

UNITED STATES DEPARTMENT OF ENERGY  
OFFICE OF THE CHIEF FINANCIAL OFFICER

LPG PUBLIC MEETING

FRIDAY, JUNE 15, 2007

U.S. Department of Energy  
Forrestal Building  
Main Auditorium  
1000 Independence Avenue, SW  
Washington, D.C. 20585

**PARTICIPANTS****DOE:**

Kathy Binder, Facilitator  
Warren Belmar, Panel Member  
Lawrence Oliver, Panel Member

**Industry:**

Steven Winn, NRG Energy, Inc.  
Robert Temple, C P S Energy  
John Snedeker, Synergistic Dynamics, Inc.  
Michael Walker, Indiana Gasification  
Paul Hinnenkamp, Entergy Nuclear  
John McCarthy, Celunol Corporation  
Robert Dingess, PetroTex Hydrocarbons, LLC  
John Welch, USEC, Inc.  
Steven Howlett, General Electric  
Joe Turnage, Constellation Generation Group  
Jeffrey Lyash, Progress Energy Florida, Inc.  
Louis Rosocha, Los Alamos, New Mexico  
Marilyn Elliott, Cob Creations, LLC  
Marni Zollinger, Cob Creations, LLC  
Ben Rees (read by Marni Zollinger), Evolution Markets  
Mayor Andre DeBerry, Mayor, City of Holly Springs, MS  
Michael McCall, Forex Financing Group  
Stephan Dopuch, Baard Energy, LLC

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**P R O C E E D I N G S**

[Time Noted 9:00 a.m.]

MS. BINDER: Good morning. We are going to get started. Welcome to DOE. I see that some of the speakers have already taken their assigned seating. Thank you for that.

My name is Kathy Binder I am here as part of the host team of the Loan Guarantee Program. And I will be serving as basically a timekeeper and pseudo facilitator. So you will see me shepherding you around all day.

Before we get started I would like to lay down a few housekeeping rules -- not rules actually. But to let you know what's available here in the department. Some of you have already found the snack bar; right? If you haven't, it's out this door and to the right. The cafeteria is also to the left. So if you want to eat here at DOE you can do that internally. If you leave the building, and I think everybody got one of these information sheets as you checked in. Did you get one of these? It talks about the security so you

1 understand our security procedures. Our court  
2 reporter who is transcribing today is sitting  
3 in the back. She will be able to hear the  
4 speakers. Speakers you have 15 minutes, as you  
5 know.

6 My job will be to give you notice, a  
7 two-minute warning the blue sign and thanks  
8 when your time is up. Okay. No hooks, but  
9 thanks. So please try to stay on track.

10 The other thing I would like to let you  
11 know is the host team has these special badges.  
12 So if we can answer any questions today, please  
13 feel free to call on us.

14 We have ten speakers for the morning.  
15 I'm not sure exactly when we'll break for  
16 lunch. I think the lunch break is one hour.

17 MR. WARREN: Correct.

18 MS. BINDER: Okay. The lunch break is  
19 one hour. And I think -- oh, if you do want to  
20 have sidebar conversations please take those  
21 outside. This is being recorded for another  
22 overflow room which obviously this room is not  
23 overflowing. But it will be taped in another

1 room, the small auditorium which is to the  
2 right. So if you need to -- if you want to  
3 even access that room it's open, but we  
4 encourage you to stay here at least if the room  
5 is not overflowing.

6 Thank you for being here and welcome to  
7 DOE.

8 MR. BELMAR: Thank you, Kathy. On  
9 behalf of the Department of Energy, I would  
10 like to welcome you all here this morning. My  
11 name is Warren Belmar. I am the Deputy General  
12 Counsel for Energy Policy at the Department of  
13 Energy. My colleague Lawrence Oliver will be  
14 joining me on the panel today. He is our  
15 Assistant General Counsel for Fossil Energy and  
16 Energy Efficiency.

17 The purpose of today's hearing is to  
18 hear your comments and suggestions on the  
19 notice of proposed rulemaking that the  
20 Department issued last month with respect to  
21 our efforts to implement Title 17 of the Energy  
22 Policy Act of 2005 which authorizes the  
23 Secretary of Energy to issue loan guarantees

1 for new and innovative technologies that reduce  
2 or sequester greenhouse gases and anthropogenic  
3 emissions.

4 We appreciate the large turnout today  
5 and look forward to learning a lot from your  
6 comments and testimony. As you all are aware,  
7 we have the rulemaking proceeding open -- the  
8 record open until the 2nd of July. So if  
9 issues come up today and you feel that you  
10 didn't have an adequate time in your testimony  
11 to address them, we hope you will give us more  
12 information and detail in written comments.  
13 And, of course, those of you who have not  
14 elected to request to testify this morning are  
15 free to file as detailed a set of written  
16 comments as you think will be helpful for us.

17 Having said that, in order to stay on  
18 schedule, why don't we start with our first  
19 speaker of the morning, and that is Mr. Steven  
20 Winn with NRG Energy, Inc. Mr. Winn, welcome.

21 MR. WINN: Thank you.

22 I want to thank you, Mr. Oliver and Mr.  
23 Belmar for allowing me to speak today.

1           My name is Steve Winn. I'm Executive  
2 Vice President of Strategy, Environmental and  
3 Nuclear development for NRG Energy, Inc. I  
4 would like to thank the Department of Energy  
5 for its efforts in developing the Loan  
6 Guarantee Program. As a company, we appreciate  
7 the efforts undertaken by the DOE to support  
8 initiatives that will satisfy our nation's  
9 energy needs. By creating incentives for the  
10 development of new nuclear power plants and  
11 other advanced, carbon reducing technologies,  
12 the DOE will provide the initial push required  
13 to lower emissions and diversify our energy  
14 sources away from foreign sourced fuels.  
15 Moreover, we appreciate the need to develop a  
16 rational program that provides a useful  
17 incentive, but at the same time protects  
18 American taxpayers from unnecessary risk or  
19 subsidy.

20           NRG owns more than 23,000 megawatts of  
21 generation including 1,150 megawatts of nuclear  
22 generating capacity from two large commercial  
23 units at the South Texas Project near Bay City,

1 Texas, which is operated by the STP Nuclear  
2 Operating Company. In 2006, we announced plans  
3 -- our plan to develop up to an additional  
4 10,000 megawatts of generation nationwide,  
5 including next generation nuclear and IGCC. We  
6 are now working with STP Nuclear Operating  
7 Company (STPNOC), as well as the City of San  
8 Antonio another STP owner, to develop two new  
9 Advanced Boiling Water Reactors at the South  
10 Texas Project. These two new units will  
11 provide more than 2,700 new megawatts of badly  
12 needed, baseload generating capacity along the  
13 Texas Gulf Coast, using a safe and clean  
14 technology, without carbon emissions. This  
15 project also will reduce demand on natural gas,  
16 which provides the majority of the electric  
17 generation in Texas. In building this project  
18 we will enhance diversification of fuel supply  
19 for electricity in Texas and contribute  
20 meaningfully to our nation's domestic energy  
21 security.

22 NRG believes that the coming wave of  
23 nuclear plants in the U.S. will require the

1 commitment of developers like NRG, equipment  
2 suppliers, and state and local governments, and  
3 we believe that all of the parties have  
4 tangibly shown their commitment. NRG is  
5 spending tens of millions of dollars to prepare  
6 an application to the NRC to license these two  
7 new units. Vendors have shown a willingness to  
8 support their designs and invest in the  
9 manufacturing process. And, as one example of  
10 commitment from state and local government, the  
11 Texas state government has passed bills that  
12 assist in the development of new nuclear. The  
13 remaining piece in the future success of  
14 nuclear is a strong commitment on the part of  
15 the Federal government.

16           During the coming years while we await  
17 NRC's issuance of the licenses, we anticipate  
18 that the development of the new STP units will  
19 involve expenditures of hundreds of millions of  
20 dollars to maintain our development timeline.  
21 Simply put, NRG cannot make the commitment to  
22 spend its share of these additional funds  
23 unless it has the confidence that it can secure

1 the financing along with its equity investment  
2 for the total project costs. Taking into  
3 account interest during construction, we expect  
4 that in the 2009-2010 time frame we will need  
5 to finance several billion dollars for our  
6 project alone. Moreover, every company that  
7 provided a letter of intent to the NRC will  
8 require similar capital commitments. The size  
9 of the investment required, the fact that we  
10 are building the first new units in 25 years,  
11 and the well-organized but as yet unproven  
12 licensing process presents risks that our  
13 lenders will find difficult to manage.  
14 Managing these risks, and providing the capital  
15 necessary for a nuclear resurgence, can only be  
16 accomplished by using the DOE Loan Guarantee  
17 Program that Congress provided in Title XVII of  
18 the Energy Policy Act of 2005, one of the  
19 objectives of which was to incentivize new  
20 nuclear plant development.

21 While we greatly appreciate DOE's  
22 efforts in developing the Proposed Rule, what  
23 has been published in the Federal Register has

1 some specific issues that will not allow NRG,  
2 and other potential nuclear developers, to  
3 proceed with new nuclear projects.  
4 Fundamentally, the program that has been  
5 proposed includes barriers that limit the  
6 amount of capital the financial markets can  
7 provide to support the first "wave" of new  
8 nuclear to be developed. The U.S. financial  
9 markets are highly efficient at matching the  
10 right capital to the right risk profile. Safe  
11 investments, such as U.S. government  
12 obligations go to those who apply a premium to  
13 that safety. Risky investments go to those  
14 willing to accept risks in exchange for  
15 appropriate reward. Any program that attempts  
16 to tie risky, non-guaranteed loans to safe,  
17 government-backed loans fails to recognize the  
18 market's preference for self-selection. Such a  
19 program has the curse of making every investor  
20 unhappy. The risk averse investor is forced to  
21 take risk, and those with an appetite for more  
22 risk are forced to buy guaranteed paper.  
23                    Luckily, the changes required to create

1 a workable program are relatively few in  
2 number. I would like to focus on two priority  
3 issues that need to be resolved. First, the  
4 program should provide for a cleanly marketable  
5 tranche of guaranteed debt. The simplest way  
6 to do this is for 100 percent of the debt to be  
7 guaranteed based upon a debt limit of 80  
8 percent of total project costs. If, for some  
9 reason, a non-guaranteed obligation were to be  
10 included in the guidelines then it is essential  
11 that this debt can be sold separately from the  
12 guaranteed debt and that it is pari passu  
13 (rather than subordinated) to the guaranteed  
14 debt.

15 Second, the DOE needs to create  
16 certainty and predictability in the program as  
17 to the availability of a large dollar volume of  
18 guarantees for the first dozen or more "central  
19 power generation facilities" by adopting a rule  
20 that reflects the practices that are  
21 commonplace for project financings of this  
22 magnitude and complexity necessary for central  
23 power generation facilities.

1           Let me brief address both of these  
2 issues. Looking at the proposed requirement  
3 that lenders assume risk by providing 10  
4 percent of the financing as non-guaranteed  
5 debt, it seems clear that the rule is assuming  
6 the government risk in the financing will be  
7 mitigated if lenders assume some high level of  
8 risk related to the project. This perceived  
9 need that the lenders share in project risk is  
10 at odds with the purpose of the program. The  
11 purpose of the loan guarantee program is to  
12 incentivize the development of certain types of  
13 projects by providing efficient access to  
14 capital through mitigation of lender risk. It  
15 is specifically because these new projects have  
16 risks, that lenders find it difficult to absorb  
17 them, that the program exists. We agree that  
18 there is an additional goal of minimizing risk  
19 to the government and taxpayers. However, this  
20 goal is best achieved by minimizing  
21 transactional costs related to lending, thereby  
22 improving project economics, and by assessing  
23 the overall risk of the project, especially the

1 risk being taken by project sponsors. For  
2 example, in our project, our company and other  
3 project sponsors would be expected to make  
4 equity contributions of up to \$2 billion. This  
5 is a very substantial investment, and this  
6 contribution will not be covered by any  
7 guarantee program. We will have more risk  
8 exposure than a creditor with a 10 percent non-  
9 guaranteed piece, and our recovery from a  
10 failed project will be zero. Our investment is  
11 the best vehicle for minimizing the  
12 government's risk. In order to make this level  
13 of commitment to a project we will conduct  
14 thorough and disciplined assessment of the  
15 project costs and risks, and we will focus on  
16 the terms of vendor and other contracts that  
17 mitigate various risks to the project. And  
18 much of our investment will be made before the  
19 government puts any capital at risk. Review of  
20 our efforts will be the best method for  
21 understanding the government's risk in any  
22 project.

23 A more efficient mechanism that the

1 government could use to mitigate its risk,  
2 would be if the term of the loan guarantee were  
3 shorter than the life of the project. This  
4 forces project sponsors and lenders to plan for  
5 refinancing the project within a limited number  
6 of years following initial operation. Since  
7 the refinancing would not be guaranteed, the  
8 lenders would have an additional incentive to  
9 insure that the project is viable without a  
10 loan guarantee once it has achieved a few  
11 successful years of operation. Thus, we  
12 suggest that the program look more favorably  
13 upon and permit loans of up to 100 percent of  
14 project debt (80 percent of project costs),  
15 where the applicant proposes a loan term  
16 substantially shorter than the 30 years or 90  
17 percent of plant life provided for in the  
18 statute and allowed under the proposed rule.  
19 For example, a guarantee of 100 percent of debt  
20 should be available where the loan term is for  
21 the construction period plus ten years after  
22 commercial operation.

23 We also recognize that it may be

1 necessary or desirable in some projects to have  
2 one or more tranches of debt that are not  
3 guaranteed by the government. We disagree,  
4 however, that any rule that this debt be held  
5 pro rata by the same lenders that hold the  
6 guaranteed debt and that such non-guaranteed  
7 debt could not have a lien on project assets  
8 pari passu with the government-guaranteed debt.

9 A good example of why these requirements are  
10 unworkable and not in the government's interest  
11 is presented by some of the plans of our  
12 project at STP. Over the next few years, we  
13 plan to work to obtain vendor and other  
14 financing in the amount of several hundred  
15 million dollars to help fund the investment in  
16 long lead time equipment and licensing expenses  
17 that the project will incur while preparing to  
18 meet our aggressive construction schedule.  
19 These efforts will expedite project completion  
20 and help minimize overall project costs, and  
21 they should be viewed favorably by the  
22 government. Moreover, if we are able to obtain  
23 long-term financing, this tranche of debt would

1 be assumed by those lenders (rather than by the  
2 government) and thus would reduce the overall  
3 guarantee commitment of the federal government.  
4 If we are able to leave this debt in place, the  
5 dollar amount of debt guarantee, and the risk  
6 the government is exposed to, would be reduced  
7 dollar for dollar.

8           Obviously, the government could not  
9 reasonably expect that these early lenders  
10 would accept anything other than a pari passu  
11 security interest in the project assets.  
12 Moreover, this debt would be "stripped" from  
13 the guaranteed debt at the outset, as these  
14 lenders would not be prepared to take on the  
15 government-guaranteed debt. Thus, the "no-  
16 stripping" and "no pari passu" rules may have  
17 the perverse effect of increasing the debt  
18 burden on the government. As NRG and other  
19 developers seek other sources of funds, in an  
20 effort to minimize both the government's and  
21 their own risk, it is essential that the  
22 proposed rules be revised to eliminate the "no  
23 stripping" requirement and to allow for

1 tranches of debt that have pari passu security  
2 interests.

3 In addition, there are other reasons  
4 that the "no stripping" requirement should be  
5 abandoned. For example, this rule would  
6 eliminate the ability of lenders and borrowers  
7 to maximize the efficiency of the existing  
8 marketplace. There is a deep, well-established  
9 market in government-guaranteed debt, and  
10 notwithstanding the fact that an underlying  
11 project involves nuclear energy or other  
12 advanced technology, this existing market  
13 provides a large amount of available capital  
14 and liquidity that can help make this Loan  
15 Guarantee Program efficient and successful.  
16 Many of the investors in the government-  
17 guaranteed debt markets actually have a charter  
18 or regulatory restriction that prohibit them  
19 from investing in riskier securities. A "no  
20 stripping" requirement would erect a  
21 significant barrier to the ability to access  
22 this market, because many of these market  
23 participants cannot, or will not want to, take

1 on the risks of unguaranteed debt. This result  
2 is counter to the policy objective of Title  
3 XVII. At best, market participants would incur  
4 significant unnecessary transaction costs to  
5 achieve project structures that would amount to  
6 "synthetic" stripping. At worst, the barriers  
7 would limit access to the capital markets,  
8 restrict liquidity, and make government-  
9 guaranteed projects more expensive and more  
10 risky, if possible at all.

11 The other essential change to the  
12 proposed rules is the need to create a certain,  
13 transparent, and predictable program size for  
14 large central power generation facilities.  
15 This is sorely lacking currently. Development  
16 of these projects requires a multi-year  
17 commitment of very large amounts of capital,  
18 all in reliance on the fact that a guarantee  
19 will be available under the Loan Guarantee  
20 Program to make financing available at a  
21 reasonable cost. First and foremost, the  
22 current DOE "authority" proposed for the amount  
23 of loan guarantees available for central power

1 generation facilities (\$4 billion) in federal  
2 fiscal year 2008 would not be adequate for our  
3 project at STP. Given that several similar  
4 nuclear projects will be seeking loan  
5 guarantees in the 2009-2010 time frame, the  
6 current authorization levels do not inspire any  
7 confidence that a workable volume of loan  
8 guarantees will be available. For a multi-year  
9 project of this magnitude, NRG cannot proceed  
10 indefinitely without obtaining significant  
11 comfort that a loan guarantee will be available  
12 for its project. In fact, the development of a  
13 clear and stable loan guarantee program was one  
14 of the primary pre-conditions NRG has placed on  
15 continued development of STP. We are committed  
16 to the project, but we will not waste our  
17 equity funds if we do not believe that  
18 sufficient capital will be available to support  
19 the rest of the project. We therefore believe  
20 that it is critical that DOE obtain certainty  
21 on this question. One option is to reverse the  
22 current DOE interpretation of Title XVII  
23 regarding the application of the authorization

1 requirements from Section 504(b) of the Federal  
2 Credit Reform Act of 1990. Another option  
3 would be to support Senate Bill 1321, which  
4 unambiguously confirms Congress's view that the  
5 authorization requirement does not apply to  
6 Title XVII, because this program is funded by  
7 fees charged to borrowers.

8           If this question cannot be resolved  
9 favorably so as to avoid annual appropriation  
10 or authorization risk and allow DOE to exercise  
11 its discretion in establishing the volume of  
12 guarantees that will be issued, then DOE should  
13 seek a firm multi-year authorization to issue  
14 loan guarantees for central power generation  
15 facilities in the amount of \$50-100 billion.  
16 Our nation needs the development of this  
17 critical infrastructure, and it will only be  
18 possible if there is increased certainty that a  
19 realistic amount of guarantees will be  
20 available to support these projects.

21           Once again, we thank DOE for the  
22 opportunity to provide our comments, and we  
23 urge that the proposed rule be revised to

1 create an effective and efficient Loan  
2 Guarantee Program. We support the twin goals  
3 of reducing carbon emissions and enhancing a  
4 secure domestic supply of electricity for the  
5 United States.

6 MR. BELMAR: Thank you very much. You  
7 were very, very eloquent.

8 MR. WINN: Thank you.

9 MR. BELMAR: Our next speaker is Robert  
10 Temple with CPS Energy.

11 MR. TEMPLE: Good morning. I am Bob  
12 Temple, Deputy General Counsel of CPS Energy.  
13 CPS Energy is really the City of San Antonio,  
14 acting by and through the City Public Service  
15 Board. We are a municipal utility operating in  
16 Texas and we serve -- we provide electric and  
17 gas service in and around San Antonio, home of  
18 the four-time champion Spurs.

19 [Laughter.]

20 MR. TEMPLE: CPS Energy has a major  
21 asset in its generating portfolio and that's a  
22 40 percent interest in the plant that Mr. Winn  
23 just mentioned, South Texas Nuclear Project,

1 that provides San Antonio with about 1,050  
2 megawatts of electric generating capacity which  
3 we use to serve our customers in our electric  
4 certificated service area. In June 2006, Mr.  
5 Winn's organization announced their intention  
6 to add two new advanced boiling water reactors  
7 at the STP site. As a current owner of an  
8 undivided interest in the South Texas Nuclear  
9 Project, CPS Energy has a right to participate  
10 in the development of new units at STP.

11 In order to fully evaluate its  
12 alternatives in participating in the  
13 development of new reactors at the STP site,  
14 CPS Energy has engaged members of the Energy  
15 and Power Group and the Public Finance Group of  
16 Merrill Lynch's Global Markets and Investment  
17 Banking Team to act as its strategy financial  
18 advisor in this matter. As a result,  
19 Christopher Fink who is the managing director  
20 at Merrill Lynch is here with me today. Chris  
21 is the head of Merrill Lynch's nationwide  
22 public power practice and is responsible for  
23 financing some of the largest and most

1 innovative public power entities in the United  
2 States. Following my remarks, should you have  
3 any questions about the bankers' view of the  
4 public power issues, Chris will be available to  
5 answer any questions.

6 Our proposed project at the South Texas  
7 Nuclear Project site is one of the early moving  
8 projects, with plans to submit a combined  
9 operating license application to the U.S.  
10 Nuclear Regulatory Commission in the fall of  
11 2007, just a few months away. However, my  
12 remarks today are not being made just in  
13 furtherance of this project, but are being made  
14 on behalf of the Large Public Power Council,  
15 which is an association of 24 of the largest  
16 governmentally owned electric utilities in the  
17 United States, of which CPS Energy is a  
18 member.

