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FUTUREGEN 2.0 PROGRAM  
PUBLIC SCOPING MEETING

TAYLORVILLE HIGH SCHOOL  
TAYLORVILLE, ILLINOIS  
JUNE 7, 2011

Representatives:

Mr. Cliff Whyte, Department of Energy  
Mr. Jeff Hoffmann, Department of Energy  
Mr. Michael Long, Ameren Energy Resources  
Mr. Gordon Beeman, FutureGen Alliance

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1 (On the record at 7:01 p.m.)

2 MR. WHYTE: Welcome to the Department of  
3 Energy's public scoping meeting for FutureGen 2.0. My  
4 name is Cliff Whyte. I am the NEPA compliance officer  
5 for the Department of Energy at the National Energy  
6 Technology Laboratory in Morgantown, West Virginia.  
7 Let the record show that the meeting began on June 7,  
8 2011, at 7:00 p.m. at Taylorville High School in  
9 Taylorville, Illinois.

10 First, I want to thank the high school for  
11 the opportunity to be here this evening. It's a nice  
12 venue to have these meetings, someplace hopefully that  
13 was convenient for you all, and we appreciate everyone  
14 who's attending this meeting. As part of its  
15 compliance with the National Environmental Policy Act,  
16 DOE has determined that an Environmental Impact  
17 Statement is required for this project.

18 The EIS, as we're going to call it from  
19 here on out this evening, will analyze and describe  
20 the potential environmental impacts of the proposed  
21 project and the project alternatives. Take a moment  
22 here. Can everybody hear me okay in the back?

23 (No response.)

24 MR. WHYTE: This scoping meeting I want to

1 clarify is for FutureGen 2.0. FutureGen 2.0 project  
2 is not the same project that was considered under the  
3 original FutureGen, although it does share several of  
4 its common concepts such as carbon capture and  
5 storage.

6           In addition, although DOE has or is  
7 considering supporting other projects in the area such  
8 as the Taylorville Energy Center, these projects are  
9 not part of or related to the FutureGen 2.0 program.  
10 Before we continue with the FutureGen 2.0 program, I  
11 do want to recognize some folks from the Taylorville  
12 Energy Center project that were gracious enough to be  
13 here tonight in case there was any confusion and  
14 anyone wanted to discuss questions with that project.

15           I'd like to recognize Mr. Jim Prescott,  
16 Jack Brown, and Jeff Gonka. So if you came here  
17 tonight wanting to discuss any aspects of that  
18 project, please seek these gentlemen out. I  
19 appreciate them being here this evening with us to  
20 deal with that issue.

21           One of the first steps in the preparation  
22 of an EIS is to hold a public scoping meeting or a  
23 series of public scoping meetings. And a lot of times  
24 there's confusion about what a public scoping meeting

1 is. It's really an opportunity for the public to  
2 participate in the evaluation of the possible  
3 environmental impacts associated with the proposed  
4 project. More importantly, it's an opportunity for  
5 DOE to listen to your concerns about the proposed  
6 project, be they environmental issues, economic  
7 impacts, social matters, or health and safety  
8 concerns. The goal here tonight is to determine the  
9 major topics that need to be covered in the EIS.

10 For your convenience, there are comment  
11 sheets that were available back there on the table  
12 where you came in. On those comments sheets you can  
13 provide additional written comments. Those can be  
14 mailed or e-mailed to me. Also on those sheets you  
15 may indicate if you'd like to have a copy of the draft  
16 EIS, and we'll talk a little bit more about that later  
17 in the presentation. But you can request copies of  
18 that via electronic format or hard copy or a summary.

19 The informal session tonight saw a lot of  
20 people come through here, and I appreciate that. I  
21 appreciate the attendance. We were able to listen to  
22 your concerns, and it was a joy to meet some of you  
23 for the first time and to get reacquainted with some  
24 folks I hadn't seen in a while. So we thank you all

1 for being part of that. Those informal sessions are  
2 an important piece of this. That's the  
3 question-and-answer, the one-on-one time that is  
4 important for everyone to gain a better understanding  
5 of what the concerns are, so thank you for that.

6           During the formal session tonight, we will  
7 read items into the record. We will provide a little  
8 bit of history of the FutureGen project. We'll go  
9 over the relevant parts of the National Environmental  
10 Policy Act process. Also, Ameren Energy Resources and  
11 FutureGen Alliance will briefly present an overview of  
12 their respective pieces of the project. I'll provide  
13 a little discussion about the NEPA process and our  
14 anticipated schedule in preparing the EIS. At that  
15 point, we'll begin the formal comment period this  
16 evening.

17           We do have a few elected officials who are  
18 joining us this evening, and we appreciate their  
19 attendance. We'll give them the opportunity to say a  
20 few words, and then we'll begin to go down the list of  
21 folks who have signed up to speak. Written comments  
22 are given equal weight to oral comments. If you would  
23 choose not to speak but rather to take one of the  
24 comment forms and mail it or e-mail it to me, that

1 will be given the same weight as if you provided  
2 testimony this evening. Again, the comment sheets are  
3 available. If you didn't get one, they're available  
4 in the back. And remember that this comment period  
5 closes on June 22, 2011, which is a Wednesday.

6 I would like to recognize some of the folks  
7 that are here this evening before we get on with the  
8 program. First of all, Mayor Greg Brotherton, thank  
9 you for being here this evening. County Board Chair  
10 John Curtain, Mayor Steve Sipes, Mary Renner from  
11 Christian County Economic Development Office.  
12 Representing the Department of Energy this evening we  
13 have division director Tom Sarkus. At NETL we have  
14 Jeff Hoffmann who's a project manager with the  
15 Department of Energy.

