Public Meeting on Nuclear Security Matters
Rockville, Maryland
August 4, 2004

Meeting Summary

General

Roy Zimmerman, Director, Office of Nuclear Security and Incident Response, opened the meeting, welcomed the attendees, and discussed his views on the goals for the public meeting on security. Mr. Zimmerman said that NRC planned the meeting to share its activities and information with the public, and hoped for a frank and candid conversation about matters involving security at nuclear facilities.

Mr. Zimmerman recounted NRC's position that we know of no other commercial facilities that are as well protected as the nuclear power plants, that licensees took many steps voluntarily to enhance security at their plants, and that NRC followed these voluntary actions by formalizing certain steps in the Orders that it issued.

Openness

Mr. Zimmerman said the NRC prides itself on being very open when dealing with the public, but that in a post-9/11 environment, sharing information is more difficult because of the sensitivity of some of the information. Glenn Tracy, Director, Division of Nuclear Security reiterated that it would be difficult to find a Federal agency more open than the NRC prior to September 11, 2001, but that in the aftermath of the terrorist attacks, the NRC decided that the overall responsibility for public health and safety outweighed some aspects of openness, and therefore the degree to which the NRC could interact with the public changed with respect to security issues.

Sharing of Information

Mr. Zimmerman noted that, due to the sensitive nature of the information, even sharing certain security-related information with NRC licensees, the entities ultimately responsible for protecting the plants, is difficult. Therefore, the NRC has sponsored clearances for up to five individuals at each nuclear power plant. When asked whether these clearances can be granted to representatives of non-governmental organizations (NGOs), Mr. Zimmerman said that past attempts to do this did not satisfy the "need-to-know" criterion and, therefore, the NRC declined the clearances.

One participant asked whether the NRC decision to move emergency preparedness (EP) function into the Office of Nuclear Security and Incident Response would result in more of the EP information being captured by the "sensitive information" category and not be shared with the public. Mr. Zimmerman responded by saying that "emergency preparedness is about the people," and the public needs to know about evacuation plans, mitigative strategies, etc. He concluded by saying that the NRC is committed to getting the EP information to the public,

although certain select information, e.g., looking at emergency planning from the terrorists' perspective, might not be shared.

One participant raised the issue of "over-secrecy" interfering with objective review of NRC's studies, resulting in damage to scientific fairness. Mr. Zimmerman responded that the NRC uses its advisory committees to ensure scientific review of its policies and decisions.

Some participants took issue with what they considered a "double standard" used by the NRC in deciding what persons would be granted access to sensitive information. One participant cited a recent letter from then-Executive Director for Operations William D. Travers to Congressman Edward J. Markey (April 30, 2004) in which Dr. Travers noted the NRC's reasons for granting access to sensitive unclassified Safeguards Information to members of the Nuclear Energy Institute but not to other parties in a hearing. As Dr. Travers stated in that letter, access to sensitive information requires not only clearance but also the need to know the information, and he noted that the NRC's policies on this subject "comport with well-established government requirements and practices." In response to a request for copies of Dr. Travers' letter, the NRC staff distributed copies to meeting participants.

Results of the Reactor Oversight Program

Mr. Tracy provided a broad overview of a number of NRC security initiatives. As part of this overview, Mr. Tracy announced that findings of security inspections are now considered too sensitive for public disclosure and so the results will no longer be posted on NRC's website. One participant commented that the old Physical Protection Significance Determination Process (PPSDP) would allow no red findings for security, and he asked if that was still true. Further, he asked if there would be enforcement for findings in the new force-on-force program. Mr. Tracy responded that the process was being revised, but for the present, the results from the pilot force-on-force program are not subject to enforcement. The pilot program concludes in October 2004, and will be followed by the final force-on-force program and the results will be subject to appropriate enforcement action. In the pilot Significance Determination Process, red findings are possible.

Several participants expressed concern that the PPSDP results are being removed from NRC's website, noting that posting at least the colors (i.e., the color-coded indications of performance) wouldn't help a terrorist but could be used by groups overseeing the performance of the plants. Mr. Zimmerman said that although the colors won't be on the website, the NRC intends to do a "roll-up" of the results and advise the public of the findings without attributing them to specific sites. One participant asked that the NRC consider more creative ways to protect the information but still maintain communications with the public that resides near nuclear power plants. Mr. Zimmerman stated that the NRC was open to consider such alternatives.

