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Douglas J. Walters  
SENIOR DIRECTOR, SECURITY  
NUCLEAR GENERATION DIVISION

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OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

Mr. John A. Asalone  
Office of Information and  
Regulatory Affairs  
Office of Management and Budget  
NEOB-10202, (3150-0002)  
Washington, DC 20503

**SUBJECT: RIN 3150-AH60, Proposed Rule, 10 CFR Part 73, Design Basis Threat,  
(70 FR 67380)**

The Nuclear Energy Institute<sup>1</sup> provides the following response to the Proposed Rule, 10 CFR Part 73, Design Basis Threat (DBT) (70 FR 67380).

**Changes to the Details That Drive Security Designs And Protective Strategies Should Not Be Made Without Proper Input from the Effected Licensees**

The approach proposed in this rulemaking provides broad DBT requirements which afford the NRC significant flexibility to change the important details of the DBT which drives the security designs and protective strategies without input from the affected regulated licensees. The use of Regulatory Guides and Adversary Characteristics Documents (ACDs) to establish the details of the DBT has the potential for circumventing the Paperwork Reduction Act, the Administrative Procedure Act, and avoiding regulatory and backfit analyses.

The proposed rule maintains a level of detail in Section 73.1(a) that is generally comparable to the current regulation, while updating these general DBT attributes in the regulation with the insights gained from the development of the supplemental security requirements imposed by the April 29, 2003, DBT order.

<sup>1</sup> NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plants designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

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More specific details (e.g., specific weapons, ammunition, etc.) are contained in ACDs, which contain classified and safeguards information. The ACDs may be updated from time to time as a result of the NRC's periodic actual threat reviews, which NRC has been conducting since 1979. Future revisions to the ACDs would not require changes to the DBT regulations in Section 73.1, provided the changes remain within the broad scope of the rule text. The result is a proposed rule with a level of detail that reflects the major features of the DBTs, but provides the NRC significant flexibility to change the DBT without proper input from the affected regulated licensees. This would then allow changes to the details that drive security designs and protective strategies without proper input from the affected licensees.

### **The Design Basis Threat Scope Must Be Clear And Not Greater than the Largest Threats Against Which Private Sector Facilities Can Reasonably Be Requested To Defend Themselves**

In the Supplemental Information published with the Proposed Rule Section III the NRC states "The Commission concludes that the proposed amendments to § 73.1 will continue to ensure adequate protection of public health and safety by requiring the secure use and management of radioactive materials. The revised DBTs represent the largest threats against which private sector facilities must be able to defend with high assurance."

The threat continuum for any facility ranges from simple intrusion to full scale warfare, with the protection responsibility of the owner/operator falling somewhere in between. The DBTs must be based on recognition of the proper role of government in protecting against a threat generated by an enemy of the United States. Defining the appropriate boundary between the private and public sectors in the protection of commercial nuclear facilities is a difficult task, but one which must be accomplished. Crucial in allocating responsibilities between NRC licensees and the government is the limited extent to which the former is required to protect against a threat generated by an enemy of the United States or that is much larger than a private facility can defend against. The threat continuum for any private facility will have a range that fluctuates depending on the threat environment within the United States.

We agree with the Commission's statements that the revised DBTs represent the largest threats against which private sector facilities can reasonably be expected to defend. We are concerned that the proposed use of ACDs and Regulatory Guides to define the specific details runs the risk of clouding the boundary between private and governmental responsibilities. We believe the existing DBT establishes the maximum threat that a private facility can defend against and therefore it is the

demarcation for supplementing the defense of the facility by the integrated response capabilities of local, State, and Federal government resources.

The required security posture for commercial nuclear facilities that is the responsibility of the licensee is defined by NRC regulation and is based upon the DBT. Facilities must design to and demonstrate the ability to protect against the DBT. This establishes the baseline of physical security for all commercial nuclear facilities. The NRC rigorously inspects and tests the ability of facilities to defend against the DBT through inspections which include evaluated force-on-force exercises. This ensures that private sector nuclear facilities are demonstrably prepared to defend themselves. Threats beyond the DBT must be addressed utilizing an integrated response from local, State, and Federal government resources.

The nuclear industry, the NRC, and the Department of Homeland Security (DHS) recognize this delineation of private and public responsibility. DHS reviews all threats, including those that potentially affect nuclear facilities, and is responsible for establishing appropriate responses to those threats. Through the performance of Comprehensive Reviews at commercial nuclear power plants and other critical infrastructure, DHS is identifying additional government measures that will enhance the protection of critical infrastructure against a broad spectrum of threats, including those beyond the NRC regulated DBT. These additional protective measures are focused on enhancing the integrated response capabilities surrounding each critical infrastructure facility.

The Nuclear Sector Coordinating Council has addressed the subject of the DBT in its proposal for the Nuclear Sector Specific Plan, which it approved on November 17, 2005. The following approach is proposed for inclusion in Sections 2.3.1.8 and 7.1 of the Nuclear Sector Specific Plan.

Given the impact of the DBT characteristics on the security posture and level of protection of commercial nuclear power plants, any changes to the DBT requires coordination with DHS and NRC, and consultation with the plant owner/operators.

NEI agrees with the Nuclear Sector Coordinating Council proposal that any changes NRC makes to the DBT requires coordination with DHS and consultation with the plant owner/operators. NEI believes that consultation with the licensees should involve a rulemaking process which would occur if references to the specific ACDs and Regulatory Guides are contained in the text of Section 73.1 so that the details that drive security design and protective strategy are discussed through a regulatory process.

Licenses are not - - and should not be - - required to defend against threats posed by enemies of the United States or those that are larger than a private facility has the capability to defend. The threat underlying the Commission's April 29, 2003 Order and reflected in the proposed DBT constitutes the largest threats which a private entity can reasonably be expected to defend. Any increase would amount to improper escalation into the realm of requiring an integrated response capability. Further, any consideration of such a threat must take place as part of an overall societal allocation of security resources, within the context of relative risk.

### **The Backfit Rule Requires That The NRC Perform An Analysis of Changes in Position**

The NRC has determined that a backfit analysis is not necessary in connection with the proposed changes to the DBT because the changes result from redefining the level of protection that should be regarded as adequate. Such a determination should be supported by analysis, but the proposed rulemaking does not provide such an analysis. Each future change to the ACDs and Regulatory Guides will require a separate backfit analysis.

### **The Paperwork Reduction Act /Administrative Procedure Act is Circumvented By This Approach**

The NRC's Regulatory Analysis understates the impact of requiring revisions of every licensee's security program documents, and should be redone and republished for comment to permit proper comment.

Attachment 1 contains our detailed comments on proposed use of ACDs and Regulatory Guides to promulgate the details of the DBTs

Attachment 2 contains our comments on the proposed rule provisions, as well as whether or how the 12 factors in the *Federal Register* Notice should be addressed in the DBT rule. Attachment 2 contains Security-Related Information and should be withheld under 10 CFR 2.390.

Attachment 3 contains our comments on Paperwork Reduction Act, Backfit Analysis, and Regulatory Analysis.

Attachment 4 contains our comments on applicability of 10 CFR 50.13, Attacks and destructive acts by enemies of the United States; and defense activities, to this rulemaking.

