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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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BRIEFING ON DESIGN BASIS THREAT REEVALUATION

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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
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
staff recommendations.

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

Do any of the other Commissioners have any opening remarks?

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

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

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

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

As I said, we have been making these appeals to the Commission on a pretty regular basis since 1985 actually and my Institute established a --
first held an international conference on prevention of nuclear terrorism and then convened a task force with representatives of over nine countries looking at various aspects of this rather troublesome problem. One of the issues looked at was the importance of establishing denial of access at nuclear power facilities, denial of access being the best defense. We've consistently over the years with the Committee to Bridge the Gap, in their testimony before the Advisory Committee on Reactor Safeguards and our letter to the Commission at the time of a specific nuclear threat made over Radio Tehran at the time when the U.S. was possibly prepared to knock out the Stuttgart missile batteries to the time of the Gulf War when again we perceived a possible threat to nuclear facilities. We've just been doing this for some time and we hope, as I will testify now, that recent events will make it clear that such action is indeed warranted.

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

One, current security requirements at nuclear power plants are inadequate to protect against vehicle bombs because vehicular attack is not included
in the design basis threat for radiological sabotage.

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

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

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

The issue has been before the Commission for a decade, since the truck bombings of the U.S. Embassy and the military compound in Beirut. There is no reason after the TMI and the World Trade Center incidents here in this country for further delay in acting to protect our reactors against vehicular
attacks. We emphasize and wish to stress that the action plan you have before you does not preclude the Commission's acting more expeditiously than within the one year time frame that's laid out in that plan and we ask the Commission to seize the opportunity today to issue an immediately effective rule modifying the design basis threat to include vehicular attack in ordering utilities to proceed immediately with installation of permanent roadway barrier and perimeter denial systems.

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

You're familiar with the Sandia National

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

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

Now, past Commissions have chosen not to upgrade the design basis threat on the grounds that a truck bomb attack in the United States was not credible, that there was no specific credible threat against nuclear facilities and if such a threat materialized there would be sufficient advance warning
to take appropriate preventive measures.

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

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

Chairman Selin, you yourself indicated that had the motorist been transporting explosives, that he could have damaged safety and emergency
systems and, to use your words, and then you're skating on very thin ice. We submit that the Commission really does not know just how thin the ice was at TMI or is at other reactors, or to put it another way, how deep is defense in depth without applying the IPEEE program to apply to radiological sabotage.

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

My testimony goes on to cite the chronology laid out in the Incident Investigation Team's report on the TMI intrusion and to point out that -- what should be obvious in the report, which is that both TMI and NRC personnel failed to considered promptly the possibility of radiological sabotage. But, of course, we note that they were not required to
consider the possibility of a vehicle bomb since that possibility is not included in the design basis threat.

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

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

None of the Commission's past reasons for refusing to act can be plausibly defended by this Commission today. A vehicular intrusion has occurred at an operating nuclear power plant. A successful truck bomb attack has taken place in the United States. There was no advance warning in either case and there is now a specific and credible threat.
against nuclear facilities. Under such compelling circumstances, continued inaction by the NRC would be imprudent and would endanger the public health and safety and the common defense and security of the United States, both of which it is your mission to protect under the Atomic Energy Act.

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

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

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

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

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

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

MR. LEVENTHAL: I do not know what they're doing in the current circumstances. There have been threats made by the Serbs actually, a couple of threats made by the Serbs to attack European nuclear power plants in the event that there were military intervention in the former Yugoslavia. But it is my understanding that use of a vehicle is contemplated in
preparing the defenses for those plants. I visited plants in Germany and in Japan, two nations that come to mind, and it's obvious that they have the kinds of barriers in place that have attacked by vehicle rather than attacked with sneakers in mind. Whether they're on a heightened state of alert today because of this situation in the U.S. with the World Trade Center or because of the Serbian situation, I don't know, but I think the point is that those plants are better protected against vehicular attack than U.S. plants.

