ccordingly, . . . we would not require an applicant to consider IGCC in a BACT analysis for [such a] unit. . . . [and] we would not include IGCC in the list of potentially applicable control options that is compiled in the first step of a top-down BACT analysis. Instead, we believe that . . . IGCC . . . is an alternative . . . and therefore it is most appropriately considered under Section 165(a)(2) of the CAA rather than section 165(a)(4).

On this last point, the Page memo asserts EPA's position that:

[t]here are two different parts of the PSD permitting process where consideration of alternative designs or production processes may occur. One part is under Section 165(a)(2) where it is required that the permitting authority allow an 'opportunity for interested persons . . . to appear and submit written or oral presentation on the air quality impact of such source, alternatives thereto, control technology requirements, and other appropriate considerations' (emphasis added). The other part is section 165(a)(4), which requires that a proposed facility subject to PSD apply BACT.

Page memo at 1-2 (emphasis added in original). Additionally, although the initial request did not seek such information, EPA offers up in the last paragraphs of the Page memo a new view of the requirements for evaluating and determining lowest achievable emissions rates (LAER) for new coal-fired power plants in nonattainment areas, asserting

Because we believe IGCC results in a redefinition of the source in this situation, it should not be considered in a LAER analysis for an SCPC unit.

Id. at 3. The Page memo again distinguishes, in the nonattainment permitting context, between the LAER determination itself and a separate "alternatives analysis" for the proposal, to be undertaken apart from the LAER determination. Id. The Page memo was signed on December 13, 2005, and forwarded to EPA Regional Offices on that same date. See, e.g., "EPA's Position on IGCC," electronic mail from Richard Long, Director, U.S. EPA Region 8 Air and Radiation Program to Don Vidrine, Bureau Chief, Air Resources Management Bureau, Montana Department of Environmental Quality, and to other state permitting authorities in Region 8 states (December 13, 2005)(covering and forwarding an

email from Scott Mathias, Associate Director, Information Transfer and Program Integration Division, U.S. EPA Office of Air Quality Planning and Standards, also dated December 13, 2005, and attaching the Page memo, the February 2005 E3 Plath request letter, and an EPA document entitled “igcc bact q&a.doc”) (attached hereto as Appendix 3) At some later point, the Page memo was made available to the general public, by a posting on the EPA website at <http://www.epa.gov/Region7/programs/artd/air/nsrmemos/igccbact.pdf>.

At no point prior to its signing and posting on the web, however, was the Page memo published in the Federal Register, or otherwise made available for comment, either to the states, which have authority to interpret and apply the permit requirements of the Act, see 42 U.S.C. §§7471, 7502(c)(5), 7410(a)(1),(a)(2),(j), or to the general public. The Page memo’s author is a high ranking EPA official, who is authorized to speak on behalf of the Agency, and the memo has been disseminated to the states and published on the EPA website as a statement of Agency policy and law. However, the memo’s significant legal shortcomings make it seem as though it is little more than the product of a limited and strictly internal evaluation. Indeed, insofar as its content directly contradicts the published legal opinions of the attorney in EPA’s Office of General Counsel with responsibility for new source review matters, it would seem that the Page memo was developed against the advice and opinions offered by EPA counsel. See, e.g., Gregory B. Foote, Considering Alternatives: The Case For Limiting CO2 Emissions From New Power Plants Through New Source Review, 34 ELR 10642, 10646-10648, 10651-10654, 10657-10660 (July 2004)(describing the BACT requirement and EPA policy on redefining the source, and explaining that in a permit application for a new electric generating unit, consideration of IGCC technology in a BACT or LAER determination must be undertaken because IGCC does not ‘redefine the source’)(attached hereto as Appendix 4). It is unlawful for the Agency to make such pronouncements of law as are contained in the Page memo without first undertaking a comprehensive public review and comment process – it is both contrary to the explicit statutory requirements contained in the CAA, and it reflects fundamentally unreasonable Agency decisionmaking.

As set forth more fully below, EPA is simply wrong on each point contained in the Page memo. The Agency is wrong to assert that a permit applicant need not include analyses of cleaner processes such as IGCC and CFB technology in a BACT or LAER determination. The Agency's position on that point directly conflicts with the plain language of the Clean Air Act, its legislative history, and EAB and federal court precedent, as well as with the positions taken by several state permitting authorities. EPA is similarly incorrect in asserting that Congress intended to establish a separate "alternatives analysis" in which IGCC or other low-emitting alternatives would be considered, but not made the basis of a BACT or LAER determination. The Agency's sole basis for its position is its reliance on a misreading of its own "redefining the source" policy. EPA's position completely ignores prior Agency rulemakings in which IGCC technologies were determined to be included within the general category of electric generating facilities, and ignores or miscomprehends EAB holdings underlying the "redefining the source" policy and interpreting it.

The Plain Text of the Clean Air Act Requires Consideration of IGCC as Part of a BACT Determination for a New Coal-Fired Power Plant.

The Clean Air Act requires that a permit issued to a power plant or other new facility in an attainment area must include an emission limit that constitutes BACT for each regulated attainment pollutant. 42 U.S.C. §§ 7471, 7475(a)(2), 7479(3), 40 C.F.R. §§ 51.166(j) and (q) and 52.21(j).

The term "best available control technology" means an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation... emitted or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through the application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each pollutant.

42 U.S.C. § 7479(3) (emphasis added); *see also* 40 C.F.R. § 52.21(b)(12).

EPA's position, in the Page memo, that BACT determinations should not include consideration of IGCC ignores the statute's requirement that BACT be based on

“methods, systems, and techniques . . . for control of each pollutant,” including “fuel cleaning,” “innovative fuel combustion techniques” and other “production processes.” EPA’s position therefore is in direct conflict with the plain text of the Act because IGCC is an inherently cleaner “production process” for the generation of electricity from coal that prevents the emissions of regulated pollutants into the atmosphere by removing contaminants such as sulfur and mercury from the hydrocarbons in the coal before the hydrocarbons are burned. See 42 U.S.C. § 7479(3).