Design Basis Threat

Some participants asked what level of detail could be discussed in public meetings on the design basis threat (DBT), asking whether participants can even discuss what's not in the DBT. Mr. Zimmerman said that discussion of matters even not included in the DBT would be considered sensitive since it would begin to draw boundaries around what is in the DBT, and this information could potentially assist an adversary. Other participants wanted to discuss the

comparison between the DBTs of the Department of Energy (DOE) and NRC, and asked if the NRC was going to reconsider its DBT. Roberta Warren, Chief of the NSIR's Threat Assessment Section, commented that NRC has dealt closely with DOE in development of separate DBTs and both agencies recognize the differences and understand that these differences are based on different types of facilities and nuclear material to be protected. Mr. Zimmerman agreed with Ms. Warren and, acknowledging that the participant still appeared to have some concerns about this matter, invited him to submit his concerns in writing for the NRC to followup on.

Threat Environment

One participant asked if it was true that the Commission had been briefed before September 11, 2001, on Osama bin Laden's possible interest in targeting a nuclear power plant. Ms. Warren commented that both prior to and following the September 11, 2001, attacks, whenever such information came forward, the NRC considered it and responded accordingly. Mr. Tracy also noted that, due to the sensitive sources of this information, it was not appropriate discussion in the public meeting.

Aircraft Impact

There was discussion of aircraft impact on and the potential risk associated with air attacks at nuclear power plants. Mr. Zimmerman noted that a recent exercise conducted at Indian Point included the scenario of an aircraft crashing into a part of the facility to test the impact this would have in responding to the emergency. He noted that engineering studies conducted by the national laboratories for the NRC have shown that the design of the plant and mitigation systems provide time to react and that time is available for the licensees to take actions to mitigate the consequences of such an event.

One participant took issue with the scenario used in the Indian Point emergency exercise, saying that it didn't adequately address the issue of aircraft impact and, therefore, proved nothing. Another participant asserted that the NRC was underestimating the potential harm from an aircraft attack, which is of concern based on the content of the 9/11 Commission Report. Mr. Zimmerman noted that NRC takes the 9/11 Commission Report very seriously, including the suggestion that nuclear power plants are high on al Qaeda's list of targets. He reiterated the NRC's position on the risk inherent in an aircraft attack, saying that it is unlikely that a significant radiological release that could affect public health and safety would result from an impact by a large commercial aircraft and that the NRC studies show that there would be time to implement plant mitigating measures and offsite emergency plans.

Force-on-Force Exercises

Mr. Tracy described changes and improvements to the force-on-force exercise program, both before and since September 11, 2001. He noted that the staff had begun improving realism of exercises and requiring licensees to only use the security force committed to in their plans, even before 9/11. Since that time, the program has incorporated use of the Multiple Integrated Laser Engagement System (MILES), enhanced adversary realism, instituted controller training, revised the exercise format and content, and developed guidance and standards for adversary force capabilities.

One participant asked what was the role of the NRC consultant in the force-on-force exercises, whether they are still a part of the program, and whether the NRC's consultant still runs the exercises and judges the results. Mr. Tracy responded that the contractors the NRC uses as consultants are a vital part of the force-on-force program and will continue to be so for the foreseeable future. The participant asked what would be the frequency of the exercises in the future, and Mr. Tracy commented that the NRC conducted exercises would be every three years at each plant instead of every eight as in the past. In addition, Mr. Tracy pointed out that the April 2003, training and qualification order required licensees to conduct force-on-force exercises on their own more frequently. The participant asked whether the policy set by a 1978 memo from then-Executive Director for Operations Lee V. Gossick, that security at nuclear power plants should not be designed with the assumption that they would have prior warning of an attack, was still valid. This is still the policy of the NRC. Although intelligence information may play a vital role in preparing for potential attacks, the security, contingency, and emergency response plans are designed to protect the public from the effects of a terrorist attack that occurs without prior knowledge or advance warning.

One participant asked how NRC was going to prevent "gaming" of the exercises, i.e., players cheating the system to ensure a positive result. Mr. Tracy commented that the NRC has instituted several controls against this, including: (1) having the participants with knowledge of the scenarios sign non-disclosure forms prohibiting them from discussing the contents of the scenarios, (2) use of MILES gear for technical accuracy of controller findings, and (3) the use of additional observers to assess the validity of exercises and conclusions.