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We appreciate the opportunity to provide comments on this rulemaking. Please contact Jack Roe at 202.739.8138 or me to discuss our comments or if any further information is desired.

Sincerely,



Douglas J. Walters

Enclosures

c: Mr. Craig Conklin, Department of Homeland Security

## **Rulemaking by the Use of Adversary Characteristics Documents and Regulatory Guides**

The *Federal Register* Notice states that the specific details related to the threat are contained in Regulatory Guides and Adversary Characteristics Documents (ACDs), which are not publicly available because they contain both safeguards information (SGI) and classified information (70 Fed. Reg. 67380). As further explained in the Notice, the attributes described in the ACDs are consistent with the requirements imposed in the April 29, 2003, DBT order (*id.*). The proposed regulation, however, does not mention the ACDs or the associated Regulatory Guides and thus, leaves the key regulating documents outside the range of checks and balances that would be provided by inclusion in an NRC rule or regulation. The security designs and protective strategies of nuclear facilities are driven by the details in these documents, not the broad and general attributes in the rule. Therefore, the industry recommends that the proposed regulation be revised to specifically and explicitly incorporate the ACDs and Regulatory Guides by reference.

The Notice states that the ACDs and Regulatory Guides may be updated from time to time as a result of the NRC's periodic threat reviews, but does not contain any indication that affected licensees will have an opportunity to comment on proposed changes. The principal reason for incorporating the ACDs and Regulatory Guides by reference is to establish, consistent with the Administration Procedure Act (APA), a clear requirement that before revising the ACDs and Regulatory Guides, the NRC must provide notice to the licensees who may have to take action in response to such changes and afford them an opportunity to comment. Incorporation by reference would also inform members of the public that, in addition to the general provisions in the regulation, the NRC has specified more detailed provisions. Even though these detailed provisions cannot be made publicly available, knowledge of their existence should increase public confidence that the NRC is paying attention to the details. In addition, incorporation by reference would provide notice of a changing security requirement to persons who may be contemplating the development of applications for new licenses. Such persons would thus be more likely to contact the NRC earlier in the design process to request the ACDs and Regulatory Guides in accordance with Section 652 of the Energy Policy Act of 2005.

### **Protection of Design Basis Threat Responsibilities**

As described in the Notice, the periodic NRC reviews will consider changes in the threat environment that have occurred. Since the intent of ACD and Regulatory Guide modification would be to require licensee security programs to defend against these new or changed characteristics, before making each change the NRC also must consider whether the responsibility for the associated protection should be borne by the government or licensees.

Potentially affected licensees should have an opportunity to comment on proposed changes prior to summary imposition. Licensees' views on such issues should be considered by the NRC because licensees are more familiar with local conditions and the detailed designs of their respective facilities. Licensees have a uniquely important perspective on the effects of the proposed changes on licensed activities, including technical feasibility/practicality, cost and potential effects on facility operations and the integrated response capabilities. Without licensee input regarding the proposed ACD and Regulatory Guide changes, there will be an increased risk that the NRC will impose changes based on inadequate information. The result may be unanticipated costs or unintended adverse consequences on the reliability and safety of licensed facilities.

Another benefit of licensee participation in the consideration of proposed ACD and Regulatory Guide changes is that licensees would thereby gain a greater understanding of the reasons for the changes and the elements of safeguards program design that are most likely to meet the NRC's objectives.

### **Changes In NRC Security-Related Requirements Must Be Addressed Under the Backfit Rule**

Use of a notice and comment process for consideration of changes to the ACDs and Regulatory Guides will also result in more rigorous analyses in accordance with 10 CFR 50.109, the Backfit Rule. The NRC should follow the backfit process when considering ACD and Regulatory Guide changes. Our experience suggests, however, that backfit analyses done as part of the notice and comment rulemaking process tend to be more rigorous and transparent than those performed and retained "in-house" to support revisions to guidance documents.

Although the Commission has determined that the changes reflected in the revised DBT, the ACDs and the security orders are within an exception in the Backfit Rule, such a conclusion at this time is premature and must be considered on a case-by-case basis. The required level of protection has now been set at the outer limit of what can reasonably be imposed on private companies, and there is less warrant for conjecture that any future ACD and Regulatory Guide changes will fall within this exception. Consequently, backfit analyses will be increasingly important in future reviews of the threat environment to assure that the integrated response capabilities are considered.

SECY 05-0106 states that the ACDs would have the same regulatory status as guidance documents, and would be made binding on licensees through voluntary security plan revisions (SECY 05-0106 at 6). The same "voluntary" process would be used for ACD changes (*id.*). These statements ignore the reality, implicit in the SECY 05-0106 statement that NRC will use orders where licensees do not "volunteer", that the ACDs and Regulatory Guides are to be viewed by the NRC

staff as requirements, not mere guidance. The ACDs state specific details of the DBT which licensees are required to use to design their security protective measures and protective strategies, and cannot be considered to be equivalent to mere guidance documents. It follows that the ACDs are in fact, regulatory requirements, and that the notice and comment provisions of the APA must be followed to effect changes to them.

### **The Administrative Procedure Act and Paperwork Reduction Act Must be Followed**

Incorporation of the ACDs and Regulatory Guides by reference in the DBT rule would be consistent with and in furtherance of the requirements of the APA, which provides that “[f]or the purpose of this paragraph [§ 552(a)(1)], matters reasonably available to the class of persons affected thereby is deemed published in the Federal Register where incorporated by reference therein with the approval of the Director of the Federal Register.” As discussed below, the case of the DBT rule, ACDs and Regulatory Guides, the persons affected are the licensees and applicants who must comply with the rule.

APA Section 552(a)(1) also states that “[e]xcept to the extent a person has actual and timely notice of the terms thereof, a person may not in any manner . . . be adversely affected by [ ] a matter required to be published in the Federal Register and not so published.” This provision “requires agencies to set out in advance the legal standards that will be applied so that actions can be guided and strategies planned.” Alliance for Cannabis Therapeutics v. DEA, 15 F.3rd 1131, 1136 (D.C. Cir. 1994) (internal quotes and citation omitted).

Thus, the statute requires that disclosure of the requirements to the persons who must meet them. Courts generally reject claims that an agency position should not apply because it was unpublished where the claimant cannot show harm due to lack of prior notice. Id. New York v. Lying, 829 F.2d 346, 355 (2d Cir. 1987); Donovan v. Wollaston Alloys, Inc., 695 F.2d 1 (1st Cir. 1983). Therefore, the “persons affected” for the purpose of the proposed DBT rule are the licensees that would be required to take action in response to the DBT, ACDs and associated Regulatory Guides.

Incorporation of the ACDs and Regulatory Guides by reference would not affect the NRC’s ability to designate the information in these documents as classified or safeguards information and to control their disclosure accordingly because the requirements of 5 USC 552(a)(1) and (2) are subject to the exemptions from required public disclosure provided in 5 USC 552(b) to the same extent as requests for agency records under 5 USC 552(a)(3). Consequently, classified and safeguards information contained in the ACDs and Regulatory Guides may be withheld from public disclosure pursuant to Freedom of Information Act exemption 3, and 10 CFR §§ 2.390(a)(3) and 9.17(a)(3). In particular, persons who may have an arguable

interest in assuring the adequacy of security at licensed facilities would have no greater legal right to access to the ACDs and Regulatory Guides than if the ACDs and Regulatory Guides are not mentioned in the DBT regulations.