COMMISSIONER ROGERS: Thank you.

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

MR. LEVENTHAL: Okay. Thank you.

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

I take it from your recommendation that we move forward with immediate action, an immediately effective rulemaking to a rule to address what you see as the problem. Do I correctly infer from that that in the context of the procedures that we've established for backfits, if you applied those here, that you would view this as an adequate protection question, action ought to be taken to protect the
public health and safety today immediately and it ought to be done irrespective of the cost?

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

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

MR. LEVENTHAL: Yes. I'm sorry. Now I understand the question. I would say that the circumstances in this case clearly would justify that. I think the TMI intrusion which was recaptured on video tape on sort of a delayed replay basis, indicated that this was not a hard target, this was a soft target. He drove through an open gate, he crashed through two protected area fences and through the aluminum door of the turbine building and 60 feet into the plant, close enough so that had the car had explosives, it would have affected vital systems. That suggests a vulnerability that if someone was determined to engage in this kind of an attack today, he might well be able to be successful. I don't
understand why U.S. plants should be vulnerable in that way when other buildings that are important to the public, not only in health and safety terms but in governmental terms, are protected.

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

MR. LEVENTHAL: That's correct.

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

MR. LEVENTHAL: That's correct. We considered the threat credible even before the TMI
intrusion and the World Trade Center explosion.

COMMISSIONER CURTISS: Okay. All right.

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

MR. LEVENTHAL: Well, we don't really make that distinction, at least not in our petition for rulemaking which was, as you know, rejected by the Commission. There we included all surface vehicle bombs, both boat borne and truck or car borne bombs. We did not deal with -- I believe we specifically
excluded at the time reference to bombs borne by aircraft simply because we realized that that was a different type of a problem, one that would be more difficult to defend against and our logic was that if you have the opportunity to defend against one type of an attack on a pretty effective basis, that you perhaps should move promptly to deal with that and ponder further the more difficult form of attack and one that would probably be less likely to occur, since one has to assume that it's easier and more feasible to attack by boat or by car or truck than it is by plane.

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

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

MR. GREENBERG: If I could interject here
for a moment.

COMMISSIONER CURTISS: Yes, please.

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

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

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

COMMISSIONER CURTISS: An airplane threat, I guess, would be a not credible event then. Is that
what I should infer?

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

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

MR. LEVENTHAL: We'd definitely include waterborne bombs. There are ways to assure a setback distance in that given situation. We are here talking
essentially about setback distances. We're talking about denial of access. With a plane, it's obviously a very different type of a situation and it's a very difficult situation. Some plants are better equipped to defend against it than others. In fact, TMI, as it turns out, is better defended against an airborne attack because of this special containment because the plant is close to an airport.

COMMISSIONER CURTISS: Okay.

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

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

In your testimony in 1988 before the Gejdenson Subcommittee, at the time what you described in terms of the physical protections that you would
recommend be taken and described in the public record was a double chain link fence with an aircraft cable between the fence with a standoff distance of 100 yards, assuming a five ton truck and I think that was the gist of the steps that you suggested be taken. Is that your position today, that action if taken would be sufficient to address the problem?

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

COMMISSIONER CURTISS: Okay. If one were to take those steps that you've just outlined and emphasizing here that that would include the requisite standoff distance, which you defined at the time as 100 yards, would that moot the question of whether we should address this issue in the context of IPEEE?
What's left to address in IPEEE if you take steps that essentially eliminate the threat?

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

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

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

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

CHAIRMAN SELIN: Commissioner Remick?

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

MR. LEVENTHAL: Not the boat bomb.

COMMISSIONER REMICK: Oh, I'm sorry.

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

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

MR. LEVENTHAL: It might well, and then I think you'd also have to think through how you can best defend against that. I wouldn't deny that, but I would argue, as I did before, that if there are vulnerabilities that you can effectively close at
relatively little cost and do it quickly, that you
should do that even if there are other forms of attack
that are still possible.

