

IN THE MATTER OF:

A CALLED IN APPLICATION FOR PLANNING PERMISSION FOR THE DUALLING  
OF THE A4130 CARRIAGEWAY, CONSTRUCTION OF THE DIDCOT  
SCIENCE BRIDGE, ROAD BRIDGE OVER THE APPLEFORD RAILWAY SIDINGS  
AND ROAD BRIDGE OVER THE RIVER THAMES, AND ASSOCIATED WORKS

LAND BETWEEN A34 MILTON INTERCHANGE AND B4015 NORTH OF CLIFTON  
HAMPDEN, OXFORDSHIRE

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CLOSING SUBMISSIONS  
ON BEHALF OF UKAEA

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I. INTRODUCTION

1. The United Kingdom Atomic Energy Authority (“**the UKAEA**”) appeared at this inquiry because the development of the UKAEA’s headquarters at the Culham Campus is one of the foremost examples of why the proposed development (“**the Scheme**”) is needed now.
2. This position has been confirmed through the UKAEA’s evidence to this inquiry. Planning permission for the Scheme must be granted now to unlock the future development of the Culham Campus and the national benefits which that development will deliver. If planning permission is not granted for the Scheme, those benefits will be stifled and may be lost altogether.<sup>1</sup> The Scheme is long overdue, even more so after this inquiry. Any further delay would be intolerable, both for the UKAEA, the fusion sector in this country and for Oxfordshire.
3. There has been no meaningful challenge to the UKAEA’s evidence. This is unsurprising: the UKAEA’s evidence was robust and the UKAEA’s case is compelling in all respects.
4. When given the opportunity to do so, the objectors to the Scheme did not cross-examine two of the UKAEA’s witnesses; and the questions that were put to Professor

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<sup>1</sup> Mr Sensecall’s POE at [7.5] ff on PDF p. 33.

Sir Ian Chapman disclosed no credible or coherent arguments against the UKAEA's case. To the contrary, the cross-examination of Professor Sir Ian Chapman only served to highlight how robust his evidence was to the inquiry.

5. Not only was there a failure to effectively challenge (or even attempt to challenge) the UKAEA's case in cross-examination, but there was also a failure by the objectors to present any credible evidence against the UKAEA's position. To the extent that the objectors' evidence dealt with the UKAEA's case and the Culham Campus, it was obviously flawed. Essentially a single argument was advanced, namely that there were alternative public transport solutions which would allow further development at the Culham Campus. Like the objectors' wider arguments about alternative solutions, this argument was flawed in multiple respects.
6. It follows that the UKAEA's evidence has demonstrated that planning permission should be granted for the Scheme without delay for the following four key reasons:
  - 6.1. **Reason 1** - There are existing highway capacity constraints on the highway network around the Culham Campus.
  - 6.2. **Reason 2** - The Scheme is necessary to unlock the planned redevelopment of the Culham Campus. There are no alternatives, either to the need for development of the Culham Campus or to the Scheme.
  - 6.3. **Reason 3** - The future development of the Culham Campus, in accordance with the UKAEA's masterplan, exemplifies sustainable development and will deliver a range of national benefits.
  - 6.4. **Reason 4** - The planning balance is overwhelmingly in favour of the grant of planning permission for the Scheme.
7. This last reason exemplifies the flawed – and frankly unreasonable – case presented by the objectors at this inquiry. The objectors accept that the Scheme complies with the development plan as a whole.<sup>2</sup> No contrary evidence has been presented. This is of critical importance. The fact of accordance with the development plan demonstrates that whatever the Scheme's impacts – whether as assessed by OCC or as claimed by objectors – they are acceptable, in the round, when assessed against the relevant

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<sup>2</sup> XX of Mr Tamplin by SODC.

planning policy. As a result, the Scheme benefits from the statutory presumption in favour of granting permission. There are no reasons to set aside that presumption in this case.

8. Accordingly, the UKAEA submits that planning permission should be granted for the Scheme without delay and invites you to report to the Secretary of State that:

8.1. **On the Secretary of State's first issue:** the Scheme is fully consistent with Government policies for delivering a sufficient supply of homes, as set out in Chapter 5 of the NPPF.

8.2. **On the Secretary of State's second issue:** the Scheme is fully consistent with Government policies for building a strong, competitive economy, as set out in Chapter 6 of the NPPF.

8.3. **On the Secretary of State's third issue:** the Scheme is consistent with the development plan for the area.

8.4. **On the Secretary of State's fourth issue:** the other matters which have been identified as relevant do not provide a basis for refusing to grant planning permission.

8.5. Accordingly, the Scheme benefits from the statutory presumption in favour of the grant of planning permission in s. 38(6) of the Planning and Compulsory Purchase Act 2004; there are no other material considerations which justify a decision contrary to the development plan; and as such planning permission should be granted for the Scheme.