The industry believes that the ACDs and Regulatory Guides meet the criteria of the Director of the Federal Register for incorporation by reference in the DBT rule. The criteria used by the Director are provided in 1 CFR § 51.7, as follows:

- (1) it conforms to the policy stated in § 51.1;
- (2) is published data, criteria, standards, etc.
- (3) substantially reduces the volume of material in the Federal Register; and
- (4) is reasonably available to and usable by the class of persons affected by the publication.

The first criterion is met because incorporation of the ACDs and Regulatory Guides by reference conforms to the policy in 1 CFR § 51.1 in that it (1) would benefit both the Federal Government and the members of the class affected; and (2) is not intended to detract from legal or practical attributes of the system established by the Federal Register Act, the APA or any law or regulation. In this case, the alternative to incorporation by reference is omission of any statement. As discussed above, in this instance incorporation by reference would better accomplish the purposes of the APA and the Federal Register Act than the alternative.

The second criterion is satisfied since the ACDs and Regulatory Guides, as described in the Notice, would contain criteria or standards.

The third criterion is satisfied since the ACDs and Regulatory Guides contain a substantial number of pages. Even if the number of pages was small, however, the requirement that the incorporation "substantially reduce the volume of material in the Federal Register" is obviously premised on the assumption that matter not incorporated by reference will be published in full. Here, that premise is not applicable because the ACDs and Regulatory Guides contain classified and safeguards information that cannot be published in the Federal Register. Consequently, the ACDs and Regulatory Guides should be exempt from this criterion.

The fourth criterion would be met because the NRC will make the ACDs and Regulatory Guides available to the affected licensees and current and future applicants. The criteria for usability, which are listed as an element of the fourth criterion, are consistent with normal NRC practice, and must be met for the ACDs and Regulatory Guides to perform their intended functions.

Finally, the fact that the ACDs and Regulatory Guides are produced by the NRC should not prevent their incorporation by reference because the ACDs and Regulatory Guides possess the "highly unusual" characteristic of containing classified or safeguards information. Moreover, the 1 CFR § 51.7(b) also states that a publication may be approved for incorporation by reference if it cannot be printed using the Federal Register/Code of Federal Regulations printing system.

In summary, incorporating the ACDs and Regulatory Guides by reference will provide notice to "the public" to the maximum extent possible consistent with the classification of the information, and will establish a clearly defined legal process for changing the ACDs and Regulatory Guides. The standards that the Director of the Federal Register applies for approval of incorporation by reference should result in approval for the ACDs and Regulatory Guides. Even if the NRC does not obtain the Director's approval, the regulation should nevertheless include specific references to the ACDs and Regulatory Guides so that future changes to the ACDs and Regulatory Guides would necessitate amendment of the regulation.

## Comments on Proposed Rule Provisions, As Well As Whether Or How the 12 Factors Should Be Addressed In the Design Basis Threat (DBT) Rule

### Proposed Rule Provisions

#### New Nuclear Power Plants

Section V. Petition for Rulemaking (PRM-73-12) stated that for new nuclear power plants, the opportunity exists to develop designs that provide for enhanced protection against potential threats. The industry acknowledges this but believes it does not justify the adoption of a different DBT for new nuclear power plants than for operating nuclear power plants because the NRC has already set the DBT at the level of the largest threat against which a private guard force can reasonably be expected to defend and a different DBT for new plants could result in two DBTs for the same nuclear power plant site with a currently operating nuclear power plant. The Statement of Considerations for the final rule should make this point clear.

#### Nuclear Power Plants with MOX fuel assemblies

The rule should clearly state that the applicable design basis threat for a power reactor licensee that possesses or uses mixed oxide (MOX) fuel is the DBT for power reactors. Such a position would be entirely consistent with that taken by the Commission in the recent proceeding involving Duke Energy Corporation's application for a license amendment to authorize the use of four MOX fuel lead assemblies at the Catawba Nuclear Station.

As a Part 50 reactor facility, Catawba was required to protect against the "radiological sabotage" DBT defined in 10 CFR 73.1(a)(1). Additionally, from the time the licensee took delivery of the unirradiated MOX assemblies until the time <sup>public</sup> when those assemblies were placed into the Catawba reactor, the DBT for theft in 10 CFR 73.1(a)(2) applied. *See Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-05-14, \_\_ NRC \_\_ (June 20, 2005 slip op. at 4). During that interim, Catawba would possess formula quantities of SSNM and would thus technically be a Category I facility. Duke therefore proposed to implement special security arrangements during the period from MOX fuel delivery until placement of the MOX assemblies in the reactor. Because Duke would be required to meet various regulations in support of the DBT for "theft", it sought exemptions from some provisions in 10 CFR Parts 11 and 73 (applicable to Category I facilities) for this time period (a matter of days or weeks).

As the Commission recognized, "the precise issue in this case was not whether the DBT applied, but whether or not the evidence established that the regulatory standard for authorizing exemptions was satisfied." CLI-05-14, slip op. at 4.

Nevertheless, the Commission did address the DBT question (albeit indirectly) several times in the course of the proceeding.

The intervenor opposed issuance of the exemptions that Duke sought, and contended that Catawba should be required to meet all security requirements applicable to Category I facilities (the DBT for Category I facilities) as a prerequisite to the license amendments. Significantly, however, the Commission rejected various attempts to establish the Category I facility DBT as applicable to Catawba.

For example, the Commission denied the intervenor's request for access to certain 2003 NRC orders to modify licenses at reactor facilities. These orders included confidential safeguards and classified information about the DBT for commercial reactors and for individual Category I facilities. The Commission rejected the intervenor's argument that it needed access to such protected information (including information about the Category I facility DBT) to formulate contentions concerning Duke's amendment application. The intervenor was given access to the licensee's proposed MOX-related security plan amendments and its exemption request, which contained safeguards information. *See Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-6, 59 NRC 62, 71-73 (2004).*<sup>2</sup>

Also relevant to the DBT question was the Commission's position that Duke's security arrangements for protecting MOX fuel would not be measured against the NRC's general security orders issued to reactors, and its direction that the parties should assume that the Catawba facility would "comply with all applicable general security requirements" in NRC rules and orders. CLI-04-6, 59 NRC at 73.

The Commission also ruled that as a matter of law, the NRC's post-9/11 security orders for the Category I fuel fabrication facilities operated by Nuclear Fuel Services, Inc. (NFS) and BWX Technologies (BWXT) do not apply to Catawba. *See Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-19, 60 NRC 5, 11 (2004).* This ruling also raised the DBT issue. One of the intervenor's proposed security contention asserted that Duke should be required to meet "the same enhanced security standards that the NRC imposed on other Category I facilities in the wake of the 9/11 terrorist attacks." *See CLI-04-19, 60 NRC at 7.* The

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<sup>2</sup> In its ruling, the Commission pointed out that the MOX license amendment proceeding had nothing to do with the NRC's post-9/11 general security order: "It is not those orders, but Duke's MOX-related security submittal, that details the particular security measures that will be taken as a consequence of the presence of the MOX fuel assemblies at issue here." CLI-04-6, 59 NRC at 72. The intervenor already had access to the licensee's security submittal.

