## APPENDIX B PUBLIC SCOPING SUMMARY

## **B.1 INTRODUCTION**

To ensure that all of the issues related to the FutureGen Project Environmental Impact Statement (EIS) are addressed, DOE invited comments on the proposed scope and content of the EIS from all interested parties. This process, referred to as scoping, began with an Advance Notice of Intent (ANOI) to Prepare an EIS for Implementation of the FutureGen Project published in the *Federal Register* on February 16, 2006, in which the public was requested to provide comments. On July 28, 2006, a Notice of Intent (NOI) was published announcing the four candidate site alternatives identified for evaluation and analysis in the EIS, and the formal public scoping period of July 28 through September 13, 2006, requesting public input. Following the NOI, a Notice of Public Scoping Meetings was published in the *Federal Register* on August 4, 2006, announcing the dates, times and locations of the public scoping meetings (see Section B.2).

The DOE National Energy Technology Laboratory (NETL) conducted the public scoping meetings in which government agencies, private-sector organizations, and the general public were invited to present verbal comments or suggestions with regard to the alternatives and impacts to be considered in the EIS. Scoping meetings were held in August 2006 near each proposed project site (see Table B-1). Oral comments were heard during the scoping meetings and transcribed.

The following issues were listed in the NOI. As part of the EIS process, DOE will address the issues when considering the potential impacts resulting from the siting, construction, and operation of the FutureGen power plant, sequestration site, and associated facilities. The environmental issues include:

- Air quality impacts: potential for air emissions during construction and operation of the power
  plant and appurtenant facilities to impact local sensitive receptors, local environmental
  conditions, and special-use areas, including impacts from smog and haze, and impacts from dust
  and any significant vapor plumes
- Noise and light impacts: potential impacts from construction, transportation of materials, and facility operations
- Traffic issues: potential impacts from construction and operation of the facilities, including changes in local traffic patterns, deterioration of roads, traffic hazards, and traffic controls
- Floodplains: potential impacts to flood flow resulting from earthen fills, access roads, and dikes that might be needed in a floodplain
- Wetlands: potential impacts resulting from fill, sediment deposition, vegetation clearing, and facility erection that might be needed in a wetland
- Visual impacts associated with facility structures: views from neighborhoods, impacts to scenic views (e.g., impacts from water vapor plumes, power transmission lines, pipelines), internal and external perception of the community or locality
- Historic and cultural resources: potential impacts from the site selection, design, construction, and operation of the facilities
- Water quality impacts: potential impacts from water utilization and consumption, and potential impacts from wastewater discharges
- Infrastructure and land use impacts: potential environmental and socioeconomic impacts of project site selection, construction, delivery of feed materials, and distribution of products (e.g., power transmission lines, pipelines)

- Marketability of products and market access to feedstock
- Solid wastes: pollution prevention plans and waste management strategies, including the handling of ash, slag, water treatment sludge, and hazardous materials
- Disproportionate impacts on minority and low-income populations
- Connected actions: potential development of support facilities or supporting infrastructure
- Ecological impacts: potential on-site and off-site impacts to vegetation, terrestrial wildlife, aquatic wildlife, threatened or endangered species, and ecologically sensitive habitats
- Geologic impacts: potential impacts from the sequestration of CO<sub>2</sub> and other captured gases on underground resources such as potable water supplies, mineral resources, and fossil fuel resources
- Ground surface impacts from CO<sub>2</sub> sequestration: potential impacts from leakage of injected CO<sub>2</sub>, potential impacts from induced flows of native fluids to the ground surface or near the ground surface, and the potential for induced ground heave or microseisms
- Fate and stability of sequestered CO<sub>2</sub> and other captured gases
- Health and safety issues associated with CO<sub>2</sub> capture and sequestration
- Cumulative effects that result from the incremental impacts of the proposed project when added to other past, present, and reasonably foreseeable future projects
- Compliance with regulatory requirements and environmental permitting
- Environmental monitoring plans associated with the power plant and with the CO<sub>2</sub> sequestration site
- Mitigation of identified environmental impacts
- Ultimate closure plans for the CO<sub>2</sub> sequestration site and reservoirs

## **B.2 PUBLIC SCOPING MEETINGS**

DOE held four public scoping meetings for the FutureGen Project EIS; the dates and locations of these meetings are shown in Table B-1. The meeting locations were selected based on their close proximity to the alternative site locations in Texas and Illinois.

