

**PR 52**  
**(72FR56287)**

**From:** <rschmidtgbr@aol.com>  
**To:** <SECY@nrc.gov>  
**Date:** Mon, Dec 17, 2007 7:29 AM  
**Subject:** RIN 3150-AI19

6

Dear Sirs,

please find attached the text below also as WORD attachment.

RIN 3150-AI19

Proposed Rule on Aircraft Impacts for New Power Reactor Designs

DOCKETED  
 USNRC

December 17, 2007 (3:10pm)

OFFICE OF SECRETARY  
 RULEMAKINGS AND  
 ADJUDICATIONS STAFF

Dear Sirs,

Thank you for the communications of Messrs Schneider and Tartal, allowing me to participate (as a German citizen) in the public meeting of Nov. 15 on "Aircraft Impact Assessment Rule".

In the end, I could not come, being too busy at the Washington ANS meeting.

So, I take this opportunity for written comments:

1. time-frame: terrorist fascions come in waves and eventually disappear by arrest, political solutions or societal developments (see urban guerillas in Germany in the 1970s). The current, very dangerous threat is now and may persist in the next 10 to 20 years. Therefore a limitation of the rule to new standard design certifications, etc. is inappropriate, since the 100 existing plants and current COLs are not included.
2. siting-criteria: the IAEA has developed siting criteria for aircraft impact assessment, which considers both the likelihood of a crash and the potential impact on the neighbourhood; i.e. the ease of evacuation in a beyond-design-base accident. In the nineteen-seventies it was recognized, that West Germany, then the NATO frontline-state of the cold war, exceeded those criteria. All new plants were equipped with 2.5 m armed concrete shells; little backfitting was done to old ones. While the primary threat in Germany was seen in fast-flying military aircraft the amount of protection achieved against a slow-flying Jumbos, gas clouds and guerrilla rockets checked out positively. The original IAEA criteria may very well be used as the basis for adapted criteria to the present threat.
3. technical references: in the times of these new protection requirements in Germany, the undersigned was chief project engineer for a number of plants under construction and in planning and participated in major publications on thick concrete, thin concrete, aircraft shake-up spectra, internal security and other protective measures. References could be provided as appendices to the assessment portions or back-ups of the proposed rule.
4. wire-mesh covers, for new plants and as a backfit: such covers, spanned over buildings to be protected have been investigated for decades. They are a very practical and economical solution, at expenses per plant in the order of magnitude of the paper-work costs, estimated in the proposed rule. The most recent one, in which the undersigned participated, is German Patent Application (pending) Number 102007 003 844.7. It is the most complete one for various applications, technical feasibility and cost estimates; the undersigned can gladly provide more infos to interested parties and is also available for corresponding consulting.

I feel that the proposed rule could be much improved, by responding to my

Template = SECY-067

SECY-02

suggestions on its scope (item 1) and considering application of logical criteria (see item 2) to at least the tail-end of plants with a life-expectancy of i.e. at least 20 years.

Sincerely, Reiner Schmidt, MSc  
e-mail: [rschmidtgbr@aol.com](mailto:rschmidtgbr@aol.com)

**Mail Envelope Properties** (47666AB5.AB8 : 6 : 35512)

**Subject:** RIN 3150-AI19  
**Creation Date** Mon, Dec 17, 2007 7:25 AM  
**From:** <[rschmidtgbr@aol.com](mailto:rschmidtgbr@aol.com)>

**Created By:** [rschmidtgbr@aol.com](mailto:rschmidtgbr@aol.com)

**Recipients**

nrc.gov  
TWGWPO02.HQGWDO01  
SECY (SECY)

**Post Office**

TWGWPO02.HQGWDO01

**Route**

nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	3160	Monday, December 17, 2007 7:25 AM
TEXT.htm	3465	
NRCRESPONSE.doc	23552	
Mime.822	40810	

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling  
This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
Junk Mail handling disabled by Administrator  
Junk List is not enabled  
Junk Mail using personal address books is not enabled  
Block List is not enabled

## RIN 3150-AI19

### Proposed Rule on Aircraft Impacts for New Power Reactor Designs

Dear Sirs,

Thank you for the communications of Messrs Schneider and Tartal, allowing me to participate (as a German citizen) in the public meeting of Nov. 15 on "Aircraft Impact Assessment Rule". In the end, I could not come, being too busy at the Washington ANS meeting.

So, I take this opportunity for written comments:

1. *time-frame*: terrorist fascions come in waves and eventually disappear by arrest, political solutions or societal developments (see urban guerillas in Germany in the 1970s). The current, very dangerous threat is now and may persist in the next 10 to 20 years. Therefore a limitation of the rule to new standard design certifications, etc. is inappropriate, since the 100 existing plants and current COLs are not included.
2. *siting-criteria*: the IAEA has developed siting criteria for aircraft impact assessment, which considers both the likelihood of a crash and the potential impact on the neighbourhood; i.e. the ease of evacuation in a beyond-design-base accident. In the nineteen-seventies it was recognized, that West Germany, then the NATO frontline-state of the cold war, exceeded those criteria. All new plants were equipped with 2.5 m armed concrete shells; little backfitting was done to old ones. While the primary threat in Germany was seen in fast-flying military aircraft the amount of protection achieved against a slow-flying Jumbos, gas clouds and guerrilla rockets checked out positively. The original IAEA criteria may very well be used as the basis for adapted criteria to the present threat.
3. *technical references*: in the times of these new protection requirements in Germany, the undersigned was chief project engineer for a number of plants under construction and in planning and participated in major publications on thick concrete, thin concrete, aircraft shake-up spectra, internal security and other protective measures. References could be provided as appendices to the assessment portions or back-ups of the proposed rule.
4. *wire-mesh covers, for new plants and as a backfit*: such covers, spanned over buildings to be protected have been investigated for decades. They are a very practical and economical solution, at expenses per plant in the order of magnitude of the paper-work costs, estimated in the proposed rule. The most recent one, in which the undersigned participated, is **German Patent Application (pending) Number 102007 003 844.7**. It is the most complete one for various applications, technical feasibility and cost estimates; the undersigned can gladly provide more infos to interested parties and is also available for corresponding consulting.

I feel that the proposed rule could be much improved, by responding to my suggestions on its scope (item 1) and considering application of logical criteria (see item 2) to at least the tail-end of plants with a life-expectancy of i.e. at least 20 years.

Sincerely, Reiner Schmidt, MSc  
e-mail: rschmidtgbr@aol.com