## **II. THE FOUR KEY REASONS FOR GRANTING PLANNING PERMISSION**

### **(1) Reason 1 - There are existing unacceptable capacity constraints on the highway network around the Culham Campus.**

9. The evidence before the inquiry demonstrates unequivocally that there are existing unacceptable capacity constraints on the highway network around the Culham Campus.

10. Mr Foxall identified nine junctions near to the Culham Campus which are already operating over capacity, of which four are particularly relevant because they restrict

flows over the two existing river crossings located at Clifton Hampden and Culham.<sup>3</sup> The capacity exceedances at these junctions which Mr Foxall has identified are not marginal; to the contrary, they are significant, being well over the 90% target.

11. Further, Mr Foxall's technical evidence was consistent with the evidence of local people, for example Mr Pryor and Mr Alcantra, who addressed the inquiry in the very first week. Indeed, even objectors identified the unacceptability of the present position. For example, Ms Casey-Rerhaye complained about congestion in Culham and identified a need for improvements.<sup>4</sup> Her qualification that this was only at peak hours does not detract from the situation: the assessment of peak hour traffic flows is precisely the approach which must be adopted as a matter of best practice.
12. The only person who disputed Mr Foxall's conclusion that there are existing capacity constraints on the local highway network was Mr James. Mr James' argument was flawed in multiple respects. In particular:
  - 12.1. Mr James founded his argument on an addendum transport assessment dated 24 November 2021 ("**ATA1**") which was prepared in support of an application by UKAEA for planning permission for a new Research and Development building in the Campus.<sup>5</sup>
  - 12.2. ATA1 was superseded by a further addendum transport assessment dated 31 March 2022 ("**ATA2**") in respect of the same building. Mr James was not aware of ATA2 when he prepared his written evidence, he did not address ATA2 in his XiC and, as he confirmed in XX, he had not considered ATA2 and the differences to ATA1 before giving his oral evidence. In short, Mr James has ignored the contents of ATA2.
  - 12.3. This is an error of substance, as Mr Foxall explained in his XIC, because ATA2 does not support Mr James' argument. In particular, ATA2 concludes – consistently with Mr Foxall's analysis – that there are existing capacity issues on the highway network which are unacceptable. For example, ATA2

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<sup>3</sup> Mr Foxhall's POE at [2.9] on PDF p. 8. Those junctions are OFF 3, 5, 6, 7, 9, 10, 11, 12 and 13. And at [2.10] highlight OFF 6, 7, 10 and 11.

<sup>4</sup> Ms Casey-Rerhaye's POE at [2], [10] and [13]. There is a dispute as to what form of improvements are necessary, but for the reasons below, UKAEA's approach is to be preferred.

<sup>5</sup> INQ 15.1

identifies capacity existing capacity issues at the access to the Culham Campus, at the Clifton Hampden signals and the Culham river crossing signals.<sup>6</sup>

- 12.4. Further and importantly, the analysis in ATA2 was different to the analysis in ATA1. For example, in respect of the Clifton Hampden signals ATA2 identified a need for further mitigation, including from the Scheme, which had not been identified in ATA1.<sup>7</sup> These are material differences which represent a finding of greater adverse capacity constraints than those identified in ATA1. Again, these were matters which Mr James overlooked.
- 12.5. In any event, even if ATA2 was ignored, Mr James' evidence was still flawed because he misunderstood the scope of ATA1. ATA1 was – very obviously – an assessment of the impact of the proposed Research and Development building only.<sup>8</sup> ATA1 was not an assessment of the impact of all the development shown in the Framework Masterplan or all the development planned for in policy STRAT8. It follows that ATA1 is not evidence that the Culham Campus can be redeveloped acceptably without the delivery of the Scheme. Rather, it only demonstrated the acceptability of the delivery of the Research and Development building and, even then, in the longer term forecasts the Scheme was taken into account as necessary mitigation.<sup>9</sup>
- 12.6. It follows that Mr James has looked at the wrong document and, even in respect of the document that he did look at, he fundamentally misunderstood its contents. This is unsurprising given he does not possess any relevant technical qualification (in stark contrast to Mr Foxall) and, the interpretation of the traffic modelling in ATA1 and/or ATA2 is not within Mr James' claimed expertise in sustainable transport planning.
13. Accordingly, the correct conclusion is that there are existing capacity constraints on the local highway network near the Culham Campus. Further, the degree of constraint – i.e. the existing levels of congestion – is already unacceptable.

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<sup>6</sup> INQ 15.2 – ATA2 at Table 6.13 on PDF p. 68, rows 1, 2 and 7.

<sup>7</sup> INQ 15.2 – ATA2 at Table 6.13 on PDF p. 68, rows 2.

<sup>8</sup> Albeit having regard to committed development at that point in time, i.e. the RACE Extension, NFTP and STEP/UKAEA. See INQ 15.2 – ATA1– at Table 3.13 on PDF p. 15. This is a small fraction of the development in the Framework Masterplan.

