LAA/3/D

APP/L2250/V/10/2131934 & APP/L2250/V/10/2131936

SECTION 77 TOWN AND COUNTRY PLANNING ACT 1990 – REFERENCE OF APPLICATIONS TO THE SECRETARY OF STATE FOR COMMUNITIES AND LOCAL GOVERNMENT

TOWN AND COUNTRY PLANNING (INQUIRIES PROCEDURE) (ENGLAND) RULES 2000

REBUTTAL PROOF OF EVIDENCE OF TIM MASKENS BA (Hons) MA (Cantab.)

AIRPORT OPERATIONS

In respect of:

Planning Application Reference:	Y06/1647/SH (New Terminal Building)
Planning Application Reference:	Y06/1648/SH (Runway Extension)

relating to land at London Ashford Airport, Lydd, Romney Marsh, Kent, TN29 9QL

LYDD
London Ashford Airport

CONTENTS

Appendices (bound separately)

1. Introduction and Scope of Rebuttal

1.1 I set out by way of assisting the Inquiry some points of rebuttal to the proof of evidence of Mr Spaven (for Lydd Airport Action Group (LAAG)). This Rebuttal Proof of Evidence is organised in such a way to directly address the main themes raised by Mr Spaven. Certain specific points will be countered where considered to be relevant to the theme. For the sake of conciseness, this Rebuttal Proof is not intended to be an exhaustive rebuttal and instead only deals with selected points where it is considered necessary to respond. Where a specific point has not been dealt with, this does not mean that these points are accepted and these other points will be addressed at the Inquiry, if required.

1.2 To assist in locating the relevant section of Mr Spaven's evidence to which I refer in rebuttal, the appropriate paragraphs in LAAG/10/A are inserted in parentheses thus [ ].

1.3 The main themes to be addressed are:

1.3.1 Aviation information provided in the Environmental Statement (ES) for the Applications.

1.3.2 Feasibility of flight paths

1.3.3 Comparison of flight path assumptions with the 1988 operating environment; and

1.3.4 Commercial airliner operations on the extended runway

2. Aviation information provided in the ES for the Applications

2.1 [3.1] Mr Spaven asserts that the ES is deficient because "*a significant number of inadequacies and inaccuracies remain*." This is not correct. The Airport has produced a robust and highly detailed ES that has been the result of nearly 5 years of consultation, whereby the Airport has made strenuous efforts to answer stakeholders' queries and clarify or provide additional information. The specific issues are discussed below.

2.2 [3.3-3.5] In an attempt to undermine the ES, Mr Spaven alleges that the baseline conditions are inaccurate when compared with existing conditions and that air traffic at the Airport has reduced. However, Mr Spaven's assertions are based on an incomplete picture of the total activity at the Airport as the CAA passenger figures exclude air taxi or pleasure flights, and the commercial flight movement numbers exclude positioning, private, training and business flights. Despite Mr Spaven's assertions, the actual number of movements of larger aircraft above 5.7 tonnes in 2010 – this being a measure of environmental impact - was more than double the number in 2009 and 2005 (Appendix 1). The Airport's activity is therefore on an increasing trend.

2.3 [3.6-3.9] Mr Spaven challenges the ES assumptions on flight paths, asserting that the assessed impacts cannot be relied upon. This is not the case. The Airport has made conservative or 'worst-case' assumptions on aircraft types and flight paths to give confidence that the likely actual environmental effects of the Applications will be better than predicted in the ES.

2.4 [3.10-3.18] Mr Spaven asserts that aircraft have been wrongly allocated to groups and this would affect the noise modelling. This is not the case. Size, speed and performance, type of operation were also taken into

account in allocating aircraft to groups to ensure that the ES assumptions on flight paths reflected actual Air Traffic Control (ATC) operational procedures. The examples mentioned by Mr Spaven in paragraph 3.16, are just below 5700kg (BE20 is 5670kg) but are not permitted by ATC to make a left turn on departure from runway 21, in order to eliminate any possibility of infringing the restricted airspace around Dungeness. Therefore these types had to be allocated flight paths flown by Group 3. The noise model therefore made the correct assumptions on flight path allocations.

2.5 [3.19-3.20] Mr Spaven makes great issue of a typographical error on the flight path diagrams, whilst later acknowledging that they resulted from a simple transposition. He clearly understands what the correct version – appended to my Proof of Evidence - should have been based on in his subsequent arguments. This did not affect the assessments as the noise consultants were working from a correct draft copy. The INM modelling inputs were correct.