16 We have Nelson Rekos who's a project  
17 manager with the Department of Energy. Representing  
18 Ameren Energy Resources we have Mike Long, the plant  
19 manager. We have Steve Whitworth, manager of  
20 environmental services; we have Mitch White, plant  
21 technical services supervisor; and Brian Martin,  
22 environmental scientist. With the FutureGen Alliance  
23 we have Mr. Gordon Beeman. Also like to recognize  
24 Gretchen Hunt who is the stakeholder involvement

1 manager; and Sally Greenberg with the State of  
2 Illinois Geological Survey.

3                   we have a contractor who's working for the  
4 Department of Energy who's preparing the EIS, and that  
5 is Potomac-Hudson Engineering. We have president of  
6 the Potomac-Hudson, Mr. Fred Carey with us this  
7 evening -- he's in the back -- along with Cynthia Ong  
8 and Andrea Wilkes and Amanda Tyrrell. Again, I'm  
9 Cliff Whyte, and I appreciate everybody being here this  
10 evening.

11                   Next on our agenda will be Mr. Jeff  
12 Hoffmann. He's going to talk a little bit about DOE's  
13 role and some background information.

14                   MR. HOFFMANN: Thank you. Thanks. I'm Jeff  
15 Hoffmann with the Department of Energy, Office of Major  
16 Demonstrations. I'm the project manager on the  
17 FutureGen Alliance side which covers the pipeline and  
18 sequestration portion of the project. Nelson Rekos  
19 is, as Cliff had mentioned, he's a project manager  
20 with the Office of Major Demonstrations, and he's  
21 responsible for the Ameren side which covers the power  
22 plant within the fence line.

23                   I'd like to start off and just kind of give  
24 a brief introduction to FutureGen 2.0. FutureGen 2.0

N



1 is a government/industry partnership to test  
2 oxy-combustion technology for safe and permanent  
3 carbon sequestration at meaningful commercial scale.  
4 I'm not going to go into details on either the  
5 technical details of the Ameren side or the FutureGen  
6 Alliance side. Representatives from both of those  
7 projects will be speaking immediately after me.

8           what I would like to say is that the U.S.  
9 Department of Energy has awarded approximately \$1.05  
10 billion, \$1 billion of which is American Recovery and  
11 Reinvestment Act funding, to execute the FutureGen 2.0  
12 project. Combined with the industry cost share, the  
13 total project value is approximately \$1.3 billion.

14           The objectives of the FutureGen project are  
15 to validate the technical feasibility and economic  
16 viability of near-zero emission energy from coal,  
17 validate the effectiveness, safety, and permanence of  
18 CO2 sequestration into the saline formation, establish  
19 a standardized technology and protocols for CO2  
20 measurement, verification, and accounting, typically  
21 referred to as MVA, and gain domestic and global  
22 acceptance of the FutureGen 2.0 concept to facilitate  
23 broad deployment of oxy-combustible CCS.

24           I'd like to give a little bit of context of

1 where FutureGen 2.0 fits into the office of the  
2 Department of Energy Major Demonstrations Program.  
3 For the past 25 years, DOE NETL has been co-funding  
4 industry government cost-share projects to the  
5 large-scale demonstration of clean coal technologies.  
6 Over that time period, many of the large-scale  
7 demonstrations have resulted in moving pre-commercial  
8 technologies to widespread commercial deployment.

9           FutureGen 2.0 fits near the end of this  
10 arrow. It's intended to bring the, to develop and  
11 test technology options for both new power plants as  
12 well as repowering existing technologies with carbon  
13 capture sequestration. It's expected that the  
14 technology proven and lessons learned by FutureGen 2.0  
15 will be useful in the deployment of the next  
16 generation of coal-based power plants.

17           This slide here represents the broad  
18 spectrum of major demonstration projects and test  
19 projects that are currently being funded by the  
20 Department of Energy's large-scale demonstration  
21 program. Included here are a variety of technologies  
22 including Integrated Gasification Combined Cycle coal  
23 plants, and it's the same technology that was intended  
24 for use in the original FutureGen. It also includes

1 post-combustion capture from conventional pulverized  
2 coal plants as well as carbon capture sequestration  
3 from industrial processes including the ADM project  
4 located nearby in Decatur, Illinois.

5           Note that FutureGen 2.0 is the only  
6 oxy-combustion project in this portfolio. Also  
7 mentioned, as many of you are familiar with the  
8 Taylorville Energy Center, that while it's not  
9 represented in here, it's among a number of other  
10 projects that are intended on moving carbon capture  
11 sequestration forward. This slide here represents  
12 those that are directly funded out of the Department  
13 of Energy National Energy Technology Laboratory.

14           Another item I want to point out with this  
15 slide is that many of the projects, the lion's share  
16 of those that are being conducted are looking to  
17 sequester the CO<sub>2</sub> in the EOR. Important to this  
18 project and one of the primary objectives is the  
19 demonstration of long-term permanent and safe  
20 sequestration in saline formations. Of the list of  
21 technologies or list of projects that I depicted  
22 before, only three of these, FutureGen 2.0 being one  
23 of them, are targeting the saline formations. It's  
24 worth mentioning that FutureGen 2.0 is planned to be

1 the largest scale in terms of tons-per-year storage of  
2 the three that are identified here.