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

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

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

MR. LEVENTHAL: Well, we don't have full
access to the intelligence available and to the
investigation itself, as I assume the Commission does
and as I assume you may be briefed on this afternoon.
I guess I would say this. If there's any uncertainty
in the minds of the federal investigators as to
whether this group has links with other groups or
whether it is presenting the views of others who are
still at large and have the same kinds of capabilities
that were employed at the World Trade Center, if I
were in your position I'd be very nervous about that
and I wouldn't want to hang my hat on assurances by the same agencies that missed the World Trade Center attack entirely that you have nothing to fear right now.

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

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

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

COMMISSIONER REMICK: Well, in your proposal, are you proposing that we address just nuclear power plants of the various facilities under our jurisdiction?
MR. LEVENTHAL: Well, you're aware that nuclear fuel facilities -- there was a review of the design basis threat there to make it comparable to the requirements that DOE applies to its facilities, and the Commission took an interesting action at that time. They said, "Well, DOE doesn't have any nuclear power plants. We do. They're not -- so, whatever applies to their reactors doesn't necessarily apply to us. With their nuclear fuel facilities, since there was a comparability question involved there, the Commission did upgrade to the design basis threat to contemplate attack with a vehicle. We don't understand why an attack with a vehicle is credible at a nuclear fuel facility licensed by the NRC, but is not credible with regard to a reactor licensed by the NRC and we think it's that kind of inconsistency that you should address realistically, not legalistically, although realistic and legalistic are not necessarily in conflict. But one can often get in the way of the other.

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

COMMISSIONER REMICK: Yes. But you are
addressing nuclear power plants strictly.

MR. LEVENTHAL: In this testimony, yes.

COMMISSIONER REMICK: In this testimony, okay.

MR. LEVENTHAL: That's correct.

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

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

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

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

COMMISSIONER REMICK: But you're not
proposing all public buildings or all reservoirs or chemical plants or anything like that? It's not your purview?

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

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

MR. LEVENTHAL: In non-nuclear facilities?

COMMISSIONER REMICK: Yes.

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

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

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

COMMISSIONER de PLANQUE: I have no further questions.

CHAIRMAN SELIN: Fine.
COMMISSIONER CURTISS: Just one question.

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

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

Similarly in asking the questions that I did about whether you view this as a backfit, an adequate protection issue, how you would propose to treat waterborne and airborne threats, one ought to ask the question if we move forward in a particular
way in this context, is there a basis for it, will people come in and argue at some future point based upon the action we take here? The logic of that action dictates that we ought to protect against waterborne or airborne bombs or what have you irrespective of the cost.

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

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

COMMISSIONER CURTISS: I came to know it well.

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

Our view on those fuel facilities which handle enriched uranium, more highly enriched uranium,
is not to protect them against the vehicle bomb threat
but to protect them against vehicle penetration that
might lead to the special nuclear materials being
carted away. Right or wrong, it's a different logic.
I don't think there's an inconsistency that we handle
those facilities different --

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

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

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

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

The second is that the ground rules for
our review are limited to radiological damage. Our
charter is to radiological protection of the general
public, that if in so doing we manage to protect the economic investment or the people who work in the plant, that would be so much better, but that's not in our ground rules. Our ground rules are should we reconsider the threat of what -- the design threat that would lead to radiological damage.

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

I will also say, in my opinion the waterborne threat is considerably less plausible than the bomb threat, particularly because of the amount of --- of the vehicular threat partly because of
experience with vehicular threats and partly because of the difficulty of getting a waterborne vehicle to a place where you have reasonably high confidence that you would do severe damage to the plant.

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

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

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

MR. LEVENTHAL: I understand that.

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

MR. LEVENTHAL: We think the health and
safety arguments are quite plausible and quite compelling.

