



# NRC NEWS

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**Remarks by Commissioner Edward McGaffigan, Jr.**  
U.S. Nuclear Regulatory Commission

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I appreciate the opportunity to appear before you today for the seventh time. I do not intend to take up very much of the next hour in delivering a speech. Like Chairman Diaz yesterday, I intend to give the floor over to answering your questions for the bulk of the time.

The past year has been marked by significant progress in enhancing the already unmatched security at our nation's civilian nuclear facilities. A year ago I concluded my remarks to you by stating: "The Commission has much to do in the months ahead on security matters. It is the single issue which has most dominated our time since September 11. We have a firm foundation on which to build and we will continue to ensure that these facilities are the best defended and most physically hardened facilities in our critical infrastructure. We will do so responsibly, in full consultation with the Office of Homeland Security, the Justice Department, the Pentagon, the intelligence community and others. We hope that the Congress will pass the legislation which we have been requesting for many years that we believe would bolster the current security regime. The NRC is not an independent actor on homeland security matters. We need to be part of the integrated national effort which the President is seeking to put in place with the help of the Congress. A year from now I believe that we can have much of our enhanced security regime in place. I look forward to discussing these issues with you then."

Today, we do have much of our enhanced security regime in place. Month after month the NRC staff, particularly the staff of the Office of Nuclear Security and Incident Response, and the Commission have worked long hours to develop, analyze and then implement appropriate security enhancements for all of our homeland-security significant licensees. We have done so in partnership with other federal agencies. We have done so

in partnership with the States to the maximum extent possible. We have done so in partnership with cleared industry stakeholders. And we have done so while listening to the input of stakeholders who do not hold clearances, such as the Project on Government Oversight (POGO), which became a public channel for the frustration of some members of our licensees' security forces.

I do not have time to cite all of our achievements. But I would refer you to our home page, where under Commission Documents, Commission Correspondence, you will find a September 5, 2002 and a March 31, 2003 letter from former Chairman Meserve to Secretary Ridge that outlines those achievements. I honestly believe that aside from the Office of Homeland Security, now the Homeland Security Council, no agency of government has worked harder, or achieved more, on homeland security in the past nineteen months than the NRC. You heard Marianne Burtnett of the Homeland Security Council staff tell you yesterday that NRC was the "rock star" last August in putting in place on time the five-tier Homeland Security Advisory System directed by Homeland Security Presidential Directive #3. She said that we "led the way" and were a model for other agencies in how to implement that Presidential Directive. Many hours went into that achievement last summer. The staff first held closed meetings with various categories of licensees and State officials. They sought to determine what other agencies were doing. And then with the help of the Commission, they drafted Regulatory Issue Summary 2002-12 for each category of licensee, a far larger set of licensees than had been covered by NRC's previous three-tier threat advisory system. The simple act of mailing that regulatory issue summary with its safeguards information or confidential attachment to every licensee, with copies to every State Homeland Security Advisor and every State NRC Liaison Officer, by the President's August 24, 2002 deadline was a monumental effort carried out by our support staff, and to my knowledge with no wrong enclosures.

This is a gathering largely of those interested in reactor issues, and I will soon turn to reactor security. But I want to tell another story about extraordinary staff achievement, this time with regard to the control of high-risk radioactive sources that might be used in a Radiological Dispersal Device. Former Chairman Meserve and Secretary of Energy Abraham met last summer and agreed to launch a joint working group to study additional controls on high-risk radioactive sources. By early this year that working group had identified the radionuclides of greatest concern and recommended action levels (in Curies) for each radionuclide. They had outlined a program to achieve cradle to grave controls on those sources, including export and import controls. Simultaneously we were working with the International Atomic Energy Agency (IAEA) to revise their draft Code of Conduct on the Safety and Security of Radioactive Sources and supporting documents to insure compatibility with the DOE/NRC Working Group recommendations. As we prepared for potential war with Iraq, the Homeland Security Council assigned NRC the task of tightening control on these high-risk radioactive sources as part of what became known on March 17 as Operation Liberty Shield. With tremendous help from our Agreement State colleagues, who for security reasons could not be fully informed of our intentions, our staff put together the mailing addresses and fax numbers of every licensee in the country who might possess such high-risk sources, some 1500 or so licensees. On

the evening of March 17 within minutes of the commencement of Liberty Shield, the NRC staff issued an advisory to them, outlining additional security measures they should take. Again, I believe that our staff was considered a model by HSC in carrying out this Presidential assignment.