Commission rejected this claim and dismissed the contention. It ruled that the post-9/11 enforcement orders imposing security upgrades applicable to the two existing Category I facilities “did not create a universal design basis threat applicable to any other facility (such as Catawba) that might possess Category I material in the future.” *Id.*, 60 NRC at 10. Those orders did not amend NRC regulations or establish (either by law or in practice) a new review standard for other licensees or applicants.

Moreover, the Commission ruled, the security needs at Catawba and those at the Category I facilities are “visibly different.” Citing the NRC Staff’s safety evaluation, the Commission pointed to the relative unattractiveness of the MOX fuel lead assemblies from a proliferation standpoint, due to the low plutonium concentration, composition, and form (size and weight). *Id.*, 60 NRC at 11-12. Finally, the Commission rejected the notion that the enhanced security requirements imposed on Category I facilities after 9/11 would “inevitably” be imposed on Catawba when it possesses the unirradiated fuel assemblies. *Id.* at 12.

Later, during the discovery phase of the Duke MOX fuel license amendment case, the intervenor argued that it required access to classified NRC guidance documents addressing the application of the sabotage and theft/diversion DBTs to the NFS and BWXT Category I facilities in existence in 2000. The licensee did not have access to this classified guidance. Again, the Commission rejected intervenor’s request for access to the Category I facility DBT. *See Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-29, 60 NRC 417 (2004)*. In its ruling, the Commission explained the rationale for its decision that the Category I facility DBT did not apply to Catawba even though Duke proposed to possess a formula quantity of SSNM at Catawba for a brief period of time. It noted that when the classified guidance documents were issued, “there was no Category I facility license that was similar to Catawba in terms of the form in which the material would be possessed or the activities for which the material would be used.” *Id.*, CLI-04-29, 60 NRC at 423. The Commission stated:

Duke has never seen our 2000 design basis threat guidance on Category 1 facilities and does not now need to see them. Nor does BREDL, for these guidance documents do not pertain to this proceeding. If Duke receives the current license amendment, it will, technically, be a Category I facility during the time it possesses the four unirradiated MOX test assemblies. But, as we already have held in this proceeding, the circumstances at Duke’s Catawba reactor, even at that time, will be very different from the two existing Category I facilities (the NFS and BWXT plants). Because of its composition, form and low plutonium concentration, the MOX material is not nearly as attractive to potential adversaries from a theft and diversion

standpoint as the material at the existing NFS and BWXT facilities. Those facilities engage in fuel processing and possess larger quantities of highly enriched uranium in more accessible forms. When the NRC issued its guidance documents in 2000, it did not intend those guidance documents to cover or address a power reactor licensee's possession and use of already fabricated MOX fuel. Indeed, not only would MOX fuel assemblies be difficult for a terrorist to acquire and transport, but using such an assembly to create a radiological dispersion device would be impractical and ineffectual. For these reasons, it is clear to the Commission that while Catawba would technically be a Category I facility, there is no rational reason for Catawba to have a significantly different level of security than is already existing at the reactor site. Therefore, dissemination to the intervenor of Category I security guidance that applies to the BWXT and NFS facilities would be unnecessary and inappropriate.

We are obliged to guard zealously against unnecessary disclosure of classified security information. Catawba simply does not share the underlying conditions, or potential hazards, precipitating the classified security guidance we issued in 2000 that was intended to deal with the general type of Category I facilities then in existence. That guidance does not extend to Catawba. Catawba is not a large-scale fuel facility; rather, it is a commercial nuclear reactor that will, for a short time, possess more plutonium than other commercial reactor sites. As we stated earlier in this case, “[a]t stake here is the appropriate increment – the appropriate heightening of security measures – necessitated by the proposed presence of MOX fuel assemblies at the Catawba reactor site.” Guidance applicable to an entirely different type of facility is not useful in evaluating the Catawba MOX security proposal.

In short, the guidance documents interpreting the application of 10 C.F.R. §§ 73.1(a)(1) and 73.1(a)(2) to large Category 1 fuel cycle facilities are so remote from the security issues surrounding the proposed Catawba MOX amendment that it is not “indispensable” for BREDL to obtain those documents in discovery, particularly in view of their classified nature. BREDL does not have a “need to know” the requested guidance documents at any phase of this adjudication.

CLI-04-29, 60 NRC at 424-25 (internal citations omitted).

In addressing the DBT question, the Commission did not focus exclusively on Catawba's technical status as a Category I facility during the brief time it proposed to possess unirradiated MOX test assemblies. The Commission also considered the

differing circumstances surrounding the use of MOX fuel at Catawba as opposed to those at existing Category I facilities. Specifically, it took into account the composition, form, and low plutonium concentration of the MOX material. It noted the relative unattractiveness of that MOX material from a theft and diversion standpoint as compared to that at Category I fuel fabrication facilities, which possess larger quantities of highly enriched uranium in more accessible forms. Further, the Commission considered the intended scope of the 2000 classified guidance, and confirmed that the guidance was never intended to apply to a power reactor licensee's possession and use of MOX fuel. Based on these factors, the Commission found "no rational reason for Catawba to have a significantly different level of security than is already existing at the reactor site."

The NRC Atomic Safety and Licensing Board in the Duke MOX license amendment proceeding found that Duke met its burden of showing that the requested exemptions were appropriate, and that Duke's physical protection system will "provide high assurance that activities involving the MOX fuel will not be inimical to the common defense and security nor constitute an unreasonable risk to the public health and safety." The Board did, however, require the licensee to meet certain conditions in connection with the proposed receipt of the MOX fuel. Although Duke complied with the conditions, the Commission undertook a *sua sponte* review of the Licensing Board's order imposing those conditions and disapproved each of them. The Commission found that the Board had relied on certain assumptions that were contrary to the weight of the evidence in the proceeding, that it should not have offered its own interpretation of the NRC's DBT regulations, and that the conditions imposed were not necessary to ensure compliance with the NRC's exemption standard. Further, the Commission stated:

In future cases, any legal questions about the interpretation of the DBT regulatory requirements which arise in the course of considering the admission of contentions or later in the adjudication should be referred to the Commission for appropriate guidance in lieu of needless speculation and misinterpretation.

CLI-05-14, slip op. at 5.

A regulatory solution to this situation – that is, establishing the applicability of the reactor DBT for situations in which a reactor licensee seeks to possess and use previously-fabricated MOX fuel – would simplify future licensing proceedings and reduce the cost and delay occasioned by the need to litigate these questions in individual contested cases.

## **Whether or How the 12 Factors Should Be Addressed In the Design Basis Threat (DBT) Rule**

This section contains our comments whether or how the 12 factors related to the Energy Policy Act of 2005 in the *Federal Register* Notice should be addressed in the DBT rule.

