TOWN AND COUNTRY PLANNING ACT 1990 - SECTION 77 AND TOWN AND COUNTRY PLANNING (INQUIRIES PROCEDURE) (ENGLAND) RULES 2000

APPLICATIONS BY LONDON ASHFORD AIRPORT LTD

SITE AT LONDON ASHFORD AIRPORT LIMITED, LYDD, ROMNEY MARSH, TN29 9QL

APPENDIX IN SUPPORT OF LAAG/3/H

NUCLEAR ASSESSMENT CRITERIA

(extracts from relevant guidelines and letters)

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FOR LAAG

PLANNING INSPECTORATE REFERENCE: APP/L2250/V/10/2131934

LPA REFERENCES: Y06/1647/SH and Y06/1648/SH

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EXTRACTS FROM NII GUIDELINES AND LETTERS

IN SUPPORT OF NOTE TO THE INQUIRY 'LAAG/3/H'

1. The Basic Safety Objective (BSO)

1.1) *The BSO marks the start of the broadly acceptable level* (SAPs [1], page 95, para 569)

1.2) *The BSO form benchmarks that reflect modern nuclear safety standards and expectations.* (SAPs [1], page 95, para573)

2. Basic Safety Level (BSL)

2.1) *It is HSE policy that a new facility or activity should at least meet the BSLs. However in meeting the BSL the risks may not be ALARP (as low as reasonably practicable). The application of ALARP may drive the risks lower. Deciding when the level of risk is ALARP needs to be made on a case by case basis. A proportionate approach should be used so that the higher the risk, the greater is the degree of disproportion needed to justify not implementing additional safety measures.* (SAPs [1], Page 95, para 571)

3. Application Of BSO And BSL To Proposed Expansion Of LAA

Mr Allmark made it clear both in his letters to the public and to the Autys that the benchmarks in this case were those governed by societal risk.

3.1) *The acceptability of a hazard is judged against the objective numerical targets and legal limits laid down in the SAPs which relate to the likelihood of an event and consequences. Target 9 of the SAPs is the most relevant for this consideration which states that for an accident with a risk of 100 or more fatalities, the basic safety level should be a probability of 1 in 100,000 per annum and the basic safety objective of 1 in 10,000,000.*

*(*Extract taken from a letter written by Tim Allmark, Principal Inspector Of Nuclear Installations, LAAG/3/B, letter 1, starting end of page 2).

4. As Low As Reasonably Practical (ALARP)

4.1) SAPs [1], paragraph 10 states:

R2P2 described risks that are unacceptably high and the associated activities would be ruled out unless there are exceptional reasons, and risks which are so low that they may be considered broadly acceptable and no further regulatory pressure to reduce risks further need be applied. However the legal duty to reduce risks so far as is reasonably practicable applies at all levels of risk and extends below the broadly acceptable level.

4.2) The SAPs Targets Guidelines [2], paragraph 3 state:

It is important to recognise that the BSO doses/risks have been set at a level where HSE considers it not to be a good use of its resources or taxpayers money, not consistent with a proportionate regulatory approach to pursue further ***improvements*** *in safety. In contrast , licensees have an overriding duty to consider whether they have reduced the risks as low as reasonably practical (ALARP) on a case by case basis irrespective of whether the BSOs are met. As such it will in general be inappropriate for licensees to use the BSOs as design targets or as surrogates to denote when ALARP levels of dose or risk have been achieved.*

In other words, there is still a drive to reduce risks below the BSO to as low as reasonably practicable but, in any case, it certainly applies to cases where the risk is higher than the BSO.

