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Meeting Title: Briefing on Design Basis Threat  
Revolution

Meeting Date: 4/22/93 Open ✓ Closed \_\_\_\_\_

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

Title: BRIEFING ON DESIGN BASIS THREAT REEVALUATION

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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BRIEFING ON DESIGN BASIS  
THREAT REEVALUATION

- - - -

PUBLIC MEETING

Nuclear Regulatory Commission  
One White Flint North  
Rockville, Maryland

Thursday, April 22, 1993

The Commission met in open session,  
pursuant to notice, at 2:35 p.m., Ivan Selin,  
Chairman, presiding.

COMMISSIONERS PRESENT:

IVAN SELIN, Chairman of the Commission  
KENNETH C. ROGERS, Commissioner  
JAMES R. CURTISS, Commissioner  
FORREST J. REMICK, Commissioner  
E. GAIL de PLANQUE, Commissioner

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## STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

SAMUEL J. CHILK, Secretary

WILLIAM C. PARLER, General Counsel

JAMES TAYLOR, Executive Director for Operations

ROBERT BERNERO, Director, NMSS

FRANK MIRAGLIA, Deputy Director, NRR

ROBERT BURNETT, Director, Division of Safeguards &  
Transportation, NMSS

FRANK CONGEL, Director, Division of Radiation  
Protection and Emergency Preparedness, NRR

PAUL LEVENTHAL, President and Executive Director,  
Nuclear Control Institute

DAN HORNER, Deputy Director, Nuclear Control Institute

ELDON V.C. GREENBERG, Counsel to Nuclear Control  
Institute

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

2:35 p.m.

CHAIRMAN SELIN: Good afternoon, ladies and gentlemen. The Commission is meeting at this time to receive a briefing on the reevaluation of the design basis threat.

Mr. Leventhal, please have a seat.

Following the intrusion at the Three Mile Island facility and the bombing of the World Trade Center, the Commission requested the staff reevaluate and update if necessary the design basis threat for a vehicle intrusion and the use of vehicular bombs.

The briefing this afternoon will occur in two sections. First there will be a public meeting and after that a closed meeting where more specific security information will be discussed.

I wish to assure the crowd that the closed meeting really does go into more specific information and nothing more than that. The essence of the staff presentation will be given at the public meeting.

This is a means, first, for our invited witnesses, the NCI, to discuss their views and then for the staff to explain directly to the Commission what options are being considered. By this means the Commission hopes to gain a better understanding of the

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1 staff recommendations.

2 The Nuclear Control Institute, which has  
3 requested to address the Commission, will present to  
4 us their views first. I understand copies of the  
5 viewgraphs are available at the entrance to this room.

6 Do any of the other Commissioners have any  
7 opening remarks?

8 Mr. Leventhal, we welcome you and your  
9 colleagues here and you may proceed.

10 MR. LEVENTHAL: Thank you very much, Mr.  
11 Chairman, and also the members of the Commission.

12 We thank you for this opportunity to  
13 present the views of both the Nuclear Control  
14 Institute and the Committee to Bridge the Gap on the  
15 need, as we see it, to require protection of nuclear  
16 power plants against truck bombs and other forms of  
17 vehicular attack.

18 As you know, we've been petitioning the  
19 Commission to take such action over the better part of  
20 the past decade and we do appreciate your willingness  
21 to hear our views today and we hope to seriously  
22 consider our appeal to take the requested action now.

23 As I said, we have been making these  
24 appeals to the Commission on a pretty regular basis  
25 since 1985 actually and my Institute established a --

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1 first held an international conference on prevention  
2 of nuclear terrorism and then convened a task force  
3 with representatives of over nine countries looking at  
4 various aspects of this rather troublesome problem.  
5 One of the issues looked at was the importance of  
6 establishing denial of access at nuclear power  
7 facilities, denial of access being the best defense.  
8 We've consistently over the years with the Committee  
9 to Bridge the Gap, in their testimony before the  
10 Advisory Committee on Reactor Safeguards and our  
11 letter to the Commission at the time of a specific  
12 nuclear threat made over Radio Tehran at the time when  
13 the U.S. was possibly prepared to knock out the  
14 Stuttgart missile batteries to the time of the Gulf  
15 War when again we perceived a possible threat to  
16 nuclear facilities. We've just been doing this for  
17 some time and we hope, as I will testify now, that  
18 recent events will make it clear that such action is  
19 indeed warranted.

20 As we stated in our recent communications  
21 with Chairman Selin, as well as in Senate testimony on  
22 March 19, our position is as follows:

23 One, current security requirements at  
24 nuclear power plants are inadequate to protect against  
25 vehicle bombs because vehicular attack is not included

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1 in the design basis threat for radiological sabotage.

2 Second, recent events have made clear that  
3 such attacks are credible and that the Commission  
4 cannot rely on sufficient advance warning to put  
5 protective measures in place.

6 Third, the Commission must therefore  
7 promptly mandate permanent measures to upgrade  
8 security at licensed reactors.

9 We're encouraged by the Commission's March  
10 1 directive on reevaluation of a design basis threat  
11 and the staff's March 11 action plan is encouraging,  
12 but in our view they do too little, too slowly and  
13 provide no assurance of real reform at the end of the  
14 process. We think that the one year time line built  
15 into the plan is excessive given the potentially  
16 catastrophic consequences of a truck bomb attack and  
17 the feasible and relatively inexpensive measures that  
18 can be put into place quickly to prevent such an  
19 attack.

20 The issue has been before the Commission  
21 for a decade, since the truck bombings of the U.S.  
22 Embassy and the military compound in Beirut. There is  
23 no reason after the TMI and the World Trade Center  
24 incidents here in this country for further delay in  
25 acting to protect our reactors against vehicular

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1 attacks. We emphasize and wish to stress that the  
2 action plan you have before you does not preclude the  
3 Commission's acting more expeditiously than within the  
4 one year time frame that's laid out in that plan and  
5 we ask the Commission to seize the opportunity today  
6 to issue an immediately effective rule modifying the  
7 design basis threat to include vehicular attack in  
8 ordering utilities to proceed immediately with  
9 installation of permanent roadway barrier and  
10 perimeter denial systems.

11 The other elements of upgrading the design  
12 basis threat, namely increasing the number of presumed  
13 attackers, the capability of their armaments and the  
14 level of insider assistance to be protected against,  
15 all of those can be considered in accordance with the  
16 time line of the March 11 action plan. But we wish to  
17 emphasize the importance that we place on immediately  
18 effective rule to first of all acknowledge that  
19 nuclear power plants can be attacked with a vehicle  
20 and, secondly, to require utilities to put in the  
21 basic defenses that would make such attacks virtually  
22 impossible. Talk about simple physical barriers that  
23 have been costed out for the Commission on previous  
24 occasions.

25 You're familiar with the Sandia National

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1 Laboratory's report that was commissioned by the NRC  
2 in 1984 after the Beirut bombings and the non-  
3 classified summary of that report which states that  
4 the results show that unacceptable damage to vital  
5 reactor systems could occur from a relatively small  
6 charge at close distances and also from larger but  
7 still reasonable sized charges at large setback  
8 distances greater than the protected area of most  
9 plants. A second report from Sandia was prepared on  
10 the variety of counter measures that could be used and  
11 SECY-86-101 that same year estimated that a vehicle  
12 denial system for roadway access would cost about  
13 \$100,000.00 to \$200,000.00 for a facility and  
14 \$10,000.00 to \$20,000.00 annual to maintain while a  
15 perimeter access denial system would only cost  
16 \$500,000.00 to \$1 million to install and \$25,000.00 to  
17 \$50,000.00 annually to maintain.

18 Chairman Selin, you cited similar figures  
19 in your Senate testimony of March 19.

20 Now, past Commissions have chosen not to  
21 upgrade the design basis threat on the grounds that a  
22 truck bomb attack in the United States was not  
23 credible, that there was no specific credible threat  
24 against nuclear facilities and if such a threat  
25 materialized there would be sufficient advance warning

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1 to take appropriate preventive measures.

2 We believe that these claims were  
3 dramatically debunked by the surprise truck bomb  
4 attack on the World Trade Center on February 26th and  
5 by the letter received by the New York Times which,  
6 according to published reports, has been linked by  
7 federal investigators to defendants in the case. As  
8 you know, that letter, in the name of the Liberation  
9 Army 5th Battalion, included a threat against "nuclear  
10 targets" and claimed "more than 150 suicidal  
11 soldiers."

12 This incident, on top of the Three Mile  
13 Island incident in which a demented terrorist  
14 successfully penetrated a plant and brought his  
15 vehicle within the "close distances" required to  
16 conflict "unacceptable damage" with a "relatively  
17 small charge," to use the terms of the 1984 Sandia  
18 study. We believe that this event, in combination  
19 with the TMI event, should make the required action by  
20 the Commission quite clear and we remain puzzled as to  
21 why the Commission will not act more promptly to close  
22 what we regard to be an obvious vulnerability.

23 Chairman Selin, you yourself indicated  
24 that had the motorist been transporting explosives,  
25 that he could have damaged safety and emergency

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1 systems and, to use your words, and then you're  
2 skating on very thin ice. We submit that the  
3 Commission really does not know just how thin the ice  
4 was at TMI or is at other reactors, or to put it  
5 another way, how deep is defense in depth without  
6 applying the IPEEE program to apply to radiological  
7 sabotage.

8 For this reason, we believe that an  
9 enhanced implementation of the IPEEE program, one that  
10 examines the ability of vital systems to withstand  
11 credible explosions, should be among the items in the  
12 ongoing reevaluation of the design basis threat.  
13 Because a single explosion could destroy multiple  
14 safety systems, examples of which we specified in the  
15 annex to our original request for action for an IPEEE  
16 program applying to this particular danger, we believe  
17 that IPEEE is an essential corollary to upgrading the  
18 design basis threat.

19 My testimony goes on to cite the  
20 chronology laid out in the Incident Investigation  
21 Team's report on the TMI intrusion and to point out  
22 that -- what should be obvious in the report, which is  
23 that both TMI and NRC personnel failed to considered  
24 promptly the possibility of radiological sabotage.  
25 But, of course, we note that they were not required to

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1 consider the possibility of a vehicle bomb since that  
2 possibility is not included in the design basis  
3 threat.

4 In short, personnel were not prepared for  
5 the possibility of radiological sabotage and more than  
6 two hours elapsed before they even checked for a bomb  
7 and a total of four and a half hours passed before  
8 explosives were finally ruled out by the experts.

9 We support the action taken by General  
10 Public Utilities. They obviously read the writing on  
11 the wall, realized the extent to which their plant was  
12 vulnerable or, to put it another way, how lucky they  
13 are that Mr. Nye did not carry explosives in his car.  
14 We believe the NRC should take its cue from GPU and  
15 promptly upgrade the design basis threat to protect  
16 against such attacks without waiting to see whether  
17 one materializes, whether a truck bomb attack  
18 materializes at a domestic nuclear power plant.

19 None of the Commission's past reasons for  
20 refusing to act can be plausibly defended by this  
21 Commission today. A vehicular intrusion has occurred  
22 at an operating nuclear power plant. A successful  
23 truck bomb attack has taken place in the United  
24 States. There was no advance warning in either case  
25 and there is now a specific and credible threat

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1 against nuclear facilities. Under such compelling  
2 circumstances, continued inaction by the NRC would be  
3 imprudent and would endanger the public health and  
4 safety and the common defense and security of the  
5 United States, both of which it is your mission to  
6 protect under the Atomic Energy Act.

7 So, we asked the Commission today to adopt  
8 an immediately effective rule upgrading the design  
9 basis threat to include attacks with a vehicle. We  
10 asked the Commission to order licensees to immediately  
11 erect roadway barrier and perimeter denial systems.  
12 We asked the Commission to implement an IPEEE program  
13 to determine the ability of vital systems to withstand  
14 credible explosions, and we asked that you vote to  
15 take these actions today before the conclusion of this  
16 meeting.