<sup>9</sup> INQ 15.1 – ATA1 – At Table 7.15 on PDF p. 50 – see final column having regard to the Scheme.

14. In light of this conclusion, the objectors' argument about the veracity of the transport modelling undertaken by Oxfordshire County Council ("OCC") is a red herring. UKAEA's case is based on existing, recorded, constraints, not future modelled constraints. The fact that the constraints will only get worse without intervention (as OCC's modelling demonstrates) reinforces UKAEA's case but it is not an essential component of its argument.

**(2) Reason 2 - The Scheme is necessary to unlock the planned redevelopment of the Culham Campus. There are no alternatives, either to the need for development of the Culham Campus or to the Scheme.**

15. The effect of these existing capacity constraints is that there are already restrictions on the redevelopment of the Culham Campus.

Planned future growth

16. The Culham Campus was removed from the Green Belt by Policies STRAT6 and STRAT8 of the South Oxfordshire Local Plan ("the SOLP") for the express purpose of allowing the strategic redevelopment of the Campus.<sup>10</sup> The principle of significant future development at the Culham Campus is enshrined in the development plan. It is also supported by national policy in the UK's Fusion Strategy.<sup>11</sup>
17. Policy STRAT8 expressly supports the redevelopment and intensification of the Culham Campus.<sup>12</sup> The development envisaged by Policy STRAT8 is ambitious: the allocation is some 77 hectares; the redevelopment and intensification of the campus must deliver at least a net increase in employment land of 7.3 hectares (when combined with adjoining land)– the second largest single employment allocation in the SOLP;<sup>13</sup> and at the same time, the adjacent land – amounting to some 217 hectares – is allocated for c. 3,500 home by policy STRAT9 – the largest single housing allocation in the SOLP.<sup>14</sup>

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<sup>10</sup> See, in particular Policy STRAT8, part 6: *'The Culham Science Centre is removed from the green Belt and inset as shown on Land inset from the Green Belt boundary (Appendix 4) to enable this development to be brought forward'* (PDF p. 51).

<sup>11</sup> CD G.19 (for example) pp. 13 & 14. And see below.

<sup>12</sup> Part 1 of Policy STRAT8 (PDF p.50).

<sup>13</sup> See Policy EMP1 – CD G.01.00 at PDF p. 128.

<sup>14</sup> CD G.01.00 at PDF p. 49.

18. UKAEA's ambitions for the development of the Culham Campus are set out in the Framework Masterplan. As Mr Sensecall explained in his XIC, the Framework Masterplan envisages comprehensive redevelopment through to 2050 on a continuous basis. The Framework Masterplan is aligned with Policy STRAT8 (as well as the other relevant policies of the SOLP). There is alignment between the Framework Masterplan and the UK's Fusion Strategy, the latter of which is particularly ambitious for future development in the national interest at the Culham Campus. To that end, the Government has committed funding of c. £184 million via the Fusion Foundations Programme to support the transformation of the Culham Campus, as envisaged in the Framework Masterplan. Further, the UKAEA is already working closely with SODC and OCC (as local highways authority) on the drafting of a local development order to facilitate the delivery of the ambition in the Framework Masterplan.<sup>15</sup>

#### Need for the Scheme

19. The planned redevelopment of the Culham Campus, as shown in the Framework Masterplan and planned for in policy STRAT8, cannot be accommodated within the existing highway network, as Mr Foxall explained in his evidence.<sup>16</sup>
20. This has been demonstrated by the recent planning history of the campus. As Mr Sensecall explained, recent planning permissions for development within the Culham Campus have only been granted because the UKAEA has "traded" floorspace, i.e. it has given up some already permitted development in order to allow other development to be permitted.<sup>17</sup> This approach has been necessitated because – and only because – of the inadequate road infrastructure which serves the Culham Campus. The trading of floorspace cannot continue. It is an interim solution dependent based on maintaining the status quo; it is not a long term solution for planned future growth.
21. In addition, Mr Foxall's conclusion is consistent with the development plan. The SOLP explains the Culham Campus' specific need for the Scheme in terms: '*[Culham Campus] cannot expand without necessary infrastructure, including the Didcot to Culham Rover Crossing and Clifton Hampden Bypass*'.<sup>18</sup> More widely, the development plan also

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<sup>15</sup> Mr Sensecall's POE at [1.7] on PDF p. 5.

<sup>16</sup> Mr Foxall's POE at [2.15] on PDF p. 9 and [2.17] on PDF p. 10.

<sup>17</sup> Mr Sensecall's XiC.