4.3) The NII's guidance on ALARP [3] states in paragraphs 24 to 28 states:

'*In any assessment as to whether the risks have been reduce ALARP, measures to reduce risk can only be ruled out if the sacrifice involved in taking them would be grossly disproportionate to the benefits of the risk reduction*'

...we believe that the greater the risk, the more that should be spent in reducing it and the greater the bias on the side of safety'

And in paragraph 50:

'*The option or combination of options which achieves the lowest level of residual risk should be implemented, provided that disproportionate costs are not incurred.*'

And noting paragraph 22:

'Individual duty-holders ability to afford a control measure or the financial viability of a particular project is not a legitimate factor in the assessment of its costs'

In other words, ALARP is based upon **reducing** the risk to as low as reasonably practicable, not actively increasing it.

4.4) This position is backed up by letters from the NII:

a) *The TOR philosophy has been translated in certain specific cases into numerical targets in the form of Basic Safety Levels (BSLs) and Basic Safety Objectives (BSO). The BSOs present a broadly acceptable levels below which regulatory resources will generally not be used* ***to seek further improvements*** *and where assessors should confine themselves to considering the validity of the arguments presented. The levels of risk are little changed between current operations[1] and those proposed and, in addition, fall below the BSO levels[2].* (Extract take from a letter written by Tim Allmark to the Autys, LAG 3B letter 3, page 3)

b) *T*

he incremental change in crash risk due to change in movements proposed in the planning applications is very small[3] and the calculated radiological release frequency remains less than the BSO target of 10^{-7} per annum[4]. According to NII guidance there is, therefore, no requirement for inspectors to ***seek further reduction.*** (Extract from a letter written by the NII, LAAG 3B, letter 2, page2)

4.5) It is clear from these letters that if the calculated figure had been above the BSO (we believe it is based the failure to numerically account for site specific factors, skidding and fires etc) then NII would have sought further reductions,

[1] It should be noted that the NII is under a misapprehension that 'current operations' equates to 9,000 small and large transports movements per year when in reality there are only 220. Hence the NII's impression that expansion only introduces a small incremental risk, when in fact it would result in a step change. The probability of a severe radiological release for the developed case would be aro 45x the current situation, rising to aro 145x if the airport were to achieve its masterplan (explained in LAAG/3/E)

[2] This, as we now know, is having failed to take account of any landings on runway 21, skidding, fires, site specific factors, the exceptional birdstrike risk, Dungeness A, railhead etc

[3] As footnote 1

[4] As footnote 2

in other words would have objected to this case. It also seems clear that they would have objected based upon the figures which Mr Nicholls generated, albeit these are underestimated for reasons given in LAAG/3/H.

4.6) It should also be noted that this marker of 10^{-7} is consistent with that used by ESRT, the NII's technical advisor, throughout all of its reports.

5. Failure To Review The Allowable Frequency Of An Aircraft Collision

5.1) As noted in my proof of evidence (LAAG/3/A, paragraphs 30 to 40) the NII's guide on 'Numerical Targets and Legal Limits in Safety Assessment Principles For Nuclear Facilities' [2] paragraph 51 states

In the case of accidents where the consequences are very much larger than target 9 (100 fatalities) then there may be need to demonstrate correspondingly lower predicted frequencies of occurrence.

5.2) This means the NII should, in any case, have reviewed these targets and 'raised the bar' based upon:

a) The intolerable outcome. Events in Japan have shown that these 'incredible events' do happen with irreversible consequences to society.

b) ESRT's admission that the model is unable to represent the risk posed by LAA which has constrained access, curved/non-aligned flight paths.

5.3) The NII has never justified its failure to reduce the allowable frequency based on extreme consequences. It has never been challenged on its failure to raise the bar in light ESRT's admissions that the model is inadequate as this only came to light during the inquiry.

TRUDY AUTY

References:

1. Safety Assessment Principles For Nuclear Facilities 2006, Revision 1 (LAA/15/F 5)

2. Numerical Targets And Legal Limits In Safety Assessment Principles For Nuclear Facilities An explanatory note. December 2006. Available from HSE (can be provided if required)

3. Principles and Guidelines To Assist HSE in its judgements that license holders have reduced risk as low as reasonably practicable. Available from HSE (can be provided if required).