Illinois – Both Sites
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IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)
(The complete comment document submitted to DOE is shown in G8.)

Wetlands

#1 Each wetland listed for Mattoon and Tuscola in These tables as well as any other references in the text should have the following reference. *Field verified by wetland delineations conducted August 2006.

Unobstructed views of the powerplant.

"Two residential properties directly adjacent to the proposed power plant site, two residences within 0.25 mile (0.4 kilometer), and approximately 20 residences within a 1-mile (1.6-kilometer) radius of the site would have unobstructed views of the facility."

"Three residences directly adjacent to the site and seven residences within 0.5 mile (0.8 kilometer) of the site would have unobstructed views of the power plant."

#2 The Illinois sites are capable of generating ample available soil (due to reservoir construction) to construct earthen berms, and earthen berms are logical additions to various perimeter locations to screen otherwise unobstructed views of the power plant. Tree planting is also capable of significantly screening the views. For example, for the Mattoon site, depending on the location of the plant, a 16-foot high berm has the potential to screen most of the structures of the power plant from the adjacent residences, and trees will further enhance the screen.

Table 3-14, possible BMPs, does not mention berms as a method to mitigate potential impacts to aesthetics and noise. Berms and vegetation are effective mitigation tools that should be listed in the table.

Description of Mt. Simon Formation

"The thickness of the Mt. Simon formation is considerably uncertain because the formation was deposited on an eroded, high-relief surface, and thicknesses have been observed to vary by hundreds of feet over small distances."

#3 This is an incorrect statement about the thickness of the Mt. Simon. While this statement may be true for the western part of the basin, it is not correct for the central part where the two proposed FutureGen sites are located. The Mt. Simon is thin on top of eroded, high-relief surfaces also know as, Precambrian highs, because it was never deposited on these features. However, regional mapping suggest that the Mattoon and Tuscola sites are not in areas with Precambrian highs since these high areas usually occur on the western and southern part of the Illinois Basin. It is highly probable that the Mt. Simon should be at least 1300 feet thick at both sites. In addition, recent seismic reflection data across the two injection sites does not show any Precambrian highs.

IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)

(The complete comment document submitted to DOE is shown in G8.)

Description of Eau Clair seal.

"While the Eau Claire seal is well documented as a good seal for natural gas storage at other locations, if it has more siltstone than shale at the Mattoon or Tuscola sites, the seal is not likely to be as effective as if it is predominantly shale."

#4

This is a misleading implication. It is highly unlikely that the Eau Claire is siltier at Mattoon and/or Tuscola given the depositional nature of sediments which get finer as they move distally from their source. Given what we know of the Eau Claire at Manlove Gas Storage field and the direction of the sediment source from that location, Tuscola and Mattoon, which are down dip from Manlove, should be more shaley, not potentially silty. The available well control in the Illinois Basin suggests that the Eau Claire has higher siltstone content to the north of the two proposed sites; therefore, it is extremely probable that the Eau Claire will have thicker and higher clay content at the prospective site than wells to the north. All of the geologic data suggests that the Eau Claire seal at Mattoon and Tuscola will be as good as or better than the same interval at the natural gas storage projects at other locations.

Relation of primary seal to active or transmissive faults

"The Illinois Department of Natural Resources (IDNR) has mapped no significant faults within approximately 50 miles (81 kilometers) of Mattoon (ISGS, 1997)."

"As previously discussed, significant faulting and fracturing is likely to be present along and near the steep western flank of the Tuscola Anticline located about 3 to 4 miles (4.8 to 6.4 kilometers) east of the Tuscola Sequestration Site."

#5

While the first statement is correct, the Tuscola Anticline would be within 50 miles of the Mattoon site as well. A fairer, more accurate statement for both locations might be:

> "The Tuscola Anticline is located about 3 to 4 miles (4.8 to 6.4 kilometers) east of the Tuscola Sequestration Site {approximately 24 miles north-northeast of the Mattoon Sequestration site}. This setting of a steep flank of an anticline may contain some faults and fractures, but to date none have been found or mapped in the area of review by the Illinois Department of Natural Resources (IDNR).

IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)
(The complete comment document submitted to DOE is shown in G8.)

Modeling of Fault Leakage Scenarios

"The results of the numerical modeling of the fault leakage scenario for the proposed Mattoon Site indicate that, for permeabilities of 1 md and higher, the amount of CO2 leakage through the fault would be relatively small, as measured by the CO2 flux rates, extent of the plume, and CO2 gas pressure at the base of the overlying Maquoketa formation. If the fault were 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate would be about 173 tons (157 metric tons) of CO2 per year, or 0.006 percent of the 2.8 million tons (2.5 MMT) per year injection rate. The maximum plume extent occurred for the higher permeability faults and was 1.4 miles (2.3 kilometers) at year 60. The plume extent for the 1 and 0.01 md cases was essentially zero. Significant permeation of the Eau Claire shales is unlikely to occur at fault permeabilities less than 1 md (FG Alliance, 2006a)."