<sup>18</sup> CD G.01.00 at [3.67] on PDF p. 48.

explains the importance of the Scheme to the delivery of growth across the Science Vale. This is a strategic priority for the County.<sup>19</sup>

22. The only solution to the inadequate highway capacity near the Culham Campus is the Scheme. Mr Foxall has considered each of the alternative solutions and none are adequate. In particular:

22.1. The physical constraints on the relevant junctions prevent meaningful changes to the layout and/or operation of those junctions in order to increase their capacity.<sup>20</sup> This is especially the case in respect of three of the four junctions near the Culham Campus which Mr Foxall identified as being particularly important.<sup>21</sup>

22.2. Since June 2021, OCC has implemented an interim strategy.<sup>22</sup> The planned redevelopment of the Culham Campus – in accordance with STRAT8 and the Framework Masterplan – is not possible under this interim strategy.<sup>23</sup>

22.3. UKAEA has already made contributions towards public transport improvements.<sup>24</sup> The provision of further financial contributions towards enhanced public transport provision will not provide sufficient mitigation for the delivery of all the planned redevelopment at the Culham Campus.<sup>25</sup> Further and critically, the public transport improvements funded by such contributions need to be deliverable, but the evidence before this inquiry – in particular from the Oxford Bus Company – demonstrates that meaningful public transport improvements are not feasible in the absence of the Scheme.<sup>26</sup> So too with additional cycling and walking provision, improvements to which require further infrastructure that will only be delivered by the Scheme.<sup>27</sup>

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<sup>19</sup> See the discussion of the development plan in Mr Sensecall's POE at [2.1] – [2.21].

<sup>20</sup> Mr Foxall's POE at [2.19] on PDF p. 10.

<sup>21</sup> Ibid.

<sup>22</sup> 'Releasing Development Strategy in Didcot and surrounding villages in the vicinity of HIF1 Schemes'

<sup>23</sup> Mr Foxall's POE at [2.33] on PDF p. 13.

<sup>24</sup> Mr Foxall's POE at Appendix E.

<sup>25</sup> Mr Foxall's POE at [2.27] on PDF p. 12.

<sup>26</sup> CD N.07. See also Mr Foxall's POE at [2.29] on PDF p. 12. The position in respect of the mainline train is similar: improvements are driven by increased patronage; increased patronage will only be delivered by additional development, e.g. residential development on STRAT9; and that development is reliance on the Scheme.

<sup>27</sup> Mr Foxall's POE at [2.30] on PDF p.12.

23. Not only is the Scheme necessary to address the overarching issue of highway capacity, but it is also necessary to deliver three of UKAEA's specific objectives for the redevelopment of the Culham Campus.<sup>28</sup>
- 23.1. First, the planned growth at Culham Campus requires the construction of a second entrance/exit and this is integrated into the Scheme, specifically the Clifton Hampden by-pass. This has been agreed as the most appropriate approach with OCC.
- 23.2. Secondly, the modal shift that is a fundamental part of UKAEA's vision for the Culham Campus is dependent on the new walking and cycling provision that is part of the Scheme.
- 23.3. Thirdly, the Scheme will enable the delivery of a new main entrance to the Culham Campus which is more befitting of its status as a world leading science and technology campus. Planning permission for this entrance has already been granted by SODC but completion of the new entrance is dependent on the Scheme given the land shared between the developments.
24. It follows that the Scheme is needed to unlock the planned redevelopment of the Culham Campus. There is no other feasible solution.

#### The flaws in the objectors' case on alternatives

25. The objectors have raised a multiplicity of arguments about alternative solutions.
26. The starting point is to understand the correct approach to arguments based on alternatives. The objectors have consistently failed to understand the correct approach, despite the legal principles being well established and despite those principles being highlighted by UKAEA, as well as other parties to the inquiry.<sup>29</sup> The objectors have acted contrary to those well established principles and behaved unreasonably as a result.<sup>30</sup> The UKAEA reiterates the following principles:

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<sup>28</sup> Professor Sir Ian Chapman's POE at [2.4] on PDF p. 5.

<sup>29</sup> For example, INQ1 at [23] on PDF p. 9; and INQ7 at [21] on p. 6.

<sup>30</sup> PPG: Paragraph: 031 Reference ID: 16-031-20140306 and Paragraph: 056 Reference ID: 16-056-20161210

- 26.1. The only statutory provision which requires consideration of alternatives in this case is reg. 18(3)(d) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (“**the EIA Regulations**”).<sup>31</sup> That provision requires an environmental statement to include a description of the reasonable alternatives studied by the developer and an indication of the main reasons for the option chosen. OCC, as applicant, has plainly complied with this duty. Notably the objectors did not cross-examine Mr Maddox on this point.
- 26.2. Aside from this statutory provision, an alternative scheme (or site) will only be a material consideration in exceptional circumstances.<sup>32</sup> However, even in exceptional circumstances, where alternative proposals might be relevant, inchoate or vague schemes and/or those that are unlikely or have no real possibility of coming about would not be relevant.<sup>33</sup>
27. The objectors advance three alternative arguments. The first argument is that there is one (or more) alternatives to the Scheme. The second argument is that the UKAEA should locate its development elsewhere. The third argument is that there are alternative transport solutions which can unlock the planned redevelopment of the Culham Campus. Applying the correct approach, each and every one of these arguments is unreasonable and flawed for the following reasons.
- 27.1. First, the objectors have not identified – or even attempted to identify – the necessary exceptional circumstances to require consideration of alternatives to the Scheme.
- 27.2. Secondly and in any event, the alternatives relied on by objectors are vague and inchoate, and there is no evidence that any of them will come forward. This was accepted in terms by Mr Tamplin and Mr Williams.<sup>34</sup> It is also confirmed by the multiplicity of different suggestions made: there is no single, evidenced alternative; rather objectors have simply made a multiplicity of

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<sup>31</sup> See also, to the same effect, Sch. 4 to the EIA Regulations.