The IGCC process involves the gasification and processing of the coal feedstock to remove impurities including various acids and particulate matter. The gas that is produced is then burned in a combined cycle combustion turbine, and electricity is generated in much the same way as it is in a natural gas combined cycle generating system. See Foote, 34 ELR at 10659-60 & nn. 150-153. IGCC is “the lowest emitting among all coal production processes as to NAAQS pollutants . . . [and when fitted with appropriate available controls] also provides vastly superior performance and dramatically lower cost in removing mercury and other toxic metals as compared to pulverized coal boilers.” Id. at 10660. The U.S. Department of Energy (DOE) has declared, as long as 4 years ago, that an IGCC power plant can “provide a stable, affordable, high-efficiency energy supply with minimal environmental impact. . . . Coal gasification is a well-proven technology that has had many applications . . . most recently to large-scale power generation. . . . [IGCC power plants are] capable of exceeding the most stringent emissions regulations currently applicable to coal-fired power plants.” Jay Ratafia-Brown, et al., Major Environmental Aspects of Gasification-Based Power Generation Technologies, Final Report ES-5 (DOE/NETL Contract Number DE-AT26-99FT20101 (December 2002)(Attached hereto as Appendix 5), at 1-1.

IGCC is available, now, as a process for generating electricity from coal. Several IGCC power plant facilities are in operation today in the United States, with over a decade of operating experience. Additionally, there are other large international IGCC power production facilities as well, several of which are at least ten years old. Id. at Appendix I-B “Description of Commercial-Scale IGCC Power Plants,” see also Foote, 34 ELR at 10660 (noting that as of the article’s 2004 publication date, “worldwide

electrical output of IGCC total[ed] about 5,800 megawatts (MW), with approximately 5,000 MW of additional capacity in the planning stage.”).

IGCC power plants continue to be proposed for commercial development in the United States. Most recently, a commercial-scale IGCC plant has been proposed in Henderson County, Kentucky, to be known as the Cash Creek Generating Station. The ERORA Group, L.L.C., Prevention of Significant Deterioration, Title V Operating Permit & Phase II Acid Rain Joint Application for Cash Creek Generating Station, Henderson County KY, Volume 1 of 2, (July 2005) (attached hereto as Appendix 6). The Cash Creek PSD application includes a complete comparison of the IGCC proposal with conventional pulverized coal facilities and with CFB, as part of its BACT determination, and concludes that IGCC is BACT for this site after a top-down BACT analysis. The state of Wisconsin Department of Natural Resources also has approved a permit for an IGCC power plant in January 2004. Wisconsin Department of Natural Resources Permit No. 03-RV-166, Elm Road Generating Station North Site With Accommodations (January 14, 2004) (Attached hereto as Appendix 7). The permit establishes that IGCC emissions are lower than a supercritical pulverized coal plant at the same site using the same fuel.

Although the IGCC process is currently being refined and improved, it is well established that IGCC is already “available” for commercial power production applications and at competitive costs, and within the meaning of 42 U.S.C. §7479(3). See Foote, 34 ELR at 10647 & n.54, 10659-60; see also Edward Lowe, General Manager, Gasification, GE Energy, GE’s Gasification Developments, presented at Gasification Technologies 2005 Conference, San Francisco, CA, (October 10, 2005) (Attached hereto as Appendix 8)(describing the GE IGCC system and noting that IGCC is on parity with new pulverized coal plants with respect to cost); Ron Herbanek, Mechanical Engineering Director, E-Gas and Thomas A. Lynch, Project Development Manager, ConocoPhillips, E-Gas Applications for sub-Bituminous Coal, presented at Gasification Technologies 2005 Conference, San Francisco, CA, (October, 11 2005) (Attached hereto as Appendix 9)(presenting a new design for use with subbituminous coal, in progress, and noting the very low air emissions associated with it). The power industry research organization, EPRI, confirms that IGCC plants using bituminous coals

produce electricity at costs comparable to conventional coal-fired technology. See George Boras and Neville Holt, EPRI, Pulverized Coal and IGCC Plant Cost and Performance Estimates, presented at the Gasification Technologies 2004 Conference Washington DC (October 3-6, 2004) (attached hereto as Appendix 10) (noting the comparability of the cost of electricity produced by new IGCC and new pulverized coal systems). In 2005, the State of Illinois funded a feasibility study for a proposed 500 MW IGCC plant, which included a comparison with a 500 MW pulverized coal-fired facility. The study concluded that the IGCC plant is both economic and far lower emitting as compared with the pulverized coal fired unit. The ERORA Group, Taylorville Energy Center IGCC Feasibility Analysis, report prepared pursuant to agreement no. SIUC 04-15 with Southern Illinois University (January 2005) (attached hereto as Appendix 11).

IGCC Must Be Considered in the BACT Determination Because it is a “Method, System, or Technique for Control of Air Pollutants.”