2.6 [3.21-3.27] Mr Spaven then seeks to challenge the industry-wide common practice of calculating an average runway utilisation ratio or "modal split", claiming that "*it cannot be used as a predictor of future use [at the Airport]*". This appears to be a misunderstanding of the application of the 'modal split' in the ES. The fleet mix tables in Appendix 16.4 of the SEI March 2009 (CD1.41) do in fact identify the correct runway allocation for Group 1 (B737/A319) aircraft, which are assumed to land using runway 21, regardless of the wind direction. Of the Group 1 aircraft landings and take-offs expected to use the Airport when the Airport is operating at its peak throughput of 500,000ppa, a maximum of 438 Group 1 aircraft per annum would be predicted to land on runway 21 with any tailwind component. This represents only 1% of the total annual movements as a worst-case situation and this percentage will be reduced further for every

occasion that ‘Scenario 3’ (D044 inactive) flight paths are available. The Group 1 ES assumptions are therefore correct and the overall modal split is not significantly affected.

2.7 [3.23] Mr Spaven asserts that Group 2 will not be able to land on runway 03 when danger area D044 is active. However, the Airport’s current operations demonstrate that Group 2, 3 and 4 aircraft are all able to manoeuvre and land on runway 03 with its existing landing distance of 1470m. Post-extension, the landing distance will be increased to 1799m, so there is no reason why the same aircraft could not carry out this manoeuvre with more runway to land on. Therefore the 70/30 runway split will continue to be valid for these aircraft groups.

2.8 [3.25] Mr Spaven suggests that the ES assumptions should have taken into account Group 1 aircraft cancelling or diverting to another airport due to adverse tailwinds. However, the probability of all of the adverse factors coming together at the same time – ranges active, tailwind component exceeding 10kts, contaminated runway, largest aircraft in whole fleet mix fully laden with fuel and passengers – is extremely small and not likely. Put into perspective, as Group 1 tailwind landings are a maximum of 1% of the total movements, the proportion diverting would be a fraction of 1%. In any event, there would be no environmental impacts from cancelled or diverted flights.

2.9 [3.27] Mr Spaven implies that a 80/20 split should be used by referring to a 1988 noise study (the methodology of obtaining that figure was not revealed), but then Mr Spaven seems to contradict this by providing Mr Pitfield in LAAG/5/A with a 60/40 split, without foundation, for the aircraft crash modelling assumptions in table 4 on p13 of LAAG/5/A. This is just one example of Mr Spaven's inconsistent evidence. The Airport’s 2008 data showed a ratio of 68/32. The long term average of 70/30,

incorporating the preferential use of runway 21, is therefore a reasonable and likely assumption.

2.10 [3.28-3.34] Mr Spaven devotes several pages of text to analysing the usage of flight paths that are available when Lydd Ranges are not firing, i.e. danger area D044 is de-activated. These paragraphs are not relevant, as the ES considered the worst-case scenario whereby D044 was deemed to be active throughout the Airport's operational hours, and so made no assumptions based on the unpredictable periods of activity of the firing ranges. Consequently aircraft were only allocated to flight paths that remain clear of the danger area.

2.11 The SEI March 2009 (CD1.41) paragraphs 16.9.3-10 consider a set of flight paths (known as 'scenario 3') available during periods of closure of the Lydd firing ranges. The noise assessment results demonstrate a reduction of up to 40% in the number of properties exposed to noise, particularly in Lydd. This section of the SEI emphasises that the utilisation of this airspace cannot be guaranteed, but when it is available to the Airport, it can result in significant environmental benefits.

2.12 Robust coordination procedures (approved by the CAA's Directorate of Airspace Policy) are in place between the Airport's ATC and the Army's Firing Range observation and control tower staff. The Airport's ATC is provided with a programme of firing times (example shown at Appendix 2) which are confirmed each morning with telephone checks to both Hythe and Lydd range control. Overflight of the area is permitted outside of the firing times. The Airport has an excellent working relationship with the MoD Defence Training Estate SE. The MoD has not objected to the Applications.

2.13 [3.35-3.45] Mr Spaven criticises the airspace background detail of the ES diagrams, but overlooks the fact that these are not aviation charts for the guidance of pilots, but simpler diagrams that we have produced for ecologists, ornithologists, noise experts, local residents, councillors and others. The precise position of the boundary of the danger area or restricted area is of no consequence. It is obvious that the flight paths must remain clear of these areas, and that is stated in the ES. Pilots will be expected to comply with the detailed instructions and data found on standard aviation charts.