19 LPC members include not only the  
20 largest governmentally owned retail systems in  
21 the country but also a number of wholesale  
22 generators of electricity that serve  
23 municipally owned retail systems. It is

1 estimated that LPPC members serve approximately  
2 18 million retail customers and own and operate  
3 electric generation facilities that produce  
4 over 11,610,000,000 megawatts hours of  
5 generation annually. LPPC members are located  
6 throughout the country in states including  
7 California, Colorado, Arizona, New York, Texas,  
8 Washington, Florida, Georgia, Nebraska and  
9 South Carolina. Several members either  
10 currently own outright or have significant  
11 shares in commercial nuclear projects. Clearly  
12 it is at the current nuclear sites where the  
13 first wave of new reactors will be added, and  
14 the availability and viability of the loan  
15 guarantee program is critical to the  
16 development of this next generation of  
17 reactors.

18 I want to thank DOE staff for  
19 soliciting early feedback on its notice of  
20 proposed rulemaking and urge that it take to  
21 heart the recommendations that it is hearing  
22 today. Public power shares the concerns that  
23 are being expressed by the investor-owned

1 utilities, the investment banking community and  
2 the Nuclear Energy Institute regarding critical  
3 deficiencies in the proposed loan guarantee  
4 program and the loan guarantee program's  
5 inability in its current form to fulfill the  
6 promises from the Energy Policy Act of 2005.  
7 As we team up with investor-owned utilities or  
8 independent power producers, either as co-  
9 owners or operators and tenants-in-common, we  
10 find that many of the technical and operational  
11 changes to the loan guarantee program requested  
12 by the industry as a whole will also be  
13 important to public power entities to make  
14 these large-scale projects economically viable.  
15 While we share those concerns, rather than  
16 repeat what DOE has already heard and will hear  
17 from these groups today, these remarks focus on  
18 some specific issues in the proposed loan  
19 guarantee program that need to be addressed for  
20 the loan guarantee program to be viable for  
21 public power entities like CPS Energy. I will  
22 specifically address LPPC's perspectives on the  
23 regulatory prohibition against the program

1 backing tax exempt debt and on the amount of  
2 equity contribution required.

3           The provisions in DOE's notice of  
4 proposed rulemaking with unique impacts on  
5 public power entities are located in section  
6 609.10, related to the Loan Guarantee  
7 Agreement. Turning to our first issue, Section  
8 609.10(e)(7) provides that the loan guarantee  
9 may not finance, either directly or indirectly,  
10 tax-exempt obligations. Section 149(b) of the  
11 Internal Revenue Code similarly prohibits  
12 municipalities from issuing tax exempt  
13 obligations that are federally guaranteed.  
14 Thus, to the extent that such a prohibition is  
15 needed, it exists in this statute and need not  
16 also be recognized in DOE regulation. However,  
17 Section 149(b)(3) of the Internal Revenue Code  
18 provides a number of legislatively mandated  
19 exceptions to this prohibition including bonds  
20 guaranteed by the Bonneville Power Authority,  
21 the Student Loan Marketing Association, and  
22 Federal Housing Administrator. Title XVII of  
23 the 2005 Energy Policy Act does not prohibit

1 the issuance of loan guarantees for tax-exempt  
2 obligations. We request that the Department of  
3 Energy not exercise its discretion to prohibit  
4 such guarantees in the even that there is a  
5 time in the future that guarantees nuclear  
6 loans to public power entities qualified for an  
7 exception to the then existing Internal Revenue  
8 Code.

9 The second provision I would like to  
10 address is in proposed Section 609.10(d)(5),  
11 which requires that "the [b]orrower and other  
12 principals involved in the project have made or  
13 will make a significant equity investment in  
14 the project." Public power entities do not  
15 have investors that provide equity, but rather  
16 they fund their projects based on their ability  
17 to collect funds from rate payers which enables  
18 such entities to make the principal and  
19 interest payments for project debt that covers  
20 100 percent of a project's cost. C P S Energy  
21 and many other public power entities are highly  
22 rated by the investment community. The loan  
23 quality is not enhanced by having a specialist

1 level of equity contribution. The financial  
2 markets have accepted this level of debt  
3 capitalization based on the public entity's  
4 unfettered ability to increase rates in the  
5 amounts necessarily to pay the debt service on  
6 its outstanding obligations. Every revenue  
7 bond resolution requires that the municipal  
8 utility set its rates at a level at least  
9 sufficient to cover its annual debt service.

10 Public power entities have no ability  
11 to raise equity to invest in new generation  
12 except to the extent that they raise rates in  
13 anticipation of needed equity in the future.  
14 This is an extremely inefficient and costly  
15 practice that would result in ratepayers being  
16 charged increased rates well in advance of the  
17 placed-in-service date of the financed  
18 facility. Ratepayers would then be paying  
19 higher rates without having the resulting power  
20 until some point in the future. As such, we  
21 request that the guarantee rules allow for  
22 public power entities to continue to issue debt  
23 to finance 100 percent of their project costs

1 subject to continued market acceptance of such  
2 a practice. With respect to the requirements  
3 for project equity, DOE should not be charged  
4 with evaluating the overall quality of the  
5 financing, and not with setting artificial  
6 limits for it.

7 In closing, I want to thank the  
8 representatives from the Department of Energy  
9 for this opportunity and urge that you take  
10 action to address the issues that are proposed  
11 and adopt the resolution I've proposed. If you  
12 have any questions, Mr. Fink from Merrill  
13 Lynch, and I are happy to respond.

14 MR. BELMAR: Thank you very much. You  
15 addressed an area that has not been as focused  
16 on for us and we are very pleased that you have  
17 raised these issues for us.

18 MR. TEMPLE: Thank you.

19 MR. BELMAR: Our next witness is John  
20 Snedeker with Synergistic Dynamics.

21 MR. SNEDEKER: Good morning. Mr.  
22 Belmar, Mr. Oliver, ladies and gentlemen, it's  
23 a pleasure to be here. My name is John

1     Snedeker, I am Chairman and CEO of a consulting  
2     firm in Savannah, Georgia named Synergistic  
3     Dynamics. We have been specializing in the  
4     defense maritime and energy industries since  
5     1983.

6             I thank you for the opportunity to  
7     present this statement. It is a summary of my  
8     written comments submitted in response to the  
9     Notice of Proposed Rulemaking that sets forth  
10    the proposed rules to govern the Title XVII  
11    loan guarantee program for projects that  
12    involve and employ Innovative Technologies.  
13    And because technology is a focus of the  
14    proposed rule, I think it would be appropriate  
15    to give you some brief background that would  
16    qualify me as qualified to speak to the  
17    technology issues that are raised in the rule.

18            I was employed by the old Grumman  
19    Corporation before it became Northrop Grumman  
20    for 24 years. And Grumman was a pioneer in  
21    some of the innovative technologies that are  
22    the subject of the loan guarantee program, most  
23    particularly hydrogen, solar, and municipal

1 solid waste disposal facilities from  
2 municipalities.

3           During my career with Grumman, I was  
4 assigned to project teams developing these  
5 technologies and I was also the business and  
6 contracts manager for the Lunar Module program  
7 of the contract with NASA.

8           We have been involved in the Maritime  
9 Administration's loan guarantee program that's  
10 known as Title XI (of the Merchant Marine Act  
11 of 1936, as amended). And my associates in  
12 this endeavor have included clients who have  
13 been successful through our efforts in getting  
14 loan guarantees through that program and H.  
15 Clayton Cook, Jr., counsel with Seward and  
16 Kissell here in Washington who was a former  
17 general counsel of the Maritime Administration.

18          So we have a lot of background in a program  
19 that is mature, it's been through some ups and  
20 downs, but it's been through the reform process  
21 in the last several years and we think that it  
22 is an excellent model to emulate.

23           Our involvement with this type of

1 project for Energy went back to 2002 when  
2 Congress Rick Larsen of Washington state  
3 proposed a loan guarantee program, a fairly  
4 sketchy proposal. We offered to assist his  
5 staff to draft regulations based on the Title  
6 XI program and we've been making similar  
7 recommendations to DOE ever since the Energy  
8 Policy Act of 2005 was enacted into law.

9 My first topic heading is the  
10 applicability to existing applications. DOE  
11 proposes to exempt applicants who responded to  
12 this solicitation issued in August 2006 from  
13 strict compliance with the proposed rules. I  
14 respectfully submit that this would be a  
15 mistake. Since all applicants who responded to  
16 this solicitation in August 2006 knew that no  
17 guarantees would be issued until the rules were  
18 in place, they will not be prejudiced if  
19 required to submit full applications in  
20 compliance with the final rules.

21 Application procedures. The  
22 application process as proposed is lengthy and  
23 costly for both applicants and the DOE staff.

1 Requirements as to scope and content are almost  
2 the same for pre-applications as they are for  
3 the full applications. Therefore, I recommend  
4 that the requirement for a formal pre-  
5 application proposal as set forth in Section  
6 609.4 be deleted. And, instead, prospective  
7 applicants should be invited to attend an  
8 informal conference here in the Forrestal  
9 Building, a similar process to what Maritime  
10 Administration employs across the street. The  
11 conference would enable the DOE staff to  
12 quickly review all of the requirements for a  
13 full application proposal with the applicant  
14 and answer questions and most particularly to  
15 determine whether the project is really  
16 eligible. In which case, if it was not, the  
17 recommendation would be, don't bother because  
18 everybody's time would be wasted.

19 I also recommend that the names of the  
20 fees as listed in the proposed rule be changed  
21 to be more descriptive. The first fee should  
22 be called Application Fee; the second fee to be  
23 called Investigation Fee; and a third fee to be

1 called a Guarantee Fee. And I recommend that  
2 the amounts of these fees be set forth in the  
3 rules either in dollar amounts or by formula.

4 Coming to the subject of project  
5 eligibility, I believe that DOE has correctly  
6 interpreted the Section 1701 and 1703 of the  
7 Policy Act to restrict loan guarantees to  
8 projects that "employ new or significantly  
9 improved technologies as compared to commercial  
10 technologies in service in the United States at  
11 the time the guarantee is issued."

12 A new or significantly improved  
13 technology as defined in the definitions at  
14 Section 609.2 of the proposed rules, as a  
15 "technology that has only recently been  
16 discovered or learned, or that involves or  
17 constitutes one or more meaningful and  
18 important improvements in the productivity or  
19 value of that technology."

20 This definition creates two  
21 significantly different scenarios with  
22 dramatically different technical and financial  
23 risks:

- 1           1. Is a new facility or process based  
2           on the one or more recently  
3           discovered technologies, and
- 4           2. Is a modification to, or an  
5           expansion of an existing facility  
6           to install or incorporate modern,  
7           advanced and innovative  
8           technologies, but not be totally  
9           dependent on such a break through.

10           On page 10 of the Preamble, DOE  
11           requires that technologies for project  
12           proposals must be mature enough to assure  
13           dependable commercial operations that generate  
14           sufficient revenues to service the project's  
15           debt. This raises -- this somewhat conflicting  
16           set of comments in the rules and in the  
17           preamble raises a question of just how much new  
18           and innovative technology will be sufficient to  
19           establish eligibility and what must be the  
20           stage of development of such technologies in  
21           order that the technologies employed be judged  
22           to be mature enough to be economically sound,  
23           yet innovative enough to be eligible.

1           The project and transaction costs do  
2 not conform completely with the generally  
3 accepted accounting principles or to the  
4 Internal Revenue Code. But then, I would have  
5 to add in fairness, that neither do the rules  
6 governing the Title XI program.

7           We, and other people that have been  
8 involved in the Title XI program have been  
9 advocating for a number of years that the Title  
10 XI Loan Guarantee Program rules be made more --  
11 that conform more generally to the accounting  
12 principles. And one of the most significant  
13 things is to include the guarantee fee in the  
14 financing. Title XVII does not provide for  
15 that. Title XI does. We recommend that the  
16 DOE guarantee fee be included in the financing.

17           The financing issues that have already  
18 been addressed by the previous two speakers are  
19 fundamental to our recommendations. We  
20 recommend that the structure of the loan  
21 guarantee program be changed in two fundamental  
22 respects.

23           1. Guarantee 100 of the approved

1                   project costs;

2                   2. Assign the entire responsibility to

3                   DOE for originating, structuring

4                   and approving the financing and for

5                   administering the guaranteed loan

6                   through its term.

7                   Under this structure the debt

8                   obligations would then be AAA-rated paper the

9                   same as U.S. Treasuries, regardless of the

10                  credit rating of the borrower. This means the

11                  commitments to provide the funds at closing can

12                  be readily obtained from institutional

13                  investors. Furthermore, with all or part of

14                  the long-term debt rated AAA, the borrower will

15                  be more attracted to the financial community

16                  which enhances its ability to obtain short-term

17                  credit facilities for working capital.

18                  Senator Harry Reid introduced a bill on

19                  the 17th of May, Senate Bill 1419, that, among

20                  other things, would permit the Secretary to

21                  guarantee 100 percent of the debt issued for

22                  the first six renewable fuel facilities, silent

23                  on what happens after that.

1           We believe that the technical and  
2 financial risks can be mitigated if the  
3 following basic requirements are invoked as DOE  
4 policy and set forth in the proposed rules:

- 5       • The project sponsor and it's joint venture  
6       partners, if any, must be well-established  
7       for-profit business organizations in sound  
8       financial conditions as evidenced by at  
9       least three years of audited financial  
10      statements.
- 11     • If the applicant is to be a new business  
12     entity created specifically for the  
13     purpose, the project sponsor and its joint  
14     venture partners, if any, shall also  
15     guarantee the debt of the newly-formed  
16     business entity.
- 17     • The applicant must have experienced  
18     management, scientific, and engineering  
19     staff in place at the time it submits its  
20     application.
- 21     • Contractors must be established firms.  
22     Contractors to the applicant must be  
23     established firms with experience

1           constructing the type of facilities  
2           proposed for the project, and must provide  
3           performance bonds. And finally,

- 4           • The equity investment in the project must  
5           be in cash to be deposited into an escrow  
6           account at the time of closing.  
7           Disbursements from the escrow account must  
8           be drawn first from the sponsors' equity,  
9           lastly from the proceeds of the guaranteed  
10          loan.

11                   This is a part of the new reform  
12          program that was instituted for the Maritime  
13          Administration's Title XI Program because  
14          people were dipping into the government's  
15          portion of the funds before spending their own  
16          money. In one case a project went into default  
17          before all of the sponsors' equity had been  
18          drawn.

19                   Working capital at the time of closing  
20          must be at least equal to six months of debt  
21          service (principal and interest) plus one year  
22          of insurance premiums and the ration of long-  
23          term debt to equity, with the guaranteed loan

1 in place, must be acceptable to the Secretary.

2 Thank you very much. This concludes my  
3 statement. I appreciate the opportunity to  
4 share my views with you today. I look forward  
5 to being of assistance to DOE in making the  
6 Title XVII program a success. Thank you very  
7 much.

8 MR. BELMAR: Thank you very much Mr.  
9 Snedeker.

10 Our next speaker is Michael Walker from  
11 Indiana Gasification project.

12 MR. WALKER: Thank you. I'm Michael  
13 Walker. I'm Vice President of E3 Gasification.

14 We are part of the Indiana Gasification team  
15 developing a coal to Substitute Natural Gas  
16 plant in southwest Indiana. We submitted a  
17 pre-application in response to DOE's August  
18 solicitation.

19 Prior to working with E3 Gasification I  
20 worked on a project at the Kennedy School of  
21 Government at Harvard describing how federal  
22 loan guarantees could be used in conjunction  
23 with private equity and utility regulatory

1 authority to provide low-cost loans to advance  
2 technologies and specifically we were focused  
3 on coal gasification technologies. And it  
4 could be done in a way that provided virtually  
5 no cost or risk to the federal government.  
6 That financing structure was what we called the  
7 three-party covenant and is actually what we  
8 are trying to implement in our project in  
9 Indiana using a federal loan guarantee and  
10 utility regulatory authority to back the loan  
11 guarantee.

12           What I want to talk about before I get  
13 into a few specific comments on DOE's rule is  
14 one of the issues that was front and center  
15 when loan guarantees were first discussed in  
16 the Energy Policy Act debates in 2005 which was  
17 the issue of natural gas and natural gas  
18 prices. My partner, Bill Rosenberg, who is my  
19 partner at E3 Gasification and was one of the  
20 colleagues on the Harvard paper testified in  
21 front of the Senate Energy Committee in 2005  
22 about how loan guarantees -- based on the  
23 findings of our project -- how loan guarantees

1 could be used to stimulate technologies to help  
2 address the growing natural gas crisis in the  
3 U.S. At that time natural gas prices I think  
4 were at \$6 or approaching \$7 per Mcf. Today I  
5 think they're just below \$8 per Mcf. And, you  
6 know, 400 percent increase for prices that were  
7 around throughout most of the 1990s. And this  
8 affects all sectors of the U.S. economy from  
9 home heating to industrial production and to  
10 increasing over time electric power generation  
11 which affects everybody's electric bill.

12 Last year the chemical industry  
13 testified the impacts of natural gas prices on  
14 their industry. They have lost over 100,000  
15 jobs and \$50 billion in lost business to  
16 overseas competitors because their natural gas  
17 bill went from about \$7 billion in 1999 to over  
18 \$30 billion in 2005.

19 I attached to my formal statement a  
20 chart that shows the EIA natural gas supply  
21 forecast through 2030. And if you look at that  
22 supply forecast it shows that essentially  
23 domestic production on and off shore over the

1 next 30 years is projected to remain flat.  
2 Imports -- pipeline imports from Canada and  
3 Mexico are projected to decline. And the  
4 Alaska Gas Pipeline, which is hopefully going  
5 to be built, is projected to essentially make  
6 up for the declines in imports from Canada and  
7 Mexico. And at least 95 percent of the  
8 incremental supply needed to meet projected  
9 demand will need to come from liquefied natural  
10 gas from overseas imports. It is our view that  
11 that is not an optimal supply scenario for the  
12 United States. That it's in fact a significant  
13 economic and energy security risk. The loan  
14 guarantee program was initially discussed in  
15 Senate hearings as something that could help  
16 address this issue. And we would urge DOE, in  
17 implementing it, to consider these issues and  
18 to make natural gas energy security a real  
19 priority.

20 One of the reasons LNG is a concern,  
21 although I'm not -- I don't want to sound like  
22 I'm against LNG, LNG is going to be a necessary  
23 piece of the natural gas supply portfolio,

1     there's no question about that.  But we don't  
2     want to become over-reliant on it which is  
3     evidenced by some recent articles in the Wall  
4     Street Journal that talk about the exporting --  
5     LNG exporting countries wanting to form an  
6     OPEC-like cartel to control natural gas prices.

7     And there was a quote in one of the articles  
8     from the Libyan Oil Minister that said:  "We're  
9     trying to strengthen the cooperation among gas  
10    producers to avoid harmful competition."  I  
11    don't think that's the kind of market that the  
12    U.S. wants to be reliant on.

13                 So the DOE loan guarantee program has  
14    the opportunity to support technologies to help  
15    address this issue.  And specifically one of  
16    the technologies and the technology that we're  
17    trying to deploy is coal to substitute natural  
18    gas.  You can build -- if you were to build 30  
19    coal to substitute natural gas plants size  
20    similar to the one we are proposing, you could  
21    produce as much gas as the Alaska gas pipeline  
22    is projected to supply.  So you could make a  
23    significant impact on natural gas supply in the

1 United States.

2           And the technology, one of the other  
3 benefits to technology is that when you produce  
4 substitute natural gas from coal you have to  
5 get rid of a big piece of the carbon. You do  
6 that in the process. By design you must  
7 capture at least 80 percent of the CO<sub>2</sub> in  
8 designing one of these plants. So you have a  
9 concentrated stream of CO<sub>2</sub> that is ready and  
10 available to sequester. And so building a few  
11 of these plants would essentially provide a  
12 platform for geologic sequestration  
13 demonstrations at commercial scale. You would  
14 have several million tons per year concentrated  
15 streams of CO<sub>2</sub> that could be used for very low  
16 cost sequestration demonstrations.

17           On the specific proposal from DOE, I  
18 have just three comments. Two of which very  
19 much echo what was said before. The first is  
20 that we would urge DOE to reconsider whether  
21 they're going to provide 100 percent guarantees  
22 of debt on 80 percent of project costs. That  
23 was how guarantees were discussed in the

1 original legislation. And actually -- and it's  
2 our reading of Title XVII that there's no  
3 prohibition on DOE providing 100 percent  
4 guarantees of 80 percent as long as it doesn't  
5 exceed 80 percent of total project costs. And  
6 that is the lowest cost way to finance these  
7 projects. It's the most efficient way. And so  
8 to meet the objectives of Title XVII we would  
9 urge DOE to think about that issue.

10           The second issue, related issue is if  
11 there are not going to be 100 percent  
12 guarantees, then the subordinate debt or the  
13 private debt that comes in needs to not be  
14 forced to be supportive. It needs to be able to  
15 be pari passu. There are other DOE -- there's  
16 other federal loan guarantee programs that have  
17 private lenders or that private debt is part of  
18 the mix and they're allowed to come in pari  
19 passu. In fact, on the TIFIA, the  
20 transportation infrastructure program, I  
21 believe the guarantee debt actually initially  
22 comes in subordinate and then if there is a  
23 bankruptcy proceeding it's elevated to be pari

1 passu. But the private debt actually starts  
2 out senior in that program.

3           The second -- well, the last issue I  
4 would like to touch on is we strongly support  
5 DOE in how they are going about this in terms  
6 of focusing on creditworthy projects. There's  
7 a lot of language in the notice of proposed  
8 rulemaking about DOE's intent to select the  
9 most creditworthy projects. I think that's  
10 critical to the success of the program.  
11 Clearly you can't have a few bad projects early  
12 in the program where the program is likely to  
13 disappear.

14           We think that one of the most important  
15 criteria is clearly the program is designed to  
16 support advanced technology. So there is going  
17 to always be some technology risk. I think  
18 that the intent of the program is to take some  
19 technology risk. But there doesn't need to be  
20 much other risk. And specifically you can have  
21 projects that have very assured revenue  
22 streams. They have strong contracts and things  
23 to guarantee that the debt payments will occur.

