Ms Kee Evans  
Eversheds LLP  
1 Callaghan Square  
Cardiff  
CF10 5BT

Dear Madam

TOWN AND COUNTRY PLANNING ACT 1990 (SECTION 78)  
APPEALS BY RES UK & IRELAND LTD:

APPEAL A - TURNCOLE FARM, THE MARSHES, DENGIE, SOUTHMINSTER - APPLICATION REF: FUL/MAL/10/01070

APPEAL B - LOWER BURNHAM ROAD AND FAMBRIDGE ROAD, NEAR COLD NORTON, ESSEX - APPLICATION REF: FUL/MAL/12/00119

APPEAL C - TURNCOLE FARM, THE MARSHES, DENGIE, SOUTHMINSTER - APPLICATION REF: FUL/MAL/11/00879

1. I am directed by the Secretary of State to say that consideration has been given to the report of the Inspector, John Woolcock BNatRes(Hons) MURP DipLaw MPIA MRTPI, who held a public local inquiry between 23 April and 8 May 2013 into your appeals against a decision of Maldon District Council to refuse planning permission for:

   **Appeal A:** Wind Farm Development consisting of seven three-bladed, horizontal-axis wind turbines, each up to 126.5 m maximum height to blade tip, with associated electricity transformers, underground cabling, access tracks, road widening works, crane hard-standings, control building, substation compound, communications mast and anemometry mast for a period of twenty-five years. Also temporary works including a construction compound, laydown area, rotor assembly pads, turning heads, welfare facilities and four guyed anemometry masts, in accordance with application reference FUL/MAL/10/01070, dated 14 February 2011.

   **Appeal B:** Permanent road widening works for the purpose of facilitating access for abnormal load deliveries to the proposed wind farm at Turncole Farm. The new highway created will be fenced or similar to allow access to the abnormal
loads only and not all traffic. The works will take place at the two road junctions between Lower Burnham Road and Fambridge Road near Cold Norton. The works will result in a change of use from residential and agricultural land to form new highway. Works in accordance with application reference FUL/MAL/12/00119, dated 8 February 2012.

Appeal C: Permanent road widening works and replacement of Twizzlefoot bridge for the purpose of facilitating access for abnormal load deliveries to the proposed wind farm at Turncole Farm. The works will result in a change of use from agricultural land to form new highway. Works in accordance with FUL/MAL/11/00879, dated 5 October 2011.

2. On 5 June 2013, the appeals were recovered for the Secretary of State's determination, in pursuance of section 79 of, and paragraph 3 to Schedule 6 to, the Town and Country Planning Act 1990, because they relate to proposals of major significance for the delivery of the Government’s climate change programme and energy policies.

Inspector’s recommendation and summary of the decision

3. The Inspector recommended that all the appeals be allowed and planning permission be granted subject to conditions. For the reasons given below, the Secretary of State agrees with the Inspector’s conclusions and agrees with his recommendation. A copy of the Inspector’s report (IR) is enclosed. All references to paragraph numbers, unless otherwise stated, are to that report.

Procedural matters

4. In reaching this position, the Secretary of State has taken into account the Environmental Statement (ES) and Supplemental Environmental Information (SEI) which was submitted under the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 and the Inspector’s comments on the ES and SEI at IR2 and 119. The Secretary of State considers that the ES and SEI comply with the above regulations and that sufficient information has been provided for him to assess the environmental impact of the proposals. Given that the appeals are linked, he agrees with the Inspector that they should be either all allowed or all dismissed (IR119).

5. Following the close of the inquiry, on 9 January 2014 the Secretary of State wrote to the main parties to invite them to consider whether any amendments would be appropriate to the noise condition that was considered at the inquiry. On 3 February the Secretary of State received a noise condition agreed upon by the appellant and the Council, and a representation from the Rule 6 party. These representations were circulated to the parties for final comment.

6. A list of all the responses received from parties is set out at Annex A to this letter. The Secretary of State has taken account of all these responses in his consideration of the appeals before him. As the responses were circulated to the main inquiry parties, he does not consider it necessary to summarise the responses here or attach them to this letter. Copies of the correspondence can be obtained upon request to the address at the bottom of the first page of this letter.
Matters arising after the close of the inquiry

7. Following the close of the inquiry, The Department of Communities and Local Government (DCLG) published the ‘Planning Practice Guidance for Renewable and Low Carbon Energy’ (PPGRLCE) in July 2013, and cancelled ‘Planning for Renewable Energy: A Companion Guide to Planning Policy Statement 22’. The Planning Inspectorate invited comments on the PPCRLCE (IR6). In reaching his decision on these appeals, the Secretary of State has taken into account the PPGRLCE and the parties’ responses to this.

8. In December 2013, Renewable UK published new research and a proposed planning condition covering the regulation of Other Amplitude Modulation, with accompanying guidance notes. However this has not yet been reflected in an update to the current good practice guidance that accompanies ETSU-R-97 and has not been endorsed by Government.

Policy considerations

9. In deciding the appeals, the Secretary of State has had regard to section 38(6) of the Planning and Compulsory Purchase Act 2004 which requires that proposals be determined in accordance with the development plan unless material considerations indicate otherwise.

10. In this case, following the revocation of the Regional Spatial Strategy for the East of England, the adopted development plan for the area comprises only the saved policies of the Maldon Local Plan 2005 (IR7). The Secretary of State considers that the local plan policies listed in Annex 1 of the IR are the most relevant policies to these appeals.

11. The Secretary of State notes that the Council is reviewing its Local Plan, but as this is still at consultation draft stage and is liable to change, he attributes it little weight.

12. Other material considerations which the Secretary of State has taken into account include the National Planning Policy Framework (the Framework); the National Policy Statements (NPS) for Energy (EN-1) and Renewable Energy (EN-3); the Community Infrastructure Levy (CIL) Regulations 2010 as amended; and Circular 11/95: The Use of Conditions in Planning Permissions. The Secretary of State has also taken into account Ministerial Written Statements on renewable energy published in June 2013 by the Secretary of State for Energy and Climate Change and by the Secretary of State for Communities and Local Government. He has not taken into account Planning for Renewable Energy: A Companion Guide to PPS22, as this was cancelled by the PPGRLCE.

13. The Secretary of State has had regard to the fact that on 28 August 2013 Government opened a new national planning practice guidance web-based resource. However, given that the guidance has not yet been finalised, he has attributed it limited weight.

Main issues

Renewable energy benefits

14. The Secretary of State agrees with the Inspector’s assessment of the renewable energy benefits of the scheme at IR196-198. He agrees that it would make a
significant contribution to meeting national targets and reducing greenhouse gas emissions, and that this consideration weighs heavily in favour of the proposal.

Landscape character and appearance

15. The Secretary of State agrees with the Inspector’s overall assessment and reasoning in regard to landscape and visual impacts at IR121-145. He agrees that the scheme duration of 25 years would be a substantial period for those who would have to endure any adverse effects and that the reversibility of the scheme should not be an influential factor in determining these appeals (IR127). He notes that the Inspector considers that the impact of the proposal on landscape character, when taken cumulatively with the previously permitted Middlewick wind farm, would be of moderate to minor significance (IR128-134). Additionally, the proposal would have an adverse effect on visual amenity, both by itself and cumulatively, of major/moderate significance from some vantage points, but more generally of moderate significance, reducing to minor or negligible with distance (IR135-145). Like the Inspector, the Secretary of State considers that the overall adverse effect on the landscape character and visual amenity of the area would be of moderate significance, and that this consideration weighs against the proposal and brings it into conflict with the aims of several Maldon Local Plan Policies (IR145).

Living conditions

16. The Secretary of State has given careful consideration to the Inspector’s assessment of the impacts on the living conditions of local residents at IR146-176. Regarding outlook, he agrees with the Inspector that the proposed Turncole turbines, either by themselves or cumulatively with other existing or proposed turbines, would not result in an overwhelming and oppressive impact on the outlook from nearby dwellings or their associated amenity space that would result in unsatisfactory living conditions. Likewise, he agrees that the limited removal of roadside vegetation along the route proposed for abnormal indivisible loads would not harm the residential amenity of nearby occupiers (IR161). Consequently he agrees with the Inspector’s judgement that the proposal would not unacceptably affect amenities and the use of land and buildings which ought to be protected in the public interest (IR162).

17. Regarding noise and disturbance, the Secretary of State agrees with the Inspector that a lower fixed day-time cumulative limit of 40 dB would properly accord with the provisions set out in ETSU-R-97 (IR169). He agrees that wind turbine noise and some disturbance during construction and decommissioning would, to some extent, detract from the tranquillity of the area, but that subject to the suggested condition the scheme could operate within acceptable ETSU-R-97 limits (IR170-173).

18. Regarding the issue of Amplitude Modulation (AM), the Secretary of State has considered the representations made in response to his request for further information and the suggested additional conditions put forward by the appellant and SIEGE. He is persuaded that there is a need for an additional condition to protect the living conditions of nearby residents from unacceptable AM. He agrees with the view expressed in the appellant’s representation of 10 February that, given the wider debate that is presently taking place concerning the most appropriate form that a fit for purpose AM noise condition should take, it would not be appropriate at this stage to choose between the condition put forward in the appellant’s earlier response of 3 February and the alternative form of an AM noise
condition advanced in a technical report provided by SIEGE with its response of 3 February and endorsed in the Council's representation of 10 February (an 'updated' Den Brook condition). The Secretary of State agrees with the noise condition proposed in the applicant's representation of 10 February and considers that it is the most appropriate in current circumstances, because this condition will allow a properly endorsed AM noise assessment and rating methodology to be appropriately incorporated into an AM scheme to be agreed by the Council, taking account of any further advice forthcoming from the UK Institute of Acoustics and/or Government prior to commencement of operation of the development. For these reasons the Secretary of State has added Condition 25 in Annex B to this letter.

19. Overall, with the addition of Condition 25, the Secretary of State agrees with the Inspector that the evidence indicates that the combined effects of the proposed turbines on the outlook of nearby occupiers, along with operational noise in compliance with ETSU-R-97 limits, likely shadow flicker, health fears, and any disturbance or disruption during construction, operation or decommissioning, would not have a significant adverse effect on the living conditions of local residents. As a result, there would be no conflict with those parts of relevant Local Plan policies that aim to protect the amenity of neighbouring properties and their occupiers (IR176).

Heritage assets

20. In determining these appeals, the Secretary of State has had regard to its potential impacts on listed buildings, with particular regard to the desirability of preserving those buildings or their settings, as required by section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990. He has given careful consideration to the Inspector's assessment of impacts on listed buildings and archaeological features at IR177-182. The Secretary of State agrees that the evidence indicates that the proposed turbines would not significantly affect views that are important to the setting of heritage assets and that there would be no conflict with relevant Local Plan policies on landscape features and buildings of historic importance. The less than substantial harm to heritage assets that would result from the solus and cumulative effects of the proposed development would be a matter to be weighed against the benefits of the scheme in accordance with the provisions of the Framework (IR183).

Other Matters

21. The Secretary of State agrees with the Inspector's reasoning and conclusions on air safety at IR184-186, nature conservation and biodiversity at IR187-189, highway safety at IR190 and other considerations at IR191-195, including an alternative delivery route for abnormal loads.

Conditions

22. The Secretary of State has considered the Schedule of Conditions at the end of the Inspector's report and national policy as set out in Circular 11/95 and the Framework. He is satisfied that the proposed conditions, and also Condition 25 that he has added for the reasons above, are reasonable and necessary and would meet the tests of Circular 11/95 and paragraph 206 of the Framework.
Planning balance and overall conclusions

23. The Secretary of State has given careful consideration to the Inspector’s balancing exercise and consideration of policy matters at IR199-204, and his overall conclusions at IR212-214. He agrees with the Inspector that the benefits of renewable energy should be given significant weight. The Secretary of State also agrees that the proposed wind farm would have an adverse effect on landscape character and visual amenity of overall moderate significance, but that the adverse effects on the living conditions of those residing in the area would not be significant. He also agrees that there would be some harm to local amenity, but that this would largely be attributable to the effects on the local landscape and visual amenity of the area, which should not be double-counted. The proposal would have only a minor adverse effect on cultural heritage. Subject to the imposition of appropriate conditions the wind farm would not unduly affect air safety, biodiversity or highway safety (IR199-200).

24. The proposal would conflict with saved Local Plan policies on landscape and visual impact. However the Framework provides that due weight should be given to relevant policies in existing plans according to their degree of consistency with the Framework (IR201). In this case, the Local Plan does not include criteria-based policies to enable the assessment of renewable energy schemes. Furthermore, whilst the Special Landscape Area designation in which the proposal is situated is indicative of a valued landscape, the Plan does not set criteria-based policies against which proposals for any development on or affecting such landscape areas would be judged. This is not consistent with the Framework (IR203). Having had particular regard to paragraph 98 of the Framework, the Secretary of State considers that the landscape and visual amenity impacts of the proposal would be acceptable in this case, as would other impacts subject to the relevant conditions. He agrees with the Inspector that the planning balance falls in favour of the proposal and that it would be sustainable development to which the presumption in favour set out in Framework would apply (IR204).

Formal decision

25. Accordingly, for the reasons given above, the Secretary of State agrees with the Inspector’s overall conclusions at IR212-213 and his recommendation at IR215. He hereby grants planning permission for the construction and operation of a wind farm and associated highway works, as described in paragraph 1 above, for an operation period of 25 years in accordance with application references FUL/MAL/10/01070, FUL/MAL/12/00119 and FUL/MAL/11/00879, dated 14 February 2011, 8 February 2012 and 5 October 2011, respectively, subject to the conditions at Annex B of this letter.

26. An applicant for any consent, agreement or approval required by a condition of this permission has a statutory right of appeal to the Secretary of State if consent, agreement or approval is refused or granted conditionally or if the local planning authority fails to give notice of their decision within the prescribed period.

27. This letter does not convey any approval or consent which may be required under any enactment, bye-law, order or regulation other than that required under section 57 of the Town and Country Planning Act 1990.
28. This letter serves as the Secretary of State’s statement under Regulation 21(2) of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999.

**Right to challenge the decision**

29. A separate note is attached setting out the circumstances in which the validity of the Secretary of State’s decision may be challenged by making an application to the High Court within six weeks from the date of this letter.

30. A copy of this letter has been sent to Maldon District Council. A notification letter has been sent to all other parties who asked to be informed of the decision.

Yours faithfully

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**Julian Pitt**

Authorised by Secretary of State to sign in that behalf
ANNEX A

Post-inquiry representations

In response to the Secretary of State’s letter of 9 January 2014:

Maldon District Council (3 February 2014)
RES UK & Ireland Limited (3 February 2014)
Southminster Inhabitants Environmental Group Enterprise (SIEGE) (3 February 2014)

In response to the Secretary of State’s emails of 3 and 4 February 2014:

Maldon District Council (10 February 2014)
RES UK & Ireland Limited (10 February 2014)
SIEGE (10 February 2014)
ANNEX B: CONDITIONS

Application Reference FUL/MAL/10/01070 / Appeal A: APP/X1545/A/12/2174982

1) The development hereby permitted shall begin not later than five years from the date of this decision.

2) This permission shall expire 25 years from the date when electrical power is first exported from any of the wind turbines hereby permitted to the electricity grid network, excluding electricity exported during initial testing and commissioning (“First Export Date”). Written confirmation of the First Export Date shall be provided to the local planning authority no later than one calendar month after the event.

3) The development hereby permitted shall be carried out in accordance with the following approved plans: Planning Application Boundary (Site Location Plan) Drawing No.02340D2908-05, Turbine Layout with Micro-siting Drawing No.02340D2107-05 and Infrastructure Layout Drawing No.02340D1001-14.

4) If any wind turbine fails for a continuous period of 12 months to supply electricity to the local electricity grid network, then, unless otherwise approved in writing by the local planning authority that wind turbine and ancillary development solely related to it shall be taken down and removed from the site and the land shall be reinstated in accordance with a reinstatement scheme approved in writing by the local planning authority (which shall include a timetable for the removal of the turbine(s) and the reinstatement of the land). The developer shall submit the reinstatement scheme to the local planning authority not later than 28 days after the expiry of the twelve month period provided for in this condition, and the scheme shall be implemented as approved.

5) No later than twelve months before the expiry of this permission a scheme for the decommissioning and the restoration of the site shall be submitted to the local planning authority for approval in writing. The scheme shall make provision for the removal of the wind turbines and their associated ancillary equipment to a depth up to one metre below ground and the reinstatement of the site. The scheme shall include proposals for the management and timing of the works, measures to be taken to safeguard and where possible enhance wildlife habitats and a traffic management plan and shall be implemented as approved.

6) No development shall commence until a Construction Method Statement has been submitted to and approved in writing by the local planning authority. The construction of the development shall only be carried out in accordance with the approved Construction Method Statement, unless otherwise approved in writing by the local planning authority. The Construction Method Statement shall address the following matters:
   (a) A Site Environmental Management Plan to include details of measures to be taken during the construction period to protect wildlife, habitats and hydrology; an ecological survey; an investigation and monitoring scheme to oversee and direct construction works; and details of soil handling, storage and restoration.
   (b) Details of the timing of works and methods of working for cable trenches and foundation works.
   (c) Details of the timing of works and construction of the substation/control buildings and anemometry masts.
(d) Dust management.
(e) Pollution control: protection of water courses and ground water and soils, bunding of fuel storage areas, sewage disposal.
(f) Disposal of surplus materials.
(g) Construction noise management plan including identification of access routes, locations of materials lay-down areas, details of equipment to be employed, operations to be carried out, mitigation measures and a scheme for the monitoring of noise.
(h) Details of a site evacuation/flood management plan.
(i) Temporary site illumination.
(j) The construction of the access into the site and the creation and maintenance of visibility splays.
(k) Wheel cleaning facilities.
(l) Arrangements for keeping the site entrance and adjacent public road clean.
(m) Post-construction restoration and reinstatement of the working areas.

The approved Construction Method Statement shall be implemented and maintained for the duration of the construction works.

7) No development shall commence until a scheme providing for works in the public highway (reflecting the works shown on Figures 3.1 and 3.2 of submitted Supplementary Environmental Information) to enable abnormal indivisible loads (AIL) to access the site has been submitted to and approved in writing by the local planning authority. The scheme shall be implemented as approved and shall:

(a) Make provision to ensure that the use of the improvement works at the junction of Marsh Road with Church Road/Southminster Road Burnham-on-Crouch is restricted to these AIL only.
(b) Include an arboricultural method statement which shall address management and safeguarding of all trees along the AIL route.

8) No development shall commence until a Construction Traffic Management Plan has been submitted to and approved in writing by the local planning authority. The plan, which shall be implemented as approved, shall apply to all construction traffic and shall include, but shall not be limited to:

(a) A pre and post construction road survey, and a programme and methodology for any repairs as a consequence of any damage caused by construction traffic following the completion of construction.
(b) Provisions for the routeing of traffic to and from the site.
(c) Proposal for the timing of traffic movements.
(d) Proposal for the management of traffic movements at junctions with, and pedestrian crossings of, the public highway.
(e) Provisions of signs warning of construction traffic.
(f) The removal and replacement of street furniture, road verges, or other items within the public.
(g) Arrangements to ensure that construction traffic does not use the junction of Marsh Road with Church/Southminster Road Burnham on Crouch when children are scheduled to arrive at or leave Ormiston Academy or St. Mary’s Primary school.

9) No AIL movements shall take place until all works have been completed in accordance with the permissions granted pursuant to Appeal References APP/X1545/A/12/2179484 and APP/X1545/A/12/2179225.
10) The hours of operation of the construction phase of the development and any traffic movements to or from the site associated with the construction of the development hereby permitted shall be limited to 0700 hours to 1900 hours on Mondays to Saturdays. No work shall take place on Sundays or Bank Holidays, except for any works previously approved in writing by the local planning authority. Construction works so approved shall not be audible from the boundary of any dwelling. Any emergency works carried out outside the hours provided for in this condition shall be notified in writing to the local planning authority within seven working days of occurrence.

11) Notwithstanding the provisions of Condition 10, delivery of abnormal indivisible loads may take place outside the hours specified subject to not less than 24 hours prior notice of such traffic movements being given to the local planning authority.

12) All cabling on the site between the wind turbines and the site sub-station shall be installed underground.

13) The turbines shall have a semi matt finish and a pale grey colour. Prior to the erection of any turbine its exact finish and colour along with details of the dimensions, finish and colour of any external transformer units and the proposed meteorological and communications masts shall be submitted to and approved in writing by the local planning authority. No name, sign, symbol or logo shall be displayed on any external surfaces of the turbines or any external transformer units or the masts other than those required to meet statutory requirements. The development shall be carried out as approved and thereafter be retained in accordance with the approved details.

14) The height of each of the wind turbines shall not exceed 126.5 metres to the tip of the blades when the turbine is in the vertical position. The hub height of the wind turbines shall be between 77 metres and 87 metres. In each case the height shall be as measured from natural ground conditions immediately adjacent to the turbine base.

The wind turbines shall be erected at the following coordinates:

<table>
<thead>
<tr>
<th>Turbine ID</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>597864</td>
<td>197734</td>
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<tr>
<td>T2</td>
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<tr>
<td>T3</td>
<td>598408</td>
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<td>T4</td>
<td>598756</td>
<td>197686</td>
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<td>T5</td>
<td>599047</td>
<td>197452</td>
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<tr>
<td>T6</td>
<td>599442</td>
<td>197280</td>
</tr>
<tr>
<td>T7</td>
<td>599420</td>
<td>197663</td>
</tr>
</tbody>
</table>

Notwithstanding the locations of the turbines and other infrastructure shown on Figure 4.2 of the Environmental Statement the turbines may be located within the micro-siting areas shown on Figure 4.1 of the Environmental Statement. The consequential realignment of the associated infrastructure shall also be permitted.

15) All wind turbine blades shall rotate in the same direction.

16) No wind turbine or anemometry mast shall be externally lit except for a PIR activated light above the door to turbines and substation to aid engineers accessing the site during dusk or darkness, temporary lighting required during
the construction period or during maintenance, unless otherwise previously approved in writing by the local planning authority.

17) No development of the substation shall commence until details of the appearance, surface materials and dimensions of the proposed substation have been submitted to and approved in writing by the local planning authority. The details of the compound and substation shall reflect what is shown in Figures 4.7 and 4.8 of the Environmental Statement and shall not exceed the total area shown in those figures unless otherwise approved in writing by the local planning authority. The development shall be carried out as approved.

18) No development shall commence until a scheme reflecting the Ecological Mitigation and Enhancement Strategy contained in Chapters 6 and 14 of the Environmental Statement has been submitted to and approved in writing by the local planning authority. The scheme shall be implemented as approved.

19) No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted to and approved in writing by the local planning authority.

20) No development shall take place on site until a scheme to secure the investigation and alleviation of any electro-magnetic interference to TV and radio reception caused by the operation of the turbines has been submitted to and approved by the local planning authority. The scheme shall provide for the investigation by a qualified independent television engineer of any complaint of interference with television reception at a dwelling (defined for the purposes of this condition as a building within use Class C3 of the Use Classes Order) which lawfully exists or had planning permission at the date of this permission where such a complaint is notified to the developer by the local planning authority within 12 months of the First Export Date. Where impairment is determined by the qualified independent television engineer to be attributable to the wind farm, details of the mitigation works which have been approved in writing by the local planning authority shall be implemented in accordance with the approved scheme.

21) Prior to the erection of any wind turbine a scheme providing for the avoidance of shadow flicker at any dwelling lawfully existing or with planning permission at the date of this permission shall be submitted to and approved in writing by the local planning authority. The approved scheme shall be implemented and thereafter retained.

22) Prior to the commencement of the development an ornithological post construction monitoring scheme (to include but not be limited to corpse searching) for a period of five years to commence when all of the wind turbines have been erected shall be submitted to and approved in writing by the local planning authority. The scheme shall include a methodology for the carrying out of the monitoring and shall make provision for annual reports of that monitoring to be submitted to the local planning authority. The monitoring scheme shall be implemented as approved.

23) No development shall take place until details of a scheme to mitigate any adverse effects of the development on the Primary Surveillance Radar at Southend Airport which shall include the arrangements for the implementation of the scheme, have been submitted to and approved in writing by the local
planning authority. No turbine shall be erected until the scheme has been implemented in accordance with the approved details.

24) The level of noise immissions from the combined effects of the wind turbines within this development (including the application of any tonal penalty) when calculated in accordance with the attached Guidance Notes, shall not exceed the values for the relevant integer wind speed set out in the attached Table 1. Noise limits for dwellings which lawfully exist or have planning permission for construction at the date of this consent but are not listed in the Tables attached shall be those of the physically closest location listed in the Tables unless otherwise approved in writing by the local planning authority. The coordinate locations to be used in determining the location of each of the dwellings listed in Table 1 shall be those listed in Table 2.

The wind farm operator shall continuously log power production, wind speed and wind direction, all in accordance with Guidance Note 1(d). These data shall be retained for a period of not less than 12 months. The wind farm operator shall provide this information to the local planning authority on its request within 28 days of receipt in writing of such a request. The data shall be supplied in comma separated values in electronic format unless otherwise approved in writing by the local planning authority.

Within 28 days from receipt of a written request from the local planning authority following a complaint to the local planning authority from an occupant of a dwelling which lawfully exists or has planning permission at the date of this permission, the wind farm operator shall, at the wind farm operator’s expense, employ an independent consultant approved in writing by the local planning authority to assess the level of noise immissions from the wind farm at the complainant’s property in accordance with the procedures described in the attached Guidance Notes. The written request from the local planning authority shall set out at least the date, time and location that the complaint relates to and any identified atmospheric conditions, including wind direction.

The wind farm operator shall provide to the local planning authority the independent consultant’s assessment of the said complaint in accordance with the attached Guidance Notes within the later of two months of the date of the written request of the local planning authority above or two months following the approval of the local planning authority of the independent consultant and the approval of rain gauge location(s) under Guidance Note 1e, unless the time limit is extended in writing by the local planning authority. All data collected for the purposes of undertaking the compliance measurements shall be made available to the local planning authority on its request within 28 days of receipt in writing of such a request.
Table 1: Noise limits expressed in dB $L_{A90,10\text{-minute}}$ as a function of the standardised wind speed (m/s) at 10 metre height as determined within the site averaged over 10 minute periods

<table>
<thead>
<tr>
<th>Location</th>
<th>Standardised wind speed at 10 m height in m/s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>West Wycke Farm</td>
<td>38.0</td>
</tr>
<tr>
<td>Great West Wycke Farmhouse</td>
<td>38.0</td>
</tr>
<tr>
<td>1 Redward Cottages</td>
<td>38.0</td>
</tr>
<tr>
<td>New Bungalow</td>
<td>38.0</td>
</tr>
<tr>
<td>Turncole Farm</td>
<td>44.8</td>
</tr>
<tr>
<td>Broadward Farm</td>
<td>44.9</td>
</tr>
<tr>
<td>Poultry Farm</td>
<td>38.0</td>
</tr>
<tr>
<td>3 East Wick Cottages</td>
<td>38.0</td>
</tr>
<tr>
<td>Montsale Bungalow</td>
<td>38.0</td>
</tr>
<tr>
<td>West Wycke Bungalow</td>
<td>38.0</td>
</tr>
<tr>
<td>Old Montsale Farm</td>
<td>38.0</td>
</tr>
<tr>
<td>Wraywick Farm</td>
<td>38.0</td>
</tr>
<tr>
<td>Deal Hall</td>
<td>38.0</td>
</tr>
<tr>
<td>New Montsale</td>
<td>38.0</td>
</tr>
<tr>
<td>Middlewick Cottage</td>
<td>38.0</td>
</tr>
<tr>
<td>Middlewick</td>
<td>38.0</td>
</tr>
<tr>
<td>Court Farm</td>
<td>38.0</td>
</tr>
<tr>
<td>Wraywick Cottage</td>
<td>38.0</td>
</tr>
<tr>
<td>Dammerwick Farmhouse</td>
<td>38.0</td>
</tr>
<tr>
<td>Newmans Farm</td>
<td>38.0</td>
</tr>
<tr>
<td>8 Dammerwick Cottages</td>
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<td>1 East Wick Cottages</td>
<td>38.0</td>
</tr>
<tr>
<td>2 Coney Hall Cottages</td>
<td>38.0</td>
</tr>
<tr>
<td>Coney Hall</td>
<td>38.0</td>
</tr>
</tbody>
</table>
Table 2 Coordinate locations of the properties listed in Table 1.