Section V. Petition for Rulemaking (PRM-73-12), states that "The DBT is based upon review and analysis of actual demonstrated adversary characteristics in a range of terrorist attacks, and a determination as to the attacks against which a private security force could reasonably be expected to defend." The industry agrees that the DBT must be based on a determination as to the attacks against which a private security force could reasonably be expected to defend. The NRC did not envision the events of September 11, but promulgated 10 CFR 50.13, *Attacks and Destructive Acts by Enemies of the United States; and Defense Activities*, in 1967. This regulation evidences a clear understanding that threats beyond the legal and practical capabilities of private security forces remain the responsibility of Federal, State and local governments.

### **Factor:**

(1) the events of September 11, 2001;

### **Comment:**

No changes to the proposed rule are required to address the events of September 11, 2001. The events of September 11 were carried out by an enemy of the United States and, the Federal government has acknowledged its responsibility to defend against such threats. In considering potential security enhancements at nuclear facilities in light of those events, the NRC has properly taken into account the level of threat against which a private sector guard force can be reasonably expected to defend. The NRC actions in response to the events of September 11 have been described by the NRC in various orders, speeches and Congressional correspondence and are summarized below. The industry believes that this history shows that the events of September 11, 2001 have been adequately considered in the security measures at nuclear facilities.

Prior to September 11, 2001, nuclear facilities were among the best defended, most hardened commercial facilities in the Nation. Following the terrorist attacks on the NRC took prompt action to improve security at nuclear power plants and other NRC-regulated facilities, including nuclear fuel manufacturing facilities, and activities such as transportation of spent nuclear fuel. These actions included a series of safeguards and threat advisories. In response, licensees took action to enhance security at their respective facilities.

On February 25, 2002, the NRC issued an order to all nuclear power plant licensees requiring that they increase their defensive capabilities to protect against a new threat. The resulting enhancements to security included increased security patrols, augmented security forces, additional security posts, increased vehicle standoff distances, and improved coordination with law enforcement and intelligence communities, as well as strengthened mitigation procedures and strategies.

On January 7, 2003, the NRC required further enhancements to access controls for the power plants. On April 29, 2003, the NRC issued three additional orders requiring additional security enhancements, including:

- Work-hour limitations on security personnel;
- Enhanced training and qualification requirements for security force personnel; and
- Revisions to licensee security, training and qualifications, and contingency plans to protect against the supplemented design basis threat of radiological sabotage.

The April 2003 Order required that the licensees submit their revised plans to the NRC for review and approval by April 29, 2004, and that the plans be implemented at the nuclear power plants by October 29, 2004. The licensees submitted revised security plans in April 2004.

On October 23, 2003, the Commission issued an immediately effective Order imposing additional security measures to all power reactor licensees and research reactor licensees who transport spent nuclear fuel.

On January 12, 2004, the Commission issued an immediately effective Order imposing additional security measures for source manufacturers and distributors of high risk radioactive sources.

In July 2004, the Commission approved issuance of orders imposing additional security measures for the Honeywell uranium conversion facility, independent spent fuel storage facilities, and all decommissioning nuclear power plants with spent fuel in the spent fuel pool.

Some of the requirements set forth in these various orders formalize a series of security measures that NRC licensees had taken in response to advisories issued by the NRC in the aftermath of the September 11, 2001 terrorist attacks. Additional security enhancements, developed during the ongoing NRC security review, are also provided in these orders. These orders remain in effect, and their requirements are incorporated into the proposed DBT, ACDs and Regulatory Guides. Consequently, the DBT clearly is based on consideration of the events of September 11, 2001.

In February 2003, NRC resumed the force-on-force program in the form of a pilot program to test recent program enhancements. In February 2004, the NRC began a transition force-on-force program, incorporating the lessons learned during the pilot program. The transition program followed the same format as the pilot program; however, the "mock adversary" force used the characteristics of the Design Basis Threat, as enhanced and supplemented by NRC orders. The full security performance assessment program resumed in November 2004. Under that program, NRC will conduct approximately 22 force-on-force exercises per year, so that each site's security will undergo an NRC evaluated exercise at least once every three years.

**Factor:**

(2) an assessment of physical, cyber, biochemical, and other terrorist threats;

**Comment:**

The proposed rule adequately addresses the physical, cyber, biochemical, and other terrorist threats for a private security force. Physical threats are explicitly and adequately addressed in the DBT. Cyber threats also are adequately addressed in the DBT, which includes requirements related to attack by stealth or deceptive actions. Protection from cyber threats has been incorporated in each nuclear power plant Security Plan. NEI has developed an industry guideline, NEI 04-04 "Cyber Security Program for Power Reactors, Revision 1." The guideline was endorsed by the NRC on December 23, 2005 as an acceptable method for establishing and maintaining a cyber security program. This guideline provides a graded approach that is based on risk to plant operations by a digital system. A structured process is used to identify critical digital systems requiring protection from cyber attack and takes into consideration consequence and susceptibility in determining risk.

Similarly, no changes to the DBT are required to assure protection against biochemical threats. Current regulatory requirements provide adequate protection against such threats. For example, under Appendix A to Part 50--*General Design Criteria for Nuclear Power Plants*, General Design Criterion 19, nuclear power plants are designed to assure that control rooms remain habitable during a postulated hazardous chemical release. As a result, in the event of a biochemical attack, control room operators will be able to take action to operate the nuclear power unit safely and to maintain it in a safe condition.

**Factor:**

(3) the potential for attack on facilities by multiple coordinated teams of a large number of individuals;

**Comment:**

The proposed rule adequately addresses the potential for attack on facilities by multiple coordinated teams of a large number of individuals. The proposed rule

explicitly addresses the use of one or more teams. While the number of individuals is not stated in the proposed rule, and is left for specification in the ACDs and Regulatory Guides, the NRC has acknowledged that the current DBT, as reflected in the security order, is the largest threat against which private sector facilities can reasonably be required to defend. Protection against any threat beyond the current threat elements and characteristics is the responsibility of local, State and Federal governments. Current regulatory requirements already provide for appropriate liaison and communication with local, State and Federal law enforcement authorities.

**Factor:**

(4) the potential for assistance in an attack from several persons employed at the facility;

**Comment:**

The proposed rule adequately addresses the potential for assistance in an attack from several persons employed at the facility. The current DBT addresses internal threats and extensive regulations, programs and physical measures are in place to address this threat and maintain a work force of trustworthy and reliable employees.

**Factor:**

(5) the potential for suicide attacks;

**Comment:**

The proposed rule adequately addresses suicide attacks. The current DBT considers that the attackers are willing to be killed in their attack. The protective measures in place to prevent access to vital areas include armed guards with authority to use deadly force is sufficient to neutralize attackers willing to be killed or commit suicide in their attack.

**Factor:**

(6) the potential for water-based and air-based threats;

**Comment:**

The proposed rule adequately addresses the potential for water-based and air based threats. The proposed DBT explicitly addresses the water-based threat, including the use of water vehicles and a waterborne vehicle bomb assault. No changes to the DBT are required to address air-based threats because the current DBT and other design and operational features of nuclear facilities provide reasonable protection against such threats. Any increase in the DBT beyond the current level would constitute an extension of the threat into the realm of an enemy of the United States.

Studies conducted by the nuclear industry, the NRC and others have shown that it is unlikely that an air-based attack on a nuclear power plant can cause significant

harm to the public. This is due to the measures taken by the Federal government to reduce the likelihood of attack, the relative difficulty in piloting a large airplane into the critical parts of nuclear plants, the robustness of nuclear plant structures, the multiple safety systems designed into the plants and the industry's practiced and proven ability to carry out emergency plans.