1       Our project in Indiana has focused very much  
2       on financial structuring that would provide  
3       that. We are going to have long-term  
4       contracts, 30-year contracts for the substitute  
5       natural gas produced by the project. Those  
6       contracts are with regulated utilities,  
7       electric and gas utilities in the state of  
8       Indiana. Those contracts will be approved by  
9       the Utility Regulatory Commission for the term  
10      of the contracts. And there was legislation  
11      passed about a month ago in Indiana that says  
12      that to the extent the Utility Commission  
13      approves those contracts there can never be  
14      another look back at those contracts by a  
15      future utility commission. So it's a final  
16      determination prior to the loan guarantee being  
17      issued that is backed by statute. If the  
18      statute ever gets overturned, there is language  
19      in the statute that says the revenue stream  
20      associated with the SNG contracts is a property  
21      right and changing that property right would  
22      constitute a taking. And so there should be a  
23      very clear constitutional takings claim for the

1 revenue stream to pay off the debt.

2           So that's what we're trying to do to  
3 make sure our project provides minimal risk to  
4 the DOE guarantee. But the DOE guarantee is  
5 still critical to the project because the  
6 technology we are using is, you know, not  
7 commercial in a broad sense. It's been used in  
8 limited applications. And that technology risk  
9 will make financing a project much more  
10 expensive in the private markets than it could  
11 be done with a DOE guarantee.

12           That's all. Thank you very much. We  
13 appreciate the opportunity to make these  
14 comments.

15           MR. BELMAR: Thank you very much.

16           Our next witness is Paul Hinnenkamp  
17 from the Entergy Nuclear Company.

18           MR. HINNENKAMP: Yes, good morning.  
19 Good morning Mr. Oliver and Mr. Belmar. Thank  
20 you for the opportunity to provide comments on  
21 the loan guarantee program. Entergy  
22 Corporation supports the efforts of the  
23 Department of Energy to develop and implement

1 an effective loan guarantee program. My  
2 comments today are intended to share Entergy  
3 Corporation's perspectives on the importance of  
4 new nuclear for this country to share and  
5 highlight the commitments and the progress that  
6 we have made in developing new nuclear and to  
7 highlight the key requirements for a effective  
8 loan guarantee program.

9 For the record, my name is Paul  
10 Hinnenkamp. I am vice president of development  
11 for Entergy Corporation. Entergy Corporation  
12 is an integrated energy company primarily  
13 focused on electric power production and retail  
14 distribution.

15 We are the second largest commercial  
16 nuclear operator in the United States operating  
17 12 nuclear power plants in eight different  
18 state including Arkansas, Louisiana,  
19 Massachusetts, Michigan, Mississippi, Nebraska,  
20 New York and Vermont.

21 Our owned nuclear power generation  
22 facilities provide more than 10,000 megawatts  
23 of nuclear power generation operating in an

1 average capacity factor of 94 percent. And we  
2 serve over 2.6 million customers in our  
3 traditional service territory of Mississippi,  
4 Louisiana, Arkansas, and Texas, another 1.8  
5 million customers in Michigan and then untold  
6 millions by our merchant plant in the New  
7 England region.

8           The substantial increase in electricity  
9 demand over the past decade has created  
10 challenges to find more cost-effective power  
11 generation technologies, particularly baseload  
12 requirements. Between 1999 and 2003, over  
13 205,000 megawatts of new power generation  
14 capacity were constructed in the United States.

15       Over 80 percent of that capacity is natural  
16 gas-fired, and much of that capacity is for  
17 intermediate or peaking applications and not  
18 baseload. This extensive reliance on natural  
19 gas generation has contributed to the increase  
20 in pressures on the natural gas prices.

21           Looking to the future, Entergy  
22 Corporation has significant baseload generation  
23 requirements. Over the next ten years we will

1 need approximately 3-4,000 additional megawatts  
2 of baseload generation.

3 We are committed to the deployment of  
4 new nuclear power generation where it is a  
5 cost-effective solution for our customers. It  
6 is our view that nuclear power remains the only  
7 technically proven, economically viable source  
8 for the large scale, baseload generation of  
9 clean, affordable power. Our current strategy  
10 will position Entergy to be one of the first  
11 movers in the development of this new  
12 generation of nuclear power when the challenges  
13 that face us today are resolved. Our decision  
14 to proceed with further new nuclear development  
15 is contingent on achieving the necessary  
16 legislative and regulatory action to enable  
17 efficient financing and timely cost recovery.

18 We have been an industry leader in the  
19 development of the next phase of new nuclear  
20 power generation. Entergy was one of the  
21 founders of the NuStart consortium which, as  
22 you know, is comprised of ten utilities and  
23 General Electric and Westinghouse and is

1 working with the federal government and  
2 yourselves to push forward new nuclear  
3 generation and to demonstrate previously unused  
4 Nuclear Regulatory Commission policy and  
5 regulation surrounding construction and  
6 operating licenses as well as early site  
7 permits.

8           We have received an early site permit  
9 for our Grand Gulf facility in Mississippi.  
10 This was only the second such permit issued by  
11 the Nuclear Regulatory Commission. That permit  
12 certifies that the site meets all necessary  
13 environmental and safety criteria for  
14 construction of the new nuclear unit.

15           Activities necessarily to plan and  
16 develop the new nuclear project are underway at  
17 both our Grand Gulf facility in Mississippi and  
18 our River Bend facility in Louisiana including  
19 site layout, site specific design and scoping  
20 of the owner's division of responsibility.

21           We are developing applications for  
22 combined construction and operating licenses  
23 for both of those facilities and expect to file

1 those applications for Grand Gulf at the end of  
2 this year and for the River Bend facility at  
3 the middle of next year.

4 We are negotiating the procurement of  
5 long-lead items that will be required for a new  
6 unit including the reactor pressure vessel and  
7 the steam turbine generator rotors. It is our  
8 view that the procurement of these items will  
9 be a supply constraint, and we are taking  
10 action now to support our build option.

11 Further, we are negotiating an  
12 Engineering, Procurement, and Construction  
13 contract. Such a contract will be necessary to  
14 develop the terms and conditions as well as  
15 define the cost and schedule of such a new  
16 build.

17 On a local level the Louisiana Public  
18 Service Commission has approved a rule that  
19 supports deployment of new nuclear in  
20 Louisiana. The rule allows for a phased  
21 approach that would pre-approve spending levels  
22 for different phases of the project.

23 We are also working with the

1 Mississippi legislature to introduce  
2 legislation that would similarly revise the  
3 cost recovery rule under which the Mississippi  
4 Public Service Commission would regulate siting  
5 and construction of a new nuclear unit.

6 Our intent to proceed with new nuclear  
7 development is contingent upon achieving the  
8 necessary legislative and regulatory action to  
9 enable efficient financing and timely cost  
10 recovery. The actions that have been taken on  
11 a state level have moved that from an uncertain  
12 status to a certain status for Louisiana and we  
13 expect to see that in Mississippi. When we  
14 complete our negotiations on an EPC contract,  
15 we will have certainty around the terms and  
16 conditions of the project as well as the cost  
17 and schedule. That will leave the financing of  
18 the project as the most important and most  
19 uncertain piece of the puzzle for us to solve.

20 To loan guarantee program is significant to  
21 resolving that uncertainty.

22 Entergy Corporation believes that the  
23 Title XVII Loan Guarantee Program is absolutely

1 essential for achieving our plans for  
2 developing new nuclear power plant facilities.

3 Simply stated, the federal loan guarantees are  
4 essential to reduce the financial risk of new  
5 nuclear deployment and enable Entergy to  
6 leverage the large investment required for  
7 these capital intensive facilities. There are  
8 several significant reasons why these loan  
9 guarantees are so important.

10 Number one, nuclear power facilities  
11 are very capital intensive and represent an  
12 enormous corporate commitment. The cost of a  
13 single nuclear power facility represents  
14 approximately 25 percent of our total market  
15 cap. We cannot take on the debt required to  
16 finance a new build without an effective loan  
17 guarantee program.

18 Number two, we strongly believe that  
19 the loan guarantees are necessary for access to  
20 the credit markets, which will provide the  
21 necessary financing for these new nuclear  
22 projects.

23 And number three, our nuclear

1 facilities will be subject to a cost-of-service  
2 rate regulation. In order to obtain the  
3 necessary approvals from state public service  
4 commissions, we will need to demonstrate that  
5 the cost for these facilities have been  
6 prudently incurred. Loan guarantees will  
7 facilitate a favorable determination of  
8 prudence.

9           The loan guarantee program should  
10 facilitate access to credit markets on  
11 reasonable terms and enable us to continue to  
12 execute our plans for the deployment of new  
13 nuclear power generation. However, we do have  
14 concerns that the program does not provide an  
15 effective structure to financing new nuclear  
16 power generation facilities. We are part of  
17 the Nuclear Energy Institute Finance Task Force  
18 and you will hear later from Richard Myers, and  
19 we encourage you to give them careful  
20 consideration.

21           From our perspective three items:

22           One, we believe that the loan guarantee  
23 structure described in the proposed rulemaking

1 will restrict access to credit markets and  
2 increase the cost of borrowing with no  
3 commensurate benefits. The combination of less  
4 than 100 percent loan coverage, government  
5 superior rights, prohibition on pari passu  
6 structures and prohibition of stripping will  
7 create a loan guarantee instrument that will  
8 have a limited market if one at all. The  
9 provisions will restrict our access to the  
10 credit markets. This runs counter to the  
11 Congressional intent of the loan guarantee  
12 program which was to facilitate increased  
13 access to credit markets for the deployment of  
14 innovative technologies.

15           Second, the Administration's policy to  
16 place arbitrary caps on the volume of loan  
17 guarantees effectively precludes DOE from  
18 consideration of otherwise eligible  
19 technologies such as nuclear power, simply  
20 because of the scale of technology. The  
21 authorizing language on eligible projects does  
22 not state a preference for smaller-scale  
23 technologies. We believe that the project

1 scale and capital intensity of technologies  
2 should be taken into account in planning the  
3 program activity levels.

4           Finally, the Title XVII solicitation  
5 process needs to be flexible. We have a legal  
6 obligation to provide electricity service to  
7 our customers. We plan and schedule new  
8 generation projects to meet projected increases  
9 in the demand for electricity, as well as to  
10 replace existing generation facilities that may  
11 have reached the end of their useful lives.  
12 Planning for the deployment of a new nuclear  
13 generation facility requires a complex,  
14 integrated series of steps involving approvals  
15 from public state commissions, the Nuclear  
16 Regulatory Commission, the Entergy Board of  
17 Directors, as well as the outside lenders. We  
18 need to be able to obtain commitments for a  
19 loan guarantee professional on a schedule that  
20 dovetails with these other requirements. The  
21 DOE solicitation process needs to be open and  
22 flexible in order to effectively interface with  
23 the schedules of our corporation, its

1 regulators and its financial advisors.

2 In conclusion Entergy Corporation is  
3 committed to developing the option to build new  
4 nuclear power generation facilities. We  
5 believe that new nuclear development in this  
6 country has significant national energy  
7 security, energy independence, environmental  
8 and economic benefits. We believe that the  
9 successful deployment of new nuclear power  
10 generation facilities will require federal loan  
11 guarantees. We support the DOE efforts to  
12 implement an effective loan guarantee program  
13 and are appreciative of your efforts to date.  
14 However, we do believe that a workable loan  
15 guarantee program for new nuclear power  
16 generation facilities requires changes in the  
17 provisions of the rulemaking regarding the  
18 structure of the guarantees, the volume  
19 limitation on the guarantee commitments and the  
20 solicitation process. We plan to provide  
21 additional details to the Department of Energy  
22 on these and other issues in written comments.

23 Thank you for your consideration. I

1 would be pleased to answer any questions that  
2 you may have.

3 MR. BELMAR: Thank you very much. I  
4 will look forward to the more detailed written  
5 comments that you will be submitting as well.  
6 That was very helpful. Thank you.

7 Our next witness is Mr. John McCarthy  
8 with Celunol Corporation. Mr. McCarthy.

9 MR. MCCARTHY: Good morning and thank  
10 you very much for the opportunity to comment on  
11 the Department's proposed loan guarantee  
12 program procedures as outlined in the May 16th  
13 notice of proposed rulemaking. My name is John  
14 McCarthy. I'm the Executive Vice President and  
15 Chief Financial Officer of Cambridge,  
16 Massachusetts based Celunol Corporation. I'm  
17 appearing on behalf of the company, a leading  
18 developer of cellulosic ethanol technology  
19 which is one of the leading technologies  
20 specified in the Energy Policy Act of 2005 and  
21 the President's Advanced Energy Initiative. We  
22 expect within the next week to complete a  
23 merger with Diversa Corporation, a San Diego-

1 based developer and producer of specialty  
2 enzyme products. In early July we will file  
3 formal written comments in this docket under  
4 the new corporate name that we will adopt  
5 following the merger of our two companies.

6 Much is riding on this rulemaking as  
7 you've heard from the speakers before. If the  
8 loan guarantee program works properly, the  
9 federal government will have a powerful tool to  
10 speed the commercial availability of several  
11 highly promising new energy technologies.  
12 These include technologies that could be  
13 crucial to helping the country meet its growing  
14 energy needs within pressing constraints --  
15 diminishing fossil fuel supplies, continuing  
16 excessive reliance on foreign oil, growing  
17 conflicts over land use, and the specter of a  
18 food-vs.-fuel conflict. Above all there's the  
19 growing recognition that we can no longer treat  
20 our atmosphere as a sink for carbon dioxide  
21 without the risk of catastrophic climate  
22 change. Both the President and Congress have  
23 clearly stated their desire to see these new

1 technologies in the marketplace as quickly as  
2 possible, so the Department bears an important  
3 responsibility.

4           Let me begin with two observations.  
5 The first is a simple point that may not be  
6 obvious. The goal of the loan guarantee  
7 program is to successfully commercialize these  
8 technologies. This is the measure by which DOE  
9 will be judged. In addition the department  
10 wants to guarantee loans to be repaid. While  
11 this is a constraint, it is not the purpose of  
12 the program. Let me offer an analogy: If the  
13 hospital bill was paid but the patient dies,  
14 that is not judged a successful outcome. The  
15 reason for government involvement in the loan  
16 guarantee program is this important public  
17 purpose. Strategy government involvement now  
18 can make these new technologies available years  
19 before they would otherwise be. The  
20 government's role is not limited to that of a  
21 lender. You are a crucial technology  
22 development partner.

23           The second observation relates to

1 scale-up risk. This is the principal reason  
2 why loan guarantees are needed to support the  
3 final transition of certain advanced energy  
4 technology like cellulosic ethanol to  
5 commercialization. Federal grants are an  
6 effective way for the government to support  
7 discrete research and development projects, or  
8 small-scale demonstration projects. Seed  
9 capital of a few million dollars can help  
10 leverage a technology in the early stages of  
11 development. The federal government has  
12 provided that sort of funding to biofuel  
13 initiatives including Celunol, and helped  
14 advance the industry to where it is today. We  
15 are now at a point where we are in the  
16 vernacular of the technology industry, crossing  
17 "the valley of death." We are transitioning  
18 quickly from demonstration to commercialization  
19 of our technology. With this rapid progress  
20 comes soaring capital commitments as you've  
21 heard from prior speakers. A single commercial  
22 cellulosic ethanol facility can easily cost in  
23 excess of \$100 million. The federal government

1 is simply unable to make outright grants on the  
2 scale required for commercialization of all  
3 these important technologies. However, by  
4 offering assistance in the form of loan  
5 guarantees, the government can effectively  
6 leverage its contribution and support several  
7 high-risk, high-payoff technologies.  
8 Conversely, without government loan guarantees  
9 for first-generation commercial projects,  
10 there's a high risk or even certainty that  
11 several promising new technologies simply won't  
12 get off the ground. Private lenders are  
13 unwilling to support untested technologies.  
14 They are just not in the business of  
15 underwriting technology risk. Again, as you've  
16 heard from the speakers so far.

17 With those summary comments as  
18 background, I would like to offer specific  
19 observations from Celunol's perspective about  
20 four areas of the proposed rules.

21 The first area I will address relates to  
22 loan subordination and prohibition of  
23 stripping. The proposed rules limit loan

1     guarantees to 90 percent of the face value of  
2     the loan. It requires that the government hold  
3     a superior lien position to all of the lenders,  
4     and it prohibits the non-guaranteed loan from  
5     being sold separately or stripped. The  
6     structure does not reflect the realities of the  
7     commercial lending marketplace. If  
8     implemented, these conditions will make it very  
9     difficult for private lenders to participate in  
10    projects backed by federal loan guarantees and  
11    cripple the central purpose of the loan  
12    guarantee program. Under this structure,  
13    private lenders for the minority share of  
14    project debt will be both fully exposed to  
15    technology risks for their portion of the loan  
16    and in a first-loss position -- effectively  
17    mitigating -- helping to mitigate the  
18    government's technology risk when it should be  
19    the other way around. Furthermore, the  
20    prohibition on stripping seriously narrows the  
21    possibility of finding even a few private  
22    lenders to take this risk, because lenders who  
23    prefer loans with high risk and high returns do

1 not want to be saddled with guaranteed paper  
2 that has a very low return. This is not my  
3 perspective alone; it is supported by many,  
4 many experts from the financial community.

5           These deficiencies can be easily  
6 overcome by having the DOE guarantee 100  
7 percent of project debt. This is consistent  
8 with the language in Section 1702(c) of the  
9 Energy Policy Act. For example, a 100 percent  
10 loan guarantee of 80 percent of the project  
11 costs (for 80 percent of the total costs) could  
12 allow a project to go forward. By contrast, a  
13 90 percent loan guarantee of 80 percent of the  
14 project costs totaling 72 percent of the total  
15 cost, even if it costs the government less on  
16 paper, may not be sufficient for the project to  
17 go forward. Bearing in mind that the goal is  
18 to bring these new technologies to the market,  
19 I submit to you that it makes sense to have a  
20 slightly more costly structure that is  
21 effective in achieving its purpose than a less  
22 costly structure that is ineffective, and that  
23 fails to help the technology become commercial.

1 We realize that the guarantee of a full amount  
2 of a loan -- excuse me. We recognize that with  
3 a guarantee of the full amount of the loan the  
4 DOE will be less able to rely on private  
5 lenders to analyze and monitor loans, but it is  
6 practical for DOE to engage the same expert  
7 professionals that commercial lenders use.

8 In the future, Celunol believes that  
9 Congress should consider legislative changes to  
10 permit the non-guaranteed loan to actually have  
11 the first lien on the project. This is fully  
12 consistent with the public policy being  
13 promoted by the program, but we realize that  
14 the Department is not at liberty to make this  
15 particular change in the current rulemaking  
16 round.

17 The second area of concern is the E pact  
18 requirement that there be a "reasonable  
19 prospect of repayment of principal and interest  
20 on guaranteed debt obligations." We understand  
21 the DOE's effort to make debt repayment a high  
22 priority, but the law does not require the DOE  
23 to apply the same standard as commercial

1 lenders who are profit motivated. Commercial  
2 lenders shy away from technology risks and look  
3 for third parties to guarantee performance --  
4 even with standard technologies. That kind of  
5 third-party guarantee is very hard to come by  
6 for new technologies. Therefore, the  
7 department must be prudent in its attitude  
8 towards risk. Excuse me. Therefore, while the  
9 Department must be prudent, its attitude toward  
10 risk must be fundamentally different from that  
11 of commercial lenders.

12           We are not saying that the Department  
13 should not be concerned about repayment. For  
14 example, we expect the Department to apply  
15 standard commercial lending principles to the  
16 elements of projects that are not new and  
17 undemonstrated. We also expect the Department  
18 to offer loan guarantees only for technologies  
19 that have reached the point where they are  
20 truly ready to be deployed commercially. One  
21 benchmark we support is a requirement that in  
22 order for a technology to be supported by loan  
23 guarantees, it should be successfully

1 demonstrated at a smaller, pre-commercial  
2 scale.

3           The third issue concerns the definition  
4 of "new or significantly improved  
5 technologies." The Department's proposed  
6 definition requires that guarantees be offered  
7 either for technologies that have "only  
8 recently been discovered or learned," or for  
9 those that "involve or constitute meaningful  
10 and important improvements in the productivity  
11 or value of the technology." Regarding the  
12 first clause, there are technologies that have  
13 existed for many years but haven't been  
14 commercialized. For example, the principle of  
15 fuel cells dates back to the 1850's, but the  
16 prospect of widespread commercialization has  
17 only arisen within the past decade. We believe  
18 the criterion the Department should use is  
19 whether the technology is in fact in widespread  
20 commercial use, not the date of its first  
21 discovery. Regarding the second clause the  
22 Department should clarify that a loan guarantee  
23 may be available to the same party either for a

1 new technology or for significant improvement  
2 to that technology.

3           The fourth area of concern is the  
4 definition of "commercial technology." The  
5 Department has asked for comment on two  
6 possible definitions -- five years or five  
7 commercial installations. One proposed  
8 alternative is that the technology has been in  
9 use for five years alone or more. Excuse me.  
10 One proposed alternative is that if the  
11 technology has been in use for five years or  
12 more, it is de facto commercial regardless of  
13 the number of installations. We believe that  
14 this is not a practical approach. In fact, if  
15 a technology has been in use for this long but  
16 there are fewer than five commercial  
17 installations, the technology is very likely  
18 not in general use.

19           The five-installation alternative is  
20 more compelling, but flexibility is needed.  
21 There may be technologies that offer compelling  
22 advantages, such as reduced greenhouse gas  
23 emissions that are already in use in more than

1 five instances, but they are still at a stage  
2 of development where the technology's cost  
3 structure is not directly cost-competitive with  
4 conventional technologies that do not offer  
5 such benefits. In such an example, we believe  
6 there should be a strong public policy  
7 rationale for continued loan guarantees for  
8 such technology. So we recommend that while  
9 the Department may state a definition of  
10 "commercial technology," it should not lock  
11 itself out of the ability to be flexible.

12 Our written comments will address these  
13 issues and provide specific language  
14 recommendations for modifications to the  
15 proposed rule as well as more extensive  
16 discussions of our rationales for these  
17 changes. We will also address other issues  
18 that I have not raised in my comments today  
19 because of the time constraints.