3           Just a brief overview of what carbon  
4 sequestration is. Carbon sequestration can be  
5 described in a variety of manners one of which is  
6 terrestrial sequestration where CO<sub>2</sub> is absorbed from  
7 the air and is sequestered and captured in trees,  
8 soils, and grasses. The other is point source  
9 capture, what we are looking to do here, where carbon  
10 dioxide from flue gas streams such as in the FutureGen  
11 2.0 Meredosia facility or other options such as  
12 ethanol plants, cement, steel, and refineries, and  
13 natural gas processing plants where the carbon is  
14 captured, cleaned, and purified and compressed to be  
15 pipeline-ready.

16           The carbon is then sequestered in geologic  
17 storage formation such as saline formations, depleted  
18 oil/gas wells, unmineable coal seams, basalts, shales,  
19 and other types of suitable geologic formations. It's  
20 worth mentioning that, again, the FutureGen program is  
21 targeted to test and prove storage in deep saline  
22 formations.

23           why this is important is if you look at  
24 this slide here, this captures information from a

1 National Storage Atlas that's developed by the  
2 National Energy Technology Laboratory and their  
3 partners. What this depicts here is what's been  
4 identified as a conservative or low-availability  
5 estimate of storage formations as well as a  
6 high-availability estimate of storage formations.  
7 What's important from the perspective of saline  
8 formations is that compared to oil and gas fields and  
9 unmineable coal seams, in the context of the available  
10 storage capacity, saline formations have at least an  
11 order of magnitude more storage capacity than oil and  
12 gas fields and unmineable gas coal seams.

13           Also important is the broad distribution of  
14 saline formations compared to some of the other  
15 options. Saline formations are of much greater  
16 distribution throughout the United States many of  
17 which are located in areas that are currently near  
18 existing coal-fire and other industrial CO<sub>2</sub> sources.

19           In my last slide, I'll cover a little bit  
20 of background and speak a little bit to what, how  
21 Cliff had identified that FutureGen 2.0 is different  
22 than the original FutureGen program. FutureGen itself  
23 was conceived and initially announced in the last  
24 decade, formally kicked off in 2004 with a March 2004

1 report to Congress. In that report, FutureGen was  
2 identified as an integrated research initiative with  
3 the objective to establish feasibility and viability  
4 of producing electricity from coal with near-zero  
5 emissions.

6                   Shortly after that report was published,  
7 FutureGen Industrial Alliance was formed, and the  
8 original FutureGen project that would have been  
9 located in Mattoon was designed as an Integrated  
10 Gasification Combined Cycle, or IGCC plant with  
11 hydrogen production and carbon capture sequestration  
12 in the Mt. Simon saline formation.

13                   In August 2010, Secretary Chu announced  
14 that FutureGen 2.0 was another alternative to  
15 achieving near-zero emissions, near-zero-emission  
16 electric power from coal, the primary drivers of which  
17 were the fact that rising costs for IGCC concepts as  
18 well as a number of other IGCC concepts had been  
19 announced. And FutureGen 2.0 represents  
20 oxy-combustion which is an amenable and potentially  
21 cost-effective option for repowering the existing  
22 plants or the existing fleets of new power plant  
23 construction.

24                   with that, I'd like to introduce Mike Long,

1 he's the plant manager, to go into additional detail  
2 of the Meredosia side, the Ameren side of FutureGen  
3 2.0.

4 MR. LONG: Thank you, Jeff. As Jeff said,  
5 I'm Mike Long, plant manager of the Meredosia power  
6 station. What I'd like to talk to you about this  
7 evening is a little bit about Ameren Energy Resources,  
8 who we are, a project overview of the Meredosia  
9 project, and a description of oxy-combustion  
10 technology.

11 Most of you are aware of Ameren, and under  
12 the umbrella of the Ameren corporation are three  
13 companies: Ameren Illinois, Ameren Missouri, and  
14 Ameren Energy Resources. Ameren Energy Resources is  
15 the owner and operator of power stations in Illinois,  
16 and they're an independent power producer. By that I  
17 mean that we're not a rate-regulated utility, that we  
18 sell our energy to the open market.

19 Last year our total generating capacity of  
20 the AER was 6,250 megawatts, and last year it produced  
21 just under 30 terawatt hours of energy. Ameren Energy  
22 Marketing is a company within AER that sells the power  
23 from the Meredosia power station and the other plants  
24 in the AER system. We sell to wholesale and retail

1 customers, municipals, cooperatives, common marketers  
2 and the like as listed on the slide.

3           The project team for the Meredosia FG2  
4 project is, of course, Ameren Energy Resources.  
5 They're the owner and operator of Meredosia plant.  
6 Babcock and Wilcox; they're responsible for the boiler  
7 island and gas quality control system. Air Liquide,  
8 responsible for the air separation unit and the  
9 compression and purification unit.

10           URS was hired by Ameren as a project  
11 manager; they're responsible for balance of plant and  
12 interconnecting that to the existing plant facilities.  
13 And by balance of plant, I'll explain. On this  
14 project, Unit 4, which is the unit that is being  
15 repowered, the turbine and all of the systems that  
16 support that turbine and generator will remain in  
17 place. And that's what we refer to as the balance of  
18 plant.

19           As we look at this picture, on your left,  
20 left of the slide, there's a tall chimney, and that is  
21 plant south. And as you look to the right would be  
22 plant north. That chimney is connected to units 1 and  
23 2, which are fueled by coal. And those units  
24 currently have their operation suspended. Unit 3 has



1 a stack on top of it. It is the next stack to your  
2 right. Unit 3 also is powered by coal, and that unit  
3 is in operation.