17 There's no question that the NRC's own  
18 rulemaking procedures permit the Commission to take  
19 such action by means of an immediately effective rule  
20 if it finds that for good cause the usual notice and  
21 comment are "impractical or impracticable or contrary  
22 to the public interest." We submit that to delay any  
23 longer taking the basic measures needed to address the  
24 obvious vulnerability of nuclear power plants to truck  
25 bomb attacks is both impracticable and contrary to the

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1 public interest.

2 We thank you again for this opportunity to  
3 express our views and I and my associates, Eldon  
4 Greenberg, our counsel, and Daniel Horner, our Deputy  
5 Director, would be pleased to answer any questions you  
6 might have.

7 CHAIRMAN SELIN: Thank you for your  
8 presentation. Thank you for a well prepared  
9 presentation. You stayed within the time limits. You  
10 even quoted me accurately. I thank you for that.

11 I'll turn to Commission Rogers first. Do  
12 you have questions for the witnesses?

13 COMMISSIONER ROGERS: Well, do you have  
14 any knowledge of what's happening in any other Western  
15 countries that have commercial nuclear power programs  
16 that perceive a growing and credible threat of this  
17 sort? What is your information with request to other  
18 situations in other countries?

19 MR. LEVENTHAL: I do not know what they're  
20 doing in the current circumstances. There have been  
21 threats made by the Serbs actually, a couple of  
22 threats made by the Serbs to attack European nuclear  
23 power plants in the event that there were military  
24 intervention in the former Yugoslavia. But it is my  
25 understanding that use of a vehicle is contemplated in

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1 preparing the defenses for those plants. I visited  
2 plants in Germany and in Japan, two nations that come  
3 to mind, and it's obvious that they have the kinds of  
4 barriers in place that have attacked by vehicle rather  
5 than attacked with sneakers in mind. Whether they're  
6 on a heightened state of alert today because of this  
7 situation in the U.S. with the World Trade Center or  
8 because of the Serbian situation, I don't know, but I  
9 think the point is that those plants are better  
10 protected against vehicular attack than U.S. plants.

11 COMMISSIONER ROGERS: Thank you.

12 COMMISSIONER REMICK: If you have any  
13 specific information on what you just stated, I would  
14 appreciate receiving it.

15 MR. LEVENTHAL: Okay. Thank you.

16 COMMISSIONER CURTISS: I just have two or  
17 three areas I'd like to explore.

18 I take it from your recommendation that we  
19 move forward with immediate action, an immediately  
20 effective rulemaking to a rule to address what you see  
21 as the problem. Do I correctly infer from that that  
22 in the context of the procedures that we've  
23 established for backfits, if you applied those here,  
24 that you would view this as an adequate protection  
25 question, action ought to be taken to protect the

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1 public health and safety today immediately and it  
2 ought to be done irrespective of the cost?

3 MR. LEVENTHAL: In other words, taking the  
4 cost effective factor into consideration? Is that the  
5 thrust of your question?

6 COMMISSIONER CURTISS: Let me phrase it  
7 differently. Under the regime that we have, we were  
8 able to take action without regard to cost when  
9 necessary to protect the public health and safety. To  
10 go beyond that, the regulation requires that we  
11 evaluate the costs associated with those actions.

12 MR. LEVENTHAL: Yes. I'm sorry. Now I  
13 understand the question. I would say that the  
14 circumstances in this case clearly would justify that.  
15 I think the TMI intrusion which was recaptured on  
16 video tape on sort of a delayed replay basis,  
17 indicated that this was not a hard target, this was a  
18 soft target. He drove through an open gate, he  
19 crashed through two protected area fences and through  
20 the aluminum door of the turbine building and 60 feet  
21 into the plant, close enough so that had the car had  
22 explosives, it would have affected vital systems.  
23 That suggests a vulnerability that if someone was  
24 determined to engage in this kind of an attack today,  
25 he might well be able to be successful. I don't

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1 understand why U.S. plants should be vulnerable in  
2 that way when other buildings that are important to  
3 the public, not only in health and safety terms but in  
4 governmental terms, are protected.

5 COMMISSIONER CURTISS: I asked the  
6 question because the written statement and your  
7 presentation here does include some discussion of what  
8 the costs are of the various options. Just to be  
9 clear here, what you're proposing is that we take this  
10 action as an action necessary to protect the public  
11 health and safety, to maintain adequate protection and  
12 it should be taken irrespective of what the cost is.

13 MR. LEVENTHAL: That's correct.

14 COMMISSIONER CURTISS: Okay. Secondly, I  
15 take it your organization's respective positions  
16 throughout this discussion, going back to 1985, I  
17 think you said, have consistently been that the  
18 vehicle threat, even though we hadn't had one prior to  
19 TMI, was sufficiently credible in your view, given  
20 what was going on in the world generally, that we  
21 ought to modify the design basis threat to account for  
22 at least prior to TMI a yet to be demonstrated vehicle  
23 bomb threat. Is that an accurate statement for you?

24 MR. LEVENTHAL: That's correct. We  
25 considered the threat credible even before the TMI

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1 intrusion and the World Trade Center explosion.

2 COMMISSIONER CURTISS: Okay. All right.  
3 Now, recognizing that your testimony here is focused  
4 on the vehicle bomb threat, taking those two points,  
5 as we've just discussed them, that this action is  
6 necessary to protect the public health and safety and  
7 hence cost ought to be irrelevant in what we do, and  
8 secondly it doesn't take an actual vehicle threat as  
9 we had with the TMI, you could know that beforehand,  
10 the logic of your argument would suggest, and here I  
11 want to explore how far you would carry the argument,  
12 would suggest that we ought to do the same thing for  
13 waterborne bombs or for airplanes. You're not  
14 suggesting that here at least today. How do you  
15 distinguish, given the logic of your argument, why we  
16 should address vehicle bombs and not, if in fact  
17 that's your position, go beyond that to address  
18 waterborne bombs or airplane attacks or what have you?  
19 What is the basis for distinguishing the two?

20 MR. LEVENTHAL: Well, we don't really make  
21 that distinction, at least not in our petition for  
22 rulemaking which was, as you know, rejected by the  
23 Commission. There we included all surface vehicle  
24 bombs, both boat borne and truck or car borne bombs.  
25 We did not deal with -- I believe we specifically

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1 excluded at the time reference to bombs borne by  
2 aircraft simply because we realized that that was a  
3 different type of a problem, one that would be more  
4 difficult to defend against and our logic was that if  
5 you have the opportunity to defend against one type of  
6 an attack on a pretty effective basis, that you  
7 perhaps should move promptly to deal with that and  
8 ponder further the more difficult form of attack and  
9 one that would probably be less likely to occur, since  
10 one has to assume that it's easier and more feasible  
11 to attack by boat or by car or truck than it is by  
12 plane.

13 COMMISSIONER CURTISS: Is your argument  
14 there that it is less likely to occur because they  
15 don't rent airplanes at U-Haul centers or what have  
16 you, that they're less able to obtain that form of  
17 transport or that it's more difficult, read more  
18 costly and perhaps impossible to protect against that  
19 kind of threat?

20 MR. LEVENTHAL: Well, it's surely easier  
21 to rent a truck than it is to rent a plane. So, I  
22 guess one has to assume on that basis that it's  
23 somewhat less probable that an attack would come by  
24 plane.

25 MR. GREENBERG: If I could interject here

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1 for a moment.

2 COMMISSIONER CURTISS: Yes, please.

3 MR. GREENBERG: We were looking at a  
4 situation where there was substantial evidence that  
5 truck bombs were weapons of choice by terrorists. We  
6 had the Beirut incidents in 1983 that really  
7 stimulated the whole U.S. government to look at the  
8 particular problem of land borne vehicles carrying  
9 explosives. When you start looking at something like  
10 an airplane, that's a hypothetical possibility but we  
11 don't have any experience, at least none that I'm  
12 aware of.

13 COMMISSIONER CURTISS: Yes. Would it be  
14 fair to say that airplanes and boats are not credible  
15 threats?

16 MR. LEVENTHAL: No, I think attack by boat  
17 is a credible threat and I also understand that there  
18 has been some attention paid to that in terms of the  
19 design of the plants themselves. There appears to be  
20 no attention paid to penetration by cars or trucks.  
21 Surely it's not included in the design basis threat  
22 and the TMI intrusion is proof positive that the plant  
23 was highly vulnerable.

24 COMMISSIONER CURTISS: An airplane threat,  
25 I guess, would be a not credible event then. Is that

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1       what I should infer?

2               MR. LEVENTHAL: No, it could be credible,  
3       but it's also harder to defend against. What I'm  
4       trying to argue here is that simply because there's  
5       another type of threat that's harder to defend  
6       against, that's not a reason for not defending against  
7       a threat that you can more readily defend against.

8               COMMISSIONER CURTISS: Logically I think  
9       you make a persuasive argument, a compelling argument  
10      and in some respects I agree with the points that you  
11      make. But from the standpoint of the framework within  
12      which we have to render a decision on this, the logic  
13      of the argument that when one makes the case that it's  
14      an adequate protection issue, that is to say you  
15      assume that this is necessary to protect the public  
16      health and safety and that you don't need an intrusion  
17      to be demonstrated, as you've maintained since 1985  
18      that vehicle borne threats are, in fact, credible long  
19      before we had the TMI event. The logic does cause you  
20      to ask the question, "How far would you carry that?  
21      Would you carry that to waterborne bombs or airplane  
22      threats to the plant or what have you?"

23              MR. LEVENTHAL: We'd definitely include  
24      waterborne bombs. There are ways to assure a setback  
25      distance in that given situation. We are here talking

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1 essentially about setback distances. We're talking  
2 about denial of access. With a plane, it's obviously  
3 a very different type of a situation and it's a very  
4 difficult situation. Some plants are better equipped  
5 to defend against it than others. In fact, TMI, as it  
6 turns out, is better defended against an airborne  
7 attack because of this special containment because the  
8 plant is close to an airport.

9 COMMISSIONER CURTISS: Okay.

10 MR. LEVENTHAL: I think what the  
11 Commission has to look at is in the worst case how are  
12 you going to defend not having taken action if there  
13 is an attack against a plant? On what basis are you  
14 going to explain to the public why, after TMI-1, after  
15 the World Trade Center it was still felt that there  
16 was not an urgent enough situation to take the most  
17 fundamental kind of defense here and the one that is  
18 the least costly to implement, namely physical  
19 barriers.

20 COMMISSIONER CURTISS: Okay. Let me pick  
21 up on that point because I have two other quick areas  
22 I'd like to pursue with you.

23 In your testimony in 1988 before the  
24 Gejdenson Subcommittee, at the time what you described  
25 in terms of the physical protections that you would

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1 recommend be taken and described in the public record  
2 was a double chain link fence with an aircraft cable  
3 between the fence with a standoff distance of 100  
4 yards, assuming a five ton truck and I think that was  
5 the gist of the steps that you suggested be taken. Is  
6 that your position today, that action if taken would  
7 be sufficient to address the problem?

8 MR. LEVENTHAL: Those types of defenses,  
9 I believe that was on the basis of some expert advice  
10 we got at the time as to what would work best. There  
11 may, in fact, have been improvements in the  
12 technology. But basically aircraft cable to prevent  
13 penetration of the perimeter fence and hydraulically  
14 lifted gates to prevent access through the main  
15 driveways as well as perhaps concrete flower pots to  
16 require a zigzag route into the plant. These are  
17 methods and technologies that are well known,  
18 relatively inexpensive and can be installed fairly  
19 quickly.

20 COMMISSIONER CURTISS: Okay. If one were  
21 to take those steps that you've just outlined and  
22 emphasizing here that that would include the requisite  
23 standoff distance, which you defined at the time as  
24 100 yards, would that moot the question of whether we  
25 should address this issue in the context of IPEEE?

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1 What's left to address in IPEEE if you take steps that  
2 essentially eliminate the threat?

3 MR. LEVENTHAL: I guess what's left is the  
4 question if there were an explosion at that point  
5 because the truck couldn't get any further in. Are  
6 there any systems on the plant grounds or within the  
7 plants that could be affected by a blast, a credible  
8 explosion that could be achieved at that distance?

9 COMMISSIONER CURTISS: Yes. I'm taking  
10 your proposed standoff distance of 100 yards as the  
11 assumption here. Let's assume for the sake of  
12 argument that that would be sufficient to counter the  
13 effects of the blast.

