

CCPI-3 PUBLIC WORKSHOP  
QUESTIONS AND PUBLIC COMMENT  
ON THE DRAFT FUNDING OPPORTUNITY ANNOUNCEMENT

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TRANSCRIPT OF PROCEEDINGS

PITTSBURGH, PENNSYLVANIA  
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## P R O C E E D I N G S

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3 TED McMAHON: I would like to welcome everybody  
4 back to the afternoon session. I would like to go ahead and  
5 get started here with our panel discussion, our  
6 question-and-answer period.

7 As we said in the morning, the purpose of this  
8 discussion here is to answer your questions and to take your  
9 comments regarding the Funding Opportunity Announcement for  
10 the Clean Coal Power Initiative Round 3.

11 We have a court reporter here to take down all the  
12 comments and questions. And so when you ask a question, I  
13 would ask that you go to the microphones. There are two  
14 microphones in the aisles there. State your name, state  
15 your affiliation, and then ask your question or pose your  
16 comment.

17 So we have written this Funding Opportunity  
18 Announcement, and we are requesting applications from the  
19 public, from industry, or other public organizations. And  
20 we want to make sure that we get applications. And so one  
21 of our concerns here is that we have written an announcement  
22 that the public and industry can respond to. And so we  
23 would like to hear your comments on any parts of the  
24 announcement that may cause a problem for you regarding  
25 submitting an application.

1           Now, some issues may be legal or statutory  
2 requirements that we can't change. Others may be policy  
3 issues that we could change if we go back and think about it  
4 and decide that someone's raised a valid concern.

5           So I guess having said that, I would like to open  
6 the floor to the audience here for them to ask any questions  
7 or provide any comments. Again, state your name.

8           WILLIAM ELLISON: I am Bill Ellison of Ellison  
9 Consultants. In Europe, which is deep into Kyoto compliance  
10 so far as possible, they place great emphasis in this whole  
11 CO<sub>2</sub> matter on the idea that a unit be CO<sub>2</sub> capture ready.  
12 Another terminology that is used is near zero emissions,  
13 meaning -- zero emission technology, meaning near zero  
14 emissions.

15           And in a publication this year in the German VGB  
16 Journal, numbers are given for this low levels of  
17 emission -- of flue [gas] concentration that presumably will  
18 not interfere unduly with any or most of the CO<sub>2</sub> processes  
19 that you are well focused on.

20           I am wondering if CO<sub>2</sub> capture readiness is a more  
21 meaningful and relevant thing for the U.S. now, with CO<sub>2</sub>  
22 capture itself being something a little further down the  
23 road. So I am wondering if your program is unnecessarily  
24 excluding the whole concept of CO<sub>2</sub> capture readiness.

25           TED McMAHON: I guess I am not sure how to respond.

1 Scott, do you have a response?

2 SCOTT KLARA: Well, I guess that's a fairly loaded  
3 question. But the struggle that I certainly have with CO<sub>2</sub>  
4 capture ready is that it's in the eye of the beholder. CO<sub>2</sub>  
5 capture ready could mean something as simple as providing  
6 some extra foot space for a speculative capture technology,  
7 or it could even be more significant to where you actually  
8 put up the piping runs and you put in a compressor.

9 And so I guess what the bottom line is, I would  
10 view a lot of the CO<sub>2</sub> capture ready things that you can do  
11 to a facility don't necessarily require an R&D program. And  
12 ours is truly focused on trying to demonstrate the whole  
13 system, from capture to sequestration.

14 But certainly we appreciate your comment of  
15 anything the plant might do for capture ready, it could be a  
16 good thing if carbon constraints become something that you  
17 need to do.

18 WILLIAM ELLISON: But CO<sub>2</sub> capture readiness most  
19 specifically has to do with setting the plant up so it will  
20 not interfere chemically with the operation of the process,  
21 not these other matters that you mentioned, which are of  
22 some secondary nature.

23 Now, in the case of EPRI, they gave a very fine  
24 paper last year, and they said, well, DOE has been making it  
25 clear for years that we are ultimately headed, for pollution

1 control purposes, to deplete our NOx emissions as low as  
2 .01; whereas, the Europeans are talking about .03 pounds.

3 So whichever that level might be, there is a  
4 bracket in there of attainment. And the question is how  
5 would DOE view that being done most commercially and  
6 effectively. So I think that's the point of my question.

7 SCOTT KLARA: I am not sure I completely understand  
8 it. But I guess I would say that, as you heard this  
9 morning, there are some emission guidelines in EPCACT, for  
10 example, that have come out in EPCACT. But the focus of this  
11 effort, certainly NOx and other things have to be within  
12 attainment levels of any proposed plan, at least in the  
13 United States. But we are truly trying to just focus on the  
14 CO2 capture and sequestration side. But your technology  
15 certainly has to be concerned about any issues related to  
16 NOx and SOx levels that might impact that.

17 TED McMAHON: Before we continue, I just want to  
18 remind everyone that this session here is being recorded,  
19 and the transcript of what we are saying here is going to be  
20 posted on our Web site. So the next comment, please.

21 RICHARD STONE: My name is Dick Stone with  
22 Excelsior Energy. As I understand it, this program is for  
23 the demonstration of commercial-scale advanced carbon  
24 capture technologies. What does DOE consider currently  
25 available pre-combustion carbon capture technologies that

1 are commercially available so we wouldn't be proposing  
2 something that you think is not qualifying? What  
3 commercial-scale, pre-combustion technologies do you  
4 consider commercial?

5 TED McMAHON: Well, I think that it's going to be  
6 up to an applicant to define how their technology represents  
7 an advancement over what is currently commercially  
8 available. I think advancements can result from scale,  
9 scale-up. Advancements can result from integration, solving  
10 novel integration issues.

11 But specifically the announcement does not identify  
12 brand names or specific technologies as being commercial or  
13 not commercial because what we are seeking are advancements  
14 which may build on the things that are available at this  
15 time.

16 So we can't preclude a specific system because  
17 someone may be able to say, well, here, I am using this  
18 system, and I've made some advancement or some improvement  
19 to it. And then we will evaluate that in terms of, you  
20 know, as part of the evaluation criteria, what is the  
21 significance of the advancement.

22 And if you have a relatively small advancement of  
23 the technology, you might get a relatively low score on that  
24 one aspect of your application. But if you otherwise have a  
25 project that fully integrates the capture and sequestration

1 aspects of a power facility, it might be a good project.

2 RICHARD STONE: May I ask a second question?

3 TED McMAHON: Sure.

4 RICHARD STONE: On the size, commercial size, is  
5 there a minimum threshold?

6 TED McMAHON: There is no minimum threshold in  
7 terms of a megawatt scale or a number of cubic feet per  
8 minute or whatever. Again, it's incumbent on the applicant  
9 to tell us how the technology that's demonstrated at the  
10 proposed scale, how that will demonstrate commercial  
11 operation and how that may be scaled up to commercial size  
12 if it's not full commercial size in demonstration.

13 So, again, that's another aspect of the evaluation  
14 criteria, that if a project is demonstrating a technology at  
15 a relatively small scale which would require a relatively  
16 big scale-up to a commercial replication, then that might  
17 give a relatively low score. But that doesn't disqualify  
18 it. A low score on that one criteria. But that doesn't  
19 necessarily disqualify it from consideration.

20 RICHARD STONE: Thank you.

21 KAREN PARYSEK: I am Karen Parysek from Praxair.  
22 Could you please clarify what is the requirement and what is  
23 the goal or a desirable duration for the capture and  
24 sequestration. I see a 30-day period. I see demonstration  
25 period. And then I see life of the project. What is

1 exactly required?

2 TED McMAHON: Well, the requirement is to  
3 demonstrate 50 percent capture. And 50 percent capture of  
4 what? At one point in time or over some long period? I  
5 think that we would want to measure that during a continuous  
6 run time that is measured as a 30-day average. And that is  
7 a goal of the announcement. I mean, that's something that  
8 you have to propose to do.

9 But let's be clear. It's not a 30-day run. You  
10 know, it's a 30-day average during a continuous operation  
11 period.

12 The demonstration period would include time for  
13 start-up, shakedown, that kind of thing. It would include  
14 whatever the applicant considers to be a run necessary to  
15 demonstrate full commercial operation, which would include  
16 things like maintenance, equipment, how long the equipment  
17 lasts, that kind of thing.

18 So the whole period can be a matter of, like I  
19 said, like one to three years has been typical of CCPI  
20 projects.

21 Now, let me pose a question back to you. I mean,  
22 the issue with the 30-day run time, is that something that's  
23 confusing to you or something that you feel needs further  
24 clarification?

25 KAREN PARYSEK: No. Particularly at the other end

1 of the spectrum where, you know, if we were to design a  
2 capture and sequestration system, is it expected to only  
3 operate during the demonstration period? Or if it's a  
4 commercial project, then is it intended to run for the  
5 lifetime of the commercial project?

6 TED McMAHON: Well, we can't require you to run the  
7 project once our agreement is completed. So we can't make  
8 any requirements on you for that period of time following  
9 the demonstration.

10 Typically, these projects last in sort of the  
11 four-year time frame, four- or five-year time frame. And  
12 that's when we want you to work to achieve the goals of the  
13 program. And then when the project is over, the title to  
14 the property vests with the applicant, and the government  
15 doesn't make any requirements following the demonstration.

16 JAMES MERRITT: I am James Merritt. I am with  
17 Sithe Global, Vice President of Engineering. I actually  
18 have seven questions. But I think they are fairly fast.  
19 And I would like to thank Praxair for opening the last one.

20 My first question is what is the recourse if you  
21 achieve the 50 percent but you never achieve the 90 percent  
22 removal.