In addition, EPA has publicly recognized IGCC as an ‘inherently low-polluting process/practice’ for generating electricity, in presentations given by EPA representatives both before and after December 13, 2005. See, e.g., Robert J. Wayland, U.S. EPA Office of Air and Radiation, OAQPS, “U.S. EPA’s Clean Air Gasification Activities”, Presentation to the Gasification Technologies Council Winter Meeting, January 26, 2006, (attached hereto as Appendix 12), slide 4; and “U.S. EPA’s Clean Air Gasification Initiative”, Presentation at the Platts IGCC Symposium, June 2, 2005, (attached hereto as Appendix 13), slide 11 (citing the “inherently lower emissions of nitrogen oxides, sulfur dioxides, and mercury,” as among the “fundamental advantages” of IGCC). Mr. Wayland also correctly notes that IGCC units use less water, and produce fewer global warming pollutants than conventional pulverized coal units, another point relevant to the statutory directive to “take into account environmental . . . impacts” in determining BACT limits. Wayland January 26, 2006 Presentation, Slide 4; 42 U.S.C. § 7479(3).

The EAB has stated that in the BACT context the term “control option may be an ‘add-on’ pollution control technology that removes pollutants from a facility’s emission stream, or an ‘inherently low-polluting process/practice’ that prevents emissions from being generated in the first instance.” In re Knauf Fiber Glass, GmbH, 8 E.A.B. 121 at

129 (EAB, 1999); see also NSR Manual at B.10. Insofar as IGCC is an inherently low-polluting process for generating electricity from coal, and EPA's own statements agree that it is, it is contrary to established EAB precedent, and to the plain text of the Act for the Agency to assert in the Page memo that it should not be considered in a BACT determination for a new coal-fired power plant.

IGCC Must be Considered in the BACT Determination Because it is "Fuel Cleaning".

The definition of BACT explicitly requires considering the application of "fuel cleaning ... for control of each pollutant." 42 U.S.C. § 7479(3). The EAB has held that "[i]n deciding what constitutes BACT, the Agency must consider both the cleanliness of the fuel and the use of add-on pollution controls." In re Inter-Power of New York, 5 E.A.D. 130, 134 (EAB, 1994) (internal citation omitted). In addition, the EAB's Hawaiian Sugar decision states that "the definition of BACT includes consideration of both clean fuels and use of air pollution control devices." In re Hawaiian Commercial & Sugar Co., PSD Appeal No. 92-1 at 5 n.7 (EAB, July 20, 1992).

EPA has within the last year reaffirmed its view that IGCC is an available method for cleaning and treating coal to remove air pollutants prior to combustion:

One approach to controlling SO₂ emissions from steam generating units is to limit the maximum sulfur content in the fuel. This can be accomplished by burning... a fuel that has been pre-treated to remove sulfur from the fuel... There are two ways to pre-treat coal before combustion to lower sulfur emissions: Physical coal cleaning and gasification... Coal gasification breaks coal apart into its chemical constituents (typically a mixture of carbon monoxide, hydrogen, and other gaseous compounds) prior to combustion. The product gas is then cleaned of contaminants prior to combustion. Gasification reduces SO₂ emissions by over 99 percent.

U.S. EPA, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, 70 Fed. Reg. 9706, 9710-11 (February 28, 2005). As a result of fuel cleaning, IGCC units "will inherently have only trace SO₂ emissions because over 99 percent of the sulfur associated with the coal is removed by the coal gasification process." Id. at 9715.

EPA's own pronouncements asserting that IGCC is a method for cleaning coal before combusting it to generate electricity demonstrate that the Page memo's pronouncements are contrary to the statutory requirement that fuel cleaning be analyzed in determining BACT.

IGCC Must be Considered in the BACT Determination Because it is Both an "Innovative Fuel Combustion Technique", and a "Production Process" for Generating Electricity from Coal, as Congress Explicitly Recognized When Enacting the BACT Definition.

The Clean Air Act also defines BACT the maximum achievable emissions limit based on the application of "production processes" and "innovative fuel combustion techniques." 42 U.S.C. § 7479(3). EPA recognizes these characteristics of IGCC, see Wayland, January 26, 2006 Presentation, slide 4, and EPA's counsel has asserted his view that "applications for permission to construct new or expanded coal-fired facilities using conventional pulverized coal boilers should also carefully consider inherently less-polluting production processes. . . . these choices include [CFB] boilers. Another option with even lower inherent emissions is the IGCC. The CAA legislative history is clear that BACT was intended to encompass both CFB and IGCC" Foote, 34 ELR at 10659.

Indeed, Congress straightforwardly recognized IGCC as a 'production process and available method[], system[] and technique,' when enacting the BACT definition in 1977. The congressional history of the BACT definition includes the following discussion:

Mr. HUDDLESTON. Mr. President, I send to the desk an unprinted amendment.

The PRESIDING OFFICER. The amendment will be stated.

The legislative clerk read as follows:

The Senator from Kentucky (Mr. HUDDLESTON) proposes an unprinted amendment numbered 387: On page 18, line 15, after "ment" insert "or innovative fuel combustion techniques."

Mr. HUDDLESTON. Mr. President, the proposed provisions for application of best available control technology to all new major emission sources, although having the admirable intent of achieving consistently clean air through the required use of best controls, if not properly interpreted may deter the use of some of the most effective controls.

The definition in the committee bill of best available control technology indicates a consideration for various control strategies by including the phrase “through application of production process and available methods, systems, and techniques, including fuel cleaning or treatment.” And I believe it is likely that the concept of BACT is intended to include such technologies as low Btu gasification and fluidized bed combustion. But, this intention is not explicitly spelled out, and I am concerned that without clarification, the possibility of misinterpretation would remain.

It is the purpose of this amendment to leave no doubt that in determining best available control technology, all actions taken by the fuel user are to be taken into account- be they the purchasing or production of fuels which may have been cleaned or up-graded through chemical treatment, gasification, or liquefaction; use of combustion systems such as fluidized bed combustion which specifically reduce emissions and/or the post-combustion treatment of emissions with cleanup equipment like stack scrubbers.

The purpose, as I say, is just to be more explicit, to make sure there is no chance of misinterpretation.

Mr. President, I believe again that this amendment has been checked by the managers of the bill and that they are inclined to support it.