"The results of the numerical modeling of the fault leakage scenario for the Tuscola Site indicate that, for permeabilities of 1 md and higher, the amount of CO2 leakage through the fault is at least 2 percent of the total amount injected, as measured by the CO2 flux rates, extent of the plume, and CO2 gas pressure at the base of the overlying Maquoketa formation. If the fault was 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate for the first 60 years would be about 1.1 million tons (1 MMT) of CO2 or 2 percent of the 55 million ton (50 MMT) per year injection rate. The maximum plume extent occurred for the higher permeability faults and was 2.5 miles (4 kilometers) at year 100 and was still expanding. The plume extent for the 1 and 0.01 md cases was essentially zero. Significant permeation of the Eau Claire shales is unlikely to occur at fault permeabilities less than 1 md (FG Alliance, 2006b)."

#6

The major difference is that the Mattoon site says that results of numeric modeling suggest leakage would be "relatively small (p. 4.4-11)." For Tuscola, the conclusion is that "at least 2 percent of the total amount of injected" CO_2 could leak.

For the Mattoon and Tuscola sites the EIS leakage models have similar thicknesses of porous intervals, similar permeabilities, and place a 321 foot long fault with a 50 md permeability through the cap. **BUT:**

With both sites nearly the same and the same theoretical modeled fault, how can there be 1.1 million tons of leakage out of 55 million tons injected for the Tuscola site but only 173 tons of leakage out of 2.8 millions tons injected per year at the Mattoon site? - 2 percent versus 0.006 percent?

Mattoon – The EIS has a steady-state flux rate of 173 tons of CO2 per year for the 2.8 million tons injected per year.
Tuscola – The EIS has a steady-state flux rate for the first 60 years of 1.1 million tons or 2 percent of the 55 million ton per year injection rate.

Is the steady-state flux rate of 173 tons per year for the Mattoon site also for the first 60 years?? Is the Tuscola leakage 1.1 million tons over 60 years? If so then the leakage is 0.65 percent per year.

IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)
(The complete comment document submitted to DOE is shown in G8.)

They also look at different lengths of times for the maximum plume extent:

Mattoon – for the higher permeability faults 1.4 miles at year 60
Tuscola – for the higher permeability faults 2.5 miles at year 100 and was still expanding.

Why are the maximum plume extents not compared for the same time periods?

The comparison of sites can only be reasonably accomplished if the information from the models is shown with steady-state flux rates for the same time periods and the same injection rates. Since both sites have similar thicknesses of porous intervals and permeabilities, it seems the differences
#7 in the modeled results can only result from errors in the assumptions

The assumptions used to model the fault leakage scenarios for the two sites are very different. Both sites are supposed to have a maximum of 2.8 million tons injected PER YEAR – not 55 million ton(s) per year at Tuscola and 2.8 millions tons injected per year at Mattoon. The 55 million ton figure is the total amount injected over the plant lifetime, not an annual rate, and is an obvious error.

Does the modeled leakage result from faults with the same permeabilities since 4 different permeabilities were used in the modeling? Is the extent of the plumes based on the same permeability faults?

The Tuscola modeling needs to be redone with the same assumptions as for Mattoon.

Aquifer designations

"The aquifers that lay beneath the injection site would not fit EPA's definition (EPA, 2006) of an Underground Source of Drinking Water (USDW), which includes any aquifer or part of an aquifer that:

- Supplies any public water system, or contains a sufficient quantity of groundwater to supply a public water system and currently supplies drinking water for human consumption or contains fewer than 10,000 milligrams per liter of total dissolved solids (TDS); and
- Is not an exempted aquifer.

#8
Following EPA's definition above, the shallow aquifers near the sequestration site cannot be classified as USDW because they do not supply any public water system or have the quantity of water to do so."

The statement that the aquifers beneath the injection sites would not fit EPA's definition of an underground source of drinking water (USDW) may not be correct. An aquifer only needs to contain a sufficient quantity of groundwater to supply a PWS and currently supplies a PWS, or contains less than 10,000 mg/l TDS.

IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)

(The complete comment document submitted to DOE is shown in G8.)

A PWS, as defined by EPA, must serve 15 connections or 25 people for at least 60 days per year. Figuring 25 people at 75 gal/person/day = 1875 gal/day divided by 1440 minutes/ day = 1.3 gallons/minute. Therefore, an aquifer only needs to supply 1.3 gal/minute for 60 days a year to have "sufficient quantity". This equates to 112,500 gallons per year.

#8 Without a demonstration that the aquifer(s) in question can not supply this amount or contains greater than 10,000 mg/l TDS we would consider them to be USDWs. Generally, throughout Illinois the 10,000 mg/l TDS is the controlling factor for what is and what isn't a USDW for purposes of the UIC Program.

Since this project will be designed and built following the Class I construction standards and will clearly be injecting well below the lowest USDW this shouldn't be a major issue.