4           The unit that we're concerned with here on  
5 this project is Unit 4. It has the, in the yellow  
6 rectangular box, that is Unit 4. What you're looking  
7 at in that box in this particular picture is Boiler 6.  
8 Boiler 6 will be replaced with a new oxy-combustion  
9 boiler. It will be referred to as Boiler 7, and the  
10 plant itself will extend to the property in the  
11 foreground of this picture.

12           Unit 4 was selected as an ideal candidate  
13 for oxy-combustion simply for, well, for a couple of  
14 reasons actually. Its main fuel is oil, and because  
15 of that, it does not compete as efficiently as coal  
16 does in an open market; and as a result, it sits idle  
17 quite a bit. So a new power source to a turbine  
18 generator is very desirable to, for Unit 4. It's also  
19 a logical next step as far as scale for the  
20 oxy-combustion technology.

21           200 megawatts is the size of this unit, and  
22 it's a logical step from a 30-megawatt test unit that  
23 we have already proven to the first commercial scale  
24 size. The turbine generator also has very low

1 operating hours in the neighborhood of 20,000 hours,  
2 which by power plant standards is very low. And that  
3 is as a result of the fuel that is used in that unit,  
4 as I just described.

5           Okay. So what is oxy-combustion? If you  
6 think about the air that you breathe, approximately 80  
7 percent of it is nitrogen, 20 percent being oxygen.  
8 In a combustion process, be it coal or gasoline or  
9 wood or whatever, the end result is CO<sub>2</sub> and nitrogen.  
10 Basically what the oxy-combustion process is doing is  
11 simply stripping the nitrogen away from the air and  
12 using that in a combustion process.

13           Now, in order to make certain that the  
14 volume is the same throughout that process, CO<sub>2</sub> is  
15 recirculated back into the combustion process, and as  
16 a result, as you can see on the graphs behind me, that  
17 approximately 20 percent of that process is all that  
18 is going to the compression purification unit. The  
19 rest is being utilized in the combustion process.

20           Okay. The plant will basically be made up  
21 into three sections. There's a typical boiler island  
22 or power block that's in the middle, and that's where  
23 the electricity is generated, but it's added a couple  
24 processes on the front end and the back end. The air

1 separation unit is obviously on the front; that's  
2 where oxygen is utilized to strip the nitrogen from  
3 the air, the air goes to the boiler for combustion  
4 purposes, and the flue gas from that process goes  
5 through environmental cleanup equipment. And that  
6 equipment is basically equipment that is currently  
7 used on existing power plants today. It's a bag house  
8 and scrubber system.

9 Flue gas from that system is recirculated  
10 back to the O2 stream; as we mentioned in the previous  
11 slide, that would be part of the combustion process.  
12 At the end, we're left with a very concentrated stream  
13 of CO2 which is compressed at the compression and  
14 purification stage. From there it enters into the  
15 sequestration pipeline.

16 And with that, we're ready for Gordon  
17 Beeman from FutureGen Alliance, and Gordon can take it  
18 from there.

19 MR. BEEMAN: Good evening. My name's  
20 Gordon Beeman. I'm the manager for design engineering  
21 for the FutureGen Alliance. I'd like to send regrets  
22 from Ken Humphreys our CEO. He would have liked to  
23 have been here tonight. Unfortunately, he's currently  
24 out of the country trying to attract other members to

1 the Alliance. What I'm going to talk about tonight is  
2 essentially the FutureGen Alliance's part of the  
3 project, which is essentially the CO2 pipeline that  
4 comes from the Meredosia plant, and then the CO2  
5 storage site.

6 FutureGen Alliance was formed shortly after  
7 the report to Congress. It's essentially a consortium  
8 of coal producers and equipment suppliers and  
9 electrical-generation utilities who generate  
10 electricity from coal. They've come together with the  
11 main purpose of trying to find a way to produce clean  
12 coal and capture CO2. So if you look at our project  
13 concept, essentially what we have is the power plant  
14 that Mike referred to earlier.

15 We have currently a CO2 pipeline that runs  
16 to the sequestration site, and then there'll be an  
17 injection well. We actually think we will wind up  
18 with two injection wells. They will inject the CO2  
19 deep underground, more than a mile underground, into  
20 the Mt. Simon saline formation. The nice thing about  
21 the geology in central Illinois is essentially we have  
22 a primary caprock of shale which serves as a primary  
23 means of sequestering the CO2, and then there are also  
24 our secondary shale layers higher up in the formation

1 that would also serve as additional barriers.

2           So the project goals, I think Jeff talked a  
3 little bit about them earlier. We want to demonstrate  
4 the siting, permitting, insuring, operating activities  
5 necessary to put together a CO2 storage plant that's  
6 fully integrated with the power plant. It's our goal  
7 to store ultimately 39 million metric tons of CO2 that  
8 would otherwise be emitted to the atmosphere. We  
9 expect to store about 1.3 million metric tons on an  
10 annual basis.

11           We want to demonstrate the comprehensive  
12 monitoring technologies that are required to ensure  
13 that the CO2 is going into the formation as we expected  
14 it to go into the formation and it's behaving in the  
15 formation as we expect it to and that we know the  
16 extent of the formation. We also intend to establish  
17 a visitor and research and training facilities that  
18 would be dedicated to looking at carbon capture and  
19 storage technologies, and we want to provide a pathway  
20 for future activities in the same area. FutureGen 2.0  
21 essentially is a first-of-a-kind project. We hope to  
22 make it easier for those that come down the road.