<table>
<thead>
<tr>
<th>House Name</th>
<th>British National Grid Coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Easting</td>
</tr>
<tr>
<td>West Wycke Farm</td>
<td>597924</td>
</tr>
<tr>
<td>Great West Wycke Farmhouse</td>
<td>598490</td>
</tr>
<tr>
<td>1 Redward Cottages</td>
<td>598532</td>
</tr>
<tr>
<td>New Bungalow</td>
<td>598818</td>
</tr>
<tr>
<td>Turncole Farm</td>
<td>599105</td>
</tr>
<tr>
<td>Broadward Farm</td>
<td>598483</td>
</tr>
<tr>
<td>Poultry Farm</td>
<td>598944</td>
</tr>
<tr>
<td>3 East WickCottages</td>
<td>600254</td>
</tr>
<tr>
<td>Montsale Bungalow</td>
<td>600456</td>
</tr>
<tr>
<td>West Wycke Bungalow</td>
<td>597954</td>
</tr>
<tr>
<td>Old Montsale Farm</td>
<td>600729</td>
</tr>
<tr>
<td>Wraywick Farm</td>
<td>598431</td>
</tr>
<tr>
<td>Deal Hall</td>
<td>601025</td>
</tr>
<tr>
<td>New Montsale</td>
<td>600712</td>
</tr>
<tr>
<td>Middlewick Cottage</td>
<td>600712</td>
</tr>
<tr>
<td>Middle wick</td>
<td>601275</td>
</tr>
<tr>
<td>Court Farm</td>
<td>601408</td>
</tr>
<tr>
<td>Wraywick Cottage</td>
<td>598135</td>
</tr>
<tr>
<td>Dammerwick Farmhouse</td>
<td>596297</td>
</tr>
<tr>
<td>Newmans Farm</td>
<td>596221</td>
</tr>
<tr>
<td>8 Dammerwick Cottages</td>
<td>596029</td>
</tr>
<tr>
<td>Brook Farmhouse</td>
<td>595815</td>
</tr>
<tr>
<td>1 East WickCottages</td>
<td>600105</td>
</tr>
<tr>
<td>2 Coney HallCottages</td>
<td>600877</td>
</tr>
<tr>
<td>Coney Hall</td>
<td>600901</td>
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</tbody>
</table>

Note to Table 2: The geographical coordinate references are provided for the purpose of identifying the general location of dwellings to which a given set of noise limits applies.

25) No generation of electricity to the grid from the wind turbines shall take place until a Scheme for the regulation of amplitude modulation has been submitted to and approved in writing by the local planning authority. The scheme should be implemented as approved.
Guidance Notes for Noise Conditions

These notes are to be read with and form part of Condition 24. They further explain the noise conditions and specify the methods to be employed in the assessment of complaints about noise immissions from the wind farm. Reference to ETSU-R-97 refers to the publication entitled The Assessment and Rating of Noise from Wind Farms (1997) published by the Energy Technology Support unit (ETSU) for the Department of Trade and Industry (DTI).

Guidance Note 1

(a) Values of the $L_{A90,10}$ noise statistic should be measured at the complainant’s property, using a sound level meter of EN 60651/BS EN 60804 Type 1, or BS EN 61672 Class 1 quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This should be calibrated in accordance with the procedure specified in BS 4142: 1997 (or the equivalent UK adopted standard in force at the time of the measurements). Measurements shall be undertaken in such a manner to enable a tonal penalty to be applied in accordance with Guidance Note 3.

(b) The microphone should be mounted at 1.2-1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved in writing by the local planning authority, and placed outside the complainant’s dwelling. Measurements should be made in “free field” conditions. To achieve this, the microphone should be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the wind farm operator shall submit for the written approval of the local planning authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative measurement location.

(c) The $L_{A90,10}$ measurements should be synchronised with measurements of the 10-minute arithmetic mean wind speed and operational data logged in accordance with Guidance Note 1(d), including the power generation data from the turbine control systems of the wind farm.

(d) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed in metres per second and wind direction in degrees from north at hub height for each turbine and arithmetic mean power generated by each turbine, all in successive 10-minute periods. Unless an alternative procedure is previously approved in writing by the local planning authority, this hub height wind speed, averaged across all operating wind turbines, shall be used as the basis for the analysis. Each 10 minute arithmetic average mean wind speed data measured at hub height shall be ‘standardised’ to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres. It is this standardised 10 metre height wind speed data which is correlated with the noise measurements and referred to in Table 1. All 10-minute periods shall commence on the hour and in 10-minute increments thereafter.
synchronised with Greenwich Mean Time and adjusted to British Summer Time where necessary.

(e) Prior to the commencement of measurements the wind farm operator shall submit for the approval in writing of the local planning authority details of the proposed location of a data logging rain gauge which shall be installed during the course of the assessment of the levels of noise immissions. The data logging rain gauge shall record rainfall over successive 10-minute periods synchronised with the periods of data recorded in accordance with Note 1(d).

Guidance Note 2

(a) The noise measurements should be made so as to provide not less than 20 valid data points as defined in Guidance Note 2 paragraph (b).

(b) Valid data points are those measured in the conditions specified by the local planning authority under noise condition 24, but excluding any periods of rainfall measured in the vicinity of the sound level meter.

(c) For those data points considered valid in accordance with Guidance Note 2(b), values of the $L_{A90,10}$-minute noise measurements and corresponding values of the 10-minute wind speed, as derived from the standardised ten metre height wind speed averaged across all operating wind turbines using the procedure specified in Guidance Note 1(d), shall be plotted on an XY chart with measured $L_{A90,10}$ noise level on the Y-axis and the standardised mean wind speed on the X-axis. A least squares, "best fit" curve of an order deemed appropriate by the independent consultant (but which may not be higher than a second order polynomial) shall be fitted to the data points and define the wind farm noise level at each integer wind speed.

Guidance Note 3

Where noise immissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty is to be calculated and applied using the following rating procedure.

(a) For each 10-minute interval for which $L_{A90,10}$ data have been determined as valid in accordance with Guidance Note 2 a tonal assessment shall be performed on noise immissions during 2 minutes of each 10-minute period. The 2-minute periods should be spaced at 10-minute intervals provided that uninterrupted uncorrupted data are available (“the standard procedure”). Where uncorrupted data are not available, the first available uninterrupted clean 2-minute period out of the affected overall 10-minute period shall be selected. Any such deviations from the standard procedure, as described in Section 2.1 on pages 104-109 of ETSU-R-97, shall be reported.

(b) For each of the 2-minute samples the tone level above or below audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104-109 of ETSU-R-97.

(c) The tone level above audibility shall be plotted against wind speed for each of the 2-minute samples. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.
(d) A least squares “best fit” linear regression line shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the “best fit” line at each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process shall be repeated for each integer wind speed for which there is an assessment of overall levels in Guidance Note 2.

(e) The tonal penalty is derived from the margin above audibility of the tone according to the figure below.

![Penalty vs. Tone Level above Audibility](image.png)

**Guidance Note 4**

If the wind farm noise level (including the application of any tonal penalty as per Guidance Note 3) is above the limit set out in the conditions, measurements of the influence of residual noise shall be made in accordance with a methodology that has been previously submitted to and approved in writing by the local planning authority to determine whether or not there is a breach of condition. This may be achieved by repeating the steps in Guidance Notes 1 & 2 with the wind farm switched off in order to determine the residual noise, $L_3$, at the assessed wind speed. The wind farm noise at this wind speed, $L_1$, is then calculated as follows, where $L_2$ is the measured wind farm noise level at the assessed wind speed with turbines running but without the addition of any tonal penalty:

$$L_1 = 10 \log \left( 10^{\frac{L_2}{10}} - 10^{\frac{L_3}{10}} \right)$$

The wind farm noise level is re-calculated by adding the tonal penalty (if any) to the wind farm noise.
1) The development hereby permitted shall begin not later than five years from the date of this decision.

2) The development hereby permitted shall be carried out in accordance with the following approved plans: Planning Application Boundary Drawing No.02340D2909-01 and Delivery Analysis Drawing No.02340D2414-01 Sheets 1 and 2, except in respect of the detail shown on Sheet 2 which shall be approved pursuant to Condition 3 below.

3) No development shall commence until a scheme has been submitted to and approved in writing by the local planning authority detailing:
   (a) The works required to implement the permission, along with a timetable for implementation.
   (b) Proposals to restore land outside the carriageway of the public highway (including new or replacement planting of trees and hedges).
   (c) The maintenance of the restoration works for a period of five years from their completion.
   (d) The method statement providing for works to manage and safeguard trees during implementation of the works.

The scheme shall be implemented as approved.

4) No development under this permission shall take place prior to the commencement of development of the wind farm granted planning permission under Appeal Reference: APP/X1545/A/12/2174982.
Report to the Secretary of State for Communities and Local Government

by John Woolcock  BNatRes(Hons) MURP DipLaw MPIA MRTP
an Inspector appointed by the Secretary of State for Communities and Local Government
Date:  21 October 2013

Town and Country Planning Act 1990

Maldon District Council

appeals by

RES UK & Ireland Ltd

Inquiry held on 23-26 and 30 April, 1, 2 and 8 May 2013

Appeal A: Turncole Farm, The Marshes, Dengie, Southminster CM0 7JJ
Appeal B: Lower Burnham Road and Fambridge Road, Near Cold Norton, Essex CM3 6NW
Appeal C: Turncole Farm, The Marshes, Dengie, Southminster CM0 7JJ

Report APP/X1545/A/12/2174982, 2179484 and 2179225
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## ANNEX1 Summary of Local Plan policies cited in the SoCG

## SCHEDULE OF CONDITIONS – Appeal A

## SCHEDULE OF CONDITIONS – Appeals B and C

## APPEARANCES

## PROOFS OF EVIDENCE, WRITTEN REPRESENTATIONS and SoCG

## DOCUMENTS SUBMITTED AT INQUIRY

## DOCUMENTS SUBMITTED AFTER THE CLOSE OF THE INQUIRY

## LIST OF PLANS

## CORE DOCUMENTS
ABBREVIATIONS

AIL    Abnormal indivisible loads
BS4142 Method for rating industrial noise affecting mixed residential and industrial areas
BS5837 Trees in relation to design, demolition and construction
CD    Inquiry Core Document
CLVIA  Cumulative landscape and visual impact assessment
DNO   Distribution Network Operator
EA    Environment Agency
EH    English Heritage
EIA   Environmental Impact Assessment
EN-1  Overarching National Policy Statement for Energy
EN-3  National Policy Statement for Renewable Energy Infrastructure
ES    Environmental Statement
ETSU-R-97 The Assessment and Rating of Noise from Wind Farms, ETSU-R-97, Energy Technology Support Unit
Framework National Planning Policy Framework
GHG   Greenhouse Gases
ID    Inquiry Document – document submitted during the Inquiry
LP    Maldon District Replacement Local Plan 2005
MoD   Ministry of Defence
NATS  National Air Traffic Services
NE    Natural England
NPSE  Noise Policy Statement for England
MoD   Ministry of Defence
OAM   Other Amplitude Modulation
PPS22 now replaced Planning Policy Statement 22: Renewable Energy
PPS22CG now cancelled Planning for Renewable Energy – A Companion Guide to PPS22
RE    Renewable energy
RSPB  Royal Society for the Protection of Birds
SEI   Supplementary Environmental Information
SIEGE Southminster Inhabitants Environmental Group Enterprise
SLA   Special Landscape Area
SoCG Statement of Common Ground between the Council and the appellant
SPA   Special Protection Area
SSSI  Site of Special Scientific Interest
T1-T7 Proposed wind turbines 1 to 7 in appeal scheme
VP    View Point
ZTV   Zone of Theoretical Visibility
Appeal A: APP/X1545/A/12/2174982
Turncole Farm, The Marshes, Dengie, Southminster CM0 7JJ

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by RES UK & Ireland Ltd against the decision of Maldon District Council.
- The application Reference FUL/MAL/10/01070, dated 14 February 2011, was refused by notice dated 25 October 2011.
- The development proposed is “Wind Farm Development consisting of seven three-bladed, horizontal-axis wind turbines, each up to 126.5 m maximum height to blade tip, with associated electricity transformers, underground cabling, access tracks, road widening works, crane hardstandings, control building, substation compound, communications mast and anemometry mast for a period of twenty-five years. Also temporary works including a construction compound, laydown area, rotor assembly pads, turning heads, welfare facilities and four guyed anemometry masts.”

Appeal B: APP/X1545/A/12/2179484
Lower Burnham Road and Fambridge Road, Near Cold Norton, Essex CM3 6NW

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by RES UK & Ireland Ltd against the decision of Maldon District Council.
- The application Reference FUL/MAL/12/00119, dated 8 February 2012, was refused by notice dated 16 May 2012.
- The development proposed is “permanent road widening works for the purpose of facilitating access for abnormal load deliveries to the proposed wind farm at Turncole Farm. The new highway created will be fenced or similar to allow access to the abnormal loads only and not all traffic. The works will take place at the two road junctions between Lower Burnham Road and Fambridge Road near Cold Norton. The works will result in a change of use from residential and agricultural land to form new highway.”

Appeal C: APP/X1545/A/12/2179225
Turncole Farm, The Marshes, Dengie, Southminster CM0 7JJ

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by RES UK & Ireland Ltd against the decision of Maldon District Council.
- The application Reference FUL/MAL/11/00879, dated 5 October 2011, was refused by notice dated 23 May 2012.
- The development proposed is “permanent road widening works and replacement of Twizzlefoot bridge for the purpose of facilitating access for abnormal load deliveries to the proposed wind farm at Turncole Farm. The works will result in a change of use from agricultural land to form new highway.”
Summary of Recommendations:

Appeal A: APP/X1545/A/12/2174982
The appeal be allowed, and planning permission granted subject to conditions.

Appeal B: APP/X1545/A/12/2179484
The appeal be allowed, and planning permission granted subject to conditions.

Appeal C: APP/X1545/A/12/2179225
The appeal be allowed, and planning permission granted subject to conditions.

Preliminary matters

1. The appeals were recovered, by letter dated 5 June 2013, for determination by the Secretary of State because the appeals relate to proposals of major significance for the delivery of the Government’s climate change programme and energy policies. This report briefly sets out the respective cases of the parties and deals more fully with their submissions in the Conclusions section, citing documents before the Inquiry, and submitted after its close, where appropriate.

2. The planning application for the scheme in Appeal A was accompanied by an Environmental Statement (ES). Supplementary Environmental Information (SEI) was submitted on 26 July 2012. The ES and SEI were advertised in accordance with the Environmental Impact Assessment (EIA) Regulations. Following the submission of the SEI the Council issued updated reasons for refusal in January 2013. The ES and SEI reasonably comply with the relevant provisions of the EIA Regulations, and the Environmental Information, as defined in the EIA Regulations, has been taken into account in this report and its recommendations.

3. On application Southminster Inhabitants Environmental Group Enterprise (abbreviated to ‘SIEGE’ in this report), which currently has a membership of about 700 people, was granted Rule 6(6) status pursuant to the Town and Country Planning (Determination by Inspectors) (Inquiries Procedure) (England) Rules 2000, which then applied. SIEGE participated fully in the Inquiry, opposing the proposed development.

4. The Institute of Acoustics published A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise (GPG) after the close of the Inquiry. This was endorsed as a supplement to ETSU-R-97. The parties were given the opportunity to comment.

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1 In Appeal A the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 continue to apply in accordance with the transitional arrangements for the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.
2 CD20.
3 ID41.
4 ID41.1.
5 Only the appellant responded, which is at ID41.2.
5. The High Court judgment in *Anita Colman and SoS for CLG and North Devon DC and RWE* also came after the Inquiry had closed. The parties commented on this by email.

6. Written statements to Parliament on onshore wind were published on 6 June 2013. The parties were given the opportunity to comment. The Department for Communities and Local Government subsequently published *Planning practice guidance for renewable and low carbon energy* on 29 July 2013 (PPG). There is nothing to indicate that the written statements to Parliament were withdrawn with the publication of the PPG. Comments about the PPG were invited from the parties.

**Planning policy**

7. Following the revocation of the Regional Spatial Strategy for the East of England and of all remaining structure plan policies, the adopted development plan for the area comprises saved policies of the Maldon District Replacement Local Plan 2005 (LP). I deal with relevant policies in more detail later in this report, but highlight that the three appeal sites lie within a Special Landscape Area (SLA), as designated by LP Policy CC7. They also lie within the defined Coastal Zone pursuant to LP Policy CC11. Maldon District Council’s emerging Local Development Plan is at preferred options consultation stage and so cannot be given much weight in determining these appeals.

8. Paragraph 3 of the *National Planning Policy Framework* (hereinafter the *Framework*) states that national policy statements are a material consideration in decisions on planning applications. I deal in more detail later with the *Framework*. However, it replaced *Planning Policy Statement 22: Renewable Energy* (PPS22). Footnote 17 to paragraph 97 of the *Framework* states that in assessing the likely impacts of potential wind energy development in determining such planning applications the approach in the *National Policy Statement for Renewable Energy Infrastructure* (EN-3), read with the relevant sections of the *Overarching National Policy Statement for Energy* (EN-1), should be followed. In accordance with paragraph 1.2.1 of EN-1 and paragraph 1.2.3 of EN-3 there are no reasons here why these national planning statements should not apply in the interests of consistency, notwithstanding that the appeal scheme falls below the 50 MW threshold for national infrastructure projects.

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6 *Anita Colman and SoS for CLG and North Devon DC and RWE* [2013] EWHC 1138 (Admin) Case No:CO/12831/2012 at ID42.
7 ID42.1, ID42.2 and ID42.3.
8 ID43a, ID43a.1 and ID43b.
9 ID43.1 and ID43.2.
10 ID44.
11 Submissions from the main parties are at ID44.1, ID44.2 and ID44.3. The appellant’s response to the Council’s and SIEGE’s submissions are at ID44.4.
12 CD23a.
13 The SLA is shown on ES Figure 5.2. Appeal sites A and C lie within the Dengie Marshes SLA.
14 The Coastal Zone is shown on ES Figure 5.3. The designation arose from the Coastal Protection Belt in the now revoked Essex & Southend-on-Sea Replacement Structure Plan. This applied stringent restrictions on development at ID31.
15 ID23.
9. Planning Practice Guide to PPS5: Planning for the Historic Environment remains extant, but it is guidance about implementing PPS5 Planning for the Historic Environment, which was replaced by the Framework. Planning for Renewable Energy – A Companion Guide to PPS22 (PPS22CG) was cancelled by the PPG. The PPG was foreshadowed in the written statements to Parliament dated 6 June 2013. It is a material consideration in determining these appeals and there are no reasons why it should not generally be followed. Paragraph 15 of the PPG sets out a number of matters which it is important to be clear about in considering planning applications. Particular planning considerations that relate to wind turbines are included in PPG paragraphs 29-45. More details about how these apply in this case are included in the relevant sections of this report.

The appeal sites and surrounds 16

10. The proposed Turncole wind farm site comprises large open agricultural fields primarily used for crops. It lies about 2.6 km south-east of Southminster, and about 2.7 km north-east of Burnham-on-Crouch, on the Dengie peninsula. Other settlements in the area include Stoneyhills, which is about 2.8 km to the west, and Asheldham and Dengie, which are smaller dispersed settlements some 3.5 km to 3.8 km north of the site.17 The nearest national designations are the Crouch and Roach Estuaries Site of Special Scientific Interest (SSSI) to the south, and the Essex Coast Environmentally Sensitive Area to the south-west. The closest international designations are the Crouch and Roach Estuaries Special Protection Area (SPA), Special Area of Conservation and Ramsar site.18 There are a number of listed buildings and archaeological sites in the locality which are identified in the ES.19

11. There are 27 dwellings within 2 km of the proposed wind farm.20 It was clarified at the Inquiry that the occupiers of both Turncole Farm and Broadward Farm have a financial interest in the proposed wind farm. Footpaths in the locality include St Peter’s Way long distance footpath, which runs in an east-west direction approximately 6 km at its nearest point to the north of the proposed wind farm. Footpaths FP18 and FP24 are the closest to the appeal site in Appeal A at a distance of about 1 km.21 Sustrans cycle routes lie approximately 14 km and 15 km from this appeal site at their nearest points.22

12. There are other wind turbines in the wider locality.23 A turbine 36.4 m to blade tip is located at Southminster Hall, about 1.9 km north-west of the proposed Turncole wind farm.24 The first two of 10 permitted 121 m to blade tip turbines at Bradwell-on-Sea were constructed at the time of the Inquiry, some 8 km to the north of the proposed Turncole wind farm.25 These were permitted on appeal in

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16 Based on SoCG and evidence at the Inquiry.
17 The location is shown at ES Figure 1.1.
18 SAC/SPA/Ramsar sites and SSSI are shown on ES Figure 3.2 and ES Figure 6.10.
19 Shown on ES Figure 7.2.
20 These are shown on ES Figure 5.14.
21 The nearest public footpaths are shown on ES Figure 5.14.
22 Sustrans routes and St Peter’s Way are shown on ES Figure 5.1.
23 SoCG Table 1 sets out details about existing and permitted wind turbines within 25 km of the proposed Turncole wind farm. Locations for some are shown on ES Figure 5.10.
24 Southminster Hall is shown on ES Figure 5.14.
25 ID29.
2010. 26 Middlewick wind farm, about 1.3 km north of the proposed Turncole wind farm, has planning permission for 9 turbines, each 125 m to blade tip. 27 In that case the main parties agreed that a joint day and night-time lower noise limit of 38 dB $L_{A90,10\text{ min}}$ for properties not financially involved with the Middlewick wind farm could be adopted. 28 This joint limit was justified on the grounds that it would prevent a sudden increase in acceptable noise limits during the night-time and to prevent excessive night-time noise levels above background levels. 29 Construction of Middlewick wind farm had not commenced at the time of the Inquiry, but all preconditions have been discharged. 30 At a distance of some 22 km to 23 km there are offshore wind farms at Gunfleet Sands and Kentish Flats. At a similar distance there are also five turbines at Earls Hall Farm, which is about 1 km to the west of Clacton-on-Sea. 31

13. In terms of landscape character the proposed wind farm site is located in National Character Area 81: Greater Thames Estuary. 32 The key characteristics of this area include extensive open space dominated by the sky, within a predominantly flat, low-lying landscape, with a strong feeling of remoteness and wilderness on the open beaches and salt marshes, on the reclaimed farmed marshland and also on the mudflats populated by a large and varied bird population. 33 It adds that hedges are absent from the large, rectilinear fields, and that generally tree cover is limited to farmsteads and dwellings on higher, drier pockets of ground. Character Area 111: Northern Thames Basin lies to the west of Area 81. This is a more diverse landscape, which includes broad plateau areas mainly in agricultural use, along with broad and smaller river valleys. 34 In the Essex Landscape Character Assessment the site is identified within the Dengie and Foulness Coast (F3), and described as a large scale, flat landscape with wide views, with a remote tranquil character, arable farmland intersected by ditches with only a few hedgerows. 35

14. At a more local level appeal sites A and C are located within Landscape Character Area D8 Dengie Drained Estuarine Marsh. 36 Key characteristics of this area include low drained land of mostly arable farmland intersected by linear ditches and dykes, with restricted access and isolated farms, along with a sense of huge sky, sound of birds, tranquillity and panoramic views across the marshland and out to sea. There is evidence that tranquillity increases significantly to the east of the settlements at Southminster and Burnham-on-Crouch. 37 The consented Middlewick wind farm site lies within Area D8. To the east of Area D8 lies Area C3 Dengie Flats Estuarine Marsh/Mudflats, some 3 km from the Appeal A site, which is an inter-tidal landscape. The character of Area C3 is influenced by the

26 ID20.
27 Granted planning permission on appeal in 2011 at CD58.
28 References to all noise levels in this report do not repeat the $L_{A90,10\text{ min}}$ descriptor, e.g 38 dB $L_{A90,10\text{ min}}$ would be specified simply as 38 dB.
29 CD58 paragraph 38 and Condition 40.
30 Council’s response to Inspector’s question.
31 Inspector’s site visit – location is shown on ES Figure 3.2.
32 Shown on ES Figure 5.4.
33 CD95.
34 CD96.
35 CD89 and ES Figure 5.5.
36 CD89 and ES Figure 5.5.
37 ID9.

http://www.planning-inspectorate.gov.uk
changing colours of the sea and sky. To the north and west, at a distance of about 2 km from the proposed Turncole wind farm, lies Landscape Character Area E2 Tillingham and Latchingdon Coastal Farmland. This is gently undulating farmland, locally quite steep, behind the coastal marshland. Features cited as key characteristics in Area E2 include right-angled bends in lanes which reflect ancient field patterns, and that Dutch elm disease has made elm loss noticeable in hedgerows. Settlements north of Burnham-on-Crouch lie within Area E2. Appeal site B lies within a transition area between Drained Estuarine Marsh and Coastal Farmland character areas. Bradwell wind farm and Bradwell Power Station lie within landscape character Area D7 Bradwell Drained Estuarine Marshes, which lies about 6 km from the proposed Turncole wind farm. This is the same character type as Area D8.

15. Appeal sites A and C lie within the Maldon peninsula regional seascape unit as devised for the ES. This is wedged between the River Blackwater to the north and the River Crouch to the south, and is described in the ES as a highly distinctive and surprisingly isolated seascape consisting of a peninsula, which at its narrowest is no more than 6 km wide. My site visits confirmed the findings in the ES that, although a coastal landscape, the area is defined by land and sky and the flatness of the terrain rather than the sea itself, with the wide expanse of mudflats at low tide visually separating the sea from the land.

**Proposed development**

16. It was clarified at the opening of the Inquiry that the three appeal schemes relate to a single proposal, and that if the appeals were to succeed it would be necessary to link the resultant planning permissions by conditions. The proposed development includes seven wind turbines (T1-T7) with a maximum height to blade tip of 126.5 m. Proposed infrastructure layout is shown on ES Figure 4.2, with indicative turbine elevations depicted at ES Figure 4.3. During construction and commissioning temporary works would include a construction compound and anemometry masts. The construction phase of the proposal would be expected to last 12 months, with the wind farm then to operate for a 25 year period before being decommissioned.

17. The sites of the proposed highway works in Appeals B and C are shown as Detail 3 and 4, and Detail 29, respectively, on the Delivery Analysis, which is Figure 3.1 of the SEI. This also indicates the proposed route for abnormal indivisible loads (AIL). Grid connection works were considered in the ES, but are not part of the appeal scheme and would need to be the subject of separate consideration by the distribution network operator.

18. Based on a wind turbine with a nominal capacity of 1.8 MW, the proposed wind farm would have an estimated installed capacity of 12.6 MW. The proposed wind farm would be capable of producing the equivalent amount of electricity per
annum that is required for the annual domestic needs of approximately 7,585 households based on the UK averaged domestic electricity consumption of 4,700 kilowatt hours per annum, so offsetting approximately 15,300 tonnes of carbon dioxide per annum.43

Statement of Common Ground

19. A Statement of Common Ground (SoCG) between the Council and the appellant dated 26 March 2013 sets out, amongst other things, documentation for the applications. However, the application drawings in the SoCG were revised at the Inquiry to the List of Plans attached to this decision.44 This clarified that other drawings submitted are indicative and do not form part of the applications. A drafting error for proposed highway works (Detail 9) was corrected at the Inquiry.45

20. The Council has no objections to the proposal on a number of grounds, subject to the imposition of appropriate planning conditions. These are ecology, tourism, archaeology, shadow flicker, public safety, ice-throw or driver distraction, loss of agricultural land, human rights, hydrology, contamination, aviation, health effects of infrasound or low frequency noise, and electro-magnetic interference. The SoCG states that commercial viability, including available wind speed, is not a land use consideration.

21. The Council’s concerns about the effects of the proposed wind turbines on the residential amenity of nearby occupiers relate solely to the properties at Turncole Farm and Broadward Farm.

22. With respect to landscape character effects, the SoCG states that the proposal would not give rise to any significant direct effects on the physical fabric of the landscape in the longer term. The Council and the appellant agree that the effects of Bradwell and Middlewick wind farms would be such that the host landscapes Area D7 and Area D8 would have wind turbines as a key characteristic across portions of the two areas. It is further agreed that the additional effects of Turncole wind farm would be to extend the influence that would already arise from Middlewick wind farm and Bradwell wind farm across character Area D8, such that wind farms would become a key characteristic of the entire character area.

23. The Council and the appellant agree that the operation of the wind farm would affect the setting of heritage assets in the vicinity of the development, but any such effects would be reversed when the wind farm was decommissioned. The Council’s concern relates to a number of specified listed buildings.46 The issue between the Council and the appellant is the balance of the benefits of the proposal against any harm to the significance of listed buildings in the vicinity due to change in their setting, by Turncole wind farm alone and in combination with Middlewick and Bradwell wind farms.