<sup>32</sup> *R. (Mount Cook Land Ltd) v Westminster City Council* [2003] EWCA Civ 1346, [2017] PTSR 1166 per Auld LJ at [30].

<sup>33</sup> *Ibid.*

<sup>34</sup> XX by OCC.

generalised statements. This applies with even greater force to the alternative arguments about the development of Culham Campus.

- 27.3. Thirdly, the objectors' case on alternatives was not based on any identified alternative, but instead on the contention that alternatives needed to be investigated again. This is untenable: there is no deficiency in the analysis already undertaken and repetition of that analysis would only engender further delay. During that time the already unacceptable congestion – including in Culham – would persist. This is a situation that is in nobody's interest, not even the objectors to the Scheme.
- 27.4. Fourthly, the specific arguments about the Culham Campus were based on basic misunderstandings of the UKAEA's work and redevelopment aspirations.

The suggestion that the UKAEA either could or should move its operations elsewhere is untenable, as Professor Sir Ian Chapman explained. To do so would be to lose all of the benefits inherent in the existing work at the campus and to lose all the benefits of clustering.

Equally, the suggested reliance on public transport to unlock the development of the Culham Campus is untenable. The UKAEA already has an ambitious travel plan that is aligned with the Local Transport and Connectivity Plan ("LTCP"). None of the objectors identified any deficiency in the travel plan, even when given the opportunity to do so; indeed, Mr James considered it to take modal shift "very seriously". However, even with this ambition, the Scheme remains necessary, as both the travel plan itself makes clear and as Mr Foxall explained. This is particularly the case in respect of improvements to bus and train services: bus services will only improve when the congestion is resolved, such that they are commercially attractive; and train services will only improve when patronage increases, but that itself requires further housing – something which only the Scheme can unlock. This is specifically the case in respect of Culham, as policy STRAT9 expressly acknowledges.

Finally, the suggestion of working from home more – a point only trailed in XX of Professor Sir Ian Chapman – showed a gross misunderstanding of the

UKAEA's work, in particular the need for employees to be on site to collaborate on the ongoing research projects.

28. It follows that there are no alternatives, either to the need for development of the Culham Campus or to the Scheme. The Scheme is necessary to unlock the planned redevelopment of the Culham Campus.

**(3) Reason 3 – The future development of the Culham Campus, in accordance with the UKAEA's masterplan, exemplifies sustainable development and will deliver a range of national benefits.**

29. By permitting the Scheme now, the future development of the Culham Campus will be unlocked and substantial national benefits will be secured through the future growth of what is already a facility of national – as well as international – significance.<sup>35</sup>

The Culham Campus & the work of UKAEA

30. In January 1960 the UKAEA secured planning permission from OCC to develop the Culham site – then a former naval airfield – as a research establishment.<sup>36</sup> The laboratory, which covers some 80 hectares, was conceived, planned and built as a whole in the mid 1960s.<sup>37</sup> The laboratory today remains largely as it existed then: the original complex of building still extends to approximately 59,000m<sup>2</sup>.<sup>38</sup> As Mr Sensecall explained, the UKAEA has already embarked on a programme of redevelopment, but there is still a long way to go in order to deliver the facilities which the UKAEA, Oxfordshire and the UK require.
31. The Culham Campus is at the centre of fusion development globally.<sup>39</sup> Not only is the Culham Campus the headquarters of the UKAEA, the largest fusion research organisation in the world, but it is also the home to a range of globally unique facilities.<sup>40</sup> As a result, the Culham Campus is the “go to” place for both fusion research and private fusion companies, with private fusion companies already located

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<sup>35</sup> Ibid at [4.6] on PDF p. 8.

<sup>36</sup> Mr Sensecall's POE at [4.3] on PDF p. 11.

<sup>37</sup> Mr Sensecall's POE at [4.4] on PDF p. 11.

<sup>38</sup> Ibid.

<sup>39</sup> Professor Sir Ian Chapman's POE at [1.4] on PDF p. 4.