14 MR. LEVENTHAL: I don't know the answer to  
15 that question. I think that's what you need an IPEEE  
16 program to find out and that's a very good example of  
17 why the program makes sense. We don't know how great  
18 the defense in depth is when it comes to redundant  
19 systems that could be knocked out with a single  
20 explosion. We did submit, as I mentioned in my  
21 testimony, a list that we wanted to submit under seal.  
22 The Commission advised us we did not have to submit it  
23 under seal, even though it was our preference to do  
24 so. We were advised by experts that those are  
25 examples of potentially vulnerable systems that you

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1 want to check out and would be appropriate to be  
2 checked out with an IPEEE program.

3 COMMISSIONER CURTISS: Okay. I don't have  
4 any other questions.

5 CHAIRMAN SELIN: Commissioner Remick?

6 COMMISSIONER REMICK: Just following up on  
7 your answer to one of the Commissioner Curtiss'  
8 questions, you indicated that you thought the boat  
9 bomb and aircraft bomb were less likely. But it seems  
10 if you had --

11 MR. LEVENTHAL: Not the boat bomb.

12 COMMISSIONER REMICK: Oh, I'm sorry.

13 MR. LEVENTHAL: I didn't say the boat  
14 bomb. Aircraft.

15 COMMISSIONER REMICK: Okay. Aircraft  
16 bomb. But if you had determined terrorists and you  
17 were able to prevent vehicle bombs and prevent against  
18 boat bombs, I would think the aircraft bomb approach  
19 would become more likely then if you had determined  
20 terrorists.

21 MR. LEVENTHAL: It might well, and then I  
22 think you'd also have to think through how you can  
23 best defend against that. I wouldn't deny that, but  
24 I would argue, as I did before, that if there are  
25 vulnerabilities that you can effectively close at

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1 relatively little cost and do it quickly, that you  
2 should do that even if there are other forms of attack  
3 that are still possible.

4 COMMISSIONER REMICK: You indicated both  
5 in your written testimony and your oral presentation,  
6 "And there is now a specific and credible threat  
7 against nuclear facilities." What specifically are  
8 you referring to there?

9 MR. LEVENTHAL: I was referring to that  
10 letter received by the New York Times and that we  
11 understand has been linked to the defendants in the  
12 World Trade Center case.

13 COMMISSIONER REMICK: And you view that as  
14 a credible threat?

15 MR. LEVENTHAL: Well, we don't have full  
16 access to the intelligence available and to the  
17 investigation itself, as I assume the Commission does  
18 and as I assume you may be briefed on this afternoon.  
19 I guess I would say this. If there's any uncertainty  
20 in the minds of the federal investigators as to  
21 whether this group has links with other groups or  
22 whether it is presenting the views of others who are  
23 still at large and have the same kinds of capabilities  
24 that were employed at the World Trade Center, if I  
25 were in your position I'd be very nervous about that

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1 and I wouldn't want to hang my hat on assurances by  
2 the same agencies that missed the World Trade Center  
3 attack entirely that you have nothing to fear right  
4 now.

5 I think if you can take prudent action to  
6 close existing vulnerabilities, you can breathe a lot  
7 easier about the possibility that intelligence  
8 agencies might miss the next threat and that the next  
9 threat might be directed to a nuclear facility.

10 COMMISSIONER REMICK: Do you happen to  
11 know in that letter what they were referring to when  
12 they said nuclear targets?

13 MR. LEVENTHAL: No. They spelled nuclear  
14 with a capital N. I don't know what that suggests.  
15 But we are aware of what the potential nuclear targets  
16 are in the United States and one of them is the more  
17 than 100 operating nuclear power plants. Those are in  
18 your charge. They may mean defense establishments,  
19 they may mean transports. Some of the transports are  
20 in your charge, others are not. But what's clearly in  
21 your charge I think you should attend to.

22 COMMISSIONER REMICK: Well, in your  
23 proposal, are you proposing that we address just  
24 nuclear power plants of the various facilities under  
25 our jurisdiction?

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1 MR. LEVENTHAL: Well, you're aware that  
2 nuclear fuel facilities -- there was a review of the  
3 design basis threat there to make it comparable to the  
4 requirements that DOE applies to its facilities, and  
5 the Commission took an interesting action at that  
6 time. They said, "Well, DOE doesn't have any nuclear  
7 power plants. We do. They're not -- so, whatever  
8 applies to their reactors doesn't necessarily apply to  
9 us. With their nuclear fuel facilities, since there  
10 was a comparability question involved there, the  
11 Commission did upgrade to the design basis threat to  
12 contemplate attack with a vehicle. We don't  
13 understand why an attack with a vehicle is credible at  
14 a nuclear fuel facility licensed by the NRC, but is  
15 not credible with regard to a reactor licensed by the  
16 NRC and we think it's that kind of inconsistency that  
17 you should address realistically, not legalistically,  
18 although realistic and legalistic are not necessarily  
19 in conflict. But one can often get in the way of the  
20 other.

21 I think you've got a real world situation  
22 on your hands here today. You've got an immediately  
23 effective way to deal with it and we're urging you to  
24 please do it.

25 COMMISSIONER REMICK: Yes. But you are

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1 addressing nuclear power plants strictly.

2 MR. LEVENTHAL: In this testimony, yes.

3 COMMISSIONER REMICK: In this testimony,  
4 okay.

5 MR. LEVENTHAL: That's correct.

6 COMMISSIONER REMICK: Now, I assume that--  
7 it's not clear, but I'm assuming that your interest is  
8 preventing radiological sabotage and not diversion or  
9 economic loss to the plant. Am I correct?

10 MR. LEVENTHAL: I think if there were an  
11 explosion, there would probably be all of the above,  
12 but we are dealing specifically with radiological  
13 consequences, that's correct.

14 COMMISSIONER REMICK: Does the Institute's  
15 interest include facilities other than nuclear  
16 facilities that might be subject to terrorist threats  
17 also?

18 MR. LEVENTHAL: Well, we are the Nuclear  
19 Control Institute, so our assigned interest is that of  
20 nuclear facilities. I guess I would like to  
21 concentrate my testimony on that question. There are  
22 a lot of facilities to worry about. Some of them are  
23 already protected in ways that we think nuclear power  
24 plants should be protected.

25 COMMISSIONER REMICK: But you're not

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1 proposing all public buildings or all reservoirs or  
2 chemical plants or anything like that? It's not your  
3 purview?

4 MR. LEVENTHAL: It's not part of our  
5 proposal, but I would say logic would dictate that  
6 there ought to be a lot of different types of  
7 facilities in buildings where security should be  
8 addressed as a consequence of the World Trade Center  
9 explosion. But in our testimony and because of our  
10 particular mission, we deal with nuclear facilities.

11 COMMISSIONER REMICK: Would that  
12 protection include vehicle bomb barriers, vehicle  
13 access barriers and so forth, those various other  
14 potential targets?

15 MR. LEVENTHAL: In non-nuclear facilities?

16 COMMISSIONER REMICK: Yes.

17 MR. LEVENTHAL: Yes, to the extent it can  
18 be practically and feasibly applied.

19 COMMISSIONER REMICK: Okay. I think that  
20 answers my question.

21 CHAIRMAN SELIN: Thank you, Commissioner.  
22 Commissioner de Planque?

23 COMMISSIONER de PLANQUE: I have no  
24 further questions.

25 CHAIRMAN SELIN: Fine.

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1 COMMISSIONER CURTISS: Just one question.

2 CHAIRMAN SELIN: I'm sorry. Go on,  
3 Commissioner Curtiss.

4 COMMISSIONER CURTISS: I'll plead guilty  
5 to being legalistic, I guess, since I'm the lawyer on  
6 the Commission. I do think it's important though that  
7 as we hear your appeal and there is some logic to it,  
8 but as we hear your appeal whatever action we take is  
9 one that is based upon what we've seen to date that is  
10 consistent with the decisions that we've taken in  
11 other contexts and that can be defended as such when  
12 it comes to future circumstances that might arise.  
13 You pointed to a question on your part as to why  
14 category 1 fuel facilities and reactors were treated  
15 differently, what you perceived to be an  
16 inconsistency. I actually think there is an answer to  
17 that and that is that there's material at category 1  
18 facilities that might be quite attractive to a  
19 potential terrorist and maybe more attractive and  
20 hence there is a logic to that.

21 Similarly in asking the questions that I  
22 did about whether you view this as a backfit, an  
23 adequate protection issue, how you would propose to  
24 treat waterborne and airborne threats, one ought to  
25 ask the question if we move forward in a particular

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1 way in this context, is there a basis for it, will  
2 people come in and argue at some future point based  
3 upon the action we take here? The logic of that  
4 action dictates that we ought to protect against  
5 waterborne or airborne bombs or what have you  
6 irrespective of the cost.

7 So, if that's a legalistic view, I plead  
8 guilty to that. I think it is a question that goes to  
9 the logic of whatever we do and I think that is an  
10 important consideration here.

11 MR. LEVENTHAL: I guess I sort of  
12 subscribe to the logic of someone we know in common,  
13 Big Al Simpson, which would be to say if there's  
14 something you can do easily and practically, why not  
15 do it and be done with it and not belabor it? That  
16 was the philosophy he expounded upon when I was co-  
17 chairing the TMI investigation with Jim Asselstine and  
18 I think it's a pretty good logic to apply here.

19 COMMISSIONER CURTISS: I came to know it  
20 well.

21 CHAIRMAN SELIN: Yes. I would like to  
22 make a couple of comments. It's really for the  
23 record.

24 Our view on those fuel facilities which  
25 handle enriched uranium, more highly enriched uranium,

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1 is not to protect them against the vehicle bomb threat  
2 but to protect them against vehicle penetration that  
3 might lead to the special nuclear materials being  
4 carted away. Right or wrong, it's a different logic.  
5 I don't think there's an inconsistency that we handle  
6 those facilities different --

7 MR. LEVENTHAL: But if I may respond to  
8 that, those facilities have, because of those  
9 defenses, built in protection against radiological  
10 sabotage that might be affected by a vehicle.

11 CHAIRMAN SELIN: Could be, but the design  
12 threat does not include a vehicular bomb, it includes  
13 vehicular penetration.

14 MR. LEVENTHAL: But that's how vehicular  
15 bombs are executed. They get in as close as they can  
16 and then they explode. So, the point I'm making is  
17 that you do have implicitly protection --

18 CHAIRMAN SELIN: Mr. Leventhal, you're  
19 arguing we were handling them inconsistently. I'm  
20 debating that. I'm not saying that inadvertently we  
21 might actually have satisfied you on the facilities  
22 that may have happened.

23 The second is that the ground rules for  
24 our review are limited to radiological damage. Our  
25 charter is to radiological protection of the general

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1 public, that if in so doing we manage to protect the  
2 economic investment or the people who work in the  
3 plant, that would be so much better, but that's not in  
4 our ground rules. Our ground rules are should we  
5 reconsider the threat of what -- the design threat  
6 that would lead to radiological damage.

7           The third is I really do have to -- as  
8 plausible and as interesting as your testimony is, I  
9 guess I can't quite say that I'm the realistic on the  
10 Commission, to go with Commissioner Curtiss being the  
11 lawyer on the Commission, but realistic or not, if we  
12 say that this threat is plausible enough that it  
13 should be fixed immediately, then we don't have to  
14 look at our backfit rule. If we argue that the threat  
15 is reasonably plausible, no more nor less than other  
16 threats but the defenses are so easy we should do  
17 them, then we do have to go through our backfit rule  
18 and say, "Are the defenses -- the costs commensurate?"  
19 because if it really is a threat to health and safety,  
20 then we're not supposed to take the degree of defense  
21 in hand.

22           I will also say, in my opinion the  
23 waterborne threat is considerably less plausible than  
24 the bomb threat, particularly because of the amount of  
25 -- of the vehicular threat partly because of

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1 experience with vehicular threats and partly because  
2 of the difficulty of getting a waterborne vehicle to  
3 a place where you have reasonably high confidence that  
4 you would do severe damage to the plant.