23 TED McMAHON: Well, the 90 percent removal is not a  
24 requirement of this announcement. The 50 percent removal is  
25 a requirement. In other words, you have to propose to

1 achieve and show that you can achieve 50 percent capture and  
2 sequestration of the plant emissions.

3 The application then should show how the technology  
4 can evolve further following a demonstration to move towards  
5 the 90 percent capture.

6 JAMES MERRITT: And if the 50 percent isn't  
7 achieved?

8 TED McMAHON: Well, there is no contractual  
9 requirement that you achieve that requirement. I mean, it's  
10 a best effort basis. We are trying to demonstrate new  
11 technologies, and there is no penalty or anything like that  
12 for not achieving it. You need to make a good faith effort  
13 to achieve that. I mean, you need to propose it, and you  
14 need to make a good faith effort to achieve the 50 percent  
15 capture.

16 JAMES MERRITT: You said that you need to have  
17 letters of intent or rights of way established when you go  
18 into this grant. This process takes years to do,  
19 particularly if you have miles to go. To connect to the CO<sub>2</sub>  
20 lines for us, it's almost 41 miles. That's a lot of people  
21 that you have to get permission from.

22 If your status is that you have identified the  
23 route and you are in the process of negotiating these rights  
24 of way, is that going to be accepted, or will you be  
25 declined immediately?

1           TED McMAHON: No. That's the kind of thing that  
2 you would propose for a project definition phase. That's  
3 pretty much what that phase is designed to do. In the past  
4 we have said a lot it's about air permits. But now we are  
5 kind of moving into a new area here and getting rights of  
6 way. I assume you are talking about building a pipeline?

7           JAMES MERRITT: Yes.

8           TED McMAHON: Yeah. I mean, I think that would  
9 fall under that category.

10          JAMES MERRITT: The next question was you  
11 emphasized the saline injection as being an ideal target. I  
12 don't see a return if you have enhanced oil recovery. So I  
13 can see that it would be very difficult to pay back the loan  
14 unless some sort of a CO<sub>2</sub> penalty existed that you are going  
15 to have to avoid.

16                 Have you determined any kind of a target yet that  
17 we should be putting into our financial plans for an avoided  
18 CO<sub>2</sub> penalty? Because Congress hasn't provided us one yet.

19           TED McMAHON: By avoid a CO<sub>2</sub> penalty, that would be  
20 sort of a credit, sort of like anticipating a market, if you  
21 have a trade market for CO<sub>2</sub>. Is that what you mean?

22           JAMES MERRITT: That is correct.

23           TED McMAHON: Well, we don't have anything included  
24 like that. I guess that's something that we could consider.

25                 But regarding repayment, we certainly understand

1 your concern. And what you are saying is you are going to  
2 build a plant or build a process, you are going to capture  
3 CO<sub>2</sub>, and that costs money to do that. You are going to  
4 sequester it in a formation that does not really generate  
5 revenue for you. Is that correct?

6 JAMES MERRITT: Correct.

7 TED McMAHON: So we understand that that creates a  
8 difficulty for you in repayment. But we believe that  
9 repayment is required by legislation.

10 And I am going to ask Nancy. I don't know if you  
11 want to comment on that.

12 NANCY TOPPETTA: Well, that's true. The repayment  
13 requirement in this Funding Opportunity Announcement is  
14 based on legislation, annual appropriations for the CCPI  
15 program specifically. And I am not exactly sure what kind  
16 of limitations the saline injections has on your repayment  
17 potential, at least not technically. But there are various  
18 streams of repayment revenue, streams of revenue. But you  
19 are saying you are not going to have any revenue?

20 JAMES MERRITT: We would have no revenue if you put  
21 it into the saline formation. The only discount you may get  
22 is a discounted loan rate from the government, and that may  
23 be an opportunity for return.

24 NANCY TOPPETTA: Repayment is really -- you can get  
25 creative with it. I mean, it's a 20-year period. And if

1 you have other -- if you can think of alternatives or other  
2 ways to repay, I mean, even --

3 TED McMAHON: Well, future sales of the  
4 demonstration technology, if you are talking about a capture  
5 technology --

6 JAMES MERRITT: We are a host. We are not a  
7 technology. We are a host.

8 TED McMAHON: Okay. Well, the technology provider,  
9 whoever is demonstrating their capture system, that  
10 organization can base repayment on future sales of their  
11 technology.

12 JAMES MERRITT: Okay. You have opened the next  
13 question, then, for me. What mechanism is in place right  
14 now to transfer data and technology knowledge from the  
15 international leadership forum? I have not seen any reports  
16 come out of that that say what other countries are working  
17 on to see if you can give us a head start in the United  
18 States. Do you have a process in place already to transfer  
19 that knowledge?

20 TED McMAHON: I am not familiar with the forum that  
21 you are talking about.

22 JAMES MERRITT: The international carbon capture  
23 leadership. I don't know what the name of the forum is.

24 SCOTT KLARA: I think you are referring to the  
25 Carbon Sequestration Leadership Forum.

1 JAMES MERRITT: Yes.

2 SCOTT KLARA: And I guess what I can tell you to  
3 pay attention to would be there are technology synopses  
4 available, very brief ones, on the CSLF site. However, with  
5 every one of those technology options, there should be  
6 literature, there should be articles, et cetera, available,  
7 and even potentially reports depending on the kind of  
8 organization pursuing it, that you should be able to track  
9 down relative to the state of technology.

10 JAMES MERRITT: Next was confidentiality of  
11 financial statements. Because we are an independent power  
12 producer, we have competitive power purchase agreements.  
13 That means that we do not wish to disclose those prices to  
14 the competitors because we are competing against each other  
15 to the people we sell to. FOIA requests, because you are a  
16 government entity, could result in those financials being  
17 released to the public. How can we protect our financial  
18 statements?

19 NANCY TOPPETTA: Well, I mean, there are exceptions  
20 to FOIA that could very likely apply to financials. So  
21 those would be explored. We have a FOIA officer who would  
22 scrub any documents that are required. And if they are  
23 prepared by you, by the company, and your recipient, that  
24 recipient would be informed of any FOIA request. So that's  
25 all taken into consideration.

1           JAMES MERRITT: All right. Let the attorneys do  
2 it. Okay.

3           I have got two left. Can cost share be the cost of  
4 the power plant, the overall power plant, the site, all the  
5 processes, the development, engineering, or does it have to  
6 be specific to the carbon capture process?

7           TED McMAHON: I do not believe that it has to be  
8 specific to the carbon capture process. I mean, costs, they  
9 have to be costs to you. If you are building a new  
10 facility, it has to be a cost to you. An existing plant is  
11 not used as cost sharing.

12           JAMES MERRITT: The last question is a very good  
13 one. With the DOE or NETL working on this process, if you  
14 try and sequester CO<sub>2</sub> and you put it into a saline aquifer,  
15 those aquifers go over many states. There is a large  
16 environmental risk here. Without indemnification of the  
17 environmental hazards or the sharing of the risks, it would  
18 not make sense to go forward on this, to put it into the  
19 ground.

20           What sharing of the risk is going to exist by  
21 receiving a grant from NETL?

22           TED McMAHON: He's asking --

23           JAMES MERRITT: Are you going to share on the  
24 environmental risk?

25           NANCY TOPPETTA: What was the last part again?

1           JAMES MERRITT:  If there is environmental risk  
2 because you have some sort of a problem, you have leakage  
3 from an aquifer, something like that, you could end up in a  
4 situation where you are sued and you are taken to court.  
5 And we want to find out if NETL is going to share in the  
6 risk.

7           NANCY TOPPETTA:  Well, I mean, this project is  
8 similar to any other DOE-funded project as far as liability  
9 goes.  DOE does not assume liability generally.  We are in  
10 it for the amount of the government share, basically, is one  
11 way to look at it.

12           If a leak happens and it's fixed during the project  
13 period, then if that's an allowable project cost, which  
14 likely would be, then DOE would share -- it would provide  
15 its share in that.  So to the extent that something goes  
16 wrong within the project period and it's an allowable cost,  
17 then, yes, DOE would provide its share.

18           But I don't know -- you know, insurance?  You know,  
19 I don't know what --

20           TED McMAHON:  We are not going to indemnify the  
21 recipient.  Is that correct, Nancy?

22           NANCY TOPPETTA:  That is correct.  DOE does not  
23 indemnify.

24           JAMES MERRITT:  But is there a potential that you  
25 could assist us with getting interstate indemnifications

1 through the U.S. government? Would you assist in that  
2 process? Because without that process in place, it's going  
3 to be very difficult to put CO<sub>2</sub> in the ground.

4 NANCY TOPPETTA: How do you mean "assist"?

5 JAMES MERRITT: Assist us, when we have to go and  
6 ask for those indemnifications from Congress or a senator  
7 and try and pass the bill in the House, is NETL going to be  
8 there with us to say we need this to make these programs  
9 work, or are you going to stand back and let us carry the  
10 ball?

11 NANCY TOPPETTA: We can't engage in lobbying, if it  
12 falls in that realm.

13 JAMES MERRITT: Well, we need assistance there.  
14 Thank you for your time.

15 TED McMAHON: Thank you.

16 GREGORY CAMPBELL: Greg Campbell, Castle Research  
17 Associates. I've walked today, and I've heard a lot about  
18 carbon capture and sequestration. And I am wondering if the  
19 other terms on the slides are going to stay in the request,  
20 "beneficial reuse."

21 TED McMAHON: Well, for the purposes of this  
22 announcement, really, we are defining "beneficial reuse" as  
23 a subset of sequestration, meaning are you getting some use  
24 out of pumping the CO<sub>2</sub> underground. Our priority is to  
25 capture CO<sub>2</sub> and to store it in the geologic formation. And

1 if you can get some benefit from doing that, then that's  
2 fine.