CHAIRMAN SELIN: Okay. Thank you --

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

So, I think that when one talks about cost, the costs have to be not only in purely economic terms, but the overall cost in the safe operation of the plant, whether that is improved or perhaps in some way reduced as a result of improving -- responding to another possible threat. I think you must take into account that this Commission considers all of these matters and we certainly are not dictating or not directing our attention solely to dollar costs of
installing some kind of physical barrier. I think
we're concerned in moving into this domain with what
the operational difficulties are that may come about.

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

MR. LEVENTHAL: I would just respond very
briefly that I'm familiar with what some of those
impediments are when it comes to dealing with the
insider threat and the pat-down rule and that sort of
thing. I think putting cable up around the perimeter
of the protected area to prevent unauthorized
penetration and installing hydraulically lifted gates
that can be immediately lifted when there is a
perceived threat, I don't think those should interfere
too severely with the safe operation of the plant. In
fact, I would argue that's a further reason for
proceeding along the lines that we recommend today.
MR. GREENBERG: I think we pointed out in our testimony as well, Commissioner Rogers, that there are a number of plants, not a large number, but several at least, that do have these kinds of vehicular protections. To my knowledge, no one has suggested that those compromise the safe operations of --

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

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

CHAIRMAN SELIN: That's exactly the question --

COMMISSIONER ROGERS: That's exactly the
question.

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

COMMISSIONER ROGERS: That's exactly the question.

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

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

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

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

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

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

MR. LEVENTHAL: Thank you again.

CHAIRMAN SELIN: Thank you.
COMMISSIONER CURTISS: Thanks, Paul.

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

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

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

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

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

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

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

Now, with all of those caveats, what are we going to cover today? Well, we hope to give the Commission some background on how this issue was dealt within the past, what the staff actions were in the
past and outline the options that staff have currently under consideration, and then sometime after the public meeting we will come back to the Commission with an analysis of the public meeting, a more detailed presentation of staff analysis and recommendations from the staff.

(Slide) Slide 2, please.

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

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

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

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

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

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

(Slide) Next slide, 3, please.

Turning now to past deliberations, alternatives were developed in SECY-88-127 based on
staff analysis and interaction with the intelligence community. Basically that paper presented three options for contingency planning and three options for physical security. I'd like to cover first the contingency planning.

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

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

The third alternative, long-range contingency planning, would require the licensee to go through all of the necessary designs to install a permanent vehicle protection system, but not install it. In essence, get ahead of the power curve. In all cases, adequate standoff distances would be required.
for a design basis vehicle that would be yet
developed.

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

(Slide) Next slide, please.

During the 1985 through 1988 time period,
the Commission met with the CIA, the FBI, the DOE and
the National Security Council. In particular, the
National Security Council was solicited for their view
of the status or the existence of a vehicular design,
a vehicular threat or vehicular bomb threat in
America. The Agency views and resulting data will be
briefed in the follow-on meeting and are considered
classified. However, I can note at this point that
during the Lieberman hearings recently held, that the FBI said that they knew of no credible threat directed towards the nuclear community.

(Slide) Next slide, please.

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

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

COMMISSIONER REMICK: Bob, before leaving that slide, what classes of our licensees have some form of contingency plan, not only for vehicles but requirement of having security contingency plan or safeguards?
MR. BURNETT: Okay. Both reactors and category 1 plants have contingency plans. Contingency plans, however, come in two major colors, should I say, the vehicular denial system, which is at the power reactors, and at category 1. In addition, both of those facilities have what I call safeguards contingency plans to address such things as hoax bomb threats when they're received, standoff firing attacks, fires that could start on-site that you would have to move, in the case of a category 1 site, people into a holding pen area to make sure we didn't lose special nuclear material. And, in fact, all forms of contingencies, if a weapon was discovered on site, if a weapon was discovered on a person, almost every form of contingency you can think of.

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

MR. BURNETT: Yes, power reactors only.