5 You're a very good witness. I noticed no  
6 matter what the question is your answer is always the  
7 same, and that's a sign of sophistication.

8 MR. LEVENTHAL: Could I say at one point  
9 on the economic aspect, I wonder if there is a single  
10 public utility commission in this country that would  
11 object to a \$1 million or so cost being folded into  
12 the rate base to provide the kind of protection that  
13 could be affected here today by simply voting aye on  
14 the question of the immediately effective rule and the  
15 required installation of those barriers.

16 CHAIRMAN SELIN: Sure. But we don't have  
17 the authority to issue an immediately effective rule  
18 on the grounds that it's only \$1 million. It would  
19 have to be on the grounds that the threat calls for it  
20 from the point of view of the protection of --

21 MR. LEVENTHAL: I understand that.

22 CHAIRMAN SELIN: Otherwise we -- whether  
23 we get comment or not, we need to go through the  
24 backfit calculations, et cetera.

25 MR. LEVENTHAL: We think the health and

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1 safety arguments are quite plausible and quite  
2 compelling.

3 CHAIRMAN SELIN: Okay. Thank you --

4 COMMISSIONER ROGERS: I'd like to just say  
5 one -- make one little point on cost. The costs that  
6 you've alluded to here are financial costs, dollars.  
7 Our concerns are not only with those kinds of costs,  
8 but the costs that come about in perhaps diverting  
9 attention or making it more difficult to carry out the  
10 operation of the plant itself in the safest possible  
11 way. We've seen already from the TMI experience that  
12 the physical security requirements do interfere with  
13 the safe operation of the plant under normal  
14 circumstances. That's a cost in my view and it's a  
15 very high cost and probably a much higher cost than  
16 the dollar cost that one talks about here.

17 So, I think that when one talks about  
18 cost, the costs have to be not only in purely economic  
19 terms, but the overall cost in the safe operation of  
20 the plant, whether that is improved or perhaps in some  
21 way reduced as a result of improving -- responding to  
22 another possible threat. I think you must take into  
23 account that this Commission considers all of these  
24 matters and we certainly are not dictating or not  
25 directing our attention solely to dollar costs of

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1 installing some kind of physical barrier. I think  
2 we're concerned in moving into this domain with what  
3 the operational difficulties are that may come about.

4 For example -- I'm not giving this as  
5 something that we really have studied, but for example  
6 the access of fire equipment to respond to something  
7 going on in the protected area. To what extent would  
8 these kinds of barriers interfere with that in a way  
9 that might possibly cause a much more serious problem  
10 that we know about that can happen. So, these are  
11 other matters that must be taken into account as we  
12 view introducing new additional impediments to the  
13 operation of the plant.

14 MR. LEVENTHAL: I would just respond very  
15 briefly that I'm familiar with what some of those  
16 impediments are when it comes to dealing with the  
17 insider threat and the pat-down rule and that sort of  
18 thing. I think putting cable up around the perimeter  
19 of the protected area to prevent unauthorized  
20 penetration and installing hydraulically lifted gates  
21 that can be immediately lifted when there is a  
22 perceived threat, I don't think those should interfere  
23 too severely with the safe operation of the plant. In  
24 fact, I would argue that's a further reason for  
25 proceeding along the lines that we recommend today.

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1 MR. GREENBERG: I think we pointed out in  
2 our testimony as well, Commissioner Rogers, that there  
3 are a number of plants, not a large number, but  
4 several at least, that do have these kinds of  
5 vehicular protections. To my knowledge, no one has  
6 suggested that those compromise the safe operations  
7 of --

8 COMMISSIONER ROGERS: But every single  
9 plant in this country is different from every other  
10 plant. The physical layouts are different. They're  
11 very, very different and you cannot argue that  
12 something that doesn't interfere with safe operation  
13 at one plant would automatically not interfere at  
14 another plant. It could very well -- it very well  
15 might.

16 MR. LEVENTHAL: But where is the greater  
17 danger? Is the greater danger that tomorrow or the  
18 day after someone might actually attempt to explode a  
19 bomb inside the plant grounds, or is the greater  
20 danger that by putting in these barriers you're  
21 somehow going to interfere with fire fighting  
22 equipment arriving for an entirely different matter?

23 CHAIRMAN SELIN: That's exactly the  
24 question --

25 COMMISSIONER ROGERS: That's exactly the

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1 question.

2 CHAIRMAN SELIN: -- that we're going to  
3 have to look at.

4 COMMISSIONER ROGERS: That's exactly the  
5 question.

6 MR. LEVENTHAL: Well, my answer to that is  
7 that, at least to my mind, it's pretty obvious what  
8 the answer is.

9 COMMISSIONER ROGERS: Well, it's not at  
10 all obvious to this mind.

11 CHAIRMAN SELIN: Fair enough. At the risk  
12 of not letting you get in the very last word, Mr.  
13 Leventhal, remember the Hebrews had to wander around  
14 40 years in the wilderness. Eight isn't that long.

15 Thank you very much for having been  
16 witnesses and we call the staff at this point.

17 MR. LEVENTHAL: I'd like to leave with you  
18 also our counsel, Eldon Greenberg's testimony before  
19 the Senate Subcommittee. It does lay out the  
20 chronology of the various efforts and I alluded to  
21 those.

22 CHAIRMAN SELIN: Would you give it to the  
23 Secretary? Fine.

24 MR. LEVENTHAL: Thank you again.

25 CHAIRMAN SELIN: Thank you.

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1 COMMISSIONER CURTISS: Thanks, Paul.

2 CHAIRMAN SELIN: I think without further  
3 adieu, we'll welcome you, Mr. Taylor and the staff,  
4 and ask you to go ahead with your presentation.

5 MR. TAYLOR: We're here in response to the  
6 Commission's request that staff reevaluate the current  
7 design basis threat for radiological sabotage. Our  
8 briefing today represents the first phase of that  
9 reevaluation in which we will briefly describe the  
10 Commission's previous deliberations on vehicle threats  
11 and then identify an updated list of physical security  
12 options for consideration.

13 I note that in the interest of an open and  
14 thorough review of the design basis threat, the staff  
15 will conduct a subsequent public meeting to obtain  
16 information from all interested parties and that  
17 meeting is scheduled for May 10th at the Crown Plaza.  
18 Thus, the staff will not provide specific  
19 recommendations to the Commission today, but will do  
20 so after the public meeting so that the results of it  
21 can be considered by the staff and used appropriately  
22 for its recommendations.

23 I'll now ask Bob Burnett to commence the  
24 presentation.

25 MR. BURNETT: Good afternoon.

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1           You'll have to bear with me a little bit  
2 today. Today's briefing is going to be somewhat  
3 difficult. Some of the supportive details, Mr.  
4 Chairman, that you already referred to are classified  
5 and it makes the job of asking questions and answering  
6 them somewhat difficult. But we are going to try our  
7 very, very best to be candid and as open as possible  
8 within the security boundaries.

9           Also, another difficulty that we incurred,  
10 the World Trade Center incident, which we all know  
11 happened in February, we had hoped that we would have  
12 additional data available for today. But because of  
13 a gag order that has been put in place in the State of  
14 New York, no additional information has been made  
15 available to our Agency.

16           As the EDO mentioned, the public meeting  
17 is now scheduled for May the 10th at the Holiday Inn  
18 in Rockville. We have put out a news release and a  
19 Federal Register notice and copies of those were  
20 provided at your desk when you showed up. They are at  
21 both doors.

22           Now, with all of those caveats, what are  
23 we going to cover today? Well, we hope to give the  
24 Commission some background on how this issue was dealt  
25 within the past, what the staff actions were in the

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1 past and outline the options that staff have currently  
2 under consideration, and then sometime after the  
3 public meeting we will come back to the Commission  
4 with an analysis of the public meeting, a more  
5 detailed presentation of staff analysis and  
6 recommendations from the staff.

7 (Slide) Slide 2, please.

8 All right. Why are we here today? I  
9 think we've all said it several times. It's because  
10 of recent incidents, the Three Mile Island intrusion  
11 and the World Trade Center bombing. Both of these  
12 incidents has caused the Commission, as well as the  
13 staff, to reconsider the design basis threat and the  
14 subsequent protection that is afforded to nuclear  
15 facilities in this country.

16 During the review, I think it is important  
17 that we mention the relevant petitions submitted by  
18 the Nuclear Control Institute and the Committee to  
19 Bridge the Gap. It was originally submitted 1/11/91  
20 and it did suggest that vehicle protections be  
21 immediately put into place, increase the number of  
22 attackers that should be protected against, also  
23 increase the weaponry employed by those adversaries  
24 and, in addition, ask for an immediate remedy in the  
25 form of an action to put the contingency plans that

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1 are required by the generic letter in place  
2 immediately.

3 Both the action plan and the petition was  
4 subsequently denied. The action was denied in the  
5 same month of January and the petition later in June  
6 of that year.

7 Further, recently, the FBI and the DOE and  
8 the CIA have met with the Commission and provided  
9 relative information. Again, it's not possible to go  
10 into that, but we will look into it in greater depth  
11 in the meeting to follow.

12 Also, the recently held Lieberman hearing.  
13 Basically, Mr. Lieberman, Senator Lieberman suggested  
14 that the Commission move as fast as possible on this  
15 issue.

16 Also in response to the Commission  
17 direction, the staff has forwarded up a multi-phased  
18 work place, promising to give a fresh look at the  
19 complete design basis threat, including soliciting  
20 public opinion. As I've said earlier, current plans  
21 are to get back to the Commission as soon as possible  
22 after that public meeting.

23 (Slide) Next slide, 3, please.

24 Turning now to past deliberations,  
25 alternatives were developed in SECY-88-127 based on

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1 staff analysis and interaction with the intelligence  
2 community. Basically that paper presented three  
3 options for contingency planning and three options for  
4 physical security. I'd like to cover first the  
5 contingency planning.

6 The first alternative was for the NRC  
7 itself to complete and develop a contingency plan in  
8 the event that information was received that a  
9 licensed facility was targeted by a vehicle or a  
10 vehicle bomb. Basically we were asked to do  
11 prethinking and get all documentation prepared that  
12 would be necessary to order the licensee to respond.

13 The second alternative, which we labeled  
14 short-term contingency planning, required the licensee  
15 to review his sites for land vehicle approaches and  
16 device a contingency plan to intercept a would be  
17 design basis vehicle. This contingency plan had to be  
18 operational within 12 hours of notification by the  
19 NRC.

20 The third alternative, long-range  
21 contingency planning, would require the licensee to go  
22 through all of the necessary designs to install a  
23 permanent vehicle protection system, but not install  
24 it. In essence, get ahead of the power curve. In all  
25 cases, adequate standoff distances would be required

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1 for a design basis vehicle that would be yet  
2 developed.

3 Now, turning to the physical security  
4 alternatives. The licensee in alternative 1 would  
5 install a vehicle protection roadway system only.  
6 Alternative 2, he would extend the vehicle protection  
7 system all the way around the perimeter. Both of  
8 those cases would be required to protect against a  
9 design basis vehicle. The third alternative would do  
10 all of the above except would assume the presence of  
11 a design basis explosive on the vehicle. Therefore,  
12 added standoff ranges, where necessary, would have to  
13 be provided. The design basis vehicle and the  
14 explosive was considered safeguard information and  
15 would be provided under separate cover.

16 (Slide) Next slide, please.

17 During the 1985 through 1988 time period,  
18 the Commission met with the CIA, the FBI, the DOE and  
19 the National Security Council. In particular, the  
20 National Security Council was solicited for their view  
21 of the status or the existence of a vehicular design,  
22 a vehicular threat or vehicular bomb threat in  
23 America. The Agency views and resulting data will be  
24 briefed in the follow-on meeting and are considered  
25 classified. However, I can note at this point that

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1 during the Lieberman hearings recently held, that the  
2 FBI said that they knew of no credible threat directed  
3 towards the nuclear community.

4 (Slide) Next slide, please.

5 After the Commission received several  
6 staff papers and briefings and data from the  
7 intelligence community, the Commission issued their  
8 staff requirements memorandum in June, on June the  
9 16th, 1988. It directed the staff to develop the  
10 Headquarters contingency plan previously briefed, and  
11 to require the licensee to develop contingency plans  
12 to protect against the design basis vehicle alone. No  
13 explosives were to be presumed aboard.