Wetland mitigation

#9 "IDNR has the authority to regulate jurisdictional wetlands through Section 404 and the IWPA."

Remove the above sentence. It restates the last paragraph of the previous page and its reference to Section 404 could be confusing. Replace with: "Impacts to any of the wetlands identified in the wetland delineation will require mitigation under the IWPA.

Wetland Mitigation

#10 "The amount of mitigation required for the proposed power plant site and other project components (e.g., utility corridors) is not known at this time. Ratios have been established by the USACE regarding mitigation. For example, a 2:1 ratio would require 2.0 acres (0.8 hectares) of wetland creation for every acre (0.4 hectare) of wetland loss. Typical mitigation ratios for unavoidable impacts to wetlands would be 1:1 for open water and emergent wetlands, 1.5:1 for shrub wetlands, and up to 2:1 for forested wetlands. The appropriate type and ratio of mitigation would be determined through the Section 404 permitting process."

This paragraph should include a sentence about IWPA requirements such as: "Mitigation required by IWPA could be as high as a 5.5:1 ratio, but is unlikely to be any higher than a 4.0:1 ratio."

IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)

(The complete comment document submitted to DOE is shown in G8.)

Response to Comment #1:	The following footnote has been added to Tables S-12 and 3-3: "Wetland acreage (hectares) are based on field verified wetland delineations conducted in August 2006."
Response to Comment #2:	Possible mitigation measures are presented in Table S-16 and Table 3-13, where "landscaping" would include such things as constructed berms and screens produced by planted trees. As the design process progresses, consideration of various mitigation measures will be further defined; therefore, the text will remain as presented in the EIS.
Response to Comment #3:	The text in Section 3.2.2.3 has been revised as follows: "The primary reservoir uncertainty at the Mattoon and Tuscola sites is the volume of effective porosity and the permeability of the various rock layers. This uncertainty is primarily driven, in part, by the distance of the site (36 miles [58 kilometers] and 56 miles [90 kilometers], respectively) from the nearest well with subsurface data in the Mt. Simon formation."
Response to Comment #4:	The text states that if (conditional) the Eau Claire had more siltstone than shale at the sequestration sites, it would be less effective as a seal; therefore, the text will remain as presented in the EIS. Site specific testing during the characterization phase would resolve any uncertainty.
Response to Comment #5:	Text in Section 5.4.2.1 has been revised as follows to indicate that possible faults and fractures in the Tuscola Anticline have not been found or mapped to date by Illinois Department of Natural Resources: "This setting of a steep flank of an anticline may contain some faults and fractures, but to date none have been found or mapped in the area of review by the Illinois Department of Natural Resources (FG Alliance, 2006b)."
Response to Comment #6:	There is a typographical error in Section 8.3.3 of the EIV. The model results were corrected in the EIS. The leakage rates for Mattoon and Tuscola were calculated using similar model parameters (including permeability). The 157 MT/yr should be 15,700 MT/yr, which is exactly 0.6 percent of the 2.5 MMT/yr injection rate, which is correctly stated in the text. At Mattoon for the same fault leakage scenario, 1.02 MMT of CO_2 enters the Ironton-Gatesville sandstones after 60 years or 2 percent of the 50 MMT total injected. These values are very similar as would be expected and principally reflect the impacts of differences in CO_2 properties for the shallower reservoir depth at the Tuscola Site. The fault leakage scenarios for both Tuscola and Mattoon were evaluated over a 60-year period. The text in Section 5.4 (Tuscola) was revised as follows: "If the fault were 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate for the first 60 years would be about 1.1 million tons (1 MMT) of CO_2 or 2 percent of the total 55 million tons (50 MMT) injected." The text in Section 4.4 (Mattoon) was revised as follows: "If the fault were 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate would be about 17,300 tons (15,700 metric tons) of CO_2 per year, or after 60 years, approximately 0.80 MMT or 1.6 percent of the 50 MMT total injected."

IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)
(The complete comment document submitted to DOE is shown in G8.)

Response to Comment #7:

There is a typographical error in Section 8.3.3 of the EIV. The model results were corrected in the EIS. The leakage rates for Mattoon and Tuscola were calculated using similar model parameters (including permeability). The 157 MT/yr should be 15,700 MT/yr, which is exactly 0.6 *percent* of the 2.5 MMT/yr injection rate, which is correctly stated in the text. At Mattoon for the same fault leakage scenario, 1.02 MMT of CO_2 would enter the Ironton-Gatesville sandstones after 60 years or 2 *percent* of the 50 MMT total injected. These values are very similar as would be expected and principally reflect the impacts of differences in CO_2 properties for the shallower reservoir depth at the Tuscola Site. The fault leakage scenarios for both Tuscola and Mattoon were evaluated over a 60 year period.

The text in Section 4.4 (Mattoon) was revised as follows: "If the fault were 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate would be about 17,300 tons (15,700 metric tons) of CO_2 per year, or after 60 years, approximately 0.9 million tons (0.80 MMT) or 1.6 percent of the 55 million tons (50 MMT) total injected."

