Illinois Environmental Protection Agency

Notice of Public Comment Period for the Proposed Issuance of Revised Construction Permit/PSD Approval to Christian County Generation in Taylorville

Christian County Generation, LLC, 1044 North 115th St., Suite 400, Omaha, Nebraska, has applied to the Illinois Environmental Protection Agency (Illinois EPA) for an extension of the air pollution control construction permit/PSD approval that was previously issued for a proposed integrated gasification combined cycle (IGCC) power plant at 1630 North 1400 East Road in Taylorville. This plant would consist of three gasifiers, two syngas cleanup trains, a sulfur recovery unit, two combustion turbines, and ancillary operations. The requested extension of the permit would provide additional time for commencement of construction of this plant. The Illinois EPA, Bureau of Air, has made a preliminary determination to issue a revised permit that would provide the requested extension. The revised permit would also address new rules and requirements that would apply to the plant.

Prior to making a final decision on the request for extension of the permit for the proposed plant, the Illinois EPA is holding a comment period to accept public comments on this proposed action and the draft permit. **Comments must be postmarked by the close of the comment period, which is scheduled to end on midnight July 16, 2009.** If sufficient interest is expressed in this matter, a public hearing may be held. Any request for hearing must be in writing and should identify the nature of the issues proposed to be raised in the hearing. Comments, questions, requests for information, and any requests for a public hearing, should be directed to Brad Frost, Bureau of Air, Illinois EPA, P. O. Box 19506, Springfield, IL 62794-9506, phone 217/782-2113, TDD 217/782-9143.

Persons wanting more information may view the draft of the revised permit and the project summary at http://www.epa.state.il.us/public-notices/ These documents and the application materials and relevant information relating to the previously issued permit will be available for inspection at the Taylorville Public Library, 121 West Vine, Taylorville and the Illinois EPA, Bureau of Air office at 1340 N. Ninth St., Springfield. Additional material that makes up the administrative record for the draft permit is also available for inspection at the Bureau of Air's Springfield office. People planning to inspect material at the Illinois EPA should call ahead so someone will be available to assist them (217)782-7027. Copies of documents will also be made available upon request.

This plant is considered a major project under the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, for emissions of nitrogen oxides (NOx), sulfur dioxide (SO_2), particulate matter (PM), carbon monoxide (CO) and sulfuric acid mist. The permit issued for the plant established Best Available Control Technology

(BACT) for emissions of these pollutants, as required by the PSD rules. For emissions of SO_2, PM and sulfuric acid mist, the permit requires high-efficiency cleaning of the raw syngas prior to combustion. For CO and NOx, which are formed by fuel combustion in the turbines, good combustion practices and the combination of nitrogen injection and selective catalytic reduction are required. Appropriate control measures are required for other units. The revised permit would require additional measures as BACT for the flare for the gasification process to minimize flaring and emissions associated with flaring.

The air quality analysis previously submitted by Christian County Generation for this project shows that it will not cause a violation of the National Ambient Air Quality Standards (NAAQS) for NOx, SO_2, PM_{10} or CO or an exceedance of applicable PSD increments. For NO_x and CO, this analysis shows maximum impacts that are below the PSD significant impact levels. For SO_2, the maximum modeled ambient concentrations with the plant would be 738 micrograms per cubic meter ($\mu g/m^3$) 3-hr average, 201 $\mu g/m^3$ 24-hr average and 22 $\mu g/m^3$ annual average, compared to NAAQS of 1,300, 365, and 80 $\mu g/m^3$, respectively. For PM_{10}, the maximum concentrations would be 130 $\mu g/m^3$ 24-hr and 28 $\mu g/m^3$ annual, compared to NAAQS of 150 and 50 $\mu g/m^3$, respectively. For SO_2, the maximum increment consumption, which generally reflects the impact of the plant, would be 28 $\mu g/m^3$ 3-hr, 6.2 $\mu g/m^3$ 24-hr, and 0.35 annual compared to increments of 512, 91 and 20 $\mu g/m^3$, respectively. For PM_{10}, the maximum increment consumption would be 14.8 $\mu g/m^3$ 24-hr and 1.3 $\mu g/m^3$ annual, compared to increments of 30 and 17 $\mu g/m^3$, respectively. With its request, Christian County Generation submitted additional analyses that confirm that the project would not cause exceedances of the NAAQS for PM_{10} and $PM_{2.5}$.