14 The staff issued Generic Letter 89-07,  
15 April 28th, 1989 requiring licensees to create a  
16 contingency plan within six months. That plan would  
17 be available on-site for review by NRC inspectors.  
18 Indeed, the specifications of the design basis vehicle  
19 was provided under safeguarded information, separate  
20 cover.

21 COMMISSIONER REMICK: Bob, before leaving  
22 that slide, what classes of our licensees have some  
23 form of contingency plan, not only for vehicles but  
24 requirement of having security contingency plan or  
25 safeguards?

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1 MR. BURNETT: Okay. Both reactors and  
2 category 1 plants have contingency plans. Contingency  
3 plans, however, come in two major colors, should I  
4 say, the vehicular denial system, which is at the  
5 power reactors, and at category 1. In addition, both  
6 of those facilities have what I call safeguards  
7 contingency plans to address such things as hoax bomb  
8 threats when they're received, standoff firing  
9 attacks, fires that could start on-site that you would  
10 have to move, in the case of a category 1 site, people  
11 into a holding pen area to make sure we didn't lose  
12 special nuclear material. And, in fact, all forms of  
13 contingencies, if a weapon was discovered on site, if  
14 a weapon was discovered on a person, almost every form  
15 of contingency you can think of.

16 COMMISSIONER REMICK: When you say  
17 reactors, you mean power reactors only?

18 MR. BURNETT: Yes, power reactors only.

19 COMMISSIONER REMICK: Don't non-power  
20 reactors also have contingency plans of some type, not  
21 talking about vehicular?

22 MR. BURNETT: I'll yield to Mr. Frank  
23 Miraglia on that one.

24 MR. MIRAGLIA: I don't believe that they  
25 have security contingency plans. The requirements are

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1 established in Part 73 of the regulations and I think  
2 it's an Appendix E or Annex E to that that talks to  
3 the general outline of a requirement contingency plan.  
4 As Mr. Burnett said, it establishes planning criteria  
5 to respond to a whole range of contingencies, from  
6 bomb hoax to degraded security features to say what  
7 steps would be taken and how would they be implemented  
8 under those various contingencies.

9 COMMISSIONER REMICK: What level of staff  
10 review have contingency plans received? I'm referring  
11 mostly to reactors now. Have all of the contingency  
12 plans been subject to staff review and to what extent?

13 MR. MIRAGLIA: To use Bob's phrase, they  
14 come in different colors. The broad requirement for  
15 contingency planning that was required under Part 73  
16 was reviewed in the licensing context for Part 73, did  
17 they have contingency plans and what contingencies  
18 would be covered. Those were reviewed in the  
19 licensing context and then they would be reviewed by  
20 inspection and the like.

21 The generic letter expanded the  
22 contingency plan to say that there should be  
23 contingency planning for protection against surface  
24 vehicle bombs that could be implemented in 12 hours.  
25 Those contingency plans in that generic letter said

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1 that that did not require it to be submitted to  
2 Headquarters for review in a licensing context and  
3 should be made available in the field and would be  
4 looked at in the inspection process. We have examined  
5 that on at least two occasions via the resident  
6 inspectors and reasonable base inspectors.

7 COMMISSIONER REMICK: Two occasions  
8 meaning two different times --

9 MR. MIRAGLIA: Two different times.

10 COMMISSIONER REMICK: -- or two different  
11 plants?

12 MR. MIRAGLIA: Two different times at the  
13 facilities. I believe shortly after the  
14 implementation date, the effective implementation date  
15 of the regulations there was some looking. I think we  
16 did something at the Persian Gulf time and there's  
17 just recently, after the World Trade Center, we had  
18 licensees and resident inspectors to look down.

19 I think I should emphasize that these  
20 plants have never been exercised, so we have not  
21 inspected them from the point of view of total  
22 effectiveness. But, number one, were there plans in  
23 place, were there vehicles or appropriate instruments  
24 by which they could get vehicles or if they had said  
25 that they were going to have ditches or whatever the

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1 things are, that those things were there and they  
2 appeared to be implemented in the 12 hour time frame.

3 COMMISSIONER ROGERS: Excuse me. Do we  
4 actually go and look to see or do we get letters from  
5 people telling us they had these?

6 MR. MIRAGLIA: The inspectors looked at  
7 the plans and verified to what they could. I wouldn't  
8 go as far, Mr. Rogers, to say that they looked at the  
9 -- if there was a letter and agreement to say where  
10 they would get vehicles if vehicles were going to be  
11 used to provide a standoff distance, whether those  
12 contracts -- there was documents to say that that was  
13 in their plan and there was letters of agreement.  
14 Whether they could actually pull those number of  
15 vehicles in at a time, we didn't check that kind of a  
16 factor. So, it was that type of review.

17 COMMISSIONER REMICK: Frank, when you say  
18 that they were never exercised, am I correct that  
19 you're talking about for vehicle threat? Have  
20 contingency plans in general --

21 MR. MIRAGLIA: Yes.

22 COMMISSIONER REMICK: -- ever been  
23 exercised or activated?

24 MR. MIRAGLIA: In the normal safeguards  
25 program, they are required to conduct contingency

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1 drills and exams.

2 CHAIRMAN SELIN: Are they contingencies or  
3 are those just regular security plans?

4 MR. MIRAGLIA: They exercise the  
5 contingency plan. They would presume a fire or they  
6 would presume a protected area intrusion and the  
7 guards would --

8 CHAIRMAN SELIN: The reason I'm drawing  
9 the difference is that the protection against  
10 vehicular threat is not --

11 MR. MIRAGLIA: That's correct.

12 CHAIRMAN SELIN: I mean first you have to  
13 say, "Assume that we give you warning," and then in  
14 the case of that warning, wherein as in the other  
15 cases they're supposed to be able to do that from a  
16 standing start.

17 MR. MIRAGLIA: You're absolutely correct,  
18 Mr. Chairman. I was addressing Commissioner Remick's  
19 concern. We're talking about contingency plans of two  
20 different colors. I'm not talking about the vehicle  
21 contingency plan, I'm talking about the contingency  
22 plans that are developed in concern with Part 73 that  
23 said there should be contingency planning for certain  
24 security events, those that would be consistent with  
25 the existing design basis threat other than the

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1 vehicle threats. Those contingency plans are  
2 exercised.

3 COMMISSIONER REMICK: Have they ever been  
4 activated for cause? I mean either by us or by  
5 licensees other than an exercise, have there been  
6 any --

7 MR. MIRAGLIA: You're talking of either  
8 type?

9 COMMISSIONER REMICK: Any type, yes.

10 MR. MIRAGLIA: To the best of my  
11 knowledge, I don't believe the vehicle ones have been  
12 in place in toto. I believe that during the Persian  
13 Gulf crisis some licensees elected as a matter of  
14 prudence to implement at least parts of those plans.  
15 To the other licensees, there may have been some  
16 instances under bomb threats and these kind of things  
17 where they have exercised those parts of the plan.  
18 That's the best answer I can give you. We can give  
19 you a more definitive answer --

20 MR. BURNETT: Contingency plans address so  
21 many different contingencies. The lower level  
22 contingencies are being not really exercised, but  
23 being reacted to more often than you might think. If  
24 you look at the incidents that we report where  
25 somebody accidentally came through the detectors with a

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1        weapon because he had come from a shooting range. They  
2        have a contingency on how to deal with that arm  
3        know that that's happening all the time. You know  
4        that there are fires that have happened, so they have  
5        used their contingency plan there. You've heard of  
6        people having medical demands on site. So, there are  
7        always different levels of a contingency plan.

8                COMMISSIONER REMICK: Thank you. You made  
9        the point I was trying to make, is that there's  
10       nothing new about contingency plans or are they unique  
11       to vehicle threats? It's a part of our safeguards and  
12       security apparatus in Part 73, right? It was not  
13       specifically designed to answer vehicle threats, it's  
14       to handle all kind of contingencies at facilities.

15               I would like you to check because my  
16       memory tells me that at least some non-power reactors  
17       at least one time had to develop contingency plans.  
18       Maybe I'm getting old, but I would appreciate it if at  
19       a later date you let me know if I'm incorrect on that.

20               MR. MIRAGLIA: We can do that.

21               CHAIRMAN SELIN: Commissioner Curtiss?

22               COMMISSIONER CURTISS: Yes. Do you have  
23       any more, Forrest?

24               COMMISSIONER REMICK: No.

25               COMMISSIONER CURTISS: At the risk of

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1     sounding legalistic, let me turn back to the subject  
2     of the backfit issue because the question has come up,  
3     as I look at the history, at every juncture when we've  
4     looked at what the options are in this area, beginning  
5     in 1986.

6             The SECY paper, Bob, that you're referring  
7     to now, the 1988 SECY paper which led to the decision  
8     to require contingency plans discusses in some terse  
9     detail, I guess, the backfit question and in  
10    particular expressed the staff's view at the time that  
11    the contingency plan options, both short-term and  
12    long-term, as well as the two options that you laid  
13    out there, two additional options, each of which would  
14    have led to a modification of the design basis threat,  
15    and I'll read here, "May present difficulties in  
16    justifying backfitting. Based upon staff opinion,  
17    change to the regulatory base is unwarranted because  
18    no change to the threat environment has occurred.  
19    Under these circumstances, it may be difficult to  
20    satisfy the substantial additional safety requirements  
21    for the regulatory analysis portion of a backfit  
22    analysis."

23            Now, from the standpoint of the relevant  
24    regulatory provisions, 50.109, we've essentially got  
25    today the very same -- in fact, we do have the

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1 identical backfitting framework that we had back in  
2 1988 and that led the staff to this conclusion. I  
3 have two questions here. One is more of a historical  
4 one.

5 When we have modified the design basis  
6 threat, or if we were to modify the design basis  
7 threat to account for some form of action, does that  
8 action itself mean that the steps that have to be  
9 taken to respond to that threat are themselves  
10 adequate protection measures? That is to say they  
11 need not be justified based upon the backfit. That's  
12 the first question.

13 The second question is do I -- should I  
14 infer from this paragraph, and in particular the  
15 language that says, "Based upon staff opinion, change  
16 to the regulatory base is unwarranted because no  
17 change to the threat environment has occurred," that  
18 if a change in the threat environment has occurred, in  
19 this case perhaps TMI and the World Trade Center  
20 together, that that fact is relevant from the  
21 standpoint of the backfit analysis, and if so, how?  
22 Does it mean that the potential benefits that would  
23 accrue from protecting against that threat would be  
24 significant? Does it mean that it's an adequate  
25 protection issue? How should I view the application

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1 of the backfit provision in this context and what  
2 you've said to date on this issue?

3 MR. TAYLOR: We may have to answer that  
4 when we actually come forward with recommendations.  
5 I don't know that we -- are you prepared to answer  
6 that today?

7 MR. BURNETT: Only partially. We have  
8 started thinking about the issue, Mr. Commissioner.  
9 If we modify the design basis threat under prudence,  
10 in other words we're seeing a trend in this country  
11 and therefore it would be prudent to do that, then  
12 it's very hard for us then to say that it's not  
13 subject to backfit. That's one of the statements that  
14 I've received from the lawyers in preparing for really  
15 the final determination that we have to present after  
16 the open meeting.

17 COMMISSIONER CURTISS: Can I expand on  
18 that? Historically we've taken what appear to be two  
19 kinds of actions. We have taken some steps that we  
20 believe would be prudent to take even though the  
21 design basis threat itself need not be modified. That  
22 was the gist of the contingency plans that the  
23 Commission approved in 1988. In that context, I think  
24 one might argue that a cost benefit justification  
25 ought to be applied there. You're not changing the

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1 design basis threat, you are not perhaps therefore  
2 arguing that it's necessary to protect the public  
3 health and safety. But we have taken that kind of  
4 action.