43 SoCG Section 20 notes that these offset figures would change during the lifetime of the proposed wind farm as the national mix of generation sources changes.
44 ID13.
45 ID15.1 and ID15.2.
46 These are Old Montsale, Newman’s Farmhouse, Dammer Wick Farmhouse, Bridgewick Cottages, Court Farmhouse, together with the nearby Bake/Brewhouse and Barn, and the Church of St James. Relevant extracts from the Statutory List are at PoE3 Appendix B.
24. Appendix 2 of the SoCG sets out an agreed statement about energy policy, and there is agreement about the public benefits that would result from the generation of renewable energy (RE) and reduction of greenhouse gases (GHG) in terms of offsetting carbon dioxide, based on certain assumptions.

25. LP Policy PU6 is the most relevant policy as it deals with wind energy development. Other policies which may be relevant are set out in the SoCG, with the weight to be given to them a matter to be determined. A summary of these policies is included as Annex 1 to this report.

26. A noise common ground statement includes an agreed set of tables documenting representative average typical background noise levels, and noise levels with the appropriately derived noise limits for various lower absolute noise limits for Turncole wind farm alone, and cumulatively with Middlewick wind farm operating at its consented noise limits.47 The Council and the appellant agree about a night-time fixed limit, but there is a dispute about what would be the appropriate day-time fixed limit.

27. The landscape experts at the Inquiry set out matters in dispute concerning the removal of trees and vegetation along the route proposed for construction vehicles.48 There is disagreement about the acceptability of the visual and character effects at several locations, whether Tree 10 should be Grade A or B, and the effects of the proposal on its health and longevity. Similar concerns exist for Tree 11. Other issues concern the implications for a roadside pond, along with the effects of the removal of roadside vegetation on the residential amenity of some dwellings.49

The case for SIEGE

The main points are as follows.50

28. National planning policy provides strong support for the development of RE, and the central message contained within paragraph 17 of the Framework is that planning should “encourage...the development of renewable energy.” But there are other material considerations, which must be taken into account. It is self-evident that wind turbines can have dramatic adverse effects on landscape and on amenity. Therefore, a balancing exercise must be carried out. The benefits of the scheme, both in terms of its actual output of electricity, the resultant benefit to overall climate change objectives, along with other benefits, including socio-economic benefits, are to be weighed against the disbenefits. SIEGE adopts and supports the Council’s case, but focuses on cumulative impacts, particularly in relation to residential amenity and construction traffic.

29. There is no presumption in favour of RE development. The presumption contained in the Framework is only in favour of sustainable development. The reference to “impacts” in paragraph 98 makes it plain that this guidance is not the engagement of a balancing exercise that balances impacts against the overall need for RE, but an evaluation of whether the landscape, visual and other

47 ID7.
48 ID22.
49 Photographs are included in PoE11 Appendices 5 and 6 with locations at ID 21. Appendix 10 of PoE2 shows the delivery analysis drawings with aerial photograph overlays.
50 Based on closing submissions at ID38.
impacts are, of themselves, acceptable. EN-1 makes plain that the landscape and visual effect of wind turbines is directly relevant to the issue of whether or not they can be permitted. The decision maker “should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project.” 51 Paragraph 98 of the Framework does not preclude weighing in the balance the actual energy benefits which flow from a scheme against its adverse impacts. Nor does it prevent consideration of the suitability, overall, of a particular location for a proposed scheme.

30. The language within the Framework indicates a weakening of the support for renewables from the policy provisions of the former PPS22, a key principle of which suggested that the benefits of renewable development must always be afforded “significant weight”. A blanket approach of simply assuming that there is a significant substantial weight to be attached to the appellant’s need case should not be adopted. This is not a major RE scheme, and EN-1 paragraph 3.2.3 provides that substantial weight should be given to considerations of need, with the weight so attributed in any given case being proportionate to the anticipated extent of a project’s actual contribution to satisfying a need for a particular type of infrastructure.

31. The benefits of the scheme should be considered in terms of targets for installed renewables capacity, energy output and socio-economic benefits. Regional and sub-regional targets are only a mechanism by which it is sought to ensure that national targets are met. The UK’s international obligations are imposed in national terms. When assessing planning weight it is necessary to make that assessment within the context of an understanding of performance against national targets. An understanding of the amount of energy which would actually be produced is the first step to understanding how much displacement there would be of energy produced from fossil fuel sources. The scheme if allowed to run at full capacity would produce 12.6 MW, compared to 20 MW at each of the Bradwell and Middlewick wind farms. It would not be a major wind farm development, nor would it make a large contribution to national RE targets. There would be benefits in electricity generation, and reduction of GHG, but their significance in a national context is less clear, and the appellant has probably overstated these benefits. There would also be some socio-economic benefits, primarily from the construction of the wind farm, but the amount of money generated which would remain in the local economy would be limited, and few permanent jobs would result once the scheme was operational.

32. Against this must be balanced the very real harm which the appeal proposals would do. In relation to landscape and visual matters, the starting position is the view of the Dengie as an unspoilt, rural location of peace, tranquillity and vast skies. The introduction of more turbines into this highly sensitive landscape would have a variety of negative landscape effects. The sheer size of the industrial structures would impose on an area where very few features protrude above the natural landscape. They would stand clear of any woodland or other landscape features, and in any near or medium distance views would dominate and dwarf any existing structures and dwellings. In terms of materials, form and functionality the turbines would be alien to the local landscape, with blade

51 EN-1 paragraph 5.9.15. A similar statement is made in respect of visual impact at paragraph 5.9.18.
rotation drawing attention. The blades would have a swept area 7% greater than that of the turbines at Middlewick wind farm, and 28% greater than those at Bradwell wind farm, which would increase the visual distraction. In combination with the Middlewick turbines the appeal scheme would induce an increasing sensation of creeping industrialisation into a rural area, which with the visual and noise effects, would significantly reduce the remaining sense of remoteness and tranquillity. This would harm the recreational amenity of the area for walkers, cyclists and equestrians.

33. The Council and the appellant have not given full consideration to the significant damage this development, alone and cumulatively, would cause to the residential amenity of a number of properties. There has been no assessment of cumulative impact on the residential amenities of properties other than Turncole Farm and Broadward Farm. The appellant’s methodology is not transparent. This is important because intimidating cumulative effects on residential amenity have been found at a distance of 2 km in the Sillfield appeal. The ES in relation to West Wyckke Farm states that there “are likely to be uninterrupted views of the proposed wind farm from first floor rear windows”, and in relation to West Wyckke Bungalow that there “are likely to be more open views of the turbines from the rear gardens”. More crucially, in relation to Great West Wycke Farmhouse the ES states that the nearest turbine would be 0.83 km to the north, and that “The principal focus and direction of views from both the house and garden is to the north and northwest... On the basis that views from the main living areas and garden towards the proposed turbines are unobstructed and likely to be dominated by the proposed wind farm development the effects on visual amenity are deemed to be considerable.” The appellant’s witness found that the scheme would not be overbearing or oppressive, and so was forced into the unenviable position that the ES was inconsistent and wrong.

34. The public interest is engaged when damage to residential amenity is such that the property would become an unattractive place to live. In addition, wide-ranging damage to residential amenity that does not make any single property unattractive, but harms the general attractiveness of the outlook of the local area as a place to live, is also a public issue, which must engage the public interest. Local residents chose to live in the Dengie because of its peace, quietness, unspoilt landscape and tranquillity. The test applied in the Carland Cross appeal is for determining whether or not a scheme should be refused on residential amenity grounds alone – it does not follow that if this test is not met that these effects should simply be disregarded.

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52 PoE8 paragraph 2.1.
53 PoE7 paragraph 17.
54 WR4
55 CD69 paragraph 47.
56 ES paragraphs 5.11.8 and 5.11.10.
57 ES paragraph 5.11.12. In WR2 the occupiers refer to this property as Great West Wycke Farmhouse, but it is referred to in the ES as Great West Wick R3 and Great West Wycke Farm in the suggested noise conditions.
58 WR2.
59 PoE6, PoE7, WR2 and WR3.
60 CD62.
35. There is no policy or precedent which supports the appellant’s position that the financial interests of the occupiers of Turncole Farm and Broadward Farm renders harm to the residential amenity of these properties acceptable. The accepted test is whether residential amenity would be damaged in the opinion of the public at large, as potential purchasers of the property.

36. The appellant’s study of Inspectors’ decisions in relation to residential amenity should be given very little weight because there is no analysis of how many decisions related to cumulative effects, spread or number of turbines involved. These are factors that would affect the field of view. The cumulative impact in relation to 70 properties, with clear or peripheral line of sight, especially at times when deciduous trees have lost their leaves, weighs in the planning balance against the scheme. Unacceptable effects on residential amenity were found in the Enifer Downs decision, which concerned five turbines spread out at 800 m, with little or no screening. Support derives from the Poplar Lane decision where seven turbines at 750 m were found unacceptable on the grounds that they would be overwhelming, obstructive and unavoidable to residents on the basis of a single field of view from main rooms and gardens. In the Brightenber decision it was found that potential views for those working the land were oppressive and overbearing as the farmer would be unable to escape them. This would apply to farmland at Northwycke Farm, which would be 300 m from the nearest Middlewick turbine and 1,450 m from the nearest Turncole turbine.

37. The Council’s case on noise is largely supported, but noise levels should never have been set above 35 dB, and the Middlewick Inspector was wrong to determine a lower noise limit of 38 dB. If WHO revised guidelines had been considered, ETSU noise limits should be 30 dB during the day-time. Concerns exist about the methodology used in the noise assessment, particularly calibration uncertainty, induced noise from windshields, exclusion of rain affected results, and monitoring undertaken in moderately exposed positions. ETSU-R-97 day-time limits are intended to apply in sheltered positions such as gardens and patios, not in more windy positions. Given the difficulty in assessing noise, perhaps an uncertainty of +/- 3 dB should be added to the predicted noise levels from the turbines. There is also concern about noise health effects. Noise can be a problem for people, which can be particularly acute for those not kindly disposed to them and/or those who can see them.

38. ETSU-R-97 is inadequate in protecting residents from harmful noise impacts when used in very low background noise areas. Wind farms are industrial development to which BS4142 Method for rating industrial noise affecting mixed residential and industrial areas should apply. Dwellings situated between the Middlewick and Turncole wind farms would be subject to the combined noise generated, which would be incessant and overwhelming. It would be impossible to apportion the contribution that each of the two wind farms had made in the

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61 Appellant’s PoE10 Appendix I.
62 Table 1 PoE8. SIEGE highlights concern about overwhelming panoramas of rotating turbines in views from Great West Wycke Farmhouse, Wraywick Farm, Wraywick Cottages, Montsale Bungalow and Middlewick Cottages.
63 CD68.
64 Appeal Reference:APP/L3245/A/08/2088742 and 2088745.
65 CD61.
66 PoE5 sections 3, 4, 5 and 8. Health issues are also raised in WR4.
event that noise limits imposed were exceeded. Reference should also be made to the *Noise Policy Statement for England* (NPSE), which aims, within the context of Government policy on sustainable development, to avoid significant adverse impacts on health and quality of life, to mitigate and minimise such impacts, and where possible contribute to the improvement of health and quality of life. This approach should be preferred because it is a more recent statement of Government policy, and because it seeks to clarify the underlying principles and aims of existing policy documents, legislation and guidance related to noise.

39. A condition dealing with amplitude modulation is necessary to protect local residents from a phenomenon that they think would be a significant issue, which the appellant denies would occur. The suggested condition would control the period during which greater than expected amplitude modulation (which is referred to in this report as Other Amplitude Modulation (OAM)) could occur, where this is defined as a change in the measured $L_{Aeq, 125}$ milliseconds of more than 3 dB occurring within a 2 second period. There would be no harm to the appellant in accepting such a condition if the appellant is sure that OAM would not arise. If there is difficulty in enforcing an OAM condition, or noise limits because of cumulative effects, then the appeal scheme should not be built.

40. There is concern about construction traffic and highway safety from the appeal scheme and cumulative effects with construction traffic from other wind farms. The difficulties of manoeuvring large vehicles through local roads would result in real danger to other road users. The junction of Church Road/Southminster Road and Burnham Marsh Road, and the proximity to St Mary’s Church, Ormiston Academy and St Mary’s Primary School, are of particular concern. Middlewick wind farm is required to commence construction by May 2014, but there is no time limit for its completion. There is a possibility that construction traffic from Middlewick and Turncole wind farms could use the same local roads at the same time. The appellant’s evidence is not based on a worst case scenario, and there are no grounds to find that there would not be significant adverse impacts from construction traffic. Even if construction of the two wind farms was consecutive rather than contemporaneous, the extended duration of disruption would be more significant for the residents affected.

41. SIEGE adopts the Council’s case concerning a marine transport route, but raises two points concerning the appellant’s reasons why a route via Burnham Wick Farm was not possible; severe impact on breeding lapwing, and conflict of interest with a tenant leasing an airstrip. The latter has been overcome by the relocation of fixed wing aircraft. Burnham Wick Farm is just over 2 km from Turncole Farm and its use as a lapwing breeding ground has not been considered.

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67 PoE7 paragraphs 19 and 22.
68 CD103.
69 ID19.
70 PoE8 and PoE7.
71 ID26 and WR1.
72 CD58.
73 ID36.
42. There is also concern that the turbines would affect foraging and roosting birds which come in from the SPA at times of high tides.\(^74\)

43. There has been no assessment of the size or condition of the hedgerows proposed to be removed by road widening, notwithstanding that were planning permission to be granted no separate application under the Hedgerow Regulations 1997 would be needed. Such a basic assessment is required by BS5837.\(^75\) In the absence of such information the evidence provided is deficient.

44. The PPG confirms what SIEGE understood to be the Government’s view of onshore wind development.\(^76\) Its advice about location and output is relevant as the same installation could produce 25% more power on coastal sites facing the predominant south-westerly winds. Wind is unreliable and not effective.\(^77\) ETSU-R-97 makes no allowance for infrasound. Paragraph 31 of the PPG refers to the strategic road network, but with only two B class roads to the peninsula the road network is not suitable for construction traffic. The advice about cumulative impacts in the PPG supports SIEGE’s view that the proposal would result in a wind farm dominated landscape.

45. The scheme would bring some benefits and Government policy supports RE development generally, where possible. However, the considerable harm here demonstrably outweighs those benefits for what is unsustainable development. Moreover, the lack of proper consideration of a number of material matters leaves room for significant uncertainty as to the impact of the proposal, and the appeals should be dismissed.

The case for Maldon Council

The Council’s case refers to noise, landscape and visual impact, residential amenity, cultural heritage, marine delivery route, and the planning balance. The main points are as follows.\(^78\)

Noise

46. The cumulative impact of Turncole wind farm in combination with Middlewick wind farm would result in significant and demonstrable noise implications upon Broadward Farm, Wraywick Cottage, Wraywick Farmhouse, and Montsale Bungalow resulting in a harmful loss of amenity to the detriment of the occupiers of these residential properties, making them unacceptable places to live, contrary to LP Policies CON5 and PU6.

47. ETSU-R-97 is a convenient tool, but falls well short in taking into account what existing background levels are for the purposes of deciding whether increases in noise levels could be kept to an acceptable level. ETSU-R-97 is only part of the enquiry and it is not proper to assume that increasing the noise level from a low background level to a level of 35 dB would not have an adverse impact. There is nothing to rule out the use of other tools or methodologies being used in addition

\(^{74}\) PoE8 paragraph 6.6. \(^{WR4}\).
\(^{75}\) British Standard 5837:2012 Trees in relation to design, demolition and construction at CD97.
\(^{76}\) ID43.2.
\(^{77}\) WR4.
\(^{78}\) Based on closing submissions at ID39.
48. There is considerable agreement by the noise experts about the objective noise data, and how the consented wind farm at Middlewick should not, in accordance with ETSU-R-97, be considered as part of the prevailing background noise. However, the experts disagree about the determination of the lower cumulative noise limit when applying the factors set out in ETSU-R-97. This provides that the actual value within the range 35-40 dB should depend upon (1) the number of dwellings in the neighbourhood, (2) the effect of noise limits on the number of kWh generated, and (3) the duration and level of exposure. In this case the number of dwellings impacted by the Middlewick and Turncole wind farms would be about twice the number of dwellings impacted by Middlewick wind farm alone. With both schemes in place there would be roughly twice the number of turbines compared with just Middlewick wind farm. Accordingly, whilst the increase in the number of dwellings affected might suggest decreasing the lower absolute cumulative limit, that would effectively be cancelled out by the fact that it would reduce the generating capacity of roughly twice as many turbines. So there is no persuasive case, by reference to these three factors, for setting the absolute lower cumulative limit for Middlewick and Turncole wind farms any higher than the lower limit for the Middlewick scheme alone.

49. The appellant favours the highest possible cumulative limit of 40 dB. The Council is not prepared to go any higher than 38 dB. This would require all the turbines to be switched off if the wind direction was between 60 and 150 degrees. This is a strong indication that it is simply not possible satisfactorily to accommodate a second wind farm on the scale proposed that would be acceptable in noise terms. The appellant argues for an increased absolute lower limit to 40 dB not because of any sound justification by reference to the ETSU-R-97 criteria, but because it would be necessary to do so to make the two wind farms ETSU-compliant. With or without reference to ETSU-R-97 the proposal would result in an unacceptable level of noise, harming residential amenity.

Landscape and visual impact

50. As a result of the scale of the proposed turbines and their visual intrusion in combination with Middlewick and Bradwell wind farms the proposal would have a detrimental impact upon this unique countryside and coastal landscape, which is recognised for its natural beauty and tranquillity as a SLA. The proposed development would be contrary to LP Policies CC6, CC7, BE1 and PU6.

51. It is necessary in assessing LVIA of the Turncole proposal to consider the landscape that existed before any wind turbines were there at all, not just the additional effects of Turncole wind farm against a baseline of the other wind turbines, as existing and including Middlewick wind farm. This is the only way to come to a proper judgement about the capacity of the landscape to

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79 PoE1 section 9 and 13.
80 PoE2 section 3 deals with landscape character, and section 4 with visual amenity.
accommodate wind farm development. Otherwise an assessment which only extended to considering the quantum of additional development each time could go on indefinitely, becoming easier each time to justify a further quantum of additional development. It is not simply that Turncole wind farm would reinforce this key characteristic. It is more complex, with the addition of another wind farm raising important questions about the compositional relationship between Middlewick and Turncole wind farms in visual terms. There is a lack of coherence in how the turbines in the two wind farms would be distributed relative to each other.\textsuperscript{81} This is contrary to the Scottish National Heritage guidance which states that a key factor determining the cumulative impact of wind farms is the distinct identity of each group, typically related to their degree of separation and similarity of design, and that it is critical to achieve a balance between wind farms and the undeveloped open landscape retained between them. It adds that adequate separation would help to maintain wind farms as distinct entities, but that the separation distance required would vary according to the landscape characteristics.\textsuperscript{82}

52. There is more to landscape character than simply the underlying physical quality of the land, and central to this is how it would be perceived. The presence of further wind turbines in this area would lead to a further substantial change in how this open and flat landscape would be perceived. Turncole wind farm would extend the area experiencing at least a medium magnitude of change to virtually the whole of landscape character Area D8.\textsuperscript{83} Furthermore, this analysis refers to only two categories of magnitude of effect, medium and high, and Middlewick wind farm alone would result in an area of high magnitude effects. The effects would be intensified still further in the area of overlap were both Middlewick and Turncole wind farms to be built; but such an effect would not be captured by the categories used in the appellant’s assessment.

53. This raises issues about landscape capacity. The only capacity study prepared for the area assumes a separation distance of 10 km between wind farms, and on this basis estimates that Character Area 81 (Greater Thames Estuary) as a whole could accommodate 18 turbines.\textsuperscript{84} Adding Turncole wind farm to Bradwell and Middlewick wind farms would result in 27 turbines in the Dengie peninsula alone.

54. The SLA is likely to have been designated as a result of a subjective assessment that considered that there was something special about it, not just on the assumption that the most interesting aspects of rural landscape are good amplitude of relief, vegetation cover and the presence of water as a landscape element, as set out in the Countryside Conservation Plan in 1986.\textsuperscript{85} The SLA designation underlines how important it is, when carrying out a landscape character assessment, not just to consider whether the development would make physical changes to the land, but also whether it would lead to changes in how the landscape was perceived.

\textsuperscript{81} Illustrated in ES Figure 5.16D and 5.18D, and PI4 and PI7 supplementary viewpoints in Additional Visualisations.
\textsuperscript{82} CD83.
\textsuperscript{83} SEI Figure 5.2 and update at ID24.
\textsuperscript{84} CD87 and PoE2 Appendix 8.
\textsuperscript{85} CD90.
55. Main viewpoints of concern to the Council are as follows. Cumulative VP1 should be considered with caution given that dwellinghouses conceal the turbines, which would be more visible back and further along Marsh Road from this viewpoint. For Cumulative VP2 the magnitude of change should be medium-high or high given the proximity of the proposed turbines. From Cumulative VP4 Turncole wind farm would result in the entirety of the framed scene from this vantage point being consumed by turbines. The in-combination cumulative visual effect at this location would be of high magnitude. The appellant’s assessment for Cumulative VP9 fails to take account of the degree of change to the overall composition of the scene, which would be substantially more cluttered with turbines than would be the case if only the Middlewick turbines were developed. Supplementary VP PI3 should be assessed as high-medium because very similar effects were so graded for PI2. Supplementary VPs PI4 and PI7 highlight concerns about the harmful compositional relationship between the proposed Turncole turbines and those already consented. The three wind farms would present as a cluttered mass of turbines, poorly related to each other in scale and distribution. This demonstrates how the Turncole proposal would tip the balance, forcing a quantum of wind farm development on this landscape that is beyond its capacity to accommodate satisfactorily.

Residential amenity

56. In combination with Middlewick wind farm the proposal would result in extreme cumulative effects on the outlook of Turncole Farm and Broadward Farm that would make them unpleasant places to live, contrary to LP Policies BE1 and PU6. This is illustrated in Supplementary Viewpoints PI 8-11. There would be no proper respite from an outlook consumed by turbines from any of the main residential areas in either property. This would result in an unpleasant feeling of being entirely surrounded by wind turbines and the experience would be akin to living, sleeping and relaxing within a wind farm, which would not be consistent with the proper planning of the area. No test is prescribed by law or policy to determine whether the effects on residential amenity would be acceptable. It is ultimately a matter for the decision maker, who has a very broad discretion, having regard to the advice in The Planning System: General Principles ODPM 2005. However, in deciding whether residential amenity would be compromised to such an extent by visual effects that it would be in the public interest to refuse permission, it is not necessary to go so far as to show that the properties would be uninhabitable for the threshold to be met.

Cultural heritage

57. Scattered historic farmsteads are intrinsic to the historic character of the area. The proposed development and its cumulative impact with Middlewick and Bradwell wind farms would have a detrimental impact on this historic landscape and the wider setting of listed buildings in the area, contrary to LP Policies CC6.

86 A comparative table by the landscape experts of their assessment of effects on viewpoints is at ID17.
87 ES Figure 5.15D.
88 ES Figure 5.16D.
89 ES Figure 5.18D.
90 ES Figure 5.23D.
91 PoE2 section 5.
and BE1.

58. Heritage impact was not thoroughly tested at the Middlewick Inquiry; the Council did not put forward a heritage witness, the Inspector did not identify the impact on heritage assets as a main issue, and the decision predated English Heritage’s (EH) advice on the setting of heritage assets.92

59. The Council’s assessment methodology appropriately builds in consideration of significance into the assessment of magnitude of change, and does not overstate the relevance of visual change, which is a vital consideration in relation to setting.93 The appellant’s analysis is flawed because it does not, as a cultural heritage matter, deal with the detrimental impact of the proposal on the historic landscape. EH’s The Setting of Heritage Assets sets out that setting embraces all the surroundings (land, sea, structures, features and skyline) from which the heritage asset can be experienced or that can be experienced from within the asset.94 The wider landscape is not something that stands separately from setting, but can potentially be a fundamental part of the setting of a listed building.

60. The marshland on which the listed buildings in question were erected was reclaimed for agricultural purposes in the 18th century, and all, except for the Church of St James, were built shortly after the land was reclaimed to facilitate the agricultural use. These buildings are generally isolated and free-standing. A key part of the heritage significance of these buildings is their intimate connection with the reclaimed marshland. Their heritage significance does not lie primarily in their historic fabric. For example, if the buildings were to be dismantled and re-erected in the middle of Maldon, they would lose much of their heritage significance because of the loss of their intimate association with the marshland.

61. It is not sufficient to argue that the proposal would retain the working agricultural setting with fields and farms that contribute positively to the significance of the listed buildings, as this does not deal with how the Turncole proposal would impact visually on those settings. For example, it is plain that the aspect from Old Montsale could hardly be more open.95 The suggestion that erecting wind turbines on this land would not have any impact on the setting of Old Montsale could not reasonably be made. In terms of the Framework, this would result in substantial harm to the setting from Turncole wind farm alone. Substantial harm would similarly result to Newman’s Farmhouse. For Dammer Wick Farmhouse, Bridgewick Cottages, Court Farmhouse together with bake/brewhouse and barn, and Church of St James, Turncole wind farm alone would result in less than substantial harm to setting. With respect to the Church of St James the Council is concerned about views from the church.96 Cumulatively with Middlewick wind farm substantial harm to setting would result to all the listed properties cited above, except for Dammer Wick Farmhouse.97

92 CD58 paragraphs 5 and 63-65. CD107.
93 CD108 paragraph 119.
94 CD107.
95 PoE3 plate 3.
96 Shown on ES Figure 5.18D.
97 PoE3 section 5.
62. The judgment in *East Northamptonshire DC v SoS for CLG* is a reminder of what must be done to ensure compliance with the statutory duty in section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990, which requires special regard to be given to the desirability of preserving the setting of a listed building. Paragraphs 133-134 of the Framework require a balancing exercise between harm and benefits, and should be approached with caution in the light of this judgment. The Council does not consider the approach in the Framework to be necessarily deficient, but for the purpose of the section 66(1) duty it will be necessary, when weighing the harm, whether substantial or not, to make clear that special regard has been paid in that exercise to the desirability of preserving the setting of listed buildings. This may lead to more weight being attached to the harm side of the balance than might have previously been considered appropriate.

Construction traffic and marine delivery route

63. The proposal would lead to noise and disruption from AIL and other construction traffic, particularly using Old Heath Road and the residential section of Marsh Road. Significant levels of tree and hedgerow removal would be needed along Old Heath Road, which would have a detrimental impact on the character and appearance of this narrow tranquil rural road.99

64. Insufficient justification has been provided to demonstrate why a marine delivery route for AIL, which is to be used in constructing Middlewick wind farm, cannot be accommodated as an alternative for AIL to Turncole wind farm. The local road network would be subject to an excessive increase in vehicle movements, which would have a detrimental impact upon the residential amenities of properties along the construction routes, contrary to LP Policies CC10, BE1, T2 and PU6.

65. In Appeal B (Fambridge) removal of trees and hedgerows and intensification of road usage and noise on Lower Burnham Road would harm the character and appearance of this rural road and the SLA. The proposal would also result in potential noise and vibration affecting the amenity of residential properties. The appeal scheme would be contrary to LP Policies CC6, CC7, CC10 and CON5.

66. In Appeal C (Twizzlefoot) construction traffic would lead to a significant increase in noise and disruption along the residential section of Marsh Road, to the extent that it would harm the residential amenities of occupiers of these properties, contrary to LP Policies BE1 and PU6.

67. The failure to adequately investigate the use of a marine delivery route is contrary to relevant policy.100 Emails submitted during the Inquiry are the extent of evidence about the appellant’s investigation.101 These do no more than ask the relevant landowner to confirm the appellant’s understanding that the owners were not willing to grant a right of marine access over their land. No investigation was undertaken to see if commitments made to other operators could be overcome. There is nothing before the Inquiry of any approach to the Middlewick wind farm developer directly to facilitate both developers having

98 ID12.
99 PoE2 section 6 and ID22.
100 As set out in section 4 of PoE4.
101 ID35.1 and ID35.2.
marine access. This is a serious failure to comply with EN-3, which provides that it may be appropriate for developers to work together to ensure that AILs are managed to ensure that disruption to local residents and other highway users is reasonably minimised.\textsuperscript{102} There is no evidence that the appellant investigated this option with anything like the degree of proactiveness that it was reasonable to expect in the circumstances. The need for the extensive tree and vegetation removal adjacent to local roads has not been demonstrated.