3 GREGORY CAMPBELL: Then you are excluding something  
4 like storing it as a liquid fuel?

5 TED McMAHON: As a fuel?

6 SCOTT KLARA: I guess what you would have to do is,  
7 with regard to beneficial reuse, the best and maybe only  
8 example that we are thinking of right now is enhanced oil  
9 recovery. But if you are able to prove in your beneficial  
10 reuse scheme that the CO<sub>2</sub> is permanently stored and locked  
11 away, then I would think we would have to consider that as a  
12 sequestration scheme. But if you are talking about putting  
13 it away for an interim period of time and it's going to  
14 eventually be released, then obviously we couldn't consider  
15 that.

16 GREGORY CAMPBELL: But there are other schemes.

17 SCOTT KLARA: And I don't know what you proposed.  
18 But there are capture schemes that could actually make  
19 carbonate bricks and argue that it's stored indefinitely.  
20 Certainly if you can prove the viability of that kind of  
21 concept, I would think we would have to consider that as a  
22 sequestration option. But at the end of the day, you would  
23 have to prove to us and help us prove to ourselves that it  
24 is permanently stored.

25 TED McMAHON: And the announcement is not

1 specifically limited to the technologies or approaches that  
2 we have put forward here today, because you may have some  
3 approach that we don't really know about, are not too  
4 familiar with. But, again, if we don't know about it, it's  
5 something that you have to make us aware of on a  
6 comprehensive basis and make sure that it meets the basic  
7 objectives of the announcement.

8           JOSEPH REGNERY: Joe Regnery with Rentech. I had a  
9 question on the power generation threshold. If we are  
10 producing out of a poly-generation plant and we were  
11 consuming a portion of the generated megawatts, do those  
12 count? Does that parasitic load count with that generation  
13 profile?

14           TED McMAHON: No. It's the output of the plant.

15           JOSEPH REGNERY: Output to what? So you are only  
16 counting export power?

17           TED McMAHON: Yeah. Because if we counted internal  
18 power, then there would be no need for a requirement. It  
19 wouldn't make any sense.

20           JOSEPH REGNERY: But if we don't put the power  
21 generation block in and we buy power off the grid, we are  
22 just displacing what we would otherwise take off the grid.  
23 So why wouldn't you count that?

24           TED McMAHON: Well, we count it because I believe  
25 it's a requirement from the original clean coal legislation,

1 which is one of the pieces of legislation that governs our  
2 program.

3 JOSEPH REGNERY: Okay.

4 TED McMAHON: I mean, now, having said that, does  
5 this have an impact on your ability to submit a proposal to  
6 us?

7 JOSEPH REGNERY: Yes. It eliminates our ability to  
8 submit a proposal to you. If we cannot account for the fact  
9 that we are going to power-generate 800 megawatts and then  
10 have that 800 megawatts and consume a significant portion of  
11 it, say half of that, at our own applications within the  
12 poly-generation unit, then we don't meet your threshold.

13 But if you allow us to account for that consumption  
14 of that electricity that we are generating, then we meet  
15 your threshold.

16 TED McMAHON: And the threshold is 50 percent of  
17 the energy output of the plant, which would have to take  
18 into account the energy content of the fuels that you are  
19 producing. Okay.

20 JOSEPH REGNERY: So --

21 TED McMAHON: Well, okay. I mean, we have your  
22 comment here, and we will take it under advisement.

23 JOSEPH REGNERY: Thank you.

24 SIMON LOMAX: Hi. My name is Simon Lomax. I am  
25 with Argus Media. I had a question about the estimated

1 funding portion of the announcement. It says the DOE  
2 anticipates that up to 250 million may be available. I  
3 wondered whether or not that 250 million is then a ceiling  
4 that's imposed upon you because of some sort of authorized  
5 cap.

6 TED McMAHON: No.

7 SIMON LOMAX: Could you talk about that, please.

8 TED McMAHON: Yeah. It includes prior year  
9 appropriations, fiscal year 2006, 2007. It includes funds  
10 from projects that we have previously selected and have not  
11 gone forward that we are able to retain and use for this  
12 announcement. So we know how much that is.

13 But then it also counts fiscal year 2008  
14 appropriations, which, as you all probably know, we are in  
15 fiscal year 2008, but the budget has not been finalized.  
16 Although there are House and Senate committee marks, we call  
17 them, that have funding. And then it includes anticipated  
18 funding for fiscal year 2009 based on the President's budget  
19 request that's being generated.

20 So Congress still has to finalize fiscal year 2008,  
21 2009. So we think we know what those numbers are going to  
22 be, but they are not finalized, and we can't presume to say  
23 what Congress might do.

24 SIMON LOMAX: So it's not as though it's something  
25 in EPACT 2005 that says that Phase 3 of Clean Carbon

1 Initiative, we have only got 250 million to play with?

2 TED McMAHON: That is correct. EPACT does not  
3 speak to this.

4 SIMON LOMAX: Thank you.

5 MARK LeCLAIR: Hi. My name is Mark LeClair. I am  
6 the CEO of NanoSpire, Incorporated. I represent a Hawaiian  
7 company named Peletex. Peletex intends to use foam to do  
8 CO<sub>2</sub> capture, and we intend to feed the CO<sub>2</sub> in liquid to an  
9 algae farm to produce biodiesel.

10 And my question would be to what extent would the  
11 DOE cost share on the actual end use of the CO<sub>2</sub> versus the  
12 CO<sub>2</sub> capture portion itself?

13 TED McMAHON: Well, I am not sure I understand your  
14 process. But, I mean, we can cost share up to 50 percent of  
15 activities related to carbon capture and sequestration of  
16 carbon.

17 Again, we have to make sure that the carbon that's  
18 emitted from the plant does not end up in the atmosphere  
19 through some process. If it's converted to fuel or  
20 whatever, it has to be somehow sequestered and stored away  
21 from further release.

22 MARK LeCLAIR: I guess what I am wondering is would  
23 they actually help cost share on the construction of the  
24 algae farm itself versus the carbon capture portion. And  
25 that would be on site, too, by the way.

1           SCOTT KLARA: Well, I think it's prudent on you to  
2 draw your envelope around your process where it makes sense.  
3 And not knowing your process, it's hard for us to give you a  
4 firm position here. But if the algae is part of the capture  
5 process and you can show that to us, then sure.

6           NANCY TOPPETTA: But if I could just comment on the  
7 cost share, this also goes back to the earlier cost share  
8 question that was asked. The DOE cost share is going to  
9 apply to the project costs within the project period  
10 defined. So whatever your statement of project objectives  
11 is and whatever period that covers, that's where you will  
12 see the DOE 50 percent cost shared.

13           So even on the new plant, it would depend on how  
14 you submit your proposal, and that would come into play. If  
15 it makes sense, if it's part of your proposal, then it  
16 becomes -- you know, if it becomes an allowable cost within  
17 the project, that's what DOE is going to share on.

18           TED McMAHON: Your project also has to encompass  
19 the whole envelope of what we are looking for, because we  
20 want to enter into a project -- and maybe this is relevant  
21 to your project. But we don't want to enter into one  
22 portion of a project that depends on some other facility or  
23 some other organization or something like that that is  
24 outside the scope of the project.

25           If you say, well, I am going to build this

1 processing unit and I need some other company to build a  
2 power plant or build a capture unit or something, we are  
3 going to say, well, you don't really have a complete project  
4 there.

5 MARK LeCLAIR: Yeah. I am talking about where it  
6 would all be built all at the same time.

7 TED McMAHON: Okay.

8 MARK LeCLAIR: Thank you.

9 TED McMAHON: Sure.

10 KAREN PARYSEK: Karen Parysek of Praxair. I have  
11 questions and concerns, two parts, regarding the schedule  
12 and as it relates to the budget.

13 If the schedule is such that it takes the better  
14 part of a year for evaluation and up to two years for a  
15 negotiation, the budget number submitted after three years,  
16 the validity of those is highly questionable.

17 And then also if we do have a commercial project  
18 and we choose to, instead of sitting on our hands for three  
19 years, go ahead and spend money at 100 percent cost share  
20 until the DOE money is available, and yet your current  
21 requirement is that there is a 50 percent cost share during  
22 each period, there is an imbalance there. So would there be  
23 an opportunity to balance that?

24 TED McMAHON: Well, the purpose of letting you know  
25 what the likely schedule is, a year for people to write

1 their proposals and then for us to evaluate them and then up  
2 to two years for a negotiation, is to identify what those  
3 costs are going to be three years from now, including some,  
4 well, projection on what is the cost for this going to be  
5 three years from now.

6 And then the other part of your question is if you  
7 are selected, you can spend money at your own risk in  
8 anticipation of receiving an award. You can spend money on  
9 what's called pre-award costs. And I don't know if Jo Ann  
10 or Stephanie or someone wants to comment on what's allowed  
11 under pre-award.

12 JO ANN ZYSK: Well, what would happen while you are  
13 in negotiations, you can incur costs at your own risk. If  
14 there is not agreement, you cannot come forward to request  
15 any of those costs. If there is an agreement, then when  
16 it's awarded, you can invoice for those costs.

17 However, DOE is under the obligation to complete  
18 the NEPA process. So there will be a restriction on those  
19 items that you can expend DOE dollars on during that period.

20 KAREN PARYSEK: Okay. Thank you.

21 And then I would just like to add a comment  
22 regarding the first point about a cost projected three years  
23 in advance, that it's not common business practice in our  
24 company, anyway, to trust numbers with that great of a  
25 projection with any accuracy.

1           So if there was any way to accelerate that  
2 schedule, if we, for example, could say we are ready,  
3 willing, and able to negotiate just as fast as you want to,  
4 you know, is DOE able to also negotiate faster?

5           TED McMAHON: Yeah. I mean, we are able to  
6 negotiate faster. I would point out that two years is the  
7 upper limit. And this has been something that is a new  
8 policy for DOE. And I would point out, as I said in my  
9 presentation, repayment is typically what takes the most  
10 time in the negotiation process.

