

**BEFORE THE ENVIRONMENTAL APPEALS BOARD  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C.**

IN THE MATTER OF: )  
 )  
POWER HOLDINGS OF ILLINOIS, LLC ) PSD APPEAL NO. 09-04  
 )  
PERMIT NO. 081801AAF )

**SUR-REPLY OF THE STATE OF ILLINOIS**

The State Of Illinois (“Illinois”), by and through Illinois Attorney General Lisa Madigan, hereby files this Sur-Reply to the Sierra Club’s (“Petitioner”) Reply to Illinois’ Response to Petitioner’s Petition for Review (“Petition”) of the above-referenced Clean Air Act permit issued to Power Holdings of Illinois, LLC (“Power Holdings”) by the Illinois Environmental Protection Agency (“IEPA”). This Sur-Reply is filed pursuant to the Order of the Environmental Appeals Board (“Board”) dated March 17, 2010. Illinois respectfully requests that the Board deny the Petition for Review for the reasons set forth within its Response and this Sur-Reply.

**I.  
INTRODUCTION**

As a preliminary matter, the Reply of Petitioner does nothing more than re-argue the previous arguments of its Petition. The Board’s Order of March 17, 2010, allowed the filing of Petitioner’s Reply because it felt that, “such additional briefing may be helpful in its consideration of the issues and, as such, may ultimately expedite a final decision.” (*Board’s Order of 3/17/10, pg. 2*). Petitioner’s Reply adds nothing further to the consideration of the issues.

## II. ARGUMENT

### A. Flare Minimization Work Practices Were Available for Public Review and Comment

Petitioner argues that because the "Flare Minimization Plans", which represent a portion of BACT for gas flaring during startup, shutdown and malfunction, were not part of the public participation process and because these plans may be subject to later revision, clear error was committed by the Illinois EPA. (*See Pet. Petition for Review, pg. 2*). Petitioner in its Reply raises no new issues, cites to no new case law and again argues that there was no opportunity to review Flare Minimization Plan but does now focuses on the Flare Minimization Work Practices. (*See Petitioner's Reply, pgs. 1-14*).

Flare Minimization Planning is exactly as titled. A plan to minimize the number of times flares are utilized. The permit is quite clear on how the flares will work to reduce emissions. "Emissions from flaring associated with startup of gasifiers would be minimized as alcohol would be used as the startup feedstock to bring the gasifier to normal operating temperature..." (*See Pet. Ex. 1, pg. 12-13*). Additionally, only natural gas will be used to preheat the gasifiers, the flares will be fitted with automatic igniters and only natural gas or SNG may be used as fuel for the pilot burners for the flares. Contrary to Petitioner's argument, the Permit does contain non-numeric limitations that demonstrate how emissions will be reduced. (*See Pet. Ex. 1, pg. 14*). These are not later developed practices; in fact the permit is very explicit on the work practices of the flaring procedures. (*See Pet. Ex. 1, pg. 16-23*).

The Flare Minimization Plan requires Power Holdings to further reduce flaring and the associated emissions once the plant begins operations. This is done by analyzing the cause of the flaring events that do occur and taking further steps to eliminate or reduce them. (*See Pet. Ex. 1, pgs. 19-23*). It is only once a flaring event occurs that the applicant can make a determination as

to the cause and then take the steps necessary to minimize these types of events in the future. Again this portion of the Permit sets out non-numeric practices which Power Holdings will utilize to reduce emissions.

Petitioner argues that Illinois has misread the *RockGen* case, in which the Board rejected a proposal to allow a permittee to violate the BACT limits in the permittee's PSD permit during start up and shut down. (See *RockGen*, 8 E.A.D. 536, 551). In fact, it is Petitioner that has misread *RockGen*. Illinois would reassert that this case does not involve an exception to BACT limits set in the PSD permit. Instead, Power Holdings' flare minimization plans would be used to ensure compliance with the secondary BACT limits established in the Power Holdings PSD permitting process for periods of startup, shutdown and malfunction. (See *Pet. Ex. 1*, pgs 13-14 & 23-24). The Permit prohibits Power Holdings from exceeding these limits and, sets forth additional design and operational requirements to ensure compliance and limit flaring events. (See *Pet. Ex. 1*, pgs. 13-14). The flaring minimization planning is an enhancement to the secondary BACT emission limits contained in the permit.

#### **B. Synthetic Natural Gas May Be Utilized For Firing the Superheaters**

Illinois in its Response to Petitioner's Petition did not argue that Petitioner was making a true "lifecycle" argument; instead Illinois argued that Petitioner's argument was "akin" to a "lifecycle" argument. (See *Illinois' Response*, pg. 13). Petitioner claims that IEPA "did not look at higher emissions upstream of those combustion units if Synthetic Natural Gas ("SNG") is used because of the need to manufacture SNG onsite". (See *Petitioner's Reply*, pg. 14). In other words, IEPA should have looked at the "lifecycle" of the SNG produced by the Power Holdings during its BACT analysis. Such an analysis is not necessary.