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

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

MR. MIRAGLIA: I don't believe that they have security contingency plans. The requirements are
established in Part 73 of the regulations and I think it's an Appendix E or Annex E to that that talks to the general outline of a requirement contingency plan. As Mr. Burnett said, it establishes planning criteria to respond to a whole range of contingencies, from bomb hoax to degraded security features to say what steps would be taken and how would they be implemented under those various contingencies.

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

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

The generic letter expanded the contingency plan to say that there should be contingency planning for protection against surface vehicle bombs that could be implemented in 12 hours. Those contingency plans in that generic letter said
that did not require it to be submitted to Headquarters for review in a licensing context and should be made available in the field and would be looked at in the inspection process. We have examined that on at least two occasions via the resident inspectors and reasonable base inspectors.

COMMISSIONER REMICK: Two occasions meaning two different times --

MR. MIRAGLIA: Two different times.

COMMISSIONER REMICK: -- or two different plants?

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

I think I should emphasize that these plants have never been exercised, so we have not inspected them from the point of view of total effectiveness. But, number one, were there plans in place, were there vehicles or appropriate instruments by which they could get vehicles or if they had said that they were going to have ditches or whatever the
things are, that those things were there and they appeared to be implemented in the 12 hour time frame.

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

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

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

MR. MIRAGLIA: Yes.

COMMISSIONER REMICK: -- ever been exercised or activated?

MR. MIRAGLIA: In the normal safeguards program, they are required to conduct contingency
drills and exams.

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

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

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

MR. MIRAGLIA: That's correct.

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

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

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

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

COMMISSIONER REMICK: Any type, yes.

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

MR. BURNETT: Contingency plans address so many different contingencies. The lower level contingencies are being not really exercised, but being reacted to more often than you might think. If you look at the incidents that we report where somebody accidently came through the detectors with a
weapon because he had come from a shooting range, they have a contingency on how to deal with that and you know that that's happening all the time. You know that there are fires that have happened, so they have used their contingency plan there. You've heard of people having medical demands on site. So, there are always different levels of a contingency plan.

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

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

MR. MIRAGLIA: We can do that.

CHAIRMAN SELIN: Commissioner Curtiss?

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

COMMISSIONER REMICK: No.

COMMISSIONER CURTISS: At the risk of
sounding legalistic, let me turn back to the subject of the backfit issue because the question has come up, as I look at the history, at every juncture when we've looked at what the options are in this area, beginning in 1986.

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

Now, from the standpoint of the relevant regulatory provisions, 50.109, we've essentially got today the very same -- in fact, we do have the
identical backfitting framework that we had back in 1988 and that led the staff to this conclusion. I have two questions here. One is more of a historical one.

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

The second question is do I -- should I infer from this paragraph, and in particular the language that says, "Based upon staff opinion, change to the regulatory base is unwarranted because no change to the threat environment has occurred," that if a change in the threat environment has occurred, in this case perhaps TMI and the World Trade Center together, that that fact is relevant from the standpoint of the backfit analysis, and if so, how? Does it mean that the potential benefits that would accrue from protecting against that threat would be significant? Does it mean that it's an adequate protection issue? How should I view the application
of the backfit provision in this context and what you've said to date on this issue?

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

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

COMMISSIONER CURTISS: Can I expand on that? Historically we've taken what appear to be two kinds of actions. We have taken some steps that we believe would be prudent to take even though the design basis threat itself need not be modified. That was the gist of the contingency plans that the Commission approved in 1988. In that context, I think one might argue that a cost benefit justification ought to be applied there. You're not changing the
design basis threat, you are not perhaps therefore arguing that it's necessary to protect the public health and safety. But we have taken that kind of action.

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

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

MR. MIRAGLIA: One reason for that is the original Part 73 I think preceded some of the backfit
considerations. I think we need to go back and look at that.

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

COMMISSIONER CURTISS: Yes, go ahead.

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

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

CHAIRMAN SELIN: Fine.