11          JO ANN ZYSK: And you also have a play in that.  
12 You can shorten that negotiation process by getting DOE the  
13 information that they need in a timely manner.

14          Another thing I wanted to bring up is, although the  
15 costs increase, at the time we select the project, I do not  
16 believe that DOE will go above the dollar amount that you  
17 originally request. In other words, your costs might  
18 increase, but that's going to increase your cost sharing.  
19 That's not going to increase the DOE dollars.

20          TED McMAHON: That's why you need to have future  
21 dollars in your application.

22          VISHAL VARMA: Vishal Varma, Air Products &  
23 Chemicals. Does DOE have or is likely to have any positions  
24 on the quality specifications of the CO<sub>2</sub> that would be  
25 sequestered, especially into saline aquifers? Because we

1 presume that there are already specific issues in place for  
2 EOR.

3           The reason I ask that is because I am not saying  
4 there will be, but there could be traces of SO<sub>x</sub>, NO<sub>x</sub>, so on,  
5 dogs and cats, basically, in the CO/CO<sub>2</sub> that's going into  
6 the aquifer. And that raises the potential for liability,  
7 especially if you have diffusion of these acid gases into  
8 ground water and so on.

9           I have another question, but that's my first one.

10           SCOTT KLARA: With that question, there really are  
11 no specifications yet for CO<sub>2</sub> into any formation. Now, you  
12 will see specifications that given EOR projects might  
13 require. You will see specifications that pipelines  
14 require. But also we have seen cases where you could put a  
15 pipeline in place and put all kinds of cats and dogs in it,  
16 as you know.

17           And so I think it's prudent on you as the proposer  
18 to do enough homework upfront, again, to prove to us that  
19 whatever your geologic storage formation is, that you  
20 propose enough due diligence and research necessary, if  
21 those are concerns, bring them to the surface and say how  
22 you plan on addressing those concerns throughout the course  
23 of the research project.

24           VISHAL VARMA: Sort of my other question is out of  
25 the total cost share is there a cap on the percent to be

1 spent on the transport and sequestration versus capture, or  
2 is that something that's totally flexible for now? Just  
3 because, you know, the actual cost of sequestration --  
4 transport and sequestration is a function of how far the  
5 capture facility is from potential sites, and there are  
6 regions, partnerships, where there may be significant EOR  
7 potential or there might not be significant EOR potential.  
8 A potential applicant might want to generate revenues from  
9 an EOR site which is not too close, which raises the  
10 possibility of building a much longer pipeline than just  
11 burying it into the ground right very close to the site of  
12 the capture itself.

13 TED McMAHON: No. I mean, there is no limit on  
14 that other than the amount of funding that we have  
15 available. We are trying to demonstrate an integrated  
16 approach to capture and sequestration. And transportation  
17 is certainly a part of that. And if it's a good project, a  
18 project that is commercially viable, you know, EOR, which it  
19 could conceivably be, that would be something that we would  
20 consider.

21 VISHAL VARMA: Thank you.

22 RICHARD WINSCHER: I am Dick Winschel with CONSOL  
23 Energy. I would like to ask for a clarification. On the  
24 slides that you presented, Ted, on your No. 13 slide, it  
25 says, concerning allocation of funds, it says, "At least

1 70 percent of funds for gasification and other technologies  
2 capable of producing and sequestering a concentrated stream  
3 of carbon dioxide."

4 Now, as I read that at face value, I would include  
5 post-combustion capture as long as you make a concentrated  
6 stream of CO<sub>2</sub>, oxy-fuel, as long as you get a concentrated  
7 stream of CO<sub>2</sub>. But then it says and "up to 30 percent of  
8 funds for capture sequestration projects other than those  
9 described above."

10 And I am struggling to see what else is there. I  
11 mean, what's the breakout between 70 and 30? I would like a  
12 definition, if that's possible.

13 TED McMAHON: Yeah. The Energy Policy Act says --  
14 I can tell you what it says.

15 The thing that is left off the slide is that  
16 70 percent of the funds are to be used only to fund projects  
17 on coal-based gasification technologies including, and then  
18 it lists a bunch of gasification technologies, and then it  
19 says "other advanced coal-based technologies capable of  
20 producing a concentrated stream of carbon dioxide."

21 So my reading of that is that a power plant, an  
22 IGCC or an oxycombustion, is a coal-based technology. An  
23 amine scrubber is an amine-based technology and is not a  
24 coal-based technology.

25 I am not a lawyer, and I don't play one on TV. So

1 maybe my interpretation is not correct. But that's my  
2 understanding of it.

3 And so the 70 percent applies to gasification-based  
4 or oxycombustion or other similar technologies. But the  
5 30 percent would apply to post-combustion capture.

6 RICHARD WINSCHEL: Okay. Thank you.

7 TED McMAHON: But, again, I don't know if we need  
8 to clarify that.

9 SCOTT KLARA: We will try to get a better read on  
10 that and provide some documentation in the Q&A responses  
11 after this meeting to try to get some clarification to the  
12 interpretation.

13 RICHARD WINSCHEL: Will that be put on the Web  
14 site, Scott?

15 TED McMAHON: Yes.

16 RICHARD WINSCHEL: Okay. Thank you.

17 CURTIS JABS: I am Curtis Jabs, Basin Electric  
18 Power Cooperative. I want to ask another question on  
19 intellectual property. Filling out the application itself,  
20 you asked for flow diagrams, process, et cetera, a lot of  
21 information in the application itself. If that is marked  
22 "confidential," what assurance do we have that that will  
23 remain confidential?

24 I know if you are given an award, that can be  
25 negotiated. But the information in the application itself,

1 if that's confidential, that will remain confidential?

2 NANCY TOPPETTA: During the selection process, it  
3 will be. The thing with the application is, though, once  
4 there is an award, that application is incorporated into the  
5 cooperative agreement award. But if you have proprietary  
6 information, I would actually defer to our patent attorney  
7 on that. If you have specifics, we can work with you on  
8 that.

9 TED McMAHON: Lisa, do you have anything to comment  
10 on that? If you could go to the microphone.

11 NANCY TOPPETTA: Lisa is our patent attorney, by  
12 the way, Lisa Baker.

13 LISA BAKER: I guess we would treat the application  
14 like we would any other document that would be requested  
15 under FOIA. We don't release proposals or whatever  
16 routinely unless they are requested under FOIA.

17 If we would get a request for an application like  
18 that, we would go through our normal FOIA process. And  
19 there are exemptions under the FOIA statute for financial or  
20 trade secret commercial-type information. And our policy is  
21 to redact that kind of information before a document will be  
22 released.

23 But we don't go out after an award is made and  
24 publish or release your application as a matter of policy or  
25 anything like that. We would only release it if we got a

1 request under the Freedom of Information Act.

2 CURTIS JABS: I guess I do see this as problematic,  
3 and I think there is going to be some reluctance of sharing  
4 information if there is no guarantees that it will always  
5 remain confidential if you are not given an award.  
6 Obviously, if you are given an award, then you can negotiate  
7 that.

8 LISA BAKER: Oh, if you don't get an award, then I  
9 believe our proposals are destroyed, aren't they?

10 NANCY TOPPETTA: That's right. We don't release  
11 applications.

12 LISA BAKER: It would never be released.

13 SCOTT KLARA: And I will add to that, too, that all  
14 reviewers that would be seeing a proposal, whether it be a  
15 winning proposal or not, are subject to nondisclosure. So  
16 that would provide additional, hopefully, confidence to you  
17 that even the people that are seeing it on the review side  
18 would be in some serious trouble should that information get  
19 out based on their hand.

20 JO ANN ZYSK: In addition, we would not be placing  
21 any confidential information in your award itself.

22 TED McMAHON: And finally I would add that we work  
23 with people every day. Personally, I've never worked on a  
24 project that's had a Freedom of Information request, but we  
25 do get those routinely. And I would encourage you to speak

1 with people that we work with on what level of confidence  
2 they have regarding the way we treat confidential data.

3 WILL JOHNSON: My name is Will Johnson with Visage  
4 Energy. I have two questions. My first question is that in  
5 California we have numerous different refineries, and they  
6 produce a lot of petroleum coke. The question is would pet  
7 coke qualify as coal under the CCPI.

8 TED McMAHON: No, it does not. I mean, this is a  
9 question we get asked fairly frequently. And you are free  
10 to use up to 25 percent pet coke. But 75 percent of the  
11 fuel input should be coal.

12 WILL JOHNSON: The reason is no because that's the  
13 way the '05 law is written, or is it a determination that's  
14 made by NETL?

15 TED McMAHON: Well, I guess I would have to go back  
16 and review that. My understanding, it's from the original  
17 clean coal legislation. But we will certainly go back and  
18 review that. We are going to review the requirement that  
19 50 percent of the electrical output has to be electricity,  
20 as the previous gentleman asked about. So we will go back  
21 and review that.

22 WILL JOHNSON: And a second question, I was  
23 wondering if a purchase power agreement that's associated  
24 with a project where a utility company was paying a  
25 premium -- for example, let's say if the going market rate

1 was 5 cents but they paid a premium of let's say 3 cents for  
2 a particular carbon storage project and so forth, would that  
3 increment above the market price, would that be considered  
4 cost share?

5 TED McMAHON: Well, it has to be a cost to the  
6 project, something that the recipient is paying, to be  
7 considered a cost and, therefore, allowable as cost share.

8 NANCY TOPPETTA: It sounds like possibly program  
9 income. And we may want to address this off-line. We can  
10 get into a further explanation. But I think program income  
11 might work to offset cost share. But --

12 TED McMAHON: So program income is what? Is that  
13 income that then is --

14 NANCY TOPPETTA: Well, it's income -- it's  
15 considered program income if it's realized during the course  
16 of the project period. So if they are going to pay that  
17 increment, that would have to be in the operations phase.  
18 If that income comes in during the operations phase, then I  
19 believe it can work as an offset.