5 The other kind that comes to mind is a  
6 change to the design basis threat itself. There the  
7 question that I have, and I'll be as clear as I can,  
8 when we modify the design basis threat, are the  
9 actions that a licensee has to take as a result of  
10 that action on our part actions necessary to protect  
11 the public health and safety and hence ones that can  
12 be taken irrespective of cost? It's important  
13 because, as you point out in your SECY paper,  
14 depending upon how we come out on the standoff  
15 distances, the costs may be much more substantial than  
16 simply putting in an aircraft cable or delta barriers  
17 or what have you, and depending, of course, on the  
18 recommendation that is taken. So, if you're prepared  
19 to speak to it now, I'd be interested in your  
20 response. If you'd like to reflect on that more  
21 carefully, I'd like to hear your response at some  
22 point.

23 MR. TAYLOR: I think we'd prefer it.

24 MR. MIRAGLIA: One reason for that is the  
25 original Part 73 I think preceded some of the backfit

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1       considerations. I think we need to go back and look  
2       at that.

3               CHAIRMAN SELIN: When you're looking at  
4       that, if I may add something to that, Commissioner?

5               COMMISSIONER CURTISS: Yes, go ahead.

6               CHAIRMAN SELIN: By definition, a design  
7       basis threat is not intelligence. It may be affected  
8       by intelligence, et cetera, as the Commission said in  
9       its testimony, the testimony I gave that the  
10      Commission went through. We take a look at  
11      intelligence, we take a look at a range of threats, we  
12      take a look at the costs to counter them. So, it's  
13      not a linear process where one set of people get  
14      together and say, "What is the threat?" and then  
15      another set of people say, "How can we best respond to  
16      it?" There is a back and forth here. So, this is a  
17      much trickier question than the normal one you get  
18      into about how likely is it a pressure vessel will  
19      fail under certain kinds of pieces. So, it's a very,  
20      very important question. I don't think I know the  
21      answer and I don't think it's an easy answer to come  
22      up with.

23              MR. TAYLOR: We'll try to be prepared.

24              CHAIRMAN SELIN: Fine.

25              MR. BURNETT: (Slide) All right. I was

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1 on slide 6.

2 The Commission directed in their March 1  
3 direction to staff that we take into account any  
4 deficiencies or lessons learned or articulated by the  
5 incident investigation team looking into the Three  
6 Mile Island incident. The findings that do concern  
7 the design basis threat are: one, vehicles are not  
8 currently addressed in the design basis threat, and  
9 specifically what should the licensee response be to  
10 a vehicle intrusion? That was one of their findings.  
11 A second finding was licensee response can be  
12 significantly affected by the mode of transport  
13 utilized by the adversary. We are integrating their  
14 findings into our analysis, just to let you know that  
15 we are doing that.

16 (Slide) Slide 7.

17 This particular slide was created  
18 hopefully to pass on as much information as we could  
19 about the Trade Center bombing. However, as I've  
20 said, the gag order is in effect and it does address  
21 and does affect all federal agencies. So, I'm sort of  
22 hung up there. But the motivation of the adversaries  
23 is still unknown, nor do we know the exact composition  
24 of the explosive.

25 (Slide) Next slide, please, slide 8.

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1 I would like to get into the current  
2 options that the staff have under consideration and  
3 have it included in the staff paper that supports this  
4 meeting. I would also like to remind you that the  
5 current contingency planning that exists at all the  
6 reactors does use a design basis vehicle, and we will  
7 brief more detailed on what that vehicle is. Just  
8 keep in mind that all of the contingency planning is  
9 premised on the fact that we have advanced information  
10 of pending attack.

11 CHAIRMAN SELIN: Mr. Burnett, would you go  
12 back to the previous chart for a moment, please?  
13 Let's see if we can get the screen to go back to the  
14 previous chart also.

15 When you say 500 to 1500 pounds of  
16 explosive, that's sort of straightforward,  
17 nitroglycerine type --

18 MR. BURNETT: Well, that's what I said.  
19 The exact composition is not known and if I refer  
20 strictly to media reports, I have heard it go from  
21 everywhere to a mixed composition, which would be  
22 dynamites and high explosives, including ANFO, but I  
23 do not know --

24 CHAIRMAN SELIN: But it's stuff you could  
25 pick up at a construction site? We're not talking

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1 about Semex or some sophisticated -- as far as the  
2 media are concerned, et cetera?

3 MR. BURNETT: I wish I could tell you.  
4 We're not. I don't know. I literally have not been  
5 privy to the information.

6 CHAIRMAN SELIN: I'm not that concerned  
7 with what happened at Three Mile Island -- I mean at  
8 the World Trade Center. I am concerned in the design  
9 basis whether we end up talking about stuff that's  
10 readily available or some of the much more  
11 sophisticated explosives that have been found with  
12 terrorists later on.

13 MR. BURNETT: When we talk about  
14 explosives in the design basis, we will talk in  
15 equivalent terms of TNT.

16 CHAIRMAN SELIN: Okay.

17 MR. BURNETT: So, we will make that  
18 transition during the process.

19 CHAIRMAN SELIN: Thank you.

20 MR. BERNERO: And we can give you some  
21 equivalences of these lesser or better high explosives  
22 to relate to that.

23 MR. BURNETT: Okay. The first option that  
24 I would like to address, of course, is the edge of the  
25 envelope and that is no change. There are some people

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1 that could argue that that is applicable because  
2 intelligence sources still have not reported any  
3 targeting of nuclear facility, and the official words  
4 used by the FBI is that the chance of nuclear  
5 terrorism is low. Okay? However, on the con side,  
6 there has been now the intrusion in TMI and the  
7 incident at the World Trade Center and in neither did  
8 we receive any advanced warning. So, we certainly are  
9 acknowledging that.

10 As for the cost, I would like to say it's  
11 not specifically addressed on this slide, but the cost  
12 of implementing the contingency plans that now exist  
13 when they say, "Let's do it." It cost them something  
14 between \$25,000.00 and \$150,000.00 to create the  
15 documents and the necessary systems and it's estimated  
16 that to put it into action will cost \$4,000.00 a day.

17 (Slide) Next slide, please, slide 9.

18 CHAIRMAN SELIN: I'm sorry. Just one  
19 other question. If the contingency plan, in this case  
20 it's really based on some intelligence --

21 MR. BURNETT: Yes.

22 CHAIRMAN SELIN: -- as opposed to an event  
23 that happens on the plant, the contingency plan is  
24 implemented, kept up for say two months just to be  
25 arbitrary. At the end of that time, is there any

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1 deleterious effect on the security of the plant? In  
2 other words, having implemented the plant and then  
3 coming back from it, obviously there are operational  
4 problems while the plant is implemented. But at the  
5 end of the two months, does the licensee ability to  
6 then react to a second contingency, is that negatively  
7 effected or would these things be contingencies such  
8 that once they've been done, other than the cost and  
9 the inconvenience of having done them --

10 MR. BURNETT: Hopefully he could call on  
11 them a second time.

12 CHAIRMAN SELIN: Yes, that's what I was  
13 trying to say. Thank you.

14 MR. BURNETT: Do keep in mind that  
15 sometimes they are staff intensive. Guard forces do  
16 get burned out. They may have to bring in second  
17 sources of guards and implement that way. But it's my  
18 understanding that they could implement it a second  
19 time.

20 Slide 9.

21 The second option, which is roadway  
22 protection only, that again was one mentioned in 1988.  
23 In this case, however, we've extended it slightly to  
24 give some protection on either side of the roadway so  
25 that a car could not easily circumvent the gate. If

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1 the vehicle did get captured or engaged a roadway  
2 protection system, keep in mind that some explosive  
3 protection would result being caught at that position  
4 rather than being able to penetrate and nestle into  
5 some vital equipment. Of course the remainder of the  
6 perimeter would still be vulnerable and if an  
7 adversary did a reconnaissance of his targets, he  
8 could certainly see the most vulnerable portions of  
9 the perimeter.

10 Option 3 --

11 COMMISSIONER de PLANQUE: Before you go on  
12 to that, I'd like to understand how you would  
13 implement this in a practical situation. For example,  
14 at a shift change. If the barrier is not raised and  
15 lowered for every vehicle entering, then how would you  
16 protect against the TMI type intrusion?

17 MR. BURNETT: There are many ways to put  
18 in a vehicle denial system. There is a possible  
19 utilization of double barriers where the cars go  
20 through one, one remains up and then it Xs out the  
21 second one.

22 COMMISSIONER de PLANQUE: The air lock  
23 equivalent, yes.

24 MR. BURNETT: Yes. Okay. So, that would  
25 counter what you just said there.

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1 COMMISSIONER de PLANQUE: Except it would  
2 also be a rather tedious process.

3 MR. BURNETT: It would add time and tedium  
4 to the process.

5 MR. MIRAGLIA: Or they can remove it to a  
6 vehicle control access further out. In other words,  
7 move the vehicle access --

8 COMMISSIONER de PLANQUE: Providing --

9 MR. BURNETT: Away from the protected  
10 area.

11 MR. MIRAGLIA: Away from the protected  
12 area.

13 COMMISSIONER de PLANQUE: But you would  
14 only see it as being effective either that way -- or  
15 in that way against a TMI type intrusion?

16 MR. BURNETT: Yes, because if there was a  
17 spacing in your exiting vehicles, then obviously  
18 somebody could exploit that spacing. Generally we  
19 discourage vehicles coming into the protected area  
20 except for those that are doing maintenance type work.  
21 The parking lots generally, in fact in all cases, are  
22 outside of the protected areas. So, during shift  
23 changes, you really don't get that much of these gates  
24 being opened and closed.

25 COMMISSIONER de PLANQUE: Is that true for

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1 every plant?

2 MR. MIRAGLIA: We're talking about -- go  
3 back to the TMI analogy. It was the second gate. The  
4 first gate is owner controlled property and was not  
5 the protected area. This would be defending the  
6 protected area perimeter with those kinds of gates.  
7 There's not a large number. It's usually the egress  
8 of personnel to the parking lot and then out.

9 MR. BURNETT: And I'm not aware of any  
10 large scale parking that is within the protected area  
11 boundaries.

12 MR. MIRAGLIA: Most security plans have  
13 vehicle control. Only certain vehicles can get access  
14 to within the protected area. They, in most cases,  
15 they only be driven by certain authorized people.

16 MR. BURNETT: Absolutely.

17 MR. MIRAGLIA: So, it's that access that's  
18 being talked about here.

19 MR. BERNERO: I think the Commissioner may  
20 be thinking that if you did adopt this roadway  
21 protection option at a site like TMI, you would be  
22 drawn toward the bridges as the most effective place  
23 to put them and then that would give you the problem  
24 of shift change.

25 COMMISSIONER de PLANQUE: Right.

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1 MR. BERNERO: But in general, this kind of  
2 barrier would be for the protected area, not for the  
3 owner controlled area, for the very reason of that  
4 shift change burden.

5 MR. BURNETT: And the recommendation would  
6 actually be at the existing protected area barrier,  
7 not in the case of TMI out at that bridge that's  
8 three-quarters of a mile --

9 CHAIRMAN SELIN: It just happens that  
10 they're not putting their protection at the bridge,  
11 they're putting their protection at the --

12 MR. BURNETT: That's correct.

13 MR. BERNERO: Protected area.

14 CHAIRMAN SELIN: They have seven egress  
15 points instead of the two bridges that lead to the  
16 island.

17 MR. BURNETT: Yes, sir.

18 COMMISSIONER de PLANQUE: Okay.

19 MR. BURNETT: Let's see. I was on --  
20 okay, I was on option 3. In this option, the complete  
21 perimeter would be protected, thereby negating the  
22 advantages of doing reconnaissance by the attackers  
23 and hitting the weak point. They would be required to  
24 protect the entire perimeter against a design basis  
25 vehicle. Again, some explosive protection would

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1 result, but it would result in a varying degree of  
2 protection and very unique on a site basis. Some  
3 sites have vital equipments located relatively close  
4 to the protected area and I will talk more  
5 specifically about that in the classified section, and  
6 that even engagement of the truck at that existing PA  
7 could endanger those vital equipments. While others,  
8 the vital areas are much more internally located and  
9 you might get a high level of protection even at the  
10 existing fence lines. So, it is a variable.