The text in Section 5.4 (Tuscola) was revised as follows: "If the fault were 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate for the first 60 years would be about 1.1 million tons (1 MMT) of CO_2 or 2 percent of the total 55 million tons (50 MMT) injected."

Response to Comment #8:

The paragraph has been reworded to state: "The deep saline aquifers proposed for sequestration would not fit EPA's definition (EPA, 2006b) of an Underground Source of Drinking Water (USDW), which includes any aquifer or part of an aquifer that:

- Supplies any public water system,
- Contains a sufficient quantity of groundwater to supply a public water system and currently supplies drinking water for human consumption or contains fewer than 10,000 milligrams per liter of total dissolved solids (TDS); and
- Is not an exempted aquifer.

Following EPA's definition above, the shallow aquifers near the sequestration site may be classified as USDW. However, the deep saline aquifer targeted for CO_2 sequestration would not qualify as a USDW because of their very high total dissolved solids concentrations."

IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)
(The complete comment document submitted to DOE is shown in G8.)

Response to Comment #9:	Concur with the redundancy. The following sentences were deleted from Sections 4.8.2.1 and 5.8.2.1 "IDNR has the authority to regulate jurisdictional wetlands through Section 404 and the IWPA. IDNR also has peripheral authority through the Illinois Rivers, Lakes and Streams Act." Replacement sentence not added as impacts are not discussed in affected environment section.
Response to Comment #10:	The following was added to Sections 4.8.3.1 and 5.8.3.1: "Mitigation required by IWPA could be as high as a 5.5:1 ratio, but is unlikely to be any higher than a 4.0:1 ratio. Tables 3-13 and 3-14 in Section 3.4 provide potential mitigation measures and best management practices to avoid, minimize, and offset impacts to wetlands."

IL2. Red Barn Vet Service (March, Linda)

FutureGen Project

Environmental Impact Statement for Implementation of the FutureGen Project
U.S. Department of Energy, National Energy Technology Laboratory

PUBLIC HEARING COMMENT CARD

TUSCOLA

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1 I SUPPORT THE FUTURE GEN PROJECT IN OUR AREA - LOOK FOLWARD TO HAVING YOU HERE —

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS ☒ HARD COPY ☐ CD / SUMMARY

NAME LINDA MARCH ORGANIZATION RED BARN VET SERVICE

ADDRESS 854 CR 2100 E CITY SIDNEY STATE IL ZIP 61877

E-MAIL ADDRESS

IL2. Red Barn Vet Service (March, Linda)

Response to Comment #1: Comment noted and will be included in the Administrative Record of the EIS.

IL3. City of Effingham (Lange, John J.)

Crossroads of Opportunity

Effingham
ILLINOIS

CITY HALL
201 East Jefferson
P.O. Box 648
Effingham, Illinois
62401-0648

Mayor
John J. Lange
Public Affairs

Commissioners
Alan Harris
Accounts & Finances

Karen Flach
Public Property

Merv Gillenwater
Public Health & Safety

Larry Micenheimer
Streets & Public Improvements

June 26, 2007

Mr. Mark McKoy
NEPA Document Manager
U.S. Department of Energy
National Energy Technology Laboratory
P.O. Box 880
Morgantown, WV 26507-0880

Attention: FutureGen Project EIS

Dear Mr. McKoy:

The City of Effingham was one of the candidates in the final site selection process for the FutureGen project. The Effingham site was ranked number five and was not part of the final evaluation; however, we appreciated the opportunity to participate in the original selection process.

#1

We now would like to support our other local central Illinois communities of Mattoon and Tuscola in their efforts. Please consider this letter as formal support of the project in the June 26, 2007 public hearing in Mattoon and the June 28, 2007 public hearing in Tuscola.

Sincerely,

CITY OF EFFINGHAM

John J. Lange
Mayor

JJL:jm
cc: Mayor Charles E. White, Mattoon
Mayor Daniel J. Kleiss, Tuscola
file

Building Official
217-342-5300
Fax 217.342.5391

City Clerk
217-342-5301
Fax 217.347.2675

City Treasurer
217-342-5302
Fax 217.342.5311

Engineering
217-342-5303
Fax 217.342.5391

Mayor's Office
217-342-5304
Fax 217.342.2746

Water/Sewer
217-342-2366
Fax 217.342.5356

www.effinghamil.com

IL3. City of Effingham (Lange, John J.)

Response to Comment #1: Comment noted and will be included in the Administrative Record of the EIS.

IL4. Tuttle, Albert D.