<sup>40</sup> Professor Sir Ian Chapman's POE at [1.5] on PDF p. 4.

at the Campus, and more deciding to move to the Campus.<sup>41</sup> Professor Sir Ian Chapman explained to the inquiry that these companies encompass both innovative start ups and some of the biggest commercial players in the sector.<sup>42</sup> At present some 3,400 people are employed at the Culham Campus, across all the organisations, of which 2,400 are employed by UKAEA.<sup>43</sup> This level of employment is forecast to rise to 5000 with the planned development of the campus.<sup>44</sup>

32. The importance of this future development at Culham Campus has been confirmed very recently in a letter directly to this inquiry from the Secretary of State for Energy Security and Net Zero.<sup>45</sup> This letter bears re-reading. The Secretary of State considers that the Culham Campus ‘is key to our global advantage’ and that its development is entirely consistent with the UK’s Fusion Strategy. In particular, the Secretary of State told the inquiry that:

*‘A central part of the UK’s Fusion Strategy is to grow the Culham campus, taking advantage of its attractiveness as a centre for global fusion investment and firms that want to take advantage of the concentration of expertise and skills such a centre brings. As the campus grows it will become the natural home for global fusion [research and development] in the same way that Silicon Valley is the natural home of tech development. This supports the wider economic growth across the UK given the geographical dispersal of the fusion technology supply chain in the UK.’*

33. The Secretary of State also explained this position in earlier correspondence with the Department for Levelling Up, Housing and Communities about OCC’s resolution to refuse planning permission (before the application was called-in). This letter also bears re-reading:

*‘This decision [by OCC to resolve to refuse planning permission] has significant negative implications for the UK’s ambitions in fusion energy [...]*

*As you will no doubt be aware, the UK is a global leader in fusion energy technology. The economic and environmental opportunities it could bring are enormous. We have a real opportunity for the UK to take advantage of a transformational emerging green technology and ensure that we don’t throw away a strategic advantage decades in the making.*

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<sup>41</sup> Ibid.

<sup>42</sup> Professor Sir Ian Chapman’s POE at [5.1] on PDF p. 9 and [7.2] on PDF p. 10.

<sup>43</sup> Professor Sir Ian Chapman in XX.

<sup>44</sup> Professor Sir Ian Chapman’s POE at PDF p. 31.

<sup>45</sup> Core Document (“CD”) N18.

*At the heart of our global advantage is the Culham Centre for Fusion Energy [...]. It has expertise and technical capabilities not found anywhere else on Earth. The UK's fusion strategy published in 2021 seeks to make the most of this and develop the Culham campus into a global cluster for fusion in the same way that Silicon Valley is the global cluster for tech companies. This not a wild ambition - officials in my Department are already talking to companies from the US, Sweden, Japan and Canada about locating at Culham. We are also in talks with international investors about significant potential investment in UK fusion. For all these organisations, Culham campus is the draw. [...]*

*Culham is not the only place that UKAEA are investing. They are building their new prototype fusion power plant in Nottinghamshire and have a technology hub at Rotherham. But it is development of the Culham campus that makes such investments possible. We are already planning on investing around £700m in UK fusion in this Spending Review period and are in discussions with the Treasury to invest a further £600m up to 2027, depending on the outcome of negotiations with the EU around participation in EU programmes. Without developing the Culham Science Centre, the benefits of these investments are at serious risk.'*<sup>46</sup>

34. The development plan also recognises that the Culham Campus '*is the leading UK centre for fusion research and technology and is of international importance*'; with commensurate policy support for its growth.<sup>47</sup> SODC has stated in terms: '*The Council recognises the key role of the [Culham Campus] site and supports and encourages its redevelopment*'.<sup>48</sup>

#### The benefits of redevelopment at the Culham Campus

35. The benefits of the redevelopment at the Culham Campus are numerous and were not meaningfully challenged by objectors. In particular:
- 35.1. Redevelopment at the Culham Campus is an exemplar of sustainable development. The redevelopment will use previously developed land in a sustainable location. Further, the redevelopment of the Culham Campus is the first step in ensuring the co-location of high quality jobs and high quality homes, as envisaged by policies STRAT8 and STRAT9, which ensure the co-location of significant employment and housing growth at Culham.
- 35.2. The redevelopment at the Culham Campus is an important driver of the Science Vale. The Science Vale is recognised as '*an international location for*

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<sup>46</sup> Appendix L to Mr Tamplin's POE.

<sup>47</sup> CD G1 at [3.67] on PDF p. 46.

<sup>48</sup> CD G0.1 at [3.658] on PDF p. 46.