11 In this case, call your attention to the  
12 fact that in addition to the costs show for larger  
13 perimeters, more access points, staff estimates could  
14 go as high as \$.3 million.

15 CHAIRMAN SELIN: Could you stop for a  
16 second?

17 MR. BURNETT: Yes, sir.

18 CHAIRMAN SELIN: I have to tell you I'm  
19 really struck by how low the estimates are to carry  
20 out these options. Do we have a way of -- have we  
21 communicated with the licensees in doing this already  
22 or do we have a way to test these against reality or  
23 are they sort of so much per linear foot and so much  
24 per barrier?

25 MR. MIRAGLIA: Most of the cost estimates

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1 are based upon vendor supplied information and then we  
2 have had -- we did talk with TMI in trying to get a  
3 feel for the cost estimates that they have generated  
4 for their fixes and what was involved in those kinds  
5 of activities. So, I think the public meeting --

6 CHAIRMAN SELIN: Will we smoke these out  
7 there because it would be very unfortunate if we made  
8 a set of decisions and then found that there's an  
9 order of magnitude difference with the --

10 MR. MIRAGLIA: We've tried to look at  
11 that. As Mr. Burnett just said, there's a range.  
12 We've tried to give you averages. The sites are very,  
13 very different. The site perimeters go from 1,000  
14 feet to 9,000 or 10,000 feet. Various number of  
15 access gates. It's a very variable. We try to come  
16 up with some kind of a median estimate and then  
17 there's --

18 CHAIRMAN SELIN: I'm not questioning the  
19 way the estimate was done.

20 MR. TAYLOR: No, we hope to get input on  
21 this.

22 CHAIRMAN SELIN: The question is can we  
23 get some corroboration from the licensees.

24 MR. MIRAGLIA: Yes, sir. I think that  
25 would be one of the things we would focus on on the

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1 public meeting, is to try to get comments and  
2 realistic estimates.

3 COMMISSIONER ROGERS: And really try to  
4 find the extremes, really clearly the most expensive  
5 and clearly the least.

6 MR. MIRAGLIA: Yes, sir.

7 COMMISSIONER CURTISS: Now, in that  
8 regard, I'm looking for it in your paper, but  
9 somewhere in your paper you note that you've detected  
10 already an increased demand for --

11 MR. BURNETT: Yes, sir. It could affect  
12 availability.

13 MR. MIRAGLIA: Yes, sir. It's been noted  
14 because we tried to make some estimates of how long  
15 would it take and we got the response back depending  
16 on availability and the demand is high right now.

17 COMMISSIONER CURTISS: There are really  
18 two points here. One, as you point out in the paper,  
19 it affects the schedule, the pace with which, if that  
20 option is pursued, the licensee can move forward.

21 To the Chairman's point, when you get to  
22 the meeting it may well be that you have some real  
23 life experience with people who are now engaged in  
24 procuring this kind of equipment.

25 MR. BURNETT: Yes, sir. Okay, sir.

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1 (Slide) Moving to slide 11, option 4  
2 would require the licensee to protect against a design  
3 basis vehicle and a design basis explosive. The big  
4 advantage of this option, it would make all sites  
5 consistent in their level of protection to both  
6 vehicles and explosives. Some sites we believe would  
7 be able to provide this protection at their existing  
8 protected area fences while others would have to  
9 modify their protected area of fence line. This could  
10 be done in two methods: one, actually moving the fence  
11 line and the vehicle protection systems out to the  
12 correct standoff distances, or leave the current  
13 personnel detection fences where they are and just  
14 kind of put a hump on the outside of the fence with  
15 Jersey bounces or some other physical denial technique  
16 to engage the vehicle only and not the people.

17 CHAIRMAN SELIN: This one would be truly  
18 a performance rule that you'd be talking about.

19 MR. BURNETT: Yes, sir.

20 CHAIRMAN SELIN: As opposed to the others,  
21 which are really very much prescriptive rules, do take  
22 these steps as opposed to get these results.

23 MR. BURNETT: And of course, this is the  
24 most expensive option.

25 MR. MIRAGLIA: And again, going to your

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1 previous comment, Mr. Chairman, the cost here would be  
2 very variable. It would be very site-dependant  
3 depending on the analysis and how fine -- and how  
4 complete the analysis would be. This could be a very  
5 costly one. And again, this is just a best estimate  
6 on our part and I think we could perhaps flesh that  
7 issue out also during the public meeting.

8 MR. BURNETT: I would add, however,  
9 depending on the size of the explosive which then  
10 drives the size of the vehicle, this particular option  
11 really has a very wide range totally dependant upon  
12 those two factors.

13 COMMISSIONER CURTISS: Let me just refer  
14 back to Mr. Leventhal's testimony in 1988, because he  
15 addresses this point specifically, and I'll just read  
16 the short sentence.

17 "The fencing would have to be at least 100  
18 yards away." Now we can pursue the question of  
19 whether 100 yards is an appropriate standoff distance  
20 in the closed session, but he goes on to say, "and  
21 that perhaps may be the most troublesome aspect of  
22 this from the perspective of the utilities because  
23 some plant sites may not be large enough to allow  
24 that."

25 As we get into the follow-on discussion,

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1 I'd like to pursue the question of what the  
2 implications are in terms of the standoff distance,  
3 how it's calculated for individual sites and what the  
4 implications are for individual sites, but I raise  
5 that question now because, as I alluded to earlier,  
6 that cost consideration of option number 4 is the one  
7 that I think drives that option, if I understand what  
8 you've outlined.

9 MR. MIRAGLIA: And there may be some  
10 substantial outliers in that regard.

11 MR. BURNETT: That's true. We are  
12 prepared, however, to talk about standoff distances  
13 versus explosive sizes in the classified meeting.

14 CHAIRMAN SELIN: That's not really the  
15 issue. The question comes, if 95 percent of the  
16 plants could easily meet, say, this 100 yard measure  
17 and five percent would have to spend \$20 million to do  
18 it, would we really stick to the 100 yards? Is the  
19 differential between 80 yards and 100 enough? Which  
20 really gets to the point about how you do design basis  
21 threats versus what we mean by these different terms,  
22 you know, what needs to be in backfit and what  
23 doesn't.

24 MR. BURNETT: And we've run preliminary  
25 analyses on a few number of sites, like 26, that by

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1 putting a barrier at the existing fence what effective  
2 explosive protection would you get, and that's where  
3 you're coming from.

4 CHAIRMAN SELIN: But you have the same --  
5 I mean, you have really two variables and one is the  
6 size of the explosive and the second is the standoff  
7 distance.

8 MR. BURNETT: Yes, sir.

9 CHAIRMAN SELIN: Even if you get  
10 comfortable with the standoff distance, then the next  
11 question comes, how large a design basis threat? Now  
12 10,000 pounds is going to war, so we're probably not  
13 going to talk about 10,000 pounds of explosives, but  
14 when you're talking between 2,000 and 2,500 you're  
15 going to do the same calculations. They're at the  
16 point of rapidly diminishing return.

17 MR. BURNETT: I think we have some data  
18 that we can make available in the closed meeting.

19 CHAIRMAN SELIN: Okay.

20 MR. BURNETT: That's the end of this  
21 portion of the briefing.

22 CHAIRMAN SELIN: I believe we need a fifth  
23 option and I would like to try to sketch out why I  
24 think this. Until there's an SRM there's no  
25 requirement for it, but I'd like you to think about

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1 what would be involved in this. It's sort of a long  
2 discussion. I apologize in advance, but I don't mean  
3 it because I'm going to do it anyway. I mean, I feel  
4 bad but I'm not --

5 MR. BURNETT: Not that bad.

6 CHAIRMAN SELIN: Yes, exactly. We can't  
7 go to intelligence, we can't go to some particular  
8 development in either doctrine in a document we've  
9 picked up or in explosives and say, "Here's the threat  
10 that everybody has to be defended against." No matter  
11 how you do it, we are talking about design basis in  
12 the same way that the Commission talked about in its  
13 testimony before Senator Lieberman's subcommittee,  
14 namely take a look at a range of threats and take a  
15 look at a range of responses and see what makes sense.  
16 Really, although I don't agree with -- I far from  
17 agree with everything that Mr. Leventhal said, his  
18 basic concept says, "Look, you can do something about  
19 this. Why don't you do about it?" is really not very  
20 far from a reasonable logic. Different people will  
21 come to different conclusions, but how tough is it to  
22 fix and how much of a range of things can we fix is a  
23 reasonable set of questions.

24 It doesn't fit in very well with our logic  
25 that says this is the kind of risk to a power plant

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1 that everybody has to fix regardless of the cost and  
2 here's what we have to do, some tradeoffs. One power  
3 plant will turn out it's going to cost them  
4 \$300,000.00 and they should do it, another one is at  
5 \$500,000.00. Does that mean they shouldn't do it?  
6 We're not really set up for the formal process of  
7 setting up -- saying, "This must be done and this will  
8 depend on the cost with this move continue."

9 So, I would like you to consider another  
10 option which is a little different from these, which  
11 basically says something like the following. We  
12 really are concerned. We'd like the plants to take a  
13 look at what it would cost to -- I'll make up some  
14 numbers -- to handle 2,000 pounds at 100 yards from a  
15 vehicle going no faster than 50 miles an hour and use  
16 some common sense, taking into account your geography,  
17 et cetera. We basically ask the plants if they'll do  
18 this without going to the point of passing a rule that  
19 says you must do this and see what the results are and  
20 after you get the results and then we go and say, "Do  
21 we have to take further action?"

22 Now, that's not exactly what I'm calling  
23 for, but my point is that each of the Commissioners  
24 one way or another has said there are huge differences  
25 from plant to plant. One thing that seems to me that

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1 is not unreasonable may turn out to be a bad idea. It  
2 may turn out it's too hard to do and I'd sort of like  
3 your reaction about whether you could do something  
4 like this before we do the SRM, not afterwards,  
5 because I don't want to ask for something that's  
6 impossible. But maybe the status quo ante shouldn't  
7 be -- in other words, a situation which would have to  
8 be remedied by the rule needn't be what we have today,  
9 but could be something where the Commission as a  
10 matter of policy expressed an interest in having the  
11 plants do what they reasonably can do to respond to  
12 this, see what the licensees would say they would do  
13 and then see if we need to go further than that with  
14 a rule. This is something where you have to speak  
15 very closely to the general counsel and say do we have  
16 the authority to do something like this, would this be  
17 an undesirable precedent? But, in effect, it would be  
18 to bring the licensees in to looking at what the  
19 design basis threat should be and what the response  
20 should be and give it a chance to see if it turns out  
21 that the Commission feels there's a question of  
22 policy, there should be some response to a vehicular  
23 bomb, and it's a big if, what the licensees could do,  
24 what they'd be willing to do without being mandated to  
25 do it and see, after we went through that cycle, how

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1 much more we would require in a rule.

2 Now, it may turn out that the Commission  
3 doesn't want to do this, but I think you have to look  
4 at a wider range of options than just we have these  
5 kind of mandates we can put out, because this is  
6 really a peculiar situation. It just doesn't fit into  
7 the normal pieces, both because it's hard to say, "Is  
8 this something everybody must do, or is it a cost  
9 benefit analysis?" and also because the situations are  
10 just so different.

11 I would almost consider a rule that says  
12 every licensee must spend \$300,000.00 to defend  
13 against a vehicular -- let's see what we get for it.  
14 I'm exaggerating. I don't mean that literally, but  
15 what I'm saying is that --

16 COMMISSIONER ROGERS: Mr. Parler would be  
17 very uncomfortable. You got his attention.

18 CHAIRMAN SELIN: In other words, the  
19 resources are central to this. If you can do it  
20 easily, why don't you do it without forcing us to  
21 order you to do it? And if it's really hard, tell us  
22 about it and let's see if there's a problem between  
23 the two. There may or may not be a way to come up  
24 with an option that counts for something like that.  
25 We have to live within our own rules. We can't set a

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1 whole new legal framework for a situation. But I  
2 don't believe that this type of situation was really  
3 foreseen when we set up the sharp distinction between  
4 this is what's required and this is a cost benefit  
5 analysis.