Mr. MUSKIE. Mr. President, I have also discussed this amendment with the distinguished Senator from Kentucky. I think it has been worked out in a form I can accept. I am happy to do so. I am willing to yield back the remainder of my time.

123 Cong. Rec. S9434-35 (June 10, 1977) (debate on P.L. 95-95) (emphasis added).

Congress could not have been clearer. Congress intended BACT to be determined based on consideration of IGCC and CFB (fluidized bed combustion). EPA’s

pronouncements to the contrary in the Page memo are blatantly in conflict with congressional intent.

Moreover, this legislative history makes plain that the statute does not authorize EPA to create a new, and essentially meaningless “alternatives analysis” to which any process, technique or alternative approach to pollution control can be shunted, separate and apart from the BACT determination. Congress intended that “in determining [BACT], all actions by the fuel user are to be taken into account . . . [including] gasification, or liquefaction; use of combustion systems such as [CFB] which specifically reduce emissions.” *Id.* There is no ambiguity in this statement. And, indeed, the EPA and the EAB have consistently interpreted the CAA and the agency’s regulations as requiring the permit applicant either to implement the most effective available means for minimizing air pollution, as BACT, or justify its selection of less effective means on grounds consistent with the terms and purposes of the Act. As stated in long-standing EPA guidance, “[r]egardless of the specific methodology used for determining BACT, be it ‘top-down,’ ‘bottom-up,’ or otherwise, the same core criteria apply to any BACT analysis: the applicant must consider all available alternatives, and [either select the most stringent of them or] demonstrate why the most stringent should not be adopted.” Memorandum from John Calcagni, Director of EPA Air Quality Management Division, to EPA Regional Air Directors (June 13, 1989), at 4 (emphasis added). Accordingly, as part of the BACT determination itself, the PSD permit applicant must both identify all available technologies, including the most stringent, and also provide adequate justification for dismissing any available technologies. There is no separate alternatives analysis apart from the BACT determination.

EAB decisions adjudicating PSD permit appeals also examine the core requirements for the BACT determination process. “Under the top-down methodology, applicants must apply the best available control technology unless they can demonstrate that the technology is technically or economically infeasible. The top-down approach places the burden of proof on the applicant to justify why the proposed source is unable to apply the best technology available.” In re: Spokane Regional Waste-to-Energy Applicant, PSD Appeal No. 88-12 (EPA June 9, 1989), at 9 (internal quotation marks omitted) (emphasis in original); see also In re: Inter-Power of New York, Inc. PSD

Appeal Nos. 92-8 and 92-9 (EAB March 16, 1994) (“Under the ‘top-down’ approach, permit applicants must apply the most stringent control alternative, unless the applicant can demonstrate that the alternative is not technically or economically achievable.”); In the Matter of Pennsauken County, New Jersey Resource Recovery Facility, PSD Appeal No. 88-8 (EAB November 10, 1988) (“Thus, the ‘top-down’ approach shifts the burden of proof to the applicant to justify why the proposed source is unable to apply the best technology available.”)

Whatever analytical process is utilized for determining BACT, the case law clearly establishes that the requirement to consider in the BACT determination all available processes, systems, and technologies, including the most stringent, must be satisfied, and adequate justification provided in the administrative record for dismissing any of the technologies considered. Thus, to conduct a BACT determination consistent with the requirements of federal law, an applicant must thoroughly evaluate all available methods, systems or techniques including, inter alia, IGCC and CFB. By contrast, the Page memo’s pronouncement that IGCC should not be considered, that is, that it must be excluded from the BACT analysis as a matter of law, is clearly contrary to established precedent.

IGCC Must Be Considered in Setting LAER Because IGCC Achieves the Lowest Emissions In the Source Category Including Facilities Generating Electricity from Coal.

The Clean Air Act requires the permitted emissions rate for a regulated pollutant, for a new facility proposed in a non-attainment area, to reflect either

- (A) the most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or,
- (B) the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent.

42 U.S.C. §7501(3)(emphasis added); see also id. §7503(a)(2) (state nonattainment plan permit programs must require new sources to comply with LAER). As EPA counsel has recognized, this “definition of LAER is more rigorous than that of BACT, in keeping with the need for more stringent measures in area that have not attained the NAAQS.”

Footnote, 34 ELR at 10646. This portion of the Act, and the BACT provisions, are “intended to stimulate the development of improved methods for reducing air pollution” *id.*, not simply support the continuation of the status quo. The legislative history explains that the requirement for LAER in nonattainment areas is intended to serve the purposes of the Act by not limiting consideration to the best available technologies: “the technology-forcing purpose . . . is best served by requiring maximum feasible pollution control from . . . new sources in dirty air areas.” H.R. Rep. No. 294, 95th Cong. 215 (1977).

Congress established in the text of the Act major differences between the BACT and LAER requirements. None of these important differences are reflected in the Page memo, which impermissibly attempts to treat the BACT and LAER requirements similarly. First, the statutory criteria for determining LAER do not authorize consideration of the discretionary factors included in the definition of BACT, including cost, energy or environmental impacts, when determining what the lowest achievable emission rate should be. That decision is to be narrowly focused on the most stringent limitations and the best emissions performance for the source category. The LAER definition demands that the search for examples from which to find the lowest emission rate or best demonstrated emissions performance for the nonattainment pollutant must extend to the entire class or category of sources. The statutory text clearly bars an interpretation that would limit the scope of the LAER analysis to the process type proposed by an applicant, if other processes are also used in the same source category. The source category here is electric power generation, which EPA has traditionally identified by its standard industrial classification (SIC) code.