23           This briefly kind of shows the injection  
24 well. What you see here is a well head, the piping

1 that leads up to the well head for the injection of  
2 the CO2. The CO2 will come into the site in a  
3 12-inch-diameter pipeline. Comes in as supercritical  
4 CO2, which means it's a liquid. It'll be, reach the  
5 site at somewhere over 1500 PSI probably at around 90  
6 degrees Fahrenheit. we will then inject it down into  
7 the ground.

8           As we put the pipeline together, the  
9 pipeline will be at least four feet underground in all  
10 areas. Where it comes through agricultural land, we  
11 will be down at least five feet. And we made a  
12 commitment to stay 150 feet away from residences even  
13 though requirements say 50 feet is sufficient. As I  
14 mentioned earlier, we probably will have two injection  
15 wells, and then there will be several monitoring wells  
16 that would be placed on site to monitor the CO2 plume.

17           As you may know, FutureGen Alliance has  
18 selected Morgan County site near Jacksonville as a  
19 permanent preferred site for the CO2 storage facility;  
20 however, there are two alternate sites, here in  
21 Christian County and in Douglas County. All three  
22 sites are being carried forward through the EIS, and  
23 we will be evaluating all three sites.

24           If we look specifically at the Morgan

1 County formation, we will be storing CO2 about a mile  
2 underground. It's far away from the groundwater which  
3 only goes down to a depth of about 200 feet. As I  
4 indicated before, at that site we have three primary  
5 seals, and we believe that the, as we've seen in other  
6 demonstration projects, that the Mt. Simon formation  
7 would be very high-quality storage reservoir for CO2.

8           As I mentioned earlier, there are a  
9 significant amount of monitoring activities that take  
10 place. Not only are there wells that go down to  
11 monitor the pressure in the formation. There are  
12 wells that go down above the caprock to check for any  
13 potential CO2 leakage that comes up. There are seismic  
14 arrays in place to help understand how the plume is  
15 moving.

16           Significant amount of monitoring pieces are  
17 required by the class 6 injection permit that we will  
18 receive from the U.S. EPA, and if you have any  
19 particular questions about these monitoring  
20 activities, please contact one of us later.

21           In summary, FutureGen 2.0 is the world's  
22 first near-zero emission power plant. A high rate of  
23 carbon capture. We expect carbon capture to be in  
24 excess of 90 percent. We expect near-zero levels of

1 other traditional emissions. There will be full  
2 integration between the CO2 pipeline and the geologic  
3 storage.

4           we will essentially enable the use of  
5 Illinois basin coal as a clean coal piece, and we will  
6 create and create construction and permanent jobs.  
7 we'll provide additional revenue for those landowners  
8 whose deep underground storage space is used for the  
9 CO2 storage. And that will increase county tax  
10 revenue, and it should contribute somewhere between,  
11 construct somewhere between the 25 and \$50 million in  
12 the visitor research and training facilities.

13           MR. WHYTE: Thanks, Gordon. I'm going to  
14 give just a short talk about the National  
15 Environmental Policy Act. It's going to be short  
16 because I'm nearly blind from the sun coming in on me  
17 here. But anyway, it is a federal law that's been in  
18 effect for quite some time, since 1970. It applies to  
19 all federal agencies. When there's federal monies  
20 involved, when there's federal projects that are being  
21 undertaken, they must comply with NEPA. It is a  
22 national charter for the protection of the  
23 environment, and it promotes environmental  
24 considerations in a decision-making process.



1           One of the central tenets of an EIS is to  
2 make the information available to the public. This  
3 information needs to be high-quality, it needs to be  
4 in the hands of the public and also in the hands of  
5 the expert agencies in the various resource areas.  
6 One of the things I failed to say earlier today was  
7 that I appreciated the fact that there were a number  
8 of state agencies represented here this evening, and  
9 we appreciate all those folks coming out to be part of  
10 this. And finally, public involvement is one of the  
11 most important aspects.

12           For this particular EIS, we made the  
13 determination in November that an EIS was necessary.  
14 Notice of intent was filed in the Federal Register on  
15 May 23. There've been a number of mailings and  
16 scoping letters that have been sent out to various  
17 agencies. And it's basically a 30-day window for the  
18 scoping period, although as I've said earlier, we'll  
19 accept comments that are a little late to the extent  
20 that it's practicable. Public comments should be  
21 submitted to DOE by wednesday, June 22.

22           A typical environmental impact statement,  
23 which can be voluminous, is, consists of various  
24 pieces, and these general pieces of the document

1 remain the same. There's a purpose and need for  
2 agency action. There's a proposed agency action and  
3 the reasonable alternatives, a discussion of the  
4 proposed project and project alternatives, a  
5 description of the affected environment, an analysis  
6 of the potential environmental consequences, and  
7 there's also a list of agencies, organizations, and  
8 persons who are contacted. Also public participation  
9 and responses to public input are included in these  
10 documents.

11           As I'm sure many of you saw in one of the  
12 posters back here this evening, we're early on in this  
13 process for the FutureGen 2.0 project. The notice of  
14 intent was filed in May, and right now we're at the  
15 first comment period, the first public scoping. A  
16 draft EIS will come next followed by a comment period  
17 on that draft document so that we can solicit  
18 additional input.