2.14 [3.41] Mr Spaven then analyses each of the flight paths in turn but makes numerous erroneous assumptions with regard to aircraft routes and procedures. The ES flight paths are based on actual ATC experience. For example, Mr Spaven suggests that FP3 would be limited to Visual Flight Rules (VFR) traffic, but overlooks the fact that a) some Instrument Flight Rules (IFR) departures from Lydd may safely fly below the airways system and b) occasionally IFR departures into controlled airspace can use FP3 to join airways at navigational waypoints WAFFU or XIDIL (in the English Channel). Furthermore FP3 is the light aircraft departure route into the training circuit. This highlights the detailed consideration that the Airport has given to the flight path diagrams. Mr Spaven would surely have been more critical if we had omitted FP3 from the assessment.

2.15 [3.43] Curiously, Mr Spaven refers to the early left turn departure route FP6 and states "*there is no reason why this flight path could not be flown by other aircraft types*". This completely contradicts the assertion that a similar turn could not be executed for the same aircraft departing runway 21. The difference is of course that aircraft departing runway 21 must avoid the danger area D044. No such constraint exists for departing runway 03, so larger aircraft can make a gentler turn left on FP5. By

allocating the flight paths in this way, the ES has assessed a worse case scenario for environmental effects than that suggested by Mr Spaven.

2.16 [3.47-3.54] Despite LAAG's acknowledgement that the "*ILS is the procedure of choice due to its greater precision*" (Appendix 3), Mr Spaven asserts that aircraft might use the Non-Directional Beacon (NDB) or the RNAV approach procedures and this could adversely affect the noise assessment. This is simply not the case as explained in my Proof of Evidence in paragraph 8.4. Large commercial airliners are not permitted to fly the NDB procedure. In relation to the noise assessment for Scenario 3 (D044 not active), figure 16.27 of CD 1.41a shows how, in fact, noise is significantly less in the vicinity of Lydd Town and New Romney compared with the D044-active scenarios assumed for the ES.

2.17 **Summary**

I conclude from this section of my rebuttal that:

2.17.1 The ES assumptions on baseline traffic levels are valid, and that numbers of large aircraft are actually increasing rather than decreasing as Mr Spaven asserts.

2.17.2 The noise contours are therefore based on conservative or likely worst-case assumptions on aircraft types and flight paths.

2.17.3 Runway utilisation has been correctly described in the ES.

3. Feasibility of depicted flight paths

3.1 [4.1-4.8] Mr Spaven questions the feasibility of some of the proposed flight paths in terms of the practical ability of aircraft of a given size to fly them. However, the procedures have already been designed, charted, approved and subsequently regulated by the CAA for aircraft of the same size and speed as a B737 to be able to use the current short runway. The runway extension and starter extension will in fact improve the usability of the flight paths, rather than make them more difficult to fly.

3.2 [4.9–4.15] Mr Spaven asserts that the circling procedure will be difficult to for Group 2 aircraft to fly, basing this on manufacturer's guidance alone. However, Mr Spaven acknowledges in paragraph 4.9 that: "*In addition, each airline has its own procedures for carrying out a circling approach as set out in the CAA-approved Operations Manual*." Therefore the procedure is entirely possible as any operator could compile a set of procedures specifically for landing on runway 03 at the Airport which will take into account all the relevant factors including the danger area. As CAA-approved AOC operators up to and including aircraft speed category C (faster than the SAAB 340 discussed in Mr. Spaven's evidence) already use the circling procedure without infringing the danger area, it is not unreasonable to assume that aircraft of the same speed should continue to do so in the future, particularly with the benefit of a greater landing distance afforded by the extended runway pursuant to the Applications. The MoD has not objected to the Applications.