Table B-1. Public Scoping Meeting Locations and Dates

Location	Date	
Jewett (Fairfield), Texas	August 00, 0000	
City of Fairfield's Green Barn, Fairfield, Texas	August 22, 2006	
Odessa (Midland), Texas		
Center for Energy and Economic Diversification (CEED) Building, Midland, Texas	August 24, 2006	
Tuscola, Illinois	August 29, 2006	
Tuscola Community Building, Tuscola, Illinois		
Mattoon, Illinois	August 31, 2006	
Riddle Elementary School, Mattoon, Illinois		

In addition to the NOI and Notice of Public Scoping Meetings published in the *Federal Register*, DOE published notices in local newspapers during the weeks of August 13, 20, and 27, 2006, as shown in Table B-2. The public scoping period ended on September 13, 2006.

Table B-2. Dates and Publications for Advertisements

Meeting Location/ Newspaper	Dates of Publication	
Jewett (Fairfield), TX (August 22, 2006)		
The Press	August 17, 2006	
The Bryan-College Station Eagle	August 17, 19, 20, and 22, 2006	
Jewett Messenger	August 16, 2006	
Waco Tribune-Herald	August 17, 2006	
Fairfield Recorder	August 17, 2006	
Odessa (Midland), TX (August 24, 2006)		
Midland Reporter-Telegram	August 17, 20, and 23, 2006	
Andrews County News	August 17 and 20, 2006	
The Fort Stockton Pioneer	August 17, 2006	
Odessa American	August 17, 20, and 24, 2006	
El Seminario	August 17, 2006	
Tuscola, IL (August 29, 2006)		
The Tuscola Review	August 22 and 29, 2006	
The Regional	August 25, 2006	
The Tuscola Journal	August 22, 2006	
Tri-County Journal	August 24, 2006	
The News-Gazette	August 22, 27, and 28, 2006	
Mattoon, IL (August 31, 2006)		
Mattoon Journal Gazette	August 24, 27, and 30, 2006	
Charleston Times Courier	August 24, 27, and 30, 2006	
Decatur Herald and Review	August 24, 27, and 30, 2006	

Each meeting began with an informal open house from 4:00 to 7:00 pm (Daylight Saving Time) during which time attendees were given information packages about the project and were able to view project-related posters. DOE-NETL and FutureGen Project personnel were available to answer questions. Alliance and local representatives were also available at displays illustrating various features of the proposed project and proposed sites.

The informal open house was followed by a formal DOE presentation. The Jewett, Texas meeting began at 7:03 pm and adjourned at 9:32 pm; the Odessa, Texas meeting began at 7:01 pm and adjourned at 9:32 pm; the Tuscola, Illinois meeting began at 7:00 pm and adjourned at 9:34 pm, and the Mattoon, Illinois meeting began at 7:02 pm and adjourned at 10:38 pm. Collectively, 917 individuals attended the public scoping meetings; a few individuals attended more than one meeting (see Table B-3).

Meeting Location	Number of People in Attendance <sup>1</sup>
Jewett (Fairfield), Texas	171
Odessa (Midland), Texas	148
Tuscola, Illinois	234
Mattoon, Illinois	364
Total	917

Table B-3. Attendance at Public Scoping Meetings

All attendees were invited to provide comments, either written or spoken, on the proposed project. Those attendees wishing to speak were given an opportunity to sign up to do so. Comment sheets were made available for all attendees wishing to provide written comments.

DOE-NETL led the presentations and presided over the four formal meetings. A court recorder was present at each meeting to ensure that all spoken comments were recorded and legally transcribed. A total of 132 individuals presented verbal comments (see Table B-4). In addition, individuals could request to receive the Draft EIS, Final EIS, or Summary (hard copy of the full EIS or a hard copy summary plus a compact disk [CD] that contains the entire EIS).

Table B-4	Verbal Comment	s Received during tl	he Public Scopin	a Meetinas
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Meeting Location	Number of People who Gave Verbal Comments <sup>1</sup>
Jewett (Fairfield), Texas	30
Odessa (Midland), Texas	24
Tuscola, Illinois	31
Mattoon, Illinois	47
Total	132

<sup>&</sup>lt;sup>1</sup> Based on transcripts for each meeting.

Anyone who wished to provide comments in writing was invited to do so by completing a comment card at the public scoping meetings and giving it to DOE or a FutureGen team member at the meeting. DOE-NETL also provided an e-mail address for members of the public who preferred to submit their comments electronically, a postal address for those who preferred to mail their comments, a telephone fax number for those who preferred to fax their comments, and a toll-free telephone number for those who preferred to provide spoken comments. In all, 318 comments were submitted via e-mail, mail, fax, or telephone, or at the public meetings (see Table B-5).

<sup>&</sup>lt;sup>1</sup> Based on individuals who signed the attendance sign-in sheets.