FutureGen Project

Environmental Impact Statement for Implementation of the FutureGen Project
U.S. Department of Energy, National Energy Technology Laboratory

PUBLIC HEARING COMMENT CARD

MATTOON

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1 LACKING TECHNICAL EXPERTISE ALL FOUR CONSIDERED SITES APPEAR TO BE ACCEPTABLE. HOWEVER, MY PERSONAL OPINION IS THAT AN ILLINOIS SITE SHOULD BE SELECTED FOR FUTUREGEN. HOWEVER, THE NATION'S ENERGY NEEDS SHOULD NOT RELY ON ONE TECHNOLOGY. THEREFORE TEXAS COULD BE CONSIDERED FOR A SOLAR GEN PROJECT, OKLAHOMA COULD BE CONSIDERED FOR A WIND GEN PROJECT, AND THE FLOW OF WATER IN THE MAJOR RIVERS COULD BE USED TO GENERATE ELECTRICITY.

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS ☒ HARD COPY ☐ CD / SUMMARY

NAME
ADDRESS
E-MAIL ADDRESS

7 Mr. Albert D. Tuttle
5795 Lerna Rd
Mattoon, IL 61938-8561

IGANIZATION
TY STATE ZIP

IL4. Tuttle, Albert D.

Response to Comment #1:	DOE oversees numerous programs that are investigating and supporting a wide variety of renewable energy generation technologies, including wind, solar, and hydro. However, the particular goal of the FutureGen Project is to demonstrate an advanced power generation facility based on fossil fuels, specifically coal. Hence, technologies that would not be based on coal use are not within the scope of the FutureGen Project.

IL5. Hughes, Polly

July 9, 2007

Mr. Mark L. McKoy
Environmental Manager
US Dept. of Energy
National Energy
Technology Laboratory
P.O. Box 880
Morgantown, WV 26507

Dear Mr. McKoy:

#1 As a resident of Mattoon, Illinois, I strongly support the construction of FutureGen at the Mattoon or the Tuscola site. As an employee of an organization that works for the development of skilled workforce in the East Central Illinois region, I am very interested and excited about the potential growth and opportunity that FutureGen can bring to our area.

Sincerely,

Polly Hughes
Mattoon, IL 61938

IL5. Hughes, Polly

Response to Comment #1: Comment noted and will be included in the Administrative Record of the EIS.

IL6. Nuding, Elaine

July 9, 2007

Mr. Mark L. McKoy
Environmental Manager
U S Dept. Of Energy
National Energy
Technology Laboratory
P. O. Box 880
Morgantown, WV 26507

Dear Mr. McKoy,

I strongly support the construction of FutureGen at the Mattoon or Tuscola site. I am an employee of an organization that works for the development of
#1 skilled workforce in the East Central Illinois region.

FutureGen will bring much growth and opportunity to our area.

Sincerely,
Elaine Nuding
Elaine Nuding
Effingham, IL 62401

IL6. Nuding, Elaine

Response to Comment #1: Comment noted and will be included in the Administrative Record of the EIS.

IL7. French, Tamra

July 9, 2007

Mr. Mark L. McKoy
Environmental Manager
US Dept. of Energy
National Energy
Technology Laboratory
P.O. Box 880
Morgantown, WV 26507

Dear Mr. McKoy:

#1 As a resident of Central Illinois, I strongly support the construction of FutureGen at the Mattoon or the Tuscola site. As a government employee in the East Central Illinois region, I am very interested and excited about the potential growth and opportunity that FutureGen can bring to our area.

Sincerely,

Tamra French

Tamra French
Paris, IL

IL7. French, Tamra

Response to Comment #1: Comment noted and will be included in the Administrative Record of the EIS.

IL8. Crossroads Workforce Center (Stephenson, Bob)

CROSSROADS

IETC

ILLINOIS EMPLOYMENT & TRAINING CENTER

Visit us on the web at: www.lwa23.net

Centralia
224 N Elm
Centralia, IL 62801
618-532-4741
Fax: 618-532-0013

Effingham
1901 S. 4th Street
Suite 203
Effingham, IL 62401
217-342-4382
Fax: 217-347-2100

Mattoon
305 Richmond Ave. East
Mattoon, IL 61938
217-235-2222
Fax: 217-235-2228

Olney
216 East Main
Olney, IL 62450
618-392-7777
Fax: 618-392-7015

Salem
206 W. Main
PO Box 934
Salem, IL 62881
618-548-9001
Fax: 618-548-9007

Charleston
304 8th Street
PO Box 634
Charleston, IL 61920
217-345-3501
Fax: 217-345-3509

July 10, 2007

Mark L. McKoy, Environ. Mgr.
US Dept. of Energy
National Energy Technology Lab
P.O. Box 880
Morgantown, WV 26507

Dear Mr. McKoy:

#1 As a resident of east central Illinois, I strongly support the construction of FutureGen at the Mattoon or the Tuscola site. I am an employee of the Crossroads Workforce Investment Board which works for the development of skilled workforce in the East Central Illinois region and I am very interested and excited about the potential growth and opportunity that FutureGen can bring to our area.