Federal and other governmental efforts to protect the nation from terrorist attacks by air have increased substantially since September 11, 2001. Those efforts already include a variety of measures such as (1) enhanced airline passenger and baggage screening, (2) strengthened cockpit doors, (3) expanded the Federal Air Marshals Program, (4) established Federal Flight Deck Officer Program which permits trained pilots to carry firearms, and (5) provided additional security training to flight attendants. These efforts reduce the risk that a commercial passenger airplane will be hijacked.

Federal law enforcement and intelligence agencies have increased efforts to identify potential aircraft-related threats before they can be carried out. Such improvements have already been exercised by the Department of Defense and the Federal Aviation Administration through responses to airspace violations near nuclear power plants that were subsequently determined not to be threats. These and other government-wide efforts have improved protection against air attacks on all industrial facilities, both nuclear and non-nuclear.

The Aircraft Owners and Pilots Association (AOPA) representing over 400,000 general aviation pilots, provided comments on Docket PRM-50-80 regarding nuclear power plant security and outlined the proactive approach the general aviation community has taken with post September 11, 2001 security measures. Following the events of September 11, 2001, AOPA sought out an expert to determine if a small aircraft might be effective in an attack on a nuclear power plant. The report by Robert M. Jefferson stated that the crash of a general aviation aircraft would not cause a dangerous release of radiation. The Jefferson report makes it clear that general aviation aircraft are not effective weapons and small aircraft are not a significant threat to the safety of the public when it comes to nuclear power plants. The report concluded that general aviation aircraft do not pose a serious threat to the nation's nuclear power plants. In the report, "Nuclear Security - General Aviation Is Not a Threat," Jefferson stated that if a general aviation aircraft were to crash into any part of a nuclear power facility, the "result of such an endeavor would fail to produce the damage necessary to cause any radiological involvement of the public."

Nuclear power plants were not originally designed to withstand the impact from jet airliners being deliberately crashed into the structures. However, the nuclear industry and the NRC have conducted independent studies of such an attack on

nuclear power plants and concluded that it is unlikely that significant harm to the public would result from such an attack. This is due to the measures taken by the Federal government to reduce the likelihood of attack, the robustness of nuclear plant structures, the multiple safety systems designed into the plants and the industry's practiced and proven ability to carry out emergency plans.

**Factor:**

(7) the potential use of explosive devices of considerable size and other modern weaponry;

**Comment:**

The proposed rule adequately addresses the potential use of explosive devices of considerable size and other modern weaponry. The detailed requirements are stated in the ACDs and Regulatory Guides and are properly withheld from public disclosure. Explosives devices significantly larger than the size specified in those documents and weaponry encompassed by them would constitute a threat by an enemy of the United States and would go beyond the largest threat which private guard forces could reasonably be expected to defend against. The Commission has properly recognized in its regulations, decisions, public statements and testimony to Congress that it is simply not practicable to require NRC-regulated facilities to protect against the full range of the modern arsenal of weapons and that the defense and internal security capabilities of this country constitute, of necessity, the basic "safeguards" with respect to possible hostile acts by an enemy of the United States.

**Factor:**

(8) the potential for attacks by persons with a sophisticated knowledge of facility operations;

**Comment:**

The proposed rule adequately addresses the potential for attacks by persons with a sophisticated knowledge of facility operations. The current DBT takes into consideration that the attackers may have considerable knowledge of the plant and how to destroy key equipment. Even knowledgeable attackers would face significant difficulty because nuclear power plants are very complex and are configured with several compartments behind locked and alarmed doors. This is due to the potential for events effecting redundant equipment and the need for the design to handle several accident conditions and have the appropriate spatial separation to safely shut down the plant. All these design features make it very difficult for an attacking force to get to the equipment sets to cause radiological sabotage, and provide the plant security force with inherent advantages in defending against such attacks.

**Factor:**

(9) the potential for fires, especially fires of long duration;

**Comment:**

No changes to the proposed rule are required to address the potential for fires, including fires of long duration. Nuclear power plant design and operation are subject to various regulatory requirements related to potential fires, including 10 CFR 50.48 Fire protection, Appendix R to Part 50—Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979, and Criterion 3 – Fire Protection of Appendix A to Part 50. As a result, nuclear power plants incorporate extensive fire protection design and operations features including detailed fire hazards analyses that consider the potential for fires, determine the nuclear safety consequence of postulated fires and specify measures to prevent, detect, control and extinguish fires and to assure that a fire that is not promptly extinguished will not prevent the safe shutdown of the plant.

NRC already required nuclear power plant licensees to implement specific security enhancements and/or measures to mitigate the potential consequences of an attack on a nuclear power plant. The enhanced security requirements are contained in the Interim Compensatory Measures required by Order dated February 25, 2002 and the DBT as supplemented by Order on April 29, 2003. Additional site-specific inspections of nuclear power plants are underway to ensure appropriate mitigative strategies have been put into place and are effective. In addition, site-specific assessments of important aspects of nuclear power plants are also underway or planned to identify if there are any additional potential mitigation strategies that licensees are expected to consider.

The enhanced fire protection requirements (ICM Provision B.5.b) and mitigation strategies are adequate to address the largest reasonable threat against which a private company can reasonably be expected to defend.

**Factor:**

(10) the potential for attacks on spent fuel shipments by multiple coordinated teams of a large number of individuals;

**Comment:**

The proposed rule adequately addresses the potential for attacks on spent fuel shipments by multiple coordinated teams of a large number of individuals. While the number of individuals is not stated in the proposed rule, and is left for specification in the ACDs and Regulatory Guides, the NRC has acknowledged that the current DBT, as reflected in the security order, is the largest threat against which a private sector guard force can reasonably be required to defend. Protection against any threat beyond the current threat elements and characteristics is properly the responsibility of the Federal, State, and local governments. Current regulatory requirements already provide for appropriate liaison and communication

with local law enforcement authorities in connection with spent fuel shipments. Spent fuel shipments have been occurring regularly for many years without any significant security events. The security provided for these shipments has provided adequate protection of the public. The spent fuel is shipped in robust transport casks, and the nature of the spent fuel further reduces the potential risk of its use as a threat against the public.

**Factor:**

(11) the adequacy of planning remain valid to protect the public health and safety at and around nuclear facilities, as appropriate, in the event of a terrorist attack against a nuclear facility;

**Comment:**

No changes to the proposed rule are required to address the adequacy of planning to protect the public health and safety at and around nuclear facilities, in the event of a terrorist attack against a nuclear facility. Current NRC regulations (e.g., 10 CFR 50.47 and Appendix E) provide adequately for planning to protect the public health and safety at and around nuclear facilities, as appropriate, in the event of a terrorist attack against a nuclear facility.