*science and technology*’ which should *‘continue to grow as a world- renowned science, research and innovation hub that attracts business, creates job opportunities and delivers housing growth’*.<sup>49</sup> This ambition is embedded in the overarching vision and objectives of the development plan;<sup>50</sup> and it is made real by the strategic policies in the development plan which make the Science Vale the focus for major new development, including specifically at Culham.<sup>51</sup>

- 35.3. The work of the UKAEA at the Culham Campus is a cornerstone of the UK’s Fusion Strategy. The UKAEA is at the forefront of research into unlimited and climate resilient energy creation. The fusion research programme at the Culham Campus is truly a world leader in managing the environmental effects of humankind.
- 35.4. The Culham Campus is a significant driver of inward investment into the UK and into the county specifically. This includes both public investment – such as the significant Government funding for the transformation of the campus – and also private investment – for example through the more than 40 private companies who have chosen – and are continuing to choose – to locate themselves at the Culham Campus a part of the growing fusion cluster.<sup>52</sup>
- 35.5. Linked to this investment, the redevelopment of the Culham Campus will deliver significant employment benefits. This is expressly recognised in the SOLP which considers the growth of the campus to support *‘the objective to increase the number of high quality jobs in the district’*.<sup>53</sup>
36. Taken together, this is a package of benefits which are truly of a national and international scale. However, critically, this is a package of benefits which will only be realised in full when the redevelopment of the Culham Campus is unlocked by the Scheme.

#### The Secretary of State’s first and second questions

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<sup>49</sup> CD G0.1.00 at [2.29] on PDF p. 29 and [2.5] on DPF p. 13.

<sup>50</sup> CD G0.1.00 at PDF pp. 13 – 14 – see in particular the desire for a *‘prosperous place to live’* in the vision to 2035 and objective 1.4 (growth of Science Vale).

<sup>51</sup> See, especially, Policy STRAT1 which specifically refers to the Science Vale and Culham – CD G1 on PDF p. 22.

<sup>52</sup> Professor Sir Ian Chapman’s POE at [4.5] on PDF p. 8.

<sup>53</sup> CD G0.1.00 at [3.68] on PDF p. 46.

37. These benefits are all in accordance with national policy. Accordingly, the UKAEA submits that the Secretary of State's first and second questions should be answered as follows.
38. First, the Scheme is consistent in all respects with the Government's policies for delivering a sufficient supply of homes in the NPPF. As the District Councils have explained, it is only through the delivery of the Scheme that the necessary planned housing growth can be delivered, and their respective housing supplies maintained. Accordingly, the Scheme is the only way to significantly boost the supply of homes in the County, in accordance with paragraph 60 of the NPPF. Further, focussing on Culham specifically, the delivery of STRAT9, adjacent to the Culham Campus, with employment and housing collocated, is an exemplar sustainable housing development, in accordance with paragraphs 74 of the NPPF.
39. Secondly, the Scheme is also consistent in all respects with the Government's policies for building a strong and competitive economy. The Scheme satisfies each and every paragraph in Chapter 6 of the NPPF.
40. The unlocking of future development at the Culham Campus exemplifies this consistency with the NPPF. For example, in respect of the overarching objective in paragraph 85:
- 40.1. The UKAEA and its associated cluster businesses can only invest, expand, and adapt at the Culham Campus if the Scheme is delivered. The Scheme is a necessary precondition to this economic development.
- 40.2. There is a clear national need for the UKAEA and its associated cluster businesses to grow. This need attracts significant weight. So too the Scheme which is the only realistic way to meet that need.
- 40.3. The Science Vale – of which the Culham Campus is a principal part – is an area of scientific innovation and strength. It should be allowed to grow, and the Scheme is necessary to remove the barriers to this growth.
- 40.4. The work of the UKAEA at the Culham Campus is an area in which Britain is already a global leader. That position of strength can only be furthered and protected for the long term through the growth of the Culham Campus, an objective which depends on the Scheme.

41. Further, the delivery of the Scheme is in accordance with paragraph 86 of the NPPF (especially sub-paragraphs (a) and (c)):
- 41.1. The development plan contains a clear vision to support growth in the Science Vale. However, that policy vision can only be delivered by the development of the Scheme. This is exemplified by the Culham Campus: the campus sits at the heart of the Science Vale and is a key driver to its success, but its redevelopment to achieve the planned objectives is dependent on the Scheme.
- 41.2. The transport infrastructure – both in terms of highway capacity and to support sustainable transport – is a barrier to investment in the County. This is exemplified by the Culham Campus: funding has been secured for its redevelopment, but this funding can only be utilised if the necessary infrastructure is in place to facilitate that redevelopment.
42. Finally, the role of the Scheme in unlocking the redevelopment of the Culham Campus is in accordance with paragraph 87 of the NPPF. The need to redevelop the Culham Campus is a good example of a sector having specific locational requirements, including the development of “clusters”, which are specifically contemplated by this paragraph of the NPPF. The Campus is an established global centre in the fusion sector and the benefit of its redevelopment, in particular the clustering of the UKAEA’s research with others operating in the fusion sector, cannot be realised in another location, as Professor Sir Ian Chapman explained in XiC.