Bob Stephenson

Business Services Representative
Crossroads Workforce Center (formerly IETC)
216 E. Main – Olney, IL 62450

FACES *of* OPPORTUNITY

Business & Employer Services
Community & Career Resource Centers

IL8. Crossroads Workforce Center (Stephenson, Bob)

Response to Comment #1: Comment noted and will be included in the Administrative Record of the EIS.

IL9. Hickox, Don

July 9, 2007

Mr. Mark L. McKoy
Environmental Manager
US Dept. of Energy
National Energy
Technology Laboratory
P.O. Box 880
Morgantown, WV 26507

Dear Mr. McKoy:

#1 As a resident of Newton, Illinois, I strongly support the construction of FutureGen at the Mattoon or the Tuscola site. As a board member of an organization that works for the development of skilled workforce in the East Central Illinois region, I am very interested and excited about the potential growth and opportunity that FutureGen can bring to our area.

Sincerely,

Don Hickox
Newton, Illinois 62448

IL9. Hickox, Don

Response to Comment #1: Comment noted and will be included in the Administrative Record of the EIS.

IL10. Effingham County Board (Waldhoff, Leonard)

EFFINGHAM COUNTY BOARD

County Board Chairman
Carolyn Willenburg

County Board Vice Chairman
Bob Shields

County Board Members
Don Althoff
Terry Croft
Don Cunningham
Mark Percival
Larry Vahling
Charles Voelker
Leonard Waldhoff

Committees
Tax & Finance
★ Larry Vahling
Terry Croft
Don Cunningham
Leonard Waldhoff

Public Buildings & Grounds
★ Leonard Waldhoff
Don Althoff
Larry Vahling
Charles Voelker

Transportation
★ Bob Shields
Larry Vahling
Charles Voelker

Legislative
★ Terry Croft
Leonard Waldhoff
Bob Shields

Technology/GIS
★ Larry Vahling
Don Althoff
Mark Percival

Health Services
★ Charles Voelker
Mark Percival
Don Cunningham

Reports
★ Mark Percival
Don Cunningham
Terry Croft

Insurance
★ Terry Croft
Don Althoff
Mark Percival

Public Safety
★ Don Althoff
Don Cuningham
Bob Shields

Airport
★ Don Althoff
Mark Percival

★ indicates Committee Chair

County Board
Effingham, IL 62401
(217) 342-4990

July 11, 2007

Mr Mark L McKoy
Environmental Manager
US Dept of Energy
Technology Laboratory
PO Box 880
Morgantown, WV 26507

Dear Mr McKoy:

#1 As an Elected Official of a neighboring community of Mattoon, IL, I strongly support the construction of FutureGen at the Mattoon or Tuscola location.

As an Elected Government Official, I am very interested and excited about the potential opportunity of growth and economic development that FutureGen can bring to our region.

Sincerely,

Leonard Waldhoff
Effingham County Board
Effingham, IL 62401

IL10. Effingham County Board (Waldhoff, Leonard)

Response to Comment #1: Comment noted and will be included in the Administrative Record of the EIS.

IL11. Corley, Glenna J.

FutureGen Project

Environmental Impact Statement for Implementation of the FutureGen Project
U.S. Department of Energy, National Energy Technology Laboratory

PUBLIC HEARING COMMENT CARD

TUSCOLA

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1

The proximity of the FutureGen site to "dense" population areas in Illinois relative to the sites in Texas give me numerous concerns. Especially: (1) Air pollution from accidental spills of chemicals used or stored on site, unplanned restarts & flaring events affecting a 2 mile radius. (2) Noise & vibration from coal train traffic & shakers, dust from coal, sulfur & slag piles. (3) Traffic impact - both train & vehicular on the entire area — especially if superimposed on the addition of a proposed nearby ethanol plant.

Will money promised by the State of Illinois really be available as claimed?

Your May 2007 draft statement was extremely well done. Thank you!

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS ☒ HARD COPY ☐ CD / SUMMARY

NAME Glenna J. Corley ORGANIZATION

ADDRESS 760E CR 1150N CITY Tuscola STATE IL ZIP 61953

E-MAIL ADDRESS

IL11. Corley, Glenna J.

Response to Comment #1:

DOE is reviewing potential impacts from air emissions, noise, vibrations, increased traffic, and many other possible effects as part of DOE's responsibilities to consider impacts before DOE commits completely to the project and to give fair consideration to the alternatives, including alternative sites. Furthermore, DOE will consider the expressed concerns of members of the public when DOE makes decisions on whether to go forward with the project, which alternatives to use, and which mitigation measures may be required.

1. DOE concurs that the Illinois sites are more "densely" populated than the Texas sites; however, the radius of air emissions impacts from the facility is comparable for all sites. The EIS is meant to look at several resource areas in assessing environmental impact for the site selection. DOE will consider these issues and its decision will be presented in the Record of Decision. Because of the types and quantity of chemicals that would be stored on-site, air pollution from accidental spills would be negligible. Odor from the aqueous ammonia may be released within the boundary of the site and is discussed in Sections 4.2; 5.2; 6.2; and 7.2 of the EIS. Other discussions related to accidental releases are provided in Sections 4.17; 5.17; 6.17; and 7.17.