Several participants took issue with the NRC allowing the Nuclear Energy Institute to hire Wackenhut to supply the mock adversary force since Wackenhut supplies the security forces for nearly half of the nuclear power plants nationwide. The participants contended that this represents a conflict of interest and the public would not be able to trust the results. Mr. Zimmerman said that he understood the issue and that the NRC intended to watch the exercises very carefully and take appropriate corrective actions, if necessary.

One participant asked if the results of the force-on-force exercises are documented in a report, and whether the lessons learned are shared with industry. Alan Madison, Chief of NSIR's Vulnerability Assessment and Integrated Response Section, said that the results were documented, shared with industry, and formed part of the basis for actions recommended to the Commission.

Integrated Approach to Safety, Security, and Emergency Response

Mr. Zimmerman said that NRC takes an integrated approach to protecting the public, and that such an approach warrants consideration of safety, security, and emergency response measures in planning and responding to terrorist events. Since this focus has changed a lot since 9/11, Mr. Zimmerman noted that it resulted in the recent reorganization in NRC to consolidate the emergency planning and preparedness functions into the Office of Nuclear Security and Incident Response.

Coordination with Federal, State, and Local Agencies

Mr. Tracy noted that there is now closer coordination between NRC, FBI, DHS, and other elements of the Intelligence Community, and that the NRC's relationship with other Federal agencies remains strong.

One participant asked if the NRC, and the Federal government for that matter, planned any training and testing of the new National Response Plan (NRP) and noted that the well-established Federal Radiological Emergency Response Plan was being eliminated in about 180 days. Mr. Zimmerman responded that the NRC is working closely with the DHS in finalizing the NRP and that the Radiological/Nuclear Annex is generally consistent with the FRERP and will supersede it early next year after the NRC conforms its procedures and works with the States. Thomas Blount, Senior Emergency Preparedness Specialist, Division of Preparedness and Response, stated that there is training scheduled for fall 2004 on the NRP and the Radiological/Nuclear Annex.

Spent Fuel

On the subject of the potential risk in securing spent fuel pools, one participant asked why there is a disparity between DOE's view and the NRC's view. He noted that DOE decided to remove the fuel from the K-Basin on the Hanford Reservation, but the NRC maintains that it is sufficient to rearrange the geometry of the fuel in the pool to provide adequate protection. Mr. Tracy noted that these decisions may have been driven by differences in the supporting analyses, but the NRC remained convinced that the fuel could remain safely stored in spent fuel pools.

Several participants asked why the NRC is not recommending additional hardening of the spent fuel pools, especially in light of the recent report from the National Academy of Sciences (NAS) recommending such action. Mr. Zimmerman responded that the NRC has been studying the protections for spent fuel pools for a long time and has already provided guidance to its licensees on measures to enhance protection of their pools. He also commented that, although the NRC staff agrees with some aspects of the NAS study, the staff doesn't agree with all of the recommendations. One participant asked whether the NRC's actions included removing the fuel from the pools and placing it into the dry casks. Mr. Zimmerman responded that the actions the NRC recommended didn't identify that removal of the fuel was necessary to ensure safety and security.

One participant asked why the NRC asked licensees with spent fuel pools simply to consider upgrades to security at spent fuel pools, rather than requiring the upgrades. The NRC has already required licensees to make certain enhancements since 9-11-01. The recent letter to licensees only asked licensees to consider these measures as part of the enhancements because they may be appropriate depending on plant specific conditions and operations.

Radioactive Materials Security

Mr. Tracy noted that the NRC has issued orders for materials licensees, independent spent fuel storage, and spent fuel transportation, and issued confirmatory action letters to research and test reactors. He said that the NRC has worked closely with the Agreement States to strengthen protection of materials security, and has issued guidance and recommendations for enhanced security at facilities with materials of greatest concern.

One participant took issue with the fact sheet on “dirty bombs” on the NRC’s website. He said the fact sheet should note that the first step in protecting oneself when exposed to a dirty bomb is to cover the mouth and nose with your hand or a piece of cloth. Another participant encouraged NRC to reconsider making public information about materials licenses in ADAMS and NRC’s website. The commenter believed NRC made too much information available that could aid adversaries in stealing or sabotaging radioactive sources.