19           The schedule that we envision for this is  
20 that a draft environmental impact statement will  
21 likely be out in the spring of 2012. At that point,  
22 obviously we'd have another public hearing and be back  
23 here to present that document and collect public  
24 information or public input on that document. The

1 final EIS we're projecting to be published in the fall  
2 of 2012 with the record of decision to follow after.

3 The purpose of the public scoping meeting  
4 is to collect your input. We want to know what the  
5 local folks believe should be in the scope of the EIS.  
6 What are the issues, what are the concerns, what data  
7 do you believe needs to be generated or used, what  
8 analysis needs to be performed, and in general what  
9 the stakeholder concerns are.

10 After the meeting tonight, you're welcome  
11 to continue to submit comments. My address is on here  
12 as well as on the comment forms that are available in  
13 the back as well as my e-mail address and a toll-free  
14 number. And again, I can't emphasize enough comments  
15 are due by Wednesday, June 22.

16 At this point, we're going to begin the  
17 formal collection of comments. Again, please note  
18 this is not a question-and-answer session. This is  
19 your opportunity to read your comments, your thoughts  
20 into the record such that they can be recorded. After  
21 the public, each speaker's had an opportunity, we'll  
22 open this back up to anyone who hasn't preregistered  
23 to speak or anybody who has anything additional to  
24 add, and after we close the formal public comment

1 portion, we will be available after the meeting to  
2 have additional questions and answers similar to what  
3 we did before the meeting. Please limit your speeches  
4 to five minutes. Again, we'll give opportunities to  
5 speak as time allows at the end.

6           There will be an official transcript made.  
7 It's likely that that will be available in a couple of  
8 weeks online. Speakers, please when you come up to  
9 the microphone, please state your name clearly and  
10 your affiliation. If you're with an organization or  
11 speaking on behalf of a group or club, please make  
12 that known. That said, let's start with the comments,  
13 and let me get the list here. First commenter this  
14 evening will be Mayor Greg Brotherton.

15           MAYOR BROTHERTON: Thank you. My name is  
16 Greg Brotherton, and I'm currently serving as mayor of  
17 the city of Taylorville. I've lived in the city of  
18 Taylorville for most of my life. I grew up here, I  
19 met and married my wife here, and I've raised my  
20 children here. Taylorville is my home, and I want  
21 only the best for it and its citizens.

22           The city of Taylorville has demonstrated  
23 time and time again that it wants to embrace clean  
24 energy technologies. This has been evidenced by the

1 numerous local meetings and rallies held in support of  
2 both the proposed Taylorville Energy Center, and  
3 FutureGen 2.0. This project means more than just new  
4 jobs for our citizens. It represents hope for the  
5 city and the surrounding county, hope for a new  
6 industry and the revival of our local economy, hope  
7 for a brighter future for our sons and daughters.

8                   We offer to be associated with FutureGen  
9 2.0 because we believe that it represents an  
10 investment that will be a catalyst for growth not only  
11 within the city but in the rest of the state as well.  
12 Taylorville has a long, rich history that evolved  
13 around the mining of coal. Christian County was once  
14 home to the world's largest coal mine, and it is still  
15 rare to find a resident who is not related to someone  
16 who once worked in those mines.

17                   After suffering through decades of a local  
18 economic downturn, the result in large part from the  
19 area coal mine shutting down, the idea that a new  
20 technology may once again allow this relatively  
21 abundant resource to be utilized is definitely  
22 exciting for us and the country as a whole. We  
23 believe in the viability of the coal gasification  
24 process and understand the science behind the CO<sub>2</sub>

1 sequestration.

2                 with that said, our citizens also recognize  
3 the need for a comprehensive approach to addressing  
4 this country's energy needs, one that includes not  
5 only clean coal but also includes renewable energy  
6 sources like wind, solar, biomass, hydropower, nuclear  
7 power, and efficient natural gas. We want our leaders  
8 to eagerly embrace those opportunities that will allow  
9 us to gain a greater degree of energy  
10 self-sufficiency. A FutureGen 2.0 project offers us  
11 that type of opportunity.

12                 The federal government has shown support  
13 for this type of project by including loan guarantees  
14 in the Energy Policy Act of 2005. This type of  
15 funding assistance helps make the implementation of  
16 the new technologies possible and in turn benefits all  
17 of us. We certainly welcome this as evidence that our  
18 federal government sees the need for the development  
19 of clean energy technologies like FutureGen 2.0.

20                 I cannot overemphasize the positive impact  
21 that a project like FutureGen would have in our city.  
22 workers involved in construction would eat at our  
23 restaurants, shop at our stores, stay in our motels,  
24 and rent available residential property. I truly

1 believe that the much-needed economic stimulus that  
2 this project would provide would also trigger  
3 additional new investment into the area.

4           The concept plans for FutureGen 2.0 have  
5 received the approval and support of not only the city  
6 of Taylorville but of numerous other area entities as  
7 well. The Taylorville Chamber of Commerce, Christian  
8 County Board, and the Christian County Economic  
9 Development Corporation have all voiced their support  
10 for the project. The citizens of Taylorville are  
11 confident that the proposed facility will be built and  
12 operated well within all of the health-based federal,  
13 state, and environmental standards.

14           No one is more concerned about those issues  
15 than our own citizens. After all, it is their  
16 community, their environment that's being impacted,  
17 and their quality of life that would be bettered. As  
18 the Department of Energy proceeds through the National  
19 Environmental Policy Act environmental impact study, I  
20 hope that they will weigh the needs and desires of the  
21 local community above those of the outside interests.