Neither the PSD regulations found at 40 C.F.R. §52.21, nor the guidance in the New Source Review Workshop Manual Draft 1990 ("NSR Manual") make any reference nor require

consideration of such emissions during the BACT analysis. The BACT analysis considers feasible emission standards for a particular emission unit and limits its comparison of alternative control technologies to those which are available for that emission unit. 40 C.F.R. §52.21(b). The NSR Manual also supports this unit specific analysis. (*See Power Holdings Response, Ex. 2, pg. B.4-B.5*).

Further, the NSR Manual outlines what it calls a “top-down” BACT analysis when evaluating alternative control technologies. (*See Power Holdings Response, Ex. 2, pg. B.5-B.9*). If the top alternative is not chosen, then further analysis is needed. *Id.* The permit provides that natural gas is to be the fuel that is combusted in the superheaters. (*Pet. Ex. 1, pg. 37*). The IEPA goes on to state in its Responsiveness Summary that SNG, because of its equivalency to natural gas can be utilized. Two identical fuels are allowed, both are the “top” alternative, and IEPA was not required to go any further in its “top-down” BACT analysis. The *Desert Rock* decision cited by the Petitioner simply is not applicable to this situation. IEPA completed the appropriate BACT analysis, by selecting the “top” control technology. There can be no error for not considering other technologies as was the case in the *Desert Rock* decision.

Petitioner’s again tries to emphasis the difference between natural gas and SNG emissions. However, Petitioner offers no technical or analytical support for its argument. The purported difference in fuel choices with respect to emissions is, on its face, statistically insignificant and therefore supports, rather than diminishes, the conclusion that they should be treated as indistinguishable.

### **C. Greenhouse gas emission limits are not yet required in PSD permits**

Petitioner continues to assert that IEPA is required to include emission limits for carbon dioxide (“CO<sub>2</sub>”) and methane in the Power Holdings PSD permit to comply with federal (42 U.S.C. § 7475(a)(3) and 40 C.F.R. § 52.21(a)(2)(ii)) and state law (35 Ill. Admin. Code

§ 201.141.) (*Petitioner's Reply*, pgs 20 -25.) These assertions are incorrect. On the federal level, US EPA recently issued a final decision making clear that no stationary sources will be required to obtain Clean Air Act permits that cover greenhouse gases (GHGs) before January 2011. (*75 Fed. Reg. 17004 et seq. (April 2, 2010.)*) As to whether Illinois rules could be construed to require a limit on GHG emissions prior to 2011, the answer is unambiguously set forth in state statute: IEPA may not impose "any legally enforceable commitments related to the reduction of greenhouse gases" unless required to do so by an act of Congress or the United States Senate ratifies the Kyoto Protocol. (*415 ILCS 140/15.*)(*See Exhibit 1 attached hereto.*)

**1. US EPA will not require GHG limits in PSD permits before January 2011**

On April 2, 2010, US EPA published a final decision<sup>1</sup> phasing in GHG permitting requirements for Clean Air Act construction and operating permits. (*75 Fed. Reg. 17004 et seq. (April 2, 2010.)*) In this decision, which interprets 40 C.F.R. § 52.21 and several sections of the Clean Air Act (including 42 U.S.C. § 7475), US EPA formally announced that PSD permits will be required to include GHG limits – but not before January 2, 2011:

*... EPA has concluded that PSD program requirements will apply to GHGs upon the date that the anticipated tailpipe standards for light-duty vehicles (known as the "LDV Rule") take effect. Based on the proposed LDV Rule, those standards will take effect when the 2012 model year begins, which is no earlier than January 2, 2011.*

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<sup>1</sup> On March 4, 2010, a filing was submitted in this docket on behalf of IEPA that included a copy of a letter from US EPA Administrator Lisa Jackson previewing the final decision that was published on April 2, 2010. (*IEPA Response, Ex. 1.*) Petitioner attempts to portray the inclusion of the letter as an effort to introduce new evidence. (*Petitioner's Reply, at pgs. 22-24.*) In fact, the letter was submitted because, at the time, it was the most authoritative summary available of the decision about to be published in the Federal Register. Now that the final decision governing GHG limits in PSD permits has been published, Administrator Jackson's letter does not serve any purpose in this proceeding. For that reason, and to avoid an unnecessary dispute, we hereby withdraw "IEPA Response, Ex. 1."