Meeting Location	Number of Comments Received <sup>1</sup>	
Jewett (Fairfield), Texas	47	
Odessa (Midland), Texas	195	
Tuscola, Illinois	24	
Mattoon, Illinois	46	
Tuscola and Mattoon <sup>2</sup>	2	
Site not Specified	4	
Total	318	

Table B-5. Number of Written Comments Received During the Scoping Period

## **B.3 PUBLIC COMMENTS AND CONCERNS**

Numerous comments were received with respect to specific natural and human environmental resources. The comments received were consolidated, summarized and categorized as appropriate into major groupings, including general comments about the project, the EIS and the scoping process; purpose and need for the Proposed Action; the Proposed Action; the alternative sites, and resource-specific concerns. Respondents expressed concerns about the need for the proposed FutureGen Project, both from the perspective of electricity demand and from the perspective of whether coal use is the best choice to meet that demand. In particular, some respondents stated that wind energy could be a more viable alternative to generate electricity. Questions were also raised about who would be responsible for monitoring the FutureGen Project. Comments also requested that connected actions such as other proposed development projects and cumulative impacts of reasonably foreseeable projects and the proposed FutureGen Project be considered in the EIS.

The majority of the comments were related to the use of natural resources (e.g., coal, land, water), the discharge of pollutants to the natural environment (e.g. air, water,), and the socioeconomic impacts of the project (e.g. jobs, taxes, property values). Comments were also received relating to wetlands impacts, vehicular and rail traffic, and demands on local community services (e.g., emergency responders, local water systems). Concerns were expressed about the potential for the project to be targeted by a terrorist group. Several comments were expressed about connected actions and the cumulative effects of current industrial activities and future projects planned within the vicinity of the alternative site locations. Respondents requested that project information and details be included in the EIS, including process information, information about the expected efficiency and reliability of the plant, feedstock, utilities and resource requirements, and emissions. Other comments showed concerns relative to the transmission corridors, pipelines and various other features. Questions and concerns were raised regarding the permanence and safety of geologic sequestration of CO<sub>2</sub>. Table B-6 provides a summary of all substantive comments received that relate to the resource-specific areas. This table does not include all of the comments received; rather, it summarizes the general themes of public concern.

<sup>&</sup>lt;sup>1</sup> Includes comments received at public scoping meetings, by electronic mail, facsimile, U.S. Postal Service, or telephone.

<sup>&</sup>lt;sup>2</sup> Comments were for both the Tuscola and the Mattoon sites, not one site specifically.

Table B-6. Summary of Comments Received

Resource Area	Comment
Air Quality	<ul> <li>What types and amounts of air pollutants, including mercury, would be emitted by the proposed FutureGen Project?</li> <li>Consider the air emissions from sources other than the proposed power plant, including coal handling and storage, and construction of additional infrastructure.</li> </ul>
Geology and Soils	<ul> <li>The EIS should evaluate what surface/subsurface fault activation may occur due to carbon sequestration.</li> <li>The EIS should evaluate the impact of potential destruction that may result from a magnitude 5 or higher earthquake or other seismic event from any fault that may possibly impact the plant and the sequestration plan.</li> </ul>
Water Resources and Floodplains	<ul> <li>The EIS should address the availability of the water supply.</li> <li>How much non-point source water pollution would be generated by the FutureGen Project?</li> <li>How much and where would the FutureGen Project affect floodplains?</li> <li>What connections of saline aquifers with freshwater aquifers exist where carbon sequestration is proposed for the FutureGen Project?</li> <li>The EIS should evaluate the impact of this facility on surface and groundwater that flows near or under the plant during construction and operation.</li> </ul>
Wetlands	How much and where would the FutureGen Project affect emergent and forested wetlands?
Ecological Resources	<ul> <li>The EIS should evaluate plant and wildlife that are currently on the endangered species list, including the Texas Horned Toad.</li> <li>This EIS should include an analysis that quantifies air pollution, noise pollution, wildlife habitat loss, wildlife habitat fragmentation, and other environmental impacts.</li> </ul>
Cultural Resources	The EIS should evaluate archaeology in the area; there are some important Native American sites in this area which must be protected.
Land Use (including Prime Farmland)	<ul> <li>The EIS should evaluate how much land use change would occur due to the FutureGen Project.</li> <li>The EIS should evaluate how much and where prime farmland would be affected due to the FutureGen Project.</li> </ul>
Aesthetics	The potential visual impacts of the proposed power plant and associated infrastructure (e.g., electrical lines) should be addressed in the EIS.
Traffic and Transportation	<ul> <li>The EIS should evaluate how the FutureGen Project would affect roads in the area or create the need to build more roads or improve roads.</li> <li>The EIS should evaluate if congestion and connectivity would be affected due to the FutureGen Project.</li> <li>If coal is to arrive by rail, would current infrastructure support new coal trains? How many trains and coal carloads would arrive per day or week? In many areas we have unguarded rail crossings, and bridges or overpasses that are impractical. What would be the cost of infrastructure improvements to permit this volume of rail traffic to function safely, and without large negative impacts on automobile</li> </ul>