3.3 [4.17 – 4.19] Mr Spaven attempts to undermine the CAA approved circling procedure by making a misleading comparison with Farnborough Airport. Circling is restricted at Farnborough due to the noise abatement requirement to establish on the runway centreline at a minimum of 3 nautical miles, this requiring a much larger circling pattern than that

required at the Airport (i.e. LAA). The speed category D aircraft referred to in paragraph 4.18 of Mr Spaven's Proof are faster than the maximum of category C that can operate at the Airport both now and in the future. Regardless of Mr Spaven's observations, the Airport's circling procedures were designed and published on the instrument approach charts and approved by the CAA. What is interesting to note from Mr Spaven's appendices 9, 10 and 11, however, is that the Airport is not alone in having flight paths that must account for danger areas or restricted areas. Within 10 miles of Farnborough there are 3 danger areas, a High Intensity Radio Transmission Area, a Military Air Traffic Zone, an Aerodrome Traffic Zone and Heathrow's controlled airspace 5 miles NW. Within 10 miles of Southend there are 2 danger areas, 2 gas venting sites, and a restricted area around Bradwell nuclear power station at 11 miles North East.

3.4 [4.20] Mr Spaven claims the runway 03 arrival paths in Fig 16.1 of CD1.41 are questionable but he has misinterpreted and confused the procedures in Fig 16.1, the fleet mix allocations to the flight paths in Appendix 16.4 of CD 1.41 and the CAA published procedures for the Airport. FP2 is the predominant arrival path for light aircraft, following the 1500ft overhead join as described in Mr Spaven's Appendix 12. FP1 is used some of the time by Group 4 aircraft, and this is entirely in accordance with the CAA published procedures for VFR aircraft (Appendix 4). Further, the instrument approach charts publish a left hand circling procedure for light aircraft (FP1) in addition to the more usual right hand circling procedure (FP2). Thus, FP1 is possible under ATC instructions when the air traffic situation or weather conditions dictate. The expression "**do not descend deadside"** refers to a part of a standard (2000ft) overhead join procedure which is not used at the Airport. The aircraft instead descend on the crosswind leg as depicted in Lydd Aeroclub's diagram in Mr Spaven's Appendix 12. This procedure should not be confused with FP1, as Mr Spaven seems to have done.

3.5 [4.21 – 4.26] Mr Spaven gives a comprehensive description of the relationship between runway length, aircraft weight and performance, weather factors, and regulatory limitations applicable to commercial flight operations. My Proof of Evidence briefly described exactly the same issues in paragraphs 3.4-3.6, and these form the basis of the runway extension Application which is to enable aircraft up to B737 size to carry fare-paying passengers, rather than limiting the same sized aircraft to private or empty positioning flights only. The 294m runway extension and 150m starter extension for runway 21 will enable larger passenger aircraft to gain sufficient speed and height to be able to complete the right turn after take-off without infringing the danger area.

3.6 [4.26] Mr Spaven asserts that large passenger aircraft will be unable to depart runway 21 on FP12 without infringing the danger area D044 by hypothesising incorrectly the danger area airspace should be treated the same as an obstacle, and applying this to EU-OPS regulations. But Mr Spaven then states correctly that "*there are no regulatory provisions which set out the minimum distance by which danger area airspace must be avoided*" when applied to departures and therefore the succeeding text in paragraphs 4.26-4.40 is based on an invalid assumption and should be disregarded.

3.7 [4.28] Mr Spaven asserts that the bank angles will be too difficult to fly, but then concedes that, if required, the CAA can approve increased bank angles as part of the airlines operating procedures for the Airport as laid down in the Flight Operations Manual. In February 2007 flight trials were conducted at the Airport with a B737-300 containing crew, press and dignitaries (but not with fare-paying passengers with luggage). This aircraft managed the turn without any difficulty from the current 1505m runway. The danger area was not infringed. Other aircraft of the same speed category as B737 can also execute the turn. The extended runway and

starter extension pursuant to the Applications would allow the take-off run to commence 444m further away from the danger area, making the turn easier to carry out than when departing from the current short runway.

3.8 [4.33-4.37] Mr Spaven argues that the early turn departure would not be possible at the Airport, but then demonstrates that even a B747 (5 times heavier than a B737) can carry out such manoeuvres. Mr Spaven's discussion on the early turn departure procedures at Hobart and Cairns Airports illustrates that even successful busy international airports have airspace issues that necessitate the development of special procedures. Hobart handles approximately 1.9 million passengers per annum, and Cairns 3.6 million. As these procedures may be flown by B767 (156 tonnes MTOW), A300 (165 tonnes MTOW) at Hobart, B777 (300 tonnes MTOW) and B747 (396 tonnes MTOW) at Cairns, any aircraft using Lydd Airport would be able to execute the manoeuvre, given that even the largest aircraft from the future fleet mix – a B737-800 or A320 at a maximum weight of 79 tonnes – is less than one fifth of the weight of the B747 Jumbo Jet listed above, and can take off at a lower speed, thus enabling a smaller radius of turn.