20 In closing, I would like to return to  
21 where I began by reemphasizing that the success  
22 of the loan guarantee program will be measured  
23 by whether it succeeds in advancing the

1 commercial adoption of these advanced energy  
2 technologies, not the performance of these  
3 loans in accordance with straight commercial  
4 lending standards.

5 We appreciate the opportunity to have  
6 me appear before you and thank you very much.

7 MR. BELMAR: Thank you very much. Why  
8 don't we just keep going if people don't mind.

9 We're a little ahead of schedule, I'm advised,  
10 but I don't think that's a problem. We may  
11 have some more things to do this morning then.

12 Our next witness is Robert Dingess who  
13 is with PetroTex Hydrocarbons. Mr. Dingess,  
14 welcome.

15 MR. DINGESS: Thank you. Mr. Oliver  
16 and Mr. Belmar, thank you for the opportunity  
17 to be here today. My name is Rob Dingess with  
18 PetroTex Hydrocarbons. We are a privately held  
19 technology company specializing in the high  
20 production of high quality hydrocarbon products  
21 that are derived from a process that recycles  
22 rather than burns, used or otherwise  
23 contaminated oils and fuels. If nuclear would

1 be one end of the spectrum as far as size and  
2 impact, our technology probably represents the  
3 other end of that scale, a smaller more niche  
4 item that we believe would qualify, and I'll  
5 take a few moments to talk about that.

6           Historically, environment technology  
7 companies have struggled to raise the capital  
8 necessary to fund construction of commercially  
9 viable projects based on new technology. Once  
10 constructed, it takes a period of time to  
11 substantially penetrate markets thereby  
12 delaying the environmental impact. Our  
13 industry is no different from others. Once a  
14 final rule is enacted the loan guarantee  
15 program provides the promise of bridging that  
16 gap so that innovative viable energy  
17 technologies can be more rapidly deployed  
18 producing visible and measurable benefits to  
19 the public.

20           For example, in our industry  
21 approximately 2.4 billion gallons of used oil  
22 are sold in the United States every year. Of  
23 that about 1.2 billion gallons are collected --

1 gathered back in each year. But only a  
2 fraction of that is re-refined, the rest is  
3 burned as a fuel in cement kilns, furnaces,  
4 asphalt plants, et cetera. Again, to draw an  
5 analogy, if nuclear is the cleanest fuel from a  
6 greenhouse gas standpoint, used oil as a fuel  
7 is probably the dirtiest and most harmful.

8 Burning used oil wastes the significant  
9 energy that it takes to create the base oils  
10 from crude and results in the emission of  
11 contaminant, greenhouse gases into the  
12 environment.

13 We consider our technology a major  
14 sequester of greenhouse gases in that our  
15 process dramatically reduces emissions in a way  
16 that recycles used oil back into its highest  
17 best use in a cost-effective manner. The  
18 process requires significantly less energy, no  
19 waste streams and very low emissions. Most  
20 importantly, the net greenhouse gas and  
21 contaminant reductions are easily documented.

22 As you can imagine, we are excited  
23 about the possibility of applying for loan

1 guarantees that may expedite our ability to  
2 construct these facilities. Rapid deployment  
3 of our technology in non-attainment communities  
4 may translate into significant, positive local  
5 and regional air quality improvements as dirty  
6 burning fuels are replaced with cleaner ones.

7 Our overall assessment is that the  
8 proposed rule provides an excellent balance  
9 between environmental and market viability. We  
10 also laud the rule's emphasis on technologies  
11 with significant improvements over those  
12 currently available. Targeting emerging  
13 technologies is and should be the primary focus  
14 rather than helping to deploy outdated  
15 technologies or practices.

16 Our addendum contains specific comments  
17 on various sections. However, our greatest  
18 concern with the rule and process described is  
19 not its structure, but the time it will take  
20 for DOE to process the applications. Under the  
21 proposed rule, a technology that is deployed in  
22 five locations or been deployed for five years  
23 is ineligible. We would ask that the rule

1 include hard and fast timelines for processing  
2 applications. The longer the timelines the  
3 harder it is for companies that have these  
4 types of innovations, but are smaller, to work  
5 their way through the process.

6 We would like to strongly commend the  
7 work that's been done on behalf of the rule.  
8 We look forward to participating in the process  
9 once the rules are completed.

10 In conclusion, let me just say that it  
11 would be very easy for the Department of Energy  
12 to focus on very large projects. Given the  
13 amount of money that you have to work with, you  
14 could pick two or three projects and probably  
15 use up most of the funds that have been  
16 allocated. We would strongly encourage you not  
17 to move in that direction. It happens often in  
18 the transportation sector. We see that where  
19 DOTs, for example, at the state level have  
20 reduced members of staff to process and work  
21 with the programs or the programmatic monies  
22 that they have. They will tend to pick large  
23 projects that are easier to administer in the

1 sense than a lot of small projects that eat up  
2 a lot of staff time. Our project may not be as  
3 large as some of the others that have been  
4 described today, but we would ask that there be  
5 some sense of trying to create a nice mix of  
6 projects both large and small.

7 Basically that's it from us. If you  
8 have any questions, I'd be glad to answer them.

9 Otherwise, thank you for your time.

10 MR. BELMAR: Thank you, sir.

11 We have just a side announcement for a  
12 one-minute break. It seems that someone left  
13 his cell phone in the men's room outside the  
14 auditorium. And if it's yours, you may want to  
15 pick it up.

16 Our next witness for the morning is  
17 Richard Myers who is representing the Nuclear  
18 Energy Institute. Mr. Myers, welcome.

19 MR. MYERS: Mr. Belmar, Mr. Oliver,  
20 thank you. For the record, my name is Richard  
21 Myers. I am vice president of policy  
22 development at the Nuclear Energy Institute.  
23 NEI's members include all companies licensed to

1 operate commercial nuclear power plants in the  
2 United States as well as plant designers, major  
3 architect/engineering firms, and fuel cycle  
4 companies. NEI works with its member companies  
5 to establish unified nuclear industry policy on  
6 a range of technical, regulatory, financial and  
7 legislative issues.

8 In our comments today, I won't dwell or  
9 provide a detailed analysis of the notice of  
10 proposed rulemaking. NEI will certainly  
11 provide you gentlemen with a detailed  
12 assessment of the proposed rule in our comments  
13 due on July 2nd. I would observe, however,  
14 that the NOPR differs only slightly from the  
15 guidelines published last August, and NEI  
16 provided the Department a detailed assessment  
17 of our concerns with those guidelines by letter  
18 dated January 24th of this year. Since most of  
19 the deficiencies identified in January are  
20 repeated in the proposed rule, many of our  
21 concerns still apply.

22 NEI's comments today articulate seven  
23 general principles that should, in our view,

1 inform the design of the energy loan guarantee  
2 prosthesis authorized by Title XVII.

3 Principle number one, the loan  
4 guarantee program is essential to support  
5 financing and construction of significant  
6 numbers of new nuclear power plants.

7 The loan guarantee program addresses  
8 the two major challenges facing new nuclear  
9 power plant construction in the U.S.: First,  
10 the size of these projects relative to the size  
11 of the companies who will build them and,  
12 second, the political regulatory and licensing  
13 risks associated with the first wave of nuclear  
14 projects financed in this country in 30-plus  
15 years.

16 The new nuclear plants now in the early  
17 stages of development are capital-intensive  
18 projects, and will require a level of capital  
19 investment that will strain the financing  
20 capability of the U.S. electric sector --  
21 particular since the investment in new nuclear  
22 generating capacity coincides with a period of  
23 heavy capital investment across the entire

1 sector in transmission, distribution, other  
2 forms of generation and environment control  
3 technologies.

4 New nuclear project are \$5-6 billion  
5 undertakings. Although \$5-6 billion projects  
6 are not unique in the energy sector, they are  
7 typically undertaken by major oil companies,  
8 with market values 10 to 15 times higher than  
9 the largest electric companies. Even the  
10 largest U.S. electric company, with a market  
11 value in the \$40-billion range, would be hard-  
12 pressed to finance a \$5-6 billion nuclear  
13 project on balance sheet without the credit  
14 support provided the loan guarantee program.

15 Several states -- including Florida,  
16 Virginia, Louisiana, South Carolina, and Texas  
17 have passed legislation or implemented  
18 regulations encouraging companies to develop  
19 new nuclear projects by providing greater  
20 assurance of cost recovery. Even for many of  
21 these companies -- still subject to cost-of-  
22 service regulation, with supportive state  
23 policies -- the loan guarantee program is

1 critical. The scale of these nuclear projects  
2 is so large that the first plants will require  
3 sharing of risk among shareholder, lenders,  
4 ratepayers and the federal government through  
5 the loan guarantee program. In the absence of  
6 a workable loan guarantee program, we will not  
7 see the sustained new nuclear construction  
8 necessarily to meet our nation's energy and  
9 environment goals.

10 In addition, until the first new plants  
11 navigate the Nuclear Regulatory Commission's  
12 new licensing process without impact on  
13 schedule and costs, the capital markets will  
14 not finance new nuclear projects in the absence  
15 of a federal loan guarantee. As a group of  
16 five major investment banks told Energy  
17 Secretary Bodman on March 7th: "We believe new  
18 nuclear construction projects will not have  
19 access to the credit markets in order to  
20 finance such projects during construction and  
21 initial operations without the support of a  
22 federal loan guarantee."

23 Principle number two, construction of

1 significant numbers of new nuclear power plants  
2 and associated fuel cycle facilities is  
3 essential to meet our nation's energy and  
4 environment goals.

5 NEI estimates that the U.S. electric  
6 industry must built at least 50,000 megawatts  
7 of new nuclear capacity by 2030 in order to  
8 maintain nuclear energy at 20 percent of U.S.  
9 electric supply. That is a relatively heroic  
10 effort, but necessary if this nation hopes to  
11 reduce the greenhouse gas intensity of the U.S.  
12 economy, reduce pressure on natural gas supply  
13 needed for electricity generation, and provide  
14 a greater measure of price stability for  
15 consumers.

16 A substantial expansion of nuclear  
17 energy is also a strategic component of  
18 President Bush's energy policy, and the  
19 President has stressed this countless times.

20 To the extent the regulations to  
21 implement the energy loan guarantee program do  
22 not provide a viable basis for financing new  
23 nuclear capacity and related nuclear technology

1 projects, then the Department of Energy is not  
2 discharging a key component of the President's  
3 energy policy or the Energy Policy Act of '05.

4 Principle number three: Of the three  
5 major incentives for new nuclear construction  
6 provided by the Energy Policy Act, the loan  
7 guarantee program is clearly the most effective  
8 in addressing the major challenge, which is  
9 construction financing.

10 It is now almost two years since the  
11 Energy Policy Act was signed by the President  
12 and, in that time, with the benefit on the  
13 industry's side of better definition of the  
14 financing challenges, the nuclear industry has  
15 come to realize the limitations of what was  
16 provided.

17 The production tax credit provided by  
18 the act marginally improves the financial  
19 attractiveness of a nuclear project after it is  
20 in commercial operation. But the construction  
21 period is when a new nuclear project most needs  
22 credit support and the PTC provides no help at  
23 that time.

1           The Standby Support or delay insurance  
2 against licensing or litigation delays is  
3 limited to debt service and provides no  
4 coverage for the other substantial delay costs  
5 that would be incurred by a nuclear project  
6 subject to licensing or litigation delays. In  
7 addition, the standby support is viewed as  
8 inadequate by the financial markets. In short,  
9 this tool does not provide the support we  
10 envisioned or that's necessary.

11           That leaves the energy loan guarantee  
12 program as a critical factor in the corporate  
13 decision to proceed with a new nuclear project.

14           Principle number four: The rule  
15 proposed by the Department of Energy has, at  
16 its center, a financing structure that is  
17 simply not workable.

18           Let us assume, for example, a typical  
19 80/20 debt-to-equity project finance capital  
20 structure. Under the proposed rule that could  
21 result in a 20 percent equity commitment from  
22 the project sponsor, a federal government  
23 guarantee for 72 percent of the project cost

1 (or 90 percent of the loan amount), and a  
2 second tranche of unguaranteed commercial debt  
3 for 8 percent of the project cost, with the  
4 commercial debt deeply subordinate to the  
5 guaranteed debt and a prohibition against  
6 stripping the guaranteed tranche from the  
7 unguaranteed tranche. The proposed rule thus  
8 creates a hybrid loan facility for which there  
9 is no natural market -- a guaranteed debt  
10 corporate with triple-A credit and an  
11 unsecured, unguaranteed debt component that is  
12 effectively "quasi-equity."

13 The implementing regulations should  
14 allow for 100 percent coverage of the loan  
15 amount up to 80 percent of the total project  
16 cost. NEI believes there is ample evidence  
17 that this was Congress' intent, witness most  
18 recently the May 3rd letter to the President  
19 and Chairman and Ranking Members of the House  
20 Energy and Commerce Committee and its  
21 Subcommittee on Energy and Air Quality.

22 NEI also believes that 100 percent loan  
23 coverage is the rule rather than the exception

1 in federal loan guarantee programs. The  
2 President's proposed budget for the '08 fiscal  
3 year proposes approximately \$290 billion in new  
4 loan guarantee authority. Of that total, 75  
5 percent qualifies for 95-100 percent loan  
6 coverage.

7 Principle number five: The regulations  
8 implementing the loan guarantee program should  
9 provide the flexibility necessary to  
10 accommodate different technologies and  
11 financing requirements.

12 The energy loan guarantee program is  
13 designed to stimulate investment in a broad  
14 portfolio of low-emission technologies, and it  
15 must provide sufficient flexibility to  
16 accommodate this technological diversity, while  
17 ensuring an adequate volume of federal loan  
18 guarantees is available for that purpose.  
19 Different technologies and different project  
20 sponsors will have different financing needs.  
21 A well-designed loan guarantee program must  
22 accommodate these variations and the  
23 differences in risk exposure to the federal

1 government should be reflected in the credit  
2 subsidy cost of the loan guarantee. The  
3 regulations should not take a "command-and-  
4 control" approach to financial structuring.

5 Principle number six: The loan  
6 guarantee program should provide a transparent  
7 methodology for calculating the credit subsidy  
8 costs, and such costs should be reasonable and  
9 commercially viable, in line with those of  
10 other federal loan guarantee programs.

11 And finally, principle number seven:  
12 The Department of Energy cannot and should not  
13 seek to escape its obligation to provide its  
14 own due diligence on projects seeking loan  
15 guarantees.

16 In public meetings and private  
17 discussions, officials with the Executive  
18 Branch have explained that the 80 percent loan  
19 coverage in the August '06 guidelines and the  
20 90 percent loan coverage in the NOPR is  
21 intended to force unguaranteed commercial debt  
22 into the projects, thereby ensuring that the  
23 capital markets will bring due diligence to the

1 lending process and that investors will have  
2 "skin in the game."

3 First and foremost, in the case of a  
4 \$5-billion nuclear project, \$1 billion worth of  
5 sponsor equity, which is in a first-loss  
6 position, will ensure an extremely high level  
7 of due diligence by the project sponsor. More  
8 fundamentally, however, issuing a federal loan  
9 guarantee is uniquely a federal government  
10 function, and the Department has a non-  
11 dischargeable obligation to perform its own due  
12 diligence. DOE must retain competent financial  
13 advisors and outside counsel to perform that  
14 due diligence.

15 In conclusion, the nuclear energy  
16 industry is enormously frustrated by this  
17 administration's failure to implement one of  
18 the key provisions of the Energy Policy Act in  
19 a timely and effective way.

20 We are fast approaching the second  
21 anniversary of the signing of EPACT. In order  
22 to maintain current schedules, which are driven  
23 by the acute need for new baseload generating

1 capacity, the first wave of new nuclear  
2 projects requires certainty, this year, that  
3 the federal government can deliver a workable  
4 loan guarantee program. And these projects  
5 require the necessary administrative  
6 infrastructure and loan volume in place in 2008  
7 to firm up financing plans and execute loan  
8 guarantee commitments.

9 Nuclear generating companies need to  
10 apply for, and execute, loan guarantee  
11 agreements as early as 2008 because they will  
12 be taking a number of major steps before they  
13 receive their construction operating licenses  
14 from the NRC. These project development steps  
15 will require expenditures that could reach  
16 hundreds of millions of dollars a year for  
17 several years before receipt of the COL.

18 Companies will not undertake these  
19 investments unless they have certainty that  
20 financing will be available, and the terms and  
21 conditions under which it will be available. A  
22 workable loan guarantee program, coupled with  
23 assurance of sufficient loan guarantee volume,

1 is an absolute prerequisite.

2 Thank you, gentlemen, for the  
3 opportunity to provide the nuclear industry's  
4 perspective on this very important rulemaking.

5 MR. BELMAR: Thank you, Mr. Myers.  
6 That was very helpful. Just one question for  
7 you, sir. In number four you talk about the  
8 NEI also believes that 100 percent loan  
9 coverage is the rule rather than the exception  
10 in federal loan guarantee programs. To the  
11 extent that you said that you will be  
12 submitting more detailed written comments,  
13 could you please amplify on that in your  
14 comments so that we could have a better support  
15 in the record for that point?

16 MR. MYERS: Absolutely. We would be  
17 happy to do that.

18 MR. BELMAR: Thank you. Well, we are  
19 moving well ahead of schedule. Our ninth  
20 witness this morning is John Welch with USEC.  
21 Sir.

22 MR. WELCH: Mr. Belmar, Mr. Oliver,  
23 members of the panel, thank you for the

1 opportunity to comment on the recent notice of  
2 proposed rules for DOE's loan guarantee  
3 program. My name is John Welch. I am the  
4 president and chief executive officer of USEC,  
5 Inc. Today the sole domestic producer of  
6 enriched uranium that supplies fuel to both  
7 U.S. and foreign nuclear power plants.

8 USEC strongly supports the  
9 implementation of the loan guarantee program as  
10 envisioned in the Energy Policy Act of 2005.

11 With regard to nuclear power, we are a  
12 generation behind the rest of the world in  
13 investing in certain new nuclear technologies.

14 But prompt implementation of the Act, and in  
15 particular the guarantee program, will help  
16 support critical investments that will enable  
17 us to recover lost ground and strengthen our  
18 nation's energy security.

19 Deploying these first-of-a-kind  
20 projects envisioned by the Act will be  
21 difficult without government support. Although  
22 capital markets continue to evolve, investors  
23 typically look to benchmark potential

1 investments against comparable technologies,  
2 projects and competitors. This is not always  
3 consistent with promoting investment in new  
4 technologies, especially for projects that may  
5 require significant amounts of capital with a  
6 long-time horizon. The loan guarantee program  
7 needs to maintain its focus squarely on the  
8 notion of supporting commercialization of  
9 technologies not mature enough to access the  
10 capital markets due to their innovative nature.

11 The government support for the  
12 deployment of these critical technologies will  
13 strengthen our nation's energy independence. I  
14 commend the U.S. government's recognition that  
15 these innovations need support, and I applaud  
16 you for seeking input from the energy industry,  
17 financial institutions, and other agencies  
18 implementing similar programs. But we can't  
19 drag our feet -- we must move forward.

20 The proposed rules received significant  
21 response from many stakeholders recommending  
22 ways that the program could better fulfill its  
23 intent. In particular, concerns have been

1 expressed and today as well regarding the  
2 constraints on the amount of guaranteed debt,  
3 seniority of debt tranches, and the stripping  
4 of debt into components more suitable for the  
5 capital markets. I won't spend time rehashing  
6 these. USEC supports the statements made by  
7 the Nuclear Energy Institute, those put forth  
8 by the financial community on these matters,  
9 and those made in testimony by Exelon's  
10 Christopher Crane before the House Subcommittee  
11 on Energy and Air Quality in April regarding  
12 the loan guarantee program.

13 I would though like to make a few  
14 salient points.

15 The proposed rules restrict the  
16 program's ability to meet its objectives. The  
17 principal objective of the program is, and I  
18 quote, "to encourage commercial use in the  
19 United States of new or significantly improved  
20 energy-related technologies" with the belief  
21 that "accelerated commercial use of energy-  
22 related technologies will help sustain economic  
23 growth, yield environmental benefits and

1 produce a more stable and secure energy supply  
2 and economy for the United States."

3 To accelerate commercial use of energy-  
4 related technology in a manner that promotes  
5 the government's broader policy objectives, the  
6 government's intent is to accept technology  
7 risk in an amount or at a pace that exceeds the  
8 appetite of many parts of the private sector.  
9 It should not accept that risk blindly,  
10 however. Rather, the Department can protect  
11 the government's interests through a program  
12 that provides a framework for rigorous project  
13 evaluation and the flexibility to structure a  
14 guarantee based on a project's risk profile.

15 Project evaluation happens in the  
16 government and private sector every day. Many  
17 benchmarks are already being used in commercial  
18 financial institutions, rating agencies and  
19 other government loan programs. The Department  
20 of Energy should examine best practices and  
21 establish a process utilizing the best  
22 resources available outside the Department if  
23 appropriate. The U.S. government already

1 operates many successful guarantee programs.  
2 Don't reinvent the wheel.

3 In addition to the project sponsor's  
4 assessment of a project's risk, the loan  
5 guarantee program currently contemplates due  
6 diligence or credit reviews from additional  
7 debt investors and rating agencies. These  
8 cannot replace the fact that the Department  
9 must complete its own due diligence review of  
10 each application even if other external reviews  
11 occur. This may require hiring outsiders with  
12 financial and industrial expertise the  
13 Department does not already possess. But one  
14 assumes that Congress intended the staff and  
15 resource build up when it appropriated money in  
16 this year's federal budget creating an office  
17 to manage the program.

18 Ultimately, the loan subsidy cost  
19 compensates the government for the risk it  
20 bears. The subsidy cost should be determined  
21 by using a transparent methodology that is  
22 commercially reasonable and consistent with  
23 other federal programs. It should also be

1 included as part of the total project costs to  
2 allow companies to finance it over the term of  
3 the guarantee.