Table B-6. Summary of Comments Received

Resource Area	Resource Area Comment	
Noise	An analysis of the noise that would be produced both during	
	construction as well as operation of the plant, transmission lines and any pipelines used to sequester CO <sub>2</sub> should be undertaken including a complete analysis of the impact to any individual with hearing problems who may reside along or near hearing distance from the plant, pipeline, or transmission lines.	
	The EIS should evaluate noise levels from vibrations and noise generated by the unloading of approximately 200 train car loads of coal per week.	
Utility Systems	The EIS should evaluate what additional infrastructure is needed including pipelines, roads, storage facilities, pumping stations, etc. and the impacts on already damaged environments (for example, fragmentation of prairies, bottomland hardwoods, emergent wetlands, etc.).	
	The EIS should evaluate if existing transmission towers are sufficient to handle the expected 275 MW of electricity or if additional transmission lines would be required, and at what dollar cost and environmental impact.	
Materials and Waste	Does the FutureGen process generate ash like a normal lignite/Powder River Basin coal burning process? If not, how is it different? What happens to the mercury that generally resides in the lignite/coal? Is it captured for commercial use or disposal or is it somehow utilized in the process? Are there landfill operations needed with the FutureGen process? If so, how would that be handled?	
	The EIS should evaluate the impact of accumulating piles of ash/slag and sulfur generated by the gasification process until a market outlet for these products is found.	
	The EIS should evaluate if there is any real market for coal slag, and if the market is large enough to handle all that is expected to be produced. Slag contains silicates and mineral oxides, some of which are hazardous. If not appropriately handled, this would be an "emission" but of the solid rather than aerosolized type. How and where would it be disposed of if required, and at what impact?"	
	The EIS should include the types and amounts of various chemicals that would be used and stored.	
Health and Safety	With the current situation of globalized terrorism, locating this type of facility in a community would make it vulnerable to a terrorist attack. What plans would be put into place to protect the plant and local citizens? How much in additional resources would be required for police and fire support, and at what cost to taxpayers? Or would this public protection be just left to chance?	
	<ul> <li>The site is located adjacent to a major highway. What is the risk of plant explosion or other accident, and what risks are posed to travelers and local citizens?</li> </ul>	
Community Services	The EIS should evaluate how much the FutureGen Project could affect access to social and community services and resources and facilitate movement of emergency services.	
Socioeconomics	The EIS should evaluate how much development and what type of development had occurred before and would occur due to the FutureGen Project.	
	The EIS should evaluate how much the FutureGen Project would affect commercial/residential growth.	
	The EIS should evaluate the impact that the FutureGen Project could have on economic growth, including jobs, tax base and land values.	

Table B-6. Summary of Comments Received

Resource Area	Comment
Risk Assessment	What leaks from the aquifer system exist or could occur (thousands of oil/gas wells and water wells have been drilled over the past 50 years in Texas and the Gulf Coast) where the FutureGen Project would be located?
	<ul> <li>What is the potential for CO<sub>2</sub> injection to pressurize fluids already injected into or that naturally exist underground and what would their fate be?</li> </ul>
	<ul> <li>What continuous monitoring program is needed to detect leaks for carbon sequestration systems? What mechanism would ensure that the long-term monitoring program needed for carbon sequestration would exist for an adequate time?</li> </ul>
	<ul> <li>How would DOE ensure that CO<sub>2</sub> storage areas are leak-tight for hundreds/thousands of years?</li> </ul>
	<ul> <li>What is the likelihood that injecting CO<sub>2</sub> underground would reverse subsidence? It is our understanding that subsidence is permanent due to the compression of clay layers underground.</li> </ul>
	<ul> <li>What is the risk that CO<sub>2</sub>-generated acids would weaken the concrete in well casings in the carbon sequestration area?</li> </ul>
	<ul> <li>What are the effects of single/multiple existing wells (water, oil, gas, salt water injection, municipal waste, hazardous waste) in the carbon sequestration area? How many of these wells are unplugged in the FutureGen Project area?</li> </ul>
	<ul> <li>How long would the well casings in the carbon sequestration area remain leak free?</li> </ul>
	<ul> <li>How would one predict when CO<sub>2</sub> migration/movement would stop (threshold of immobility) in relation to property boundaries on the surface of the carbon sequestration area?</li> </ul>
	<ul> <li>Who would require that models are continually updated using monitoring results and updated scientific information for carbon sequestration?</li> </ul>
	The EIS should address what would happen in the event of a pipeline leak or rupture.

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