As evidenced recently during several hurricanes, the current emergency planning around a nuclear power plant has proven to be a model standard for effective planning and preparedness. To further strengthen current emergency planning, the NRC continues to work with the U.S. Department of Homeland Security and other Federal agencies to integrate Federal Response Plans into a unified National Response Plan and National Incident Management System, and to refine the National Preparedness Policy. NRC also completed the development of the commercial Nuclear Reactors, Materials, and Waste Key Resource Plan for Critical Infrastructure Protection. This document serves as the Sector-Specific component of the National Infrastructure Protection Plan. In addition, NRC continues to coordinate protective strategies with various components of the U.S. Department of Defense, including NORTHCOM and NORAD, and NRC has recently participated in exercises such as Unified Defense '04 and Amalgam Virgo '04. NRC has also conducted integrated response tabletop exercises, involving licensees, State and local responders, as well as multiple Federal agencies, to focus combined efforts and actions when responding to a possible terrorist event at a nuclear power plant. In June 2004, the NRC integrated emergency preparedness functions into the Office of Nuclear Security and Incident Response to handle preparedness and response activities effectively and efficiently.

**Factor:**

(12) the potential for theft and diversion of nuclear materials from such facilities.”

**Comment:**

The proposed rule adequately addresses the potential for theft and diversion of nuclear materials from NRC-regulated. The theft of nuclear materials from a nuclear power plant is very difficult. The very nature of the fuel creates a major problem of handling due to the high radiation emitted. The fuel is very heavy and is handled under water or behind massive concrete and lead shielding. It is virtually impossible for someone to steal any fuel from a nuclear power plant. The proposed rule explicitly addresses theft or diversion of nuclear materials from Category I facilities, and various NRC regulations require the implementation of systems to prevent theft or diversion of licensed material, including 10 CFR Part 20, Subpart I, and 10 CFR Part 74.

## **NEI Comments on Paperwork Reduction Act, Regulatory Analysis, and Backfit Analysis**

The approach proposed in this rulemaking provides broad requirements that lack details and provides the NRC with significant flexibility to change the details of the DBT which drive the design of protective measures and protective strategies without appropriate input from the affected regulated licenses. The proposed approach using Regulatory Guides and Adversary Characteristics Documents to establish the details of the DBT has the potential for circumventing the Paperwork Reduction Act, and avoiding proper Regulatory Analysis Backfit Analyses.

The recent NRC Office of Inspector General (OIG) Audit of NRC's Generic Communications Program (OIG-05-A-19), September 30, 2005 addressed issues with compliance with internal and external requirements by the NRC Staff. The audit identified generic communications that are issued outside of NRC's existing regulatory framework.

The OIG reported that none of the safeguards advisories issued from September 11, 2001 until mid-May 2005 displayed an OMB control number or contained a statement that the provisions of the Paperwork Reduction Act do not apply (i.e., NRC review determined that OMB clearance was not required). The OIG found that as a result, the agency compromises its openness policy, thereby affecting the public's confidence in NRC's regulatory processes and decision-making.

The approach proposed in this rulemaking also has the potential to also compromise established regulatory processes, thereby affecting the public's confidence in NRC's regulatory processes and decision-making.

### **Paperwork Reduction Act Statement and Regulatory Analysis**

The Federal Register Notice states that: "This proposed rule does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)." This statement is incorrect and underestimates the impact on licensees due to future changes to the regulatory guide and ACDs as discussed below. The Paperwork Reduction Statement is flawed and should be revised.

The Commission has prepared a draft regulatory analysis on this proposed regulation. The analysis examines the costs and benefits of the alternatives considered by the Commission. The Commission requested public comment on the draft regulatory analysis. The regulatory analysis is based on an incorrect premise and should be revised.

The Commission's Regulatory Analysis states the following concerning impacts on licensees:

**"Impacts upon the licensees from this proposed rulemaking would be minimal. Because the adversary characteristics would remain consistent with those promulgated by orders, no technical changes will be required. Licensees may need to update references in their security plan documentation, which could be accomplished without NRC review and in conjunction with future plan updates."**

**This statement is incorrect and underestimates the impact on licensee. Licensees' security plans contain information directly related to the DBT. Changes to the DBT would require changes to each licensee's security plan. Changes to the security plan must be either approved by the NRC or communicated to the NRC containing a description of each change within two months after the change is made. To state that changes to the security plan can be made "in conjunction with future plan updates" does not adequately reflect the realities of the Commission's regulations and underestimates the impact on licensees. The NRC has a role in all changes to the (1) Security Plan, (2) Guard Training and Qualification Plan, (3) Safeguards Contingency Plan [First Four Categories of Information [Background, Generic Planning Base, Licensee Planning Base, Responsibility Matrix]], either before the change or after the change.**

**All changes to the (1) Security Plan, (2) Guard Training and Qualification Plan, (3) Safeguards Contingency Plan [First Four Categories of Information [Background, Generic Planning Base, Licensee Planning Base, Responsibility Matrix]] must be:**

- (a) approved by the NRC with a license amendment, or**
- (b) without prior Commission approval if the changes do not decrease the safeguards effectiveness of the plan, and shall submit, as specified in § 50.4 (Written Communications), a report to the NRC containing a description of each change within two months after the change is made.**

**The basis for the Commission's statements on impact on licensees is incorrect. The Paperwork Reduction Act Statement and Regulatory Analysis should be revised. The proposed rule should be re-noticed in the Federal Register to allow for proper comment on the Paperwork Reduction Act Statement and Regulatory Analysis.**

**The approach proposed in this rulemaking provides general requirements that lack details and provides the NRC with significant flexibility to change the specifics of the DBT without appropriate input from the affected regulated licensees. Future revisions to the ACDs would not require changes to the DBT regulations in Section 73.1, provided the changes remain within the broad scope of the rule text. The result is a proposed rule with a level of detail that reflects the major features of the DBTs, but provides the NRC significant flexibility to change the DBT without**

proper input from the affected regulated licensees. This would then allow changes to the details that drive security designs and protective strategies without proper input from the effected licensees. A consequence could be the unnecessary expenditure of significant time and financial resources including activities covered by the Paperwork Reduction Act.

## **Backfit Analysis**

The NRC has determined, pursuant to the exception in 10 CFR 50.109(a)(4)(iii), that a backfit analysis is unnecessary for this proposed rule. Section 50.109 states in pertinent part that a backfit analysis is not required if the Commission finds and declares with appropriate documented evaluation for its finding that a "regulatory action involves defining or redefining what level of protection to the public health and safety or common defense and security should be regarded as adequate." The proposed rule would increase the security requirements currently prescribed in NRC regulations, and is necessary to protect nuclear facilities against potential terrorists. When the Commission imposed security enhancements by order in April 2003, it did so in response to an escalated domestic threat level. Per the Backfit Rule, the NRC still must perform an analysis supporting its application of the "adequate protection" exception to the rule and changes to the regulatory guide and ACDs. Furthermore, whether such an exception applies must be determined each time a change in position occurs. It cannot be generally and unilaterally applied for all changes in position, including ACDs or their modification.

The Commission further found that the proposed rule would redefine the security requirements stated in existing NRC regulations, and is necessary to ensure that public health and safety and common defense and security are adequately protected in the current, post-September 11, 2001, environment.