4 We also suggest adding a few criteria  
5 for selecting technology.

- 6 • Judge a project on its alignment  
7 with U.S. government objectives  
8 outside the scope of the loan  
9 guarantee program.
- 10 • Consider the project's existing  
11 regulatory approvals.
- 12 • Consider how many direct and  
13 indirect U.S. manufacturing and  
14 operations jobs the project will  
15 create.
- 16 • Consider how much energy the  
17 technology will save versus the  
18 one it replaces.
- 19 • Give preferred consideration to  
20 those projects meeting multiple  
21 definitions of eligibility.
- 22 • Evaluate and take into account the  
23 limits that U.S. government

1 classification of a technology  
2 puts on the ability of investors  
3 to fully understand the  
4 technology.

- 5 • And pay particular attention to  
6 DOE's familiarity with the  
7 candidate technology. The more  
8 familiarity DOE has, the quicker  
9 you can proceed with your review  
10 and loan guarantee offer, speeding  
11 up commercialization.

12 I would like to spend a few minutes  
13 discussing a proposal for testing the program -  
14 - a proposal I believe will benefit everyone  
15 involved.

16 It's no secret that USEC supports the  
17 resurgence of nuclear power. We firmly believe  
18 the renewal of the U.S. nuclear industry must  
19 begin with deployment of our American  
20 Centrifuge uranium enrichment plant. Every  
21 cart needs a horse to pull it. As the leading  
22 generator of emissions-free electricity, U.S.  
23 nuclear plants need a reliable domestic supply

1 of enriched uranium now and in the future. And  
2 utility executives need that assurance to  
3 justify the large investment required for new  
4 reactors.

5 We believe American Centrifuge to be  
6 the perfect candidate for the loan guarantee  
7 program and I want to offer, right now, to be a  
8 pilot loan guarantee.

9 Deployment of this U.S. enrichment  
10 technology will meet multiple policy objectives  
11 of the Department and the U.S. government, in  
12 addition to those addressed in the program  
13 criteria.

- 14 • It will help provide a reliable  
15 domestic source of fuel for the  
16 104 operating U.S. reactors and  
17 for new reactors being planned.
- 18 • It will allow for nuclear fuel  
19 assurances as envisioned under the  
20 Global Nuclear Energy Partnership.
- 21 • And it fulfills the 2002 agreement  
22 between USEC and the Department of  
23 Energy that USEC deploy U.S.

1 enrichment technology to replace  
2 the gaseous diffusion plant  
3 technology that has served America  
4 reliably for the last half of a  
5 century.

6 The American Centrifuge Plant and its  
7 advanced centrifuge technology represent an  
8 opportunity to achieve several goals for the  
9 loan guarantee program in one project.  
10 Deployment of the American Centrifuge Plant  
11 will represent the commercial use of a  
12 significantly improved energy-related  
13 technology. Enriched uranium from the plant  
14 will help fuel at least 30 years of clean  
15 electricity generation by the nations' nuclear  
16 plants. At the same time, because the energy  
17 efficiency of the centrifuge plant, it  
18 eliminates electricity demand from our current  
19 gaseous diffusion operations equivalent to a  
20 1,000 megawatt power plant. That is one less  
21 new coal-fired plant needed to meet rising  
22 demand. It also includes the retirement of a  
23 major source of Freon emissions. Thus you have

1 a complete package -- an innovation technology  
2 with benefits in multiple categories.

3 Earlier this year, DOE completed its  
4 own thorough risk-assessment of the technology  
5 and our deployment plan. Since DOE developed  
6 the original design from which we developed the  
7 American Centrifuge machine, the Department has  
8 an intimate familiarity with the technology.

9 The project is at a mature stage of  
10 development and will be deployed in phases. We  
11 have our construction and operating license  
12 from the Nuclear Regulatory Commission and have  
13 commenced construction. As I speak, we are  
14 installing machines to demonstrate machine  
15 performance in a cascade configuration. We are  
16 expecting the lead cascade to be operational in  
17 mid-2007, later this summer. Due to the  
18 modular deployment the American Centrifuge will  
19 begin operating and generating cash flow before  
20 we complete the construction of the entire  
21 plant.

22 We would like to see the loan guarantee  
23 program ready in 2008 to support the debt

1 required to fund the remainder of plant  
2 construction. By the end of 2007, USEC will  
3 have contributed more than \$700 million of  
4 equity in the project towards a total of \$2.3  
5 billion.

6 Looking ahead a few years, using USEC  
7 as a pilot guarantee will now assist utilities  
8 who approach DOE for guarantees for nuclear  
9 reactors to be built early in the next decade.

10 They will benefit both from our experience and  
11 from the assurance of a domestic source of fuel  
12 for their reactors.

13 Additional benefits, the project will  
14 be built and operate in the United States  
15 creating hundreds of skilled, high-paying U.S.  
16 manufacturing and construction jobs.

17 With long-term domestic production  
18 capacity based on U.S. technology, the U.S.  
19 government can still have a major seat at the  
20 international nonproliferation table. American  
21 Centrifuge could provide access to a source of  
22 enriched uranium to offer countries forgoing  
23 their own enrichment technologies. Given its

1 modular design, the plant has further expansion  
2 potential. Assisting the successful deployment  
3 of the first phase with a guarantee will seed  
4 any future expansion.

5           With a long-term and reliable U.S. fuel  
6 source, the nation's nuclear utilities will not  
7 become solely dependent upon Russian and  
8 European governments for supplying their  
9 enriched uranium fuel. They will have a  
10 diversity of supply and competitive sources.

11           Finally, the American Centrifuge will  
12 yield a return on taxpayer investment in the  
13 original DOE centrifuge technology. The sale  
14 of product generated by its operation will  
15 potentially reap millions of dollars a year in  
16 royalties paid to the U.S. government, in  
17 addition to the revenue generated for USEC to  
18 repay the guaranteed debt.

19           I ask for DOE's invitation to apply for  
20 a loan guarantee based on our pre-application  
21 submitted in Dec 2006, and I offer our project  
22 as a pilot guarantee in what should be a  
23 successful program to ensure U.S. energy

1 security and independence.

2 We all need a program that works.  
3 Please consider the feedback given by me and by  
4 others. It reflects a broad consensus of  
5 members from the financial community and the  
6 commercial nuclear sector.

7 Thank you very much.

8 MR. BELMAR: Thank you, sir.

9 [Pause.]

10 MR. BELMAR: We are running way ahead  
11 of what we anticipated the schedule would be  
12 and that's good and bad. The good part is it's  
13 going to allow us to perhaps either move up  
14 some of the people who were asked to testify  
15 this afternoon to this morning. I'm going to  
16 ask Mr. Borgstrom who is here to see if our  
17 11th, 12th and 13th witnesses if any of them  
18 are here. And if so, we might invite them to  
19 talk this morning rather than this afternoon.  
20 I see at least one is here. That will be fine.

21 The second thing, since we are moving  
22 ahead, if anyone has an interest, after at  
23 least the 11th or 12th speaker, if we still

1 have time, I'd like to afford all of you who  
2 are here a chance to come back up if you have  
3 something that you would care to share with us  
4 in light of what you've heard from the other  
5 witnesses this morning. So why don't we  
6 continue on the schedule we are on and see if  
7 we can accommodate all of that before we take  
8 our lunch break today. Thank you.

9 MR. HOWLETT: Thank you, gentlemen,  
10 very much. You know, these public statements  
11 are a little bit like your daughter's skirts or  
12 something. Most in the audience want them to  
13 be short enough to be interesting, but those in  
14 charge want them to be long enough to cover the  
15 subject. So I shall endeavor to do both here.

16 My name is Steve Howlett, for the  
17 record. And I am the Managing Director of GE  
18 Capital Markets in charge of Government Finance  
19 and Advocacy here in Washington for General  
20 Electric. And our portfolio would include  
21 many, many government programs, rural utility  
22 services, overseas private investment  
23 corporation and the current program which does

1 finance nuclear IGCC, solar and wind projects  
2 for the U.S. government. And that would be the  
3 U.S. export import bank of the United States  
4 where I actually served for ten years prior to  
5 joining General Electric. So a little comment  
6 within that context there.

7 Thank you very much for this  
8 opportunity to offer, again, a few brief  
9 remarks on the proposed regulations for Title  
10 XVII of the Loan Guarantee Program.

11 General Electric, under the leadership  
12 of our Chairman Jeffrey Immelt, has a firm  
13 commitment to clean energy and the technology  
14 required to meet the world's challenges related  
15 to carbon emissions. Furthermore, we have over  
16 70 years experience in working with the U.S.  
17 government programs to finance GE's energy  
18 customers both in the United States and  
19 internationally. We believe that the proposed  
20 loan guarantee program can be a very powerful  
21 tool to move clean and renewable technologies  
22 from the laboratory to the consumer

23 Rather than pointing out the technical

1 problems with the loan guarantee regulations as  
2 presented, I will leave some of those details  
3 to my esteemed fellow speakers and to the  
4 written comments that are going to be provided  
5 by the various industry groups. Rather I will  
6 focus in on sort of four suggestions that the  
7 DOE might use as guidelines in dealing with  
8 these regulations.

9           First, the DOE should leverage what  
10 other government loan programs do the best.  
11 Loan and loan guarantee programs within the  
12 federal government exist with a variety of  
13 purposes and a variety of successes: export  
14 promotion, investment promotion, rural  
15 electrification just to name a few. These  
16 existing programs should serve as the  
17 guidelines and established precedents for any  
18 loan guarantee program developed by DOE in  
19 order to best achieve the mission set forth in  
20 Title XVII.

21           As an example, the U.S. government has  
22 an outstanding commitment currently to provide  
23 \$5 billion in loan guarantees to build advanced

1 nuclear power plants in China. This recent  
2 commitment is combined with the fact that the  
3 U.S. Export-Import Bank has a long history of  
4 financing nuclear power projects throughout the  
5 world, and I might add, without a single  
6 default. Furthermore, the Bank has actively --  
7 is actively seeking to finance wind, solar,  
8 IGCC, ethanol and various technologies at  
9 plants around the world at very attractive  
10 rates to foreign buyers. The Bank is funding  
11 its activities in the better classes of  
12 emerging markets, countries such as Mexico and  
13 China, at zero subsidy costs to the United  
14 States taxpayer. Modest fees, borne by the  
15 local utilities, cover the risk.

16 As a point of comparison, U.S. Ex-Im  
17 Bank offers foreign buyers 100 percent  
18 unconditional guarantee, not the 90 percent  
19 being proposed by DOE. The OECD, the governing  
20 body internationally that regulates export  
21 credit agencies, has extended terms for loans  
22 such as the one in China for up to 15-year  
23 repayment. The Congress has legislated up to

1 30 years for the DOE program which would again  
2 further lower the risk of default by lowering  
3 the debt service requirements especially in the  
4 early years. U.S. Ex-Im Bank loans may be  
5 equally collateralized among senior lenders.  
6 This is apparently not the case with the  
7 proposed regulation. And the U.S. Ex-Im Bank  
8 loans, again, for these types of clean energy  
9 projects are fully transferable and provide  
10 liquidity to lenders and such a flexibility  
11 appears to be missing and we hope to be added  
12 to the proposed regulations.

13 A buyer of nuclear, wind or solar power  
14 projects in Mexico or China could expect all-in  
15 pricing around LIBOR plus 60 to 65 basis  
16 points. At that level, U.S. Ex-Im Bank under  
17 the Credit Reform Act would not allocate any  
18 credit subsidy in these markets, but rather  
19 would rely solely upon the fees which it  
20 charges. If the bank were to guarantee a deal  
21 in Western Europe or Japan, which it has  
22 historically done, the pricing drops to around  
23 LIBOR plus 28 to 34 basis points. DOE pricing,

1 in conjunction with the lender's spread, should  
2 be in this range or lower.

3 The U.S. government should be  
4 consistent. Making the DOE program as easy, as  
5 flexible, and self-sustaining and appropriately  
6 priced to build clean energy projects in the  
7 state of New Mexico as is currently possible to  
8 do with U.S. government support in the country  
9 of Mexico.

10 As my colleague John Welch said here,  
11 you know, don't reinvent the wheel; just go out  
12 and borrow one from a sister agency.

13 The second thing is DOE should evaluate  
14 today's risk in today's context. Wind parks,  
15 gasifiers and nuclear power plants have been  
16 constructed in Europe and Asia for the past 20  
17 years. New technologies, resource data  
18 collection, and construction techniques have  
19 minimized risk from the old days of faulty  
20 data, excessive cost overruns and rebuilds.  
21 New default models must be built off of what is  
22 known today and not what was done 30 years ago.

23 An example of overestimating risk would

1 be the U.S. Ex-Im Bank's credit reform subsidy  
2 models which were cut in half after its first  
3 five years under credit reform. It was cut in  
4 half again after the next five years because  
5 they had overestimated what their actual risk  
6 would be, and yet again after another five  
7 years. This year the Bush Administration has  
8 suggested that the bank go completely off  
9 budget by acknowledging that the fees being  
10 charged were sufficient to cover the expected  
11 losses. DOE should build on such acknowledged  
12 default rates and fees from the U.S. government  
13 existing programs and from private sector  
14 lenders. The Department must avoid being too  
15 conservative at the program's outset.

16           Again, point number two, resist the  
17 temptation to really over estimate risks.

18           The third point I would like to make,  
19 is DOE should deal with trusted partners. A  
20 true conservative approach to a loan guarantee  
21 program is not to over-regulate and over-charge  
22 but rather to focus in on evaluating the  
23 players of a transaction. Well performing loan

1 portfolios stem from risk management of  
2 creditworthy players involved. For example,  
3 proper evaluation of an EPC contractor will  
4 yield much better results than charging higher  
5 fees on a project that cannot be completed  
6 because the prime contractor doesn't have the  
7 financial capacity to build such a large  
8 project. Partnering with excellent  
9 participants will ensure success.

10 Don't play "gotcha" as a regulator. Be  
11 a partner. That's the intention we believe of  
12 the loan guarantee program as envisioned by the  
13 Congress.

14 Fourth, as demonstrated in the amount  
15 of interest in this program, DOE has a very  
16 vital role to play. The goal is really cheaper  
17 and cleaner energy for the American consumer.  
18 And I would strongly encourage you, never lose  
19 sight of that goal.

20 And we appreciate the opportunity to  
21 offer our thoughts. Thank you.

22 MR. BELMAR: Thank you very much. One  
23 quick question. The comments that a number of

1 people have made to benefit from the learning  
2 that could be had from the operation of other  
3 loan guarantee programs within the government  
4 is certainly well taken. That would be  
5 particularly helpful if you could in any  
6 written comments you submit or others just  
7 highlight whether there are any statutory  
8 provisions in those other loan guarantee  
9 programs that are not present in Title XVII  
10 that would preclude us from taking your advice  
11 so we could identify the shortcomings in our  
12 statute which is of course the framework for  
13 our implementing this particular loan guarantee  
14 program.

15 MR. HOWLETT: Exactly. We will  
16 certainly do that. Thank you.

17 MR. BELMAR: Thank you.

18 We are going to ask our 11th speaker to  
19 come up now. We are going to take a five-  
20 minute break after that. If the other  
21 speakers, 12 and 13 are here, we'll give them a  
22 chance. Then I would like to give at least two  
23 minutes to anyone who has testified thus far to

1 respond if they wish to some of the comments  
2 that they've heard from others who have  
3 testified.

4 Welcome, sir. Thank you for being here  
5 early. We have Joe Turnage with Constellation  
6 Generation Group to testify next. Welcome.

7 MR. TURNAGE: Good morning. I'd rather  
8 say that than good afternoon. So thank you.

9 My name is Joe Turnage, I'm a Senior  
10 Vice President at Constellation Generation  
11 Group which is the power generation division of  
12 Constellation Energy, a Fortune 200 energy  
13 company. I do appreciate the opportunity to  
14 speak to you today on behalf of Constellation  
15 about the importance of the loan guarantee  
16 program to our efforts to develop new nuclear  
17 power plants in the United States.

18 Constellation Energy is a competitive  
19 energy company. Our principal offices are in  
20 Baltimore, Maryland. We are the nation's  
21 leading supplier of competitive electricity, to  
22 large commercial and industrial customers. We  
23 are a major generator of electricity with a

1     diversified fleet strategically located across  
2     the United States. But we are here today  
3     because Constellation is dedicated to what's  
4     being called the "new nuclear renaissance." We  
5     realize the importance of nuclear energy is the  
6     only baseload source of energy that's  
7     greenhouse gas free. Constellation currently  
8     operates a fleet of five nuclear reactors  
9     located in Maryland and New York, and we are  
10    regarded as one of the most efficient and  
11    safety conscience owner/operators in the  
12    country as evidenced by our fleet capacity  
13    factors, fleet production costs, and other  
14    indicators of performance improvement. This is  
15    a fact to take some pride in. Because our  
16    generating portfolio across the company is  
17    primarily nuclear, about 60 percent of our  
18    generation currently produces no greenhouse  
19    gases.

20           We have also been an industry leader,  
21    we believe, to the effort to develop and deploy  
22    a standardized -- underline standardized -- my  
23    boss says, "Down to the carpet and wallpaper" -

1 - fleet of efficient and safe new nuclear  
2 plants in North America. Accordingly, we were  
3 actively involved during the debate and passage  
4 of the Energy Policy Act of 2005. We believe  
5 that the Act is absolutely critical to this  
6 nation's effort to reduce dependency on foreign  
7 sources of energy while at the same time  
8 developing innovative technologies designed to  
9 create a path to a low-carbon energy future.  
10 We have commended both the Congress and the  
11 Bush Administration for passing this landmark  
12 legislation.

13           The incentives of the Energy Policy Act  
14 are predicated on Congress' well-grounded  
15 understanding of the difficulty that energy  
16 companies face when trying to build large,  
17 complex, capital-intensive energy projects.  
18 This difficulty is exacerbated for nuclear  
19 projects because of, quite frankly, the legacy  
20 of the past, a legacy characterized by a two-  
21 step licensing process that resulted in large  
22 cost over-runs and delays, abandoned projects,  
23 bankruptcies, and in some cases, completed

1 plants never being operated. Twenty-eight  
2 years after Three Mile Island, we are only now  
3 beginning to overcome that legacy.

4 We at Constellation recognized pretty  
5 early on that the incentives contained in the  
6 Energy Policy Act would be necessary to bring  
7 about this new nuclear renaissance. This  
8 recognition was driven in part by our past  
9 experience and the experience of my boss, Mike  
10 Wallace, who is Constellation's generations  
11 president. Mike actually is the only nuclear  
12 executive currently in the U.S. who was also an  
13 executive during the last round of nuclear  
14 construction. While at Commonwealth Edison  
15 (now Exelon), Mike had the responsibility for  
16 the construction of the Byron and Braidwood  
17 nuclear plants, with a special focus of  
18 Braidwood as the last of six new plants that  
19 Commonwealth Edison completed in the '90s -- in  
20 the '80s rather, and he experienced first-hand  
21 the reality of those tumultuous delays and cost  
22 overruns when we did that two-step licensing  
23 process years ago.

1           Therefore, as a company that's  
2     dedicated to new nuclear, we were pleased that  
3     the final bill contained substance standby  
4     support provisions. The industry absolutely  
5     requires that assurance of regulatory  
6     stability. We are pleased that the NRC has  
7     thus far implemented Part 52 in a timely and  
8     transparent manner.

9           Likewise, the production tax credits  
10    contained in the Energy Policy Act we think are  
11    necessary to incentivize earlier movers who may  
12    otherwise be reluctant to be the first to  
13    market.

14           But with regard to those two  
15    incentives, as you've heard already today from  
16    Richard Myers, necessary, not sufficient. The  
17    most important Energy Policy Act incentive for  
18    new nuclear is the Title XVII loan guarantee  
19    program. We view it as indispensable. The  
20    loan guarantees are meant to address a market  
21    financing gap that results from a combination  
22    of several factors including the prior nuclear  
23    plant construction cycle that, as I mentioned

1 earlier, was burdened by regulatory uncertainty  
2 and resulting delays and cost overruns. Also  
3 includes perceptions of an untested, though  
4 certainly improved regulatory system, perceived  
5 technology risk, and importantly an  
6 institutional loss of understanding regarding  
7 the reality of nuclear financial risk in some  
8 elements of the financial community.

9           The loan guarantee program is intended  
10 to fill this financing gap by creating a non-  
11 recourse financing platform whereby energy  
12 companies with relatively modest market caps,  
13 particularly compared to the capital cost of  
14 new nuclear projects are allowed to leverage  
15 their limited equity in a manner just not  
16 possible without the benefit of the guarantee.

17       By requiring significant equity, however,  
18 toward a project's costs, the program insures  
19 that only creditworthy projects will apply.

20           Since the passage of the Energy Policy  
21 Act, and in reliance on the incentives  
22 recognized in this legislation, Constellation  
23 has been actively pursuing our vision of the

1 new nuclear build. In September 2005, we  
2 selected the U.S. Evolutionary Power Reactor, a  
3 pressurized water reactor designed by Areva, as  
4 our technology choice.

5 That same month, we formed a joint  
6 venture with Areva called UniStar Nuclear, the  
7 ultimate purpose of which is to construct a  
8 fleet of standardized -- underline standardized  
9 -- U.S. EPRs in the United States, to the  
10 benefit of those parties who join us in this  
11 endeavor. In May, 2006, we began working on  
12 the combined construction permit and operating  
13 licenses for our reference plan. We plan to  
14 submit that to the NRC in December of this  
15 year. This license will be for the  
16 construction and operation of a U.S. EPR at our  
17 current site in Calvert County, Maryland. In  
18 July 2006, we submitted the COLA section  
19 regarding our project's quality assurance  
20 program and we received the NRC approval of  
21 this section this past March.

22 Last fall, we placed an order for the  
23 initial forging that are required to construct

1 the first U.S. EPR. To date, with our  
2 partners, we have spent several hundred million  
3 dollars on our new nuclear efforts. Obviously  
4 given our commitment and our appreciation for  
5 the importance of a workable loan guarantee  
6 program we follow the rulemaking process for  
7 Title XVII very closely and with some anxiety.