22           The Taylorville City Council has  
23 demonstrated its support of the project. We have  
24 worked with and will continue to work hand in hand

1 with developers to ensure that FutureGen 2.0 project  
2 has what it needs from our city. Thank you very much  
3 for allowing this opportunity to address you.

4 MR. WHYTE: Thank you. Our next speaker  
5 this evening will be County Board Chair Mr. John  
6 Curtain.

7 MR. CURTAIN: Thank you, Mr. Whyte. My  
8 name is John Curtain. I'm the chairman of the  
9 Christian County Board. On behalf of the members of  
10 the Christian County Board and the residents of  
11 Christian County that we represent, I want to express  
12 our support of the DOE's federal mission here tonight  
13 to help to understand the full impact of FutureGen  
14 2.0's CO2 storage field.

15 We're more than pleased to host you here  
16 and appreciate the opportunity to let you know what we  
17 perceive will be the most important impact this  
18 project will have here locally and all across the  
19 entire region of the state. I was around here during  
20 the boom years when coal was king and working in the  
21 mines was a way of life for most of our residents here  
22 in Christian County.

23 My father-in-law moved here from Ohio back  
24 in the 30s to work in the mine where he made a good



1 salary and provided for his family. Coal moved out of  
2 this county by the trainloads, and the miners had  
3 secure jobs. I also have seen that boom end and  
4 eventually nearly die off when demand for Illinois  
5 coal waned due to more stringent standards in the  
6 Clean Air Act.

7 Coal-fired power plants that are now going  
8 off line must be replaced by using coal in a clean and  
9 more environmentally responsible way. We have a huge  
10 abundance of coal reserves here, and we desperately  
11 need these jobs. Please heavily consider the positive  
12 impact of this project on our region in your  
13 environmental impact studies. Thank you very much.

14 MR. WHYTE: Thank you. The next speaker  
15 will be Mayor Steve Sipes.

16 MAYOR SIPES: Thank you. I'm Steve Sipes,  
17 mayor of the city of Pana. The city of Pana is very  
18 excited about the opportunity to help host the CO2 deep  
19 underground storage site for FutureGen 2.0 in  
20 Christian County. If Christian County is selected,  
21 this project would not only put central Illinois on  
22 the map in terms of environmentally responsible  
23 electric generation, but it opens the door to cleaner  
24 uses of Illinois coal. That's why we appreciate the

1 Department of Energy's mission to help bring these  
2 projects to a reality. The number of jobs and the  
3 amount of local spending this project will bring to  
4 our area especially during this national job downturn  
5 and would, I would hope would make a strong  
6 consideration in your impact study.

7 In Christian County we have had plenty of  
8 time to learn about the environmental benefits and  
9 impacts of CO2 storage because of our familiarity with  
10 other projects. We have had presentations from the  
11 Illinois State Geological Survey, and we've had time  
12 to ask questions about the process until we are  
13 relatively comfortable. We understand that the  
14 FutureGen 2.0 storage project will result in millions  
15 of tons of avoided carbon dioxide emissions. In  
16 addition, we look forward to the economic boost  
17 projects such as the FutureGen CO2 storage project can  
18 provide for our area. Creating jobs in central  
19 Illinois leads to overall economic growth in all  
20 sectors including our community of Pana. Thank you.

21 MR. WHYTE: Thank you. The next speaker  
22 that signed up in advance was Mr. Jadon Evans.

23 (No response.)

24 Okay. Mr. Marsh? would you like to make

1 any comments on the record. You're signed up in  
2 advance. Okay. No problem.

3 That brings us to those who signed up this  
4 evening, and the first speaker off that list is  
5 Mr. Alan Rider.

6 MR. RIDER: Good evening. My name is Alan  
7 Rider, R-i-d-e-r. I represent me, the private  
8 citizen. I live in the Mt. Auburn area of Christian  
9 County. I would like to make a few comments for the  
10 record, and one is pertaining to clean coal  
11 technology. Coal burning for energy production has  
12 not changed at all.

13 we burn coal, it has the same waste  
14 byproducts today as it had 10 years ago, 20 years ago,  
15 and 30 years ago. Some of it, of course, can be  
16 captured and properly disposed, as the Ameren  
17 officials pointed out, and they're absolutely correct.  
18 Scrubbers have been in place for several, several  
19 years. There're still some areas that need to be  
20 worked on in terms of capturing. Perhaps mercury  
21 might be one of them.

22 Another one though is what this whole  
23 project and this whole discussion is about, and that  
24 is CO<sub>2</sub>. It's a big concern. Every time you look in

1 the newspaper, I would suggest almost weekly if not  
2 daily, you're seeing something about weather, you're  
3 seeing something about climate change, you're seeing  
4 something about things changing in our world and  
5 including Illinois.

6 Including Illinois in terms of last year,  
7 last summer, for example, the Great Lakes reached its  
8 highest temperature of the year a month ahead of its  
9 normal average time that it reaches its maximum  
10 temperature. The farmers in northern Indiana today  
11 are still attempting to plant their corn crops. This  
12 is today, not last year, not 10 years ago. This is  
13 today. They've had the rainiest season in northern  
14 Indiana ever in recorded history. 2010 was the  
15 recorded warmest year in recorded history worldwide.

16 So I'm asking the question why are we  
17 investing tax dollars in an established industry? why  
18 do we not use our tax dollars to catch up to other  
19 countries who are ahead of the United States of  
20 America in terms of leading-edge energy technology  
21 production, namely China and Germany. Other people  
22 have made comments, yes, China still produces a lot of  
23 dirty energy. You're correct, they do. But they are  
24 also on the leading edge of clean energy technology

1 because they know, they have seen the handwriting on  
2 the wall, and their government has taken the position  
3 to do something about it aggressively.