2. DOE performed a comparative analysis to assess the potential effects of noise and vibration from construction and operation of the FutureGen Project on receptors within the vicinity of the proposed sites. The results of the analysis are presented in Section 3.1.14 and summarized in Table 3-3. The results of the comparative analysis are also presented in the EIS Summary in Table S-12.

The potential impacts of noise from the rail cars transporting coal to and from the Tuscola Site are evaluated in Section 5.14.3.2 of the EIS. Using the Federal Transit Administration (FTA) noise and vibration impact assessment guidelines and methodologies, DOE estimated L_{max} values ranging from 76 to 88 dBA would cause intermittent ambient noise level increases as the coal freight train passes through the City of Tuscola. Freight train noise would be generated by the movement of the locomotive, rail cars, whistles/horns, and track switches/crossovers along the CSX rail line. A comparison of the number of rail trips projected for coal deliveries during plant operations with the existing condition show that no more than one additional rail trip would be generated on a daily basis. The incremental change in the noise environment was considered to be minimal as there is currently an average of 7 trains per day passing through the CSX rail line.

The EIS addresses the point of noise associated with coal unloading at the Tuscola Site in Section 5.14.3.2. Noise is anticipated to be generated from unloading/loading activities such as the movement of containers, placement of coal feedstock on conveyor systems, and surficial contact of rail containers with other metallic equipment. Based on the estimated number of coal deliveries to the proposed power plant site, DOE predicted an hourly L_{eq} of 69 dBA from unloading/loading activities at the rail yard using noise prediction equations provided in Table 5-6 of FTA's Noise and Vibration Assessment guidance document.

IL11. Corley, Glenna J.

This estimate assumes that the coal unloading facility would not be enclosed in a building. DOE anticipated little or no increase in the noise level at the three closest residences (SL-1, SL-2, and SL-3) along CR 1050N because the coal unloading/loading area would likely be located near the southern boundary of the proposed site, which is approximately 0.5 mile from the closest residential receptors. DOE did not evaluate the impacts of intermittent noise and vibrations that may be generated by rail car shakers if they are used to loosen coal material from the walls of the rail cars during unloading activity. The noise and vibration associated with rail car shakers would be considered if they are included in the final design.

3. Table 3-6 of the EIS lists 14 projects, including 5 potential ethanol plants, that DOE considered in its evaluation of cumulative project effects. The analysis presented in Section 3.3.4.1 indicates most of the other projects would be constructed before the FutureGen Project, which would reduce the potential overlap in construction traffic. However, DOE concludes that over the long term, the projects would increase both rail shipments and truck shipments on local highways. The cumulative effect on rail traffic would depend upon the number of plants actually built, the method of fuel shipment, and the length of trains. DOE concludes, for example, that if all the grain and produced fuel from the proposed ethanol and bio-diesel plants were transported by train, it could require up to 25 100-car trains each week. The FutureGen Project would add about five 100-car trains per week.

4. DOE cannot warrant what a State government will or will not do, promise notwithstanding. Comment noted and will be included in the Administrative Record of the EIS.

IL12. Lawerence County Board (Gillespie, Charles E.)

COUNTY OF LAWRENCE

The County Courthouse
1100 State Street
Lawrenceville, IL 62439
Lawrence County

Phone: 618/943-3369 Fax: 618/943-4434 E-Mail: coordina1@yahoo.com

July 12, 2007

Mr. Mark L. McKoy
Environmental Manager
US Department of Energy
National Energy
Technology Laboratory
P. O. Box 880
Morgantown, WV 26507

Dear Mr. McKoy:

#1 As Chairman of the Lawrence County Board, Lawrenceville, Illinois, I am very interested that FutureGen be located in Mattoon or Tuscola, Illinois. This area of our State has many high-skilled technology trained workers available for this kind of employment.

The County of Lawrence, Lawrenceville, Illinois is approximately 85 miles from either site and we are very supportive of FutureGen being located in Mattoon or Tuscola.

Sincerely,

Charles E. Gillespie,
Chairman

CEG:sm

cc: Polly Hughes

IL12. Lawerence County Board (Gillespie, Charles E.)

Response to Comment #1: Comment noted and will be included in the Administrative Record of the EIS.

IL13. Scott, Barbara Attebery

Mark McCoy, Environmental Manager 7-15-2007
United States Department of Energy
Technology Laboratory -P.O. Box 880
Morgantown , West Virginia 26507 - 0880

Dear Mr. McCoy ;

I am a property owner in Douglas County with the property being close to the Kaskaskia River and about a mile from a proposed pipeline at one of the sites ...My concerns with Future
#1 Gen has to do with 1) the proposed storage of liquid carbon dioxide underground under great pressure 2) the water use and what is done with waste water and it,s effect on the Mahomet Aquifer and on the water supply in that whole area. .I have property in Champaign and in Ford County ,also . The latter are planning to run a water line into Gibson City for an ethanol plant .Champaign and the surrounding towns (including my Douglas County property)use water from
#2 the Aquifer.
With plans for several other ethanol plants in the area of Champaign County I am wondering what will happen to our water supply.