Let me now turn to power reactor security. When we met last year, we had just issued our February 25, 2002 Order with its interim compensatory measures. That Order had made implicit (and in some cases, for example the size of the truck bomb, explicit) changes in the design basis threat for radiological sabotage. Those changes were captured in the enhanced adversary characteristics used in the table top security exercises that resumed last summer. For the first time those security exercises specifically sought the involvement of a broad array of State, local and Federal law enforcement and emergency planning officials, because as I said last year, we have sought from the outset of our security review to put in place an integrated approach to the security of these sites. Wherever we draw the line on the design basis threat, there is a possibility of a beyond design basis threat actually confronting the plant. The responsibility for dealing with such beyond design basis threats is clearly shared with government, and government has to tell you how it will carry out its responsibilities. As Chairman Diaz indicated yesterday, we intend to work with the Department of Homeland Security on this. But first we need to revise the DBT. And we will soon do this by Order.

In revising the DBT for radiological sabotage, we have sought the views of as broad a range of stakeholders as possible given that all of the details are properly safeguards information. The staff has met with other Federal agencies, State homeland security officials and cleared industry representatives. They have received many written responses to our request for comments. The Commission has twice met with industry representatives to hear directly their concerns. I am proud of the process we have followed. We have followed similar processes in developing the access authorization Order issued in January and the training Order approved by the Commission and soon to be issued. Indeed, on the training Order, at POGO's suggestion, the staff sought direct input from security officers around the nation. On the fatigue Order we followed a totally public process, putting out two drafts for comment and holding two rounds of public meetings on those drafts.

I hear a great deal of comment about using a rulemaking process rather than Orders to effect these changes. Frankly, aside from fatigue, I do not believe that any conforming rulemaking activity that subsequently follows these Orders will go into any detail on any of these matters. The details belong in safeguards information documents. To be binding, they need to be in the form of Orders. In my view, the 10 CFR 73.1 description of the design basis threat for radiological sabotage in the future should consist of about one line that says the details are issued by Order. No one's legal rights are curtailed by the issuance of such Orders. Any licensee has the right to contest the Order before a licensing board panel, which is quite capable of holding closed hearings on safeguards information matters. We have gone the extra mile in having as broad comment as possible before issuing all but the initial February 25, 2002 Order.

This is not the forum in which to discuss the details of the DBT. But I will tell you that the Commission has thought long and hard about the fundamental issue we posed in our January 2, 2003 letter asking for comments from cleared stakeholders, namely the appropriate limits on the threat against which a regulated private sector security force should have high assurance of defending. The industry has publicly argued that essentially anything beyond the threat enhancements of last summer's enhanced adversary characteristics involves an "enemy of the State" threat against which they should not be required to defend. I respect the argument, but I will end up disagreeing on some of these matters. The "enemy of the State" regulation, 10 CFR 50.13, was not meant to be construed as widely as the industry attempts to do today.

When the Commission completes its deliberations on the DBT, we will have put in place all the results of our comprehensive security review as they pertain to power reactors. As Chairman Diaz has said, we then expect a period of regulatory stability during which our power reactor licensees can consolidate the various enhancements that we have ordered. But our work will be far from over. We intend to continue to work with the Department of Homeland Security and other Federal agencies, as well as State and local law enforcement and emergency planning officials, to insure an overall integrated approach to the security of these critical facilities. You saw the early fruits of that effort on March 17 as part of Operation Liberty Shield, in which DHS took the lead in talking to Governors about possible augmentation of security at power reactor facilities. And we will continue to try to identify possible cost-effective mitigating strategies against beyond-DBT threats.

Chairman Diaz spoke yesterday about the difficulty of public communication on security matters, and indeed in general. NRC has a responsibility to say what we can about these matters in public without aiding potential terrorists. We should not abandon the playing field to either anti-nuclear activists or pro-industry groups. As you will see from the transcripts of public Commission meetings, I am clearly frustrated that we have not said more thus far, particularly when it comes to the vulnerability of spent fuel pools to terrorist attacks. There is a lot of bad information being spread about the alleged vulnerability of spent fuel pools, and this has been going on for more than a year. Unfortunately, in some cases, previous NRC staff or contractor studies, which themselves either have errors, or made non-physical simplifying assumptions, are misused to make extraordinary claims about spent fuel pool vulnerabilities. The worst of these NRC staff studies was NUREG-1738, a study which the staff released in January 2001, but which the Commission never endorsed because of our deep misgivings about it. Indeed we asked for public comments on NUREG-1738, held a public meeting on it in February 2001 at which various groups asked that it be peer-reviewed because of its obvious flaws, but never decided that question because the paper which would have been the vehicle for that decision was withdrawn by the staff after the events of September 11, 2001. I can tell you I would have voted for a peer review and that our current more realistic research on spent fuel vulnerability does not support that study. As Chairman Diaz said yesterday in response to a question, terrorists can't violate the laws of physics, but researchers can. Even they can't do it for long. We will soon be releasing more information on spent fuel vulnerability. In fact, a fact sheet may already be in ADAMS. Let me read from that fact

sheet:

“Nuclear power reactor spent fuel pools are not soft structures. They are neither easily reached nor easily breached. Instead, they are robust structures constructed of very thick concrete walls with stainless steel liners. In addition, other design characteristics of these pools can make them highly resistant to damage and can ease the ability to cope with any damage. Such characteristics can include having the fuel in the pool partially or completely below grade and having the pool shielded by other plant structures.