Moreover, as will be shown below, EPA itself has recognized again and again that IGCC is not in a different “source category” from conventional or supercritical pulverized coal fired power plants – all are production processes for generating electricity from coal. This fact, coupled with the facts that they are inherently lower emitting processes, and currently “achieve in practice” those lower emissions levels, mandates their consideration as the basis for a LAER determination, under the statute’s plain language.

Given that the definition of BACT does not mandate the application of the lowest achievable emissions rate, but instead extends broader discretion to the permitting agency

to consider other factors along with evidence of the best emissions performance, there was no need for Congress to have expressly stated in the BACT definition what category of sources must be canvassed in determining the BACT emissions rate. Certainly nothing in the BACT definition supports EPA's conclusion that the broad array of options that must be considered under LAER should not also be considered when establishing a BACT emissions limit.

Including IGCC in the BACT (or LAER) Determination Does Not Redefine the Source.

The sole basis given for the Page memo's assertion that IGCC need not be considered in the BACT and LAER determinations is that

Congress distinguished 'production processes and available methods, systems and techniques' that are potentially applicable to a particular type of facility and should be considered in the analysis of BACT from 'alternatives' to the proposed source that would wholly replace the proposed facility with a different type of facility."

Page Memo at 2. EPA's position that IGCC is a different type of facility, rather than a different process with the same category of sources, *i.e.* electric generating units, finds no basis in the Clean Air Act, or its legislative history, as described above. Moreover, it is completely inconsistent with EAB precedent developing the Agency's "redefining the source" policy.

The Page memo relies on asserted ambiguities in EPA's 1990 Draft NSR Manual to support its position that IGCC would impermissibly redefine the source and therefore should not be considered in the BACT determination. It is notable that the NSR Manual is a policy pronouncement that itself was not subjected to notice and comment rulemaking, and that the agency has conceded to the Supreme Court is therefore not legally binding. Alaska Dep't Env'tl. Conservation v. EPA, 540 U.S. 461, 475 n.7 (2004). Moreover, to the extent that any portion of the NSR Manual supports the Page memo's interpretation of the CAA it is clearly contrary to law, and should be revised to specifically require consideration of IGCC, or abandoned. The "redefining the source" policy – which, again, is an agency policy and not binding law – does not excuse a

permitting agency from the statutory requirement to consider lower-polluting alternative production processes for the same product.

There is no explanation of the basis or purpose for the “redefining the source” policy in the NSR Manual itself. Two decisions by the EPA Administrator explain the limited nature of the “redefining the source” policy, however. In In re Pennsauken County, New Jersey, Resource Recovery Facility, PSD Appeal No. 88-8 (Adm’r, Nov. 10, 1988), the petitioner asked the EPA Administrator to deny a PSD permit to a municipal waste combustor and, instead, require the county to dispose of its waste by co-firing it with coal in existing power plants. See id. at 10. In effect, the petitioner wanted the EPA to order the applicant to engage in what EPA characterized as a different type of activity: electricity generation, rather than waste disposal. The Administrator rejected this option because the petitioner’s argument was based on his general opposition to a waste combustor, not to the amounts of regulated air pollutants emitted by the proposed source or the emissions limits that were conditions in the permit. Thus, the Administrator held, the petitioner was asking EPA to “redefine the source” from a waste combustor to a power plant:

Petitioner Filipczak’s fundamental objections to the Pennsauken permit are not with the control technology, but rather, with the municipal waste combustor itself. He urges rejection of the combustor in favor of co-firing a mixture of 20% refuse derived fuel and 80% coal at existing power plants. These objections are beyond the scope of this proceeding and therefore are not reviewable under 40 C.F.R. 124.19, which restricts review to “conditions” in the permit. Permit conditions are imposed for the purpose of ensuring that the proposed source of pollutant emissions-- here, a municipal waste combustor-- uses emission control systems that represent BACT, thereby reducing the emissions to the maximum degree possible. These control systems, as stated in the definition of BACT, may require application of “production processes and available methods, systems, and techniques, including fuel cleaning as treatment or innovative fuel combustion techniques” to control the emissions. The permit conditions that define these systems are imposed on the source as the applicant has defined it... [T]he source itself is not a condition of the permit.

Id. at 10-11 (emphasis added). The Administrator subsequently reaffirmed the Pennsauken County decision and explained that “source,” within the newly created “redefining the source” policy, refers to a source category.

In Pennsauken, the petitioner was urging EPA to reject the proposed source (a municipal waste combustor) in favor of using existing power plants to co-fire a mixture of 20% refuse derived fuel and 80% coal. In other words, the petitioner was seeking to substitute power plants (having as a fundamental purpose the generation of electricity) for a municipal waste combustor (having as a fundamental purpose the disposal of municipal waste)...

In re Hibbing Taconite Company, 2 E.A.D. at n. 12 (Adm’r 1989) (parentheticals original, emphasis added). After clarifying the “redefining the source” policy as only preventing a change in the “fundamental purpose,” i.e., the source category, the Administrator further explained that the “redefining the source” policy did not allow the permitting agency to blindly accept the source design proposed by the applicant. Id. at 842-843. In Hibbing, the permit applicant wanted to burn petroleum coke at its taconite plant, but EPA required the applicant to consider burning natural gas- a lower polluting process and cleaner fuel- as part of a BACT determination. Id. The Administrator specifically rejected the idea that requiring consideration of cleaner fuel constitutes “redefining the source” because the fundamental purpose, or source category, remains the same.

[O]ne argument that could be made is that the Region, by requiring the burning of natural gas to be an alternative to be considered in the BACT analysis [for a petroleum coke-fired plant], is seeking to “redefine the source.” Traditionally, EPA has not required a PSD applicant to redefine the fundamental scope of its project... [The redefining the source] argument has no merit in this case.