20 But, again, we can address this better off-line  
21 maybe through IIPS. But it is not straight cost share. I  
22 can't say that it's not considered cost share, but it's not  
23 cost to the project. So it would not be defined as cost  
24 share. But if it's realized during the course of the  
25 project operation phase, it's program income.

1 WILL JOHNSON: Okay.

2 NANCY TOPPETTA: And there are actually financial  
3 assistance regulations which are 10 CFR -- that's Code of  
4 Federal Regulations -- 600. They define project income, and  
5 those regulations would then come into play in making a  
6 determination on how that would flesh out during the  
7 project. But, again, it is not by definition cost share.

8 DENYSE DuBRUCQ: Hi. I have three financial  
9 questions.

10 TED McMAHON: Ma'am, could you state your name and  
11 affiliation.

12 DENYSE DuBRUCQ: Yes. Denyse DuBrucq with AirWars  
13 Defense. It hasn't been stated, but is this payback period  
14 where the company owes DOE money, is that money included  
15 with interest, or is it interest free?

16 TED McMAHON: No. The responsibility is to repay  
17 the government's contribution to the project without accrual  
18 of any interest.

19 DENYSE DuBRUCQ: Good. Two, some of the risks that  
20 are in the project -- every project is going to have risk of  
21 some sort, whether it's burying stuff or some system that  
22 might not work. Can you include the insurance to cover  
23 those risks within the cost share?

24 NANCY TOPPETTA: If those insurance costs, as you  
25 propose them, are reasonable and they are for this project,

1 for the project, yes. They would be considered --

2 DENYSE DuBRUCQ: So if it's risks specific for the  
3 project, that can be covered?

4 NANCY TOPPETTA: Yeah. If you are trying to  
5 purchase insurance for this project, then, yes, it would be.

6 DENYSE DuBRUCQ: And the third question is, if over  
7 time between the time you propose your proposal and you get  
8 through negotiations you find that you have got some costs  
9 that are not as high as you predicted because, say,  
10 something that you were going to do became a commercialized  
11 item before you knew about it and things like that, how do  
12 you handle that and the funding level requested?

13 TED McMAHON: Well, you are going to request the  
14 funding in your proposal based on your best estimate at this  
15 point in time. If something costs less during the project,  
16 then the project costs less, and there can be --

17 DENYSE DuBRUCQ: Can you use that as some of your  
18 underestimated categories?

19 NANCY TOPPETTA: I think it would reduce the  
20 overall total project value.

21 DENYSE DuBRUCQ: So, in other words, when you save  
22 money, that reduces your share, your matching fund?

23 TED McMAHON: Well, if during the course of the  
24 project if you save money on one area, on another area you  
25 may have increased costs. In that area you can use those

1 funds for [where you have increased costs].

2 DENYSE DuBRUCQ: We can balance it out a little  
3 bit?

4 TED McMAHON: Yeah, as long as they are allowable  
5 costs.

6 NANCY TOPPETTA: That truly is a pricing question  
7 that we would probably run into.

8 JO ANN ZYSK: Once you have an award and you have a  
9 budget, you can shift the money from one category to  
10 another. For instance, if didn't buy enough -- you didn't  
11 need all the equipment that you proposed but you need more  
12 labor dollars, you can shift that money into the other cost  
13 element. You cannot shift it into something you did not  
14 propose.

15 DENYSE DuBRUCQ: Oh, granted, granted. But I just  
16 wanted to know how flexible you were. Thank you.

17 THOMAS GDANIEC: Tom Gdaniec, Westinghouse Plasma  
18 Corp. I have got two questions about the energy input.  
19 First, when you look at the coal being 75 percent, can we  
20 assume that's on a BTU basis or weight basis?

21 TED McMAHON: BTU basis.

22 THOMAS GDANIEC: Thank you. If the process for  
23 gasification that is selected uses electricity as in the  
24 case of plasma gasification, would that electricity that's  
25 internally being used for the plasma be counted as energy

1 input to the facility?

2 TED McMAHON: That's a good question. So where  
3 does the electricity come from?

4 THOMAS GDANIEC: It would come off the internal.  
5 It would be a parasitic load.

6 TED McMAHON: It would be a parasitic loss.

7 THOMAS GDANIEC: But it drives the gasification  
8 process.

9 TED McMAHON: Well, I guess I would have to think  
10 about that. I can't answer that right now.

11 SCOTT KLARA: We will get back with you on that.  
12 But I guess the initial reaction is we probably need to go  
13 back and look at gross versus net and that kind of thing  
14 relative to the coal input, and we will give you a  
15 clarification.

16 THOMAS GDANIEC: Okay. Thank you.

17 MARK LeCLAIR: Hi. My name is Mark LeClair. I am  
18 the CEO of NanoSpire, Incorporated, and consultant to  
19 Peletex, Incorporated. Back in 1972, Bob McIlvaine and some  
20 of his associates ran a full-scale test down in Tampa,  
21 Florida, where they used foam to do CO<sub>2</sub> capture, showed very  
22 positive results, but we are not certain whether or not the  
23 data exists from that or not.

24 Now, if this data should somehow see the light of  
25 day again, would this technology fall under the category of

1 an existing technology, and would we be differentiated  
2 enough to be able to not be lumped into that category where  
3 we are making an incremental advance over an existing  
4 technology?

5 TED McMAHON: Okay. As I understand the question,  
6 you are saying there was a test performed a long --

7 MARK LeCLAIR: Full-scale.

8 TED McMAHON: In 1972?

9 MARK LeCLAIR: Uh-huh.

10 TED McMAHON: And the technology has not been  
11 further deployed since that time. Is that correct?

12 MARK LeCLAIR: That's correct. So is that an  
13 existing technology because it didn't exist, but yet we  
14 don't really know whether the data itself exists or not.  
15 And the problem they ran into was turning the foam back into  
16 a liquid. And we intend to address that problem. And would  
17 that be considered an incremental advance, or would that  
18 just be part of developing the technology that would be  
19 considered legitimate?

20 SCOTT KLARA: I would say in your proposal you have  
21 to make an argument to us that shows that it isn't  
22 commercially available. And if you could make a reasonable  
23 argument that this isn't commercially available, then I  
24 suspect, then, as reasonable folks we would probably say  
25 it's not recognized [as commercial technology].

1           MARK LeCLAIR: But if it's not commercially  
2 available --

3           SCOTT KLARA: Yeah. And, again, we are fuzzy on a  
4 lot of answers. People say size and this kind of question.  
5 But the bottom line is because there is a lot of fuzziness.  
6 And so it's really prudent on the proposer to provide a  
7 convincing argument.

8           We are not out here to stop proposers from coming  
9 through, but we want to give you the flexibility in cases  
10 that are kind of unique like this.

11           And so my view is, if you can make a strong  
12 argument that you can't go out and buy this off Company XYZ  
13 today, then I would say that's not available.

14           MARK LeCLAIR: Okay. Thanks.

15           JAMES MERRITT: Again, James Merritt with Sithe  
16 Global. You said before in your presentation the monies had  
17 to be spent in America. Much of the technology for these  
18 operations, the supplies, are going to be coming from  
19 overseas: Steel, gasifiers, reactors. No matter what it  
20 is, a lot of it is going to come from overseas.

21           Do we have to take title here in the States, spend  
22 the money in the States, or can we actually get our  
23 materials from overseas suppliers, engineering from  
24 overseas? What can we do there?

25           TED McMAHON: Well, we will have to clarify that.

1 You know, there have been Buy American acts, and there was  
2 another clause that was a cooperative agreement.

3 But typically, I mean, people buy equipment,  
4 supplies, and everything from overseas. Now it's very hard  
5 to even tell where something comes from. Well, as an  
6 individual consumer it is, anyway. But you can buy foreign  
7 goods. And if there are limits on those, we will go  
8 research that and provide that in our answers here.

9 JAMES MERRITT: Okay. Now, the next question is  
10 rather twisted. The Navajo Nation is where our project is  
11 at. Are you going to include that in spending money in  
12 America, or is that going to be considered excluded as a  
13 sovereign nation?

14 SCOTT KLARA: We will get you a read on that one as  
15 well.

16 JAMES MERRITT: Thank you for your time and  
17 presentations today.

18 SHANNON ANGIELSKI: My name is Shannon Angielski,  
19 and I am with the Coal Utilization Research Council. And I  
20 have three questions with respect to the 50 percent CO<sub>2</sub>  
21 capture requirement. I will just go ahead and ask all of  
22 them maybe, and then you guys can answer them, if that's  
23 easiest.

24 The first is just curiosity. What is the basis for  
25 choosing the 50 percent CO<sub>2</sub> capture level? The second is --

1 and this is sort of a two-part question. But does  
2 50 percent capture mean 50 percent storage of the gas that  
3 goes through the scrubber, or does it mean 50 percent of  
4 what enters the scrubber needs to be captured? And then the  
5 third is how would a slip stream system fit into this.

6 TED McMAHON: Okay. So where did the 50 percent  
7 number come from? Well, we want the project to be large  
8 enough to --

9 Well, maybe I better answer maybe the last question  
10 first. You have to capture and sequester 50 percent of the  
11 plant emissions. Okay? So it's not a percentage capture.  
12 You know, it's not 50 percent of some slip stream that's  
13 10 percent of your total output. It's 50 percent of your  
14 total output of your particular plant.

15 And where did that number come from? I mean, we  
16 wanted the project to be large enough so that we could  
17 understand the total impact on plant operations and  
18 economics.