Planning balance and policy

68. The proposal would be in breach of the development plan policies cited, and the Framework is a material consideration in deciding whether other material considerations are sufficient here to warrant granting planning permission notwithstanding the conflict with the development plan. Paragraph 14 of the Framework is triggered in this case because LP Policy PU6 is out of date. However, other LP Policies such as Policy CC6 and CC10 are of a general nature in relation to certain matters. There is nothing inherently in these generic policies that is considered out of date. But as paragraph 14 of the Framework applies planning permission should be granted unless (1) the adverse effects of doing so would significantly and demonstrably outweigh the benefits, or (2) specific policies in the Framework indicate that development should be restricted. Permission should be refused on both limbs.

69. Substantial weight should be given to the high level of support for RE projects, but paragraph 98 of the Framework provides that permission should only be granted if the impacts are (or can be made) acceptable. The totality of adverse impacts in terms of noise, landscape and visual harm, residential amenity, cultural heritage and transport implications, when assessed in the round, significantly and demonstrably outweigh the benefits, when assessed against the Framework as a whole.

70. Even if the test in the first limb is not met, permission should still be refused because on its own Turncole wind farm would result in substantial harm to the setting of two heritage assets, and in combination with the Middlewick wind farm substantial harm would be caused to the setting of three other Grade II listed buildings. Paragraph 133 of the Framework provides that permission should be refused unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss. The proposal would make a contribution to the wider benefits of generating RE, but in isolation, the extent of that contribution would not result in ‘substantial public benefits’.

71. In any event, it is not accepted that any substantial benefits would outweigh the harm caused. Two features of this case distinguish it from a typical wind farm assessment pursuant to paragraph 14 of the Framework; the public interest in avoiding the very substantial harm to the residential amenity of the occupiers of Turncole Farm and Broadward Farm, and the startling inadequacy of efforts to mitigate the transport impacts of the scheme.

72. The PPG cancels PPS22CG, but EN-1 and EN-3 still apply, and the June 2013 Ministerial written statements have not been superseded or withdrawn. The PPG

\textsuperscript{102} EN-3 paragraph 2.7.82.
can be treated as an annex to paragraph 98 of the Framework, which provides that applicants are not required to demonstrate the need for RE development. But the PPG indicates that when a decision is finely-balanced consideration may now be given to the energy contribution that would be made by the proposal. This concerns the relative efficiency of the installation. The Inquiry heard little evidence about this, other than in reference to reduced capacity were a noise constraint to apply, which was not fully tested at the Inquiry. The PPG gives added weight to the Council’s case concerning impact in an extremely flat landscape, and in recognising that turbines within the setting of a heritage asset may cause substantial harm to the significance of the asset. 103

73. Appeal A should be dismissed because of conflicts with the development plan and, having considered the Framework in particular, there are no material considerations that would warrant a different outcome. Appeals B and C should be dismissed as their primary purpose is to facilitate Appeal A.

The case for the appellant

The appellant considers the main issues here concern noise, cultural heritage, residential amenity, and landscape and visual effects. The main points are as follows. 104

Noise

74. Issues raised by SIEGE concerning background noise measurements, noise predictions and sleep disturbance have been appropriately addressed. 105

75. The Council relies on paragraph 123 of the Framework and section 5.11 of EN-1, along with the aims of the NPSE, in its approach to the need to avoid significant negative impacts on amenity from operational noise. But the advice about wind farm noise is crystal clear. ETSU-R-97 should be used to assess and rate noise from wind farms. 106 EN-3 advises that where the correct methodology has been followed and compliance with ETSU-R-97 demonstrated, it may be concluded that little or no weight should be given to adverse noise impacts. 107 This is particularly important because it acknowledges that there may be adverse noise impacts which in policy terms will nonetheless be acceptable.

76. On the basis that ETSU-R-97 alone should be used, the only dispute between the noise experts is whether the day-time fixed noise limit should be 36 dB or 38 dB for Turncole wind farm alone, and therefore whether the allowable cumulative noise level for Turncole wind farm with Middlewick wind farm should be 38 dB or 40 dB. The latter is to be preferred having regard to the three factors advised in ETSU-R-97 for determining the appropriate fixed noise level. 108 Firstly, there are comparatively few houses which would receive noise levels in excess of 35 dB. 109 The second factor concerns the effect of noise limits on electricity generation, and there is uncontested evidence that a 1 dB reduction in the noise limit here would

103 ID44.2.
104 Based on closing submissions at ID40.
105 PoE9 and ID41.2.
106 EN-3 paragraph 2.7.56.
107 EN-3 paragraph 2.7.58.
108 PoE9 paragraphs 5.29-5.33.
109 SEI Figure 1.2.
result in a 12% loss of annual energy generation.\textsuperscript{110} This is an imbalance that points to allowing a 40 dB cumulative level. Finally, with respect to the duration and level of exposure, there is a very strong WSW to SSW prevailing wind. Only three of the 10 properties considered lie downwind of the prevailing wind direction for the proposed Turncole turbines.\textsuperscript{111} Of these Turncole Farm and Broadward Farm are financially involved with the scheme, the other, Montsale Bungalow, would receive wind farm noise immission levels of less than 33 dB at all relevant wind speeds, even in the prevailing wind direction when downwind of Turncole wind farm. No property could be downwind of Middlewick wind farm and Turncole wind farm at the same time, such that the cumulative effect would be significant. The duration and level of exposure to noise from Turncole wind farm of any property, save for those financially involved, above 35 dB, would be very limited. There is strong evidence that a day-time fixed noise limit of 38 dB for Turncole wind farm would be appropriate.\textsuperscript{112}

77. SIEGE requested a condition to regulate OAM, but the Council makes no such request and does not engage on this topic. There is no evidence to warrant the imposition of an OAM condition. In the two appeals where such conditions have been imposed, \textit{Denbrook} and \textit{Swinford}, the conditions either do not work, or are imprecise and unenforceable.\textsuperscript{113}

Cultural heritage

78. The planning officer did not recommend an objection based on cultural heritage, and the Council’s reason for refusal of the Turncole wind farm was not specific about the particular listed buildings which the Council Members had in mind.\textsuperscript{114} The Council’s Statement of Case did not identify the listed buildings of concern, and this was not clarified until publication of the SoCG. Insofar as the Council’s evidence to the Inquiry represents the position of the Members, it should be treated with caution because it emerged after the Members’ decision and was not referred back to them. No case was made at the Inquiry of a detrimental impact on the historic landscape, and no evidence has been adduced about any cumulative impact of Turncole wind farm with Bradwell wind farm.

79. There was no reason for refusal on cultural heritage grounds in the Middlewick wind farm application, and the Inspector found no harm would be occasioned to heritage assets by that development, notwithstanding that the Middlewick ES did find significant impacts on some listed buildings.\textsuperscript{115} The Council’s case in the Turncole wind farm Inquiry raises concern about the in-combination effect of Turncole wind farm and Middlewick wind farm, but does so without any assessment of harm to the significance of cultural heritage assets from the impact of Middlewick wind farm alone. This is a major omission. Court Farm, Bridgewick Cottages and the Church of St James Dengie are much closer to the site of Middlewick wind farm than to that of the proposed Turncole wind farm,

\textsuperscript{110} Based on the analysis for Wraywick Farm ID18.
\textsuperscript{111} The 10 properties are included in Table 8 of Appendix C PoE9, which assumes downwind propagation at all times. The location of the dwellings is shown on ES Appendices Figure 3.2. This would result in the noise limits set out in the appellant’s proposed noise limits for Table 1 Condition 24 at ID4.7.
\textsuperscript{112} CD39 and CD65.
\textsuperscript{113} CD14, CD17 and CD20.
\textsuperscript{114} CD58 and CD115.
and if these properties would not be harmed from Middlewick wind farm then that is good evidence that they would not receive harm from Turncole wind farm.

80. There are very clear differences between the appellant’s and the Council’s method of assessment for cultural heritage impacts.\textsuperscript{116} The appellant’s should be preferred because the Council’s approach; (1) relies on an assessment of sensitivity in which an essential link between the level of change and the contribution of setting to significance is lost, (2) assesses levels of change (magnitude) on a visual basis without reference to the contribution that setting makes to significance \textsuperscript{117}, (3) deals only with visual amenity as opposed to the significance of the cultural heritage asset \textsuperscript{118}, and (4) does not reflect revised guidance \textsuperscript{119}.

81. A wider setting does exist for the post-reclamation Grade II listed farmhouses seen in a farming environment, but overall the contribution of setting to significance is very local given the type of listed buildings. The landscape has evolved and contains modern agricultural buildings, modern fencing, and evidence of modern cultivation methods. Newman’s Farmhouse and Dammer Wick Farmhouse do not lie in the same open marshland as the other properties and are located close to the boundary of the D8 landscape character area. Overall, considering Turncole wind farm alone, or cumulatively with Middlewick wind farm, either additionally or in-combination, there would be no harm to the significance of listed buildings. In the absence of harm no balancing exercise applies under the \textit{Framework}.

82. There is a tension between section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, as applied in the \textit{Barnwell} judgment, and the advice in the \textit{Framework}.\textsuperscript{120} The statutory requirements refer to a listed building or its setting, while the \textit{Framework} refers to harm to significance. However, nothing in the \textit{Barnwell} judgment imports a substantive test into section 66. It remains a requirement to pay particular attention to the desire expressed in the section. The substance of the tests relating to harm and substantial harm in the \textit{Framework} are matters of policy, and are quite separate from the statutory requirements. Nonetheless, if harm arose to the significance of a listed building, which resided in any impact on setting, planning permission might still be granted based on the need for, and benefits of, the proposed wind farm. The \textit{Framework} presumes in favour of granting permission for RE development. In this case there is nothing within the evidence or the law which should lead to a refusal of permission on the basis of harm to the significance of any cultural heritage asset.

Residential amenity

83. The visual component of residential amenity has been debated at many wind farm inquiries and the issue has reached maturity.\textsuperscript{121} The test is whether or not

\textsuperscript{116} PoE12 Appendix 2 and PoE3 Appendix 1.
\textsuperscript{117} PoE3 paragraph 4.16.
\textsuperscript{118} PoE3 Appendix A.
\textsuperscript{119} CD107 and CD108.
\textsuperscript{120} \textit{Barnwell Manor} wind farm appeal decision at CD60 and High Court judgment at ID12, which is now a matter for the Court of Appeal.
\textsuperscript{121} PoE10 Appendix 1 and the \textit{Burnthouse Farm} decision at CD47 paragraph 10.
the proposed development would affect the outlook of residents to such an extent i.e. be so unpleasant, overwhelming and oppressive, that the residence would become an unattractive place to live. There is no specific development plan policy in this case which sets out a test in different terms. Furthermore, the test is not whether a house would become less attractive to inhabit, but unattractive. That is not to say that significant visual effects on residents are not a material consideration if they fall short of converting a property into being ‘an unattractive place to live’. It might be that in a particular case significant visual effects on a number of houses falling short of an impact on residential amenity would carry sufficient weight to warrant at least a careful approach to the planning balance. But that would be a very different issue from residential amenity.

84. The issue here is the impact on the visual component of the residential amenity of Turncole Farm and Broadward Farm, where the occupiers have a financial interest in the appeal scheme. In other appeal decisions judgements about residential amenity have been influenced by the financial involvement of the occupiers. There is nothing wrong in law with this approach, and ETSU-R-97 takes a similar approach with respect to noise.

85. It is common ground between the Council and the appellant that Middlewick wind farm alone has been found to be acceptable, and that Turncole wind farm alone would also be acceptable. The only issue relates to their cumulative impact. There are only 13 properties within 1 km of the proposed turbines. None of the dwellings in relative proximity to the site would be affected by views of the turbines, including in combination with Middlewick wind farm, to the extent that there would be unacceptable harm to residential amenity from a visual perspective. If, on the contrary, it was necessary to do so, taking into account the financially involved status of Turncole Farm or Broadward Farm, neither would become an unattractive place to live.

86. A shadow flicker assessment predicts that only Turncole Farm could experience such an effect; from T4 for up to 16 minutes per day during the afternoon from mid to late December. However, the actual amount would be likely to be much less because of times of cloud cover and variation in the orientation of blades. Shadow flicker could be addressed by a condition which required the avoidance of such effects.

Landscape and visual effects

87. The third edition of GLVIA does not engage with landscape capacity, and is solely concerned with the landscape and visual impact of projects. The East of England Regional Assembly publication Placing Renewables in the East of England is therefore of limited assistance. It is clear that there is some capacity for wind energy development in the area.

122 Middlewick CD58 paragraph 31 and Gayton-Le-Marsh ID16 paragraph 49.
123 PoE10 section 6.
124 ES section 12.7.
125 ID4.7 Condition 18.
126 ID14.
127 CD87.
128 Natural England’s consultation response at CD94.
88. GLVIA provides that cumulative impacts may be assessed either incrementally or in combination, but an incremental effects assessment is crucial in assessing the impacts of Turncole wind farm on the relevant baseline. A pure in-combination effects assessment can easily stray into issues of capacity. The emphasis must always remain on the main project being assessed, and whether it would add to or combine with others to create a significant cumulative effect. The Council does not assess the incremental landscape effects of Turncole wind farm, but assesses landscape effects purely on an in-combination basis. This contrasts with the Council’s approach to visual effects, which assessed impacts on an additional or incremental basis.

89. Furthermore, the Council’s assessment makes no attempt to evaluate the proposed development against the key characteristics of the landscape character area, which are a sense of huge sky, sound of birds, tranquillity and panoramic views across the marshland and out to sea. However, with respect to tranquillity, the Inspector in the Bradwell wind farm appeal found that the area was one which most people would recognise as being tranquil in a general sense. This degree of tranquillity applies to the site of the proposed Turncole wind farm.

90. The Council’s landscape assessment finds that in combination Turncole wind farm would breach a critical threshold of acceptability. But this does not take into account Middlewick and Bradwell wind farms in development baseline information, and is a capacity finding without a capacity study. It is not possible from the Council’s visual impact assessment to determine the additional effects of Turncole wind farm on a baseline of Middlewick wind farm and perhaps Bradwell wind farm. Impacts on receptors such as individual residents and settlements from viewpoints should be determined, and the Council’s broad conclusions, such as a finding of major significance from cumulative visual effects for residents within the Marshes, are unhelpful. This is important because it means that the evidence of the landscape experts cannot be compared on a like-for-like basis.

91. Landscape and visual effects are summarised as follows. Effects on landscape elements would be negligible with only limited removal of some roadside vegetation. Turncole wind farm would mainly affect an area of landscape already significantly affected by Middlewick wind farm. Changes would be of low magnitude and of moderate-slight significance to the edges of character Area D8 to the east of Burnham-on-Crouch and Southminster. The host landscapes Areas D7 and D8 will have turbines as a key characteristic across the two areas as a result of the permitted wind farms. Adjacent landscapes to the east and west would already have views of turbines from most of the areas that would also be affected Turncole wind farm. Cumulatively there would be a slightly intensified effect at the southern end of character Area D8.

92. Turning to visual effects there would be localised significant effects on views from local receptors, including PROW and residents up to 3-4 km from the proposed turbines. However, in such a flat landscape the visibility of turbines disappears more quickly than in other landscapes due to the layering effect of hedgerows.

129 GLVIA Paragraph 7.28 at CD14.
130 CD57 paragraph 18.
131 PoE2 paragraph 3.57.
132 PoE2 paragraph 4.67.
133 PoE 10 section 6.
and trees intercepting sightlines. Most of the receptors in the area would be affected by the significant visual effects of Middlewick wind farm.\textsuperscript{134} Significant visual effects from Turncole wind farm would be limited in their extent, magnitude and number of receptors affected.\textsuperscript{135} However, in a few locations the turbines would give rise to effects of major-moderate significance.\textsuperscript{136}

93. The impacts of Turncole wind farm would be acceptable, and nothing has been demonstrated to indicate that the development would give rise to landscape character and visual impacts above and beyond those of the many wind farms which have secured permission.

94. With respect to the local environmental impact of highway works, contested evidence concerning trees is limited to the likely effects on Trees 10 and 11, and Tree Group 32 and 33.\textsuperscript{137} There is evidence from a qualified and experienced arboriculturist that Trees 10 and 11 could be safeguarded by condition.\textsuperscript{138} Trees within Group 32 would be very likely to be lost, but there are no specimen trees and some of the trees are already damaged by passing vehicles. The proposed highway works in Appeal B would result in the loss of a semi-mature ash tree and up to 60 m of hedgerow, but this is described as a 2 m wide mature species-poor hedgerow, which is dominated by diseased elm with blackthorn, hawthorn and field maple.\textsuperscript{139} This and other losses of roadside vegetation would not be unacceptable given the impacts of Dutch Elm Disease, along with the obligation of the highway authority to maintain a cleared height along public roads. There is also potential for replanting at the Fambridge South bend;\textsuperscript{140} and to some extent along the remainder of the Appeal A access route. The impacts of Appeals B and C, and the highway improvements in connection with Appeal A would cause no landscape character effect of any significance and would be acceptable in terms of local environmental effects.

Other considerations

95. The Council contends that the appeal scheme should use the same route, or another marine delivery option, as that to be used by Middlewick wind farm, involving landing AIL on the south coast of the Dengie peninsula on land managed by Strutt and Parker Farms. The Council’s case that there is insufficient justification for not pursuing a marine delivery route for AIL is not a main issue because approaches to the only landowners who could provide such a route, given the extensive mud flats on the east coast of the peninsula, were rebuffed.\textsuperscript{141} The appellant had to commit to a scheme at the appeal stage, and use of a marine landing site would have required an additional planning permission. The Council’s reliance on national planning advice about developers working together to manage AILs does not take into account that the promoters

\textsuperscript{134} Viewpoints 2 and 6.
\textsuperscript{135} Viewpoints 1, 3 and 5.
\textsuperscript{136} Viewpoint 4.
\textsuperscript{137} SEI Figure 3.2 Detail 8, Detail 9 and Detail 13. PoE11 Appendix 6 Photographs 3 and 4 show Groups 32 and 33, Tree 10 is included in Appendix 5. Tree 11 is shown on ID15.1.
\textsuperscript{138} PoE11 and ID4.7 Condition 6.
\textsuperscript{139} SEI Volume 1 Text Table 1 page 43.
\textsuperscript{140} ID34.
\textsuperscript{141} ID35.1 and ID35.2.
of Development Consent Orders have compulsory purchase powers. This is not an option for the appellant, who cannot compel an owner to cooperate.

96. The transport assessment in the SEI found that construction traffic would not result in a significant increase in traffic volumes on local roads. AIL would be escorted and the Highway Authority does not consider that it would result in an unacceptable risk to highway safety. Local fears about traffic chaos and danger at school arrival and leaving times at the junction of Southminster Road and Marsh Road do not take into account that not all construction traffic would arrive by this route. There would only be 49 one-way movements of AIL, involving activity over a total of 1-2 weeks using the proposed widening in front of the entrance to St Mary’s Church. Undue disruption could be avoided by conditions limiting the use of this widened junction to AIL and controlling movements at school arrival and leaving times. No evidence was brought by the Council about construction traffic noise in support of its reasons for refusal, and the appellant’s technical evidence on this is uncontested.

97. Ecological issues raised by SIEGE and the RSPB have been addressed and there are no residual concerns. The implementation of habitat management within the site under a scheme to be approved would result in a net ecological benefit for the site, and post construction monitoring of birds would be required by the suggested condition.

98. An initial objection from Southend Airport concerning possible radar interference was withdrawn, and there is evidence of a reasonable prospect of mitigation being installed. This is a matter that can be addressed by condition. The objection from the operator of the grass airstrip at Burnham Wick Farm has also been withdrawn on the basis that fixed wing operations would be relocated to an alternative site.

Planning balance and policy


100. Section 38(6) of the 1990 Act applies, but other material considerations in the form of national policies are far more important than those of the LP in this case. LP Policy PU6 is in effect an embargo on wind farm development because of the requirement that there should be no significant visual impact. Policy PU6 is not consistent with the Framework, and very little weight (in terms of the impact on the character and appearance of the area) should therefore be given to it.

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142 EN-1 paragraph 5.13.10 and EN-3 paragraph 2.7.82.
143 ID4.7 Conditions 6 and 7(h).
144 PoE9.
145 WR5.
146 ID4.7 Conditions 17 and 21.
147 ID33.
148 ID4.7 Condition 22.
149 ID11 and ID36.
150 PoE13 Section 3 and Appendix 1.
151 CD57 paragraph 31.
Emerging Policy D4 has a similar limitation in that it requires ‘no adverse impacts on locally designated sites’, but in any event this can be given little weight at present.\textsuperscript{152} Policy PU6 requires no unacceptable effects in terms of noise and traffic, but is deficient in terms of the tests applied to cultural heritage and residential amenity. Policy PU6 refers to acceptability and ultimately defers to EN-3, since this can only be assessed by reference to specific guidance on operational wind farm noise.

101. Policy CC6 concerning landscape protection should be given little or no weight because it is irrelevant to the reasons for refusal and contains a ‘no harm’ test contrary to the Framework. Similarly, LP Policy CC7 concerning the SLA should be given very little weight as the ‘conserve and enhance’ development control test, if it means no harm should be occasioned, compares unfavourably with paragraph 2.7.48 of EN-3. SLAs were abandoned for the structure plan in 2001, and the designation is not carried forward in the emerging plan. There is no clarity about the reasons why the designation was made. Amplitude of relief, vegetation and presence of water were valued in the 1985 designation, but these features are notably absent in the area of the Dengie Marsh.\textsuperscript{153}

102. Policy BE1 deserves no weight as the policy and supporting text only refers to new buildings, and it was never intended to apply to plant or machinery. Policy CON5 is concerned only with pollution unrelated to noise and so is not relevant. Policy T2 is of marginal help, notwithstanding that it deals with off-site highway improvements, because there is no development control test within it. Adequate highway information has been submitted. Policy CC10 concerns historic landscape features, but the Council makes no case on this issue. No weight should be given to Policy CC11, dealing with the coastal zone in purely locational terms, on the grounds that it is not consistent with the Framework.

103. The proposed development would breach several provisions of the development plan, but the appeals should be determined by reference to national guidance; the Framework, and via it to EN-1 and EN-3, along with the recent PPG. Likely impact here does not go beyond what is expected for any wind energy development with associated highway access works.\textsuperscript{154} The balancing exercise for cultural heritage in paragraphs 133 or 134 of the Framework is not required. Proposed conditions would require the decommissioning of development, and paragraph 2.7.43 of EN-3 recognises the materiality of reversibility. Operational noise could comply with appropriate rating levels under ETSU-R-97.

104. The paragraph 14 Framework presumption in favour of sustainable development applies to wind energy development, so planning permission should be granted unless adverse impacts would significantly and demonstrably outweigh the benefits when assessed against the policies in the Framework taken as a whole. In doing so close regard should be given to paragraph 93, which provides that the delivery of RE is essential to the economic, social and environmental dimensions of sustainable development, and to paragraph 98, which favours proposals where impacts are, or can be made, acceptable. The presumption in the Framework is more powerful than previous advice in PPS22

\textsuperscript{152} CD23b and ID32.
\textsuperscript{153} CD90.
\textsuperscript{154} EN-1 paragraphs 5.9.8 and 5.9.14-5.9.18.
that significant weight should be given to the need for and benefits of RE
development.

105. Nothing in the PPG creates a different approach in planning policy terms to the
determination of proposals for wind farms. The Council did not challenge the
material on capacity factors submitted to the Inquiry, in which it was calculated
that the power output would be 46.5 GWh/yr if Vestas V90 1.8 MW candidate
turbines were used. SIEGE did not raise issues concerning the merits of
alternative wind farm sites or infrasound at the Inquiry. Consultation and
engagement was undertaken with the local community before the wind farm
application was submitted.

106. This is not a case where there is overwhelming local objection to the proposal.
There was support at the Inquiry. At the application stage there were 270
expressions of support, set against the 470 expressions of opposition. There is a
compelling case for allowing the appeals on the basis of the policy in the
Framework, along with EN-1 and EN-3.

Written representations

Application stage

107. The Council received about 470 letters objecting to, and about 270 letters
supporting, the proposed development in Appeal A. The application was
opposed by 18 Parish and Town Councils, but supported by one Parish Council.
In Appeal B five written submissions against the proposal were submitted to the
Council at the application stage, along with objections from North Fambridge
Parish Council and Cold Norton Parish Council. In Appeal C there were five
written submissions opposing the development and objections from Southminster
Parish Council and Burnham-on-Crouch Town Council.

Appeal stage

108. There were 71 written submissions at the appeal stage about Appeal A. These
raise concerns similar to those expressed by the Council and SIEGE, but also
refer to the impact of construction vehicles on the wider road network, health
issues and shadow flicker from turbines, along with concerns about wildlife and
nature conservation. At the appeal stage 28 written representations were
submitted about the SEI in respect of Appeals B and C. In summary these

155 ID44.1 and ID44.4.
156 ID18.
157 ES sections 3.7 and 3.8.
158 ID27.
159 These are summarised on pages 46-48 and pages 53-54 of CD14.
160 Objections were submitted by Southminster Parish Council, Burnham-on-Crouch Town
Council, Tillingham Parish Council, Asheldham/Dengie Parish Council, Bradwell-on-Sea Parish
Council, Maryland Parish Council, Latchingdon Parish Council, Althorne Parish Council,
Purleigh Parish Council, Cold Norton Parish Council, Stow Maries Parish Council, Woodham
Walter Parish Council, Maldon Town Council, Langford & Ulting Parish Council, Little Braxted
Parish Council, Goldhanger Parish Council, Tolleshunt Major Parish Council, Tolleshunt Knights
Parish Council. St Lawrence Parish Council supported the proposal. A summary of these
submissions is set out in pages 8-17 of the Council’s Committee report at CD14.
161 CD15 and CD18.
162 CD16 and CD19.
concerned road safety, noise, vibration and disturbance, along with loss of roadside vegetation.

Consultees 163

109. Natural England (NE) withdrew its initial objection subject to conditions on biodiversity enhancement, mitigation measures and monitoring. Furthermore, NE does not consider that there would be any likely significant effects on designated European sites or protected species. NE considers that the openness and tranquillity of the landscape contribute to its high sensitivity to change, and that in such a flat landscape any vertical structure would be highly prominent. However, NE acknowledges that the turbines would not break or interrupt any significant feature of the skyline, and that very open landscapes have a greater capacity for wind turbine developments. On balance, NE found that the Dengie peninsula has a greater capacity to accommodate wind farm energy, and raised no objection to the appeal proposal on landscape grounds.164

110. The Royal Society for the Protection of Birds (RSPB) withdrew its previous objection subject to the imposition of appropriate planning conditions, but sought agreement on post-construction monitoring by means of a section 106 agreement.

111. The Environment Agency (EA) has no objection subject to an approved Working Method Statement.

112. The Highway Authority initially objected, but the details in the SEI addressed its concerns, and there is no objection to the proposal subject to conditions dealing with, amongst other things, a construction/decommissioning traffic management plan, site access details, and before and after survey. There is no objection regarding Public Rights of Way.

113. English Heritage (EH) advised that the proposal has been considered by its specialist staff and that it did not wish to offer any comments, other than that the proposal should be determined in accordance with national and local policy guidance, and on the basis of the Council’s specialist conservation advice. The latter provides that the seven wind turbines and associated infrastructure within the historic, natural landscape, would have a significant impact on the setting of a number of listed buildings, given that the historic buildings on the Dengie were mostly associated with agricultural use of the reclaimed marshes.

114. The Civil Aviation Authority advised on procedural matters, but left it for others to comment on the proposal. The Ministry of Defence (MoD) has no objection, but requested notification if planning permission was granted so that information could be plotted on flying charts. National Air Traffic Services (NATS) advised that the proposal would not conflict with NATS safeguarding criteria and, therefore, no objection was raised. London Southend Airport initially objected to the proposal, but indicated that this could be withdrawn if appropriate mitigation measures were identified. The wording of a suitable condition was subsequently agreed. There is no objection from London Stansted Airport.

163 Responses are included in the Questionnaire.
164 CD94.
115. The Joint Radio Company (on behalf of UK Power Networks and National Grid Gas Networks) does not foresee any potential problems concerning interference.

**Conditions and obligations**

116. The Council and the appellants in earlier versions of the SoCG agreed suggested conditions in the event that the appeals were to succeed and planning permission to be granted. SIEGE participated in the without-prejudice round table discussion at the Inquiry about suggested conditions. I also questioned the wording of some conditions. The discussion had regard to Circular 11/95 *The Use of Conditions in Planning Permissions*. The outcome of the discussion was a revised list of suggested conditions. These are dealt with in more detail in the Conclusions section of this report.