(75 Fed. Reg. 17007, *emphasis added*.) A requirement that will apply *no earlier than* 2011, clearly did not apply when the Power Holdings PSD permit was issued in 2009. Therefore, IEPA did not err by failing to include GHG emission limits in Power Holdings' PSD permit.

**2. GHG limits are not required to comply with the Illinois State Implementation Plan**

US EPA's April 2, 2010 decision also indirectly addresses Petitioner's assertion that GHG limits are required in the Power Holdings permit to ensure compliance with the Illinois State Implementation Plan ("SIP"). (75 Fed. Reg. 17011- 17012.) The decision emphasizes that states are free to include GHG limits in a SIP before such limits are required under federal law. *Id.* Indeed, as Petitioner notes, Delaware has already done so. (*Petitioner's Reply*, pgs. 24-25.) Delaware's decision to include CO<sub>2</sub> requirements in the Delaware SIP, and US EPA's subsequent decision to approve that SIP, does not mean that other states must do the same. As US EPA points out:

Congress could not have intended States to have latitude to implement their own approaches to air pollution control, and simultaneously, require that air pollutants regulated by one State automatically apply in all other States.

*75 Fed. Reg. 17011.*

Illinois clearly has the necessary latitude under federal law to include GHG provisions in the Illinois SIP, but there is no indication – in Petitioner's filings or elsewhere -- that Illinois has done so. In fact, a 1998 Illinois law prohibits IEPA from proposing "any legally enforceable commitments related to the reduction of greenhouse gases" unless required to do so by an act of Congress or the United States Senate ratifies the Kyoto Protocol. (415 ILCS 140/15.) As noted above, US EPA interprets the Clean Air Act to mean that States may, but are not required to include GHG's in their SIPs – and the Senate has never ratified the Kyoto Protocol.

Consequently, IEPA has not and cannot (until at least January 2, 2011) include GHG limitations in the Illinois SIP.

In the absence of an Illinois SIP provision restricting GHG levels, Petitioner's argument fails (*i.e.*, 35 Ill. Admin. Code § 201.141 must be interpreted to require CO<sub>2</sub> and methane limits in the Power Holdings air permit in order to ensure compliance with the Illinois SIP.) Since federal law does not require GHG provisions in the Illinois SIP and, under current Illinois law, IEPA cannot propose the addition of GHG provisions to the Illinois SIP until there are federal limits on GHG emissions, Petitioner is simply wrong to read state permitting rules to require CO<sub>2</sub> and methane limits in a permit *to ensure compliance with the SIP*. IEPA did not err by rejecting Petitioner's request to add requirements to the Illinois permitting rules and Illinois SIP that simply are not there.

### **III CONCLUSION**


For the reasons set forth herein, the Illinois EPA respectfully requests that the Board deny review of all avenues of appeal sought by the Petitioner or, in the alternative, order such relief

that is deemed just and appropriate.

Respectfully submitted,

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**EXHIBIT 1**

**ENVIRONMENTAL SAFETY**  
**(415 ILCS 140/) Kyoto Protocol Act of 1998.**

(415 ILCS 140/1)

Sec. 1. Short title. This Act may be cited as the Kyoto Protocol Act of 1998.

(Source: P.A. 90-797, eff. 12-15-98.)

(415 ILCS 140/5)

Sec. 5. Definitions. As used in this Act:

(a) "FCCC" means the 1992 United Nations Framework Convention on Global Climate Change.

(b) "Kyoto Protocol" means the protocol to expand the scope of the FCCC that was negotiated in December 1997 in Kyoto, Japan.

(Source: P.A. 90-797, eff. 12-15-98.)

(415 ILCS 140/10)

Sec. 10. Findings and purposes. The General Assembly hereby finds that:

(1) The United States is a signatory to the 1992 United Nations Framework Convention on Global Climate Change.

(2) A protocol to expand the scope of the FCCC was negotiated in December 1997 in Kyoto, Japan, requiring the United States to reduce emissions of greenhouse gases such as carbon dioxide and methane by 7% from 1990 emission levels during the period 2008 to 2012, with similar reduction obligations for other major industrial nations.

(3) Developing nations, including China, India, Mexico, Indonesia, and Brazil, are exempt from greenhouse gas emission limitation requirements in the FCCC.

(4) Developing nations refused in the Kyoto negotiations to accept any new commitments for greenhouse gas emission limitations through the Kyoto Protocol or other agreements.

(5) With respect to new commitments under the FCCC, President Clinton pledged on October 22, 1997, that "The United States will not assume binding obligations unless key developing nations meaningfully participate in this effort".

(6) On July 25, 1997, the United States Senate adopted Senate Resolution No. 98 by a vote of 95-0, expressing the sense of the Senate that, inter alia, "the United States should not be a signatory to any protocol to or other agreement regarding, the Framework Convention on Climate Change ... which would require the advice and consent of the Senate to ratification, and which would mandate new commitments to mitigate greenhouse gas emissions for the Developed Country Parties, unless the protocol or other agreement also mandates specific scheduled commitments within the same compliance period to mitigate greenhouse gas emissions for Developing Country Parties".