19 We want to make steps towards our overall program  
20 goal, which is the 90 percent. That's 90 percent capture.  
21 That's our long-term program goal. And so there is a  
22 steppingstone toward that. And the number is roughly  
23 equivalent to what a natural gas system would be.

24 So it's not a -- well, I mean, it's a firm number  
25 in terms of what's written in the announcement, but there is

1 no theoretical groundwork, if you want to say, that we used  
2 to come up with that. We use it as sort of a guideline.

3 And I think I have answered your first and your  
4 third questions. What was the second?

5 SHANNON ANGIELSKI: The second is when you measure  
6 the 50 percent, does that mean that 50 percent of the CO<sub>2</sub>  
7 that goes through the scrubber, is that the measurement, or  
8 is it what goes into the scrubber?

9 TED McMAHON: It's what comes out of the plant.

10 SHANNON ANGIELSKI: So it's the total?

11 TED McMAHON: Yes.

12 SHANNON ANGIELSKI: On a separate question, is it  
13 possible to use other forms of federal assistance for a  
14 project that might be awarded? So, for instance, there is  
15 the DOE loan guarantee program or tax incentives that might  
16 be available. Will we be able to use other forms of federal  
17 assistance for these types of projects?

18 NANCY TOPPETTA: I couldn't hear you. I'm sorry.

19 TED McMAHON: Can she participate in the loan  
20 guarantee program, tax credits.

21 NANCY TOPPETTA: Well, the announcement doesn't  
22 have any restrictions. DOE doesn't put any restrictions on  
23 your ability to apply for those programs.

24 TED McMAHON: But I guess I would say you can't use  
25 any other federal funds for your cost share. Am I right,

1 Jo Ann?

2 JO ANN ZYSK: That's right. You cannot take any  
3 government money and propose it as your cost share.

4 SCOTT KLARA: The question, I think, is if it's  
5 government money from a tax credit or government money from  
6 a loan guarantee, would you consider that government money.

7 TED McMAHON: Well, the tax credit, you are not  
8 going to get the tax credit until you start operating the  
9 plant.

10 SHANNON ANGIELSKI: Unless it's an investment tax  
11 credit.

12 TED McMAHON: Correct.

13 SHANNON ANGIELSKI: Right now in the code, there  
14 are investment tax credits that are available which  
15 conceivably you would get before the plant is constructed.

16 NANCY TOPPETTA: Your specific question, I guess,  
17 was just can you apply for those?

18 SHANNON ANGIELSKI: That was my question. But I  
19 guess it begs the question, too, as to how would it apply to  
20 the cost share.

21 TED McMAHON: Well, I guess I would ask you to  
22 write down what specific tax credits you are talking about  
23 and submit those to us through our IIPS system, and we will  
24 answer those through that.

25 SHANNON ANGIELSKI: Okay. Thank you.

1           JERRY GOLDEN: Jerry Golden, Mitsubishi Heavy  
2 Industries America. I guess I just want to get a  
3 clarification on your last statement about slip stream on  
4 the existing plant. If we are looking at putting a capture  
5 plant at an existing facility, say a thousand-megawatt  
6 plant, are you saying I've got to get 50 percent reduction  
7 of the thousand megawatts, or is it a 50 percent removal  
8 from, say, a 200-megawatt slip stream?

9           TED McMAHON: Well, the way the announcement is  
10 written, it's 50 percent of your plant emissions. But we  
11 would interpret that on a given boiler. I mean, if you have  
12 one complex that has four 500-megawatt boilers, you would  
13 look at one of those boilers and reduce the emissions by  
14 50 percent from that one.

15           JERRY GOLDEN: But even, say, two 500-megawatt  
16 boilers, when you are looking at -- that becomes a very  
17 sizable plant relative to the state of the technology.

18           TED McMAHON: Right.

19           JERRY GOLDEN: And I think we could be putting a  
20 150-megawatt removal plant on, which would be a significant  
21 advancement over the state of the art. But I am kind of  
22 hearing you telling me that that wouldn't work.

23           TED McMAHON: The way the announcement is written  
24 right now, that would not work. So, again, I would ask you  
25 to state whether that's going to have an impact on your

1 ability to submit a proposal to us.

2 JERRY GOLDEN: I think that I can assure you that  
3 it would have an impact.

4 TED McMAHON: Okay.

5 JERRY GOLDEN: Thank you.

6 JOSEPH REGNERY: Joe Regnery from Rentech again.  
7 Is there any flexibility on that 50 percent power generation  
8 plant? Because you have excluded -- if your goal is to  
9 define carbon capture sequestration from pre-combustion  
10 opportunities, you have excluded all forms of gasification  
11 technologies that would use it for other productions, such  
12 as chemicals, FT [Fischer-Tropsch] fuels, ammonia processes  
13 making fertilizers. And yet those processes use the same  
14 base technology and provide the same base engineering and  
15 science, and yet you have excluded those. So I am just  
16 wondering if there is any flexibility there.

17 TED McMAHON: Well, we will go back and review  
18 that. The program has traditionally been a program focused  
19 on electric power generation. And sometimes these things  
20 get carried forward. And we are going to have to revisit  
21 that and see if there is any -- well, to determine if that  
22 still is a requirement for us or to determine if we have any  
23 flexibility.

24 JOSEPH REGNERY: I don't read that threshold  
25 requirement in EPACT.

1           TED McMAHON: No, it's not in EFACT. My  
2 understanding, it comes from the original clean coal  
3 legislation from 1985, something like that.

4           JOSEPH REGNERY: But its relevance in today's  
5 marketplace is you have excluded a number of people who  
6 could possibly bid who are actually putting in gasification  
7 plants on an accelerated basis before any announced IGCC  
8 plant would go in.

9           TED McMAHON: Okay. Well, we have your comment  
10 here, and we will go back and review the requirement for  
11 50 percent electric power generation.

12           JO ANN ZYSK: I would like to go back to the  
13 question about American made versus foreign. We have a  
14 clause that goes in each of our awards, and it's a required  
15 clause. It says, "Notice regarding the purchase of  
16 American-made equipment and products. Sense of Congress.  
17 It is the sense of Congress that, to the greatest extent  
18 practicable, all equipment and products purchased with funds  
19 made available under this award should be American made."  
20 So that will be placed in each of the awards.

21           TED McMAHON: And to me, "where practicable" means  
22 that justifications exist for providing for foreign-made  
23 goods. Is that right?

24           JO ANN ZYSK: Yes.

25           DAVID LEATHERS: David Leathers, Jamestown Board of

1 Public Utilities. A couple questions related to the  
2 timeline. Will project acceleration be of value to DOE in  
3 the sense that evaluating projects and proposals, will the  
4 DOE assign greater value to projects that can come online  
5 quickly, say in 2012 or 2013?

6 TED McMAHON: I don't think that's a part of our  
7 evaluation criteria. We have the requirement that you  
8 should meet the operations requirement and capture by 2014.  
9 But we don't have any requirement that accelerating that  
10 schedule gives you any advantage.

11 Now, maybe a project that is fairly far along in  
12 its development cycle would be considered a strong project  
13 because you already have a lot of work done on it already,  
14 as opposed to someone who is just conceiving a project, and  
15 that might be some advantage.

16 DAVID LEATHERS: Okay. And kind of playing on  
17 that, can the NEPA process be expedited if a proposed  
18 project has completed the state environmental impact  
19 statement process?

20 TED McMAHON: I am going to ask Rich Hargis to  
21 respond to that. He's our NEPA expert that's here today.

22 RICHARD HARGIS: If there has been a state EIS  
23 completed for the project and it has the same scope as the  
24 EIS that DOE would have to do, I can foresee that the  
25 process would be expedited because you have already got all

1 of the necessary environmental information.

2 But you would still have to go through some of the  
3 same steps, like public scoping. We would still have to do  
4 a scoping of the process, a federal scoping process. So you  
5 still have federal steps that would have to be taken, but  
6 you would almost be guaranteed to be way ahead of the curve  
7 than somebody just coming in starting the process from  
8 scratch.

9 DAVID LEATHERS: Thank you.

10 HOSSEIN GHEZEL: My name is Hossein Ghezal of  
11 FuelCell Energy. I have three questions. Actually, a  
12 couple of them is related to just clarify some of the items  
13 we discussed. One is the slip stream, meaning one of the  
14 gentlemen here mentioned about the slip stream of a larger  
15 power plant. Is that something that you folks are going to  
16 go back and clarify later on, or is it --

17 TED McMAHON: Yes.

18 HOSSEIN GHEZEL: Like if it is a thousand-megawatt  
19 power plant -- typically, coal power plants are large, huge.  
20 And if you want to conserve all the effluent of a  
21 thousand-megawatt power plant, of course, that's going to be  
22 costly. So is this issue of slip stream going to be  
23 clarified later?

24 TED McMAHON: Yes. I mean, yes. We have a  
25 requirement right now that 50 percent of the emissions from

1 a given plant need to be captured and sequestered. We have  
2 been given a comment that says, you know, well, that's going  
3 to impact someone's ability to submit a proposal. So we are  
4 going to try to clarify that requirement.

5 The requirement in the announcement as it exists  
6 now I think is not really unclear. But I think what the  
7 comment is is that it is burdensome.

8 HOSSEIN GHEZEL: I mean, being unclear is the  
9 reference to "plant." What is a plant? Is that the  
10 demonstration plant, or is that the power plant that is the  
11 host site? That's kind of unclear. But I guess this  
12 conversation here made it clear that's actually the host  
13 site or the greenfield power plant.

14 TED McMAHON: Yeah. And, again, if you have a  
15 multi-boiler plant, you can pick one of those boiler  
16 systems.

17 HOSSEIN GHEZEL: Right. But typically, I mean -- I  
18 mean, it could be a gasification plant.

19 TED McMAHON: That's correct. And for a  
20 gasification system, you know, the requirement would be like  
21 on a single train of -- if you have a two-train gasification  
22 system, a single train is sufficient.