3.9 A European example that could have been included is Innsbruck Airport where, following an offset, steep descent ILS approach, aircraft must carry out a hard left turn through 200 deg within a maximum radius of 0.86nm (e.g. indicated airspeed 153kt, bank angle 25deg), whilst climbing at maximum gradient to 9500ft. Despite challenging procedures, Innsbruck Airport is a successful airport with over 70 flights a day of aircraft up to B737-800, A321. By contrast Lydd Airport’s procedures are relatively straightforward.

3.10 [4.38] In regard to the airlines’ likely operational technique for ensuring a safe departure from runway 21 when the Lydd danger area is active, I

agree with Mr Spaven that there is scope to reduce the aircraft weight. As the likely destinations are only domestic and European, the weight of fuel required can be significantly reduced from the maximum capacity whilst still retaining a viable payload of passengers. The runway 21 departure flight paths are therefore feasible, even for the largest aircraft expected to operate at the Airport, and once again, it underlines the importance of the runway and starter extension.

3.11 **Summary**

I conclude from this section of the rebuttal evidence that:

3.11.1 Group 2, 3 and 4 are able to fly the approach to runway 03 on FP1 as they do currently. The increased landing distance afforded by the extension will assist the execution of the procedure.

3.11.2 The runway extension and starter extension will enable commercial airliners to carry out the right turn from runway 21 without infringing the Lydd Range

3.11.3 There are examples of more onerous departure manoeuvres at busy airports involving larger commercial aircraft than a B737 flying FP12 at the Airport.

3.11.4 Airlines will only be flying domestic and European destinations from the Airport, so can operate with a lighter fuel load to improve take-off performance and be able to fly the departure procedure.

4. Comparison of flight path assumptions with 1988 operating environment

4.1 Mr Spaven asserts in his paragraph 6.4 that the current and proposed operating environment has "*reduced margins of safety in respect of the risk of an aircraft crashing on the Dungeness nuclear power station*" compared with the operating environment in 1988. As I was a member of the Airport's ATC staff from January 1989 - September 1992, I can confidently state that this is not the case. In fact new equipment (incorporating the latest technology) and Airport flight procedures in tandem with improved aircraft navigation equipment and performance plus the addition of protective airspace around Dungeness, have significantly improved the safety of the operating environment.

4.2 [6.3] In rebuttal of Mr Spaven's specific points, I list the facts below:

4.2.1 The Airport has a viable and accurate ILS that can operate regardless of the operating times of the firing ranges.

4.2.2 The Airport's current flight procedures comply with the airspace restriction around Dungeness. In 1988 there was no such protected airspace. Larger aircraft are now prevented from turning left on departure from runway 21, and they are not able to fly an approach to the Airport between the eastern edge of the ranges and the power station as they could in 1988– this must surely be a significant safety improvement.

4.2.3 The new ILS procedure was designed by DAP with complete regard to the safety of Dungeness power stations. The 3 aerial components of the new ILS equipment are of a higher specification

and accuracy than the 1988 model. There has therefore been no erosion of safety of the flight paths since 1988.

4.2.4 The NDB procedure is not available to large aircraft such as B737, or any of the faster executive jets. The procedure is only available if the ILS is unserviceable. There can therefore be no risk contribution from this procedure.

4.2.5 In 1988, aircraft of speed category B (turboprop airliners, small executive jets) could fly the circling manoeuvre to the east of the runway, right next to the power stations (without the protection of the restricted area), for landing on runway 03 (formerly called runway 04) (Appendix 5 to my Proof).Now category B aircraft must circle on the west side of the Airport, well away from the power stations. This is another safety improvement on the 1988 operation.

4.2.6 The Airport has certainly not "*specifically ruled out installation of radar*" as claimed by Mr Spaven, but will consider it after the Airport reaches sufficient numbers of aircraft movements. The case for installing radar, which is not a mandatory requirement, is linked to the overall number of aircraft, including light aircraft, flying in the vicinity of Lydd, not the number of passengers. Nevertheless, the Airport is currently investigating a new type of surveillance system called Wide Area Multilateration, and has had initial contact with Manston regarding the future provision of a radar feed.

I would add the following:

4.2.7 To assist in the safe navigation and monitoring of the safety of aircraft, the Airport now has modern VHF direction finding (VDF)

equipment which is twice as accurate as the 1988 equipment. Aircraft now have GPS to assist with accurate navigation.