8 We have been hopeful that the rules governing  
9 the loan guarantee program would reflect the  
10 visionary spirit of the Energy Policy Act.

11 We have had an opportunity to review  
12 the notice of proposed rulemaking that was  
13 published in the Federal Register on May 16th  
14 and we will submit detailed comments to the  
15 July 2nd deadline. Therefore, for today's  
16 purposes, I don't intend to offer a full  
17 critique of the NOPR but rather I'd like to  
18 share Constellation's concerns with the NOPR  
19 focusing on a few issues that we view as  
20 critical. Then I would like to offer some  
21 suggestions that we believe will address both  
22 the justified concerns of the Department of  
23 Energy as well as the needs of industry.

1           Our largest concern surrounds the issue  
2 of the percentage of the project's debt the  
3 loan guarantee will cover. We note that Title  
4 XVII authorized the DOE Secretary to issue  
5 guarantees of "up to 80 percent of the project  
6 cost of the facility that is the subject of the  
7 guarantee."

8           Given the current financing gap in the  
9 market and in light of Constellation's intent,  
10 we believe that the Department would be fully  
11 justified in granting 100 percent of the  
12 project's debt, up to 80 percent of the project  
13 cost threshold. However, in the NOPR, the  
14 Department insists that each project have a  
15 tranche of non-guaranteed debt.

16           Candidly, we understand the appeal of  
17 having a tranche of non-guaranteed debt. The  
18 requirement that lenders have "skin in the  
19 game" is based, we think, on the belief by the  
20 Department that the non-guaranteed lenders  
21 taking project risk will complete rigorous  
22 credit analysis and project diligence to ensure  
23 that the project is commercially viable.

1           While we understand this position, we  
2     don't believe it's either (1) necessary in  
3     order to assure repayment and adequately  
4     protect the taxpayers or (2) available at this  
5     stage for new nuclear plant financings. Under  
6     the right conditions -- under the right  
7     conditions -- we believe that private lenders  
8     or even export credit agencies, could have the  
9     risk appetite to subscribe to a small, non-  
10    guaranteed tranche of project debt. And it  
11    should be our mutual goal to get to this stage  
12    as rapidly as possible as a necessary step  
13    toward full commercial financing.

14           But the key words are "under the right  
15    conditions", and unfortunately, before the  
16    market can even consider providing such  
17    financing on even a limited basis, the NOPR  
18    contains other requirements that will prejudice  
19    the non-guaranteed debt to such a degree that  
20    lenders will refuse to participate, and this  
21    program will fail.

22           I am referring, of course, to the  
23    requirements that the DOE be in a superior lien

1 position vis-à-vis non-guaranteed debt and to  
2 the prohibition against stripping the  
3 guaranteed and non-guaranteed debt. These  
4 positions, when taken together, are  
5 incompatible with non-recourse project  
6 financing. Under these conditions lenders will  
7 choose not to participate. This being the  
8 case, what is the solution?

9 Well, one possible solution might be to  
10 allow both a pari passu security structure and  
11 stripping. However, based on our review of  
12 that NOPR and DOE's discussion of the proposed  
13 rule, we understand this option is probably not  
14 available. It seems clear to us that the  
15 reason DOE insists upon a superior lien is  
16 because of its statutory interpretation of  
17 Title XVII. As a consequence, DOE believes  
18 that it does not have the authority to change  
19 its position. As an aside, we disagree with  
20 this interpretation.

21 But it begs the question, of whether  
22 just allowing stripping would lead to a viable  
23 loan guarantee program and the answer is no, it

1 would not. It's not a fair assumption that  
2 non-recourse, non-guaranteed and deeply  
3 subordinated debt will be available to these  
4 projects -- at any price. The only way to  
5 imagine this working, other than placing the  
6 debt with the project sponsor, is that the non-  
7 guaranteed debt would demand the benefit of a  
8 corporate guarantee. But we believe the logic  
9 in this approach is flawed. First the NOPR  
10 contemplates that any credit support given to  
11 the non-guaranteed debt would have to be made  
12 available to the guaranteed debt. In this  
13 case, the non-recourse nature of the project is  
14 destroyed.

15           Second, if the non-guaranteed debt  
16 receives preferential credit support in the  
17 form of a guarantee, then the Department's  
18 rationale for requiring non-guaranteed debt,  
19 which is to say the independent credit  
20 analysis, would no longer exist.

21           Based on our analyses of these issues  
22 we come to the conclusion that having the  
23 guarantee issued by the Department cover all of

1 the debt of the project up to 80 percent of the  
2 total project cost is the only regulatory  
3 solution to create a workable program. We  
4 believe that DOE can adopt this position in the  
5 final rule while at the same time taking steps  
6 to address its valid concerns including its  
7 fiduciary responsibilities as stewards to the  
8 taxpayer dollars, and we would like to  
9 recommend the following as an approach.

10 Our recommendations for meeting the  
11 goals of both DOE and the energy industry  
12 include the following:

- 13 1. We believe the ultimate focus of  
14 the loan guarantee program should  
15 be on robust credit analysis and  
16 underwriting. With each project  
17 evaluated under the loan guarantee  
18 program, the Department should  
19 retain expert outside financial,  
20 technical and legal advisors to  
21 assist in a rigorous credit and  
22 legal analysis. This diligence  
23 process will result in the

1 commercialization of the  
2 creditworthy and innovative  
3 projects while also insuring the  
4 lowest feasible cost of financing,  
5 which in turn minimizes the risk to  
6 the taxpayer. There are many  
7 examples in the government of  
8 successful loan guarantee programs  
9 that function exactly in this  
10 manner. Perhaps the most analogous  
11 we've heard about today already,  
12 the loan guarantee program of the  
13 Export-Import Bank and the Overseas  
14 Private Investment Corporation.  
15 These programs demonstrate that the  
16 federal government is more than  
17 capable of performing sound,  
18 professional, due diligence for  
19 complex, non-recourse financings of  
20 large infrastructure projects.  
21 Ironically, by insisting on a very  
22 expensive subdebt financing  
23 structure (assuming the debt

- 1           existed, which we think it does  
2           not) projects would be put at  
3           greater risk of default, certainly  
4           an unintended consequence.
- 5           2. The loan guarantee program should  
6           be temporary. Once the financing  
7           gap closes, so too should be the  
8           loan guarantee program. Our  
9           expectation is that by the time the  
10          5th nuclear plant (of each  
11          technology) has operated for five  
12          years, the market will have  
13          achieved the necessary level of  
14          comfort for the program to  
15          terminate.
- 16          3. We would hope to see the loan  
17          guarantee program budget ceiling  
18          authorized by Congress to adequate  
19          levels and several years in  
20          advance. Industry needs to operate  
21          with a degree of certainty. This  
22          is particularly true of the nuclear  
23          industry, where companies will

1           spend hundreds of millions of  
2           dollars on long-lead materials and  
3           other development costs in reliance  
4           on the fact that the loan guarantee  
5           office will be available and  
6           adequately funded.

7           I want to conclude with a kind of sense  
8           of urgency. Thank you for considering our  
9           recommendations which we believe will lead to a  
10          successful program that addresses our concerns  
11          as well as those of the Department. Before  
12          concluding, I would like to express the sense  
13          of urgency. We believe it's very important for  
14          DOE to move quickly to establish a viable loan  
15          guarantee program along the lines that we  
16          recommended today.

17          We have been frustrated with the lack  
18          of progress in establishing the loan guarantee  
19          program, but given the importance of this  
20          program to our energy security, to our  
21          environment, and to this administration's  
22          energy policy, we are still hopeful and  
23          optimistic that this Department will promulgate

1 regulations that are attentive to the concerns  
2 of the industry and to the banks whose  
3 participation will be critical.

4           When the Energy Policy Act passed about  
5 two years ago, we expected that the loan  
6 guarantee program would be in operation at this  
7 point. We anticipate that there are many  
8 reasons, some of which are beyond the  
9 Department's control, why this is not the case.

10       But please appreciate that we cannot continue  
11 to have an indefinite conversation about how to  
12 make this program work. We will not continue  
13 to go at risk without a clear line of sight to  
14 a workable program. And just as importantly in  
15 a year or less the momentum to build new  
16 nuclear plants in the United States will be  
17 lost to China, to India, and others. The  
18 competition for infrastructure resources is  
19 global. And we are not just competing against  
20 other companies, but against other countries.  
21 In this environment, time is our enemy, and  
22 because the cost of failure is too high, we  
23 would urge the Department of Energy to

1 establish the program intended by the Congress  
2 and the President.

3 Thank you very much for your attention  
4 and this opportunity to speak on this very  
5 important issue.

6 MR. BELMAR: Thank you very much. I  
7 don't know if we have anyone else at the  
8 moment. Are you number 12 or 13? Okay. Why  
9 don't you come on up. Are you either Jeffrey  
10 Lyash or -- oh, you must be Jeffrey. Okay. We  
11 are going to stop after this. We are going to  
12 take a five-minute break and then if any of the  
13 people who have had a chance to testimony wish  
14 to come, we'll just go in order and give you  
15 all a few minutes to further amplify the  
16 record. I just want to say that we found  
17 everything extremely helpful thus far. We  
18 really appreciate your taking the time to share  
19 your thoughts with us thus far and for the rest  
20 of the day.

21 Yes, sir.

22 MR. LYASH: Thank you, sir. And thank  
23 you for the opportunity to comment this

1 morning. My name is Jeff Lyash. I'm the  
2 president and chief executive officer of  
3 Progress Energy Florida. We are a regulated  
4 electric utility that serves 1.7 million  
5 accounts in Florida. We are part of Progress  
6 Energy, Incorporated which is a holding company  
7 that also has an electric utility serving North  
8 and South Carolina. Together the two utilities  
9 serve more than three million accounts in those  
10 three states. And as part of the southeast  
11 U.S. we are in one of the fastest growing  
12 regions in the country which demands the  
13 addition of generation over the next decade.

14 In my comments today, I want to  
15 emphasize the critical importance of having a  
16 workable federal loan guarantee program for new  
17 nuclear power projects and for the Department  
18 of Energy to send a strong, clear signal that  
19 the federal government supports commercial  
20 nuclear operations as a part of our solution.  
21 Given the growth our region faces and the  
22 obligation our utilities have to provide for  
23 the future power needs of the population, I

1 feel a very keen sense of urgency on this  
2 topic. So do many of our state and federal  
3 policymakers and Wall Street is watching very  
4 closely.

5 Progress Energy is a member of the  
6 Nuclear Energy Institute which has already made  
7 comments this morning. And we fully support  
8 the seven principles that NEI calls for as a  
9 guide in the design of the energy loan  
10 guarantee program. As NEI states in its  
11 comments, this loan program is the most  
12 important part of the Energy Policy Act  
13 incentives to address the major challenge  
14 facing nuclear power expansion -- that is the  
15 challenge of construction financing for these  
16 very large and long-lead-time capital projects.

17 Progress Energy has been safely  
18 operating nuclear power plants for more than 35  
19 years. Much of my own career has been in the  
20 nuclear field. We now have five nuclear  
21 reactors currently in operation and we are  
22 working on license applications for two new  
23 nuclear projects, two units each, one project

1 in Florida and one in North Carolina. In  
2 fact, for our Florida project we've selected a  
3 site and a technology and we are in the process  
4 of developing the necessary permitting and  
5 license applications and we are driving toward  
6 a 2016 in-service date for that first unit.  
7 This an active project.

8 I want to make three points.

9 First, population and economic growth  
10 are driving the demand for electricity and  
11 forcing utilities and states to make near-term  
12 decisions about how to meet that growth. At  
13 Progress Energy Florida alone, we are adding  
14 40,000 new customers each year and we project  
15 that that will continue and the demand for  
16 electricity will grow by 25 percent in the next  
17 ten years in our service territory.

18 Second, in our state and nation,  
19 nuclear power is an essential part of a  
20 balanced solution to meeting these growing  
21 energy needs in a way that's environmentally  
22 responsible. The issues of climate change and  
23 energy security reinforce the case for increase

1 nuclear-powered generation. That was true when  
2 Congress enacted the Energy Policy Act in 2005,  
3 and it is even more true today.

4 At Progress Energy, our balanced  
5 approach to growth includes increased energy  
6 efficiency, alternative and renewable energy,  
7 but they are not enough. So it includes  
8 construction of state-of-the-art power plants.

9 Regarding that last element, our company, as I  
10 said, is actively pursuing the possibility of  
11 building two new nuclear projects. The first  
12 unit for Florida, as I said, would be in  
13 service in 2016. And what that means is that  
14 we must make decisions in the next year or so  
15 about whether to go forward. If we cannot  
16 prudently proceed with a nuclear unit, we will  
17 need to change course and that course will be  
18 back toward fossil-based generation, gas, or  
19 coal. Several folks have pointed out the  
20 policy and energy security implications of  
21 continuation of that trend.

22 That leads me to my third point, the  
23 one most important for the matter at hand.

1 While I'm encouraged by the momentum that is  
2 building in favor of new nuclear power plants  
3 in this country especially in Florida, a  
4 critical missing piece is having a realistic  
5 workable loan guarantee program -- one that is  
6 large enough and structured in a commercially  
7 reasonable way such that it will make a  
8 difference. Absent that tangible support, it  
9 will be difficult for the new nuclear plants  
10 now being considered to go forward because of  
11 the financial strain on the companies involved.

12 Congress did its part in 2005 by  
13 establishing the broad framework for U.S.  
14 Energy policy, with nuclear power as an  
15 important element. Concerned about fuel  
16 diversity and price stability, the Florida  
17 Legislature and the governor did their part  
18 last year by approving legislation specifically  
19 and directly supportive of new nuclear plants  
20 including greater assurance of cost recovery.  
21 Then, earlier this year, the Florida Public  
22 Service Commission also did its part by  
23 adopting the implementation rules in support of

1       that legislation.

2                   Also, week by week, we are seeing more  
3       and more support for nuclear energy from  
4       community leaders, the news media and others  
5       throughout Florida and beyond. Moreover, just  
6       last week in Florida, the Public Service  
7       Commission took action that discouraged new  
8       pulverized coal plants while reinforcing the  
9       need for new nuclear plants to increase the  
10      state's fuel diversity.

11                   All of that positive momentum for  
12      nuclear expansion is good, it's very good, but  
13      it's not sufficient. The magnitude of these  
14      nuclear capital projects is such that it  
15      requires a workable federal loan guarantee  
16      program, especially for the initial plants.  
17      The \$9 billion being considered for the entire  
18      energy loan program is hardly enough, much less  
19      the \$4 billion of that set aside for nuclear  
20      projects.

21                   Consider that the cost of one nuclear  
22      project would be 30 to 40 percent of the total  
23      market capitalization of Progress Energy, one,

1 and would roughly double the size of the  
2 utility assets we own in Progress Energy  
3 Florida. You can begin to see the significant  
4 financial risk involved and the reason there is  
5 such a strong need for a federal loan guarantee  
6 program.

7 On behalf of Progress Energy, I would  
8 like to ask the Department of Energy to do its  
9 part to support commercial nuclear expansion as  
10 one element of a balanced approach to meeting  
11 our nation's energy future. The demand for  
12 energy is driving the need for new generation  
13 and near-term decisions. Nuclear power is an  
14 essential part of a diverse energy mix, and a  
15 realistic loan guarantee program is a critical  
16 missing piece that we need as soon as possible.

17 It will certainly bear on our -- Progress  
18 Energy Florida's -- near-term decision of  
19 whether to proceed with our pending nuclear  
20 project.

21 Thank you for the opportunity to  
22 comment on this important topic, gentlemen.

23 MR. BELMAR: Thank you very much, sir.

1       Would you mind taking a five-minute break and  
2       we'll just stretch our legs, and then if anyone  
3       has any further comments we'll invite the first  
4       12 witnesses to come back up and we'll still be  
5       way ahead of schedule for the rest of the day.

6       Thank you.

7                   [Brief recess taken at 11:21 a.m.]

8               MR. BELMAR: I think we have everyone  
9       who testified who wishes to have another chance  
10      to say a few more words in the front row. Not  
11      everyone is here, but why don't you just come  
12      up in order again, identify yourself, and then  
13      feel free, since we have another 25 minutes  
14      until the preordained luncheon break at 12:00  
15      to take two or three minutes.

16              MR. TEMPLE: I'll do my best not to  
17      take more.

18              MR. BELMAR: And more if you need.

19              MR. TEMPLE: Okay. I'm Bob Temple with  
20      CPS Energy and the comments I'm about to make  
21      are on behalf of CPS Energy. There are two  
22      significant points I want to talk about and  
23      then just echo what a couple of other speakers

1 have said about three other things. The two  
2 points I would like to make are related to our  
3 plans at STP.

4 First of all, one of the speakers  
5 earlier talked about setting up an equity  
6 account and doing a drawdown and you don't  
7 think a lot about these projects until you  
8 actually are in them and working through the  
9 issues on them.

10 With a project like ours, we're going  
11 to have a significant equity contribution well  
12 before there's even any possibility, a glimmer  
13 of hope of a loan guarantee program coming into  
14 effect. As Mr. Winn said before, the combined  
15 operating license application is submitted, it  
16 will be tens of millions of dollars spent on  
17 the project. And subsequent to that, in order  
18 to keep a project like this on line, you're  
19 going to have to start ordering long-lead items  
20 and doing significant engineering work which  
21 nobody is going to do for free. So all of that  
22 is going to be cash out of hand and you're  
23 talking about heading for a dual reactor site,

1 certainly the billion dollar mark before you  
2 are that deep into the project. This is -- I'm  
3 talking about a couple of years downstream from  
4 where we are currently in this project. So  
5 therefore, there's going to be a large equity  
6 contribution already. You will have purchased  
7 a site, you will have developed that site, and  
8 you will have done all of the work that I just  
9 mentioned.

10 That sort of leads to sort of the  
11 second half of that same idea which is  
12 consideration certainly for nuclear projects as  
13 to when the DOE loan guarantee money might be  
14 available. And with respect to nuclear  
15 projects I would suggest the appropriate time  
16 is when the Nuclear Regulatory Commission would  
17 declare a combined operating license  
18 application administratively complete. It's  
19 going to take about three years for the NRC  
20 just to process the application and to hold up  
21 closing on all of the debt financing necessary  
22 for a project of this size for that far into  
23 the project means, again, you've got to spend

1 and put additional billions of dollars at risk  
2 and that's not the objective of this program.

3 The second significant issue is to  
4 clarify that for large capital-intensive  
5 projects like nuclear power projects that are  
6 owned by multiple entities, that each owner of  
7 an undivided interest in a qualifying project  
8 should be able to be an applicant under the  
9 program. Right now, the program is a little  
10 ambiguous and I would suggest that only one  
11 applicant can come per project. And I would  
12 suggest that that's inappropriate for this kind  
13 of thing.

14 Then three things I want to just  
15 emphasize that other speakers have spoken to is  
16 the need to know what the fees are going to be.

17 It helps us choose a reasoned choice among  
18 alternatives. I think that's a great  
19 suggestion.

20 MR. BELMAR: The fees you're talking  
21 about the credit subsidy cost as well as the  
22 risk --

23 MR. TEMPLE: Yes, sir, exactly. The

1 second one is to have those fees be able to be  
2 part of the guaranteed debt. And the third one  
3 is that the publication of timelines for  
4 processing the application, again, so that the  
5 financing community and the applicant can  
6 understand what their timelines are supposed to  
7 be. And that's all I have to offer.

8 MR. BELMAR: I knew sooner or later we  
9 would get to specific provisions of the  
10 proposal.

11 Thank you.

12 MR. TEMPLE: Thank you very much.

13 MR. BELMAR: Mr. Myers.

14 MR. MYERS: We were disappointed  
15 earlier this week to read the administration's  
16 statement of administration policy on HR-6.  
17 HR-6 includes some provisions to make technical  
18 changes to Title XVII. Those changes may not  
19 be perfect, but they are an attempt, I think, a  
20 good faith attempt by a partisan group of  
21 Senators to clarify some of the ambiguities  
22 that have proven troublesome to the  
23 administration as it has developed this

1 rulemaking and remove some of the  
2 uncertainties. They may not be perfect, but I  
3 think they are a good faith attempt to try and  
4 create a workable program. And I would just  
5 lodge a plea with the Department and the  
6 Executive Branch broadly rather than simply to  
7 resist as a matter of reflex any proposals to  
8 improve the statutory language to remove  
9 ambiguity perhaps to work more constructively  
10 with the Congress to make changes that may be  
11 necessary to get us around some of these  
12 problems like the subordination issue.

13 Thank you.

14 MR. BELMAR: Thank you, sir.

15 Just to make the record clear, this is  
16 Steven Howlett with General Electric.

17 MR. HOWLETT: Thank you very much. Two  
18 very brief points. One has to do with -- it  
19 would be helpful for the administration to have  
20 a clarification vis-à-vis the ability of the  
21 Department of Energy to use any fees which are  
22 collected administratively to then go out and  
23 be able to hire outside consultants. Because

1 we know that it will be difficult for the  
2 Department to come up with -- to come up to  
3 speed quickly and so the need for outside  
4 consultants and outside counsel will be viably  
5 important. And if the administration believes  
6 that the legislation does not cover that, then  
7 it would be helpful, I think, to get that on  
8 the record quickly so that then the Congress  
9 can go back and make those corrections. There  
10 is legislation which exists under  
11 [indiscernible] statute which allows them to  
12 use money which are collected as fees from  
13 project sponsors to go out and hire outside  
14 consultants for the benefit of the bank. And  
15 so I think if similar legislation is required  
16 for the department to use outside consultants,  
17 that would be helpful.

