TOWN AND COUNTRY PLANNING ACT 1990, SECTION 73 TOWN AND COUNTRY PLANNING (INQUIRIES PROCEDURE) (ENGLAND) RULES 2000 APPLICATION BY LONDON CITY AIRPORT LIMITED

to vary Conditions 2, 8,

12, 17, 23, 25, 26, 35, 42, 43 and 50

attached to planning permission

13/01228/FUL allowed on appeal APP/G5750/W/15/3035673 dated 26th

July 2016

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Summary Proof of Evidence - Noise

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1. Introduction

- 1.1.1 The noise assessment for these proposals addresses three effects. The first effect is the result of changes in aircraft movements as a result of forecast changes in the mix of aircraft likely to operate from the airport should the changes applied for be approved. The second effect is the consequence of permitting more aircraft movements between 06:30 and 06:59 and the third effect is the consequence of introducing aircraft movements into the period 12:30 to 18:30 (19:30 during BST) on Saturday.
- 1.1.2 The reasons for refusal refer to the second and third effects.

2. Assessment Metrics and Significance

- 2.1.1 The unusual feature of this application is that there are potential effects that are very specific to local circumstances, namely the increase on early morning aircraft movements and the loss of respite on Saturday afternoons.
- 2.1.2 Noise indices of any kind are only of use if they are linked to the results of noise and social surveys or incidence of health effects which permit the establishment of a correlation between numerical noise index values (and changes in those values) and observed effects in a population. There are very limited data in the literature to enable noise indices, and changes in their values, to be used to assess the significance of the effect of increase the number of aircraft movements in the half hour between 0630 and 0700. There is only information relating to the full night period 2300-0700. There is some information about the role played by respite periods for populations around airports, particularly in the case of airports with more than one runway where runway mode segregation or alternation is possible.
- 2.1.3 Due to the proposed changes in Saturday operational hours, a specific assessment of weekend noise has been undertaken. Air noise predictions have been undertaken in terms of the standard daytime L_{Aeq,16h} metric, but the predictions are based on only the aircraft movements at the weekend. This is not a standard assessment metric. This has not been done before, and the method of drawing conclusions from the outcome is not an established procedure with the result that the conclusions need to be regarded with caution.

Night movements

- 2.1.4 The proposed increase in the number of movements between 06:30 and 06:59 is a change in the number of movements in the formal night time assessment period 23:00-0700. It is, however, likely that the community response to night noise at an airport which has no aircraft movements in the night until 06:30 will be different, for the same noise index value (and the same change in noise index value), from the case of an airport which has movements during other hours in the night.
- 2.1.5 The ES assesses the change in movement numbers during this period in terms of the $L_{Aeq, 8h}$ index.

Sleep disturbance

2.1.6 With regard to sleep disturbance, the percentages highly sleep-disturbed are presented in the World Health Organization Environmental Noise Guidelines for the European

Region 2018 (ENG). Broadly speaking, an increase of 1dB results in an extra 1% of the population being Highly Sleep Disturbed. The ES finds that in several locations there are increases of up to 2 dB in summer $L_{Aeq,8h}$ which, if there is no major seasonal variation is equivalent to L_{night} , but the additional population likely to be highly sleep disturbed is not reported. The research which led to these figures did not take into account whether or not the residents studied had sound insulation installed in their homes.

The weekend curfew

2.1.7 The change in the weekend curfew period from the current 12:30 Saturday until 12:30 Sunday by the introduction of aircraft movements between 12:30 and 18:30 (19:30 during BST) on Saturdays is a noise effect unique to London City Airport and there is therefore no established noise index for quantifying or assessing the effect. The schedule absence of aircraft movements is referred to as respite, and studies that have been carried out into the benefits of respite have not yielded a deterministic method of assessment.

3. Conclusions

- 3.1.1 The main issue before this inquiry as far as noise is concerned is whether, in the first reason for refusal, the words "significant harm" are true, i.e. whether "the proposal, by reason of the additional morning and Saturday flights, and reduction of the existing Saturday curfew would result in a new material noise impact which would result in significant harm to the residential amenity of nearby residential properties."
- 3.1.2 Additional issues are whether, if there would be significant harm, this would be contrary to policies D13 and T8 of The London Plan (2021) and policies SP2 and SP8 of the Newham Local Plan (2018), and whether that would be (a) sufficiently mitigated or (b) outweighed by other advantages of the appeal proposals. Point (b) depends on matters such as forecasting which are outside the scope of my evidence.

Significant harm

- 3.1.3 The Appellants' Environmental Statement concludes that (8.8.6) "Nobody is forecast to experience a significant increase in night-time air noise levels between the Do Minimum scenario and the Development Case scenario, with the vast majority of people forecast to experience a negligible increase of less than 2 dB." Given that some of those experiencing the increase are exposed to noise at levels above SOAEL, this conclusion is at odds with the decision of the Secretary of State in the Luton S73 application who found that an increase of "1 dB" above SOAEL was notable (and the applicants found it to be significant). There are people (ES Table 8.25) who may not be in the "vast majority" but are forecast to experience an increase in the night noise index which by the appellants' own criteria is not negligible. I explain why in 7.2.13 above. Considering only "vast majorities" is not an acceptable method of assessment.
- 3.1.4 With regard to Saturday afternoons, the ES finds "8.8.7 The number of people exposed to air noise during the weekend in 2031 will remain similar to 2019, as the greater use of quieter new generation aircraft by 2031 will offset the increase in weekend movements. The number of people exposed to air noise during the weekend will be more for the Development Case scenario compared to the Do Minimum scenario. This is due to the proposed extension to the airport's operating hours on Saturdays into the early evening and the resulting increase in weekend movements. Comparing the Development Case and Do Minimum scenarios all changes in weekend air noise are forecast be Negligible (less than 2 dB)." This conclusion regarding negligibility is based on the application of a weekend noise index that has no technical support, and cannot be used to measure community response to removal of the Saturday afternoon curfew.

This conclusion is at odds with the views of surrounding residents received following the publication of the application details.

Policy contravention

3.1.5 The evidence of Mr Liam McFadden shows that if there would be significant harm the proposals would be contrary to the noise requirements of the policies cited in the first reason for refusal.

Mitigation

3.1.6 It is essential to note that the loss of the Saturday afternoon curfew and the additional flights between 06:30 and 07:00 will have an immediate effect, the day that any new permission is implemented. Even if those noise indices which are valid for the assessment of airport noise effects were to show noise reductions over time due to the effects of re-fleeting, they would have no benefit in mitigating the effect of introducing the proposals for a long time. Because there is no valid measure of the noise impact of removing the Saturday afternoon respite period, even after enough time has passed for the effects of any refleeting to happen it is still not possible to measure objectively the two effects, negative and positive, in the decision-making balance, and a value judgement is unavoidable. Enhanced noise insulation could be put in place before implementation of the new proposals, but it is not known what effect that would have on community reaction to the loss of a complete absence of noise from flights serving London City Airport on Saturday afternoons, both indoors and outdoors.