4           It's also important to note that this  
5 particular project is almost 80 percent funded by the  
6 federal government. Now, if this were a project that  
7 private industry thought was profitable, I don't  
8 think -- I think they would invest in it by  
9 themselves, and I understand the whole federal  
10 government subsidy program; I get that.

11           Carbon capture, of course, on this scale  
12 has not been done, and I understand that this project  
13 is a test for that; I get that. There are very few  
14 carbon capture operations presently operational, and  
15 yes, we did see a slide a few minutes ago that showed  
16 the ones that were.

17           But I would like to point out that, for  
18 example, the information that I found on the Morgan  
19 County site is made up of sandstone, sits at a slight  
20 angle, and that makes carbon capture or gas being  
21 injected into the earth a little bit more mobile and  
22 potentially problematic. So I would like to include  
23 that in the record that I am challenging the location  
24 for the gas capture.

1                   I would also like to point out that  
2 Illinois is impacted by the New Madrid Fault. And  
3 there are many here who are thinking we haven't had  
4 any problem with earthquakes around here lately, so  
5 what is your concern? I would suggest to you that  
6 perhaps that comment would also have been made in  
7 Japan one year ago. If you're not sure, what I meant  
8 was they had an earthquake that did a lot of damage to  
9 their nuclear industry there.

10                   I'm also concerned about the lack of  
11 regulations that are in place for carbon capture.  
12 who's liable if there is a breakdown and a release of  
13 carbon that is injected into the earth? Is it going  
14 to be the Alliance? There are no, there are no  
15 regulations in place right now or they're perhaps  
16 being formed and generated and debated, but to my  
17 knowledge, there are no regulations in place right  
18 now.

19                   Of course, we're talking about carbon  
20 capture and the resulting electricity that will be  
21 produced from it. I asked a question earlier to one  
22 of the Ameren officials, well, how will this  
23 electricity be priced? The answer was, we don't know.  
24 I asked the question, well, will it be subsidized

1 perhaps by the government? The answer was, I don't  
2 know. It has not yet been decided. Now, if it is  
3 being subsidized by the government, whether it's a  
4 federal or the state subsidy, guess who's paying for  
5 that? You and I, the taxpayers.

6 I would suggest that is not a viable  
7 alternative. I'm sure all of you read in the paper  
8 probably daily about the concern on the federal level  
9 and our own state level about debt, federal debt. If  
10 this project is being subsidized to produce  
11 electricity -- excuse me. If this project is being  
12 pursued to have subsidized electricity by the  
13 government, I would suggest that's not in our best  
14 interest.

15 The electricity that will be produced is  
16 also said to be increasing -- let me rephrase that.  
17 It came out awkward. The official, Ameren officials  
18 suggest that more electricity will be produced if this  
19 operation and this project goes forward. I am asking  
20 the question, is this electricity needed. I know our  
21 gentleman from the Department of Energy did some  
22 explanation of this FutureGen 2.0 and differentiated  
23 it from the prior FutureGen project. But to me as a  
24 citizen, I do not understand the difference, and if

1 the project, if the earlier project was cancelled or  
2 at least postponed or suspended because of cost  
3 overruns, I don't understand why this one would not  
4 have the same problem. Thank you very much.

5 MR. WHYTE: Thank you, Alan. The last  
6 speaker that signed up is Jack Norman.

7 MR. NORMAN: Thank you. My apologies. My  
8 name is Jack Norman. I'm here as a citizen of the  
9 state of Illinois. All of us, wherever we live and  
10 work and whatever our other concerns may be, are  
11 entitled to hope for proof of this project's  
12 workability and for its complete success.

13 On the way there, it is critical to  
14 identify potential hazards arising from projects,  
15 construction, and operation, to thoroughly  
16 characterize and evaluate them, and as needed, to  
17 construct ways to avoid or sufficiently minimize those  
18 hazards. Decisions must not be based on mere hope or  
19 on personal affiliations. Thank you.

20 MR. WHYTE: Thank you, sir. That concludes  
21 our list of registered speakers. Is there anyone here  
22 this evening who hasn't had an opportunity to speak  
23 that would like to enter comments into the record?

24 (No response.)



1                   MR. WHYTE: Hearing none, are there any who  
2 have spoken who would wish to provide additional  
3 comments at this time? Mr. Rider?

4                   MR. RIDER: Yes, sir. My name is Alan  
5 Rider. I'm a private citizen from the Mt. Auburn area  
6 of Christian County. I overlooked this comment, and I  
7 apologize for that. My, one of my comments was  
8 investing tax dollars in a leading- or cutting-edge  
9 technology. I would also like to point out that if  
10 you're investing those dollars in those types of  
11 projects, those would also create jobs. Thank you  
12 very much.

13                   MR. WHYTE: Anyone else who'd like to enter  
14 comments into the record this evening?

15   (No response.)

16                   MR. WHYTE: well, thank you for your  
17 comments, participation this evening. Please remember  
18 that the scoping period ends on June 22, 2011. we're  
19 going to hang around here for a little while. If  
20 anyone would like to have additional discussion,  
21 please welcome to do that. This concludes the formal  
22 session of the public scoping meeting for FutureGen  
23 2.0. Let the record show that this meeting adjourned  
24 at 8:02 p.m. Thank you all.  
  (Off the record at 8:02 p.m.)