23 HOSSEIN GHEZEL: The second question I do have is  
24 related to a clarification of earlier conversation about the  
25 host site and the cost sharing. I kind of had this

1 impression that if the cost of the project requires the host  
2 site to put some of its own money, like interface, you know,  
3 costs interfacing for some of the facility, that would be  
4 counted as a cost share. But in one of the questions, you  
5 explicitly mentioned host site cannot be a cost share. And  
6 I just want to --

7 TED McMAHON: Well, if you have costs, if you are  
8 going to retrofit an existing plant, there is going to be  
9 costs associated with retrofitting the plant. You are going  
10 to have the new equipment, and then some interface is going  
11 to -- you know, some funds are going to have to be spent to  
12 interface that new equipment in the plant. And those would  
13 all be allowable costs, and they would be project costs.  
14 And then DOE can reimburse those costs at the agreed-to cost  
15 share ratio.

16 HOSSEIN GHEZEL: Right.

17 JO ANN ZYSK: However, that's only a portion --  
18 that's your portion of that plant. You cannot take the cost  
19 of running that plant and propose that as cost sharing.

20 HOSSEIN GHEZEL: Yes. That's correct.

21 TED McMAHON: Right. And I think the comment that  
22 I made earlier was if you have an existing facility that's  
23 worth, you know, a half billion dollars, you can't count  
24 that as cost share, either.

25 HOSSEIN GHEZEL: Yes. Good. The third question

1 and last is related to the schedule. Somewhere in this  
2 solicitation, you mention that DOE will define the schedule  
3 later after the award is done. I think it's on page 89 at  
4 some point.

5 TED McMAHON: I'm sorry. Page --

6 HOSSEIN GHEZEL: I apologize. It's page 12, the  
7 second paragraph. It says, "Upon selecting a project for  
8 award under this announcement, DOE shall establish a  
9 reasonable period of time during which the recipient shall  
10 complete the construction or demonstration phase." Could  
11 you define that schedule, please.

12 TED McMAHON: No, that's not the schedule. That's  
13 a requirement of the Energy Policy Act. I think what a  
14 proposer needs to do is propose a realistic schedule to  
15 perform your project.

16 But the Energy Policy Act says that DOE will  
17 establish a reasonable period of time in which you are given  
18 to complete the construction or demonstration phase of the  
19 program.

20 And so what I interpret that to mean is that, you  
21 know, you propose a four-year project. Okay? And then DOE  
22 is going to say, well, we understand that you may have some  
23 schedule delays, and so what we are going to do is establish  
24 a reasonable period. We think you can get that done in five  
25 years. Okay? And if you don't complete that within five

1 years, then the Secretary of Energy can extend that period.  
2 But you are agreeing not to extend the project beyond that  
3 five-year period.

4 HOSSEIN GHEZEL: So in the proposal, we give you  
5 our best guess at that point?

6 TED McMAHON: Well, you give a realistic project  
7 schedule. And if you want to identify what you think that  
8 reasonable period should be, I mean, you can feel free to do  
9 that. But the project schedule and the reasonable period  
10 are two different things.

11 HOSSEIN GHEZEL: All right. Thank you.

12 VISHAL VARMA: Vishal Varma, Air Products &  
13 Chemicals. Does the project operator have to show a minimum  
14 internal rate of return or some metric of return investment  
15 or return invested capital in order to show that the project  
16 is financially feasible? That's one question.

17 A related question is, well, obviously the project  
18 is not capturing CO<sub>2</sub> and, you know, very likely it may not  
19 be recovering all of its incremental costs associated with  
20 capture and sequestration, especially if there are no  
21 incremental revenues coming from a stream like EOR. In that  
22 case, are there any ways in which the operator could be  
23 compensated for, you know, the incremental O&M in order to  
24 render the project profitable for that matter?

25 TED McMAHON: Could you answer, Frank?

1           FRANK LANGHAMMER: Well, with respect to the  
2 minimum IRR, the answer is no, there is none. And with  
3 respect to your second question, I am not sure that I  
4 completely follow.

5           VISHAL VARMA: Well, my second question was that,  
6 in comparison to a plant which is not capturing CO<sub>2</sub> today,  
7 the costs, the variable and fixed costs, of a plant which is  
8 capturing CO<sub>2</sub> will be higher. And if you are operating in a  
9 competitive market and trying to send power, you might not  
10 be able to recover all of that cost, incremental cost. And  
11 you may end up in a situation where, if you are not able to  
12 recover the costs, you are not dispensing power. And are  
13 there any ways in which the project operator could hedge  
14 some of that risk?

15           TED McMAHON: Well, I guess one thing that you are  
16 asking, I think, is you are losing money on every ton of CO<sub>2</sub>  
17 that you capture or sequester. So I guess one thing that  
18 you are asking, is that an allowable project cost. And  
19 that's something that we probably have not encountered to  
20 date. I would say that the normal day-to-day operation of  
21 the plant is not an allowable cost.

22           VISHAL VARMA: That means the DOE cost share award  
23 will not cover any operating costs from the plant? It's  
24 only the capital that is subject to the allowable cost share  
25 from the DOE? Is that understanding correct?

1           TED McMAHON: Stephanie, can you get up to the mic,  
2 Stephanie, and respond to that.

3           STEPHANIE CIMINA: Stephanie Cimina. I am with the  
4 Department of Energy. The normal operating costs of the  
5 plant would not be allowable. But any incremental costs  
6 when you are doing a sequestration, those are the allowable  
7 costs.

8           VISHAL VARMA: And when you say those are the  
9 allowable costs doing a sequestration, you mean during the  
10 normal operation of the plant?

11          STEPHANIE CIMINA: Yes, when you are doing the  
12 sequestration, those costs. Not the normal operating costs  
13 of the plant.

14          VISHAL VARMA: Okay. And when you say -- okay. So  
15 fine. Sequestration costs. But there is also the cost of  
16 operating the scrubber. If you are in post-combustion,  
17 there is cost of operating, you know, your other  
18 technologies that are, you know, depending on purely oxy or  
19 pre-combustion or whatever. So will that incremental cost  
20 also be covered, or is it just the sequestration that will  
21 be covered?

22          STEPHANIE CIMINA: Well, no. If those other costs  
23 are included in the total project, they would be allowable  
24 costs.

25          VISHAL VARMA: Okay.

1           STEPHANIE CIMINA: Do you understand?

2           VISHAL VARMA: Yeah. I mean, what you are saying,  
3 my understanding is that the allowable cost during the  
4 operating phase of the project will include both the  
5 incremental cost of capture -- that means not the base plant  
6 itself, but the cost of operating capture technologies.

7           STEPHANIE CIMINA: Yes.

8           VISHAL VARMA: And the sequestration.

9           STEPHANIE CIMINA: Yes.

10          VISHAL VARMA: Both of those?

11          STEPHANIE CIMINA: Yes.

12          VISHAL VARMA: Okay.

13          STEPHANIE CIMINA: And then you had another  
14 question about loss?

15          VISHAL VARMA: Well, yeah. That was around, you  
16 know, we have here in this country, you know, both regulated  
17 markets and deregulated markets for sale of power. And  
18 there might be a situation in which a power plant is selling  
19 power at a contract price for power, which means that the  
20 cash flows from the sale of power are determined instead.

21                 On the other hand, you might be selling power in a  
22 competitive market, in a competitively good market, where  
23 you are bidding, you know, on a day-ahead basis and where  
24 the price is -- you know, is really, you know, fluctuating  
25 depending on what's the -- you know, if it's going to be

1 summertime, the prices are higher. If it's going to be base  
2 load, the prices are lower. And that kind of subjects the  
3 operator to pricing risks.

4 And given the fact that the capture plant is  
5 running on a higher cost, I see the margins -- right? --  
6 kind of shrinking. And in a worst-case scenario, your cost  
7 might actually be higher than the price for which you are  
8 selling the power. You are potentially running in losses.  
9 And I am just, you know, playing out some scenarios.

10 STEPHANIE CIMINA: Okay. But a loss would not be  
11 an allowable cost.

12 VISHAL VARMA: Okay. That was my other question.

13 STEPHANIE CIMINA: Okay.

14 VISHAL VARMA: Thank you very much.

15 FRANK LANGHAMMER: I would just add to that that  
16 this whole issue of what are allowable costs and are not I  
17 feel we should have at least a mild disclaimer that you need  
18 to read the announcement carefully and the references to  
19 various sections of the Code of Federal Regulations with  
20 respect to what's allowable and what's not. And your  
21 application should be based on your understanding of what  
22 those say.

23 To the extent that you need greater clarification,  
24 it would be useful if you submitted your question in writing  
25 through the appropriate channels so that we can answer it in

1 a -- we can expand and make sure that we are confident in  
2 what you are asking and on what our answer is.

3 CURTIS JABS: Curtis Jabs, Basin Electric Power  
4 Cooperative. Probably more of a comment, please add me to  
5 the concern of the criteria that you use 50 percent of the  
6 output of a plant to capture the carbon.

7 In our state, we have power plants that range from  
8 200 megawatts to 550. And so with 50 percent requirement,  
9 that's quite a range. I would rather see you give us a  
10 commercial project, maybe tons per year or a minimum I think  
11 would be better criteria.

12 TED McMAHON: Okay. And you are commenting on the  
13 requirement that 50 percent of the carbon emissions be  
14 captured?

15 CURTIS JABS: That is correct.

16 TED McMAHON: Yes.

17 JOSEPH REGNERY: Joe Regnery with Rentech again.  
18 The question I have goes back to the previous gentleman's  
19 question about the cost sharing. When you do pre-combustion  
20 carbon capture, you actually have a tripartite "it" against  
21 you. You have the cap ex cost. You have the additional  
22 megawatt load for the compressors that you have to operate  
23 and the carbon capture systems that you have to operate.  
24 But then you also have an opportunity cost of the loss of  
25 megawatts that you would otherwise be putting to the grid.