4.2.8 The old (1954) Airport control tower that was still in use in 1988 only had windows on 3 sides, with a limited view facing South East towards the runway. Air Traffic Controllers could not see aircraft to the North, in an arc from New Romney Church to Lydd Town. The new control tower has excellent 360 deg panoramic views, enabling controllers to visually monitor aircraft to ensure their safety and that they are complying with instructions. This is another safety improvement.

4.3 Mr Spaven's assertions are therefore incorrect. The safety of the current operations is clearly significantly greater, and is even more so if improved flight crew procedures and aircraft equipment are taken into account.

4.4 [6.6, 6.7] Mr Spaven then analyses the 1988 flight paths in an attempt to claim that the current flight paths pass nearer to Dungeness power stations than they did in 1988. This is completely untrue, the current flight paths have a much greater clearance from Dungeness. In 1988, the NII permitted up to 6000 departures of large aircraft heavier than 5700kg MTOW to turn left on track D4 (Mr Spaven’s Appendix 1) towards the power station, and also perform visual left hand training circuits, passing around the power station. Light aircraft were also permitted to carry out left hand circuits, turning before the power station. (Mr Spaven's Appendix 21). The Airport’s current and future procedures do not permit large aircraft above 5700kg to turn left, and when D044 is active, they in fact turn right, away from Dungeness. Light aircraft may continue to turn left, as were approved for circuits in 1988, and the restricted area affords the requisite protection for Dungeness. The operational safety level has therefore improved significantly since 1988.

4.5 [6.8] Mr Spaven presumes, without substantiation, that flight path A5 was somehow a restriction placed on the Airport by the NII in 1988 on the grounds of nuclear safety. This is incorrect, it was actually proposed by the Airport in 1988 to be used for light aircraft only and not commercial aircraft, as the flight path could not be visually monitored by controllers due to the restricted vision from the old control tower. This was the reason behind not allocating flight path A5 to commercial aircraft. The NII did not make any comment on A5 in their 1988 statement. A5/D5, now designated FP1/FP12, can now be closely monitored from the new control tower, thus enhancing its safe utilisation by a wider range of aircraft.

4.6 [6.9-6.11] Mr Spaven asserts that the air traffic levels considered in 1988 were lower than for the current Applications. This is not the case. The 1988 NII assessment was based on a greater annual aeroplane movements of 56,000pa with flight paths nearer to two active nuclear power stations. The current proposed cap is for only 40,000 total aeroplane movements, with flight paths that direct the largest aircraft away from the remaining active power station (Dungeness B) and the power station currently undergoing decommissioning (Dungeness A). The operating level of 500,000ppa or 40,000 movements is not expected to be reached until well after Dungeness B has commenced decommissioning, scheduled for 2018. The NII has carried out Periodic Safety Reviews since 1988, and an assessment in relation to the current proposals, and has no objection to the Applications.

4.7 [6.12-6.19] Mr Spaven asserts that engine or other failures could lead to an aircraft flying over the power station and possibly crashing on to it. This is completely without foundation. In fact, the 1988 NII Public Inquiry Statement of Representations by the Health and Safety Executive shows that the NII consulted the CAA on such risks, including birdstrike and

engine failure (page 4, paragraph 12), and were satisfied that the *"risk of an aircraft crash onto the power stations from normal use of the airport is sufficiently remote, being within its current risk assessment criteria."* The power station operator, CEGB, concurred with its view (page 3, paragraph 8). The NII has also consulted the CAA on the current Applications and conclude also that "*the risks to the existing power stations from the proposed expansion of Lydd Airport have been considered to be acceptable and it has given advice to the planning authority*" (Govt. response to the consultation on the draft NPSs for Energy Infrastructure, Oct 2010). David Nicholls, for the Applicant, will be providing detailed rebuttal evidence on the subject of Nuclear Safety.

4.8 **Summary**

4.8.1 Improvements have been made to the aviation environment, Airport facilities and procedures since 1988, contrary to Mr Spaven's opinion.

4.8.2 Flight paths are currently further from the Dungeness power stations than in 1988

4.8.3 The Dungeness restricted area, introduced 2001, area adds further protection when compared with the 1988 aviation environment

4.8.4 There were 2 active nuclear power stations in 1988. The single remaining station, Dungeness B, is scheduled to close in 2018.