18 And then secondarily I would just  
19 stress the need for the longer term,  
20 particularly related to those technologies  
21 which are not particularly commercially viable  
22 at this point. I'm speaking specifically about  
23 solar because the current technology is way

1 above market and oftentimes requires certain  
2 subsidies to get down to near market terms. As  
3 the technology improves, however, realistically  
4 the longer-term financing will allow the  
5 capital costs to be spread out over the full 30  
6 years. So I think for whatever technologies  
7 exist out there, especially ones which are not  
8 commercially viable right now under the  
9 program, I would strongly urge the Department  
10 not to disregard the necessity to go the  
11 maximum term. And so those are my only  
12 comments. Thank you.

13 MR. BELMAR: Thank you very much, sir.  
14 If no one else has anything to add from the  
15 group who testified this morning, we are going  
16 to take an early recess. We are going to  
17 reconvene at 1:00 and hear the remaining  
18 witnesses for the program and then we will give  
19 them an opportunity to respond, if they wish  
20 to. If any of you are here who testified and  
21 feel there is something you would like to add  
22 in the afternoon, if you're still here, we'll  
23 give you a chance to do that too.

1           One thing I think we all share is a  
2           great appreciation for Congress' activity in  
3           enacting Title XVII. It presents a wonderful  
4           opportunity and an enormous responsibility for  
5           the Department of Energy. I just want you to  
6           know that we are all trying to work with you to  
7           come up with a program that achieves the  
8           objectives that Congress had in mind when they  
9           did pass the statute. And we are looking for  
10          your contributions so that the regulations that  
11          are adopted do the best job that we can at this  
12          time within the constraints of the current  
13          statutory configuration to achieve that  
14          mutually desired objective.

15                 For that we thank you for your time and  
16          effort this morning. We are adjourned.

17                 [Whereupon, at 11:42 a.m., the meeting  
18          was recessed to be reconvened this same day at  
19          1:00 p.m.]



1 We were able to complete the hearing testimony  
2 this morning in record time. And that doesn't  
3 mean you all have to be as expeditious as  
4 possible, but it sure was nice to give everyone  
5 ample time and more time if they needed it  
6 because it was available.

7 So, why don't we start off -- I think  
8 our first witness is number 14 on our list,  
9 Louis Rosocha, and is he here?

10 Rosocha? I stand corrected, sir.

11 MR. ROSOCHA: I think I'll probably  
12 finish in less than that. Well, thank you very  
13 much for the opportunity to --

14 MR. BELMAR: Please identify yourself.

15 MR. ROSOCHA: Yes. I'm Louis Rosocha  
16 from the Los Alamos National Laboratory. I'm a  
17 team leader for plasma processing at that  
18 laboratory within the plasma physics group.

19 MR. BELMAR: Are you here on your own  
20 behalf, sir?

21 MR. ROSOCHA: I am here representing a  
22 potential work for others program that is being  
23 negotiated with Cob Creations. So there is a

1     licensing of a technology from Los Alamos that  
2     is being proposed.

3             MR. BELMAR:   Okay.   Thank you.

4             MR. ROSOCHA:   Yeah, I have -- we have  
5     spoken with our audits and assessments office  
6     yesterday at the laboratory. So since the early  
7     1990's, I have been involved at the Los Alamos  
8     Laboratory on the application of novel  
9     techniques for environmental applications  
10    related to air pollution control and energy.  
11    In particular these techniques have been based  
12    on non-thermal plasmas which are an efficient  
13    form of doing favorable chemistry with  
14    electricity through the medium of a plasma or  
15    an ionized gas. So mainly we were involved in  
16    these non-thermal plasmas for air pollution  
17    control, the destruction of hazardous chemicals  
18    and now plasma-enhanced combustion to improve  
19    fuel efficiency and reduce pollution.

20            So initially we started out with  
21    pollution control and waste treatment cleaning  
22    up the DOE complex back in the early to mid-  
23    1990's. But it also involved the Department of

1 Defense and other private sector applications  
2 through the negotiation of cooperative research  
3 and development agreements and things of that  
4 sort. So I'm also speaking today somewhat on  
5 behalf of Dr. Igor Matveev of Applied Plasma  
6 Technologies. This is a company in Falls  
7 Church, Virginia which the laboratory has  
8 collaborative project with. So speaking at  
9 this meeting though is limited to U.S.  
10 citizens, I understand, so Dr. Matveev cannot  
11 come -- cannot speak even though he and I have  
12 collaborated on various projects in the past.  
13 He's a permanent resident of the Ukraine  
14 although he's a permanent resident alien within  
15 the U.S. or a green card holder. He's  
16 supplying the public with a general description  
17 of his technology which is considered for this  
18 particular energy and pollution control  
19 application. And he has distributed or will  
20 submit copies of a document dealing with his  
21 company's expertise in plasma-assisted  
22 combustion.

23 So what I wish to address here today is

1 that aspect of DOE's May publication on the  
2 loan guarantee program and that's specifically  
3 page 11, the definition of the terms "New or  
4 significantly improved."

5 So this particular project that we are  
6 speaking about today has interest to be applied  
7 to Cob Creation's business model, to either  
8 create or find and contact with other entities  
9 such as the Los Alamos National Laboratory and  
10 Applied Plasma Technologies, the company in  
11 Falls Church, Virginia, and work on an  
12 optimized result or an optimized application.  
13 So as such the combination of this technology  
14 is new and it's important that we establish the  
15 rules by which each component technology is  
16 judged as new or significantly improved.

17 So let me explain some of the details  
18 of this collaboration and why I am here.

19 So Cob Creations approached us, namely  
20 the Los Alamos National Laboratory and the  
21 company Applied Plasma Technologies in 2006.  
22 So Cob had a process for process engineered  
23 fuel made from municipal solid waste, in other

1 words, trash, and the idea is to be able to  
2 burn that or combust it and generate energy.  
3 But to do so more cleanly in as close to zero  
4 emissions -- zero emissions into the atmosphere  
5 or into water -- as possible. So because this  
6 fuel, this processed engineered fuel is clean  
7 to start with, cleaner than coal and higher in  
8 BTU content than coal, there is great  
9 opportunity here for our nation's energy  
10 security. So our Technology Transfer Division  
11 at Los Alamos engaged in discussions and  
12 negotiations with Cob to enter into agreements  
13 to commercialize plasma technology for both air  
14 emissions control and advanced combustion  
15 technologies that were invented at Los Alamos.  
16 So this is part of the laboratory's technology  
17 transfer effort to the private sector.

18 Then the DOE also has a program called  
19 the Initiative for Proliferation Prevention  
20 dealing with the former Soviet Union. There  
21 was a project with this company, Applied Plasma  
22 Technologies and Dr. Matveev and because of  
23 progress made in the area of plasma-assisted

1 combustion through that project, it was decided  
2 to investigate even further advanced combustion  
3 techniques in the context of that IPP program.

4 So Cob and LANL are now working with the DOE  
5 IPP and USIC program, the U.S. Industry  
6 Coalition, to transfer technology from the  
7 former Soviet Union, in particular Russia and  
8 some from the Ukraine, to incorporate into a  
9 second-phase advanced combustion  
10 commercialization project using plasmas.

11 So let me just review for you what our  
12 applications were. In many cases there were  
13 chlorinated organic solvents coming out of  
14 various processes or stack-gases in the DOE  
15 complex, for example, Rocky Flats before it  
16 closed, solvents in the groundwater at Savannah  
17 River, and other places, remediation sites  
18 within the DOE and the DOD. For example,  
19 McClellan Air Force Base where we did field  
20 testing as well as Savannah River. The  
21 emission of oxides and nitrogen from Air Force  
22 jet engine test facilities, for example, Tinker  
23 Air Force Base and then off-gas emissions from

1 DOE mixed waste. In other words, radiochemical  
2 waste that was being treated, say, by a furnace  
3 or a thermal treatment unit. So we would clean  
4 up the stack-gas emissions from that. We also  
5 performed experiments and demonstrations on  
6 cleaning up vessels that were contaminated with  
7 uranium and plutonium using plasmas and also  
8 commercial collaborative projects with the  
9 semiconductor industry on cleaning up some of  
10 their stack-gases. So, as I said, Savannah  
11 River site, Rocky Flats, McClellan Air Force  
12 Base, Tinker Air Force Base, Texas Instruments  
13 and others were some of these sites.

14 Then in the late 1990's we were chosen  
15 to be a demonstration technology for mixed  
16 wastes -- mixed chemical -- radiochemical waste  
17 cleanup by the Western Governor's Association.  
18 However, let me just say it very simply and  
19 without any sort of malice intended. There  
20 were just political considerations at the time  
21 that made it impossible for that plan to be  
22 implemented. However, the technology has  
23 proven to produce very high destruction and

1 removal efficiencies. We have done it with  
2 many things ranging from chlorinated solvents  
3 to pesticides that are surrogates for chemical  
4 warfare agents and SOx and NOx emissions from  
5 combustion facilities and so forth. We are  
6 attempting to achieve ALAR, as low as  
7 reasonably achievable.

8           Then the next thing in this  
9 collaborative venture or plan was for Cob  
10 Creations to send the test results to the EPA  
11 for review and they were satisfied that the  
12 technology could demonstrate ALAR or near zero  
13 emissions based on some of the past tests that  
14 the Los Alamos Laboratory has completed.

15           So, Cob's goal was not simply to deal  
16 with this process engineering fuel in an old-  
17 fashioned coal fluidized bed furnace or  
18 something like that, they wanted higher  
19 performance and higher efficiencies. Coal  
20 facilities are about 80 percent efficient just  
21 in the furnace. There's ash that's residual,  
22 it's toxic to the ground and has to be managed.  
23       And of course, there's a lot of air pollution

1 and that's where plasma can play a particular  
2 role in terms of treating air pollution.

3 And then the technology from Applied  
4 Plasma Technologies, Dr. Matveev's technology  
5 for which he has U.S. patents on this so-called  
6 "plasma tornado" that possibly can produce  
7 above 99 percent combustion efficiency for the  
8 process engineered fuel if the fuel is ground  
9 up into micronized particles.

10 So what we are looking at here is  
11 coupling Los Alamos' plasma off-gas treatment  
12 technology as an ideal marriage with an  
13 advanced combustion system to try to achieve  
14 near zero air pollution emissions.

15 So the next thing I'll talk about is  
16 new or significantly improved technology. All  
17 these ideas that we're looking at and that I've  
18 presented here so far I believe are the  
19 cleanest combination of technologies that can  
20 give us the cleanest combustion for the fuels  
21 and power of the 21st century in the world  
22 today. So our non-thermal plasma portion of  
23 this was paid for by the Department of Energy

1 and also by funds in agreements to partners in  
2 the industrial sector. So it was developed  
3 both by the DOE and by funding from the private  
4 sector, but the laboratory owns the  
5 intellectual property right now.

6 Applied Plasma Technologies plasma  
7 combustion, for example, for what are called  
8 plasma pilot lights for engines and then the  
9 stabilization of combustion is not entirely  
10 new, but it's very new to power generation. It  
11 was used in the former Soviet Union for  
12 military applications like fighter aircraft to  
13 relight stalled jet aircraft and also stabilize  
14 combustion in military aircraft and watercraft  
15 and so forth.

16 So I believe we are on the cusp of an  
17 opportunity here to leverage the Department of  
18 Energy's past investments and their commitment  
19 to develop innovative technologies for the DOE  
20 complex cleanup, as I mentioned, and then to  
21 transfer these technologies as is some of the  
22 mission of the Department of Energy  
23 laboratories, transfer these technologies to

1 the private sector to strengthen our nation's  
2 energy security.

3 So plasma-based pollution control and  
4 plasma-assisted combustion are established  
5 technologies, but they haven't been  
6 commercialized for power generation and they  
7 are new to it and we believe, you know, they  
8 will result in clean combustion, but they have  
9 not been applied commercially to date in the  
10 United States. So Cob Creations will be the  
11 technology vendor and so it will take  
12 technology developed within the DOE and apply  
13 it newly to energy advances and cleaner use of  
14 energy and optimize the use of many things like  
15 municipal solid wastes. So, I believe it's  
16 possible that we could really foster a leap  
17 forward and clean use of energy and pollution  
18 control for our nation.

19 Thank you for your attention.

20 MR. BELMAR: Thank you very much.

21 Our next witness this afternoon is  
22 Marilyn Elliott with Cob Creations.

23 Again, I'm interpreting your testimony,

1     sir, as saying that the regulations that have  
2     been proposed are satisfactory to you. You  
3     didn't have any specific suggestion or  
4     amendments to the notice of proposed rulemaking  
5     to change any of the proposals? And that's the  
6     focus that we have primarily here on how to  
7     make sure that whatever regulations are adopted  
8     on a final basis can accommodate the projects  
9     that would fall within the scope of Title XVII.

10           MS. ELLIOTT: Well, I'd just like to  
11     thank Dr. Rosocha for coming and speaking this  
12     afternoon. I would also like to thank Dr.  
13     Matveev for his and Dr. Rosocha's assistance  
14     with this project.

15           My name is Marilyn Elliott and I am  
16     Chief Engineer for Cob Creations. I truly do  
17     appreciate the fact that the proposed rule when  
18     final shall not apply to the pre-applications  
19     and applications that were submitted on  
20     December 31st of being that Cob Creations did  
21     get their pre-application in on the 31st of  
22     December 2006.

23           I understand that the loan guarantee

1 program should only be in use by technologies  
2 that have been used in a very limited number of  
3 commercial projects or only for a limited  
4 period of time. However, the proposed rules  
5 states that the DOE proposes to state in its  
6 regulations that a technology would be  
7 considered in general use and therefore  
8 ineligible for a Title XVII loan guarantee if  
9 it has been ordered for, installed in, or used  
10 in five or more projects in the United States  
11 at the time the loan guarantee is issued.

12 I recommend changing that language to  
13 read that the technology is considered in  
14 general use and therefore ineligible for a  
15 Title XVII loan guarantee if it has been  
16 ordered for, installed in, or used in five or  
17 more projects in the United States at the time  
18 the loan guarantee pre-application has been  
19 submitted or the application has been  
20 submitted, instead of at the time that the loan  
21 guarantee is issued. The project review  
22 process is and can be a lengthy one, evidently.  
23 And in innovative technology you really should

1 not be penalized and deemed ineligible for a  
2 loan guarantee just because it has the ability  
3 to obtain some limited funding and obtain some  
4 orders during that review process.

5           The proposed rules focus on issuing  
6 loan guarantees for new or significantly  
7 improved technologies. However, there is no  
8 language addressing supporting systems of said  
9 technologies of which an entire process is  
10 composed or comprised. These supporting  
11 systems could very well make up the bulk of the  
12 project costs. I would like to elaborate on  
13 this point. For instance, Cob Creations is a  
14 technology vendor which produces a clean,  
15 process-engineered fuel from a municipal solid  
16 waste. And it uses that fuel for power  
17 productions and efficiencies of 80 percent or  
18 higher, while at the same time producing zero  
19 emissions as Dr. Rosocha informed us.

20           The technology that we utilize for the  
21 first step in our process is recovering  
22 recyclables. And that technology has actually  
23 been available in the United States for more

1 than 20 years. However, in our evaluation of  
2 this technology we discovered that there are  
3 several components that are inefficient and  
4 which we could optimize and we have such as the  
5 employment of passive cryogenic systems with no  
6 moving parts, and very highly efficient  
7 superconductivity technology; magnetic  
8 levitation; and micronization using the high  
9 speeded vortex. And this is the micronization  
10 of our fuel that Dr. Rosocha was saying would  
11 be definitely needed.

12 Now, these systems that are supportive  
13 systems, as you can see, we have taken a great  
14 deal of effort to optimize and to use quite a  
15 bit of innovation there and I think that these  
16 should qualify for a loan guarantee. However,  
17 when a project just takes a new innovative  
18 system and it couples it with quite  
19 conventional systems, then I think that one  
20 should maybe be put a little bit farther down  
21 the line and the one with the most innovation  
22 of course should take first place. It's Cob's  
23 position that a marriage of new, innovative

1 technology with conventional systems that have  
2 not been optimized is akin to putting new wine  
3 into old bottles and would definitely do the  
4 public a disservice.

5           Our investigation revealed that there's  
6 a non-commercial, proven technology for zero-  
7 emissions combustion, which Dr. Rosocha has  
8 informed us about, and we can bring that to the  
9 marketplace. We have also discovered that  
10 there are technologies that are available to  
11 generate electricity which when carefully  
12 integrated into a unit increase the power  
13 efficiencies of 80 percent or greater while at  
14 the same time producing zero emissions, this  
15 section of our facility, the power generation  
16 facility or the power generation section  
17 utilizes, to name a few, the technology that  
18 was introduced by Tesla and that has actually  
19 been optimized by manipulation of the boundary  
20 layer using electrohydrodynamics.  
21 Thermoacoustics is another technology that we  
22 are employing. Along with the  
23 superconductivity and the magnetohydrodynamics

1 with a proprietary twist that actually solved a  
2 lot of the problems that were associated with  
3 that technology.

4 Our mission has been to bring a  
5 solution to the problem of our increasing need  
6 for energy, without adding to the environment's  
7 current burden of greenhouse gases and toxic  
8 air emissions. Cob's mission is to use a  
9 renewable source of energy, return those  
10 valuables from that source back into the  
11 marketplace and produce clean-burning fuel and  
12 supply electricity for our nation's economic  
13 machinery.

14 So it's my recommendation that the DOE  
15 loan guarantee should focus, not only on new  
16 and innovative technologies but should support  
17 projects that take an innovative approach to  
18 the conventional supporting systems as well as  
19 those technologies.

20 Finally, I would like to suggest that,  
21 given the fact that there is a Waste-to-Energy,  
22 Zero-Emissions technology available, that Cob  
23 has, that municipal solid waste be added as a

1 separate category that will qualify for the DOE  
2 loan guarantee. What I've noticed is that we  
3 have a category that is entitled "Renewable  
4 Energy Sources and Biomass and wind, et al,"  
5 are listed as acceptable in that category and  
6 municipal solid waste has been specifically  
7 declared ineligible for that. Now, that we  
8 have this Waste-to-Energy, Zero-Emissions  
9 technology available I think that municipal  
10 solid waste should definitely be included. Cob  
11 Creations meets the criteria in the efficiency  
12 electrical generation and the pollution control  
13 categories, however, once again I'm just  
14 reiterating that municipal solid waste has been  
15 disqualified. It is my position that financial  
16 support for innovative projects to turn MSW  
17 into a clean-burning fuel will provide another  
18 source of energy while at the same time clean  
19 up our environment. We do realize that even  
20 though you can take the trash out today, you  
21 would still have to take it out tomorrow.

22 Thank you so much for allowing me this  
23 time.

1 MR. OLIVER: I have one quick question.

2 MS. ELLIOTT: Yes.

3 MR. OLIVER: When you say "municipal  
4 solid waste has been disqualified" you mean  
5 under the guidelines?

6 MS. ELLIOTT: Yes.

7 MR. OLIVER: Okay. Because under NOPR  
8 we don't do that.

9 MS. ELLIOTT: Right.

10 MR. OLIVER: Okay.

11 MR. BELMAR: Thank you very much. Our  
12 next person to make a presentation is Ben Rees  
13 with Evolution Markets. Okay. If you would  
14 identify yourself for the record.

15 MS. ZOLLINGER: I will. My name is  
16 Marni Zollinger, I'm the CEO of Cob Creations,  
17 LLC. Ben Rees is out of California and his  
18 travel plans took him as far as Texas today.  
19 And so by agreement we have asked if we could  
20 read it into the record. There are the three  
21 copies and he was cleared as a speaker. And so  
22 I'm going to just go ahead and read his  
23 statement if that's all right. Okay.

1           My name is Ben Rees. I broker  
2 Renewable Energy for Evolution Markets,  
3 Incorporated. Evolution Markets, Inc. is the  
4 world's largest energy and environmental  
5 commodities brokerage inclusive of Greenhouse  
6 Gas reductions, SOx Emissions Allowances, NOx  
7 allowances, OTC Coal, Emission Reduction  
8 Credits, Houston NOx allowances, Los Angeles  
9 NOx and Sox, Discrete Emissions Reductions,  
10 Renewable Energy Credits, Weather Derivatives,  
11 Natural Gas and Power, Evolution Markets'  
12 brokers have facilitated the first trades, and  
13 are the highest volume brokers and have been  
14 voted best broker across the majority of these  
15 commodities.

16           I wish to address the Financial  
17 Structure of the DOE loan guarantee as  
18 discussed as per page 20 of the DOE material  
19 published on May -- it says May 20th, but I  
20 believe it's May 10th. In this discussion, the  
21 concern of the DOE is that the debt (which the  
22 DOE may guarantee) have position for first lien  
23 position of the potential projects. It is an

1 unusual investor who allows this with the debt  
2 player. Cob has been innovative in their  
3 approach, finding a win-win-win with those who  
4 need clear power credits, called RECs, to  
5 occupy this funding position and so most  
6 effectively protect the DOE and the taxpayers'  
7 interests.

8 We have been working with Cob to  
9 provide the equity portion of these facilities.

10 Cob has worked with the Green-e program  
11 administered by the Center for Resource  
12 Solutions in San Francisco, California. The  
13 Green-e program is the effective regulatory  
14 body of the national voluntary RECs market  
15 insofar as they define eligibility criteria for  
16 facilities as well as perform an end-of-year  
17 audit to ensure the accurate accounting of  
18 national voluntary RECs transactions. COB  
19 Creations is on track to become the first  
20 municipal solid waste technology to be Green-e  
21 eligible. Because of the LANL's fantastic  
22 results the federal EPA's evaluation, and the  
23 certified ASTM lab results of the PEF made from

1 municipal solid waste they are the first  
2 combustion technology ever to be truly possible  
3 as a RECs producer.

4 I have been tasked with generating 20  
5 percent of total costs of development from the  
6 Renewable Energy Credit sales to voluntary REC  
7 buyers. Evolution Markets Inc. brokers roughly  
8 90 percent of the total volume of national  
9 voluntary RECs. In what has historically been  
10 an undersupplied market, the range of voluntary  
11 buyers have expressed strong interest in the  
12 Cob Creations facilities, and, pending  
13 contractual agreement and credit approval  
14 between the counterparties, we are very  
15 confident that we will successfully negotiate  
16 Renewable Energy Credit transactions between  
17 Cob Creations and buyers, sufficient to cover  
18 the required 20 percent non-debt portion of the  
19 project finance. The purpose of the RECs in  
20 both voluntary as well as compliance markets is  
21 to create an alternative financing stream for  
22 renewable energy projects. Please feel free to  
23 call or write me directly for further

1 information regarding renewable Energy Credits.