The approach proposed in this rulemaking provides general requirements that lack details and provides the NRC with significant flexibility to change the specifics of the DBT without appropriate input from the affected regulated licensees or performance of the required assessments to support use of the adequate protection exception. The proposed approach using Regulatory Guides and Adversary Characteristics Documents to establish the details of the DBT has the potential for circumventing the process of Backfit Analysis and not provide the affected entities an opportunity to review a proper Backfit Analysis. The Commission should explain the method to provide the affected entities an opportunity to review a meaningful Backfit Analysis.

## Design Basis Threat and the "Enemy of the United States" Exception

Defining the appropriate boundary between private and public sectors in the protection of nuclear facilities is a difficult task, but one which must be accomplished. Crucial in allocating responsibilities between licensees and the government is the extent to which the former is required to protect against a threat generated by an enemy of the United States.

This issue is addressed directly in Section 50.13 of NRC regulations, "Attacks and destructive acts by enemies of the United States; and defense activities." The regulation provides, in pertinent part,

An applicant for a license to construct and operate a production or utilization facility, or for an amendment to such license, is not required to provide for design features or other measures for the specific purpose of protection against the effects of . . . (a) attacks and destructive acts, including sabotage, directed against the facility by an enemy of the United States, whether a foreign government or other person . . . (Emphasis added.)

In adopting Section 50.13 the Commission noted that protection against hostile enemy acts is the responsibility of the nation's defense establishment and various agencies having internal security functions. It further observed that reactor design features to protect against the full range of the modern arsenal of weapons are simply not practicable, and that the defense and internal security capabilities of the country constitutes, of necessity, the basic safeguards with respect to a possible hostile acts by an enemy of the United States. The Commission continued:

The circumstances which compel this recognition are not, of course, unique as regards a nuclear facility; they apply also to other structures which play vital roles within our complex industrial economy. The risk of enemy attack or sabotage against such structures, like the risk of all other hostile attacks which might be directed against this country, is a risk that is shared by the nation as a whole.<sup>1</sup>

Section 50.13 was upheld in court soon after its adoption.<sup>2</sup> The NRC has consistently distinguished between actions encompassed within the DBT, which licensees must defend against; and those constituting acts by an "enemy of the United States." For example, more than twenty years ago, in a case involving the Braidwood nuclear power plant, a Licensing Board described the DBT as contemplating "well-trained individuals (likely assisted by a knowledgeable

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<sup>1</sup> 32 Fed. Reg. 13,445 (1967).

<sup>2</sup> *Siegal v. Atomic Energy Commission*, 400 F.2d 778 (D.C. Cir. 1968).

insider), who carry hand-held weapons and/or other hand-carried equipment for destroying the reactor's integrity," and noted that "Part 73 refers to sabotage accomplished with the use of small weapons by small bands of saboteurs." By contrast, said the Licensing Board, Section 50.13 "addresses military-style attacks which are broader in nature and carried out with heavier weapons."<sup>3</sup>

The Commission has noted the mutual exclusivity between sabotage and "enemies of the United States." In particular, it has observed that attacks by the latter are the responsibility of the "national defense establishment and various agencies having internal security functions," and that "requiring reactor design features to protect against the full range of the modern arsenal of weapons is simply not practical."<sup>4</sup>

A January 2002 Licensing Board decision in the Millstone license amendment proceeding rejected a proposed late-filed contention dealing with the likelihood and consequences of potential acts of terrorism against the Millstone spent fuel pool which was founded on the events of September 11. The Board rejected the proffered contention "on the basis of the bar against considering contentions of this sort set forth in 10 C.F.R. § 50.13," and NRC decisions applying that policy.<sup>5</sup> The Board cited with approval the applicant's view that terrorist acts come within the scope of Section 50.13, at least to the extent those acts exceed the Design Basis Threat. It also indicated agreement with the NRC Staff's position that the Commission's 2001 decision in the *Private Fuel Storage* proceeding had reaffirmed the basis for Section 50.13, "concluding that the events of September 11, 2001 are precisely the kind of threats excluded from consideration in licensing decisions by 10 C.F.R § 50.13."<sup>6</sup> Similarly, the Licensing Board presiding in the McGuire/Catawba license renewal proceeding noted, in rejecting a proposed contention on security and terrorism, that "terrorism concerns raised by NIRS clearly fall within the ambit of section 50.13."<sup>7</sup>

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<sup>3</sup> *Commonwealth Edison Co.* (Braidwood Nuclear Power Station, Units 1 and 2), and LBP-85-27, 22 N.R.C. 126, 137 (1985).

<sup>4</sup> See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 379 (2001).

<sup>5</sup> *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-02-05, 55 N.R.C. 131, 134.

<sup>6</sup> *Id.* at 144.

<sup>7</sup> *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2, and Catawba Nuclear Station, Units 1 and 2), LBP-02-04, 55 N.R.C. 49, 113. In this regard, these rulings are consistent with a much earlier ruling of the Appeal Board that "the Commission did not intend the design basis threat of radiological sabotage to include the possibility of an attack by international or transnational terrorists." *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-653, 16 N.R.C. 55, 73 (1981).

A principal objective of the proposed DBT is to make generically applicable the security requirements previously imposed by the Commission's April 29, 2003 Order.<sup>8</sup> In implementing this objective, The Commission stated that it reflects the largest threats against which a private security force could reasonably be expected to defend.<sup>9</sup> Accordingly, any escalation would constitute an extension of the threat into the realm of an enemy of the United States. Under Section 50.13, defending against such threats is properly the responsibility of the national defense establishment and agencies having internal security functions.

Further, any consideration of such threats needs to be evaluated collectively by the military, Department of Homeland Security, the States, and local law enforcement. In testimony offered to Congress shortly after the September 11 attacks, then NRC Chairman Richard A. Meserve noted that "[t]he public sector, whether at the Federal, State or local level needs to examine the assignment of resources to deal with design basis threats to nuclear facilities together with the assignment of resources to protect less well-defended, less hardened facilities against threats beyond their means to defeat."<sup>10</sup> As Dr. Meserve explained in his testimony:

[T]he security for nuclear facilities should be addressed in the context of the protection of other sensitive infrastructure. Society should allocate its security resources in accordance with relative risk, and, as a result, the separation of nuclear facilities from all other types of sensitive infrastructure will fragment the analysis inappropriately.<sup>11</sup>

In sum, licensees are not - - and should not be - - required to defend against threats posed by enemies of the United States. The threat underlying the Commission's April 29, 2003 Order and reflected in the proposed DBT constitute the largest threat against which a private entity can be reasonably expected to defend. Any increase would amount to improper extension into the realm of an enemy of the United States and would require an integrated response capability. Further, any consideration of such a threat must take place as part of an overall societal allocation of security resources, within the context of relative risk. Licensees are utilities that do not have unlimited resources. Utilities are required to protect not only their nuclear power plants but also other parts of their infrastructure. Increasing the DBT to the level associated with an enemy of the United States would drain protection resources from other parts of the utility infrastructure.

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<sup>8</sup> 70 Fed. Reg. 67,380, 67,381

<sup>9</sup> *Id.* at 67,382, 67,385

<sup>10</sup> Statement Submitted by the United States Nuclear Regulatory Commission to the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce, United States House of Representatives, Concerning Nuclear Power Plant Security, pp. 4-5 (Dec. 5, 2001).

<sup>11</sup> *Id.* at 7.