EPA regulations define major stationary sources by their product or purpose (e.g., "steel mill," "municipal incinerator," "taconite ore processing plant," etc.), not by fuel choice. Here, Hibbing will continue to manufacture the same product (i.e., taconite pellets) regardless of whether it burns natural gas or petroleum coke... The record here indicates that there are other taconite plants that burn natural gas, or a combination of natural gas and other fuels.

Thus, it is reasonable for Hibbing to consider natural gas as an alternative in its BACT analysis.

Id. (parentheticals in original, emphasis added).

In other words, from its inception, prior to the 1990 Manual, the “redefining the source” policy has merely stood for the concept that EPA will not require an applicant to abandon its intended purpose for some other industrial venture. To the extent EPA’s subsequently-issued draft NSR Manual is inconsistent with prior Administrator interpretations in Pennsauken and Hibbing, (which constitute the agency’s official position adopted by formal adjudication), the draft Manual, which was neither finalized as guidance nor adopted by rule or adjudication, is not entitled to any deference.¹ By misapplying its own policy pronouncements, EPA in the Page memo has effectively recreated the ‘redefining the source policy’ as the ‘redesigning the source rule’-- allowing a permit applicant to control the BACT analysis based on its chosen fuel, design, and combustion technology, by asserting that IGCC ‘redesigns’ the source or is not in the same source category.

In rulemakings establishing emissions limitations for facilities that generate electricity from coal, EPA has repeatedly and consistently recognized that IGCC is in the same source category as other facilities that generate electric power from coal. In 1998 EPA adopted a nitrogen oxide limit as part of its new source performance standards that applied to all new electric generating units, regardless of whether it uses pulverized coal or IGCC combustion technologies. Revision of Standards of Performance for Nitrogen Oxide Emissions From New Fossil-Fuel Fired Steam Generating Units, 63 Fed. Reg. 49442 (September 16, 1998). On February 28, 2005, EPA proposed to revise its new source

¹ Informal statements of agency policy not adopted by rule are due no deference from courts. Christensen v. Harris County, 529 U.S. 576, 587-588 (2000). Moreover, from a substantive perspective the NSR Manual’s application of the “redefining the source” policy is due no deference because it conflicts with the agency’s prior interpretations, in addition to simply being wrong. See Pauley v. Beth-Energy Mines, 501 U.S. 680, 698 (1991) (no deference to agency interpretations that are inconsistent with previously held view); see also Brotherhood of Locomotive Engineers v. Atchison, Topeka & Santa Fe R.R. Co., 516 U.S. 152 (1996), Malcomb v. Island Creek Coal Co., 15 F.3d 364, 369 (4th Cir. 1994) (deference is not due to an agency interpretation of its own rules that is inconsistent).

performance standards for the electric generating units new source category and, again included pulverized coal and IGCC technologies in the same source category. 70 Fed. Reg. 9706 (Feb. 28, 2005). On May 18, 2005, EPA finalized a rule establishing NSPS for mercury air emissions for the source category electric utility steam generating units, including IGCC.² Standards of Performance for New and Existing Electric Utility Steam Generating Units; Final Rule, 70 Fed. Reg. 28,606 (May 18, 2005); see also Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4754, 4657 (Jan. 30, 2004)(explaining that IGCC units are included in the source category electric utility steam generating units or ‘utility units’). EPA continues to make presentations extolling the virtues of IGCC as “the future of electricity generation”. Wayland, January 26, 2006 Presentation, slide 4. In other words, EPA has, by rule, consistently treated all electric generating units that derive heat energy from coal (including gasified coal) as part of the same source category.

By applying the “redefining the source” policy properly – that is, as it is described by the Administrator in Pennsauken and Hibbing, it can be seen that IGCC and CFB are not in a different source category from traditional coal-fired power plants, or from SCPC units, but rather are within the same source category. EPA itself has affirmed this view in its NSPS rules and in its public statements about the virtues of IGCC technology. As in Hibbing, the redefining the source policy “has no merit in this case” – i.e. as used in the Page memo, because “EPA regulations define major stationary sources by their product or purpose (e.g., “steel mill,” “municipal incinerator,” “taconite ore processing plant,” etc.), and not by fuel choice.” Hibbing, 2 E.A.D. at 842-43.

² This rule is contrary to the Clean Air Act for a variety of reasons, including that the Act does not authorize EPA to regulate statutorily listed hazardous air pollutants, such as mercury, through the establishment of NSPS. The rule has been challenged by a variety of petitioners, including some of the groups signing this letter, in the U.S. Court of Appeals for the District of Columbia Circuit. New Jersey v. EPA, D.C. Cir. Docket No. 05-1162 (consolidated with, and now referenced as Docket No. 05-1097). Also, while Mr. Wayland characterizes this rule as having created a separate “category” for IGCC sources, Wayland, January 26, 2006 Presentation at slide 11, his presentation does not correctly represent what EPA finalized in the rule, which promulgates NSPS for “subcategories” of the source category electric utility generating units. See 70 Fed. Reg. 28,606; 69 Fed. Reg. at 4657.

The Page Memo Unlawfully Undermines State Permitting Agency Pronouncements on the Required Elements of a BACT Determination.

Under the Act’s framework of “cooperative federalism,” it is state agencies that have ultimate responsibility for permitting new coal-fired power plants and other stationary sources, consistently with the requirements of the federal Act. EPA’s Page memo, however, articulates a legal position that is directly contrary to the positions taken by several of the states that have considered the question whether and how IGCC, CFB, and other innovative processes must be considered under the federal Clean Air Act.