117. No planning obligation pursuant to section 106 of the 1990 Act has been submitted. No submissions were made at the Inquiry that an obligation would be necessary in this case. I asked at the Inquiry whether an obligation would be required to regulate traffic routing, but there was no dispute that this could be addressed by a condition requiring a scheme of traffic movement. The RSPB submission refers to an obligation for monitoring, but this is also a matter that could be the subject of a condition.

My Conclusions begin on page 33 of this report.

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165 A final version setting out matters in dispute is at ID4.7.
Conclusions

Preliminary matters

118. The following conclusions are based on the evidence given at the Inquiry, the written representations and my inspection of the site and its surroundings. In this section the figures in parenthesis [ ] at the end of paragraphs indicate source paragraphs from this report.

Environmental Impact Assessment

119. The ES and SEI reasonably comply with the relevant provisions of the EIA Regulations. Given that the appeals are linked, they should be either all allowed or all dismissed. [1,2,73]

Main considerations

120. The three appeal schemes relate to a single proposal. The linked development means that the main considerations apply to the totality of the proposal. In the absence of any matters set out, about which the Secretary of State particularly wishes to be informed for the purposes of considering these appeals, the evidence indicates that the main considerations here are as follows. [1,16]

(1) The effects of the proposed development on its own, and in combination with other existing and permitted wind turbines in the locality, on
   a) The character and appearance of the area, having regard to policies for countryside protection.
   b) The living conditions of nearby residents, with particular reference to;
      (i) outlook;
      (ii) noise and disturbance;
      (iii) other living conditions considerations.
   c) Heritage assets.
   d) Air safety.
   e) Nature conservation and biodiversity.
   f) Highway safety.
   g) Other considerations.

(2) Whether sufficient justification has been provided to demonstrate why a marine delivery route for abnormal loads cannot be accommodated as an alternative.

(3) The compatibility of the proposed development with national and local policy in respect of the generation of energy from renewable sources.

(4) Whether any benefits of the scheme would be sufficient to outweigh any harm that might be caused.

(5) The extent to which the proposed development would be in accordance with the development plan for the area.

(6) The extent to which the proposed development would be in accordance with the National Planning Policy Framework (the Framework).
Whether any permission should be subject to any conditions or obligations and, if so, the form that these should take.

(8) Overall conclusions.

The remainder of this report addresses the matters outlined above, and my recommendations are based on these findings.

(1a) Character and appearance

Landscape and visual impact assessments

121. The methodologies used in compiling the expert landscape and visual impact assessments (LVIA) submitted by the Council and the appellant do not provide for a direct like-for-like comparison of sensitivity, magnitude, and significance of effects. Furthermore, these pre-date the Landscape Institute’s third edition of the Guidelines for Landscape and Visual Impact Assessment (GLVIA). [4,51,90]

122. EN-1 acknowledges that it will not be possible to develop necessary large-scale energy infrastructure without some significant residual adverse impacts.166 The relative scale of wind farms might be open to some interpretation, but what is relevant here is that the appeal scheme comprises seven very tall structures. The PPG advises that cumulative impacts require particular attention. It adds that cumulative landscape impacts are the effects on the fabric, character and quality of the landscape, and is concerned with the degree to which proposed development would become a significant or defining characteristic of the landscape. Cumulative visual impacts concern the degree to which development would become a feature in particular views or sequence of views, and the impact upon people experiencing those views.167 GLVIA Chapter 7 deals with cumulative effects, and refers to definitions used in Assessing the Cumulative Effect of Onshore Wind Energy Developments.168

123. There was some debate at the Inquiry about what should be the baseline here for any assessment. GLVIA provides that the baseline for LVIA of a project comprises existing schemes and those which are under construction. In this case the LVIA baseline includes the turbine at Southminster and those erected or under construction at Bradwell. The baseline for assessing cumulative landscape and visual effects (CLVIA) according to GLVIA should include those schemes considered in the LVIA baseline and, in addition, potential schemes that are not yet present in the landscape, but for which planning permission has either been applied for, or been granted. This would include the permitted Middlewick wind farm. GLVIA recognises that CLVIA could focus on either additional effects of the appeal scheme on top of the cumulative baseline, or the combined effects of all the past, current and future proposals together with the appeal scheme.169 Both should be assessed in this case because the Dengie peninsula is recognised as a distinct part of the coastal landscape, where incremental and combined effects would need to be considered. This section of the report is therefore structured as follows. In dealing with landscape character the solus effects of the appeal scheme are considered first, followed by an assessment of cumulative effects.

166 EN-1 paragraph 3.2.3.
167 PPG paragraphs 39 and 40.
168 Published by Scottish Natural Heritage in 2012 at CD80.
169 ID14 paragraph 7.18.
with the latter having regard to both additional and combined effects. The same approach is then undertaken for visual effects. [12,51,52,88,90]

124. GLVIA notes that people living in an area might be affected by changes in views and visual amenity, and that the visual receptors most susceptible to change are likely to include residents at home or engaged in outdoor recreation.\(^{170}\) It adds that effects on private property are frequently dealt with through ‘residential amenity assessments’, which are separate from LVIA. GLVIA provides that visual effects assessment may sometimes be carried out as part of a residential amenity assessment, in which case it would supplement and form part of the normal LVIA for a project.\(^{171}\) This distinction is recognised by dealing in this section with the visual amenity of residents as a character and appearance issue, and dealing separately with deprivation of outlook from specific dwellings as a living conditions issue later in this report.

125. The GLVIA defines landscape receptors as aspects of the landscape resource with potential to be affected by the proposal. Visual receptors are individuals or groups of people with potential to be affected by the proposal. For both landscape and visual effects the GLVIA methodology combines sensitivity of receptors (value of receptor/particular view and their susceptibility to the change proposed) with magnitude of effects (size/scale, geographical extent, duration and reversibility of effects) to indicate the significance of effects.\(^{172}\)

126. The 2008 ARUP study for the East of England Regional Assembly considered that Area 81 Greater Thames Estuary, given the large scale, relatively simple nature of this landscape, but with a degree of remoteness, had a medium sensitivity to commercial scale turbine development.\(^{173}\) This study is useful as background information for considering LVIA sensitivity, but as the GLVIA emphasises, it is not a substitute for the individual assessment of the susceptibility of the receptors in relation to change arising from a specific development proposal.\(^{174}\) Therefore, little weight should be given to ARUP’s capacity estimate of a maximum of 18 turbines for Area 81, which is based on examination of a separation distance of 10 km between wind farms for sparsely populated, less sensitive landscapes. [53,87]

127. EN-3 advises that the length of time the development would be operational is a material consideration. The appeal scheme would have a limited duration of 25 years, and conditions could ensure that decommissioning reversed significant harmful effects. However, this would be a substantial period for those who would have to endure any adverse effects from the proposed wind farm. Turncole wind farm would be a long-term development and the reversibility of the scheme should not be an influential factor in determining these appeals. [103]

\(^{170}\) ID14 paragraphs 6.13 and 6.33.
\(^{171}\) ID14 paragraphs 6.17 and 6.36.
\(^{172}\) The ES uses a four point scale for significance of major, moderate, slight and minimal; but the terminology suggested in the GLVIA (paragraph 3.34) should be preferred, which is major/moderate/minor/negligible. The ES categorises sensitivity as high, medium or low; and magnitude as high, medium, low or negligible and these terms are used in this report (ES Appendices paragraph 5.1.23).
\(^{173}\) PoE2 Appendix 8 page D7.
\(^{174}\) CD14 paragraph 5.41.
Landscape character

128. The area is valued for its perceptual qualities and for some recreational activities like walking and cycling, where experience of the landscape is important.\(^{175}\) This is reflected in its SLA and Coastal Zone designation, the latter with strongly protective policy seeking to maintain the open and rural character of the coastline. The basis for the SLA designation is not fully transparent, but it is likely to have been influence by the perceptual qualities of the area, and so it is a consideration which should be given weight.\(^{176}\) The Essex Historic Environment Characterisation Project defines character areas with a particular focus on the historical integrity present in the landscape. However, it is not very helpful in assessing the landscape effects from the proposed wind farm in its agricultural context.\(^{177}\) [13,14,54,101]

129. The baseline for assessing the solus effects of the appeal scheme on the local landscape includes the turbines already erected and those under construction. Relevant landscape receptors for landscape character Area D8 Dengie Drained Estuarine Marsh include its large scale and lack of complexity, along with a sense of openness and huge sky. National Character Area 81: Greater Thames Estuary is described as having a strong feeling of remoteness and wilderness on the open beaches and salt marshes, on the reclaimed farmed marshland and also on the mudflats, but the Dengie peninsula is mostly a settled agricultural area. Its restricted access gives it a feeling of remoteness, but not of wilderness, because it is largely drained arable farmland with some large agricultural buildings. The openness of the area contributes to its tranquillity, but agricultural activity and vehicles are intrusive at times. The proposed turbines would have little effect on the fabric of the landscape, but would add tall structures that would introduce movement and noise. There would be some adverse effects on tranquillity. However, the size of the turbines, given their simple and slender form, would not be out of scale with the vast skies and openness of the area. In my view landscape character Area D8 has medium sensitivity to the proposed development. The SEI states that if Turncole wind farm was to be considered alone it would result in a high magnitude of landscape effects and major/moderate significance within an area about 1 km from the turbines (with medium-low sensitivity). It also found that medium magnitude and moderate significance would extend some 2.3 km to 3 km from the turbines.\(^{178}\) My site visits indicated that the solus effects of the appeal scheme would be of moderate significance to landscape character Area D8 as a whole. [13,14,18,52,89]

130. Landscape character Area C3 Dengie Flats Estuarine Marsh/Mudflats is an inter-tidal landscape and its character is influenced by the changing colours of the sea and sky. The proposal would only affect the southern part of this area, and with medium sensitivity and a low magnitude of effect, the appeal scheme would be of moderate/minor significance. There is a marked transition in topography between landscape character Area D8 and Area E2, with the latter characterised by gently undulating farmland, locally quite steep, located behind the coastal marshland. Only the south-eastern part of this area would be

\(^{175}\) Taking into account all the factors set out in Box 5.1 page 84 of GLVIA CD14.
\(^{176}\) CD90.
\(^{177}\) PoE2 Appendix 5.
\(^{178}\) SEI paragraphs 5.3.15 and 5.3.16.
affected by the appeal scheme because of the topography and intervening vegetation and buildings within settlements. With medium sensitivity and a low magnitude of effect, the appeal scheme would be of moderate/minor significance. Landscape character Area D7 Bradwell Drained Estuarine Marsh shares some of the characteristics of Area D8, but it also contains Bradwell Power Station and Bradwell wind farm, and is about 6 km north of the proposed Turncole wind farm. The effects of the appeal scheme would have negligible significance on landscape character Area D7. This would also apply to other landscape character areas in the wider locality. [14]

131. Taking all these findings into account I find that the overall solus effects of the appeal scheme on the landscape resource of the area would be of moderate significance. I turn next to the different approaches put to the Inquiry about cumulative effects.

132. The appellant’s analysis emphasises additional effects of the appeal scheme on top of the cumulative baseline. Middlewick wind farm by itself would leave only small parts of the south-western corner and the south-eastern tip of landscape character Area D8 outside the area that would experience a medium magnitude of effect. Turncole wind farm would extend the influence that would arise from Middlewick wind farm across relatively small areas in the overall context of Area D8 adjacent to Burnham-on-Crouch and the River Crouch. In terms of size/scale this would not be a substantial change to the landscape resource, but it would result in wind farms becoming a key characteristic of the entire character area. A small area between the Middlewick and Turncole wind farms would have high magnitude of effect from both schemes, but this would have a limited geographical extent, and the intensified effect would not significantly affect Area D8 as a whole. Overall effects on the cumulative baseline would be of low magnitude, and with medium sensitivity, of moderate/minor significance. The presence of Middlewick wind farm would therefore mean that the change to landscape character as a result of the appeal scheme would not be as substantial as would the effects of Turncole wind farm alone on the existing baseline. Given this finding it is necessary to also consider the combined cumulative effect. [88,91]

133. The Council favours an assessment of the combined effects of all the past and current proposals together with the appeal scheme. The combined effects of Bradwell, Middlewick and Turncole wind farms would alter the overall perception of the eastern part of the Dengie peninsula as a remote and tranquil area. However, high magnitude landscape effects would largely be contained within parts of Area D7 and Area D8, with only limited effects on Area C3 and Area E2. The dominant characteristics of this part of the Dengie peninsula would remain its huge skies, wide horizon and openness of this flat landscape. The combined effects of the existing and proposed turbines would not result in more than moderate significance for the landscape resource. No cumulative threshold of acceptability for wind turbine development on the Dengie peninsula would be breached as a result of the appeal scheme. [51,52]

134. In terms of landscape character, I consider that the solus effects of Turncole wind farm would be adverse and of moderate significance, but cumulatively with

179 ID24.
Middlewick wind farm this significance would be reduced to moderate/minor. Furthermore, given the scale of this landscape, the combined effects of Bradwell, Middlewick and Turncole wind farms on this part of the Dengie peninsula would not result in effects of more than moderate significance for the overall landscape resource. I turn next to visual effects.

Visual effects

135. The assessment of visual effects concerns the effects of the proposed wind farm on the views available to people and their visual amenity. The zone of theoretical visibility (ZTV) for such large and moving structures in this landscape is extensive, but there is a measure of agreement between the experts about an appropriate study area and representative viewpoints. Visual receptors here include people living and working in the area, along with visitors and those engaged in recreational activities. These people are likely to be particularly susceptible to the change in views that would result from the proposed turbines, and there is evidence that the visual amenity of the area is valued. GLVIA notes that residents at home, especially using rooms normally occupied in waking and daylight hours, are likely to experience views for longer than those briefly passing through an area. I consider that visual receptors here would have high sensitivity to the change in views that would result from the appeal scheme.

136. In assessing the size/scale of visual effects this section considers the solus effects, and the additional and combined cumulative effects, for various vantage points/locations, so as to come to a judgement about the overall significance of visual effects. This is based on the expert evidence, wireframes and photomontages, along with my observations on site visits. The following considers likely visual effects on five broad areas, (1) the area in the vicinity of the proposed Turncole wind farm and extending south-west to Burnham-on-Crouch (2) the area to the south and along the river (3) the eastern part of the Dengie peninsula (4) the area to the immediate and more distant north, and (5) the immediate area extending north-west to Southminster.

137. The area in the vicinity of the proposed Turncole wind farm and extending to the south-west includes dwellings R1-6. The wireframe at ResVP3 is indicative of views from these properties and the local road. It shows how the proposed turbines would be distributed along part of this long horizon. Such large structures in open view would adversely affect the rural scene. Dwellings R16 and R17 are closer to Burnham-on-Crouch and would be less affected. The proposed wind farm would be exposed in views from VP2. VP1 is further to the west and intervening trees, buildings and telegraph poles would soften the

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180 ES Figure 5.13.
181 ID14 paragraph 6.36.
182 ID17 is a useful summary of the experts’ assessment of effects on viewpoints, but Mr Goodrum’s evidence concerns the effects of adding Turncole wind farm to the baseline of Middlewick and Bradwell wind farms, while Mr Cowlin’s evidence focuses entirely on in-combination cumulative effects. These are not, therefore, directly comparable. This report follows the guidance in GLVIA.
183 Residential dwellings are numbered R1-R25 on Figure 5.14 of the ES.
184 ES Figure 5.30.
185 ES Figure 5.16A and 5.16B.
visual effects of the proposed wind farm.\(^{186}\) The alignment of the proposed turbines from VP1 and VP2 is shown on ID25. The Bradwell turbines at about 9 km distance have little impact. The Turncole turbines would have limited effects on views from the outskirts of Burnham-on-Crouch. I find that the proposal by itself would have medium magnitude of effect on views from the part of the road east of Twizzlefoot bridge and in the vicinity of the associated dwellings, reducing to low to the west of VP1. Solus visual effects would be of major/moderate significance, reducing to moderate in the western part of this area, and minor or negligible from Burnham-on-Crouch. Cumulatively, with Middlewick wind farm seen in the background, or set to one side and set back from Turncole wind farm, the two wind farms would be seen as separate features.\(^{187}\) This would limit any visual confusion. Additional or in-combination cumulative visual effects would not raise the significance above that found for the solus effects.

138. The view from the south and along the river is shown in VP9.\(^{188}\) In this wide view the turbines would have a low magnitude of effect. VP8 is more distant and shows that the turbines would have a limited visual effect in this panoramic view.\(^{189}\) From parts of the footpaths in this area nearest to the proposed turbines there would be a medium magnitude of effect. Sequential views, when the observer needs to travel to another view point to see other turbines, such as along a road or footpath, apply to the sea wall path.\(^{190}\) However, with such extensive ZVTs for the wind farms sequential views would be more influenced by the changing visual relationships between wind farms, based on separation distances and spatial distribution. This is apparent in the views from VPI4 and VPI5, with perspective creating a clear distinction between the wind farms. However, the additional visual effect of the Turncole turbines with a cumulative baseline that included Middlewick wind farm would result in some overlapping and resultant visual clutter (VPI4) and an extension of wind farms along more of the horizon (VPI5). By itself the appeal scheme would generally have moderate significance of visual effects, but for some parts of the footpaths it would have major/moderate significance. Additional and in-combination cumulative effects would be of major/moderate significance.

139. Views from the eastern part of the Dengie peninsula are depicted in VPI3 and VPI6, and from the sea wall path in VPI6 and VPI7. From the vantage points closer to the proposed turbines the significance of solus visual effects would be major/moderate, but from the sea wall this would reduce to moderate or moderate/minor, and to negligible at the Chapel of St Peter on the Wall (VP7). This area includes the line of dwellings R18-25, along with R7 and R8 at East Wick. ResVP24 and ResVP8 indicate typical views.\(^{191}\) Solus visual effects would be of significance ranging from major/moderate to negligible in the north-eastern part of this area. The additional cumulative effect with Middlewick wind farm would be significant and is shown on VPI3. However, the wide separation between the wind farms would be apparent. The combined cumulative visual effect would not substantially diminish the expansive views of open sky and long

\(^{186}\) ES Figure 5.15A and 5.15B.
\(^{187}\) ES Figures 5.16C and 5.16D, Figures 5.15C and 5.15D.
\(^{188}\) ES Figures 5.23A and 5.23B.
\(^{189}\) ES Figures 5.22A and 5.22B.
\(^{190}\) CD14 Table 7.1 page 131.
\(^{191}\) ES Figure 5.34 and Figure 5.31.
horizon in this eastern part of the Dengie peninsula. Cumulative visual effects would be of moderate/minor significance.

140. VP4 and VP5 are to the north of both the proposed Turncole wind farm and the permitted Middlewick wind farm. Views from the front of the Church of St James of Turncole wind farm by itself would be of moderate significance, with the nearest turbine 3.8 km away.\textsuperscript{192} VP10, VP11, VP12, VP13, VP14 and VP15 are much further to the north and the visual effects of the Turncole wind farm would be negligible from vantage points in these areas. The additional effect of Turncole wind farm on a baseline which included Middlewick would alter the view from the Church significantly. This would spread turbines across a large proportion of the view to the south, over lower lying parts of the Dengie Marsh, and so increase significance of visual cumulative effects to major/moderate.\textsuperscript{193} Views towards Bradwell wind farm would be largely screened by buildings and vegetation and the significance would not be enhanced by any in-combination cumulative effects.

141. The immediate area extending north-west to Southminster includes dwellings R9-12 and further to the west R13-15, along with the road that provides access.\textsuperscript{194} From VP12 and this part of the road the Turncole turbines would be prominent features at a distance of about 1 km. This effect would diminish with distance to the west and the effect at VPI1 and VP3, the latter on the outskirts of Southminster, would be much less.\textsuperscript{195} From the nearer parts of this area the solus visual effects would be of major/moderate significance, reducing to moderate towards Southminster. Cumulatively, with Middlewick wind farm in the baseline, the main additional effect would be the presence of wind farms on both sides of this road. It would be possible to see the two wind farms from some vantage points together within the same wide arc of view, or in the vicinity of Broadward and Turncole Farms in succession with a turn of the head so as to see the other wind farm. But from the western approaches within this area VP3, VPI1 and VPI2 indicate the substantial visual separation that would exist between the wind farms, and in which other features such as the open sky, the long horizon or nearer vegetation would soften the visual effects of the turbines. Closer to Broadward and Turncole Farms views to the north would be towards Middlewick wind farm and in the distance Bradwell wind farm, and to the south towards Turncole wind farm.\textsuperscript{196} However, views from within this area would take in the wide gap between the wind farms. This visual perception of separation distance between Middlewick and Turncole wind farms would limit any additional or in-combination cumulative visual effects. I do not consider that cumulative effects in this area would increase the overall the significance of visual effects above major/moderate.

LVIA conclusions

142. The PPG sets out landscape issues which might need to be documented in an assessment of cumulative impacts, including scale of development, sense of

\textsuperscript{192} ES Figures 5.18A and 5.18B.
\textsuperscript{193} ES Figures 5.18C and 5.18D.
\textsuperscript{194} VPI10 and VP18 along with ResVP10 at ES Figure 5.32 and ResVP14 at ES Figure 5.33 indicate likely typical views from this area.
\textsuperscript{195} ES Figures 5.17A and 5.17B.
\textsuperscript{196} VPI8/9 and VPI10/11.
distance, focal points, skylining and sense of remoteness or wildness. The proposed turbines would be large structures, but would be set within a landscape that is characterised by features of substantial scale, such as the vast skies and wide, flat expanse of the land. The proposed turbines would not, given the separation distance from both Middlewick and Bradwell wind farms, erode a sense of perspective and distance in views across the Dengie peninsula. There are no significant focal points in the local landscape which would be affected by the proposed development. The addition of Turncole wind farm would not result in development along the skyline appearing disproportionately dominant, or significantly detract from any sense of wildness. The limited removal of roadside vegetation would not unduly affect the character or appearance of the area. Trees 10 and 11 contribute to the visual amenity of the area, but measures could be taken to safeguard these trees during road improvements. Some of the work to roadside vegetation, including within Tree Groups 32 and 33, would need to be carried out in any event as routine maintenance, and so the proposed alterations would not unduly affect the rural scene. The proposal would not conflict with LP Policy CC10 concerning any materially adverse impact upon protected lanes and hedgerows. 

143. The proposal would have a limited effect on the character of the undeveloped coast and so would not conflict with advice in the Framework that such areas should be maintained, and their distinctive landscapes protected and enhanced. The PPG also advises that schemes may have visual impacts on the marine and coastal environment and that it may be appropriate to assess potential impacts on seascape character. However, the area in which the appeal site lies is defined by land and sky, and the flatness of the terrain, rather than the sea itself. The wide expanse of mudflats at low tide visually separates the sea from the land. The proposed Turncole turbines would be prominent features in views from the sea towards the peninsula, but they would not, either by themselves or cumulatively with other onshore and offshore turbines, have a significant effect on its seascape character.

144. Natural England (NE) considers that the openness and tranquillity of the landscape contribute to its high sensitivity to change, and that in such a flat landscape any vertical structure would be highly prominent. However, NE acknowledges that the turbines would not break or interrupt any significant feature of the skyline, and that very open landscapes have a greater capacity for wind turbine developments. NE found on balance that the Dengie peninsula has a greater capacity to accommodate wind farm energy. On this basis, NE raises no objection to the proposal.

145. The proposed development would have an adverse effect on landscape character of moderate significance, which would cumulatively with Middlewick wind farm reduce to moderate/minor significance. It would have an adverse effect on visual amenity, both by itself and cumulatively, of major/moderate significance from some vantage points, but more generally of moderate significance, reducing to minor or negligible with distance. I find that the overall adverse effect on the landscape character and visual amenity of the area would be of moderate significance. This is a consideration which weighs against the
proposal and brings it into conflict with the aims of LP Policies PU6, CC6, CC7, CC11, S2 and BE1, which are considered in more detail later.

(1bi) Living conditions - outlook

146. The Council’s second reason for refusal in Appeal A concerns cumulative effects on the outlook of Turncole Farm and Broadward Farm, but many local residents, in written representations to the Council and at the appeal stage, expressed concerns about the effects of the proposed turbines on their residential amenity. There is no test prescribed by law or policy to assess deprivation of outlook. The Planning System: General Principles ODPM 2005 states that the planning system does not exist to protect the private interests of one person against the activities of another, although private interests may coincide with the public interest in some cases. It adds that it may be necessary to distinguish between public and private interests and that the question is whether the proposal would unacceptably affect the amenities and the existing use of land and buildings which ought to be protected in the public interest. The Secretary of State in the Burnthouse Farm appeal considered that in assessing the effect on visual outlook it is helpful to pose the question; “would the proposal affect the outlook of these residents to such an extent, i.e. be so unpleasant, overwhelming and oppressive that this would become an unattractive place to live? ”

147. However, it was acknowledged at the Inquiry that the Secretary of State’s view in the Burnthouse Farm appeal is not to say that significant visual effects on residents are not a material consideration if they fall short of converting a property into being ‘an unattractive place to live’. The appellant believes that it might be, in a particular case, that significant visual effects on a number of houses falling short of an impact on residential amenity would carry sufficient weight to warrant at least a careful approach to the planning balance. It seems to me that any such impact should properly be categorised as an effect on the visual amenity of the area, which would fall to be considered as a separate component of visual effects in a LVIA. This would, therefore, be a character and appearance issue to be weighed accordingly in the planning balance. This approach is recommended, and would be consistent with the latest edition of GLVIA. [21,33,34,56,83]

148. The appellant’s primary submission is that there would be no harm to the visual component of residential amenity at either Turncole Farm or Broadward Farm, but that if it was necessary, account should be taken of the financially involved status of these properties. Neither resident has objected to the proposed development. In the Middlewick appeal the Inspector, in identifying properties that would have principal aspects and/or gardens that would look towards the appeal site, set aside cottages with a financial interest in the proposal. In the Gayton appeal the Inspector noted that the nearest dwelling to a turbine was the home of the landowner who could be expected to have made his own assessment of the likely visual impact of the development on his living

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201 CD47.
202 ID40 paragraph 64.
203 CD58 paragraph 31.
The Council argues that judgements about residential amenity should not be affected by financial involvement, and that there is no policy support for such an approach. It may well be that no policy is necessarily required to underpin the approach taken by the Inspectors in the Middlewick and Gayton appeals, and nothing wrong in law in doing so. However, in the absence of a specific policy provision, such as exists in ETSU-R-97 for noise, it seems to me that if a private interest was required to be protected in the public interest, then the requisite protection would be justified irrespective of who occupied the dwelling. It would not be in the public interest to create dwellings with unsatisfactory living conditions. If the public interest was so engaged the personal preferences of the current occupier would not be decisive. Therefore, it seems to me that a different threshold of impact on outlook should not apply for Turncole Farm and Broadward Farm on account of the current occupiers’ financial interest in the proposed wind farm. [35,84,85]

149. The judgment in the Spring Farm Ridge case does not provide much help concerning a test to assess deprivation of outlook to be applied in the current appeal. In that case a local plan policy required development to not unacceptably harm the amenities of any neighbouring properties, and it was held that the Inspector did not apply a higher threshold of acceptability than that set out in the local plan. However, there is no comparable development plan policy in the current case. It seems to me that where decision makers have asked whether the impact would make a property an ‘unattractive’ or ‘unsatisfactory’ or ‘unsuitable’ place to live, they were articulating effects on outlook in this way as an aid to making a judgement about whether a private interest was, in the particular circumstances, required to be protected in the public interest.

150. In considering deprivation of outlook in relation to a wind farm scheme, it is useful to ask whether the presence of turbines, by reason of their number, size, layout, proximity and movement, would have such an overwhelming and oppressive impact on the outlook from a dwelling and its amenity space that they would result in unsatisfactory living conditions, and so would unacceptably affect amenities and the use of land and buildings which ought to be protected in the public interest. This public interest threshold is a matter to be determined in the particular circumstances which apply. However, the level of impact or threshold at which the public interest would be so engaged should be no different for wind turbines than would be the threshold applicable to other types of development.