(7) The Kyoto Protocol fails to meet the tests established for acceptance of new climate change commitments by President Clinton and by U.S. Senate Resolution No. 98.

(8) Achieving the emission reductions proposed by the Kyoto Protocol would require more than a 35% reduction in

projected United States carbon dioxide and other greenhouse gas emissions during the period 2008 to 2012.

(9) Developing countries exempt from emission limitations under the Kyoto Protocol are expected to increase their rates of fossil fuel use over the next 2 decades and to surpass the United States and other industrialized countries in total emissions of greenhouse gases.

(10) Increased emissions of greenhouse gases by developing countries would offset any potential environmental benefits associated with emissions reductions achieved by the United States and by other industrial nations.

(11) Economic impact studies by the U.S. Government estimate that legally binding requirements for the reduction of U.S. greenhouse gases to 1990 emission levels would result in the loss of more than 900,000 jobs in the United States, sharply increased energy prices, reduced family incomes and wages, and severe losses of output in energy-intensive industries such as aluminum, steel, rubber, chemicals, and utilities.

(12) The failure to provide for commitments by developing countries in the Kyoto Protocol creates an unfair competitive imbalance between industrial and developing nations, potentially leading to the transfer of jobs and industrial development from the United States to developing countries.

(13) Federal implementation of the Kyoto Protocol, if ratified by the United States Senate, would entail new Congressional legislation whose form and requirements cannot be predicted at this time, but could include national energy taxes or emission control allocation and trading schemes that would preempt State-specific programs intended to reduce emissions of greenhouse gases.

(14) Piecemeal or other uncoordinated State regulatory initiatives intended to reduce emissions of greenhouse gases may be inconsistent with subsequent Congressional determinations concerning the Kyoto Protocol and with related federal legislation implementing the Kyoto Protocol.

(15) Individual state responses to the Kyoto Protocol, including development of new regulatory programs intended to reduce greenhouse gas emissions, are premature prior to Senate ratification of the Protocol in its current or amended form and Congressional enactment of related implementing legislation.

(16) There is neither federal nor State statutory authority for new regulatory programs or other efforts intended to reduce greenhouse gas emissions for purposes of complying with or facilitating compliance with the provisions of the Kyoto Protocol.

(Source: P.A. 90-797, eff. 12-15-98.)

(415 ILCS 140/15)

Sec. 15. Restrictions on State rules related to greenhouse gas emissions.

(a) Effective immediately, the Environmental Protection Agency and the Pollution Control Board shall not propose or adopt any new rule for the intended purpose of addressing the adverse effects of climate change which in whole or in part

reduces emissions of greenhouse gases, as those gases are defined by the Kyoto Protocol, from the residential, commercial, industrial, electric utility, or transportation sectors. In the absence of an Act of the General Assembly approving such rules, the Director of the Environmental Protection Agency shall not submit to the U.S. Environmental Protection Agency or to any other agency of the federal government any legally enforceable commitments related to the reduction of greenhouse gases, as those gases are defined by the Kyoto Protocol.

(b) Nothing in this Section shall be construed to (i) limit or impede the authority of the Illinois Environmental Protection Agency and Illinois Pollution Control Board to propose, adopt, or enforce rules and laws which implement the federal Clean Air Act or are intended to attain or maintain national ambient air quality standards; or (ii) limit or impede State or private participation in any on-going voluntary initiatives to reduce emissions of greenhouse gases, including, but not limited to, the U.S. Environmental Protection Agency's Green Lights program, the U.S. Department of Energy's Climate Challenge program, and similar State and federal initiatives relying on voluntary participation, provided, however, that said rule-making or participation does not involve any allocation or other distribution of greenhouse gas emission entitlements pursuant to or under color of the Kyoto Protocol.

(Source: P.A. 90-797, eff. 12-15-98.)

(415 ILCS 140/20)

Sec. 20. Effectiveness. Section 15 of this Act shall become inoperative upon ratification of the Kyoto Protocol by the United States Senate or if Congress otherwise authorizes reductions of emissions of the gases described in Section 15 for the purpose of addressing the adverse effects of climate change.

(Source: P.A. 90-797, eff. 12-15-98.)

(415 ILCS 140/55)

Sec. 55. (Amendatory provisions; text omitted).

(Source: P.A. 90-797, eff. 12-15-98; text omitted.)

(415 ILCS 140/99)

Sec. 99. Effective date. This Act takes effect upon becoming law.

(Source: P.A. 90-797, eff. 12-15-98.)