In the recent past, seven state permitting authorities, in Georgia, Illinois, Kentucky, Montana, New Mexico, West Virginia, and Wisconsin have considered the question whether IGCC must be included in the analysis used to determine the BACT emissions limits for proposed new coal-fired sources.³ For example, in Illinois, the Director of the state’s Environmental Protection Agency, Renee Cipriano, issued a letter announcing the Agency’s conclusion “that it is appropriate for applicants for [coal-fired power] plants to consider IGCC as part of their BACT demonstrations. In this regard, IGCC is an alternative production process that can be used with coal to generate electricity.” Letter from Renee Cipriano, Director, Illinois Environmental Protection

³ Georgia: Letter from James A. Capp, Manager, Stationary Source Permitting Program, Georgia Department of Natural Resources, to D. Blake Wheatley, Assistant Vice President, Longleaf Energy Associates, L.L.C. (March 6, 2002) (stating that the PSD application for the Longleaf Facility was deficient because it did not “discuss any other methods [for] generating electricity from the combustion of coal, such as . . . integrated combined cycle”).

Illinois: Letter from Renee Cipriano, Director, Illinois Environmental Protection Agency, to Mr. Thomas Skinner, Regional Administrator, U.S. EPA Region V, Re: Scope of Evaluation of Best Available Control Technology (BACT) Integrated Gasification Coal Combustion (IGCC) (March 19, 2003)(referencing and attaching Letter from Donald E. Sutton, IEPA Division of Air Pollution Control to Jim Schneider, Indeck-Elwood L.L.C., Request for Additional Information (March 8, 2003).

Kentucky: Hearing Officer’s Report and Recommended Secretary’s Order, Sierra Club, et al. v. Environment & Pub. Prot. Cabinet, File No. DAQ-26003-037 & DAQ-26048-037 (Commonwealth of Kentucky DATE) at 158-177.

Montana: In re Air Quality Permit for the Roundup Power Project (Permit No. 3182-00), Case No 2003-04 AQ (MT BER, June 2003).

New Mexico: Letter from Richard L. Goodyear, New Mexico Environment Department to Mr. Larry Messinger, Mustang Energy Corporation, L.L.C. (December 23, 2002); Letter from Raj Solomon, New Mexico Environment Department to Ms. Diana Tickner, Vice President, Peabody Energy (September 16, 2005).

West Virginia: Division of Air Quality, Longview Permit No. R-14-0024, Response to Comments 2 (Comments Received Between October 1, 2003 and January 15, 2004) at 35; Response to Comments 1 (Comment Received Before October 1, 2003) at 48.

Wisconsin: Letter from Scott Hassett, Secretary, Wisconsin DNR, to Carl A. Sinderbrand (June 10, 2003).

Agency, to Mr. Thomas Skinner, Regional Administrator, U.S. EPA Region V, Re: Scope of Evaluation of Best Available Control Technology (BACT) Integrated Gasification Coal Combustion (IGCC) (March 19, 2003)(referencing and attaching a letter requesting such analysis as part of the Indeck-Elwood coal-fired power plant permit application)(Cipriano letter attached hereto as Appendix 14; attachment re: Indeck-Elwood as Appendix 15).

In Kentucky, the question was adjudicated, as part of the review of the grant of a PSD permit to the Thoroughbred Generating Station (TGS). The hearing officer's final report and order in that case holds that the Environmental and Public Protection Cabinet, the state's PSD permitting authority:

erred as a matter of law by concluding that it lacked authority to require TGC [the applicant] to include IGCC and CFB in its BACT analysis. The Cabinet's reliance on the definition of "source" as referring to the PC boilers proposed by TGC is too narrow and is contrary to the PSD program's focus, which is site oriented, not equipment oriented.

Clearly the Cabinet had authority to require [the applicant] to do a BACT analysis on both IGCC and CFB. This is clear from the legislative history of the amendment of the BACT definition

Hearing Officer's Report and Recommended Secretary's Order, Sierra Club, et al. v. Environment & Pub. Prot. Cabinet, File Nos. DAQ-26003-037 & DAQ-26048-037 (Environmental and Public Protections Cabinet, Commonwealth of Kentucky 2005)(attached hereto as Appendix 16) at 176, ¶¶ 413 & 414.

In Montana, the state's Board of Environmental Review recently required that the state's Department of Environmental Quality must include IGCC in the BACT determination for a proposed new electric power generating unit. In re Air Quality Permit for the Roundup Power Project (Permit No. 3182-00), Case No 2003-04 AQ (MT BER, June 2003) (attached hereto as Appendix 17). The Board declared that "[t]he applicable definition of BACT includes innovative fuel combustion techniques." Id. at 18.

The state of New Mexico, in evaluating a PSD permit application for a conventional coal-fired power plant proposed by the Mustang Energy Corporation, also required “a site-specific analysis of IGCC . . . in order to make a determination regarding BACT for the proposed facility.” Letter from Richard L. Goodyear, New Mexico Environment Department to Mr. Larry Messinger, Mustang Energy Corporation, L.L.C. (December 23, 2002) at 1 (attached hereto as Appendix 18); see also Letter from Raj Solomon, New Mexico Environment Department to Ms. Diana Tickner, Vice President, Peabody Energy (September 16, 2005)(reiterating the requirement that IGCC technology be fully and completely evaluated as part of the BACT determination for the proposed Mustang facility, not simply dismissed as technically infeasible)(attached hereto as Appendix 19).

The state of West Virginia Department of Air Quality, in considering a PSD permit application for the Longview power plant, asserted its view that the state’s rules would allow the approval of an innovative process technology in lieu of BACT, but would not authorize the permitting agency to require the development of IGCC as BACT. Additionally, the agency declared that consideration of IGCC was not “appropriate in this case” – namely the proposed Longwood supercritical coal-fired facility. West Virginia DAQ, Longview, Permit No. R-14-0024, Response to Comments 2 (Comments Received Between October 1, 2003 and January 14, 2004), at 35 (excerpt attached hereto as Appendix 20).