Fire Protection

One participant commented that the NRC has allowed substantial numbers of nuclear power plants to be out of compliance with fire protection standards since 1980. He also commented that the NRC should require bunkering not only of the control room but of the safe shutdown facility. The NRC confirmed that this individual made these comments as part of the fire protection rulemaking. Mr. Zimmerman stated that NRC would consider these comments.

Review of Security Plans

Mr. Tracy described numerous efforts by the NRC to enhance security since September 11, 2001, including orders, vulnerability analyses and mitigative strategies, inspections, reinstitution of the force-on-force exercise program, guidance to licensees, and review of revised security plans. He described the development of the templates to guide the review of revised plans and the ongoing staff efforts to review the licensees’ security, contingency, and guard training plans before the October 2004 deadline for implementation. He noted that the review is proceeding and is on schedule.

Public Confidence

One participant noted that, before September 11, 2001, the NRC and industry were stalemated over how much security should cost. He then asked what confidence the public could have that this stalemate had ended, considering that the dialogue on security enhancements has since moved behind closed doors. Mr. Zimmerman responded that, since 9/11, the industry stated that it has spent an estimated $1 billion on security upgrades by October 2004, and that NRC has observed significant changes at the sites.

General Security Issues

One participant commented that the first line of defense is deterrence, but by suppressing so much of the details of security, the NRC is preventing the licensees from being visible about their security and thereby enhancing deterrence. The participant went on to say that there’s anecdotal evidence of many people being able to access the nuclear power plants without being challenged. Mr. Zimmerman responded that licensees have stepped up security and surveillance over not only the protected area but also the owner controlled area surrounding the plant. This surveillance has resulted in numerous reports of individuals being sighted by plant security, challenged, and then investigated by local police authorities.

One participant expressed concerns that there are no barriers to the intake structures at nuclear power plants, noting that the U.S. Navy has water barriers at their facilities. Mr. Zimmerman responded that there are barriers that might not be apparent to someone outside

the protected area barrier, and noted that some protection and functional capabilities are afforded by engineering and design, not just physical barriers.

Relicensing Hearings

One participant asked that NRC consider security matters when conducting hearings on relicensing of nuclear power plants, noting that when she sent concerns in to the Licensing Board, the concerns were ruled inadmissable. Mr. Zimmerman recommended that interested members of the public avail themselves of the various means of joining the process, submitting questions and concerns if necessary. Francis Cameron, the meeting's facilitator, cautioned that sometimes the question about security might not relate to the hearing and, therefore, that could be the reason it was ruled inadmissable.

One participant noted that the NRC relies on the protection afforded by the containment dome in preventing releases of radioactivity in a terrorist event. He then commented that the licensing arm of the NRC is presently considering approval of plant designs without containment domes, and asked that NSIR insert itself into the NRC review of advanced reactors. The NRC staff responded that security experts are involved in advanced reactor reviews.

Rulemaking

One participant asked what were NRC's plans to rewrite 10 CFR Part 73, the security regulations. Mr. Tracy said that the staff's rulemaking plan is due to the Commission in April 2005, but that there would be limits on what the NRC can discuss on the subject in public forum.

Future Meetings

Mr. Zimmerman said that the NRC hoped to conduct similar meetings with the public in the future. He also noted that certain of the future meetings might address specific subjects, as determined by public interest and current events.

Take-Aways

1. Mr. Zimmerman stated that the NRC would publish a summary of the meeting on the NRC website.
2. Mr. Zimmerman stated that the NRC would publish answers to questions posed by attendees (target date: mid-September 2004).
3. Mr. Zimmerman said the NRC will look into one participant's claim that armed guards are not posted at all access points to the Three Mile Island plant.
4. The NRC committed to consider whether it is a problem that a plant undergoing re-licensing used a pre-9/11 DBT to design the plant.
5. The NRC committed to consider whether some research reactors were allowed to store Category I material without conforming to Category I security requirements.
6. Re-confirm NRC commitment to the Gossick memorandum.

Conclusion

Mr. Zimmerman thanked those who took the time to participate in person, and those participated by telephone. He reiterated his interest in conducting future meetings and expressed the hope that the constructive dialogue would be maintained.