I have farmland in Montgomery County ,also, where we have been listening to coal companies touting Longwall Coal mining. I have seen the devastation and unpredictable results of this type of mining on the land and water supplies as well as buildings .drainage systems and
#3 farm land. , etc. This FutureGen is one big experiment . And if that carbon dioxide finds a way to seep up out of the ground it will kill all it touches. FutureGen plans to use coal - a fuel that will be mined by a method that may damage farmland in 2/3 of this rich food producing state in the breadbasket of the nation. Coal cannot be replenished once it is gone.

In our frenzy for energy we are forgetting our grandchildre n and greatgrandchildren who one day may have fuel for their cars but not enough food to eat.. Wind,solar and water are nonpolluting sources of power. Let us look very carefully at what some companies are doing for big money and the tactics they use to get it. Will my children and grandchildren benefit from the
#4 careful farming techniques my father and grandfathers used in Montgomery County? Will they be able to see the original prairie plants on the strip of abandoned railway right of way that I planned for them to see? Will they enjoy the people , the green pasture , still water and the clip clop of horses feet in Douglas County that I have loved ? Only time and involvement of a concerned citizenry will provide the answer..

Sincerely yours ,
Barbara A Scott
Barbara Attebery Scott PhD

IL13. Scott, Barbara Attebery

Response to Comment #1:

DOE commissioned a Risk Assessment to learn more about the risks and potential consequences of leaks of CO_2 and other gases that would be stored underground. *Adverse* risks have not been identified for any of the sites. Old wells that may penetrate the target reservoirs and overlying primary seals must be investigated further, especially at the Texas sites if either of these is selected. Water use, especially cumulative impacts from FutureGen and other water comsumers that may come to the area of concern in the future, may be considered further regardless of which site is selected. The primary water use of FutureGen will be for cooling water. Essentially all of the water drawn for cooling will be lost to evaporation to the atmosphere. Waste water would not be injected into the Mahomet Aquifer or released into the recharge zone for this aquifer (or put where it could affect any other aquifer).

FutureGen aims to have "zero liquid discharge," which means that process water would not be released in liquid form. The only release of process water will occur as water vapor. Wastewater from sanitary systems may be treated and released as is typical for an industrial facility and would not be injected into the Mahomet Aquifer or released into the recharge zone for this aquifer.

Response to Comment #2:

For the Tuscola Site, DOE has been considering whether there would be cumulative impacts from FutureGen's water consumption combined with the water consumption of other future water consumers that may take water from the Mahomet Aquifer in the vicinity of Champaign, Illinois. Currently, it appears that increasing discharges of municipal waste water from a Champaign-area waste water treatment plant (this water flows into the Kaskaskia River) will reduce the need for FutureGen to take water directly from the Mahomet Aquifer near Champaign, Illinois. FutureGen would increasingly use the waste water, instead of fresh groundwater. Because of this, DOE does not foresee an adverse impact on the Mahomet Aquifer in the long-term, but this issue would be reviewed again in a Supplement Analysis if Tuscola is selected.

Response to Comment #3:

DOE analyzed the risk and the potential consequences of leaking CO_2 from the sequestration reservoir and found that gas releases were considered extremely unlikely (having a probability ranging from 1 every 1,000 to 10,000 years). Gas releases (seepage to the surface) are extremely unlikely due to the depth of injection and the presence of many hundreds of feet of confining layers (caprock) overlying the storage formation. The only scenario that was found that could cause adverse health effects was a slow continuous leak through a deep well. Because wells in the region of influence intersecting the storage formation would be sealed to prevent such leaks, this situation would be unlikely to occur.

The impacts of coal mining in general, the future geographic distribution of coal mining in general, and the specific impacts of FutureGen on coal mining are beyond the scope of this EIS. The FutureGen Project does aim to demonstrate the capture and geologic sequestration of CO_2 emissions from the combustion of coal in a power plant. Some of the same or similar technologies might be used to capture and sequester CO_2 emissions from the combustion of oil, natural gas, municipal garbage, or biomass in a power plant. FutureGen aims to demonstrate and to support research and development to reduce our nation's and the world's emissions of CO_2, which is widely thought to contribute to global climate change.

IL13. Scott, Barbara Attebery

Response to Comment #4:	Usage of wind, solar and water resources also creates various types of environmental impacts, and the usage of wind and water resources has encountered substantial opposition on environmental grounds. DOE advocates a balanced and judicious usage of all resources along with conservation of resources and improved efficiency of resource usage on both the production and consumption sides. Please view all of the DOE websites (including those of all the DOE laboratories) for an overview of DOE's efforts.