1 And in that loss, there is also a loss of value in the sense  
2 that you reduce mass flow through your CT, and that has a  
3 reduced output as well. So it's actually I consider it a  
4 three-point hit. But it can actually be considered a  
5 four-point hit. Are those opportunity costs recoverable in  
6 a cost share basis?

7 TED McMAHON: Well, I think that's the question  
8 that Stephanie just answered, and she said that losses are  
9 not allowable costs.

10 JOSEPH REGNERY: They are not losses. They are  
11 opportunity costs. It's megawatts you would otherwise sell  
12 that you can't sell now.

13 TED McMAHON: Yeah. Well, we recognize that -- I  
14 mean, frankly, that's the point of the program here, is to  
15 reduce those losses. We recognize that those are losses.  
16 And we are attempting to develop technologies that minimize  
17 those losses, because we anticipate in the future that there  
18 will be regulations requiring carbon capture and  
19 sequestration.

20 So, again, we are here to assist with funding with  
21 respect to costs that are allowable, equipment costs,  
22 incremental costs associated with performing the  
23 demonstration to try to demonstrate those technologies and  
24 move them forward so that we can be ready when regulations  
25 are enacted that are anticipated.

1           JOSEPH REGNERY: I understand. But if we could  
2 account for that in our cost share, that would give us a  
3 much better economic profile to do this on your path.

4           TED McMAHON: Well, we will take that under  
5 advisement and consider that.

6           GEORGE OFFEN: Hello. I am George Offen with EPRI,  
7 and I stood up only because of the previous comment from  
8 this mic, and I wanted to reinforce that.

9           That was one power company that made the comment  
10 about the 50 percent requirement. We are, of course,  
11 exposed, as you know, to many power companies. And there  
12 are several who are talking to us about their interest in  
13 demonstrating post-combustion -- in this case  
14 post-combustion capture, also IGCC capture.

15           All of those projects are reasonable size, I would  
16 say. They are the last scale before you go fully  
17 commercial. They are 10 to 20 to 50 megawatts. They are  
18 all going to go on power plants that are 400-plus megawatts,  
19 300-plus megawatts.

20           Those projects of and by themselves at the scale  
21 they are are talking about, order of magnitude 100 million,  
22 plus or minor a factor of two, but that kind of a number  
23 just for the capital costs, you can see from that that  
24 putting a system that's 400 megawatts up there is just  
25 unachievable. And I think the nation would suffer from not

1 having that next step that you are wisely trying to make  
2 happen.

3           So I am just sort of speaking from what we hear  
4 from a number of other members, all of them that want to  
5 participate in not just CCP-3 but -- CCPI-3, but just  
6 participate or do something in that area. I would encourage  
7 you to rethink that.

8           TED McMAHON: Thank you, George, for your comment.

9           DAVID STOPEK: David Stopek from Sargent & Lundy.  
10 During the presentations you mentioned that the IRS has  
11 recently determined that this funding may be subject to tax,  
12 taxation. And that should be spelled out exactly how that's  
13 done when you issue that, because I think that's going to  
14 strongly influence companies when they evaluate the value of  
15 the DOE participation against the possible taxation that  
16 they would be subject to. So they are going to need to  
17 understand that and have guidance.

18           TED McMAHON: Well, I don't think that DOE is going  
19 to specify the tax implications of this project. I mean, I  
20 think that that's going to be up to you and the IRS to  
21 determine that. And I don't know if Nancy wants to make any  
22 more comments on what we know about this recent ruling or  
23 not.

24           NANCY TOPPETTA: I could defer to Frank, but I  
25 could also say we would encourage you to discuss that with

1 your tax attorney. We don't really set the tax policy.  
2 There are arguments both ways for the issue that you are  
3 talking about. But it really is an issue for each  
4 individual recipient to consider. And you might want to get  
5 advisement on that. Frank?

6 FRANK LANGHAMMER: I would just add I would repeat  
7 what you just said. You need to talk with your tax counsel  
8 and with your accountants, because the way of structuring  
9 these cooperative agreements and the repayment agreements  
10 are so diverse that I think it's possible that the IRS could  
11 come down in different ways on it. So we would just  
12 encourage you to talk to your tax adviser.

13 JAMES N. IRVIN: Nick Irvin, Southern Company  
14 Services. I have a comment and a question, kind of redirect  
15 George's comment about the 50 percent capture requirement.  
16 Not only does it become burdensome from a financial  
17 standpoint. That is a jump in scale that is much larger  
18 than what we normally consider the right gap to try to span,  
19 going from where, particularly post-combustion, where they  
20 are on the single-megawatt scale. Trying to go to several  
21 hundred megawatts imposes a lot of risk on all projects. So  
22 I urge you to take that into consideration.

23 Also, one other question. For post-combustion  
24 capture in particular, what do you consider -- could you  
25 expand on what you consider commercially available or

1 typical conventional processes.

2 TED McMAHON: Well, we state in the announcement  
3 that amine processes are commercially available processes.  
4 And we are seeking advancements over what's commercially  
5 available.

6 And, again, advancements can come in a number of  
7 ways. I mean, advancements could be as a result of scale,  
8 as a result of integration. So beyond that, I don't think  
9 that we are going to identify what is commercial. But it's  
10 up to you in your application to identify a baseline and  
11 show how you are making an advancement over that.

12 GEORGE OFFEN: Let me ask for a clarification on  
13 that.

14 TED McMAHON: Could you state your name, please.

15 GEORGE OFFEN: I'm sorry. George Offen with EPRI.  
16 Amines covers a huge range. And people are, as you know,  
17 developing various other amines, all amine-based but with  
18 substantial variances and substantial differences. What's  
19 your take on that? How does that play out in your  
20 definition of what's commercially available?

21 SCOTT KLARA: I think the bottom line is, again,  
22 this is one of these issues where we're potentially leaving  
23 it open because it is an open issue, meaning it's up to you  
24 to come forward and prove to yourselves and to us that this  
25 isn't something that today I could go out to a commercial

1 vendor and say, you know, I want a scrubbing technology, and  
2 they are going to say, sure, here it is, here is the design,  
3 we could sell it to you tomorrow.

4           And as long as you could make that argument, so  
5 that's -- that could suggest that if you look at an amine  
6 and you could say Company XYZ delivers this amine system,  
7 but, you know, we are looking at a tweak of this, you know,  
8 it's an advancement. Well, sure. I think we are reasonable  
9 folks. We would say, yeah, that's not ready today, it's an  
10 advancement.

11           So you really have to put that argument forward.  
12 And because every situation likely is going to be so unique  
13 what you might consider an advancement, that we leave it up  
14 to you. If it's something you could go buy today without  
15 any issues, then I would think we would say that's a  
16 commercial offer.

17           TED McMAHON: And, again, that is something that's  
18 evaluated, and you are not disqualified for providing some  
19 small advancement. That is something that is going to get  
20 scored. If you provide significant advancement towards our  
21 goals, that might be looked at more favorably but as one  
22 part of the evaluation. There are many other parts of the  
23 evaluation. So it doesn't necessarily disqualify you.

24           MARK LeCLAIR: I have a related question. My name  
25 is Mark LeClair from Peletex. One of the things we are

1 considering is to incorporate absorbents and possibly even  
2 amines into the foam that we are going to use to do CO<sub>2</sub>  
3 capture. Would that be considered an incremental advance?

4 SCOTT KLARA: Again, you have to show to us that it  
5 would not be the typical use of an amine and it has some  
6 benefit to your foam, I mean, just some basic simple logic  
7 flow along those lines that, of course, for example, you  
8 could use a membrane that is impregnated with an amine.  
9 Nobody would say that's an amine scrubbing system.

10 And so, again, you have to show to us -- and,  
11 again, just logic. Just prove to yourselves that this is  
12 something you couldn't go out to the vendor next-door and  
13 buy and it does present some potential performance and cost  
14 benefits that aren't available right now.

15 TED McMAHON: Well, I see we are here at our  
16 allotted time of 2:30. I would sort of give a final call  
17 here for any more questions and comments.

18 GEORGE OFFEN: George Offen with EPRI. Again,  
19 reflecting on what we hear from a number of our members,  
20 there are quite a few -- for some reason or other, we have a  
21 fair amount of interest along the coast, along the eastern  
22 coast, of people interested in projects, go all the way up  
23 to the central Atlantic states. Many of them are burning  
24 imported coal and make up nationwide a very small fraction  
25 of the coal that's used, I think a couple of percent, 2 or

1 3 percent. But it happens to be concentrated in those areas  
2 where there are people who have interest in participating.

3 As they read and tell us about this, the  
4 solicitation, they are out of it. Is there any way to  
5 rethink that? I guess the question, is it a policy issue or  
6 a technical issue? If it's a technical issue, we don't see  
7 a difference at this level of what you are doing, whether  
8 it's domestic or not.

9 TED McMAHON: Well, we will go back and review  
10 that. It could be a policy issue. It's not really a  
11 technical issue. It could be a legislative issue.

12 GEORGE OFFEN: Thank you.

13 TED McMAHON: And was there another comment over  
14 here? Are there any other questions or comments?

15 Hearing none for the second time, I would like to  
16 thank everybody for their participation and for their  
17 questions and comments. And I would reiterate that if you  
18 want to reinforce any of your questions or comments, submit  
19 them through our IIPS system, and we will take a look at  
20 them and provide answers to questions and take comments and  
21 consider them seriously.

22 So with that, I would like to thank everybody for  
23 their participation and close the workshop. Thank you very  
24 much.

25 (At 2:40 p.m. the proceedings were concluded.)

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