151. Where the impairment of outlook for any dwelling was so deleterious that this threshold was breached then the resultant harm to living conditions would be a weighty consideration against allowing the development proposal to proceed. If this applied to more than one dwelling in the locality then the greater would be the harm. Conversely, if the effects of development fell below this threshold the protection afforded to the public interest by the planning system would not be engaged. As a result, any such adverse effect on outlook would not feature in

204 ID16 paragraph 49.
205 Notwithstanding some similarities in principle, an important difference between the effects of noise and outlook on involved occupiers is that ETSU-R-97 quantifies a level of difference for noise which is acceptable, whereas it would be difficult to identify such a threshold for deprivation of outlook.
206 South Northamptonshire Council and SoS CLG at ID30.
207 Inspector’s question to Mr Stewart.
the planning balance, irrespective of how many dwellings were so affected. But to reiterate, this would not preclude weighing in the balance, as a component of the character and appearance issue, the effects on the locality generally that would derive from visual effects on resident receptors, which nonetheless fall short of impacting adversely on living conditions by deprivation of outlook. [34]

152. The assessment in the ES identified 13 dwellings within about 1 km of the proposed turbines, and an additional 14 dwellings within 2 km. I was able to make a reasonable assessment of the likely relationship between these properties and the proposed turbines on the basis of the submitted documentation, along with my accompanied and unaccompanied site visits to the area. It is clear from the wireframes, photomontages and my site visits that the outlook from some dwellings and their amenity space would be significantly altered by the siting and height of the proposed turbines. References to other decisions and separation distances are not of much assistance, as so much depends on local circumstances, such as the specific configuration of the turbines, orientation and layout of dwellings, topography and vegetation. [36,83,85]

153. T3 would be about 830 m from Great West Wyke Farmhouse. The principal focus and direction of views from both the house and garden is to the north and north-west across an extensive and open landscape. The turbines would be prominent in views from the garden and from those windows which afford views to the north-west, north and north-east. The wind farm would occupy an arc of view of 96 degrees. But within this T1, T2, T6 and T7 would be 1 km or more from Great West Wyke Farmhouse. At this distance I do not consider that these turbines would have an overbearing or dominating effect. Neither would T3, T4 and T5 be so close or so high as to create an oppressive feel to living and amenity spaces within the property. The rotation of turbine blades would be eye-catching and at times distracting, but turbines are structures which lack solidity and the proposed layout would mean that they were spaced so that the vast open sky would remain the most significant feature in the outlook from this dwelling. The existing turbine at Southminster would be visible just to the west of T1, but given its height and separation distance it would not cumulatively with Turncole wind farm add significantly to the overall impact on the outlook from Great West Wyke Farmhouse. The permitted Middlewick wind farm at a distance of about 3 km would appear in views from this property between T4 and T5 of the Turncole wind farm. Bradwell wind farm would be apparent beyond this at a distance of about 9 km. These other turbines would add to visual clutter and movement along this part of the wide flat horizon. However, at the distances involved the effect, whilst a relevant LVIA consideration, would not cumulatively with the appeal scheme add significantly to the sense that this property was overwhelmed by wind farm development. The offshore turbines are too distant to have any significant impact. In my judgement, the overall effect of Turncole wind farm, both by itself and cumulatively with other existing or proposed turbines in the area, would not have an overwhelming and oppressive impact on the outlook from Great West Wyke Farmhouse. The outlook from Redward Cottages, which lies further to the south, would be even less affected. [33]

208 Appendix 4 of the SoCG provides agreed distances and directions of residential dwellings within about 1 km of the proposed turbines.

209 ES Figure 5.30. EXPLAIN MORE
154. Similar considerations apply to the likely effect on the outlook from West Wyke Farm and West Wyke Bungalow, which would be about 800 m from the nearest proposed turbine. However, T4, T5, T6 and T7 would be between 1 km to 1.5 km from these properties. Notwithstanding that there would be some uninterrupted and open views of the proposed turbines from these properties, given the separation distance and layout, I do not consider that the appeal scheme would, by itself or cumulatively, have an impact on outlook that would engage the planning regime as a matter of public interest.

155. Further to the east of Great West Wyke Farmhouse there are two bungalows sited within the curtilage of a large poultry farm, which would be about 800 m south of the nearest turbine.\textsuperscript{210} The outlook from these properties is influenced by large low rise poultry sheds with feed silos. In this context the turbines, although much higher than any other structures in view, would not have an oppressive impact on the outlook from these bungalows. East Wick Cottages, which comprises four dwellings, lie about 1 km to 1.1 km south-east of the site of the nearest proposed turbine. T1 would be about 2.5 km away. Turncole wind farm would occupy a small arc of view of 28 degrees and would appear as a compact, albeit significant, feature in views across the intervening open and flat farmland.\textsuperscript{211} Some of the views in this direction would also encompass some nearby agricultural outbuildings, and garden trees, which would provide a degree of local screening from some vantage points within these properties. The separation distance and layout of the proposed wind farm would not result in any overwhelming effect on East Wick Cottages. In the outlook from these properties Turncole, Middlewick and Bradwell wind farms would appear as separate and distinct features, diminishing in relative scale with distance, on this broad horizon. They would not, cumulatively, unduly impact on the living conditions of occupiers by virtue of any oppressive impact on outlook.

156. Montsale Bungalow, Old Montsale and New Montsale lie to the east of the proposed wind farm. The view from these properties across open farmland is typified by Residential Building VP24 from Montsale Bungalow.\textsuperscript{212} This has an arc of view of 35 degrees. Other dwellings to the south-east of Montsale Bungalow would be more aligned with the proposed wind farm along its length from T6/T7 to T1. These dwellings are some 1.16 km to 1.25 km from the site of the nearest proposed turbine, and at this distance and configuration I do not consider that the scheme would have an adverse impact on outlook insofar as this would affect living conditions. Middlewick wind farm would be seen as a separate development to the north-west of Turncole wind farm and no significant cumulative impact on outlook would result. Other dwellings to the east are more distant from the proposed wind farm, which would further diminish any adverse effects on the outlook from these properties.

157. Turncole Farm is about 750 m north of proposed T4 and T7, and about 1.3 km north-east of T1.\textsuperscript{213} The dwelling has an east-west orientation with principal garden areas located to the south and west of the house. There are large

\textsuperscript{210} New Bungalow and Poultry farm in ES paragraphs 5.11.15-5.11.18.
\textsuperscript{211} ES Figure 5.31.
\textsuperscript{212} ES Figure 5.34.
\textsuperscript{213} Rear and front views are at VPI10 and VPI11 of the Additional Visualisations, the angle of view towards Turncole and Middlewick wind farms is shown on SEI Figure 5.4.
agricultural buildings located close to the eastern and southern curtilage of the dwelling, which would largely screen T7, T6 and T5. There are also some garden trees which would soften the visual impact of T1, T2 and T3. T4 would be prominent in views from habitable rooms facing south, and from parts of the rear garden. However, with perspective its hub height would be comparable to that of the roof ridge of the nearest part of the nearby large agricultural building. The scale of T4 would not dominate the outlook from this property. By turning around it would be possible to see turbines from both the Turncole and Middlewick wind farms from parts of the garden and tennis court. But given the orientation of the building, views from windows would be largely towards Turncole wind farm to the rear and towards Middlewick wind farm to the front. It was apparent from my site visit that the outlook from the front and rear of the premises are quite distinct aspects of the property. The front overlooks a small grassed area, parking and turning area, and the road. The outlook to the rear takes in the private amenity space, along with the agricultural buildings. I do not consider that the introduction of wind turbines into both of these aspects would cumulatively create a feeling that the premises was enclosed or surround by wind farms.

158. Broadward Farm lies some 750 m north of proposed T2.214 It has a similar orientation to Turncole Farm, but has a more open aspect to the south and east. My site visit confirmed comment in the ES that there would be uninterrupted views towards the proposed wind farm from south facing windows, and from the rear garden area resulting in a considerable change in the nature of the existing views. The proposed turbines would have an arc of view of 81 degrees. T7, T6 and T5 would be furthest from the property and would appear at an oblique angle, and at a height comparable, with perspective, to the nearest of the line of telegraph poles that runs into the distance to the east of T7. However, T4, T3, T2 and T1 would be more prominent. Nonetheless, these would be widely spaced with scope for the open sky to retain its dominance in the overall outlook. Given the separation distance and configuration of the proposed wind farm, I do not consider that it would have an overwhelming or oppressive effect on the outlook to the rear of Broadward Farm. Cumulative issues similar to Turncole Farm arise with respect to Middlewick wind farm. However, Middlewick wind farm would be further away and at a more oblique angle to the frontage of Broadward Farm, and for the reasons set out above, any cumulative impact on outlook would not weigh significantly against the proposal.

159. I also visited Wraywick Cottage and Wraywick Farmhouse as part of my accompanied site inspection. These lie to the north and north-west of the proposed Turncole wind farm, and to the west and south-west of Middlewick wind farm. T2 would lie about 1 km to the south of Wraywick Cottage. VPI2 assists in assessing the likely relationship between these properties and the proposed wind farms, although the view point is not within the curtilage of either property.215 The principal focus of views from the front of Wraywick Cottage is to the south-west and not towards Turncole wind farm. In addition, there is extensive planting and vegetation to the side and rear of the property, including tall conifer trees, which would provide a degree of screening in this direction. Given the

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214 ES Figure 5.32, rear and front views are at VPI8 and VPI9 of the Additional Visualisations, the angle of view towards Turncole and Middlewick wind farms is shown on SEI Figure 5.3.
215 VPI2 of the Additional Visualisations.
separation distance, orientation and local screening, Turncole wind farm would not adversely impact on the outlook from this property. The extensive planting to the rear would also mean that no cumulative effects on outlook would arise with Middlewick wind farm. Wraywick Farmhouse would be about 1.3 km from the nearest turbine proposed at Turncole and about 870 m from the nearest with permission at Middlewick. It has an extensive garden and a large conservatory, which along with other windows in the house, would afford views towards the proposed wind farms. However, Turncole wind farm would be a sufficient distance away so as not to have an overbearing effect on the outlook from this property, either by itself or cumulatively with Middlewick wind farm.

160. The wireframe from Rumbolds is indicative of the likely effects of Turncole wind farm on the outlook from properties to the west and in the vicinity of Southminster.\(^\text{216}\) It would occupy a small sector of the wider panoramic view across the Dengie marshes. This indicates that the proposal would not have a dominating or overbearing effect on the outlook of dwellings in this area. I have had regard to all the representations, but it was clear from my site visits that the outlook from other dwellings in the wider area, not specifically addressed in this section of the report, would not be materially affected by the proposal. \([36]\)

161. The Enifer Downs appeal is not comparable to the circumstances which apply here because three dwellings in that case were located less than 500 m from the proposed 120 m high turbines.\(^\text{217}\) In my view, the proposed Turncole turbines, either by themselves or cumulatively with other existing or proposed turbines, would not result in an overwhelming and oppressive impact on the outlook from nearby dwellings or their associated amenity space that would result in unsatisfactory living conditions. The limited removal of roadside vegetation along the route proposed for AIL would not harm the residential amenity of nearby occupiers. \([27,36,64]\)

162. In my judgement, the proposal would not unacceptably affect amenities and the use of land and buildings which ought to be protected in the public interest. If the Secretary of State were to come to a different conclusion about the effects of the proposal, either by itself or cumulatively, concerning deprivation of outlook from any nearby dwelling, the resultant harm and policy conflict would weigh heavily against allowing the appeals.

(1bii) Living conditions - noise and disturbance

163. The PPG states that ETSU-R-97 should be used when assessing and rating noise from wind energy developments, and refers to the endorsement of the GPG as a supplement to ETSU-R-97.\(^\text{218}\) The Noise Policy Statement for England (NPSE) is also relevant.\(^\text{219}\) This aims through the effective management and control of noise within the context of Government policy on sustainable

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\(^{216}\) At a separation distance of 1.61 km and arc of view of 11 degrees. ES Figure 5.33.

\(^{217}\) CD68 paragraph 42.

\(^{218}\) PPG paragraph 30. The Assessment and Rating of Noise from Wind Farms, ETSU-R-97 at CD102. This was drafted by the Noise Working Group for ETSU, which is an abbreviation for Energy Technology Support Unit. EN-3 states at paragraph 2.7.56 that ETSU-R-97 should be used in the assessment of noise from the operation of wind turbines, and footnote 32 to paragraph 2.7.55 provides that ETSU-R-97 includes any supplementary guidance to it endorsed by the Government.

\(^{219}\) ID103.
development to avoid significant adverse impacts on health and quality of life, mitigate and minimise adverse impacts on health and quality of life, and where possible, contribute to the improvement of health and quality of life. BS4142 *Method for rating industrial noise affecting mixed residential and industrial areas* and the WHO revised guidelines can help inform an overall judgement about the likely effects of noise. However, ETSU-R-97 found a literal interpretation of BS4142 difficult to apply to an assessment of wind farm noise and that it might not be appropriate. Given the policy support for ETSU-R-97 the WHO revised guidelines should not be determinative. There was some criticism of specific details concerning the manner in which the appellant’s noise assessment was carried out. However, I am satisfied that the methodology and its implementation reasonably accords with relevant guidance about good practice. There are no substantive grounds to find the assessment wanting by reason of any calibration uncertainty, induced noise from windshields, exclusion of rain affected results, or monitoring undertaken in exposed positions.

164. Turncole wind farm on its own would comply with ETSU-R-97. The noise experts disagree about whether the day-time fixed noise limit should be 36 dB or 38 dB for Turncole wind farm alone, and therefore whether the allowable cumulative noise level for Turncole wind farm with Middlewick wind farm should be 38 dB or 40 dB. There are no reasons to find against the agreed limit for the night-time fixed noise limit. [12,26,48,76]

165. ETSU-R-97 is not to be interpreted as statute or applied inflexibly, especially as the document describes a framework for the measurement of wind farm noise and gives indicative noise levels thought to offer a reasonable degree of protection to wind farm neighbours, without placing unreasonable restrictions on wind farm development or adding unduly to the costs and administrative burdens of developers or local authorities. The noise limits set out in ETSU-R-97 are fixed limits within the range of 35-40 dB during the day and 43 dB during the night (with higher limits for dwellings with a financial interest in the scheme), or 5 dB above the prevailing background level, whichever is the greater. The actual value chosen within the 35-40 dB range depends upon three factors: the number of dwellings in the neighbourhood of the wind farm, the effect of noise limits on the number of kWh generated, and the duration and level of exposure.²²⁰

166. ETSU-R-97 states with regard to the first of these factors that the more dwellings that are in the vicinity of a wind farm the tighter the limits should be as the total environmental impact would be greater, and conversely if only a few dwellings would be affected then noise limits towards the upper end of the range may be appropriate. The GPG states that the number of neighbouring properties will depend on the nature of the area (rural, semi-rural, urban), and that the predicted 35 dB contour can provide a guide to the dwellings to be considered in this respect. This is a rural area and Figure 1.1 of the SEI indicates that only eight dwellings would fall within the predicted 35 dB contour. Two of these are dwellings where the occupiers have a financial interest in the appeal scheme. Considerations here would, therefore, indicate a noise limit towards the upper end of the range. [48,76]

²²⁰ CD102 pages viii and 65. This is also addressed in Section 3.2 of the GPG at ID41.
167. The second factor concerns the potential impact on the power output of the wind farm. The GPG provides that this is mainly based on the relative generating capacity of the development. It adds that where the amenity fixed limit has little or no impact on the generating capacity then a reduced noise limit may be applied. But that it is not the case here, where cumulative noise is a significant design constraint. There is undisputed evidence that the imposition of the noise limits suggested by the Council would result in a significant reduction in energy yield. This would indicate that a reduced noise limit would not be appropriate in this case. [48,49,76]

168. The GPG states that the third factor, duration and level of exposure, is more difficult to formulate. ETSU-R-97 states that the proportion of the time at which background noise levels are low, and how low the background noise level gets, are both recognised as factors which could affect the setting of an appropriate lower limit. The GPG notes that in rural areas this will often be determined by the sheltering of the property relative to the wind farm site. However, this would not be a consideration here in this open and flat landscape. In accordance with the GPG, account can also be taken of the effects of wind directions and likely directional effects, and that for cumulative developments, the effective duration of exposure may increase because of cumulative effects. With the prevailing WSW to SSW wind there would be limited periods where any dwellings would be significantly affected by downwind noise from both Turncole and Middlewick wind farms. [48,49,76]

169. ETSU-R-97 provides that in low noise environments, such as applies in this case, a day-time level within a range of 35-40 dB would offer a reasonable degree of protection to wind farm neighbours without placing unreasonable restriction on wind farm development. It adds that these levels are low compared to some advisory documents reviewed by the Noise Working Group and that this was because of its concerns to properly protect the external environment. In this case I consider, based on the three factors above, that a lower fixed day-time cumulative limit of 40 dB would properly accord with the provisions set out in ETSU-R-97. Furthermore, there are no particular circumstances or factors which apply here to justify a departure from applying ETSU-R-97 for operational noise. A condition could provide for a methodology to be approved for detecting a breach of these limits where both Middlewick and Turncole wind farms were operating. [38,39,75]

170. EN-3 provides that where the correct methodology has been followed and a wind farm shown to comply with ETSU-R-97 recommended noise limits, the decision maker may conclude that it will give little or no weight to adverse noise impacts from the operation of the wind turbines. Subject to setting a lower fixed day-time cumulative limit of 40 dB, that is the situation which would apply here. On this basis, the scheme could be operated in accordance with the provisions and limits set out in ETSU-R-97, and it would not be necessary to impose the limits suggested by the Council. If, on the contrary, the Secretary of State were to find that a lower limit was required to accord with ETSU-R-97, the limits suggested by the Council for Table 1 of the noise condition would significantly affect the electricity output from the proposed development. This

221 ID18.
222 EN-3 paragraph 2.7.58.
would be a consideration to weigh in the planning balance. [49,76]

171. ETSU-R-97 incorporates some consideration of blade swish, but there is local concern that wind turbine noise might be more intrusive due to amplitude modulation that would be in excess of that acknowledged by the Noise Working Group. This was referred to as Other Amplitude Modulation (OAM) at the Inquiry. However, there is currently no technical evidence to justify the specific parameters proposed in the condition suggested by SIEGE concerning amplitude modulation. Furthermore, the GPG states that the evidence in relation to OAM is still developing, and that current practice is not to assign a planning condition to deal with amplitude modulation. ETSU-R-97 states that developers have to consider the interests of individuals as protected under the Environment Protection Act 1990. Current practice as set out in the GPG and endorsed as a supplement to ETSU-R-97 therefore means that any unacceptable noise impact resulting from OAM would have to be addressed under the provisions for statutory nuisance. The Council took no issue with OAM and did not suggest a condition. No compelling evidence has been adduced at this Inquiry to indicate that it would be necessary and reasonable to impose a condition to deal with OAM. [39,77]

172. There is considerable concern about noise, vibration and disruption from construction traffic using the local road network having a detrimental impact upon the residential amenities of properties along the route, particularly AIL passing along Old Heath Road and the residential section of Marsh Road. However, the Council did not present any technical evidence at the Inquiry to dispute the appellant’s assessment. This concluded that noise levels at the nearest properties to the construction traffic route were predicted to equate to a moderate noise impact, that construction and decommissioning would have a minor noise effect, and that such noise could be dealt with by way of planning conditions restricting the hours when noisy activities could take place. Furthermore, no convincing evidence was adduced to contradict the appellant’s findings that the potential impact of vibration would be negligible, provided that any defective surfaces likely to be of significance for ground-borne vibration were treated in accordance with an appropriate planning condition. [40,63,65,66,96]

173. Wind turbine noise and some disturbance during construction and decommissioning would, to some extent, detract from the tranquillity of the area. However, the suggested conditions would minimise such impacts. The expert evidence indicates that the scheme could operate within acceptable ETSU-R-97 limits. Furthermore, the NPSE aims are to be applied in the context of Government policy on sustainable development. I find no conflict with LP Policies CON5 and PU6 insofar as noise and disturbance is concerned.

(1biii) Living conditions – other considerations

174. There is local concern about possible shadow flicker from moving turbine blades. However, given the separation distance from dwellings, this is a matter

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223 The GPG represents good practice as at May 2013 and it does not exempt further advances from being used. A regular review will be undertaken with a new version produced when significant changes have occurred (GPG paragraph 1.2.3). If such advances or changes were to arise before the issue of the Secretary of State’s decision this might be a matter that would need to be referred back to the parties.
that could be adequately addressed by the imposition of an appropriate planning condition. Flashes of reflected light from blades could be minimised by approving the surface treatment. The imposition of such conditions would accord with the advice in the PPG.\textsuperscript{224} There is no convincing evidence before the Inquiry that the proposed wind farm would give rise to unacceptable infrasound or adversely affect the health of local residents. Any fears about such possible adverse effects cannot be given significant weight. [44,86,105]

175. The last bullet point in PPG paragraph 15 states that protecting local amenity is an important consideration which should be given proper weight in planning decisions. The PPG does not define the term ‘local amenity’ or refer to it in the questions to be considered in paragraphs 29-45, but it seems to me that it includes more than ‘visual amenity’, which is specifically cited in paragraph 41. Local amenity should, therefore, be given its ordinary meaning. As such the PPG seeks to safeguard the pleasantness of a place or locality. However, reference to a particular place would not preclude this being a specific dwelling. Local amenity could therefore include an element that derives from residential amenity. In the absence of any definition of ‘local amenity’ it is reasonable to apply the last bullet point of paragraph 15 to both the locality and to residential amenity, having regard to the distinction drawn in this report between the effects of the proposal on the character and appearance of the area, and the effects on living conditions of nearby residents attributable to noise, disturbance and any deprivation of outlook. Protecting local amenity should be given significant weight. I have found that the proposal would have an adverse impact on the character and appearance of the locality, but that any adverse effects on living conditions, having regard to relevant national policy for wind farms, would not weigh heavily against the proposal.

176. The evidence indicates that the combined effects of the proposed turbines on the outlook of nearby occupiers, along with operational noise in compliance with ETSU-R-97 limits, likely shadow flicker, health fears, and any disturbance or disruption during construction, operation or decommissioning, would not have a significant adverse effect on the living conditions of local residents. As a result, there would be no conflict with those parts of LP Policies PU6, CON5 and BE1 that aim to protect the amenity of neighbouring properties and their occupiers.

\textit{(1c) Heritage assets}

177. The Council’s fifth reason for refusal in Appeal A states that the proposed development and its cumulative impact with the consented Middlewick and Bradwell wind farms would have a detrimental impact on the historic landscape and the wider setting of Grade II listed buildings in the area. The circumstances which applied in the Middlewick wind farm appeal are not directly comparable with those that now apply, in terms of both evidence adduced about cultural heritage and relevant policy, and so drawing on that case is not helpful in determining these appeals. The main parties agree that the operation of the proposed wind farm would affect the setting of heritage assets in the vicinity of the development, and that any such effects would be reversed when the wind farm was decommissioned. However, what is disputed is whether this would

\textsuperscript{224} PPG paragraphs 36 and 37.

http://www.planning-inspectorate.gov.uk
amount to substantial harm, or less than substantial harm.
[10,23,57,58,59,78,79]

178. Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires special regard to be given to the desirability of preserving the setting of a listed building. Recent judgments set out how this applies. The Framework provides that development resulting in substantial harm to the significance of heritage assets should not be permitted unless it would be necessary to achieve substantial public benefits that would outweigh the harm. Where less than substantial harm would result, this should be weighed against the public benefits of the proposal. The PPG states that the significance of heritage assets derives not only from their physical presence, but also from their setting, and that depending on their scale, design and prominence a wind turbine within the setting of a heritage asset may cause substantial harm to the significance of the asset. [62,80,82]

179. The Maldon District Historic Environment Characterisation Project refers to reclamation of the Dengie Marshes in the 17th century and that the row of farms from Bridgewick to Holliwell are located on or close to the chenier or sand and shell island in the centre of the marsh. This is the historical context for the Grade II listed buildings at Bridgewick Cottages, Court Farmhouse and the Bake/Brewhouse to its north and the barn on the opposite side of the road, and Old Montsale. The agricultural land surrounding these properties does make a contribution to the significance of these heritage assets. However, the proposed wind turbines would, apart from their visual impact, have a limited effect on the appreciation of the agricultural surroundings that comprise the setting to these properties. The predominance of historic farmed land around the listed buildings would remain, albeit with some modern agricultural buildings and practices evident. The turbines would be tall vertical structures occupying a relatively small part of the wider agricultural setting. Their visual impact would have a minor effect on the significance of these heritage assets. This would be so even with a cumulative baseline that included Middlewick and Bradwell wind farms. [60,61,81]

180. Newman’s Farmhouse and Dammer Wick Farmhouse lie towards the edge of the marsh and closer to Burnham-on-Crouch. Their historic association with the draining of the marsh is not as apparent as it is for the farmhouses located along the chenier in the centre of the marsh. The cluster of farm buildings around each listed building provides their more immediate setting. Although the proposed Turncole turbines would be seen in the wider setting of these buildings, both by themselves and cumulatively with Middlewick and Bradwell wind farms, they would have a negligible effect on the setting and the significance of these heritage assets. [61,81]

181. The Church of St James Dengie is located on the edge of a small settlement. It is sited within a walled graveyard and enclosed by trees and vegetation in Dengie Manor to the north and west. It is a modest building, and in this context it is not a visual focal point. Long range views towards the Church do not contribute much to its significance. However, it is sited on a low ridge and has

225 ID12 and ID42.
226 PPG paragraph 34.
227 CD92.
an outlook to the south over the marsh, which would be towards the proposed
Turncole and Middlewick wind farms. The nearest Turncole turbine would be
some 3.8 km distant, with the closest Middlewick turbine about 1.7 km from the
Church. Views of both the Church and the proposed turbines in combination
would be limited to some parts of the graveyard close to the Church. These
would not detract from the historic significance of the Church. The outlook from
the Church towards the proposed wind farms would have a negligible effect on
the setting and significance of this heritage asset. [61]

182. There is nothing to indicate that any adverse effects on archaeological features
within the appeal site in Appeal A could not be mitigated by the imposition of a
condition that required the implementation of a programme of archaeological
works approved by the Council. 228

183. The evidence indicates that the proposed turbines would not significantly affect
views that are important to the setting of heritage assets. English Heritage does
not object to the proposed development. Having special regard to the desirability
of preserving the setting of listed buildings, I find that the proposed development
would have a minor or negligible effect. This would not be sufficient to bring the
proposal into conflict with LP Policy CC10 concerning landscape features of
historic importance. Similarly, any adverse effects on heritage assets would be
so slight as to not result in any material conflict with those parts of LP Policies
BE1 and PU6 concerning historic buildings and areas of historical importance.
The less than substantial harm to heritage assets that would result from the solus
and cumulative effects of the proposed development would be a matter to be
weighed against the benefits of the scheme in accordance with the provisions of
the Framework. [62,82,113]

(1d) Air safety

184. There is no objection to the proposal from either the MoD or NATS on air
safety grounds. There is local concern about air safety given the proximity of
Southend-on-Sea airport. However, any radar interference from the proposed
turbines is a matter that could be dealt with by means of an appropriate planning
condition. There is evidence to indicate a reasonable prospect of any necessary
mitigation being installed within the lifetime of any grant of planning permission.
[98,114]

185. There is a grassed airstrip located to the south of the proposed wind farm.
The operator of this airstrip initially objected to the proposed wind farm, but
subsequently agreed with the appellant for fixed wing air craft to fly from another
site, with only helicopters using the existing airstrip. The General Aviation
Awareness Council raised a similar objection to that of the local operator.
However, there is no reason to find that the proposed turbines, with the revised
arrangement for the local operator, would compromise air safety. [98,108]

186. Subject to the imposition of appropriate planning conditions, there is no basis
to find against the proposal on air safety grounds. This would accord with the
advice in the PPG that risks to air safety can often be mitigated through
consultation. 229

228 SoCG paragraph 19.4.
229 PPG paragraph 31.
187. There is concern about the adequacy of the information available to assess the likely effects of removing some roadside vegetation, and that no assessment has been made to assess if the hedgerows were classified as important under the Hedgerow Regulations. However, any such assessment should be proportionate, and in Appeal B the SEI refers to the loss of up to 60 m of mature species-poor hedgerow, which is dominated by diseased elm with blackthorn, hawthorn and field maple. There is sufficient information available to come to a decision about the likely effects of removing roadside vegetation to provide for AIL. The evidence indicates that the limited removal of roadside vegetation envisaged would not have a significant effect on nature conservation. Measures could also be taken to safeguard the roadside pond. [27,43,94]

188. Foraging and roosting birds may come inland from the SPA and Wallasea Island in periods of high tides, but there is no evidence that the proposed turbines would significantly affect these movements. One of the reasons cited by the landowner against a marine delivery route across Burnham Wick Farm was that it would severely impact on breeding lapwing. This is an area close to the River Crouch and about 2 km from the proposed turbines. However, I do not consider at such a distance that this reference is sufficient to outweigh the findings of the assessment in the ES and SEI, which concluded that the appeal scheme would be unlikely, by itself or in combination with other turbines, to adversely affect the favourable conservation status of lapwings.\textsuperscript{230} The proposal, either by itself or in combination with other development, would not significantly affect the Crouch and Roach Estuaries SSSI and Special Protection Area, Special Area of Conservation and Ramsar site to the south of the appeal site. [10,41,42]

189. The SEI provided adequate information for Natural England to remove its objection to the scheme. The RSPB also withdrew its objection subject to suitable conditions being imposed concerning mitigation, biodiversity enhancement and post-construction monitoring. With the imposition of appropriate planning conditions, the proposal would not have a significant adverse impact on nature conservation or biodiversity. This is not a consideration which materially weighs against allowing the appeals. Subject to the imposition of appropriate planning conditions the scheme would accord with LP Policies CC1, CC2 and CC3 which concern development affecting internationally, nationally and locally designated nature conservation sites. It would also comply with LP Policy CC5, which aims to safeguard protected species and features of nature conservation interest, and with LP Policy CON5, which expects all development to minimise the impact on the environment by adopting environmental best practice and implementing the necessary pollution prevention measures. [97,109,110,117]

\textit{(1f) Highway safety}

190. There is local concern about highway safety on the road network due to construction vehicles. However, there is no objection from the Highway Authority, and no substantive challenge to the findings of the traffic assessment in the SEI that likely traffic increases would not be significant. The junction of

\textsuperscript{230} ES Volume 2 Text paragraphs 6.8.67, 6.8.76, 6.8.87 and 6.8.94. SEI Volume 1a paragraph 1.6.9.
Church Road/Southminster Road and Burnham Marsh Road, and the proximity to St Mary’s Church, Ormiston Academy and St Mary’s Primary School, are of particular concern to local residents. The management of construction traffic could be controlled, and this could be coordinated if necessary with vehicular movements associated with the construction of Middlewick wind farm. The effects on the local road network could be minimised by enforcement of an approved construction traffic management scheme. I am satisfied that those constructing the wind farm would have sufficient control over construction traffic for this to be a matter that was adequately controlled by a condition, and that it would not be necessary to deal with this by means of an obligation. Subject to the imposition of such conditions, I find no conflict with the relevant provision of LP Policy T2 concerning highway safety. [40,44,96,112,117]

(1g) Other considerations

191. It was confirmed at the Inquiry that the preferred grid connection location would be a substation on the south-eastern side of Burnham-on-Crouch and that power lines would be routed to the substation via underground cabling. Notwithstanding several recorded archaeological sites between the appeal site and the south-eastern side of Burnham-on-Crouch, there is nothing to indicate that a satisfactory route could not be designed for such an underground connection. The SoCG records that likely potential environmental effects of this grid connection were considered in the ES and considered not to be significant. Grid connection would be a matter for the relevant regional Distribution Network Operator (DNO). There are no obvious reasons why such a connection would not be possible, or that the necessary approvals would be refused, but this remains a matter for the DNO, and a commercial risk for the appellant. Proximity of a likely grid connection is not a consideration which would weigh against the proposal.