4.8.5 NII, in consultation with CAA, have no objection to the Applications

5. Commercial airliner operations on the extended runway

5.1 Section 7 of Mr Spaven's evidence seeks to undermine the Applications by claiming that the extended runway pursuant to the Applications will be insufficiently long or wide enough for commercial airliner operations. In fact, the runway dimensions of the extended runway will be sufficient for the short-haul operations proposed by the largest aircraft predicted to use the Airport. Mr Spaven's evidence actually helps to confirm exactly why the Airport is proposing to extend the runway, pursuant to the Applications.

5.2 [7.2-7.25] Mr Spaven attempts to discredit the Airport by claiming that it falls short of the ideal design. Mr Spaven does this by referencing Annex 14, the ICAO guidance for the design of airports, particularly new ones. The Airport is not building a brand new runway, but is extending its existing one, to improve its efficiency of operation. Many of the subsequent paragraphs of text in Mr Spaven's evidence raise precisely the issues that the Airport aim to solve by extending the runway to a sufficient length to enable passenger operations by aircraft up to a maximum size of B737/A319/A320 and no larger.

5.3 Mr Spaven's opinion that the proposed runway dimensions are barely sufficient under high aircraft loads (not accounting for the fact that the flight sectors will be short, with light fuel loads) and extreme meteorological conditions for the largest aircraft in the future fleet mix demonstrates that the Airport has no intention of operating larger aircraft than any of those listed in the fleet mix. The runway distances pursuant to the Applications are perfectly suitable for short haul operations in aircraft up to B737 size. In fact the landing and take-off distances on the Airport’s extended runway will be nearly 200m longer than those proposed for Southend Airport’s runway extension, which intends to cater for similar short-haul destinations in B737 or A320 aircraft.

5.4 [7.26-7.31] Mr Spaven asserts that the relocation of one of the instrument landing system (ILS) aerials will create difficulties whereby aircraft may not be able to use the proposed landing distance. However, the Airport has researched its development proposals carefully and will use a similar solution to the CAA approved procedure at Sumburgh Airport, which also has an offset ILS. Therefore the full 1799m of landing distance will be available.

5.5 [7.32-7.40] Mr Spaven alleges that retaining the runway width at 32m instead of widening it to 45m will be "*one further limitation which will impact upon the operation of B737/A319 size aircraft*" But, by way of self-contradiction, in Mr Spaven's paragraph 7.33, he states, in reference to the CAA coding of the existing and extended runway, that "*This means that it can support aircraft with a wingspan of up to 36 metres and a undercarriage span of up to 9 metres. This includes the Boeing 737 and Airbus 319.*" So Mr Spaven's own evidence demonstrates that the Airport will be able to operate all of the aircraft in the fleet mix assessed in the ES. The CAA Aerodrome Standards Department are in discussions with the Airport on the runway coding, to permit a minimum TODA of 1979m. This is adequate for B737 and A319 short-haul operations and compares favourably with many UK airports.

5.6 **Summary**

5.6.1 The runway extension pursuant to the Applications will be adequate for the short-haul operations proposed to be operated by aircraft in the fleet mix up the maximum size of a B737 or A319/A320

5.6.2 Mr Spaven's evidence confirms the need for a runway extension to improve the operational efficiency of the runway.

5.6.3 The Airport has solutions for the technical issues raised by Mr Spaven.

6. Conclusion

6.1 Mr Spaven has sought to undermine the Applications by firstly, casting doubt on the quality of the information used to compile the ES and secondly, by attempting to raise operational issues that may affect the use of the Airport by the largest aircraft in the fleet mix.

6.2 I have shown in this Rebuttal proof of evidence that Mr Spaven's assertions are inaccurate, inconsistent and often self-contradictory, and are based on a misunderstanding of the Applications and the aviation procedures that support them.

6.3 Some of Mr Spaven's evidence actually reinforces the Airport's position that the runway extension and starter extension will improve the operational efficiency for all of the aircraft types that can use the Airport currently, not just the largest of the current or future fleet mix. The Airport has not applied for a longer or wider runway than is absolutely necessary for the largest aircraft. Impacts have therefore been minimised as far as possible, and a structural constraint placed on aircraft operations to ensure containment within the ES limits.

6.4 In conclusion, I consider that there are strong and compelling reasons, in terms of Airport operations, for the Applications to be approved, and no good reasons in these respects for planning permission to be refused.