#### The flaws in the objectors’ case

43. The only challenge to the UKAEA’s case on this issue was from Mr Kirby who asserted that the UKAEA had not fairly reflected the challenges facing fusion. Mr Kirby was in error. Professor Sir Ian Chapman’s POE is clear about the ‘*considerable*’ scientific and engineering challenges in delivering fusion.<sup>54</sup> Further, Mr Kirby’s representations failed to consider two critical factors: first, the advances in fusion science and technology over recent years, coupled with the advanced manufacturing and computing capabilities now available, mean that fusion energy is closer than ever before;<sup>55</sup> and secondly, the national benefits which the Culham Campus is already

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<sup>54</sup> Professor Sir Ian Chapman’s POE at [4.3] on PDF p. 8.

<sup>55</sup> Professor Sir Ian Chapman’s POE at [4.4] on PDF p. 8.

delivering – and will continue to deliver if future redevelopment is unlocked – are realised on the journey towards a commercial fusion market – they arise from the scientific and engineering endeavour which is already underway and which the planned redevelopment will further.

**(4) Reason 4 – The planning balance is overwhelmingly in favour of the grant of planning permission for the Scheme.**

44. Remarkably, at the end of this inquiry, there is apparent agreement that the Scheme accords with the development plan, read as a whole.<sup>56</sup> The objectors to the Scheme have not even contested this critical point: each and every planning witness for a party who supports the Scheme has given their evidence with no challenge on this issue; and contrary evidence has been presented by objectors. It follows that the answer to the Secretary of State's third question must be that the Scheme is consistent with the development plan for the area.
45. This conclusion is significant because the development plan contains a range of policies for assessing the acceptability of the Scheme's different impacts, including those on local residents and the environment. In circumstances where there is compliance with that range of policies, the only proper conclusion must be that the impacts of the Scheme are acceptable. Accordingly, whatever the various matters raised by objectors, these are all immaterial in the final planning balance because the Scheme's impacts are acceptable when assessed against the adopted standards.
46. Compliance with the development plan, read as a whole, is also significant because the Scheme benefits from a statutory presumption in favour of the grant of planning permission. This is consistent with the raft of strategic policies which lend strong and unequivocal support to the delivery of the Scheme.<sup>57</sup>
47. In the final planning balance, faced with the statutory presumption in favour of granting planning permission for the Scheme, the objectors have relied on two, allegedly countervailing, matters.

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<sup>56</sup> See, for example, XX of Mr Tamplin by SODC.

<sup>57</sup> See, for example, Policy TRANS1b and STRAT3 of the SOLP.

48. The first of those matters is the argument about alternatives. That argument is flawed and must be accorded no weight for the reasons already explained. Indeed, the absence of any better alternative positively supports the Scheme.
49. The second matter is the extent to which the delivery of the Scheme is consistent with the attainment of net zero and the decarbonisation of the transport network. This argument is also flawed and must be afforded no weight for the following reasons:
- 49.1. First, the objectors' argument was considered and rejected at the Examination in Public into the SOLP.<sup>58</sup> Consistency in decision making requires the same conclusion here as the objectors have not shown – or even attempted to show – a good reason to depart from this conclusion.<sup>59</sup>
- 49.2. Secondly, the role of the Scheme in achieving decarbonisation is made explicit in the LTCP which specifically lists the Scheme as a necessary measure to achieve its ambitious aims.<sup>60</sup> Objectors cannot laud the LTCP without considering it as a whole. Quite simply: building the Scheme now – including the new roads within it – is compatible with attaining net zero.
- 49.3. Thirdly, the correct basis of assessment is to consider the net GHG emissions against the relevant carbon budgets. This was the approach in the environmental statement, it is an approach which is consistent with national policy as Mr Sensecall identified, and it is an approach which has been consistently upheld by the Planning court.<sup>61</sup> On this approach, the GHG effects during the construction of the Scheme are acceptable and, when operational, the Scheme will lead to a reduction in GHG emissions compared to a scenario where it is not delivered.<sup>62</sup> This is a beneficial operational effect which supports the grant of planning permission for the Scheme.
50. It follows that the other considerations in this case do not support a departure from the development plan; to the contrary, they support the grant of planning permission

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<sup>58</sup> CD G0.1.8 at [51] on PDF p. 16.

<sup>59</sup> See in particular the XX of Mr Tamplin by UKAEA: Mr Tamplin gave no recognition to the principle of consistency and simply wished to ignore the conclusions of the Examining Inspector.

<sup>60</sup> See CD G4 at PDF pp. 157 – 158.

<sup>61</sup> See Mr Sensecall's POE at [6.60] on PDF p. 32 and *R. (GOESA Ltd) v Eastleigh Borough Council* [2021] EWHC 1221

<sup>62</sup> CD A.15.15 at [15.12.1] on PDF p. 28.

for the Scheme. It further follows that the planning balance lies in favour of the grant of planning permission for the Scheme. This is the outcome which is, very clearly, in the best interests of planning and development in Oxfordshire, as well as the fusion sector in the UK.

## **VI. CONCLUSION**

51. For the reasons planning permission should be granted for the Scheme without any further delay.

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