Finally, the state of Wisconsin’s Department of Natural Resources (WDNR) has considered the issue of whether the state is authorized, under its own regulations, to consider IGCC in a BACT determination for a new conventional coal-fired power plant. WDNR concluded that because US EPA had not specifically required the consideration of IGCC in the BACT determination, and because Wisconsin law prohibits the state from adopting standards more stringent than the corresponding federal standards,” the state could not base a BACT determination on IGCC. Foote, 34 ELR at 10651 n.84 (citing Letter from Scott Hassett, Secretary, Wisconsin DNR, to Carl A. Sinderbrand (June 10, 2003)).

The states are given primary authority under the Clean Air Act to determine what constitutes BACT for a new source in a clean air area, on a case-by-case basis. They

have engaged in detailed analysis of these issues, often before adjudicatory bodies, or on appeal before state or federal courts. It is not appropriate or lawful for EPA to attempt to pre-empt the authority granted to these states under the Act by issuing nationally applicable guidance that has the effect of banning advanced technologies from consideration by the states. This is particularly true where the Agency has not given any state the opportunity to provide comment on the record, including their unique perspective gained as a result of having undertaken the case-by-case BACT determinations.

The Clean Air Act Requires Agency Pronouncements of Law to be Made After Opportunity for Notice and Comment.

The Clean Air Act's Prevention of Significant Deterioration provisions require that each state's SIP "shall contain emissions limitations and such other measures as may be necessary, as determined under regulations promulgated under this part, to prevent significant deterioration of air quality in each region (or portion thereof) designated . . . as attainment or unclassifiable." CAA §161, 42 U.S.C. § 7471 (emphasis added). Section 307(d)(1)(J) of the Act also explicitly makes the Act's detailed rulemaking requirements, including the requirement for public notice and comment found at 42 U.S.C. §§ 7607 (d)(2)-(11), applicable to "promulgation or revision of regulations under part C of subchapter I of this chapter (relating to prevention of significant deterioration of air quality" 42 U.S.C. §7607(d)(1)(J).

As we have described in detail above, the December 15, 2005 Page memo contains new pronouncements of law related to adopting emissions limitations for new sources that become part of a State's program for the prevention of significant deterioration of air quality. Because EPA is prescribing criteria to govern the issuance by the states of "emissions limitations" "necessary . . . to prevent significant deterioration of air quality," EPA may only issue such criteria by rulemaking, after notice and an opportunity for public comment. 42 U.S.C. §7471, 7607(d)(1)(J); see also Appalachian Power Co. v. EPA, 208 F.3d 1015, 1021-22 (D.C. Cir. 2000)(holding that pronouncements by the Agency that represent a settled EPA position on the law require promulgation only after notice and comment rulemaking pursuant to CAA §307(d)).

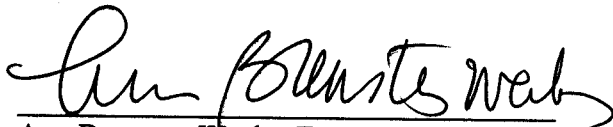
EPA is furthermore not relieved from the requirement that the Page memo must undergo notice and comment rulemaking before it can have any force or effect, simply by asserting that the Page memo is a revision of an Agency interpretation of the law. Because the Page memo revises interpretations of the Act reached and adopted by the Agency through both the rulemaking process and through the adjudicatory rulings by the Agency's Environmental Appeals Board, EPA may not now revise those interpretations without the opportunity for notice and comment rulemaking. See Christensen v. Harris County, 529 U.S. 576 (2000)(holding that a change to a rule must be effected by a new rulemaking); Environmental Integrity Project v. EPA, 425 F.3d 992, 997 (D.C. Cir. 2005)(holding that the Agency can change its interpretation established by administrative rulings only through notice and comment rulemaking). Moreover, EPA may not simply discard and supercede its prior final interpretations of its governing statute just by sending a letter to an outside consultant, nor can the Agency hide behind assertions that the Page memo is simply an "interpretive rule." See, e.g., Monmouth Medical Center v. Thompson, 257 F.3d 807, 814 (D.C. Cir. 2001) (holding that "[o]nce an agency gives its regulations an interpretation it can only change that interpretation as it would formally modify the regulation itself: through the process of notice and comment rulemaking").

The Page memo was not promulgated as the result of notice and comment rulemaking, and the positions it contains conflict not only with the statutory text the memo purports to interpret, but also are in conflict with prior Agency interpretations of the Act adopted through rulemakings and adjudication (and which therefore have the force of law). It therefore cannot and does not supercede those prior Agency interpretations of the Act. In addition, as we have described above, the Page memo is an unlawful attempt to pre-empt and undermine the interpretations of BACT made by a number of states that require consideration of IGCC as an available technology in the BACT determination. To the extent that EPA is attempting to control the outcome of state permit decisions under the PSD program, the memo can have no effect because it

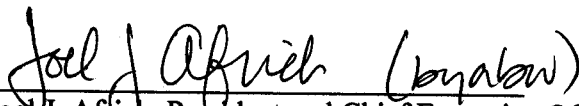
has not been issued in accordance with the rulemaking procedures required by the Act.

For all these reasons, we therefore request that you immediately withdraw the Page memo.

RESPECTFULLY SUBMITTED,



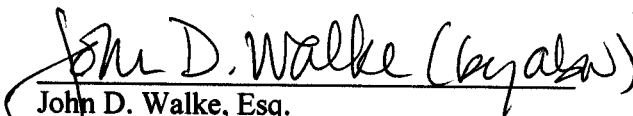
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Enclosures: Appendices 1-20.