2 We believe that the rule giving debt  
3 priority will discourage investors, but  
4 encourage national investment in Clean Energy  
5 Projects that are truly able to meet the GREEN-  
6 e standard through RECs. The DOE should  
7 consider this particularly because we know of  
8 no other party but Cob who can do this, if they  
9 wish to write the rules so strictly. We are  
10 glad to be part of this project.

11 MR. BELMAR: Thank you very much. Our  
12 next witness is Mayor Andre DeBerry, the Mayor  
13 of the City of Holly Springs, Mississippi.  
14 Okay. I guess you were before. I skipped a  
15 line. I skipped two lines, actually.

16 Can you please identify yourself?

17 MS. ZOLLINGER: I certainly will.

18 [Laughter.]

19 MS. ZOLLINGER: Greetings everyone. My  
20 name is Marni Zollinger and I'm the CEO of Cob  
21 Creations, LLC. As the party charged with  
22 carefully holding the Intellectual Property, I  
23 have a few concerns to cover quickly from the

1 DOE material on the loan guarantee published  
2 May 10th, 2007. They are very logical, but  
3 they appear to have been overlooked.

4 First, on page 61, number 11 which  
5 reads, "operate, convey and dispose of the  
6 defaulted project" to be changed to read,  
7 "operate, convey and dispose of defaulted  
8 machinery." And page 62 number 18 which reads,  
9 "DOE or its representatives have access to the  
10 project site at all reasonable times in order  
11 to monitor the performance of the project" to  
12 be amended to "DOE or its representatives to  
13 have access to machinery it guarantees at all  
14 reasonable times in order to monitor the  
15 performance of the machinery still or until  
16 satisfaction/retirement of the loan guarantee."

17 We believe that these changes will  
18 provide the incentive for today's innovations  
19 and give incentive for the satisfaction of the  
20 loans so that the next Next Generation or new  
21 innovations can come forward in the subsequent  
22 years.

23 To all parties, we stand together here

1 today to move forward while many applicants  
2 have, due to the May 10th document which  
3 clarified HOW new and HOW innovative a project  
4 needed to be, to qualify for the loan  
5 guarantee, do not.

6 I have no doubt that there are many  
7 disappointed parties who made small  
8 improvements in existing technologies, which  
9 were good and laudable, but not of interest to  
10 the 2005 Congress, which asked for no less than  
11 Revolutionary Advances.

12 In their words, they seek to Loan  
13 Guarantee projects that avoid, reduce, or  
14 sequester air pollutants or anthropogenic  
15 emissions of greenhouse gases; and employ new  
16 or significantly improved technologies as  
17 compared to commercial technologies and service  
18 in the United States at the time the guarantee  
19 is issued.

20 Our technology fits three of the ten  
21 categories, but the DOE made it clear that the  
22 category list was nonexclusive, as you pointed  
23 out. If we had invented the moon sling, the

1 re-atomizer, or any dynamo, whatever answered  
2 the call for REVOLUNTIONARY CHANGE and could  
3 perform, was eligible.

4 In short, the DOE quietly announced a  
5 Manhattan Project to answer our nation's need  
6 for abundant clean energy. Was it necessary?  
7 Is it necessary? Some might feel that the  
8 natural plan of our society, rewarding the  
9 diligent and the "better choice" with commerce,  
10 also predicates our continual improvement.

11 I'm sorry to say that that is naïve.

12 In summer of 2006, Cob had ASTM  
13 certified tests on process engineered fuel from  
14 MSW from Southern's Alabama Power.

15 The results can be summarized quickly:

16 Our PEF from renewable source was higher in  
17 BTUs, significant lower in SOx, NOx, Mercury  
18 and ash.

19 The question to ask the person who  
20 believes that our American way naturally will  
21 produce the improvements that American people  
22 want is, "Why is there still a single coal  
23 burning facility in America today that did not

1 convert to PEF?"

2 Why isn't our air cleaner and our  
3 energy less expensive today?

4 The answer to the question of why we  
5 are still burning fossil fuels is ... because  
6 there exist fossil fuel burning facilities in  
7 America, and the utilities and many other third  
8 parties have long-standing mutually beneficial  
9 relationships.

10 If there is another answer, I would  
11 like to hear it and I want to hear it.

12 I, too, would like to believe in that  
13 American that would naturally reward a cleaner,  
14 better, more abundant renewable fuel. But I  
15 learned that sending our test results to the  
16 procurement department or the new fuels  
17 analysis section of a utility was worth a block  
18 against my email.

19 Now, why should that have been  
20 discouraging?

21 What do we care if they don't want  
22 better returns and less pollution?

23 The answer is: Financial Realities.

1 Building a multi-million dollar facility  
2 requires long-term contracts to purchase the  
3 process engineered fuel or product. By not  
4 buying our PEF, the utilities had blocked new,  
5 upcoming, cleaner, better, renewable fuel.

6 We only overcame that effective block  
7 when we determined to 1) turn the PEF to power  
8 directly from the landfill; 2) with zero  
9 emissions; 3) sell power -- a readily  
10 exchangeable commodity to pay the debt in  
11 return investment.

12 But in achieving all of this, we  
13 optimized and improved the facility beyond the  
14 recognition or the ready recognition of the  
15 average banker. We were in innovation's no-  
16 man's land. And that is the Cob story.

17 Someone in Congress understood this. I  
18 do not know who. Someone in Congress wanted to  
19 see a truly forward program and knew where the  
20 power would have to be applied in a financial  
21 package. The Congress did ask that we do the  
22 rest of the work to activate the financial  
23 package. The DOE recognized that technology

1 alone does not build facilities. We were asked  
2 to bring the bank for debt, the investors for  
3 equity, and the municipalities and collateral,  
4 all of which require a strong coalition of the  
5 willing to fight a different war. I could not  
6 be more proud of the Congress that did this.

7           It looked for new faces and truly new  
8 technologies in the banker as no-man land of  
9 innovation and offered a kind of support, not  
10 direct tax dollars with government scientists,  
11 but a Romanesque solution -- a loan guarantee.

12       How I wish that all of my tax dollars could be  
13 not spent this way.

14           But the battles are not yet over. In  
15 the testimony of the General Accounting Office  
16 on April 24, 2007, before the Subcommittee of  
17 Energy and Air Quality and the Committee on  
18 Energy and Commerce in the House of  
19 Representatives the GAO censured the Department  
20 of Energy. They reported that in February of  
21 2007 that the DOE had spent approximately one  
22 half million dollars from three separate  
23 accounts to perform the early labors of the

1 pre-app phase, and then, through February, the  
2 DOE Deputy General Counsel and others continued  
3 to work on the project by creating the notice  
4 of the proposed rulemaking that we are all  
5 responding to, and reviewing the pre-  
6 applications for completeness.

7           The General Accounting Office takes  
8 offense because the DOE had implied that they'd  
9 suspended the work and that they were  
10 obediently waiting on their hands for their  
11 proper appropriations.

12           I want to commend the entire DOE staff  
13 and especially the Deputy General Counsel for  
14 working above and beyond the call of duty. In  
15 any other business your dedication would have  
16 earned you recognition. But in government  
17 while the DOE recognizes the DOE had  
18 independent authority to implement the loan  
19 guarantee program the DOE was censured and  
20 required to report their misdeed to the  
21 Comptroller General of the United States.

22           I believe that anything that derails  
23 the Loan Guarantee process is against the

1 solution to the war abroad and the power and  
2 pollution crisis that we face at home.

3           The future of zero emissions,  
4 renewables stock, high efficiency combustion  
5 and who knows that other fantastic advances  
6 should not be in the hands of a comptroller. I  
7 call on every Senator on the Hill (97 of whom  
8 were informed of zero emissions combustion in  
9 January of this year) every representative and  
10 every presidential candidate to give support to  
11 the DOE and this new vitally important  
12 Manhattan Project that will create a new age in  
13 clean air and clean, abundant power.

14           The DOE states that they maintained  
15 then and now that they were in the right.

16           We, Cob, and our partners LANL and APT,  
17 our financial partners and investors and the  
18 municipalities themselves, cannot think of a  
19 better revenge than complete success. We  
20 intend to do our part for the common good, for  
21 every service man in a war zone today, for  
22 every man, woman, and child that has asthma,  
23 allergies, or worse, caused by particulates in

1 the polluted air that we breathe.

2 God willing and politicians UNTIED FOR  
3 OUR GOOD, the DOE Loan Guarantee Program will  
4 go on.

5 Thank you.

6 MR. BELMAR: Thank you.

7 Now, we finally get to Mayor Andre  
8 DeBerry from the City of Holly Springs.

9 MR. DeBERRY: Good evening. And to  
10 think that I have to come behind Marni.

11 [Laughter.]

12 MR. DeBERRY: Let me take this  
13 opportunity to thank the members of the panel  
14 and the DOE loan guarantee staff for this  
15 opportunity for a little insignificant  
16 politician statesman to come here from a small  
17 community called Holly Springs, Mississippi to  
18 come and to hopefully bring some level of  
19 competence to this whole process as we try to  
20 move forward.

21 And I promise you I will not be a  
22 typical elected official. My presentation will  
23 probably be the shortest of all, and as it

1 should be.

2           The City of Holly Spring, Mississippi,  
3 is an applicant who has submitted, with the  
4 sponsorship of IFFG and using the COB Creations  
5 combination technology, an application to the  
6 DOE LG Program. I would like to address the  
7 DOE material for this application policy  
8 session page 29, discussing the Executive Order  
9 13272 for the proper consideration of small  
10 entities. I could see reading through the  
11 document that DOE has considered the needs of  
12 small entities such as inventors but has it  
13 considered the needs of smaller yet creative  
14 communities.

15           The City of Holly Springs is steeped in  
16 history, culture and architectural  
17 significance. It has served as a staging  
18 ground in two of the most significant events in  
19 our nations' history, those being the Civil War  
20 and the Civil Rights Movement. With the advent  
21 destruction of Hurricane Katrina the state has  
22 found itself recovering from a substantial  
23 negative economic punch. Yet, while it is

1 weathering the blow, still there is a need to  
2 employ additional economic tools to increase  
3 the essential earning potential of our  
4 residents and create a system of delivering  
5 that (once and for all) expands and challenges  
6 our creative skills and knowledge.

7           Once more referring to the Executive  
8 Order 13272 "proper consideration of small  
9 entities" in rulemaking to say "As there are  
10 other larger cities with applications, such as  
11 Phoenix with more population, and Salt Lake,  
12 states such as New Mexico and Ohio with more  
13 pollution, Florida and Kentucky with other  
14 strategic advantages, I urge the DOE to  
15 consider our location and people, who were the  
16 first to provide a letter of intent to Cob  
17 Creations. I would ask that the DOE consider  
18 allowing preference for locations that are  
19 smaller, just as, per Executive Order 13272 you  
20 observe considerations for small entities.

21           Additionally, perhaps consideration  
22 would be given to the fact that other locations  
23 have other renewables that can be utilized,

1 such as sunnier locations for PV and windier  
2 locations for wind farms. Holly Springs wants  
3 to become a renewable clean power producer. A  
4 Holly Springs Cob facility in Mississippi could  
5 provide clean, reliable power and jobs for  
6 hundreds of people.

7           The late Senator Robert Kennedy once  
8 remarked that "Some men see things as they are  
9 and ask why?" I dream things never were and  
10 ask why not?"

11           These are the kinds of opportunities  
12 that have in the past been missed for the  
13 people of Mississippi. On my watch as mayor, I  
14 will fight for our residents and so I wanted to  
15 appear here myself in person. For we all must  
16 recognize that abundant, clean energy will  
17 always mean an abundant economy, and prepare us  
18 for the future. As we continue to dream things  
19 never were and ask why not.

20           Victor Hugo once reminded us there's  
21 nothing so great in all the earth as an idea  
22 whose time has come to be born and to be  
23 implemented. I submit to you this afternoon

1       that the idea and the time has come for this to  
2       be born and to be implemented.

3               Thank you so much.

4               MR. OLIVER: Thank you.

5               MR. BELMAR: Thank you, sir.

6               Our next speaker is Mr. Michael McCall  
7       with Forex Financial Group.

8               MR. McCALL: Good afternoon. Once  
9       again, my name is Michael McCall. I'm with  
10      International Forex Finance Group and we are  
11      one of the sponsors that basically help  
12      facilitate and integrate this team. And to set  
13      up a win-win solution for this opportunity the  
14      Department of Energy has allowed institutions  
15      and other investors to participate. My  
16      presentation is going to be very short. The  
17      team has made a really good presentation on  
18      where we're heading and we really appreciate  
19      the Department of Energy to allow the guarantee  
20      program to help the institutions to finance  
21      these types of technologies, especially these  
22      innovative technologies.

23              One of the things I wanted to add is,

1 you know, in today's market to access capital  
2 in the supply and demand to excess capital is a  
3 very difficult process. And, you know, we  
4 really need to focus on the bank institutions  
5 to maybe relook at their process and  
6 requirements to provide these types of funding  
7 for these types of activities. Although as you  
8 may well know, banking provides unsecure loans  
9 at 20 and 24 percent, you know, and here we  
10 have the Department of Energy providing a  
11 guarantee to revolutionize the economy,  
12 creating jobs, and basically being in the  
13 forefront of the world economy as far as the  
14 energy sector. So we really appreciate that to  
15 be in place.

16           There was a comment in the DOE  
17 guidelines that talks about -- on page 22,  
18 about adopting -- merits adopting minimum  
19 equity percentages. Well, in this particular  
20 case you have a company that have contracts,  
21 purchase agreement that basically be driven by  
22 cash flow. So I don't have any comments in  
23 regards to that, but I noticed that was in

1 place, but just to keep you in mind that when  
2 you look at the pre-application and the  
3 supplement to the pre-application agreements  
4 with the energy sector to generate those  
5 revenue streams, the debt service, the project  
6 and its costs, I think we meet those  
7 requirements there. So I appreciate it and,  
8 again, really appreciate Cob Creations, Dr.  
9 Rosocha, and Mayor DeBerry which took the first  
10 lead and it's a city a municipality that wants  
11 to participate and understand the future in the  
12 need of its community and we are really excited  
13 to see this revolutionary activity for the  
14 economy providing regarding the energy  
15 promotion. Thank you.

16 MR. OLIVER: Thank you.

17 MR. BELMAR: Thank you very much.

18 Our next witness is Stephan Dopuch of  
19 Beard Energy.

20 MR. DOPUCH: I guess I have to say I  
21 vote for Mississippi.

22 [Laughter.]

23 MR. DOPUCH: Very good. Thank you

1 ladies and gentlemen and distinguished  
2 representatives of the Department of Energy and  
3 other guests. My name is Steve Dopuch. I'm  
4 Vice President of Baard Energy. Baard Energy  
5 is a privately held firm owned by John and  
6 Kathie Baardson. Our corporate offices are in  
7 Vancouver, Washington. We also have offices in  
8 Salt Lake City, Utah; Cleveland and Columbus,  
9 Ohio. I am a resident of northeastern Ohio,  
10 and I'm here today on behalf of Baard Energy.  
11 I want to thank you for the honor to address  
12 you today.

13 Baard Energy is in the business of  
14 developing plants which produce alternative  
15 energy and fuels from advanced technologies.  
16 Our development experience includes wood-  
17 burning power plants, natural gas cogeneration,  
18 ethanol, and we are also working in the area of  
19 biodiesel, oil shale, and, of course, coal.  
20 Our first development in Ohio, as a matter of  
21 fact, will be a 55 million gallon per year  
22 ethanol plant located in Coshocton, Ohio. That  
23 project is currently under construction and is

1 now owned by a company by the name of Altra,  
2 Incorporated. Last summer Beard Energy  
3 announced the Ohio River Clean Fuels project,  
4 an alternative fuels facility to be located in  
5 Wellsville, Ohio, also a very small city in  
6 Ohio in northern Appalachia. The plant will  
7 produce approximately 35,000 barrels a day of  
8 ultra-clean transportation fuels which will be  
9 converted from domestic sources of coal and  
10 biomass feedstocks; both abundant resources  
11 found in Ohio and throughout the Appalachian  
12 region. Our project is designed to be carbon-  
13 stingy and we will operate to provide synthetic  
14 fuels from coal and biomass that actually  
15 reduce lifecycle greenhouse gas emissions as  
16 well as providing significant reductions in  
17 urban emissions during the use of these fuels.

18 Construction of this plant will require  
19 over 4,000 skilled ironworkers, pipefitters,  
20 electricians, and other skilled tradesmen.  
21 Once completed, the plant will employ more than  
22 250 people who will be highly paid chemical-  
23 industry wages, wages that are meaningful and

1 provide a very comfortable lifestyle for these  
2 employees. In other words, these are quality  
3 jobs. The estimated job creation beyond the  
4 immediate plant is expected to be over 2.5 to 1  
5 during the construction phase. And during  
6 operations, the anticipated jobs multiplier is  
7 estimated to be nearly 3 to 1. And this does  
8 not include the estimated 350 high-paying coal  
9 mining jobs which are projected to be by some  
10 in the industry have its own job multiplier of  
11 5 to 1 or greater.

12 Our company has contracted a number of  
13 world-class partners to assist us in this  
14 project. And I'll skip this part of my  
15 testimony for the sake of time, but we have  
16 assembled a great group of professional  
17 engineers to help us to put this together.

18 We wish to provide our comments today  
19 in order to further the important work that the  
20 Department of Energy has been directed to  
21 initiate by Congress in Title XVII of the  
22 Energy Policy Act as well as the important  
23 objectives outlined by the President's Advanced

1 Energy Initiative. We are very encouraged by  
2 the thinking expressed by the Department of  
3 Energy Loan Guarantee Office in their recent  
4 NOPR. And please understand that our comments  
5 are focused on our intimate knowledge and  
6 interest in the coal-to-liquids aspects of the  
7 program in question. And this is the basis for  
8 all our comments to you.

9 Before I detail our comments today, let  
10 me first make a definitive statement to you.  
11 That is, we feel the prescribed rules as  
12 implied in the NOPR are a clear indication that  
13 DOE has invested a significant amount of time  
14 in furthering their understanding of what it  
15 will take to attract capital in order to  
16 finance these facilities. We believe you have  
17 a realistic notion of what the challenges are.

18 As mentioned in the written comments to  
19 you submitted on June 12th, in the interest of  
20 brevity we wish to highlight three major  
21 components that we feel will be crucial in  
22 setting the proper and responsible environment  
23 for attracting major streams of capital to fund

1 a number of very significant developments in  
2 our country. And let's not forget, we are  
3 trying to significantly reduce our dependence  
4 on foreign oil while not ignoring environmental  
5 concerns. And as mentioned earlier Baard will  
6 build a project that will even improve the  
7 environmental impact of liquid transportation  
8 fuels. Finally, these developments must be  
9 robust and provide decent and certain economic  
10 returns for the investment community.

11 First, in the area of project costs,  
12 Baard Energy has provided the DOE guidance on  
13 one method of creating a solid business model  
14 which includes the ability to provide the  
15 project price-certainty that will be very  
16 important to the capital markets. The capital  
17 necessarily to meet initial margin requirements  
18 to support commodity hedges should be  
19 specifically included in the definition of  
20 project costs by the loan guarantee program.  
21 The justification for this decision is that  
22 instruments such as these will better insulate  
23 these projects from volatile commodity market

1 risks and significantly add to the certainty of  
2 the project to pay its debt.

3           In the area of credit subsidies, our  
4 project has already planned for the necessity  
5 of self-paying for the loan guarantee  
6 subsidies. Therefore, we do not feel that any  
7 special authorization beyond DOE program costs  
8 will be necessary and we firmly agree and  
9 encourage the DOE's intention to proceed in  
10 this fashion.

11           In the area of financial structure, we  
12 have noted our agreement with the DOE on the  
13 insistence in maintaining a first-lien  
14 priority. More important, we are applauding  
15 the Department's intention to adjust the  
16 guaranteed amount to 80 percent with even more  
17 consideration to enhance the additional debt.  
18 Our financial advisors are very encouraged by  
19 this signal. While we would still suggest more  
20 consideration for the stripping provisions, we  
21 have noted in our comments to you that we  
22 understand the concerns expressed by DOE.  
23 Baard Energy feels that the adjustment in the

1 guaranteed amount may encourage and will  
2 encourage more capital investment interest in  
3 these high-profile projects.

4           So, finally I would like to close and  
5 thank the Department of Energy. We look  
6 forward to your help in pushing these important  
7 programs forward. These are very important  
8 projects. We do in fact need a loan guarantee,  
9 I won't beat around the bush on that. Most of  
10 all, we want to thank you for the valuable time  
11 you took to listen to us today. Thank you,  
12 gentlemen.

13           MR. OLIVER: Thank you.

14           MR. BELMAR: Thank you very much. This  
15 is the last witness for the day. We found it  
16 very helpful to hear from everyone. We have  
17 the record open on this rulemaking proceeding  
18 until the 2nd of July. So, if based on any of  
19 the comments you've heard or anything that your  
20 unique circumstance makes you focus on now that  
21 you've had a chance to hear other people's  
22 comments and wish to further educate us, we  
23 would encourage you to submit written comments

1 that expand on the points and that you think  
2 deserve to be given further attention.

3           With that, I would like to thank you  
4 all for your time and effort and all of the  
5 assistance that you've afforded the Department  
6 in helping us to fashion a better, more  
7 workable rule. And we share with you the  
8 desire to achieve the objectives that Congress  
9 set out in the statute when it did enact Title  
10 XVII. We thank you for your help.

11           With that, the hearing is adjourned.

12           [Whereupon, at 2:00 p.m., the public  
13 meeting was adjourned.]