MR. BURNETT: (Slide) All right. I was
The Commission directed in their March 1 direction to staff that we take into account any deficiencies or lessons learned or articulated by the incident investigation team looking into the Three Mile Island incident. The findings that do concern the design basis threat are: one, vehicles are not currently addressed in the design basis threat, and specifically what should the licensee response be to a vehicle intrusion? That was one of their findings. A second finding was licensee response can be significantly affected by the mode of transport utilized by the adversary. We are integrating their findings into our analysis, just to let you know that we are doing that.

(Slide) Slide 7.

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

(Slide) Next slide, please, slide 8.
I would like to get into the current options that the staff have under consideration and have it included in the staff paper that supports this meeting. I would also like to remind you that the current contingency planning that exists at all the reactors does use a design basis vehicle, and we will brief more detailed on what that vehicle is. Just keep in mind that all of the contingency planning is premised on the fact that we have advanced information of pending attack.

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

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

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

CHAIRMEN SELIN: But it's stuff you could pick up at a construction site? We're not talking...
about Semex or some sophisticated -- as far as the
media are concerned, et cetera?

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

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

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

CHAIRMAN SELIN: Okay.

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

CHAIRMAN SELIN: Thank you.

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

MR. BURNETT: Okay. The first option that
I would like to address, of course, is the edge of the
envelope and that is no change. There are some people
that could argue that that is applicable because intelligence sources still have not reported any targeting of nuclear facility, and the official words used by the FBI is that the chance of nuclear terrorism is low. Okay? However, on the con side, there has been now the intrusion in TMI and the incident at the World Trade Center and in neither did we receive any advanced warning. So, we certainly are acknowledging that.

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

(Slide) Next slide, please, slide 9.

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

MR. BURNETT: Yes.

CHAIRMAN SELIN: -- as opposed to an event that happens on the plant, the contingency plan is implemented, kept up for say two months just to be arbitrary. At the end of that time, is there any
deleterious effect on the security of the plant? In other words, having implemented the plant and then coming back from it, obviously there are operational problems while the plant is implemented. But at the end of the two months, does the licensee ability to then react to a second contingency, is that negatively effected or would these things be contingencies such that once they've been done, other than the cost and the inconvenience of having done them --

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

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

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

Slide 9.

The second option, which is roadway protection only, that again was one mentioned in 1988. In this case, however, we've extended it slightly to give some protection on either side of the roadway so that a car could not easily circumvent the gate. If
the vehicle did get captured or engaged a roadway protection system, keep in mind that some explosive protection would result being caught at that position rather than being able to penetrate and nestle into some vital equipment. Of course the remainder of the perimeter would still be vulnerable and if an adversary did a reconnaissance of his targets, he could certainly see the most vulnerable portions of the perimeter.

Option 3 --

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

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

COMMISSIONER de PLANQUE: The air lock equivalent, yes.

MR. BURNETT: Yes. Okay. So, that would counter what you just said there.
COMMISSIONER de PLANQUE: Except it would also be a rather tedious process.

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

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

COMMISSIONER de PLANQUE: Providing --

MR. BURNETT: Away from the protected area.

MR. MIRAGLIA: Away from the protected area.

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

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

COMMISSIONER de PLANQUE: Is that true for
every plant?

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

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

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

MR. BURNETT: Absolutely.

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

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

COMMISSIONER de PLANQUE: Right.
MR. BERNERO: But in general, this kind of barrier would be for the protected area, not for the owner controlled area, for the very reason of that shift change burden.

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

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

MR. BURNETT: That's correct.

MR. BERNERO: Protected area.

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

MR. BURNETT: Yes, sir.

COMMISSIONER de PLANQUE: Okay.