6 MR. TAYLOR: We'll mull on that one, Mr.  
7 Chairman. That's about as far as I can go.

8 CHAIRMAN SELIN: Well, I mean we need some  
9 interaction. I don't want to --

10 MR. TAYLOR: I understand.

11 CHAIRMAN SELIN: But if there is an  
12 approach that would be followable --

13 MR. TAYLOR: Let us think through that.

14 CHAIRMAN SELIN: -- I would like to know  
15 that before we end up giving you the instructions on  
16 how to respond to this piece.

17 Commissioner Rogers?

18 COMMISSIONER ROGERS: Yes. I'd just like  
19 to say that I find the Chairman's remarks very  
20 interesting and somewhat appealing, but they also  
21 bring to mind the other side of that coin and that is  
22 one that was pointed out to us I think by the  
23 Administrative Conference of Paper, I think it was, on  
24 nonprescriptive regulation, the enormous costs that  
25 come about when there is too much freedom left in the

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1 system without enough specificity. I think the  
2 question was how high to put a fire extinguisher, you  
3 know, and if you leave it to the licensee to decide  
4 the proper height of the fire extinguisher to meet all  
5 the possible situations, handicapped and various other  
6 needs that might have to be addressed, the cost of  
7 trying to implement that is enormously greater than  
8 saying "the fire extinguisher should be a height at  
9 three and a half feet off the floor," period, just put  
10 it there.

11 And I think that that's another aspect of  
12 this that one has to take into account, because I can  
13 see the difficulties that licensees might have in  
14 grappling with these things. "What should we do?"  
15 Not "What can we do?" but "What should we do?" And so  
16 I think that while I agree that somehow we have to --  
17 I like the idea that there's yet another way of  
18 looking at this than just the options that have been  
19 offered to us, because I think there has to be more  
20 practicality interjected into this.

21 I do think at some point we may have to  
22 say "This is what you must do," if we can. Now I know  
23 there's the legal aspects of that, but I think that  
24 somehow we've got -- we can't just dump it back on the  
25 licensees. I think we'll have to give guidance in

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1 some way. Now whether it's a legal requirement or  
2 not, I don't know. These are things that will have to  
3 emerge. But I do think it is important to keep in  
4 mind that when too much freedom is left, that that's  
5 also a very difficult situation to deal with. It  
6 doesn't necessarily simplify it for the licensee.

7 CHAIRMAN SELIN: Do you have other points  
8 you want to --

9 COMMISSIONER ROGERS: No.

10 CHAIRMAN SELIN: Commissioner Curtiss?  
11 You're not struck dumb by all this?

12 COMMISSIONER CURTISS: Well, I'm struck.  
13 I'm not sure I'm struck dumb.

14 CHAIRMAN SELIN: Speechless.

15 COMMISSIONER CURTISS: Speechless.

16 CHAIRMAN SELIN: Commissioner Remick?

17 COMMISSIONER REMICK: Just a couple  
18 questions. What do we know about what other countries  
19 are doing from the vehicle threat standpoint?

20 MR. BURNETT: I have some general data my  
21 staff was putting together knowing this question was  
22 coming, but I can also start. For instance, some  
23 countries, in particular the U.K. -- yes, that's  
24 right. Be careful with classified, he just warned me.

25 COMMISSIONER REMICK: You can provide it

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1 later.

2 MR. BURNETT: Can I better discuss this in  
3 the classified section?

4 COMMISSIONER REMICK: Or provide it later,  
5 that's fine. Just curious.

6 MR. TAYLOR: I think we better.

7 COMMISSIONER REMICK: Has the staff as of  
8 this afternoon decided that public health and safety  
9 is not being adequately protected from the vehicle as  
10 a result of not --

11 MR. TAYLOR: We're not ready --

12 COMMISSIONER REMICK: You're not prepared  
13 to yet.

14 MR. TAYLOR: -- to answer that today.

15 COMMISSIONER REMICK: I'm thinking about  
16 what was requested of us by Mr. Leventhal.

17 The other thing, if the Commission should  
18 decide to require permanent vehicle barriers -- I'm  
19 looking at the General Counsel at the moment -- and if  
20 I read 50.13 as a Philadelphia law, how do I  
21 reconcile the wording there?

22 MR. PARLER: Well, you would have to go to  
23 the background of 50.13 and not just stop with the  
24 wording itself. Obviously there would have to be  
25 reconciliation, at least in my judgment, some place,

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1 either in the rule that may come out of this subject,  
2 this discussion, the follow-up meetings, et cetera.  
3 That would probably be the way to do it.

4 If you look at the background of 50.13, it  
5 was the result of an issue that was raised in the '60s  
6 in the Turkey Point proceeding by a lawyer that used  
7 to work with us that went down to Florida to practice  
8 law, and the focus there was on attacks from enemies  
9 of the United States, specifically in that case  
10 because of the situation in Cuba. If you forget about  
11 that background and just look at the words themselves  
12 in the regulation -- it talks about design features,  
13 et cetera, et cetera -- there would be perhaps some  
14 lack of clarity at least on the part of those that are  
15 not familiar with the origins of the 50.13.

16 So there should be, to repeat, some  
17 putting of the 50.13 in perspective in whatever  
18 change, if any, might come out of this exercise.

19 COMMISSIONER REMICK: Would that include  
20 possibly needing to revise 50.13?

21 MR. PARLER: I wouldn't think so.

22 COMMISSIONER REMICK: You would not think  
23 so?

24 MR. PARLER: No, sir.

25 COMMISSIONER REMICK: Okay. Thank you.

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1 CHAIRMAN SELIN: Anything else?

2 COMMISSIONER REMICK: No, thank you.

3 CHAIRMAN SELIN: Commissioner de Planque?

4 COMMISSIONER de PLANQUE: No.

5 CHAIRMAN SELIN: Did you care to say  
6 anything else before we go to the closed session?

7 MR. TAYLOR: We have nothing else.

8 CHAIRMAN SELIN: Fine. Why don't we take  
9 a short break in which the room will be cleared?

10 (Whereupon, at 4:15 p.m., the above-  
11 entitled matter was concluded.)  
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CERTIFICATE OF TRANSCRIBER

This is to certify that the attached events of a meeting  
of the United States Nuclear Regulatory Commission entitled:

TITLE OF MEETING: BRIEFING ON DESIGN BASIS THREAT REEVALUATION

PLACE OF MEETING: ROCKVILLE, MARYLAND

DATE OF MEETING: APRIL 22, 1993

were transcribed by me. I further certify that said transcription  
is accurate and complete, to the best of my ability, and that the  
transcript is a true and accurate record of the foregoing events.

Carol Lynch

Reporter's name: Peter Lynch





OPEN COMMISSION MEETING - APRIL 22, 1992

VEHICLE THREATS

- O BACKGROUND OF CURRENT ACTIVITIES
- O PAST COMMISSION DELIBERATIONS
- O CURRENT OPTIONS FOR CONSIDERATION
- O STAFF CONCLUSION

## BACKGROUND

- O Current Reconsideration Reflects Concerns Raised by TMI Intrusion and World Trade Center Bombing
- O Nuclear Control Institute Request to Reopen Petition for Rulemaking and Request for Action, February 19, 1993
- O Commission Meeting, March 5, 1993, Included Presentations by CIA and FBI
- O Senate Hearing on Nuclear Power Plant Security, March 19, 1993
- O Staff Two Phase Plan to Revisit Design Basis Threat
  - Phase 1 - Revisit 1985 through 1988 Commission Deliberation
  - Phase 2 - Multimonth effort to examine design basis threat

## PAST COMMISSION DELIBERATION - THE OPTIONS

- O SECY-88-127, dated May 10, 1988, provides finalized list of six options
- O Contingency Planning (3 options)
  - NRC HQ Contingency Plan
  - Licensee Short-Range Contingency Planning
  - Licensee Long-Range Contingency Planning
- O Physical Security Measures (3 options)
  - Roadway Access Denial
  - Protected Area Denial
  - Vehicle Bomb Protection

## SUMMARY OF ASSESSMENTS AND GUIDANCE

- O Other Agencies Providing Threat-Related Information, Assessments, Participation in Commission Meetings
  - Central Intelligence Agency
  - Federal Bureau of Investigation
  - Department of Energy
- O Guidance Solicited from NSC (DOD, DOE)

## 1988 DECISION

### O Commission Decision

- Generic NRC HQ contingency plan for use in event vehicle bomb threat arises
- Licensee short-range contingency plan

### O Staff Issues Generic Letter 89-07, "Power Reactor Safeguards Contingency Planning for Surface Vehicle Bombs," dated April 28, 1989

### O Staff Specifies A Conservative Design Basis Vehicle (SGI) for Planning Purposes

## BACKDROP FOR CURRENT LIST OF OPTIONS

### O Intrusion at Three Mile Island, February 7, 1993

#### Incident Investigation Team Findings

1. Performance objectives of 10 CFR Part 73 for establishing and maintaining a physical protection system do not effectively address the use of a vehicle for entering the protected area.
2. Method of entry into the protected area significantly affected the security program response strategy toward protecting the vital areas and protecting against radiological sabotage.

BACKDROP FOR CURRENT LIST OF OPTIONS - continued

O World Trade Center Bombing, February 26, 1993

Tentative Information

1. Initial media reports indicate a van, loaded with between 500 and 1,500 pounds of explosive, was used in the attack in a public parking garage under the Vista hotel.
2. Motivation unknown.



## CURRENT OPTIONS FOR CONSIDERATION

### O OPTION 1 - No Change

Pro: Procedures established for temporary measures within 12 hours after notification by NRC to establish safe standoff distances. A Safeguards Information addendum characterized a design basis truck bomb.

Available threat-related information suggests that the threat to nuclear facilities is low.

Con: Experience of TMI intrusion into protected areas not addressed.

Relies on advanced warning from the Intelligence Community, but the World Trade Center bombing demonstrated that a threat could materialize in the United States without being detected.

Costs: None

## CURRENT OPTIONS FOR CONSIDERATION - CONTINUED

O OPTION 2 - Road Protection - On existing roadways and some distance on either side of the vehicle control points into protected areas.

Pro: Would protect against a Three Mile Island type intrusion.

Con: Remainder of the protected area perimeter vulnerable.

Cost to Licensee: For four protected area access points with 4 active barriers and 400 feet of concrete barriers, the total initial capital cost would range between \$200,000 and \$300,000. Costs would vary would vary by site.

Cost to NRC: A one-half FTE to conduct licensing reviews and .5 FTE to inspect systems.

Schedule: If barriers are available, staff estimates that it would take 6 months for licensees to implement this option.

### CURRENT OPTIONS FOR CONSIDERATION - Continued

O OPTION 3 - Protected Area Perimeter Protection - Against vehicular intrusions PA. Varying degrees of protection against a vehicle bomb.

Pro: Enhanced, but varying, degrees of protection against vehicle attempting to rapidly approach vital areas, through the protected area, to cause radiological sabotage.

Con: Protection against a vehicle bomb would be highly site specific and could be low at some sites.

Cost to Licensee: Estimated typical initial capital cost between \$300,000 and \$400,000. Actual costs are site & measure specific.

Cost to NRC: A one-half FTE for licensing reviews and 1 FTE inspect systems.

Schedule: 6 months to implement, if active barriers available.

CURRENT OPTIONS FOR CONSIDERATION - Continued

O OPTION 4 - Vehicle bomb protection derived from within a range of postulated threats - Protection against vehicle intrusions and design basis vehicle and explosive device.

Pro: All licensees would provide at least a known, consistent level of protection against vehicle intrusions and a land-vehicle bomb.

Con: Some sites may require either an additional layer of security and a commitment of additional security officers for the life of the plant or significant modifications to existing protected areas.

Cost to Licensee: Estimated initial capital cost between \$500,000 and \$800,000. Actual costs are site and measure specific.

Cost to NRC: Four FTE to confirm licensee analyses, 1 FTE licensing reviews, and 1.5 FTE inspect systems.

Schedule: Nine months to implement if barriers available.

### STAFF CONCLUSION

- O That staff recommendation be delayed until after the May 10, 1993, public meeting on the DBT for radiological sabotage to allow for staff consideration of public input.