

**AYRSHIRE JOINT STRUCTURE PLAN AND TRANSPORTATION COMMITTEE
23 MARCH 2001**

Wind Turbine Farms and Glasgow Prestwick International Airport

PURPOSE OF REPORT

- 1 To advise the Committee of the impact wind turbine farms may have on transmitted signals within the area covered by the airport radar at Prestwick.

BACKGROUND

- 2 A letter sent by the Director of Operations at Glasgow Prestwick International Airport has been forwarded to the Structure Plan Manager from the Head of Planning, South Ayrshire Council. The letter outlines concerns that wind farm proposals may have on safety and operational efficiency.
- 3 The airport radar employs a system known as moving target where all static targets such as hills are deleted. The screen only displays returns which are moving in radar range. The system used at Prestwick is widely used by other Airports and has a range of 42.5 miles. The radar is used to monitor all aircraft activity in this area and advise aircraft in coming and out going from the airport. As the airport's controlled air space (CAS) extends to only 2.5 miles radius of the airport and to a height of 2000 feet, any aircraft travelling outside CAS or carrying out training/exercises do not require the permission of Prestwick air traffic control. Aircraft are free to move to a height of 5,500 feet where all airspace is controlled by Scottish En Route Centre.
- 4 The particular problem that windfarms present is that they are detected as moving targets that give a strong radar return. For example the windfarm on Hare Hill creates an interference cluster of 3 square miles. This windfarm is approximately 19 miles and in direct line of the main runway. This interference would render any aircraft movement in the vicinity of the area invisible to the air traffic controller. The cumulative impact of wind farms may create significant operational difficulties for the airport. A meeting with the Operations Manager was held on the 5 March to discuss these concerns.

STRATEGIC GUIDANCE

- 5 At the meeting it was agreed with the Airport management and air traffic control staff to work jointly with this Committee to establish a resolution to the issue. This may require the preparation of additional strategic guidance to councils within Ayrshire when assessing wind farm proposals. Work has been put in hand between the Councils and the senior air traffic control officer to identify areas that would be operationally sensitive to wind farm proposals within the radar range. A list of potential wind farm proposals is also being drawn up. This work and its implications will be reported to Committee at the earliest opportunity. In the interim the current policy framework outlined in the Structure Plan, Policies E10 & E11 remain applicable. Policy E11 E however requires to be given additional significance in the light of the concerns raised.
- 6 In addition given the extent of the radar area (42.5 miles) the solution may also require to be addressed within the context of the policy of adjoining authorities toward wind farm proposals. Of immediate concern are the proposed modifications to the Glasgow & Clyde Valley Structure Plan on this issue (see attached Committee paper).

RECOMMENDATIONS

- 7 It is recommended that the Committee:
 - note the contents of this report;
 - forward to the Scottish Executive and all authorities within the radar area a copy of this report seeking their support in addressing this issue; and
 - request the Structure Plan Manager to prepare a more detailed report in the light of further work with the Airport management.

Ian Johnson
Manager
Ayrshire Joint Structure Plan & Transportation Committee

Person to Contact: John Esslemont – 01292 673766