MR. BURNETT: Let's see. I was on -- okay, I was on option 3. In this option, the complete perimeter would be protected, thereby negating the advantages of doing reconnaissance by the attackers and hitting the weak point. They would be required to protect the entire perimeter against a design basis vehicle. Again, some explosive protection would
result, but it would result in a varying degree of protection and very unique on a site basis. Some sites have vital equipments located relatively close to the protected area and I will talk more specifically about that in the classified section, and that even engagement of the truck at that existing PA could endanger those vital equipments. While others, the vital areas are much more internally located and you might get a high level of protection even at the existing fence lines. So, it is a variable.

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

CHAIRMAN SELIN: Could you stop for a second?

MR. BURNETT: Yes, sir.

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

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

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

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

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

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

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

MR. MIRAGLIA: Yes, sir. I think that would be one of the things we would focus on on the
public meeting, is to try to get comments and realistic estimates.

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

MR. MIRAGLIA: Yes, sir.

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

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

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

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

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

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

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

MR. BURNETT: Yes, sir.

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

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

MR. MIRAGLIA: And again, going to your
previous comment, Mr. Chairman, the cost here would be very variable. It would be very site-dependant depending on the analysis and how fine -- and how complete the analysis would be. This could be a very costly one. And again, this is just a best estimate on our part and I think we could perhaps flesh that issue out also during the public meeting.

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

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

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

As we get into the follow-on discussion,
I'd like to pursue the question of what the implications are in terms of the standoff distance, how it's calculated for individual sites and what the implications are for individual sites, but I raise that question now because, as I alluded to earlier, that cost consideration of option number 4 is the one that I think drives that option, if I understand what you've outlined.

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

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

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

MR. BURNETT: And we've run preliminary analyses on a few number of sites, like 26, that by
putting a barrier at the existing fence what effective explosive protection would you get, and that's where you're coming from.

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

MR. BURNETT: Yes, sir.

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

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

CHAIRMAN SELIN: Okay.

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

CHAIRMAN SELIN: I believe we need a fifth option and I would like to try to sketch out why I think this. Until there's an SRM there's no requirement for it, but I'd like you to think about
what would be involved in this. It's sort of a long discussion. I apologize in advance, but I don't mean it because I'm going to do it anyway. I mean, I feel bad but I'm not --

MR. BURNETT: Not that bad.

CHAIRMAN SELIN: Yes, exactly. We can't go to intelligence, we can't go to some particular development in either doctrine in a document we've picked up or in explosives and say, "Here's the threat that everybody has to be defended against." No matter how you do it, we are talking about design basis in the same way that the Commission talked about in its testimony before Senator Lieberman's subcommittee, namely take a look at a range of threats and take a look at a range of responses and see what makes sense.

Really, although I don't agree with -- I far from agree with everything that Mr. Leventhal said, his basic concept says, "Look, you can do something about this. Why don't you do about it?" is really not very far from a reasonable logic. Different people will come to different conclusions, but how tough is it to fix and how much of a range of things can we fix is a reasonable set of questions.

It doesn't fit in very well with our logic that says this is the kind of risk to a power plant
that everybody has to fix regardless of the cost and here's what we have to do, some tradeoffs. One power plant will turn out it's going to cost them $300,000.00 and they should do it, another one is at $500,000.00. Does that mean they shouldn't do it? We're not really set up for the formal process of setting up -- saying, "This must be done and this will depend on the cost with this move continue."

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

Now, that's not exactly what I'm calling for, but my point is that each of the Commissioners one way or another has said there are huge differences from plant to plant. One thing that seems to me that
is not unreasonable may turn out to be a bad idea. It may turn out it's too hard to do and I'd sort of like your reaction about whether you could do something like this before we do the SRM, not afterwards, because I don't want to ask for something that's impossible. But maybe the status quo ante shouldn't be -- in other words, a situation which would have to be remedied by the rule needn't be what we have today, but could be something where the Commission as a matter of policy expressed an interest in having the plants do what they reasonably can do to respond to this, see what the licensees would say they would do and then see if we need to go further than that with a rule. This is something where you have to speak very closely to the general counsel and say do we have the authority to do something like this, would this be an undesirable precedent? But, in effect, it would be to bring the licensees in to looking at what the design basis threat should be and what the response should be and give it a chance to see if it turns out that the Commission feels there's a question of policy, there should be some response to a vehicular bomb, and it's a big if, what the licensees could do, what they'd be willing to do without being mandated to do it and see, after we went through that cycle, how
much more we would require in a rule.