“Spent fuel pools at operating power reactors are protected by robust licensee security plans, which have been further augmented as a result of NRC’s February 25, 2002 Order, the details of which are sensitive. Even prior to September 11, 2001, licensees had multiple barriers and sensors, well-armed and trained guards, ready to defend from prepared positions. The February 25, 2002 Order augmented those capabilities through requirements for increased patrols, augmented security forces, additional security posts, greater vehicle stand-off distances, and enhanced coordination with law enforcement authorities. The Order also directed licensees to develop guidance and strategies to maintain or restore spent fuel pool cooling capabilities using existing or available resources.

“The National Research Council in its 2002 report, Making the Nation Safer: The Role of Science and Technology in Countering Terrorism, found: “The threat of terrorist attacks on spent fuel storage facilities, like reactors, is highly dependent on design characteristics. Moreover, spent fuel generates orders of magnitude less heat than an operating reactor, so that emergency cooling of the fuel in the case of an attack could probably be accomplished using ‘low tech’ measures that could be implemented without significant exposure of workers to radiation.” The Commission agrees with this statement, and through its February 25, 2002 Order has already made provision that licensees prepare such “low tech” measures in advance.

“In the unlikely event that a spent fuel pool were successfully attacked, and the water either partially or completely drained (an almost impossible event for below grade pools), there would still be several hours or longer for recovery of fuel cooling.

“Finally, preliminary results from current NRC analyses indicate that, even if all water were lost in a spent fuel pool and spent fuel recovery actions were not successful in cooling the fuel, most fuel in the pool would not be involved in any fire initiated in the fuel cladding. Thus, the consequences of such an extreme event would be much less severe than previously estimated in the NRC staff’s February 2001 study, NUREG-1738.

“Given all of this, NRC does not believe that the fundamental recommendation of the Alvarez study, namely that all spent fuel more than five years old be placed in dry casks through a crash 10-year program costing many billions of dollars, is at all justified. The Commission will release an initial critique of the Alvarez study shortly.”

How will we convince the public at large that what we are doing to protect nuclear

facilities from terrorist attacks is reasonable, given the details of our security arrangements will be classified? In all honesty, I am not sure that we ever will. The debate may be much like the defense debate throughout the Cold War. That debate featured “missile gaps” and “Team Bs” and never ended until the Cold War was over. The classified information on Soviet capabilities was subject to multiple interpretations. Cold War hawks tended to worst-case the information, attribute extraordinary performance to Soviet and Warsaw Pact forces, and demand sharp increases in defense spending. Cold War doves tended to see Soviet and Warsaw Pact capabilities as Potemkin villages, and argue for cuts in defense spending. The truth was somewhere in between, but as a nation we insured through our elected representatives, both Presidents and Congresses, that the threat was adequately, if not perfectly met. We erred, if at all, with today’s 20-20 hindsight of real Soviet capabilities, on the high side. The Commission’s job, under the full cognizance of the President and the Congress, is to ensure that the current terrorist threat is adequately met. I believe that we will be able to convince the Congress of this and to say enough in public to convince most of the public of this. But I fully expect that there will be ongoing criticism both from those who feel we are not doing enough, and will hold us to an absolute assurance of perfect protection standard, and from those who feel we are doing too much, and attributing to terrorists capabilities far beyond what they actually possess. As in the Cold War, we will err, if at all, on the high side. The integrated security strategy we seek to put in place, marrying the licensee’s high assurance against a design basis threat and significant deterrence against beyond design basis threats, with State, local and Federal response capabilities against beyond-DBT threats will likely far exceed the security strategy for all other elements of our national infrastructure for a very long time to come. Obviously, it does so today. Some of you may feel that that is unfair. The nuclear industry has always been held to a higher standard than other industries. That is why the NRC exists. But it is not an absolute or perfection standard. I believe that we are striking the right balance here as we do in our safety regulation, but reasonable people may differ. That, as Chairman Diaz said yesterday, is the genius of a democratic society.

I have devoted all of my formal presentation to security matters today. I hope I will get questions on other matters, for despite our focus on security issues since September 11, I, as well as most of our staff, spend most of our time on the critical safety issues that are the core of our mission. Let me now open the floor to your questions.