192. There is no evidence that the proposed turbines would result in any interference with electro-magnetic transmissions in the locality. This is a matter that in accordance with the PPG could be addressed by condition. [20,115]

193. The proposal would result in some socio-economic benefits, primarily from the construction of the wind farm, but the impact on the local economy would be limited. [31]

(2) Alternative marine delivery route for abnormal loads

194. The Council’s fourth reason for refusal in Appeal A considers that insufficient justification has been provided to demonstrate why a marine delivery route for abnormal loads cannot be accommodated as an alternative. It adds that such an approach is to be used with the Middlewick wind farm, and would be the preferred AIL delivery route. EN-1 advises that the relevance or otherwise of alternatives is in the first instance a matter of law, and that from a policy perspective there is no general requirement to consider alternatives or to

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231 ES Figures 7.1 and 7.2.
232 SoCG paragraph 8.2.
233 CD26 section 4.9.
234 The Inquiry heard that this would involve landing AIL on the south coast of the Dengie peninsula on land managed by Strutt and Parker Farms.
establish whether the proposed project represents the best option.\textsuperscript{235} The appeals should accordingly be dealt with on their merit. However, with respect to road traffic noise from construction vehicles for residents along the proposed route, it is relevant to note that the NPSE aims to mitigate and minimise adverse impacts on the quality of life. The \textit{Framework} advises that the planning system should contribute to and enhance the natural and local environment by, amongst other things, minimising impacts on biodiversity. Furthermore, EN-3 encourages applicants to work together so as to minimise cumulative effects on highway users.\textsuperscript{236} Given that the proposed route for AIL in the appeal scheme would result in the loss of some roadside vegetation, along with the aims of the NPSE, the availability of alternative access for AIL is a relevant consideration to be weighed in the balance in this case. \[64,67,95\]

195. However, the issue is not whether an alternative might be more appropriate than that proposed, but whether an available alternative access for AIL might meet the need in a way which could be less objectionable than the appeal scheme. If so, this would add weight to arguments in favour of dismissing the appeals. If not, this would add weight to the case that the appeals should succeed. There would be biodiversity and amenity advantages in AIL avoiding local roads by using a marine delivery route. But the evidence before the Inquiry is that such an option is currently unavailable to the appellant.\textsuperscript{237} The Council believes that the appellant could have pursued this more rigorously with the landowners involved. However, the landowners’ responses do not provide any reasonable basis for doing so. Strutt and Parker Farms confirmed that it was not able to grant rights of access due to commitments made to other operators. SIEGE argues that the alternative arrangement for fixed wing aircraft using the grassed strip, which only emerged at the Inquiry, is a relevant consideration given that the owner of the only other land which could facilitate marine delivery cited the creation of a conflict of interest with a tenant leasing an airstrip as one reason for having no interest in developing an access route across his land. Nonetheless, EN-1 paragraph 4.4.3 last bullet point supports the case that there should be some onus on those advocating an alternative approach to provide evidence about its suitability. It seems to me that this might include evidence showing that a preferable alternative was available, or at least had reasonable prospects. No such evidence was adduced at this Inquiry. The likelihood of an alternative marine delivery route for AIL does not, therefore, add weight to arguments in favour of dismissing the appeals. \[41,67\]

(3) \textit{Renewable energy (RE)}

196. There is a wide measure of agreement about relevant policy for RE, which is helpfully set out in Appendix 2 to the SoCG, along with common ground in Appendix 3 about constructed, under construction and consented capacity in the region. In summary, the European Union Renewable Energy Directive has a commitment to a binding target of 20\% of its energy coming from renewable sources by 2020. The UK Renewable Energy Strategy confirms the 15\%.

\textsuperscript{235} EN-1 paragraph 4.4.1.
\textsuperscript{236} EN-3 paragraph 2.7.82. However, it should be noted that those promoting Nationally Significant Infrastructure Projects would have compulsory purchase powers, which is not so for the appellant.
\textsuperscript{237} Emails from landowners dated August 2012. ID35.1 Strutt and Parker Farms and ID35.2 Burnham Wick Farm.
contribution which the UK is expected to make to the EU’s 2020 target, and in order to be achievable, it will require more than 30% of the UK’s electricity generation to come from renewable sources. The Government has since confirmed in the UK Renewable Energy Roadmap 2011 the scale of the development of RE that will be required to meet the 2020 targets. [24,69,99]

197. The Written Ministerial Statement by Edward Davey: Onshore Wind provides that appropriately sited onshore wind, as one of the most cost effective and proven RE technologies, has an important part to play in a responsible and balanced UK energy policy as it reduces reliance on imported fossil-fuels and helps keep the lights on and our energy bills down. The statement adds that the UK has some of the best wind resources in Europe, and that the Government is determined that the UK will retain its reputation as one of the best places to invest in wind energy.238 [72]

198. The proposed wind farm would be capable of producing the equivalent amount of electricity per annum that is required for the annual domestic needs of approximately 7,585 households based on the UK averaged domestic electricity consumption of 4,700 kilowatt hours per annum, so offsetting approximately 15,300 tonnes of carbon dioxide per annum.239 The PPG refers to capacity factor as the simplest way of expressing the energy capture at a site, and notes that this can be useful information in considering the energy contribution to be made by a proposal, particularly when a decision is finely balanced.240 However, in this case an estimate of actual electricity generation has been submitted, which was not disputed at the Inquiry. This takes into account local wind conditions and the candidate turbine. The generation of 46.5 GWh/yr of RE would make a significant contribution to meeting national targets and reducing GHG emissions. This is a consideration which weighs heavily in favour of the proposal. [18,28,31,44,72,105]

(4) Planning balance

199. The planning balance is a matter of judgement. The proposed wind farm would have an adverse effect on landscape character and visual amenity of overall moderate significance. However, its likely effects on the living conditions of those residing in the area would not be significant having regard to relevant policy. There would be some harm to local amenity, but this would largely be attributable to the effects on the local landscape and visual amenity of the area, which should not be double counted in the balancing exercise. The proposal would have a minor effect on cultural heritage. Subject to the imposition of appropriate conditions the wind farm would not unduly affect air safety, biodiversity or highway safety. Some minor benefits would accrue to the local economy. The main consideration here is the effect on the character and appearance of the area, against which must be weighed the benefits of the RE that would be generated during the lifetime of the proposed wind farm. EN-3 recognises that the landscape and visual effects will only be one consideration to be taken into account and that these must be considered alongside the wider

238 ID43b.
239 SoCG section 20 notes that these offset figures would change during the lifetime of the proposed wind farm as the national mix of generation sources changes.
240 PPG paragraph 38.
environmental, economic and social benefits that arise from RE projects. The balancing exercise should be made within the context of Government policy on sustainable development.

200. The proposed development would make a significant contribution to RE targets and towards the reduction of GHG. This should be given significant weight. The proposal would not generate an unacceptable level of noise or traffic, and having regard to Government policy on sustainable development would accord with the aims of the NPSE. The harm to the character and appearance of the area, and any disruption and inconvenience for those using the local road network during construction and decommissioning, along with any slight effect on heritage assets, would be outweighed by the public benefits of generating electricity from a renewable source. I am satisfied that the circumstances here would justify the removal of part of the hedgerow in Appeal B.\textsuperscript{241} In my judgement, the planning balance falls in favour of the proposed development. \textsuperscript{[30,31,32,44,45]}

(5) Development plan

201. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires these appeals to be decided having regard to the development plan, and to be determined in accordance with it, unless material considerations indicate otherwise. The proposal would conflict with LP Policy PU6, which permits renewable energy facilities provided that they would not have a significant visual impact on the appearance of the surrounding area, the countryside or local landscape. But there would be no conflict with the provisions of Policy PU6 concerning an unacceptable effect on noise and traffic. The proposal would conflict with LP Policy CC6, which permits development in the countryside only where no harm would be caused to the landscape character of the locality. The proposed wind farm would also be contrary to LP Policy CC7 concerning the SLA because it would not conserve the character of the area. Furthermore, the scheme would not meet the requirements in LP Policy CC11 that development permitted in the Coastal Zone would require a coastal location and have minimal impact on views into and out of the area. Nor would it accord with a requirement that development outside development boundaries should make a positive contribution to the landscape and open countryside pursuant to LP Policy BE1. A similar conflict arises with Policy S2, which provides that outside the boundaries for settlements the coast and countryside would be protected for their own sake, particularly for their landscape. However, the proposal would not offend Policy CC10 concerning the historic landscape, or the other LP Policies set out in Annex 1 to this report. But overall, the proposal conflicts with the development plan when read as a whole. However, the Framework provides that due weight should be given to relevant policies in existing plans according to their degree of consistency with the Framework. \textsuperscript{[7,68,100-103]}

(6) National Planning Policy Framework

202. The economic, social and environmental roles for the planning system, which derive from the three dimensions to sustainable development in the Framework, require in this case that a balancing exercise be performed to weigh the benefits

\textsuperscript{241} Regulation 6(e) of The Hedgerow Regulations 1997 provides that the removal of any hedgerow to which the Regulations apply is permitted if it is required for carrying out development for which planning permission has been granted.
of the proposed wind farm against its disadvantages. Core planning principles in the Framework support the transition to a low carbon future in a changing climate, and encourage the use of renewable resources, for example by the development of RE. Supporting the delivery of RE is central to the economic, social and environmental dimensions of sustainable development. Other core principles recognise the intrinsic character and beauty of the countryside, along with conserving and enhancing the natural environment, and conserving heritage assets in a manner appropriate to their significance. It also provides that a proposal for RE should be approved if its impacts are, or could be made, acceptable. SIEGE submits that this reference to "impacts" means that this is not the engagement of a balancing exercise between impacts and the need for RE, but an evaluation of whether the landscape, visual and other impacts are, of themselves, acceptable. However, whether 'acceptable' here means worthy or deserving of being accepted, or satisfactory/tolerable, this is a matter to be judged, not in some absolute sense, but in the context of the Framework’s overall objectives for sustainable development. [29,69,70,103,104]

203. The LP does not include criteria-based policies to enable the assessment of RE schemes. Furthermore, whilst the SLA designation is indicative of a valued landscape, the LP does not set criteria based policies against which proposals for any development on or affecting such landscape areas would be judged. The provisions in the LP are not consistent with the Framework. This is not disputed by the Council. On matters about which the development plan is silent, the Framework advises that permission should be granted unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the Framework taken as a whole; or specific policies in the Framework indicate development should be restricted. With respect to the latter, the minor effect on designated heritage assets in this case would not be sufficient to justify such a restriction. [68]

204. I have found that the planning balance here falls in favour of the proposal. This is not a case where the adverse impacts I have identified would significantly and demonstrably outweigh the benefits of the scheme. The proposal would not accord with the development plan, but I consider that it would be acceptable having regard to the Framework’s objectives for sustainable development. The encouragement given in the Framework for RE is sufficient here to outweigh any harm to the intrinsic character and beauty of this part of the countryside. The suggested conditions would make this scheme acceptable, and in accordance with the Framework this would indicate that the RE proposal should be approved. The proposed development gains considerable support from the Framework, when read as a whole. There are grounds here to find that the proposal would be sustainable development, to which the presumption in favour set out in the Framework would apply.

(7) Conditions and obligations

205. The need for conditions and their wording should properly be considered in the light of the advice contained in Circular 11/95 The Use of Conditions in Planning Permissions. The parties reached a measure of agreement at the Inquiry about possible conditions in the event that planning permission was granted for the proposal. [116]

206. The conditions agreed at the Inquiry, with some minor alterations in the interests of precision and enforceability would be necessary to minimise the
impact of the proposed development. The conditions set out in the Schedule of Conditions attached to this report would reasonably relate to the proposed development and would appropriately address some of the issues raised at the Inquiry. The reason for each condition is set out in more detail below. No planning obligation has been submitted and none is necessary. [117]

Appeal A

207. A five year commencement period would be appropriate given the requirement for off-site highway works (Condition 1). This was not disputed at the Inquiry. This would be a temporary permission and a condition would need to specify that it would expire 25 years from the date that electricity was first exported to the grid (Condition 2). Otherwise than as set out in any decision and conditions, or approval pursuant to a condition, it would be necessary that the development be carried out in accordance with the approved plans, including micro-siting, for the avoidance of doubt and in the interests of proper planning (Condition 3). Provision for the removal of structures and restoration, including any turbines which ceased to operate for a continuous period of 12 months, would be necessary in the interests of the appearance of the area, and to accord with paragraph 45 of the PPG (Conditions 4 and 5). A construction method statement would need to be approved and implemented to safeguard the amenities of the area (Condition 6). For similar reasons, it would be necessary to implement approved works in the public highway, subject to an arboricultural method statement, to accommodate abnormal indivisible loads (AIL) (Condition 7).

208. A traffic management plan for all construction vehicles would be necessary in the interests of highway safety (Condition 8), as would a restriction on AIL movements prior to the completion of the proposed highway works at Fambridge and Twizzlefoot (Condition 9). Hours of operation of the construction phase would need to be restricted, whilst making provision for emergency works and AIL (Conditions 10 and 11). On-site cabling would need to be underground in the interests of the appearance of the area (Condition 12). For similar reasons, the finish of the turbines and other details of the transformer units and masts would need to be approved, and no name, sign, symbol or logo should be displayed on any of these structures (Condition 13). The height and location of the proposed turbines, subject to appropriate micro-siting, would need to be specified so as to accord with the assessment of their likely effects (Condition 14). Turbine blades should rotate in the same direction for visual amenity reasons (Condition 15). Similarly, external lighting would need to be controlled (Condition 16). So too would details about the substation and compound (Condition 17).

209. A scheme for ecological mitigation and enhancement would need to be approved and implemented in the interests of biodiversity (Condition 18), as would ornithological monitoring (Condition 22). It would be necessary to secure the implementation of a programme of archaeological work in accordance with an approved scheme of investigation (Condition 19). Conditions would be required to deal with any electro-magnetic interference to TV and radio reception, and any shadow flicker (Conditions 20 and 21). Details of a scheme to mitigate any adverse effects of the development on the Primary Surveillance Radar at Southend Airport would need to be approved and implemented (Condition 23).

210. A noise condition would be necessary to accord with the provisions of ETSU-R-97. The suggested form of the condition and associated Guidance Notes would accord with the Institute of Acoustics’ Good Practice Guide. In Guidance
Note 4, given the possibility of other wind turbines in the area not under the control of the appellant, it would be necessary for a methodology to be approved for the measurement of the influence of residual noise. There is a dispute between the appellant and the Council, in the event that it was necessary to constrain the normal running of turbines so as to comply with the noise condition, about the need to impose a condition requiring a scheme to be submitted showing the meteorological conditions under which each turbine was to be constrained and the nature of the constrained mode. The appellant considers that this should be a matter for the operator, as it might vary depending on circumstances. This argument has some force. In ensuring compliance with the condition it would not be necessary for the Council to be advised of any scheme of constraint, only that it was effective.

Appeals B and C

211. A five year commencement period for the schemes in Appeals B and C would be necessary to accord with any planning permission granted in Appeal A (Condition 1). Otherwise than as set out in any decision and conditions, it would be necessary that the development be carried out in accordance with the approved plans, for the avoidance of doubt and in the interests of proper planning (Condition 2). However, in Appeal B the detail on Sheet 2 is noted as indicative only, and so would need to be approved as part of a scheme of works. This would also need to include a timetable for implementation. Similarly for Appeal C works would need to be approved because the drawing states that details of the bridge are indicative only and subject to detailed design. For both, details would need to be approved of implementation works, restoration and maintenance of land outside the highway carriageway, along with in Appeal B a method statement to safeguard trees (Condition 3). The link between Appeals B and C with Appeal A should not just be to the grant of planning permission for Turncole wind farm, but to the implementation of that permission, as the proposal has been assessed as an integrated scheme (Condition 4).

(8) Overall conclusions

212. The Written statement to Parliament Local planning and onshore wind proposes amended secondary legislation to make pre-application consultation with local communities compulsory for the more significant onshore wind applications, to ensure that community engagement takes place at an earlier stage in more cases. In this case consultation and engagement with the local community was undertaken before the application was submitted. Furthermore, there has been extensive community involvement in the processing of the applications and appeals. There is considerable local opposition to the proposed development, which is evident from the written representations and the submissions made at the Inquiry, but also some support. One of the aims of national planning policy is to strengthen local decision making. However, it remains a general principle of the planning system that local opposition or support for a proposal is not in itself a ground for refusing or granting planning permission, unless it is founded upon valid planning reasons. The proposal falls to be determined on its planning merits. [72,105]

242 ID43a.
244 The Planning System: General Principles ODPM 2005.
213. The proposed development would result in some harm. EN-1 states that without significant amounts of new large-scale energy infrastructure, the objectives of the Government’s energy and climate change policy cannot be fulfilled, but it will not be possible to develop the necessary amounts of such infrastructure without some significant residual adverse impacts. The relative scale of wind farms might be open to some interpretation, but for such tall structures this advice would be relevant here, particularly as cumulatively the appeal scheme would contribute to the Government’s objectives. In my judgement, the likely harm from Turncole wind farm, both by itself and cumulatively with other existing or proposed turbines in the locality, would be outweighed by the RE benefits of the proposal. The scheme would conflict with the development plan, but the Council accepts that relevant policy is out-of-date. The support the proposal gains from the Framework carries the greater weight. National policy and guidance is a consideration in this case which indicates that the appeals should be determined other than in accordance with the development plan. Taking all these considerations into account, I consider that the proposed wind farm would be acceptable in this location.

214. All other matters raised in evidence have been taken into account, but there is nothing to outweigh the main considerations that lead to my conclusions.

Recommendations

215. It is recommended that the appeals be allowed and that planning permission be granted, subject to the conditions set out in the attached Schedule of Conditions.

John Woolcock
Inspector

245 EN-1 paragraph 3.2.3.
ANNEX 1  Summary of Local Plan policies cited in the SoCG

Policy PU6 states that proposals for the development of RE facilities will be permitted provided they would not: (a) have a significant visual impact on the appearance of the surrounding area, the countryside or local landscape: and (b)(i) generate an unacceptable level of noise or traffic; or (ii) have an adverse impact upon areas of ecological, architectural, landscape, historical or conservation importance; or have a detrimental impact upon adjoining properties and landholdings.

Policy S1 concerns development boundaries for settlements, and S2 provides that outside these boundaries, the coast and countryside would be protected for their own sake, particularly for their landscape, natural resources and areas of ecological, historical, archaeological, agricultural and recreational value.

Policy BE1 sets out criteria for the design of new development and landscaping. These include compatibility with their surrounding in terms of matters such as scale, visual impact, effect on amenity, relationship with mature trees, and traffic impact and access arrangements.

Policies CC1, CC2 and CC3 concern development affecting internationally, nationally and locally designated nature conservation sites, respectively.

Policy CC5 aims to safeguard protected species and features of nature conservation interest, and includes provision for mitigation measures and habitat enhancement where wildlife gains can be achieved.

Policy CC6 aims to protect, conserve and enhance the natural beauty, tranquillity, amenity and traditional quality of the landscape. It permits development in the countryside only where no harm would be caused to the landscape character of the locality, the location, siting, design and materials would be appropriate, and landscaping would protect and enhance the local distinctiveness and diversity of the area.

Policy CC7 provides that within SLAs permission would not be given for development unless its location, siting, design, materials and landscaping would conserve or restore the character of the area.

Policy CC10 provides that development would not be permitted which would have a materially adverse impact upon landscape features of historic importance such as ancient woodland, registered parks and gardens, registered battlefields protected lanes and hedgerows.

Policy CC11 states that within the defined Coastal Zone development would only be permitted if it, amongst other things, required a coastal location, would not adversely affect the open and rural character of the area, its historic features and its wildlife, and had minimal impact on views into and out of the area.

Policy CON5 provides that development having an adverse impact on the environment by pollution of land, air, water etc would be refused, and expects all development to minimise its impact on the environment by adopting best practice and implementing necessary pollution prevention measures.
Policy T2 provides that new development should, where appropriate, provide for safe access, off-site highway improvements, and road layouts appropriate for the location. It adds that larger scale development requires a Green Travel Plan.
SCHEDULE OF CONDITIONS

Appeal A: APP/X1545/A/12/2174982

1) The development hereby permitted shall begin not later than five years from the date of this decision.

2) This permission shall expire 25 years from the date when electrical power is first exported from any of the wind turbines hereby permitted to the electricity grid network, excluding electricity exported during initial testing and commissioning ("First Export Date"). Written confirmation of the First Export Date shall be provided to the local planning authority no later than one calendar month after the event.

3) The development hereby permitted shall be carried out in accordance with the following approved plans: Planning Application Boundary (Site Location Plan) Drawing No.02340D2908-05, Turbine Layout with Micro-siting Drawing No.02340D2107-05 and Infrastructure Layout Drawing No.02340D1001-14.

4) If any wind turbine fails for a continuous period of 12 months to supply electricity to the local electricity grid network, then, unless otherwise approved in writing by the local planning authority that wind turbine and ancillary development solely related to it shall be taken down and removed from the site and the land shall be reinstated in accordance with a reinstatement scheme approved in writing by the local planning authority (which shall include a timetable for the removal of the turbine(s) and the reinstatement of the land). The developer shall submit the reinstatement scheme to the local planning authority not later than 28 days after the expiry of the twelve month period provided for in this condition, and the scheme shall be implemented as approved.

5) No later than twelve months before the expiry of this permission a scheme for the decommissioning and the restoration of the site shall be submitted to the local planning authority for approval in writing. The scheme shall make provision for the removal of the wind turbines and their associated ancillary equipment to a depth up to one metre below ground and the reinstatement of the site. The scheme shall include proposals for the management and timing of the works, measures to be taken to safeguard and where possible enhance wildlife habitats and a traffic management plan and shall be implemented as approved.

6) No development shall commence until a Construction Method Statement has been submitted to and approved in writing by the local planning authority. The construction of the development shall only be carried out in accordance with the approved Construction Method Statement, unless otherwise approved in writing by the local planning authority. The Construction Method Statement shall address the following matters:
   (a) A Site Environmental Management Plan to include details of measures to be taken during the construction period to protect wildlife, habitats and hydrology; an ecological survey; an investigation and monitoring scheme to oversee and direct construction works; and details of soil handling, storage and restoration.
   (b) Details of the timing of works and methods of working for cable trenches and foundation works.
(c) Details of the timing of works and construction of the substation/control buildings and anemometry masts.
(d) Dust management.
(e) Pollution control: protection of water courses and ground water and soils, bunding of fuel storage areas, sewage disposal.
(f) Disposal of surplus materials.
(g) Construction noise management plan including identification of access routes, locations of materials lay-down areas, details of equipment to be employed, operations to be carried out, mitigation measures and a scheme for the monitoring of noise.
(h) Details of a site evacuation/flood management plan.
(i) Temporary site illumination.
(j) The construction of the access into the site and the creation and maintenance of visibility splays.
(k) Wheel cleaning facilities.
(l) Arrangements for keeping the site entrance and adjacent public road clean.
(m) Post-construction restoration and reinstatement of the working areas.

The approved Construction Method Statement shall be implemented and maintained for the duration of the construction works.

7) No development shall commence until a scheme providing for works in the public highway (reflecting the works shown on Figures 3.1 and 3.2 of submitted Supplementary Environmental Information) to enable abnormal indivisible loads (AIL) to access the site has been submitted to and approved in writing by the local planning authority. The scheme shall be implemented as approved and shall:
   (a) Make provision to ensure that the use of the improvement works at the junction of Marsh Road with Church Road/Southminster Road Burnham-on-Crouch is restricted to these AIL only.
   (b) Include an arboricultural method statement which shall address management and safeguarding of all trees along the AIL route.

8) No development shall commence until a Construction Traffic Management Plan has been submitted to and approved in writing by the local planning authority. The plan, which shall be implemented as approved, shall apply to all construction traffic and shall include, but shall not be limited to:
   (a) A pre and post construction road survey, and a programme and methodology for any repairs as a consequence of any damage caused by construction traffic following the completion of construction.
   (b) Provisions for the routeing of traffic to and from the site.
   (c) Proposal for the timing of traffic movements.
   (d) Proposal for the management of traffic movements at junctions with, and pedestrian crossings of, the public highway.
   (e) Provisions of signs warning of construction traffic.
   (f) The removal and replacement of street furniture, road verges, or other items within the public.
   (g) Arrangements to ensure that construction traffic does not use the junction of Marsh Road with Church/Southminster Road Burnham on Crouch when children are scheduled to arrive at or leave Ormiston Academy or St.Mary’s Primary school.
9) No AIL movements shall take place until all works have been completed in accordance with the permissions granted pursuant to Appeal References APP/X1545/A/12/2179484 and APP/X1545/A/12/2179225.

10) The hours of operation of the construction phase of the development and any traffic movements to or from the site associated with the construction of the development hereby permitted shall be limited to 0700 hours to 1900 hours on Mondays to Saturdays. No work shall take place on Sundays or Bank Holidays, except for any works previously approved in writing by the local planning authority. Construction works so approved shall not be audible from the boundary of any dwelling. Any emergency works carried out outside the hours provided for in this condition shall be notified in writing to the local planning authority within seven working days of occurrence.

11) Notwithstanding the provisions of Condition 10, delivery of abnormal indivisible loads may take place outside the hours specified subject to not less than 24 hours prior notice of such traffic movements being given to the local planning authority.

12) All cabling on the site between the wind turbines and the site sub-station shall be installed underground.

13) The turbines shall have a semi matt finish and a pale grey colour. Prior to the erection of any turbine its exact finish and colour along with details of the dimensions, finish and colour of any external transformer units and the proposed meteorological and communications masts shall be submitted to and approved in writing by the local planning authority. No name, sign, symbol or logo shall be displayed on any external surfaces of the turbines or any external transformer units or the masts other than those required to meet statutory requirements. The development shall be carried out as approved and thereafter be retained in accordance with the approved details.