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

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

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

CHAIRMAN SELIN: In other words, the
resources are central to this. If you can do it
easily, why don't you do it without forcing us to
order you to do it? And if it's really hard, tell us
about it and let's see if there's a problem between
the two. There may or may not be a way to come up
with an option that counts for something like that.
We have to live within our own rules. We can't set a
whole new legal framework for a situation. But I
don't believe that this type of situation was really
foreseen when we set up the sharp distinction between
this is what's required and this is a cost benefit
analysis.

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

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

MR. TAYLOR: I understand.

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

MR. TAYLOR: Let us think through that.

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

Commissioner Rogers?

COMMISSIONER ROGERS: Yes. I'd just like
to say that I find the Chairman's remarks very
interesting and somewhat appealing, but they also
bring to mind the other side of that coin and that is
one that was pointed out to us I think by the
Administrative Conference of Paper, I think it was, on
nonprescriptive regulation, the enormous costs that
come about when there is too much freedom left in the
system without enough specificity. I think the
question was how high to put a fire extinguisher, you
know, and if you leave it to the licensee to decide
the proper height of the fire extinguisher to meet all
the possible situations, handicapped and various other
needs that might have to be addressed, the cost of
trying to implement that is enormously greater than
saying "the fire extinguisher should be a height at
three and a half feet off the floor," period, just put
it there.

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

I do think at some point we may have to
say "This is what you must do," if we can. Now I know
there's the legal aspects of that, but I think that
somehow we've got -- we can't just dump it back on the
licensees. I think we'll have to give guidance in
some way. Now whether it's a legal requirement or not, I don't know. These are things that will have to emerge. But I do think it is important to keep in mind that when too much freedom is left, that that's also a very difficult situation to deal with. It doesn't necessarily simplify it for the licensee.

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

COMMISSIONER ROGERS: No.

CHAIRMAN SELIN: Commissioner Curtiss?

You're not struck dumb by all this?

COMMISSIONER CURTISS: Well, I'm struck.

I'm not sure I'm struck dumb.

CHAIRMAN SELIN: Speechless.

COMMISSIONER CURTISS: Speechless.

CHAIRMAN SELIN: Commissioner Remick?

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

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

COMMISSIONER REMICK: You can provide it
MR. BURNETT: Can I better discuss this in the classified section?

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

MR. TAYLOR: I think we better.

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

MR. TAYLOR: We're not ready --

COMMISSIONER REMICK: You're not prepared to yet.

MR. TAYLOR: -- to answer that today.

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

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

MR. PARLER: Well, you would have to go to the background of 50.13 and not just stop with the wording itself. Obviously there would have to be reconciliation, at least in my judgment, someplace,
either in the rule that may come out of this subject, this discussion, the follow-up meetings, et cetera. That would probably be the way to do it.

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

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

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

MR. PARLER: I wouldn't think so.

COMMISSIONER REMICK: You would not think so?

MR. PARLER: No, sir.

COMMISSIONER REMICK: Okay. Thank you.
CHAIRMAN SELIN: Anything else?

COMMISSIONER REMICK: No, thank you.

CHAIRMAN SELIN: Commissioner de Planque?

COMMISSIONER de PLANQUE: No.

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

MR. TAYLOR: We have nothing else.

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

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

This is to certify that the attached events of a meeting
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DATE OF MEETING: APRIL 22, 1993
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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 Specifies A Conservative Design Basis Vehicle (SGI) for Planning Purposes
BACKDROP FOR CURRENT LIST OF OPTIONS

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.
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 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.