14) The height of each of the wind turbines shall not exceed 126.5 metres to the tip of the blades when the turbine is in the vertical position. The hub height of the wind turbines shall be between 77 metres and 87 metres. In each case the height shall be as measured from natural ground conditions immediately adjacent to the turbine base.

The wind turbines shall be erected at the following coordinates:

<table>
<thead>
<tr>
<th>Turbine ID</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>597864</td>
<td>197734</td>
</tr>
<tr>
<td>T2</td>
<td>598203</td>
<td>197889</td>
</tr>
<tr>
<td>T3</td>
<td>598408</td>
<td>197589</td>
</tr>
<tr>
<td>T4</td>
<td>598756</td>
<td>197686</td>
</tr>
<tr>
<td>T5</td>
<td>599047</td>
<td>197452</td>
</tr>
<tr>
<td>T6</td>
<td>599442</td>
<td>197280</td>
</tr>
<tr>
<td>T7</td>
<td>599420</td>
<td>197663</td>
</tr>
</tbody>
</table>

Notwithstanding the locations of the turbines and other infrastructure shown on Figure 4.2 of the Environmental Statement the turbines may be located within the micro-siting areas shown on Figure 4.1 of the Environmental Statement. The consequential realignment of the associated infrastructure shall also be permitted.

15) All wind turbine blades shall rotate in the same direction.
16) No wind turbine or anemometry mast shall be externally lit except for a PIR activated light above the door to turbines and substation to aid engineers accessing the site during dusk or darkness, temporary lighting required during the construction period or during maintenance, unless otherwise previously approved in writing by the local planning authority.

17) No development of the substation shall commence until details of the appearance, surface materials and dimensions of the proposed substation have been submitted to and approved in writing by the local planning authority. The details of the compound and substation shall reflect what is shown in Figures 4.7 and 4.8 of the Environmental Statement and shall not exceed the total area shown in those figures unless otherwise approved in writing by the local planning authority. The development shall be carried out as approved.

18) No development shall commence until a scheme reflecting the Ecological Mitigation and Enhancement Strategy contained in Chapters 6 and 14 of the Environmental Statement has been submitted to and approved in writing by the local planning authority. The scheme shall be implemented as approved.

19) No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted to and approved in writing by the local planning authority.

20) No development shall take place on site until a scheme to secure the investigation and alleviation of any electro-magnetic interference to TV and radio reception caused by the operation of the turbines has been submitted to and approved by the local planning authority. The scheme shall provide for the investigation by a qualified independent television engineer of any complaint of interference with television reception at a dwelling (defined for the purposes of this condition as a building within use Class C3 of the Use Classes Order) which lawfully exists or had planning permission at the date of this permission where such a complaint is notified to the developer by the local planning authority within 12 months of the First Export Date. Where impairment is determined by the qualified independent television engineer to be attributable to the wind farm, details of the mitigation works which have been approved in writing by the local planning authority shall be implemented in accordance with the approved scheme.

21) Prior to the erection of any wind turbine a scheme providing for the avoidance of shadow flicker at any dwelling lawfully existing or with planning permission at the date of this permission shall be submitted to and approved in writing by the local planning authority. The approved scheme shall be implemented and thereafter retained.

22) Prior to the commencement of the development an ornithological post construction monitoring scheme (to include but not be limited to corpse searching) for a period of five years to commence when all of the wind turbines have been erected shall be submitted to and approved in writing by the local planning authority. The scheme shall include a methodology for the carrying out of the monitoring and shall make provision for annual reports of that monitoring to be submitted to the local planning authority. The monitoring scheme shall be implemented as approved.

23) No development shall take place until details of a scheme to mitigate any adverse effects of the development on the Primary Surveillance Radar at
Southend Airport which shall include the arrangements for the implementation of the scheme, have been submitted to and approved in writing by the local planning authority. No turbine shall be erected until the scheme has been implemented in accordance with the approved details.

24) The level of noise immissions from the combined effects of the wind turbines within this development (including the application of any tonal penalty) when calculated in accordance with the attached Guidance Notes, shall not exceed the values for the relevant integer wind speed set out in the attached Table 1. Noise limits for dwellings which lawfully exist or have planning permission for construction at the date of this consent but are not listed in the Tables attached shall be those of the physically closest location listed in the Tables unless otherwise approved in writing by the local planning authority. The coordinate locations to be used in determining the location of each of the dwellings listed in Table 1 shall be those listed in Table 2.

The wind farm operator shall continuously log power production, wind speed and wind direction, all in accordance with Guidance Note 1(d). These data shall be retained for a period of not less than 12 months. The wind farm operator shall provide this information to the local planning authority on its request within 28 days of receipt in writing of such a request. The data shall be supplied in comma separated values in electronic format unless otherwise approved in writing by the local planning authority.

Within 28 days from receipt of a written request from the local planning authority following a complaint to the local planning authority from an occupant of a dwelling which lawfully exists or has planning permission at the date of this permission, the wind farm operator shall, at the wind farm operator’s expense, employ an independent consultant approved in writing by the local planning authority to assess the level of noise immissions from the wind farm at the complainant’s property in accordance with the procedures described in the attached Guidance Notes. The written request from the local planning authority shall set out at least the date, time and location that the complaint relates to and any identified atmospheric conditions, including wind direction.

The wind farm operator shall provide to the local planning authority the independent consultant’s assessment of the said complaint in accordance with the attached Guidance Notes within the later of two months of the date of the written request of the local planning authority above or two months following the approval of the local planning authority of the independent consultant and the approval of rain gauge location(s) under Guidance Note 1e, unless the time limit is extended in writing by the local planning authority. All data collected for the purposes of undertaking the compliance measurements shall be made available to the local planning authority on its request within 28 days of receipt in writing of such a request.
Table 1

Noise limits expressed in dB $L_{A90,10\text{-minute}}$ as a function of the standardised wind speed (m/s) at 10 metre height as determined within the site averaged over 10 minute periods

<table>
<thead>
<tr>
<th>Location</th>
<th>Standardised wind speed at 10 m height in m/s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>West Wycke Farm</td>
<td>38.0</td>
</tr>
<tr>
<td>Great West Wycke Farmhouse</td>
<td>38.0</td>
</tr>
<tr>
<td>1 Redward Cottages</td>
<td>38.0</td>
</tr>
<tr>
<td>New Bungalow</td>
<td>38.0</td>
</tr>
<tr>
<td>Turncole Farm</td>
<td>44.8</td>
</tr>
<tr>
<td>Broadward Farm</td>
<td>44.9</td>
</tr>
<tr>
<td>Poultry Farm</td>
<td>38.0</td>
</tr>
<tr>
<td>3 East Wick Cottages</td>
<td>38.0</td>
</tr>
<tr>
<td>Montsale Bungalow</td>
<td>38.0</td>
</tr>
<tr>
<td>West Wycke Bungalow</td>
<td>38.0</td>
</tr>
<tr>
<td>Old Montsale Farm</td>
<td>38.0</td>
</tr>
<tr>
<td>Wraywick Farm</td>
<td>38.0</td>
</tr>
<tr>
<td>Deal Hall</td>
<td>38.0</td>
</tr>
<tr>
<td>New Montsale</td>
<td>38.0</td>
</tr>
<tr>
<td>Middlewick Cottage</td>
<td>38.0</td>
</tr>
<tr>
<td>Middlewick</td>
<td>38.0</td>
</tr>
<tr>
<td>Court Farm</td>
<td>38.0</td>
</tr>
<tr>
<td>Wraywick Cottage</td>
<td>38.0</td>
</tr>
<tr>
<td>Dammerwick Farmhouse</td>
<td>38.0</td>
</tr>
<tr>
<td>Newmans Farm</td>
<td>38.0</td>
</tr>
<tr>
<td>8 Dammerwick Cottages</td>
<td>38.0</td>
</tr>
<tr>
<td>Brook Farmhouse</td>
<td>38.0</td>
</tr>
<tr>
<td>1 East Wick Cottages</td>
<td>38.0</td>
</tr>
<tr>
<td>2 Coney Hall Cottages</td>
<td>38.0</td>
</tr>
<tr>
<td>Coney Hall</td>
<td>38.0</td>
</tr>
</tbody>
</table>
Table 2

Coordinate locations of the properties listed in Table 1.

<table>
<thead>
<tr>
<th>House Name</th>
<th>British National Grid Coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Easting</td>
</tr>
<tr>
<td>West Wycke Farm</td>
<td>597924</td>
</tr>
<tr>
<td>Great West Wycke Farmhouse</td>
<td>598490</td>
</tr>
<tr>
<td>1 Redward Cottages</td>
<td>598532</td>
</tr>
<tr>
<td>New Bungalow</td>
<td>598818</td>
</tr>
<tr>
<td>Turncole Farm</td>
<td>599105</td>
</tr>
<tr>
<td>Broadward Farm</td>
<td>598483</td>
</tr>
<tr>
<td>Poultry Farm</td>
<td>598944</td>
</tr>
<tr>
<td>3 East WickCottages</td>
<td>600254</td>
</tr>
<tr>
<td>Montsale Bungalow</td>
<td>600456</td>
</tr>
<tr>
<td>West Wycke Bungalow</td>
<td>597954</td>
</tr>
<tr>
<td>Old Montsale Farm</td>
<td>600729</td>
</tr>
<tr>
<td>Wraywick Farm</td>
<td>598431</td>
</tr>
<tr>
<td>Deal Hall</td>
<td>601025</td>
</tr>
<tr>
<td>New Montsale</td>
<td>600712</td>
</tr>
<tr>
<td>Middlewick Cottage</td>
<td>600712</td>
</tr>
<tr>
<td>Middle wick</td>
<td>601275</td>
</tr>
<tr>
<td>Court Farm</td>
<td>601408</td>
</tr>
<tr>
<td>Wraywick Cottage</td>
<td>598135</td>
</tr>
<tr>
<td>Dammerwick Farmhouse</td>
<td>596297</td>
</tr>
<tr>
<td>Newmans Farm</td>
<td>596221</td>
</tr>
<tr>
<td>8 Dammerwick Cottages</td>
<td>596029</td>
</tr>
<tr>
<td>Brook Farmhouse</td>
<td>595815</td>
</tr>
<tr>
<td>1 East WickCottages</td>
<td>600105</td>
</tr>
<tr>
<td>2 Coney HallCottages</td>
<td>600877</td>
</tr>
<tr>
<td>Coney Hall</td>
<td>600901</td>
</tr>
</tbody>
</table>

Note to Table 2: The geographical coordinate references are provided for the purpose of identifying the general location of dwellings to which a given set of noise limits applies.
Guidance Notes for Noise Conditions

These notes are to be read with and form part of Condition 24. They further explain the noise conditions and specify the methods to be employed in the assessment of complaints about noise immissions from the wind farm. Reference to ETSU-R-97 refers to the publication entitled *The Assessment and Rating of Noise from Wind Farms* (1997) published by the Energy Technology Support unit (ETSU) for the Department of Trade and Industry (DTI).

Guidance Note 1

(a) Values of the $L_{A90,10\text{-minute}}$ noise statistic should be measured at the complainant’s property, using a sound level meter of EN 60651/BS EN 60804 Type 1, or BS EN 61672 Class 1 quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This should be calibrated in accordance with the procedure specified in BS 4142: 1997 (or the equivalent UK adopted standard in force at the time of the measurements). Measurements shall be undertaken in such a manner to enable a tonal penalty to be applied in accordance with Guidance Note 3.

(b) The microphone should be mounted at 1.2-1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved in writing by the local planning authority, and placed outside the complainant’s dwelling. Measurements should be made in “free field” conditions. To achieve this, the microphone should be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the wind farm operator shall submit for the written approval of the local planning authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative measurement location.

(c) The $L_{A90,10\text{-minute}}$ measurements should be synchronised with measurements of the 10-minute arithmetic mean wind speed and operational data logged in accordance with Guidance Note 1(d), including the power generation data from the turbine control systems of the wind farm.

(d) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed in metres per second and wind direction in degrees from north at hub height for each turbine and arithmetic mean power generated by each turbine, all in successive 10-minute periods. Unless an alternative procedure is previously approved in writing by the local planning authority, this hub height wind speed, averaged across all operating wind turbines, shall be used as the basis for the analysis. Each 10 minute arithmetic average mean wind speed data measured at hub height shall be ‘standardised’ to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres. It is this standardised 10 metre height wind speed data which is correlated with the noise measurements and referred to in Table 1. All 10-minute periods shall commence on the hour and in 10-minute increments thereafter synchronised with Greenwich Mean Time and adjusted to British Summer Time where necessary.
(e) Prior to the commencement of measurements the wind farm operator shall submit for the approval in writing of the local planning authority details of the proposed location of a data logging rain gauge which shall be installed during the course of the assessment of the levels of noise immissions. The data logging rain gauge shall record rainfall over successive 10-minute periods synchronised with the periods of data recorded in accordance with Note 1(d).

Guidance Note 2

(a) The noise measurements should be made so as to provide not less than 20 valid data points as defined in Guidance Note 2 paragraph (b).
(b) Valid data points are those measured in the conditions specified by the local planning authority under noise condition 24, but excluding any periods of rainfall measured in the vicinity of the sound level meter.
(c) For those data points considered valid in accordance with Guidance Note 2(b), values of the $L_{A90,10\text{-minute}}$ noise measurements and corresponding values of the 10-minute wind speed, as derived from the standardised ten metre height wind speed averaged across all operating wind turbines using the procedure specified in Guidance Note 1(d), shall be plotted on an XY chart with measured $L_{A90,10\text{min}}$ noise level on the Y-axis and the standardised mean wind speed on the X-axis. A least squares, “best fit” curve of an order deemed appropriate by the independent consultant (but which may not be higher than a second order polynomial) should be fitted to the data points and define the wind farm noise level at each integer wind speed.

Guidance Note 3

Where noise immissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty is to be calculated and applied using the following rating procedure.

(a) For each 10-minute interval for which $L_{A90,10\text{-minute}}$ data have been determined as valid in accordance with Guidance Note 2 a tonal assessment shall be performed on noise immissions during 2 minutes of each 10-minute period. The 2-minute periods should be spaced at 10-minute intervals provided that uninterrupted uncorrupted data are available (“the standard procedure”). Where uncorrupted data are not available, the first available uninterrupted clean 2-minute period out of the affected overall 10-minute period shall be selected. Any such deviations from the standard procedure, as described in Section 2.1 on pages 104-109 of ETSU-R-97, shall be reported.
(b) For each of the 2-minute samples the tone level above or below audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104 -109 of ETSU-R-97.
(c) The tone level above audibility shall be plotted against wind speed for each of the 2-minute samples. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.
(d) A least squares “best fit” linear regression line shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the “best fit” line at each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process shall be repeated for each integer wind speed for which there is an assessment of overall levels in Guidance Note 2.
(e) The tonal penalty is derived from the margin above audibility of the tone according to the figure below.
Guidance Note 4

If the wind farm noise level (including the application of any tonal penalty as per Guidance Note 3) is above the limit set out in the conditions, measurements of the influence of residual noise shall be made in accordance with a methodology that has been previously submitted to and approved in writing by the local planning authority to determine whether or not there is a breach of condition. This may be achieved by repeating the steps in Guidance Notes 1 & 2 with the wind farm switched off in order to determine the residual noise, L₃, at the assessed wind speed. The wind farm noise at this wind speed, L₁, is then calculated as follows, where L₂ is the measured wind farm noise level at the assessed wind speed with turbines running but without the addition of any tonal penalty:

\[
L_1 = 10 \log \left[ 10^{L_2/10} - 10^{L_3/10} \right]
\]

The wind farm noise level is re-calculated by adding the tonal penalty (if any) to the wind farm noise.
Appeal B: APP/X1545/A/12/2179484

1) The development hereby permitted shall begin not later than five years from the date of this decision.

2) The development hereby permitted shall be carried out in accordance with the following approved plans: Planning Application Boundary Drawing No.02340D2909-01 and Delivery Analysis Drawing No.02340D2414-01 Sheets 1 and 2, except in respect of the detail shown on Sheet 2 which shall be approved pursuant to Condition 3 below.

3) No development shall commence until a scheme has been submitted to and approved in writing by the local planning authority detailing:

(a) The works required to implement the permission, along with a timetable for implementation.

(b) Proposals to restore land outside the carriageway of the public highway (including new or replacement planting of trees and hedges).

(c) The maintenance of the restoration works for a period of five years from their completion.

(d) The method statement providing for works to manage and safeguard trees during implementation of the works.

   The scheme shall be implemented as approved.

4) No development under this permission shall take place prior to the commencement of development of the wind farm granted planning permission under Appeal Reference: APP/X1545/A/12/2174982.

Appeal C: APP/X1545/A/12/2179225

1) The development hereby permitted shall begin not later than five years from the date of this decision.

2) The development hereby permitted shall be carried out in accordance with the following approved plans: Planning Application Boundary Drawing No.02340D2513-05 Sheets 1 and 2, Bridge Proposed Adjacent to Twizzlefoot Bridge Drawing No.02340D2413-06 Sheets 1 and 2, except in respect of the detail shown on Drawing No.02340D2413-06 which shall be approved pursuant to Condition 3 below.

3) No development shall commence until a scheme has been submitted to and approved in writing by the local planning authority detailing:

(a) The works required to implement the permission, along with a timetable for implementation.

(b) Proposals to restore land outside the carriageway of the public highway (including new or replacement planting of trees and hedges).

(c) The maintenance of the restoration works for a period of five years from their completion.

   The scheme shall be implemented as approved.

4) No development under this permission shall take place prior to the commencement of development of the wind farm granted planning permission under Appeal Reference: APP/X1545/A/12/2174982.
APPEARANCES

FOR THE LOCAL PLANNING AUTHORITY:

Gwion Lewis of Counsel
Instructed by Solicitor for Maldon District Council.

He called

Dick Bowdler BSc FIOA CEng CPhys FCIBSE MCIArb Noise consultant.
Nigel Cowlin BA(Hons) DipLA CMLI Landscape planning consultant.
Roy Lewis BA(Hons) MA(Arch Cons) MRTPI IHBC Director of Grover Lewis Associates Limited.
Clive Tokley MRTPI Town planning consultant.

FOR THE APPELLANT:

Marcus Trinick QC Partner Eversheds LLP.

He called

Dr Andrew Bullmore BSc(Hons) PhD MIOA Managing Partner of Hoare Lee Acoustics.
Colin Goodrum BSc(Hons) DipLA CMLI Senior Partner of LDA Design.
Simon Pryce BSc(Hons) FArborA CBiol MSB MICFor Simon Pryce Arboriculture.
Dr Stephen Carter BSc(Hons) PhD MIfA FSA Scot Senior Consultant of Headland Archaeology (UK) Limited.
David Stewart MA(Cantab) Dip TP MRTPI David Stewart Associates.

FOR SIEGE Rule (6) party:

Michael Fry of Counsel Instructed by SIEGE.

He called

John Holland Local resident and retired electrical engineer.
Frederick Ayley Local resident.
Peter Bateman Local resident.
Stephen Thorogood Chairman of SIEGE and local resident.

INTERESTED PERSONS:

James Cousins Representing St Mary Church Council.
Eileen Rowlands Local resident.
John Harrison BTech(Hons) CEng Local resident.

http://www.planning-inspectorate.gov.uk
PROOFS OF EVIDENCE (PoE), WRITTEN REPRESENTATIONS (WR) AND STATEMENT OF COMMON GROUND

Maldon District Council

PoE1 Summary, Proof and Appendices of Dick Bowdler
PoE2 Summary, Proof and Appendices of Nigel Cowlin
PoE3 Summary, Proof and Appendices of Roy Lewis
PoE4 Proof and summary by Clive Tokley

SIEGE

PoE5 Proof of John Holland
PoE6 Proof of Frederick Ayley
PoE7 Proof of Peter Bateman
PoE8 Proof of Stephen Thorogood
WR1 Written statement of Peter Giles local resident.
WR2 Written statement of Steve and Lesley Brock local residents.
WR3 Written statement of Helen Fisher local resident.
WR4 Written statement of Mania Row MA local resident.

Appellant

PoE9 Summary, Proof and Appendices of Dr Andrew Bullmore
PoE10 Summary, Proof and Appendix of Colin Goodrum
PoE11 Summary, Proof and Appendices of Simon Pryce
PoE 12 Summary, Proof, Rebuttal and Appendices of Dr Stephen Carter
PoE 13 Summary, Proof and Appendices of David Stewart
WR5 Written statement of David Broughton BSc MSc MPhil CEnv MIEEM on Ecology Matters.

Other representations

Written representations to the Council at the application stage - attached to Questionnaire.
Third party written representations about appeals - in Red folder.


DOCUMENTS SUBMITTED AT THE INQUIRY (ID)

Document  1 Opening statement on behalf of the appellant.
Document  3 Opening statement of behalf of SIEGE
Document  4.1 Draft conditions – Appeal A.
        4.2 Draft conditions – Appeals B and C.
        4.3 Revised draft conditions with tracked changes – Appeal A.
        4.4 Revised draft conditions – Appeals A.
        4.5 Revised draft conditions – Appeals B and C.
        4.6 Revised draft conditions – Appeals A, B and C.
        4.7 Final version of suggested conditions – with appellant’s and Council’s suggested figures for Table 1 of noise condition.
Document  5 Appellant’s proposed noise limits.
Document  6 Appellant’s response to Council’s proposed noise limits.
Document  7 Noise Common Ground v5.0.
Concerned about wind turbines in Aberdeenshire prepared by Dick Bowdler.

Tranquillity mapping.

Viewpoint alignments and mast locations.

Letter dated 19 April 2013 from Square One law LLP withdrawing objection by Mr John Boyce.


Definitive list of drawings.


Carriageway widening in vicinity of Tree 11 and Tree 12.

Carlton Grange appeal decision Ref:APP/D2510/A/12/2176754.

Comparative table of the assessment of effects on viewpoints – version 2.

Calculation of the energy loss due to environmental noise curtailment.

Amplitude Modulation (AM) noise condition suggested by SIEGE.

Hockley Farm appeal decision Ref:APP/X1545/A/06/2023805.

Photo locations Mr Pryce.

Highway works views of Mr Cowlin, Mr Pryce, Mr Goodrum and matters in dispute.

Maldon District Local Development Plan Preferred Options Consultation (2012).

Revised extent of Middlewick medium magnitude effects (CD58 paragraph 19)

Annotated version of viewpoint alignments and mast locations.

Statement by Mr J Cousins on behalf of the Parochial Church Council of the Parish of St Mary the Virgin Burnham on Crouch, including photographs 1 and 2.

Statement by Eileen Rowlands.

Email dated 23 April 2013 from Highway Authority concerning adopted highway boundary east of Muscle bridge.

Plan showing location of first two wind turbines erected at Bradwell.

High Court judgment Spring Farm Ridge South Northamptonshire Council and SoS CLG Case No:CO/8849 and 89/2012.


Turncole Mitigation Options Paper, Osprey Consulting Services Ltd may 2013.

Land Plan and Swept Path showing proposed lease plan for land at Fambridge Road.

Emails to and from Strutt and Parker Farms dated June and August 2012 concerning access for delivery of components by boat.

Emails to and from other farm owner dated August 2012
concerning access for delivery of components by boat.

Document 36 Email from John Boyce dated 7 May 2013 concerning flying from Burnham site.
Document 37 Email from appellant concerning grid connection dated 7 May 2013.
Document 38 Closing statement on behalf of SIEGE.
Document 40 Closing submissions on behalf of the appellant.

DOCUMENTS CONSIDERED AFTER THE CLOSE OF THE INQUIRY

41.1 Letter from Secretary of State for Energy and Climate Change to President Institute of Acoustics dated 20 May 2013.
41.2 Appellant’s comments on GPG.

Document 42 **Anita Colman and SoS for CLG and North Devon DC and RWE [2013] EWHC 1138 (Admin) Case No:CO/12831/2012**.
42.1 Email from appellant dated 21 May 2013.
42.2 Email from Council dated 29 May 2013.
42.3 Email from SIEGE dated 24 May 2013.

Document 43a Written statement to Parliament Local planning and onshore wind, Dept for Communities and Local Government, 6 June 2013.
43a.1 Letter to PINS from Secretary of State, 6 June 2013.
43.1 Comments by appellant.
43.2 Comments by SIEGE.

Document 44 **Planning practice guidance for renewable and low carbon energy**, The Department for Communities and Local Government, 29 July 2013 (PPG).
44.1 Comments by the appellant.
44.2 Comments by the Council.
44.3 Comments by SIEGE.
44.4 Appellant’s response to the Council and SIEGE comments on the new Planning Practice Guidance.
LIST OF PLANS

Appeal A
Planning Application Boundary (Site Location Plan) Drawing No.02340D2908-05.
Turbine Layout with Micro-siting Drawing No.02340D2107-05.
Infrastructure Layout Drawing No.02340D1001-14.

Appeal B
Planning Application Boundary Drawing No.02340D2909-01.
Delivery Analysis Drawing No.02340D2414-01 Sheets 1 and 2.

Appeal C
Planning Application Boundary Drawing No.02340D2513-05 Sheets 1 and 2.
Bridge Proposed Adjacent to Twizzlefoot Bridge Drawing No.02340D2413-06
Sheets 1 and 2.
### CORE DOCUMENTS (CD)

#### Planning Application Documents

<table>
<thead>
<tr>
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#### Planning Policy Documents

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### Landscape and Visual Documents

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**Ecology**

| 99. | Highways Act 1980, ss41 and 154 |
| 100. | Essex County Council Highway Maintenance Strategy, April 2008 (Appendix 3 of Simon Pryce Proof) |
| 101. | Collett Transport Test Drive Report no 20513 - for RES Ltd, March 2010 |

**Noise**

| 102. | *The Assessment and Rating of Noise from Wind Farms 1997 (ETSU-97-R)* |
| 103. | Noise Policy Statement for England (NPSE) |
| 104. | ISO 9613 Part 2 Noise Propagation Model |

**Cultural Heritage**


**Miscellaneous Documents**

| 109. | Proposals Map from Maldon Local Plan |
| 110. | Calculation of the Energy Loss due to Environmental Curtailment at the Proposed Turncole Wind Farm |
| 111. | Appeal decision *Tunstall* APP/E2001/A/10/2130670 |
| 112. | Appeal decision *Benington* APP/J1915/A/09/2104406 |
| 113. | Appeal decision *Dawes Lane* APP/Y2003/A/12/2169774 |
| 114. | Appeal decision *Truthan Barton Farm* APP/D0840/A/11/2163691 |
| 115. | Middlewick ES Chapters LVIA, Cultural Heritage & Noise on CD |
RIGHT TO CHALLENGE THE DECISION IN THE HIGH COURT

These notes are provided for guidance only and apply only to challenges under the legislation specified. If you require further advice on making any High Court challenge, or making an application for Judicial review, you should consult a solicitor or other advisor or contact the Crown Office at the Royal Courts of Justice, Queens Bench Division, Strand, London, WC2 2LL (0207 947 6000).

The attached decision is final unless it is successfully challenged in the Courts. The Secretary of State cannot amend or interpret the decision. It may be redetermined by the Secretary of State only if the decision is quashed by the Courts. However, if it is redetermined, it does not necessarily follow that the original decision will be reversed.

SECTION 1: PLANNING APPEALS AND CALLED-IN PLANNING APPLICATIONS;
The decision may be challenged by making an application to the High Court under Section 288 of the Town and Country Planning Act 1990 (the TCP Act).

Challenges under Section 288 of the TCP Act

Decisions on called-in applications under section 77 of the TCP Act (planning), appeals under section 78 (planning) may be challenged under this section. Any person aggrieved by the decision may question the validity of the decision on the grounds that it is not within the powers of the Act or that any of the relevant requirements have not been complied with in relation to the decision. An application under this section must be made within six weeks from the date of the decision.

SECTION 2: AWARDS OF COSTS

There is no statutory provision for challenging the decision on an application for an award of costs. The procedure is to make an application for Judicial Review.

SECTION 3: INSPECTION OF DOCUMENTS

Where an inquiry or hearing has been held any person who is entitled to be notified of the decision has a statutory right to view the documents, photographs and plans listed in the appendix to the report of the Inspector’s report of the inquiry or hearing within 6 weeks of the date of the decision. If you are such a person and you wish to view the documents you should get in touch with the office at the address from which the decision was issued, as shown on the letterhead on the decision letter, quoting the reference number and stating the day and time you wish to visit. At least 3 days notice should be given, if possible.